

HiFi/Stereo Review

JANUARY 1968 • 60 CENTS

**A Buyers' Guide to Turntables, Changers, and
Tone Arms * A Basic Library of Country and
Western Music * Eddy Arnold and Buck Owens**



H1068 451472DBE0030B0R31
ROBERT DUBERT JR
30 BAY ST RD
4
BOSTON MA 02115



receiver that has them.



When you visit your dealer,
be sure to hear the 700-T
through a pair of Fisher XP-9B
four-way bookshelf loudspeakers:
12-inch woofer, 6-inch lower midrange,
5-inch upper midrange, 1½-inch soft-dome tweeter;
300, 1000 and 2500 Hz crossovers;
\$199.50 in oiled walnut.

CIRCLE NO. 44 ON READER SERVICE CARD

* U.S. PATENT # 3290443

This is the only \$500 The Fisher 700-T.

To hi-fi enthusiasts, the name Fisher does not mean merely the world's largest manufacturer of high fidelity components.

It also means the leader in high fidelity innovation.

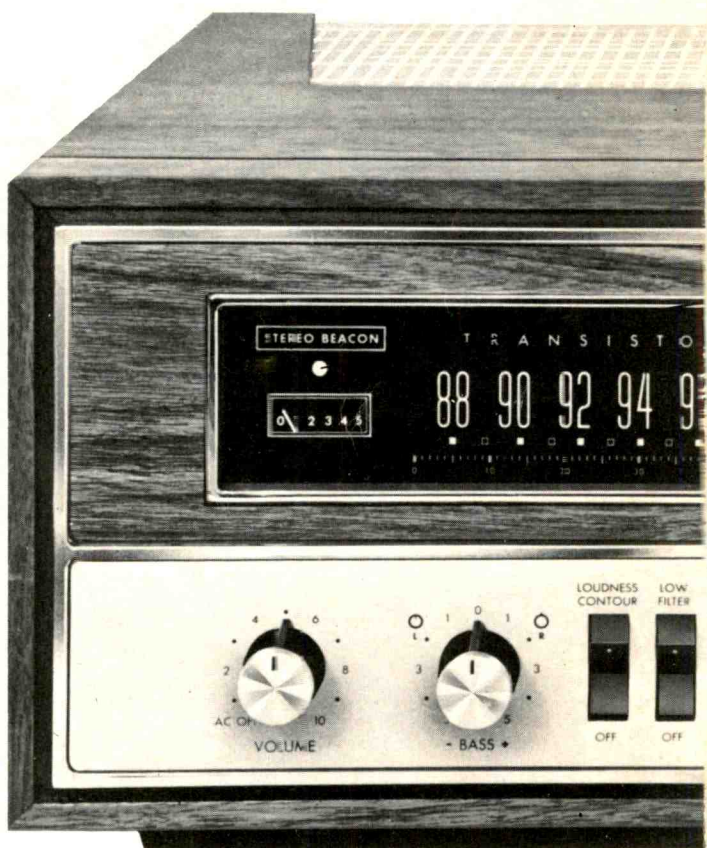
The result of this leadership is the most advanced all-solid-state FM stereo receiver to date.

The Fisher 700-T at \$499.50 (cabinet \$24.95).

The exclusive features described at the right are only one indication that this is the finest FM stereo receiver ever made. There are also the specifications: 120 watts (IHF), 0.8% harmonic distortion, four IF stages, 50 db selectivity, 2.0 db capture ratio, 70 db signal-to-noise ratio and 40 db FM stereo separation.

Some day, there may be other \$500 receivers with features and specifications like these.

The point is, the Fisher 700-T has them right now.



The Fisher



Mail this coupon for your free copy of the Fisher Handbook, 1968 Edition. This 80-page reference guide to hi-fi and stereo also includes detailed information on all Fisher components. Mail coupon to:

Fisher Radio Corp.
11-35 45th Road
Long Island City, N.Y. 11101

Name _____

Address _____

City _____ State _____ Zip _____

0201687



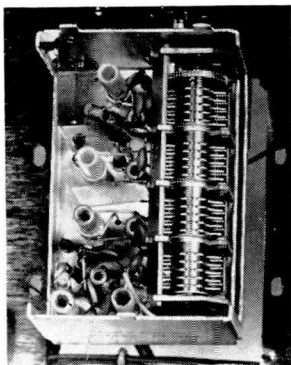
OVERSEAS AND CANADIAN RESIDENTS PLEASE WRITE TO FISHER RADIO INTERNATIONAL, INC., LONG ISLAND CITY, N.Y. 11101

**These are
the features that
all \$500 receivers
should have.**

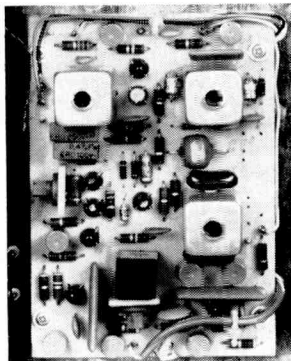
Patented Stereo Beacon*
for automatic mono/stereo switching.



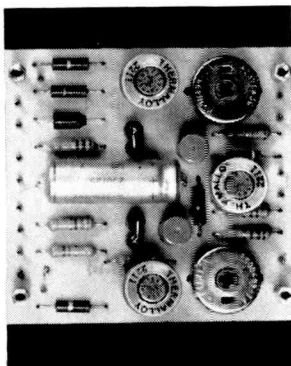
Super-Synchrode™ front end
with three field effect transistors for a
tuner sensitivity of 1.8 microvolts (IHF).



Four-Diode Coincidence Circuit
that eliminates triggering caused by spurious
signals. Only a true stereo signal can trip the
mono-stereo switch.



Transist-O-Gard™
overload protection circuit
that eliminates any possibility of transistor damage
from overload, short circuits or faulty
speaker wiring.



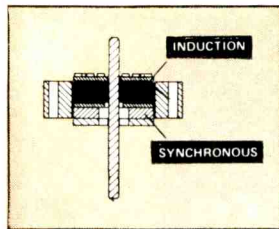
What we learned from the public at the high fidelity shows

Before we unveiled the new synchronous Garrards at the New York and Los Angeles High Fidelity Shows, there were certain considerations in our own minds. One was whether people would grasp the special importance of synchronous speed in automatic turntables...the improvement it can make in performance. Then, we wondered whether even the knowledgeable men and women who come to high fidelity shows would understand the new Synchro-Lab Motor™, which is not only synchronous, but has certain desirable features of the induction type, in addition. We also asked ourselves whether, in the big news about the motor, people might not overlook many other significant advancements incorporated in the new Synchro-Lab Series™. We knew that the Garrard models represented a major forward step in automatic turntable performance. Would visitors to the shows realize it?



We are happy to report that they did. We found they were quick to appreciate the advantages of a synchronous turntable motor that delivers a *guaranteed constant speed*, regardless of changes in voltage, record load, stylus pressure or temperature. Many of them were surprised, and expressed their pleasure, at learning that the new motor is available not only in our top model, but in a complete range of prices.

And their questions showed that they understood the admittedly technical features of the Synchro-Lab Motor, with its two rotor sections that combine true synchronous speed with high torque, instant power and freedom from rumble.



What about the other new features? Some were apparent at a glance—the highly refined, ultra-low mass tonearm on the SL 95, for example, with its Afrormosia wood inset, its gyroscopically gimbaled needle pivots for minimal friction, its new anti-skating control with patented sliding weight design, its calibrated stylus pressure gauge with precision 1/4 gram click settings.

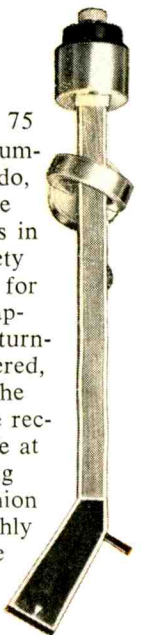
Other features needed demonstration, which, we are pleased to say, drew favorable response from most. For instance, the new automatic spindle (based upon Garrard's traditional "pusher" prin-

ciple) on the SL 95 and SL 75 which does what the inverted umbrella spindle was supposed to do, but does it better and far more safely. This new spindle works in combination with a record safety platform, and we showed how, for manual play, the platform disappears into the unit, leaving the turntable surface free and uncluttered, but ready to be released with the touch of a button. It holds the records absolutely steady and safe at two points, each record falling straight down on a micro-cushion of air. They liked the new highly simplified controls, and we learned that interest in cueing is still very high.



Incidentally, it seems worthwhile to mention that Garrard's cueing controls, on all its new models, can be used whether records are being played manually or automatically.

Were you at one of the Shows? If so, thank you for visiting us, and for your appreciation of the new units. For those who could not attend, we have the same 20-page full color Comparator Guide we gave visitors, illustrating the entire Garrard line from \$37.50 to \$129.50. For complimentary copy, write: Garrard, Dept. AA-5, Westbury, N.Y. 11590.



HiFi/Stereo Review

JANUARY 1968 • VOLUME 20 • NUMBER 1

THE MUSIC

THE BASIC REPERTOIRE

Haydn's Symphony No. 104, "London"..... MARTIN BOOKSPAN..... **57**

A BASIC LIBRARY OF COUNTRY-AND-WESTERN MUSIC

Through the great tradition to the present—a recorded sampling..... ROBERT SHELTON..... **61**

EDDY ARNOLD

A c-&-w star's odyssey from Grand Ole Opry to Coconut Grove..... ROBERT WINDELER..... **74**

THE SECRET (C-&W) LIFE OF NOEL COPPAGE

A confession from "out there in radioland"..... NOEL COPPAGE..... **78**

SINGER-SONGWRITER BUCK OWENS

The man who turned Bakersfield, Cal., into "Nashville West"..... JOHN DEVOE..... **81**

"STARS OF THE GRAND OLE OPRY"

RCA Victor's "keepsake package" contains forty c-&-w classics..... WILLIAM FLANAGAN..... **121**

THE EQUIPMENT

NEW PRODUCTS

A roundup of the latest high-fidelity equipment..... **24**

HI-FI Q & A

Answers to your technical questions..... LARRY KLEIN..... **28**

AUDIO BASICS

Audio Specifications XVII: Transient Distortion..... HANS H. FANTEL..... **34**

TECHNICAL TALK

Stereo-Mono Revisited—a communication and a reply; Hirsch-Houck laboratory reports on the Dynaco PAT-4 stereo preamplifier kit, the Empire 4000M Cavalier speaker system, and the Ortofon SL-15 cartridge and RS-212 tone arm..... JULIAN D. HIRSCH..... **37**

RECORD PLAYERS, TURNTABLES, AND TONE ARMS

A question-and-answer buyers' guide..... GEORGE MARTINSON..... **67**

INSTALLATION OF THE MONTH

(Trans)Portable Stereo..... **77**

TAPE HORIZONS

Tapes in Theatricals..... DRUMMOND MCINNIS..... **133**

THE REVIEWS

BEST RECORDINGS OF THE MONTH..... **85**

CLASSICAL..... **96**

ENTERTAINMENT..... **117**

STEREO TAPE..... **129**

THE REGULARS

EDITORIALLY SPEAKING..... WILLIAM ANDERSON..... **4**

LETTERS TO THE EDITOR..... **6**

GOING ON RECORD..... JAMES GOODFRIEND..... **47**

ADVERTISERS' INDEX; PRODUCT INDEX..... **136**

COVER: "MUSICIENS" BY RENAUD DE MONTAUBAN; BIBLIOTHÈQUE DE L'ARSENAL, FRANCE; PHOTO BY EDDY VAN DER VEEN

Copyright © 1967 by Ziff-Davis Publishing Company. All rights reserved. HiFi/Stereo Review, January 1968, Volume 20, Number 1. Published monthly at 307 North Michigan Avenue, Chicago, Illinois 60601, by Ziff-Davis Publishing Company—also the publishers of Airline Management and Marketing, Boating, Business & Commercial Aviation, Car and Driver, Cycle, Electronics World, Flying, Modern Bride, Popular Electronics, Popular Photography, Skiing, Skiing Area News, and Skiing Trade News. (Travel Weekly is published by Robinson Publications, Inc., a subsidiary of Ziff-Davis Publishing Company.) One year subscription rate for U.S., U.S. Possessions and Canada, \$6.00; all other countries, \$7.00. Second Class postage paid at Chicago, Illinois and at additional mailing offices. Authorized as second class mail by the Post Office Department, Ottawa, Canada, and for payment of postage in cash. SUBSCRIPTION SERVICE: All subscription correspondence should be addressed to HiFi/Stereo Review, Circulation Department, Portland Place, Boulder, Colorado 80302. Please allow at least six weeks for change of address. Include your old address, as well as new—enclosing if possible an addressed label from a recent issue.

HiFi/Stereo Review

PUBLISHER
PHILLIP T. HEFFERNAN

EDITOR
WILLIAM ANDERSON

MANAGING EDITOR
WILLIAM LIVINGSTONE

MUSIC EDITOR
JAMES GOODFRIEND

TECHNICAL EDITOR
LARRY KLEIN

ASSOCIATE EDITOR
ROBERT S. CLARK

ART DIRECTOR
BORYS PATCHOWSKY

PRODUCTION ASSISTANT
JOYCE PARKER

CONTRIBUTING EDITORS
MARTIN BOOKSPAN
HANS H. FANTEL
WILLIAM FLANAGAN
DAVID HALL
NAT HENTOFF
JULIAN D. HIRSCH
GEORGE JELLINEK
IGOR KIPNIS
PAUL KRESH
DRUMMOND McINNIS
REX REED
PETER REILLY
ERIC SALZMAN

EUROPEAN EDITOR
FREDERIC GRUNFELD

LONDON EDITOR
HENRY PLEASANTS

ADVERTISING SALES MANAGER
LAWRENCE SPORN

ADVERTISING SERVICE MANAGER
ARDYS C. MORAN

Editorial and Executive Offices
Ziff-Davis Publishing Company
One Park Avenue, New York, New York 10016
212 679-7200
Eastern Advertising Manager: Jerry Sweeney
Paul E. Gelfman, James J. Sullivan

Midwestern Office
307 North Michigan Avenue, Chicago, Illinois 60601
312 724-0892
Advertising Manager: Jerry Sweeney

Western Office
9025 Wilshire Boulevard
Beverly Hills, California 90211
213 Crestview 4-0265; BRAdshaw 2-1161
Western Advertising Manager: Bud Dean

Japan: James Yagi
Tshikawa Mansion
4, Sakuragaoka, Shibuya-ku
Tokyo, Japan
Telephone: 462-2911-3

Circulation Office
Portland Place, Boulder, Colorado 80302

EDITORIAL CONTRIBUTIONS must be accompanied by return postage and will be handled with reasonable care; however, publisher assumes no responsibility for return or safety of art work, photography or manuscripts.

Member Audit Bureau of Circulations



ZIFF-DAVIS PUBLISHING COMPANY
William B. Ziff, Chairman of the Board (1946-1953)
William Ziff, President
W. Bradford Briggs, Executive Vice President
Herschel B. Sarbin, Senior Vice President
Philip Sine, Financial Vice President
Walter S. Mills, Jr., Vice President, Circulation
Stanley R. Greenfield, Vice President, Marketing
Phillip T. Heffernan, Vice President,
Electronics Division
Frank Pomerantz, Vice President, Creative Services
Arthur W. Butzow, Vice President, Production
Edward D. Muhlfeld, Vice President, Aviation Division
Irwin Robinson, Vice President, Travel Division



EDITORIALLY SPEAKING

By William Anderson

THE COUNTRY POINT OF VIEW

REGULAR followers of this journal of opinion will be aware of the running dialog we have been encouraging between our readers and contributors on the subject of music criticism. The most recent (and still continuing) skirmish, touched off by the tandem articles "Critics' Loves" and "Critics' Hates" in the September and October issues, resulted in a spate of letters that were, frankly, disappointing. The burdens of far too many of them were the old saws that dissenters have long fondly believed to be the ultimate in last words: "It's unfair to criticize," "Nobody ever erected a statue to a critic," and "Those who can, do; those who can't, criticize." Old saws though these sentiments (and others like them) may be, that does not make them any the less untrue. They spring from a fundamental misapprehension of the nature and purpose of criticism, which is, in composer-critic Virgil Thomson's words, "the only antidote we have to paid publicity." Central to all of them is the pernicious and altogether erroneous notion that criticism should be "objective"—presumably because art is. The best rejoinder I have ever found to this is a passage (which I am inordinately fond of quoting) from Anatole France:

"There is no such thing as objective criticism any more than there is objective art, and all who flatter themselves that they put aught but themselves into their work are dupes of the most fallacious illusion. . . . The best we can do, it seems to me, is gracefully to recognize this terrible situation and to admit that we speak of ourselves every time we have not the strength to be silent."

Professional critics, of course, are paid *not* to be silent, to speak of themselves as much as their courage and private sensibilities will permit. And since they are also paid to know what they are talking about, it has always seemed to me that we should listen to them as much as our own courage and private sensibilities will let us. This is not to say that we need always agree with them, but the challenge of another point of view, another set of prejudices, is useful in clarifying our own and, if we are fair-minded, permitting us to see—even if a little stubbornly—through someone else's window.

We are pleased, in this issue, to offer such a window to our readers with an examination, in some depth, of country-and-western music. It is not a window that most professional critics look through with any pleasure—nor, it seems to me, with any sympathy or understanding. It strikes me, however, that they are soon going to be forced to. C-and-w has been around for quite a while, quietly (and sometimes not) gathering strength and cohorts; it can now properly qualify, I believe, as a *phenomenon*. Popular singing stars are taking it up with a vengeance (Perry Como, Nancy Sinatra, Andy Williams, Jack Jones, Dean Martin, and others), its big stars fill even Carnegie Hall without difficulty, New York's Hotel Taft (!) has just opened a club called the Nashville Room, and Buck Owens only recently played to standing-room crowds in New York's East Village hippyville. If, through no fault of your own, the world of c-and-w has until now been closed to you, I cannot do better than recommend the guided tour offered this month by sympathetic and understanding critic Robert Shelton. Disagree with him if you will, but listen to him too—he is wonderfully subjective and knows what he is talking about.

The First All-Label, No-Obligation Discount Record Service to Offer All These Advantages

BIG DISCOUNTS!
Always at least 33 1/3% ... in some cases up to 75%!

SHOP-AT-HOME!
No crowds or traffic to fight!

UNLIMITED SELECTION!
Any record on any label available in the U.S.!

NO MINIMUM PURCHASE REQUIRED!
Order only the records you want...when you want them!

Plus a unique extra bonus...
SELECT ANY RECORD OF YOUR CHOICE—FREE
if you join now and pay the modest *lifetime* enrollment fee

Now...a record-buying service that has all the advantages you've been looking for — Records Unlimited! It gives you big discounts on *all* records, *all* labels — *with no minimum purchase required*. And you buy with at-home shopping convenience! What's more, you get your first record *free* for joining right now!

No other service, club or method of buying records offers all this *without obligation of any kind!*

No obligations — No limitations

If you buy records regularly — 5, 7 or 12 a year — you probably like to make your selections from a variety of labels. And you don't want the commitment to buy a specified number of records. What you *do* want are the most generous discounts that can be offered on *every one* of the records you buy!

You get *all* these advantages *only* with Records Unlimited!

Discounts up to 75%

As a member, *you have no obligation to buy any records*. But every record you *do* buy will have a discount of at least 33 1/3% off the manufacturers' suggested list price (see the chart).

You can choose *any* 12" long-playing record of *any* label available in the United States. In some cases we are able to offer discounts up to 75%!

Free Buying Guides

You will learn about these special savings regularly through your *free* copies of the Records Unlimited buying guide, which will carry listings of new releases and best-selling hit records in all fields of music...classical, folk, pop, teen, Broadway, etc. You can take advantage of the *super* discounts, or order *any* record you want at our regular *low* discount prices (plus a small mailing and handling charge).

All records, of course, are brand-new and guaranteed to be in perfect playing condition.

First Record Free

Your first record is *free*, if you join now and pay the modest \$2.50 *lifetime* enrollment fee. You can select your free record *now* — stereo or mono — from the best-selling records shown on this page, or you can pick any other record currently available in the U.S.

Just fill out and mail the coupon along with your check or money order for \$2.50 to cover your *lifetime* enrollment fee. We'll send the *free* record of your choice promptly. You'll also receive a copy of the current Records Unlimited buying guide, listing hundreds of records available to members at special discount prices.

FREE RECORD RACK! Act now, and we'll also send you, free, a handsome, brass-finished browser record rack!

records unlimited
Harmony, Indiana

BIG DISCOUNTS ON ALL LABELS

See for Yourself!

Manufacturers' Suggested List Prices*	RECORDS UNLIMITED
\$1.79 through \$1.98	\$1.19
2.49 through 2.78	1.60
3.49 through 3.78	2.33
3.79 through 3.98	2.43
4.79 through 4.98	2.98
5.79 through 5.98	3.68
6.79 through 6.98	4.37

Special-Price Records Each Month!

Leading Labels \$.95 • \$1.19 • \$1.60
(Originally sold for up to \$4.79*)

*In some areas, records may be purchased at below manufacturers' suggested list prices.

CHOOSE A RECORD FREE—NOW!
Take any one of these hit albums — or any other record you want!



Records Unlimited
Box 500, Harmony, Indiana 47853

I'm enclosing my \$2.50 *lifetime* enrollment fee. Please enroll me as a member of Records Unlimited and send me this record — free:

Catalog No.

Title

Label

Send this record in:
 Stereo Monaural

Also send me my free record rack and a copy of the current Records Unlimited buying guide. I understand that enrollment includes no obligation to purchase any records at any time, but I can make the purchases I wish at the low Records Unlimited discount prices.

Name

Address

City

State

Zip Code

720-6/S6

 **Crown**

Leadership presents

the **NEW**

**Computer Logic Control
Pro 800 Transport**



MODEL SX 824

In the league of nimble-fingered tape-handlers there exists a recurrent problem. It has been demonstrated time and again that anyone can ruin a valuable tape by absentmindedly outsmarting the interlock system of an otherwise safe tape recorder.

In answer to this problem and similar problems arising in automated and remote control applications, the *CROWN Pro 800* was designed. This recorder has a computer logic system using IC's which prohibit all such destructive operations.

The *CROWN* computer stores the last command given it in its memory (forgetting all previous commands) and by a continuous knowledge of the operating state of the machine (motion and direction), it takes all the necessary measures and executes the command. This is all done *without* time-wasting delay mechanisms.

Computer Logic Control brings to you rapid error-free tape handling. It is actually impossible to accidentally break a tape. Call your *CROWN* dealer **NOW!**

MOST PERFECT REPRODUCTION

- ☞ Performance as yet unequalled
- ☞ Four years proven Solid State circuitry
- ☞ Extremely low noise electronics

FINEST TAPE HANDLING

- ☞ Computer smooth operation
- ☞ True straight line threading
- ☞ Patented Electro-Magnetic brakes never need adjusting

Write to **Crown International**
Box 1000, Dept. HSR-1
Elkhart, Indiana 46514

MADE ONLY IN AMERICA

CIRCLE NO. 77 ON READER SERVICE CARD



LETTERS TO THE EDITOR

Satie

● I enjoyed Stephen Cannon's article on Erik Satie (October), especially the clever way he justified observing the 101st birthday celebration—I think it was very much in the spirit of what Satie stood for. Reading about my own role in the *Vexations* performance at the Pocket Theater brought back the peculiarly ritualistic nature of that performance—it was like celebrating a Zen mass. And I also recalled that afterwards someone—was it John Cage himself?—raised the question of whether the performance had been authentic. The directions on the single-page score contained the number 840, but there was confusion after the performance was over whether the original idea was to "be played 840 times" or to "be repeated 840 times." The latter would, of course, have resulted in a total of 841 performances, since the repetitions could only come after the first playing, or. . . . But I think you see what I mean. Satie again wins the game and, as Cannon points out, games were very serious business to him.

HOWARD KLEIN
New York, N. Y.

Paderewski

● I would like to supplement Robert Offerfeld's statement in his article "The Forgotten Wars of Ignace Jan Paderewski" (October) that, "as late as the 1930's, . . . [Paderewski] was apt to include more big works on a single program than anyone else around." In April, 1931, I heard him play, at two-day intervals, three programs which included Beethoven's Sonatas Op. 27 No. 2, Op. 57, and Op. 111; Chopin's B Minor Sonata; Schumann's F-sharp Minor Sonata and *Carnaval*; the Brahms *Handel Variations*; the Bach-Liszt A Minor and G Minor Preludes and Fugues; two Ballades, a Scherzo, and two of the larger Polonaises of Chopin, Liszt's thirteenth *Hungarian Rhapsody* and his *Liebestod* and *Flying Dutchman Spinning Song* transcriptions; the Wagner-Schelling *Tristan* Prelude and the Strauss-Tausig "One Lives but Once" paraphrase; and twenty-six other pieces by Chopin, Schubert, Brahms, Rubinstein, Rachmaninoff, Debussy, and others. Of these forty-five works, only five were repeated in this series of three concerts. Several of the more considerable pieces were tossed in as encores.

While the repertoire covered by Paderew-

ski in his concerts was exceeded by that of some other pianists, it was (contrary to some of the slighting comments made about him) comparable to that of most of his noted contemporaries. It was indeed time for Mr. Offerfeld's fine article on this great man and incomparable artist.

HARRY L. ANDERSON
San Diego, Cal.

● Robert Offerfeld's grand defense of Ignace Jan Paderewski (October) was a wonderful birthday present (I was seventy October 4).

My father took me to hear Paderewski in 1910, and I always made it my business to hear him whenever I could. I have almost all his records from his first in 1911 until the last, and I hear him every day!

The October HiFi/STEREO REVIEW is one that I will keep! Thanks again for saying and writing what I would have liked to have said and written.

LOUIS J. COBEY
Nutley, N. J.

Hi-Fi Hearing

● In the October "HiFi Q & A" I read with interest Mr. C. B. Clemmons' question concerning his hearing problem. I have a similar condition, worse in one ear than the other. My hearing loss was explained to me as being caused by nerve deterioration.

Like Mr. Clemmons, I experienced no loss in my appreciation for good music. Listening with a good set of stereo headphones enables me to hear much music which is lost to me at normal room volume. This applies especially to quiet passages in some of my classical recordings. I agree that adjusting tone controls to accentuate higher frequencies is not much help. I remember reading that the greatest percentage of audible instrumental tones is below the 5000-cycle range. I am even aware of tones in music which I know are higher in frequency than those within my maximum range on the HiFi/STEREO REVIEW test record.

I recently purchased an amplifier with twice the wattage of my previous one, and found this an improvement, because of the cleaner and more undistorted sound it produces. Also, I very seldom move the tone controls from the flat position. My speakers and headphones seem to reproduce all the

(Continued on page 12)

HiFi/STEREO REVIEW

NOW—HAVE A DISCOUNT RECORD STORE IN YOUR OWN HOME

Save up to 55% on every record you ever want to buy! No obligation to buy any records

The Longines Symphonette's new service, THE CITADEL RECORD CLUB gives you any record, any artist, any label at savings up to 55% off manufacturer's suggested price. No obligation to buy any records • Free Record Bonus Certificates • Jet Speed Service • Special Money-Back Membership—Just Like a Free Trial • See details below!

You've seen the ads in this and other publications: Get 10 records FREE, they say. Then in smaller print, if you agree to buy 10 or 11 more in just one year, they give you your choice of from 30 to 90 records . . . and that is not free choice, for the Schwann Catalog lists more than 30,000 long-play records now available to you. The extra records you have to buy (no matter what choice is given you) are part of the offer. More records you really don't want. And did you ever try to turn down a record club selection of the month? You have to move fast. This kind of club requires you to buy records you don't really want.

THERE IS A BETTER WAY: The Longines Symphonette's New Citadel Club gives you a huge "Discount Record Store" in your own home . . . acts like a "record buyers cooperative".

The sincere CITADEL CLUB way is quite simple. There are no hidden contracts, no obligation to buy any records at all, and you have your FREE choice of any record available today at discounts of up to 55%, with a minimum of 35% guaranteed. Here's how easy it is to start saving on the records you buy:

1 ANY RECORD, ANY ARTIST, ANY LABEL, ANY KIND OF MUSIC! What do you prefer? Popular? Classical? Broadway Show? Rock and roll? Movie or TV themes? Order Herb Alpert, Barbra Streisand, Robert Goulet, Dean Martin, Frank Sinatra, Herman's Hermits, any original Broadway Cast . . . you name it. Citadel has it.

2 YOU ARE NOT REQUIRED TO BUY ANY RECORDS AT ALL! Buy as many or as few records as you need—records of your choice!

3 IRON CLAD GUARANTEE: FACTORY-FRESH RECORDS, MOST SEALED IN PLASTIC. Any record that passes our inspection team and is imperfect, is replaced without additional cost to you.

4 24 HOUR SERVICE IN MOST CASES! Your orders filled promptly . . . The fastest service in the industry.

5 FREE MEMBERSHIP KIT INCLUDES 300-PAGE SCHWANN CATALOG PLUS TWO OTHER BIG BOOKS! As a member you get the famous SCHWANN catalog which lists more than 30,000 long-play records now available. Same book used by the biggest stores . . . tells you the manufacturers' suggested price and other information. And you get two BONUS BIG BOOK CATALOGS listing special bargains and current top sellers. All FREE with your membership.

6 "MONEY-BACK" MEMBERSHIP—JUST LIKE A FREE TRIAL! We invite you to accept a three-month trial for just \$1. And—we will even give you a Record Bonus Certificate worth \$1 toward your first purchase . . . just like a FREE trial. **AND**—we'll even bill you later for the small \$1 fee. Remember—every Citadel Club membership is for the entire family. Your children can order and save. Any member of your family can order records . . . and save. Three-month "Money-Back" trial for only \$1.

TYPICAL CITADEL SUPER BARGAINS!

Performer	Normal List Price	Your Citadel Price	Performer	Normal List Price	Your Citadel Price
Herb Alpert and The Tijuana Brass	4.79	2.19	Frank Sinatra	4.79	2.29
Barbra Streisand	4.79	2.49	Eric Leinsdorf	5.79	2.99
The Monkees	4.79	2.29	Mantovani	4.79	2.29
Harry Belafonte	4.79	2.49	Leonard Bernstein	5.79	2.99

**SEND NO MONEY
MAIL COUPON TODAY!**

CITADEL RECORD CLUB • Symphonette Square, Larchmont, N. Y. 10538

Enroll me in the club for all the privileges described in the advertisement. I get FREE kit including SCHWANN catalog plus two bonus big books. I AM NOT OBLIGATED TO BUY ANY RECORDS . . . but save up to 55% on those I really want, any artist, any label. Bill me for the \$1 trial membership and send the \$1 Record Bonus Certificate which I can use toward my first purchase.

CHECK HERE FOR STEREO TAPE MEMBERSHIP

STEREO TAPE MEMBERSHIP includes FREE KIT plus famed HARRISON Stereo Tape Catalog (Just 50¢ additional)

Mr. _____
 Mrs. _____
 Miss _____
ADDRESS: _____

CITY: _____

STATE: _____ 

© C. S., Inc.

775-006

CIRCLE NO. 17 ON READER SERVICE CARD

Columbia Record Club's special offer to lovers of Classical Music—

Enjoy the Classical Records You Want—at Savings of

BERG: LULU SUITE
SCHOENBERG: THEME AND VARIATIONS
WEBER: IM SOMMERWIND (THREE PIECES)
EUGENE ORMANDY
Conductor
THE PHILADELPHIA ORCHESTRA

5648

BRUCKNER
Symphony No. 5
Te Deum
EUGENE ORMANDY
conductor
THE PHILADELPHIA ORCHESTRA

5898-5899

Rossini Overtures
GEORGE SZELL
Conductor
THE CLEVELAND ORCHESTRA

5569

BERLIOZ OVERTURES
COLIN DAVIS
conductor
LONDON SYMPHONY ORCHESTRA

5647

A GOLDEN TREASURY OF CONCERT FAVORITES VOL. 3
MOZART: SYMPHONIES NO. 40 & 41
JUPITER 1-2 MORE
SCHUBERT: SYMPHONY NO. 5

TWO-RECORDS COUNT AS ONE SELECTION

3864

BRAHMS
SYMPHONY No. 3 in F
ACADEMIC FESTIVAL OVERTURE
LEONARD BERNSTEIN
conductor
THE NEW YORK PHILHARMONIC

3436

SPANISH MUSIC FOR TWO GUITARS
ISA PRESTI, guitar
ALEXANDRE LABRITA, guitar

3137

PENDERECKI
ST. LUKE PASSION TO THE VICTIMS OF HIROSHIMA
Soloists, Chorus and Orchestra

5900-5901

SPECIAL OFFER
This Deluxe 3-record set counts as only 2 selections!

BERNSTEIN CONDUCTS THE GREAT ROMANTIC SYMPHONIES
2911-2912. Leonard Bernstein conducts the New York Philharmonic in masterful recordings of Franck's Symphony in D Minor; Dvořák's Symphony Number 5 in E Minor ("From the New World"); Mendelssohn's Symphony Number 4 in A Major ("Italian"); and Schubert's Symphony Number 8 in B Minor ("Unfinished").

BEETHOVEN
"AH, PERFIDO!"
Cantata on the Death of Emperor Joseph II
REGINE CRESPIN
MARTINA ARROYO
JUSTINO DIAZ
THOMAS SCHEPPERS, Conductor
THE NEW YORK PHILHARMONIC

5617

ORFF
CATULLI CARMINA
EUGENE ORMANDY
Conductor
The Philadelphia Orch.

5407

THE VIRTUOSO TRUMPET
VOL. 3
ANTONIO JANIGRO
Conductor
I SOLISTI DI ZAGREB

3258

PIANORAMA
JOSEPH COOPER
PIANO

5411

QUARTETTO ITALIANO
DEBUSSY
String Quartet in G Minor
RAVEL
String Quartet in F

5531

HANDEL MESSIAH
(Abridged)
COLIN DAVIS
conductor
LONDON SYMPHONY ORCHESTRA

3343-3344

SPECIAL OFFER
This Deluxe 7-record set counts as only 5 selections!

BEETHOVEN'S NINE SYMPHONIES
2919-2920-2921-2922-2923. All nine of Beethoven's Symphonies are included in this deluxe package of seven records (but which count as only 5 selections)! Eugene Ormandy conducts the Philadelphia Orchestra in inspired interpretations of these important works which deserve a prominent position in your library of fine recordings.

JANACEK
FROM THE HOUSE OF THE DEAD
BOHUMIL GREGOR
Soloists, Chorus and Orchestra of the Prague National Theatre

5097-5098

LORD'S PRAYER
MORMON TABERNACLE CHOIR
BATTLE HYMN OF THE REPUBLIC
THE LORD'S PRAYER—4 MORE

1090

ORMANDY: PHILADELPHIA ORCHESTRA'S GREATEST HITS
Clair de Lune
Sabre Dance

3628

GERSHWIN
RAPSODY IN BLUE
Spellbound Concerto
Warsaw Concerto
3 MORE

3527

VLADIMIR HOROWITZ
Chopin · Liszt
Rachmaninoff
Schumann

1067

THE SORCERER'S APPRENTICE
3 OTHER WORKS
LEONARD BERNSTEIN
New York Philharmonic

3782

Beethoven
Fifth Symphony
BERNSTEIN
N. Y. PHILHARMONIC

1325

VIVALDI
THE FOUR SEASONS
Leonard Bernstein
N. Y. PHILHARMONIC
John Corigliano
VIOLIN

2213

ESPAÑA
BERNSTEIN
N. Y. PHILHARMONIC
SPANISH FAVORITES
by FALLA
RAVEL
CHABRIER

2214

TCHAIKOVSKY
Symphonies Nos. 1, 2 & 3
ANTAL DORATI
London Symphony Orchestra

4647-4648

THE ROMEROS
World of Flamenco
TWO-RECORDS COUNT AS ONE SELECTION

5318

BEETHOVEN: "EMPEROR" CONCERTO
CALVIN GOULD, piano
LEOPOLD STOKOWSKI
American Symphony Orch.

2509

KOSTELANETZ
Conducts
"PROMENADE FAVORITES"
N. Y. Philharmonic

2704

BERNSTEIN'S GREATEST HITS
NEW YORK PHILHARMONIC

5236

MAHLER: SYMPHONY No. 7
LEONARD BERNSTEIN
NEW YORK PHILHARMONIC

2955-2956

BRUCKNER
Symphony No. 3
GEORGE SZELL
Cleveland Orchestra

3455

VERDI: FALSTAFF
Leonard Bernstein
Vienna Philharmonic
with Fischer-Dieskau

3595-3596-3597

GRANADOS: 12 SPANISH DANCES FOR PIANO
Alicia de Larrocha,
PIANIST

3889

TCHAIKOVSKY
BALLET: The Sleeping Beauty
Swan Lake
John Hollingsworth,
conducting
SINFONIA DI LONDRA

TWO-RECORDS COUNT AS ONE SELECTION

3890

SAINT-SAENS
Organ Symphony (No. 3)
Philadelphia Orch. · Ormandy
E. POWER BIGGS
ORGANIST

1076

A FESTIVAL OF MARCHES
March of the Toreadors
American Salute
Stars and Stripes Forever
Meadowlands
9 more
PHILADELPHIA ORCH.
ORMANDY

1083

TWO FAVORITE GUITAR CONCERTOS
CASTELNUOVO TEDESCO
RODRIGO
JOHN WILLIAMS
Guitar
ORMANDY
Philadelphia Orchestra

2471

BACH: THE WELL-TEMPERED CLAVIER
· Book 1 ·
Preludes and Fugues 1-8
GLENN GOULD

1264

MAHLER
"Resurrection" Symphony (No. 2)
LEONARD BERNSTEIN
N. Y. PHILHARMONIC
Touré · Veneta
Collegiate Chorale

2348-2349

A Golden Treasury of Concert Favorites
VERDI AND ROSSINI OVERTURES
GILBERT & SULLIVAN OVERTURES
[2-Record Set]

2285

ALBAN BERG'S WOZZECK
4786-4787. Pierre Boulez conducts the Orchestra and Chorus of the Paris National Opera. Starring roles by Walter Berry, Isabel Strauss and Carl Doench. This magnificent two-record set of a Twentieth Century masterpiece won the Grand Prix Du Disque!



5883



5437



4387



5372



5532

Almost 50%



2018



5234



5839



5320-5321



3780



1645



2887



1606



2508



3792



1172



2880



2244



5529



2245



1093



1100



1195



2479



1605



1279



1695

You are invited to take

ANY 10

STEREO OR REGULAR RECORDS

FREE

if you begin your membership by purchasing just one record now, and agree to buy nine more records during the coming twelve months (you will have up to 300 records a month to choose from)

IMAGINE GETTING ONE RECORD FREE FOR EVERY RECORD YOU BUY! That's the fabulous "discount" the Columbia Record Club offers its members all year round...just about a 50% saving on all records ordered through the Club! Remember — this is not a special "sale" offered from time to time...members enjoy this greatest-of-all discount right from the beginning — and for as long as they remain in the Club! And to demonstrate the full benefits of this unique record-buying plan, we'll send you 10 records FREE right now!

THAT'S RIGHT! JOIN NOW AND GET 10 RECORDS FREE — any 10 of the magnificent albums shown here (more, if you select any of the special sets). We'll give you these 10 free records in advance for just buying one record now at the regular Club price...and agreeing to buy only nine more records during the coming year. In short, within a year you'll have a sizable library of at least 20 records of your choice — but you'll have paid for only ten of them!

FREE SUBSCRIPTION TO MUSIC MAGAZINE. You'll have no problem in selecting records during your membership, because the Club offers up to 300 different records each month to choose from...all described in the monthly Club magazine, which you receive free. In addition to a dazzling list of great classical records each month, you'll be able to choose from hit albums from every field of music — the best-sellers from over 70 different record labels! You may accept the monthly classical selection...or take any of the other records offered...or take no record at all that month.

RECORDS SENT ON CREDIT. Upon enrollment, the Club will open a charge account in your name...you pay for your records only after you have received them — played them — and are enjoying them. They will be mailed and billed to you at the regular Club price of \$5.98 (Popular, \$4.98), plus a small mailing and handling charge.

YOU GET MORE FREE RECORDS...as soon as you complete your enrollment agreement, you continue to receive ONE RECORD FREE FOR EVERY RECORD YOU BUY! There are no "savings certificates" to accumulate, no delays, no limitations — every time you buy a record, you choose one free! The Columbia bonus plan is the best one in existence today! Under this plan you pay as little as \$2.79 a record (including all shipping charges) for all the records you want — for as long as you want. What's more, when you do continue your membership, you only have to buy four records a year to remain a member in good standing.

MAIL THE CARD TODAY! Just write in the numbers of your ten free records and first selection (for which you will be billed only \$4.98, plus postage and handling). Be sure to indicate whether you want your records in stereo or regular high-fidelity. Send no money now — just the postpaid card.

More than 1,500,000 families now belong to the world's largest record club

Columbia Record Club

Terre Haute, Indiana



3767-3768



2267



2881



3760



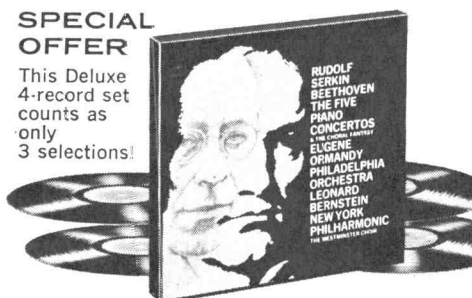
2640



2652

SPECIAL OFFER

This Deluxe 4-record set counts as only 3 selections!



BEETHOVEN'S FIVE PIANO CONCERTOS

2463-2464-2465. A monumental collection of the five Beethoven Piano Concertos as performed by world-renowned Rudolf Serkin backed by Leonard Bernstein and the New York Philharmonic and Eugene Ormandy and the Philadelphia Orchestra.



2875



3773



The pre-recorded cassette explosion.

Here's how Norelco can help you hear it.

Norelco has four distinctly different cassette machines. They all play back the new pre-recorded cassettes. And they all record on blank ones.

There's the improved portable Carry-Corder™ '150'—the first cassette recorder. The new '175'—the first monaural cassette port-

able with a big speaker. And the first two-home cassette recorders—the monaural '350' and the stereo '450'.

You're in the middle of the pre-recorded cassette explosion. Let Norelco help you hear it with any one of the first and finest line of cassette recorders.



Norelco®

the re-inventor of tape recording

North American Philips Company, Inc., High Fidelity Products Department,
100 East 42nd Street, New York, N. Y. 10017

CIRCLE NO. 42 ON READER SERVICE CARD

frequency range I need to provide me maximum enjoyment of music.

STEPHEN ANDRASKA
Maple Heights, Ohio

Music on TV

● I wish to take William Anderson to task because, in his editorial entitled "Music on Television" in the November issue, he completely ignored the abundant source of actual television music—namely, the shows themselves. Such prominent Hollywood composers as Elmer Bernstein, Jerome Moross, Maurice Jarre, George Dunning, and Richard Rodgers have contributed music to such shows as *The Great Adventure*, *River Boat*, *The Big Valley*, *Wagon Train*, and *Cimarron Strip*. There seems to be a trend among music critics today to ignore motion-picture and television music, praising it with faint damns at best. Music is an intrinsic and indispensable part of motion-picture and television productions, and the sooner producers, directors, and critics learn that, the sooner such productions will improve. And the next time you go to the liquor store to buy some Olympia beer, it won't be the commercial's visual aspects you'll be remembering; it will be the idyllic simplicity of that commercial's music, composed by the same man who wrote the sound tracks for *The Big Country*, *The Cardinal*, and *The War Lord*—Jerome Moross. Who says there isn't music on television?

STEPHEN GROSSCUP
Santa Monica, Cal.

Mr. Anderson replies: "I share Mr. Grosscup's admiration for the high quality of the music being written to accompany commercials and wild, wild west shows, but it will be a cold day in New York, with my turntable and tape recorder on the fritz, before I sit through either the commercials or the inane puerilities of the shows Mr. Grosscup mentions in order to hear it. And I think it will be an even colder day for both of us when the music has any effect whatsoever on the tired pop-pap it is serenading."

The Critics Confess

● Your article "The Critics Confess: Ten Composers I Hate" (October) called to mind a passage in George Martin's biography of Giuseppe Verdi. He says, "But to the Spanish plays he [Verdi] responded simply by matching their raw, elemental passion with equally straightforward passionate melody. As operas *Ernani*, *Il Trovatore*, and *La Forza del Destino* are easy to criticize or even ridicule until discussion reaches the theatrical success of the melodies. Then the critic's squeaky voice is overwhelmed by the roar of public approval."

W. G. WRIGHT
Detroit, Mich.

● The amusing experiment with your critics' musical idiosyncrasies ("Ten Composers I Hate") produced enlightening but rather terrifying results. As is quite common in such cases, the authors reveal a great deal about themselves but very little about the composers they discuss. In fact, much of the critical opinion embarrassingly resembles the things that might be said, in a state of complete mental nudity, on the psychoanalyst's couch. Any lack of knowledge, maturity, insight, or moderation shows up in mercifully.

(Continued on page 14)



TWO MEN WHO DID SOMETHING THAT HAS NEVER BEEN DONE BEFORE!

Urbie Green and Enoch Light plus twenty of the world's greatest trombonists create a unique stereo recording



CIRCLE NO. 46 ON READER SERVICE CARD

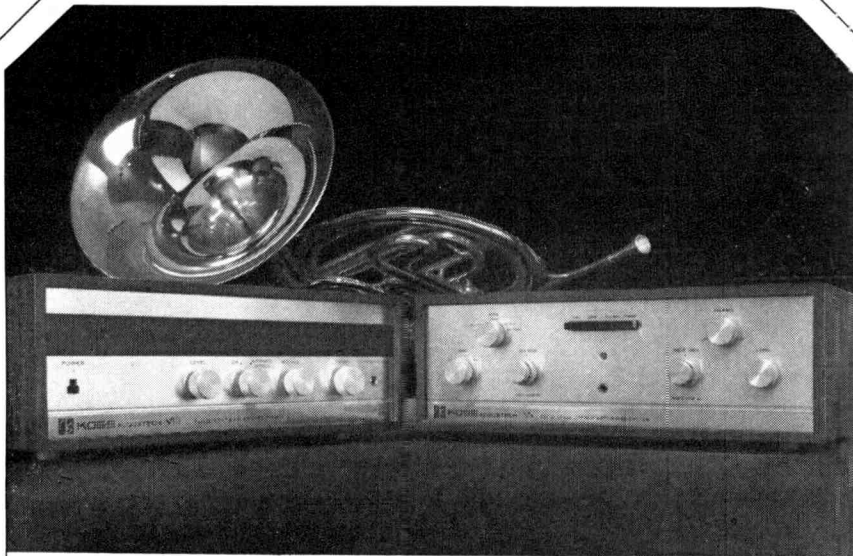
An incredible array of trombone virtuosi join Enoch Light and Urbie Green to create the warm, true, unrestricted, vital sound of 21 trombones . . . no overdubbing, no tape tricks, no shortcuts of any kind. This is the way 21 trombones really sound recorded on 35 mm magnetic film with the full distortion-free clarity of Project 3, the Total Sound stereo. The full line of new Project 3 Total Sound stereo recordings is at your dealers now!

Listen to Project 3 Total Sound . . . you may never again be satisfied with any other recorded sound.

Project 3
TOTAL SOUND

RADIO CITY, 1270 AVENUE OF THE AMERICAS
NEW YORK, N. Y. 10020, PHONE: (212) 765-9760

*A Trademark of The Total Sound Inc.



Koss-Acoustech VA Solid State Stereo Control Amplifier
Koss-Acoustech VIII Solid State FM Stereo Tuner

meet our 2-piece orchestra

It doesn't look like an orchestra. But turn it on, close your eyes . . . and you're in front of the Boston Pops. The 200 watt amp delivers a surge of full orchestral power, yet uncanny silence between passages. Instant rise time captures the entire cymbal clash and the tympani comes through with dramatic distortion-free power.

Want to change the program? Turn the tuning knob and scan the slanted dial (you'll see the dial only when tuner is on). Now check the tuning meter for precise reception . . . and your system becomes the Ramsey Lewis Trio. It's unquestionably pure sound, and plug-in etched circuit boards of glass epoxy guarantee that sound year after year.

Got your Stereophones? Turn off the big Amp and plug the phones right into the tuner. It has its own built in amp to drive phones (and high-efficiency speakers).

Performance, features, convenience . . . more than you get in "front row center."

specifications:

IHF Measurements **Model VA Amplifier.** Dynamic Power (1kHz) 4 ohm load: 200 watts; Dynamic Power (1kHz) 8 ohm load: 160 watts; RMS Power—8 ohm load: 80 watts; Frequency Response: ± 1 db 5 Hz to 200 kHz ± 3 db 3Hz to 300 kHz; Rise Time: Less than 1½ microsecond, free of overshoot and ringing; Intermodulation Distortion SMPTE, 60 and 600 Hz mixed 4:1; with 8 ohm load: Less than 0.15% at 2 watts through phono-inputs; Less than 0.45% at 60 watts rms both channels. **Model VIII Tuner.** IHF Sensitivity: 2 microvolts or better; Volume Sensitivity for Full Signal-to-Noise: 4 microvolts; Cross-Modulation Rejection: Better than 95 db; includes images, cross-modulation and all other unwanted signals; Intermodulation Distortion: 0.3% or better; Stereo Separation at 1kHz: 35 db or better; Capture Ratio: 2 db; Output to Power Amplifier: 1½ V at 100% modulation.

Prices: Model VA Amplifier \$399.00, Model VIII Tuner \$349.00.

KOSS

Koss Electronics Inc., 2227 N. 31st St., Milwaukee, Wis. 53208
Export Cable: STEREOFONE • Koss-Impetus/2 Via Berna/Lugano, Switzerland

CIRCLE NO. 1 ON READER SERVICE CARD

less clarity. Didn't your critics realize that they each handed you intellectual and psychological X-rays of themselves? I wouldn't be caught dead supplying my own musical hatreds for publication in a large-circulation magazine.

Lack of sufficient information is particularly evident in the cases of Max Reger and Alexander Scriabin. I'll eat my hat if any of the Reger-haters knows more than eight works of the over one-hundred-twenty opus numbers this composer has left; assuredly they are completely unfamiliar with the dozens of major choral works and practically all of Reger's keyboard compositions, which form the bulk of his output. The same seems to apply to Scriabin: the rejections are certain to be based on a knowledge of, at best, ten opus numbers out of a total of seventy-five.

FRITZ A. KUTTNER
New York, N. Y.

"Loves" and "hates" can hardly be anything but subjective and self-revelatory. We rejoice that our critics have the courage to be candid. As for Reger and Scriabin, is it not reasonable to believe that what little we hear of them today is the best of a bad lot, winnowed out for us by performers, critics, and discriminating audiences of the past? It is sadly true that prodigies of artificial resuscitation applied to "neglected" composers all too frequently reveal but one thing: there are ample reasons for their neglect.

The Basic Repertoire

● For years Martin Bookspan has not failed to remind me how different tastes can be. In his recent "Basic Repertoire" account of Mozart's D Minor Piano Concerto (September), for example, he mentions a "hysteria" in the now withdrawn Rudolf Serkin-Alexander Schneider disc. And he has praised Bernstein's recording of Bach's *Magnificat*. To my taste the Bernstein *Magnificat* is hysterical—and heavy-handed as well—while the Serkin-Schneider Mozart D Minor is even more moving in its spontaneity than the later Serkin-Szell.

JOHN MARBERRY
Greeley, Col.

Mr. Bookspan replies: "Mr. Marberry has jumped to a false conclusion. My reference to an earlier Serkin recording of the Mozart D Minor was not to the now withdrawn Serkin-Schneider version but to the even earlier Serkin-Ormandy recording. I quite agree with Mr. Marberry that the Serkin-Schneider performance was a splendid one, but since it too is no longer available, I felt there was no point in discussing it."

● After having followed your magazine for close to a year now, and dissecting Martin Bookspan's "Basic Repertoire" choices, I feel there is one glaring discrepancy in Mr. Bookspan's selection: to include two Gershwin works strikes me as entirely wrong.

The "Basic Repertoire" supposedly comprises classical music only. If it did not, I would be writing a scathing letter demanding that Duke Ellington and Miles Davis be given preference over Gershwin. But seeing that the first premise holds, I must demand that other classical composers be given priority over the pop-symphonic jazz of Gershwin. Certainly, Mr. Bookspan doesn't consider

(Continued on page 16)

uniCLUB

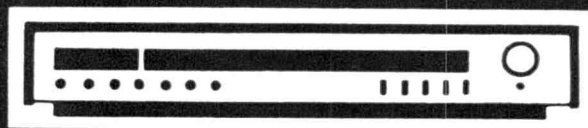
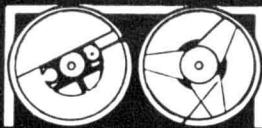
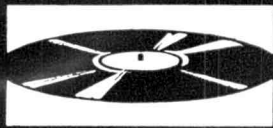
saves you more
on more of what you want!

RECORDS

TAPES

STEREO GEAR

BOOKS



THESE 10 FACTS ADD UP TO 10 REASONS TO JOIN uniCLUB NOW!

FACT 1—CHOICE—EVERY RECORD, TAPE, BOOK IN U.S.A.

uniCLUB has all the labels. All of them. No exceptions. Choose any LP or tape on over 350 different labels. Capitol • Columbia • RCA • Angel • DGG • Folkways • Mercury • London—to name just a few. Your selection is absolutely unlimited. Every LP and tape available in the U.S.A.

FACT 2—SAVINGS—HUGE! COMPARE UNICLUB PRICES

You save a minimum of 35% on LP's; 1/3 on tapes; 25% on books except texts. No guesswork about it—the prices are shown below.

	List	Through uniCLUB	You Save
ALBUMS	\$1.98	1.23	.75
	2.98	1.85	1.13
	3.79	2.39	1.40
	4.79	2.99	1.80
	5.79	3.69	2.10
TAPES	5.98	3.99	1.99
	6.98	4.65	2.33
	7.98	5.35	2.63
	8.98	5.99	2.99
	9.98	6.65	3.33
BOOKS	4.95	3.75	1.20
	5.95	4.50	1.45
	6.95	5.25	1.70
	7.95	5.95	2.00

FACT 3—REQUIREMENTS—NONE!

There is no requirement to buy anything until you wish. And you'll never get a record, tape or book until you order it.

FACT 4—COST TO JOIN—\$5

\$5 covers LIFETIME MEMBERSHIP in uniCLUB. There are no dues and no annual fees. There is never another fee although benefits are increasing all the time.

FACT 5—QUALITY—GUARANTEED PERFECT

You receive only factory-sealed brand new albums, tapes and books. You are guaranteed satisfaction with the quality of all purchases. A defective album or tape is always returnable at Club expense. Books are first quality original publishers' editions only.

FACT 6—ORDERING—MADE EASY AND CONVENIENT

A FREE Schwann catalog is sent upon joining. It lists over 30,000 LP's—every LP available on every label. No guesswork here either. The records you want you'll find under "Classical," "Popular," "Opera," "Folk," "Jazz," "Original Cast Shows," "Drama and Comedy," etc. The Harrison catalog, sent FREE upon joining if you request, does the same job for tapes and auto cartridges. uniGUIDE, the Club magazine, keeps you posted on releases of your favorite artists, supplements the Schwann and Harrison catalogs and lists extra-discount club specials.

FACT 7—"SPECIALS"—SAVE YOU EVEN MORE!

Specials are a regular feature of uniCLUB. You save extra dollars—often on a single item—40-80%. Specials appear in the uniGUIDE. See examples of the uniCLUB special's right here. You could save the price of your membership on 2 or 3 of these specials alone. You may order any or all of these 50% off items when you join—if you wish.

HERE ARE THREE FEATURES THAT ONLY UNICLUB HAS:

FACT 8—STEREO GEAR COSTS UP TO 50% LESS

• Acoustic Research • Ampex • Dynaco • Electro Voice • Empire • Kenwood • Tandberg • Garrard • Fisher • Sony. These are just a few of the manufacturers whose equipment you may buy at large discounts through uniCLUB. Both uniCLUB and full manufacturers' guarantees apply. Factory-sealed units are shipped promptly, always insured. Get a low uniCLUB quote on your needs and expand your system today!

FACT 9—BOOK DIVISION SAVES YOU 25%—ALL PUBLISHERS

Random House • Doubleday • Little, Brown • McGraw-Hill • Simon & Schuster • MacMillan—to name just a few. uniCLUB furnishes every book except *texts and *technical books at 25% discount. And, you get only original publishers' editions—not book-club editions. All paperbacks are available too at the same 25% discount. *Texts and technical books—10% off.

FACT 10—YOUR ORDER IS SHIPPED THE DAY UNICLUB GETS IT

Instead of just same-day processing—uniCLUB boasts same-day shipment of your LP and tape orders. Only uniCLUB can do it—500,000 LP's, tapes and cartridges in stock make it possible. (Books take slightly longer to reach you.)

MONEY-BACK GUARANTEE

If after receiving your uniCLUB materials you aren't convinced we meant what we said—that uniCLUB membership offers more Club for the money—or if you've simply changed your mind, tell us within 30 days and your money will be fully refunded at once.

GIFT MEMBERSHIPS

Save even on your enrollment. \$2.50 brings full privileges for life to friends, relatives and neighbors. Splitting the cost with one person brings cost down to \$3.75 each, with four others, cost is only \$3.00 apiece.

SPECIALS!

YOU CAN SAVE ON RIGHT NOW!

Every MGM popular, jazz or classical LP:

List \$5.79 — Just \$2.99

List \$4.79 — Just \$2.49

List \$3.79 — Just \$1.99

DGG entire catalog, mono & stereo: List \$5.79 — Only \$3 per disc.
High-Fidelity Special — The new Garrard Synchro-Lab SL95:
List \$129.50 — Club Special \$83.00

uniCLUB Inc.

255 West 42nd Street
New York, N. Y. 10036

DEPT. HS18

Send my Free Schwann catalog, order blanks and uniGUIDE by return mail. \$5 enclosed guarantees me:

1. LIFETIME MEMBERSHIP in uniCLUB
2. 35%-80% savings on LP albums, 1/3 off on tapes, 25% on books.
3. No requirements ever to buy anything. Nothing will ever be sent until I order it.

I must be delighted with uniCLUB or within 30 days I will let you know and receive a full refund.

NAME _____

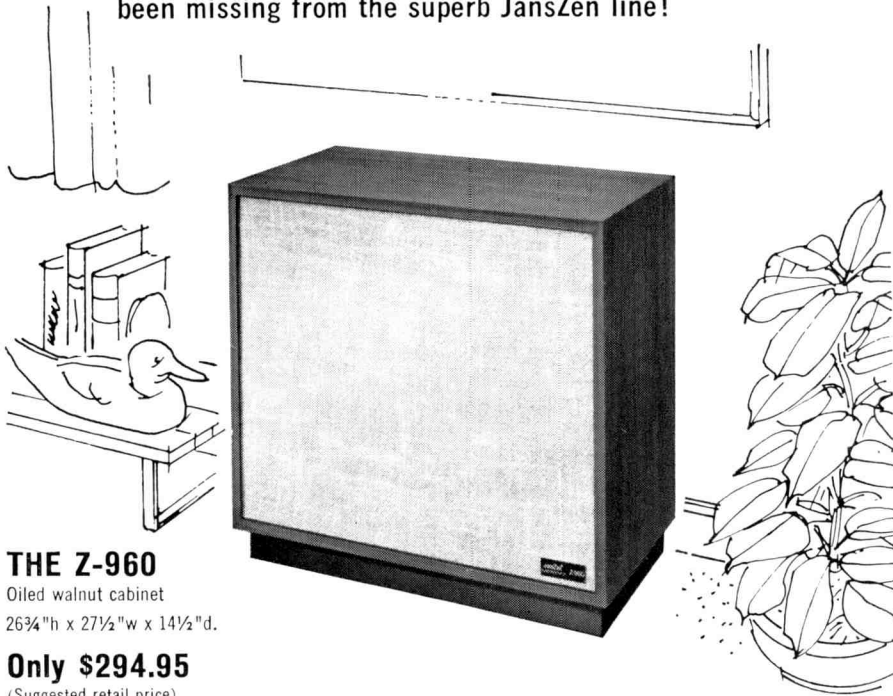
ADDRESS _____ CITY _____ STATE _____ ZIP _____

Send gift memberships at \$2.50 each to names and addresses listed on attached sheet.

I am also interested in pre-recorded tapes.

Now . . . another new and very special JansZen* electrostatic speaker system!

Special, because buyers have asked JansZen dealers time and again for a specific combination of our electrostatic speakers and woofer, for the famous JansZen fidelity and for a show-off cabinet . . . all at an in-between price. Here it is . . . the one model that has been missing from the superb JansZen line!



THE Z-960

Oiled walnut cabinet
26¾" h x 27½" w x 14½" d.

Only \$294.95

(Suggested retail price)

If one of your big ambitions has been to step up to JansZen performance and quality and you've been hamstrung by a not-so-big budget, you can start stepping up now. The Z-960 has been custom-designed for you.

It features three of our superlative JansZen electrostatic speakers mated to our Model 350D dynamic woofer. Repeat: *three* electrostatics! The Model 350D, of course, is the only dynamic woofer specifically designed to match the JansZen electrostatic and is hermetically sealed into a fiberglass-filled enclosure.

The Z-960 is a fully integrated system . . . the sole function of which is pure *reproduction* of the original sound from 30 to over 30,000 Hz. It is a rich extension of the acoustical authority of smaller JansZen systems and its definitive performance can hardly be differentiated from our costliest system. It holds its own in any size room and with the finest associated equipment money can buy.

Ask to hear the Z-960 at your dealer's. Its performance and price will speak for themselves. If you wish, write us direct for descriptive literature.

*JansZen speakers incorporate designs by Arthur A. Janszen and are made exclusively in the United States by

NESHAMINY ELECTRONIC CORP.

JansZen FURLONG, PENNSYLVANIA, U.S.A. 18925

CIRCLE NO. 40 ON READER SERVICE CARD

Gershwin a better composer than Hindemith, Vaughan Williams, or Schoenberg—or, for that matter, Liszt, Satie, Webern, Ives—the list is much longer. If we are to respect Mr. Bookspan's selections, let him adhere to basic truth and forget glossy entertainment values. Gershwin may have written some great songs, but the Concerto in F and *An American in Paris* cannot compare with *Matris der Maler* or Vaughan Williams' Fifth Symphony.

RALPH I. VOERTH
Maple Shade, N. J.

Mr. Voerth misunderstands the fundamental concept of "The Basic Repertoire": the choices are not predicated upon the ultimate value of works, but rather upon the frequency with which they are heard in the concert halls and in recordings. Few musical scholars believe that Gershwin wrote "jazz" (neither did he), and many consider him a classical composer (see Edward Jablonski's article in HiFi/STEREO REVIEW, May, 1967).

Dangerously Curious

● Mark me as one of the "dangerously curious" who find Stravinsky's youthful Symphony in E-flat thoroughly enjoyable—William Flanagan's review of the Columbia recording (September) notwithstanding.

One has the impression that the critic is so thoroughly disappointed that Stravinsky didn't write a *Firebird* at the age of twenty-five that he is unable to tolerate Stravinsky's early exercise, which contains for me very pleasant echoes of Balakirev, Glazounov, and Tchaikovsky (as well as *Stravinsky*, despite what Mr. Flanagan may think).

I would point out that Bartók's First Rhapsody, written when he was two years younger, demonstrates scarcely a hint of Bartók's later voice; it is decidedly influenced by Liszt and Richard Strauss. Debussy's *L'Enfant Prodigue*, written when he was twenty-two, is mostly Massenet. The *Burlesque* of Richard Strauss (twenty-one years old) is pseudo-Brahms. But that doesn't mean that we can't enjoy them. And when Flanagan makes statements like "mostly painful and boring" or "the tunes are alarmingly third-rate" of the Stravinsky symphony, I answer—baloney! Reminiscences of Tchaikovsky do not mean automatic inferiority. My wife has caught me on a few occasions humming along with some of the symphony's "non-existent melodies." But perhaps my tastes are not as cultivated as the critic's.

BERNARD A. DUPONT
Providence, R. I.

Mr. Flanagan replies: "It seems to me that I have mentioned the influence of Strauss on the early Bartók so frequently in this magazine that it has begun to bore even me. And—I concede it humbly—if my constant reader bears no more evidence of Debussy's oncoming radicalism in L'Enfant Prodigue than he does of Stravinsky's in the Symphony in E-flat, then his training in musical analysis is either more or less sophisticated, his ear either far more or far less 'cultivated' than mine.

"I have never even thought—much less written—that 'reminiscences of Tchaikovsky,' or any other composer, in themselves constitute 'automatic inferiority.' And while I did write, and believe, that the tunes in

(Continued on page 18)

POPULAR SCIENCE Magazine Says:

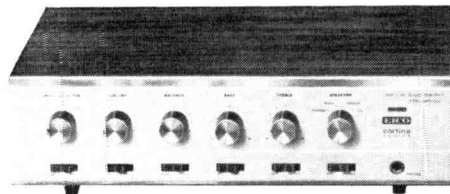
"The EICO Cortina Series are low-cost audio components that look and sound like high cost components."

HIRSCH-HOUCK LABS Says:

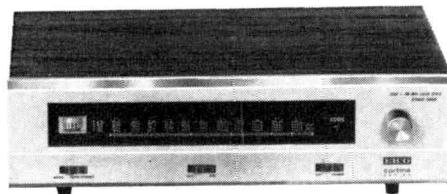
"We can't think of a better value in High Fidelity Amplifiers."

HIGH FIDELITY Magazine Says:

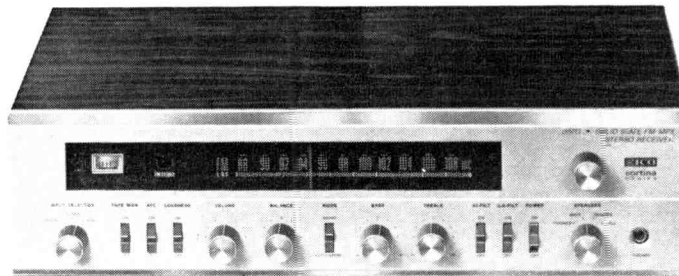
"EICO has come up with a real winner.."



89.95 Kit
129.95 Wired



89.95 Kit
129.95 Wired



159.95 Kit
239.95 Wired

THE VERDICT IS IN.

High Fidelity authorities agree: Cortina's engineering excellence, 100% capability, and compact dramatic esthetics all add up to **TOTAL STEREO PERFORMANCE** at lowest cost.

Take a lesson from your own personal shopping experience: *Top Buys* have a way of quickly becoming scarce. Be sure you get *your* Cortina. Get over to your local EICO dealer real soon.

Cortina 3070 A full capability 70-watt All Silicon Solid-State Stereo Amplifier for \$89.95 kit, \$129.95 wired, including cabinet.

Total Music Power: 70W into 4 ohms. 50W into 8 ohms. Harmonic Distortion: less than 0.8%. IM Dis-

ortion: less than 2% at full power. Hum & Noise: 72db below rated output. Frequency Response: ±1.5db 5Hz to 100KHz; ±0.5db 8Hz to 60KHz. Channel Separation: 40db. Size (HWD): 3 1/8" x 12" x 7 3/4".

Cortina 3200 Solid-State Automatic FM Stereo Tuner for \$89.95 kit, \$129.95 wired, including cabinet.

Usable Sensitivity IHF: 2.4uv for

30db quieting. Channel Separation: 40db at 1KHz. Signal-to-Noise Ratio: 60db. Capture Ratio: 4.5db.

Image Rejection: 45db. Selectivity: 45db. Audio Frequency Response: ±1db 20Hz to 15KHz. Size (HWD): 3 1/8" x 12" x 7 3/4".

Cortina 3570 70-Watt All Solid-State FM Stereo Receiver for \$159.95 kit, \$239.95 wired, including cabinet.

Same specifications as Cortina Tuner and Amplifier. Size (HWD): 4 1/8" x 16" x 9".

SIMPLIFIED KIT ASSEMBLY — New EICO exclusive circuitry techniques make kit building easier, faster, more enjoyable. RF, IF and Multiplex circuitry of tuner and receiver are all supplied completely pre-assembled and pre-aligned. Each channel of the amplifier and receiver uses 3 etched printed-circuit module boards.

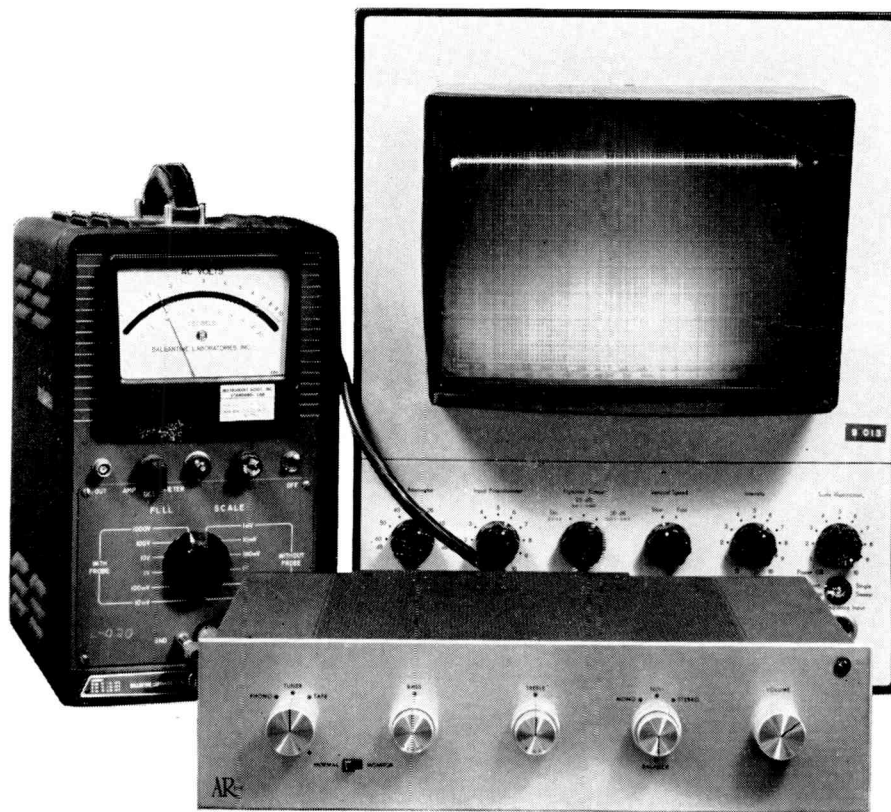
cortina by EICO
Designed, manufactured in U.S.A. and guaranteed by EICO.

CIRCLE NO. 25 ON READER SERVICE CARD

EICO Electronic Instrument Co., Inc. HFS-1
283 Malta Street, Brooklyn, N.Y. 11207
 Tell me where I can have a free Cortina demonstration
 Send me free 32-page catalog on EICO's 200 "best-buy"
Name _____
Address _____
City _____
State _____ Zip _____

the perfect amplifier

One property of a perfect amplifier is its ability to reproduce musical tones of any pitch without changing their relative loudness, so that the sound of each musical instrument retains its identity. An amplifier with this capability would produce the straight line shown on the screen of the test instrument in the photograph below. The amplifier should be able to do this at the highest power levels needed for home music reproduction, without measurable distortion.



Both channels of this AR amplifier are simultaneously operating at just below clipping level, delivering more than 60 watts each to 4-ohm loads continuously. As the frequency of the input signal is gradually changed from 20 to 20,000 Hz, a bright spot moves across the calibrated screen of the test instrument. Any decrease in power output in this frequency range would have caused a downward deflection of the spot and a deviation from a straight-line trace on the screen. The small undulations at each end are produced by the test equipment.

Tests performed on every AR amplifier insure that harmonic distortion is less than 0.5% from 20 to 20,000 Hz at full power, and intermodulation less than 0.25% at full power, which is 60 watts per channel rms, 4 ohms; 50 watts per channel rms, 8 ohms; both channels running.

the new AR^{INC.} amplifier

Only a few of the amplifiers available to the public are capable of the performance demonstrated on the opposite page, which satisfies the requirements of music, the limits of hearing, and the size and acoustics of homes and apartments. Until now, such amplifiers have cost \$310 to \$720, and have been massive and cumbersome even when made with transistors. Now, one is available at \$225 which occupies less space than some preamplifiers alone: the new AR amplifier.

1 High-fidelity amplifiers should be compared on the basis of the realism with which they reproduce music for home listeners. Test equipment can also be used to compare amplifiers, taking known data on hearing and music into account. By either comparison method, we know of no amplifier which could provide more realistic sound for critical listeners.*

2 The AR amplifier is complete. Its control section includes everything needed for home listening and recording, with new types of tone and balance controls. A metal case comes with it, as do the accessories needed for custom mounting (an optional walnut case is available for \$15).

The AR amplifier also comes with an unprecedented 2-year guarantee of its performance and workmanship, covering all parts, labor, reimbursement of freight charges to and from the factory or authorized service station, and new packaging, if required, also free of charge.

**Non-technical readers, as well as those with some knowledge of electronics, will find helpful information in AR's new guide to amplifiers, "You Don't Have To Be An Engineer". Full specifications of the AR amplifier (33 graphs) are also available. Both items are free on request.*

ACOUSTIC RESEARCH, INC., 24 Thorndike Street, Cambridge, Massachusetts 02141

NEW PRODUCTS

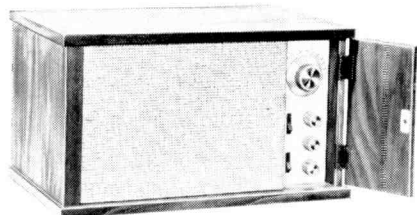
A ROUNDUP OF THE LATEST HIGH-FIDELITY EQUIPMENT



● **3M Company** has introduced the Wollensak Model 3500, a two-speed ($3\frac{3}{4}$, $1\frac{7}{8}$), dual-power mono portable tape recorder. The 3500 has a 5-inch reel capacity, an automatic recording level with manual override, separate volume and tone controls, and an electrically controlled speed change. The specifications at $3\frac{3}{4}$ ips include a record/playback response of 100 to 8,000 Hz ± 3 db, and wow and flutter of less than 0.4 per cent. The Model 3500 measures $11\frac{1}{2} \times 10\frac{1}{4} \times 4$ inches and is powered by six $1\frac{1}{2}$ -volt "D" cells or 120-volt a.c. line current. Weight is $8\frac{3}{4}$ pounds. Price: \$89.95.

Circle 173 on reader service card

● **Lafayette** has introduced the Criterion IV, a high-fidelity solid-state FM radio. The radio has a 5-inch full-range, high-compliance speaker with a massive magnet assembly mounted in a completely sealed, damped enclosure utilizing the acoustic-suspension principle. The radio has a built-in FM antenna system (plus external antenna terminals), an input for a tape recorder or record player with a ceramic or crystal cartridge, a tape-output jack, and a



jack for connection of an external 8-ohm speaker. The audio section has a 6-watt music-power rating (at 8 ohms), and the tuner section has an IHF sensitivity of 2.5 microvolts. Front-panel controls are: tuning, volume, bass, treble, input-selector switch, and main-remote speaker-selector switch. The oiled-walnut cabinet measures $14\frac{1}{2} \times 9 \times 8\frac{1}{4}$ inches. Price: \$69.95.

Circle 174 on reader service card



● **Shure** has expanded its series of Unisphere "ball-type" microphones to include three new models with special problem-solving design features. Included in the series is the Model 585SAV Unisphere A (shown) which has a gain control mounted on the microphone case. This control enables the user of the microphone to change the loudness of the public-address system to which the microphone is connected. It gives a speaker or singer, for example, the ability to control his own voice volume for dramatic effects. It is ideal for use when the amplifier is inaccessible or out of easy reach.

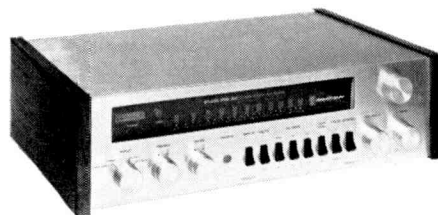
The second new Unisphere is the Model 565S, which has the added advantage of an on-off switch included as part of the swivel connector assembly. The third new unit is the Model 566, which offers special shock mounting to prevent pickup of mechanical vibrations and handling noise. It also has a Cannon-type connector and a combination impedance-changing (50 or 150 ohms) and on-off switch.

Like all Unisphere microphones, these new models are designed to minimize feedback as well as provide effective

control of explosive breath sounds and wind noise. All are unidirectional dynamic microphones with uniform cardioid pickup patterns and a frequency response of 50 to 15,000 Hz. Price of the Model 566 is \$84, the Model 565S is \$60, and the Model 585SAV is \$43.50.

Circle 175 on reader service card

● **University's** first electronic component is the Studio Pro 120 stereo-FM receiver. Among the receiver's features are the use of front-panel rocker switches for selection of loudness compensation, selection of either of two pairs of stereo speakers, tape monitoring, high- and low-frequency filters, and so forth. The unit has automatic stereo FM switching, interstation-noise muting, an illuminated tuning meter, and tape-head inputs. Specifications include a mu-



sic power of 60 watts per channel at 4 ohms and 0.8 per cent distortion. The continuous power output rating is 30 watts per channel at 0.3 per cent distortion. Frequency response is 10 to 100,000 Hz within 3 db. Hum and noise at the magnetic phono input is -60 db; high level, -80 db. The individual bass and treble controls for each channel have a range of ± 18 db at 20 and 20,000 Hz, respectively. The FM sensitivity is 2.3 microvolts (IHF), distortion is less than 0.5 per cent at 100 per cent modulation, capture ratio is better than 1 db, and stereo separation is 40 db at 1 kHz. Dimensions are $4\frac{1}{2} \times 12 \times 16\frac{1}{2}$ inches. Price: \$379.50.

Circle 176 on reader service card



● **Crown-Corder's** new automatic telephone-answering accessory, the Telephone Valet Model CTA4000, is designed to operate either independently or in conjunction with an external transistor tape recorder. This unit automatically answers the telephone, relates a 30-second previously recorded

message (from its built-in recorder), and then feeds a 30-second caller's message into an external tape recorder. When the caller finishes, the telephone Valet automatically hangs up the phone.

The number of incoming calls recorded is limited only by the tape-reel size and speed of the recorder used. When used with a $3\frac{1}{4}$ -inch reel recorder, up to one hundred and twenty messages may be recorded. A cassette recorder, using a C-90 cartridge, will record forty-five calls on each side of the tape. Power consumption when on standby is 4 watts. This unit may also be used without an external tape recorder simply to answer the telephone with pre-recorded information messages. Connection to the telephone requires no wiring and takes less than 10 minutes. The

(Continued on page 26)

If you're still listening to 1963 stereo, update with Scott (THERE'S A SOUND REASON)

How long have you had your present amplifier or tuner . . . five years? Maybe eight or ten? A lot has happened since you bought it . . . new developments like Field Effect Transistors, Integrated Circuitry, direct coupled all-silicon output. And the performance you *are* getting just isn't the performance you *could* be getting. Don't miss out . . . check out these two new Scott advanced components:

Scott 260B 120-Watt Stereo Amplifier — This solid-state power-house includes a tone-control by-pass switch for laboratory-flat response, plus dual microphone inputs and headphone jack conveniently mounted on the front panel. Professional control complement includes dual speaker selector switches, rumble and noise filter controls, loudness compensation, and tape monitoring facilities. This is truly the audiophile's dream amplifier!

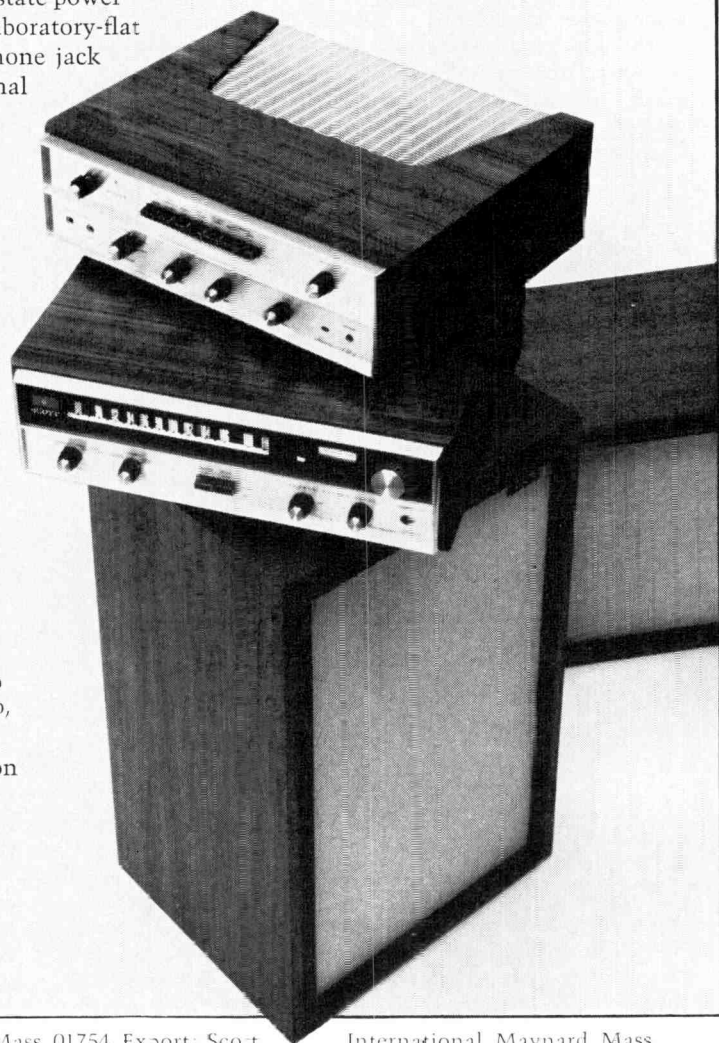
260B Specifications: Music power rating at 0.8% harmonic distortion, 120 W @ 4 ohms, 100 W @ 8 ohms; Frequency response, 15-30 kHz \pm 1 dB; Power bandwidth, 20-20 kHz; Hum and noise, -55 dB; Price \$294.95.

Scott 312D FM Stereo Broadcast Monitor Tuner — 3-Field Effect Transistor front end and Integrated Circuit IF bring the 312D's performance close to the theoretical limits of sensitivity, selectivity, and interference rejection. 3-way meter provides for signal strength, center tuning, and multipath correction. Levels of both phone and amplifier outputs may be independently varied by special front panel controls.

312D Specifications: Usable sensitivity, 1.7 μ V; Capture ratio, 1.9 dB; Cross modulation rejection, 90 dB; Stereo separation, 40 dB; Selectivity, 46 dB; Signal/noise ratio, 65 dB; Price \$319.95.

Write for complete information and specifications on Scott stereo components.

Scott . . . where innovation is a tradition



© 1967, H.H. Scott, Inc.

H.H. Scott, Inc., Dept. 245-01, 111 Powdermill Road, Maynard, Mass. 01754, Export: Scott

International, Maynard, Mass.

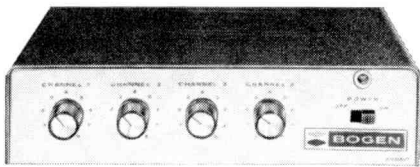
NEW PRODUCTS

A ROUNDUP OF THE LATEST HIGH-FIDELITY EQUIPMENT

unit has a walnut-grain finish and its dimensions are approximately 2 x 8 $\frac{1}{4}$ x 10 $\frac{1}{2}$ inches. Price \$99.95.

Circle 177 on reader service card

● **Bogen** is producing a mixer-preamplifier, the MX6A-T, that greatly extends the performance capability of public-address systems and tape recorders. The MX6A-T is an a.c.-powered solid-state unit that can be used to add four more microphones or other signal sources to an existing system. Up to three MX6A-T units may also be paralleled to provide twelve individual inputs. Each of the



four inputs has an individual volume control and can handle either high- or low-impedance microphones or electric guitars. In addition, two of the four channels will accept high-level sources such as an FM tuner or a crystal-cartridge phonograph. The output signal of the MX6A-T is fully capable of driving any integrated amplifier or separate power amplifier. The MX6A-T uses standard phone jacks for high-impedance microphones and guitars, screw terminals for low-impedance microphones and RCA-type phono jacks for output to the auxiliary input of a public-address amplifier or tape recorder. List price: \$74.85.

Circle 178 on reader service card

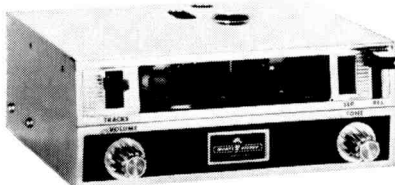


● **RCA** has announced the introduction of a new low-cost eight-track stereo cartridge tape player for the home. The MJC-26 Mark 8 player, a compact unit with built-in playback preamplifiers, plugs into the tape-

input or auxiliary jacks of stereo consoles, receivers, and amplifiers. The unit plays the Stereo 8 tape cartridges that offer up to eighty minutes of playing time. Available in a walnut-finished wood cabinet, the MJC-26's dimensions are 3 $\frac{3}{8}$ inches high, 6 $\frac{3}{4}$ inches wide, and 9 $\frac{3}{4}$ inches deep. The unit operates on standard a.c.-line voltage. Price: \$69.95.

Circle 182 on reader service card

● **Muntz Stereo-Pak** is producing the M-45, a fully automatic four-track stereo-cartridge playback unit. The M-45 model has controls for volume, tone, reject, track



selection, and channel separation. Power output is 6 watts per channel, frequency response is 50 to 12,000 Hz, and the unit operates on 12 volts d.c. The M-45 measures 7 inches wide, 3 inches high, 7 inches deep, and weighs 5 $\frac{1}{2}$ pounds. Price: \$59.95.

Circle 183 on reader service card

● **Altec Lansing** has published a twenty-one-page illustrated brochure (AL1368) covering the 1968 Altec Lansing line of high-fidelity components and speaker systems. Among the additions made to the Altec line are a variety of high-style furniture equipment cabinets and speaker systems. The units are fully described, and technical specifications are given.

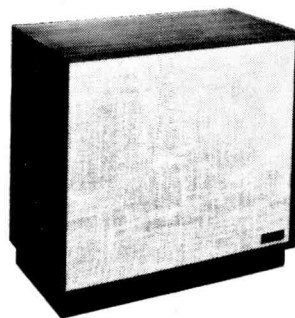
Circle 184 on reader service card

● **Allied** has announced the introduction of its Model 399 solid-state AM/FM stereo receiver. The 122-watt unit uses nuvistors in the FM front-end tuning sections and double-tuned i.f. transformers. Other features include interstation-noise muting on FM, separate clutch-type bass and treble controls for each channel, scratch and rumble filters, a speaker-off switch for use with a front-panel stereo headphone jack, a tape-monitor switch, and tape-head inputs with separate equalization for 7 $\frac{1}{2}$ - and 3 $\frac{3}{4}$ -ips tapes. The FM-tuner section of the 399 has a 1.5-microvolt sensitivity (IHF), automatic stereo switching, stereo separation better



than 35 db, and a signal-to-noise ratio of 65 db. The AM section has a 5-microvolt sensitivity. The amplifier stages are capable of delivering 43 watts per channel (continuous) into 4-ohm loads at 0.5 per cent distortion. Harmonic distortion at 1-watt output is 0.13 per cent; IM distortion is 0.7 per cent. Hum and noise at the high-level inputs are -80 db; at the low-level inputs (magnetic-phono and tape-head), -65 db. The Model 399 measures 5 x 12 x 16 inches and comes in a metal case. Price: \$299.50. The optional walnut case shown is \$19.95.

Circle 185 on reader service card



● **JansZen's** new Z-960 console loudspeaker system employs three JansZen electrostatic radiators matched within 1 db for treble reproduction. Low frequencies in the Z-960 are handled by the Model 350D cone woofer, designed specifically to be the low-frequency counterpart of the JansZen electrostatic in terms of minimum distortion and good transient response. The heavily weighted, high-compliance cone of the woofer is capable of $\frac{5}{8}$ -inch excursions without breakup or frequency doubling. The woofer is in a sealed fiber-glass-filled enclosure and, together with the three JansZen electrostatic radiators, provides a linear frequency response from 30 to beyond 30,000 Hz. Amplifier power required is 20 watts or higher. The oiled-walnut cabinet of the Z-960 measures 26 $\frac{3}{4}$ inches high, 27 $\frac{1}{2}$ inches wide, and 14 $\frac{1}{2}$ inches deep, and is meant to be floor-standing. Price: \$299.95.

Circle 186 on reader service card

Life Begins at \$299.95

A wise investment in stereo equipment will open up a whole new way of life for you. An ever-changing background of symphonies, operas, band concerts . . . recreated in three-dimensional stereo . . . makes a home more than just a collection of furniture. And even if you have less than \$300 to spend, you don't have to settle for less than the best in stereo . . . Scott.

(THERE'S A SOUND REASON)

The Scott 342B 65-watt stereo receiver offers you razor-sharp reception and luxury features that competitive receivers can't match. Stereo broadcasts turn the 342B on to stereo *automatically* . . . you don't have to leave your chair. You can listen to speakers in one or several rooms of your home, or turn all speakers off and listen in privacy through stereo earphones. Professional controls let you vary the music to your own tastes and room acoustics . . . you can even set Bass, Treble, and Volume individually for *each* channel! Technically speaking, the 342B has Integrated Circuit IF, Field Effect Transistor front end, and all-silicon direct coupled output, just like Scott receivers costing hundreds of dollars more.

For a few dollars more, you can enjoy a new insight on AM programming. Scott's 382B is the 65-Watt AM/FM counterpart of the 342B. Both of these best-selling Scott receivers offer you top performance value at the lowest possible price.

Life begins at your Scott dealer's showroom.

342B/382B Features: Dual Bass, Treble, and Loudness controls; Noise filter; Dual speaker switches; Mono-Stereo switch; Stereo balance switch; Tape monitor switch; Professional tuning meter; Stereo headphone output.

342B/382B Specifications: Music power rating, 65 Watts at 4 ohms load, 50 Watts at 8 ohms; Frequency response, 18-25,000 Hz \pm 1 dB; Power bandwidth, 25-20,000 Hz; Usable sensitivity, 2.2 μ V; Selectivity, 42 dB; Stereo separation, 36 dB; Capture ratio, (342B) 2.5 dB, (382B) 3 dB;

Price: (342B) \$299.95, (382B) \$339.95.



Scott . . . where innovation is a tradition

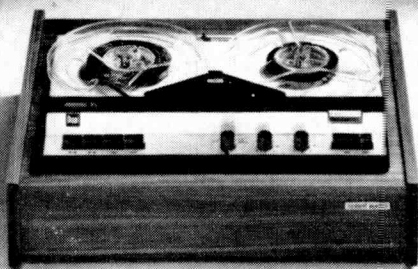


©Copyright 1967, H.H. Scott, Inc.

H.H. Scott, Inc., Dept. 245-01, 111 Powdermill Road, Maynard, Mass. 01754, Export: Scott International, Maynard, Mass.
For your free copy of Scott's 1968 Guide to Custom Stereo, Circle Reader Service Number 100

Dual's reputation
for precision
has now gone to its heads.

The Dual TG 27



We built our new Dual 4-track stereo tape deck with the same precision and reliability we put in our Dual turntables.

Take the tape heads, for example. We make them ourselves. Their unique hyperbolic contour provides maximum tape-to-head contact. And they go a long way towards explaining the Dual's superior high and low end response. (They also eliminate the need for pressure pads.)

The advanced braking system coordinates a slip-clutch and a tension limiter, so that even the thinnest tapes won't stretch or break.

Other features of the Dual TG 27 include pushbutton operation, mixing controls for any two inputs, level controls that operate synchronously or independently, sound-on-sound, "pause", automatic end-of-tape stop and instant tape-counter reset button.

For more information, write **United Audio**, 535 Madison Ave., New York, N.Y. 10022.



Specifications: Frequency response at 7½ ips, 25-16,000 Hz ±2.5 db; at 3¾ ips, 30-13,000 Hz ±2.5 db. S/N ratio: 50 db minimum. Wow and flutter, 0.1% maximum. All-silicon solid state. Dimensions: 14½" x 11". **\$199.50.** Combination base and plexiglass, walnut-panelled dust cover, **DCB-27 \$34.50.**

Hi Fi Q&A



By
**LARRY
KLEIN**

Stereo Separation Specification

Q. I have noticed that in the specifications of many stereo amplifiers and amplifier sections of stereo receivers there is a specification for "separation." If a stereo amplifier is, in effect, made up of two separate mono amplifiers, how can there be varying degrees of stereo separation?

KENNY SAX
Clifton, N.J.

A. Loss of separation in an amplifier occurs when the signal going through one channel impinges on the signal going through the other channel. Separation is tested by feeding an audio test tone to one channel and measuring how much of the test tone appears in the other channel. The test-tone signal level in channel A, for example, would be referred to as 0 db and the signal measured in the other channel would be so many db less than 0 db—a minus figure such as -50, -60, etc.

Loss of separation in an amplifier comes about because of undesired coupling between the channels. This coupling is almost always capacitive and results when wires or components such as resistors or capacitors are in close proximity to each other. A minute capacitance is set up between the parts that "leaks" the signal into the opposite channel. In effect, very small coupling capacitors are connected between all components in the chassis and between all components and the metal chassis itself. How important this "distributed" capacitance is, in terms of amplifier performance, is determined both by the impedances of the stages or circuits involved and the level and frequency of the signals going through them. A high-frequency, high-level signal in a high-impedance circuit stands the best chance of producing unwanted coupling to an adjacent circuit. In any case, unless the design of an amplifier is really poor, its stereo separation should far exceed that which is available on tapes and discs.

Incidentally, loss of stereo separation in FM tuners and phono cartridges occurs for entirely different reasons, and no parallels can be drawn between the three types of components.

Tape Twitter

Q. When my tape recorder is in the fast-forward mode or rewinding a tape, I hear through my speakers a rapid high-pitched twittering that is clearly the recorded "message" on the

tape. The sound is faint but quite audible. Does this mean that my tape recorder's heads are misaligned or that the tape is rubbing across—and wearing down—the heads?

FRANK RIVERA
San Juan, Puerto Rico

A. First of all, the sound you are hearing has nothing to do with alignment. Your second guess may be more accurate, but almost all recent recorders have some provision for preventing tape-to-head contact when the recorder is in a fast-forward or rewind mode. The twittering may result simply from the proximity of the tape's rapidly shifting magnetic field to the playback-head gap without there being any actual physical contact between the tape and head. With the machine set to rewind, but switched off, tighten the tape by hand over the guides and check to see if there is any tape-to-head contact. If there is any clearance at all, then you have nothing to worry about.

Tuning Bass-Reflex Cabinets

Q. Several years ago, while browsing through an acoustical engineering book, I came across some formulas for designing ducted-port bass-reflex speaker enclosures. I have designed and constructed several different enclosures using the formulas and obtained very satisfactory results. Please comment on the application and validity of the formulas.

TERRY K. SCHANDEL
Oregon City, Ore.

A. The difficulty with cabinet-tuning formulas—whether applied to ducted ports, tubes, or simple square cutouts—is that many designers seem to think that all that has to be known about the speaker mechanism is its free-air resonant frequency (the resonance of the speaker-cone assembly before the speaker is installed in a cabinet). The numbers related to the free-air resonant frequency, plus the enclosure's internal cubic volume, are inserted into the particular formula. The dimensions of the tuning port can then be derived.

I must admit that until I became involved in designing the large bass-reflex cabinet that appeared in the August, 1964 issue of *HiFi/STEREO REVIEW*, this was my impression also. But in attempting to determine how many ½-inch tun-

(Continued on page 32)

**Several interesting facts about the design of the new Dual 1015:
after you read them, you may wonder why other automatic turntables aren't made this way.**

You've probably noticed that many of the new automatic turntables, in several price ranges, offer features like anti-skating, cueing, special motors of one kind or another, plus some pretty fancy designs for overall appearance.

But our features are different because we don't offer them just for the sake of offering them. They are there to perform a real function. With precision and accuracy.

Take our anti-skating control.

It's there because, quite simply, our low-mass tonearm skates. That isn't something to be ashamed of. It indicates bearing friction so low (less than 40 milligrams) that there's no internal resistance to skating. Even at 1/2-gram.

And that's not all.

Our anti-skating control is continuously variable and dead-accurate. It doesn't under-compensate or over-compensate. This means the stylus will track with equal force on both walls of the stereo groove.

Okay, now for our cueing control.

The purpose of cueing is to lower or lift a stylus at a predetermined spot on a record. Accurately and gently. If it does neither, or just one of these things, it's not cueing.

Dual's cue-control is accurate and gentle. Rate of descent is 0.5cm/second and controlled by silicon damping and piston action (which also prevent side-thrust from anti-skating). And the cue-control works on automatic as well as manual start.

Here are a few more things that should interest you:

Our hi-torque motor is a constant speed motor. (It maintains record speed within 0.1% even if voltage varies from 80 to 135 volts.) It's quieter and more powerful than a synchronous motor, and is precisely linked to the platter to turn the record accurately. Not just itself. Our counterbalance has practically no overhang (for compactness), and locks in position to prevent accidental shifting.

By the way, about that fancy design for overall appearance:

We know that a lot of you wouldn't even consider a top, precision product if it didn't look good.

With all that precision, and a price of only \$89.50, the Dual 1015 gets better looking all the time. (So do all the other Duals, from the 1010S at \$69.50 to the 1019 at \$129.50.)

**United Audio Products, Inc., 535
Madison Ave., New York, N.Y. 10022**

Dual 1015



Now at Radio Shack... Scott's great new ready to play stereo!

Plug-together components take the mystery out of hi-fi

You can say goodbye to screwdrivers, soldering irons, and the problems of matching (and not *mis*-matching) the parts that make up a top-rated audio system. *And* the cabinet problem, *and* the space problem, *and* the price problem. Even the number of pieces has been reduced from 7 to 3. The new Scott 2504 compact music system combines the FM stereo tuner, stereo amplifier, and stereo automatic turntable into ONE stunning module. Plug in the two precisely matched Scott acoustic suspension speakers and . . . presto . . . you have the world's best buy in an integrated radio/record music center at \$299.95. All cabinetry, cables, and antenna included . . . nothing else to buy!

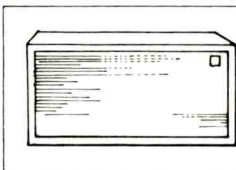
Wondering about the performance and features of this fantastic value?

Just compare these specifications and features with those of the most expensive component systems you might have considered but couldn't afford: Frequency response, 18-25,000 Hz; Usable sensitivity, 2.0 μ V; Stereo indicator light . . . lights on stereo, but not on noise; Stereo headphone output for private listening; Separate switches to control main and remote speakers; Separate Bass, Treble, and Loudness controls for *each* stereo channel; Special tape monitor controls for expert off-the-air taping; Accurate tuning meter for precise tuning; Easy-to-read slide-rule dial; Weighted, balanced tuning control knob; Microphone/guitar inputs let you make your own music; Professional turntable by Garrard plays records of all sizes, all speeds; Highly sensitive Pickering magnetic cartridge with diamond stylus faithfully reproduces every sound on your records.



ONLY
\$299.95
NO MONEY DOWN

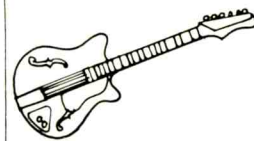
YOU CAN ADD ANY OF THESE ACCESSORIES FOR FURTHER ENJOYMENT



Remote speakers, for music in other rooms.



Stereo headphones, for private listening.



Guitar . . . make your own music.



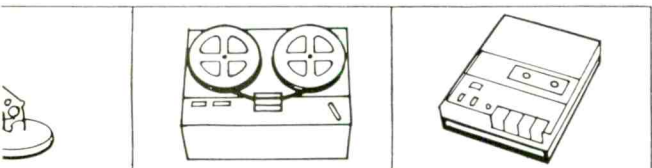
Microphone . . . public address

SCOTT COMPACTS ARE AVAILABLE AT RADIO SHACK STORES IN THE CITIES LISTED BELOW:

- | | | | | | | | |
|--|---|---|--|---|--|-----------------------------------|--|
| EAST and SOUTH | Kentucky
Bowling Green
Newport | Ohio
Cincinnati
Cleveland
Columbus
Lima
Willowick | Virginia
Arlington
Hampton
Norfolk
Portsmouth
Virginia Beach | Orange
Stamford
Torrington
West Hartford | Framingham
Leominster
Warwick | East Providence
Warwick | Bakersfield
Covina
Downey |
| Florida
Jacksonville
Orlando
West Palm Beach | Maryland
Baltimore
Langley Park
Rockville | Pennsylvania
Greensburg
Philadelphia
Pittsburgh
Plymouth Meeting | NEW ENGLAND and NEW YORK | Maine
Bangor
Portland
Waterville | New York
Albany
Binghamton
Buffalo
New York
Rochester
Schenectady
Syracuse | Arizona
Phoenix | Garden Grove
Glendale
Inglewood
La Habra
Long Beach
Los Angeles
Mountain View
No. Hollywood
Oakland (S. L.)
Pasadena
Pomona
Sacramento
San Bruno |
| Georgia
Atlanta | Michigan
Detroit | Tennessee
Memphis
Nashville | Connecticut
Bridgeport
Hamden
Manchester
New Britain
New Haven
New London | Massachusetts
Boston
Braintree
Brockton
Brookline
Cambridge
Dedham | New Hampshire
Manchester | Rhode Island
Providence | |



... COMPLETES YOUR COMPACT STEREO MUSIC SYSTEM:



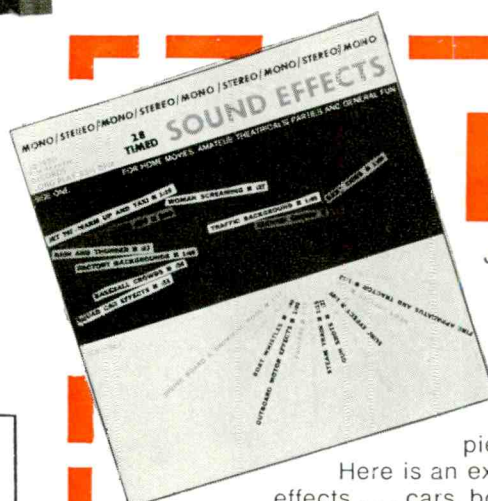
... for your system. Tape recorder . . . build your own tape library. Cartridge player . . . play your car stereo cartridges.

San Diego
San Francisco
Santa Ana
Santa Monica
Torrance
West Covina
Colorado
Denver
New Mexico
Albuquerque
Oregon
Portland
Utah
Salt Lake City

Washington
Seattle
MIDWEST
Arkansas
Little Rock
Kansas
Kansas City
Wichita
Louisiana
Gretna
New Orleans
Shreveport
Minnesota
Duluth

Minneapolis
St. Paul
Missouri
Kansas City
St. Joseph
St. Louis
Nebraska
Omaha
Oklahoma
Oklahoma City
Tulsa
Texas
Abilene

Arlington
Austin
Brownsville
Corpus Christi
Dallas
El Paso
Fort Worth
Houston
Irving
Lubbock
Midland
San Antonio
Sherman
Tyler
Waco



FREE!


Just for listening to any hi-fi system at any Radio Shack store, Radio Shack will give you this fabulous stereo recording . . . a fascinating gift you'll want to own as a show-piece for your LP collection!

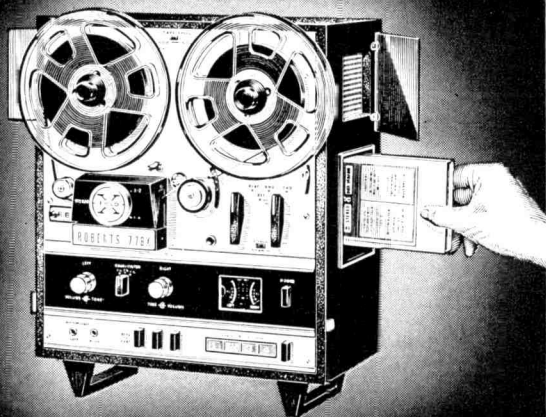
Here is an exciting collection of sound effects . . . cars, boats, crowds, trains, battle sounds, planes, and others too numerous to mention. Just perfect for home movies, amateur theatricals, parties, and all-around fun! Bring this coupon to your nearest Radio Shack store, and receive this thrilling stereo gift.

No mail orders will be accepted on this very special offer.

make your own CARTRIDGES
for your 8 track car stereo

with ROBERTS stereo TAPE RECORDER

Record and Play your favorite music from
LP records and FM Multiplex with the exclusive
ROBERTS Solid-State CROSS  FIELD
quality in 4 speeds
... even the new LP 17/8 ips



Model 778X
less than \$430



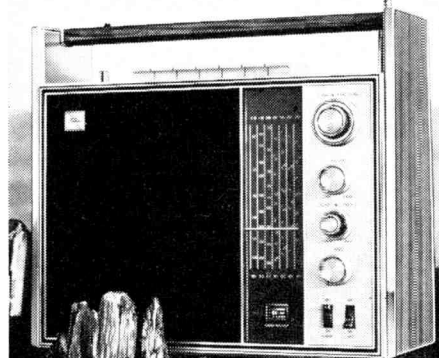
the Pro Line

ROBERTS

Division of Rheem Manufacturing Company
Los Angeles, California 90C16

CIRCLE NO. 48 ON READER SERVICE CARD

Grab an earful of the world!



19 Transistor 7 Band Shortwave/FM/
AM 2-in-1. Newest for the portable
people! A solid state masterpiece
in genuine teak with chrome ac-
cents. World wide coverage. LW,
150-400 kc. SW₁, 1.6-4 mc. SW₂,
4-10 mc. SW₃, 10-20 mc. SW₄,
20-30 mc. Receives international
shortwave plus FAA weather/
navigation reports, CAP, ship-to-
ship and ship-to-shore communi-
cations.

Toshiba Navigational MGC
(Manual Gain Control) allows re-
ceiver to operate as sensitive
direction-finding/homing device. 4
world-scanning antennas plus 2
external antenna connections.

7 keyboard band selectors.
Electronic tuning meter. Switch-
able Automatic Frequency Con-
trol. Pilot lamp. 1-8 watt output.
2 speakers.

Full 1 year parts and labor war-
ranty. The Toshiba Global Model
19L-825F. \$180.00*

Toshiba

THE INTERNATIONAL ONE

Toshiba America, Inc., New York, N. Y. *Mfg. Suggested Retail Price

CIRCLE NO. 62 ON READER SERVICE CARD

ing holes (designed to function as a "distributed port") were required for specific speaker resonances, I ran into a puzzling phenomenon. I found that one brand of speaker with a 35-Hz free-air resonance might require, say, seventy tuning holes while another speaker, also with a 35-Hz resonance, might require as many as ninety holes. Disbelieving the results of my tests, I reran the free-air resonance measurements on the speakers and rechecked the curves on the cabinet with the speakers in it three or four times and found that the results were always the same. Simply stated, any formula used to tune bass-reflex cabinets has to take into account the relative contributions of the mass and compliance of the speaker cone in determining its free-air resonant frequency, and the cabinet has to be so designed that the enclosure volume and port size are balanced against them. The question is discussed and the techniques for deriving the required data are given in a reprint of an article by a Jensen engineer that is available free from Jensen Manufacturing, Technical Service Dept. HF/SR, 5655 West 73 Street, Chicago, Illinois 60638. (Enclose a stamped self-addressed legal-size envelope.)

In addition, for the August, 1965 issue of HiFi/STEREO REVIEW I wrote an article "How To Tune a Bass-Reflex Enclosure" that does not tell how to select the optimum size of enclosure, but which will serve excellently when one has to work with a given size of cabinet or when one does not wish to undertake the rather involved techniques required in the reprint mentioned above.

Wearing Diamonds

Q. Assuming that the diamond is the hardest substance known to man and that vinyl is not, why does a diamond phonograph stylus ever wear out?

JARED HOKE
West Hartford, Conn.

A. The "hardest substance known to man" is not an infinitely hard substance; hence, why should it not be worn down by traveling over literally miles of groove walls? Under those conditions, for any substance not to be worn down, it would have to be infinitely hard—or the groove walls would have to be frictionless. Also, the many abrasive particles that find their way into the grooves act as a "grinding compound" that tends to wear the diamond more than the elastic, deformable vinyl.

Because the number of questions we receive each month is greater than we can reply to individually, only those questions selected for this column can be answered. Sorry!

HiFi/STEREO REVIEW

We believe that the Nocturne Five-Thirty delivers a degree of excellence never before attainable at such a modest price.

That's what we said when we introduced the Five-Thirty stereo receiver.

We said other things too.

Like it's the best receiver we have ever made. And that its sound will please the most critical ear; its styling the most critical eye.

We must have been very convincing.

Within a relatively short time, the Five-Thirty has become one of the best selling stereo receivers on the market.

The Five-Thirty is a complete, solid state control center with a powerful 70-watt

stereo amplifier and an AM/FM, FM stereo tuner that delivers astonishingly clear broadcast reception. The most advanced integrated micro-circuits are employed for absolute reliability and unsurpassed performance. Ultra-wide frequency response, well beyond the range of hearing, coupled with very low distortion, guarantees flawless sound quality with extraordinary clarity and spaciousness.

The AM section of the Five-Thirty employs a MOSFET front-end and separate AM board with its own I.F. strip. The result is a radically new sound in AM—an AM radio that serious music listeners can take seriously.

If AM radio isn't your cup of tea, we

make an FM/FM stereo receiver called the Five-Twenty. It's identical to the Five-Thirty in every way, minus the AM section.

Whether you choose the Five-Thirty or the Five-Twenty, we guarantee you'll be buying a receiver that delivers a degree of excellence never before available at such a modest price.

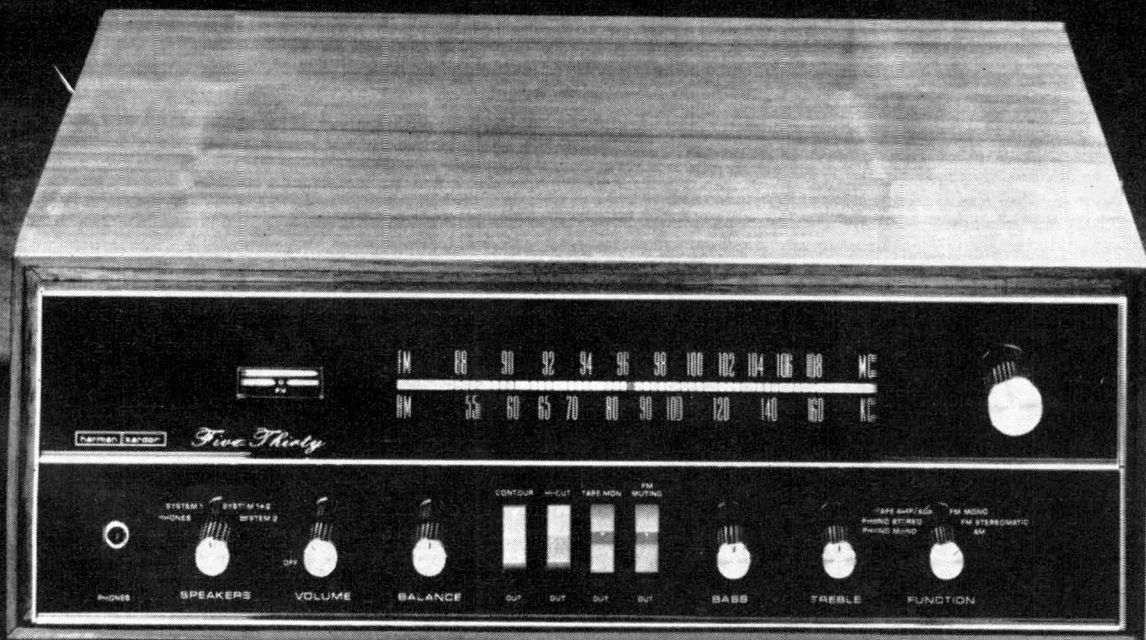
Now where have we heard that before?

For more information write Harman-Kardon, Inc., HFSR-1, Plainview, New York 11803.

harman kardon

A subsidiary of Jervis Corporation

“...excellence never before attainable at such a modest price.”



The Nocturne Five-Thirty Stereo Receiver

LOOKING FOR ABSOLUTE PERFECTION?

You may never find it, but it's unlikely that you will ever come closer than with the

UHER®
9000
TAPE
DECK

by
martel



FAULTLESS REPRODUCTION AND PERFORMANCE CAN ONLY BE HAD THROUGH SUCH METICULOUS ENGINEERING AND MANUFACTURING PROCEDURES AS THOSE FOLLOWED BY UHER IN A FACTORY DEVOTED EXCLUSIVELY TO TAPE RECORDER PRODUCTION. THE UHER 9000 HAS ALL THE FEATURES NORMALLY INCLUDED IN THE MOST SOPHISTICATED TAPE DECKS, PLUS MANY EXCLUSIVE UHER FEATURES UNOBTAINABLE ELSEWHERE.

IF TAPE RECORDING IS A SERIOUS THING TO YOU, YOUR TOTAL ANSWER IS THE UHER 9000.

EQUALLY FINE IN CONSTRUCTION, AND AT THE VERY TOP IN ITS FIELD OF APPLICATION IS THE

UHER®
4000-L



FULLY PORTABLE BATTERY OR AC OPERATED TAPE RECORDER. IT PERFORMS WITHOUT REGARD FOR TIME OR PLACE, AND IN ITS LEATHER CARRYING CASE IS READY TO GO ANYWHERE.

THE UHER 4000-L IS THE FIRST CHOICE OF REPORTERS, NATURALISTS, EXPLORERS, AND BUSY EXECUTIVES THE WHOLE WORLD OVER. FAITHFULLY RECORDING WHATEVER YOU HEAR WHEREVER YOU ARE, THE UHER 4000-L WILL BECOME YOUR CONSTANT COMPANION.

TO LEARN MORE ABOUT THESE PROMINENT MEMBERS OF THE FIRST FAMILY OF TAPE RECORDERS, SEE YOUR UHER DEALER. OR YOU MAY USE THE COUPON TO OBTAIN COMPLETE INFORMATION.

SOLE U.S. IMPORTERS



martel
ELECTRONICS

2339 SOUTH COTNER AVENUE,
LOS ANGELES, CALIFORNIA 90064

NEW YORK 1199 BROADWAY
CHICAGO, 5445 NO LINCOLN

MARTEL ELECTRONICS, Inc.

2339 So. Cotner Ave.,
Los Angeles, Calif., 90064.

HFSR 1

Please send me at once literature on the entire Martel product line.

.....

.....

.....Zip.....

AUDIO BASICS

by HANS H. FANTEL

SPECIFICATIONS XVII: TRANSIENT DISTORTION

HAVING dwelled at length last year on the subject of distortion, I now propose to start the new year and end the old topic with a bang. In acoustic parlance, a "bang" is a *transient*, and its meaning is the same as it is in the hotel trade—something that comes and goes quickly. Transients are sounds bursting forth suddenly at high loudness levels and breaking off just as fast.

Music is full of transients, such as the crash of the stick on the drumhead, the clangorous moment of contact between a pair of cymbals, or the hard impact of piano hammers against the strings where the score says *fortississimo*. Yet, in the sum total of orchestral sound, these dramatic collisions, however spectacular, are less pervasive than their subtler relatives—the plucking of strings or the tiny explosions of compressed air produced by the tongue against the reeds of woodwinds. These, too, are transient sounds, lasting in their critical phase only a small fraction of a second. In the orchestral aggregate, these unobtrusive transients contribute vitally to the texture of sound.

The trouble is that transients are difficult for amplifiers and speakers to reproduce. They fall victim to *transient distortion*, a deplorable process that can turn a sharp, hard click or snap into a fuzzy "thunk." The reason is that electronic circuits and speaker cones are afflicted with inertia. They have trouble starting—or stopping—swiftly enough to reproduce the transient's wave shape accurately.

When the sudden bang comes along, it causes a fast-rising electric pulse. Engineers, describing the visual pattern presented by such a pulse on the oscilloscope, say that it has a steep wavefront or a fast rise time. This means that the amplifier (or speaker) must jump to the signal's peak correspondingly with virtually no inertial delay. And when the bang is gone, the amplifier must go back into neutral as promptly as it left.

Only very good components can do this. Others tend to round off the steep wavefronts and/or persist in jiggling away in spurious oscillation long after the transient signal has ceased. The ear perceives such transient distortion as a sonic pall cast over the whole texture of the sound, clouding the musical detail. The sound gets soggy, and its washed-out quality drains the music of its tension and excitement.

Unfortunately, there is no altogether satisfactory way of measuring transient distortion. Some manufacturers specify the "rise time" of their amplifiers—that is, the amount of time it takes to reach a specified output level. Measured in microseconds (millionths of a second), this is a pretty good index to the amplifier's reaction speed, and it correlates with the amplifier's frequency-response range. Sometimes specifications will show scope traces of an amplifier's (or phono cartridge's) reproduction of square-wave patterns. Similar patterns (tone bursts) are sometimes shown to characterize the transient response of loudspeakers.

Such square waves and tone bursts, like all test tones, are simplifications of the more complex waveforms generated by musical instruments. Consequently, these tests provide only presumptive evidence of an amplifier's transient characteristics. In my opinion, the human ear, listening for sharpness of tonal definition and clarity of texture, still remains the most reliable test instrument for transient distortion.

Pioneer built *Integrated Systems** for Audiophiles and Music Lovers because Audiophiles and Music Lovers built Pioneer



The Integrated Systems concept is the latest and most advanced development towards the faithful reproduction of sound. It is the result of the creative engineering and advanced technology of Pioneer Electronics Corp., one of the world's largest manufacturers of audio components.

The heart of Pioneer's Integrated Systems concept is the new IS-80, a component in which two power amplifiers combined with an electronic crossover are totally integrated with three speakers in each channel of a stereo system. The electronics are specifically designed to the speakers' requirements—wide frequency range, linearity, and extremely low distortion over a wide dynamic range.

The integration of these elements produces, for the first time, distortion-free sound and an unbelievable clarity.

But the Integrated Systems concept extends even beyond this superior approach to sound reproduction.

The IS-80 Integrated System may be coupled with Pioneer's SC-100 preamplifier, a distinguished instrument for the control and preamplification of any program source of music.

Or the IS-80 may be coupled with the new IS-31, a complete combination AM-FM stereophonic tuner, turntable, and preamplifier housed in a handsome cabinet. Its striking design makes it adaptable to any room and eliminates any problems of installation.

The technology and design of these concepts are pioneering the future of new areas of high fidelity. As Webster defines it . . . **to pioneer is to open or prepare the way for others to follow.**

Advance your present system or establish your musical reproduction foundation with tomorrow's equipment today! Be sure to hear Pioneer's Integrated Systems at a Pioneer franchised dealer in your area. Pioneer Integrated Systems are available in combinations from \$1,125 up.

Write for more data and an invitation to one of our demonstrations of this unique concept. We are scheduling nationwide demonstrations now, to be made in conjunction with franchised dealers and factory personnel. Mail the coupon below.

PIONEER ELECTRONICS U.S.A. CORPORATION
140 Smith St., Farmingdale, Long Island, N. Y. 11735 • (516) 694-7720



Manufacturers of Quality Audio Components • Receivers •
Turntables • Speaker Systems • Loudspeakers • Headsets

PIONEER ELECTRONICS U.S.A. CORP.
140 Smith St., Farmingdale, Long Island, New York, 11735

Dear Sirs:

- I am interested in hearing a demonstration of the Integrated Systems and would appreciate receiving an invitation when demonstrations will be in my area.
- Please send me literature.

Name _____

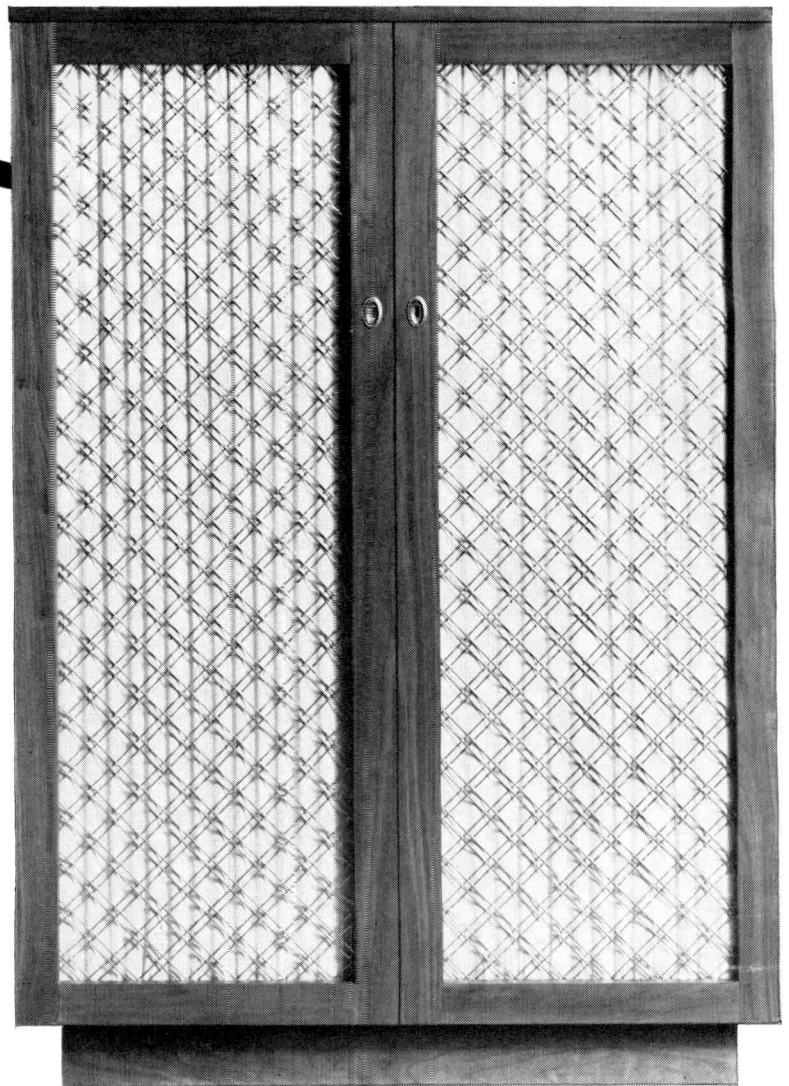
Address _____

City/State _____ Zip Code _____

My Hi-Fi dealer is _____

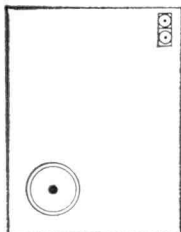
Cross Over to ALL THE MUSIC

The unique Bozak "building block" principle is a speaker system growth that helps you cross over, in easy stages, to truly full sound. Grow to the Concert Grand — the optimum in home music enjoyment. You can begin with as few as three speakers — a bass and a tweeter pair. Then, when *you* decide, add another bass and another tweeter pair. It's just like adding violins to your orchestra! Step three — add a midrange and a crossover network. You now have a truly big system. Improve upon it, when you want to, by completing the array with two more bass speakers, two more tweeter pairs, and a second midrange — fourteen speakers in all. This is sound quality you have to hear to believe! Listen to it at your nearest Bozak dealer's — or to other Bozak models. If you don't know your dealer's name, ask us. Then, go hear "ALL the music at its big sound best."

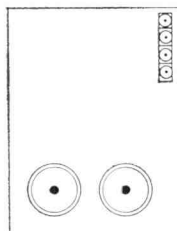


P.O. BOX 1166 • DARIEN
CONNECTICUT 06820

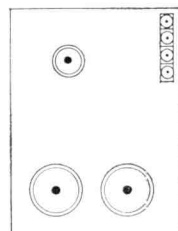
CONCERT GRAND
CLASSIC ENCLOSURE



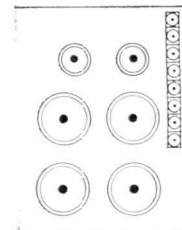
Begin with B-199A
Bass and
B-200Y Treble Pair



Add Second B-199A
and Second E-200Y



Add B-209B Midrange
and N-10102A
Crossover

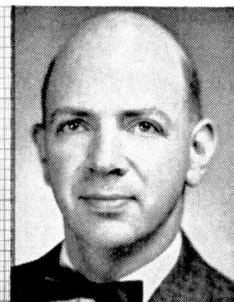


Add Two B-199A's,
a Second B-209B
and Two B-200Y's

EXPORT: Elpa Marketing Industries, Inc., New Hyde Park, N.Y. 11040

TECHNICAL TALK

By JULIAN D. HIRSCH



● **STEREO-MONO REVISITED:** I have received the following very interesting communication in response to my recent column dealing with stereo-disc reproduction. Its author, Dr. Duane Cooper of the University of Illinois' Coordinated Science Laboratory, is one of the leading investigators in the area of disc reproduction problems, and his comments deserve to be brought to the attention of the readers of this column.

In his Technical Talk column for October, 1967, Julian Hirsch discussed the technical quality of stereo *vs.* mono discs and explained the advisability of replacing the mono cartridge with a modern stereo one for the playing of mono discs. Mr. Hirsch and I agree on the cartridge question, but we differ on the inherent quality of the stereo disc. It seems to me that in an all-other-things-equal comparison, the technical facts indicate that the mono disc offers less distortion.

Of the four major distortion mechanisms (tracking-failure error, vertical tracking-angle error, tracing error, and groove-deformation error) that record playing is heir to, Mr. Hirsch nominates only one as inherently worse for stereo. That one, "pinch effect," is but one aspect of tracing error. Mr. Hirsch also casts doubt on the reality of the effect for stereo reproduction. Actually, all four phenomena degrade stereo-disc playback far more than mono, but Mr. Hirsch could be allowed to dispose of tracking-failure error by the use of adequate tracking force, and tracking-angle error by standardization (15 degrees) of the vertical tracking angle. However, there still remain the latter two problems, and they are not nearly so easily taken care of.

Though still present, tracing error and groove-deformation error are of lesser consequence for mono, because the push-pull symmetrical "movement" of the mono groove walls cancels a large part of the distortion effects in the lateral direction. They are left largely uncanceled in the vertical direction—to which motion the mono-mode connection renders the pickup insensitive. (For an eerie experience, try listening to distortion in the near-absence of program simply by misphasing the mono-mode connection for playback of a mono record.) However, tracing and deformation errors are serious for the stereo record because each of the two groove walls carries its own signal, and hence the stylus is not moved in a systematic push-pull fashion. This means that there is no systematic error cancellation in any direction—which accounts for Mr. Hirsch's inability to discover any improvement in the performance of a stereo disc upon switching to the mono mode.

As a demonstration of the sonic difficulties encountered by a record attempting to produce a low-distortion signal from each groove wall separately, the reader can play the following "dirty trick" on one of his high-quality, but loud, mono records: listen in the stereo mode with but one of the channels operating. The owner of a mono system can do this too if he has a stereo cartridge. Compare the sound with that of the same record played in the mono mode. The observed difference in quality is exactly the all-other-things-equal quality difference between mono and stereo recordings.

Reliable distortion measurements have been reported on in the professional literature. For example, at a moderate recording level near 3 centimeters per second, figures ranging from some 10 to 50 per cent have been measured for the distortion generated by combined tracing and deformation error in normal stereo discs. The amount depends upon the distance of the groove from the record center, upon the recording level, and (because of the deformation factor) upon tracking force. The measurement was of the 500-Hz intermodulation beat tone generated from a test disc with recorded tones at 4,000 and 4,500 Hz.

Though it is one of the few valid ways of measuring record distortion, this beat-tone IM test is not widely used in other applications. Of course, these record-distortion mechanisms do produce harmonic distortion, but only rather weakly (contrary to Mr. Hirsch's categorizing pinch as largely second-harmonic in nature), and in such a manner that the effects of tracing and deformation error tend partly to cancel one another. In beat-tone IM testing, however, the distortions seem to augment one another. With the conventional IM test discs, such as used by Mr. Hirsch, the spurious tones largely cancel one another when the distortion reading depends on the distortion analyzer's detecting only amplitude modulation. Record distortion is radically different from, say, amplifier distortion, and for records, the usual distortion measurements are largely meaningless except for detecting tracking failure. Of the old test standbys, only the little-used beat-tone IM seems to have retained its value.

I am sure Mr. Hirsch would agree that those measured 10 to 50 per cent distortion figures are wildly in excess of any that could be considered reasonable for a high-fidelity amplifier. The question might be whether we should revise our distortion standards generally, or whether we could agree that there might be something peculiar to record distortion that makes it more tolerable. There seems to be little question about the audibility of the distortion, in principle. Audibility in this case is determined by the phenomenon of auditory masking, in which low-frequency tones impair the audibility of high-frequency ones, especially those

REVIEWED THIS MONTH

•
Dynaco PAT-4 Stereo Preamplifier
Empire 4000M Speaker System
Ortofon SL-15T Phono Cartridge

high-frequency tones near the harmonics of the low-frequency ones. Beat-tone IM should therefore be as audible as harmonic distortion or conventional IM, if not more so, and the standards for it should be at least as critical.

Tolerance of distortion is a different question. It appears to be a learned accommodation in which the ear is "brainwashed" into dismissing persistent, or possibly gradually increasing, distortion. Distortion that changes abruptly (as in an A/B test) or that increases suddenly with an increase in signal (as in an amplifier near overload or in record tracking failure) is the more acutely noted, though still sometimes tolerated. It happens, however, that tracing and deformation error do increase gradually and in proportion to the signal level, so that there could be a stealthily induced, tolerance-producing brainwashing. I have even noticed something of the sort in myself. I took a vacation during which I was isolated from TV, radio, and hi-fi for several weeks, but did get to some concerts. Upon returning home, my stereo system sounded incredibly bad, but no fault could be found. In a day or so it sounded as usual. If tolerance is an answer, it is a pretty unreliable one upon which to pin one's hopes.

The only real answer is to cure the distortion. Tracing and groove-deformation errors appear to be of roughly equal significance in today's art, and are stubbornly resistant to simple solutions. In the past ten years, however, deformation has been reduced through reductions in the mechanical impedance of the phono-cartridge stylus assembly. Efforts at reducing tracing error by switching to the elliptical stylus have been less successful, because the improvement is nearly overpowered by the greater groove-

deformation potential of the elliptical. The residual uncanceled distortion on the mono disc is the more sensitive to any improvement, so that the value of the elliptical—what there is of it—is the more often noted on mono discs.

The only cure that is capable of removing tracing error altogether seems also to offer, through gentling the transient groove-wall shock, substantial reductions in deformation error at the same time. I refer to specially designed waveform-shaping machinery, such as RCA's tracing correlator and Telefunken's tracing simulator. So remarkable is this unplanned side benefit that the performance with wrong-sized playback styli, such as the elliptical, seems also to be greatly improved. The improvement may be largely expended, as seems to be the choice of RCA Victor, in making possible higher recording levels, so that substantial gains may be made against surface noise, while still obtaining some reduction in distortion. The other choice, which seems to be Telefunken's, is to maintain a roughly unchanged position relative to noise, but to try to bring the distortion down as much as the tape masters will permit.

While these efforts provide some grounds for optimism, it is still the case that the other recording companies have no evident plans to follow the anti-distortion lead of RCA and Telefunken. Since the distortion situation is not satisfactory, and since the mono record is the one offering the lower distortion, the cynic will not be surprised to learn that among these other companies there may be numbered the world's leaders in the movement to abandon the manufacture of mono records. The lover of mono records, prizing their clarity above the blandishments of the stereo illusion, could have hoped for better. *D. H. C.*

Mr. Hirsch replies:

I will concede at the outset that my knowledge of phono-cartridge tracking problems is quite superficial when compared with Dr. Cooper's. However, certain portions of his communication require comment.

In reference to the "dirty trick" Dr. Cooper describes in his fourth paragraph: I tried this on many records, of every caliber of quality, with the best equipment I could muster. At no point could I hear the slightest difference between stereo and mono connections, other than a slight reduction of rumble in the mono mode. If the difference referred to by Dr. Cooper really exists, it must be of exceedingly small magnitude—at least in relation to the other distortions of the recording/reproducing process.

In the following paragraph, he writes of the distortion measurements reported on in the professional literature. Surely this can't be the same kind of distortion we are used to hearing from amplifiers, tuners, and speakers! Most of us find distortion levels of a few per cent intolerable in these portions of our systems. I can't see how anyone could listen to records if distortions in the tens of per cents were present at ordinary levels. Could it be that the numerical scale of offensiveness is radically different in record distortion compared with amplifier distortion? Otherwise, how is it that we can hear one or two per cent of amplifier distortion in the presence of 50 per cent record distortion? This reminds me of the "Doppler-distortion" problem in loudspeakers.

It is analytically provable, measurable in the laboratory, and yet, as far as I know, it cannot be heard except in the most artificially extreme case (when it approaches 50 to 100 per cent). It seems to me that to speak of 50 per cent (or even 10 per cent) IM distortion in records is misleading if it is not stated that this amount may be equal in auditory offensiveness to, say, 0.5 per cent of "ordinary" or amplifier distortion. These numbers are for example only—I have no idea what the actual relationship may be.


I agree about the matter of tolerance for distortion in sound. However, I think that there is a great difference between the acceptance of the nearly 100 per cent distortion from a transistor radio by a teenager and the "nit-picking" criticism of many audio enthusiasts. I don't believe that I could ever develop a tolerance for most types of distortion, yet I am aware that I can accept "less-than-perfect" sound under a variety of conditions and enjoy it, while remaining fully aware of its deficiencies.

Regardless of the theoretical and practical evidence of the advantages of the pre-distortion disc-recording technique, many listeners consider that the commercial discs so produced reaching the market are frequently sonically inferior to other conventionally made records. I would rather not get into a record-criticism session, but to me it is obvious that other factors in making and playing records far outweigh the matters dealt with by Dr. Cooper. *J. D. H.*

(This month's equipment reports begin on page 40)

Our most-honored receiver




*Sherwood Electronic Laboratories
 proudly announces
 that its most-honored FM receiver,
 the Model S-8800, has been further enhanced
 with the addition of Field-Effect Transistors.*

The highly-rated Sherwood S-8800 now features Field Effect Transistors (FET's) in the RF and Mixer stages to prevent multiple responses when used with strong FM signals.

Among the Model S-8800's many useful features are two front-panel switches for independent or simultaneous operation of main and remote stereo speaker systems.

Visit your Sherwood dealer now for a demonstration of those features which make Sherwood's new Model S-8800-FET receiver so outstanding. With Sherwood, you also get the industry's longest warranty—3 years, including transistors.

Compare these Model S-8800 specs: 140 watts music power (4 ohms) • Distortion: 0.1% (under 10W.)
 • FM sensitivity: 1.8 μ v (IHF) • Cross-modulation rejection: -95db • FM hum & noise -70db.

CIRCLE NO. 51 ON READER SERVICE CARD

Model S-8800 custom mounting \$369.50
 Walnut leatherette case \$378.50
 Hand-rubbed walnut cabinet \$397.50

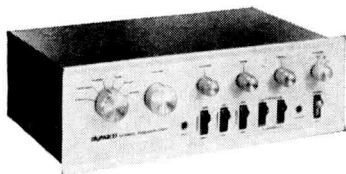
Sherwood

Sherwood Electronic Laboratories, Inc.,
 4300 North California Avenue,
 Chicago, Illinois 60618. Write Dept. R1.

≈ EQUIPMENT TEST REPORTS ≈

By Hirsch-Houck Laboratories

DYNACO PAT-4 STEREO PREAMPLIFIER KIT



● HAVING achieved an extremely high level of performance with vacuum-tube circuits, Dynaco engineers were understandably cautious about leaping into the solid-state arena. As we see it, they felt that any new solid-state component must offer a tangible advantage over its vacuum-tube counterpart. We have seen this philosophy embodied successfully in their Stereo 120 power amplifier (HIFI/STEREO REVIEW, June 1967). Now, the popular PAS-3X preamplifier has a potential successor in the new PAT-4 transistorized stereo preamplifier.

The PAT-4, which presently coexists with the PAS-3X, has many features in common with it, plus some interesting refinements. Like the PAS-3X, it is simple. Only four transistors are used in each channel, corresponding in function to the two dual-triode tubes of the PAS-3X. One pair serves as a feedback-equalized low-level preamplifier for magnetic phono cartridge, tape head, or microphone. The first two functions are equalized for the RIAA and NAB (7½-ips) playback curves, respectively, and the last is normally flat (but can easily be converted to another magnetic-phono or other high-gain equalized input).

The second pair of transistors provides some gain, plus tone control and frequency-filter functions. The feedback-type tone controls are similar to those in the PAS-3X, with a definite "flat" response at their center settings. In addition, the tone controls, when centered, are removed completely from the circuit, without the necessity for added switching.

Each channel has its own bass and treble tone control, mounted concentrically with the corresponding control for the other channel. The four-position high-frequency filter is one of the best we have seen, with 18-db-per-octave slopes and nominal cut-off frequencies of 7,000, 10,000, and 15,000 Hz, plus an OFF or flat setting. This is one filter that really works, cleaning up distortion and hiss with minimum effect on the program content.

Aside from the six-position input selector, volume, balance, and tone controls, and high-filter switch, the Dynaco PAT-4 has six rocker-type switches. One controls a.c. power (there are two switched and two unswitched a.c. convenience outlets in the rear of the unit) and is illuminated when turned on. Another rocker switches in a low-frequency filter, and a third adds loudness compensation at low volume-control settings. A pair of switches is used for mono/stereo mode selection. With both down, normal stereo operation is obtained. Pressing the top of either the A or the B switch connects the signal from that channel through both outputs. Pressing both switches up (MONO) provides a partially blended (quasi-mono) signal with about 6-db separation between the outputs. (This setup is suggested for use with Dyna's derived center-channel setup, for reducing the excessive separation of stereo earphones, and for all other times when a mono signal is desired.) The last switch is for tape monitoring. Unlike any other preamplifier we have seen, the PAT-4 has a spring-return switch for this function. The assumption is that one will only wish to monitor from the

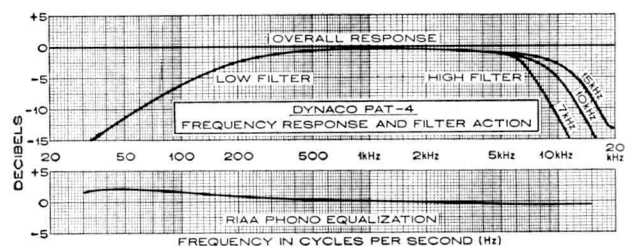
tape as a brief check on recording conditions. (A standard switch available from Dyna may be substituted if desired.) For normal tape playback, the TAPE position of the input selector is used.

A front-panel input jack (for a regular three-contact stereo phone plug) overrides the input selector and disconnects all other signal sources when a signal source is plugged into it. This is a high-level input, but we found that a high-impedance dynamic microphone or electric guitar worked well through it.

The front-panel output jack is intended for stereo headphones of 600-ohm or higher impedance. It is in parallel with one pair of the two pairs of output jacks in the rear of the PAT-4. The second pair of outputs is switched off when phones are plugged into the front-panel jack. Another obvious use of the front-panel input and output jacks is to connect to an external tape recorder when the rear of the PAT-4 is inaccessible.

In addition to the normal inputs and outputs in the rear, the Dynaco PAT-4 has three sets of phono inputs. The LO magnetic-cartridge inputs can handle up to about 80 millivolts before overloading. The HI inputs are designed to accommodate cartridges with unusually high outputs—up to 700 millivolts—if and when they become available. (A simple modification of the circuit boards will be necessary for use of the HI inputs.) The CER inputs are for ceramic cartridges, converting their outputs to a velocity basis and reducing the level to that of a magnetic cartridge. The construction manual for the kit is up to Dyna's usual high standard and construction time runs about 7 or 8 hours.

In our laboratory tests, we loaded the PAT-4 outputs with about 100,000 ohms, simulating the input impedance



of many transistor power amplifiers. Harmonic distortion was less than the residual distortion of our test instruments (0.06 per cent) up to 3 volts output. It rose to 0.1 per cent at 7 volts and 0.25 per cent at 10 volts. Clipping occurred at about 11 volts. Since no power amplifier requires more than a couple of volts to develop its full output, one may reasonably describe the Dynaco PAT-4 as essentially distortionless.

The PAT-4 has a truly flat frequency response with its tone controls centered. Our General Radio response-curve plotter drew a straight line, ± 0.25 db, from 20 to 20,000 Hz when measuring the PAT-4. We commented earlier on the excellent high-frequency filter characteristics of the PAT-4; the low-frequency filter had a more gradual slope of 6 db per octave beginning at about 150 Hz. The loudness compensation affects only the frequencies below about 1,000 Hz and is sufficiently moderate that it does not impart any "boom" or tubby quality to the program.

The LO-input phono equalization was within $+2$, -0.5
(Continued on page 42)



**We made the Fisher 110
as good as we knew how.**

**But what it will sound like
is up to you.**

The Fisher 110 is a 35-watt AM-FM stereo receiver with built-in automatic turntable. It comes to you without speakers because we know that the selection of speakers is a matter of personal taste.

We know that by leaving it up to you, you'll choose the speakers that will make the 110 sound best.

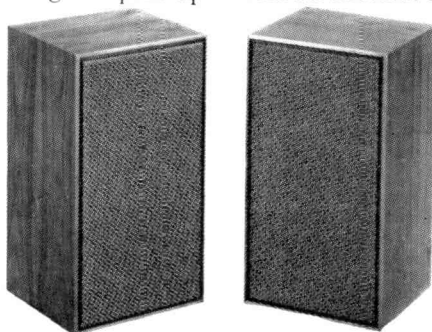
You can get a good idea how a receiver will sound from the specifications. Take the 110, for example. Its FM tuner section has an IHF sensitivity of $2.0 \mu\text{v}$. You know that means it's sensitive enough to pick up the weakest FM stations and reproduce the signal strong and clear.

The 110 has an amplifier section with a power bandwidth from 30 to 20,000 Hz. Harmonic distortion is under 0.8%. The turntable is a BSR and it has a low-mass magnetic cartridge. With these specifications it has to be good.

And the price is only \$379.95.

But you can't pick out speakers just from studying specifications. That's why we suggest that you take your time and choose the best ones you can afford.

If you ask us our opinion; we'll recommend the S-10 speaker systems, designed especially for the Fisher 110. The S-10 has a 10-inch woofer and a 3-inch tweeter, with crossover at 2500 Hz. Frequency response is from 20 to 20,000 Hz. We think a pair of S-10's sounds great with the 110. But don't take our word for it. Hear it yourself and make up your own mind. (When you buy the Fisher 110 with a pair of S-10's, it's called the Fisher 110-S and costs \$449.95.*) For more information, plus a free copy of The Fisher Handbook 1968, an authoritative 80-page reference guide to hi-fi and stereo, use coupon on magazine's front cover flap.



The Fisher.

* ALSO AVAILABLE, THE FISHER 105, IDENTICAL TO ABOVE BUT WITHOUT THE AM SECTION, WITHOUT SPEAKERS, IT COSTS \$359.95; WITH A PAIR OF S-10 SPEAKERS, IT COSTS \$429.95. FISHER RADIO CORPORATION, INC., 11-25 45TH ROAD, LONG ISLAND CITY, N. Y. 11101. OVERSEAS AND CANADIAN RESIDENTS PLEASE WRITE TO FISHER RADIO INTERNATIONAL, INC., LONG ISLAND CITY, N. Y. 11101.

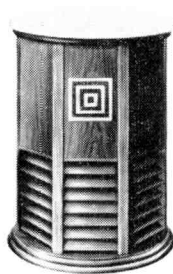
CIRCLE NO. 44 ON READER SERVICE CARD

db from 30 to 15,000 Hz and the NAB tape equalization was +2.5, -1 db over its range. The tone controls rotate through about 180 degrees, instead of the usual 300 degrees, and are designed so that the treble control has little effect until near its full rotation, while the bass control has almost all its effect in the first half of its rotation. The LO phono input requires 2.2 millivolts for 1-volt output at maximum volume-control setting, and the HI input requires 13.2 millivolts for the same output. The high-level inputs require a 0.12-volt input signal for 1-volt output. The signal-to-noise ratio is 66 db on LO phono, 53 db on TAPE HEAD, and better than 80 db on the high-level inputs.

Like a good power amplifier, the PAT-4 has no sonic character of its own—when the tone controls are centered and the filters switched out. We have seen some of the better power amplifiers described as a "piece of wire with gain" as a tribute to their insignificant distortion. The

Dynaco PAT-4 most definitely is in the same category. The "piece of wire" can be twisted very effectively with the controls of the PAT-4. The loudness compensation is truly usable, the filters work as filters should, there are no clicks or thumps when any of the switches or controls are operated, there's no hum or hiss (except with the volume set for full gain on a low-level input, a most unlikely operating condition), and it is free of microphonics and internal heating. Add to this an extraordinary degree of operating flexibility achieved with a total semiconductor complement of eight silicon transistors and two power-supply rectifier diodes, and you have an excellent example of what can be achieved by competent engineering and design integrity. In sonic quality, we would unhesitatingly say that the Dynaco PAT-4 is unsurpassed by any preamplifier we have seen. It is a remarkable unit and unmatched at anywhere near its low price of \$89.95 in kit form or \$129.50 factory-wired.

EMPIRE 4000M CAVALIER SPEAKER SYSTEM



● EMPIRE'S 4000M Cavalier speaker system is a scaled-down version of the Model 9000 Royal Grenadier reviewed in the December, 1966, issue. Like its predecessors, the Model 4000M is constructed in the form of a cylindrical column, with the woofer at the bottom; however, the woofer faces forward rather than downward and radiates through a louvered opening. The 4000M stands 25 inches high, is 18 inches in diameter, and weighs 75 pounds with its marble top in place. It is finished in satin walnut and is also available with a walnut top.

The Model 4000M has a 10-inch woofer with a 2-inch voice coil, rated to handle up to 60 watts of music power or 40 watts of sine-wave power. The crossover is at 1,500 Hz, at which frequency a single small direct-radiator cone tweeter takes over. A three-position switch under the base of the column adjusts the high-frequency level relative to the lower frequencies.

We tested the Empire 4000M in a normally "live" room, with the speaker a couple of feet from one of the walls. Our three microphones were distributed throughout the room and their outputs electrically summed to produce a single frequency-response plot. Repeating the test with three different microphone positions enabled us to develop a composite curve representative of the total output of the speaker in a typical listening room.

With the tweeter-level control set in the middle, or "normal" position, the response of the Empire 4000M was quite smooth and free of peaks and holes between 60 and 15,000 Hz. The output level above 700 Hz averaged about 5 db less than below that frequency. Below 70 Hz, the

output fell off rapidly, although there was a slight rise in output level at 40 Hz.

Harmonic distortion at a 1-watt drive level was under 5 per cent down to 50 Hz, increasing fairly rapidly below that frequency. Allowing for variations in low-frequency response in different listening rooms, we would consider the effective lower limit of the Empire 4000M to be between 50 and 60 Hz. The dispersion of frequencies up to 1,500 Hz was excellent. The small cone tweeter complements this characteristic very well at high frequencies, although the tweeter should be faced toward the listening area for best results.

The tone-burst response of the Empire 4000M was excellent at all frequencies. In the mid-range, in particular, the 4000M was definitely superior to the larger Model 9000 in its transient response. This is doubtless because of the smaller, lighter cone and voice coil in the Model 4000 woofer.

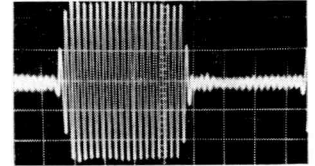
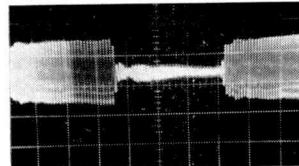
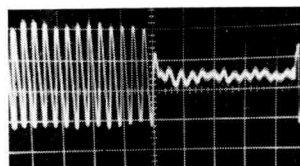
The sound of the Empire 4000M was full and warm, with a trace of the bass-heavy characteristic of the Model 9000. Although it obviously has a smooth and uniform response to beyond the limits of audibility, the Model 4000M is in no sense a bright-sounding speaker. We found that a bit of bass cut from amplifier tone controls, as well as using the maximum treble setting of the tweeter-control switch, enabled us to balance the sound of the system to suit our taste.

The Empire 4000M speaker system brings the basic properties of the larger and costlier Empire models to a lower price bracket. Undeniably handsome, it is not as formidable in size as the Model 9000, and its sound quality is similar to that of its larger relative, though not its equal in the lowest bass registers. While the Model 4000 may not appeal to those who like their highs "sizzling," by the same token it can be a good choice for those listeners who favor the lower and middle frequencies. The Empire 4000M, with a marble top, sells for \$159.95. The Model 4000, with a walnut top, is \$149.95.

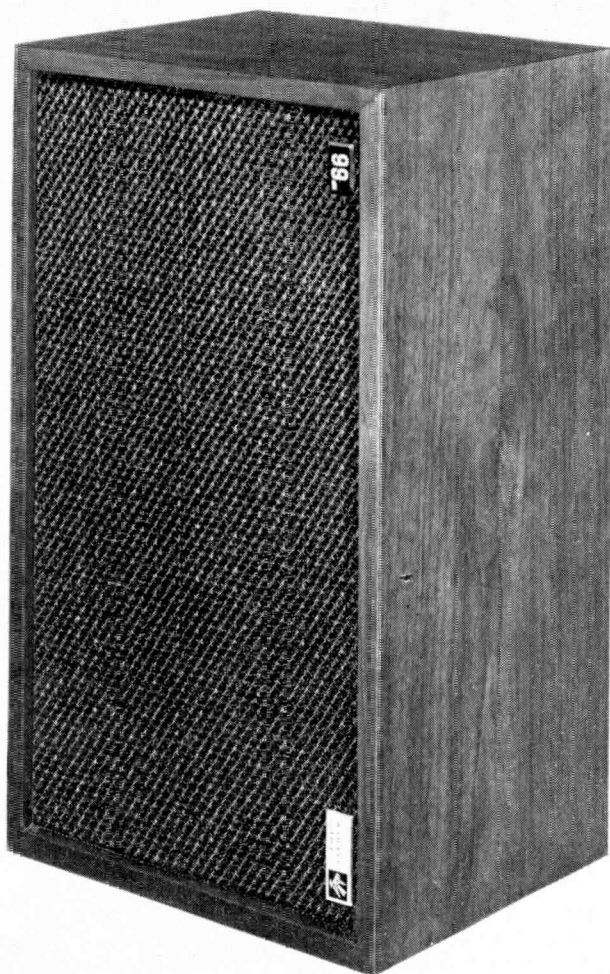
For more information, circle 188 on reader service card

(Continued on page 44)

The Empire 4000M speaker system's tone-burst response was excellent at all frequencies. Shown at right are the speaker's well-defined and typical tone bursts at 310, 1,050, and 10,000 Hz.



The most competitive bookshelf system ever designed by Fisher.



Our moderately priced XP-66 has some competition, something we usually try to avoid.

(Our full-range XP-6B at only \$89.95 and our \$149.50 XP-7—sometimes known as the ultimate bookshelf speaker system—are each in a class by themselves.)

At \$119.95, the Fisher XP-66 is a system designed to win your favor from other fine speaker systems available at the same price. No easy task, we know.

That's why we made the XP-66 a *three-way* system; not just another two-way. It contains a special six-inch mid-range driver sealed off from the rest of the system to prevent interaction between mid-range and woofer—and to provide audiophiles with a cleaner-than-ever over-all sound for their \$119.95.

And we were thinking competitively when we designed the XP-66's woofer and tweeter.

The new 12" free-piston bass driver uses a high-

mass copper voice coil that allows flawless bass reproduction down to 30 Hz, without muddiness, without doubling.

Our new low-mass wide-dispersion treble driver, with its highly damped cone constructed of a special fibrous material, eliminates resonance and breakup, and provides smooth reproduction of highs from 1,000 Hz through 19,000 Hz.

We weren't taking *any* chances—even the crossover network of the XP-66 is a special design.

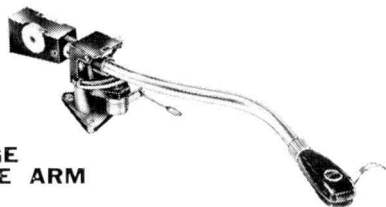
So, if you're out to spend \$119.95 on a bookshelf speaker, we urge you to compare them all.

And let the best sound win.

For more information, plus a free copy of the new 1968 edition of Fisher's 80-page reference guide to hi-fi and stereo, use coupon on magazine's front cover flap.

The Fisher

**ORTOFON
SL-15T CARTRIDGE
AND RS-212 TONE ARM**



● HIRSCH-HOUCK LABS reported on the Ortofon S-15T phono cartridge in the July 1967 issue of HI/FI STEREO REVIEW. This premium-priced moving-coil cartridge was noteworthy for its extremely low intermodulation distortion and smooth, extended frequency response. The S-15T was also the heaviest and bulkiest stereo cartridge we have ever tested (owing to its built-in step-up transformers), which makes it difficult to use in some tone arms. Ortofon has now released the SL-15T, which is similar to the S-15T but has a size and weight comparable to most other stereo cartridges. The transformers are now encapsulated in a small separate assembly (with phono plugs and sockets) that is meant to be located near the amplifier. The SL-15T cannot be used without the transformer (or an equivalent preamplifier) since the output from its 2-ohm coils is less than 0.2 millivolt at normal recorded levels.

The stylus is an elliptical diamond, with radii of 0.3 and 0.7 mils, and rated static compliance of 20×10^{-6} cm/dyne. Ortofon recommends a tracking force of 1 to 2 grams. Stylus replacement requires return of the cartridge to its importer, Elpa Marketing Industries. Like its predecessor, the SL-15T has a powerful external magnetic field, which makes it difficult to use with steel or iron turntables. This, however, should present no problem in most installations, since modern turntable platters are usually of non-ferrous construction.

We measured the frequency response of the Ortofon SL-15T as within ± 1.5 db from 40 to 11,500 Hz, rising to a broad peak of 4 to 5 db in the 13,000 to 15,000-Hz region. The output at 20,000 Hz was slightly greater than at middle frequencies. Channel separation averaged about 20 db up to 9,000 Hz and was typically 10 to 15 db in the 10,000 to 20,000-Hz range. Sweep measurements down to 10 Hz revealed no sign of a resonance with the cartridge installed in the new Ortofon RS-212 arm.

The output of the SL-15T (through the external step-up transformer assembly) was 7.6 millivolts at 3.54 cm/sec velocity. The hum shielding of the cartridge was good, and the transformer assembly required only moderate care in its orientation to reduce hum pickup to inaudible levels.

Like the S-15T, the new SL-15T cartridge had, in our tests, outstandingly low intermodulation distortion. At the recommended 2-gram tracking force, it was less than 1 per cent up to 25 cm/sec peak velocity, climbing to a still low 2.3 per cent at 27.1 cm/sec. Increasing the force to 3 grams resulted in less than 1 per cent IM even at 27.1 cm/sec. We see no advantage in the higher force, however, and would suggest operation at 2 grams. At 1 gram, the distortion was low up to 13 cm/sec, but rose rapidly at higher velocities. The test-record square-wave response revealed several cycles of low-amplitude, damped ringing at the stylus resonance of about 15,000 Hz.

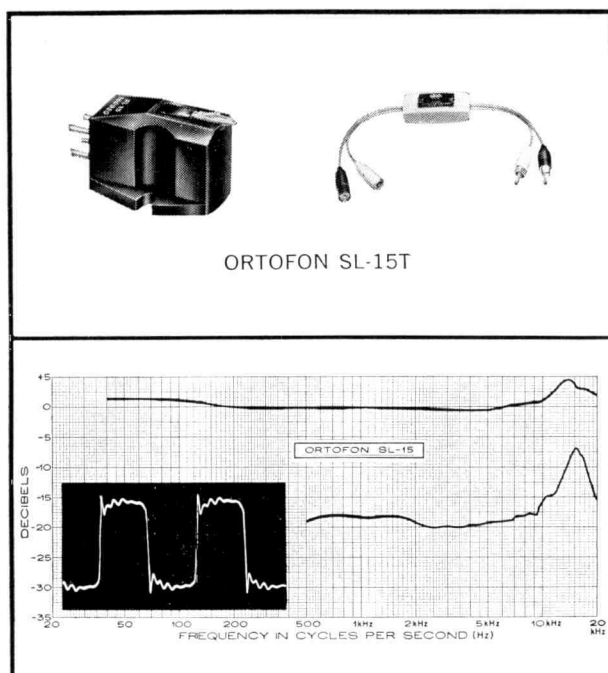
In listening to the SL-15T cartridge, we were immediately impressed by its distortionless, neutral quality. It imparts no detectable emphasis or coloration to any part of the frequency spectrum, and it is easy to forget that one is listening to a phonograph record when one is using the SL-15T cartridge. By our own grading system, we would rate the Ortofon SL-15T on a par with the other two highest-ranking cartridges we have tested (see report on eleven stereo cartridges in the July 1967 issue.) Ortofon's years of experience in designing and manufacturing high-quality car-

tridges and arms are clearly evidenced in the SL-15T, about which we are unreservedly enthusiastic.

The Ortofon RS-212 tone arm is a new design, incorporating an anti-skating feature, a cueing arm lift with hydraulic damping, and the ability to accommodate cartridges weighing from 7 to 19 grams. Installation of the arm is simplified by a complete set of positioning jigs. After the arm has been balanced with the adjustable counterweight, the desired tracking force (from 0 to 4.5 grams) is dialed in with a calibrated, knurled knob on the counterweight. Spring tension is used to supply the downward tracking force. We found the dial indication to be accurate within 0.1 gram.

The anti-skating correction is applied by offsetting the attachment point of the tracking-force spring. The anti-skating force thus automatically compensates for changes in the dialed-in tracking force. The degree of anti-skating correction can be adjusted over wide limits by a knurled thumbscrew that moves the attachment point of the spring. The installation manual suggests the optimum setting for the elliptical stylus used on Ortofon cartridges.

As with some of the earlier Ortofon arms, the output-cable assembly furnished with the RS-212 arm is termi-



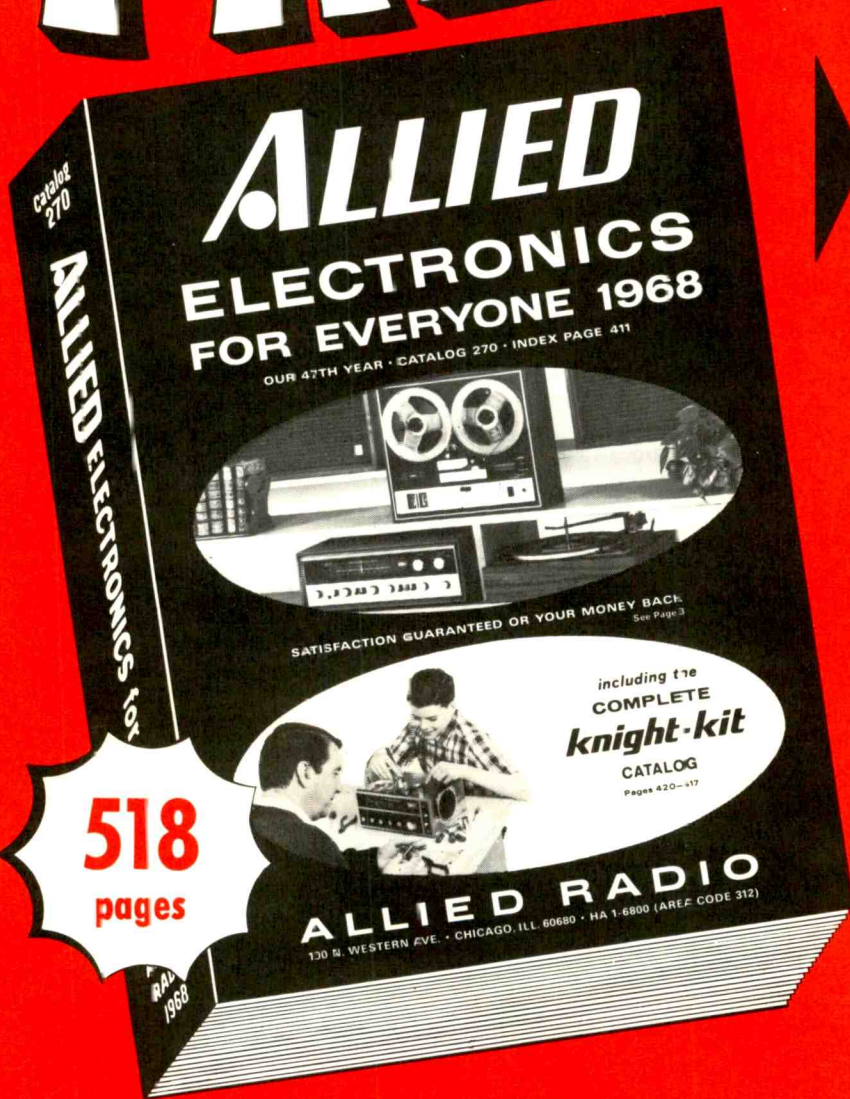
The upper curve represents the averaged frequency response of the cartridge's right and left channels. The lower curve, which starts at 500 Hz, represents the averaged separation between channels. The amount of separation at any frequency is indicated by the vertical distance between the upper and lower curves, and is expressed in decibels. Inset at the lower left of the graph is an oscilloscope photograph of the cartridge's response to a 1,000-Hz square wave on a test record. The shape of the reproduced wave is an indication of a cartridge's overall frequency response and resonances.

nated in a five-pin plug that mates with a connector in the base of the arm. No wiring is required in the arm installation, other than attaching the clips in the low-mass plug-in cartridge shell to the pins on the cartridge. We found the lateral tracking error of the Ortofon RS-212 arm to be less than 0.5 degree per inch of radius, an excellent figure that is about as good as can be achieved with a 9-inch arm such as this. The RS-212 was not only easy to install, but had a fine "feel" and was a pleasure to use.

The Ortofon SL-15T phono cartridge sells for \$75.00. The RS-212 arm is \$90.00. A tone-arm board for Thorens turntables that is drilled for the RS-212 is available for \$3.

For more information, circle 189 on reader service card

FREE



New 1968 Allied Catalog

Here it is! The brand-new 1968 edition of the world's most famous catalog of electronic equipment.

518 pages, including the complete Knight-Kit Catalog—picturing, describing and pricing thousands of items—the most complete inventory ever assembled of hi-fi, radios, tape recorders, CB, electronic equipment, parts and tools—all at money-saving low prices.

You'll want your own personal copy of the Allied Catalog. It's free. So tear off, fill out, and mail a card. Do it now!

NO MONEY DOWN—24 MONTHS TO PAY!
Low Monthly Payments to fit your budget.

DO A FRIEND A FAVOR—give him this card to send for his FREE ALLIED CATALOG

NAME—PLEASE PRINT

ADDRESS

CITY

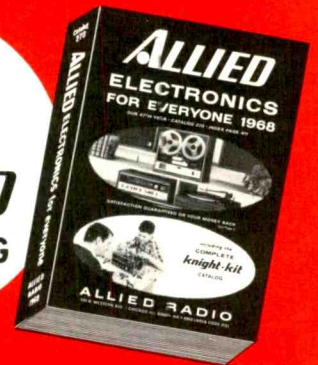
STATE

10A

ZIP

FILL THIS CARD OUT—MAIL IT NOW!

FREE
ALLIED
1968 CATALOG



WORLD'S LARGEST SELECTIONS. SATISFACTION GUARANTEED OR YOUR MONEY BACK

NAME—PLEASE PRINT

ADDRESS

CITY

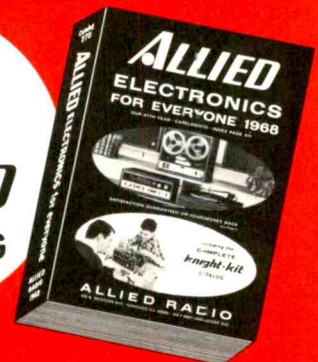
STATE

10A

ZIP

FILL THIS CARD OUT—MAIL IT NOW!

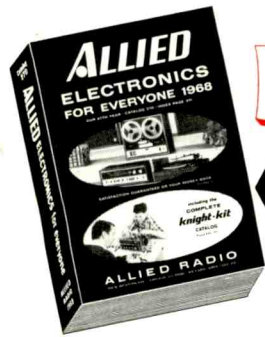
FREE
ALLIED
1968 CATALOG



WORLD'S LARGEST SELECTIONS. SATISFACTION GUARANTEED OR YOUR MONEY BACK

RUSH THIS CARD TODAY!

for your



FREE

**1968
ALLIED
CATALOG**

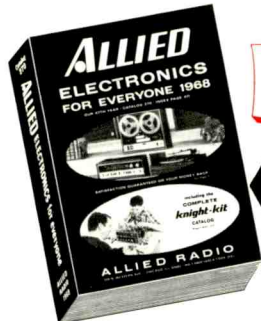
TO:

ALLIED RADIO
P.O. BOX 4398
CHICAGO, ILLINOIS 60680

PLACE
STAMP
HERE

RUSH THIS CARD TODAY!

for your



FREE

**1968
ALLIED
CATALOG**

TO:

ALLIED RADIO
P.O. BOX 4398
CHICAGO, ILLINOIS 60680

PLACE
STAMP
HERE



Why Buy by Mail from **ALLIED?**

Each year Allied fills more than a million orders by mail. Only the complete facilities of the world's largest electronics supply house can satisfy all the needs of hi-fi enthusiasts, CB users, engineers, "Hams" and experimenters.

WORLD'S LARGEST SELECTIONS

Imagine shopping for hi-fi where you can select from every model of 15 major manufacturers of receivers, tuners and amplifiers, 14 brands of tape recorders, 7 makes of turntables, nearly 100 speakers from a dozen manufacturers. Plus similar choices in every area of electronics—CB and Ham, test equipment, kits (including Knight-Kits), parts, supplies . . . almost anything you want.

MANY PRODUCTS NOT AVAILABLE ANYWHERE ELSE

As the world's largest supplier of electronics, Allied can afford to stock thousands of items not available elsewhere. In addition, many products are specially-designed and built to our specifications.

FIRST WITH THE LATEST FOR 47 YEARS

We have always been the first to offer the latest developments in electronics, as you will see when you receive your new 1968 catalog from Allied.

WE QUALITY-TEST WHAT WE SELL

Among all electronics supply houses, only Allied has a continuous program of quality-testing to assure you that everything you buy meets the highest standards.

COUNT YOUR SAVINGS AT ALLIED

You always get the lowest prices at Allied. Check Allied prices and compare. Look for the special values—available only when you shop in the Allied catalog.

IMMEDIATE SHIPMENT

There's no delay when you deal with the world's largest electronics supply house. Orders are filled promptly—usually the day they're received.

NO MONEY DOWN — UP TO TWO YEARS TO PAY

You don't need cash at Allied. Make "add-on" purchases—even though you are already paying for something else. It's easy to be a credit customer at Allied.

SATISFACTION GUARANTEED OR YOUR MONEY BACK

You can buy with confidence from Allied. We guarantee satisfaction or your money back.

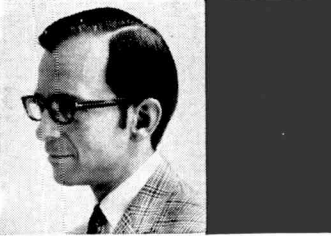
ENJOY "EASY-CHAIR" SHOPPING

Shopping's easy at Allied. More accurate, too! You always know *exactly* what you get. And *what a choice!* A selection of merchandise so vast that no store could ever assemble and stock it all.



GOING ON RECORD

By JAMES GOODFRIEND



AMERICANS AND MUSIC

ACCORDING to a recent report published by the American Music Conference, one out of every four point eight Americans (over the age of four) plays or is learning to play a musical instrument. This is a statistic worth pondering. It represents, according to the report, a substantial increase over the 1950 figure, which declares the ratio of amateur musicians to population to have been one in seven point two. An amateur musician, as defined by the AMC, is "someone who plays a musical instrument six or more times per year, without pay, or who is receiving instrumental instruction on a specific instrument."

The report says nothing about the thoughts or attitudes of these people, whether or not they are "receiving instrumental instruction" under duress, whether they approach their musical instruments six or more times per year with a feeling of eagerness and excitement, or whether "pay" (cash or some other reward) is anticipated even if not received. But surveys are notoriously poor at finding out what it is that is really on people's minds. One ought not to blame a particular survey for something that seems to be indigenous to the form.

The AMC report contains, among other things, a breakdown by instrument or type of instrument of what all these amateurs are playing, together with a comparison of the figures with those of ten years ago. The piano, for example, has had a small (17 per cent) and presumably gradual increase in the number of its adherents since 1956. There has been a slightly sharper rise in the host of string players (violin, viola, cello, bass), and a considerably sharper rise (approaching 80 per cent) in the number of brass and woodwind blowers. The accordion has taken a turn for the worse, and the ukulele, as one might expect, has fallen off by fully 40 per cent. Players of the "harmonica (excluding toys)" have more than doubled, of the guitar almost quadrupled, and of the organ somewhat more than quadrupled. The greatest increases, though, have occurred among those who favor the drums, the recorder, and something called the "'C' Melody Flute (educational)," which have earned, respectively and approximately, increases of 500, 700, and 650 per cent.

Some of the absolute figures are startling in themselves. Over twenty-three million people play, or are learning to

play, the piano, and an even ten million the guitar. There are better than two million string players in this country, and almost four million each of woodwind and brass players. The recorder (once of historical interest only) has fully eight hundred thousand amateurs, and the "C" melody flute three million. Even the "other" category, which includes "banjo, mandolin, zither, bongo drums, etc.," and which may therefore be presumed to have fluctuated wildly since 1956, claims over a million members.

Furthermore, these people bought last year an estimated retail value of \$193,200,000 worth of pianos, \$196,600,000 worth of console organs (most of the organ market for home use, we are told, has been among adults between thirty and fifty years of age), \$140,000,000 worth of fretted instruments (more "straight" guitars than electric), \$120,000,000 worth of band instruments, and \$18,000,000 worth of violins, violas, cellos, and basses. They also purchased sheet music to the tune (pardon) of \$66,000,000, bought \$10,000,000 worth of self-instruction aids, and spent \$78,000,000 on accessories.

ALTHOUGH, as the report warns us, some people account for more than one performer listing or more than one instrument sale, since some people do play more than one instrument, these are still astonishing figures: a total (excluding duplications) of better than forty-one million music-loving souls spending more money than a poor salaried employee like myself can even begin to conceive of. Why is it, then, one wonders, that the general American attitude toward music is so unknowing and condescending, rather like that of a wealthy and socially connected young lady toward a relative who is both poor and slightly strange? Why is it that concert halls are so often less than half-filled, and professional musicians more than half the time unemployed? Why is it that mass circulation publications try to avoid writings on music, apart from personality pieces on the most famous (or infamous) names? Why is it that the average recording of classical music cannot earn enough through sales to do more than barely cover its cost—if that?

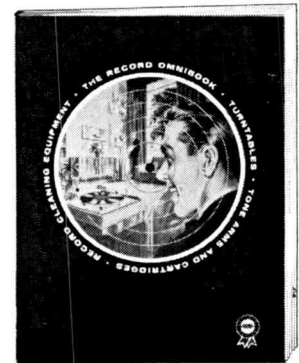
Is it possible that something is lacking in the musical experience of our

(Continued on next page)

If you want the answers to questions like:

How are wow and flutter measured . . . what is compliance . . . how should I keep my records clean . . . why is a tone arm manufactured three years ago obsolete today . . . why don't broadcast stations ever use 'automatic turntables' . . . how do I talk intelligently to hi-fi salesmen?

A. Send for Elpa's FREE informative "Record Omnibook"



If you know the answers...you're probably an Elpa customer already!

Elpa markets through its selected franchised dealers a line of turntables and record playback equipment of the highest quality. And Elpa stands between consumer and manufacturer as a guarantee of the highest quality control. Some of our endorsed products are:

THORENS - The unchallenged world leader in superb transcription turntables and tone arms.

Ortofon The ultimate in fine cartridges, matching tone arms for getting the most out of any recording.

CECIL E. WATTS, Inc. - Producer of the finest products for record care and cleaning.

LOOK FOR THE ELPA ENDORSEMENT ON EVERY COMPONENT YOU SELECT; IT WILL CONFIRM YOUR JUDGMENT OF SUPERIOR QUALITY.



Elpa Marketing Industries, Inc.
New Hyde Park, New York 11040

Dear Sirs:

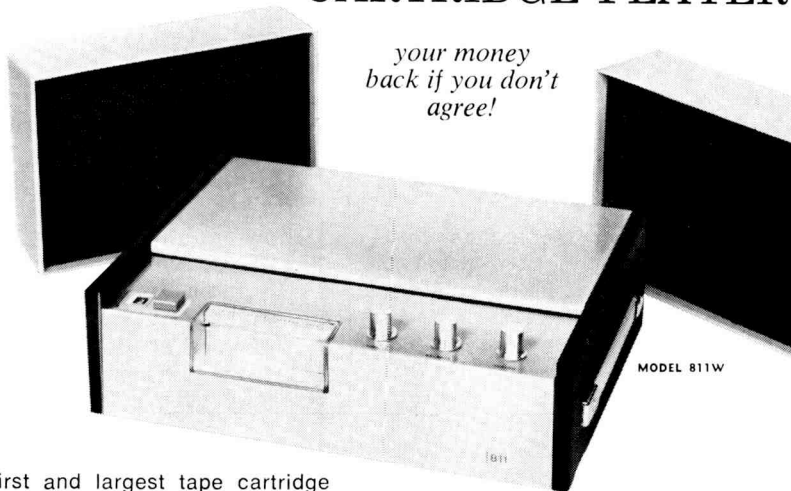
Please send me the "Record Omnibook" and put me on your mailing list for future mailings.

Name _____

Address _____

City/State _____ Zip Code _____

VIKING MAKES THE BEST-SOUNDING CARTRIDGE PLAYER



Viking, first and largest tape cartridge equipment maker, introduces three new solid state 8-track stereo tape players that rival the richness of a component hi-fi system. We're so proud of these new 811 models . . . so confident of their superior sound . . . that we'll give you your money back if you can find another that sounds better!

Features: Full fidelity playback of 8-track stereo cartridges; automatic and push-button track selection; 45-15,000 HZ frequency response; 0.3% rms flutter & wow; numerical track indicator.

MODEL 811 — Table top unit in walnut cabinet with built-in pre-amp for use with existing stereo equipment . . . under **\$100**

MODEL 811W — Table top unit in walnut cabinet, with power amplifier; two speakers; volume, balance & tone controls; 10 watts IHF music power; stereo headphone jack . . . under **\$150**

MODEL 811P — Portable unit; all features of 811W, plus detachable speakers, attractive two-tone vinyl covered case . . . under **\$150**

PRODUCTS OF SOUND RESEARCH
VIKING tape recorders
 DIVISION OF THE TELEX CORPORATION
 9600 ALDRICH AVE., SOUTH, MINNEAPOLIS, MINN. 55420

CIRCLE NO. 70 ON READER SERVICE CARD

amateurs? Are we perhaps learning techniques without acquiring taste, developing skills with no knowledge of the ends toward which those skills are best applied, with no sense of the values involved, as some scientists have discovered too late the sociological repercussions of their "pure" scientific research? What is the attitude of our forty-one million musical amateurs—what is really on their minds? Do they like music?

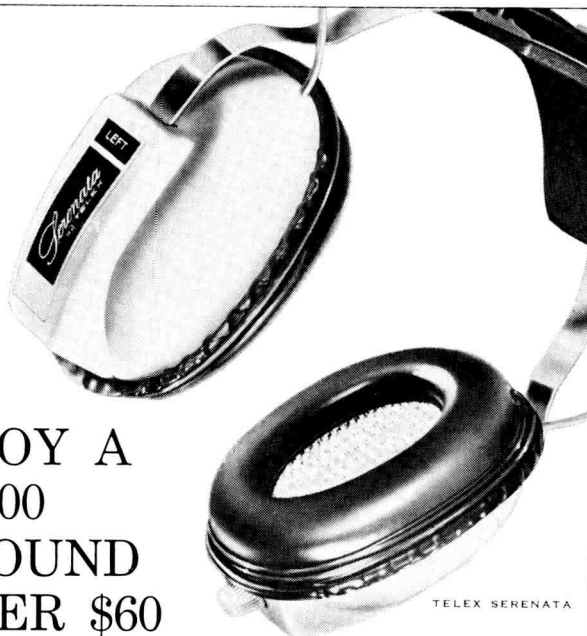
* * *

Problems related to the appreciation of music have been roundly discussed in the pages of *HiFi/STEREO REVIEW* by Arthur Matthews in his article "The War on Musical Poverty" (September), Editor William Anderson in his editorial in the same issue, and quite a lot of energetic and informed letter writers ever since. Since the written response from our readers has been all but unanimous in agreeing with both Messrs. Matthews and Anderson, I thought I might play the devil's advocate and put in a word for the "dusty professors" myself.

I am all for the appreciation of music. I like to see people enjoy music, even to be "taught" to enjoy music. But I don't think that a college classroom is the place in which to do it. Unfortunately, all too many college students (and many others too) have got it into their heads that Music I (or whatever the course may be called), as opposed to any other college course, is a sort of a seance where one is lulled into a state of blissful semi-consciousness by soft and sensuous noises, or titillated by the sound of half-remembered tunes, all provided through the medium of recordings by a professor who asks no more from his students than visible evidence of rapt enjoyment. That someone is expected to learn something in the class—like a date, a method of analysis, or a theme together with its source—seems to them the most obtuse philistinism. God knows where all this started. Perhaps it is a hangover from the days when colleges existed for the purpose of producing "gentlemen."

What a pretty knowledge we would have of the physical universe if our budding astronomers sat in blissful contemplation of the stars and planets instead of learning to compute their orbits; or of human history if our student archeologists gazed at a picture of the ancient city of Petra with pure aesthetic rapture rather than learning how and where to dig a hole to find other Petras in this many-treasured world.

In college, one learns and teaches history, not the enjoyment of history; chemistry, not the aesthetics of chemistry; music, not the appreciation of music. College is a place where (ideally) one learns how to handle intellectual tools. Enjoyment is a frequent but unpromised bonus. Untaught appreciation should have come long, long before.



ENJOY A
\$1,000
 SOUND
 FOR UNDER **\$60**

To discriminating listeners who want maximum purity, adjustable tonal balance and a complete absence of distracting background noise, the home hi-fi set is superior to the concert hall. And for this very same reason, TELEX SERENATA stereo headphones are actually superior to a \$1,000 speaker system. If you really love transparent sound, try stereo listening through Telex

high fidelity headphones. It's a thrill meant for your ears alone. Telex headphones start as low as \$15.95 at better hi-fi dealers everywhere.

PRODUCTS OF SOUND RESEARCH
TELEXacoustics
 DIVISION OF THE TELEX CORPORATION
 3054 EXCELSIOR BLVD., MINNEAPOLIS, MINN. 55416

CIRCLE NO. 61 ON READER SERVICE CARD

CIRCLE NO. 49 ON READER SERVICE CARD →

Watt for Watt Spec for Spec Dollar for Dollar Sansui offers you more...



This is the new Sansuifidelity 2000. 100 watts (IHF) of music power... 36 watts/channel RMS... harmonic distortion of less than 0.8% at *all* rated outputs... FET Front End... 1.8 μ V (IHF) FM Sensitivity... frequency response from 15-40,000 Hz. If you are an expert in audio equipment you will know what these specifications mean; if you are not, ask any sound engineer; he will tell you. He will also tell you that specifications alone do not make a great receiver. There is the perfection of every component, the most exacting quality control, the integrity and pride of the manufacturer, and that extra care and extra imagination that make a truly great product.

Your Franchised Sansui Sound Specialist invites you to see and listen to the Sansuifidelity 2000. Watch the exclusive Sansui blackout dial light up when you listen to AM or FM broadcasting and change when you switch the selector to phono or tape or auxiliary; notice the ease with which the controls let you choose exactly the blend of music you want to suit you and your personal taste. All this and much more at the unbelievable price of **\$299.95**.

Sansui

Sansui Electronics Corporation • 34-43 56th Street • Woodside, N.Y. 11377 • Telephone 446-6300
Sansui Electric Company, Ltd., Tokyo, Japan • Electronic Distributors (Canada), British Columbia

11 NEW KITS FROM HEATH...

Now There Are 3 Heathkit Color TV's To Choose From

Introducing The NEW Deluxe Heathkit "227" Color TV

Exclusive Heathkit Self-Servicing Features. Like the famous Heathkit "295" and "180" color TV's, the new Heathkit "227" features a built-in dot generator plus full color photos and simple instructions so *you* can set-up, converge and maintain the best color pictures at all times. Add to this the detailed trouble-shooting charts in the manual, and you put an end to costly TV service calls for periodic picture convergence and minor repairs. No other brand of color TV has this money-saving self-servicing feature.

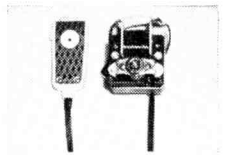
Advanced Performance Features. Boasts new RCA Perma-Chrome picture tube with 227 sq. in. rectangular viewing area for 40% brighter pictures . . . 24,000 v. regulated picture power and improved "rare earth" phosphors for more brilliant, livelier colors . . . new improved low voltage power supply with boosted B+ for best operation . . . automatic de-gaussing combined with exclusive Heath Magna-Shield that "cleans" the picture every-time you turn the set on from a "cold" start, and keeps colors pure and clean regardless of set movement or placement . . . automatic color control and gated automatic gain control to reduce color fade and insure steady, flutter-free pictures even under adverse conditions . . . preassembled & aligned 3-stage IF . . . preassembled & aligned 2-speed transistor UHF tuner and deluxe VHF turret tuner with "memory" fine tuning . . . 300 & 75 ohm VHF antenna inputs . . . two hi-fi sound outputs . . . 4" x 6" 8 ohm speaker . . . one-piece mask & control panel for simple installation in a wall, your custom cabinet or either optional Heath factory-assembled cabinets. Build in 25 hours.

- Kit GR-227**, (everything except cabinet) . . . \$42 dn., as low as \$25 mo. **\$419.95**
GRA-227-1, Walnut cabinet. . . no money dn., \$6 mo. **\$59.95**
GRA-227-2, Mediterranean Oak cabinet (shown above), . . . no money dn., \$10 mo. **\$94.50**



Kit GR-227
\$419⁹⁵
 (less cabinet)
 \$25 mo.

Kit GRA-27
\$19⁹⁵



New Remote Control For Heathkit Color TV

Now change channels and turn your Heathkit color TV off and on from the comfort of your armchair with this new remote control kit. Use with Heathkit GR-227, GR-295 and GR-180 color TV's. Includes 20' cable.

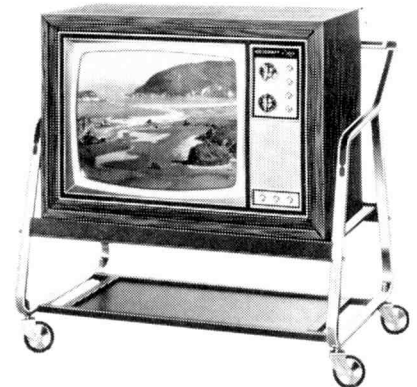


Kit GR-295
\$479⁹⁵
 (less cabinet)
 \$42 mo.

Deluxe Heathkit "295" Color TV

Has same high performance features and built-in servicing facilities as new GR-227, except for 295 sq. in. viewing area (industry's largest picture) . . . 25,000 volt picture power . . . universal main control panel for versatile in-wall installation . . . and 6" x 9" speaker.

- Kit GR-295**, (everything except cabinet), 131 lbs. . . . \$48 dn., \$42 mo. **\$479.95**
GRA-295-1, Walnut cabinet (shown above), 35 lbs. . . . no money dn., \$7 mo. **\$62.95**
 Other cabinets from \$94.50

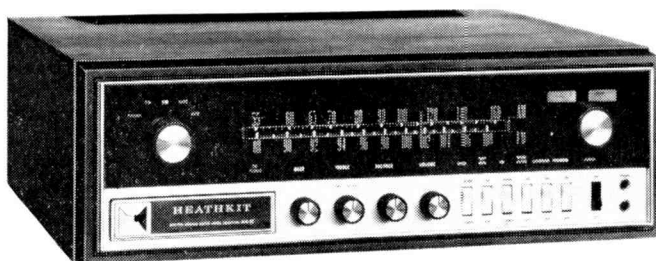


Kit GR-180
\$349⁹⁵
 (less cabinet & cart)
 \$30 mo.

Deluxe Heathkit "180" Color TV

Same high performance features and exclusive self-servicing facilities as new GR-227 (above) except for 180 sq. in. viewing area.

- Kit GR-180**, (everything except cabinet), 102 lbs. . . . \$35 dn., \$30 mo. **\$349.95**
GRS-180-5, table model cabinet & mobile cart (shown above), 57 lbs. . . . no money dn., \$5 mo. **\$39.95**
 Other cabinets from \$24.95



World's Most Advanced Stereo Receiver . . . Choose Kit Or Factory Assembled

Kit AR-15
\$329⁹⁵
 (less cabinet)
 \$28 mo.

Assembled ARW-15
\$499⁵⁰
 (less cabinet)
 \$43 mo.

Acclaimed by owners & audio experts for its advanced features like integrated circuits and crystal filters in the IF amplifier section; ultra-sensitive FET FM tuner; 150 watts dynamic music power; complete AM, FM and FM stereo listening; positive circuit protection; all-silicon transistors; "black magic" panel lighting; stereo only switch; adjustable phase control for best stereo and many more. 34 lbs. Optional wrap-around walnut cabinet \$19.95.

- Kit AR-15**, (less cab.), 34 lbs. . . . \$33 dn., \$28 mo. **\$329.95**
Assembled ARW-15, (less cab.), 34 lbs. . . . \$50 dn., \$43 mo. **\$499.50**

USE COUPON BELOW TO ORDER NOW!

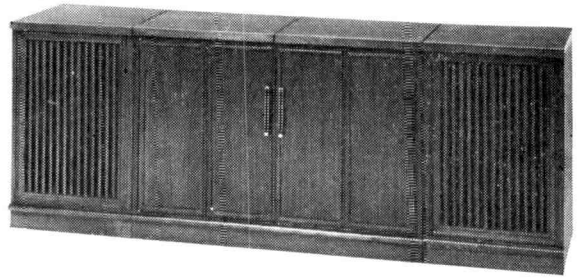
NEW! Exclusive Heath Hi-Fi Furniture... Fully Assembled And Finished

Contemporary Walnut Stereo/Hi-Fi Cabinet Ensemble Complements Modern Furnishings

Masterfully crafted of fine veneers and solids with walnut finish. Statuary Bronze handles. Equipment cabinet features adjustable shelves to accommodate all makes of hi-fi components, record storage or tape recorder compartment, turntable compartment. Speaker cabinet features special Tubular-Duct Reflex design for matching 8" or 12" speakers, plus slot for a horn tweeter.

Model AE-37, equipment cabinet...
no money dn., \$12 mo. \$125.00
Model AEA-37-1, speaker cabinet...
no money dn., \$6 mo. each \$59.50

Complete Ensemble
\$244⁰⁰

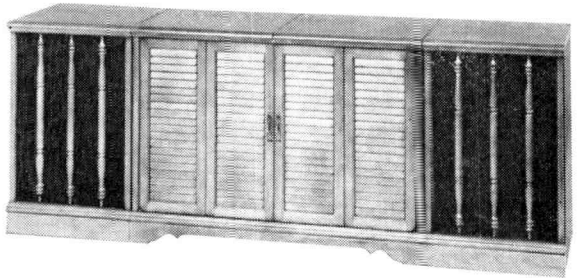


Early American Stereo/Hi-Fi Cabinet Ensemble

Early American richness with modern component layout. Constructed of specially-selected solids and veneers finished in popular Salem-Maple. Statuary Bronze handles. Equipment cabinet has adjustable shelves to accommodate any make hi-fi component, record storage or tape recorder compartment, turntable compartment. Speaker cabinet can be matched to any 8" or 12" speaker... has slot for horn tweeter.

Model AE-47, equipment cabinet...
no money dn., \$13 mo. \$135.00
Model AEA-47-1, speaker cabinet...
no money dn., \$7 mo. each \$64.50

Complete Ensemble
\$264⁰⁰

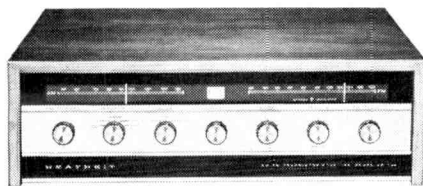
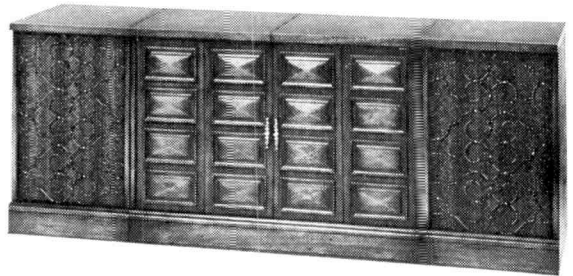


Mediterranean Stereo/Hi-Fi Cabinet Ensemble

Beautifully constructed of fine furniture solids and veneers with Pecan finish. Statuary Bronze handles. Equipment cabinet has adjustable shelves to house any make hi-fi component, record storage or tape recorder compartment, turntable compartment. Speaker cabinet can be matched to any 8" or 12" speaker... has slot for horn tweeter.

Model AE-57, equipment cabinet...
no money dn., \$14 mo. \$150.00
Model AEA-57-1, speaker cabinet...
no money dn., \$8 mo. each \$74.50

Complete Ensemble
\$299⁰⁰

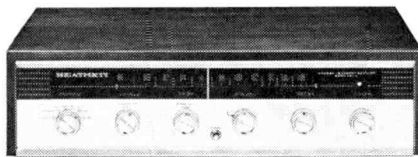


\$189⁹⁵ Kit AR-13A
\$18 mo.

Solid-State 66-Watt AM/FM Stereo Receiver

Delivers 66 watts music, 40 watts rms power from 15-30,000 Hz @ ± 1 dB. Features built-in stereo demodulator, automatic switching to stereo, filtered outputs for direct recording, squelch control and walnut-finish wood cabinet.

Kit AR-13A, 35 lbs.
no money dn., \$18 mo. \$189.95

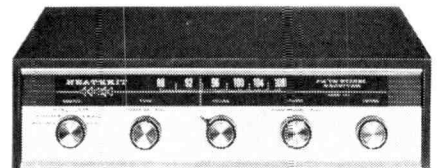


\$109⁹⁵ Kit AR-14
(less cabinet) \$11 mo.

Solid-State 30-Watt FM Stereo Receiver

Provides 30 watts music, 20 watts rms power from 15 to 50,000 Hz @ ± 1 dB. Features stereo headphone jack, filtered outputs for direct recording, transformerless output circuit and more. Install in a wall or Heath assembled-cabinet (walnut \$9.95, metal \$3.95).

Kit AR-14, 18 lbs.
no money dn., \$11 mo. \$109.95



\$72⁹⁵ Kit AR-17
(less cabinet) \$8 mo.

New! 14-Watt Solid-State FM Stereo Receiver

Features 14 watts music, 10 watts rms power from 25-35,000 Hz @ ± 1 dB; inputs for phono & auxiliary; adjustable phase; fly-wheel tuning; and compact 10 3/8" D. x 3" H. x 12" W. size. Optional cabinets (walnut \$7.95, metal \$3.50)

Kit AR-17, 12 lbs.
no money dn., \$8 mo. \$72.95
Kit AR-27, 7-Watt FM Mono Only Receiver 9 lbs. ... no money dn., \$5 mo. \$49.95



NEW
FREE 1968 CATALOG!

Now with more kits, more color. Fully describes these along with over 300 kits for stereo/hi-fi, color TV, electronic organs, electric guitar & amplifier, amateur radio, marine, educational, CB, home & hobby. Mail coupon or write Heath Company, Benton Harbor, Michigan 49022.

HEATH COMPANY, Dept. 40-1
Benton Harbor, Michigan 49022
In Canada, Daystrom Ltd.

Enclosed is \$ _____, including shipping.

Please send model (s) _____

Please send FREE Heathkit Catalog.

Please send Credit Application.

Name _____

Address _____

City _____ State _____ Zip _____

Prices & specifications subject to change without notice.

CL-311R



KENWOOD SHOW

SOLID STATE STEREO RECEIVERS

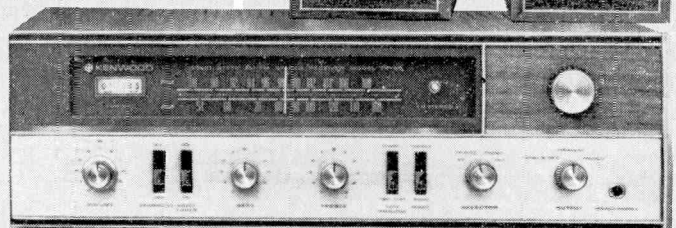
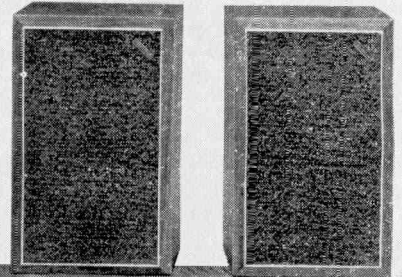
KENWOOD offers you a choice of five quality stereo receivers. Each model is designed to fill any of your specific needs. It's all a question of preference. Perhaps your choice may be the economical Model TKS-40, a combination of AM/FM receiver and speakers (Incidentally, they can also be purchased separately) . . . or Model TK-55, a straight FM stereo receiver . . . or the popular AM/FM Models TK-66 or TK-88 . . . or the luxury AM/FM Model TK-140 with 130 watts. Whatever your choice, KENWOOD lets you afford the finest by offering real dollar-for-dollar value.

HANDSOME STYLING

KENWOOD stereo receivers offer a combination of flexibility, performance and quality. The handsome, solid-state, cool-performing units are ideal for shelves or tables, and equally adaptable for custom console or wall installations of any decor.

S-40 SPEAKERS . . . \$79.95 pair

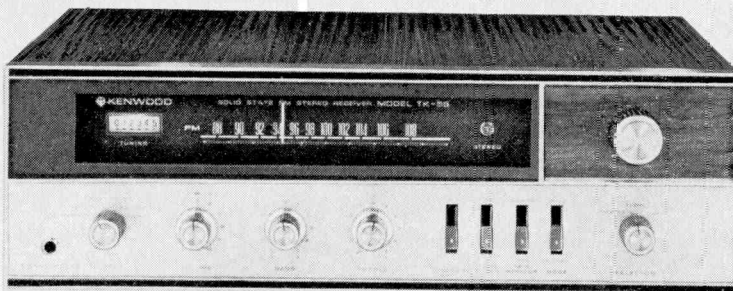
Extra large woofer and built-in tweeter offer maximum distortion-free range and purity of sound.



MODEL TKS-40 SOLID STATE STEREO MUSIC SYSTEM \$249.95*

A combination of Model TK-40 AM/FM stereo receiver with a pair of S-40 speakers.

MODEL TK-40 AM/FM 30 WATT SOLID STATE STEREO RECEIVER . . . \$189.95*



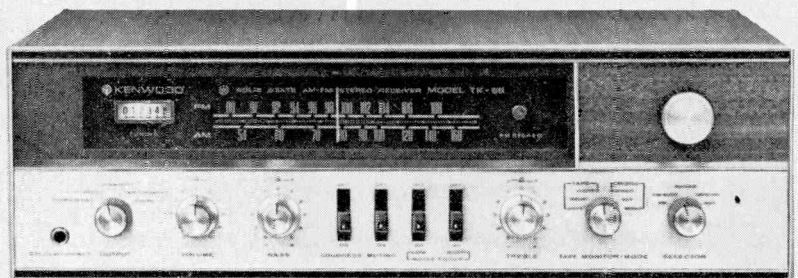
MODEL TK-55 FM 60 WATT SOLID STATE STEREO RECEIVER . . . \$199.95*

ADVANCED ENGINEERING

Each KENWOOD receiver incorporates quality features usually found in more expensive units such as: 4 gang, all transistor front-end; five I.F. stages and wide band ratio detector; all silicon power transistor amplifier; plus the exclusive blow-out-free transistor protection circuit. And, for the first time, Models TK-66, TK-88 and TK-140 feature field effect transistors (FET) — a highly-advanced solid-state device that provides greater performance and reliability.

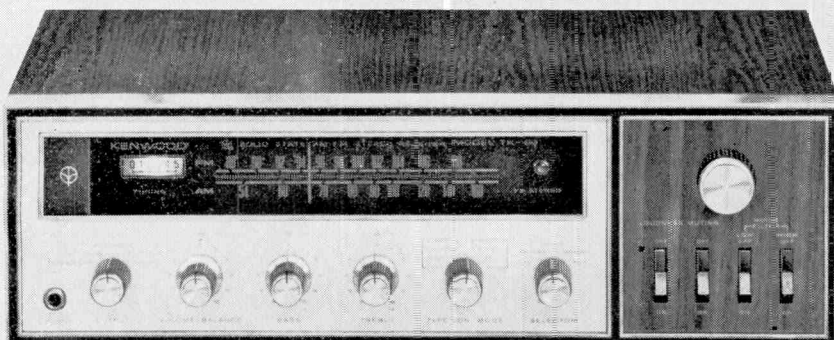
UNEQUALED VALUE

We invite you to compare KENWOOD with more expensive units on the market today. Only by comparison will you discover why KENWOOD offers remarkable value at unusually moderate prices . . . and why KENWOOD is earning the reputation . . . as the best deal around in stereo sound.



MODEL TK-66 AM/FM 60 WATT FET SOLID STATE STEREO RECEIVER . . . \$239.95*

CASE '68



**MODEL TK-88 AM/FM
90 WATT FET SOLID STATE
STEREO RECEIVER . . . \$289.95***

PROVEN RELIABILITY

Each KENWOOD receiver carries a two-year warranty. Each unit receives rigid quality control to insure the reputation it has earned over the past years of offering the most dependable and trouble-free units on the market today. KENWOOD engineers consistently maintain this high level of excellence and dependability. Visit your nearest KENWOOD franchised dealer and discover the many reasons high fidelity enthusiasts everywhere are choosing KENWOOD for . . . the sound approach to quality.

SPECIFICATIONS:

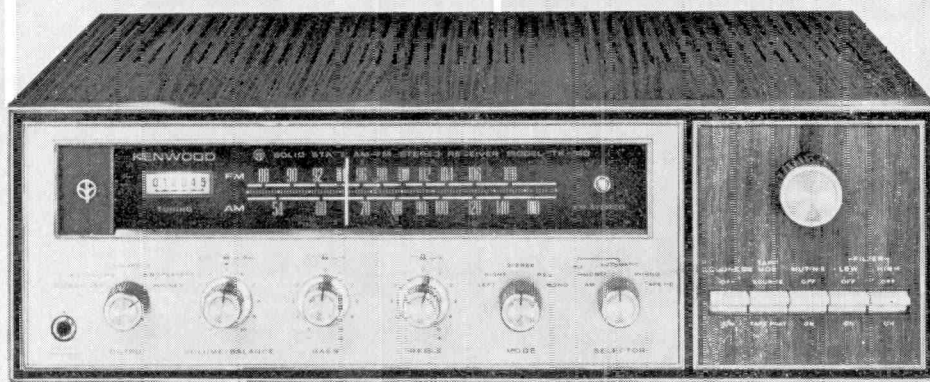
		MODEL TK-140	MODEL TK-88	MODEL TK-66	MODEL TK-55	MODEL TK-40
Total Music Power (IHF Standard)	4 ohms	130 watts	90 watts	60 watts	60 watts	30 watts
	8 ohms	120 watts	80 watts	50 watts	50 watts	25 watts
RMS Power (0.8% THD 1KHz)	8 ohms	50/50 watts	32/32 watts	20/20 watts	20/20 watts	10/10 watts
Frequency Response (± 2 dB)		20-50,000 Hz	20-50,000 Hz	20-50,000 Hz	20-50,000 Hz	20-50,000 Hz
2 Sets Stereo Speakers and Speaker Selector Switch		Yes	Yes	Yes	Yes	No
Usable Sensitivity (IHF Standard)	FM	2 μ V	2 μ V	2 μ V	2.5 μ V	2.5 μ V
FM Cross Modulation Rejection		80 dB	80 dB	80 dB	80 dB	80 dB
FM Capture Ratio		2.5 dB	2.5 dB	2.5 dB	2.5 dB	2.5 dB
FM Stereo Separation (at 400 Hz)		38 dB	38 dB	38 dB	38 dB	38 dB
FM Interstation Muting		Yes	Yes	Yes	No	No
FM Stereo/Mono Auto. Switching		Yes	Yes	Yes	Yes	Yes

*The price includes the handsome simulated walnut cabinet.

NEW
2 YEAR WARRANTY
FOR BOTH
PARTS AND LABOR

SUPERIOR PERFORMANCE

KENWOOD offers you a new adventure in exciting, crisp stereo reception with superior sensitivity, selectivity and image rejection. The advanced KENWOOD circuits pull in local stations sharp and clear; free from interference, distortion, cross-modulation or drift, weak and distant stations equally strong and distinct. Each KENWOOD receiver also offers: wider power bandwidth and frequency response; very low IM distortion for exceptional clear low to high level listening; inputs for all program sources; filters to remove record scratch noises; bass and treble controls to regulate each channel simultaneously. Most models offer a muting circuit switch to eliminate inter-station noises; and speaker output terminals for two sets of stereo speakers.



**MODEL TK-140 AM/FM
130 WATT FET SOLID STATE
STEREO RECEIVER . . . \$339.95***

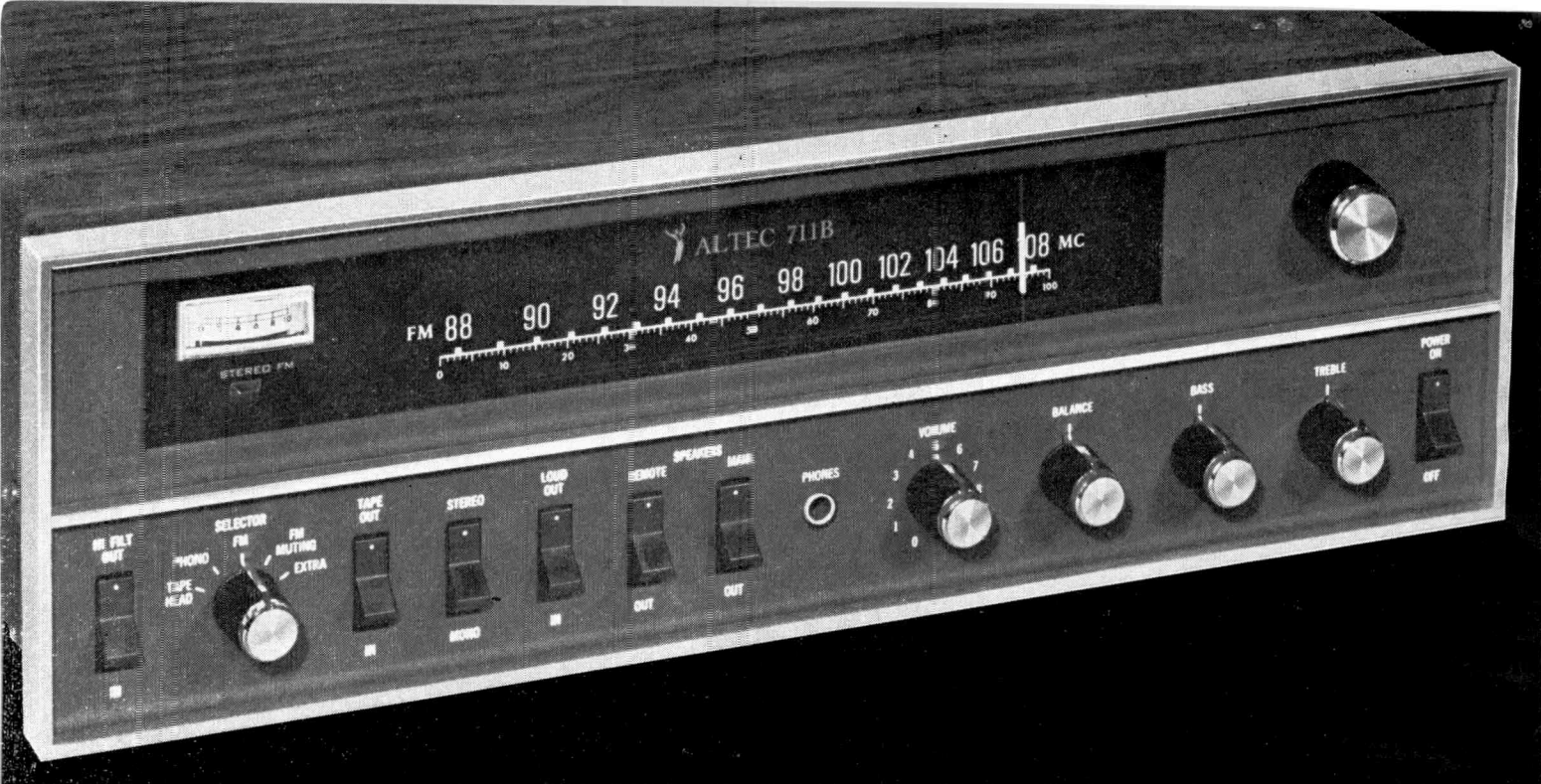
the sound approach to quality



3700 South Broadway Place, Los Angeles, Calif. 90007
69-41 Calamus Avenue, Woodside, New York 11377

Exclusive Canadian Distributor — Perfect Mfg. & Supplies Corp. Ltd., 4980 Buchan St., Montreal 9, Canada

CIRCLE NO. 33 ON READER SERVICE CARD



Our new 711B has been influenced by the company it keeps.

Never underestimate the importance of good heredity. Or of good environment. Our 711B Stereo FM Receiver has both going for it.

From concept to production line, it's shared the attention and concern of the same hands and minds that produced other fine Altec audio equipment. Equipment which has already made its mark in the world, in professional recording studios such as Paramount Pictures, ABC-TV, Disney Studios, and others. As well as in entertainment centers like the Los Angeles Music Center, Lincoln Center's Philharmonic Hall, Dallas Music Hall, the Houston Astrodome.

Matter of fact, Altec probably supplies more professional audio equipment for recording and broadcast studios, concert halls, stadiums and similar centers, than any other manufacturer in the field.

As a result, what's new to others is pretty old hat to us. Solid state, for example. We pioneered in the use of transistors for audio circuits over 10 years ago, developing special amplifiers that are used by telephone companies throughout the country, to give you better service.

With a background like this, it stands to reason the 711B would be something special. That it would have an FET front end and integrated circuits as a matter of course. (Fact is, there are two of them in the IF strip, each replacing 10 transistors for outstanding selectivity.) And the capture

ratio is an impressive 2.5 dB.

In the amplifier section, the 711B provides 100 watts of all-silicon transistor power with a frequency response of ± 1 dB, 15-25,000 Hz. Automatically resetting circuit breakers protect the components, and a built-in FM muting circuit provides noise-free tuning.

Obviously, the 711B has the latest of everything. We wouldn't consider anything less.

Take a look at it soon, at your Altec dealer's. And while you're there, ask for your copy of our new 24-page folder on stereo components and systems. Or write directly to us.

The 711B is yours for \$399.50. And if you want to hear it at its best, choose a pair of matching Altec speaker systems. That way, you'll all be in good company.



A Division of
LTV Ling Altec, Inc.,
Anaheim, Calif. 92803

COMMAND
POPULAR SAMPLER

FREE AGAIN • THE LOOK OF LOVE • THIS HEART • MERCY, MERCY, MERCY, • STUCK UP • NEVER MY LOVE • ONE STEP ABOVE
FEATURING: DOC SEVERINSEN • THE RAY CHARLES SINGERS • BENNY GOODMAN • JERRY FIELDING • "BRASS IMPACT" ORCH
AND OTHERS

PREVIEW '68

COMMAND
CLASSICAL SAMPLER

BERLIOZ: RAKOCZI MARCH • BIZET: DUO (FROM JEUX D'ENFANTS, OP. 22) • GERSHWIN: PORGY & BESS • GIGOUT: TOCCATA •
RAVEL: VALSES NOBLES ET SENTIMENTALES—NOS. 1 & 2 • GERSHWIN: AN AMERICAN IN PARIS • COPLAND: BILLY THE KID
FEATURING: WILLIAM STEINBERG & THE PITTSBURGH SYMPHONY ORCHESTRA • VIRGIL FOX

ATTENTION: RECORD BUYERS
PREVIEW THE GREATEST SOUND ON RECORDS FOR 1968

COMMAND RECORDS will soon begin shipping new 1968 albums for distribution throughout the world . . . albums FEATURING GREAT STARS with an EXCITEMENT and DIMENSION NEVER BEFORE HEARD ON RECORDS.

YOU . . . the consumer, can "PREVIEW" these new albums BEFORE they are in the stores . . . and at a SPECIAL LOW PRICE! You can hear selections from each of the new releases BY ORDERING 2 NEW PREVIEW '68 SAMPLER RECORDS . . . DIRECT FROM COMMAND!

POPULAR PREVIEW '68 lets you sample 12 selections from 12 different albums . . . each one a brand new release (not available in stores yet) or a current best seller.

CLASSICAL PREVIEW '68 includes 9 selections from the LATEST COMMAND CLASSICAL ALBUMS.

All selections in both albums are INCLUDED FOR THE FIRST TIME IN A COMMAND SAMPLER.

These PREVIEW '68 samplers can only be ordered DIRECTLY FROM COMMAND!

ORDER NOW . . . and preview the finest sound and performance on records!



1330 Avenue of the Americas, New York, N. Y. 10019

COMMAND RECORDS, Dept. HFS-1
New Deal Record Service Corp.
P.O. Box 5137
Church Street Station, New York, N.Y. 10008

Gentlemen: Please send me the Command PREVIEW '68 Albums I have checked below. I understand COMMAND pays all postage and handling costs. Full Money Back Guarantee. Allow 3-4 weeks delivery.

QUANTITY	ALBUM	PRICE	TOTAL
_____	Popular Sampler = COM 19 @	\$2.98	_____
_____	Classical Sampler CCD 8 @	2.98	_____
_____	Two or more Samplers @	2.50	_____
_____	Any Combination	each	_____

ENCLOSED IS \$ _____ (Check or Money Order)

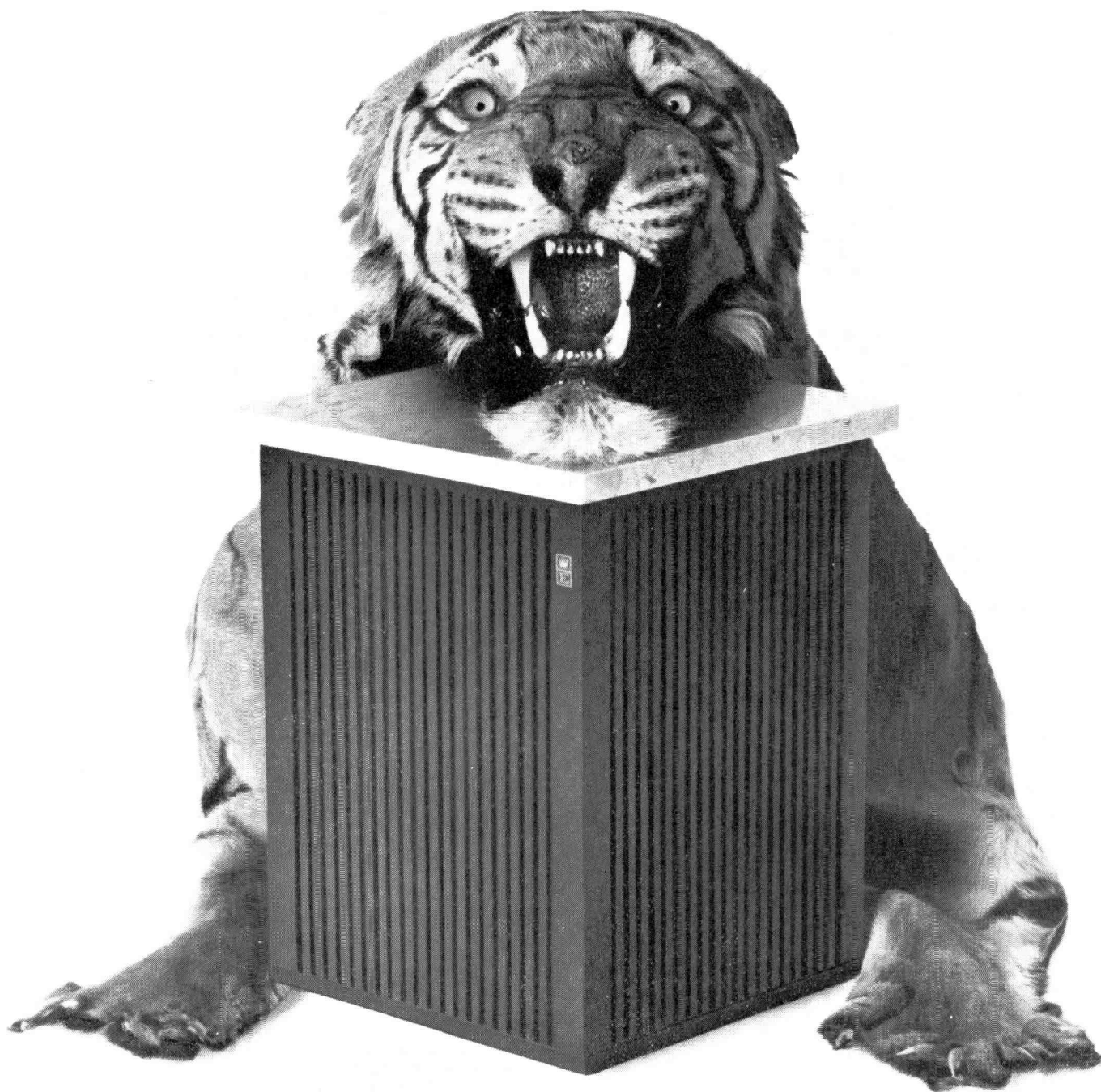
Name _____ (Please Print)

Address _____

City _____ State _____ Zip _____
Absolutely Necessary

TOP CAT

in the compact class



Empire's brand-new Kitten carries a pussycat price tag, but it handles power like a tiger. Feed it up to 60 watts and it gives back pure, undistorted music—with never a hiss or a snarl. In fact, considered from any angle, it's a powerful pretty kitty.

What your ear can hear, The Kitten sings—from an organ-pedal 30 Hz to the 18,000-Hz overtones of a coloratura trill. And The Kitten is designed to sit where it purrs happiest—on the floor, where its 10-inch high-compliance woofer can reflect its mighty bass response throughout the room. And its midrange/tweeter direct radiator delivers Bach, banjo or brass-band sound as clean as a cat's whiskers.

For free color catalog, write: EMPIRE SCIENTIFIC CORP., DEPT. G9, 845 Stewart Avenue, Garden City, New York 11530

The proof of the speakers is in the hearing, so ask your dealer to let The Kitten roar for you. Once you've heard it, you won't settle for anything less!

THE KITTEN

by  EMPIRE

Under \$100 • There's no better buy.

Size: 12 x 12 x 18". *Finish:* Polished walnut, with optional marble top or cushion. *Power Handling Capacity:* 60 watts.



Haydn's "LONDON" SYMPHONY, No. 104

FRANZ JOSEPH HAYDN:

After a drawing by George Danze, 1794

DURING the 1790's, Franz Josef Haydn twice went to London for extended stays. The visits were undertaken at the invitation of the shrewd Bonn-born impresario Johann Peter Salomon, and for each of the visits Haydn composed a set of six symphonies. Together, the twelve symphonies of the "Salomon" series mark the culmination of Haydn's output for orchestra. Never again did he return to the symphony as a form during the remaining fourteen years of his life—perhaps because he felt that the twelve "Salomon" Symphonies represented the utmost contribution he could make to the medium.

During Haydn's first visit Salomon kept him constantly busy with social engagements and musical responsibilities. Early in 1792, after Haydn had been in the British capital for about a year, he wrote:

In order to keep my word and support poor Salomon, I must be the victim, and work incessantly. I really feel it. My eyes suffer the most. My mind is very weary, and it is only the help of God that will supply what is wanting in my power. I daily pray to Him, for without his assistance I am but a poor creature.

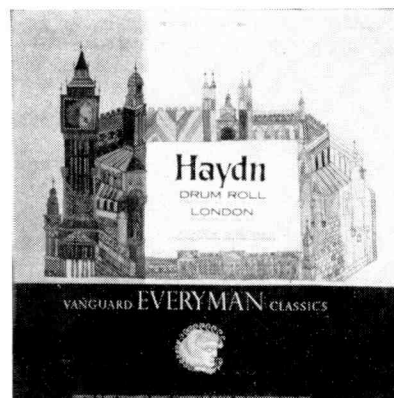
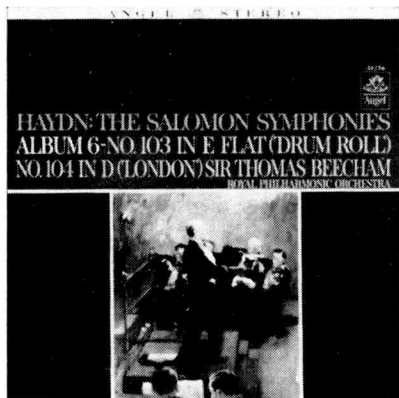
But the six symphonies of the first "Salomon" set (Numbers 93 through 98) betray no sign of strain; on the contrary, they are among the most spontaneous and vital works in all of orchestral music.

Haydn left London at the end of June, 1792, after spending about a year and a half there. Salomon as-

sured him that a return visit would be welcome at any time, and in January, 1794, Haydn bowed to the impresario's repeated requests and once more traveled to London. The first experience had taught him well, however; this time he arrived in London with some new symphonies already composed and ready for performance. The second visit lasted even longer than the first—until the end of August, 1795.

On top of the enormous social and artistic successes he enjoyed in London, Haydn also took substantial sums of money with him each time he departed. It is estimated that he grossed approximately 24,000 gulden in London—the equivalent of about \$12,000 in contemporary currency. And from Haydn's point of view there was still another benefit to be derived from his long sojourns in London: relief from his shrewish wife in Vienna. An indication of the lady's character is contained in a letter she sent him during his first London visit, in which she asked for money to buy a house in which to spend her "widowhood." When he returned to Vienna, Haydn duly inspected and purchased the house. As fate would have it, he lived in it himself as a widower, for he survived his wife by nine years.

Six of the twelve "Salomon" Symphonies bear identifying nicknames, most of which have to do with their musical characteristics: the loud and unexpected chord in the slow movement of the Symphony No. 94, for example, earned the symphony the nickname "Surprise,"



Of the three finest stereo recordings of Haydn's Symphony No. 104, two are on the Angel label: Beecham's charming reading (S 36256) and Klemperer's quite different but nonetheless effective interpretation (S 36346). The third is Mogens Wöldike's early-stereo recording for Vanguard (Everyman S 166), one of the best Haydn performances on discs.

and the martial qualities in the second and fourth movements of the Symphony No. 100 resulted in its being dubbed the "Military." The last of the twelve is known as the "London" Symphony, for no apparent reason. As a matter of fact, of all the symphonies this one has perhaps the least justification for being so called, for the principal theme of the last movement is an undisguised Austrian peasant dance, linked to a song—*Ob, Jelena*—that Haydn may have heard at Eisenstadt.

THIS last bit of information sparked a lively controversy some years ago. W. H. Hadow, in an interesting study titled *A Croatian Composer—Notes Toward the Study of Joseph Haydn*, stated that "variants of this melody are found in Croatia proper, Servia and Carniola." A counter-theory was advanced in 1926 by Michel Brenet, who wrote:

During the time Haydn lived at Eisenstadt or Esterháza, when his music resounded day and night in the castle and gardens of his prince, why should not his own airs or scraps at least of his own melodies have stolen through the open windows and remained in the memories first of the people whose duty it was to interpret them, or who were obliged to hear them, and then of the scattered population of the surrounding country?

To this question Hadow replied:

Which is more likely—that these [tunes] were orally transmitted like all early folk songs and that Haydn found them and used them, or that the peasants "heard them through the windows," memorized them at a single hearing, fitted them to secular words, and carried them through the taverns and merrymakings of their native villages? Three of the melodies, for example, appear in the Symphony No. 104 which was written for London after the Esterhazy Kapelle had been disbanded. Where and how could the villagers have come across them?

Logic would certainly seem to reside with Hadow, but in any case—whether the themes in Haydn's last symphony are folk-derived or are truly original—the symphony is a masterpiece, full of the master's unique invention and sparkle.

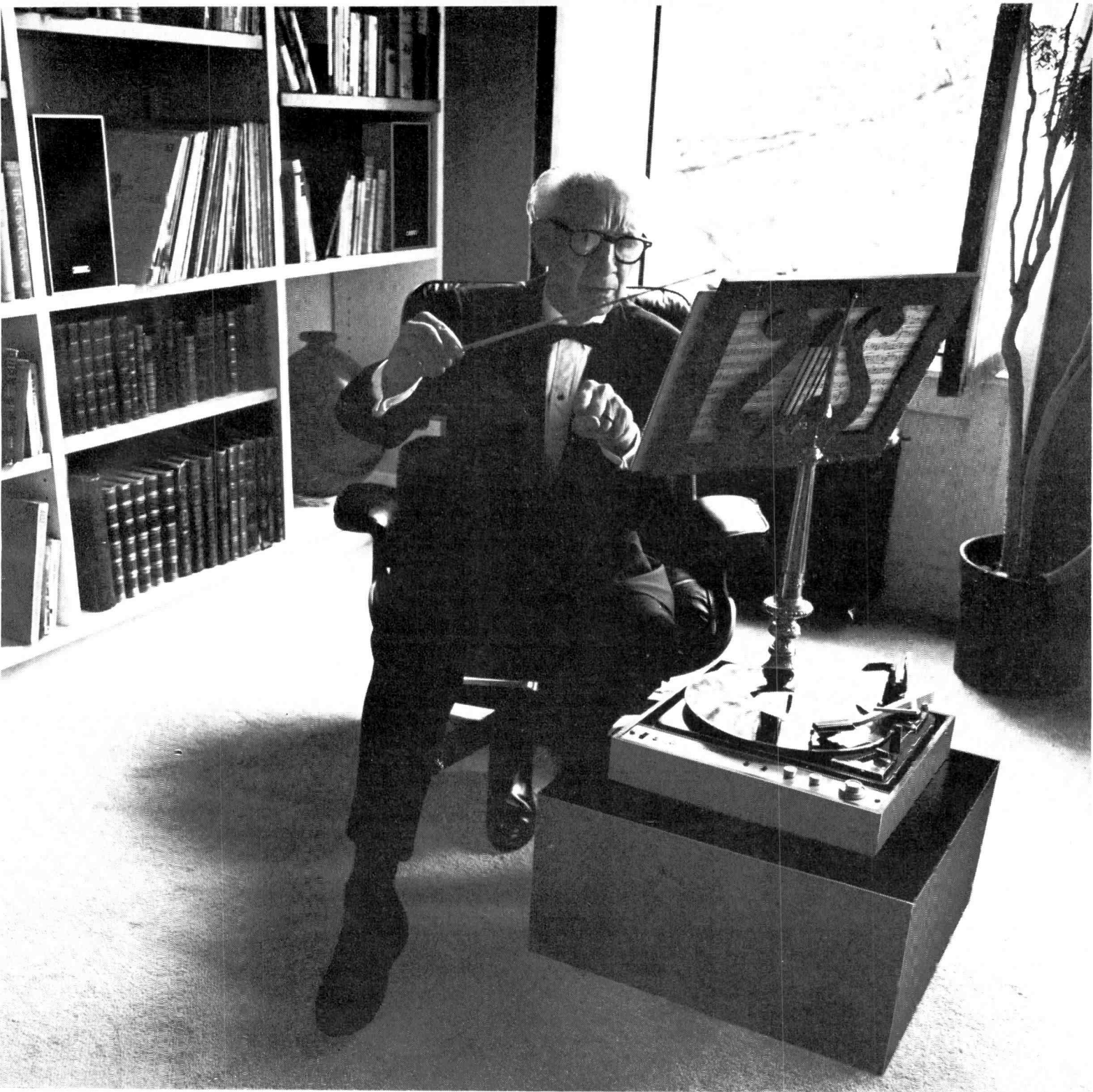
Nine recordings of the "London" Symphony are currently available, of which seven exist in stereo/mono ver-

sions. Since both the mono-only entries (by Scherchen and Szell) are outstripped musically *and* technically by several of the more recent performances, we need concern ourselves only with these seven. Four of them, it seems to me, fall into the "not quite" category: Bernstein's (Columbia MS 6050, ML 5349) stems from the period about a decade ago when the conductor was more concerned with manner than matter; Karajan's (RCA Victor LSC/LM 2535) lush-sounding evocation would be fine for Rachmaninoff, but it is not for Haydn; and the Horenstein (Vox 59330, 9330) and Münchinger (London CS 6080, CM 9216) performances are prim, proper—and uneventful.

The remaining three are all quite good in their different ways: those by Beecham (Angel S 36256, 36256), Klemperer (Angel S 36346, 36346) and Wöldike (Vanguard Everyman S 166, 166), the last a budget-price disc. Beecham's performance is full of the pointed rhythms, vital phrasing, and interpretive charm that characterized this conductor at his best. Klemperer's is a little more stolid, but quite effective on its own terms. Both performances are well played by the respective orchestras, but Klemperer has the benefit of airier, more sharply defined recorded sound. And so to the performance recorded in Vienna more than a decade ago under the direction of the Danish conductor Mogens Wöldike. Quite simply, I find this one of the finest of all Haydn symphony recordings. Utilizing a corrected score, Wöldike gives us a robust, invigorating account of the work that is positively bracing in effect. Especially clearly etched are the all-important timpani and trumpet parts. And although the recording sessions date from the mid-1950's, the sound is easily the equal of today's best. If, as has been intimated, Columbia intends to complete the Haydn symphony series begun by the late Max Goberman, I hereby nominate Wöldike as my candidate to conduct them.

The fortunate tape collector also has the Wöldike performance available to him, in a well-recorded 3¾-ips reel (Vanguard Everyman F 1916) that contains similarly fine readings of the other five of the second set of "Salomon" symphonies.

REPRINTS of the latest review of the complete "Basic Repertoire" are available without charge. Circle number 179 on reader service card.



Just because you don't know an OTL circuit from a grunch coil doesn't mean you don't know what good sound is.

But before you can have good sound, you've got to have the right combination of stereo components. And matching components is no cinch. (Even for people who do understand audio lingo.)

Of course, if your ear is really *that* good (and your wallet is fat enough), you could end up with a great system. Eventually.

But all you'll be doing is what our engineers did when they designed Sony compact stereo systems.

If you decide to trust our audio experts, you'll still have plenty to choose from. Our solid-state systems range from \$179.95* to \$379.95*.

Amplifier/preamplifier, turntable and

(in one model) an FM Stereo/AM tuner are built into a single cabinet. (But still have component quality.)

Speakers are shelf size, but they don't speak like they are.

And our compact FM Stereo/AM tuners include a portable which doubles as a component.

As your vocabulary grows, you'll find your Sony system lives up to it. For instance, you'll learn that our OTL circuit contributes to the high quality of sound reproduction in our systems.

The grunch coil? Ask your dealer what that is. If he attempts to explain it, watch out.

There ain't no such animal.



SONY[®]

!!! a Marantz receiver

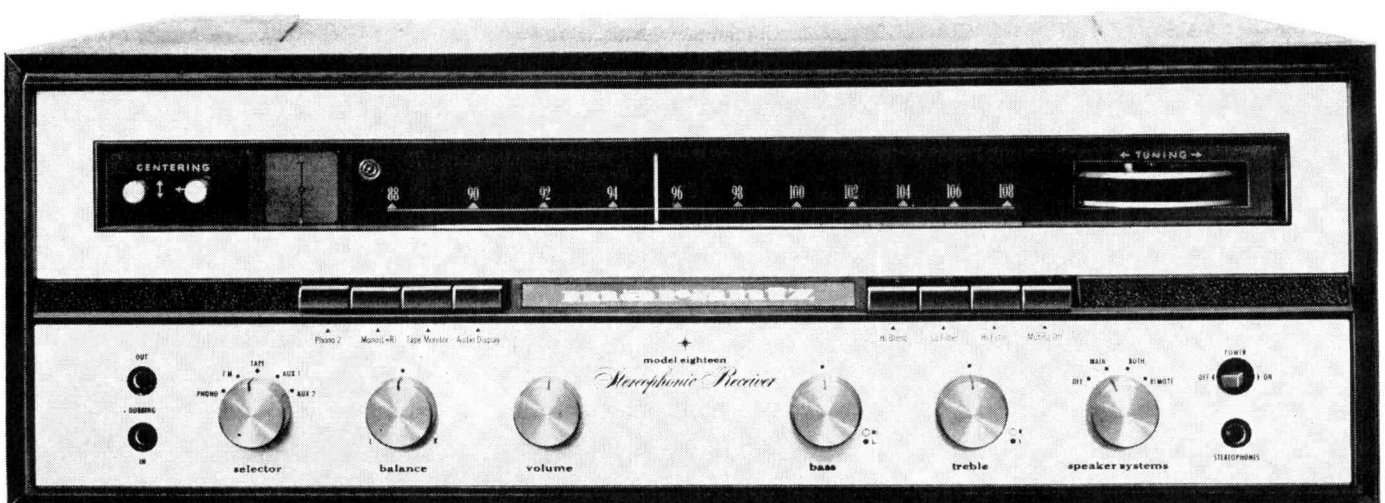
Now everyone may enjoy the eloquent sound of Marantz components, combined in a single completely solid-state system — the Marantz Model 18 Stereo Receiver. Here is the incomparable quality of Marantz stereo components — tuner, preamplifier and power amplifiers — combined on a single chassis. Designed to the unequivocal standards which have made Marantz a legend in stereo high fidelity, the Model 18 achieves the level of performance of the most expensive components in a moderately priced compact receiver. Here is the total performance you would expect from Marantz. Finer sound than you have heard from most quality component systems and it is priced at less than half the cost of the fine Marantz components which inspired its design — only \$695.00.

Features: Out of intensive research comes the Marantz "passive RF section" a revolutionary new development which advances the state of art and eliminates the overloading problems commonly encountered in strong signal areas . . . Four I.F. stages assure maximum phase linearity and maximum separation . . . an integral Oscilloscope, a Marantz hallmark, provides absolute tuning accuracy and permits elimination of multipath . . . Gyrotouch tuning provides a new experience in quick, silky-smooth station selection and precise tuning. **Amplifiers:** Solid-state throughout with a massive power output of 40 watts continuous rms per channel, from 20 Hz to 20k Hz, nearly three times the output of many receivers rated at 60 "music power" watts . . . Direct coupled design for instantaneous recovery from overload . . . Automatic protector circuits for amplifier and speaker systems eliminate program interruptions . . . Total distortion from antenna input to speaker output is less than 0.2 per cent at rated output . . . and substantially less at listening level. Flawless performance was the design objective. Flawless performance has been achieved.

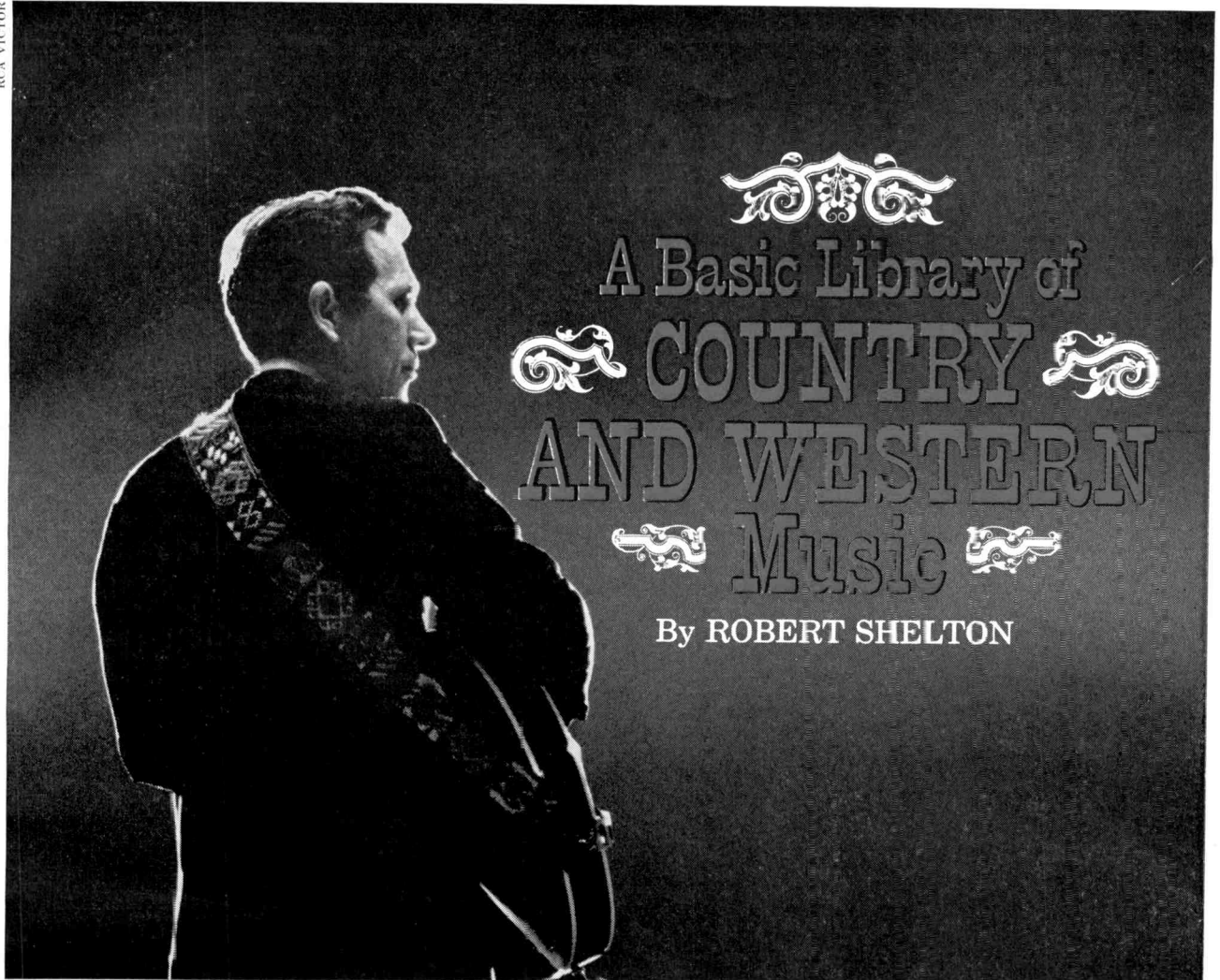
Specifications: **Tuner Section:** Signal-to-Noise Ratio — 70 DB; Harmonic Distortion at 400 Hz, 100% modulation — 0.15%; Frequency Response, 75 microsecond de-emphasis — ±0.5 DB; Multiplex Separation, 20 Hz — 43 DB, 1000 Hz — 45 DB, 10k Hz — 35 DB, 15k Hz — 30 DB. **Amplifier Section:** Power, 40 rms watts per channel at 4 and 8 ohms, 20 Hz to 20k Hz; Distortion, 0.2% THD; Frequency Response, 15 Hz to 30k Hz, ±0.5 DB. **Dimensions:** 18¼" wide x 16" deep x 6" high.

marantz®

37-04 57TH STREET, WOODSIDE, NEW YORK, 11377



MARANTZ MODEL EIGHTEEN STEREOPHONIC RECEIVER
CIRCLE NO. 37 ON READER SERVICE CARD



The versatile guitarist Chet ("Mr. Nashville") Atkins in performance.

PERHAPS no other type of music is so condescended to by sophisticated taste in this country as one of our bedrock popular forms, country-and-western—and unjustly so, for although much of the music that goes under this banner is banal and ephemeral, there is at least as much that has charm, durability, and depth. The selections that follow, seventeen discs out of the thousands available, have been deliberately chosen as a basic introduction for those who have never seriously listened to country-and-western music, and for those who cannot even credit that it is a native American art form. For these, and for others who may have been exposed only to the worst of the genre in some uncongenial service barracks, this list is offered for another try at hurdling the taste barrier.

Country-and-western music does not *need* converts, of course: its dedicated audience is enormous. It is estimated that there are 35,000,000 fans in the United States alone, widely scattered in nearly every corner of the nation (even, perhaps, Manhattan). More than two thousand radio stations program country music daily, and an enormous number of recordings, personal appearances,

and TV shows keep the "Nashville sound" abroad in the land. This commercial behemoth has grown to its present size in only a little more than forty years, beginning with a 1923 recording by Fiddlin' John Carson and 1927 recordings by Jimmie Rodgers and the Carter Family. It has gone through vast stylistic changes in that time. Meanwhile, its influence has spread. The white creators of rock-'n'-roll in the mid-1950's—Elvis Presley, Buddy Holly, Carl Perkins, *et al.*—were country singers who departed from tradition, and today's "modern" country music is located stylistically just a block or two away from Tin Pan Alley.

As any fan of country-and-western music will tell you, it is not so simple a genre as it may first appear to be. And its strengths are many: its lambent melodies, its natural lyric style that is close to conversational speech, the realistic contents of its verses, the tangy rhythms, and—particularly in such subcategories as Bluegrass or western swing—its instrumental virtuosity. In this discography I have tried to include a generous sampling of these strengths and at the same time to provide a capsule view of "the great tradition." *(Continued overleaf)*

FAMOUS ORIGINAL HITS BY TWENTY-FIVE GREAT COUNTRY MUSIC ARTISTS. CMA 712 (available from Country Hall of Fame, Box 1700, Beverly Hills, California).

Since there are so many able stylists in country music, the anthology or sampler seems a good way for the novice to take the plunge. "Famous Original Hits" is a rare compendium, organized by the Country Music Association with the participation of most of the major commercial record labels, and a highly listenable over-view of contemporary country-and-western. From the crooning of Eddy Arnold to Kitty Wells' bathetic *It Wasn't God Who Made Honky-Tonk Angels*, from Bobby Bare's displaced-rural-person blues *Detroit City* to Tex Ritter's raw folk-like *Rye Whiskey*, this album is nearly encyclopedic in its coverage of country vocal styles. Among the lesser-known singers represented are the puckish Lefty Frizzell and the creditable balladeers Ray Price, George Morgan, and Don Gibson. On balance, this is a representative basic album with a few valleys to make the peaks seem even higher.

ROY ACUFF AND HIS SMOKY MOUNTAIN BOYS: *Hand-Clapping Gospel Songs. Somebody Touched Me; Turn Your Radio On; Jesus Died for Me; I Saw the Light;* others. HICKORY 117.

The personal fortunes of country singers seem to rush to polarities: the short, tragic lives of such style-setters as Hank Williams and Jimmie Rodgers, and the incredible agelessness of such stars as Roy Acuff, Ernest Tubb, Eddy Arnold, and Hank Snow. Acuff's rural fans of twenty years ago are likely still to be devoted today, and his style has remained undiluted. To his publicists Acuff is "the king of country music," and to the musicians' community in Nashville he is a respected elder statesman. Acuff's singing is in the best mainstream country tradition—a believable and identifiable immersion in the

sense and emotion of his musical message. His penetrating, slightly nasal tenor frequently drives his exuberant band along with a fervor that begs for hand-clapping accompaniment. Whether you find Acuff's fundamentalist theology to your taste or not, his musical zeal can hardly fail to move you.

CHET ATKINS: *The Best of Chet Atkins. Jitterbug Waltz; Peanut Vendor; Django's Castle; Blue Ocean Echo; Yankee Doodle Dixie; Trambone; Main Street Breakdown; Country Gentleman;* others. RCA VICTOR 2887, LPM 2887.

To those cynics who find the bulk of Nashville music lacking in finesse, technique, or interpretive skill, the only riposte one needs is the name of the guitarist Chet Atkins. This musical jack-of-all-styles has become, to many, "Mr. Nashville," representing the triumph of polish over corn in the music coming from this center of commercial country music.

The lean, laconic, gentle Atkins went to Nashville in 1950, rose steadily to become one of RCA Victor's most active a-&-r men, and is now in charge of that company's studios there. Born in the Clinch Mountains of eastern Tennessee, son of a classical musician and singer, Atkins has also become one of the most eclectic and versatile of professional guitarists, playing classical guitar with as much skill as he does traditional or modern jazz, sophisticated pop, and down-home country. Among the influences he acknowledges are an obscure Kentucky Negro country guitarist, Les Paul, and the internationally renowned Django Reinhardt.

This recording is chosen to illustrate Atkins' breadth of range and sure-fingered grasp of styles. Other recordings, such as "Our Man in Nashville" (RCA Victor LSP/LPM 2616), dwell more upon the modern country style, but "The Best of Chet Atkins" displays his great versatility. Keen finger articulation, graceful phras-



The wit and sophistication of songwriter Roger Miller (above) have won popularity for him beyond the limits of the usual audience for country music. A more traditional singer is Roy Acuff (right), who has long been regarded as the "King of Country Music." Acuff's repertoire is largely religious.



ing, ingratiating simplicity of statement—these are some of the hallmarks of the virtuosic Atkins guitar.

ROGER MILLER: *Golden Hits. King of the Road; Dang Me; Chug-a-Lug; You Can't Roller-Skate in a Buffalo Herd; England Swings; Kansas City Star; Atta Boy, Girl; others.* SMASH © 67073, ® 27073.

The country singer and song writer who seems to have caught the public fancy most widely in recent years is a whimsical, witty, studiously relaxed young man named Roger Miller. No overnight success, Miller worked as a bellhop in a Nashville hotel while attacking the big country-music center, then languished (on a major label) before breaking through. Most of his songs have a simple, ingratiating melody line coupled with punning, clever words. Part of the tradition of country song-writing is word-play—multiple rhymes and sly jokes—and Miller crowned that tradition with hit after hit.

Miller was hurtled along almost too fast, with the attendant superhuman publicity build-up and a TV series he was clearly not ready to handle. Still, his reputation will undoubtedly survive, and his songs are the pedestal of that reputation. One of his best, *King of the Road*, seems to embody all that is permanent and valuable in country music. This tale of a footloose, happy-go-lucky drifter rang an emotional bell for anyone cooped up in an office, a jail, or a corral. Miller refutes, with flair and polish, the widespread misconception that country songs are all unsophisticated.

HANK WILLIAMS: *Greatest Hits, Volume I. Take These Chains from My Heart; Your Cheatin' Heart; Hey, Good Lookin'; Cold, Cold Heart; Half as Much; others.* MGM © S 3918, ® 3918.

Every creative field has its tempestuous, tragic bard who destroys himself, or is destroyed, on the shoals of life. Country-and-western music has had two such figures,

Jimmie Rodgers and Hank Williams. The latter died in 1953, at the age of twenty-nine, but just as the jazz fans proclaim that "Bird lives," the country fan believes that "Hank lives." And so believes MGM, which has issued and reissued many discs by Williams, the man who has been called "the Hillbilly Shakespeare." Williams had, in his brief and turbulent hour, a magic gift for melody and homespun statement. His voice sobbed and cried with a plaintiveness that could touch and hurt. He may well have been one of the greatest white blues singers. Williams was also the first major country singer since the 1930's to have broken out of the country pasture and into the national pop field, attracting millions of new listeners for the country revival of the early 1950's. A listener to these fifteen-year-old tracks will find the instrumental backings somewhat dated, but the keening, penetrating voice of this country giant is ample compensation.

DIESEL SMOKE, DANGEROUS CURVES AND OTHER TRUCK-DRIVER FAVORITES. *Six Days on the Road* (Red Sovine); *Radar Blues* (Benny Martin); *Truck-Driving Man* (Hylo Brown); others. STARDAY ® SLP 250.

ALL ABOARD FOR THE RAILROAD SPECIAL: *Sixteen of America's Greatest Railroad Songs.* *Casey Jones* (Jim Glaser); *Hobo* (Benny Martin); *Cannonball Blues* (Bill Clifton and band); *Wreck of the Old '97* (Lew Childre); others. STARDAY ® SLP 170.

Because country music is rooted in rural realities, even technology affects its content, and country culture-heroes have had to change to keep up with technology. The pony-express rider and mule-skinner first gave way to the railroad engineer, and now in the Diesel-driving teamster we have a new-style hero in an old mold. There is, of course, a common denominator in songs of the cowboy or express rider and the man behind the wheel of a



MGM RECORDS



MUSICOR RECORDS

In his short lifetime, Hank Williams (far left) brought country-and-western and pop music closer together. George Jones (left) is a currently popular singer in the so-called "honky-tonk" style.

The country-music style owes much to Negro influences, but there are few Negro performers. Ray Charles (right) is an exception: his country albums, indelibly marked with his strong musical personality, have been phenomenally successful.

Virginia's justly famed Carter Family (Maybelle, Sara, and A. P., l. to r. below) were tremendously influential in the development of the country style.



RCA VICTOR
ABC PARAMOUNT



Country music is not all vocal: Kentuckian Bill Monroe (left) is the father of the driving, rhythmic "Bluegrass" instrumental style—guitar, bass, mandolin, fiddle, and banjo. Prominent graduates of his "school" are Earl Scruggs and Lester Flatt (right).



BMI



COLUMBIA RECORDS

Versatile Johnny Cash (right) is perhaps best known for bridging the gap between commercial country music and the older folk tradition. Singer and song writer Jimmie Rodgers (far right) was the first—some forty years ago—to depart from the early country vocal style (nasal and whining) for a gentler, more crooning approach.



COLUMBIA RECORDS



RCA VICTOR

huge semi: the lonely man pitted against a hostile or dangerous environment. The truck-driver is a romantic figure, with a girl-friend at every truck-stop, a potential problem in a lonely wife at home, and a crisis at every turn of the road. This life has been caught with all its realistic flavor in the Starday album "Diesel Smoke." The set is more than a curio album, however, for good voices tell of the joys and perils of trucking. Listened to over against the more familiar songs of railroading (these Starday discs may be hard to find, but are worth searching for) we can see how the latter sired the former.

BUCK OWENS AND HIS BUCKAROOS: *I've Got a Tiger by the Tail. We're Gonna Let the Good Times Roll; Memphis; Streets of Laredo; Cryin' Time; others.* CAPITOL © ST 2283, ® T 2283.

GEORGE JONES: *Sings Country and Western Hits. Window up Above; Heartaches by the Numbers; Poor Man's Riches; It's Been So Long; others.* MERCURY © MG 60624, ® MG 20624.

A country super-star has been developing in the last few years in the person of Buck Owens, a Bakersfield (California) singer, band-leader, and song writer. Owens is one of the ablest of the "honky-tonk singers," a type that has been traced back to the 1940's and the roadhouse juke-boxes that required a more extroverted type of singing and backing than was provided by old-style country crooning. Owens has a superb voice that is projected with such vigor and spirit that it seems only a matter of time before the pop-teens of the cities discover him *en masse*. With a stunningly disciplined "rockabilly" (a fusion of rock-'n'-roll and hillbilly) band pushing and supporting him, Buck Owens is one of the most captivating country performers since Elvis Presley, and his choice of material and dedicated country orientation keep him from excesses of beat or blare. Another strong worker in the honky-tonk style is the Texan George Jones. Jones lacks some of the Owens charm and tends to drift to material and arrangements not up to his musicianship. Yet he is one of the best vocalists in a field peppered with good singers, and as such, commands immediate attention.

THE CARTER FAMILY: *'Mid the Green Fields of Virginia. Keep on the Sunny Side; Motherless Children; Foggy Mountain Top; The Poor Orphan Child; others.* RCA VICTOR ® LPM 2772.

Where does commercial country music end and folk music begin? This vexing question is often belabored by students of folk and popular culture. There is no clear-cut answer, for the two forms are continually overlapping. But the family trio, the Carter Family, stood at the crossroads and straddled the two artistically. The Carter Family comprised Sara Carter, her husband (the late A. P. Carter), and her cousin Maybelle. In a historic week in the summer of 1927, a recording scout, the late Ralph

S. Peer, recorded the Carters and Jimmie Rodgers in Bristol, a town astride the Tennessee-Virginia border. Here, in a dozen reissues from the late Twenties on, you see why the Carters were so influential. Steeped in tradition, their songs nonetheless seem to rise out of personal experience. The harmonies, the instrumental interplay, the yearning and sadness pour out with the simple beauty of fine homespun. Of the original family, Mother Maybelle and her daughters are still carrying on the tradition.

RAY CHARLES: *Modern Sounds in Country-and-Western Music, Volume I. Bye Bye, Love; You Don't Know Me; Careless Love; Worried Mind; Hey, Good Lookin'; Half as Much; others.* ABC © ABCS 410, ® ABC 410.

One of the greatest stumbling-blocks to the acceptance of country-and-western music by city sophisticates is the widely held view that it is a totally segregated musical field. It is true that white-Southern attitudes have permeated this music and its lyrics, but many of the leading figures in the history of c-&-w have publicly stated their gratitude to Negro influences. Some country-music radio surveys indicate that they have a large Negro listenership, and such emerging stars as RCA Victor's Charley Pride lend credence to the assumption that one day Negroes will be making this kind of music (as well as listening to it) in large numbers.

Nothing has made country fans more aware of this last possibility than two enormously successful albums of country music the Negro singing star Ray Charles released in 1962 and 1963, especially when Charles became the biggest seller of country songs since Hank Williams. Individualist that he is, Charles makes no attempt to imitate the country manner, but puts the strong stamp of his own personality on the tunes. Backed by brasses, saxes, and strings, Ray Charles' voice drifts languorously over the lyrics almost as if he were recalling to himself the white country radio he heard in his youth in Albany, Georgia. When he turns to the songs of Hank Williams, especially, Charles seems to have found a soul-mate, and his interpretations are near-classic.

FLATT AND SCRUGGS/DOC WATSON: *Strictly Instrumental. Pick Along; Spanish Two-Step; Nothing to It; Jazzing; others.* COLUMBIA © CS 9443, ® CL 2643.

BILL MONROE: *The High Lonesome Sound. Memories of Mother and Dad; Highway of Sorrow; Whitehouse Blues; When the Golden Leaves Begin to Fall; others.* DECCA © DS 74780, ® DL 4780.

Bluegrass, a country ensemble style, has been called rural jazz and likened to both the village bands of Eastern Europe and to Irish-Scottish jig and reel music. It is a bit of all of these, and one of the more fluid forms for country virtuosity. Lester Flatt, Earl Scruggs, and Doc Watson, in a country summit meeting, show the astounding heights it is possible to scale with the guitar and

banjo in this jam session. Scruggs' banjo and Watson's guitar are utterly distinctive as they render variants on rhythm and melody, run through rapid arpeggios, and stress "inner voices."

The Kentucky mandolinist and singer Bill Monroe is generally credited with being the "father of Bluegrass." From his various bands, since the late 1940's, have graduated nearly all the leading figures in Bluegrass, including Flatt and Scruggs. Monroe is a consummate artist whose voice is as clear, as true, and as compelling as any that can be heard anywhere in country music. Behind this clarion tenor plays a tightly disciplined yet freewheeling Bluegrass band.

AUTHENTIC COWBOYS AND THEIR WESTERN FOLK SONGS. *The Old Chisholm Trail* (Mac McClintock); *Following the Cow Trail* (Carl T. Sprague); *Zebra Dun* (Jules Allen); *There's a Brown-Skin Girl Down the Road Somewhere* (Eck Robertson); *Texas Ranger* (Cartwright Brothers); others. RCA VICTOR (M) LPV 522.

WESTERN SWING. Historic Recordings by Bob Wills, Lightcrust Doughboys, Bill Boyd, Milton Brown, Hackberry Ramblers, Harry Choats. *Barn Dance Rag*; *Never No More Blues*; *Spanish Fandango*; *The Eyes of Texas*; *Steel Guitar Stomp*; others. OLD TIMEY RECORDS (M) 105 (available from Box 9195, Berkeley, California 94719).

The purely western elements of country-and-western music are difficult to keep track of, largely because the "eastern," Nashville-centered musical stylists borrowed the westerners' Stetsons, rhinestone-studded costumes, and boots, and superimposed a lot of western musical style on the mountain music of the South. But as country and folk music moved west with the frontier, it gained special qualities of its own, new themes, and new approaches. These two discs survey the entire range of western music in historical fashion up to World War II: the bulk of the cowboy songs edited by Fred Hoepfner for the RCA collection date from the Twenties and the "Western Swing" album centers on the Thirties.

No emotion colors the early album as much as the sense of loneliness in a vast land. The second album, in contrast, shows the emerging lively swing groups that played for dances and get-togethers, as the western string bands began to incorporate city-swing elements as well as Mexican-Spanish qualities.

JOHNNY CASH: *Orange Blossom Festival. It Ain't Me, Babe*; *The Long Black Veil*; *Don't Think Twice; Mama, You've Been on My Mind*; *All of God's Children Ain't Free*; others. COLUMBIA (S) CS 9109, (M) CL 2309.

The Ozark singer and song writer Johnny Cash has impressed many as one of the most electric stage performers in any of the popular arts. He is erratic, and every bit as stormy as the late Hank Williams was, but when he is good he is transcendent. Cash's voice is a big, bold baritone that conveys a story-line and transmits a melody with

power and urgency. Whether in a Bob Dylan song such as *It Ain't Me, Babe*, a country classic such as *Long Black Veil*, or his own protest song *All of God's Children Ain't Free*, Cash is bigger than life. His real magic comes through best in person as one watches the strong, almost fierce-looking rambler move about the stage with an animal grace. Yet with sound alone, as on this disc, he can convince the listener that he deserves a special place in the pantheon of country artists.

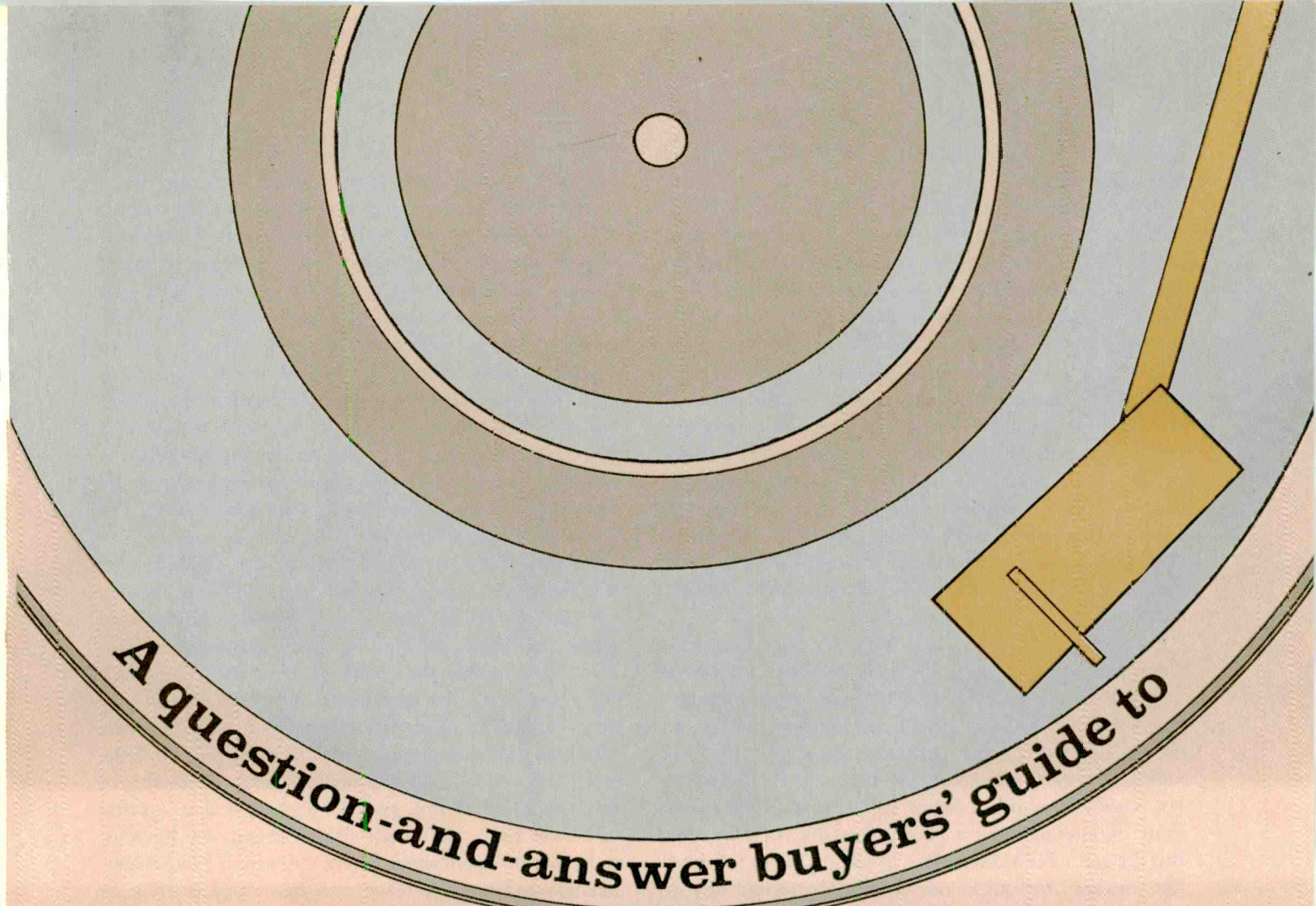
JIMMIE RODGERS: *The Best of the Legendary Jimmie Rodgers. Mule Skinner Blues*; *T for Texas*; *Waiting for a Train*; *Daddy and Home*; others. RCA VICTOR (S) LSP 3315, (M) LPM 3315.

Under the loving and careful attention of Brad McCuen, RCA Victor has issued seven long-playing discs of the recordings of "the father of country music," Jimmie Rodgers, a tubercular railroader-turned-minstrel who died in 1933 at the age of thirty-five. From these seven discs, McCuen further culled the dozen tracks for this definitive album (the stereo is electronic, of course). Rodgers was one of the recording industry's first superstars, a man whose recordings sold steadily in the darkest hours of the Depression. He directly influenced such singers as Gene Autry, Cliff Carlisle, Hank Snow, Ernest Tubb, and Elton Britt, and some of his one hundred and ten recorded songs have cropped up in Western Europe as folk songs. His tenor voice was sweet and gentle, a change from the earlier rough-toned folk singing; his debt to Negro blues was strong (and acknowledged). The distinctive form he invented was the "blue yodel," a plaintive cross between the blues and the attention-getting yodeling tricks that delighted audiences of the late Twenties. Rodgers was a working man turned entertainer, and as such he won enormous sympathy from the "little man" of the South, who could cheer his monetary successes and lament the steady erosion of his health almost as if he were a member of the family. Not everything that Jimmie Rodgers sang or recorded was of top quality, but all of it is of interest. He gave form, style, and content to country music, and also proved that it could have an enormous audience in rural America, around the world, and even in the cities. The style he created forty years ago still feels his influence.

* * *

And finally, RCA Victor, out of its bounty, has just given country-music fans a two-disc "keepsake package" of archive performances by stars of Nashville radio station WSM's Grand Ole Opry. This staple album for a country-and-western collection is reviewed by William Flanagan on page 121 of this issue.

Robert Shelton, critic of popular and folk music for the New York Times, is the author of The Country Music Story, a profuse-ly illustrated study which was published (1966) by Bobbs-Merrill.



A question-and-answer buyers' guide to

RECORD PLAYERS, TURNTABLES, AND TONE ARMS

By George Martinson

THE FUNCTION of a turntable—any turntable—is to rotate a disc record at constant speed with a minimum of extraneous vibration and noise. The function of a tone arm—any tone arm—is to carry the cartridge in such a way that it can follow the inward spiral of the record groove with a minimum of frictional drag or other kinds of mechanical interference. That's all. But, as with so many other "very simple things," a considerable amount of technological refinement has been brought to bear on those requirements. Inevitably, different manufacturers find different ways of solving the problems common to them all, and each tends to imply that his is the only—or at least the best—solution. Thus, it is sometimes difficult to sort through the advertising

claims for the really relevant items among the "features" offered.

The axiomatically simple objectives of turntables and tone arms have been further complicated by the fact that people enjoy having a turntable-and-arm combination that will play through a stack of records without attention from the user. Hence the "automatic" turntables (which used to be called "record changers") and their more complex mechanisms. And, too, in concord with an idea once expressed succinctly as "Sell the sizzle, not the steak!", manufacturers have found it easier to sell record-playing devices on the basis of special features rather than on such relatively drab (and difficult for the consumer to evaluate) essentials as low rumble, wow,

and flutter, resistance to acoustic feedback and external shock, and the like.

It is a sad fact that there is no generally accepted standard for measuring the performance of high-fidelity turntables. This situation affects most of the rumble figures you read: rumble specifications have for years been a free-for-all, with figures as high (or low, if you like) as -100 db being quoted, despite the fact that the rumble content of the best rumble test records available, measured according to the National Association of Broadcasters' standard for broadcast-station turntables, is somewhere around -45 db. For that reason, I have avoided quoting rumble specifications in the charts accompanying this article. Without implying outright dishonesty in the field, let it be said that the lack of a uniform standard in the industry makes difficult any meaningful comparison between turntables on the basis of quoted rumble ratings.

THE purpose of this article is to sift through record-player lore and uncover the essential facts you must have in order to choose a unit for your own needs properly. There are two kinds of help in addition to the text of the article. One is the charts on page 69 and 70—which, however, are not to be taken as the definitive last word, since such a listing can't begin to tell everything of interest about a player, turntable, or tone arm. But they do offer a convenient spread of useful information arranged for quick comparison. The second help is the glossary of technical terms relating to record players on page 73. Now on to some questions about players.

• *Manual or automatic?* Fifteen years ago, everyone agreed that true hi-fi performance (in respect to freedom from wow, flutter, and rumble) was available only from a single-play turntable and a manually operated tone arm. Record changers were clumsy, crude devices, noisy and hard on the records. This is definitely no longer true. Today's record changers—the best ones, at least—are every bit as good as the best manual turntables in respect to wow, flutter, and rumble—and what's more, they are gentler and far more reliable in their record-changing operations than the old changers were. Choosing between the manual and the automatic is a matter of juggling the factors of price and convenience. The best record changers, naturally, are among the most expensive units on the market. They can also be used for single-play semi-automatic operation. The principle drawback to automatic players is their greater complexity, which, as a purely statistical matter of fact, should increase the likelihood of malfunction. This is not to say that some of today's automatics are not more reliable than yesterday's manuals. The tripping/cycling mechanisms have been refined so that they can be actuated reliably even at extremely low (1 gram or less) tracking forces.

One can't argue with the claim of one maker of manual turntables that 96 per cent of recorded material is com-

plete on one record, and that one must therefore turn the disc over manually to hear the complete work. No record changer currently on the market will turn over records. Still, for someone with a large collection of multiple-record works, such as operas and oratorios, a record changer *is* a convenience, since it is necessary then only to turn over the whole stack in the middle of the work. A record changer may be a good choice also if you like to stack a whole evening's worth of music at one time. And there are audiophiles who have automatic turntables but who have never plugged in the automatic spindle. Although they play one record at a time, they like the automatic and accurate setdown of the tone arm in the lead-in groove of the record and its return to its rest post after the record is finished.

• *What kind of motor?* One of the favorite oversimplifications among pseudo-learned technical writers and audiophiles is that only a hysteresis-synchronous motor can deliver the kind of speed-constancy and freedom from rumble demanded of high-quality playback equipment. This may have been true at one time, but refined versions of other types of motors have found their way into technical respectability. The rugged old four-pole, shaded-pole induction motor is still the standby of the broadcast industry, and not so bad at that. Quality turntables today are found with induction, synchronous, and combined permanent-magnet induction/synchronous motors—and possibly other variations. Sony is using an electronically regulated direct-current motor. The proof of the turntable is in the playing, and no one kind of motor can be singled out as the ideal. It is best to ignore the matter of motor design and concentrate on the turntable's insensitivity to line-voltage variations and whether you can hear any rumble or wow (a matter I will return to later in this article).

• *What kind of drive?* Again, it is unrealistic to single out any one best method of transferring power from motor to turntable platter and then consign the rest to oblivion. Almost any of the systems, if well designed and constructed, can meet NAB specifications. The most common form of drive is inside-rim friction drive, with the drive torque transmitted from motor shaft to the inside rim of the turntable platter by a rubber-tired idler wheel that bears against both. A belt-drive (again, always with the qualifying adjective "well designed") can provide somewhat better motor-vibration isolation, but is not used in record changers partly because it tends to require more space in an already crowded area.

It is possible to draw up lists of advantages and disadvantages of various kinds of drives and, depending on the weight one assigns to the various factors, to come up with a clear choice in favor of one. But someone else's weighting will be different, and in any case good engineering sooner or later eliminates disadvantages that seemed "inherent" in some method or other. Listen with

AUTOMATIC TURNTABLES (CHANGERS)

Make and model (less base & cartridge)	Price	Speeds ¹	Motor type ²	Min. stylus force (g)	Modes of operation	Anti- skate	Dimensions ³	Special features and other information	
Allied 919	\$49.94	4	I	1	auto, semiauto, manual	—	13 × 11 × 4 (2)	Continuous repeat-play option.	
BSR (see McDonald)									
Dual 1010S	69.50	4	I	2	auto, manual	—	12¾ × 10½ × 6 (3)	Cueing device; changer spindle lifts stack off record to be dropped; vernier pitch (speed) control (1019 only).	
1015	89.50	4	I	½	auto, manual	yes	same		
1009SK	109.50	4	I	½	auto, manual	yes	same		
1019	119.50	4	I	½	auto, manual	yes	same		
Garrard 40 MK II	44.50	4	I	2	auto, manual	—	15 × 12½ × 4¾ (3)	—	
SL65	79.50	4	I-S	¾	auto, manual	yes	15½ × 13¾ × 4¾ (3)	Cueing device.	
SL95	129.50	3	I-S	½	auto, manual	yes	15¾ × 14¾ × 4½ (3)	Cueing device.	
SL75	109.50	Similar to SL95, but with simpler tone arm.	I-S	1½	auto, manual	—	15 × 12¾ × 4¾ (3)	Cueing device; ceramic pick-up with diamond stylus.	
SL55	59.50						16 × 12½ × 4¾ (3)		
30	39.50	4	I (2-pole)	4	auto, manual	—	—	—	
Knight KN-990A	29.88	4	I	—	auto only	—	14 × 12 × 5 (3)	—	
Lesca Professional 6	149.50	3	I ⁶	—	auto, manual	yes	—	—	
McDonald (BSR) 400	49.50	4	I	1	auto, manual	yes	13½ × 11¼ × 4 (2½)	Cueing device. Deluxe version of 500A (heavier turntable platter, muting switch).	
500A	59.50								
600	74.50								
Miracord PW-50H	149.50	4	H	½	auto, manual	yes	14½ × 12½ × 5½ (3¾)	Stylus overhang adjustment; cueing device.	
PW-40A	94.50	4	I	<1	auto, manual	yes	same		
620	89.95	4	I	1	auto, manual	yes	13½ × 11¾ (vertical dimension not available)	Cueing device.	
630	119.50	Refined version of 620, with screw-type stylus-overhang adjustment and gauge.							
Perpetuum-Ebner PE-2020	129.95	4	I	½	auto, manual	yes	14¾ × 12¼ × 5 (3¾)	Speeds variable ± 6%; vertical tracking angle remains constant for up to eight records; single-control operation. Single-lever operation.	
PE-720	74.95	4	I	1½	auto, manual	—	13 × 11 × 5 (¾)		
Seeburg Audiomation	795.00 (incl. cartridge)	1	H	2½	special	—	21½ × 22½ × 33½	Stores up to fifty LP albums vertically; provides up to forty hours of continuous music; optional remote control; computer-like memory bank; vertical-play mechanism magazine.	

NOTES:

- ¹"4" means 16⅔, 33⅓, 45, and 78 rpm; "3" means 33⅓, 45, and 78 rpm; 1 means 33⅓ only.
- ²I=four-pole induction; I-S=combined induction and synchronous; H=hysteresis synchronous.
- ³In inches: width, depth (front-to-back), and height above chassis. Figure in parentheses is required clearance below chassis. All dimensions have been rounded off to nearest higher quarter inch.
- ⁴Factory-set at about 4 grams; player comes with cartridge installed.
- ⁶Six-pole induction motor.

TURNTABLES WITHOUT ARMS

Make and model	Price	Speeds ¹	Motor type ²	Drive type	Dimensions ³	Special features and other information
Empire 208	\$125.00	3	H	belt	14¾ × 16¾ × 3 (¾)	Pop-up 45-rpm adapter.
Rek-O-Kut B-12H	165.00	3	H	rim	17¾ × 16 × 3 (¾)	Pilot light.
B-12GH	109.95	Similar to B-12H except smaller motor and slightly higher rumble.	H	rim	20 × 18¾ × 1½ (¾)	16-inch turntable; meets NAB standards.
B-16H	275.00					
Sony TTS-3000	149.50	2	DC	belt	14¾ × 15 × 3 (¾)	Servo-controlled d.c. motor; speed control; with base.
Thorens TD-124 (Series II)	149.50	4	I	belt, rim	15½ × 13 (¾)	Variable speed control (±3%). Separate mounting board for tone arm; built-in leveling adjustments; spirit level.
TD-150	85.00	2	I	—	15 × 12¼ × 3¼ (¾)	

NOTES:

- ¹"4" means 16⅔, 33⅓, 45, and 78 rpm; "3" means 33⅓, 45, and 78 rpm; "2" means 33⅓ and 45 rpm only.
- ²DC=servo-controlled d.c. motor; H=hysteresis synchronous; I=four-pole induction.
- ³In inches: width, depth (front-to-back), and height above chassis. Figure in parentheses is required clearance below chassis. All dimensions have been rounded off to nearest higher quarter inch.
- ⁴Twin low-speed synchronous motors with common rotor shaft.

MANUAL TURNTABLES (with arms)

Make and model	Price	Speeds ¹	Motor type ²	Drive type	Min. stylus force (g)	Anti-skate	Dimensions ³	Special features and other information
AR XA	\$ 78.00	2	PM	belt	—	—	16¾ × 12¾ × 5¼ ⁴	With base, dust cover, stylus-force gauge.
XA Universal	87.00	Same as XA, but usable on 230-volt 50-Hz power as well.						
Bogen B62	67.95	CV ⁴	I	rim	1½	—	15 × 13 × 3½	Cueing device; continuously variable speed, 29 to 86 rpm. Continuously variable speed, 29 to 86 rpm; lighter platter than B62.
B52-S	49.95	CV ⁴	I	rim	1½	—	14½ × 12½ × 2½ (2¼)	
Empire 398 498	190.00 180.00	Model 208 turntable 3	H	Model 980 arm, see separate listing (See 980 arm listing)	980	—	16 × 13¾ × 7½	With base. With base and 980 tone arm (see separate listing).
Garrard SP20	37.50	4	I	rim	2	—	14½ × 12½ × 3½ (2¼)	Automatic arm-return and shutoff.
Marantz SLT-12	295.00	2	H	—	1	—	18 × 14 × 6½	Straight-line-tracking tone arm with cartridge. Cueing device. With base.
Pioneer PL-41	199.95	2	H	belt, rim	¾	—	20 × 16 × 7¾	With base and cover; cueing device; switchable 50 to 60 Hz, 117/230-volt operation.
Sony PS-2000	329.00	2	DC	belt	<1	yes	14¾ × 15 × 3 (3½)	Servo-controlled d.c. motor with electronic amplification; strobe disc, speed control; with base and cartridge.
Stanton 800B	105.00	1	S	rim	<1	—	16 × 13 × 6	With "Unipoise" arm, base.
Telefunken 210	99.95	4	I	belt	—	—	16½ × 12½ × 7¼	With cartridge.
Thorens TD-150AB	99.75	2	S	belt	<1	—	15¾ × 13 × 5	With base; cueing device; adjustable vert. tracking angle.

NOTES:

¹"4" means 16⅔, 33⅓, 45, and 78 rpm; "3" means 33⅓, 45, and 78 rpm; "2" means 33⅓ and 45 rpm only; "1" means 33⅓ rpm only.

²DC = servo-controlled d.c. motor; H = hysteresis synchronous; I = four-pole induction; PM = permanent-magnet synchronous; S = synchronous.

³In inches; width, depth (front-to-back), and height above chassis. Figure in parentheses is required clearance below chassis. All dimensions have been rounded off to nearest higher quarter inch.

⁴Continuously variable speed, 29 to 86 rpm, with click stops for 33⅓, 45, and 78 rpm. 16⅔-rpm speed is fixed.

⁵On base with dust cover in place.

ARMS WITHOUT TURNTABLES

Make and model	Price	Range of force adj. ¹	Means of force adj. ²	Anti-skate	Length ³	Special features and other information	
ADC Pritchard	\$ 44.50	0-5	W	yes	10⅞	Arm made of walnut.	
Dynaco (B&O) TA-12	39.95	Designed specially for B & O Stereodyne cartridges—will not accommodate conventional pickups.					
TA-16	49.95	Similar to TA-12, except for 16-inch records on professional turntables.					
EMI Castagna	99.50	0-5	S	—	13 7/16	Magnetic suspension; sapphire bearings for vert. and horiz. gimbals; tracking angle adjustable.	
Empire 980	50.00	0-8	W	—	12⅜	With lift device.	
Euphonics TA-15	32.50	½-3	W	—	11¾	Viscous-damped ball-bearing pivots.	
TA-16	42.50	½-3	W	—	15		
Leak	90.00	With Leak cartridge; preset tracking force of 2 grams; cueing device.					
Ortofon RMG-212	60.00	0-7	W	—	12	Ball-bearing gimbal suspension.	
RMG-212T	65.00	Similar to RMG-212, except with predrilled board for Thorens TD-124 or TD-121 turntables.					
RMG-309	65.00	0-7	S	—	12 3/16 ⁴	Tracks at 2 grams with Ortofon cartridge; 16" arm for professional turntables.	
RS-212	90.00	0-4½	S	yes	11.8	Unified stylus-force and anti-skate adjustment.	
RS-212T	95.00	Similar to RS-212, except mounted on ebony board for Thorens turntables.					
Rek-O-Kut S-320	34.95	0-6	W	—	15	—	
S-440	27.95	Simplified version of S-320.					
S-260	39.95	Similar to S-320, except for 16" turntable.					
Shure M232	29.95	1-8	S	—	12¼	Slide adjustment for stylus overhang.	
M236	31.95	Similar to M232, except for 16" turntables.					
Shure/SME 3009	100.50	¼-6	W	yes	12⅞	Ball and knife-edge bearings; cueing device.	
3012	110.50	Similar to 3009, except for 16" turntables.					
Sony PUA-237	85.00	0-3	W	yes	13⅜	Designed for Sony VS-8E pickup; cueing device.	
PUA-286	99.50	Similar to PUA-237, except for 16" turntables; lower resonance.					
Stanton 200	24.00	0-3	W	—	9"	—	
Thorens TP-14	59.50	0-8	S	yes	12⅝"	With mounting board for Thorens TD-124 turntable; adjustable vertical tracking angle.	

NOTES:

¹In grams.

²W = force adjustment by underbalancing counterweight; S = force adjustment by tensioning spring.

³In inches; overall length except as otherwise indicated.

⁴Pivot-to-record-center distance.

skepticism to any dogmatic claims about the *absolute* superiority of one drive method over all others. Several manufacturers use a combination of methods—such as a belt-driven idler wheel that drives the inside rim of the platter by friction.

• *Is it best to assemble your own player from a separate tone-arm and turntable, or to buy a preassembled unit?* Obviously, if you want an automatic player, you must buy it complete. If you opt for a single-play, manually operated turntable, you can choose among about a dozen ready-made units or over a hundred possible combinations of separate turntables and arms. Are the combinations you can "custom-make" yourself better than the preassembled ones? Not necessarily. With preassembled units, you can be reasonably certain, based on your own observations and the manufacturer's reputation, that the arm and turntable are designed to work together. This may be more than a matter of simple compatibility. Any tone arm will play records on any turntable. But (for example) for minimum acoustic feedback and groove-jumping due to heavy footsteps or other vibrations, arm and turntable should be rigidly linked so that there can be no relative motion between them—or, in other words, so that any motion due to a force applied to the turntable is matched by motion of the tone arm. For home-assembled combinations, this generally requires a massive and rigid mounting board (people have been known to use 1/2-inch steel). In factory-made arm-turntable combinations, the engineers may have solved this problem some other way—as for instance in the AR turntable, where arm, turntable, and drive are joined by a rigid but relatively light cast frame, the whole assembly suspended from comparatively limp springs.

The chief reason for choosing arm and turntable separately is that you may have your heart set on a particular very sophisticated tone arm that is manufactured and sold only as a separate component. All separate turntable manufacturers make tone arms which, it can be assumed, work well with these manufacturers' turntables. But not all makers of arms (for example, ADC/Pritchard, Shure/SME, and others) make turntables.

The separately sold arms will all "work" with any turntable—that is, they will play records; but it is problematical whether an arbitrary pairing of even the best arm and best turntable will be a better combination than the best available preassembled, factory-made combinations. Unless you propose to study the mechanics of turntables and arms seriously or engage in a long trial-and-error process, you may be better off buying a ready-made combination and leaving the separate units for serious experimenters who have the knowledge, money, and patience to try to come up with something better than preassembled combinations.

• *What is anti-skating compensation? How important is it?* Skating force is a lateral force on the stylus which

tends to drag the stylus in toward the center of the record. It results from the frictional force between stylus and groove wall acting through the "offset" or bend in the tone arm. Its effect is to make the stylus bear more heavily on the inner groove wall than on the outer, causing potential distortion and uneven wear. Skating force is real and present in all modern tone arms with offset heads. The question is, how important is it?

First of all, skating force, though always latently present, is not significant in tone arms whose lateral pivot friction is equal to or greater than the skating force. Such arms need no anti-skating compensation. However, almost all current tone arms of recent manufacture, including the ones on the better automatic turntables, have such low bearing friction that the skating force makes itself manifest. It amounts to approximately 10 to 15 per cent of the stylus force.

Anti-skating compensation applies an equal but opposite lateral force to the tone arm, restoring equilibrium. According to the most reliable experimental evidence, in a lightweight, low-friction tone arm fitted with a top-quality cartridge, correct skating-force compensation permits somewhat lower tracking forces for a given amount of distortion than is possible without compensation. The benefits of low tracking force are well-known—primarily reduced record wear, and secondarily, less deformation of the groove walls which in turn should result in cleaner playback.

• *Sixteen-inch or twelve-inch tone arm?* The "professional" cult is with us everywhere, and it is nowhere more apparent than in hi-fi, where almost anything can acquire the label "professional-type" even if a true professional wouldn't be caught dead using it. It is true that "professionals" (people in the recording and broadcast industries) *do* use extra-long tone arms. The primary reason is that they often have to play 16-inch-diameter transcriptions, and shorter arms just won't reach. It is true that a long arm has less tracking error than a short arm, *all other things being equal*. But the improvement is insignificant, especially now that there are many, many shorter tone arms designed for extremely low tracking error. Furthermore, the added mass and mounting difficulties posed by the longer arm can be disadvantages that outweigh the dubious benefits of extra length. Don't spend the extra money. Put it into a better-designed arm or a good record-cleaning device.

There are some things you will want to watch for when you shop for a turntable, whether manual or automatic. The charts give the major overall dimensions of each unit, including the clearance required above and below the turntable base or chassis. If you buy the base designed for the player, you won't have to worry about bottom clearance, but if you plan to install the player in some kind of cabinet or pull-out drawer, you must be sure to allow enough depth. (Continued overleaf)

Depending on the design of the unit you buy, there may be another critical dimension that is not listed in the charts. Some turntables require clearance for the tone arm to swing: the counterweight end of the arm actually extends over the back or right side of the base when the arm approaches the center of a record. Naturally, the arm must be unhindered in its swing, so you must allow room in your shelving or cabinet if the tone arm requires it.

Check to make certain that the tone arm or player unit of your choice has a sufficient counterweight range to balance the cartridge you want to use. A few cartridges are unusually heavy, and the normal counterweight cannot achieve balance. Several manufacturers make counterweight-shaft extenders or extra weights for their tone arms for just such a situation. If not, just furtively tape a nickel or a quarter to the counterweight and don't tell anyone. It is not likely to affect the sound. There are a few cases in which a cartridge is too large for the tone-arm shell of a particular player, so you will want to check that possibility also.

Before you commit yourself irrevocably to a particular location and mounting style, try to judge whether you will be able to reach all controls conveniently, see all the control markings, and handle the tone arm without straining or trembling or fumbling. If you expect problems, alter your cabinet or shelf design, or choose a player with a more convenient placement of controls.

The most convenient position and mounting for a record player (though this is a matter of opinion) is probably an open shelf at about chest level when you stand. It is then easy to manipulate the tone arm, controls, and levers without bending or reaching. But considerations of decor often preclude this simple and obvious arrangement. The popular sliding-drawer mounting is risky unless you are prepared to be very gentle in pushing the drawer around. Jolting the player as the drawer is moved can cause the tone arm to skip across the record, producing nasty speaker noises and possibly damaging your stylus and record. Your local audio dealer will be able to show you other ways of placing or mounting a turntable. This magazine, hi-fi guides, and manufacturers' brochures are full of ingenious and handsome installations.

- *Listening for rumble.* The HF/SR Model 211 test record (available for \$4.98 from Stereo Test Record, P. O. Box 3110, Church St. Station, New York, N.Y. 10008) includes rumble, wow, and flutter tests and will be of enormous help in setting up your record player and the rest of your system. But if you don't have a test record available, play a music record, set the volume fairly loud and the bass control either flat or with a small amount of boost. Decide whether the volume level is about typical for your preference with that kind of music. The room should be very quiet. Then, seated in a normal

listening area, have someone lift the pickup off the record and gently replace it. Listen for an increase in low-frequency noise when the stylus is in the record groove. Try this on silent grooves and also on a quiet passage of music. Have the tone arm lifted and replaced intermittently. In moderately good turntables, you should hear no more than, at most, a vague, barely discernible low-frequency "presence" in the room when the tone arm is lowered. The best (quietest) turntables will produce almost no sound whatever in the speakers. Try this with several recordings from different manufacturers since it is not unusual to find a substantial amount of rumble recorded into a disc.

- *Listening for wow and flutter.* It is safe to say that no turntable of widely known manufacture that sells for more than \$50 will have a disagreeable amount of wow or flutter. Still, should you want to check, listen for wow with sustained organ or orchestral tones. Solo violin or wind tones may be a bit misleading because their pitch is not always perfectly constant anyway. A periodic rising and falling of pitch, typically once per revolution of the turntable, is wow. Flutter can best be heard on solo piano music. If there is a hint of warbling, as though the music is gargling its way through a liquid, the turntable has flutter.

- *Checking speed regulation.* It should not come as a surprise that the slight drag imposed by the friction between stylus and record can slow a turntable. If this occurs, *it is harmless as long as the speed of the record is correct while it is being played.* There is only one convenient way to check this: put on a record, set the tone arm down somewhere in the outermost grooves, and slip a printed "strobe disc" (available at most audio shops) over the record. When viewed in 60-Hz fluorescent or neon light, the lines of the strobe disc should appear to stand still. If they drift in the direction of turntable rotation, the turntable is running fast; if they drift the other way, the turntable is slow. You can determine just how fast or how slow. Brace a pencil or some other convenient reference against the turntable base and count the number of lines that drift by in one minute. (Get someone else to do the timing.) Twenty-one lines per minute corresponds to a speed error of 0.3 per cent; thirty-five lines per minute, 0.5 per cent. If you have perfect pitch or plan to play a musical instrument along with recorded music, your turntable speed should be accurate to within 0.3 per cent or better. Some turntables have a vernier speed-adjustment knob which you can use to set the musical pitch of a record to match that of a live instrument.

It is interesting that there is no necessary correlation between motor power and speed accuracy. A powerful motor may slow down by an unacceptable amount when used with a record-cleaning device that rests on the record as it plays.

Further, the drag imposed by the tone arm is greater when it tracks the outer grooves of a record than when it tracks the inner grooves. The difference should be no more than twenty-one lines per minute on the strobe disc; otherwise, the music may sound as though it has gone flat when you start the second side of a long work of music. Practically all turntables will slow down a little with the extra drag, but the change should be within the limits prescribed above.

Some turntables have their speeds affected by changes in power-line voltage, but the top-of-the-line models of the major manufacturers can withstand 20 to 30 volts of a.c.-line variation without going off-speed.

• *Checking for acoustic feedback.* This is difficult to do in an audio shop. At home, though, once your turntable is installed, you will want to run through this test: with the motor off, place a record on the turntable and set the tone arm down on it anywhere. Turn the volume and bass controls up to the maximum settings you are like-

ly to use. Switch the loudness compensation on. Then tap the turntable lightly, or stamp on the floor. You should hear nothing more than a good, healthy "whoomp." If the initial whoomp decays gradually, or, worse yet, builds up into a steady howl, you have acoustic feedback. Even in small amounts, it can spoil the clean bass you've paid so much to acquire. Acoustic feedback can usually be reduced by decreasing the mechanical coupling between speakers and turntable. This may be merely a matter of separating them physically, or of mounting the turntable on a foam-rubber mat. Use rubber thick enough and stiff enough that it is not completely compressed by the weight of the player, else the isolation will be lost. Avoid polyurethane foam, which tends to be compressed permanently under loads.

George Martinson, an enthusiastic and long-time follower of the audio scene, obtained his information on record players, tone arms, and motors through interviews with the equipment designers.

GLOSSARY OF RECORD-PLAYER TERMS

Acoustic feedback: Transfer of mechanical or acoustical energy from speaker(s) to cartridge, usually through the turntable mounting. This transfer sets up regeneration, which at worst can produce a sustained howl or shudder in the speakers. In milder cases, it may increase distortion or cause bass muddiness.

Phono cartridge (or pickup): The device fitted at the "business end" of the tone arm. It contains the *stylus*, or needle. Its function is to transform the wiggles of the stylus driven by the record groove into electrical signals that are a replica of the original recorded sound.

Cueing: A term rather loosely used in hi-fi circles, but usually the setting of the stylus into a particular record groove, generally by means of some assisting mechanism built in as part of the tone-arm mechanism.

Flutter: Fairly rapid periodic changes in turntable speed, named for the fluttering or warbling effect produced in the sound. It is usually caused by irregularities in some fairly fast-rotating part of the turntable drive. Specified as a percentage of the turntable's nominal speed.

Platter: The round disc, driven by the motor, that actually supports the record being played.

Rumble: Low-frequency noise generated by turntable rotation and transferred via the pickup into the amplifier and speaker. Rumble caused by motor vibration tends to be of relatively higher frequency (30 to 120 Hz) than that due to turntable-bearing irregularities (generally 30 Hz and lower). It is normally specified as being some number of decibels (db) below a standard level of recorded sound, but the standard levels and meth-

ods of measurement differ widely. Rumble levels measured by different standards cannot be compared directly.

Skating force (or lateral bias): A lateral force, created by a component of the frictional drag between the stylus and the record groove (in an offset-head tone arm), which tends to pull the stylus toward the center of the record and thus makes it bear more heavily on the inner groove wall than on the outer wall. This increases wear and distortion slightly, but the effect is often cancelled out by excessive lateral pivot friction in the tone arm.

Stylus: The "point" or "needle" (usually diamond) which follows record-groove variations and transmits the resulting vibrations to the voltage-generating mechanism in the *phono cartridge*.

Stylus force: Also called needle force, tracking force, or (erroneously) tracking pressure, this is the net downward force that seats the stylus in the record groove. Proper stylus force for most modern cartridges usually lies between 1 and 4 grams. There is usually one optimum value (for most recorded material) for a particular tone-arm/cartridge combination—seldom the lowest possible force setting available.

Stylus overhang: Distance from stylus tip to an imaginary vertical center line through the turntable spindle when the tone arm is swung to meet the spindle. It is critical, for it has a significant effect on *tracking error*.

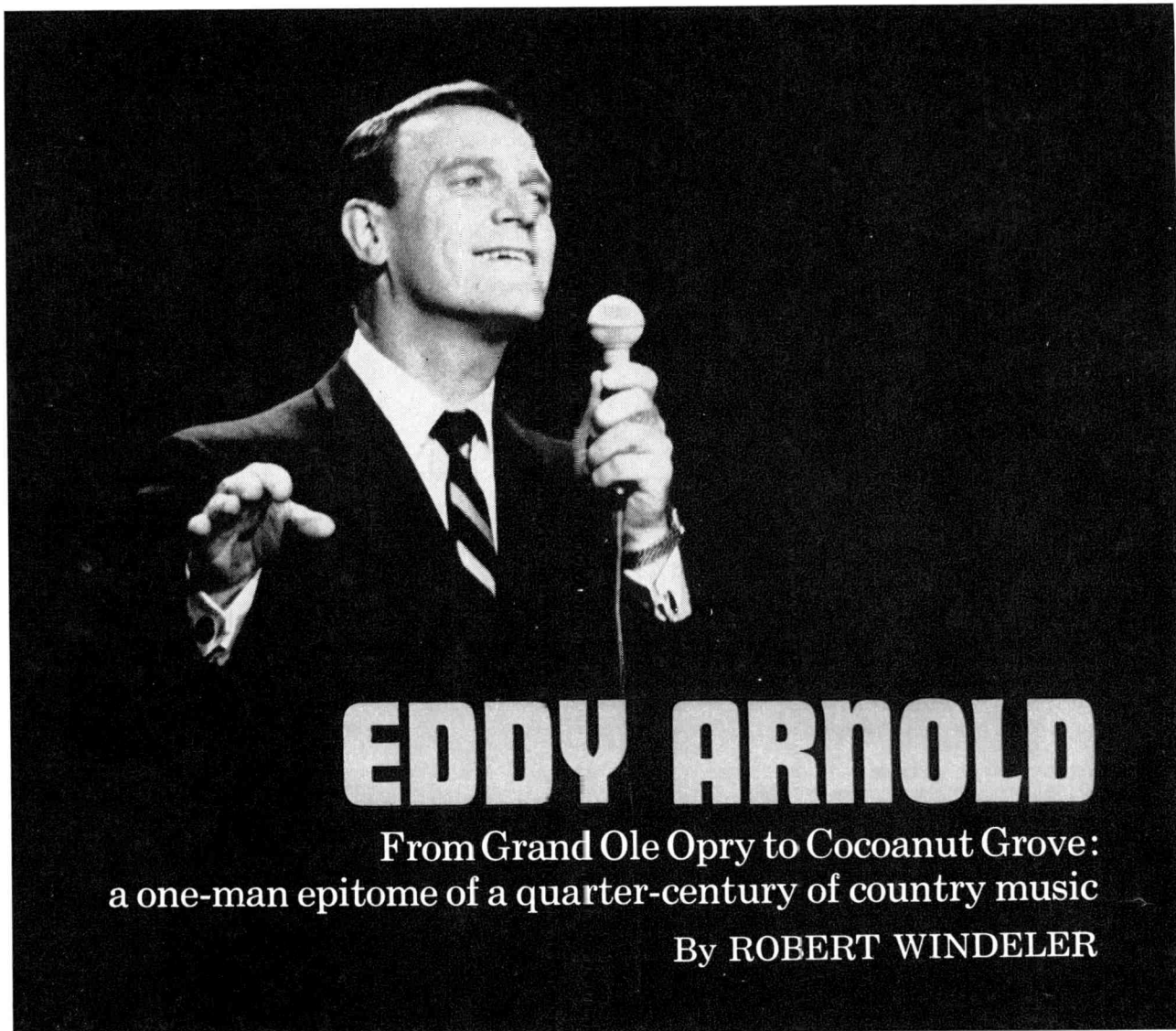
Tone arm: The device which supports the phono cartridge and guides it as it follows the spiral record groove. Ideally it should do nothing to impede the lateral or vertical movement of the cartridge. It is usually adjustable to accommodate

different cartridges and stylus-force requirements.

Tracking error: Angular deviation from perfect tangency to the record groove. Record grooves are cut by a stylus-and-cutter-head assembly that rides in a straight line across the blank master disc on a rotating leadscrew above the disc. The leadscrew in effect defines a radius of the disc. In playing a recording, however, the playback stylus describes an arc because it is carried by an arm pivoted at one end. As the stylus moves inward toward the center of the disc, its angular relationship to the groove changes. At best it can be perfectly tangent to the groove at only two points on the record surface. Proper arm design, however, can reduce tracking-error to practically insignificant amounts. Tracking error has a significant effect on distortion. So-called "straightline tracking" designs (of which the Marantz turntable is the only current example) have virtually zero tracking error because they duplicate the radial motion of the cutter assembly. They tend to be extremely expensive because of the moving mass and friction problems that have to be overcome.

Tripping: Initiation of the record-change or turn-off cycles by the movement or position of the tone arm in automatic turntables.

Wow: Fairly slow periodic changes in turntable speed, named for the slow changes in musical pitch produced in the sound. It is particularly obvious in sustained notes. Generally caused by irregularities in the turntable platter or the recording (such as warp or an off-center hole in the record). Specified as a percentage of the turntable's nominal speed.



EDDY ARNOLD

From Grand Ole Opry to Cocoanut Grove:
a one-man epitome of a quarter-century of country music

By ROBERT WINDELER

EDDY ARNOLD, once affectionately known as the "Tennessee Plowboy," won't run for governor of Tennessee—not for the next couple of elections, anyway. As he puts it, "I'm not through makin' money yet. Besides, after I was governor I couldn't go back and be an entertainer. The dignity of the office wouldn't allow it. Reagan couldn't go back now and be an actor."

Arnold's possible candidacy was first proposed by former Tennessee Governor Frank Clement, an old friend who simply picked Arnold to succeed him (in Tennessee governors are prohibited consecutive terms). Arnold had done television spots for Clement and made speeches for him in two campaigns, and he is honorary chairman of the Young Democrats in his home state. (Essentially conservative, he voted for Barry Goldwater in 1964, but having accepted President Johnson's hospitality at the ranch in Texas and at the White House, Arnold refused to work for Goldwater in the election.) When he does run for governor, it will definitely be as a Southern Democrat.

But no matter what his political future may be, Eddy Arnold is now the chief reason why more than 40 per cent of the records sold in America are country-and-western. He is also the wealthiest of country-and-western singers, having sold forty-five million singles and four million albums during his career. The Nashville sound has brought him a four-hundred-unit apartment building, a prestressed concrete business, a well and crane company, an automobile dealership, a music-publishing house, and land all over the south and west. He, in turn, has brought the Nashville sound into the mainstream of American music.

At the age of forty-seven, with twenty-six years as a professional singer behind him, Arnold is still cutting four albums and four or five singles a year. He was the first country singer to crack Carnegie Hall in New York (in 1966) and the famous Cocoanut Grove in Los Angeles (late 1967). He sings with small-city symphonies and at large state fairs—for about \$10,000 per evening.

With an annual income estimated at \$500,000, Arnold just doesn't want to be a governor. "They tell me I would win," he says, "but then I wouldn't be able to sing, and if that happened, I just wouldn't be me anymore."

Arnold comes by his country flavor honestly (he was born in Henderson, Chester County, Tennessee, the son of a sharecropper), but just as honestly he has survived—indeed led—every change in country-and-western music until today, when he and Dean Martin and Nancy Sinatra all share the same sound.

In his youth Arnold worked in a sawmill and "plowed with mules." "I began singing at high school dances and candy pulls," he says. "My first professional job was on a radio station in Jackson, Tennessee. I was workin' as an ambulance extra at the same time. I got paid twenty-five cents a call and a free room in a funeral home. It took me eight years to make the first record and two more before I had a hit, *That's How Much I Love You*, in 1946."

Arnold had signed with RCA Victor, and he has been with them ever since. Like almost every other country singer, he appeared on the Grand Ole Opry at various times during his early years as a star, but he doesn't feel that he really got his start there. At first, his superior material (something he has in common with Elvis Presley) kept him on top of the country heap. Songs like *Anytime*, *Bouquet of Roses*, *Cattle Call*, and *The Tennessee Waltz* were enough to set him apart from his contemporaries, in spite of his rather ordinary voice and the same twangy approach that everyone else used in country music until fairly recently.

"Suddenly I went cold," Arnold says. "There weren't enough of the old-time country fans to keep me up there, singing that way." So he returned to the 107-acre ranch in Brentwood, Tennessee, near Nashville, where he lives with his wife of twenty-five years and an eighteen-year-old

son (his twenty-one-year-old daughter is married). "That's a lot of acres, and I did a lot of walkin'—you'd be surprised how much thinkin' you can do when there's nothin' but the birds singin' and the crickets chirpin'. I decided I would have to be a universal performer, where you just walk out and perform, and not just be tied to pop or country or even just singin'."

Out went the checkered shirts and other western paraphernalia—today he wears western costume only for rodeos. "I didn't dig rhinestone suits either," he says. He now wears a plain black suit—or a tuxedo for special occasions like the Grove and Carnegie Hall. He changed his arrangements, softening the strings ("the fiddlers read the music now, that's the difference"). He still sang sentimental songs, but otherwise the plowboy was plowed under.

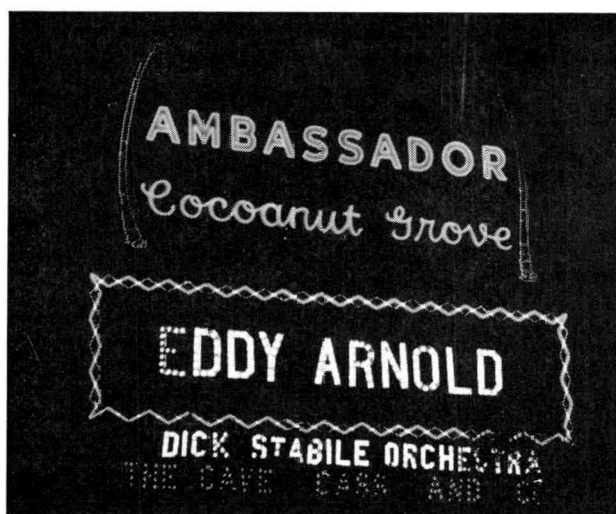
Arnold modestly volunteers: "I will tell you quick I



The Tennessee Plowboy, bashful and barefooted, made a checked-suit appearance on St. Louis' radio station KXOK in 1938.



RCA VICTOR PHOTOS



Six-year-old Eddy Arnold (left) poses proudly in his first suit with his parents on their Chester County, Tennessee, farm—a long way from the entertainment successes that eventually took him to a recent appearance at Los Angeles' famed Coconut Grove.

am not a good musician and I am not a good singer, but I am a performer and I know how to sell it." In the six years since the switch he *has* been selling it, and so successfully that the Cocanut Grove, which had even allowed some rock groups on its stage but was perhaps one of the last strongholds against the onrush of country music, finally gave in. His three-week engagement there was sold out and was also a critical success. "I don't say it to be a bragadocious person, but I used to get only the overalls—now I get the overalls and the fur coats. There's a lot of people buyin' my records now that don't know I ever even sang the old stuff. You throw a down-home country album at 'em today and people will stop and say 'what's this?'"

His pop-country amalgamation was so complete by the time he made it to the Grove that no changes in his act were necessary, except for tightening the patter between songs. He was very much at home with the Dick Stabile orchestra's twenty-seven pieces (including nine violins). "After all, I'm simply singin' romantic stuff that women want to hear." In a recent appearance on Pat Boone's television show, when asked whether he was nervous at the Cocanut Grove opening, Arnold replied, "I was a little tense, but then I'm a little old too, so I didn't care."

He still sings his old hits, accompanying himself on a non-electric guitar, but there is a heavy dose of the newer standards—such as *Moon River*, *Dear Heart*, and *Hello, Dolly!* "I'm delighted with the way music has turned today," he says. "I don't mind Dean and Nancy invadin' me 'cause I'm gonna invade them."

He no longer plays the smaller towns, and the concerts are getting fewer and farther between, in favor of spending time in Nashville and at the ranch. "I'm a boater, and I love to go out on the TVA lake near us. Heck-fire, I'm not gonna give that up for anything." At the same time Arnold knows as well as anyone the importance of ap-

pearing in public, and he describes his state fairs and big concerts as his stock in trade: "I love live audiences; I love to see eyeballs sittin' out in front of me."

Arnold will pass up a few live audiences but gain millions of eyeballs when he appears on television next season as the star of *Mr. Deeds Goes to Town*, a series based on the old Jean Arthur-Gary Cooper movie. It will be a non-singing role and Arnold's TV acting debut. "I never did it before simply because nobody ever offered me anything."

Country-music purists resent his forays into the pop world, Arnold says, and no one more than the country-and-western disc jockeys "who are still quick to take credit when I come up with a hit." He is much more interested in singers—such as Ray Charles—from other fields who are having a fling with country music. "Charles is just great, but naturally he's not gonna stay with it; nobody is."

Conversely, Arnold feels that the younger country singers are in deep trouble, despite the fact that many of them are talented. "I wish they'd use their heads and take the big step into the world of pop music and not just sit there and pick and sing."

Arnold does none of his own writing, but gets ideas for a title or a story line and gives them to a good writer to develop. His most successful theme to date has been the one for *You Don't Know Me*, which Ray Charles made into a pop-country standard. But whatever the source and whoever the singer, success, according to Eddy Arnold, "all boils down to two things: talent and sales"—although not necessarily in that order.

Robert Windeler, based in Los Angeles, is a roving reporter on cultural events in the West for the New York Times. He is currently at work on a biography of the British star Julie Andrews.



Eddy Arnold is equally at home with neighbors on the farmhouse back porch or as a guest in the governor's mansion. At right he is shown with Frank G. Clement, former Governor of Tennessee, on the occasion of his proclamation of Eddy Arnold Month.



RCA VICTOR PHOTOS



INSTALLATION OF THE MONTH

(TRANS)PORTABLE STEREO

DR. Barry N. Shaklan, a Captain in the U.S. Air Force Medical Corps presently stationed in San Antonio, Texas, was faced with the same problem that troubles most audiophile military men: how to achieve high-quality sound with high reliability and at the same time maintain reasonable portability in his system. Dr. Shaklan's solution was to employ a standard free-standing pole-and-cabinet system manufactured by Omni and modified to the demands of his equipment. The four spring-loaded poles run from floor to ceiling and are quite stable with the cabinets and equipment installed.

The McIntosh equipment visible in the upper right and left cabinets consists of an MR 71 FM stereo tuner and a C22 stereo preamplifier. The power amplifier, also a McIntosh unit, is the MC240. A Crown SS-824 four-track stereo tape recorder has been used for the past three years to transfer all of Dr. Shaklan's discs to 10 $\frac{1}{2}$ -inch tape reels—which now number about fifty. The record

player is a Thorens TD-124 turntable equipped with a Shure-SME tone arm and an ADC 10/E phono cartridge.

There are two main sets of speakers: a pair of JBL Olympus systems in the living room (one of them is visible at the lower left of the photo) and a pair of Acoustic Research AR-3's to serve the upstairs area. Accessories, some of which are visible, include a Fairchild Compunder (above the preamplifier), a pair of Superex ST-M headphones that work from a Jensen CC-1 headphone control center, a remote-control switching system designed and constructed by Dr. Shaklan, and a Yale Audio Timer installed below the tape recorder.

Dr. Shaklan writes, "My wife and I enjoy going to live concerts, and while in Europe we traveled to as many of the music centers as possible. I'm not at all disappointed with the sound of my system in contrast, and there is something to be said for being able to select the program and sit back with one's shoes off to enjoy it." —L. K.



THE SECRET (C-&-W)

SINCE MY secret is out around my house, I guess I might as well make a clean and public breast of it: I enjoy country music. I don't know when I first began to realize this. Certainly I fooled myself as long as I could. But in this effort to be honestly objective, it is perhaps best simply to report the facts. My job often requires that I drive late at night. On one of these nocturnal jaunts some time ago, as I idly scanned the radio dial, my car was suddenly filled with "the Nashville sound," coming, I discovered later, from Des Moines radio station WHO's all-night *Country Music, U.S.A.* program. I date my ruin from that moment. Gradually the habit grew: I found myself tuning in the program first occasionally, then regularly, and now consistently. I am hooked.

It is fashionable in some circles nowadays to admit to liking country music, but not in *my* circle. I have a reputation in my neighborhood as "the man who likes Bartók," a taste born of hardship (my father was a fiddler for barn dances in Kentucky) and nurtured slowly and painfully. The last time I moved, one of the moving men glanced at my record collection, and, seeing Beethoven upon Beethoven and Bach upon Bach, said involuntarily, "Oh, you're one of *them*."

I have been one of *them* for several years, and during that time I acquired a sympathetic wife and a record col-

lection to match, along with the necessary assortment of electronic components. So it is with considerable pain that I make this revelation. But it is wise to know just where the chinks in one's armor are.

When I first became aware of my deterioration—if deterioration it is—I fought against it, enlivening parties by making fun of those standard c-&-w phrases about "honky-tonks," the people "out there in radioland," and "the old clock on the wall," and quoting Max Shulman (who quoted Ernest Tubb) telling a young country singer to "sang from the hort" if he wanted to be a "stor." So far as the car radio went, I vowed to undergo complete withdrawal. But my fingers, as if they had a will of their own, repeatedly tuned in some Nashville voice on those trips late at night. The flesh is weak, as many a country song writer has admonished us in many a country song.

Although, in guarding my secret, I had long since become a psychological wreck, I felt I had betrayed little sign of my condition until a stormy night a few weeks ago when my wife waited up for me. As I pulled the family Porsche into the garage, WHO was broadcasting a record eulogizing Mr. Hank Snow (a very popular country singer, in case you are one of the benighted). A word about the radios in Porsches is helpful here: the car comes with two speakers already "custom-installed,"



LIFE OF NOEL COPPAGE

and some acoustical quirk of the hood and fenders, I guess, results in the phenomenon that, when you are getting sufficient volume inside the car, you get a lot more outside—even with doors and windows shut.

So my wife heard it all. The cat was out of the bag, as they say in Nashville. She was kind about it, although I could tell she was quite shaken. WHO by now had changed to a twangy version of *Steel Guitar Rag*. "Hearing *that* sound coming out of *that* car," my wife said over the din, "is like hearing Artur Rubinstein playing the ukulele."

I EXPLAINED (or tried to) what I believed to be the reason for my backsliding. Basically, it is a growing abhorrence for the bland, washed-out stuff called "popular music" and a disenchantment with radio programming that relies on such shopworn goods. Most of the time, a listener to AM radio has only two choices. He can listen to popular music—in which case he is almost certain to hear, no matter what the station, some square male singer nasally intoning an "old favorite" that everyone is tired of, a girl singer bellowing her head off, or one of those teenage groups that all sound alike. Or he can listen to hillbilly music.

The strains of a song called *Somewhere East of West Berlin* wafted out of my radio speaker on some lonely

road recently, and it brought to mind two things: (1) the distress call of a banshee with adenoids, and (2) the fact that country-and-western music keeps abreast of current events while popular music still wallows in corner-drugstore adventures and hot-rod, surfing, skateboarding teen-age romances. The Berlin song was recorded by hillbilly singer Stonewall (how's that for point?) Jackson, who sings as if he'd been breached. But whatever its musical failings, the song is one of a long line of country ditties that spring straight from the headlines—and the "hort."

When the Supreme Court made the decision that states were not to require daily prayer or Bible readings in schools, country-and-western responded with a song that pleaded: "Don't let them take prayer out of our classrooms." The song apparently was not very successful—I heard it only once. But it was a bona fide record, done by a group called, as near as I can remember, Claude Snodgrass and the Possum Stompers.

Even in wartime, the few pop songs that have reflected an awareness of the real world have, alas, usually been the pawns of propaganda, as exemplified by such World War I numbers as *Over There*. But country music really comes to grips with such things as war. During the Second World War, c-&-w songs with such titles as *My Filipino Baby* depicted the sociological

anomalies that result when you put farm boys in exotic surroundings. And it was only hillbilly music that captured the realistic, heartbreaking side of war in such a song as *A Dear John Letter*, wailed and talked, respectively, by Jean Shepard and Ferlin Husky during the Korean conflict. The contemporary equivalent, of course, is *Keep Those Cards and Letters Coming In*, by George Hamilton IV.

The gulf between hillbilly and popular music is even wider when it comes to dealing with the thousands of minor peacetime crises. One of the hottest of country songs not long ago was *The Little Brown Shack Out Back*, which title needs no explanation (I hope) except that it resulted from our cities' tightening up of their health codes and zoning regulations. Such day-to-day milestones of social and cultural change, chronicled in all their painful detail by hillbilly song writers, have been ignored by popular music.

One sometimes gets the idea that the new country songs are being written by a joint committee of the Ku Klux Klan and the John Birch Society. Country singers often have names like Johnny Freedom, and sing songs about how the flag is being trampled (one starts with a long recitation to this effect and goes into the tune of *America, the Beautiful* for a finale), about modern-day carpetbaggers in the South, about the errant ways of the U. S. Supreme Court, which "banned the Bible," as some song writers put it, and about high taxes. Of course, country song writers are not above a little name-dropping now and then, even if it involves identifying with a political outcast: "Everything's OK at the LBJ," one song tells us. Mostly, though, country songs extol the Good Old Virtues, many times using a cliché that Edgar A. Guest wouldn't touch: "To me you're an angel,/ But folks think you are cheap./ Well, you're known by the company you keep."

The most endearing quality of country music is its sense of humor. Roger Miller, the country song writer and performer who is so popular he is also claimed by the pop field, eschews right-wing philosophy in favor of some good mainstream joshing (*Atta Boy, Girl; You Can't Roller Skate in a Buffalo Herd; etc.*) and social satire ("I'm the number one attraction/ At the super-market parking lot./ I'm the king of Kansas City./ No, thanks, Omaha. Thanks a lot.").

Homer and Jethro have made a fortune satirizing country music, which proves the field and its fans can take a joke—they didn't sell all those records to over-civilized city types. Homer and Jethro were at it again recently when others in the field were singing songs lambasting demonstrators against the Vietnam war. The two did a parody of the country song *All I Have to Do is Act Naturally*, in which they threw a broadside at the prevailing philosophy by singing, "They're gonna put me on a troop ship,/ And send me where the fighting is the

worst./ They're gonna put me in the Army,/ But they're gonna have to catch me first."

The humor in country music is sometimes unintentional. The industry's penchant for sequels to best-selling tunes can be downright amusing even to the folks out here in radioland. It was inevitable that Miller's *King of the Road* would spawn *Queen of the House*, set to the same melody, and that *Six Days on the Road*, a truck-driving song suitable only for a male singer, should prompt the answering *Six Days of Waitin'* to the same tune for girls. Years ago, the song *I Didn't Know God Made Honky-Tonk Angels* was answered by a feminine version advising naïve menfolk that *It Wasn't God Who Made Honky-Tonk Angels*. In this case, both songs stole their melody: it originally was the tune for *The Great Speckled Bird*, a multi-million seller for Roy Acuff. (Incidentally, the country musicians are missing a bet by not reviving *The Great Speckled Bird* more frequently, with the present political situation being what it is. The song might sell even better now, if properly sung from the hort.)

I REALIZE as well as the next man how bad musically some country music is. But it is never bland. The difference between popular and country music is like the difference between professional and high-school basketball. The one is technically flawless, and unbelievably dull. The other is ragamuffin, helter-skelter, replete with wild shots and double dribbles, but it is always alive. Where in popular music is there anything to match the lament of the country boy who has just discovered the perfidy of city women and divorce-court judges: "I really got the business doing pleasure with you"? What does popular music have to set up against Jimmy Dickens' *She Ain't a Country-Music Lover*, in which he describes for us flabbergasted listeners a young lady who "thought Ernest Tubbs was a sincere place to take a bath"? Then there's the country plaint entitled simply *The Hurts Put Me in the Driver's Seat*. Now, I ask you, neighbors: when has Buddy Greco ever done anything to equal *that*?

So, as I told the wife, if it has to be one or the other on those long trips late at night, give me the Nashville boys every time. Besides having vitality, some of them—Marty Robbins and Eddy Arnold, for example—can even sing. Of course, it would be a different situation if some radio station would play classical records at that hour. But as I said it, I was a bit glad that I was never going to be put to the test. Would I, I wondered guiltily, switch over to *Country Music, U.S.A.* for a change of pace from Bartók when I was out there miles from home—where nobody would ever know?

Noel Coppage, newspaperman and humorist, has reported the news from the various parts of Radioland, U.S.A. He is at present a staff writer on The Daily Sentinel in Grand Junction, Colorado.



Singer-songwriter BUCK OWENS

“A good song is a good song, no matter
what field of music it’s in.”

By John DeVoe



BAKERSFIELD, California, a city of 68,000 inhabitants in the San Joaquin Valley of central California, is often called Buckersfield, Nashville West, or Country Music’s Second Home. The appellations are quite serious, and all are in tribute to the city’s third-largest industry: country-and-western singer Buck Owens. Agriculture ranks first in this, the largest farming area

in the United States, and is losing no ground whatsoever; oil, the second largest export, just keeps gushing. But Buck Owens may yet catch up.

As the most popular country singer for the last three years, he is well into his second million dollars. And most of the first million is wisely invested. He owns two country-music radio stations, KUZZ in Bakersfield and



HIRO MUNETOMO

If the c-&w flavor has yet to titillate the palate of the general American public, it still has success abroad—as in Japan.

KTUF in Phoenix, the only 50,000-watt station in all of Arizona. He has a record store, a talent booking agency, a music-publishing firm, his own printing company, and two ranches with about eighty head of prize Angus cattle between them.

He has lived in Bakersfield since 1951, when he arrived—broke but determined—from his boyhood home in Mesa, Arizona. He sang and wrote songs for several years (he spent seven of them in the same tacky nightclub, the Blackboard) before anything much happened. When it finally did, Buck took a lot of people along with him.

"All my people are here with me," he says, meaning not only that he has installed his parents on one of the two ranches and that his sister is his general manager, but that a quarter of the active performers in country music have followed his example and settled in or near Bakersfield. Tommy Collins, Red Simpson, Merle Haggard, Bonnie Owens, Fay Hardin, Bob Morris, Kay Adams, Dick Curless, and Joe and Rose Lee Maphis are near neighbors. Rose Maddox lives in Pomona, 140 miles south, and visits a lot.

Owens spent one hundred and six working days away from Bakersfield last year, however, touring with his four-man band, the Buckaroos, and promoting his own big-beat brand of country-and-western, with emphasis on the western. Thirty of the one hundred and six days were spent in Japan ("extremely west," as he puts it) playing two live concerts a day for fans in Osaka, Kyoto, Nagasaki, and Tokyo. "I've been an entertainer for eighteen years, and for the first time I was scared to death," he says. "The Japanese are ardent fans, but they just sit on their straw mats and *listen*."

Listening is something much of the general public in the United States doesn't do when it comes to country music, according to Owens. "It's changed in the last five years; we're making progress all the time." He appeared on the Dean Martin television show recently and ob-

served that "every song Dean did was a country song."

His own record sales are the best testimony to the phenomenally increasing acceptance of country music. Since 1963, his first big year, Owens has accounted for \$10,000,000 in record sales and has had fifteen number-one hits on the country-and-western song charts. All of his nineteen albums are still in the Capitol Records catalog, and even his recordings of hymns are snapped up by eager fans.

In personal appearances, still the staple of country-music performers, he does just as well. Last August 12, his thirty-eighth birthday, he played to 22,000 people at the Illinois State Fair. Just recently he and his Buckaroos received \$10,000 for a single appearance, a figure rarely reached by pop-music stars.

"There's no way of slowing down, much as I might like to," he says, ticking off his other enterprises: a syndicated television show out of Oklahoma City, producing records for other artists, and his own song-writing, which is where the really big money is.

Owens wrote *Cryin' Time*, *Together Again*, *Act Naturally*, and *I've Got a Tiger by the Tail*. He recorded all of them, of course, and did very well with them indeed. But he did even better when Ray Charles made *Cryin' Time* a standard and the Beatles sold three million copies of *Act Naturally* on which they used Buck's arrangement. Ray Charles later recorded six Buck Owens songs on one album. According to Owens, "The big secret is to write a song, then control it [hence the music publishing company]. When other artists perform it, you get all the royalties."

"A lot of pop people are going country with our music," he says, "and they're making fantastic records of them." He explains that one reason his music is

C-&w may yet find the broader audiences it deserves—Dean Martin (below), Perry Como, Andy Williams, and others all sing it.



CAPITOL RECORDS



"Radio stations are sort of like land—both are somethin' they're not gonna make any more of." Canny Owens owns two of them.

so readily adaptable for pop-music audiences is that everything he does—fast or slow—has a driving beat. The beat is essential in the Southwestern brand of country music heard anywhere west of Texas. Owens is the chief practitioner of country with a beat, also known as Western Swing. It's highly danceable, and teen-age combos in the West play it for dancing as readily as rock-and-roll.

"Most people picture country music as sung by the tobacco-chewing, banjo-pickin' singers of twenty years ago," Owens says. "We're taking out that old Bluegrass and all those fiddles." The Nashville sound, on the contrary, *is* stringy, with lots of fiddles. "Ours is a different feel, with much more rhythm. Here we're motivated to dance. I grew up with drums, but it wasn't until just recently that they allowed drummers into the Grand Ole Opry. Back home, when we went to high school dances

Perfectionist Buck Owens solves a miking problem with Capitol a-&-r man Ken Nelson at a recent Los Angeles recording session.



Eighty head of Black Angus are hardly enough to qualify Buck Owens as a stockman, but he manages to look the part with ease.

as kids, we danced to a country band. And now I just don't like music without a beat."

"Back home" for Owens is Texas and Arizona. He was born Alvis Edgar Owens, Jr., August 12, 1929, in Sherman, Texas, near the Oklahoma border. His father, a farmer, moved his wife, two sons, and two daughters to Mesa, Arizona (near Phoenix) in 1937. Buck, who one day just asked everyone to call him that, says "I remember being a dirt farmer's son and what it meant: wearin' Bibb overalls to school, havin' a biscuit or some salt pork for lunch. If we were lucky we got an orange."

On his thirteenth birthday his parents gave him a mandolin, which he taught himself to play. Later he mastered the guitar and half a dozen other instruments. When he was sixteen Owens had a nightly radio show on KTYL in Mesa; he played the eight-string mandolin, and a partner played guitar. KTYL was advertised as the first drive-in radio station in the country, and fans could drive into the parking lot next to the station and watch the performers through a large glass window.

In 1951 the whole Owens family moved to Bakersfield. Buck became a featured guitarist on the records of other country artists and toured central and southern California with his own band, the Schoolhouse Playboys. "Our group played country, but we could slow it down and play Latin music, *Tea for Two*, or *Sweet Georgia Brown*," he recalls. He doubled on saxophone and trumpet, and played guitar as well. In 1958 he landed on the same bill with Loretta Lynn, who is the current top female country-and-western singer, at the Club Britannia in Seattle.

"When I was about twenty-two or twenty-three, I wanted to get to be something in the country-music business, and it looked like the best way was as a song writer. I'd knocked on many doors in attempts to make records myself, and people always asked 'Got any songs?' They said they had a lot of singers, but they needed material. So I started writing." *(Continued overleaf)*

He had his first hit in 1956, a song called *Down on the Corner of Love*. It was made famous by Red Sovine, but recorded by several other artists (including Buck Owens, who did it for the obscure and now defunct Pep label). A year later he signed with Capitol Records in Hollywood; he had his first hit as a singer in 1960, *Under Your Spell Again*. His own personal favorite, *Together Again*, has been recorded by forty different performers. He still writes 80 per cent of his own material, usually with Buckaroo Don Rich.

"I get these songs just as I go along," he says. "For example, I kept seein' those Enco gas-station signs, and I thought up the tune *I've Got a Tiger by the Tail*. I never write words down; I just formulate them and sing the song over in my mind several times. If I still remember it four days later, I record it. Heck, if I forget it after four days the public will too." His themes are uncomplicated country: "I pick ideas that everyone would like. We leave the protests and the messages to others."

Owens regards his success with pop singers and pop fans as "just another tribute to country music. We no longer have to live with being called hillbillies. This has got to be attributed to getting a lot of the flakes out, taking out the overalls and the outhouses." But he himself has never considered country music "hillbilly" music. "Country music is *American* music. It comes right from the soul, right from the people. Country music didn't come from overseas. Country music came from right here, now, today, yesterday, last week, last year."

He has pledged to his fans, in writing, that he will sing "no song that is not a country song, make no record that is not a country record." Although he refuses to be known as anything but a country singer, he has done as much as anyone else to "popularize" country-and-western music—anyone, that is, except Ray Charles, who according to Owens has "sold enough country songs to burn a wet dog."

IN THE popular market, Owens feels, "country-and-western'll have a good run, and then something else will catch on." He is even prepared to bow out of the pop scene: "With the drawing together of pop, rock, and modern country-and-western, I think we're going to lose it to smart people—like Dean Martin, for instance."

Buck did the liner notes for a Lovin' Spoonful album, and he is an unabashed Beatles fan: "I have been since the inception of the Beatles, and I come by it honestly because it was before they did *Act Naturally*." He rarely listens to country music on the radio. "I listen to the other stations to see what's goin' on. A good song is a good song, no matter what field of music it's in."

Buck Owens looks, dresses, and talks like a cowboy, and he even rides herd in rare moments. He is tall (6' 1") and medium husky (185 pounds). He is given to bright orange or gold-spangled western suits that have to

be hand tailored because they are too outrageous for any store, even in California. He has dark blond hair, blue eyes, and a wide, ready smile.

He is suspicious of the fans who come to see him in Carnegie Hall and "other big places." "You never know if they're coming out of curiosity or not." He is devoted to his hard-core country-and-western fans: "They're clan-ish; if you're one of them, they'll stick with you for life. They have great pride in being a minority. I wouldn't trade 'em."

HIS biggest fans are in his family, and his own mother is literally the president of his fan club. Maisie Owens, or "Mother Owens" as she is known to the club members, has been on a leave of absence for illness. She has been temporarily replaced by "Tex," a pretty blonde given to lavender levis and exclamation points after every other sentence—spoken or written. Dorothy Owens, Buck's sister, is general manager of all his enterprises and is in complete charge when he is on the road. She runs a staff of forty-one, including the employees of the two radio stations.

He bought the radio stations because he saw them as the best kind of investment. "Radio stations are sort of like land—both are somethin' they're not gonna make any more of. I never could see how a radio station could go broke. I wanted to try my luck at it."

His parents live on the larger (107-acre) ranch in Paso Robles, California, where most of the cattle are kept. Owens, his wife of twenty years, and his four sons and one daughter live on a 30-acre spread just on the outskirts of Bakersfield. His oldest son, who is nineteen, sings, plays guitar, and is a disc jockey under the name of Buddy Allen.

Owens' travels take him in excess of 100,000 miles a year, and he is trying to cut back by going only to "places that can be got to in one day." In the jet-age that includes the Netherlands, where he and the Buckaroos will appear this spring (they had a highly successful European tour in 1965), and Hawaii, where he and his band performed in December.

When he is at home, he loves to play golf, smoke pipes and cigars, and eat steaks, black-eyed peas, and cornbread. He doesn't drink but doesn't condemn those who do. He is square, but beneath the down-home exterior there beats an ambitious heart that long ago determined "to be a big success" in his folksy field.

The real secret of that success, however, seems to be the grateful, gushing Buck Owens motto (and title of one of his hits of last year): "It Takes People Like You to Make People Like Me." That seems true enough.

John DeVoe, a free-lance writer on American popular culture, is well known for his perceptive reporting of new trends in music. This is his first appearance in the pages of HiFi/STEREO REVIEW.

HIFI/STEREO REVIEW'S SELECTION OF THE TOP RECORDINGS BEST OF THE MONTH



CLASSICAL

BENJAMIN BRITTEN'S *A MIDSUMMER NIGHT'S DREAM*

Shakespeare's fairyland is brought richly and poetically alive in a brilliant operatic treatment

BENJAMIN BRITTEN's operatic treatment of Shakespeare's *A Midsummer Night's Dream* (1960), just now available in a joyous, brilliant recorded performance by London, was produced a few years back in New York with but wan approval from either press or public. The New York City Opera Company's production, to the best of my recollection, was an impressive one and, hearing the score again in this new recording, I am more baffled than I was at the time by its admittedly respectful but tepid reception.

It is a truism that the Italians or the French—indeed, composers of just about any country—will tackle Shakespeare as operatic subject matter, sometimes, as in Verdi's case, with significant international success, but that British and American composers are wary of the playwright. They have good reason to be, Heaven knows: since Shakespeare's language *is* music—the supremely musical use of English—the composer who tries to heighten it had better be awfully good if his courage is not to be interpreted as sheer gall. The audiences of English-speaking countries, when they go to hear such a masterpiece as *Othello* sung in Italian, suffer no pain; but the same audiences hearing, say, *Antony and Cleopatra*, sung in an adaptation of Shakespeare's original English text, might well flee the theater in embarrassed panic.

Combining my recollections of the work on the stage with a careful perusal (with score) of London's new recording of Britten's *A Midsummer Night's*

Dream, I will not damn the work with faint praise by suggesting that it is the best English-language operatic setting of Shakespeare I know of. (Some of the others one could compare it to might *still* lead a reader to the conclusion that Britten's opera is a mess.) I will, instead, simply suggest that Britten has succeeded in an all-but-impossible task with an all-but-exasperating brilliance.

When the work was produced in New York, there was some critical complaint that the opera lacked cogent, idiomatic lyricism; lacked, in fact, much of any lyricism at all. To a degree, the statement is accurate. But it occurs to me that it is less an indictment of the work than it is testimony to Britten's shrewdness. Since he has never been celebrated for his lyric invention for

the human voice anyway, one can safely assume that the plainness of much of the opera's vocal style is a strategy of underplaying the words rather than making any attempt to "out-sing" them. Even so, when the moment is right, Britten intersperses his lyrical declamation with exquisitely "melodic" vocal episodes. *Not* arias; there isn't a proper "aria" in the entire opera—any more than there is in *Pelléas* or most of *Falstaff*. But short, song-like passages—rather like the musical settings used in legitimate productions of a play like *The Tempest*—turn up with a consistency and a frequency that together suggest that the composer thought of them, collectively, as a binding structural device for the opera. Oberon's



BOTTOM SERENADING QUEEN TYTANIA:
"I have a reasonable good ear in music."

"I know a bank . . ." and Tytania's "Come now, a roundel . . ." (both in Act I) are lovely examples.

The composer's treatment of those lines from the play that have gone into the language as commonplaces is canny. "The course of true love never did run smooth," for example, would tempt a more naïve composer to do something "special" musically. Britten just throws the line away, lets it pass in a bare, unremarkable setting. And with his treatment of the third-act scene in Theseus' Palace, Britten walks the fine line between wit and vulgarity with astonishing steadiness in a quick-change caricature of celebrated operatic styles that jabs at everyone from Mozart to Rossini to Verdi to the *verismo* boys. It's possible that the scene stresses the composer's ingenuity at the expense of the text, but it is too irreverently funny for me to carp about.

Obviously, if Britten has treated the text with the simplicity I have described, his orchestra must bear the heavy burden of evoking the aura of magic and mystery the play demands. It does, and we know from the first pages of the orchestral prelude that Shakespeare's fairyland will be brought richly and poetically alive. I can think of no composer alive today who can surpass Britten's inventiveness in using small orchestral forces, and he does it again here. Some of the opera's most beautiful moments—I am thinking particularly of the rigidly diatonic, vaguely Coplandesque prelude to Act III—exist in the orchestral writing. But if this is a shortcoming, as has been suggested, then the majority of important "serious" lyric theater pieces since (and including) Wagner will have to take the same rap.

The performance itself is glittering. Britten's conducting produces sounds from the London Symphony that are cracklingly alive, delicately colored, expressive. The singers are all one could hope for: countertenor Alfred Deller is an extraordinary Oberon, Elizabeth Harwood sings radiantly as Tytania, and how Peter Pears (Lysander) still manages to sing as fluently and prettily as he did years ago is my own particular puzzle for the month.

The recorded sound is spacious and clear and the stereo treatment, as it too rarely does in recorded opera, makes fine dramatic and musical sense. *William Flanagan*

BRITTEN: *A Midsummer Night's Dream*. Alfred Deller (countertenor), Oberon; Elizabeth Harwood (coloratura soprano), Tytania; Peter Pears (tenor), Lysander; Thomas Hemsley (baritone), Demetrius; Josephine Veasey (mezzo-soprano), Hermia; Heather Harper (soprano), Helena; Stephen Terry (acrobat-speaking role), Puck; John Shirley-Quirk (bass), Theseus; Helen Watts (contralto), Hypolyta; Owen Brannigan (bass-baritone), Bottom; Norman Lumsden (bass), Quince; Kenneth MacDonald (tenor), Flute; David Kelly (bass), Snug; Robert Tear (tenor), Snout; Keith Raggett (baritone), Starveling; Richard Dakin (treble), Cobweb; John Prior (treble), Peach Blossom; Ian Wodehouse (treble), Mustardseed; Gordon Clark

(treble), Moth; Eric Adler (treble), a Fairy. Choirs of Downside and Emanuel Schools; London Symphony Orchestra, Benjamin Britten cond. LONDON © OSA 1385, © AM 4385* three discs \$17.37.

LEONTYNE PRICE: A PRIMA DONNA REVISITED

Her second volume of operatic repertoire for RCA Victor is magnificent from start to finish

THE elaborate album presentation RCA Victor contrived last year to showcase the art of Leontyne Price ("Prima Donna," LSC/LM 2898, reviewed in these pages in January of 1967) was highly successful—and completely justified by the musical content. The follow-up album ("Prima Donna, Volume 2"), just released, is even better. Again, the repertoire ranges over a generous expanse of eras and styles, and the selections have been made with intelligent care. The program is varied, provocative, and congenial, and Miss Price's work is awe-inspiring in its versatility and artistic penetration. Her voice has never sounded more radiant—here is a recital to bathe the listener's ears in lustrous streams of soprano sound from start to finish.

To cite specifics, the long-spun phrases of "*Care selve*" are marvels of legato control, and "*Or sai chi l'onore*" (the recitative is breathlessly convincing) is delivered with vengeful fury yet with fastidious accuracy. The lovely *Der Freischütz* aria floats some beautiful *piano* phrases in its opening *andante*, while each phrase of the *allegro* is cleanly articulated, tense without being rushed. (Francesco Molinari-Pradelli, by the way, whose conductorial support is admirable throughout, belongs to that minority of current operatic conductors who know that haste does not automatically guarantee excitement.)

The grand Sleepwalking Scene from *Macbeth* is not only beautifully sung—it is capped by a flawless D-flat—but has an eerie, altogether believable atmosphere about it. The artist moves from one role to another with an unflinching sense of characterization, always portraying the part from within, and employing a rich palette of expressive vocal coloration. Only in the first, semi-recitative half of "*La mamma morta*" does she deliver her phrases with something less than absolute poise; but once the broad cantilena is reached with "*Vivi ancora! Io son la vita!*", the rest is all it should be. The voice is magnificently sustained in the higher reaches throughout the recital. It is somewhat breathy and insufficiently

supported at the low extreme of the range, but when Miss Price is in top form—as she is here—this deficiency must be judged insignificant.

The orchestral playing is sumptuous, and Richard Mohr has again outdone himself with an outstanding technical production. *Bravo, bravi, and, above all, brava!*

George Jellinek

LEONTYNE PRICE: *Prima Donna, Volume 2: Handel: Atalanta: Care selve. Mozart: Don Giovanni: Or sai chi l'onore (with Piero de Palma, tenor). Weber: Der Freischütz: Leise, leise. Verdi: Macbeth: Sleepwalking Scene (with Corinna Voza, mezzo-soprano, and Robert El Hage, bass). Boito: Mefistofele: L'altra notte in fondo al mare. Debussy: L'Enfant prodigue: Air de Lia. Giordano: Andrea Chénier: La mamma morta. Zandonai: Francesca da Rimini: Paolo, datemi pace. Puccini: Suor Angelica: Senza mamma.* Leontyne Price (soprano); RCA Italiana Opera Orchestra, Francesco Molinari-Pradelli cond. RCA VICTOR ⑤ LSC 2968, ⑩ LM 2968* \$5.79.

JAZZ

MASTERS OF JAZZ: PEE WEE RUSSELL AND RED ALLEN

Impulse's new recording of a concert at M.I.T. is a fundamental disc of "modern traditionalism"

ALTHOUGH their backgrounds and styles were obviously different, Pee Wee Russell and the late Henry "Red" Allen were alike in the depth and delicacy of their lyricism. (Allen, to be sure, was a showboater as an M. C., but when the time came in each set to be serious about the music, he played with a fiery grace and a disciplined passion that were real extensions of the shy, proud Allen off the stand.) Their careers were somewhat similar too, in that for many years they were categorized as "traditional" jazzmen—that meant *When the Saints Go Marching In* at least once a night and no stature among those of the young who thought jazz was born with Charlie Parker.

In recent years, however, there has been a gradual realization that Pee Wee and Red had kept their ears open all those decades and that they had, moreover, presaged several modern developments in some of their early recordings. Therefore, by the time of their M.I.T. concert in October, 1966—now available in Impulse's "The College Concert of Pee Wee Russell and Henry Red Allen"—it was no longer a surprise to find such pieces as Thelonious Monk's *Blue Monk* and John Lewis' *2 Degrees East, 3 Degrees West* on the program. Red and Pee Wee were at M.I.T. to illustrate a lecture by Whitney Balliett, jazz critic for the *New Yorker*.



LEONTYNE PRICE

Her voice has never sounded more radiant

Balliett's comments are not included, but the album certainly does illustrate a number of the basic verities of jazz.

Here, for instance, Russell and Allen are masters of phrasing—the shaping of line and time into a coherent personal perspective which, in Russell's case, produces a penetratingly original *Pee Wee's Blues* that is nonetheless thoroughly grounded in blues tradition. For although the phrasing of each is distinctive and modern, Russell and Allen do demonstrate traditionalism, a traditionalism that is broader than the narrow cult in which many of their older admirers have tried to encapsulate them. The commitment of Russell and Allen was always to the basic concept of the first jazz that horns should sing: that each man must find and develop his own sound, and that once the foundation has been laid, there is no point in being a jazzman unless you can change your music as your experiences change.

It is this sense of constant searching, of concentrating on how to tell it exactly the way it is *now*, that gives this album its special intensity. It is also characteristic of the

empathic support by a younger-generation rhythm section—Steve Kuhn, Charlie Haden, and Marty Morell. In addition to the commentary on Monk and John Lewis there are blues and standards. On one of the latter, *Body and Soul*, Red Allen proves again that he was a “soul” singer long before that term had acquired its current status.

This is not an album that is likely to have large sales, for “modern traditionalism” of the Allen-Russell bent is not in the forefront of current jazz interest. I would advise, therefore, that you get it while it’s still available. *It is a fundamental jazz record.* Nat Hentoff

PEE WEE RUSSELL/RED ALLEN: *The College Concert of Pee Wee Russell and Henry Red Allen.* Pee Wee Russell (clarinet), Red Allen (trumpet, vocals), Steve Kuhn (piano), Charlie Haden (bass), Marty Morell (drums). *Blue Monk; I Want a Little Girl; Body and Soul; Pee Wee’s Blues; 2 Degrees East, 3 Degrees West; Graduation Blues.* IMPULSE © AS 9137, Ⓜ A 9137 \$5.79.

BOBBY HACKETT’S TASTEFUL “CREOLE COOKIN’ ”

The sounds of old New Orleans are deftly recreated in the trumpeter’s latest release for Verve

EVERY release by Bobby Hackett is for me a thing to cherish—like a drawer full of old woolen mufflers—but his latest on the Verve label (“Creole Cookin’”) is just about the best he’s ever done. I will try to contain my exuberance and sound intelligent about it, but underneath I have to admit that there is simply *nothing* I can say that might dissuade you from buying it. It is simply the greatest.

I’ll never cease to wonder how Bobby manages to recreate the old New Orleans back-street sounds so completely and make them as deft and breezy as a Richard Lester movie, but proof that he can lies in this disc. The first cut, *High Society*, sent me whirling into the growing-up days I spent in New Orleans, listening to Bix Beiderbecke records and following Negro funerals up and down Rampart Street. *Muskrat Ramble* voices the reed section together under Bobby’s horn à la Ellington. Dave McKenna tap dances all over the *Original Dixieland One Step* with his fractious piano. *Lazy Mood* is taken at the best-arranged tempo since June Christy’s great vocal a few years back, and to hear the wonderfully misty, wet-cobblestone French Quarter mood evoked on *Do You Know What It Means to Miss New Orleans?* is to die.



PEE WEE RUSSELL
A basic jazz commitment: his own sound

Bobby has assembled musicians unfamiliar with New Orleans music (such progressive-jazz geniuses as Zoot Sims and Bob Brookmeyer) for these sessions, but they perform as if their names were really Bechet and Robichaux. I guess it has something to do with the universal happiness of the idiom—they’ve never before played with so much humor and taste.

I could go on and on, but don’t ask questions. Just buy this one and *live*. If you never hung around New Orleans in the days when it was still swinging, I’ll never be able, in a million words, to convince you how much you’ve missed. But this brilliant disc will, I believe, help to ease the pain. *Red Reed*

BOBBY HACKETT: *Creole Cookin’.* Bobby Hackett (trumpet and cornet); arrangements by Bob Wilber. *High Society; Basin Street Blues; Muskrat Ramble; New Orleans; Do You Know What it Means to Miss New Orleans?; Lazy Mood; When the Saints Go Marching In;* and four others. VERVE © V6-8698 \$5.79, Ⓜ 6-8698 \$4.79.

Stop scratching Beethoven.

If you have a phonograph, you have scratched records. It can't be helped. Every time a phonograph needle travels the length of a record, it scrapes away a bit of the surface.

Tape recording is different. There's no way to scratch a tape, so the sound is always pure and clear. In fact, a tape actually gets *better* after the first several playings.

But to get the full advantage of tape, you need a top-quality recorder/player. And that's where the Ampex 2161 comes in.

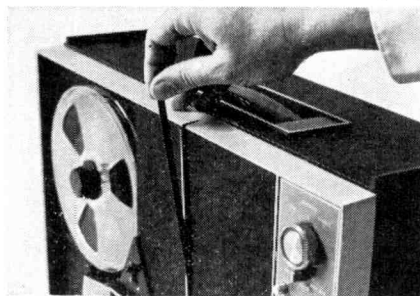
The 2161 is loaded with engineering features only Ampex offers. Like Deep-Gap heads. They deliver peak music performance five to ten times longer than other kinds. So we back them with the longest guarantee in the business.

Another Ampex exclusive is Dual Capstan drive. Most recorder manufacturers use a single capstan to drive the tape. We use two. This virtually eliminates wow and flutter, and does away with pressure pads that cause extra wear on tapes and heads.

Then there's Rigid-Block suspen-

sion. The recording and playback heads are securely anchored to a precision-machined metal casting. Consequently, tapes and heads align to one thousandth of an inch. You won't find better alignment anywhere.

So much for the things that make the tape sound better. The 2161 also has a few features that make it a lot easier to play. Automatic threading, for example. You just slip the tape into a slot and press the "play" button. Takes about two seconds. And automatic reverse. Lets you listen to a complete four-track stereo tape without switching reels. You can play



This is how easy it is to thread the Ampex 2161 tape recorder.



the same tape indefinitely—and never touch the machine.

But perhaps the most important feature of the 2161 is one you can't see. It's Ampex's experience in making the tape recorders most professionals use. All the big broadcasting networks, most local radio and TV stations, and almost all commercial sound studios use Ampex recorders as standard equipment.

That means the 2161 isn't really a home recorder. It's a home version of a professional recorder.

There's a big difference.

Ampex. The people who started it all.

STEREO TAPE BONUS. Select \$100 worth of Ampex stereo tapes for just \$39.95 with the purchase of any Ampex stereo tape recorder/player. Tape offer good only in U.S.A.



Ampex Corporation, Consumer and Educational Products Division 2201 Lunt Ave Elk Grove Village, Ill. 50007

AMPEX

VIKING MEANS EXTRA VALUE IN HI-FI STEREO TAPE RECORDERS

Now, for the first time, you can enjoy the superior reproduction, the quality engineering of a full fidelity tape recorder with three-speed, three-motor drive and solid state electronics at surprisingly modest costs. New VIKING 423 and 433 recorders are exciting additions to your stereo system — exciting both inside and out. Unequaled for operating convenience, impeccably styled, expertly engineered, these new VIKINGS are ideal for both audiophiles and serious recordists.

VIKING 433 Three speed, quarter-track stereo recorder with three separate hyperbolic tape heads, solid state record and playback electronics. Equipped with stereo headphone jack for monitoring; monitor gain controls for each channel. Eight-position function selector illuminates color-coded indicator windows. Three drive motors; mixing controls (for sound-on-sound editing), echo

switch, push-button counter, automatic shut-off, pause control, foolproof tape motion and record switch interlock. Optional remote pause control and walnut base . . . **under \$370.00**

VIKING 423 A solid, sensible, no-gimmicks unit with three speed, three motor drive and modern solid state electronics at an amazingly low price. Quarter track stereo; operates in vertical/horizontal position; built-in pause control; hyperbolic tape heads; push-button counter; directional control levers interlocked for foolproof operation; illuminated record meter, optional remote pause control and walnut base . . . **under \$250.00**

V KING 433



VIKING
tape recorders
A DIVISION OF THE
TELEX CORPORATION
9600 ALDRICH AVENUE SOUTH
MINNEAPOLIS, MINNESOTA 55420

CIRCLE NO. 69 ON READER SERVICE CARD



HIFI/STEREO REVIEW'S CHOICE OF THE LATEST RECORDINGS

CLASSICAL

Reviewed by WILLIAM FLANAGAN • DAVID HALL • GEORGE JELLINEK • IGOR KIPNIS • ERIC SALZMAN

RECORDING OF SPECIAL MERIT

BACH: *Cantata No. 13, "Meine Seufzer, meine Tränen"; Cantata No. 166, "Wo gehest du hin?"* Hanni Wendlandt (soprano); Lotte Wolf-Matthäus (contralto); Helmut Krebs (tenor); Roland Kunz (bass); Choir of St. Nicholas, Berlin-Spandau; Berlin Bach Orchestra, Helmut Barbe cond. VANGUARD EVERYMAN (S) SRV 244SD, (M) SRV 244 \$2.50.

Performance: **Very fine**
Recording: **Excellent**
Stereo Quality: **Excellent**

Both of these cantatas are splendid pieces and don't seem to have been available domestically before. Number 13, written for the second Sunday after Epiphany (not Trinity, as stated in the liner notes), is perhaps the finer of the two, with its great sighing and weeping phrases; its bass aria was once recorded for Angel by Dietrich Fischer-Dieskau. The performances here are extremely satisfying in all respects, with first-rate solo singers (Krebs is a little worn-sounding but, as always, spiritually convincing), a fine choir, and solid, well-paced conducting. The recording, derived from a Cantate original, is excellent. *I. K.*

BACH: *Keyboard Concertos: No. 3, in D Major (BWV 1054); No. 5, in F Minor (BWV 1056); No. 7, in G Minor (BWV 1058).* Glenn Gould (piano); Columbia Symphony Orchestra, Vladimir Golschmann cond. COLUMBIA (S) MS 7001, (M) ML 6401 \$5.79.

Performance: **À la Gould**
Recording: **Very good**
Stereo Quality: **Fine**

This disc adds two more of the Bach keyboard concertos to Glenn Gould's discography (No. 5, in F Minor, was previously released backed with the Beethoven First Concerto). The pianist is in excellent form throughout, though as usual there are some curious mannerisms, as well as a plethora of Gould's usual *detaché* touch with Bach. The most impressive performance for me here is that of No. 7, which has a splendidly evocative slow movement in spite of its being quite Romantic in treatment, with octave doublings in the left hand and such, and a finale

of great fervor and vividness. Gould's vocal contributions are held well in check, the orchestral accompaniments are quite satisfactory, and the recording is full and clear. *I. K.*

BARTÓK: *Piano Concerto No. 3.* **RAVEL:** *Piano Concerto in G Major.* Julius Katchen (piano); London Symphony Orchestra, István Kertész cond. LONDON (S) SC 6487, (M) SM 9487 \$5.79.

Performance: **Musicianly**
Recording: **Good**
Stereo Quality: **Nice**



CHRISTOPH ESCHENBACH
Sensitive pianism for Beethoven's First

This release has one unqualified thing going for it: the coupling of two highly attractive and accessible modern piano concertos in performances—barring a couple of stylistic niceties on which I will all too soon be carping—of irreproachable musicianship.

I grew up on the legend that Ravel's G Major Concerto, along with practically everything else he composed after about 1920, is evidence of his latter-day decline. The same legend once held true for Strauss (after *Elektra*) and Stravinsky (after *Le Sacre*)—true until performers wearied enough of the "vital" works to let the public have a shot at the "declining" ones and reverse the decision.

I mention this because, while I was aware that Ravel-in-decline is doing very nicely, I was surprised to learn that Katchen's new recording of this concerto will make a total of ten versions listed in the Schwann cata-

log. This research also reminded me that Bernstein (playing and conducting) still has his recording on the market and that it's a hard one to beat. The piece couldn't be more Bernstein's own if he had composed it. Katchen's, for all its considerable quality, falls short. For one thing, he's a little heavy with his left hand in the slow movement and a little short on wit in the finale.

He does beautifully indeed by the Bartók, and he has no strong recorded competition here. It's possible that he takes the piece a little too seriously, but the playing is nonetheless exquisite. And Kertész's support is solid and musicianly. The recorded sound is fine, but I don't seem to get much resonance from it on my equipment. *W. F.*

RECORDING OF SPECIAL MERIT

BEETHOVEN: *Piano Concerto No. 1, in C Major, Op. 15.* Christoph Eschenbach (piano); Berlin Philharmonic Orchestra, Herbert von Karajan cond. DEUTSCHE GRAMMOPHON (S) DGG 139023 \$5.79.

Performance: **Lyrical, slow, impressive**
Recording: **Excellent**
Stereo Quality: **Fine**

Although the first two movements are taken extremely slowly in this performance, I found myself being persuaded by much of the interpretation, which emphasizes the lyricism rather than the dynamism of the score, and I noticed details that are sometimes glossed over in the faster, more standard performances of this concerto. The young German Christoph Eschenbach, some of whose previous recordings I have commented on quite favorably, plays this score with distinction; it may not be to everyone's taste (mainly because of the tempos), but his interpretation has many valid and original ideas. He displays a polished, smooth technique and a great deal of sensitivity (the slow movement is especially admirable); particularly in the cadenzas, he reveals quite a bit of temperament as well. (He interpolates a few extra bars into Beethoven's cadenzas for the first and last movements—I presume they are his own additions.) The orchestral accompaniments are splendidly handled, and the recording features a slightly distant but rich-sounding orchestra with excellent perspective vis-à-vis the solo instrument. *I. K.*

RECORDING OF SPECIAL MERIT

BELLINI: *Beatrice di Tenda.* Cornelius Ophthof (baritone), Filippo Visconti; Joan Sutherland (soprano), Beatrice di Tenda; Josephine Veasey (mezzo-soprano), Agnese del Maino; Luciano Pavarotti (tenor),

Explanation of symbols:

- (S) = stereophonic recording
- (M) = monophonic recording
- * = mono or stereo version not received for review

Hi Fi/Stereo Review Record and Tape Service



Have you been having a little difficulty obtaining some of the records and tapes reviewed in this issue? HiFi/STEREO REVIEW Record and Tape Service to the rescue! Not a record club—no discounts, no special deals. We're here simply as a service to those of our faithful music-loving readers who are about to give up the search for "hard-to-get" records and tapes. If you want help in your musical dilemma, all you need do is complete the coupon below and mail it in with your remittance. We'll

see to it that your records and tapes are mailed to you promptly, well packed and fully guaranteed against damage or defects.

And if you've been having a hard time finding some favorite recording *not* reviewed in this issue, we'll do our level best to find it for you also. Simply fill in as much information as you have available (title, manufacturer, record number) on the coupon below and we'll do the rest. If you're not sure of the price, we will be happy to mail your order C.O.D.

HIFI/STEREO REVIEW RECORD & TAPE SERVICE • DEPT. SD
ONE PARK AVENUE • NEW YORK, NEW YORK 10016

Please send the records and/or tapes requested below. I understand you will pay shipping and handling charges and that all records and tapes are fully guaranteed against damage or defects.

- Check or Money Order for \$_____ is enclosed.
 C.O.D. (Within the continental limits of the United States only).

For Air Mail shipments in the United States only, add \$.75 per record ordered. For Air Mail shipments to foreign countries add \$3.50 for the first record ordered, plus \$1.00 extra for each additional record.

PAGE NO. OF REVIEW	RECORD OR TAPE TITLE	RECORD (TAPE) NUMBER (SEE REVIEW)	MANUFACTURER	PRICE (SEE REVIEW)
Total				

(New York State residents add local sales tax)

Name (please print).....
 Address.....
 City.....State.....Zip.....

Orombello; Joseph Ward (tenor), Anichino and Rizzardo del Maino. The Ambrosian Opera Chorus and the London Symphony Orchestra, Richard Bonyngne cond. LONDON © OSA 1384, ℗ A 4384 three discs \$17.37.

Performance: Enjoyable
 Recording: Very good
 Stereo Quality: Very good

Beatrice di Tenda, Bellini's ninth and penultimate opera, was virtually unknown in this century until Joan Sutherland's arrival on the musical scene about eight years ago. How could a work contemporaneous with Bellini's best creations, *Norma* and *I Puritani*, remain so long in obscurity? Having listened to the present recording and read William Weaver's informative annotations, I have garnered some pertinent facts, but the question remains unanswered. This is a flawed work, to be sure, but its lengthy stay in limbo was inexcusable.

Apparently, Bellini and his long-time librettist, Felice Romani, had serious disagreements while working on this opera—which may explain why, for all its surface fluency and professionalism, the end result fails to generate conviction. The story of the opera may or may not have historical basis, but it would not surprise me one bit to learn some day that Romani's inspiration came from Schiller's *Don Carlos*. Just change Philip of Spain into Filippo Visconti, duke of Milan in 1418, and you have the central figure. For the rest, substitute *Beatrice di Tenda* for *Elisabetta*, *Agnese* for *Eboli*, and *Orombello* for *Carlo*, and you have Bellini's plot. Instead of the Inquisition there is the kangaroo court of Milan. Other elements of the Schiller play are missing, particularly the added piquancy of the "mother-son" romance, but the conflicts are identical, though far less penetratingly motivated than they are in Schiller's drama as adapted for Verdi.

Nonetheless, there are pages which measure up to Bellini's best: several effective arias, a passionate duet between *Beatrice* and *Filippo*, and some excellent ensembles, particularly the finale of Act I. Although never a remarkable orchestral technician, Bellini uses the device of the Rossinian *crescendo* rather effectively at various junctures, and there is a choral passage for the courtiers in Act I which must have provided Verdi with the inspiration for a similar scene in *Rigoletto*'s second act. (*Beatrice di Tenda* was a repertoire piece in Verdi's younger years and in fact his wife, *Giuseppina Strepponi*, was one of its early stars.)

As in the opera itself, virtues outnumber flaws in the performance. In top vocal form here, Joan Sutherland stunningly commands the externals of the role, tossing off roulades with amazing fluency, hitting high E-flats and E-naturals with effortless accuracy. If only she could articulate the text intelligibly, and cease the distressing habit of forming vowels with an arbitrary disregard of the printed page! Josephine Veasey is exceptionally fine in the high-lying part of *Agnese*; Luciano Pavarotti as *Orombello* is a shade hard-toned and unsoft, but quite satisfactory. The Dutch baritone *Cornelius Ophof* is gifted with a brilliant top register, but he produces dry and tremulous tones and fails to make *Filippo* a commanding figure. Joseph Ward performs two roles—confidants to *Filippo* and *Orombello*, the arch-enemies—and he is adequate in both.

(Continued on page 94)

One-finger exercise for the music lover



Audio magazine captured the true spirit of the Elac/Miracord 50H in its September 1967 review. "...an outstanding performer... its automatic features make it a pleasure to use." What was *Audio* talking about?

The 50H has four pushbuttons: a "stop" reject button and three operating ones, each programmed for another record size. The gentlest touch is all that's needed to put the 50H into automatic play: single records, once over or continuously, or stacks of up to 10 in automatic sequence. Or you can ignore the buttons, and play single records manually by simply placing the arm on the record. That's how easy it is

to operate the 50H and enjoy the many performance qualities it has to offer.

Other features of the 50H include: Papst hysteresis motor; leadscrew adjustment of stylus overhang; cueing facilities; anti-skate compensation and direct-dialing stylus force adjustment to as low as ½ gram.

At \$149.50 less cartridge and base, the Miracord 50H is probably the most expensive in the field. It is also the finest. See it at your high fidelity dealer or write for descriptive literature: Benjamin Electronic Sound Corp., Farmingdale, New York 11735

Miracord
the light touch

AT LAST! "THE" ... TEBALDI GIOCONDA

with an all-star cast including

MARILYN MORNE CARLO BERGONZI ROBERT MERRILL

LAMBERTO GARDELLI

conducting the orchestra
and chorus of L'Accademia
di Santa Cecilia—Rome

Stereo OSA 1388

LONDON
THE RECORDS
WORTH WAITING FOR



Photo: Melançon

Bonyng's leadership is vital if somewhat short on elegance, but the choral work could do with more polish. I would not call *Beatrice di Tenda* an essential item for an opera library, but *bel canto* enthusiasts will find the set very enjoyable, and we are in London's debt for restoring to us an unjustly neglected work. G. J.

BLOCH: *Schelomo* (see ELGAR)

BOCCHERINI: *Cello Concerto in B-flat* (see HAYDN, *Cello Concerto*)

RECORDING OF SPECIAL MERIT

BORODIN: *Prince Igor*. Constantin Cherkliiski (baritone), Prince Igor; Boris Christoff (bass), Prince Galitsky and Khan Konchak; Todor Todorov (tenor), Vladimir; Julia Wiener (soprano), Yaroslavna; Reni Penkova (contralto), Konchakovna; Cyril Dulguerov (tenor), Eroshka; Alexei Milkovsky (bass), Skula; Luben Mihailov (tenor), Ovlur; others. Orchestra and Chorus of the National Opera Theater of Sofia, Jerzy Semkow cond. ANGEL SCL 3714 three discs \$17.37.

Performance: **Highly enjoyable**

Recording: **Very good**

Stereo Quality: **Very good**

It is a fairly well-known fact that *Prince Igor* was left unfinished at the time of Alexander Borodin's untimely death in 1887, and that it fell to the composer's colleagues, Nikolai Rimsky-Korsakov and Alexander Glazounov, to complete the orchestration and to give final shape to the theatrical presentation. Since the end result was a stage work of a somewhat impractical length, a "performing version" soon evolved by the expedient elimination of Act Three, which was composed almost entirely by Glazounov. In the interesting essay which accompanies the present recording, Boris Christoff attempts to justify the procedure by claiming that the music "should be concentrated within the greatest limits of the original source." I cannot accept this view, because (a) the libretto was completed at the time of Borodin's death; (b) it was the work of Borodin himself (and his collaborator V. Stassov) and thus its authenticity was beyond question; (c) the removal of an act seriously damages the opera's structure and cannot help doing a disservice to Borodin's original vision; and (d) granted that *Prince Igor* is enormously long, so are *Parsifal* and *Die Meistersinger*.

Be that as it may, Act Three is generally omitted in performance (even by the Bolshoi Opera), and it is not given in Angel's new recording; but a cut *Prince Igor* is better than none at all. This is, in fact, a quite remarkable performance. It radiates Slavic authenticity, and offers singing that surpasses the Bolshoi presentation recently offered in Montreal. EMI-Angel's enterprising decision to surround Boris Christoff with members of the Sofia Opera has brought rich dividends.

Prince Igor lacks a central character of the prominence of Boris Godounov or Eugene Onegin. The opera, particularly in its shortened version, is a series of episodes in which certain characters assume a predominant role within a particular scene. The powerfully drawn personalities of Prince Galitsky and Khan Konchak never meet face to

(Continued on page 96)

WHAT A GREAT IDEA!

At last BSR has done something to take the confusion out of your shopping for a quality automatic turntable. We've completely pre-assembled the Total Turntable unit for you . . . cartridge and all . . . in these superb new BSR McDonald models.

Each is precision engineered in Great Britain with features you'll find only on the most expensive professional equipment.

An anti-skate control, a resiliently mounted coarse and fine vernier adjustable counterweight, a micrometer stylus pressure adjustment from 0 to 6 grams, a cueing and pause control lever and an automatic locking rest to secure the tone arm in the "off" position. These are just a few of the very many features of BSR McDonald turntables.

Ask your dealer to demonstrate the many features or send for a free detailed brochure and name of your nearest dealer.



PRECISION CRAFTED IN GREAT BRITAIN
BSR (USA) LTD., BLAUVELT, N.Y. 10913

The BSR McDonald 400 / 808



The BSR McDonald 500A / M44-7



The BSR McDonald 600 / M44-E



TOTAL TURNTABLES

Complete with cartridge, wood base and dust cover...ready to plug into the hi-fi system...and play beautifully!

face during the course of the opera; the dual impersonation has been a traditional challenge to Russian basses, and Christoff brings it off here with particular brilliance. The characters are sharply contrasted: Galitsky is dissolute and totally unprincipled, Konchak is savage yet endearingly human. Both roles are endowed with bursting vitality in Christoff's dynamic interpretation, though his voice is neither as firmly centered nor as effortlessly produced as it was in his recording of *Boris Godunov* a few years ago.

Since Chekerliński's vocal timbre is quite different from that of Christoff, the Igor-Konchak confrontation makes a good dramatic effect. He is a smoother vocalist than Christoff, a dark bass-baritone with an Italianate vibrancy to his round, resonant mid-range. This is a voice of impressive power and sonority, but the upper third of his scale is negotiated by dint of sheer power and with a noticeable lack of refinement. This results in an effortful rendering of Igor's important aria, but the overall performance is quite impressive, uneven spots notwithstanding.

Equally impressive and similarly uneven is Julia Wiener, a strong dramatic soprano whose tones are sometimes afflicted with the typical Slavic tremolo, but who is also capable of some perfectly beautiful legato phrases and floated pianissimos. The Konchakovna of Rosa Penkova is rich and sensuous, the Vladimir of Todor Todorov is a shade bleaty but more than adequate. The colorful supporting singers are excellent, the chorus laudable in sonority and spirit if occasionally weak in its sopranos.

Semkow's direction is, in the main, admirable: most effective in the lyrical episodes, somewhat understated in the wilder pages, such as the familiar Polovtsian Dances. In general, voices are heavily favored in Angel's sonic perspective, but the overall sound is rich enough. This is a memorable presentation of an incomplete, dramatically flawed, but engrossing work. *G. J.*

BRITTEN: *A Midsummer Night's Dream* (see Best of the Month, page 85)

RECORDING OF SPECIAL MERIT

CHOPIN: *Sonata No. 3, in B Minor, Op. 58*; *Three Mazurkas, Op. 59*; *Polonaise No. 6, in A-flat Major, Op. 53 ("Heroic")*; *Polonaise No. 7, in A-flat Major, Op. 61 ("Polonaise-Fantaisie")*. Martha Argerich (piano). DEUTSCHE GRAMMOPHON © DGG 139317 \$5.79.

Performance: **Powerfully compelling and often appealing**
Recording: **Excellent**
Stereo Quality: **Good**

Martha Argerich is the young South-American-born pianist who won first prize in the 1965 International Chopin Competition in Warsaw. In this, her second disc for DGG (the first, an excellent miscellaneous recital, was released in 1961), she impresses me enormously with her superb technique and temperament. It is playing in the big manner—no miniaturism—and she thunders through climaxes with the assurance of a powerhouse veteran. Miss Argerich is not yet a subtle pianist, and she has a tendency to sound precipitous, driving through the faster sections and not always extracting the meat from the slower, poetic moments. The slow

movement of the B Minor Sonata, therefore, is disappointing, but her treatment of the finale has a dynamism that is extraordinarily compelling. This movement, the "Heroic" Polonaise, the more vigorous moments of the three late Mazurkas, and the climaxes of the *Polonaise-Fantaisie* are marvelously exciting to hear. I would not want to hear these works played always with this degree of drive—Miss Argerich sounds often like the equivalent of the angry young man, and one hopes she will attain more repose in the future—but I admire the immediacy of her style and the torrential manner in which she handles her instrument. DGG's recording, except for a slight bass deficiency, is excellent. *I. K.*

DEBUSSY: *Prelude to the Afternoon of a Faun* (see SAINT-SAËNS); *Songs* (see POULENC)

Next Month in

HiFi/Stereo Review

STEREO'S TENTH
ANNIVERSARY:

* * *

Ten Years of Stereo Recording

•

Ten Years of Stereo Equipment

•

Forecast:

Stereo Developments to Come

•

PLUS:

BEST RECORDINGS OF 1967



DEBUSSY: *String Quartet in G Minor, Op. 10*. **RAVEL:** *String Quartet in F*. Quartetto Italiano. PHILIPS © PHS 900154 \$4.79.

Performance: **Sensitive**
Recording: **Good**
Stereo Quality: **Good**

Any group undertaking a recorded coupling of these pieces is asking for trouble in the "available-competition" game. With modern stereo versions by the Budapest, Fine Arts, and Juilliard quartets, the ground would seem to be well covered.

But although I am not prepared to suggest that this new version by the Quartetto Italiano is the winner (by almost any standard, it's Juilliard hands down), it has some uncommonly winning things about it. To get the worst over with first: technically, it is no great shakes. Among many other things, the triplet figuration that gives the opening theme of the Debussy work its profile and character—which in various metamorphoses is so germane to the overall structure of the work—is often quite shoddily executed. Similarly, throughout both the Debussy and the

Ravel, what musicians used to call the "passage work" is not as cleanly articulated as it might be. Still, there is here an oddly original, touching sense of the *feeling* of the music—its expressivity—that I find quite haunting: a delicacy of lyricism, a tendency to understate that is far from common. Furthermore, on a more technical level, these musicians seem to have a very precise understanding of the area in which these works—especially the Ravel—were innovative. For the Germans in general, and Beethoven in particular, had not only said the last word in the string-quartet medium, but had virtually defined it as quintessentially linear and contrapuntal. In tackling the medium, both Debussy and Ravel faced a problem not too generally understood by most listeners who dismiss their quartets on a comparative basis. This was the task of applying the more homophonic, "coloristic," relatively static techniques of Impressionism to a medium that by tradition would be hostile to them. Debussy solved the problem only partially; he frequently reverts to a self-conscious linear texture that is uncharacteristic of his style. Ravel met the problem head on and with stunning success by imagining a stylistically integrated, instrumentally idiomatic figural invention to replace polyphonic animation.

Along with their memorable sensitivity, then, these performances by the Quartetto Italiano are unusually intelligent in projecting the intellectual sense of the music. The recorded sound is clear if perhaps a bit "small," and the stereo effects are discreet.

W. F.

RECORDING OF SPECIAL MERIT

ELGAR: *Concerto in E Minor, Op. 85, for Cello and Orchestra*. **BLOCH:** *Scelomo*. Pierre Fournier (cello); Berlin Philharmonic, Alfred Wallenstein cond. DEUTSCHE GRAMMOPHON © 139128 \$5.79.

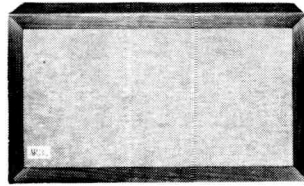
Performance: **First-rate**
Recording: **Excellent**
Stereo Quality: **Ideal**

I think that, along with the "Enigma" Variations, Elgar's Cello Concerto is perhaps his strongest work. When I come to know it better, I might even prefer it to the earlier piece. Certainly, much of what I associate with Elgar's music (and take a dim view of) is absent from the Concerto. Its textures are economical, its formal plans adventurous and personal; its entire concept is surprisingly free of the post-Brahmsian academicism that pervades most of his work. It is also warmly, convincingly, and very insistently lyrical, beautifully idiomatic in its use of the cello, and lighter and more discreet in its orchestration than anything by Elgar I've yet to hear. This performance of it is absolutely ravishing.

It is entirely possible that there are available here better recorded performances of Bloch's *Scelomo* than Fournier's effortlessly romantic but attractively understated performance—I'll not pretend familiarity with them all—but I should be very much surprised if there were. It's a refreshing pleasure, in any case, to hear the piece performed as if it were something other than a protracted sob. The recorded sound is uncommonly live and spacious.

W. F.

(Continued on page 98)



AR-3a

Acoustic Research announces a new speaker system.

In 1959, our first advertisement for the AR-3 stated, "it has the most musically natural sound that we were able to create in a speaker, without compromise." This judgment was supported by distinguished writers in both the musical and engineering fields. Hirsch-Houck Laboratories, for example, agreed that "the sounds produced by this speaker are probably more true to the original program than those of any other commercially manufactured speaker system we have heard." For nearly nine years the AR-3 has been the best speaker we could make.

However, technical development at Acoustic Research, as at many companies in the high fidelity industry, is a never-ending search for improvement. After much effort we have found a way to better the performance of the AR-3. The new speaker system, the AR-3a, has even less distortion, more uniform dispersion of sound and still greater power handling capability. The improvement can be heard readily by most listeners; it has been brought about by the use of newly designed mid-range and high-frequency units, and a new crossover network. Only the woofer and the cabinet of the AR-3 are retained in the new system. The AR-3a is priced from \$225 to \$250, depending on cabinet finish, and is covered by AR's standard five-year speaker guarantee.

Detailed information on conversion of an AR-3 to an AR-3a is available from
ACOUSTIC RESEARCH, INC., 24 Thorndike St., Cambridge, Mass. 02141

ELOY: *Equivalences* (see SCHOENBERG)

RECORDING OF SPECIAL MERIT

HAYDN: *Cello Concerto in C Major (Hoboken VIIIb:1)*. BOCCHERINI: *Cello Concerto in B-flat (arr. F. Grützmacher)*. Jacqueline du Pré (cello); English Chamber Orchestra, Daniel Barenboim cond. ANGEL © 36439 \$5.79.

Performance: Full-bodied
Recording: Good
Stereo Quality: Good

Despite the fact that in 1961 Maurice Gendron, with Pablo Casals conducting, recorded in Paris an authentic version of the Boccherini B-flat Cello Concerto (it was once available as Epic BC 1152, LC 3817—and I would like to see a Philips reissue with the least possible delay!), cellists of the stature of Pierre Fournier (DGG) and the gifted young Jacqueline du Pré still insist on recording the discredited Friedrich Grützmacher arrangement, which was stuck together toward the end of the last century from a sketchy manuscript in the Dresden State Library, with a G-minor slow movement thrown in from an altogether different Boccherini work.

Having got that off my chest, let me say that Miss du Pré, ably aided and abetted by her gifted pianist-husband (now turned conductor) Daniel Barenboim, turns in rich-toned and splendidly vigorous readings of both the Grützmacherized Boccherini and the far more interesting and very sunny Haydn concerto discovered some years ago

in the Prague National Museum archives. The recorded sound is admirable.

Those who prefer a somewhat lighter touch in these two works have a pair of excellent alternate recordings to which they can turn: Fournier on DGG for the "Boccherini" and Rostropovich on London for the Haydn. D. H.

RECORDINGS OF SPECIAL MERIT

HAYDN: *Mass No. 5, in B-flat ("Little Organ")*. MOZART: *Missa Brevis, in C Major (K. 259, "Organ Solo")*. Eiko Katonosaka (soprano); Kurt Equiluz (tenor); Elfriede Jahn (alto); Leo Heppe (bass). Vienna Chamber Choir; Hans Haselböck (organ); Vienna Volksoper Orchestra, Hans Gillesberger cond. TURNABOUT © TV 34132 S \$2.50.

Performance: Generally good
Recording: Airy
Stereo Quality: Good

MOZART: *Mass in C Major (K. 317, "Coronation")*; *Mass in C Minor (K. 427)*; *Et incarnatus est; Exsultate, jubilate (K. 165)*. Maria Stader (soprano); Oralia Domínguez (alto); Ernst Häfliger (tenor); Michel Roux (bass); Elisabeth Brasseur Chorale; Lamoureux Concerts Orchestra, Igor Markevitch cond. Berlin Radio Symphony Orchestra, Ferenc Ericsay cond. DEUTSCHE GRAMMOPHON © SLPM 136511 \$5.79.


Performance: Festive
Recording: Bright
Stereo Quality: Good

One hearing of these four sides makes it apparent which of these two composers was a believer and which was not. Within the limited span of the *Missa brevis* format, using the most modest of string forces with organ backing, Haydn tells us touchingly and beautifully just where he stands. The *Credo* and *Sanctus* in particular are full of wonderful things. Mozart for his part had little use for institutionalized religion, an attitude that must have been strengthened by his Salzburg surroundings, where ecclesiastical and temporal power were one and the same. So, whether it be the fifteen-minute *Missa brevis*, K. 259, or the "symphonic" "Coronation" Mass, Mozart wrote music essentially for ecclesiastical display purposes. As a matter of fact, his best writing for the church turns up in such quasi-operatic pieces as the *Et incarnatus* from the mature C Minor and in the youthful *Exsultate, jubilate*.

The recorded performances on the Turnabout disc are unpretentious, airy, and pleasant to the ear, though the choral enunciation seems to be obscured by somewhat distant miking. At \$2.50, the record is worth buying for the Haydn selection alone.

The DGG disc is a recoupling of performances issued originally in the early 1960's. Intense drive and nervous energy characterize Markevitch's reading of the Mass. The recording is bright and closely detailed. A softer ambience in both interpretation and sound mark the solo side featuring Maria Stader, who does a fine job with the fresh and popular *Exsultate*, with its famous *Alleluia* finale, as well as with the

(Continued on page 100)



VERITAS RECORDS PRESENTS
RECORDINGS OF TIMELESS STATURE


HAROLD BAUER VM108
WALTER GIESEKING VM109
GEORGES ENESCO VM111
ROLAND HAYES VM112
EUGEN D'ALBERT VM110

Previously Released:
JOSEF HOFMANN VM101 ■ SERGEI RACHMANINOFF VM102
LEOPOLD GODOWSKY VM103 ■ WANDA LANDOWSKA VM104
RUDOLPH GANZ VM105 ■ FRIEDRICH SCHORR VM106


Available at better record shops. Write to us for the name of your nearest Veritas record dealer.

The
Suprise Hit Record
of The Season!

Ziegfeld Follies VM107



Starring:
FANNY BRICE ■ WILL ROGERS ■ GALLAGHER AND SHEAN ■ PAUL WHITEMAN ■ UKULELE IKE ■ EVA TANGUAY ■ BERT WILLIAMS ■ NORA BAYES ■ FRANK TINNEY ■ JOSE COLLINS ■ NAT M. WILLS ■ VAN AND SCHENCK ■ MARY LEWIS.



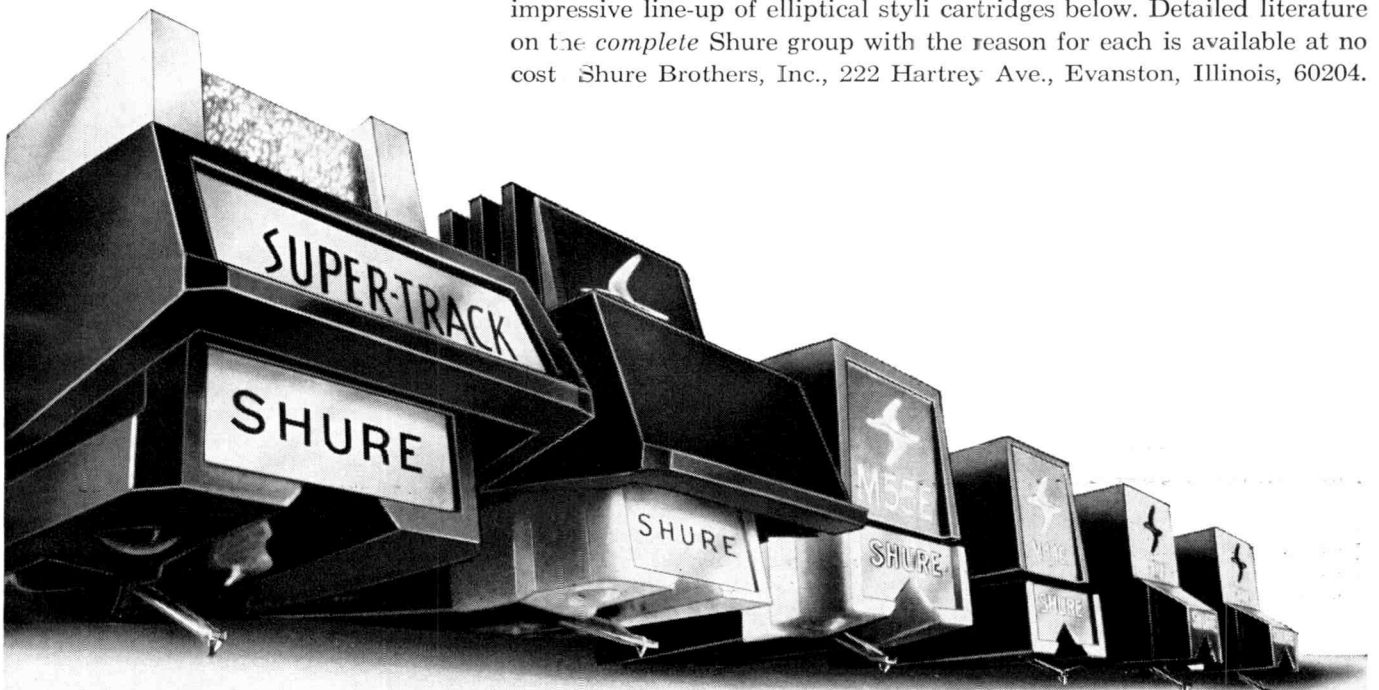
VERITAS RECORDS
22 WEST 48th STREET, N.Y.C., N.Y. 10036

Now...in every price range, every tracking force range

from \$67.50 to \$25.00...

from $\frac{3}{4}$ grams to 5 grams

With the introduction of our extremely low cost new M32E elliptical stylus cartridge (\$25.00 net, $2\frac{1}{2}$ to 5 gms. tracking, 20 to 17,500 Hz), and M31E elliptical stylus cartridge (\$27.50 net, 1 to 2 gms. tracking, 20 to 18,000 Hz), you can now get Shure quality in the broadest possible spectrum of prices and specifications. Given our "druthers", we would prefer you bought the Shure V-15 Type II Super Trackability cartridge at \$67.50. We feel it's the world's finest cartridge, and independent critics the world over agree with us. However, if your equipment or your exchequer dictates another cartridge, be assured that Shure makes a really complete line of best-in-their-price-class cartridges. Note for instance, the impressive line-up of elliptical styli cartridges below. Detailed literature on the *complete* Shure group with the reason for each is available at no cost Shure Brothers, Inc., 222 Hartrey Ave., Evanston, Illinois, 60204.



V-15 TYPE II
\$67.50
 $\frac{3}{4}$ to $1\frac{1}{2}$ gms.

M75E
\$39.50
 $\frac{3}{4}$ to $1\frac{1}{2}$ gms.

M55E
\$35.50
 $\frac{3}{4}$ to $1\frac{1}{2}$ gms.

M44E
\$34.50
 $1\frac{3}{4}$ to 4 gms.

M31E
\$27.50
1 to 2 gms.

M32E
\$25.00
 $2\frac{1}{2}$ to 5 gms.

RECORDING

TAPE RECORDER ANNUAL 1967

TAPE RECORDER ANNUAL

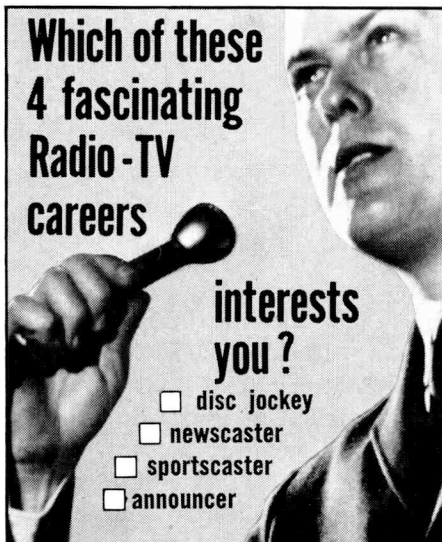
1967 — \$1.25 #42
 1966 — \$1.25 #30
 1965 — \$1.00 #31

Everything you need to know about tape recording including a complete directory of mono and stereo recorders.

Order by number from
Ziff-Davis Service Div., 595 Broadway • New York, N. Y. 10012. Enclose add'l 15¢ per copy for shipping and handling (50¢ for orders outside U.S.A.)

Which of these 4 fascinating Radio-TV careers interests you?

disc jockey
 newscaster
 sportscaster
 announcer



Our Free Voice Analysis Tells You Whether You Have The Talent To Become A Broadcast Personality!

IMMEDIATE DEMAND • Radio-TV stations everywhere need both men and women to take over important good-paying jobs right now. Free placement assistance!

TRAIN AT HOME OR IN ONE OF OUR STUDIO SCHOOLS • You can study broadcast techniques at home, in your spare time, or in one of our many studio schools throughout the country under the supervision of our Directing Faculty of 8 Famous Broadcasters. Accredited by the Accrediting Commission of the National Home Study Council.

Approved for Veterans' Educational Assistance Benefits ("G.I. Bill")! Check coupon for special information

Send to CAREER ACADEMY's division of famous broadcasters for free booklet, record and voice analysis details!

CAREER ACADEMY

825 North Jefferson Street • Studio 110
 Milwaukee, Wisconsin 53202

I want to know if I have broadcasting aptitude worth developing. Please rush more information.

name _____ age _____

address _____ phone _____

city/state/zip _____

I am interested in: Home Study Studio Training G.I. Bill

CIRCLE NO. 15 ON READER SERVICE CARD

tra, Robert Heger cond. ODEON Ⓢ SMC 91635/6/7 three discs \$17.47.

Performance: Both first-rate
 Recording: Both excellent
 Stereo Quality: Seraphim more realistic

The Lortzing millennium seems to have reached its peak: this composer's four best-known operas have all been recorded complete by Odeon, EMI's German affiliate, and *Zar und Zimmermann* is now available in domestic pressings as well. What with highlights on DGG and London, I have been listening to lots of Lortzing lately, and with considerable enjoyment, too. I grant that his operas do not export well—they are emphatically German, with long stretches of spoken dialogue; nonetheless, the music is charming, unpretentious, and tuneful, and it is put together with solid craftsmanship.

In Germany Lortzing is enormously popular, and his operas are considered worthy of top-grade productions, as is shown by the casting of the two sets at hand. Veteran maestro Robert Heger, according to the detailed liner notes, is a devoted champion of Lortzing whose association with these operas spans sixty years. His performances bespeak loving care throughout: he secures the utmost clarity, perfect balances, and a glowing tone from the excellent Berlin and Dresden orchestras.

Of the two operas, *Zar und Zimmermann* (1837) is undeniably the more appealing. Its entertaining story—about an incognito adventure of Peter the Great—is based on a real incident. Though Lortzing occasionally allows sentimentality to dim the work's high spirits, there are many moments of inspired comic invention, and the ensembles of this opera show Lortzing at his representative best. In the gratifying *buffo* role of the bumbling Burgomaster van Bett, Gottlob Frick displays immense gusto and expertise to compensate for his fading vocal resources; Hermann Prey sings the Tsar's famous air "*Sonst spielt' ich mit Zepfer*" affectingly, but much of the rest of his singing is over-intense. Both tenors are good; Schreier has the bigger part, Gedda the showier aria. Erika Köth is excellent vocally and dramatically, and so are the supporting singers and the chorus. It is hard to imagine a better performance of this entertaining little opera; at the low Seraphim price, the set seems to me an outstanding bargain for the enterprising operaphile.

Undine (1845), of course, is another treatment of the water-sprite legend that also inspired Dvořák's and Dargomizhsky's *Rusalkas*. The opera's mood is pastoral; its charming music at times recalls Mendelssohn and Weber. But listeners not strongly sympathetic to early German Romanticism may find its sugar content high, its *Sturm und Drang* ratio a bit heavy on the *Drang*.

The cast is excellent, however. Anneliese Rothenberger is enchantment itself in the title role—her immaculate intonation and vocal purity make the supernatural role believable. Prey's mannerisms again intrude on occasion; the others are virtually faultless. Both sets are extremely well recorded; *Zar und Zimmermann* offers the livelier and more exciting stereo. G. J.

MOZART: *Divertimento No. 15, in B-flat Major, for Strings and Two Horns* (K. 287); *Divertimento (Quartet) in D Major* (K. 136). Bath Festival Orchestra, Ye-

hudi Menuhin cond. ANGEL Ⓢ S 36429, Ⓜ 36429* \$5.79.

Performance: Con amore
 Recording: Very good
 Stereo Quality: Fine

The B-flat Divertimento, one of Mozart's most ingratiating works, was probably intended to be played by a small ensemble, one person per part. Conductors, however, are fond of utilizing a full string section (plus the two horns), and the score has often been recorded that way: Toscanini, Karajan, and Martin (the last a recent Nonesuch recording). Menuhin does the same, although he plays some sections as if the piece were a violin concerto and he the soloist. The D Major Divertimento, an extremely zestful, youthful piece, is very much in the same category, since it is capable of being rendered by either a string quartet or an entire string ensemble; the latter is done here. Menuhin treats both works with enormous affection, lavishing warmth and care for phrasing on the scores. He does not, however, provide much sparkle in his treatment of K. 287, and, of the available versions (the Toscanini, an extraordinary performance, is presently unavailable), some may prefer the more effervescent Karajan. The briefer D Major Divertimento is done in a most scintillating fashion. Some of Menuhin's treatment of long appoggiaturas as short ones are, I think, questionable, but on the whole this well-recorded disc has many enjoyable moments. I. K.

MOZART: *Missa brevis in C Major; Masses in C Major and C Minor; Et incarnatus est; Exsultate, jubilate* (see HAYDN)

ORFF: *Oedipus der Tyrann (Oedipus Tyrannus)*. Gerhard Stolze (tenor), Oedipus; Karl Christian Kohn (bass), a Priest; Kieth Engen (baritone), Creon; Astrid Varnay (soprano), Jocasta; James Harper (tenor), Tiresias; Carlos Alexander (bass), a Messenger; Hubert Buchta (tenor), Shepherd; Heinz Cramer (baritone), Old Shepherd; Hans Günter Nocker and Rolf Boysen (Leaders of Chorus). Chorus and Symphony Orchestra of the Bavarian Radio, Rafael Kubelik cond. DEUTSCHE GRAMMOPHON Ⓢ 139251/2/3 three discs \$17.37.

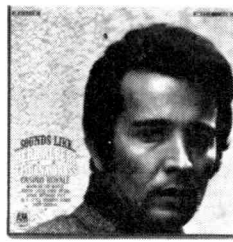
Performance: Authoritative
 Recording: Outstanding
 Stereo Quality: Excellent

Oedipus Tyrannus is the second of Carl Orff's monumental trilogy of music dramas based on the tragedies of Sophocles and Aeschylus. *Antigone*, the first, was completed in 1949 (and can be heard on DGG 138717/8/9); *Oedipus* was premiered in Munich in 1961 with several of the principal singers heard in the present recording, but under a different conductor, and *Prometheus*, the final installment, is scheduled for a Stuttgart premiere in March of this year.

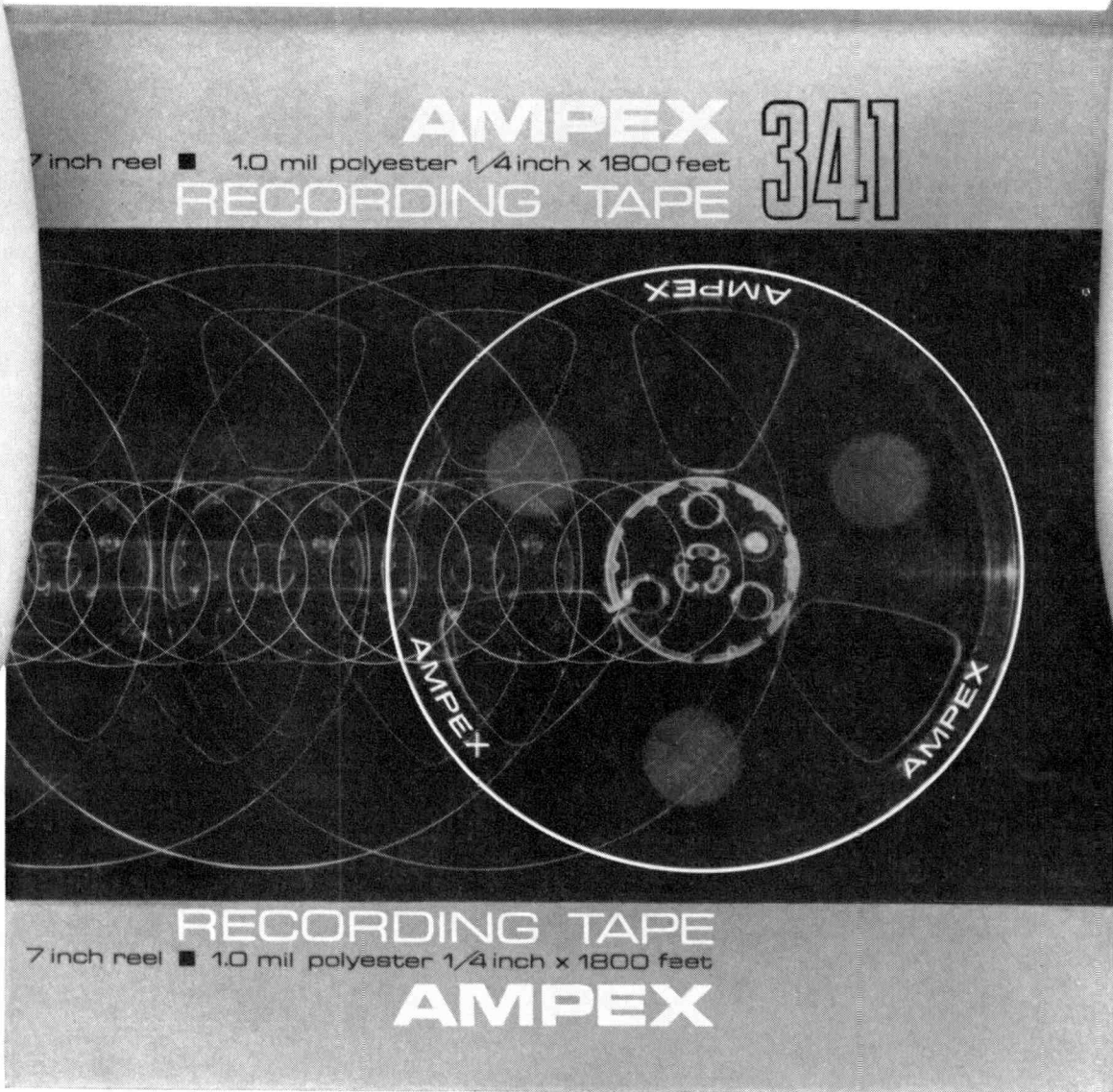
Like *Antigone*, *Oedipus* follows Hölderlin's classic German adaptation of the Sophocles text uncut. And like the earlier work, *Oedipus* places the drama above the music, in keeping with Orff's determination to be concerned "not with musical but with spiritual considerations." The effect *Oedipus* will make on the listener is, in fact, dependent upon one's acceptance of Orff's particular brand of "total theater."

(Continued on page 104)

Ampex will sell you
our great sounds at half price...



to get you to put your great sounds on Ampex tape!



When you buy tape for your own recording uses, be sure it's the kind of tape you'd choose if you were a professional.

What do the pros look for? Quality. Consistency. Dependability. They recognize that the least expensive element of tape recording is the tape. Buying cut-rate tape can blow the sound investment you've made in all your equipment.

Ampex has been the quality standard for tape recording since we perfected it in 1947. Men who make a living doing what you do for fun know that we demand the very top performance from our recording equipment.

Same goes for all the magnetic tape we make for you.

SPECIAL TRIAL OFFER

We want you to try our tape on your system and we know that it will help if we sweeten the deal a little. So here's your spoonful of sugar: A coupon with each 7" reel of Ampex general-purpose or low-noise tape in the new 300-Series box entitles you to buy your choice of any one of nine exciting pre-recorded tapes at less than half-price: \$3.50. And the blank tape inside that Ampex box entitles you to create hours of great sound. Mono or stereo. (Offer valid in U.S. only.)

AMPEX

CIRCLE NO. 7 ON READER SERVICE CARD

We have the same ingredients here: vocal writing that alternates between unaccompanied recitation, chanting on indicated pitch, and a kind of singing which frequently carries the voice outside its effective range. The orchestra consists of trumpets, woodwinds, and a battery of keyboard and percussion instruments, capable of striking effects, but frequently reduced to underlining and punctuating the vocal line with assorted smashes and bangs. It is employed, as stated in the excellent accompanying notes, "merely as a bearer of sound, neither as a rival to the vocal lines nor for tone painting." The music is a composite of elemental rhythm and brief melodic patterns—color abounds when called for, but harmonic movement is absent.

Does it work? My feeling is that in the theater it has a certain fascination. After all,

the opera faithfully follows Sophocles' powerful and ageless tragedy. Without the visual element, however, even though it is served by uncommonly gifted singing actors, *Oedipus* is a fatiguing experience. For all the impressive intellectual justification that Orff has marshalled in support of his treatment, the nagging impression remains that the medium has gotten in the way of the message. Surely if Gerhard Stolze were allowed to recite the eloquent Sophocles/Hölderlin lines instead of producing the god-awful sounds of Orff's contrivance, the overall effect would be far more powerful—and never ludicrous. Nonetheless, Stolze rates high praise for performing an impossibly demanding role with unbelievable endurance. The same goes for his colleagues, who go about their extraordinary and frequently unreward-

ing assignments with intelligence and dedication, and enunciate their lines with absolute clarity. Only Astrid Varnay's tremulous tone quality is distinctly inappropriate.

It is hard to appraise Kubelik's contribution in such an unconventional musical work, but Orff himself supervised the recording, and we can be certain that we have a performance here of total authenticity. DGG has captured it in brilliant sonics and with startling clarity. The complete Hölderlin text is enclosed, together with an English translation of the Sophocles original.

Orff has a considerable following here and abroad, and this recording will doubtless make them very proud. At the present time, however, their ranks do not include me.

G. J.

POULENC: *Les Biches: Adagietto and Rondeau (piano arr.); Improvisations Nos. 2, 5, 9, and 10; Nocturnes Nos. 1, 3, and 4. Mouvements perpétuels Nos. 1-3.* Francis Poulenc (piano). *Airs chantés.* Suzanne Peignot (soprano), Francis Poulenc (piano). *Le Bestiaire.* Claire Croiza (mezzo-soprano), Francis Poulenc (piano). **DEBUSSY:** *Six Ariettes oubliées; L'Echelonnement des baies; Le Martyre de Saint-Sebastien: La Vierge Érigone.* Lucienne Tragin (soprano), Francis Poulenc (piano). **PATHÉ** Ⓜ COLC 317 \$5.79.

Performance: Interesting curiosity

Recording: Reprocessed vintage 1928-43

I expect that before I get to the heart of this commentary on Pathé's anthology of old recordings of the late Francis Poulenc as a performer—in piano music of his own invention and voice-and-piano music by himself and Debussy—I had better state bluntly that the performances are pretty bad. Poulenc concertized and recorded performances of his own music throughout his life, particularly with Pierre Bernac, but he seems, even in his youth, to have been an uneven pianist. In one of his last public performances with Bernac in New York, he played so badly that admiring critics chose discreetly to overlook it in coverage of the recital. His playing here is only passable. Some quick passages are blurred, he and the singer are not always of one mind as to where they are in a bar, and there is something curiously perfunctory about his approach to his own music. And it is with this last observation that one can move on to what any review of a release of this sort should properly concern itself with.

Sleeve annotator Henri Hell remarks, if I am translating his French justly, that "Poulenc energetically rejected the hypnotic sonorities of Debussy's piano music as well as the transcendent virtuosity of Liszt's." The last statement, I expect, is accurate enough, but I would question the accuracy of the former. Plainer though Poulenc's style may have been during the Twenties, he helped himself generously to the lush chordal combinations of Impressionism. The difference lies rather more in formal approach: while Debussy worked with uncanny intuition in forms that generally defy analysis, Poulenc used similar harmonic techniques in highly simplistic classical formal molds.

It seems obvious from the recordings in this release that Poulenc, as a performer, was often inclined to simply throw pieces away. *La Carpe*, the closing one-page masterpiece from *Le Bestiaire*, owes its effect of haunting

(Continued on page 106)

THE PRO'S PORTABLE
New Tandberg Model 11
Transistorized Tape Recorder

Three separate heads, half- or full-track, with Pilotone head optional. Frequency response @ 7½ ips — 40-60,000 cps ±2dB; S/N ratio @ 7½ ips — better than 56dB; distortion less than .5%. Weight 7 lbs.; dimensions: 13" x 10" x 4". Batteries: "D" cell or rechargeable; 7" reel capacity. Servo-type speed control (1 per mil accuracy); immediate AB Test; built-in mixer and limiter; Cannon plug microphone input; 3-speed, DC motor. Price: \$599.

Now at your Tandberg franchised dealer.

Tandberg® OF AMERICA, INC.
 P.O. BOX 171, 8 THIRD AVENUE
 PELHAM, NEW YORK 10803

® HULDRA IS A REGISTERED TANDBERG TRADEMARK

CIRCLE NO. 58 ON READER SERVICE CARD

A closer look at the KLH Receiver.

Reception

On both AM and FM, the KLH Receiver is designed to provide *effective* reception characteristics. On FM, its excellent IHF sensitivity (2.5 microvolts) is supplemented by quick limiting that provides 40 db of quieting at 4 microvolts and full suppression of background noise at well under 10 microvolts. Stations that "come in" at all are almost certain to be fully listenable. And effective sensitivity is increased still further by excellent selectivity, which prevents strong stations or spurious signals from interfering with reception of weak

stations.

On AM, the receiver is designed to provide a maximum of musical pleasure from a less-than-ideal medium. To do so required steering a careful middle course between very wide bandwidth (fine for getting optimum high-frequency response on the few really good broadcasts, but prone to interfering whistles and "hash") and the easily-engineered narrow bandwidth characteristic that provides neither trouble nor musical sound. We think you will find our choice audibly right. Because of excellent

selectivity and AGC characteristics, you will also be able to pick out stations quickly and comfortably on the crowded AM dial.

The AM and FM sections, completely independent of each other throughout, tune easily and precisely. As with all of our other tuner circuits, we provide vernier tuning action, which we believe to be simpler, more precise, and far more trouble-free than slide-rule, dial-cord tuning. Tuning ease is also aided by a meter that serves as a "zero-center" indicator for FM and a signal-strength meter for AM.

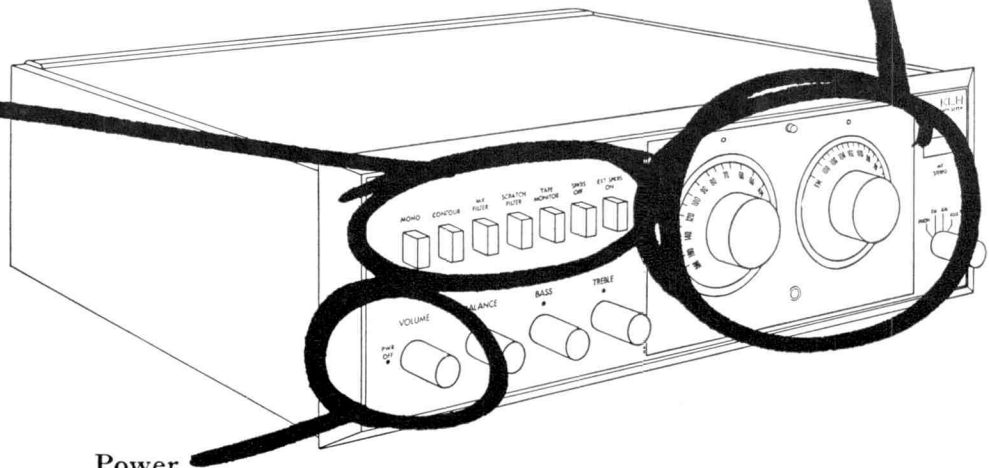
Convenience and Flexibility

The KLH Receiver is designed to offer every control facility likely to add to enjoyment of music at home. It is also designed to be positive and easy to operate, without a confusing clutter of control features. Everything from switches (push-to-operate, push-to-release) to panel graphics is aimed at clear, unambiguous identification and operation.

The receiver will power two stereo pairs of speakers, together or independently. It has a front-panel headphone jack, and the provisions for speaker shut-off permit listening to headphones in one room and speakers in another. There are rear-panel outputs and inputs for tape recording, and an extra set of inputs for connection of a second recorder or other music source.

Speaker connections don't require a screwdriver. We provide simple knurled connectors on terminal posts. (No more searching for the mysterious disappearing screwdriver, no need to steal a table knife from the silverware drawer.)

Panel-mounting can be achieved easily by removal of the walnut side panels and use of the simple (slip-in) front-locking clamps we provide.



Power

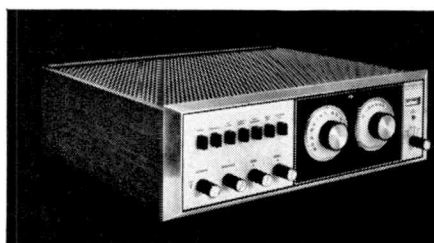
The KLH Receiver is powerful enough to drive virtually any loudspeaker now made. We could call its amplifier "100-watt" by today's 4-ohm rating method, but we believe that its IHF power into 8 ohms—better than 75 watts—is the more meaningful rating for most of the speakers now available, including our own.

In addition to its IHF stereo power, it offers the healthy proportion of continuous power needed

for loud listening levels with demanding musical material. (While most music makes only momentary demands on amplifier power, a pipe organ or other instrument with significant bass output may call for a great deal of steady-state power. Without sufficient continuous power, an amplifier may sound bassy, "mushy," or raucously distorted when you listen to an organ or the massed drums of a marching band

at a soul-satisfying level.) By the most stringent rating method, with both channels driven simultaneously into 8 ohms, the KLH Receiver will deliver at least 25 watts continuously per channel (50 watts in stereo).

Thanks to excellent stability and overload characteristics, it "sounds" powerful—with no sense of strain or compression at peak orchestral levels. Its solid bass power reinforces this impression.



† SLIGHTLY HIGHER IN THE WEST

Price:

The Suggested Price of the KLH Receiver (KLH Model Twenty-Seven) is \$299.95.†

We believe it is everything a receiver should be. At any price.

For further information write to KLH, 30 Cross Street, Cambridge, Mass. 02139 Dept. HR6



* A TRADEMARK OF KLH RESEARCH AND DEVELOPMENT CORP.

understatement to a strangely immobile vocal line and a quasi-*Gymnopedie* accompaniment. But although the song (in current edition, at least) is marked *Très triste—très lente*, both the composer and Claire Croiza run through it so casually that it makes no effect whatever.

The present release, then, is *curiosa*—for those who would study. The singing is no great shakes, and the fact that the recordings were made between 1928 and 1943 speaks for itself where sonics are concerned. *W. F.*

POUSSEUR: *Madrigal III* (see SCHOENBERG)

RECORDING OF SPECIAL MERIT

PROKOFIEV: *Chout (The Buffoon)*,

Suite from the Ballet, Op. 21a; Romeo and Juliet, Suite, Op. 61a. London Symphony Orchestra, Claudio Abbado cond. LONDON (S) CS 6522, (M) CM 9522* \$5.79.

Performance: **Top-drawer**
Recording: **Superb**
Stereo Quality: **Uncommonly good**

This is the second recording of a suite from Prokofiev's early (c. 1915) ballet *Chout* that I've reviewed recently—the other was by Rozhdestvensky and the Moscow Radio Orchestra—and this new one seems to me superior. For one thing, the London Symphony Orchestra (is it just my imagination, or is this organization getting better and better with each release?) quite outdoes the Moscow group in performance. At the same time, conductor Abbado seems to have a better

sense of the raw energy of the early Prokofiev than his Russian colleague.

And for that matter, I know of no available recorded performance of the *Romeo and Juliet* Suite—even Ansermet's—that is an improvement over this one. The performance is straightforward, vigorous, cleanly lyrical, and expressive.

The recorded sound is sumptuous, the stereo treatment ideal. *W. F.*

RAVEL: *Piano Concerto in G Major* (see BARTÓK); *String Quartet in F* (see DEBUSSY)

SAINT-SAËNS: *Carnival of the Animals.* Arthur Whittemore and Jack Lowe (duopianos); Philharmonia Orchestra, Pierre Dervaux cond. RAVEL: *Mother Goose Suite.* DEBUSSY: *Prelude to the Afternoon of a Faun.* Whittemore and Lowe (duo pianos). CAPITOL (S) SP 8657, (M) P 8657 \$4.79.

Performance: **Glossy and shallow**
Recording: **Bright**
Stereo Quality: **Good**

"It's for kids! No, it's for adults!! Actually, it's for both kids and adults!!! The controversy may rage for decades . . . but while scholars snort and ponder, people between the ages of 3 (no younger) and 133 (those any older are expressly forbidden purchase of this album) are hereby advised to join Whittemore & Lowe in order to hear and visualize the ferocity of Saint-Saëns' 'Wild Jackasses,' among others . . . the grace facile of Debussy's 'Faun' . . . and lyrical 'Mother Goose' fantasies à la Ravel."

This lead from Capitol's sleeve blurb, along with the overall title of the release ("*The Carnival of the Animals* and other Good-Time Classics for Two Pianos"), pretty much set the tone for what you'll hear on this record. The playing is generally broad, overstated, and lacking in refinement. And while Ravel's *Mother Goose Suite* exists in two authentic forms—one for one piano, four-hands, and another orchestrated by the composer—turning it into a duo-piano work merely expands it without untoward violation of the composer's intention. On the other hand, anyone prepared to live with a two-piano, souped-up version of the *Prelude to the Afternoon of Faun* has a far stronger stomach than I.

The performances are accurate enough as far as the notes go; the recorded sound is distinctly on the Good-Time Classics side. *W. F.*

SCHOENBERG: *Transfigured Night.* ELOY: *Equivalences.* POUSSEUR: *Madrigal III.* Ensemble of the Domaine Musical, Pierre Boulez cond. EVEREST (S) 3170, (M) 6170 \$4.98.

Performance: **Good**
Recording: **Okay**
Stereo Quality: **Cramped**

The Domaine Musical is a Paris concert series founded a number of years ago by Pierre Boulez to bring new music to France. This recording represents two aspects of the Domaine's activities: the presentation of music by young—or younger—composers, and the performance of major works by the older generation of twentieth-century pioneers, many of them unplayed and little-known in
(Continued on page 108)

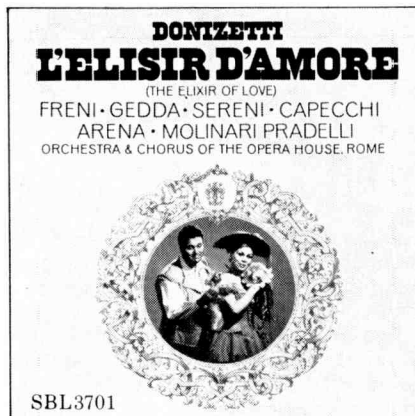
A ROMAN RENAISSANCE IN OPERA

The great operas are reborn as Angel Records launches a much-needed new series with the matchless acoustics, orchestra, and chorus of the Rome Opera.



MADAME BUTTERFLY
Sir John Barbirolli conducts his first full length opera and draws this praise from Carl Osborne in **High Fidelity**: "I do not believe there has been a 'Butterfly' on records superior to this one."

In the wings: Aida, with Birgit Nilsson and Franco Corelli. At your record dealer's next month.



L'ELISIR D'AMORE
The Rome Opera's renowned conductor, Francesco Molinari-Pradelli, conducts a superb cast headed by Mirella Freni, Nicolai Gedda, and Mario Sereni.



Audiomation[®] has just made your stereo set obsolete. Our condolences.

Only Seeburg has Audiomation—great new pet of the stereo set.

But don't despair.

Now you can have it, too. In component form. The heart of Audiomation—replacing your old-fashioned changer-turntable setup—is in the Seeburg Stereo Home Music Center Component. It includes the exclusive elements that make Audiomation work: Our computer-like Memory Bank, and our exclusive Vertical-Play mechanism-magazine. Both the Memory Bank and the Pickering cartridge in the mechanism are covered by a 5-year warranty.

You place up to 50 LP albums in the magazine. Dial any one (or more) you want to hear, and the mechanism plays them for you. One or 100 album sides—up to 40 hours of continuous music—and with optional equipment by remote control from any room in the house. You never have to touch a record again, or get up from your chair! Audiomation heightens your listening pleasure by relieving you of all your record-handling chores. And it plays and stores your records vertically—for best reproduction, least wear.

Audiomation is the most revolutionary development in stereo since stereo. Ask for a demonstration. At better hi-fi dealers now.

SEEBURG

Serving America Musically Since 1902

Consumer Products Division
The Seeburg Corporation - Chicago 60622

© REG. 656,755

© 1967, THE SEEBURG CORPORATION



France. Even though music by the Founding Fathers is not unusual on Domaine programs, *Verklärte Nacht* must surely be the only nineteenth-century piece to have ever turned up on the series. The work is heard here in the original sextet version of 1899; while the string-orchestra version is still the more familiar one, performances of the original are not all that rare, and there are three already in the catalogue. It is interesting to hear this elegant and measured French version, but one misses a certain intensity that the music seems to require.

This late-Romantic work makes an odd match for the two contemporary pieces on the over-side. Eloy, who is a Boulez disciple and his successor as director of the Domaine, has written an attractive piece in what one might call the French coloristic-constructivist tra-

dition. *Equivalences*, for six percussionists, three groups of winds, and piano, celesta, and harp, owes a good deal to Boulez in a general and sonic sort of way. It is made of highly patterned fields of color put together in a manner that sounds arcane but is actually perfectly simple to perceive. Traditionalists will complain that it lacks "substance," but if you remember that the colors *are* the substance, and if you relax and let the piece wash over you with its cool, sensuous waves of sound, you'll find . . . well, that it's very pleasant, very elegant, and very French.

Eloy's companion here, Henri Pousseur (b. 1929), is the principal Belgian representative of the younger generation of European composers who came to prominence in the 1950's with their "radical" new music. His work, often associated with that of Boulez,

is, however, much more abstract, much less sensuous. *Madrigal III*, for clarinet, violin, cello, percussion, and piano, is a new piece wrapped around an older *Madrigal I* for clarinet solo, the earlier work being literally absorbed. Like much of Pousseur's music, the idea is more interesting than the actual piece.

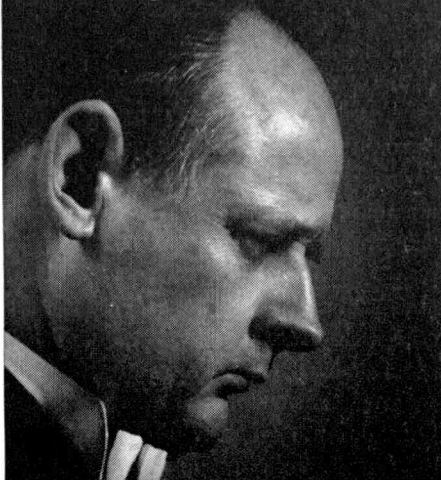
The Ensemble of the Domaine Musical is an amorphous concept. The string sextet turns out to be the Parrenin Quartet plus two, and is not conducted by Boulez or anybody at all. The Eloy piece, which is in fact performed by the excellent Strasbourg Ensemble, seems to be truncated by a measure or so at the beginning. Acceptable, if dullish and unexciting, sound. *E. S.*

SKALKOTTAS: Octet; Eight Variations on a Greek Folk Tune, for Piano Trio; String Quartet No. 3. Members of the Melos Ensemble (in the Octet); Robert Masters (violin), Derek Simpson (cello), Marcel Gazelle (piano); Dartington String Quartet. ODEON (S) ASD 2289 \$5.79.

Performance: Excellent
Recording: Excellent
Stereo Quality: Excellent

The Greek composer Nikos Skalkottas was born in 1904 and died in 1949. He studied the violin at the Athens Conservatory and went to Germany with the intention of pursuing a career as a violin virtuoso. Instead, he decided to become a composer, and studied with Philipp Jarnach, Kurt Weill, and—the decisive influence on his musical life—Arnold Schoenberg. When the Nazis came to power, Skalkottas went back to Greece, where he remained until his death, turning out composition after composition—many of them atonal or twelve-tone—for his desk drawer. Schoenberg always listed Skalkottas among his most gifted pupils, but most of the rest of the world had never even heard of him until, a number of years after his death, a Skalkottas Society was formed to publish and perform a quite astonishing *oeuvre* by this utterly neglected Greek composer. As has been the case for a number of recent musical rediscoveries, the center for the Skalkottas revival was England, and thus it is not surprising that this major Skalkottas disc should come to us in the excellent Music Today series being produced by EMI under the auspices of the Calouste Gulbenkian Foundation. The sleeve promises "a leaflet containing analytical notes and documentation," but, as has been the case with review copies of many of these albums, no such notes were enclosed. Nevertheless, the aural information is quite enough. Here are three rich and extraordinarily expressive pieces written in a kind of Mediterranean atonality that obviously derives from Schoenberg and Berg but leaves no doubt as to its own distinct quality. The *Variations on a Greek Folk Tune* are the most accessible and, in a way, the most original. The folk—even oriental—character of the tune is skillfully developed in a highly intense, dissonant, atonal manner. The Octet and the Quartet are closely related to "classical" twelve-tone procedures, treated with a superb ear for sonority and dissonant, non-tonal harmonic motion. To me the most striking quality of this music is its sensuousness, a quality never in conflict with the intellectual integrity of the music. It is astonishing to realize that this music was, for its composer, purely an inner
(Continued on page 110)

VANGUARD
Recordings for the Connoisseur



Periodically, a pianist appears of whom the proper adjective is "profound"; one who restores the classic tradition with the true individuality that comes from the abandonment of every personal caprice. Such rare pianists were Artur Schnabel, Myra Hess, Dinu Lipatti.

In this noble line, we feel, is

BRUCE HUNGERFORD

"A master of classic style and thought . . . Bravo."

—Eric Salzman,
New York Herald Tribune

Initial recordings, of a series to include the complete Beethoven Sonatas:

BEETHOVEN: Sonatas in E major, Op. 109, and C minor, Op. 111
VSD-71172*

BEETHOVEN: Sonatas in C minor, Op. 13, "Pathétique" and D minor, Op. 31 #2, "Tempest"; Andante in C major, Allegro in C minor (first recordings)
VSD-71174*

SCHUBERT: Sonata in A major, Op. posth., and 21 Waltzes and Ländler
VSD-71171*

*Full Stereo (also playable in mono)

Critical Accolades for
CARDINAL
Series

Full Stereo (also playable in mono) \$3.50

"Cardinal's bow is a major event and a tantalizing promise of good things to come."

—David Hall, *Hi Fi Stereo Review*

MAHLER: SYMPHONY NO. 2 IN C MINOR—2-disk set
Beverly Sills, soprano; Florence Kopleff, contralto; U. of Utah Civic Chorus; Utah Symphony Orchestra; Maurice Abravanel, conductor

VCS 10001/2

"This release on Vanguard's new Cardinal label is truly an astonishing one. From the technical point of view alone it represents a substantial and exciting step forward . . . achievement of a dynamic range embracing pianissimos like the whisper of a summer breeze and fortissimos that may make even your neighbors think the Day of Judgement has arrived . . . an interpretation of awesome, inspired magnificence."

—Bernard Jacobson, *High Fidelity*
November, 1967

BEETHOVEN: Quartet No. 15 in A minor, opus 132
Yale Quartet VCS 10005

" . . . a brilliant debut for the Yale group . . . immaculate playing and sterling musicianship. Without doubt, this is one of the great Beethoven Quartet recordings in the catalog."

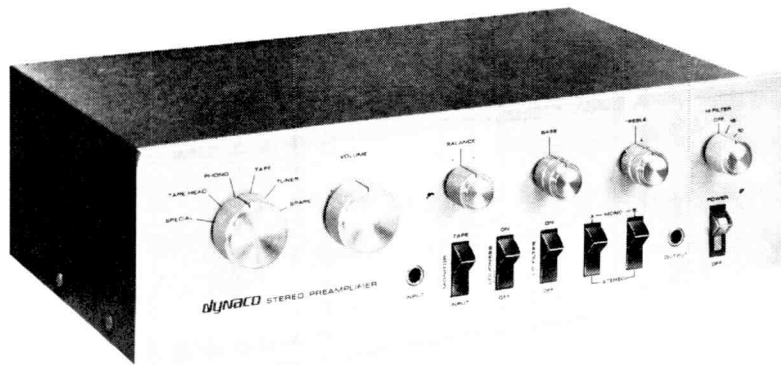
—Heuwell Tircuit
San Francisco Examiner & Chronicle

BRAHMS: VARIATIONS ON A THEME BY PAGANINI, OP. 35
FOUR BALLADS, OP. 10
LISZT: Paganini Etude No. 2
Earl Wild, pianist VSC 10006

" . . . Wild has a colossal technique . . . almost superhuman mastery . . . incredibly smooth pianism in works that dare the performer to conquer them."

—Allen Hughes, *New York Times*





A FLEXIBLE PREAMPLIFIER

At one time, the function of a preamplifier was simply to increase the level of a signal. Then, as the art of sound reproduction has become more sophisticated, additional functions have been added.



First came tone controls, then equalization, filtering, tape monitoring, blending, and so on.

What was once a simple amplifying circuit and a volume control is now a control center, handling a variety of sources with input signals ranging from a few millivolts to several volts (a range of 1000 to 1), and which must impress special response characteristics on some of these signals. Requirements for distortion now are far more stringent than in the past. Distortion levels which were once significant laboratory achievements are now common in commercial equipment.

The resultant increase in complexity of the preamplifier has caused some confusion. The knobs and switches which the audio hobbyist considers mandatory for proper reproduction bewilder and dismay family and friends.

The Dynaco PAT-4 is a preamplifier which simplifies operation so that the basic functions are readily utilized by the uninitiated. The illuminated power switch tells you the system is on—and transistors eliminate any waiting. The two large knobs are the primary controls—one selects all sources (including the tape recorder) and the other adjusts the volume. [A third similar knob on the companion stereo Dynatuner completes the radio controls.] The smaller knobs and remaining switches contribute the complete versatility and unlimited flexibility so much appreciated by the enthusiast.

A separate front panel input lets you plug in a tape recorder, or an electronic musical instrument. Its special design even makes it possible to mix a guitar, for example, with a microphone, records, or radio. There's a 600 ohm output on the front panel, too, which enables easy connection of a recorder, and has sufficient power to drive medium impedance headphones without the need for a power amplifier.

You may save a power amplifier in another way, too. If you need a remote speaker system, or a center or third stereo channel, the PAT-4's exclusive "blended-mono" mode is all set to provide this from your regular stereo amplifier, where

other preamps having center channel outputs require an additional power amplifier.

A sharp 3-position high frequency filter cuts the scratch with minimal effect on the music, and there's a low frequency filter, too. The "Special" low level input can provide for a second phonograph input, or for a special equalization position when you want to listen to older discs. Dynaco's patented "X" type tone controls provide smooth continuous tonal adjustments with the precise "center-off" assurance of step-type controls, without the complication of separate switches.

The overall quality of parts, ease of construction for the kit builder, accessibility for service, and audio performance are in the Dynaco tradition of acceptability to the perfectionist. On every performance count, the PAT-4 is exceptional. Noise and distortion are almost non-existent. Equalization is precise. Frequency response is superb, resulting in outstanding square wave and transient characteristics. There is not a trace of so-called "transistor sound". And finally, there is the undeniable virtue of complete independence from the power amplifier, so that you can choose the power, price, and tube or transistor design as your requirements dictate.

The PAT-4 is of the quality standard set by the world-famous PAS-3X. That preamplifier has been widely accepted and acclaimed for many years as the finest quality and reasonably priced. How does the PAT-4 compare with the PAS-3X?



Well, the quality of both is fully comparable. It is doubtful that it would be possible to hear any difference between them on careful listening tests. The PAT-4 does have some extra features which justify its slightly higher cost for many users.

The PAT-4 is very much in demand, and it will be many months before it is in ready supply. If you are willing to forego its extreme flexibility, the PAS-3X will match its quality, with the added virtues of economy and availability. If you want the ultimate in flexibility along with quality, please wait for the PAT-4. It is worth waiting for.

PAT-4—Kit \$89.95; Assembled \$129.95

DYNACO INC.

3060 JEFFERSON STREET, PHILADELPHIA, PA. 19121
IN EUROPE WRITE: DYNACO A/S, HUMLUM, STRUER, DENMARK



If you're
considering a fine camera

HOLD IT, PLEASE

Ask your Dealer to show you a Honeywell Pentax. Hold it, heft it, handle it. Get it in shooting position. See how remarkably well-balanced it is.

Check the crisp, bright, eye-level viewfinder. Try the precise, functionally located controls. Run your fingertips over the satin-smooth chrome. Feel the richly grained leather.

Notice the size. The Honeywell Pentax is the smallest of all 35mm single-lens reflex cameras. It's lightweight, but solid. Never a chore to carry. And it makes magnificent pictures. Get hold of it soon—Pentax prices range from just \$149.50 for the H1a to \$289.50 for the top-of-the-line Spotmatic with precise through-the-lens exposure control. Mail coupon for free literature.

Honeywell takes the guesswork
out of fine photography

Honeywell Photographic 223
Mail Station 209, Denver, Colo. 80217

Please send Honeywell Pentax literature to:

Name _____

Address _____

City / State / Zip _____

Honeywell
PHOTOGRAPHIC

CIRCLE NO. 32 ON READER SERVICE CARD
110

experience—written, in most cases, with scarcely a hope of ever actually hearing it. Fortunately we can hear it now and in first-class performances, well recorded. E. S.

RECORDING OF SPECIAL MERIT

R. STRAUSS: *Also sprach Zarathustra*, Op. 30. Chicago Symphony Orchestra, Fritz Reiner cond. RCA VICTROLA (S) VICS 1265, (M) VIC 1265 \$2.50.

Performance: **Top-drawer Reiner**

Recording: **Still stands up**

Stereo Quality: **Good**

This first budget-price issue of Strauss' great orchestral showpiece may stem from an early (1954) stereo tape master, but for me it is rivaled in the catalog only by Reiner's own full-price RCA Victor Red Seal version of eight years later. It is interesting to note that Reiner's view of the score in 1962 was somewhat more expansive in tempo than it was in 1954—34'15" as against 31'49". Presence and stereo directionality are more pronounced in the 1962 recording, but the more generalized sonority emanating from the earlier taping is effective in its own way, too, and the performance is in some ways more virtuosic. At the \$2.50 price, you can't lose with this disc. D. H.

VERDI: *La Traviata*. Montserrat Caballé (soprano), Violetta Valéry; Carlo Bergonzi (tenor), Alfredo Germont; Sherrill Milnes (baritone), Giorgio Germont; Dorothy Krell (mezzo-soprano), Flora; Fernando Jacopucci (tenor), Gastone; Gene Boucher (baritone), Baron Douphol; Thomas Jamerison (baritone), Marquis D'Obigny; Harold Enns (bass), Doctor Grenvil; Nancy Stokes (soprano), Annina; others. RCA Italiana Opera Orchestra and Chorus, Georges Prêtre cond. RCA VICTOR (S) LSC 6180, (M) LM 6180* three discs \$17.37.

Performance: **Fine singing, misplaced conductor**

Recording: **Very good**

Stereo Quality: **Very good**

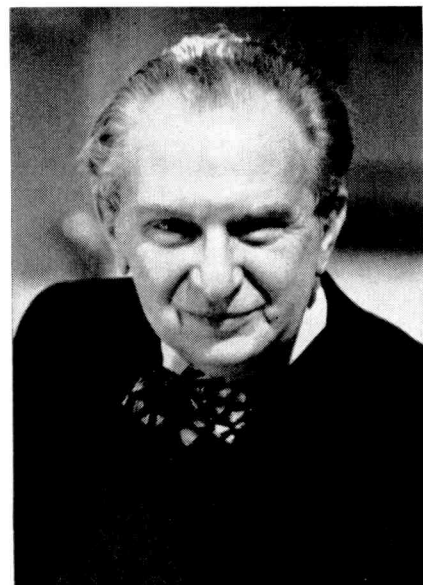
Georges Prêtre's conducting of *La Traviata* during the Metropolitan Opera's 1966/1967 season received a considerable amount of adverse comment. "Chaotically non-stylistic" was the way critic Irving Kolodin described it, and I am afraid that the same devastating phrase may be applied to much of the present recording.

The conducting of Verdi operas has indeed reached a lamentable state. We live in an age of fast-moving and photogenic *maestri* who can memorize scores of incredible complexity, but fail to come to grips with the seemingly simple demands the works of Verdi impose upon them. And what is even more disturbing is that their stylistically improper, uncomprehending interpretations are given enormous circulation via recordings, overshadowing earlier and superior, but not so easily marketable, achievements.

Georges Prêtre is a brilliant musician whose work, particularly in the French repertoire, has been praiseworthy, and whose rather unconventionally Gallic *Parsifal* at the Metropolitan two seasons ago I admired. In *La Traviata*, however, it seems to me that he mistakes crudity for intensity. His *allegros* are invariably taken at such a frantic pace that the singers' phrasing becomes inartistic and their articulation often impossible. There

are also damaging instances of dynamic miscalculation and rhythmic insecurity, as well as episodes that are graceless, mechanical, or disproportionately protracted—the slack and shapeless "*Dite alla giovine*," for example. From the point of view of conducting, this may be the least satisfactory *Traviata* in the catalog.

And it is a great pity, because the singing is on a very high level. Montserrat Caballé is an ideal Violetta: her voice is luxuriant in quality, her phrasing is sensitive and artistic, and her technique, though not bedazzling, is never less than admirable. She responds to the different challenges posed by the opera's three acts with secure artistry. Her intonation is not always absolutely perfect; still, all in all Miss Caballé's Violetta must be rated with the very best on records. Carlo Bergonzi's Alfredo is another triumph for this stylish, ever dependable artist—excellent, without reservation. Sherrill Milnes, in his first



FRITZ REINER
A top-drawer Zarathustra

major recorded role, displays a resonant voice and a good sense of style. In all likelihood, his Germont will have become a more mature characterization, rendered with a higher degree of vocal polish, a few years hence. There are several new names among the interpreters of the opera's minor roles; all are at least adequate, though none outstanding.

The orchestra and chorus deliver everything the conductor asks of them. On the credit side of the enterprise, the opera is recorded uncut, with Alfredo's "*O mio rimorso*," Germont's Act II *cabaletta*, the second stanza of "*Addio del passato*," and other seldom-heard pages restored. Technically, the recording is above reproach. But overall, the performance falls short of the standard set by RCA Victor's previous version with Anna Moffo, Richard Tucker, Robert Merrill, and the fine Italian conductorial hand of Fernando Previtali. G. J.

VIEUXTEMPS: *Concerto No. 2 for Violin and Orchestra, in F-sharp Minor, Op. 19.* **VIVALDI:** *Concerto in B-flat Major, for Solo Violin, Two String Orchestras, and Continuo, No. 60 (sic), P. 368; Posthorn Concerto in B-flat major, No. 163 (sic), P. 350.* Robert Gerle (violin); Vien-
(Continued on page 112)

CIRCLE NO. 55 ON READER SERVICE CARD →



The Action Camera never misses a shot

Lenses switch in seconds. Meter (behind the lens and on the mirror) responds instantaneously. The only camera that works without warm-up even at 4 degrees below zero.

BESELER TOPCON D-1

Charles Beseler Co., 219 S. 18th St., E. Orange, N.J. 07018
CIRCLE NO. 13 ON READER SERVICE CARD

DISCOUNTS



SELLING HI-FI
NATION-WIDE
WORLD
WIDE
SINCE
1948

COMPONENTS • RECORDERS
KITS • SPEAKER SYSTEMS • TAPE

- LOWEST PRICES
- SAME DAY REPLY TO YOUR INQUIRY
- MFRS. SEALED CARTONS
- DOUBLE BOXED WHERE POSSIBLE
- FAST, INSURED SHIPMENTS
- PACKAGE DEALS SAVE YOU MORE
- FRANCHISED DISTRIBUTORS FOR OVER 50 MFRS.
- OPEN MONDAY THRU SATURDAY
- TEN CENT 1-HOUR PARKING METERS AT PREMISES
- TELEPHONES (212) 369-6212-3



WRITE FOR SPECIALS VISIT
OUR SHOWROOM/WAREHOUSE
CARSTON Studios

1686 Second Ave. (Nr. 87), N. Y. 10028

CIRCLE NO. 71 ON READER SERVICE CARD
JANUARY 1968

subtle spoof of cocktail-hour music, a blended mixture of smooth jazz style and an arch twelve-tone asymmetry, a vaguely erotic tone poem, and a kind of intense, inward, mystical experience. Charles Wuorinen's Variations, written several years ago by a young composer who has yet to turn thirty, is an equally brilliant piece of work, an early major achievement by a prolific, exuberant, and wild young man.

Burge's own *Eclipse II* is short and neat, a quick, imaginative flicker of piano invention and color. George Crumb's Piano Pieces are also based on varieties of piano color—not only keyboard color but sounds plucked, brushed, and otherwise extracted directly from the insides of the instrument, the whole cleanly organized into a kind of big symmetrical arch. George Rochberg's *Bagatelles*, written in 1952, are little twelve-tone improvisations, sharing, with the other pieces here, an inventive wit and elegance.

Some shortcomings: the rather dull monophonic sound, clear but not doing full justice to the tremendous range of sonorities; one or two awkward tape splices; the lack of a clear listing of works on the sleeve, making it necessary to check the label to find out what comes where. Otherwise this is a disc of major interest and it proves, if nothing else, that the piano is far from finished as a creative medium. E. S.

RECORDING OF SPECIAL MERIT

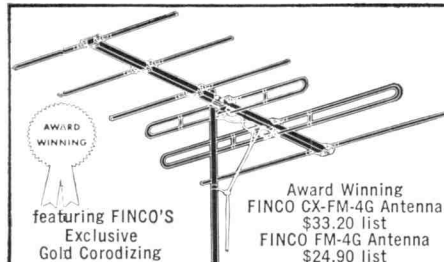
BORIS CHRISTOFF: *Russian Opera Arias*. Glinka: *A Life for the Tsar: Susanin's aria*.* Moussorgsky: *Khovantchina: Dostibei's aria. Boris Godounov: Monologue from Act II; Farewell of Boris*. Borodin: *Prince Igor: Prince Galitzky's air; Kontchak's aria*. Tchaikovsky: *Eugene Onegin: Prince Gremin's aria*. Rimsky-Korsakov: *Sadko: Song of the Viking Guest. The Legend of the Invisible City of Kitezh: Prince Yuri's aria*. Boris Christoff (bass); Philharmonia Orchestra, Issay Dobrowen and Wilhelm Schüchter cond. Colonne Concerts Orchestra, Igor Markevitch cond. PATHÉ (M) FALP 30356 \$4.79.

Performance: **Absorbing**
Recording: **Good**

These are not new recordings: the Glinka aria and the *Boris Godounov* excerpts are taken from complete sets, and most of the others were once available on LHMV 1033, a disc withdrawn about ten years ago. But the program embodies some of the most effective vocal music in Russian opera, and it is hard to imagine a more compelling and authoritative interpreter. Christoff is in great form throughout and, as always, he offers not only sonorous singing but full and memorable characterizations: the hell-raising Galitzky, the jovial Kontchak, the stern fanatic Dostibei, the simple dignified Susanin—they all make an indelible impact. The character of Boris is, of course, a mainstay of the Christoff gallery, and it is good to have this souvenir of his first complete recording of the work. The orchestral accompaniments are excellent, the recorded sound is full-bodied and effective. Very highly recommended. G. J.

RECORDING OF SPECIAL MERIT

IGOR KIPNIS: *German Music for Harpsichord and Clavichord*. Telemann: *Overture No. 1, in G Minor*. Buxtehude: *Varia-*



featuring FINCO'S
Exclusive
Gold Corodizing

Award Winning
FINCO CX-FM-4G Antenna
\$33.20 list
FINCO FM-4G Antenna
\$24.90 list

Who put the HIGH in HI-FI?

FINCO

that's who!

Get FM at its very best with a FINCO FM antenna!

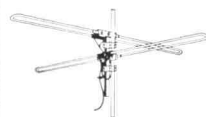
- You can hear the difference!
- You get exacting separation!
- You get crisp, clear undistorted sound!

FINCO offers the most complete line of 300 OHM — 75 OHM FM Antennas! See Your Dealer for the one best suited for Your Exact needs!

Award Winning
FINCO FM-5
\$36.35 list
FINCO CX-FM-5
\$44.65 list



Model FMT-A
All Directional FM
Turnstile Antenna
Kit. Mounts to
present mast.
\$12.95 list



Model FMSL-12
\$49.95 list
Model CX-FMSL-12
\$58.25 list



FM
STEREO KIT
Model 7512-AB
Update your Antenna
to shielded co-ax
system. \$8.95 list



Model 65-7
FM AMPLIFIER
Indoor mounted—
20 db gain
\$24.95



THE FINNEY COMPANY

34 West Interstate • Dept. HD
Bedford, Ohio 44146

CIRCLE NO. 28 ON READER SERVICE CARD



the picture hasn't changed
there's still nothing
like a LEICA

No one ever made a finer 35mm camera. You may prefer the new rangefinder Leica M4—or a Leicaflex,® the reflex camera with Leica quality. Let your Franchised Leica Dealer show you both.

E. Leitz, Inc., 468 Park Avenue South, New York, N. Y. 10016
68067

Leica®

CIRCLE NO. 36 ON READER SERVICE CARD

People who built their own Schober Organs wrote this ad

Here's what they say about the pleasure of assembling the Schober Electronic Organ from kits . . . and enjoying the magnificent sound of an instrument they've created in their spare time.

Building was fun

"Building it was at least as much fun as playing it!"

Mr. Lester F. Schwartz,
Somerset, N. J.

So proud I could pop

"I've done over 90 per cent of the work on this organ myself—and I'm so proud I could about pop!"

Mrs. V. P. Allbert,
Topeka, Kansas

Nothing as fine under \$5,000

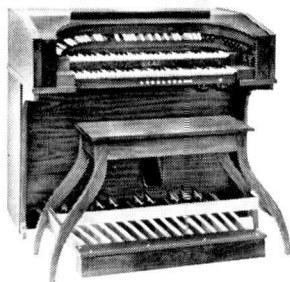
" . . . I could not find any organ that sounded as fine as the Schober under \$5,000."

Mr. Jerome J. Fraenkel,
Franklin Square, N. Y.

Proud to own

"I am proud to own such a valuable instrument."

Mr. Jean J. Juteau,
Montreal, Canada



The NEW Schober THEATRE ORGAN—
one of four models available

Most cherished possession

"My spinet has become the most cherished possession in our home—fabulous, indeed."

Mr. Frank J. Marion,
North Bergen, N. J.

Tremendous sound

"The sound is conservatively, tremendous."

Mr. Paul DeForest Wren,
Westbrook, Conn.

Unbelievably easy to build

"When we ran out of instruction, the organ was finished . . . To me it was unbelievable!"

Mr. Ted Sowinski,
Chicago, Illinois

Thousands of music lovers in every walk of life—from teen-agers to grandmothers, from people who are "all thumbs" to electronic engineers—have enjoyed the pleasure of assembling, playing and hearing the magnificent sound of the Schober organ. Whether you favor Bach or Bop, there is a Schober organ that gives you full range of expressional and tonal quality—so like a fine pipe organ that many listeners can't tell the difference. You can build a Schober organ for as little as \$645. And—even if you've never played a note before—Schober's self-teaching courses give you immediate musical results.

Over 50% of Schober Organ owners never handled an electronic job before and didn't play a note, yet assembled some of the best organs ever designed and get a daily thrill from making their own music. Isn't it time for you to take this cost-saving road to greater musical

pleasure—and enjoy the satisfaction of doing it yourself?

Free Information and Demonstration Recording
Send today for your free copy of Schober's 16-page, full color booklet, plus 7" free recording.

The Schober Organ Corp., Dept. HR-24
43 West 61st Street, New York, N. Y. 10023

Please send me Schober Organ Catalog and free 7-inch "sample" record.

Enclosed please find \$1.00 for 12-inch L.P. record of Schober Organ music.

NAME _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

CIRCLE NO. 50 ON READER SERVICE CARD

tions on "More Palatino." Kirmair: *Air varié on Theme from Mozart's "Die Zauberflöte."* J. S. Bach: *Fantasia, in G Minor (BWV 920).* C.P.E. Bach: *Fantasia, in C Major.* Pachelbel: *Chorale Partita, "Werde Munter, mein Gemüte."* Kuhnau: *Biblical Sonata No. 1 ("The Fight Between David and Goliath").* Igor Kipnis (harpsichord/clavichord). EPIC © BC 1363, ® LC 3963 \$5.79.

Performance: Full of verve

Recording: Bright

Stereo Quality: Good enough

Igor Kipnis has put together another one of his entertaining and illuminating Baroque anthologies—extending the time span in this instance to include the quaint *Zauberflöte* harpsichord variations by Beethoven's older and all-but-unknown contemporary, Friedrich Joseph Kirmair.

For me the highlights of this disc were the clavichord pieces—the richly various C.P.E. Bach *Fantasia*, the lovely Pachelbel work based on the same melody used by Bach in "Jesu, Joy of Man's Desiring" from Cantata No. 147, and the vastly entertaining program piece by Bach's predecessor at the Leipzig Thomaskirche, Johann Kuhnau. The Kipnis clavichord, unlike most that have been recorded thus far, has enough tonal body so that one can properly appreciate the subtleties of touch and "finger-vibrato" (*Bebung*) that go into well-styled performance on this intimate keyboard instrument.

The harpsichord pieces are brought off by Mr. Kipnis with surpassing brilliance and verve—the Buxtehude Variations and the scintillating Telemann overture being my special favorites.

The recorded sound is very bright, perhaps a bit too much so on the harpsichord tracks, but this can be alleviated with a touch of treble cut. D. H.

LEONTYNE PRICE: *Prima Donna, Volume Two* (see Best of the Month, page 86)

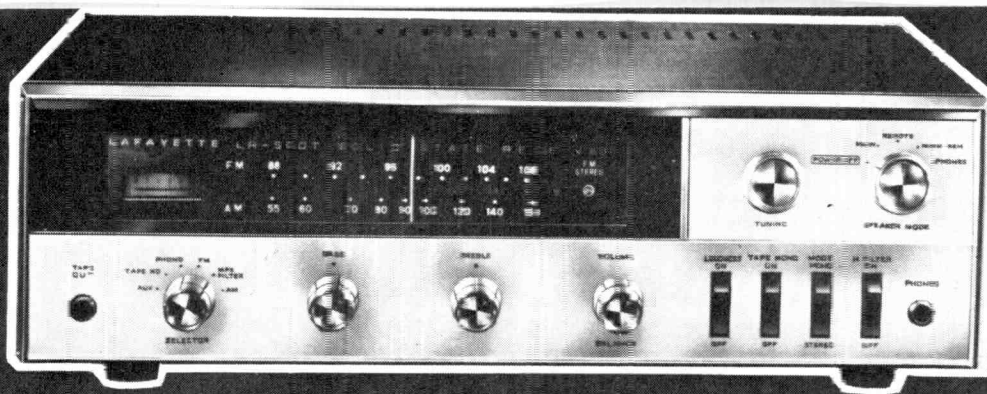
VILAYAT KHAN AND BISMILLAH KHAN: *Duets from India.* Vilayat Khan (sitar); Bismillah Khan (shehnai); Shanta Prasad (tabla). *Duetto (Jugalbandi); Chaiti-Dhun; Bhairavee-Thumree.* CAPITOL © ST 10483, ® T 10483 \$4.79.

Performance: Hypnotic

Recording: Very good

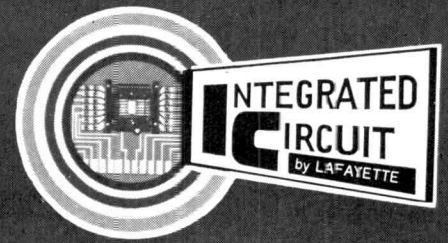
Stereo Quality: First-rate

Now that the sitar, sarod, and tabla are household words in more households than you'd believe, the country is being indoctrinated in the acrid aural pleasures of the shehnai, an oboe-like, but keyless, instrument. Its pre-eminent practitioner, Bismillah Khan, has toured here recently, and a program showing him at home in India has been programed on many educational television stations. In this set of duets, he is joined by Vilayat Khan, who is an accomplished player of the sitar; but the main interest of the performance is in Bismillah Khan because the shehnai is still rather new to most Western ears. It is astonishing how virtuosic Bismillah Khan is on what appears to be a rather limited instrument. He achieves extraordinary gradations of timbre and seemingly limitless pliability of line. Bismillah Khan should be able to continue to tour here with a success as predictable as the quality of his performances. Nat Hentoff

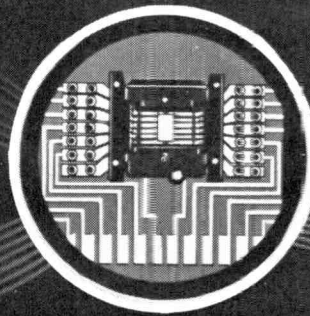


LR-500 60 WATT AM/FM MULTIPLEX STEREO/RECEIVER/FM USEABLE
SENSITIVITY: 1.8 μ v (IHF)—179.95

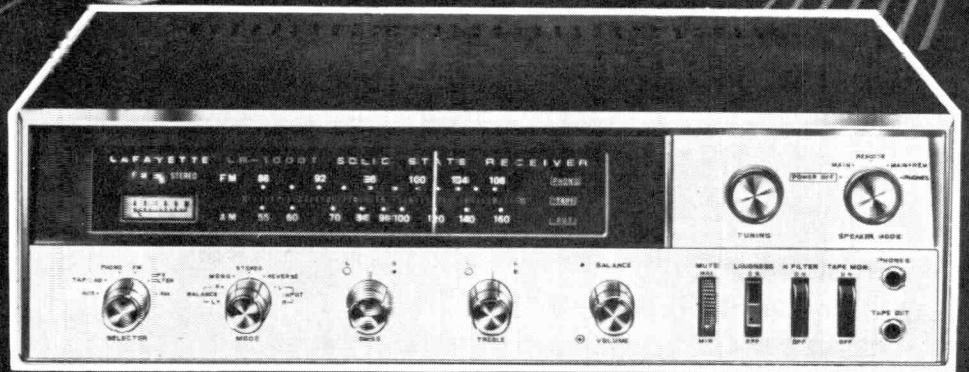
WITH NEW
REVOLUTIONARY



ELECTRONIC
MARVEL OF THE
SPACE AGE



Dealerships Available
In Selected Areas.
For Details Write:
**Lafayette Radio
Electronics**
Dept. R.L.
Box L., Syosset,
L. I., N. Y. 11791



LR-1000T 120 WATT AM/FM MULTIPLEX STEREO/RECEIVER/FM USEABLE
SENSITIVITY: 1.65 μ v (IHF)—219.95



LR-1500T 150 WATT AM/FM MULTIPLEX STEREO/RECEIVER/FM USEABLE
SENSITIVITY: 1.5 μ v (IHF)—279.95

4 INTEGRATED
CIRCUITS
Plus
2 FIELD EFFECT
TRANSISTORS

LAFAYETTE 'New Era' Stereo Super-Receivers

Only Lafayette ingenuity could give you a new experience in stereo listening! For all the features that make Hi-Fi stereo receivers truly magnificent—Integrated Circuits ("IC's"), Field-Effect-Transistors (FET's), direct coupled silicon transistor circuitry, automatic stereo/mono switching, 4-gang FM tuning condenser, 5 i.f. stages, wide-band ratio detector, fused output transistors, center channel output, built-in AM/FM antennas, dual system speaker control, **exclusive front and rear panel tape output jacks**, plus all controls to obtain the quality of sound which suits your personal taste—Lafayette offers the sound approach to superior performance. Except for power, and sensitivity all Lafayette receivers perform to the same standards. You get the kind of over-all quality, reliability, and performance that you cannot find in most expensive units.

60 WATTS.

Model LR-500T. Captures every trace of a signal and converts it to "Live Performance"...a degree of quality that far exceeds the price. **179.95**

120 WATTS.

Model LR-1000T. Exceptional component quality offering virtually flawless performance...enormous power meets the most demanding stereo Hi-Fi applications. **219.95**

150 WATTS.

Model LR-1500T. Lafayette's finest receiver, specifically designed for the audiophile who demands every performance extra that you'd find on only the finest separate tuners and amplifiers. **279.95**

Send For Your **FREE** 512 page 1968 Catalog No. 680 Dept. HMA-8 111 Jericho Turnpike, Syosset, L. I., N.Y.

Lafayette Radio Electronics
CIRCLE NO. 35 ON READER SERVICE CARD

O.K., perfectionist. Get a look at these specs.

Four heads, 4 track, 2 channel. 7" maximum reel size. Tape speeds $7\frac{1}{2}$ and $3\frac{3}{4}$ ipf (0.5%). Dual speed hysteresis synchronous motor for capstan drive, 2 eddy current outer-rotor motors for reel drive.

Wow and flutter: $7\frac{1}{2}$ ips: 0.08%; $3\frac{3}{4}$ ips: 0.12%. **Frequency response:** $7\frac{1}{2}$ ips: 30 to 20,000 Hz (2 dB 45 to 15,000 Hz); $3\frac{3}{4}$ ips: 40 to 14,000 Hz (2 dB 50 to 10,000 Hz). **SN Ratio:** 55 dB.

Crosstalk: 50 dB channel to channel at 1,000 Hz. 40 dB between adjacent tracks at 100 Hz.

Input: (microphone): 10,000 ohms. 0.5 mV minimum. (line): 300,000 ohms, 0.1 V minimum.

Output: 1 volt for load impedance 10,000 ohms or more. Phase Sensing Auto Reverse (you don't need sensing foil for automatic reverse play). Symmetrical Control System, a soft-touch control operation for fast-winding in both directions, playback and stop. Four TEAC heads in a removable unit. An optional remote control unit. An optional repeat play unit. Tape tension control switch. Independent LINE and MIC input controls.

100 KHz bias-frequency. Pair of jumbo VU meters.

Ask your TEAC dealer for Model A-6010. There's only one like it in the world.

TEAC®

TEAC CORPORATION OF AMERICA
1547 18th St. Santa Monica, Calif. 90404



CIRCLE NO. 60 ON READER SERVICE CARD



HIFI/STEREO REVIEW'S CHOICE OF THE LATEST RECORDINGS

ENTERTAINMENT

POPS • JAZZ • FILMS • THEATER • FOLK • SPOKEN WORD

Reviewed by NAT HENTOFF • PAUL KRESH • REX REED • PETER REILLY

LIZ ANDERSON: *Cookin' Up Hits*. Liz Anderson (vocals). *Grandma's House*; *The Spirit of Christmas*; *Come Walk in My Shoes*; *Tiny Tears*; *Ride, Ride, Ride*; and seven others. RCA VICTOR (S) LSP 3852*, (M) LPM 3852 \$4.79.

Performance: **Support your local Liz**
Recording: **Real nice**

NORMA JEAN: *Jackson Ain't a Very Big Town*. Norma Jean (vocals). *Conscience Keep an Eye on Me*; *From the Church to the Bar Room*; *Pursuing Happiness*; *Your Alibi Called Today*; *Ride, Ride, Ride*; and seven others. RCA VICTOR (S) LSP 3836*, (M) LPM 3836 \$4.79.

Performance: **Wanton**
Recording: **Bold**

Well, things have come to a pretty pass indeed when RCA Victor starts releasing Liz Anderson and Norma Jean in the same month. (I'll bet that that hussy Norma Jean has latched on to some influential person there.) Anyway, after all the suffering that Norma Jean has put Liz through, you'd at least think Victor would have the decency to keep their records separated from each other. Of course, I knew right away that there was something funny up when I saw the pictures on the album covers. Now Liz has a real nice cover and she has on a pretty yellow dress and a frilly apron and it shows her mixing things in a bowl from canisters marked "Heartaches," "Love," "Humor," "Melodies," and "Teardrops." She is standing in a real nice kitchen with ruffled curtains on the window. But as for Norma Jean's cover! Well, she's sitting out in a field, for all the world to see, dressed in one of those pants suits and she is looking straight into the camera and smiling, just as bold as brass. I played Liz's album clear through and it certainly was nice to hear such lovely songs as *The Spirit of Christmas* and *Grandma's House*, many of which Liz herself wrote. My favorite was *Ride, Ride, Ride*, which Liz wrote for her daughter Lynn who made it real popular as a single. "Cookin' Up Hits" is a fine album of fine songs by a fine woman.

I wasn't even going to listen to Norma Jean's album, but I told myself you always have to give a person a second chance. I had already heard *Pursuing Happiness* (it was

on the "Triangles Trio" album, in which we first heard how Norma Jean had done her dirty work on Liz's marriage), so I wasn't surprised to hear her do such things as *Your Alibi Called Today* and *Now It's Every Night* (!), but you could have knocked me over with a feather when, on the last band of the first side, Norma Jean has the *nerve* to sing *Ride, Ride, Ride*, that song which Liz composed and her daughter sings. Let me tell you, I took that record right off and I haven't let it be brought into the house again.

I know that, more's the pity, hussies like

past to amuse and titillate you." And there they came, right out of the speakers, Patti, Maxene and LaVerne, strange objects all, and funny as hell. They revived memories of war movies in stage-door canteens, singing and swaying in their Lana Turner wedgies, their hair in defense-plant hairnets and their shoulders sloped in padded satin, thumping away through their little powdered noses in close harmony like the Three Little Pigs. The Andrews Sisters are with us again, and quite truthfully, I must admit I'm pretty happy about the whole thing.

I know people who claim to know all the old Andrews Sisters arrangements by heart. Three of my friends even fight over who gets to be Patti, who gets to be Maxene and who gets to say "No, no, no" on *Don't Sit Under the Apple Tree*. (Was it LaVerne? I never could tell them apart.) Now, in the gimmicked-up, freaked-out era of electronic noise, the Andrews Sisters are mere camp items. But I'd like to point out to those who are too young even to know who the Andrews Sisters were that they understood what "camp" means before Susan Sontag was born. Still, they sold fifty million records and made seventeen movies, and practically everybody in the world who wasn't sealed in a vault saw them in hotel grills, night clubs, and on stage at the Paramount. They were authentic. And they never sounded better than they do right now, all polished off and souped up for stereo reproduction from old 78's. LaVerne is dead and the others don't sing much any more, but they are a legend.

Simply everything about this collectors' item is nostalgic and endearing. I'm going to keep my copy on the shelf next to "The Best of Carmen Miranda." Where do you plan to keep yours? R. R.



THE ANDREWS SISTERS
From the top: Maxene, LaVerne, Patti

Norma Jean sometimes make it very big in the show business and end up as top stars and have fame and glory and money. But you know something? I hear they are never very happy. P. R.

RECORDING OF SPECIAL MERIT

THE ANDREWS SISTERS: *The Andrews Sisters' Greatest Hits*. The Andrews Sisters (vocals), orchestra. *Beat Me Daddy, Eight to the Bar*; *Strip Polka*; *Apple Blossom Time*; *Bei Mir Bist Du Schoen*; *Beer-Barrel Polka*; *Rum and Coca Cola*; and six others. DECCA (S) 74919, (M) 4919* \$4.79.

Performance: **Get out the spats, Dad**
Recording: **Good**
Stereo Quality: **Fair**

It had to happen. My horoscope this month said: "Look for strange objects from your

JOHNNY CASH AND JUNE CARTER: *Carryin' On*. Johnny Cash and June Carter (vocals); unidentified accompaniment. *Long-Legged Guitar-Pickin' Man*; *Shantytown*; *It Ain't Me, Babe*; *I Got a Woman*; *Jackson*; *No, No, No*; and five others. COLUMBIA (S) CS 9528, (M) CL 2728 \$4.79.

Performance: **Cornball but fun**
Recording: **Good**
Stereo Quality: **Good**

Johnny Cash, who is usually as tense as a man tied to a giant catapult in his recorded appearances, relaxes here with June Carter as they amble their way through several pleasant songs. My own nomination for a real-good-time-was-had-by-all is *Long-Legged Guitar-Pickin' Man*, in which Mr. Cash and Miss Carter exchange insults with lively scorn. Dylan's *It Ain't Me, Babe* is done in suitably rueful style, and Ray Charles' I

Explanation of symbols:

- (S) = stereophonic recording
- (M) = monophonic recording
- * = mono or stereo version not received for review

NOW FREE!

STEREO INFORMATION

FM Station Directory

The directory lists 1571 FM stations in the United States and Canada. All the stations broadcasting in stereo are listed.

Test Reports

Test reports full of facts. The test reports were made by independent laboratories. Tests cover tuners, preamps, power amp/preamps. Read the facts from test experts.

Big 36-Page Catalog

You get a 36 page catalog. It tells you about tuners, power amplifiers, preamplifiers, pre-amp/power amplifier combination and tuner preamps.

ALL FREE

McIntosh

PLEASE SEND ME YOUR CATALOG
McIntosh Laboratory, Inc.

1 Chambers St. Binghamton, N. Y. 13903

NAME _____
STREET _____
CITY _____
STATE _____ ZIP _____

CIRCLE NO. 39 ON READER SERVICE CARD
118

Got a Woman is performed with great good-humored bawdiness. This is a nice album, and a very nice display by Cash of his talent for lighter material. Miss Carter assists him more than ably. P. R.

BILL COSBY: *Bill Cosby Sings*. Bill Cosby (vocals); chorus and orchestra. *Bright Lights, Big City; Big Boss Man; Hush Hush; Baby, What You Want Me to Do?; Tell Me You Love Me; Aw Shucks; Hush Your Mouth*; and five others. WARNER BROTHERS (S) WS 1709, (M) W 1709 \$4.79.

Performance: Ill-advised
Recording: Fair
Stereo Quality: Aggressive

The engineers and arrangers of this disaster have used every trick in the box—from an echo chamber to a chorus surrounding Mr. Cosby in close harmony—to help keep him in tune, but this affable and talented fellow, who has already proved himself as an actor and a comedian, cannot sing at all, and I wish he wouldn't try. The numbers in this "soul album" vaguely suggest the argot and atmosphere of Harlem, but the tunes are so thin and the words so random it would take at least a Louis Armstrong to put them over. Armstrong he ain't! P. K.

ANITA KERR AND ROD MCKUEN: *The Earth*. Rod McKuen (writer and narrator); Anita Kerr (composer, arranger, and conductor); The San Sebastian Strings. WARNER BROS. (S) WS 1705, (M) W 1705* \$4.79.

Performance: Kerr fine, McKuen per usual
Recording: Good
Stereo Quality: Good

(Written, with apologies to T. S. Eliot, on the occasion of the release of "The Earth," a companion recording to the previously released "The Sea.")

THE WASTE BAND(S)

January is the cruellest month, breeding
Albums out of the dead "Sea," mixing
Kerr with McKuen again, stirring
Dull verse with stringed schmaltz.
His words left us cold, covering
"Earth" in forgettable slush, filling
A tiny theme with sluggish runs.
So little surprised us, coming after these
send-ups of Mario Pei,
And burlesque of Crane; we stopped at band
five
And went for a walk, right up to Yorkville,
And drank *Kaffee*, and thought for an hour.
Bin nicht mesbigenab, stamm' aus New
York, ecst hip.
For how long is patience, to hear such arch
pap.
Those triple-told tales of McKuen, whis-
pered
In a voice of burlap. And I thought, Anita,
Anita, get out quick, or you'll smother.
You are, in your music, much better than
this.
I yawn, much of the night, and throw out
"Earth" in the morning.

P. R.

RECORDING OF SPECIAL MERIT

THE KINKS: *The Live Kinks*. The Kinks (vocals and instrumentals). *All Day and All of the Night; You're Lookin' Fine; Dandy; Well Respected Man; I'm on an Island; Sun-*

ny Afternoon; Come On Now; and four others. REPRIS (S) RS 6260, (M) R 6260* \$4.79.

Performance: Excellent
Recording: Good
Stereo Quality: Fair

As the title indicates, this is a recording of an in-person appearance of the Kinks before the customary howling, squealing, hysterical audience—and, believe it or not, this is a most enjoyable album. I suppose part of their success here stems from the Kinks' refusal to take themselves all that seriously, and part from their use of their responsive audience in a theatrical and involving way. For instance, in *Sunny Afternoon*, which they perform delightfully as a ragtime period piece, they ask the audience to participate in the chorus, and they get a hearty and genial reply from their listeners. I found it enormously refreshing to think that here, at last, were a group of young people who came to have a good time, not to work off some moist adolescent sexual and social drives. The other high spots of the album for me were an eight-minute medley that closes the performance, made up of *Milk Cow Blues, Batman Theme*, and *Tired of Waiting for You*, and a short and disarming rendition of *Dandy*. For once I agree with liner notes; they say, "This is the first live album from the Kinks, and it is probably their most significant recorded work." My congratulations are extended to everyone—including the audience. P. R.

RECORDING OF SPECIAL MERIT

PEGGY LEE: *Somethin' Groovy*. Peggy Lee (vocals); Toots Thielemans (guitar, harmonica); orchestra, Ralph Carmichael cond. and arr. *Makin' Whoopee; It Might as Well Be Spring; Two for the Road; Sing a Rainbow; No Fool Like an Old Fool; Release Me; You Must Have Been a Beautiful Baby*; and four others. CAPITOL (S) ST 2781, (M) T 2781* \$4.79.

Performance: Veivety
Recording: Good
Stereo Quality: Good

Honey-drippin', honey-sippin' Peggy Lee seems to turn out almost as many discs as Nancy Wilson, so many it is difficult to keep track of them all. But for my taste, they're all a welcome relief from the slush that piles up at my door every month. A long time ago I came to an affirmative decision that she is one of the greatest magicians a good song could ever wish for, and the intervening years have not altered that opinion.

Have you ever seen her perform? The lights have to be just right, the gowns designed just right, the hair coiffed just right, the orchestra tuned just right, the mikes adjusted just right, the air-conditioning turned up just right (she generates a lot of heat), or she just doesn't go on. This does not mean she is temperamental; it simply means she is a perfectionist, one of the few performers who *care*. That perfection is the key to why she is just about the best singer in the business today, and why, like brandy in the cask, she gets better every year.

The marvelous thing, of course, is that—unlike most female song stylists—you don't really have to see Peggy Lee to get her message. While most of the girl singers her age

(Continued on page 123)



The woofer that lost its whistle



...and other stories.

(E-V) The woofer cone in a very small enclosure must move a long way to provide all the bass you want to hear. In the new E-V EIGHT, for instance, the 6-inch cone moves back and forth over one-half inch. But in most woofers something strange happens as it moves. It whistles!

You see, the air trapped inside the speaker is literally "pumped" in and out past the voice coil. The whistle is almost inevitable. Except, that is, in the E-V EIGHT.

We did two things almost nobody else bothers to do. First, we vented the woofer. Air can't be trapped inside. Then we punched six big holes in the voice coil form. Air can't be pumped back and forth. And that's how the E-V EIGHT lost its whistle (and gained

almost 2 db extra efficiency in the low bass in the bargain!)

The E-V EIGHT tweeter was another story. We aimed to eliminate the "buzz" and "fuzz" so typical of modestly priced speaker systems. What was needed was a better way to control cone motion at very high frequencies. And it literally took years of testing to solve the problem.

The answer looks deceptively simple. We put a ring of short-fiber polyester felt behind the cone, and a precisely measured amount of viscous vinyl damping compound under the edge. Plus a light-weight aluminum voice coil to extend the range to the limits of your hearing. Highs are remarkably uniform and as clean as a (oops!) whistle!

Even the E-V EIGHT enclosure is

unusual. Examine the walnut grain carefully, especially at the corners. It's a perfect match because we use one long piece of wood, folded to form the cabinet! And we add a clear vinyl shield on every finished surface, to protect the E-V EIGHT from the mars and scratches of day-to-day living.

There are so many good ideas inside the tiny new E-V EIGHT, you may wonder how we found room for them all. Chalk it up to top-notch engineering talent and facilities, plus a very real dedication to the ideal of better value in every product.

Listen to the E-V EIGHT with the whistle-free woofer at your nearby Electro-Voice high fidelity showroom today. Then ask the price. At no more than \$44.00 it's the best story of all.

Electro-Voice®

high fidelity speakers and systems • tuners, amplifiers, receivers • public address loudspeakers
• microphones • phonograph needles and cartridges • organs • space and defense electronics

CIRCLE NO. 18 ON READER SERVICE CARD

ELECTRO-VOICE, INC., Dept. 184F;
616 Cecil St., Buchanan, Michigan 49107

Send me catalog information on the E-V EIGHT and the complete line of Electro-Voice high fidelity products.

Name _____

Address _____

City _____ State _____ Zip _____



Stars of the GRAND OLE OPRY

Reviewed by William Flanagan



SINCE I've just finished for this publication a scrupulous study and (hopefully) a thoughtful review of the new recording of Benjamin Britten's opera based on William Shakespeare's *A Midsummer Night's Dream*, it seems to me entirely reasonable that I should now turn my critical attentions to RCA Victor's "keepsake package" of archive performances by stars of radio station WSM's Grand Ole Opry in Nashville, Tennessee. As it happens, the experience has been both rewarding and refreshing; I wouldn't have missed it for the world.

The cross-section of American popularism encompassed in this two-disc set falls largely into the country-and-western category. The lyrical derivation of the more or less straight hillbilly stuff is American folk song, which, to a substantial degree, itself derives from American immigrant personalization of old English folk materials. Some of the more suavely arranged and subtly performed country numbers—such as *Abilene* and *Detroit City*—combine traces of the same Anglo-Saxon folk inflections with a strong hypo of American Negro "rhythm and blues." They don't seem to me to be a far cry from the sort of thing Elvis Presley began with and out of which developed rock-and-roll.

Perhaps you, like me, have from time to time heard jazz buffs bewail, in despair and bewilderment, the popular appeal and the staying power of both this music and rock-and-roll. Given the low estate of jazz today, I expect that the despair is understandable. But the accompanying bewilderment puzzles me, because the popularity of both c-&w and r-&r, in terms of "light" music, seems curiously to parallel the unpopularity of contemporary "serious" music, both jazz and classical. Jazz, as a "popular" form, lost its hold on the big—and especially the young—public because of the speed and sophistication of its technical evolution. Progressive jazz is hardly a music the kids can dance to, nor is it an artistic expression they can, in their youthful lack of sophistication, relate to. Concert music too, in an even more forbiddingly rapid and complex evolution, has left the wider audience with no tunes to hum, no ready emotional response (except perhaps hostility) to fall back on. The musical sentiments—and most especially the lyrics—of both the country and rock-and-roll styles have, it seems to me, held with such tenacity

simply because they have not left their audiences behind. It may be interesting, given the widespread "serious" intellectual interest (even among musicians) in the Beatles' "Sergeant Pepper's Lonely Hearts Club Band," to see whether this pattern is not about to repeat itself in popular music as well.

At any rate, RCA's country package consists of forty performances by singers and in-



MINNIE PEARL

Nostalgic contribution to a c-&w treasury

strumentalists the supplementary booklet describes as "artists who at one time were regulars on Grand Ole Opry. . . outstanding stars who helped make it great." The original recordings span a good number of years and the performers range from some who were before the public in the Twenties to today's younger set. The variety is startling.

Among the newer performers, the boys seem to have chosen the better musical material and, in general, they present it more convincingly (the big stars in c-&w tend to be the men anyway). Bobby Bare's *Detroit City* is a hauntingly lonely episode; George Hamilton IV's performance of the lovely *Abilene* (it sounds a little like the old standard *Georgia*) is the album's most appealing moment. *Young Love* is appropriately described as "ordinary," but Sonny James, in his Presleyesque way, sings it with smooth understatement and clean musicianship. John Loudermilk's bouncy treatment of *Roadhog* is also one of my favorites. Don Bowman's *Chet Atkins, Make Me a Star* is a funny, good-

natured put-on of the man who in fact did help to make him one—an RCA Victor executive, *Chet Atkins* (also a good guitarist), who does his own turn on the program in an instrumental number featuring himself as soloist.

Maybe I'm not properly tuned in to the style, but the younger, country-style girl vocalists here give me the pip. They all sound as if they derive from Patti Page, but without that lady's home-spun elegance and easy musicality. The deliveries of Connie Smith (*Once a Day*) and Norma Jean (*Let's Go All the Way*) are interchangeable as my ears perceive them. And besides, both girls sound as if they're half asleep. The less-than-new Martha Carson, in a husky, straightforward delivery of her own song *Satisfied*, makes a far more honest impression.

The album has its moments of tearing up the pea-patch hillbilly-style, and some of it—inadvertently or otherwise (I suspect the latter)—is subject to the current definition of "camp." Archie Campbell's *The Cockfight*, Lonzo and Oscar's *I'm My Own Grandpa*, and (inadvertently, I'm sure) Bradley Kincaid's wailing of *The Letter Edged in Black* are all, in a somewhat special way, quite unforgettable.

Oops—I almost forgot to mention the formidable Minnie Pearl, self-confessed and shameless "man-catcher." Her contribution to this release brings back memories of radio and my childhood: the life goals of Brenda and Cobina, the twang of Judy Canova, the rasp of Tizzie Lish. But mention of all forty bands, even on a release as memorable as this one, would require more space than I could reasonably request.

Thank you, Benjamin Britten; and thank you, Grand Ole Opry.

STARS OF THE GRAND OLE OPRY. Bobby Bare, Don Bowman, The Browns, Archie Campbell, Martha Carson, The Carter Family, Skeeter Davis, Delmore Brothers, Jimmie Driftwood, Don Gibson, George Hamilton IV, Sonny James, Johnnie and Jack, Grandpa Jones, Bradley Kincaid, Pee Wee King, Hank Locklin, Lonzo and Oscar, John D. Loudermilk, Uncle Dave Macon, Roger Miller, Bill Monroe, Willie Nelson, Norma Jean, Leon Payne, Minnie Pearl, Wade Ray, Jim Reeves, Connie Smith, Hank Snow, Ernest Stoneman, Justin Tubb, Porter Wagoner, Kitty Wells, Dottie West, Slim Whitman, Willis Brothers (vocals); Chet Atkins (guitar); Boots Randolph (saxophone); Del Wood (piano). RCA VICTOR LPM 6016 two discs \$9.58.

Facing page: Roy Acuff (center) and his group with "Stringbean" Akeman (right) on stage at the Grand Ole Opry, Nashville, Tenn. (Station WSM photo: Les Leverett)

JBL SA600: Superlative sound in all respects—any way you measure it

The JBL SA600 may be the most perfect inanimate object you will ever bring into your dwelling. It is a complete 80 watt stereophonic amplifier-preamplifier that has no peer. Without exception, all who have worked with it, tested it, and lived with it agree that the SA600 is the finest unit of its kind ever made.

Cleanest Sound Ever—Distortion is so low that it becomes next to impossible to measure; it is masked by the distortion inherent in the finest test instruments available. The SA600 must be driven to overload before meaningful distortion figures can be derived.

"Lowest Noise ever measured on an integrated amplifier," one testing laboratory reported. With the finest program material available—low noise records or tapes, even masters—the only audible noise and distortion will be in the program material itself, not the amplifier.

Design Philosophy—The SA600 began with the premise that an amplifier should be as good as the state of the art permits, with wide bandwidth and low distortion,

before inverse feedback is introduced. This is exactly what you find in the SA600. Without feedback it meets NAB specifications. Negative feedback is used to eliminate relatively minor aberrations rather than to buck out gross imperfections. The feedback loop in the SA600 extends all the way from the output back to the input terminals; no stage or any part of one is left out.

The JBL T-Circuit—The power amplifier section of the SA600 incorporates the JBL T-circuit, on which a patent is pending. It is an operational DC amplifier, the type used in analog computers. Performance is phenomenal.

Technically speaking, the output circuit consists of three cascaded complementary-symmetry emitter-follower stages. It is stable even under overload conditions and recovers instantly from transient overloads at any frequency. Dynamic loudspeaker systems with almost any impedance rating can be connected without degradation in signal quality. All stages are direct coupled, and the loudspeakers are connected directly to the output transistors, maintaining control all the way down to DC.

Power to Spare—The T-circuit provides 80 watts (40 watts per channel) of continuous sine-wave power into 8-ohm loads

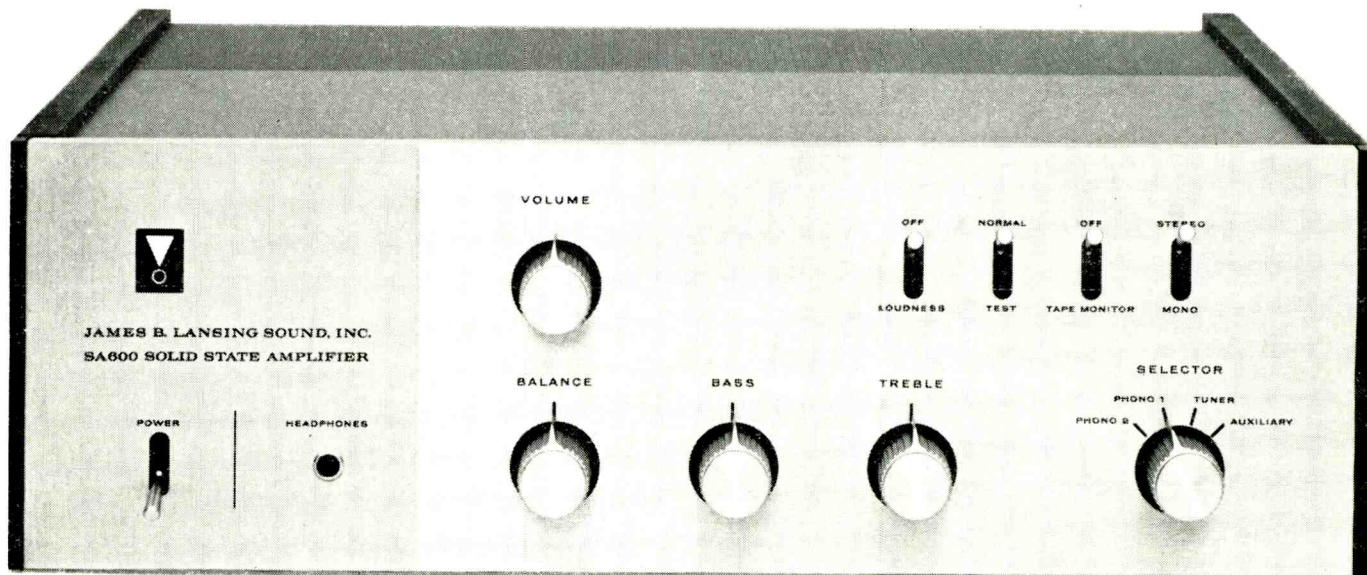
with both channels operating simultaneously, with power-line voltages as low as 110 volts, with less than 0.2% harmonic distortion at any frequency from 20 to 20,000 Hz. With 4-ohm loads the SA600 can put out 65 watts per channel for brief periods of time.

Perfect Taste—The SA600 looks every bit as good as it sounds. Knobs fit your fingers. Controls are as smooth-acting as the pots on a studio mixing console. The SA600 has a clean, professional air, yet with its warm satin-gold finish and optional walnut side panels is readily assimilated into domestic decor.

Guaranteed—A two year guarantee covers the SA600 for both parts and labor. JBL knows its product. The SA600 was designed by JBL's vice president in charge of engineering. It is manufactured in JBL's own electronics facility. Production is not simply spot checked. Each SA600 is thoroughly tested and life cycled for 25 hours before it is released for sale.

Specifications are extremely conservative, and actual performance of any given unit will fall well within these figures.

The priceless performance of the SA600 is yours for \$429. Make a date with your Franchised JBL Audio Specialist for an in-depth demonstration.

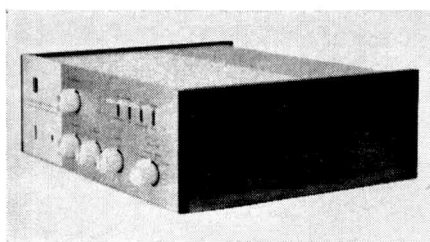


Consensus: the finest audio amplifier you can buy



JBL, 3249 Casitas Ave, Los Angeles, California 90039

CIRCLE NO. 76 ON READER SERVICE CARD



Specifications for the SA600

Power Output 80 watts continuous RMS power, 40 watts per channel, at any frequency from 10 cps to 30,000 cps.

Frequency Response ± 0.75 db 20 to 20,000 cps ± 1.5 db 10 to 130,000 cps.

Harmonic Distortion Less than 0.2% from 20 to 20,000 cps at 80 watts or any level less than 80 watts, 0.1% from 20 to 20,000 cps at one watt.

Intermodulation Distortion Less than 0.2% at 80 watts or any level less than 80 watts, 0.07% at one watt. (Typically less than 0.05%.)

Signal required for rated output Phono input at 1,000 cps reference—4 millivolts, 8 millivolts, or 16 millivolts into 47,000 ohms, switch selected. High level inputs—0.25 volts into 30,000 ohms.

Maximum Phono Signal 250 millivolts at 1,000 cps with less than 0.1% harmonic distortion.

Hum and Noise Low level inputs (1,000 ohm termination)—72 db below rated output, equivalent to one-microvolt at input terminals or 80 db below 10 millivolts.

These specifications are measured with the phono switch set at LOW, giving rated output with 4 millivolts signal. With switch set at MED or HIGH noise is further reduced to 75 db or 78 db below rated output, respectively. High level inputs—85 db below rated output.

Transient Response Rise time measured at high level inputs is 2.5 microseconds from 10% to 90% of square wave signal at 160 watts peak power or any lower power level.

Overload Recovery Less than 1/10 of one cycle to recover from 100% single cycle overload at any frequency from 20 to 20,000 cps.

Output Impedance 8 ohms rated impedance, 4 to 16 ohms nominal impedance. When driving a 16-ohm load, the SA600 meets all published specifications except that power output is reduced to 64 watts. When driving a 4-ohm load, the SA600 produces 130 watts of undistorted power for brief periods of time. Prolonged operation at more than 40 watts per channel however will trigger the built-in automatic overload devices.

Stability The SA600 is completely stable when connected to any loudspeaker system or even to a capacitive load. AC line surges do not affect the stability of the circuit.

Short Circuit Protection Absolute. The SA600 cannot be damaged by short or open circuit at the output terminals, or by any degree of impedance mismatch.

Transistors 36 silicon transistors plus 19 silicon diodes.

Special Features Built-in JBL Aural Null Stereo balancing system for simple, exact balancing of stereo installation. Three-position phono switch for best possible signal-to-noise ratio. Tape monitor switch for direct comparison of program source with recorded signal while recording. Front panel stereo headphone jack.

have either fallen from grace or retired from the business altogether, Miss Lee has never been in finer vocal or physical condition. I rest my case with this new disc.

The quality of her singing here is enhanced by the arrangements, which mostly allow her to float pensively in a hammock of guitar clusters woven together with luminous strings. But there are other sounds in Ralph Carmichael's arrangements too: bells and pianos, Toots Thielemans' back-porch harmonica, even a lusty Herb Alpert swing on *Somethin' Stupid*. There is one really terrible song (*Release Me*) which has no business in the collection, but even when the material fails Miss Lee, as it occasionally does, she can coax it into behaving in her own breathless style. (She even fashions an entirely new tone poem out of *You Must Have Been a Beautiful Baby*.) Fortunately there are lots of good songs here—*Makin' W'hoopie* is sung with enough good humor and lazy-girl sexiness to insure its permanent place in the Hall of Fame.

No question about it. "Somethin' Groovy" is a recording of largely expressive and perceptive songs sung with warmth and taste and almost supernatural class. R. R.

RECORDING OF SPECIAL MERIT

NILSSON: Pandemonium Shadow Show. Nilsson (vocals). *Ten Little Indians*; 1941; *You Can't Do That*; *Without Her*; *Freckles*; and seven others. RCA VICTOR © LSP 3874. (M) LPM 3874 \$4.79.

Performance: **Very good**
Recording: **Excellent**
Stereo Quality: **Very good**

RCA Victor is making a strong and, from the looks of the press kit they are distributing, an expensive bid to create a new pop idol in Nilsson. Judging by what I hear on this debut recording, they have a good chance of putting him over. He is talented, both as a performer and as a writer-composer, and he has been well served here by an immaculate and original production job by Rick Jarrard.

Nilsson has been around the music business for a long time, performing, writing, and doing various musical odd jobs on the fringes of the industry (at the same time he held a full-time job as a computer specialist in a bank!). He is one generation removed from a famous European circus act known as "Nilsson's Aerial Ballet," which probably explains the circus flavor of this album—that and the fact that the Beatles' last album had a distinct music-hall feeling, something that I am sure was not lost on the RCA executives.

I think that Nilsson is a better composer and lyricist than he is a performer. 1941 is a fine piece of work with a downbeat lyric, totally affecting musically. *Without Her*, similarly downbeat, is more intimately done, and has a quality of self-acceptance that compels attention. The opening band, *Ten Little Indians*, is noisy enough to break any lease with—there are whistles, calliopes, and other raucous circus sounds. Once I got the bass controls adjusted, I liked it very much, but I didn't find Nilsson's singing quite up to the level of the production effects that were going on around him or the words that he had written.

Overall, Nilsson's lyrics are rather gloomy, but pop music badly needs an intelligent ap-

proach to melancholy. Is it ready? We shall see. In the meantime, Nilsson is an interesting and promising new talent, and his debut album is recommended. P. R.

TAMMY WYNETTE: Your Good Girl's Gonna Go Bad. Tammy Wynette (vocals), unidentified western accompaniment. *Apartment #9*; *Don't Come Home a Drinkin'*; *Don't Touch Me*; *Send Me No Roses*; *There Goes My Everything*; *Almost Persuaded*; and four others. Epic © BN 26305 (M) LN 24305 \$4.79.

Performance: **Corny**
Recording: **Good**
Stereo Quality: **Good**

Pore ol' Tammy Wynette. She jes' cain't seem to resist temptation. She's always meetin' these good-fer-nuthins in them hillbilly bars, see, and you'n's all know what them hillbilly bars c'n lead to. Why they c'n lead to crud an' corruption, sure as shootin'. So to wash her self in the blood of the lamb, so to speak, ol' Tammy sings her pretty li'l head off. 'Course she ain't got much of a voice, but that's no hill for a stepper, so to speak, so ol' Tammy jes' ignores that ugly li'l fact and hopes folks'll buy her records anyway. And maybe they will. Specially folks who give lots of parties, 'cause this record is so bad it will make folks laugh a powerful lot and make the party a success. I mean, all anybody has to do is jes' set the victrola needle on Tammy's first song, called *Your Good Girl's Gonna Go Bad*. It's about this plain ol' housewife whose husband is always gettin' drunk and hangin' around bars, see, so this gal decides to put on lipstick an' some of them high-falutin' clothes like Raquel Welch wears that show almost everything in the display case, so to speak, and jes' plumb "go bad." Pretty funny.

Then she accepts her barroom fate by singin' a li'l ditty called *I Wound Easy (But I Heal Fast)*. It's about a bad girl who wounds easy but heals fast. In *Almost Persuaded*, our Tammy meets some drunk on a barstool and fights with her soul about whether she should go home with him, but finally she sees her weddin' band reflected in his watery eyes, so she resists the primrose path. Boy, they don't write songs like that no more, 'cept for ol' Tammy. By this time she is really sinkin' pretty low, so she slides into a medley of tunes designed to jerk the tears right out of the sturdiest souls (and not from cryin', neither), beginnin' with *Apartment #9*, in which ol' Tammy sends us all an invite to come right up the stairway to her pad, where all hell promises to break loose. But liquor and love don't mix, so ol' Tammy wakes up from her sordid life long enough to sing *Don't Come Home a Drinkin' (With Lovin' On Your Mind)*. "You come in a-kissin' on me, it happens ever time/ jes' stay out there and see what you c'n find" wails ol' Tammy, but obviously the message don't sink in, 'cause she turns right around and sings *Don't Touch Me*, *There Goes My Everything*, and then *Send Me No Roses*.

Boy, I shore hope none o' them barroom critters ever get wise and put ol' Tammy out of her misery forever. But if'n they do, Epic could re-release her albums as comedy songs and make a lotta dough, sure as there's a cow left in Texas. It's jes' a li'l suggestion. So to speak. R. R.

(Continued on next page)

HI-FI COMPONENTS TAPE RECORDERS

TAPES, ACCESSORIES
SLEEP LEARN KITS
MERITAPE

SAVE MONEY

- LOWEST PRICES
- INTEGRITY • SERVICE
- FRANCHISED DISTRIBUTORS

WRITE FOR OUR VERY LOW
PACKAGE QUOTATIONS
Nationally Advertised Brands
Factory Sealed Cartons

Write for **FREE CATALOG**
Visit Our Showrooms

DRESSNER

1523 G JERICO TPKE.
NEW HYDE PARK, N.Y.
11040

CIRCLE NO. 23 ON READER SERVICE CARD

JAZZ



RECORDING OF SPECIAL MERIT

STAN GETZ AND ARTHUR FIEDLER:
At Tanglewood. Stan Getz (tenor saxophone), Gary Burton (vibraphone), Steve Swallow (bass), Roy Haynes (drums), Boston Pops Orchestra, Arthur Fiedler cond. *Tanglewood Concerto; Love Is for the Very Young; Three Ballads for Stan; Where Do You Go?;* and two others. RCA VICTOR (S) LSC 2925, (M) LM 2925* \$5.79.

Performance: Graceful and virile

Performance: Excellent

Stereo Quality: Very good

There has been a tendency—certainly by this reviewer—to underestimate Stan Getz. His fluent, easily assimilable lyricism is unfashionable in a time when Ornette Coleman, Albert Ayler, and others have broken through to new and often abrasive possibilities of sound and form. But this recording, made during a Pension Fund concert at Tanglewood, is a forceful reminder of Getz's prodigious musicianship, notably his melodic resourcefulness and his total command of his instrument. Getz is particularly impressive here because he has been challenged by the quality of the writing for this special occasion. Manny Albam has rescued *The Girl from Ipanema* from many bossanova clichés with which she has been encumbered. David Raskin provides exactly apposite settings, for the orchestra as well as for Getz, of two of his songs (*Love is for the Very Young, A Song After Sundown*). Alec Wilder's *Three Ballads for Stan* and *Where Do You Go?* force Getz into contemplation, thereby making him explore his feelings more carefully than is often the case. And the most ambitious work of the concert, Eddie Sauter's *Tanglewood Concerto*, is a delightfully crafted, supple, multi-colored structure which allows Getz a considerable range of expressive roles: the light-hearted swinger, the dramatic protagonist, the introspective romanticist. All the composers wisely avoided the temptation to make the strings "jazzy," and they gave Getz not only the space in which to improvise but also the stimulation to go beyond mere fluency. N. H.

GRANT GREEN: *Street of Dreams.* Grant Green (guitar), Bobby Hutcherson (vibes), Larry Young (organ), Elvin Jones (drums). *I Wish You Love; Lazy Afternoon; Street of Dreams; Somewhere in the Night.* BLUE NOTE (S) 84253, (M) 4253* \$5.79.

Performance: Relaxed but not flaccid

Recording: Very good

Stereo Quality: Excellent

The term "mood music" need not necessarily be pejorative. In this set, for example, Grant Green and his colleagues are, as Leonard Feather aptly says in the notes,

STEREO CHAIRS

Designed by Bell Telephone Company



used in
Bell Telephone
World's Fair
Exhibit

ONLY \$2950 EACH
F.O.B. Providence

Scientifically designed for stereo or mono listening. Fiberglass shell has nylon upholstered seat and back, adjustable hi-fi earphones. Entire unit mounted on removable steel base. Similar chairs based on this design now being offered in hi-fi market for many times our price!

SHIPYARD SALVAGE Dept. B
1 Washington Ave., Providence, R.I. (02905)
(401) 467-7000

CIRCLE NO. 52 ON READER SERVICE CARD

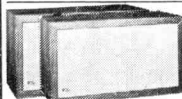
DEFA ELECTRONICS

AR-ACOUSTIC RESEARCH STEREO PACKAGE SPECIAL

ALL NEW AR ALL SILICON SOLID STATE STEREO AMPLIFIER



60 Watts per channel. Exceptionally low distortion. Freq. response ±db, 20Hz to 20kHz. Switched input circ.: Magnetic phono; tuner tape playback. 2 yr. guarantee incl. all parts, labor & shipping costs.



GUARANTEE covers

2 ALL NEW AR 3a THREE WAY SPEAKER SYSTEMS

Very low distortion and greater power handling cap. Oiled Walnut (other finishes avail.). 5 YR. labor, parts & shipping costs.

ARx2 2 SPEED TURNTABLE

Low flutter, rumble and wow. Exact speed. Incl. arm, oiled walnut base, dust cover and needle force gauge. 3 YR. GUARANTEE. PLUS: SHURE V15 Type II Cartridge, analog



computer-designed and measured Bi Radical Elliptical Stylus with Diamond Tip.

TOTAL SALE PRICE IF UNITS PURCHASED SEPARATELY \$870.50

WRITE FOR OUR LOWEST SPECIAL QUOTE FOR THIS PACKAGE & ANY OTHER SYSTEM OF YOUR CHOICE

STEREO SYSTEMS—COMPONENTS AT LOW DISCOUNT PRICES

Send For Our Quote Today!
We Carry All the Famous Brands.

DEFA ELECTRONICS CORP.
2207 Broadway, N.Y., N.Y. 10024
PHONE 874-0900 & 874-0901

CIRCLE NO. 22 ON READER SERVICE CARD
124

We Own The Sharpest Pencils In Town!



YOU SAVE MORE ON HI-FI COMPONENTS & TAPE RECORDERS

- We invite your test of our "We Will Not Be Undersold Policy."
- 15-day money-back guarantee.
- 2-yr. unconditional guarantee parts & labor no charge, at local warranty station, factory or our service dept.
- Trade-ins—highest allow. Send your list.
- Most items shipped promptly from our 250,000 inventory, fully insured.
- Our specialty—APO & Export.
- 23rd yr. dependable service world wide.

RATED #1 SERVICE—SATISFACTION ACCORDING TO NATION WIDE SURVEY.

Write For Our Price First
You'll Be Glad You Did

HI-FIDELITY

CENTER

"The House of Low Low Prices"

239-A East 149th St.,
New York, N.Y. 10451

CIRCLE NO. 31 ON READER SERVICE CARD
HI-FI/STEREO REVIEW

"cooking on a slow burner." The swinging is easy, the sound is mellow. In current argot, the album might have been titled "rapping on a Sunday afternoon." The four instrumentalists are well met. Although Hutcherson and Jones are generally regarded as among the jazz avant-garde, they fit naturally into Green's relatively uncomplicated, melody-based, leanly structured frame. And Larry Young is an organist who is content to be part of a whole. *N. H.*

BOBBY HACKETT: *Creole Cookin'* (see Best of the Month, page 88)

PEE WEE RUSSELL AND HENRY RED ALLEN: *College Concert* (see Best of the Month, page 87)

RECORDING OF SPECIAL MERIT

CHARLES TYLER: *Charles Tyler Ensemble*. Charles Tyler (alto saxophone), Joe Friedman (cello), Henry Grimes (bass), Ronald Jackson (drums), Charles Moffett (orchestra vibes). *Strange Uburu; Lacy's Out East; Three Spirits; Black Mysticism*. ESP-Disk (M) 1029 \$4.98.

Performance: **Forceful**
Recording: **Good**

This is the kind of jazz that did not exist before Ornette Coleman. Melody is free; the music's textures are not chordal, but rather are made up of changes in pitch and density, and of the shifting intersections of the various instrumental timbres as each player operates within an improvisatory frame.



CHARLES TYLER
"Action jazz," energetic and compelling

This is what critic Don Heckman once suggested might be called "action jazz." By that term he meant that the thrust of the new jazz after Coleman has involved a change "from conclusion to process, from the acquiring, molding or alteration of materials toward a predictable end to the concept of the act—no matter how unpredictable it may be—as a justifiable end in itself." And when the musicians involved, as here, are not only prodigiously energetic but also inventive, the action is substantial and compelling in the immediacy of its pow-

er. Classical cellists, by the way, should find Joe Friedman's extension of that instrument's capacities challenging. *N. H.*

RECORDING OF SPECIAL MERIT

T-BONE WALKER: *Stormy Monday Blues*. T-Bone Walker (vocals, guitar), Preston Love and Mel Moore (trumpets), John Ewing (trombone), Mel Jernigan, McKinley Johnson, and John Williams (reeds), Lloyd Glenn (piano), Mel Brown (guitar), Paul Humphrey (drums), Ron Brown (Fender bass). *I'm Gonna Stop This Nite Life; Cold Hearted Woman; Confusion Blues; Flower Blues*; and six others. BLUESWAY (S) BLS 6008, (M) BL 6008* \$4.79.

Performance: **Powerful and disciplined**
Recording: **Good**
Stereo Quality: **Very good**

Aaron Walker, a Texas-born blues minstrel now in his mid-fifties, has been an important influence in the blues field, having helped shape B. B. King and Lowell Fulson, among others. He is an unusually accomplished guitarist, and is able to make the instrument a second voice, as flexible and incisive a narrative tool as the voice that uses words to tell the story. Judging from this session, T-Bone has lost none of his fire and uncannily exact rhythmic placement—even his pauses pulsate. He is also a singer who knows how to make excitement mount. This disc is a thoroughly satisfying celebration of the blues. *N. H.*

(Continued on next page)

The University Ultra-D ...for people with champagne taste and a beer budget!

Meet the speaker system experts say is worth twice its price. Called the *Ultra-D*, it incorporates a magnificent 3-speaker system . . . a hand-rubbed cabinet walnut-finished on all four sides that's compact enough to fit almost anywhere. If you love life's finer things but don't think you can afford them all yet — start at your University dealer. He's an expert at making people with champagne tastes happy . . . even when they're on beer budgets.

SPECIFICATIONS: 10" ultra-linear woofer, 4" mid-range, 3½" direct radiator rigid diaphragm tweeter with aluminum voice coil — 30 Hz to beyond audibility — 32 watts Music Power — Brilliance/Presence Control—23 13/16" x 11 7/8" x 9¾". Less than \$70.*



Listen . . . University Sounds Better!

UNIVERSITY SOUND

A DIVISION OF LTV LING ALTEC, INC.
P.O. Box 1056, Oklahoma City, Okla., Desk #A-82.

*Manufacturers suggested resale price.

Stereo
High
Fidelity
Speaker
System



The show
people love...

"HENRY SWEET HENRY"

Broadway
original cast
recording on
ABC Records



ABCS-OC-4



ABC RECORDS, INC.
NEW YORK/BEVERLY HILLS
DIST. IN CANADA
BY SPARTON OF CANADA

CIRCLE NO. 74 ON READER SERVICE CARD
126

FOLK



RECORDING OF SPECIAL MERIT

BUNRATTY SINGERS: *Music and Song From the Medieval Banquet at Bunratty Castle*. Bunratty Singers (vocals). *The Black Bird*; *I Have a Bonnet*; *I Will Walk With My Love*; and fifteen others. CORAL © CRL 757497, (M) CRL 57497 \$4.79.

Performance: Beguiling
Recording: Fair
Stereo Quality: Helpful

Lucky travelers flying the North Atlantic air route on some lines to Europe may take time out, if they wish, to participate in a 24-hour Irish tour that starts at Shannon Airport and culminates in a medieval banquet at Bunratty Castle in County Clare. There they will not only be handsomely feted and fed, but will be serenaded by the Bunratty Singers, a group recruited from various parts of Ireland. If the recording is a true reflection of typical programming, the banquet entertainment is far above the usual tourist level. The singers and instrumentalists perform with exceptional taste and flair, and their program twinkles and sparkles with color and variety. Jigs, reels, and rollicking ballads alternate with set-dances played on pipes and sad old love songs in both Gaelic and English. Even though most of the material comes from the nineteenth century rather than medieval sources, it works somehow to evoke an archaic and appropriate spell. I particularly liked Cora Ryan's wistful performance of *I Know Where I'm Going* and Joy De Burgh O'Brien's sweet but not saccharine rendition of *Down by the Sally Gardens*, an old ballad that W. B. Yeats reshaped to an ancient air. P. K.

RECORDING OF SPECIAL MERIT

MUSIC FROM THE MORNING OF THE WORLD. Unidentified gamelan and other instrumentalists and vocalists recorded in Bali by David Lewiston. *Frog Song*; *Barong Dance*; *Lullaby*; *Ketjak Dance*; and seven others. NONESUCH © H 72015, (M) H 2015 \$2.50.

Performance: Fascinatingly varied
Recording: Good
Stereo Quality: Very good

The title of this album comes from Nehru's description of Bali as "the morning of the world." He meant it as a tribute to what appeared to be the harmoniously gentle civilization of Bali, where art and life were not separated, nature and man were still intimate. Yet Bali is not immune to the feral instincts of man, as was made evident by its participation in the murderous blood-lust which followed the unsuccessful Communist coup in Indonesia in 1966. However, the music here reflects Bali in a time of serenity, and it is a particularly instructive cross-section of that

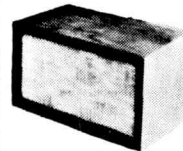
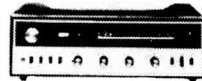
WE CAN SAVE YOU MONEY
ON THE FINEST OF STEREO COMPONENTS

SCOTT

STEREO SYSTEM SPECIAL

You save \$142.35

Scott 342B 65 Watt, solid-state FM Stereo Receiver Field Effect transistors to receive more stations more clearly; Silicon output transistors for effortless, instantaneous power; series-gate time switching multiplex circuitry for maximum separation; silver-plated front end for maximum sensitivity; superior control features you need to adjust the sound to your particular requirements.



Two Scott S-9 two-way Speaker Systems. Two-way design featuring a 6 inch woofer and a 3 inch tweeter. Fully enclosed in a walnut cabinet. Size: 14 x 8 3/4 x 6 inches.

Garrard 40 MK11 Record Player. Four-Speed 16, 33 1/3, 45 & 78, counter-balanced tone arm, plug-in cartridge shell stylus pressure gauge, will intermix records of any size in any sequence. Plus an ADC 220 stereo magnetic cartridge. System list price \$460.85. Buy from Barron for only \$328.50.



Try our quotes 5-Day Delivery Buy the Best for Less at Barron Write Now



BARRON ELECTRONICS,
242 S. Hamline Ave.,
St. Paul, Minn. 55105
Phone 698-3858 & 698-8927

CIRCLE NO. 11 ON READER SERVICE CARD



It's Smart
To Be Thrifty!

STEREO &
HI-FI BUYERS

BEFORE YOU BUY GET A RABSONS
QUOTE... YOU'LL BE GLAD YOU DID!

At Rabsons Competitive Prices, Reliability and Personal Service have been bywords for over 61 years

It's so EASY and SAFE to deal with Rabsons

- Up to 36 months to pay on Easy Pay Plan
- Centrally located—as close as your telephone—as near as your mail box
- Free Mail Order-Hi Fi Clinic Service
- Fast Air Mail Response on Quotation Requests
- Franchised Distributor for Hi Fi Lines
- 62 Years of business "Know How" to serve you better
- Shipments DOUBLE PACKED and FULLY INSURED
- "Attractive" Prices
- Warehouse on premises
- Fast Delivery—Large inventory permits processing and shipment promptly
- All merchandise brand new in Factory sealed cartons
- Save even more on complete system quotes
- Export Packing—220 Volts 50 Cycle merchandise a specialty
- Free list of monthly specials.



RABSONS 57 ST. INC.
119 West 57th Street, New York, N. Y. 10019
Tel. Area Code 212-247-0070

CIRCLE NO. 47 ON READER SERVICE CARD
HIFI/STEREO REVIEW

area's musical culture. Not only are there examples of the full Balinese orchestral style, with its plangent gongs and rustling bells, but there are also more informal musical situations, as well as accompaniments to various forms of Balinese drama. Of special interest are an *a cappella* lullaby and an epic chant—two tracks which made me wish for an album devoted entirely to the little-known vocal music of Bali. N. H.

RECORDING OF SPECIAL MERIT

CARL SANDBURG: *Sings His American Songbag*. Carl Sandburg (vocals, guitar). *What Was Your Name in the States?; The Horse Named Bill; Sucking Cider through a Straw*; and forty-seven others. CAEDMON (M) TC 2033 two discs \$11.90.

Performance: **Intimate and absorbing**
Recording: **Competent**

In 1952 and 1953, Mari Jinishian taped a series of informal sessions with Carl Sandburg. The tapes were put in storage until early 1967, when Miss Jinishian brought them to Caedmon. They constitute the best singing performances by Sandburg on record. Though hardly a professional vocalist, Sandburg was more artful than he admitted. He knew and loved these songs, and knew the situations and life styles out of which they came. This is expert story-telling, done with a comfortable mastery of dynamics and a keen relish for the diversity of the people who made the songs. As Oscar Brand says in the liner notes, this is "an experience in historical theater." N. H.

SPOKEN WORD



FOLK AND FAIRY TALES OF THE NEAR EAST. Christine Price (reader). CMS (M) 514 \$4.98.

Performance: **Soothing**
Recording: **Good**

Considering the kind of story coming in from the Near East recently, these tales out of Turkish and Persian folklore might provide a welcome interlude not only for toddlers but for adults satiated with news of war and international anger. *Sixty at a Blow* is a Turkish story about how to succeed as a giant-killer without having to kill a single giant—if you can develop a reputation for bravery by slaying a few flies. *The Serpent Fairy and the Magic Mirror*, also from Turkey, is another success story about a young man who uses the properties of an enchanted mirror to win the girl of his heart, and a whole realm that comes with her. *The Slippers of Misfortune*, an import from ancient Persia, has to do with a pair of shabby slippers whose wearer comes to learn the high price of miserliness. Miss Price, who is an

author and illustrator of children's books, reads them all (in English) in a pleasant tone of voice. P. K.

SHAKESPEARE: *The Taming of the Shrew*. An original-soundtrack recording. Elizabeth Taylor, Richard Burton, Cyril Cusack, Michael Hordern, Alfred Lynch, Alan Webb (players). Music by Nino Rota. RCA VICTOR (M) VDM 117 \$5.79.

Performance: **You're kidding, Kate!**
Recording: **Fair**

Wisely, the producer of this album has emphasized Richard Burton's performance in the movie version of the Shakespeare play. Elizabeth Taylor is kept to a minimum, which is just as well, not only because her reading of Kate's lines is as flat as a prairie, but also because her voice is surely the most unengaging of any professional actress within memory.

Burton is, naturally, a better than acceptable Petruchio, but not as good a one as might be expected from so gifted an actor. His voice often sounds thick and gritty and a bit slobbery, as if he were trying to chew the last bit of ha-ha out of his lines. What poetry there is in his speeches—and there is not a great deal in *Shrew*—Burton catches instinctively and performs magnificently.

I'm afraid this super-star version of what I have always found to be one of the more tiresome Shakespearean comedies is an almost complete fiasco on this record. Snippets of Nino Rota's wispy score writhe in and out of the scenes to less effect than the meagerest number from *Kiss Me Kate*. P. R.

*"Now, satisfy the
EYE!"*



AS-8 Credenza

Only after sound perfection was reached from this 3-way Hi Fi Speaker System was UTAH ready to incorporate it into fine furniture cabinetry. After all UTAH'S primary business is engineering and developing the epitome of sound perfection. Well, Sir, the "brass" (they're the sound engineering experts) said that the sound is there. We believe that you, the expert at choosing fine furniture will agree the eye appeal is there.

This provincial model is one of a family of three. There's an Early American version as well as a Contemporary style.

See your dealer, or write UTAH for complete information.

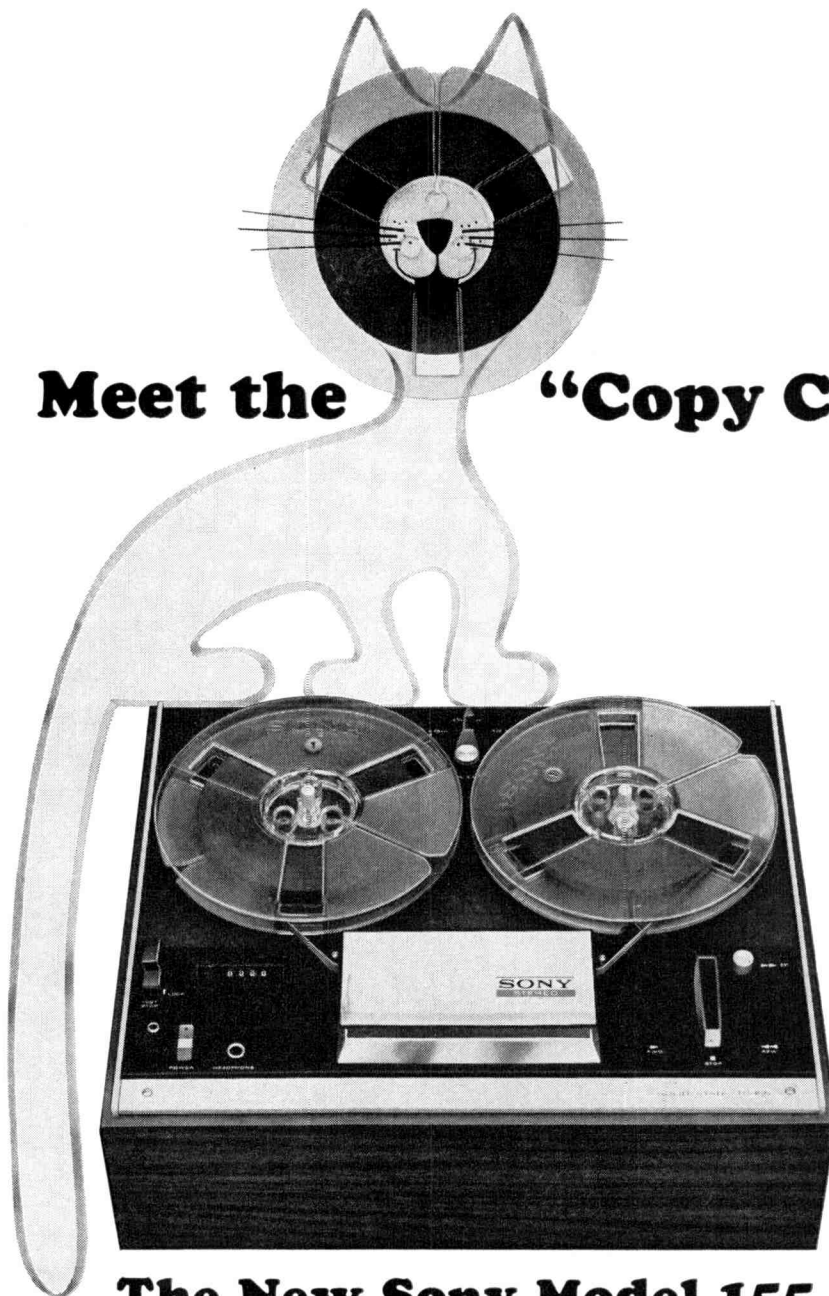


HUNTINGTON, INDIANA

12" ACOUSTIC SUSPENSION SYSTEM Price: \$189.00 Net
12" Woofer has Impedance: 8 Ohms
30 oz. magnet Power Handling: 60 Watts peak
Midrange horn, Compression Presence and Brilliance controls
tweeter L. C. Response: 35/20,000 HZ.
Crossover network

CIRCLE NO. 67 ON READER SERVICE CARD

Meet the "Copy Cat"



The New Sony Model 155 Playback/Dubbing Stereo Tape Deck!

If you now own a stereo tape recorder, you can become a "copy cat" for only **\$99.50** For the cost of about fifteen pre-recorded tapes, you can own your own complete 4-track stereo tape duplicating system and build a fabulous stereo tape library at a fraction of the cost of pre-recorded tapes! The Sony Model 155 is a complete stereo transport deck *with* solid-state playback pre-amplifiers *specifically designed to be used together with your present stereo tape recorder for dubbing!*

■ The Model 155 has features and performance never before heard of at under \$100.00! For example . . . Three speeds . . . Special filter for virtually flutterless performance . . . Retractable pinch roller to permit tape threading with one hand ease . . . Stereo headphone jack for private listening, and . . . the flexibility of vertical or horizontal operation! These are all features normally found on only much higher priced equipment. ■ The Model 155 can also be used just for stereo tape playback through your existing components or package stereo music system. Imagine . . . Sony quality true-fidelity stereo tape playback for under \$100.00! Complete with handsome walnut finish, low-profile base and optional dust cover. Let the Model 155 Playback/Dubbing Stereo Tape Deck make a "copy cat" out of you! And, as always . . . you can count upon the extraordinary "Sound of Sony"!

AMERICA'S FIRST CHOICE IN TAPE RECORDERS

SONY **SUPERSCOPE** *The Tapeway to Stereo*

© SUPERSCOPE, INC., 1967 8146 VINELAND AVENUE • SUN VALLEY, CALIFORNIA • 91352

CIRCLE NO. 56 ON READER SERVICE CARD.



HIFI/STEREO REVIEW'S CHOICE OF THE LATEST RECORDINGS

STEREO TAPE

Reviewed by WILLIAM FLANAGAN • NAT HENTOFF • IGOR KIPNIS
PAUL KRESH • PETER REILLY

CHOPIN: *Waltzes, Nos. 1-14; Fantaisie in F Minor, Op. 49; Barcarolle; Nouvelles Études; Boléro; Berceuse; Tarantelle.* Arthur Rubinstein (piano). RCA VICTOR (S) TR3 5013 \$10.95.

Performance: **Masterly but predictable**
Recording: **Good**
Stereo Quality: **Good**
Speed and Playing Time: **3¾ ips; 93'13"**

I know I'm not even supposed to *think* it, much less publish the opinion, but Rubinstein's playing of Chopin has become increasingly boring to me in recent years. And while it's only a guess, I get the eerie feeling that the playing is boring because the world's champion Chopin expert, now eighty-ish, is a little bored with the music himself. Acknowledge as one will the pianist's intellectual and physical staying power, I sense again and again on this Victor tape that he is playing *with* the music as much as he is playing it.

Granted, there isn't much else to do with the waltzes; unlike the mazurkas, for example, they are pure entertainment pieces that only occasionally cut deep. But the F Minor Fantaisie, the exquisite Barcarolle—these are pieces that one wishes Rubinstein would genuinely rethink rather than simply improvise new effects for.

I'm the last man in the world to deny an artist of Rubinstein's stature his due. Certainly his work here is masterly by conventional standards. But my own boredom with the pianist's mastery of Chopin is as much a fact as the mastery itself.

The recorded sound is somewhat variable, but generally good. W. F.

RECORDING OF SPECIAL MERIT

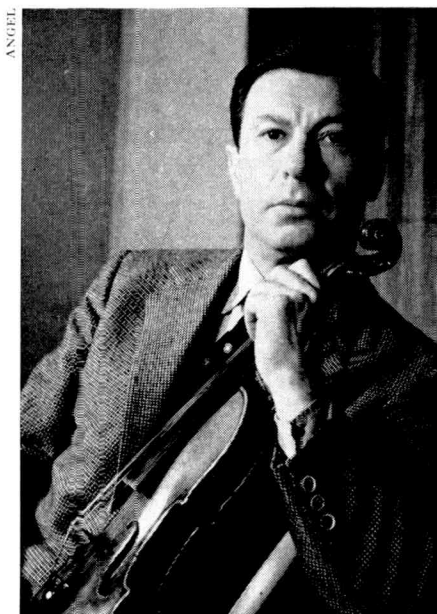
PROKOFIEV: *Violin Concerto No. 1, in D Major, Op. 19.* Nathan Milstein (violin); Philharmonia Orchestra, Carlo Maria Giulini cond. *Violin Concerto No. 2, in G Minor, Op. 63.* **GLAZOUNOV:** *Violin Concerto, in A Minor, Op. 82.* **DVORÁK:** *Violin Concerto, in A Minor, Op. 53.* Nathan Milstein (violin); New Philharmonia Orchestra, Rafael Frühbeck de Burgos cond. ANGEL (S) Y2S 3713 \$11.98.

Performance: **Superb**
Recording: **Excellent**
Stereo Quality: **Good**
Speed and Playing Time: **3¾ ips; 96'47"**

Explanation of symbols:

- (S) = stereophonic recording
- (M) = monophonic recording

This is an attractive package of Romantic and post-Romantic violin concertos for the tape collector. I'm particularly delighted by Milstein's work in the Prokofiev First Concerto. This is ordinarily one of the most alluring baits of the contemporary repertoire for the virtuoso violinist to run amok with so far as the "big throbbing tone" goes. Milstein, however, is subdued, elegant, yet warm and expressive. The Prokofiev Second Concerto yields its secrets rather less readily, being one of the composer's big pieces (like the Sixth Symphony) that *act* like all the most accessible of the composer's work but



NATHAN MILSTEIN

An attractive package of violin concertos

somehow won't succumb to casual listening. But the violinist rises to the occasion, and carries this more knotty work off quite impeccably.

It is further to Milstein's credit that he brings just the right gesture to the rather glib, attractive sentiments of the Glazounov Concerto. And there is no hint of Brahmsian overweight to his performance of the enchanting Dvořák piece. The orchestral support is absolutely tops in each case and, although I haven't the slightest notion whether Angel so intended, the pieces have been juxtaposed to set each other off with good effect.

The praise is ended. The recorded sound and stereo strike me as being a little more lively in the Prokofiev First than in the other pieces, but they are of high quality throughout. W. F.

RECORDING OF SPECIAL MERIT

RACHMANINOFF: *Symphony No. 1, in D Minor, Op. 13.* Philadelphia Orchestra, Eugene Ormandy cond. COLUMBIA (S) MQ 906 \$7.95.

Performance: **Sensational**
Recording: **Superb**
Stereo Quality: **Discreet**
Speed and Playing Time: **7½ ips; 43'56"**

For many years the Rachmaninoff First Symphony, written in 1895 when the composer was twenty-two, was little more than a rumor. The young Rachmaninoff was so depressed by the first performance of the work under Alexander Glazounov in St. Petersburg in 1897 that he wouldn't allow the manuscript to be published, finally tore it up, and refused to write another note for three years. Fifty years later, after the composer's death (1943), somebody found the orchestral parts in the archives of the Leningrad Conservatory. The symphony got a performance in Moscow and Soviet critics cheered, but the musical world in general was not set on its ear. The verdict of British musicologist Robin Hull was typical: "a disaster of youthful pride." Earlier recordings of the work, of which one by the Leningrad Philharmonic still survives in the catalog, did little to enhance its reputation as a meandering, murky orchestrated piece of bad musical tailoring.

Under Ormandy's sympathetic and imaginative direction, it still meanders at times, and still echoes the influences of Tchaikovsky and Rimsky-Korsakov in its self-indulgent romanticism, but it also flowers luxuriantly and reveals its outlines as a dramatically structured and orderly effort rather than a mere amorphous excursion in self-pity and melancholy. And there are hints of the haunting melodies, the peremptory outcries, and the long, lyrical flow of the songful passages that mark his later works and make lovers of his Second and Third Symphonies (like myself) return again and again for refreshment at their musical streams. It is a pleasure to be led through this terrain by Ormandy, a guide who has made himself thoroughly familiar with its geography, and the shimmering, sensuous sound of the Philadelphia, which can drown some works in sonic whipped cream, is entirely appropriate in this performance. P. K.

RECORDING OF SPECIAL MERIT

SCHUBERT: *Sonata in A Major, Op. 120 (D. 664); Hungarian Melody (D. 187); Sonata in A Minor, Op. 143 (D. 784); Twelve Waltzes, Op. 18 (D. 145).* Vladimir

If you're around
New York City
and like shopping
great Hi-Fi stores -
see this man...



HE'S OUR DEALER!

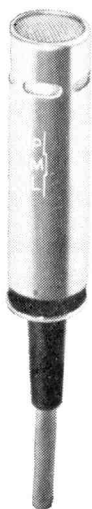
Allan Pearlman, Manager Audio Department,
Sam Goody (West Side store)
250 West 49th St., New York, N. Y.

Sam Goody is one of the largest high fidelity
retailers in the country. Sam Goody's clientele
is largely composed of knowledgeable audio-
philes. Concerning Pioneer, Allan Pearlman
states: "Sam Goody chose Pioneer for one of
its receiver lines because Pioneer's top quality
and moderate price give our customers the
value Sam Goody is noted for."

PIONEER 

PIONEER ELECTRONICS U.S.A. CORP.
140 Smith St., Farmingdale, L. I., N. Y. 11735
(516) 694-7720

At \$400 this would be
a great little microphone.
At \$99.50 it's a great
big miracle.



If you had \$400 to blow on a new
microphone, you'd expect the
moon: a professional-quality con-
denser mike with "field effect
transistors," the finest of printed
circuitry, solid state at its solid best
... to upgrade your system to top
recording studio standards of
realism.

Now you can have all of that for far less
in the new PML 71 Series Micro-Mini-
ature Condenser Microphones. Perform-
ance? Superb signal-to-noise ratio. High
sensitivity. A linear frequency response
of 40 Hz to 18 kHz \pm 3 db. Selectable
output impedance: 30/50, 200 or 600 Ω
balanced or HI-Z unbalanced.

MICROPHONES

Cardioid (15 db rejection) EC71 \$109.50
Omni-Directional EK71 \$ 99.50
(Microphone supplied with stand adaptor
and 12 ft. cable to power supply)

POWER SUPPLIES

7140S Battery Operated, Stereo/Mono
with two 12 ft. signal cables \$49.50
7130 A.C. (110/125v), Mono
with one 12 ft. signal cable \$69.50
7130S A.C. (110/125v), Stereo/Mono
with two 12 ft. signal cables \$89.50

Microphones, power supply and signal cables
are all fitted with locking connectors.

At your dealer or write Dept. R1


FROM SWEDEN

ERCONA
CORPORATION
432 PARK AVENUE 5D,
NEW YORK, N. Y. 10016

CIRCLE NO. 78 ON READER SERVICE CARD
130

Ashkenazy (piano). LONDON $\text{\textcircled{S}}$ LCL 80186
\$7.95.

Performance: Ideal
Recording: Good
Stereo Quality: Good
Speed and Playing Time: 7 $\frac{1}{2}$ ips; 44'16"

It strikes me that there are few, if any,
pianists of Vladimir Ashkenazy's generation
quite like him. The best of the younger ones
eschew what is infelicitously described as
the Grand Manner in favor of a more intel-
lectual, sharply profiled, even abstract ap-
proach (and heaven knows, a good deal of
the Romantic repertoire, in particular, has
profited from the cleansing). But among the
younger pianists, there are also the eccen-
trics, the ones who *affect* the Grand Manner
even though it is suited neither to their tem-
peraments nor their time.

Ashkenazy, almost uniquely, has it both
ways. His playing is sharp, intellectually dis-
ciplined, and technically formidable. Schu-
bert's A Minor Sonata comes over with the
drive and cohesiveness of the best of Bee-
thoven's sonatas. Yet the pianist yields to
Schubert's lyricism without inhibition. And
how he manages to bring the variety he does
to the stultifying repetition in the A Major
Sonata is a mystery. The waltzes are played
crisply and stylishly, and the *Hungarian Mel-
ody* is attractively unmannered.

The recorded sound and stereo treatment
are both very good. W. F.

COLLECTIONS

VLADIMIR HOROWITZ: *A Collection
of Vladimir Horowitz*. Chopin: *Scherzo
No. 2, in B-flat Major, Op. 31; Etude in E
Major, Op. 10, No. 3; Waltz No. 3, in A
Minor, Op. 34, No. 2; Ballade No. 3, in A-
flat Major, Op. 47; Mazurka No. 32, in C-
sharp Minor, Op. 50, No. 3; Polonaise No.
7, in A-flat Major, Op. 61 (Polonaise-Fan-
tasia)*. Schumann: *Kinderscenen, Op. 15:
No. 7, Träumerei*. Liszt-Horowitz: *Hun-
garian Rhapsody No. 2, in G-sharp Minor*.
Moussorgsky: *Pictures at an Exhibition*.
Vladimir Horowitz (piano). RCA VICTOR
 $\text{\textcircled{M}}$ TR 3 5007 \$10.95.

Performance: Horowitz of the Fifties
Recording: Fair
Speed and Playing Time: 3 $\frac{3}{4}$ ips; 81'13"

It was a good idea for RCA Victor to assem-
ble a reel of this type, demonstrating the
unique abilities of the Horowitz of over a
decade ago. The first sequence is all Chopin,
and if there is a highlight, it certainly is the
Polonaise-Fantasia, one of the most incredi-
ble of this pianist's many Chopin perfor-
mances. That item stems from a "live" rec-
ital, as do the Waltz in A Minor, the Liszt
blockbuster (the last two are from Horo-
witz's twenty-fifth anniversary album of
1953), and the Moussorgsky. Altogether,
six of Horowitz's discs were combed for this
repertoire (Victor does not specify which,
but they are LM 2137, LM 1707, LM 6014,
LVT 1032, LM 1957, and LM 2357).

In both the Chopin Waltz and the Liszt,
the engineers have removed the applause
(this had already been done for the Mous-
sorgsky in the disc version), and the result,
especially in the Hungarian Rhapsody, is son-
ically most unsatisfactory (with the last note
clipped and echo added). The discs on the
whole have a brightness missing on tape,
though Horowitz's glassy-toned piano contin-

**WRITE FOR
QUOTATION**

FACTORY SEALED CARTONS
FRANCHISED DISTRIBUTOR
QUICK SHIPMENT

**WE GIVE
DISCOUNTS
ON HI-FI
COMPONENTS**

**SOUND
REPRODUCTION
INC.**

34 New Street, Newark, N. J. (07102)
(201) Mitchell 2-6816

CIRCLE NO. 57 ON READER SERVICE CARD

Why?
DO THOUSANDS OF HI-FI
ENTHUSIASTS BUY FROM
AUDIO UNLIMITED

It's Obvious!

- LOWEST PRICES
- FAST SERVICE
- FACTORY SEALED UNITS
- FULLY INSURED SHIPMENTS
- PACKAGE DEALS—SAVE MORE
- FRANCHISED DISTRIBUTORS

Write for **FREE Listing today**

**SEND US YOUR LIST
FOR OUR AIR MAIL
QUOTE TODAY**

Visit Our Showroom and Warehouse
CLOSED MONDAYS

 **AUDIO unlimited, inc.**
715-S Second Ave. (Nr. 38), N.Y., N.Y. 10016

ues to sound glassy, unlike Columbia's recent recordings of the pianist. On the other hand, there is a degree less distortion present in some cases; the ending of the *Pictures* is an obvious case in point. I don't think that Victor has been entirely successful in transferring this material to tape, especially at the slower speed, for there is some obvious flutter (for instance, in the second of the *Pictures*). But those who are willing to put up with some of these disadvantages (particularly those who don't own the discs) will find the reel extremely rewarding. The tape box should by all rights have had something more extensive for program notes than just a one-paragraph puff piece.

I. K.

ENTERTAINMENT

ELLA FITZGERALD AND DUKE ELLINGTON: *Ella and Duke at the Côte D'Azur*. Ella Fitzgerald (vocals), Jimmy Jones (piano), Grady Tate (drums), Jim Hughart (bass); the Duke Ellington orchestra. *Lullaby of Birdland; It Don't Mean a Thing; Rose of the Rio Grande; The Matador; Old Circus Turn-Around Blues*; and ten others. VERVE Ⓢ FV6 4072-2 \$9.95.

Performance: **Polished but seldom seizing**
Recording: **Very good**
Stereo Quality: **Good**
Speed and Playing Time: **3¾ ips; 75'57"**

Recorded at the 1966 International Festival of Jazz in the French cities of Antibes and Juan-les-Pins, this program will also be part of the sound-track of a film Norman Granz is producing with the title "Duke Ellington at the Cote D'Azur." Musically, this tape—the equivalent of two twelve-inch discs—is insubstantial. Miss Fitzgerald, a singer of undeniable technical skill, is effervescently charming on such buoyant excursions as *Jazz Samba* and *It Don't Mean a Thing*, but these are essentially exercises in merry virtuosity rather than the kind of jazz singing that raises performer and audience to exultation. On ballads, Miss Fitzgerald is appealing, but in an oddly girlish way, in contrast, let us say, to the incisive maturity of Carmen McRae. With the exception of *All Too Soon*, on which tenor saxophonist Ben Webster is a guest performer, the instrumental numbers are not optimum Ellington. The band sounds loose, too loose, and the soloists somewhat distracted—perhaps by the scenery?

N. H.

CLAUDINE LONGET: *Claudine*. Claudine Longet (vocals); orchestra, Nick De Caro arr. *A Man and a Woman; Here, There and Everywhere; Meditation; Hello, Hello; My Guy*; and five others. A & M Ⓢ AM 121 \$5.95.

Performance: **Nice**
Recording: **Good**
Stereo Quality: **Very good**
Speed and Playing Time: **7½ ips; 26'08"**

Claudine Longet is a vastly pleasant-sounding young lady who sings a collection of French, English, and Brazilian songs here. She sounds best in the French songs such as *Tu as beau sourire* and the theme song from *A Man and a Woman*. *Sunrise, Sunset* founders in her interpretation, as does *My Guy*. Considering the price asked for less than thirty minutes of music, Mlle. Longet's rather standard performances, and a repertoire

Kodak

SEVEN SPEEDS. AND THEN SOME.



Meet the KODAK INSTAMATIC M95 Movie Projector—with seven projection speeds. It lets you show movies in fascinating slow motion, at normal speed or in hilarious fast action—either forward or reverse! You can even freeze on a single frame for a good long look. Switch from one speed to another as often and as fast as you wish.

There's more: Flick another switch and this Kodak projector is all set to show either super 8 or regular 8mm movies. And

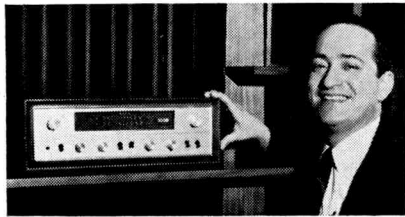
they come on bright and stay bright, thanks to the bright new quartz halogen DNF lamp.

Many other features. Fully automatic film threading. Large 400-foot reel capacity. Low silhouette design, handles like an attaché case when closed. Die-cast metal body. Choice of big-image 22mm f/1.5 lens or f/1.5 zoom lens. At your Kodak dealer's. From less than \$200.

Price subject to change without notice.

Kodak Instamatic® M95 Movie Projector

If you're around Greenwich, Conn. and like shopping great Hi-Fi stores - see this man...



HE'S OUR DEALER!

Bob Bonoff, Owner of The Sound Gallery 56 West Putnam Ave., Greenwich, Connecticut Bob Bonoff specializes in some of the most elaborate custom installations in an area where customers usually specify "the best". Mr. Bonoff has a reputation as a man who knows his equipment and is an uncompromising critic of what he sells. He states: "I chose Pioneer because I found their products meet or exceed the printed specifications. They do not lie."



PIONEER ELECTRONICS U.S.A. CORP.
140 Smith St., Farmingdale, L.I., N.Y. 11735
(516) 694-7720

that could hardly be called adventurous, I think you can safely pass this one by. P. R.

TOM PAXTON: *Outward Bound*, Tom Paxton (vocals and accompaniment). *Leaving London*; *The King of My Backyard*; *Is This Any Way To Run An Airline?*; *Talking Pop Art*; and nine others. ELEKTRA © EKX 7317 \$5.95.

Performance: Desultory
Recording: Good
Stereo Quality: Who needs it?
Speed and Playing Time: 3 3/4 ips; 37'47"

Some note of protest seems to be lurking behind the pseudo-folk lyrics of these vaguely topical songs, but I was unable to figure out quite what it is, since so much of Mr. Paxton's life seems to be taken up by such boring experiences as waiting around for airplanes, attending auctions of pop art, and standing in line for the mail at the London office of American Express. Actually, his comments about airlines and art make up the livelier and more original numbers in a dispirited set, sung in the kind of voice a clothespin might affect if it could be taught to play a guitar. P. K.

OSCAR PETERSON: *Soul Español*, Oscar Peterson (piano), Sam Jones (bass), Louis Hayes (drums), Marshall Thompson (timbales), Harold Jones (percussion), Henley Gibson (conga drum). *Mamba de Carnaval*; *Carioca*; *Soulville*; *Samba Sensitive*; and six others. LIMELIGHT © LLC 86044 \$7.95.

Performance: Largely bland
Recording: Very good
Stereo Quality: Excellent
Speed and Playing Time: 7 1/2 ips; 38'18"

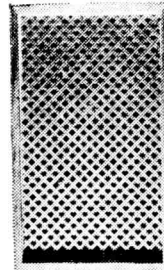
As might be expected, Oscar Peterson's foray into Latin jazz is smooth, polished, and of no substantial interest either intellectually or emotionally. He is, to be sure, a formidable technician, but his ideas are ordinary and he seldom generates the depth of feeling which separates the artisan from the artist. On two tracks, *Mamba de Carnaval* and *How Insensitive*, he does get somewhat beneath the surface into the delicate, bittersweet core of bossa-nova rue. But the rest is glib. N. H.

COLLECTIONS

FILM ON FILM—GREAT MOVIE THEMES. Enoch Light and the Light Brigade. Themes from *Born Free*, *The Sand Pebbles*, *Hawaii*, *Is Paris Burning?*, *Lady L*, *Two Lovers*, *The Blue Max*, *Who's Afraid of Virginia Woolf?*, *Alfie*, and others. PROJECT 3 © PL 5005 \$6.95.

Performance: Undistinguished
Recording: Good
Stereo Quality: Standard
Speed and Playing Time: 7 1/2 ips; 38'13"

The choice of material here is impeccable, but Mr. Light's stock in trade is to take themes of character, like the ones from *Born Free*, *Alfie*, and *Who's Afraid of Virginia Woolf?*, and marinate them in a broth of harp glissandos, trombones, tubas, French horns, woodwinds, and sobbing strings until they drown. The result is a continuous ribbon of bland sound that can be turned on or off at any point with no loss or gain to the "listener." It is best played with the volume turned way down by those in exceptional need of soothing. P. K.



MODEL SP5A

Excellent music and voice reproduction needs a good speaker system derived from current state of art and classical design. Free of obsolescence. Patent applied for. Now offering two models with several styles to choose.

TANG SP5AX A new speaker with "controlled impedance" for transistorized amplifiers.

- 1) Linearized speaker impedance vs. frequency relationship.
- 2) 45 — 18500 Hz ± 3 db at 16 ohms; system resonance 40 Hz.
- 3) Rear exit to couple to walls as low frequency horn.
- 4) Acoustical chamber and diffracting grill in front of speaker.
- 5) High efficiency 5" special speaker with heavy magnet enclosed in solid walnut cabinet 10" x 7" x 6" \$39.95 each

TANG SP5A Same as above except without impedance control, Response 45 — 18500 ± 4 db at 8 ohms \$29.95 each

Style 2 with fluffy white grill cloth add \$5.00 each.

At your dealers or inquire direct

TANG INCORPORATED

P. O. Box 162

Framingham Center, Mass. 01701

Direct mailing service available if no dealer in your area.

CIRCLE NO. 59 ON READER SERVICE CARD

STATEMENT OF OWNERSHIP, MANAGEMENT AND CIRCULATION. (ACT OF OCTOBER 23, 1962; SECTION 4369, TITLE 39, UNITED STATES CODE.)

1. Date of Filing: October 1, 1967. 2. Title of Publication: HIFI/Stereo Review. 3. Frequency of Issue: Monthly. 4. Location of known office of publication: 307 N. Michigan Avenue, Chicago, Illinois 60601. 5. Location of the headquarters or general business offices of the publishers: One Park Avenue, New York, New York 10016.
6. Names and addresses of publisher, editor, and managing editor: Publisher: Philip T. Hefernan, One Park Avenue, New York, New York 10016, Editor: William Anderson, One Park Avenue, New York, New York 10016, Managing editor: William Livingstone, One Park Avenue, New York, New York 10016.
7. Owner: Ziff-Davis Publishing Company, One Park Avenue, New York, New York 10016, William B. Ziff, One Park Avenue, New York, New York 10016, Priscilla R. Stafford, One Park Avenue, New York, New York 10016.
8. Known bondholders, mortgagees, and other security holders owning or holding 1 percent or more of total amount of bonds, mortgages or other securities: None.

9. Paragraphs 7 and 8 include, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, also the statements in the two paragraphs show the affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner. Names and addresses of individuals who are stockholders of a corporation which itself is a stockholder or holder of bonds, mortgages or other securities of the publishing corporation have been included in paragraphs 7 and 8 when the interests of such individuals are equivalent to 1 percent or more of the total amount of the stock or securities of the publishing corporation.

10. Extent and nature of circulation:

Issue No.	Copies Each Issue During Preceding 12 Months		Single Issue Nearest to Filing Date
	Issue No.	Copies Each Issue During Preceding 12 Months	
A.	Total No. copies printed (net press run)	211,770	209,210
B.	Paid circulation		
1.	Sales through dealers and carriers, street vendors and counter sales	32,350	29,500
2.	Mail subscriptions	134,370	134,260
C.	Total paid circulation	166,720	163,760
D.	Free distribution (including samples) by mail, carrier or other means	2,750	2,750
E.	Total distribution (Sum of C and D)	169,470	166,510
F.	Office use, left-over, unaccounted, spoiled after printing	42,300	42,700
G.	Total (Sum of E & F—should equal net press run shown in A)	211,770	209,210

I certify that the statements made by me above are correct and complete.
PHILIP SINE, Treasurer

Olson

FREE

Fill in coupon for a FREE One Year Subscription to OLSON ELECTRONICS' Fantastic Value Packed Catalog—Unheard of LOW, LOW PRICES on Brand Name Speakers, Changers, Tubes, Tools, Stereo Amps, Tuners, CB, Hi-Fi's, and thousands of other Electronic Values. Credit plan available.

NAME _____
ADDRESS _____
CITY _____ STATE _____
GIVE ZIP CODE _____

If you have a friend interested in electronics send his name and address for a FREE subscription also.

OLSON ELECTRONICS, INC.
786 S. Forge Street Akron, Ohio 44308



TAPES IN THEATRICALS

HOW OFTEN have you attended a play performed by an amateur or semi-professional group and cringed when a sound-effects record, scheduled to be heard at a particularly dramatic moment, turned out to be either inaudible or scratchy or marred because the stylus skipped about in the grooves? Besides embarrassing the sound-effects man, such a boo-boo certainly has a bad effect on the actors. If you're an active tape recordist, you could be the solution to a drama group's sound-effects problems—and also help in a number of other ways.

For example, rehearsals can be recorded and duplicated for distribution to understudies or others who were not present. The director, with a tape recording, can listen at home for correct delivery, enunciation, and other problems of comprehensibility that may have escaped his attention at a live rehearsal. And many an actor, after hearing a tape of his voice for the first time, will concede (after he recovers from the shock) that a little more work on his part might be in order.

If the drama group is presenting a musical or operetta, the tape recordist becomes even more valuable. He can supply the cast with tape recordings of the songs from previous performances or from a disc. Often the director will decide that the "original-cast" recording of a show is not what he had in mind and will make up a tape of the songs the way he wants them done, drawing on several different records and inserting his own pianist's rendition when no commercial disc is available. Or if the rehearsal pianist announces the possibility of future absences, the director will simply ask him to record a tape of the music for use during those absences; he can then shuttle the tape back and forth to the various sections as needed. Missing, of course, will be the tempo changes and modifications a "live" pianist could carry off at will, but often such a stand-by tape can make a rehearsal possible at times when otherwise there would be none. The dance scenes, with the music recorded on tape, could be rehearsed independently in another hall without disturbing the dramatic work. If the script calls for sound effects, they can be put on tape, thus saving the disc from the wear and tear of rehearsals. And if the necessary sound effect is not available on a disc, it can be recorded especially for the performance. With the sound effects on tape, and in proper sequence, the sound-effects problem is made easy. Leader tape is inserted between the portions of tape containing the effects, and if needed, you can write on the leader tape identifying the next effect. If any script changes come up, adding or subtracting sound effects becomes as easy as making two splices.

You may be asked to record a sequence or two from the production which can be played on a local radio station when the director takes to the air to publicize his forthcoming performances. If well recorded, one such brief sequence could even be used by your local station as part of a one-minute "spot" public-service announcement to be broadcast again and again.

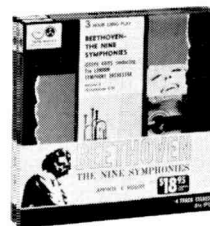
Of course, you'll receive no pay for your work, but you will gain the satisfaction of helping create a show that brings pleasure to others, you will make a host of new friends, and you will get a chance to *really* put that tape machine of yours to use.

NEW FROM TAPE-MATES

BEETHOVEN

THE NINE SYMPHONIES

JOSEF KRIPS
conducting
THE LONDON SYMPHONY ORCH.



APPROX.
6 HOURS
\$18⁹⁵

*Suggested
Retail Price*

TMS-2R-1
(2 REEL SET)

PLUS A complete catalog of over 160 HOURS or Tape-Mates 3 hour long-play stereo albums of:

POP/CLASSICS/JAZZ/VOCAL
SHOW/VARIETY/DANCE/ETC. **\$11⁹⁵**

All 3 3/4 ips on 7" reels

Suggested Retail Price

Ask your local dealer or write for complete catalog information to:

TAPE-MATES



5727 W. Jefferson Blvd., Los Angeles, Cal. 90016

CIRCLE NO. 6 ON READER SERVICE CARD



Introducing...

THE TOUJAY PEDESTAL

Created by Jerry Joseph.

The Pedestal is constructed of select walnut and made to look like a solid block of wood. Its classic lines will easily blend with traditional and contemporary interiors. Designed as a space saver, this cabinet rotates on its own swivel base and will comfortably house full size receivers, turntables, tape recorders and more than 100 records. At better Audio Dealers or write for brochure.

Toujay
designs®

146 EAST 53RD ST., N.Y.C.
TEL 752-2354

CIRCLE NO. 63 ON READER SERVICE CARD

HI FI / STEREO REVIEW CLASSIFIED

COMMERCIAL RATE: For firms or individuals offering commercial products or services. 75¢ per word (including name and address). Minimum order \$7.50. Payment must accompany copy except when ads are placed by accredited advertising agencies. Frequency discount: 5% for 6 months; 10% for 12 months paid in advance.

READER RATE: For individuals with a personal item to buy or sell. 45¢ per word (including name and address). **No minimum! Payment must accompany copy.**

GENERAL INFORMATION: First word in all ads set in bold caps at no extra charge. Additional words may be set in bold caps at 10¢ extra per word. All copy subject to publisher's approval. **Closing Date:** 1st of the 2nd preceding month (for example, March issue closes January 1st). Send order and remittance to: Hal Cymes, **HiFi/STEREO REVIEW**, One Park Avenue, New York, New York 10016.

EQUIPMENT

WRITE for quotation on any Hi Fi components: Sound Reproduction Inc., 34 New St., Newark, N.J. 07102. Mitchell 2-6816.

HI-FI Components Tape Recorders, at guaranteed "We Will Not Be Undersold" prices. 15-day money-back guarantee. Two year warranty. No Catalog. Quotations Free. Hi-Fidelity Center, 239 (HC) East 149th St., New York 10451.

FREE! Send for money saving stereo catalog #H1R and lowest quotations on your individual component, tape recorder, or system requirements. Electronic Values, Inc., 200 West 20th St., N.Y., N.Y. 10011.

KIT Experts—Dynaco Specialists—Kits at reasonable prices are our specialty. Also custom wired kits guaranteed to exceed factory standards at substantial savings. Beautiful handcrafted Walnut cases for complete Dynaco line, plus everything in audio. Kitcraft, Dept. HS-168, 738 Washington Avenue, Brooklyn, N.Y. 11238. MA-2-5230.

TAPE recorders. Hi-Fi components. Sleep Learning Equipment tapes. Unusual values. Free catalog. Dressner, 1523R Jericho Turnpike, New Hyde Park, N. Y. 11040.

LOW, Low quotes: all components and recorders. HiFi, Roslyn, Penna. 19001.

GOVERNMENT Surplus Receivers, Transmitters, Snopesopes, Radios, Parts, Picture Catalog 25¢. Meshna, Nahant, Mass. 01908.

DYNAKIT, ACOUSTIC RESEARCH AND OTHER NAME brand stereo components at 10% over dealer's cost! Interested? Send 10¢ for details to Stereo Club of America. PO Box 2474, Milwaukee, Wisconsin 53214.

RECEIVING & INDUSTRIAL TUBES, TRANSISTORS, All Brands—Biggest Discounts. Technicians, Hobbyists, Experimenters—Request FREE Giant Catalog and **SAVE! ZALYTRON**, 469 Jericho Turnpike, Mineola, N.Y. 11501.

THE Price Is Right! Hi-Fi Components. J. Wright Co., 65-B Jensen St., East Brunswick, N.J. 08816.

BUY BRITISH EQUIPMENT DIRECT FROM ENGLAND. SAVE UP TO 40%. DECCA MK4 SC4E CARTRIDGE \$75.90 INCLUDING INSURED AIRMAIL; AUDIO DESIGN LABORATORY 9 ARM \$77.90 POST PAID; TWO QUAD ELECTROSTATIC SPEAKERS DELIVERED NEW YORK \$372.45. PAYMENTS BY CERTIFIED CHECK. GOODWIN LTD., 7 BROADWAY, WOOD GREEN, LONDON N. 22.

DON'T THROW YOUR OLD CARTRIDGE AWAY. Send us \$19.95 and any old cartridge. We will ship **PREPAID** any one of the following top rated elliptical diamond stereo cartridges **NEW:** Pickering V15AME3, Empire 888SE, Shure M55E, Stanton 500E, Shure M80ED (for Lab 80), M80-ED19 (for Dual 1019). Write for lowest quotations all stereo components. **DEFA ELECTRONICS**, 2207 Broadway, New York, N.Y. 10024.

FOR SALE

JAPANESE PRODUCTS CATALOG by air mail \$5, sea \$3. Intercontinental, CPO 1717, Tokyo, Japan.

ELECTRONIC Bargains—Diodes, Transistors, Tubes, Courses. Free Catalog—Immediate Shipment. Cornell, 4215-H University, San Diego, Calif. 92105.

METAL—Treasure detectors, most sensitive. Lowest prices. Free catalog. Jetco Instruments, Box 2880-E, Huntsville, Texas 77340.

TECH MANUALS, SOLD ON MILITARY SURPLUS AND CIVILIAN ELECTRONIC EQUIPMENT. GIVE MAKE, MODEL FOR MANUAL QUOTE. SLEP ELECTRONICS, DRAWER 178HF, ELLENTON, FLORIDA 33532.

SHORTWAVE RECEIVERS AND TRANSCEIVERS. "68" MODELS BY HAMMARLUND, NATIONAL, DRAKE, SWAN. TRADES ACCEPTED ON YOUR TUBES, TEST EQUIPMENT AND GOVERNMENT SURPLUS. WRITE: BILL SLEP, W4FHY, SLEP ELECTRONICS, DRAWER 178HF, ELLENTON, FLORIDA 33532.

UHER 4000L, \$200.00. Microphone \$25.00. N. Fleming, 145 Hillside, Villanova, Pa.

LATEST TELEPHONE BUGGING COUNTERMEASURES: ENGINEERING LABORATORIES, BOX 1036, ANDERSON, INDIANA 46015.

PROXIMITY switch. Detects nearness of human body! Free information. Claremont Products, 860 Reed, Claremont North, Calif. 91711.

TAPE AND RECORDERS

RENT Stereo Tapes—over 2,500 different—all major labels—free brochure. Stereo Parti, 1616-G Terrace Way, Santa Rosa, California 95404.

BEFORE RENTING Stereo Tapes try us. Postpaid both ways—no deposit—immediate delivery. Quality—Dependability—Service—Satisfaction—prevail here. If you've been dissatisfied in the past, your initial order will prove this is no idle boast. Free catalog. Gold Coast Tape Library, Box 2262, Palm Village Station, Hialeah, Fla. 33012.

RENT 4-TRACK STEREO TAPES—Dependable service our keynote—**ALL MAJOR LABELS—FREE CATALOG** (48 States)—TRIMOR Company, P.O. Box 748, Flushing, N.Y. 11352.

HI-FI Components Tape Recorders, at guaranteed "We Will Not Be Undersold" prices. 15-day money-back guarantee. Two-year warranty. No Catalog. Quotations Free. Hi-Fidelity Center, 239 (HT) East 149th St., New York 10451.

SCOTCH Recording Tapes. Tape Recorders. Catalog 5¢. Tower, Lafayette Hill, Pa. 19444.

RENT STEREO TAPES—75¢ week. Catalog. Art's Tape Service, 1613½ North Mariposa Ave., Hollywood, Calif. 90027.

FREE Harrison Stereo Cartridge Tape Catalog, information on Autotape Club. Trade, Rent, Buy tapes. Box 19086-A, Indianapolis, Ind. 46219.

TAPEMATES makes available to you **ALL 4-TRACK STEREO TAPES—ALL LABELS**—postpaid to your door—at tremendous savings. For free brochure write: **TAPEMATES**, 5727 W. Jefferson Blvd., Los Angeles, California 90016.

TAPE RECORDER SALE. Brand new, nationally advertised brands, \$10.00 above cost. Special prices on Hi-Fi components and color television. Arkay Sales, 1028-A Commonwealth Avenue, Boston, Mass. 02215.

CASH for your unwanted prerecorded tapes. Reder, 81 Forshay Road, Monsey, New York 10952.

SCOTCH RECORDING TAPE, lowest prices. **TAPE CENTER**, Box 4305, Washington, D.C. 20012.

STEREO TAPES. Save up to 60% (no membership fees, postpaid anywhere USA). Free 60-page catalog. We discount batteries, recorders, tape accessories. Beware of slogans "not undersold," as the discount information you supply our competitor is usually reported to the factory. **SAXITONE**, 1776 Columbia Road, Washington, D.C. 20009.

SCOTCH RECORDING TAPE \$1.20. For seven inch reel; write: Mail Order Electronics, Box 1133, Merritt Island, Florida 32952.

RECORDS

PROTECT YOUR LPs: Heavy poly sleeves for jackets 5¢; poly lined paper sleeves for LPs 10¢; round bottom inner sleeves 3½¢; Record jackets white 20¢, colors 25¢. Minimum order \$5.00. Record Supplies, Hillburn P. O., New York 10931.

"HARD To Get" records—all speeds. Record Exchange, 812 Seventh Avenue, New York, N.Y. 10019.

HARD to find collectors LPs, like new, Lists 25¢. Records, Hillburn, New York 10931.

COLLECTORS JOURNAL—valuable data, varied record mart. Six issues—\$1.50. Record Research, 131 Hart, Brooklyn, N.Y. 11206.

SPECIAL INTEREST RECORDS AVAILABLE, PRODUCED BY THE EDITORS OF THE WORLD'S LEADING SPECIAL INTEREST MAGAZINES. SEND FOR FREE CATALOG. RECORD CATALOG-HF, ZIFF-DAVIS PUBLISHING COMPANY, ONE PARK AVENUE, NEW YORK, N.Y. 10016.

RARE 78's. State Category. Write Record-Lists, P.O. Box 2122, Riverside, California 92506.

FREE CATALOGS Broadcasts, Sound Tracks of Thirties. **ARG**, 341 Cooper Station, New York City 10003.

CUSTOM RECORDING

L.P. HiFi Records made from any speed tape. Play sixteen minutes per side. Three identical copies \$19.95. "Records", Box 206, N. Wales, Penna. 19454.

TUBES

DON'T BUY TUBES—Radio, TV-Xmitting, special-purpose types until you get our price list! Lowest prices in U.S.A. 5,000 types—Guaranteed Brand New. Send postcard for TV—Special Purpose Price List. **UNITED RADIO COMPANY, P.O. BOX 1000, NEWARK, N.J. 07101.**

REPAIRS AND SERVICES

ALL Makes of Hi-Fi Speakers Repaired. Amprite, 168 W. 23 St., N.Y.C. 10011. CH 3-4812.

HI-FI Problems solved by "The Hi-Fi Doctor" on the spot. Audio, Acoustic, Radio Engineer, Professional visits, day, evening. New York area. William Bohn, Plaza 7-8569.

SPEAKER REPAIR. Hi-Fi, guitar, organ speakers reconed good as new at fraction of new speaker price. For details write: Waldom Electronics, Inc., Dept. SR, 4625 W. 53rd St., Chicago, Ill. 60632.

WANTED

QUICKSILVER, Platinum, Silver, Gold. Ores Analyzed. Free Circular. Mercury Terminal, Norwood, Mass. 02062.

WANTED out of print and noncommercially released Toscanini and Furtwangler records. Must be good condition. Box 6624, Long Beach, California 90815.

AUTHORS' SERVICES

AUTHORS! Learn how to have your book published, promoted, distributed. Free booklet "ZD," Vantage, 120 West 31 St., New York 10001.

POEMS WANTED for new song hits and recordings by America's most popular studio. Tin Pan Alley, 1650-ZD Broadway, New York 10019.

RUBBER STAMPS

RUBBER ADDRESS STAMP \$1.50. SIGNATURE \$3.50. FREE CATALOG. JACKSON, P.O. BOX 443-G, FRANKLIN PARK, ILL. 60131.

STAMPS

SPACEOPHOBIA? Monaco Nudes plus 50 different, 10¢ with approvals. BKJ, Astor, Boston, Mass. 02123.

BUSINESS OPPORTUNITIES

INVESTIGATE ACCIDENTS: Earn up to \$1,000 and more a month in your own business. Work spare time with average earnings of \$5 to \$8 per hour. No selling. Send for **FREE** booklet. No obligation. No salesman will call. Write: Universal Schools, CZ 1, 6801 Hillcrest, Dallas, Texas 75205.

I MADE \$40,000.00 Year by mailorder! Helped others make money! Start with \$10.00—Free Proof. Torrey, Box 318-N, Ypsilanti, Michigan 48197.

FREE BOOK "990 Successful, Little-Known Businesses." Work home! Plymouth-245R, Brooklyn, New York 11218.

100,000 PRODUCTS Wholesale! Terrific bargains! Wholesalers, 1265-PP Broadway, New York, N.Y. 10001.

FREE "Franchise Profit Letter" tells how unique **NFR** service is helping thousands seeking profitable businesses. Write today. National Franchise Reports, HF-528, 333 North Michigan, Chicago 60601.

INSTRUCTION

LEARN Electronic Organ Servicing at home. All makes including transistors. Experimental kit—trouble-shooting. Accredited NHSC, Free Booklet. Niles Bryant School, 3631 Stockton, Dept. A, Sacramento, Calif. 95820.

ASSOCIATE Degree in Electronics Engineering earned through combination correspondence-classroom educational program. Free brochure. Grantham Technical Institute, 1505 N. Western Ave., Hollywood, California 90027.

HIGHLY effective home study course in Electronics Engineering Mathematics with circuit applications. Earn your Associate in Science Degree. Free literature. Cook's Institute of Electronics Engineering, P.O. Box 36185, Houston, Texas 77036. (Established 1945).

REI First Class Radio Telephone License in (5) weeks Guaranteed. Tuition \$295.00. Job placement free. (KANSAS CITY) R.E.I., 3123 Gillham Road, Kansas City, Missouri, Telephone WE 1-5444 (SARASOTA) R.E.I., 1336 Main Street, Sarasota, Florida 33557, Telephone 955-6922.

PRINTING

PRINTING Presses, Type, Supplies. Lists 5¢. Turnbaugh Service, Mechanicsburg, Pa. 17055.

FREE LITERATURE: 1000 Address Labels \$1.00, 1000 Business Cards \$4.95. Printing, Rubber Stamps. Jordan's, 552 West O'Connor, Lima, Ohio 45801.

PERSONALS

MAKE FRIENDS WORLDWIDE, promote international understanding, join Europe's leading correspondence club. Illustrated brochure free. **HERMES**, Box 17/33, 1 Berlin 11, Germany.

LEMURIAN VIEWPOINT—Meaningful discussions of Cosmic Truth: the purpose of human life, reincarnation, man's place in a Higher Plan, and subjects from the Lemurian Philosophy. Send for **FREE** copy—Lemurian Fellowship, Dept. 763, Box 397, Ramona, Calif. 92065.

COINS

1943PDS, 1954P, 1955S cents, all \$1.00. Free list. Moneysaver, Box 666Z, Aptos, Calif. 95003.

REAL ESTATE

PEACEFUL Southern Utah Valley Land, 2½ acres, \$250 cash or terms. Dept ZD, P. O. Box 17401, Holladay, Utah 84117.

PHOTOGRAPHY—FILM EQUIPMENT, SERVICES

SCIENCE Bargains—Request Free Giant Catalog "CJ"—148 pages—Astronomical Telescopes, Microscopes, Lenses, Binoculars, Kits, Parts, War surplus bargains. Edmund Scientific Co., Barrington, New Jersey 08007.

MEDICAL FILM—Adults only—"Childbirth" one reel, 8mm \$7.50, 16mm \$14.95. International H, Greenvale, Long Island, New York 11548.

HYPNOTISM

FREE Hypnotism, Self-Hypnosis, Sleep Learning Catalog! Drawer H400, Ruidoso, New Mexico 88345.

AMAZING HYPNOTIC record kit releases fantastic mental power! Free offer expires soon. Write: Forum, Studio AA1, 333 North Michigan, Chicago 60601.

SELF-HYPNOSIS for self-improvement. Safe, effective! Free literature. McKinley, Dept. T-5, Box 3038, San Bernardino, California 92404.

HYPNOTIZE SUCCESSFULLY—or money refunded! Complete illustrated course—including Self-Hypnosis \$1.00. Arthur Fowler, Box 4396, Woodbury, New Jersey 08096.

HYPNOTIZE FEMALES!—Unnoticed! Instantly! Nerves! Exciting! Send \$2.25. Research Enterprises, 29-SN21 Samoset, Woburn, Mass. 01801.

FEMALE HYPNOTISM! Easily! Instantly! Secret Nerve Centers! \$2.20. Brugenheimer Publishers, Box 158-E30, Lexington, Mass.

MOVIE FILMS

16mm **SOUND**-Projectors, Films, New, Used for Sale, Free Catalog. National Cinema, 333 W. 57 St., N.Y., N.Y. 10019.

EDUCATIONAL OPPORTUNITIES

LEARN While Asleep, hypnotize with your recorder, phonograph. Astonishing details, sensational catalog free! Sleep-Learning Association, Box 24-ZD, Olympia, Washington 98501.

LEARN WHILE ASLEEP. Miraculously build Mind Power, achieve Self Confidence, improve Health, gain Success. Method 92% effective. Details free. ASR Foundation, Box 7021EG Henry Clay Sta., Lexington, Kentucky 40502.

GOVERNMENT SURPLUS

JEEPS Typically From \$53.90 . . . Trucks From \$78.40 . . . Boats, Typewriters, Airplanes, Electronics Equipment, Photographic Equipment, used. 100,000 Bargains Direct From Government. Complete Sales Directory and Surplus Catalog \$1.00 (Deductible First \$10.00 Order). Surplus Service, Box 820-L, Holland, Michigan 49423.

FREE JEEP Buying information when you send us 50¢ for **NEW** Gov't Surplus Bargain Catalogue (Refundable). Surplus Trader, Box 1-X, Spring Grove, Penna. 17362.

EMPLOYMENT INFORMATION

FOREIGN and USA job opportunities available now. Construction, all trades. Earnings to \$2,000.00 monthly. Paid overtime, travel, bonuses. Write: Universal Employment, Woodbridge, Connecticut 06525.

FOREIGN EMPLOYMENT. Construction, other work projects. Good paying overseas jobs with extras, travel expenses. Write only: Foreign Service Bureau, Dept. D, Bradenton Beach, Florida 33510.

MISCELLANEOUS

WINEMAKERS: Free illustrated catalog of yeasts, equipment. Semplex, Box 7208, Minneapolis, Minn. 55412.

SPARE TIME OPPORTUNITY—MONEY. WE PAY at the rate of \$10 hr. for NOTHING but your opinions, written from home about our clients' products and publications, sent you free. Nothing to buy, sell, canvass, or learn. **No SKILL, NO GIMMICKS.** Just honesty. Details from **RESEARCH**, ZD-5, Box 669, Mineola, N.Y. 11501.

EMPLOYMENT Resumes. Get a better job & earn more! Send only \$2.00 for expert, complete Resume Writing Instructions. J. Ross, 80-34 Kent St., Jamaica, N.Y. 11432. Dept. HF.

STOP BURGLARS THE EASY WAY! ! Affix authentic "Protected by Electronic Sentry Alarm" Decals to auto windows, doors and windows of home, retail stores, vending machines, etc. Whether you have an alarm or not—thieves stay away! Only \$1.00 for each set of two. J. Ross, 80-34 Kent St., Jamaica, N.Y. 11432. Dept. HF.

TEN Winemaking Recipes and Winemaking Supplies catalog. 10¢. Country Winemaker, Box 243EGA, Lexington, Massachusetts 02173.

VENTRILOQUISM! Information free! Dummy catalog. 25¢. State age. Maher, Studio ZD1, Box 6536, Kensington Station, Detroit, Michigan 48224.

AS YOU SCAN THESE COLUMNS, more than 167,000 monthly buyers of HiFi/STEREO REVIEW are doing the same. These readers share with each other the satisfaction derived from active involvement in the enjoyment of recorded music. HiFi/STEREO REVIEW readers look to the **CLASSIFIED** each month for prime sources of products and services of interest to them—Components, Accessories, Tape, Records, Special Services—everything they need to make their favorite special interest even more enjoyable. Are they buying from you? They will, if your classified advertising appears regularly in these columns. A handy order form is supplied for your use. To appear in the next available issue, March, on sale February 20th, forward copy and payment before January 1st closing deadline to: Hal Cymes, Classified Advertising Manager, HiFi STEREO REVIEW, One Park Avenue, New York, N. Y. 10016.

CLASSIFIED ADVERTISING ORDER FORM

Please refer to heading on first page of this section for complete data concerning terms, frequency discounts, closing dates, etc.

1	2	3	4	5
6	7	8	9	10
11	12	13	14	15
16	17	18	19	20
21	22	23	24	25
26	27	28	29	30
31	32	33	34	35

_____ Words { @ \$.45 Reader Rate } = \$ _____
 { @ .75 Commercial Rate }

Insert _____ time(s) Total Enclosed \$ _____

NAME _____

ADDRESS _____

CITY _____ **STATE** _____ **ZIP** _____

SIGNATURE _____

WORD COUNT: Include name and address. Name of city (Des Moines) or of state (New York) counts as one word each. Zip Code numbers not counted. (Publisher reserves right to omit Zip Code if space does not permit.) Count each abbreviation, initial, single figure or group of figures or letters as a word. Symbols such as 35mm, COD, PO, AC, etc., count as one word. Hyphenated words count as two words. HF-168

HI FI/STEREO REVIEW ADVERTISERS' INDEX

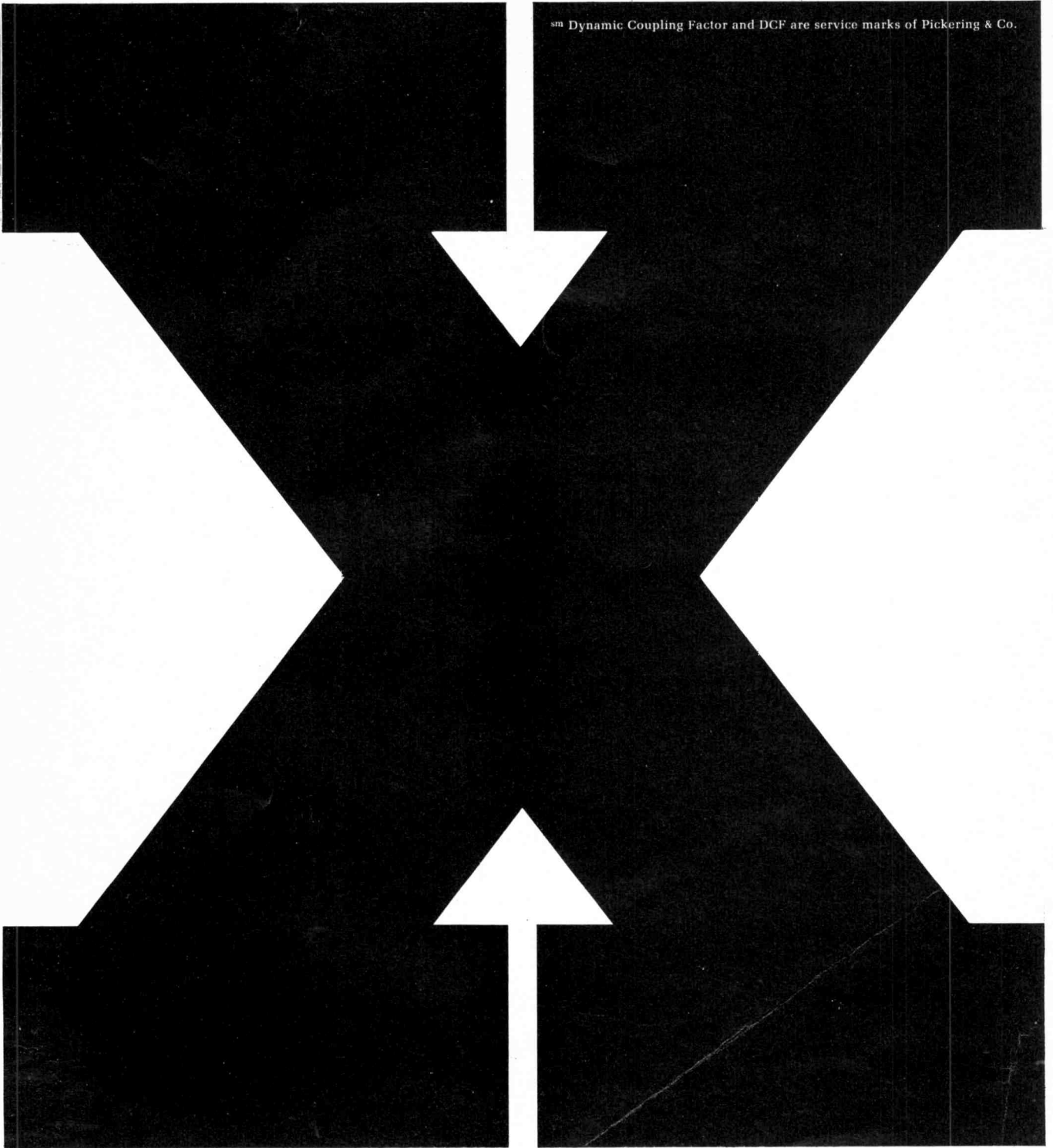
READER SERVICE NO.	ADVERTISER	PAGE NO.	READER SERVICE NO.	ADVERTISER	PAGE NO.
74	ABC Records Corp.	126	1	Koss-Acoustech	14
1	Acoustech, Inc.	14	35	Lafayette Radio Electronics	115
2	Acoustic Research, Inc.	22, 23	14	Lear Siegler, Inc.	17
3	Acoustic Research, Inc.	97	36	Leitz, Inc., E.	114
4	Allied Radio	45, 46		London Records	94
5	Altec Lansing Corporation	54	37	Marantz, Inc.	60
6	American Tape Duplicators	133	38	Martel Electronics	34
7	Ampex Corporation (Tape)	103	39	McIntosh Laboratory, Inc.	118
8	Ampex Corporation (Tape Recorders)	89	40	Neshaminy Electronics Corp.	16
	Angel Records	106	42	Norelco High Fidelity Products Division	12
9	Archive Records	100	43	Olson Electronics	132
10	Audio Dynamics Corporation	99	41	Pickering & Company, Inc.	3rd Cover
	Audio Unlimited	130		Pioneer Electronics Corporation	35, 130, 132
11	Barron Electronics	126	78	PML	130
12	Benjamin Electronic Sound Corp.	93	46	Project 3	13
13	Beseler Co., Charles	113	47	Rabsons—57th Street, Inc.	126
14	Bogen Communications	17		Radio Shack Corp.	30, 31
	Bozak, R. T.	36		Records Unlimited	5
103	British Industries—Garrard	2	48	Rheem Roberts	32
72	BSR (USA) Ltd., McDonald Division	95	49	Sansui Electric Co., Ltd.	49
15	Career Academy	102	50	Schober Organ Co.	114
71	Carston Studios	113	100	Scott, Inc., H. H.	25, 27
16	Cartridge Tape Club of America	18		Scott, Inc., H. H.	30, 31
17	Citadel Record Club	7	73	Seeburg Corporation, The	107
	Columbia Record Club	8, 9, 10, 11	51	Sherwood Electronics Laboratories, Inc.	39
20	Command Records	55	52	Shipyards Salvage	124
21	Conar	112	53	Shure Brothers, Inc.	101
77	Crown International	6	54	Sony Corp. of America (Radio, TV Div.)	59
22	Defa Electronics Corp.	124	55	Sony Corporation of America	111
23	Dressner	124	56	Sony/Superscope, Inc.	128
65	Dual	28, 29	57	Sound Reproduction, Inc.	130
	Dynaco, Inc.	109	58	Tandberg of America, Inc.	104
24	Eastman Kodak Company	131	59	Tang Speakers	132
25	EICO Electronic Instrument Co., Inc.	21	60	Teac Corporation	116
18	Electro-Voice, Inc.	119	61	Telex	48
19	Electro-Voice, Inc.	4th Cover	62	Toshiba America, Inc.	32
	Elpa Marketing Industries, Inc.	47	63	Toujay Designs	133
27	Empire Scientific Corp.	56	38	Uher by Martel	34
78	Ercona Corporation	130	64	uniClub, Inc.	15
28	Finny Company, The	113	65	United Audio Products, Inc.	28, 29
44	Fisher Radio Corporation	2nd Cover, 1, 41, 43	66	University Sound	125
29	Harman-Kardon, Inc.	33	67	Utah Electronics	127
30	Heath Company	50, 51	75	Vanguard Records	108
31	Hi-Fidelity Center	124	68	Veritas Records	98
32	Honeywell Photographic Products	110	69	Viking	90
40	JansZen Loudspeakers	16	70	Viking	48
76	JBL International	122, 123			
33	Kenwood Electronics, Inc.	52, 53			
	KLH Research & Development Corp.	105			
	Classified Advertising	134, 135			

HI FI/STEREO REVIEW PRODUCT INDEX

As an additional reader service, we list below, by classifications, the products advertised in this issue. If there is a specific product you are shopping for, look for its listing and turn to the pages indicated for the advertisements of manufacturers supplying that equipment.

CLASSIFICATION	PAGE NUMBERS	CLASSIFICATION	PAGE NUMBERS
Accessories	47, 124	Receivers, Stereo	2nd Cover, 1, 21, 25, 33, 39, 49, 50, 51, 52, 53, 54, 60, 99, 105, 115, 4th Cover
Amplification Systems	14, 21, 22, 23, 109	Records	13, 55, 94, 98, 100, 106, 108, 126
Antennas, FM	113	Record Clubs	5, 7, 8, 9, 10, 11, 15
Cabinets	51, 133	Speakers and Speaker Systems	2nd Cover, 1, 16, 25, 36, 41, 43, 97, 119, 122, 125, 127, 132, 4th Cover
Cameras	110, 113, 114	Tape Players, Cartridge	48
Cartridges	56, 101, 3rd Cover	Tapes, Prerecorded	18
Catalogs	45, 46, 118, 132	Tape Recorders and Decks	6, 12, 28, 32, 34, 89, 90, 104, 116, 128
Microphones	4th Cover	Television Kits	50, 112
Movie Projectors	131	Tone Arms	47
Music Systems	17, 27, 30, 31, 35, 41, 59, 107	Tuners	14, 21
Organs	114	Turntables and Changers	2, 29, 47, 93, 95, 111
Radios	32		

sm Dynamic Coupling Factor and DCF are service marks of Pickering & Co.



The X factor in the new Pickering XV-15.

The X in the new Pickering XV-15 stands for the numerical solution for correct "Engineered Application." We call it the Dynamic Coupling Factor (DCF).sm

DCF is an index of maximum stylus performance when a cartridge is related to a particular type of playback equipment. This resultant number is derived from a Dimensional Analysis of all the parameters involved.

For an ordinary record changer, the DCF is 100. For a transcription quality tonearm the DCF is 400. Like other complex engineering problems, such as


the egg, the end result can be presented quite simply. So can the superior performance of the XV-15 series. Its linear response assures 100% music power at all frequencies.

Lab measurements aside, this means all your favorite records, not just test records, will sound much cleaner and more open than ever before.

All five DCF-rated XV-15 models include the patented V-Guard stylus assembly and the Dustamatic brush.

For free literature, write to Pickering & Co., Plainview, L.I., N.Y.

Take a long look... at the new shape of progress from Electro-Voice.

 At E-V we'll go to unusual lengths to make better sound products. For instance, we created a microphone seven feet long. It solves long distance sound pickup problems for radio and TV. On the other hand, we needed less than 3-1/2" of height to design a 65 watt FM stereo receiver. And we keep putting bigger and bigger sound in smaller and smaller speaker systems.

And even the products that don't look radically different, sound different. That difference is what high fidelity is all about. Hear it today at leading soundrooms everywhere. Or send coupon below for free literature. It's full of progressive sound ideas for you.

A. Model 643 highly directional "shotgun" microphone. Widely used at football games, news conferences, motion pictures. \$1,560.00 list.

B. Model E-V 1277 65-watt* FM stereo receiver, complete with cabinet, yet just 3-3/8" high. Solid state, of course. \$280.00

C. Model E-V 1179 55-watt* FM stereo receiver. Tuning meter, full-time stereo light, many extras. Just \$210.00.

D. Model E-V FIVE-A two-way speaker system. With four-layer voice coil for better bass at lower cost. \$88.00.

E. Model E-V SEVEN-A two-way speaker system. Takes up just 19" of shelf space, yet delivers sound rivaling a much larger system. \$66.50.

F. Model SP12B An old favorite that has been kept up to date with scores of detail changes through the years. \$39.00

G. Model LT8 3-way speaker. The modern way to provide full-range sound in every room of your house. \$33.00.

*IHF output at 4 ohms.



Electro-Voice®

high fidelity speakers and systems • tuners, amplifiers, receivers • public address loudspeakers
• microphones • phonograph needles and cartridges • organs • space and defense electronics

CIRCLE NO. 19 ON READER SERVICE CARD

ELECTRO-VOICE, INC., Dept. 184F;
616 Cecil St., Buchanan, Michigan 49107

Please send free high fidelity literature. Please send free microphone literature.

Name _____

Address _____

City _____ State _____ Zip _____