

APRIL 1982 • \$1.25

Stereo Review®

• **THE PROSPECTS FOR BETTER TUNER PERFORMANCE** •

DIGITAL RECORDING AND PLAYBACK: PROS AND CONS

EQUIPMENT TEST REPORTS: Astatic IM-10E Phono Cartridge
Boston Acoustics A40 Speaker System • Nakamichi LX-5 Cassette Deck
Sennheiser HD 40 Headphones • Thorens TD 115 MkII Turntable

DISC SPECIALS

Barbra Streisand • Janis Joplin
John McLaughlin • Doc Watson
Art Blakey • Ray, Goodman & Brown
Soundtracks: *Pennies from Heaven*
and *Shock Treatment*

CAVALLI: *Hercule Amante*
DELIUS: *Orchestral Works*
PUCCINI: *Angel's New Tosca*
RAMEAU: *Dardanus*
TCHAIKOVSKY: *Symphony Roundup*



560156 JKE 0025W091 7411 NOV83
SETH JAKEL
25 MESSMAN DR
ORANGE NJ 07054
04

that,

1000 CP STEREO CASSETTE DECK

TAPE COUNTER

MUSIC SENSOR

2 COLOR FL PEAK DISPLAY

dB

PHONES LEVEL

DOLBY NR

INPUT

MIC

SELECTOR

PEAK HOLD

SHURE

TOUCH LOCK SENSOR

DOLBY B-C NR

The image shows the upper section of a silver-faced stereo cassette deck. On the left, there is a tape counter window displaying the number '1'. To its right is a music sensor control. The central feature is a digital peak display with a scale from -20 to +5 dB, showing a reading of +5 dB. Below the display are several controls: a selector knob, a peak hold knob, a volume knob, and a balance knob. To the right of these are three vertical sliders for Dolby NR, input level, and microphone level. On the far right, there are two circular jacks labeled 'L' and 'R' for headphones. The text '1000 CP STEREO CASSETTE DECK' is printed across the bottom of this section, with a 'SHURE' logo and a 'DOLBY B-C NR' badge.

SIGNAL STRENGTH

TUNE 93.1 MHz

MORANGE

TREBLE

BALANCE

VOLUME

SELECTOR

TAPE 1

TAPE 2

The image shows the lower section of the stereo cassette deck. On the left, there is a digital display showing 'SIGNAL STRENGTH' and 'TUNE 93.1 MHz'. Below the display are several control knobs: 'MORANGE', 'TREBLE', 'BALANCE', 'VOLUME', and 'SELECTOR'. The 'SELECTOR' knob has 'TAPE 1' and 'TAPE 2' positions. To the right of the knobs is a large circular volume knob with a finger loop. Below the volume knob is a 'PHONES' jack. The text 'SIGNAL STRENGTH' and 'TUNE 93.1 MHz' is printed above the display. The text 'MORANGE', 'TREBLE', 'BALANCE', 'VOLUME', and 'SELECTOR' is printed above the respective knobs. The text 'TAPE 1' and 'TAPE 2' is printed below the selector knob. The text 'PHONES' is printed below the jack.

Why the components of a Sherwood system perform so beautifully together, despite the fact frankly, it wasn't planned that way.

The newest trend in stereo is "the system." Sadly, what makes the new "systems" new is not an engineering breakthrough, but a merchandising gimmick. The objective? Get the consumer to buy all the components from a single manufacturer. The typical technique? Coordinate the look, make them slick, suggesting that, together, the components sound as pretty as they look.

All too often the real result is a Star Wars appearance and a so-so performance.

The Sherwood "system" is very different. It is not merely a beautiful system of components, but a system of beautiful components. That difference is not semantic. It is one of design philosophy.

EXCELLENCE IS
ACHIEVED ONE STEP
AT A TIME.

At Sherwood we never set out to create a system.

Our goal was to develop individual components offering sonic purity and good value. The design criteria were simple: when in doubt, opt for performance. (Over the past twenty-five years we've learned that's the only intelligent choice, because it often costs no more to do it right, than to do it wrong.)

Not until we'd satisfied our audio objectives did we refine the appearance. A brief glance reveals a sense of order and logic, and lack of excess. The exterior mirrors the interior.

THE SHERWOOD SYSTEM STANDS APART.

To the extent that Sherwood components work well together we are obviously pleased, but not at all surprised. When the individual pieces perform beautifully, the system will.

Our new S-9600CP receiver, shown here, features totally discrete circuitry throughout the audio path. Its power amp remains stable even into 2 ohm loads. The phono signal to noise ratio approaches the theoretical limit. The FM section has an IHF sensitivity of 1.6uV, a 75dB stereo S/N ratio and the convenience of Touch Lock Tuning. Evaluations by the enthusiast magazines of the 60 watt S-9600CP and the 20 watt S-9200CP have been unequivocal in their praise.

The S-5000C CP cassette deck provides the expected capacity for metal tape, and the unexpected clarity of the new Dolby C* system.

The ST-902 MTD turntable and tone arm

offer minimum tracking distortion based on a proven and inarguable mathematical formula.

The Sherwood S-03 3-way speakers are time compensated, bringing music to your ears in precisely the same time sequence as real instruments would at a live concert.

Judged separately, each of the components in any Sherwood system holds its own against competition costing two and three times as much. Judged together, the sound and the value is remarkable.

SATISFACTION ALMOST GUARANTEED.

No one can assure you that listening to their equipment will be the thrill of a lifetime. Sherwood at least assures you that you get what you pay for. Often much more.

We test and adjust and test again, each and every electronic component, then certify the specifications for

the specific unit on the outside of the shipping carton. You know it will do what it's supposed to. We call that Certified Performance. It is unique in the industry.

PLEASE BE PATIENT.

Listening to a Sherwood system is a pleasure. Looking for one is probably not. Limited production dictates that the Sherwood line is only available at a few stereo specialists.

For the location of the Sherwood dealer nearest you, please call toll free 1-800-323-1717 (in Illinois 1-800-942-8881), Op. #441.

We're doing our best to fulfill the increasing demand. But it's not easy.

Success is a mixed blessing.



 **Sherwood®**

CIRCLE NO. 35 ON READER SERVICE CARD

17107 Kingsview Ave., Carson, CA 90746 In Canada: The Pringle Group, Don Mills, Ontario

*Dolby is a trademark of Dolby Laboratories.



20 10 0 5

TAPE COUNTER

MUSIC SENSOR

REPEAT
STOP
M/R
SELECTOR

AUTO
SELECTOR

AUTO
REPEAT
HOLD
PEAK HOLD

SIGNAL SEARCHING
TUNE D... FM 93.1 M

MIDRANGE

TREBLE

BALANCE

VOLUME

SELECTOR

TONE ON

SERVO

MONO

LOUDNESS

TAPE DUB

TAPE

FM

PHONO

ALOX

TAPE

Sherwood:
It won't feed
your ego.
Just your
intellect.





90 watts per channel, minimum rms into 8 ohms from 20-20,000 Hz, with no more than 0.05% total harmonic distortion. 2-Year Limited Warranty.*

Five Reasons You Should Step Up to Our New Realistic® Digital Receiver

1. Digital Synthesized Tuning System

Tuning takes just a touch of the feather-action bar to go up or down to the exact center of every AM or FM channel. A search feature tunes up or down automatically, stopping on the next station. No pointer, no dial, no tuning meter — there's no need for them! Instead, a preci-



Easy-to-Read Digital Display Shows The Exact Frequency You've Tuned

sion quartz crystal, like the ones used in computers, locks in each station. The STA-2290 can't drift or be mistuned. You get pure music, *not* distortion.

2. Computer Control

Up to 12 stations — six AM and six FM — can be program-

med into the microprocessor-controlled memory for instant, pushbutton recall. Memorized frequencies are automatically protected for up to an hour in case of power loss. And with dual-gate MOSFET tuning and CMOS LSI frequency synthesis, you get superb FM stereo listening.



Detented Bass, Treble and Midrange Tone Controls Tailor Sound Perfectly

3. Clean and Powerful

There's plenty of power to reproduce the most demanding music without distortion — even through two pairs of speakers! The 90-watt amplifier delivers a wide dynamic range so the depth and "live" quality of your music is recreated with stunning clarity. Protection circuitry prevents

damage from overload or thermal problems.

4. Human Engineering

All controls and indicators are designed for convenience and ease of operation. You get bright color-coded LED function indicators, LED signal strength and power meters. And what versatility! — you can add two tape decks with monitoring and dubbing capabilities, two turntables and an aux source.



24-LED Power Indicators Read 0-1.5 Or 0-150 Watts — Help Prevent Overdriving

5. Priced Right

The computerized STA-2290 brings music to your ears for only \$599.95. And it's *designed, engineered and built* by us — the company that also builds the world's best-selling computer line — TRS-80.®

Radio Shack

A DIVISION OF TANDY CORPORATION • ESTABLISHED IN 1921
NOW OVER 8100 LOCATIONS IN 76 COUNTRIES

Retail price may vary at individual stores and dealers. *See Catalog #341 or ask our salespeople for warranty information

CIRCLE NO. 47 ON READER SERVICE CARD

FORMERLY HI FI/STEREO REVIEW (ISSN 0039-1220)

Stereo Review®

APRIL 1982 • VOLUME 47 • NUMBER 4

The Equipment

NEW PRODUCTS <i>Roundup of the latest audio equipment and accessories</i>	13
AUDIO QUESTIONS AND ANSWERS <i>FM Signal Strength, Counterfeit Components, Slew Factor</i>	LARRY KLEIN 18
CAR STEREO <i>Pre-CES New Products</i>	IVAN BERGER 22
TAPE TALK <i>Loud and Soft, Quick Response Check, Dolby and Equalization</i>	CRAIG STARK 24
TECHNICAL TALK <i>Consumer Reports' Speaker Ratings, Part 2</i>	JULIAN D. HIRSCH 27
EQUIPMENT TEST REPORTS <i>Laboratory test results on the Astatic IM-10E phono cartridge, Thorens TD 115 MkII turntable, Boston Acoustics A40 speaker system, Sennheiser HD 40 headphones, and Nakamichi LX-5 cassette deck</i>	JULIAN D. HIRSCH, CRAIG STARK 28
TUNERS <i>Industry experts discuss today's problems and tomorrow's solutions</i>	GORDON SELL 48
DIGITAL <i>Once you've made hamburger out of it, can it ever be steak again?</i>	E. BRAD MEYER 56

The Music

STEREO REVIEW THROWS A PARTY <i>Celebrating the 1981 Record of the Year awards</i>	54
BEST RECORDINGS OF THE MONTH	60
<i>Pennies from Heaven</i>	60
<i>Four New England Song Cycles</i>	62
<i>Delius: "The Fenby Legacy"</i>	62
<i>Doc and Merle Watson: "Red Rocking Chair"</i>	63
<i>Puccini: Tosca</i>	64
<i>Art Blakey: "Straight Ahead"</i>	65
POPULAR MUSIC	66
<i>Barbra Streisand: "Memories"</i>	68
<i>Ray, Goodman & Brown: "Stay"</i>	70
<i>Janis Joplin: "Farewell Song"</i>	74
<i>Shock Treatment</i>	78
<i>John McLaughlin: "Belo Horizonte"</i>	80
<i>Three Blues Reissues</i>	82
CLASSICAL MUSIC	84
<i>Cavalli: Ercole Amante</i>	86
<i>Reger String Quartet: Salon Music</i>	90
<i>Tchaikovsky: Symphony Roundup</i>	96
<i>Rameau: Dardanus</i>	106

The Regulars

BULLETIN	WILLIAM LIVINGSTONE 5
SPEAKING OF MUSIC	WILLIAM ANDERSON 6
LETTERS TO THE EDITOR	8
GOING ON RECORD	JAMES GOODFRIEND 46
ADVERTISERS' INDEX	106

COVER: Design by Borys Patchowsky; photo by Bruce Pendleton. See page 48.

COPYRIGHT © 1982 BY ZIFF-DAVIS PUBLISHING COMPANY. All rights reserved. Stereo Review, April 1982, Volume 47, Number 4. Published monthly by Ziff-Davis Publishing Company. Editorial and Executive Offices at One Park Avenue, New York, New York 10016; Telephone: 212 725-3500. Richard P. Friese, President; Furman Hebb, Executive Vice President; Selwyn Taubman, Treasurer; Bertram A. Abrams, Secretary. Also publishers of Backpacker, Boating, Car and Driver, Cycle, Fly Fisherman, Flying, Popular Electronics, Popular Photography, Psychology Today, Skiing, Stereo Directory, and Tape Recording & Buying Guide. One-year subscription rate for the United States and its possessions, \$9.98; Canada, \$10.98. All other countries, one-year subscription rate \$14.98, cash orders only, payable in U.S. currency. Second-class postage paid at New York, New York 10016

and at additional mailing offices. Authorized as second-class mail by the Post Office Department, Ottawa, Canada, and for payment of postage in cash. POSTMASTER: Forms 3579 and address changes should be sent to Stereo Review, Circulation Department, P.O. Box 2771, Boulder, Colorado 80302. SUBSCRIPTION SERVICE: All subscription correspondence should be addressed to Stereo Review, Circulation Department, P.O. Box 2771, Boulder, Colorado 80302. Please allow at least eight weeks for change of address. Include old address as well as new—enclosing if possible an address label from a recent issue. PERMISSIONS: Material in this publication may not be reproduced in any form without permission. Requests for permission should be directed to John Babcock, Rights and Permissions, Ziff-Davis Publishing Company, One Park Avenue, New York, New York 10016.

Introducing TDK AD-X. The normal bias tape with Super Avilyn technology.

New TDK AD-X is the first normal bias audio cassette to use TDK's Avilyn magnetic particle—based on the renowned Super Avilyn formulation that has kept TDK the leader in audio and videotape technology.

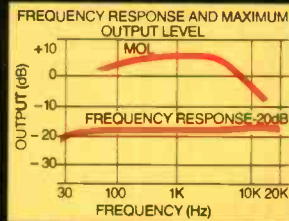
The Avilyn advantage offered in AD-X is demonstrably clear. You now can record and play back—in the normal bias/EQ position with complete compatibility for any cassette deck over a wider dynamic range and with far less distortion. Even at higher recording levels, the increased headroom in

new AD-X can easily handle strong signal input without over-saturation.

When you hear the brilliant playback resulting from the higher MOL and lower bias

noise you won't believe that your deck can "improve" so much.

The new AD-X has truly versatile applications. Its higher sensitivity makes it ideal for all-round home entertainment use and also suitable for any cassette player.



Avilyn magnetic particle achieves higher saturation and lower noise.



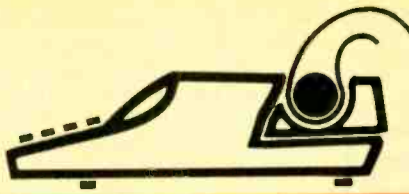
Record at higher levels with far less distortion.

To ensure years of reliable use, AD-X is housed in TDK's Laboratory Standard Mechanism, and protected by TDK's lifetime warranty. With its distinctive packaging, you won't miss it.

So for high quality recordings in the normal bias/EQ position, snap in the new TDK AD-X. You'll discover that the Avilyn advantage means superior overall performance for you.

TDK
THE MACHINE FOR YOUR MACHINE[®]
CIRCLE NO. 40 ON READER SERVICE CARD





Stereo Review

BULLETIN

Edited by William Livingstone

- **WALT DISNEY'S FANTASIA** is getting a new soundtrack and will be re-released in updated form this month. When it was originally released in 1940, the film had a score of famous classical works conducted by Leopold Stokowski, and it was the first movie with stereo sound. The new version will have the first digitally recorded soundtrack to be released. The same music will be used, of course, this time conducted by Irwin Kostal, who has won Academy Awards for his work on West Side Story and The Sound of Music. Dedicated to the memory of Stokowski, whose one hundredth birthday falls on April 18, the new version of Fantasia will be premiered at the Music Center in Los Angeles with a live orchestra and choir accompanying certain segments of the film. According to a spokesman for Disney, Fantasia has never been licensed for home video and "probably never will be."
- **THE FM ATLAS AND STATION DIRECTORY** by Bruce F. Elving has been enlarged and updated in its new seventh edition. The soft-bound book gives stereo data, network affiliation, and music formats for all FM stations in the United States, Canada, and Mexico. Its 128 pages include 55 pages of maps. To order send \$7.45 to FM Atlas, Adolph, Minn. 55701.
- **THE SUNDAY SHOW**, five hours of arts programming--some live, some taped--bows on National Public Radio stations on April 4. It will run from noon to five every Sunday, giving generous coverage to music. Set for this month are the New Swingle Singers in a show from Urbana, Illinois, and a program of chamber music of the Depression years performed in Los Angeles. From the Kennedy Center there will be a different Beethoven piano sonata every other Sunday until all thirty-two are played. Pianists will include Emanuel Ax, Rudolf Firkusny, and Ruth Laredo. Guitarist Andrés Segovia will be heard from Granada, Spain, and from Moscow there will be the Tchaikovsky Piano Competition. More to come.
- **AUDIO TECHNOLOGY FOR VIDEO** is the topic for the 1982 Midwest Acoustics Conference to be held at Herman Hall, Illinois Institute of Technology, Chicago, on Saturday, April 24. In addition to formal discussions of audio/video technology, there will be demonstrations of state-of-the-art equipment. For information, contact Hugh Pearl, Beltone Electronics Corp., 4201 Victoria St., Chicago, Ill. 60646, (312) 583-3600. Audiophiles will be welcome along with engineers and other professionals in the field.
- **PSYCHEDELIA IS BACK** in England. Warner Brothers Records' U.K. division has just released "A Splash of Color" (WEA K 58515), a compilation album by the leading lights of the new British psychedelic scene. It includes tracks by the Earwigs, the Marble Staircase, Mood Six, the Doctor, and Miles Over Matter, whom some writers are touting as the Next Big Thing. Get those old beads and caftans out of the closet.
- **A NEW AUDIO-AMPLIFIER STANDARD** has been published by the Electronic Industries Association. "Standard Test Methods of Measurement for Audio Amplifiers," RS-490, replaces EIA Interim Standard No. 2. It is the result of an industry-wide effort to promote standardization in measuring audio amplifier performance. Copies of RS-490 are \$8 each from the Standards Sales Office, Electronic Industries Association, 2001 Eye Street, N.W., Washington, D.C. 20006.
- **AWARDS:** The American mezzo-soprano Marilyn Horne will be the very first recipient of the Italian government's newly established Rossini Medal. The presentation will be made in April while Miss Horne is appearing at La Scala in Rossini's L'Italiana in Algeri....A 1981 Edison Award for the best concerto album of the year has been given by Dutch music critics to Murray Perahia's CBS Masterworks recording of Mozart's Piano Concertos Nos. 22 (K. 482) and 8 (K. 246) with the English Chamber Orchestra.

Speaking of Music...

By William Anderson



COME OUT SINGING

THERE are many odd things about the record industry, but perhaps the oddest is its apparent determination not to be subject, like the rest of the world, to the law of supply and demand. In every other endeavor I can think of, a product is produced because there are enough people who want to buy it to make selling it profitable: no market, no product. Record producers, however, listen to different drums. They will issue a recording because they feel a need to "fill a hole in the catalog" (even though the hole may be either deservedly empty or already well filled by three other, possibly superior, recordings), because an orchestra they have under contract has had to learn a new piece for a concert (and they fondly hope to vindicate a live-performance fiasco with a recorded triumph), because they have convinced themselves that what the world needs is a brand-new *Eroica* to replace last

year's two superb ones, because they must indulge an artist already in their embrace or seduce another from the arms of a competitor. All this gets—and deserves—little sympathy, but one can hardly envy the plight of a record producer caught in the mopsqueezer of an artist's ego, forced to put his name to a project that goes against his artistic or commercial conscience—or both.

Quite a few producers are caught up in just such an imbroglio right now—with the captivating complication that there are two king-size egos involved. Mother Nature, in her sublime wisdom, knows full well that in this age of radio, TV, discs, tapes, and particularly jet planes there is no need for more than one Big Tenor to handle all the world's needs. She has nonetheless, with wanton prodigality, given us two, and now sits back to enjoy the spectacle of Luciano Pavarotti and Plácido Domingo locked in a battle for

supremacy on whatever stage we offer them.

Pavarotti makes a movie (*Si, Georgio*), so Domingo makes a movie (*The Merry Widow*). Johnny Carson wants a tenor? He can have two—though not on the same night. Domingo has a TV special in January (NBC's "Caruso Remembered"), another in March (a Metropolitan Opera concert with Tatiana Troyanos on PBS), and Pavarotti has one later that month (an ABC broadcast featuring the tenor in performances with orchestra—and with his father and daughters at home in Italy). If Pavarotti can appear as an Academy Awards presenter even before he has made a movie, Domingo can play a gig as a DJ on New York's country-music station WHN (his "Perhaps Love" album with John Denver, CBS 26434, is getting a big play there). Pavarotti has an ethnic fling with an album of Neapolitan songs ("*O Sole Mio*," London 26560), and Domingo replies with "Plácido Domingo Sings Tangos" (DG 3636 416). Even if Domingo hadn't already recorded an album of zarzuela hits ("Music of My Country," London 26434) and another called "Be My Love" (DG 2530 700), it is evident that the battle has moved well into Mario Lanza territory, and the producers must be having fits. These guys are, after all, *real singing artists*, and the fight was never supposed to get *this* dirty.

In an article in the London *Times* Sunday Magazine last November, Domingo was characterized as "the greatest singer-actor of our age." And Pavarotti? "His career... has now turned into an almost perpetual publicity stunt." Clearly the world is choosing up sides—but what are poor music lovers to do? Keep score, I suppose. Pavarotti has six entries on the latest *Billboard* classical chart to Domingo's one. But Domingo has one on the Hot 100 pop chart ("Perhaps Love") as well as a recently issued Pioneer videodisc of the *Tales of Hoffmann*. And Pavarotti has two nominations for this year's Grammys. Stay tuned. □

Stereo Review

PUBLISHER
J. SCOTT BRIGGS
EDITOR IN CHIEF
WILLIAM ANDERSON
EXECUTIVE EDITOR
WILLIAM LIVINGSTONE
MANAGING EDITOR
LOUISE GOOCH BOUNDAS
ART DIRECTOR
BORYS PATCHOWSKY

TECHNICAL DIRECTOR
LARRY KLEIN
ASSOCIATE TECHNICAL EDITORS
DAVID RANADA, GORDON SELL

MUSIC EDITOR
JAMES GOODFRIEND
POPULAR MUSIC EDITOR
PAULETTE WEISS
SPECIAL PROJECTS EDITOR
STEVE SIMELS

ASSOCIATE EDITOR
DAVID STEIN
ASSISTANT EDITOR, RESEARCH
RICHARD SARBIN
EDITORIAL ASSISTANT
BARBARA AIKEN

LONDON EDITOR
HENRY PLEASANTS

CONTRIBUTING EDITORS
CHRIS ALBERTSON
IVAN BERGER
IRVING COHN
NOEL COPPAGE
RICHARD FREED
PHYL GARLAND
ROBERT GREENE
DAVID HALL
JULIAN D. HIRSCH
GEORGE JELLINEK
IGOR KIPNIS
IRVING KOLODIN
PAUL KRESH
STODDARD LINCOLN
MARK PEEL
LINCOLN PERRY
PETER REILLY
EBET ROBERTS
CHARLES RODRIGUES
ERIC SALZMAN
CRAIG STARK
JOEL VANCE

ASSOCIATE PUBLISHER
ROBERT JOHN UR, SR.

ASSISTANT TO THE PUBLISHER
JEAN ANDERSON

Editorial and Executive Offices: 212 725-3500
Ziff-Davis Publishing Company
One Park Avenue, New York, New York 10016
National Advertising Manager: Richard J. Halpern
Eastern Advertising Representative: Charles L. P. Watson

Midwestern Office, The Patis Group: 312 679-1100
4761 West Touhy Ave., Lincolnwood, Illinois 60466
Arnold S. Hoffman, David W. Paicek

Western Office: 213 387-2100
3480 Wilshire Boulevard
Los Angeles, California 90010
Western Advertising Manager: Marge Doherty-WilHITE

Japan: Iwai Trading Co., Ltd.
J. S. Yagi
603 Ginza Sky Heights Building
18-13, Ginza 7-Chome
Chuo-Ku, Tokyo, Japan 104
Telephone: (03) 586-0165, 545-3908

Circulation Office
P.O. Box 2771, Boulder, Colorado 80302

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

Member Audit Bureau of Circulations



ZIFF-DAVIS PUBLISHING COMPANY

President: Richard P. Friese
President, Consumer Magazine Division: Albert S. Traus
Executive Vice President: Furman Hebb
Senior Vice Presidents: Phillip T. Heffernan, Sidney Holtz, Edward D. Muhlfeld, Philip Sine
Vice Presidents: Robert Bavler, Baird Davis, George Morrissey
Treasurer: Selwyn Taubman
Secretary: Bertram A. Abrams



**Now there is an AM/FM radio
so advanced, no thousand-dollar
receiver can match it.**

**The Radio.
It's unlike any other radio in history.**

What other table radio contains *two* amplifiers—
one for treble, and a second with twenty watts of
power just for bass?

What other table radio has our Schotz tuner
circuitry, for unprecedented reception that out-
performs even audiophile components? (The rev-
olutionary Schotz circuitry brings in even weak
and distant FM stations strongly and clearly and
eliminates static. Now high fidelity won't get lost
in a high rise.)

What other table radio is designed to let you
plug in a tape deck, or add up to *ten* stereo pairs
of speakers for other locations in your home or
office? (Each additional speaker has its own two
amplifiers, adding another 25 watts of power!)

Yet look at it: Small. Uncluttered. Easy to use.
Simplicity itself.

The Radio.



***the* Radio** Expect to be astonished.

Where can you get one? Call Proton Corporation at
800- 854-2003 ext. 851, in California 800-522-1500 ext. 851.

CIRCLE NO. 33 ON READER SERVICE CARD



LETTERS TO THE EDITOR

Dolby-C Firsts

● In a letter in the February issue, Peter Dobbin of U.S. Pioneer states that Pioneer "was the first major manufacturer to incorporate Dolby-C in its cassette decks." Nothing could be further from the truth.

The Sony Corporation was the first manufacturer to release Dolby-C-equipped recorders for nationwide sale in the United States, beginning in April 1981. This can easily be confirmed by checking with American hi-fi dealers or Dolby Labs. Furthermore, Sony was the first manufacturer to offer Dolby-C tape recorders for sale anywhere in the world (the TC-FX-6C) in December of the previous year.

As for Mr. Dobbin's comments regarding Pioneer's "only single-chip Dolby-C circuit," it is curious that he would single out a circuit that the Hitachi Corporation produces for Pioneer as well as other tape-deck manufacturers. Sony has always produced its own Dolby noise-reduction circuits in order to ensure the utmost in both performance and reliability.

MARC FINER
National Training Manager
Sony Corp. of America
New York, N.Y.

Peter Dobbin replies: Short of having an impartial judge compare Pioneer's and Sony's bills of lading and shipping dates, there is probably no way to resolve absolutely the issue of who was first. I'm sure Mr. Finer would agree, however, that the innovative but small NAD company beat both of us to market with a Dolby-C-equipped cassette recorder—as I obliquely acknowledged in my original letter by referring to Pioneer as the first "major" supplier of Dolby-C equipment.

The single-chip Dolby IC we use was designed by Pioneer and Dolby Labs. It is, indeed, manufactured for us by Hitachi, which was granted permission to sell it to other companies in the original deal.

Benny Goodman

● Congratulations on your recognition of Benny Goodman's great and enduring con-

tribution to jazz. One can only hope that the February cover story and the award of STEREO REVIEW's Certificate of Merit will stimulate Columbia to go to the vaults and resurrect many of the records made by Goodman in the late Thirties and early Forties. Like Louis Armstrong, Goodman was compelled to record a lot of banal popular music of the time, but, again like Armstrong, he usually succeeded in putting jazz life into some pretty pedestrian tunes. While the RCA Bluebird reissues have done justice to his earlier band, the Columbia discs are all too sparsely represented.

One correction to Chris Albertson's article: the party at Mildred Bailey's that gave rise to the Goodman Trio had Goodman and Teddy Wilson, but Gene Krupa was not on drums. It was Carl Bellinger, a cousin of Bailey's who happened to have his drums at her house and sat in for the exploratory session. Krupa became a permanent member of the trio when the first recordings were made.

I am convinced that Benny Goodman deserves to join Duke Ellington and Louis Armstrong as one of the three great forces in pushing jazz to the highest levels of technical performance and creative artistry. Few sounds of this century can equal that liquid clarinet soaring high against those crisp brass and reed sections. Long may he play!

NORMAN CRAIG
Manzanita, Ore.

● I can't help wondering how many of my fellow fogies will write to tell you that the Benny Goodman Orchestra photo on page 52 of the February issue couldn't have been taken in 1953 (as the caption stated). It was probably 1937. Also, the trombonist's name was (is?) Red Ballard, not "Bellard." A good writeup, though, and a well-deserved tribute to the "King."

FREDERICK A. KESSINGER
Washington, D.C.

● In "How the 1938 Carnegie Hall Recordings Came Out of the Closet," Benny Goodman is a bit off in his recollections. (1) The studio was Empire, not Reeves. It was located on Lexington Avenue and 47th Street backing my building at 247 Park Av-

enue. (2) John Hammond and Goodman's lawyer weren't present when the acetates were played. It was me and Irving Townsend of Columbia Records.

I have an autographed copy of the acetates pulled that day. BG had two complete, unedited copies made—he had one and I had the other. He signed the label for me, and I gave BG parties for a year before the album came out playing the acetates for friends and buffs. The set I have is a collector's item which I highly prize. It is often hauled out at meetings of the Jazz Club of Sarasota when we do a Benny Goodman program.

One more note: there is a historic film clip, made by Dick Pack of Westinghouse Broadcasting, that shows William Holden and Benny Goodman dueting (on clarinets) in *Bridge over the River Kwai* at the Grande Place in Brussels during the 1958 World's Fair. It was never released and nobody has been able to find it; it must be somewhere in the WBC files. Holden was a BG groupie!

HAL DAVIS
Sarasota, Fla.

There are several stories of how the 1938 Carnegie Hall recordings were rediscovered and released. We chose to follow Benny Goodman's own.

● Benny Goodman and I are nearly exact contemporaries. I was born on May 13, he on May 30 of the same year. Our careers also coincided; our group from the Paul Whiteman band often haunted the New York bistros where Benny and his trio reigned in the mid Thirties.

I believe Chris Albertson should have pointed out in his account of Goodman's 1938 Carnegie Hall concert that the first jazz concert in Carnegie Hall was given by Paul Whiteman in 1925. Among other selections, that concert included George Gershwin repeating his 1924 Aeolian Hall performance of *Rhapsody in Blue*.

KEN DARBY
Sherman Oaks, Calif.

Prolonged searching in jazz histories and reference books has turned up no account of what jazz was played on that occasion. If Whiteman's was the first Carnegie Hall jazz concert, it seems to have made little lasting impression.

Disc Sleeves

● Although David Ranada's "Audiophile Discs" in January was well written, I am bothered by his criticism of the plastic inner sleeves used by various labels. Since the quality of the finished product is a major concern of buyers of high-price (and usually worth it) audiophile records, why did Mr. Ranada downgrade one of their major selling points?

KEVIN MIRAMON
Reno, Nev.

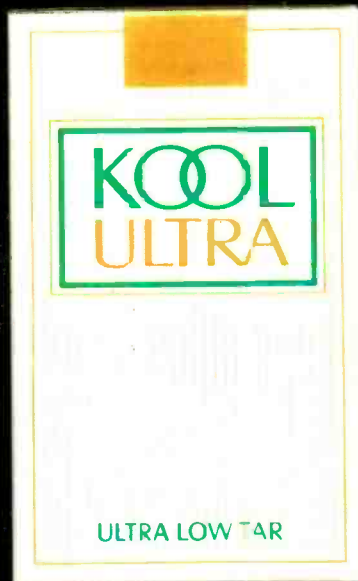
Associate Technical Editor David Ranada replies: I don't believe that the type of inner sleeve supplied should ever be the deciding factor in the purchase of a recording (mu-

(Continued on page 10)

There's only one way to play it.

No other ultra brings you a sensation this refreshing. Even at 2 mg.,
Kool Ultra has taste that outplays them all.

NEW KOOL ULTRA



Kings 2 mg.,
100's 5 mg.



Warning: The Surgeon General Has Determined
That Cigarette Smoking Is Dangerous to Your Health.

Kings, 2 mg. "tar", 0.3 mg. nicotine; 100's, 5 mg. "tar"
0.6 mg. nicotine av. per cigarette by FTC method.

© 1981 B&W Co.

sic, performance, sound quality, and pressing all take precedence). That said, there are inner sleeves and then there are inner sleeves. Paper-only sleeves can deposit more junk on a disc than they keep off. Some plastic-lined paper sleeves can react with the vinyl compounds used in records, after a while leaching out the chemical stabilizers designed to preserve the disc. Heavy plastic-only sleeves are stiff enough to grind small particles attracted by static charges into the grooves. I prefer the "rice-paper" (actually, thin plastic) sleeves supplied by Mobile Fidelity and CBS Master-sound (among others). They don't shed, they are flimsy enough not to abrade the disc, they don't seem to react with vinyl for-

mulations, and they seem to generate less static charge when a disc is inserted or removed. Mobile Fidelity and Discwasher also sell these sleeves as accessory items.

Sir Hamilton Harty

● I was glad to see Richard Freed's cautiously favorable review in January of the Chandos record of Sir Hamilton Harty's *An Irish Symphony* and *Comedy Overture*. I have had this fine record in my collection for several months and find the music a constant delight. I was already familiar with the second movement of the symphony from an old 78-rpm recording conducted by the

composer himself. Harty's long career as a conductor has tended to overshadow, at least outside the British Isles, his very considerable talent as a composer.

I have to amend Mr. Freed's comment that "this new Chandos disc may be the first recording of [Harty's] orchestral works to reach our shores." In fact, it is the second such. In 1979, on the occasion of the hundredth anniversary of Harty's birth, Chandos released a two-record set (DBR 2001) that included a handsome reading of the 1908 Violin Concerto in D Minor and the 1912 Variations on a Dublin Air for Violin and Orchestra, plus three of Harty's well-known arrangements: *The Londonderry Air* (1924), *A John Field Suite* (1939), and Handel's *Water Music* (1920).

Also, as far back as 1968 EMI issued a very fine disc called "Music of the Four Countries" (England, Ireland, Scotland, and Wales) that included as the Irish contribution Sir Hamilton's colorful and romantic tone poem *With the Wild Geese*, written for the Cardiff Festival of 1910. This recording (EMI/Odeon ASD-2400), with beautiful performances by the Scottish National Orchestra under Alexander (not yet Sir Alexander) Gibson, is still available through import shops.

RICHARD K. PATTERSON
Hyde Park, N.Y.

Vox Humana

● There seems to be a widespread assumption that if one likes classical music one must also like opera. I don't know how valid this is in general, so I can only speak of my own preferences. I can't say simply that I "like" classical music; it is, rather, a necessity, a vital part of my life, one of the true joys of existence. Unfortunately, this applies only to instrumental music. I cannot listen comfortably to a single human voice interfering with and negating, or so it seems to me, the sensations and nuances created by a great number of instrumentalists.

DAVID SARIEGO
Huntington Beach, Calif.

The Editor replies: Rattles, drums, and other noisemakers aside, a large body of respectable musical opinion holds that the human voice is the first, best instrument. It is not only the most expressive, but the most flexible and varied in pitch, timbre, and employment—with the inevitable result that individual listeners are bound to have their separate vocal prejudices. But there is nothing innately superior about the "operatic" vocal production of a Joan Sutherland, nor anything inferior about the "crooning" of a Bing Crosby, the "scatting" of an Ella Fitzgerald. The harsh, raspy voz afila is one of the essential beauties of the Spanish flamenco style, a properly trained Tibetan monk can produce two notes at the same time, Bulgarian peasants sing "harmony" that is only one note apart, and Chinese opera singing appears to issue mainly from the nose. All these styles, however, and many more unlike them, have their separate charms, their unique virtuosos, and their discriminating admirers. I would hate to think that reader Sariego has cut himself off permanently from the greater part of the world of music.

THE VIRGIN SOUND.

The Jensen System Series Speakers are unique. With uniform power response and ultra-precise crossovers, they are designed to reproduce sound without compromise, without manipulation. At Jensen, our commitment is to bring you exactly the sound that is recorded. Hear the pure, uncensored, virgin sound at better audio shops. For more information and dealer locations, call 800-323-0707.



JENSEN

CIRCLE NO. 21 ON READER SERVICE CARD

Panasonic has car stereos that eliminate unnecessary noise. The Supreme Series.™

I'd like to say a few words about unnecessary noise. Unnecessary noise from car stereos. Like static, fuzz and interference. Not to mention stations that fade, drift and overlap. They're all the result of one overriding factor. Cars move.

That's where the Panasonic Supreme Series FM Optimizer (FMO) and other noise-quieting circuitry come in. FMO monitors all incoming radio signals and automatically adjusts to match changing conditions.

If you're driving away from a radio station, its signal strength decreases. The adaptive front end compensates automatically by increasing your radio's sensitivity. That reduces fading, drifting, and overlapping stations.

The automatic treble control constantly monitors the signal-to-noise ratio and turns on a filter when the noise gets too high.

There's Impulse Noise Quieting (INQ) circuitry that tunes out the

interference created by your car, passing cars and the surroundings.

Supreme Series AM/FM stereo cassette players. Some come with Dolby* auto-reverse, electronic tuning and LED clocks. And to make the Supreme Series really sing, Panasonic has 18 speakers. From a 1" thin model to speakers that handle 100 watts of power.

Take it from Reggie Jackson, when it comes to eliminating unnecessary noise, the Supreme Series has a lot to make noise about.

*Dolby is a trademark of Dolby Laboratories.

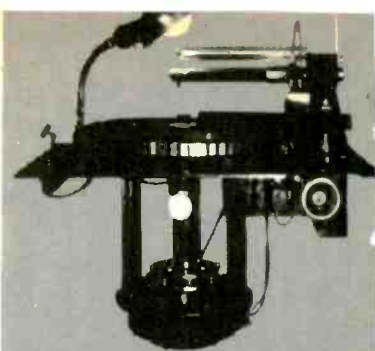


Panasonic.
just slightly ahead of our time.



CIRCLE NO. 56 ON READER SERVICE CARD

**• 1939...FIRST DIRECT-DRIVE TURNTABLE SYSTEM.
1951...FIRST MOVING-COIL CARTRIDGE.
1972...FIRST DIGITAL (PCM) RECORDING.**



In 1939, while many turntable manufacturers were trying to make the transition from horn phonographs to electrical record players, Denon developed its first direct-drive turntable. (Shown above). Denon engineers discovered that only a direct connection between motor and platter — free of the pulleys or belts found in more primitive drive mechanisms — could completely eliminate speed fluctuations that obscure musical detail.

Today, many turntable makers have discovered the virtues of direct-drive. It is now the accepted means of approaching state-of-the-art performance. But only one company has had 40 years to refine the direct-drive principle. It is the same company that 29 years ago developed another technology now in widespread use: the Moving-Coil Cartridge. It is the same company that changed the entire process of recording music by inventing digital (PCM) recording.

The company is Denon.



DENON

• 1982...DENON'S DP-60L DIRECT-DRIVE TURNTABLE.

The latest stage in Denon's refinement of direct-drive is the DP-60L Semi-Automatic Turntable. It uses a unique AC Servomotor with a quartz "clock" speed-reference to achieve exceptional torque and speed accuracy, while eliminating the corrective speed surges that degrade the performance of other direct-drive turntables. The DP-60L is supplied with two plug-in tonearm wands — one straight and one S-shaped — to assure a precise match-up with the characteristics of any phono cartridge.

The result? Musically cleaner sound, free of sonic smearing.

The Denon turntables for 1982: Six musical instruments from the company where innovation is a tradition.

DENON
*Imagine
what we'll
do next.*

CIRCLE NO. 11 ON READER SERVICE CARD

Denon America, Inc.
27 Law Drive, Fairfield, N.J. 07006

New Products latest audio equipment and accessories



**Boston Acoustics'
First Phono Cartridge**

□ A high-output moving-coil design, the MC-1 cartridge from Boston Acoustics has a low output impedance to minimize self-generated noise and to assure that capacitive and resistive load values are not critical for proper frequency response. The MC-1's high output voltage makes a pre-preamp or step-up transformer unnecessary. The unit's low mass and medium compliance are said to ease proper tone-arm matching. Aiding proper alignment are the cartridge's straight sides and the markings on the front. The cartridge comes in two versions, the MC-1H, with a large-contact-area Van Den Hul stylus, and the MC-1E, with an elliptical stylus. Specifications for both include frequency response from 20 to 20,000 Hz ± 1.5 dB, output voltage of 2.5 millivolts with a 3.54-cm/sec groove velocity, tracking force of 1.8 ± 0.3 grams, and overall weight of 5 grams. Prices: MC-1H, \$200; MC-1E, \$140.

Circle 120 on reader service card



**Sansui Turntable
Has Vibration
Cancellation**

□ Sansui's XR-Q7 direct-drive semi-automatic turntable contains what the company calls a Silent Synchronator that was designed to reduce the transmission of motor vibra-

tions to the tone arm. The system uses a second motor, coaxially mounted with the regular direct-drive motor, that rotates in the opposite direction to create equal and opposite torques. This is said to effectively null out vibrations arising in the main motor and to reduce rumble, wow, and flutter. The signal-to-noise ratio for the XR-Q7 is given as better than 80 dB (DIN-B). The turntable incorporates a Dyna-Optimum-Balanced tone arm. A quartz-locked servo system maintains turntable speed accuracy within ± 0.002 per cent. Price: \$500.

Circle 121 on reader service card



**Minicomponent System
By Blaupunkt**

□ The Blaupunkt Minicomponent System consists of the A-60 amplifier, the T-60 AM/FM tuner/preamplifier, and the C-60 stereo cassette deck. Optional L-35 minispeakers and P-60 turntable are also available. The A-60 is rated at 15 watts per channel into 8-ohm loads with no more than 0.2 per cent total harmonic distortion (THD). Frequency response is given as 20 to 20,000 Hz ± 1 dB. The A-60 contains the system's bass, treble, balance, and volume controls as well as a loudness-compensation switch. It also has twin five-step LED output-level meters.

The FM-tuner section of the T-60 has a stereo 50-dB-quieting sensitivity of 50 microvolts and stereo THD of 0.3 per cent. The T-60 also houses the system's input selection switches (Tape, Aux, Phono, FM, AM), a five-step signal-strength meter, and the tuner's slide-rule tuning dial. The frequency response of the C-60 cassette deck is given as 31.5 to 15,500 Hz with metal tape and Dolby-B circuits on. Wow-and-flutter is 0.5 per cent (wrms). The deck has twin five-segment LED record-level indicators and feather-touch transport controls. Total system dimensions are 8 1/2 x 9 x 9 inches. Weight is 21 1/2 pounds. Price: \$765 without options.

Circle 122 on reader service card



**Harman Kardon's
Ten-band Equalizer**

□ The ten-band EQ7 equalizer from Harman Kardon has a specified signal-to-noise ratio of 105 db and an overload level of 7 volts. The unit provides a ± 12 -dB boost or cut in each of ten ranges, with separate controls for left and right channels. Center frequencies for the equalizer controls are 31.5, 63, 125, 250, 500, 1,000, 2,000, 4,000, 8,000, and 16,000 Hz. Convenience features include a "replacement" tape-monitor loop, input-level controls and overload indicators for each channel, a choice of pre- or post-taping equalization, and an equalizer-defeat switch. Dimensions are 15 1/4 x 3 x 12 1/2 inches. Price: \$249.95.

Circle 123 on reader service card



**Phoenix Systems'
Phono-preamp Kit**

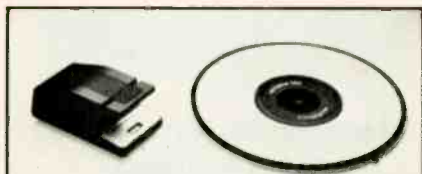
□ Phoenix Systems' P-10-MM phono-preamp kit for moving-magnet cartridges has a discrete FET front end for low noise and high input impedance for linear cartridge loading. A "split-pole" playback equalization is said to give RIAA response similar to that obtained with passive circuitry. A built-in high-pass filter rolls off at 10 Hz at 18 dB per octave. A polarity inverter switch is included "for those of you out there who feel you can hear the difference, or just want to find out." The unit has a high-level auxiliary input and can be connected directly to a power amplifier (the output of a regular system preamp can be plugged into the P-10-MM's auxiliary input).

Input impedance is 47,000 ohms, RIAA accuracy is ± 0.25 dB. Signal-to-noise ratio is 85 dB (A-weighted), distortion is less than 0.01 per cent. A moving-coil-cartridge version is also available (Model P-10-MC). Price: \$99 for either model. Phoenix Sys-

New Products latest audio equipment and accessories

tems, Dept. SR, 91 Elm Street, Manchester, Conn. 06040.

Circle 124 on reader service card

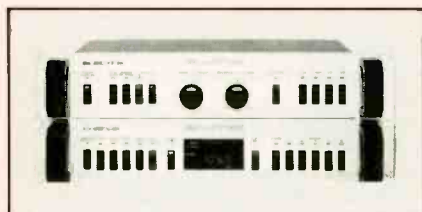


Vacuum Disc Stabilizer from Audio-Technica

□ Audio-Technica's new vacuum-operated AT666 disc stabilizer holds a phonograph record—even a severely warped one—firmly against the turntable platter while it is being played. The stabilizer comes in two parts: a precision-machined duralumin platter and a manual vacuum pump. The stabilizer platter replaces the normal rubber turntable mat, and a tube connects the platter valve to the pump. The record is placed on the platter, and the pump handle is pressed several times to evacuate the air between them. A few strokes are sufficient to hold a record with a force equivalent to that of a 550-pound weight. An indicator on the pump shows when this point has been reached.

Claimed benefits of use include flattening of warped records during play, elimination of record resonance, improvement of tracking, lowering of distortion, and lessening of acoustic-feedback problems. Price: \$275.

Circle 125 on reader service card



Preamp and Tuner From Sumo Electric

□ Sumo's Electra preamplifier (top) has a separate moving-coil phono section. The bass and treble tone controls are removed from the circuitry when their knobs are centered. Specifications include maximum distortion (harmonic or intermodulation) of 0.01 per cent and signal-to-noise ratio (S/N) of 65 dB for the moving-coil input, 70 dB for the moving-magnet input. A low-frequency filter is down 3 dB at 20 Hz. The

RIAA equalization accuracy is given as ± 0.4 dB through the moving-magnet input. Frequency response at rated output is ± 0.1 dB from 20 to 20,000 Hz.

Charlie, Sumo's digital-synthesis FM-only tuner (bottom), has an IHF mono sensitivity of 2.5 microvolts and an ultimate stereo S/N of 74 dB. Features include switches for mono/stereo, high-frequency blend, multiplex filter, muting defeat, narrow/wide i.f. bandwidth, and five-station preset memory. Prices: Electra, \$399; Charlie, \$459. Sumo Electric Co., Dept. SR, 18356 Oxnard Street, Tarzana, Calif. 91356.

Circle 126 on reader service card



Mordaunt-Short's Infinite-baffle Two-way Speaker

□ Mordaunt-Short's Carnival 3 speaker is a compact infinite-baffle system suitable for vertical use on a stand or shelf. The minimum mounting height is specified as 14 inches above the floor. The speaker uses an 8½-inch woofer/midrange together with a ½-inch synthetic-dome tweeter utilizing ferrofluid cooling and damping. The system crossover frequency is 3,500 Hz; fundamental system resonance frequency is 80 Hz. Nominal frequency range of the Carnival 3 is 40 to 25,000 Hz. System impedance is nominally 8 ohms; sensitivity is 88.5 dB sound-pressure level measured at 1 meter with a 1-watt input. Finish is teak or walnut veneer on the top cap, matte-black base,

and "hedgehog-brown" fabric grille sleeve. Dimensions are 16½ x 9½ x 7¾ inches. Price: \$445 per pair with stand (shown); \$395 per pair without stand. Mordaunt-Short, Inc., Dept. SR, 1919 Middle Country Road, Centereach, N.Y. 11720.

Circle 127 on reader service card



New Allsop Record Cleaner

□ The soft cleaning fibers of Allsop's Orbitrac record-cleaning system are said to be perfectly aligned with a record's grooves when the cleaner's pivot arm is placed in the disc's spindle hole. As the user spins the cleaner around the record, the cleaning pad, mounted on a bearing, maintains correct contact with the grooves while the cleaner itself pivots freely with hand motions. Orbitrac's fabric fibers are said to lift dirt, dust, and impurities from deep within the record grooves. The cleaning pad is kept clean with a supplied brush. The antistatic solution supplied is said to be safe for all types of disc vinyl. A storage case and an antistatic work pad are included. Price: \$25.

Circle 128 on reader service card



Akai Cassette Deck Includes Dolby-C

□ Akai's GX-F71 cassette deck is a three-head, two-motor unit with Dolby-C noise reduction (switchable to Dolby-B). A switchable automatic tape-monitoring feature simplifies use of the deck's three heads by monitoring the source during the recording-stand-by mode and automatically switching to off-the-tape monitoring in the

(Continued on page 16)

ADS L1230. A STUDIO MONITOR FOR THE HOME.

It is no surprise to us that our ADS L1230 Professional Monitor Loudspeaker has become one of our largest selling speakers to home music enthusiasts.

Born of ADS' developmental technology for professional monitor speakers for the new digital recording industry, the L1230 is a phenomenal performer. First, it is sold and shipped in mirror-symmetrical matched pairs only. The two long-excursion 8" diameter woofers, acoustic suspension soft-dome midrange driver and Barium Ferrite tweeter in each speaker are produced entirely within ADS under stringent controls. Each driver is hand calibrated and hand tested. The

result is exceptionally uniform extended frequency response, unusually wide dynamic range, outstanding transient accuracy, low distortion, perfect "point source" stereo imaging and superior driver linearity. And one further advantage instantly converts the price from an expenditure into an investment. The extremely advanced design and new technology embodied in the L1230 ensures that it will not become obsolete with today's fast-developing improvements in program source material quality.

It is a worthwhile experience to listen to a pair of L1230's. We suggest that you call toll-free 1-800-824-7888 (in California 1-800-852-7777) and ask for operator 483, Dept. SR4. We'll send you technical literature and a list of ADS Dealers where you can enjoy a demonstration.



**Analog &
Digital Systems, Inc.,**

Where Technology Serves Music
One Progress Way, Wilmington, MA 01887



New Products latest audio equipment and accessories

play mode. The tape counter can also be switched to show elapsed time.

The GX-F71 has no tape bias or equalization switches. Instead, the Auto Tape Tuning system sets optimum bias, equalization, and sensitivity levels. This feature also operates during timer-controlled recording. The auto-fader control will, at the touch of a button, fade the sound up to the desired recording level at the beginning of a piece and then fade it down at the end. The IntroScan feature plays back the first 10 seconds of each selection consecutively, allowing quick review of a tape and easy location of specific selections.

The unit's closed-loop, dual-capstan drive system gives a wow-and-flutter figure of 0.03 per cent. Frequency response is given as 20 to 20,000 Hz ± 3 dB. Signal-to-noise ratio without noise reduction is 60 dB. Use of Dolby-C is said to improve that figure by up to 15 dB at 500 Hz and up to 20 dB from 1,000 to 10,000 Hz. Price: \$449.95.

Circle 129 on reader service card



**Servo-controlled
Tone Arm on
Denon Turntable**

□ The DP-11F turntable from Denon contains a microprocessor that controls turntable speed, activates the auto-on and auto-off play functions, and controls both tracking force and antiskating compensation automatically and dynamically. This last feature, called the "Dynamic Servo Tracer" system, is said to compensate instantly for record warps and other imperfections with precise changes in tracking force, antiskating compensation, and tone-arm damping. The turntable is driven by a cogless, direct-drive, d.c. motor with quartz speed control. The operating controls (including repeat and tone-arm-lift functions) are outside the dust cover. Other features include a resonance-canceling turntable mat and tuned isolation feet. Wow-and-flutter is given as less than 0.02 per cent; rumble is less than

-75 dB (DIN-B). Dimensions are 14½ x 4 x 13½ inches. Price: \$199.

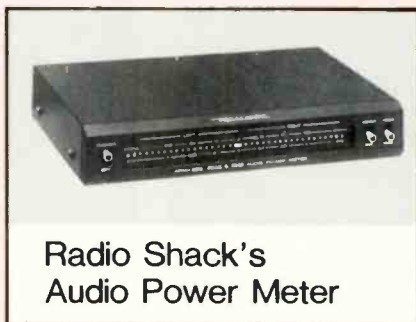
Circle 130 on reader service card



**Sony's Powered
Small Loudspeakers**

□ The Sony SA-55 Active Stereo Speaker System consists of a pair of compact stereo speakers with a built-in stereo power amplifier. When used with any tape deck or tuner, it becomes a complete playback system. The SA-55 can also be used with portable stereo cassette players and FM radios by means of an optional adaptor cable. The SA-55's amplifier, built into the left-channel speaker, has controls for power, volume, and line/monitor selection. The back panel of the left speaker also contains the tape- and auxiliary-input jacks. A single lead connects to the right-channel speaker. The power amp is rated at 3 watts per channel into 8-ohm loads from 70 to 15,000 Hz with less than 1 per cent total harmonic distortion. The speaker drivers are full-range 3½-inch units in bass-reflex enclosures. Sensitivity is 89 dB sound-pressure level at 1 meter with a 1-watt input. Speaker dimensions are 8½ x 4¼ x 10⅞ inches. Total weight is 9 pounds. System price: \$150.

Circle 131 on reader service card

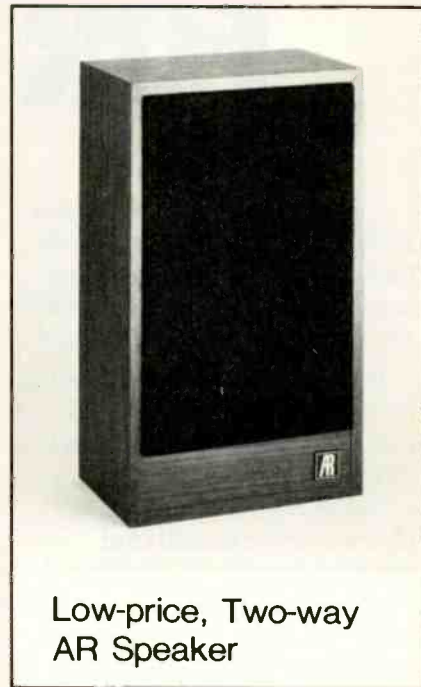


**Radio Shack's
Audio Power Meter**

□ The Realistic APM-300 Peak and RMS Audio Power Meter (part number 42-2104) monitors the signal levels being delivered to a system's speakers with a nineteen-segment LED bar-graph display. Nine red LEDs per channel symmetrically display the level while a central green LED serves as a zero reference and pilot light. The unit can be switched to display either peak or average output power on a wattage scale.

Full-scale readings are switchable between 2 and 200 watts. Rear-panel connections are provided for either 4- or 8-ohm speakers. The black metal case measures 17½ x 8¾ x 5½ inches. Price: \$49.95.

Circle 132 on reader service card



**Low-price, Two-way
AR Speaker**

□ The AR28s two-way system is one of the more economical AR models. The acoustic-suspension speaker has an 8-inch woofer and a 1-inch ferro-fluid-cooled tweeter with a crossover at 2,000 Hz. The AR28s may be used with amplifiers delivering up to 100 watts continuous power per channel; at that power level they are said to be driven into clipping no more than 10 per cent of the time with normal speech or musical program material. A 1-watt input will produce a sound-pressure level of 87 dB at 1 meter. Impedance is nominally 6 ohms, 5.5 ohms minimum. Frequency response is rated at 50 to 24,000 Hz ± 0 , -3 dB. Dimensions are approximately 21 x 11¾ x 7¾ inches; weight is 24 pounds. The AR28s is finished in walnut-grain vinyl and is sold only in pairs. Price: \$250 per pair.

Circle 133 on reader service card

NOTE: All product descriptions and specifications quoted in these columns are based on materials supplied by the manufacturers, who will respond directly to reader requests for further information.

Domestic inflation and fluctuations in the value of the dollar overseas affect the price of merchandise imported into this country. Please be aware that prices quoted in this issue are therefore subject to change.

FREE

details . A DIFFERENT KIND OF RECORD CLUB

You can now own every record or tape that you may ever want . . . at tremendous savings and with no continuing purchase obligations. You can get valuable free dividend certificates, you can get quick service and all the 100% iron-clad guarantees you want.

Now you can stop price increases that leave you with less music for your record and tape budget. You can guarantee yourself more music for less money through membership in Discount Music Club.

Look at these benefits:

TREMENDOUS SAVINGS

on every record and tape in print—no "agree-to-purchase" obligations of any kind.

DISCOUNTS OF 43% TO 73% off mfg. suggested list . . . special catalog features hundreds of titles and artists.

ALL LABELS AVAILABLE

including most imports through special custom ordering service. If we don't stock it we'll get it for you.

SCHWANN CATALOG

lists thousands of titles; classical, pop, jazz, ballet, opera, musical shows, folk, rock, vocal, instrumental, country, etc.

DISCOUNT DIVIDEND CERTIFICATES

Dividend Gifts—Every shipment carries a dividend gift or dividend certificate. Certificates redeemable immediately for extra discounts.

NEWSLETTERS

happenings in the world of music; concerts, critiques, new releases . . . special super-sale listings at discounts of up to 73%.

DISCOUNT ACCESSORY GUIDE

Diamond needles, cloths, tape cleaners, etc. Discount Music Club is your complete one stop music and accessory buying service.

QUICK SERVICE

same day shipping on many orders . . . rarely later than the next several days. Partial shipments always made in the event of unforeseen delay . . . all at no extra cost to you.

100% IRON-CLAD GUARANTEES

on all products and services. Everything is guaranteed factory fresh and free of defects or damages of any sort. Your total satisfaction is unconditionally guaranteed.

Discount Music Club is a no-obligation membership club that guarantees tremendous discounts on all stereo records and tapes and lets you buy what you want . . . when you want . . . or not at all if you choose.

These are just a few of the money-saving reasons to write for free details. You can't lose so why not fill out and mail the coupon below for immediate information.

dmc DISCOUNT MUSIC CLUB, INC.
650 Main Street DEPT. 9-0482
P.O. Box 2000
New Rochelle, N.Y. 10801

NAME _____

ADDRESS _____

CITY _____

STATE _____

ZIP _____

CIRCLE NO. 12 ON READER SERVICE CARD

Audio Q. and A.

By Larry Klein

Technical Director Klein in the speaker room at Sato Musen in Tokyo's Akihabara district.



FM Signal Strength

Q. I have noticed that my receiver's signal-strength indicator seems to hit the same high point for almost every station I tune in. I know that all FM stations are not broadcasting the same power, and it seems illogical that every one of them would reach my antenna with the same strength. Is this a design flaw in the tuner section?

EARL WEBSTER
New York, N.Y.

A. The FM signal strength at an antenna in the metropolitan New York area might range anywhere from 3 or 4 microvolts to well over 1,000 microvolts. To respond linearly or proportionately to such a wide range of signal strengths, the indicator would need a scale with the equivalent of a thousand divisions. But this would really not serve any purpose, because we are primarily interested in reading signal levels below, say, 100 microvolts. (With almost all tuners, signals above this level achieve full quieting and little improvement occurs with an increase in signal.)

If signal strength were read on a linear 0- to 1,000-microvolt scale, the 0- to 100-microvolt range would occupy only one-tenth of the meter's range. When using a signal-strength indicator to orient an antenna, a small difference might be crucial in obtaining a consistently noise-free signal. For this reason, signal-strength-indicator circuits are designed to be logarithmic rather than linear, so that the difference between 4 and 8 microvolts is readily apparent. Higher up the scale at, say, 300 microvolts, the same doubling of the signal strength would result in the same amount of increase in the reading. That's why the small differences between the *strong* signals reaching your tuner simply don't show up.

Counterfeit Components

Q. I do a lot of shopping by mail order because of my location and have been troubled by recent reports of counterfeit hi-fi products. How can one tell if a product is genuine or a cheap imitation made to look identical? The salesman at a

large Midwestern outfit wanted to sell me a phono cartridge that had a well-respected brand name, but its model number was strange and nowhere to be found in any of my catalogs. Was it a ripoff?

RICK KARDISH
Taos, N.M.

A. In general, a counterfeiter will only go through the trouble of duplicating items that are popular and reasonably costly, such as replacement styli for best-selling cartridges, high-quality cassette tapes, and some brands of car-stereo speakers. Unfortunately, the "better" counterfeits are frequently difficult to tell from the real thing through visual inspection alone. How can you tell whether you've bought a ringer? Well, if the replacement stylus is labeled "Sure" or the tape "Maxwell," then you know something's wrong, but much of the time no easy clues are provided and only the manufacturer—or a listening comparison—can tell you for sure.

In regard to "strange" model numbers on standard-brand cartridges, many cartridge companies supply their standard middle-of-the-line cartridges with special model numbers to turntable manufacturers and very large dealers. This allows the dealer to claim truthfully that you can't buy the same model elsewhere for less money. The special "models" are from normal production and the same units may be sold (with different special model numbers) to many dealers. These "private model" cartridges are in no sense "seconds," but are usually less expensive—at least to the dealers—because of the quantities ordered and (sometimes) the absence of fancy packaging.

Slew Factor

Q. Julian Hirsch frequently refers to "slew factor" in his test reports. Just what is it and how is it measured?

R. REEDER
Seattle, Wash.

A. Slew factor describes how well an amplifier can handle a high-power, high-frequency signal, and it is one of the "secondary disclosures" listed in the Elec-
(Continued on page 20)

THE V-95RX.

YOU CAN'T EVEN HEAR ITS BEST FEATURE.



This is the Teac that's quicker than the ear. It features Real Time Reverse. When your cassette comes to its end, a miniature infra-red sensor activates either the independent forward or reverse capstan (as appropriate). Its unique four-channel permalloy record/play head is repositioned. And the tape reverses course. All in an astoundingly swift 0.15 seconds. So quick, the gap is virtually inaudible. In record or play. And you'll never have to flip a cassette again.

Yet this is just one feature of an extraordinary deck which also offers the unusual option of both Dolby NR* and dbx** noise reduction. Plus Computomatic. So you can program in advance the exact cuts you want. Along with a three-motor transport system. And an optional full-function remote control.

The V-95RX. You won't know if it's coming or going.

TEAC MADE IN JAPAN BY FANATICS.

COPYRIGHT 1982, TEAC CORPORATION OF AMERICA, 7733 TELEGRAPH ROAD, MONTEBELLO, CA 90640
* DOLBY® IS A REGISTERED TRADEMARK OF DOLBY LABORATORIES, INC. ** dbx® IS A TRADEMARK OF dbx, INC.
CIRCLE NO. 42 ON READER SERVICE CARD

With Crown MULTI-MODE™ You're ready for real.



"MULTI-MODE™" describes an improved Crown output circuit that is audibly superior. It instantaneously changes its mode of operation as the signal level changes, for totally clear, undistorted sound.

The MULTI-MODE circuit makes at-home listening more real. From Bach to Bee Gees, you'll hear more of the music with MULTI-MODE.

At low signal levels, the MULTI-MODE circuit operates in a Class A mode, free from switching or notch distortion. As signal current increases, the circuit smoothly configures itself as an A + B amp, again with clear, clean output. At high signal levels, MULTI-MODE operates in an AB + B mode, pro-

viding all of the undistorted power needed.

Three new Crown POWERLINE amps bring you the sonic accuracy of MULTI-MODE and other circuit improvements. New ideas in front-panel displays and rear-panel convenience will enhance your enjoyment.

MULTI-MODE theory and operation, and the POWERLINE amps are described in the Crown Information Package. It also contains data on all Crown products for the home, a factory "tour," reprints of reviews, technical discussions of audio problems, prices and dealer lists. Send us the coupon and \$5 for your complete copy. Get ready for real.

tronic Industries Association test standard for audio amplifiers (EIA RS-490). It is measured by driving the amplifier to its manufacturer's rated output at 1,000 Hz under the gain conditions specified in the standard. The input-signal frequency is then raised, while keeping the signal level constant, until the output has a total harmonic distortion (THD) of 1 per cent. The frequency (in kilohertz) at which that occurs is divided by 20 to obtain the slew-factor rating.

Julian Hirsch finds that, in practice, it is rarely necessary to actually measure THD during the test, since one of three conditions will generally determine an amplifier's upper-frequency limit. (1) The amplifier's output power falls with increasing frequency without appreciable distortion. In such a case, the signal generator's maximum available frequency establishes the slew factor. The generator used by Hirsch-Houck Labs has an upper frequency limit of 500 kHz, and if that is reached the slew factor is rated as "greater than 25." (2) The output waveform changes abruptly from a sine wave to the straight-sided shape associated with slew limiting. (3) The amplifier blows a fuse or its output transistors.

The significance of the slew-factor rating is that it correlates the high-frequency response of an amplifier at low and high power outputs, the idea being that if an amplifier's high-frequency response to low-power signals much exceeds its high-frequency response to full-power signals, audibly awful effects called transient-intermodulation distortion (TIM) may occur. Of course, there are specific TIM tests one can make, but they are far more clumsy and, in my view, no more revealing of amplifier quality than the simpler slew-factor test.

It seems safe to say that an amplifier with a slew-factor rating of 5 or higher is unlikely to have any difficulty coping with any musical signal up to its maximum rated power. However, lower slew factors (no less than 1, however) do not necessarily imply any sonic inferiority. In other words, slew factor is a test that hardly any of today's hi-fi amplifiers ever fails, and those that have very high ratings don't sound any better than those that don't. All clear?

Four-channel Sound

Q. *What ever happened to quadraphonic sound? And in particular, where can I buy discs for my SQ/CD-4 system?*

CHARLES FOX
Arlington, Va.

A. Quadraphonics is alive and well—only in the pages of *MCS Review*, which refers to itself as "the world's leading publication dedicated only to the promotion of quadraphonics and other multi-channel sound technologies." The *MCS Review* is a lively twenty-odd-page publication that usually includes an interesting article or two, editorial comments, news, reviews, and a large number of offerings of old (and a few new) releases in the various four-channel disc and tape formats. A year's subscription is \$4 for five issues in the U.S., Canada, and Mexico, \$7 elsewhere. Write to Quad Incorporated, P.O. Box 19, Capron, Va. 23829. □



Crown®

...WHEN YOU'RE READY FOR REAL!

The Crown Information Package is also available free from your dealer. If you need a list of Crown dealers, use the Reader Service Card number, or call 219/294-5571.

CIRCLE NO. 8 ON READER SERVICE CARD

CROWN INTERNATIONAL, Dept. MM
1718 W. Mishawaka Road, Elkhart, Indiana 46517
Here's my \$5 (outside U.S. and Canada, \$8). Send my Crown Information Package, with money-back guarantee.

Name _____

Address _____

City _____ State _____ Zip _____

Phone _____ / _____

SR4

STEREO REVIEW

Sony is about to change your idea of what you can expect from an audio tape.



Introducing UCX-S with Wide Fidelity Sound.



Sony's revolutionary UCX-S has the widest dynamic range of any high-bias tape; it has actually *expanded* recording capacity.

We call it Wide Fidelity Sound.

With UCX-S, you can record at higher volume levels with less distortion than any other high-bias tape. So you can also capture the soft sounds buried before in background noise.

UCX-S has unsurpassed frequency response in the low and middle ranges. And



at the delicate high frequency ranges, the enhanced responsiveness of UCX-S gives you exceptionally beautiful high notes.

The incredible specifications include Retentivity and Squareness higher by far than any other high-bias tape. Retentivity: 1800 Gauss. Squareness: 93%, an astounding figure.

Of course, the real test comes when you lean back, close your eyes and listen. You'll hear *every* instrument. You'll hear more than you've ever heard on a high-bias tape. You'll hear it on UCX-S, with Wide Fidelity Sound.

SONY.

© 1982 Sony Tape Sales Co. a Div. of Sony Corp. of America. Sony is a trademark of Sony Corp.

CIRCLE NO. 37 ON READER SERVICE CARD

Car Stereo

By Ivan Berger



PRE-CES NEW PRODUCTS

THIS month I'll cover various new products I lacked the space for last time before they get deluged in the flood of new-product information resulting from the Winter Consumer Electronics Show.

The stereo systems provided as original equipment by car makers aren't known for innovations, but Toyota came up with a few recently. The standard system on the 1981 Cressidas (optional on Coronas) has a heat-pipe output-transistor cooling system that's the first I've seen for car use (though Sony and others have used them in home equipment). And the new Corolla SR-5's stereo console swivels to face either driver or passenger (let's hope they don't fight over it).

GM's Delco Division is competing a bit harder against the hordes of car-stereo "after-market" companies. Their new catalog lists the features (though not the specifications) of the sixteen different in-dash units, three speakers, and one graphic equalizer/booster they have available. Such information was hard to come by in former years, which made it easy to overlook the fact that Delco is one of the world's largest car-stereo manufacturers. Pulse-noise suppressor circuits will be built into Ford's new radios and stereos instead of being wired in elsewhere in the car. According to *Autosound News*, the circuit briefly switches the radio off—too briefly for the ear to notice—when the noise pulses occur. Some 1981 Ford stereos

already use this system, and most 1982 models will.

Back in the after-market, Kenwood has announced a new in-dash system and a new equalizer. The former is the KRC-712, a \$549 unit with digital tuning, 5-second sampling scanning, presets for five AM and five FM stations, Dolby noise reduction, and ANRC II. The last feature tracks fading signals, automatically shifting from the stereo mode through hi-blend, mono, hi-cut, and "soft-mute" before giving up on the station entirely. The KRC-712 delivers 15 real watts per channel (with 1 per cent or less total harmonic distortion) and has preamplifier outputs for use with auxiliary amps. The new equalizer is a bit out of the ordinary: instead of slider controls, it has pushbuttons to raise and lower response in each of its five bands. Amber LEDs display the response settings, and there's a switch to dim them if desired.

Mitsubishi is adding a "super-compact" unit, the \$200 RX-726, with an auto-reverse cassette player and manual analog tuning; it's also available in a vertical-dial model for the Chevrolet Citation. Power is 7 watts per channel with less than 5 per cent distortion. Radio Shack has just announced a "subcompact" unit in their Realistic line. It features an auto-reverse cassette player with locking fast-forward and rewind, a slide-rule AM/FM tuning dial, and an FM

mono/stereo switch. Judging from the picture, there's a convenient front-panel antenna trimmer too. The catalog number is 12-1898, and it sells for \$130 at Radio Shack stores.

Fultron (Arthur Fulmer) now has two in-dash models. Model 16-6900 (\$380) is a digital unit with preset tuning for six AM and six FM stations plus auto-reverse tape. Model 16-5500 (\$140) has auto-reverse tape too, but its tuning is manual. The line also includes a nine-band equalizer/booster with 40 watts per channel at less than 10 per cent THD for \$140. Atlantis Corporation (P.O. Box 1444, Minneapolis, Minn. 55414), a company new to me, has announced its Award line, which includes a booster and a seven-band equalizer/booster at 30 watts per channel and a nine-band equalizer/booster with double that power (no detailed specifications yet).

IN Japan, Matsushita has announced a TV set for cars that isn't the usual portable powered from the lighter socket. It's a two-part system with screen and control head designed for compact installation in the car's (presumably a limousine's) back seat while the chassis hides in the trunk. If it comes to the U.S., I suspect it's likely to wind up in vans as well.

Jensen has new ThinMount J1292 speakers designed to fit Japanese imports and other small cars. The cone is parabolic rather than purely conical in shape, which is said to enhance its response. The 5¼-inch speakers can handle 40 watts of power, and they sell for \$55 per pair. An intriguing accessory item is a security cover designed to disguise an expensive stereo system as a cheap radio. It's made by Caltex (P.O. Box 435, Sun Valley, Calif. 91352).

High-power car stereos can run down your car's battery if you're not careful (mine is wired so it runs only when the engine does for just that reason). Radio Shack now sells a \$6 "Auto Electrical System Analyzer" that plugs into a car's lighter socket and indicates with red, yellow, and green LEDs how the battery and alternator are doing. It's catalog number 22-1635. (I've seen this or an extremely similar item in mail-order ads from other companies at prices ranging up to \$13.)

In the next column or two I'll be covering the news from the CES. After that, I should be able to get around to answering some of the questions you've been sending me for a car-stereo Q-&A column. □



The new Award line from Atlantis Corporation

Kenwood's new KGC-447 graphic equalizer

Radio Shack's low-price Auto Electrical Analyzer

WHO JUST INTRODUCED AN AMPLIFIER WITH 750 WATTS/CHAN.* DYNAMIC HEADROOM FOR JUST \$799?



Who else but Carver.
Meet the new M-1.5.
Bob Carver's Penultimate Power Amplifier.

*750 watts/chan. dynamic headroom; 600 watts/chan. long-time-period reserve; 350 watts/chan. continuous.

CARVER

PO Box 664, 14304 N.E. 193rd Place
Woodinville, Washington 98072

CIRCLE NO. 5 ON READER SERVICE CARD

Tape Talk

By Craig Stark



Loud and Soft

Q. *Can you tell me the difference between signal-to-noise ratio and dynamic range? I know they must be related, but I don't know what the relation is.*

CHARLES PARSON
Columbia, Mo.

A. "Signal-to-noise" is generally used to refer to the ratio, in decibels, between the maximum signal level a device such as a tape recorder can handle without excessive distortion and the residual noise level. It is measured at a standard frequency, usually 315 or 1,000 Hz. "Dynamic range" refers to the difference, again in decibels, between the maximum and minimum undistorted levels of either music or a hi-fi component's output, but without a standard frequency being specified. At 315 Hz, the dynamic range and signal-to-noise ratio of a recorder will be the same; its dynamic range at 10 or 15 kHz will be considerably less than its S/N because of factors that limit its high-frequency storage capacity. Happily, most music sources do not produce extremely high frequencies at the same volume as low frequencies, so a limited dynamic range at the higher frequencies is not fatal to the goal of reproducing music realistically.

Quick Response Check

Q. *Is there any kind of quick check that doesn't require test equipment that I can run on a two-head cassette deck's frequency response before buying it?*

MIKE MEE
Ada, Okla.

A. There is one such test that Julian Hirsch and I have both used for years, but you have to be just a little careful in applying it.

The problem with testing a two-head deck's frequency response using normal musical sources is that you must synchronize the recorded result with a second playing of the original, which is something of a bother. The between-station hiss of an FM tuner is a remarkably fine "test signal" for frequency response, however, for you can

record a section of it, rewind the tape, and use the source/monitor switch on your amplifier to compare the recorded result with the continuing hiss from the tuner. But two warnings are in order.

First, for the test to have any usefulness you must make the playback of the recorded hiss and the continuing source hiss sound equally loud. This same principle, incidentally, applies when comparing loudspeakers; dealers know that in a demonstration the best way to make one speaker sound "better" than another is to make sure that it sounds just a little louder than its competitor. Second, because FM hiss has a pronounced high-frequency content, do not record your test tape at an indicated 0-dB level. Start at about -20 dB, and if you hear no difference between the recorded and the "original" FM hiss, the basic frequency response of the cassette deck is flat. Increase the level (making new recordings) gradually, and you'll see how much high-frequency overload margin the deck provides. At some point every cassette deck will start to lose high frequencies (the "pitch" of the hiss will lower), but if this is at a level of -10 dB or higher, your deck's response is excellent indeed. This kind of check-out can be made in under a minute once you've done it a few times.

Dolby and Equalization

Q. *I use Dolby noise reduction on all my tapes, which are recorded on CrO₂-type cassettes. I find that they actually sound better when played back without Dolby decoding and with ferric playback equalization. Why is this so?*

CHRIS NERO
Syracuse, N.Y.

A. This question keeps coming back (like a song) so perhaps I'd better answer it once again. First, Dolby-B works by boosting low-level (soft) high frequencies before they are recorded. A Dolbyized recording, then, has boosted low-level high frequencies. When played back through a correctly operating Dolby system, all low-level high frequencies—both the musical ones that received the boost and the unwanted tape hiss—are cut back by the

amount of boost originally applied, so the original frequency response of the music is restored but the tape hiss level is lowered. When you play a Dolbyized tape without decoding you lose the benefit of the noise (hiss) reduction and you hear a slightly boosted treble.

Second, when you play back a chrome-type tape with ferric equalization what you are essentially hearing is a boost of all the high frequencies (above approximately 5,000 Hz), regardless of their original level, by about 4.5 dB. You could accomplish very much the same thing with your amplifier's treble control. Again, you sacrifice noise level—the hiss gets boosted along with the music—but you get a brighter sound.

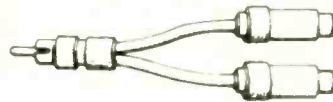
Assuming your hearing is normal, it is possible that your cassette deck is out of adjustment, leading to the need for the two treble-enhancing measures you're taking. A relatively slight amount of overbias would produce this condition. A service technician can check out the frequency response of your deck and determine whether this is the case. It could also be that other factors are operating elsewhere in your system to cause it to roll off the highs. How does your record player sound? Does it also benefit from a high-frequency boost?

Mono Playback

Q. *I have a large number of open-reel tapes of old 78-rpm recordings taped separately on the left and right tracks. My new deck won't play only one channel at a time, and my new receiver won't play only one track, so I get two unrelated pieces of music simultaneously. Is there a solution to this problem?*

ARNOLD R. WOLVEN
Goshen, Conn.

A. There are several possible solutions. The easiest is to turn the channel balance control on your receiver to its extreme left or right setting. You will then hear one of the two mono tape tracks, but only through one speaker. If you want the music from a single track to come through both speakers (and your receiver doesn't have an A+B switch that will do the job), you can use a simple "Y" adaptor available



for a couple of dollars from most audio dealers. This consists of two phono jacks connected to a single phono plug (see illustration). Unplug the cables at the recorder's output jacks, plug them into the two jacks of the adaptor, and then plug the adaptor into the desired output channel of the recorder. This will put the selected mono tape signal into both channels of your receiver. □

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

AR



A new chapter in bookshelf speaker design.

Even though they sound fine in scientific test chambers, some of the world's most expensive speakers bomb when you get them home and play a record. Trumpets blur instead of blare. Guitars wimp out. Because the speakers weren't designed to allow for the acoustics of real rooms. Rooms with walls, ceilings, floors and furniture.

Our researchers began to attack this problem years ago, creating highly complex computer software to measure the interplay between room surfaces and speakers. Using AR-built woofers, midranges, tweeters and crossover networks, they designed advanced speaker systems like the AR48s (shown at right). All components in these systems work together with room acoustics in a totally integrated sonic relationship. So that even the most inexpensive AR bookshelf speakers deliver their best performance in your home. Not in a test chamber you'll never see.

Find out why AR speakers keep winning acclaim (and three Grand Prix Awards) from the world's top hi-fi magazines. *For information and local dealer names, call 1-800-824-7888* toll-free. Ask for Operator 14.*

Hear what you've been missing.

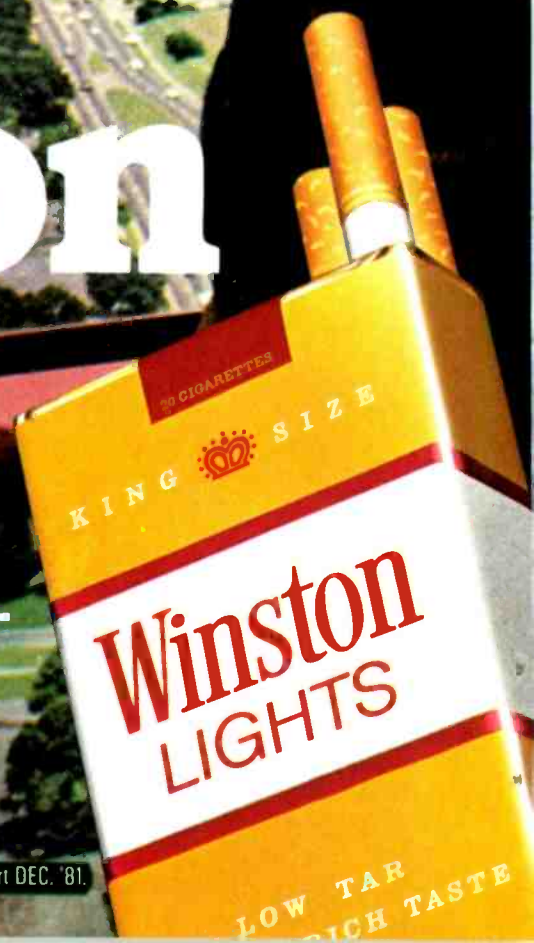


Warning: The Surgeon General Has Determined
That Cigarette Smoking Is Dangerous to Your Health.

Winston

Nobody does it better.

This is your world.
This is your Winston.
The only low tar
built on taste.
Winston Lights



Technical Talk

By Julian D. Hirsch



● Consumer Reports' Speaker Ratings ●

LAST month in this column I dealt with what I consider to be serious shortcomings in Consumers Union's approach to speaker testing, and this month we have CU's reply to those criticisms.

IT is with a sense of *déjà vu* that we find ourselves commenting upon Julian Hirsch's latest remarks about Consumers Union's loudspeaker tests since they are much the same as those he made five years ago. To be sure, disagreement continues to flourish among loudspeaker reviewers and testers. But while disagreement has value and can even lead to the discovery of new truths, Mr. Hirsch's approach, as characterized by his remark, "In fact, room acoustics have a profound effect on the sound of any speaker at almost any frequency..." (emphasis Mr. Hirsch's), is an expression of acoustic nihilism, which, at its ultimate, seems to argue for abandonment of objective loudspeaker testing. We disagree with such an argument.

One can choose to use measurements that emphasize the "profound effect" of room acoustics to the despair of the measurer, or one can search for techniques that correctly reflect real performance even though made in many different and varying listening rooms. And there is a strong measure of agreement as to the most useful of such techniques. An examination of the technical literature shows that there is a widely held view that a loudspeaker's total radiated power is the most important predictor, as yet, of its response in the home listening en-

vironment. We are of that opinion, and so, it would seem, is Mr. Hirsch, who is clearly involved with objective measurements!

Total power response can be measured or closely approximated in one of two ways: in a reverberant room, as Mr. Hirsch does, or in an anechoic chamber, as we do, using spherical integration. In the manner described by Mr. Hirsch, we measure loudspeaker power response from 20 to 20,000 Hz. The use of the anechoic chamber leads to certain incidental advantages: from these data we can also compute directivity, polar response, and power-available efficiency.

Mr. Hirsch is interested in the broad, octave-to-octave response of a loudspeaker rather than fine detail. We too take that view. Our power-response measurement is obtained using one-third-octave analysis, which yields finer detail but is nevertheless a smoothing process. Like Mr. Hirsch, we run detailed anechoic axial-response curves only to check for certain speaker anomalies. And if we derive certain essential information concerning the bass from anechoic measurements, so again does Mr. Hirsch!

Our power-response data enable us to compute the effect of room-boundary conditions on bass response. In the last few years manufacturers have become rather specific regarding loudspeaker placement in the listening room. With that information we can select reasonable loudspeaker positions for use in our computations. For our last report (September 1981), we "placed" the loudspeakers on the long wall of a 20-foot-long listening room, 10 feet apart, with the listeners assumed to be about 10 to 20

feet away on, say, a long sofa. That arrangement is common enough and quite "easy" on the loudspeakers in that it reduces the radiation anomalies produced by the side walls. That aspect of loudspeaker placement is generally left to the discretion of the user. Placement of the loudspeakers relative to the floor and the back wall hewed closely to the individual manufacturers' recommendations.

Even though our curves include room-boundary corrections, we rate performance from only 110 Hz up. Above that point, we feel, our response curves are "absolute"; they reflect what is likely to be found, *on average*, in real listening rooms. Below 110 Hz we believe the effects to be quite variable from room to room. Therefore, we assess deep bass in relative terms only. Mr. Hirsch's own judgments concerning the bass are also, by his own admission, limited to listening in his own room and the quasi-anechoic measurements he makes.

As for the other end of the hearing spectrum, while our judgments may stop at 14 kHz, the range beyond is included in our measurements. Should disc-recording technology and, far more important (but obviously far less likely in these days of noise pollution), adult human hearing acuity make a grand leap forward, it's but a trivial matter to extend the judgment span—and with very small practical effect, we might add.

As our readers know, comparative ratings are characteristic of our reports. However, such ratings can be inferred from Mr.

Tested This Month

Astatic IM-10E Phono Cartridge • Thorens TD 115 MkII Turntable
Boston Acoustics A40 Speaker System • Sennheiser HD 40 Headphones
Nakamichi LX-5 Cassette Deck

Hirsch's reports as well by reading "between the lines," so to speak. Statements such as "To us the [speaker name] certainly ranks among the top units in its price range" help the process along, even though reviewing only one (or infrequently two) loudspeaker model(s) per issue, as Mr. Hirsch does, makes it an exercise in library research to put that information together.

Of course, the thrust of Mr. Hirsch's commentary is directed at our use of an accuracy score to rate loudspeaker quality. Although we have answered this objection before, some points are worth covering again. In our published curves, the response irregularities shown correctly represent what a listener will hear. These data are based upon one-third-octave analysis, which approximates the width of critical bands over the audible frequency range we evaluate. This smooths out peaks and dips in the same manner as does the ear. It doesn't much matter to the ear (which insists on sticking to its own rules) whether a loudspeaker has a series of randomly distributed peaks or dips or whether it has a smoothly drooping or rising curve.

The effect on listeners is the same insofar as they have the ability to distinguish the more accurate loudspeaker. Equal numerical scores by CU's method will mean that listeners will be unable to make any consistent distinction. The loudspeaker with the smooth slope would perhaps be easier to equalize. But how can an audiophile without specialized equipment know how to do this? We think that each piece of equip-

ment in the sound chain should meet as best it can all the essential requirements for high-quality sound without depending on the possibly fortuitous compensating effects of some other piece of equipment in the chain.

Other factors do affect the score. For each loudspeaker, we look at the directivity index as a function of frequency and at polar response in the vertical and horizontal planes. And we also, of course, listen to every loudspeaker. Any anomalies revealed in these tests will modify the accuracy score accordingly, as has happened in the past. In our most recent loudspeaker tests there were no anomalies and no "arbitrary weightings."

The appropriateness of our scoring scheme has been demonstrated to our satisfaction by hundreds of double-blind listening tests conducted at CU. Mr. Hirsch himself favors that approach to subjective evaluations. And he doesn't doubt the validity of our scoring scheme: he states that it's no surprise that speakers with high scores tend to sound more like our reference speaker (which produces an exceedingly smooth, flat response at the listener's ears) than do ones with lower scores.

CU's objectively based ratings greatly improve the consumer's odds in an often bewildering marketplace. The consumer is still left with lots of room for personal selection among many objectively equivalent loudspeakers. That's about as much as can be done nowadays. In spite of all the tumult, we're inclined to think that Julian Hirsch

and CU are following parallel paths to common goals.

ALAN LEFKOW, *Senior Project Engineer*
Electronics Division, Consumers Union

As Mr. Lefkow states in his closing remark, both CU and Hirsch-Houck Labs are seeking the same end: a guide to speaker selection that is meaningful to readers. Although I do not take exception to most of the points he raises, there are profound philosophical differences between us concerning the *rating*, not the measurement, of speakers.

I do not consider my views on the effects of listening rooms on the sound of speakers to be any kind of "acoustic nihilism"; they are, rather, merely statements of observed fact. I have often heard loudspeakers (who hasn't?) that for one reason or another sounded superb in a dealer's showroom or at an audio show, yet were nearly unlistenable in my own home. The reverse can be true as well, which is one reason why I urge readers to listen for themselves *at home* if they can before making a final speaker choice.

As for comparative ratings: yes, my views can often be inferred from a "between-the-lines" reading of several reports, but I would not dare to "grade" speakers any more precisely than that since even A, B, C ratings imply more precision than the process merits. I can in honesty go no farther than this: any speaker (or any other product) reviewed in these pages is "satisfactory"—or better. —Julian D. Hirsch

Equipment Test Reports

By Julian D. Hirsch
Hirsch-Houck Laboratories



By Craig Stark
Starksonic Studio

Astatic IM-10E Phono Cartridge



- Astatic IM-10E Phono Cartridge
- Tracking Force: 2.25 ± 0.25 grams
- Weight: 7.5 grams
- Price: \$51.50

THE Astatic IM-10E is an induced-magnet phono cartridge manufactured in Japan for the Ohio-based company whose name was synonymous with phono reproduction long before the term "hi-fi" was coined. The IM-10E is an inexpensive, rug-

ged cartridge rated to track at 2.25 ± 0.25 grams and produce an output of 4.2 millivolts, making it especially suitable for use in low-price music systems.

The user-replaceable stylus assembly
(Continued on page 30)

...and then came the "Z" Receivers.

There was a time when you had to buy separate components to enjoy the control flexibility and power needed for true high fidelity music reproduction.

Not anymore. Sansui now has developed its "Z" series receivers.

Whether you choose the super-powered 9900Z, the modestly-sized 3900Z, or any of the four models in between, you get the full-frequency benefits of Sansui's DC-servo amplifier technology. And distortion-free FM is assured by genuine digital-synthesized tuning, with the

added accuracy of quartz PLL circuitry in our three top models. Twelve convenient instant-tune presets bring in your favorite FM or AM stations (6 of each) at a button's touch.

Real-time spectrum analysis that lets you see the shape of the sound you hear is included in our three most advanced units, along with Dolby FM decoding in the 8900ZDB. All but one of the "Z" receivers include LED displays that instantaneously show you just how much power is going to your speakers. Touch-button FM tuning and volume controls, two-deck dub-

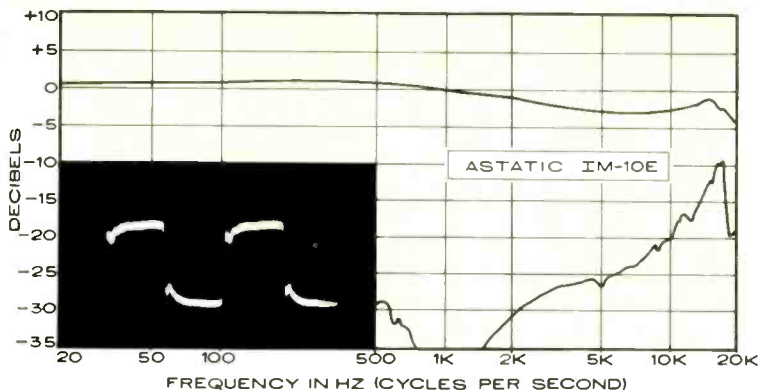
bing facilities, dual phono capability and multi-system speaker switching are all to be found, in various combinations, in the "Z" receivers. You'll also find all the additional features you've come to expect from a company that has pushed high fidelity to its limits from its beginnings.

And for all their technological sophistication the six Sansui models in the "Z" series will appeal to your eye no less than to your ear. Visit your nearest authorized Sansui dealer. He'll show you why "Z" stands for the last word in high fidelity receivers.

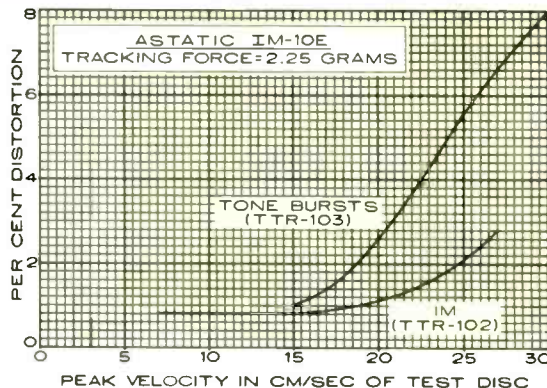


SANSUI ELECTRONICS CORPORATION
Lyndhurst, New Jersey 07071, Gardena, CA 90248
Sansui Electric Co., Ltd., Tokyo, Japan
CIRCLE NO. 32 ON READER SERVICE CARD





In the graph at left, the upper curve represents the frequency response of the cartridge. The distance (measured in decibels) between it and the lower curve represents the separation between the two channels (anything above 15 dB is adequate). The inset oscilloscope photo shows the cartridge's response to a recorded 1,000-Hz square wave, which indicates resonances and overall frequency response (see text). At right is the cartridge's response to the intermodulation-distortion (IM) and 10.8-kHz tone-burst test bands of the TTR-102 and TTR-103 test records. These high veloc-



ities provide a severe test of a phono cartridge's performance. The intermodulation-distortion (IM) readings for any given cartridge can vary widely, depending on the particular IM test record used. The actual distortion figure measured is not as important as the maximum recorded-signal groove velocity that the phono cartridge is able to track before a sudden and radical increase in distortion takes place. There are very few commercial phonograph discs that embody musical audio signals whose average recorded groove velocities are much higher than about 15 centimeters per second.

contains a titanium-bonded elliptical diamond stylus with radii of 0.3 x 0.7 mil. The molded plastic body weighs 7.5 grams, is relatively large in its vertical dimension, and employs long mounting screws.

● **Laboratory Measurements.** The IM-10E was mounted in an S-shape tone arm with an effective mass of about 15 grams (less cartridge). The combination resonated at a near ideal frequency of about 9 Hz. The nominal load impedance for the IM-10E is given as 47,000 ohms in parallel with 100 picofarads. We measured its frequency response with capacitive loads of 150 and 385 picofarads, representing typical low and high values likely to be encountered in home music systems. Although the response

was somewhat flatter with the higher value, the difference between the two was less than 1 dB, and we used 150 picofarads for all subsequent testing.

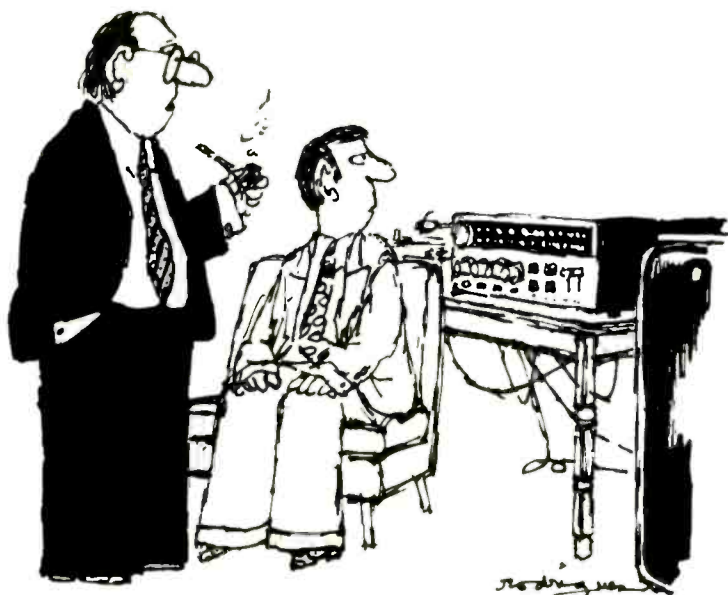
The frequency-response curve, using the CBS STR 100 test record, had the depressed upper-midrange characteristic that was quite common a few years ago but is rarely found in today's cartridges. From a maximum at 500 Hz, the output fell gradually to -3 or -4 dB between 4,000 and 10,000 Hz. It rose to approximately the reference level at 17,000 Hz, which was also the stylus resonance frequency. The channel separation was at least 25 dB up to 2,000 Hz, decreasing slowly to 15 dB at 10,000 Hz and 10 dB at 15,000 Hz.

The cartridge output was 4.5 millivolts at

a 3.54-cm/sec velocity, and the channel levels were almost perfectly matched (within 0.1 dB). The vertical stylus angle was 20 degrees, and the square-wave output from a CBS STR 112 test record showed a well-damped stylus resonance with only a single cycle of ringing. Tracking distortion was measured with two Shure test records: the TTR-102 for intermodulation (IM) distortion with 400- and 4,000-Hz tones, and the TTR-103 for high-frequency tracking distortion using shaped 10.8-kHz tone bursts. The IM distortion of the cartridge was very low, measuring approximately the 0.8 per cent record residual up to a velocity of more than 15 cm/sec and increasing to only 3 per cent at 27 cm/sec. The high-frequency tracking ability of the cartridge was less impressive, though still perfectly adequate for most purposes. The distortion rose linearly with velocity from 1 per cent at 15 cm/sec to about 8 per cent at 30 cm/sec.

All of these measurements were made using the nominal 2.25-gram vertical tracking force. We also checked the tracking ability with records having high recorded levels in different frequency ranges. A high-level 32-Hz tone on one record could be tracked cleanly at only 1 gram, and a 30-cm/sec 1,000-Hz signal on another was trackable at 1.25 grams. We could track the maximum recorded level on the German Hi Fi Institute test record (300 Hz at 100 micrometers amplitude) at 2.25 grams, which very few cartridges can do at any force. At its rated force of 2 grams, the IM-10E could play the 90-micrometer level, and at 1.25 grams it played the 60-micrometer level (in our opinion, this is required of a cartridge to qualify as a true high-fidelity reproducer).

● **Comment.** Subjective tracking tests with Shure's "Audio Obstacle Course" records confirmed the excellent tracking ability of the Astatic IM-10E. It was able to play the maximum levels on the ERA III record (Continued on page 34)



"... It's a good receiver, but it's seen better days. Take the Electronic Memory, for instance. I preset it for twelve stations, but now some days I'm lucky if it remembers two or three."

Loran™ is the cassette of the future... but it's here right now. The original and only heat resistant cassette shell and tape that withstands the oven temperatures of a car dashboard in the sun. Testing proves that even TDK or Maxell cannot take this kind of punishment.

With Loran, you'll capture a full range of sound as you've never heard it before. Tape that delivers magnificent reproduction of highs and lows, along with an exceptionally low background noise level. Super sensitive with an extremely high maximum recording level capability. That means you can record Loran at high input levels for greater clarity. As a matter of fact, we recommend it.

Because of our cassette shell, Loran

tape can stand up to being accidentally left near a source of excessive heat in your home or in your car. It is indeed the finest quality tape available today.

Loran also has exclusive features not available on any other cassette. Safety Tabs™ (patent pending) prevent accidental erasures. But unlike other cassettes, you can restore its erase and record capabilities simply by turning the Tab screw a 1/2 turn. Our Hub Lock (patent pending) secures the tape to the Hub in such a way that the harder it is pulled the tighter it's held.

With all these features, it's no wonder Loran was selected as "one of the most innovative consumer electronics products..." by the Consumer Electronics Show Design and Engineering Exhibition.

Every Loran tape comes with a full lifetime warranty. Listen to Loran. The new generation of cassettes is here right now.



LORAN™
The Design of Spectacular Sound

WHEN ALL OTHERS FAIL...LORAN CASSETTES ARE SAFE AND SOUND SENSATIONAL.



Actual cassettes tested in a closed car in the sun.

CIRCLE NO. 33 ON READER SERVICE CARD

Loran™ is manufactured exclusively by Loranger Entertainment, 10-48 Clark Street, Warren, Pa. 16365

LINEAR TRACKING THE TURNTABLE

The linear tracking tonearm is without question the ideal way to recover information from a disc. It can virtually reduce horizontal tracking error to zero, eliminate crossmodulation and significantly minimize stylus and record wear.

But until now there hasn't been a linear tracking turntable whose overall performance truly measured up to the technology of linear tracking itself.

Pioneer's new PL-L800 has changed all of that.

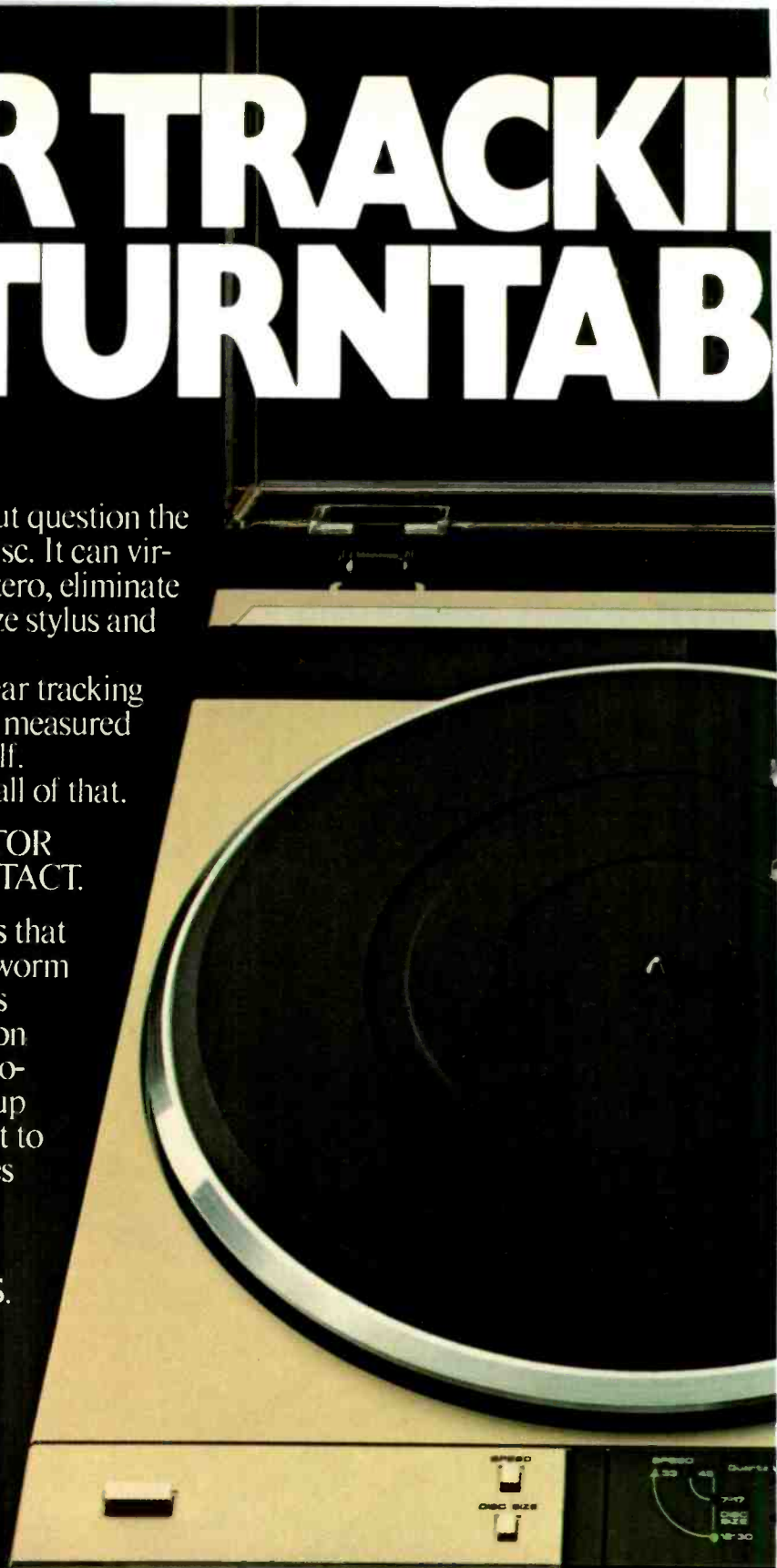
THE LINEAR INDUCTION MOTOR ELIMINATES MECHANICAL CONTACT.

Unlike other linear tracking tonearms that are driven by vibration-producing rollers, worm screws or pulleys, the PL-L800's tonearm is driven by Pioneer's exclusive linear induction motor. Through a process known as electromagnetic repulsion, a magnetic field is set up that gently propels the tonearm, allowing it to track perfectly with no mechanical linkages to degrade performance.

THE POLYMER GRAPHITE™ TONEARM DAMPENS VIBRATIONS.

To minimize any tonearm resonance caused by acoustic vibrations, the PL-L800's tonearm has been constructed with an exclusive dampening material called Polymer Graphite™. The only thing we want you to hear through our tonearm is music.

Our Coaxial Suspension System, on the other hand, will absorb vibrations that occur when someone walks or dances too hard in a room, or accidentally drops the dustcover. Because inside the cabinet is a free-floating suspension system which isolates the tonearm, platter



THE PIONEER LINEAR TRACKING

NG FINALLY GETS LE IT DESERVES.

and motor from the rest of the turntable; vibrations that reach the cabinet are absorbed by the spring-coupled insulators before they can harm the reproduction process.

THE STABLE HANGING ROTOR DESIGN REDUCES WOW AND FLUTTER.

The most advanced turntable platter motor wasn't advanced enough for the PL-L300. So we came up with a new direct drive system called the Stable Hanging Rotor. The problem with the design of conventional motors is that the fulcrum is at the base of the motor, making it impossible for the platter motor's center of gravity to coincide with the fulcrum. And that results in a wobbling of the platter, known as wow and flutter.

The Stable Hanging Rotor system reduces the cause of this wow and flutter. Because the fulcrum lies immediately below the platter, it coincides with the platter's center of gravity.

And as if all this weren't enough, the PL-L800 also is equipped with Pioneer's exclusive moving-coil cartridge. It has such unusually high output that even a receiver or amp not equipped to handle most moving-coil cartridges can be used with the PL-L800.

If you find it hard to believe that a turntable could be as remarkable as the PL-L800, we suggest you visit your nearest Pioneer dealer and see and hear the PL-L800, along with our entire line of new turntables, for yourself.

No other linear tracking turntable deserves your attention more.

PIONEER
We bring it back alive.

© 1982 Pioneer Electronics (USA) Inc., 19251, Dominguez Street, Long Beach, CA 90801

CIRCLE NO. 29 ON READER SERVICE CARD

**ER PL-L800
NG TURNTABLE.**

test reports

without audible distortion. The more demanding ERA IV record revealed a slight mistracking on the maximum level (5) of the orchestral bells and on level 4 of the combined harp and flute section.

The cartridge sounded much as one would expect from its measured performance. The reduced upper-midrange response gave it a slightly subdued character, but the overall balance was good and we were not aware of any emphasis or lack in any part of the frequency range. Probably more important than frequency response is the outstanding tracking ability of the IM-10E, which can cope with the highest recorded velocities at its rated force and in fact could be used quite successfully at 1.5

or even 1.25 grams, matching or surpassing the performance of many cartridges carrying those ratings. It is a virtual truism that a cartridge should be operated at or near its maximum rated tracking force if one hopes to realize its claimed performance. This cartridge is a striking exception to that rule, since at its *minimum* rated force it will out-track most cartridges we have tested (regardless of their price), and to bring its performance in line with that of the typical moderate-price cartridge one would have to operate it at less than 1.5 grams.

One of the most obvious differences between the Astatic IM-10E and most higher-price cartridges is its rather massive stylus system. The cantilever is visually bulky

compared with most we have seen recently, and its 17,000-Hz resonance is further confirmation that this ruggedness was achieved at a price. The Astatic IM-10E is good evidence that the inflated 1982 dollar can buy more cartridge performance than the same dollar would have provided only a few years ago. It should be a "natural" for a low-price system, especially one that will be used by children or others who might not appreciate the fragility of some higher-price cartridges. To our ears, this cartridge can hold its own with most others priced below \$100, as well as some costing much more than that.

—Julian D. Hirsch

Circle 140 on reader service card



Thorens TD 115 MkII
Turntable

- Thorens TD 115 MkII Turntable
- Size: 17½ x 14 x 5⅛ inches
- Weight: 15½ pounds
- Price: \$435

THE Thorens TD 115 MkII semiautomatic turntable, which replaces the company's Model TD 115 at no change in price, is basically identical to its predecessor, with the addition of the 78-rpm speed to the 33⅓- and 45-rpm ones. The nearly 3-pound cast zinc-alloy platter is belt-driven by a servo-controlled d.c. motor whose tachometer feedback is designed to maintain correct speed under load changes as well as line-voltage shifts.

The low-mass Thorens tone arm is a straight tubular design in which the entire

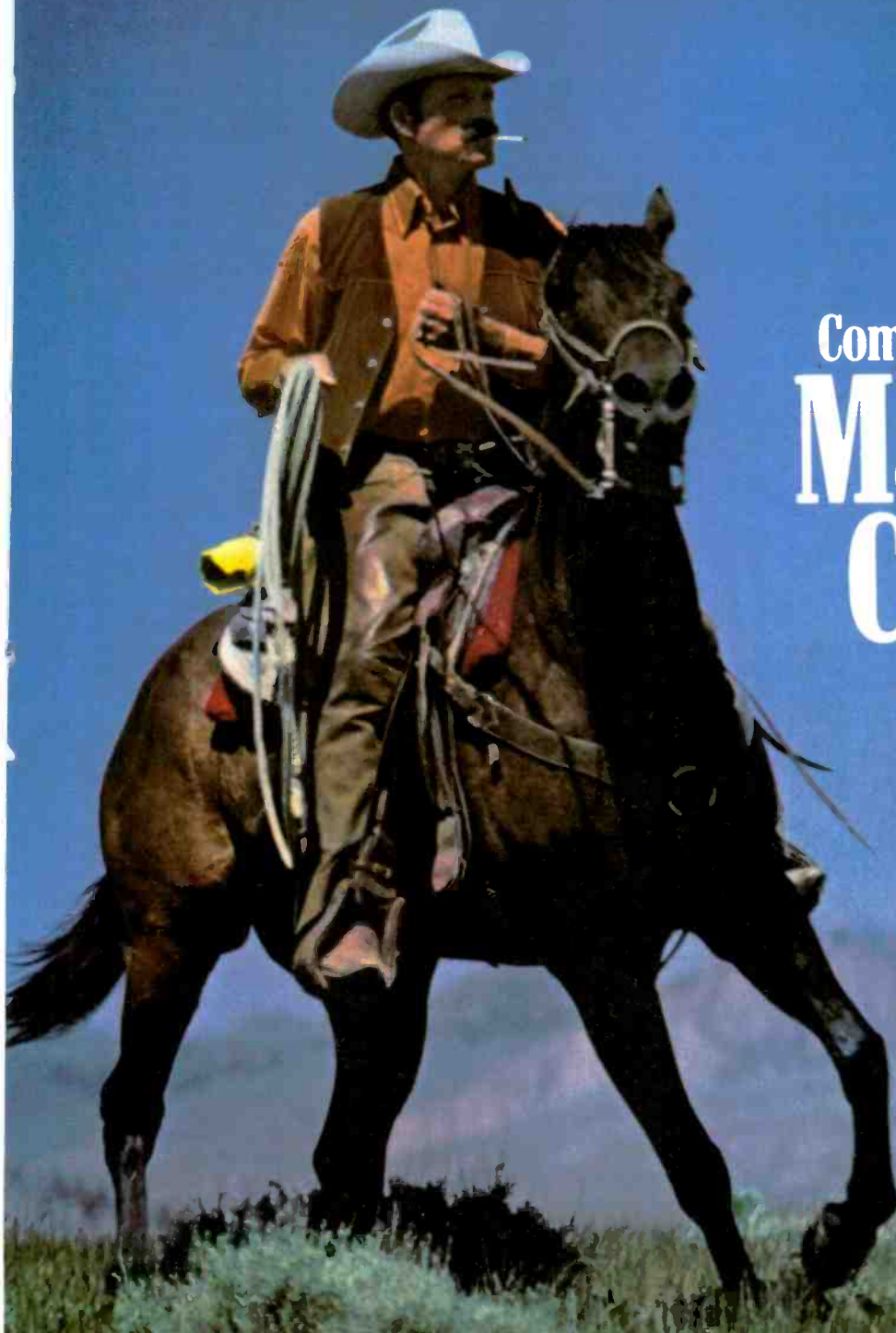
arm tube (or "wand") unplugs for changing cartridges, unlike the usual plug-in shell arrangement. One plug-in wand is supplied with the turntable. The threaded counterweight is mounted unconventionally on a bracket extending to the rear of the tone-arm pivots with the weight facing the front of the arm instead of its rear. The weight, being asymmetrical in its mass distribution, can be reversed for balancing heavy cartridges. Its adjustable stylus-force scale is not calibrated numerically but has different-thickness lines and dots to indicate force settings from 0 to 3 grams at intervals of 0.25 gram. An antiskating adjustment scale surrounds the base of the arm.

The TD 115 MkII is operated by three flat slider plates on its upper front surface.

One turns on the power and selects the speeds (33⅓ rpm when moved to the right of its center OFF position, 45 rpm to the left). For 78-rpm operation, the slider is moved to the extreme left by pressing in a small button that normally limits such movement.

Although the unit is powered, the platter will not turn until a second plate is moved either right or left. If moved left (M) the motor is turned on, but the automatic arm lift is disabled, making the TD 115 MkII a fully manual player. If moved right (START) the player must still be cued manually, but at the end of a record the arm lifts and the motor shuts off.

The remaining control is the arm-lift cue-
(Continued on page 36)



Come to
**Marlboro
Country.**



Lights: 11 mg "tar," 0.8 mg nicotine—Kings: 16 mg "tar,"
1.1 mg nicotine av. per cigarette, FTC Report Mar '81

Warning: The Surgeon General Has Determined
That Cigarette Smoking Is Dangerous to Your Health.

ing control. It is clearly marked to show the pickup position (up or down) but will not latch into its "down" setting unless the turntable has been switched on and put into motion. Shutting off the turntable manually returns the lift plate to its "up" setting and raises the arm.

A small knurled wheel, flush with the top of the control panel, provides a vernier speed adjustment for the turntable. The edge of the platter has two sets of rear-illuminated cast stroboscope holes for the 33 $\frac{1}{3}$ -rpm speed, with either 50- or 60-Hz power sources. Although no holes are provided for the other speeds, they are correct when the 33 $\frac{1}{3}$ pattern is stationary.

The turntable and arm are mounted as a single unit on a rigid plate that is suspended on soft springs from the record-player base.

magnetic antiskating compensation cannot be removed completely (the scale does not go to zero), the arm tends to drift outward when balanced, thus complicating the initial setup adjustment. With care in balancing, we found that the tracking force was within 0.2 gram of the indicated value, and when the arm was originally set to be accurate at 1 gram with an external gauge the error was less than 0.1 gram at any other setting. The effective arm mass was just under 7 grams (less cartridge and hardware), and with the Shure cartridge the arm resonated at 10 to 12 Hz, an ideal frequency range.

The tracking error was less than 0.5 degree per inch of radius over a 12-inch record surface and close to zero at most parts of the disc. The antiskating calibration, consisting of arbitrary numbers from 1 to 7, re-

pacitance to ground in each channel of the tone-arm output wiring was 215 picofarads, which is compatible with the load requirements of most good cartridges.

The turntable speed was exactly 33 $\frac{1}{3}$ rpm when the stroboscope marks were stationary, and it could be adjusted over a range of +8.7 to -7.5 per cent. When set exactly to 33 $\frac{1}{3}$ rpm, it was also exact at 45 rpm, though it ran an easily correctable 2 per cent slow at 78 rpm. The speed did not change detectably with line-voltage variations from 80 to 140 volts, nor did it drift from a cold start over several hours.

The turntable flutter was 0.08 per cent in a DIN measurement and ± 0.08 per cent weighted peak (CCIR). The flutter frequency spectrum was principally at 5 and 10 Hz, with a small component at 15 Hz. The rumble was -37 dB unweighted and -63 dB with ARLL weighting, both of which represent excellent performance. The rumble spectrum was largely random, with small but detectable peaks at 7 and 30 Hz.

The isolation from the mounting surface afforded by the turntable suspension was good, with most of the transmission taking place below 80 Hz. Since the operating controls are on the base portion of the unit and therefore isolated from the platter and tone arm, there is no tendency for control operation to jar the arm or transmit noises through the system.

● *Comment.* The performance of the TD 115 MkII is absolutely first-rate, and its low-mass tone arm allows the full benefit of today's high-compliance cartridges to be realized without introducing tracking problems with warped discs (we have seen very few that were not warped to some degree). This is also one of the very few turntables with full manual operation, free of the annoyance of having the tone-arm trip mechanism operate when one is trying to cue to an inner groove of a record. According to Thorens, internal logic circuits prevent the arm lift of the TD 115 MkII from operating during manual cueing, but they let it respond to the run-out groove at the end of a record. Fully manual cueing was possible (necessary, in fact) in the M mode of operation. However, when we used the semi-automatic operating mode the arm lift tripped if we tried to move the arm to the inner part of a disc. Over most of the surface, manual cueing could be used in either mode.

This is a fine record player with all the inherent quality that has earned Thorens its reputation among discerning audiophiles. A minor criticism is that the operating controls, though located on the front edge of the unit, are inaccessible with the cover lowered. Although the TD-115 MkII is not exactly inexpensive, it is at least affordable by anyone who is seriously interested in playing records (including old 78s) with a minimum of compromise. It is also one of the few examples we have seen in which an existing product has been improved (in this case, by the addition of the third speed) with no change in price.

—Julian D. Hirsch

Circle 141 on reader service card

(Continued on page 38)



"Look, don't worry. If it had been the Stones or the Beatles, it might be one to ten. But pirating Buxtehude can't cost you any more than, say, thirty days."

● *Laboratory Measurements.* Our test sample of the Thorens TD 115 MkII was furnished with a Shure V-15 Type IV cartridge mounted in its tone-arm wand, and we did our testing with that cartridge. Examination of the mounting instructions indicates that the cartridge-mounting process has been considerably simplified from the rather awkward procedure used on early low-mass Thorens tone arms. Since the

quires a reference to the manual for the correct setting (which is a function of the stylus shape as well as the vertical force). It proved to be quite accurate when set according to instructions. The cueing system was not only very smooth and without any tendency to jar the arm, but it was unaffected by the antiskating torque and returned the stylus to within one rotation of the point from which it was raised. The ca-

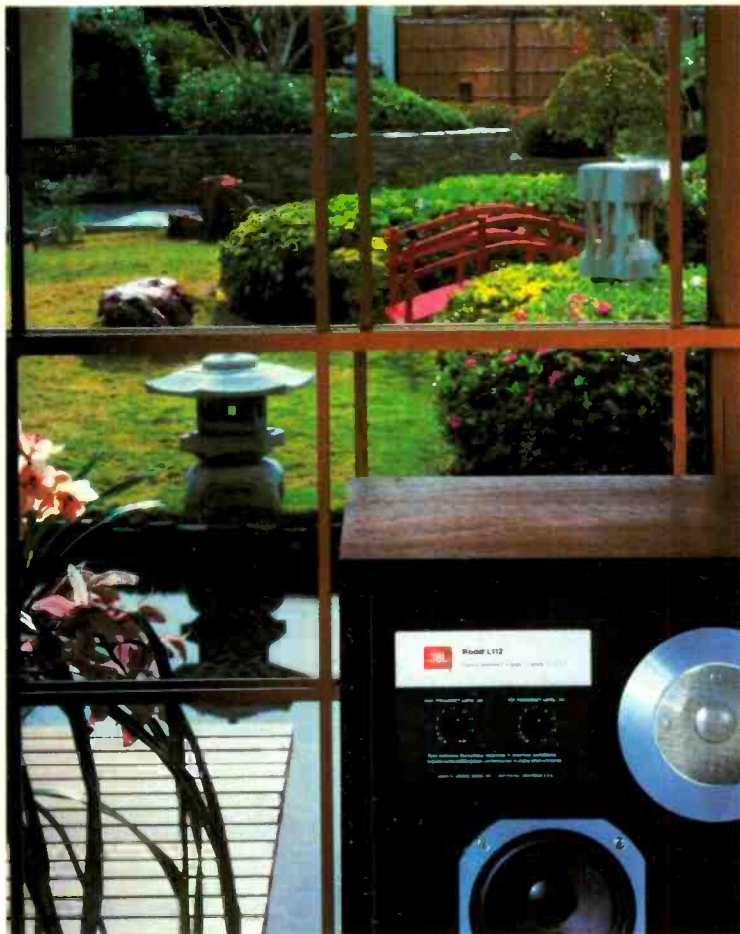
The number one selling audiophile loudspeaker in Japan isn't Japanese.

Over the years, Japan has introduced some of the most innovative audio products in the world. So it's not surprising that the Japanese are highly critical when it comes to selecting components for their own homes. What might surprise you, however, is that the number one selling audiophile loudspeaker in Japan isn't Japanese. It's made in the U.S.A. by JBL.

In fact, in a recent survey conducted by one of that country's most highly regarded audio magazines,* JBL was voted the most desired loudspeaker by an amazing 44% of those surveyed. The closest competitor received only 11.9%. Even more importantly, over 25% indicated that they already owned JBL speakers.

To find out a few more surprising facts about JBL, visit the audio specialists at your local JBL dealer.

**Stereo Sound*, Summer 1981 Speaker Systems Market Research



First with the pros.

JBL/harman international
CIRCLE NO. 20 ON READER SERVICE CARD





Boston Acoustics A40 Speaker System

- **Boston Acoustics A40 Speaker System**
- **Size:** 13½ x 8¼ x 7¾ inches
- **Weight:** 9½ pounds
- **Price:** \$75

THE Boston Acoustics A40 is a small two-way bookshelf speaker (it could reasonably be described as a "minispeaker") that delivers exceptional performance at a very low price. The crossover between its 6½-inch acoustic-suspension woofer and ¾-inch dome tweeter is at 3,500 Hz, with 6-dB-per-octave slopes. Rated impedance is 8 ohms, and there are no balance or level adjustments.

The A40 is housed in a walnut-grain, vinyl-veneer cabinet with a black cloth grille on a molded plastic frame that snaps in place. The speaker's insulated spring-loaded connectors are recessed into the rear of the cabinet.

● **Laboratory Measurements.** For our room-response measurements, the A40s were placed against a wall about 8 feet apart and 5 feet above the floor. The microphone, placed at the rear of the room, was on the axis of the left speaker and about 30 degrees off the axis of the right speaker. Even without further correction or averaging, the swept warble-tone response of the speaker was unusually smooth. The very small difference between the left and right speaker curves above about 8,000 Hz attested to the excellent dispersion of the tweeters. When we had averaged the left and right speaker outputs and corrected the result for the known high-frequency absorp-

tion in the room, we obtained a frequency response flat within ±2.5 dB from 200 to 20,000 Hz.

The bass response was measured separately with close microphone spacing. The woofer output at 110 Hz was about 3 dB higher than in a broad plateau of ±1.5 dB from 250 to 2,000 Hz, and it fell off at 12 dB per octave below 100 Hz. (This type of measurement is not fully valid above about 1,000 Hz since the dimensions of the speaker cone become comparable to the wavelength of the sound.)

When the woofer curve and the overall room curve were combined, the composite response curve was flat within ±3 dB from 70 to 20,000 Hz and was essentially free of major holes or peaks at any frequency.

The quasi-anechoic response of the speaker was measured with our INDAC FFT analysis system. The speaker was on a stand about 21 inches from the floor and at least 5 feet from any room wall. The microphone was located on the speaker axis 1 meter from the grille. The response was ±5 dB from 180 to 18,000 Hz, both limits being set by the analysis system rather than the speaker. By excluding a slight peak at about 15,000 Hz, the overall variation was reduced to ±4 dB.

When we rotated the speaker 45 degrees to measure its off-axis response, we were surprised to find only a ±2-dB variation from a few hundred hertz to 15,000 Hz, which was about the flattest speaker response we have yet measured with the INDAC system. Encouraged by this result, we turned the speaker a full 90 degrees off axis so that the microphone was effectively

measuring the output off the side of the speaker. The FFT analysis showed only a ±6-dB variation up to 16,000 Hz—better than many speakers can do along any axis!

The bass distortion was measured with the microphone close to the speaker cone at inputs of 1 watt and 10 watts (based on an 8-ohm impedance). At 1 watt, the distortion was well under 1 per cent down to 60 Hz, rising gently to 4.5 per cent at 30 Hz. The higher power, needless to say, resulted in a much more rapid increase of distortion, although it was still in the 2 to 2.5 per cent range down to 85 Hz and reached 12.5 per cent at 50 Hz.

The A40 impedance curve had broad minima of about 5 ohms in the 20- to 30-Hz range and between 200 and 300 Hz. Its maximum was about 20 ohms at the bass resonance of 90 Hz, and there was a broad rise to about 18 ohms in the 2,500- to 3,500-Hz crossover region. The sensitivity of the A40 was on the high side for a sealed system, with a 2.83-volt (1-watt) input of random noise in an octave centered at 1,000 Hz generating a sound-pressure level of 89 dB measured at a 1 meter distance.

● **Comment.** Boston Acoustics supplied typical performance data for the A40 based on their own tests and production standards. We essentially duplicated the claimed performance despite our completely different test conditions.

In recent years we have auditioned and tested a number of very good speaker systems, most of them so good that we would be hard pressed to rank them in any order of

(Continued on page 40)

MAXELL IS PLEASED TO PRESENT AN EVEN HIGHER PERFORMANCE TAPE.



If you're familiar with Maxell UD-XL tapes you probably find it hard to believe that any tape could give you higher performance.

But hearing is believing. And while we can't play our newest tape for you right here on this page, we can replay the comments of Audio Video Magazine.

"Those who thought it was impossible to improve on Maxell's UD-XL II were mistaken. The 1981 tape of the year award goes to Maxell XL II-S."

How does high bias XL II-S and our normal bias equivalent XL I-S give you such high performance? By engineering smaller and more uniformly shaped epitaxial oxide particles we were able to pack more into a given area of tape. Resulting in a higher maximum output level, improved signal-to-noise ratio and better frequency response.

To keep the particles from rubbing off on your recording heads Maxell XL-S also has an improved binder system. And to eliminate tape deformation, XL-S comes with our unique Quin-Lok Clamp/Hub Assembly to hold the leader firmly in place.

Of course, Maxell XL II-S and XL I-S carry a little higher price tag than lesser cassettes.

We think you'll find it a small price to pay for higher performance.



IT'S WORTH IT.

Maxell Corporation of America, 60 Oxford Drive, Moonachie, N.J. 07074

CIRCLE NO. 25 ON READER SERVICE CARD

quality. However, most of these speakers carried list prices between \$150 and \$300. The speakers in the under-\$100 category that are most often chosen for budget systems generally fall short of meeting minimum high-fidelity standards. The Boston Acoustics A40 is a welcome exception to that rule. Obviously it cannot develop a room-shaking bass output—the laws of physics and economics make that impossible—but even that lack is unlikely to be noticed unless one is specifically listening for it. By way of compensation, the overall balance and smoothness of the A40's sound are those of a *good* speaker by any standard,

and it can hold its own in some very exalted circles if one is willing to forgo the deep-bass performance. Very few forward-radiating systems we have seen can match its dispersion. Extended listening to the A40 has shown us that there is nothing about its sound to identify it as coming from a smallish, inexpensive speaker.

With the A40, there is no longer a valid reason to degrade the performance of low-cost components (many of which are surprisingly good) by connecting them to inferior speakers. The A40 comes surprisingly close to matching the essential sound quality and character of the best and most es-

teemed speakers for a small fraction of their cost, and it is hard to imagine a room unable to accommodate a pair of them.

Boston Acoustics points out that the low price of the A40 is largely due to the use of vinyl-clad wood and the simple crossover network (one capacitor and one inductor) made possible by the choice of driver characteristics. In respect to sound quality per dollar, the A40 is surely one of the most cost-effective speaker designs we have seen in recent times; we are impressed.

—Julian D. Hirsch

Circle 142 on reader service card



Sennheiser HD 40 Headphones

- Sennheiser HD 40 Headphones
- Frequency Range: 22 to 18,000 Hz
- Weight: 2 ounces (without cord)
- Price: \$35

THE Sennheiser brand name is closely associated with the "Open-Aire" (TM) headphone design, one in which the earpieces rest lightly on the ears (supra-aural) rather than tightly enclosing them in cushions (circum-aural). The Sennheiser HD 40 is currently the lowest-price model in the Sennheiser line. It is formed of three molded plastic parts: a flexible one-piece headband and two earpieces that can be adjusted along the length of the headband extensions and retained in place by notches. Each earpiece has a small dynamic transducer that is open to the outside through venting holes that provide an acoustic resistance load to the diaphragm; it is sepa-

rated from the wearer's ear by a thin foam-plastic cushion that unsnaps easily for cleaning or replacement.

The straight, slender integral connecting cable divides into a "Y" near the headphones. It is 10 feet long and is fitted with a molded stereo plug. The rated sensitivity of the HD 40 is 90 dB sound-pressure level (SPL) for a 1-milliwatt input to the rated 600-ohm impedance.

● **Laboratory Measurements.** On our headphone coupler (an artificial "ear") the frequency response of the Sennheiser HD 40 was unusually wide and smooth. Frequency response is not as easily defined in headphones as it is in speakers (to say nothing of other audio components) since the results depend strongly on the specific coupler used as well as other test conditions. Ours is the equivalent of a standard ANSI coupler,

and we use a 0.1-octave warble on the sweeping sine-wave signal to smooth out narrow-band response fluctuations.

The result was a ± 4 -dB variation from 65 to 8,000 Hz, with a response maximum at 11,000 Hz. The low-frequency output fell at about 8 dB per octave below 150 Hz. Conspicuous by their absence were the large output variations that are typical of most phones when measured in this manner. In fact, only a few rather expensive dynamic phones that we have tested have produced a response as smooth as this one. (Electrostatic phones, as a class, are better, but they cost five to ten times as much and should not be compared with a low-price dynamic phone.)

At 1,000 Hz an input of 1 milliwatt (0.78 volt) produced a sound-pressure level of 88 dB. The distortion at 1,000 Hz was well un-

(Continued on page 42)

DON'T BUY A MAGNAVISION JUST BECAUSE IT PLAYS MOVIES.

Watch your favorite movie on Magnavision® and you'll hardly recognize it.

Because Magnavision gives you a sharp, astonishingly clear picture—better than any VCR can deliver. And most discs are recorded in brilliant stereo sound as well, so you can hear your movie sound track the way it was *meant* to be heard... a whole new dimension in video/audio entertainment systems.

But we didn't develop Magnavision just for movies.

Magnavision is a LaserVision player.

And you'll be able to do things with the LaserVision system that are impossible with other systems.

It all starts with a laser beam: the heart of Magnavision.

The laser beam picks up a picture from a special video disc (it's about the same size as a long-playing record, but it's made of tough aluminum plated acrylic).

Nothing touches the disc except a tightly focused beam of light which reads the 0.4 micrometer pit on the disc. So *there's nothing to wear out*, and you can expect to see the same sharp, clear picture time after time.

Variable speed slow motion, jitter-free freeze-frame on any of the standard disc's 54,000 individual frames, and a "Rapid Search" button let you find just the place you want, when you want it—in seconds.

This advanced technology also gives you *room-filling stereo sound* (you can play it

through your own stereo system—frequency response is 40 to 20,000 HZ ± 3db).

You can enjoy movies, shows and concerts (wait till you hear Olivia Newton-John's* new video *Physical disc* in stereo!).

And the list grows longer every day.

There are also more and more "interactive" laser discs available—that's where the fun begins.

These are *discs that let you participate*, using the Magnavision wireless Infrared Remote Control.

You can learn *How to Watch Pro Football*† (and be quizzed afterwards); or try all the games and puzzles on the Grammy nominated *The First National Kidisc*‡.

You can go on art gallery tours and attend classical, pop or rock concerts.

Don't know how to filet a flounder? Take the *Master Cooking Course*§ from Craig Claiborne and Pierre Franey. Just put your Magnavision into "Slow Motion" and they'll show you exactly how it's done.

You can see it all on Magnavision right now.

Just stop in at your nearest Magnavision Dealer, push the "PLAY" button, and step into the future. *To find your nearest dealer, call toll-free 800-447-4700.*

© 1982 N.A.P. CONSUMER ELECTRONICS CORP.
A NORTH AMERICAN PHILIPS COMPANY

*Olivia Newton-John ©, MCA †Optical Programming Associates ©

CIRCLE NO. 24 ON READER SERVICE CARD

MAGNAVISION



THIS LASERVISION MARK CERTIFIES COMPATIBILITY WITH OTHER LASER OPTICAL VIDEO PRODUCTS BEARING THE MARK

MAGNAVOX

The brightest ideas in the world are here today.



der 0.1 per cent (below the measurement system's noise level) up to 0.6-volt input and increased to 0.5 per cent at about 6 volts. These are completely negligible distortion levels, especially when one considers the high acoustic level associated with them. As one would expect, the distortion increases considerably at low frequencies for the same reason it does with speakers: the increased mechanical diaphragm excursion. At 1 milliwatt, the distortion was under 0.6 per cent from 350 to 5,000 Hz, increasing to 2.5 per cent at 100 Hz and 8 per cent at 30 Hz. The impedance of the HD 40 phones was a constant 600 ohms from 20 to 20,000

Hz, but it is fully compatible with the normal headphone outputs on receivers.

● **Comment.** It has been our experience that headphones often sound much better than their measured frequency response would suggest. By the same token, phones with an exceptionally uniform response should be expected to sound very good. That exactly describes our experience with the Sennheiser HD 40. The sound from these phones was very well balanced and smooth—to the point that we were soon able to forget we were listening to phones. That is not easily done—at least for us—

because we find headphone colorations more difficult to ignore than speaker colorations, perhaps because of the immediacy of the headphone sound. As important as their sound was the comfort of the HD 40, surely one of the best in that regard we have used. In short, we found the Sennheiser HD 40 to be among the most comfortable and overall satisfying phones to come our way. Assuming that a non-isolating headphone is what you want, and considering the low price, the HD 40 is clearly an excellent buy.

—Julian D. Hirsch

Circle 143 on reader service card



Nakamichi LX-5 Cassette Deck

- Nakamichi LX-5 Cassette Deck
- Size: 17³/₄ x 5⁵/₁₆ x 12¹/₈ inches
- Weight: 18³/₄ pounds
- Price: \$775

THE Nakamichi LX-5 cassette deck adds the Dolby-C noise-reduction system to the discrete three-head, dual-capstan technology used in a number of the company's recent models. The separate Crystalloy playback and record heads of the LX-5 have gap widths (the distance between their pole pieces) of 0.6 and 3.5 micrometers (23.6 and 137.8 millionths of an inch), respectively, and have been so miniaturized that both will fit within the center opening of the cassette shell. Both have etched slots at the points where the top and bottom edges of the tape pass across the heads so that any wear will remain even. Additionally, the playback head is fitted with a special tape guide that also pushes the pressure pad of the cassette out of the way in the interest of lowering scrape flutter.

The dual-capstan transport uses capstans

and flywheels of slightly different sizes to regulate the pressure of the tape against the heads and to eliminate the possibility that wow-and-flutter would be magnified by having two comparable masses rotating in unison. While the transport controls of the LX-5 are microprocessor-controlled, the usual solenoid operation of the tape gate and brakes has been replaced with the gentler action of a motor and cam, ensuring that shock will not endanger the head alignment. Cassettes are inserted, tape openings downward, into slides on the back of the cassette-well door. The door is removable for routine head cleaning and demagnetization. While the cassette well is illuminated (to show how much tape remains on a side), the viewing angle is rather narrow and precludes reading the label.

Most of the controls of the LX-5 are normally hidden behind a push-to-open panel. The usual transport-operating pushbuttons are immediately accessible, of course, as are SOURCE/MONITOR and RECORD MUTE switches, along with a two-speed automatic

MASTER FADER, which permits smooth fade-in and fade-out of predetermined record levels. Behind the panel are knobs and pushbuttons for selecting output level, left- and right-channel record level, timer activation in either record or play mode, the memory rewind/replay options, and Dolby-B or Dolby-C noise-reduction systems. Bias adjustment and equalization controls are also provided to compensate for the requirements of different tape brands, but there are no internal facilities for optimizing the adjustments.

There are LED indicators along the top of the LX-5 to show when Dolby-B, Dolby-C, or the record mute are operating. The tape counter is a four-digit LED display, and sixteen-segment LED indicators calibrated from -40 to +10 dB show the record and playback levels. The rear panel of the LX-5 contains the usual line-level input/output connectors (but no built-in provision for microphone recording) together with a DIN-type jack for a remote-control accessory.

(Continued on page 44)

CAMEL

Where a man belongs.



LIGHTS: 8 mg. "tar", 0.7 mg. nicotine av. per cigarette, FTC Report DEC. '81.
FILTERS: 15 mg. "tar", 1.1 mg. nicotine av. per cigarette by FTC method.

Warning: The Surgeon General Has Determined
That Cigarette Smoking Is Dangerous to Your Health.

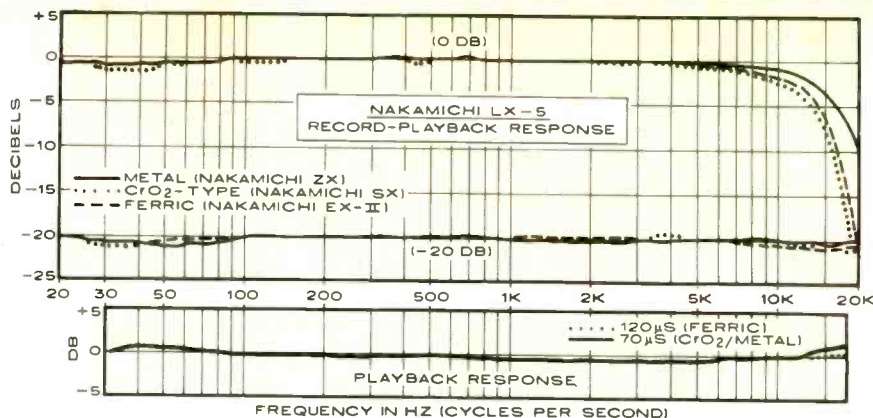
Experience the
Camel taste in Lights and Filters.

test reports

● **Laboratory Measurements.** Nakamichi provided the actual samples of their ZX (metal), SX (CrO₂-equivalent), and EX-II (ferric) tapes used for the factory adjustment of the LX-5 I tested, and these became the "references" for my measurements. However, substantially similar results were obtained with Maxell UD-XLI, TDK AD, and 3M Master I (ferric); TDK SA, BASF Professional II, PD 500 Crolyn, and Maxell XLII-S (high-bias); and Memorex Metal IV, Sony Metallic, and TDK MA-R. My samples of Fuji FX-I and Loran Ferric showed a slight loss at 20 kHz, and Fuji Metal and TDK SA-X (high-bias) showed a slight rise at that frequency, but all were well within the control range of the LX-5's bias-adjustment facility.

The playback-response curves shown in the accompanying graph for 120- and 70-microsecond tapes are so nearly perfect that they call for no comment beyond noting that they were made using the new BASF standard calibrated test tapes, which extend the measurement range from 31.5 Hz to 18 kHz in accordance with the new IEC measurement standard.

Overall record-playback response, measured at the usual -20-dB level, was so flat



The upper curves indicate overall record-playback response at the manufacturer's indicated 0-dB recording level using the tapes designated on the graph. In the center are the same measurements recorded at -20 dB relative to the upper curves, a level conventionally used for tape-deck frequency-response measurements. Bottom curves show playback response from calibrated cassettes and indicate the deck's ability to play prerecorded tapes.

across the 20- to 20,000-Hz range that it is almost pointless to put it in the graph. Even at 0 dB (which indicated 1 dB higher than

my Dolby-level calibration tape), neither metal, ferric, nor chrome-type cassettes were down by more than 2.5 dB at 10 kHz—truly extraordinary performance. Wow-and-flutter, measured with the TDK AC-342 test tape, was only 0.026 per cent on the customary weighted-rms standard and approximately 0.05 per cent on the peak-weighted DIN measurement.

Third-harmonic distortion at 0 dB measured 0.32, 0.27, and 0.29 per cent for the Nakamichi ZX, SX, and EX-II formulations, and their respective headroom before reaching 3 per cent third-harmonic distortion was an additional 9, 8, and 7.2 dB. With reference to the 3 per cent distortion point, the unweighted signal-to-noise ratios were 56.5 dB for ZX and SX, 53.4 dB for EX-II. Adding Dolby-B and CCIR/ARM weighting increased these figures to 66.7, 66.8, and 63.8 dB, respectively, for the three tapes. And with Dolby-C added, the signal-to-noise ratios (again CCIR/ARM weighted) measured, respectively, 75 dB for the metal and CrO₂-type tapes, 72.5 dB for the ferric.

Dolby tracking, measured at -20-, -30-, and -40-dB levels, was within ± 1 dB with Dolby-B and within ± 2 dB with the more effective Dolby-C throughout the 20- to 20,000-Hz range. The line input had a 50-millivolt sensitivity for a 0-dB indication, at which point the output was 0.96 volt. Fast-forward and rewind times were 55 and 50 seconds for a C-60 cassette.

● **Comment.** The Nakamichi LX-5 is a superb cassette deck, remarkable in performance, simple in operation and styling. Dubbing from various sources—LPs, FM, and even master tapes—produced impeccable copies, and even when using FM hiss as a test signal it was virtually impossible to distinguish between the original and the taped copy (using metal tape). Apart from the demands of a laboratory recorder (variable equalization, bias-monitoring jacks, etc.), this is perhaps the finest deck I have yet tested.

—Craig Stark

AUDIOPHILE'S CORNER



"... Yes, that's a very good point, madam. Aside from the excellent bass response, this is a speaker your guests will not be sitting on."

Circle 144 on reader service card

Break tradition.

Drink Ronrico Rum instead.

Face it, you already know what your usual rum, gin and vodka have to offer.

Just try one drink mixed with Ronrico, and you'll realize what you've been missing.

Ronrico is superbly smooth and light. With a surprisingly distinctive flavor that's bound to win you over.

Isn't it time you broke tradition with Ronrico Rum?

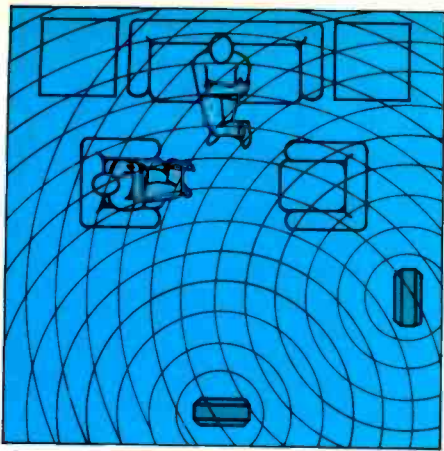
RONRICO RUM & ROSE'S LIME JUICE

5 parts Ronrico Rum
1 part Rose's lime juice
Shake with ice cubes. Pour into an on the rocks glass. Add a thin slice of lime.



RONRICO RUM & ROSE'S LIME JUICE

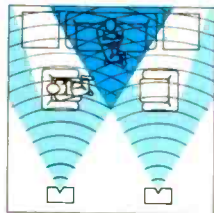
© 1990, GENERAL WINE & SPIRITS CO., N.Y.C.



BES Speakers

AT LAST A DIFFERENCE IN SOUND YOU CAN SEE.

Most speakers give you true stereo in just one part of the room. BES Speakers give you true



Other speakers

stereo virtually everywhere. That's because the heart of a BES Speaker is not a cone, but a diaphragm

that vibrates much like a guitar string, projecting sound in every direction simultaneously. You get 360-degree sound. True omnidirectional sound. Sound as close to live as you can get.

Listen to BES and hear true stereo. Everywhere.



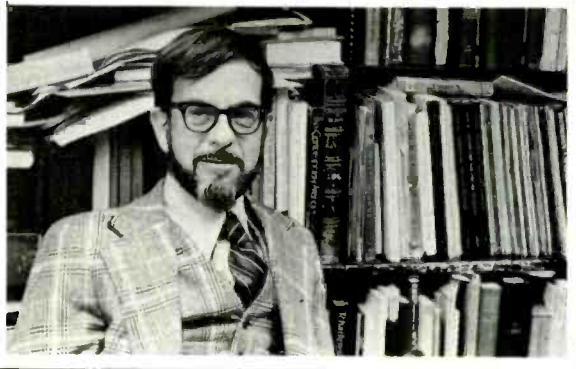
BES SPEAKERS
THE NEXT DIMENSION IN SOUND

Bertagni Electroacoustic Systems, Inc. 345 Fischer Street,
Costa Mesa, CA 92626 (714) 549-3833.

CIRCLE NO. 48 ON READER SERVICE CARD

Going on Record

By James
Goodfriend



BARTÓK'S BARTÓK

THE Bartók centennial was *last* year, but such is the power of inertia (or the frustrations of production) that it is continuing, in terms of record releases, well into this one. In the thirty-seven years since his death, Bartók's work as a composer has become quite clearly known and well explored, both on records and in concerts; the hundredth anniversary of his birth has produced few if any surprises. What we have gotten instead have been more and more and, in some cases, better and better performances of such works as the quartets, the concertos, the *Mikrokosmos*, and that once merely legendary opera *Bluebeard's Castle*.

But Bartók, as we have come to know, was a triple-threat man. His work in ethnomusicology, while hardly familiar to the average music lover, is still held to be monumental by those capable of understanding it. And interest in Bartók as a performer and interpreter—and not only of his own music—has, oddly, been growing rather than declining since his death. It is this latter capacity, Bartók as interpretive musician, that is explored to the last degree in a new two-volume, multi-record set from Hungaroton (LPX 12326-33 and LPX 12334-38) called the "Centenary Edition of Bartók's Records (Complete)."

What we have here, in a nutshell, is everything, every surviving scrap, that Bartók himself ever recorded. The two-volume format puts all the professional commercial recordings into Volume I and the private recordings, air checks, tests, etc. into Volume II. The sources of this material include not only standard 78-rpm recordings, but also wax cylinders, piano rolls, lacquers, and pieces of used X-ray film pressed into service, during a time of shortage, as a medium on which to engrave sound. The technical quality of some of these private recordings is, needless to say, almost indescribably awful (on one, a fragment of the Romanian Folk Dance No. 1, there is simply nothing musical to hear, what piano sound exists being completely covered by a kind of reverse image produced by the horrendously worn cylinder).

One can sympathize with the direction and the scholarly concern of the project.

Still, in practical terms, even the most devoted listeners are apt to stop after Volume I. It includes two recordings of the Suite, Op. 14, one of the *Petite Suite*, the Romanian Folk Dances, excerpts from *Mikrokosmos*, *For Children*, Ten Easy Pieces, and the *Bagatelles*, together with a piece by Liszt and four sonatas by Scarlatti, all for piano solo; the magnificent series of Hungarian folk songs as arranged by Bartók and Kodály and sung by Vilma Medgyaszay, Mária Basilides, and Ferenc Székelyhid; and the recordings with Joseph Szigeti of the First Rhapsody (two versions), *Contrasts* (with Benny Goodman), Beethoven's *Kreutzer* Sonata (a wonderful performance), Bartók's Sonata No. 2, and the Debussy Sonata (another marvel), plus the Sonata for Two Pianos and Percussion. Almost all of these were commercially issued in the United States and some are even still available on their original labels. But it is good to have them all together in one place.

VOLUME II offers such temptations as the Rhapsody for Piano and Orchestra (from a 1939 radio concert), the Second Piano Concerto, Debussy's *En Blanc et Noir*, the Mozart D Major Sonata for two pianos, the Brahms F Minor for two pianos, bits of Bach, Kodály, Beethoven, Mozart, and Liszt, and what may be the most exciting piano playing in the set, the Liszt/Bülow *Concerto Pathétique* as played by Bartók and Ernő Dohnányi. The problem is that almost all of these are fragments, some larger, some smaller. And the sound ranges from bad to unlistenable.

This volume is not for listening *pleasure*, however; it is simply evidence of the way Bartók thought about music and the way he played. And how did he play? Authoritatively, of course; he was a man of strong convictions. Beyond that, it seems to me, he tended to play fast, somewhat sloppily, percussively, and, at times, as rhythmically freely as any of the arch-romanticists of the time with whom, one would have thought, he would have had no sympathy. In all, Bartók as a pianist is *most* notable for what he tells us about Bartók as a composer. And he tells us that best in Volume I. □

Revised and updated!

Stereo Review's SRT14-A

STEREO TEST RECORD

THE EDITORS AND TECHNICAL STAFF OF STEREO REVIEW PRESENT THE MOST COMPREHENSIVE, ACCURATE AND EASY-TO-USE TEST RECORD EVER DEVELOPED. SRT14-A HAS BEEN REVISED AND UPDATED FROM THE ORIGINAL SRT14 VERSION USING MORE SOPHISTICATED TEST SIGNALS TO MAKE THE JOB OF SETTING UP AND EVALUATING YOUR SYSTEM EVEN EASIER.



This latest version contains everything you need to get the fullest, most realistic reproduction from your stereo equipment. Whether you've spent thousands on your stereo system or have a more modest setup, the SRT14-A is an indispensable tool for helping you realize the full potential of your equipment. Best of all, you don't have to be an electronics engineer to use it. You can actually perform a complete stereo system checkup by ear alone.

A test lab in a record jacket

Employing the most advanced recording, mastering, and pressing techniques, the Stereo Review SRT14-A is produced to strict laboratory standards. Engraved in its grooves are a series of precisely recorded test tones, frequency sweeps, and pink noise signals that enable you to accurately analyze and check your stereo system for:

- Frequency response.
- Stereo separation.
- Cartridge tracking ability.
- Channel balance.
- Hum and noise, including turntable rumble.
- Wow and flutter.
- Optimum speaker placement.
- Cartridge Tracking Force & Anti-skating.
- Musical Instrument Tuning Standards, and more...much more.

And you can do it all without any instruments...by ear alone.

Step-by-step instructions

Included with SRT14-A is a detailed instruction manual, complete with charts, tables, and diagrams. This takes you step by step through the testing process. It explains the significance of each test. It tells you what to listen for. It clearly describes any aberrations in system response. And it details corrective procedures.

For professionals too

The usefulness of the SRT14-A is not confined to the nontechnical listener. Included on the record are a series of tests that call for the use of sophisticated measuring instruments, such as oscilloscopes, chart recorders, and distortion analyzers. These tests permit the advanced audiophile and professional to make precise measurements of transient response, recorded signal velocity, anti-skating compensation, IM distortion, and a host of other performance characteristics.

SRT14-A record contents

CARTRIDGE TRACKING, HIGH FREQUENCY. Consists of a two-tone signal (16,000 and 16,300 Hz) that repeatedly swoops to a high level and returns to a fixed low level. The level and quality of the audible 300-Hz "difference tone" indicates pickup quality and mistracking.

FREQUENCY RESPONSE, 20 kHz to 25 Hz. Uses one-third octave bands of pink noise, centered on twenty-nine frequencies over the audio spectrum, compared with reference tones at three levels.

SEPARATION, LEFT-TO-RIGHT. Uses test tones consisting of one-third octave bands of pink noise recorded in the left channel with reference tones in the right, to check leakage from left to right.

SEPARATION, RIGHT-TO-LEFT. Same as Test 3, with channels reversed.

CARTRIDGE TRACKING, LOW FREQUENCY. Uses a single 300-Hz tone that repeatedly swoops to a high level, producing buzzy tones if the cartridge is misadjusted or inferior.

CHANNEL BALANCE. Two random-phase noise signals, one in each channel, produce sounds heard separately to allow accurate setting of channel balance.

CARTRIDGE AND SPEAKER PHASING. A low-frequency signal alternates in and out of phase in the two channels to allow proper phasing of cartridge and speakers.

LOW-FREQUENCY NOISE. A very-low-level orchestral passage, followed by a section of "quiet groove," allows analysis of low-frequency noise.

TURNTABLE FLUTTER. A passage of piano music is recorded three times with increasing amounts of flutter. The degree to which the record player's flutter "masks" the test passages indicates the severity of turntable flutter.

FREQUENCY-RESPONSE SWEEP, 500 Hz, TO 20,000 Hz, LEFT CHANNEL. A steady tone rises from 500 Hz to 20 kHz, allowing evaluation of system electrical response by instrument.

FREQUENCY-RESPONSE SWEEP, 500 Hz TO 20,000 Hz, RIGHT CHANNEL. Same as Test 10, but in right channel.

TONE-BURST. The test signal is sixteen cycles on, same period off, sweeping from 500 Hz to 20 kHz, allowing evaluation of transient response of phono cartridges.

INTERMODULATION DISTORTION. A phono cartridge's intermodulation distortion can be measured directly using a standard IM meter designed to analyze an SMPTE signal.

ANTI-SKATING ADJUSTMENT. A specially designed signal allows adjustment of anti-skating force for best reproduction of high-level passages.

1000-Hz REFERENCE TONES. Four tones with recorded velocities that increase by 3-dB steps can be used to determine (by the comparison method) the recorded signal velocity on a disc recording.

FLUTTER AND SPEED ACCURACY. A 3,150-Hz tone recorded with great accuracy of speed provides the standard signal for use with a flutter meter or frequency counter.

STEREO SPREAD. A series of drum beats recorded out of doors provides a guide to optimum speaker placement for a subjectively satisfying stereo effect.

STANDARD "A." The standard 440-Hz tone is recorded with very high precision for tuning instruments and for checking turntable speed.

CHROMATIC OCTAVE. The tones of the "equal-tempered" octave from 440 Hz to 880 Hz are recorded with accuracy better than 0.1 per cent.

GUITAR TUNING TONES. The six notes of standard guitar tuning are recorded with accuracy better than 0.1 per cent.

The final step

Start getting the most out of your stereo system. Make the SRT14-A your next record purchase. Just complete the coupon and mail it along with your remittance . . . today!



CHARGE ORDERS—for your convenience PHONE 24 HRS.
TOLL FREE 800-345-8112. IN PENNSYLVANIA ONLY 800-662-2444.

Test Record, Dept. 30013, P.O. Box 278, Pratt Station, Brooklyn, NY 11205
Please send _____ SRT14-A Stereo Test Records @ \$9.95 each.
(\$11.95 outside U.S.A.)

Enclosed is \$ _____
 CHARGE: VISA MasterCard
 Diners Club American Express

Account # _____ Exp Date _____

Signature _____

Print Name _____

Address _____

City / State / Zip _____

*Residents of CA, CO, DC, FL, IL, MA, MI, MO, NJ, NY State, OH, SC, TN, and VT add applicable sales tax.

STEREO REVIEW has in the past put together a number of engineering forums dealing with such component subjects as loudspeakers and phono cartridges, and they have all gone smoothly once the matter of organization was solved. We therefore anticipated no problem in conducting another such survey, this one on the subject of FM tuners.

But as the responses began to trickle in we encountered considerable difficulty in sorting them out, a difficulty that somewhat reflects the problems faced by the designers of FM equipment. For example, the IEEE/IHF

tuner standard (IEEE 185-1975) includes an "abbreviated" list of fifteen specifications that are deemed sufficient to meet "the requirements of the IHF." Of these fifteen specifications, six appear to call for measurements in both mono and stereo. And there are no less than twenty-five complex tests required for the full list of specifications, eight of them calling for both mono and stereo tests.

Just as problematical is the intimately related matter of the technical quality of U.S. FM broadcasts. Although there are some excellent-sounding FM stations in this country, they can probably be numbered on the fingers of one hand. My definition of "excellent-sounding," incidentally, has nothing to do with the fantasies of our more devout audiophiles. My desires are rather modest: all I want is that the broadcast of a given record sound as open, wide-range, and undistorted as it

sounds on my turntable. It hardly ever does, of course. The fault is not in my tuner (Julian Hirsch has rated it among the best he has tested) or in the reception conditions in my locality. The infidelity of what I hear on FM is due simply to the poor quality of the broadcast signal.

Yet, tuner designers have been regularly upgrading their products to the point that for the past five to ten years (depending on who you talk to), top-of-the-line tuners have been inherently superior in respect to distortion, audio bandwidth, separation, and noise to the signals they are designed to receive.

Tuner engineers in pursuit of ever-better specs are not, of course, totally ignoring the major practical problems of FM transmission (overmodulation, bandcrowding, etc.) and reception (input overload, multipath, etc.), though a good deal of engineering effort is being expended in making improvements in areas that are really not in desperate need of fixing. This is not meant to deny the many very real audible improvements—aside from stereo—that have occurred since I bought my first FM tuner, the \$29 Pilot Model T6C1, in the early Fifties. If FM's Golden Age is not yet upon us, it is because we have not yet dealt adequately with the technical flaws in the FCC-regulated broadcast process, have found no easy answer to the lack of care among commercial (in both senses) broadcasters or to the problems posed by the great diversity of broadcast-reception conditions at the listening end.

The forum that follows represents as accurately as possible the views of those who responded to our questionnaire. There are large areas of technical agreement as well as some off-beat iconoclasm, both expected consequences of the state of the FM art these days. Interested readers will doubtless find much of technical usefulness in the opinions expressed in the following pages.

—Larry Klein, Technical Director

THIS MONTH'S COVER

THE FM tuners shown on this month's cover are (clockwise from upper right): Tandberg TPT-3001, Yamaha T-70, Scaev ST-J75, Kenwood KT-1000, Technics ST-S3, Studer/Revox B760, McIntosh MF-80, Pioneer F-9, and the Crown FM Two.



TUNERS

A design forum takes a look at today's problems... and tomorrow's solutions

1. Do today's best tuners offer audibly improved performance over those of five or ten years ago? In what areas?

The respondents were in agreement that tuners were significantly better, at least technically, than those of past years. As radio station WNYC's Victor Campos put it, "There are tuners available for less than \$500 that easily equal or surpass in almost all respects the performance of those that sold for \$2,000 to \$3,000 five years ago."

The most easily audible improvement resulted from the extension of tuner high-frequency response to the full 15-kHz top limit defined by the Federal Communications Commission. Yamaha's Curt Sidles defined the problem: "Frequency response was typically down 3 dB at 15 kHz five to ten years ago. Through the development of pilot-signal cancellation circuits that eliminated the need for 19-kHz filters, response at 15 kHz is currently held to within 0.5 dB."

Other important design and semiconductor improvements, according to Jim Slade of Pioneer, "have significantly reduced front-end overload and thus eliminated a lot of the r.f. IM (intermodulation) problems that plagued many of yesterday's tuners."

Tor Sivertsen of Tandberg agreed with Technics' John Marchetti, who observed that "r.f. front ends have improved considerably" and went on to add that "most tuners now perform at the edge of the theoretical sensitivity limit. Also, frequency drift and improper tuning, which can be a major cause of poor stereo separation and distortion, are virtually eliminated with digitally synthesized tuning oscillators. Multipath, however, remains a major cause of distortion, loss of separation, and degradation of audio quality."

Henry Akiya of Kenwood credits performance improvements in part to such advances in device technology as preselector amplifiers and dual-gate MOSFETs that combine low-noise with high signal-handling ability. Susumu Takahashi of Sansui finds that "while the ultimate laboratory specifications may not seem to have improved over the past five years, in the 'real world' of actual tuner use such important developments as economical circuitry for true frequency synthesis have resulted in greater tuning accuracy. This, in turn, has led to lower distortion levels, total absence of tuning drift, and much greater ease of tuning."

Sony's Ikuo Kanayama notes that "with previous technology, tuner engineers were left with a choice between a product with low noise or high selectivity. Thanks to the developments in multiple ceramic filters, listeners can now enjoy clean, noise-free sound even in dense-signal metropolitan areas. Also, recent improvements in the r.f. amplifier, buffer circuits in the local oscillator, and reduced r.f. intermodulation are giving us higher signal-to-noise ratios and lower THD. This is clearly evident in an FM jungle like New York City."

Carver Corporation's Bob Carver, on the other hand, doesn't think there has been an *audible* improvement in top-of-the-line tuners in the last five years, but he does believe that the high quality of yesterday's best tuners is now available at a much lower price. Julian Hirsch of Hirsch-Houck Laboratories agrees with Carver on the lack of audible improvement. "Although there have been *measurable* improvements in distortion, noise, and channel separation, these are usually masked by limitations in the transmitted program. At least one tuner under development (from Carver) may offer audible improvements in cases where multipath is a severe problem."

2. Which are the most important factors to be taken into consideration in FM tuner design?

Answers to this question related somewhat to the first, but they varied widely. Technics' Marchetti commented that "there are many important factors to be considered in tuner design, and all have a bearing on overall performance. First of all, front-end dynamic range (freedom from overload) affects a tuner's independence from cross-modulation effects and spurious responses, while front-end sensitivity determines the level of residual and background noise. Characteristics of the i.f. and discriminator stages (such as phase linearity, bandwidth, passband accuracy, and symmetry) determine distortion, quieting, and alternate- and adjacent-channel selectivity. And the

design of the i.f. section is also very important because it must have linear response over the full bandwidth to handle the amplitude distribution of a stereo signal without audible distortion."

Sansui's Takahashi feels that the quality-determining factors "are not limited to the r.f. section, since the performance of the audio section of the tuner is equally important. For example, the stereo-decoding multiplex-section design—which determines separation and distortion—is as important as the front-end design. Most manufacturers have not given sufficient emphasis to, nor have their published specification sheets stressed the importance of, these audio-section specifications. In the r.f. section we would rank a good capture ratio as being of almost equal significance."

Larry Schotz of LS Electronics gave an answer that was short and to the point: the front end and FM detector are the most important design factors. But Sony's Kanayama found it "impossible to mention only two factors when a good tuner involves so many. Two of our major future target areas are: improvement of r.f. intermodulation and of adjacent-channel selectivity while simultaneously lowering distortion." Crown's John Bachman agreed that FM-band crowding is a serious problem: "The tuner's ability to separate out the signal you want to deliver is of utmost importance."

For Sidney Corderman of McIntosh the rather more inclusive elements of "performance and reliability" are paramount, and Renaud Delapraz of Studer/Revox noted that "it is important to make as few compromises as possible in the design of the electronic circuitry. For example, AM/FM tuners using the same i.f. amplifiers and filters for both reception modes must inevitably have trade-offs."

Sidles of Yamaha zeroed in on "anti-interference performance—improving intermodulation performance (when three or more strong signals are present at the antenna terminals) and improving strong-signal overload characteristics while avoiding blanking of nearby weak signals."

Tandberg's Sivertsen made some of the same points and mentioned the importance of minimizing internal noise caused by multiplex-decoder circuits.

Kenwood's Akiya thinks that "the most important consideration is rejection of cross-modulation and spurious responses. The second is high-frequency distortion as

Coordinated by
Gordon Sell

TUNERS... --- ---

it applies to the multiplex subchannel."

Victor Campos cited "multipath rejection and lower residual noise (AM and FM) together with lower overall distortion (particularly IM products)," Bob Carver said that the most important factor is "the ability of a tuner to deliver a quiet, full-bandwidth stereo signal under all practical conditions," and Julian Hirsch had a practical operational viewpoint: "the most important factors are (a) non-critical, non-ambiguous tuning for minimum distortion and (b) a transient-free interstation-noise squelch."

3. If you had to choose a tuner purely on the basis of specifications, which specs would you use?

Answers to this question were mostly a matter of lists rather than comments. A number of respondents—Sidles, Akiya, and Hirsch—advised caution in picking a tuner purely on the basis of specifications. Noted Hirsch: "Probably most of the existing (IEEE/IHF) specifications *could* be used. However, the important thing to remember is that specs alone are *not* a valid basis for choosing *any* high-fidelity component."

Sensitivity was the first specification cited by most of the respondents. And almost all made the point that the mono and stereo 50-dB quieting figures (rather than the IHF's 30-dB "usable sensitivity") were most useful to the consumer because they indicate the true signal level required to produce a reasonably noise-free stereo output. Technics' Marchetti made the point that most good tuners now approach the theoretical limit of sensitivity anyway.

The next-most-listed specification was the signal-to-noise ratio, followed by total harmonic distortion—both of which are reflected in the sensitivity rating. Intermodulation distortion of the r.f. signal is a seldom-listed specification, but it reflects a tuner's ability to reject spurious signals. Other specifications considered useful (in order of the number of respondents who listed them) are: alternate-channel selectivity, AM rejection, stereo separation, adjacent-channel selectivity, capture ratio, and image rejection. And several respondents mentioned other items: high-frequency distortion, pulse rejection, front-end overload, distortion vs. signal modulation, r.f. dynamic range, and i.f. bandwidth.

These responses offer some insight into what engineers consider important in designing a tuner. A consumer interested in buying one may find the answers to the next question more relevant.

4. Which specifications are most important for reception (a) in the city, (b) in the country, and (c) in the automobile?

FM-tuner performance is, as we well know, location dependent. For example, STEREO REVIEW's offices are in the multipath and r.f.-overload capital of the world, midtown

Manhattan. We are inside a steel-frame office building surrounded by other steel-frame office buildings and three blocks from the Empire State Building, from which many local radio stations transmit. In this situation, tuners that have poor overload resistance or inadequate spurious-response rejection usually deliver various strong stations at several frequencies on the FM band in addition to the official FCC-assigned one. Rural listeners have different problems, the main one being low signal strength, sometimes complicated by the possibility that other weak signals from a different direction may be sharing the channel they are trying to tune to.

Our respondents' recommended specifications for city reception were varied, but the most often mentioned were alternate-channel selectivity, capture ratio, AM rejection, and intermodulation distortion—in that order. Multipath and spurious-response rejection were also mentioned frequently, and these involve image-response and i.f. response ratio.

Sensitivity specifications take on greater importance the further you move into the country. The most common response to the "most important spec" question was 50-dB quieting sensitivity, followed by usable sensitivity, alternate-channel selectivity, and capture ratio. Pioneer's Slade put it this way: "In rural areas, where only a few relatively weak signals are received, the low-level input parameters become increasingly more important. Such measurements as 50-dB quieting are of prime importance." Corderman of McIntosh observed that capture ratio is important to the rural listener because he is often between two distant cities having stations broadcasting on the same frequency.

Different specifications were emphasized for car stereo. AM suppression was listed as important by eight of the fourteen respondents, seven cited sensitivity in one form or another, and seven cited capture ratio. Selectivity came next, followed by r.f.-intermodulation distortion. Pioneer's Slade pointed out that AM suppression is the best gauge of a tuner's susceptibility to the whoosh-whoosh of "picket-fence" noise. Sony's Kanayama sees a need for higher emphasis on selectivity and stability, and McIntosh's Corderman summed it up: "In the car we have all the problems of city reception plus the need for great sensitivity. Cars experience wide supply-voltage and temperature variations, so drift resistance is important, and automatic-stereo blend or automatic stereo/mono switching for weak signals is also very desirable."

The special problems faced by the car-stereo-tuner designer are reflected in the poor-to-mediocre performance of most car-stereo units in large metropolitan areas. It is clear that the reception problems of a *moving* FM receiver are both different from and more intense than those faced by a permanently mounted component, and perhaps the diversity of views among the engineers to some degree reflects an inability to really come to grips with the problems.

5. Are there any tuner specifications not normally measured that you believe should be? How might these be useful in

helping the consumer make a better buying decision?

Answers to this question were very consistent among the panelists. First on almost everyone's list was the need for better measurement of front-end r.f. overload. There is one relevant IEEE/IHF specification: *r.f. intermodulation*, sometimes referred to as cross-modulation. Radio-frequency overload occurs when the r.f. amplifier receives stronger signals than it can handle and its output becomes nonlinear; the result is the generation of spurious responses that interfere with the desired channel.

It is rare to find this specification in advertising or new-product announcements. Of the tuners shown on our cover, for example, only two listed r.f. intermodulation in their published specifications. Nonetheless, as Crown's Bachman observed, "tuner overload resistance, as such, is not usually listed, but in a metropolitan area it is very important." McIntosh's Corderman added that "r.f. intermodulation, which results in strong stations being tuned in at several spots on the dial, is a common urban problem, particularly when a high-gain antenna is used. Weaker stations can be masked."

WNYC's Campos reports that it is "not uncommon to find r.f. signals of up to 2 volts across antenna terminals in a metropolitan area along with other signals of 100 microvolts or so. An r.f. dynamic-range specification would indicate how well a tuner would perform with radically different and coexisting signals."

Another problem, touched upon by John Bachman of Crown, "is a tuner's ability to handle excessive modulation on the part of the broadcasters." FM stations are required to modulate at a maximum of ± 75 kHz, but they may be over or under these limits

A TUNER GLOSSARY

- **AM suppression.** A measure of how successful an FM tuner is in suppressing the noise-producing amplitude variations in the incoming signal. A high figure (in decibels) is desirable.
- **Capture ratio.** The difference in strength between two incoming FM signals of the same frequency that is necessary for a given tuner to "capture" the stronger and totally reject the weaker. A low figure (in decibels) is desirable.
- **De-emphasis.** The standard equalization introduced by an FM tuner for proper reproduction of pre-emphasized FM broadcasts. The U.S. has two FM-equalization characteristics in regular use: 75 μ sec (microseconds) for standard broadcasts and 25 μ sec for Dolbyized transmissions; in Europe 50 μ sec is standard. Some tuners provide all three.
- **Distortion.** Spurious additions to the original audio signal. Two types of audio distortion are regularly specified: *total harmonic distortion* (THD) and *intermodulation distortion* (IM).

at various times. This is usually more prevalent with rock stations. Since these specs are unlisted by tuner manufacturers, it is necessary for the customer to listen to his favorite station before he buys.

Schotz of LS Electronics thought it would be useful to plot distortion vs. tuned frequency on some analog tuners to discover how much mistuning the tuner can handle before the distortion becomes excessive.

Tandberg's Sivertsen thinks we should measure stereo intermodulation with the pilot tone: "This will help the customer become aware of the 'beat tones' and 'whistles' generated in the tuner." Akiya of Kenwood had another idea. "Some factors are difficult to assess with a single number. A useful criterion, however, would be a plot of the audio signal-to-noise ratio vs. the i.f. signal-to-noise (or interference) ratio. This plot should be shown against an ideal plot for a gaussian i.f. The comparison would show the effects of nonlinear amplitude and phase response in the i.f., and it might give a better picture of the capture ratio than a single number would."

Marchetti of Technics believes that "the present IEEE/IHF testing standards for FM broadcast receivers are more than adequate. It is conceivable that manufacturers might release more test data, but it is debatable whether this would help or hinder the consumer."

6. We often see the word *digital* used to describe tuners in advertising even though many parts of a tuner can be "digital." So just what does "digital tuner" mean?

An answer looking to the future was provided by Ikuo Kanayama of Sony: "A true digital tuner would be part of a system in

which there would be broadcast a PCM (pulse-code modulation) digital signal of super-high frequency from a satellite. The tuner would receive and demodulate that digital signal into analog information."

Kenwood's Akiya agreed, but added: "Transmission by purely digital means requires a large increase in bandwidth, and until this problem is licked the term 'digital' appears to me to be a misnomer. It is now used rather loosely in the industry because it's exotic and suggests the mystery of the computer. 'Digital' is used in reference to quartz-referenced synthesizers to describe the counting techniques applied in the PLL system. The term 'pulse techniques' is perhaps more accurate technically. For example, we use a pulse-count FM detector and sample-and-hold gate techniques to decode the sub channel. In both of these systems we have applied the pulse-handling techniques that are found in purely digital circuits, but that's as close as it comes. The term 'digital' comes into its own only when the audio information is encoded, transmitted, and processed in digital form. Such techniques are now used in recording and certain other applications such as reclamation of 'intelligible audio' at multiples of normal tape speed in VCRs."

Takahashi of Sansui addressed himself to a different point. Referring to those tuners using conventional circuits but having a digital station-frequency readout, he said: "To call a tuner 'digital' simply because it displays frequencies using LEDs or other electronic numeric displays tends to confuse and deceive the customer. After all, a tuner with a standard dial scale also has numerical digits printed on it, but no one would think of calling it a 'digital' tuner." But McIntosh's Corderman disagreed: "A digital tuner means a tuner with a digital fre-

quency display. Digital detectors or digital frequency-synthesized tuning are circuit features that, in my opinion, do not qualify to make the tuner digital."

7. What are the major advantages of frequency-synthesized tuning? Are there any disadvantages?

There was total agreement on the advantages—speed, convenience, stability, and accuracy were the words most used in the answers. Technics' Marchetti noted that "it results in many other extra features—such as touch selection, search, digital readout, signal locking, and station memory—that may not directly improve performance but are excellent convenience features."

However, almost everyone qualified his praise of digitally synthesized tuner accuracy by pointing out that accuracy is a *disadvantage* if the system centers the tuner on other than the desired frequency. Hirsch noted that it was an advantage "only if the i.f. and detector circuits are correctly aligned, which is the exception rather than the rule. But digital tuning is also normally accompanied by perfect noise-free squelch, and that is perhaps its most striking feature." Schotz observed that with digital tuning he missed the ability to slightly *mis-tune* to eliminate adjacent-channel interference. Tandberg's Sivertsen agreed: "Sometimes you get better sound quality by slight detuning."

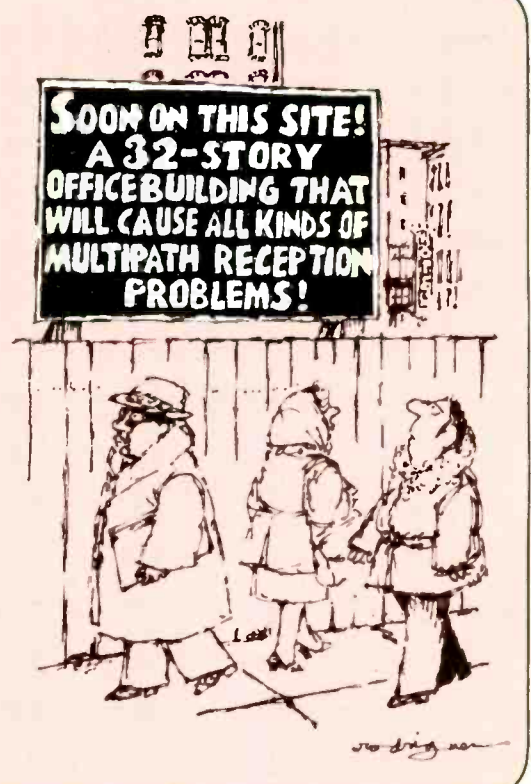
Technics' Marchetti had a caveat: "Frequency-synthesized tuning in a poorly designed tuner can be inferior to that in a well-designed 'manual' tuner because it does not insure that the symmetry of the i.f. pass band and discriminator are optimum when the oscillator is accurate."

(Continued overleaf)

- **Interstation-noise muting.** A circuit (often switchable) that silences the output of an FM tuner when it is between stations.
- **Multipath.** An undesirable condition arising when the same signal reaches the receiving antenna via multiple paths. Since one or more of these signals is delayed with reference to the direct signal, the interference between them imparts a fuzzy or rasping quality to the sound.
- **r.f. intermodulation.** A measure of the spurious response generated when two incoming radio-frequency signals mix and produce a variety of unwanted signals at other frequencies.
- **Selectivity.** A measure of how much stronger than a desired station another station broadcasting on a nearby frequency can be before significant interference occurs between the two. It is measured both for *adjacent* channels 200 kHz away and for *alternate* channels 400 kHz away from the tuned frequency.
- **Sensitivity.** Indicates the minimum incoming-signal strength needed to provide a quiet, undistorted output. There are three commonly specified

ways of measuring sensitivity: *usable sensitivity* (the minimum signal strength, in dBf or microvolts, necessary for the signal to be 30 dB stronger than its accompanying noise or distortion), *50-dB quieting sensitivity* (the minimum signal necessary for a 50-dB mono signal-to-noise ratio), and *50-dB stereo quieting sensitivity* (the minimum signal necessary for a 50-dB S/N with a stereo signal).

- **Signal-to-noise ratio (S/N).** Indicates to what degree noise (hiss and hum) is below the tuner's maximum signal-output level with a fully modulated r.f. input signal (a S/N of 80 dB means that the noise and distortion are 80 dB weaker than the signal).
- **Spurious-response rejection.** The ability to reject a variety of signals that are generally distant in frequency from the desired station. (*Image rejection* and *i.f. rejection* are both aspects of spurious-response rejection.)
- **Stereo separation.** The figure indicates the "distance" in decibels between a signal in one channel and its spurious appearance in the opposite channel (the larger the number the better).



TUNERS...=

Another frequently mentioned problem with digital tuners is degradation of the signal-to-noise ratio. Tandberg's Sivertsen, Sansui's Takahashi, and Sony's Kanayama, as well as Campos and Carver, mentioned this as a problem common to digital tuners; all, however, felt that the problem was under control. Said Sony's Kanayama: "Generally speaking, a frequency-synthesis tuner will have a poorer S/N than its analog counterpart. But with recently developed circuitry we have been able to achieve higher S/Ns than were previously possible."

Hirsch thinks too much has been made of the synthesizer noise problem. "Sometimes the noise is measurably higher, but I have never seen one whose audible noise was worsened."

8. What are the major barriers standing in the way of improved FM performance right now?

As long ago as February 1972, in a STEREO REVIEW article titled "The Infidelity of FM," the point was made that the fidelity of FM is limited in large measure by antiquated FCC rules and by the broadcast practices of radio stations in single-minded pursuit of advertising revenues. The situation has not improved any in ten years.

Sansui's Takahashi was critical of the present system of stereo FM "which de-

grades the stereo signal-to-noise ratios compared with mono transmission." Carver noted that the output noise of a stereo signal is "23 dB worse than the mono signal."

Campos criticised the FCC's insistence on "the antiquated and unnecessary 75-microsecond pre-emphasis (15 dB at 15 kHz) as well as its ambiguous rules against over-modulation and undermodulation."

Kenwood's Akiya sees the major improvement in FM-tuner performance as coming from "the achievement of an ideal amplitude phase response in the i.f. and the control of all frequency-related factors that result in minimum harmonic distortion and the best possible spurious-response rejection. Multipath remains a formidable obstacle, but improvements are to be expected in this area since a large number of stations have switched to circular polarization."

Multipath, although listed as a big problem by many participants, is one of those problems that you either have or don't have. City dwellers surrounded by large buildings often find that certain stations are unlistenable due to multipath, but many rural listeners don't even know the problem exists.

Bob Carver was one of those who thought this to be a serious problem, but he believes it is solvable through inverting the out-of-phase multipath signal and using it to cancel the distortion. Sony is reported to be working on a similar approach.

9. How does the transmitted FM signal compare with the performance abilities of today's tuners?

This deliberately pointed question generated almost universal condemnation of the

quality of most FM broadcasting in this country. Julian Hirsch and Pioneer's Slade agreed with Sansui's Takahashi, who put it into historical perspective: "It must be remembered that the majority of transmitters used by FM stations in this country were installed many years ago and have never been updated even though FM technology has advanced a great deal in the interim." Numerous respondents rated the average broadcast station as having a 60- to 65-dB signal-to-noise ratio, 0.3 per cent total harmonic distortion, and stereo separation of only 30 to 40 dB, all far below the performance of the average tuner.

But the broadcasting news isn't all bad. McIntosh's Corderman feels that "some broadcast stations are very good. Live broadcasts in some cities, such as Boston and New York, have remarkable fidelity. The fidelity requirements imposed by the FCC are minimal, so the broadcaster has considerable say in the sound quality of the program. Modulation limiters, audio compressors, and some noise-reduction processors will enhance the loudness of a station but at the sacrifice of signal fidelity."

Victor Campos, an executive at the highly thought of (and clean-sounding) WNYC-FM classical-music station, feels that "the quality of the signal depends on what station one tunes to. There is transmitting and stereo-encoding equipment for broadcasting that exceeds the capabilities of all but a few just-released tuners. And there are quite a number of stations, primarily members of National Public Radio, that often transmit a live-performance signal that challenges the characteristics of most FM tuners."

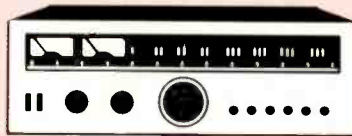
In order to appreciate the difficulties facing a tuner designer, it is necessary to understand just how a tuner converts a frequency-modulated (FM) radio wave into a usable audio signal. While the operation of an actual tuner is far more complicated than the brief outline below, it is only the general principles that need to be established.

An FM tuner performs four basic functions: it separates the desired station's signal from all the other radio-frequency (r.f.) signals, amplifies the chosen r.f. signal to a workable level, extracts the audio-information signal from the r.f. "carrier," and—in the case of a stereo broadcast—"decodes" the audio information into the two stereo channels.

The first function is performed by what is generally known as the "front end." Its circuits amplify incoming FM-band signals. To pick out the one FM frequency desired, the tuner employs a technique called "heterodyning," which converts the broadcast frequency (88 to 108 MHz) down to 10.7 MHz where specialized components amplify and process the signal.

This conversion is accomplished by mixing in a "local-oscillator" frequency that is 10.7 MHz higher than the desired channel. For example, when we tune in a station at 99.1 MHz we are actually adjusting the local oscilla-

THE FM TUNER: HOW IT WORKS



tor to put out a 109.8-MHz frequency so as to produce the difference frequency of 10.7 MHz ($109.8 - 99.1 = 10.7$). Similarly, when we tune in a station at 101.1 MHz we are adjusting the local oscillator to 111.8 MHz ($111.8 - 101.1 = 10.7$).

Next come several stages of intermediate-frequency (i.f.) amplification that pass only the 10.7-MHz frequency, blocking all r.f. signals not on that frequency (there are often four or five i.f. stages, generally the more the better). After the i.f. section (or as part of it) is a circuit called the "limiter," which cuts off any amplitude-modulated noise spikes (this is what gives FM its quiet background-noise level).

Since we are still dealing, at this point, with a frequency-modulated r.f. signal, the tuner must now separate the audio information from the high-frequency (10.7 MHz) "carrier." A "detector" circuit does this, using any

of four or five different techniques to produce a mono audio output. To understand how to get stereo from this mono signal we have to look at the output of the detector. FM broadcasts transmit an audio-signal bandwidth far wider than the human ear can hear. The range between 50 and 15,000 Hz is used for the mono signal, but the engineers are able to pack a lot of extra information into the higher (and inaudible) frequencies using a technique called "multiplexing."

To transmit a stereo recording, the broadcaster sends out a signal that is made up of the combined left and right channels ($L + R$); this is done using the first 15 kHz of the available bandwidth so non-stereo receivers can "hear" a proper mono signal. The broadcaster also transmits a signal that is the *difference* between the left and right channels ($L - R$), and this is positioned on that part of the signal centered at 38 kHz. And to ensure that these two signals are in proper phase relationship with each other, there's also a 19-kHz reference "pilot" signal. On the receiving end, the tuner manipulates the two bands algebraically— $(L + R) + (L - R) = 2L$ and $(L + R) - (L - R) = 2R$ —to produce separate left- and right-channel outputs—stereo.

Some stations are indeed capable of 80-dB and better signal-to-noise ratios and stereo separation of 50 to 60 dB. Unfortunately, there are very few such stations around because loud stations get the mass of listeners and the bulk of the advertising dollars. When you first tune in to a classical-music station with a wide dynamic range, such as WNYC or WFMT in Chicago, you may think it is off the air if you hit a stretch of quiet music.

10. Do you see any significant advances in tuner design in the near future?

Kenwood's Akiya: "Large-scale integrated circuits are opening up areas that were not worth considering a few years ago. For example, techniques used to measure distortion can be put to work in closed-loop systems inside the tuner to monitor and correct distortion. In other words, the tuner will tune automatically for minimum distortion within a frequency range rather than just for a specific frequency."

Technics' Marchetti sees similar advances through the application of advanced integrated circuitry: "The trend is to improve performance by microprocessor control of the tuner operations to adjust the operating parameters for optimum performance. Synthesized tuning was one step, auto i.f. bandwidth-switching another; in the coming years, even more circuitry functions will be manipulated automatically. Front-end overload, large- and small-signal operation, multipath effects, and antenna operation will be optimized by microprocessor control of the tuner's parameters."

According to Bachman of Crown, "the use of digital design in the detector has greatly reduced the need for retuning this stage as a result of component aging. Commonly used tuned detectors are subject to drift, causing distortion of the detected signal and greatly influencing other performance areas."

Campos noted that "there are 100-MHz chips under development that will make tuner front ends super simple. The oscillator and mixer stages will be superfluous, along with (perhaps) the i.f. and detector-discriminator circuits (an area that can use a serious and concentrated design effort, since most detectors in use today are hardly superior to the old Foster-Seely design)."

According to Larry Schotz, there are still improvements to be made in the area of 50-dB quieting sensitivity performance to secure better signal-to-noise ratios for weak signals.

Bob Carver has been working on reducing the high noise-level differential between stereo and mono as well as the multipath-reduction technique mentioned earlier. Tandberg appears to be taking a similar approach to the multipath problem. "It is also possible to use a microprocessor to control the different delays, depending on what kind of multipath problem you have. But to do this right will be expensive," says Tor Sivertsen.

Delapraz of Studer/Revox has a different perspective. He harks back to Sony's answer to the digital definition question: "In the present FM-broadcast format, we feel

we have attained the limit of improvement possible—for a reasonable price—using current technology. To improve the quality greatly, a new format needs to be created, probably one using digital encoding for transmission via satellite and dish systems, cable, or combinations thereof. We think this step will be taken only when new formats for source material (digital audio discs, etc.) are widely introduced."

11. Great changes are taking place in the recording and broadcasting industries, with digital recording and the projected wiring of all America with cable systems. Ten or fifteen years from now what form might a high-fidelity broadcast take?

Sony's Kanayama sees an exciting future. "The listener of ten to fifteen years hence may very well have a 'true digital' format. The possibility also remains for digital 'broadcasting' through a cable using optical fibers instead of today's analog cable network." Victor Campos also sees "more reliance on cable-derived signals, rather than off-the-air reception."

Quite a few others speculated on the desirability of direct digital broadcasting, but through a separate new satellite-based system rather than some kind of replacement for FM. Most see FM as being popular for a long time to come.

McIntosh's Corderman predicts that "tomorrow's audiophile will probably find FM broadcasting about the same as today's. There will be good-music stations, hard-rock stations, and everything in between. Cable FM will cost the user money, but we can at least hope for commercial-free programs. Direct-satellite broadcasting will be possible—I would like to see the national networks go to one big station in the sky, freeing up frequencies for local stations. And tomorrow's tuners will be more interference-free and easier to use; they will also be smaller and better."

12. Have you any further comments you would like to make on any aspect of FM?

Sansui's Takahashi took us to task for not paying enough attention to the importance of a good antenna. "Despite the fact that we always mention this important accessory in our owner's manuals, few customers take the matter seriously. A properly designed FM antenna can often improve the performance of a tuner by as much as ten to one or more. We find that our very best FM tuners are sometimes performing poorly simply because the antenna is inadequate for the reception conditions."

Takahashi also had a lot to say about AM tuner performance, noting that it is possible to enjoy high-fidelity ("up to a 10-kHz" frequency response) AM broadcasts thanks to circuitry employed in some Sansui tuners. Both he and McIntosh's Corderman wanted to know what is delaying the arrival of AM stereo, a system whose time, they believe, has come.

Larry Schotz regrets the effort manufacturers spend "on improving ultimate signal-to-noise capabilities of their tuners far beyond the limits of the transmitted signal

FORUM PARTICIPANTS

- Henry Akiya, Kenwood Electronics
- John Bachman, Crown International
- Victor Campos, WNYC-FM
- Bob Carver, Carver Corporation
- Sidney Corderman, McIntosh Laboratories
- Renaud Delapraz, Studer Revox
- Julian Hirsch, Hirsch-Houck Laboratories
- Ikuo Kanayama, Sony Corporation of America
- John Marchetti, Technics
- Larry Schotz, LS Electronics
- Curtis Sidles, Yamaha Electronics Corporation
- Tor Sivertsen, Tandberg of America
- Jim Slade, U.S. Pioneer
- Susumu Takahashi, Sansui Electronics Corporation



Akiya Bachman Campos



Carver Corderman Delapraz



Hirsch Kanayama Marchetti



Schotz Sidles Sivertsen



Slade Takahashi

and even the source material being used. Such effort would be better spent on improving the 50-dB quieting sensitivity and r.f. intermodulation performance which will show up in real-world signal quality."

Sony's Kanayama notes that "specifications are, of course, extremely important; however, ease of operation and the practical ability to obtain maximum quality is not to be neglected. As an industry, we should be very careful to improve performance under actual operating conditions and not controlled laboratory conditions." A view to which we can all add a loud Amen! □



Stereo Review Throws a Party...

to celebrate its Record of the Year Awards for the 1980 publishing year at New York's St. Regis Hotel on January 12. Performing artists, publicists, and record-industry guests gathered to salute twelve awards and twenty-four honorable mentions (see February 1982 issue). Guest of honor was Benny Goodman, this year's Certificate of Merit Award winner ("for outstanding contributions to the quality of American musical life"), shown above (1) accepting the original copy of the Al Hirschfeld caricature that appeared on the February cover. (2) being congratulated by hornist Barry Tuckwell and artist Hirschfeld, (3) laughing with the great jazz-piano stylist Eddie Heywood, and fielding compliments from the ladies: (4) Wanda Richert, star of Broadway's (and RCA's) award-winning *42nd Street*, (5) actress Marion Seldes, (6) mezzo Joanna Simon, (7) CBS Records producer Vera Zorina Lieberman, (8) jazz singer Jean Churchill, (9) singer Margaret Whiting and singing-actress Millicent Martin, currently winning new friends as leading-lady Dorothy Brock in *42nd Street*.

On the facing page (10) are DRG Records' Hugh Fordin, talented young composer/lyricist William Finn (*March of the Falsettos*, recorded by DRG), Katherine Hogan (Finn's legal eagle), and Pop Music Editor Paulette Weiss. (11) Singer Sylvia Syms manages, as usual, to corner two swains: Lee Roy Reams, singing/dancing star of *42nd Street*, and Rick Winter of DRG Records. (12) Jazz singer Pug Horton and clarinetist/saxophonist Bob Wilber look as good together as they sound on their

Bodeswell recording "Don't Go Away" (13) Chico ("the most important horn since Coltrane") Freeman poses with Editor William Anderson, and (14) Music Editor James Goodfriend explains why he thinks so highly of artists Jane Voss and Hoyle Osborne (honorable mention this year) to Mary Rose, the duo's manager. Paulette Weiss, and Wendy Newton, head of Green Linnet Records. (15) Cabaret artist Peter Dean, shown here with singer Susannah McCorkle, was another honorable-mention recipient. (16) Ruth Ellington, popular New York DJ (WNEW) William B. Williams, and actress/singer Paula Lawrence enjoy themselves, and (17) harpsichordist Igor Kipnis has something startling to tell John Grady, director of music at St. Patrick's. (18) Pop Music Editor Paulette Weiss and Research Editor Richard Sarbin introduce versatile jazz instrumentalist Glenn Zottola to the camera as Beth Greenberg of Gramavision Records looks on. (19) Executive Editor William Livingstone chats with Laurie MacNeill of CBS Masterworks and French pianist Jacqueline Schweitzer. (20) Violinist Erick Friedman with actress/columnist Ruth Warrick (perhaps better known as Phoebe Tyler on the TV soap *All My Children*). (21) pianists John Browning and Constance Keene with Met conductor Richard Weitach, and (22) Paulette Weiss separating writer Rob Patterson and Roy Trakin of Warner-Amex from Ken Reynolds (PolyGram) and Hope Antman (CBS). (Credits: 1, 3, 4, 10, 13, 14, 18, 22, Ebet Roberts; 2, 5, 6, 7, 8, 9, 11, 12, 15, 16, 17, 19, 20, 21, David Gould.)



DIGITAL

A not-unbiased examination of some of the pros and cons of the new recording and playback process that is about to revolutionize our listening lives

By E. Brad Meyer



It is certain that the imminent introduction of the digital/digital phono disc—digitally recorded and encoded for digital playback—will have the most far-reaching effect on the nature of reproduced music that listeners have experienced in the hundred-odd years of the history of recording. What we are about to encounter is, in short, a significant technological juncture, and at such a time there are important questions to be asked. We should be very clear in our minds about what it is we have to gain—and what we might lose—in the transition, for this is a change that will radically affect the listening lives of all who know and love recorded music.

The digital era, enthusiasts tell us, will be the millenium for recorded sound. We will be the happy possessors of home recordings that sound not merely as good as the best current analog master tapes, but significantly better. Digital sound will contain none of the frequency-response errors, distortion, noise, flutter, and so on that are inherent in even the best analog recording and reproducing systems. Instead, the music will emerge from a background of velvety silence with utter clarity and magnificent impact. Further, those who have long bemoaned the physical shortcomings of the analog-disc format have been told to expect complete freedom from inner-groove distortion, tracking error, tone-arm resonances, the deleterious effects of poor vinyl, wretched pressings, dust, record and stylus wear, and any of the myriad other perils discs are heir to.

Public and critical reaction to early digitally mastered recordings seemed to confirm these expectations—at least in part. In 1977 Telarc released a digital recording that included pieces from an old audiophile favorite, the Mercury “British Band Classics” album, and it had more bite to the brass, more thunder in the bass drum, more clarity and inner detail all around than the original. It seemed reasonable to credit the digital tape recorder used in preparing the new master with responsibility for these sound improvements. They were so great, in fact, that inadequate or poorly adjusted cartridges and arms had trouble playing the record, and audio experts speculated about how much high-fidelity playback systems would have to be improved if they were to handle the new digital recordings with their 90 dB of dynamic range and their extended frequency response.

But several things happened on the way to the millenium, and home digital-disc playback systems will not, it appears, be marketed until early 1983. In the interim, we have been listening

to analog pressings of digitally recorded tapes—gratifying enough, but not the “real thing.” We have also been listening to a number of people who contend that digital recording, at least as it is represented by currently available hardware, is a step backward in sound quality, that even the best digital recordings are less satisfying, less realistic, even less “musical” than up-to-date analog productions.

Some have gone even further, charging that digital sound is inherently fatiguing and unhealthy, that it saps the vital forces and weakens the body. Writers for small audiophile publications have had a field day with record reviews and commentary angrily damning the digital process for distortion at high levels, distortion at low levels, removal of ambience, flattening of the stereo image, coarsening of sonic textures, destruction of the natural timbre of instruments, general screechiness, and other insults to sensitive ears. In the view of some of these writers, digital is a hype, a cruel hoax perpetrated on the public by recording-equipment manufacturers and big record companies with the connivance of members of the big-time audio press (including, of course, STEREO REVIEW).

Are these “golden-ear” writers hearing something the rest of us can’t—or won’t—hear? Are they resisting the new technology because it is going to make their subjective-listening game less interesting or amenable to their control (which, as we’ll shortly see, it almost surely will)? And if they are indeed hearing *something*, is the problem the result of the digital process or is it coming from somewhere else in the recording chain? Have some listeners been conditioned over the years to hear certain kinds of noise and distortion, now largely eliminated by the digital recording process, as “normal”?

None of these questions can be answered definitively without setting up some careful, complicated, and costly experiments. But the controversy itself reveals much about the whole field of audio, encompassing as it does its technological, sociological, and psychological aspects. To figure out just what is really happening, we need only think about such factors as analog recording practice, digital recording technique, the nature of human hearing, the psychology of the condition known informally as “audiophiliosis,” and the requirements and limitations of the scientific method. A tall order, but even if we can’t discover Ultimate Truth in the discussion that follows, perhaps we can at least pick up a few clues that will help us evaluate how much of it is contained in the opinions of others.

How It Works

Most self-respecting audiophiles have by now read many explanations of the nature of digital sound, one of the most recent of these being David Rana’s piece in the February 1981 issue of STEREO REVIEW. But if we’re going to get any useful information from this present exercise, we ought to go through the fundamentals briefly once more.

Shown in the figure on page 59 is a portion of a musical waveform, the sound being represented as a voltage varying with time. What a digital recorder does is to measure the input waveform periodically and store these *measurements* instead of the waveform itself on tape. The staircase-like waveform in the figure represents the output of a circuit called the *sample-and-hold*, which takes the voltage of the input waveform every 50 microseconds or so

“... techniques required to do this ... have been refined for years by builders of computers, who naturally require that their systems operate without errors.”

and holds that voltage until it’s time to take the next sample. The output of this circuit is fed to another called the *quantizer*, which does the electronic equivalent of holding a ruler against the signal sample coming from the sample-and-hold circuit and “writing down” the number corresponding to the closest marking on the ruler.

The number coming from the quantizer is in binary form, meaning that it has been translated into a combination of ones and zeroes, or *bits*. The number of samples taken each second (the sampling rate) determines the resolution of the digital system in the time domain, which is the horizontal scale on the figure. The resolution in level (the vertical dimension) depends on the number of bits we use for each sample. Current professional digital recorders, and the proposed Sony/Philips digital discs, use sixteen-bit approximations, so the figurative ruler they use to measure the samples of the waveform has 2^{16} or 65,536 gradations. The sampling rate in all of these systems is between 44 and 51 kHz—that’s 51,000 times every second.

The quality of any recording system depends on how closely the waveform we get out of the system resembles the one we put in. So why are we interested in the apparently crude approximation represented by this sampling system when we can store the “real (analog) thing”? Because all magnetic recorders have some distortion and noise. However good the recorder may be, its job can be made much easier if, instead of asking it to store and retrieve a complex waveform, we give it the simpler task of handling only two degrees of magnetization, representing the ones and zeroes of our stream of sampled bits.

The techniques required to do this reliably and fast have been refined for many years by the builders of computers, who naturally require that their systems operate without errors. A magnetic tape recorder can, in fact, have a fairly large amount of distortion and noise and still do the job of storing “one or zero” correctly. Variations in tape speed don’t affect a digital system either, as long as they aren’t too large; the playback bit stream is sent into a temporary storage device called a buffer, from which it is read according to the pulsations of a quartz-crystal clock. The result is a tape recorder with no flutter.

As for the distortion arising from the approximation process itself, it can be made as small as need be by making the sampling interval shorter, and the gradations of the voltage measurement finer, until the difference between the approximation and the signal itself is inaudible.

From looking at the figure, which represents a 20-kHz waveform being sampled at 44 kHz, we see that there may be little more than two samples for an entire cycle of the wave. How can we reconstruct the exact curve of the waveform from only two points? We get the original waveform back by filtering the digital output to remove all frequencies greater than one half the sampling frequency. This has the effect of rounding off the sharp corners of the stepwise signal and turning the staircase-shaped approximation back into the more gently curved original signal. A similar low-pass filter is used at the input of the recorder to prevent a form of distortion known as *aliasing*.

The benefits of going through these transformations of the signal can be seen in the specifications for digital recorders: distortion at full recording level of less than 0.03 per cent, flutter unmeasurably low, signal-to-noise ratio greater than 96 dB, crosstalk better than 90 dB down, and no print-through. And the ability to store and retrieve data from the tape without error im-

plies that copies can be made from one digital machine to another without the loss in quality that occurs with conventional recorders. (This is important because records are typically cut not from the original master tape but from a copy of a copy, at the very least.) When digital playback systems for the home become available, therefore, we will have available to us *an exact duplicate* of the signal that emerged from the recording console at the original session.

But Not Always

The foregoing description of pulse-code modulation (PCM) has been what one might call the chamber-of-commerce version of digital recording. Digital recorders do not always perform as well as one might think from reading descriptions of this kind. Some of the reasons for this lie with the audio specifications themselves, which were devised to describe analog equipment and are not always appropriate for digital; others pertain to problems with digital hardware, which doesn't always work as planned. Let's consider the basic specs:

● **Distortion and Noise.** The very low distortion figures quoted for digital systems occur only at the maximum signal level (analog recorders have their worst distortion at high levels, but for a digital system the opposite is true). Distortion in a digital system arises from the fact that the "ruler" used to measure the signal has gradations of finite size, and the lower the signal level, the larger these gradations are relative to the signal. Near the bottom of its dynamic range a digital recorder can add a harsh, gritty distortion to the signal which is known as granulation noise. The subjective effect of this noise is much more unpleasant than ordinary tape hiss. To combat it, many digital recorders add a very low-level hiss to the signal to change the sound of granulation noise into the more benign hiss.

There is another kind of distortion in PCM systems that has no counterpart in analog. For reasons much too complicated to go into here, a real-world PCM system can generate distortion products at a frequency equal to the difference between the sampling rate and three times the signal. Thus, at a sampling rate of 48 kHz, a loud 18-kHz tone will generate a distortion product at 6 kHz.

With an analog recorder it is possible to hear signals that are actually below the system's noise level. In a digital system these signals aren't large enough to be noticed by the encoder and are therefore ignored.

● **Overload.** At the upper end of its dynamic range an analog recorder, when presented with a signal too loud to be recorded

without distortion, limits the amplitude of the signal gradually, rounding off the tops of the waveform in a way that makes the subjective effect relatively mild. A digital system, however, reaches its upper limit abruptly, and anything above that limit is clipped hard, with sharp corners where the waveform flattens. This hard clipping is much more objectionable than the soft clipping of the analog system, so the recording level on the digital machine must be set a few decibels farther below the maximum for safety. This effectively reduces the usable dynamic range of the digital machine from what the specification might lead one to believe.

● **Dropouts.** Digital machines do not really have the high reliability of their computer-related counterparts because the necessity for long uninterrupted running times requires that the bits be packed much more densely on the tape than in a computer tape drive. This produces a much higher incidence of missing bits, or dropouts. While a dropout caused by a momentary loss of contact between tape and head is a minor annoyance in an analog machine, in a digital system it is a disaster. With the type of encoding used on some digital machines, a big dropout causes a burst of noise at maximum output level.

So digital machines have provisions for eliminating or lessening the effect of drop-



outs. Their encoding schemes spread the signal out over the tape so that a small dropout destroys only a portion of each digital word. There are also error-correction circuits that either calculate the missing bits or make educated guesses about what they *should* be, reconstructing the exact or most likely values. If all else fails, a muting circuit cuts in and produces a brief silence instead of an ear-shattering burst of noise.

Despite all these measures, dropouts do occur even on professional digital machines, though audible ones are very rare. Digital encoders are always used with at least two tape transports running in parallel, and it is an unusual project in which the back-up machines are not needed at least once.

The Nay-sayers

Now that we have reviewed the state of the digital art, let's look at what some of its detractors are saying and see if we can figure out why they are saying it. Many of the negative comments about digital sound appear to have arisen because the signal has been sampled and quantized. There is, evidently, something about the very process that some audio purists find offensive. Such adjectives as "gritty," "harsh," "granular," and "hard," as well as complaints that the top end of the spectrum is irritating, that ambience isn't reproduced properly, or that instruments don't have the correct timbre, all tend to flow from the idea that one simply *can't* just chop up a musical signal into little bitty pieces and then expect to reconstitute it successfully. Once you have made steak into hamburger, goes the reasoning, it can never taste like steak again. (One audio ultrapurist has even spoken of the analog signal as "virgin" and equated quantization to defloration!) Music is beautiful, delicate, holy. How can it survive such a process intact?

Other critics insist that while the theory behind the quantization process may be valid, the gradations in the process aren't fine enough. What we need, they say, are converters fast enough to operate at 100 kHz instead of 50 kHz, with eighteen- or twenty-bit samples instead of sixteen. Then the pieces of chopped music would be fine enough that we wouldn't notice any seams when they are put back together.

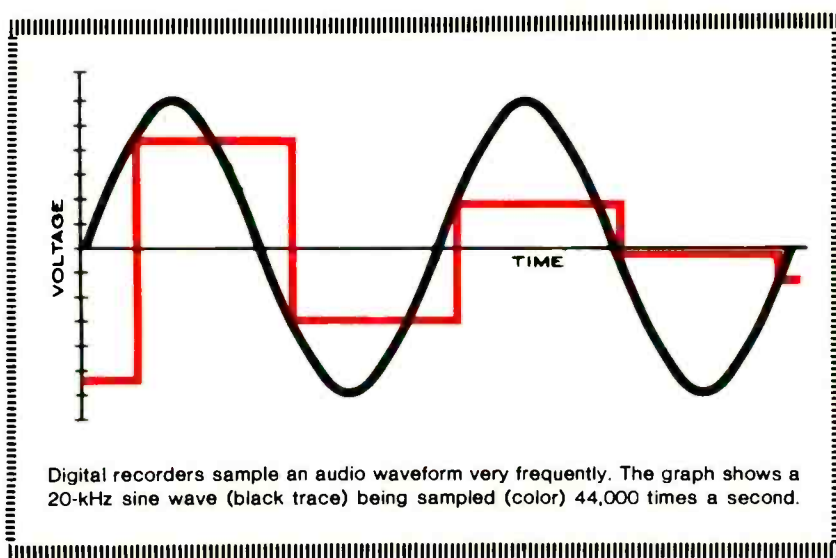
Another argument for higher sampling rates goes like this: in order to prevent aliasing distortion in the digital circuitry, we need to use a filter that cuts off the highs *very* rapidly above what is known as the Nyquist frequency, which is just one-half the sampling frequency. For the sampling rate used in the Sony/Philips disc player, 44.1 kHz, you need a filter with a slope of 48 (or more) dB per octave above 21 kHz. Filters can be built that have both a sharp cutoff and flat response in the audio band, but they are complex and require careful selection and matching of parts. And even then, the filters used for this application have large phase errors near the cutoff frequency.

Whether such phase errors are audible is still the subject of lively debate, but, say the critics, why not finesse the whole problem by building systems with a 100-kHz sampling rate that won't need such a sharp filter? A Nyquist frequency of 50 kHz leaves room for filters with a more gradual rolloff that won't require such close parts tolerances and which have better phase re-

sponse too. Current PCM recorders cannot manage a 100-kHz sampling rate, but the hardware required to do it at reasonable cost may be only a year or two away.

Is Digital Bad for You?

At the spring 1980 Audio Engineering Society convention in Los Angeles, a paper presented by psychiatrist John Diamond created a furor. Dr. Diamond contended that digitally recorded music produces stress and fatigue in the listener. To demonstrate this, he asked for volunteers from the audience and played selections of music, some of which had been digitally encoded and some not. While the music was playing, Diamond asked the subjects to extend one arm straight out from the shoulder while he attempted to push the arm downward. This test of strength in the deltoid muscle is said by Diamond to be an especially sensitive indicator of the level of stress in the body and mind. Sure enough, the subjects were markedly less successful in resisting the downward pushes during the digitally recorded selections.



Digital recorders sample an audio waveform very frequently. The graph shows a 20-kHz sine wave (black trace) being sampled (color) 44,000 times a second.

The result of all this was an uproar. Some people protested that Diamond's experimental procedure was a theatrical farce and had no place at a scientific meeting. Others upbraided the first group for subverting the process of free inquiry. Diamond himself tells dark tales of conspiracy among the manufacturers of digital equipment, who, he says, refused to provide him with source material or attend his presentation. Better-controlled experiments than Diamond's cast serious doubt on his methods and results, but the controversy rages on.

Whom Do You Trust?

It is probably not useful to try to determine the truth about digital sound just by *reading* about it. As usual in audio matters, you should listen and decide for yourself. There are, however, guidelines to follow in evaluating the various opinions you will encounter. One important caveat: *most of the people who have been offering opinions about digital sound have not yet listened to a digital playback of anything.* They are commenting on the sound of an analog disc made from a digital tape. This does not constitute a valid test of the digital encoding process; there are too many uncontrolled variables. If the record sounds bad, it could be for one of the following reasons: (1) the digital system is ruining the sound, (2) the music was badly played, (3) the microphones used for the recording were bad or poorly positioned, (4) the digital recording system reveals more of the minor faults in the source than an analog recording would, (5) the digital recording is more difficult both to cut and to play so the disc sounds bad even though the digital master tape is fine,

(6) the record sounds bad for other reasons. This is a long list, and there is *no* way for a reviewer to know, if he finds fault, just where it lies.

Only somewhat more reliable are experiences with the playback of actual digital tapes done without benefit of the original sound for comparison, because the listeners have no way of verifying that the digital recorder was the *only* possible source of the "bad sound." The only really reliable test of the digital process is one in which all other variables are controlled. This means that a direct, matched-level, double-blind

comparison must be made between the output of the digital machine and its input signal. One of the best places to do this is at a recording session, with live music coming in from the mixing board. However, opportunities to make tests of this kind are rare.

I have myself done many hours of live recording with a thirteen-bit digital system—which according to the digital critics should sound terrible. The sound is, on the contrary, exceptionally clean and transparent, especially on piano music. Others have had similar experiences with the same device. A comparison test between all the major digital recorders and a professional half-inch-tape, two-track analog machine running at 30 ips that was conducted at the Sound Emporium in Nashville last summer confirmed that there do not seem to be any major deprecations ascribable to the digital process.

Finally, it would be foolish to claim that digital recorders today sound as good as they ever will. Furthermore, if we standardize on any digital system now there will be no way to get more information out of our recordings at a later date. If it does nothing else, this spoils the game for the "audiophile" who lives in the constant hope of finding *the* new piece of equipment that will suddenly make his whole record collection come alive for the first time. And it closes the door for any who *may* learn to hear subtle but irritating problems in 1982's digital recordings some time in the future.

As of now, though, the most reliable experimental data indicate that current sixteen-bit digital machines have more than enough information-carrying capability to reproduce whatever is fed to them with audibly perfect results. Whether this produces recordings that are more satisfying than their analog predecessors depends on the nature of the source, not on the recording method employed. There are plenty of bad-sounding analog *and* digital master tapes in the world, and being able to hear them more clearly via the home digital disc isn't going to make anyone happier about them. But there are lots of good-sounding master tapes too, and if the possibility of getting one step closer to those sources appeals to you as much as it does to me, you are going to like what you hear from digital discs very much indeed. □

E. Brad Meyer, an audio and video consultant, edits *The BAS Speaker*, the journal of the Boston Audio Society. His firm, *Point One Audio*, is in Lincoln, Massachusetts.

STEREO REVIEW'S SELECTION OF RECORDINGS OF SPECIAL MERIT

BEST OF THE MONTH



• *Pennies from Heaven: a Soundtrack Album with a Difference* •

THE collection of eighteen pop recordings from the Thirties that make up the soundtrack album from Herbert Ross' and Dennis Potter's *Pennies from Heaven* is a dusty-rose billet-doux enclosed within the letter-bomb that is the movie itself. In form, the film is boldly original; in execution, the two-disc album is an art-deco, pop-music diorama displaying the fond fantasies of a generation for whom the Great American Dream was curdled by the Great Depression.

Dennis Potter's original script was the basis for a cheerily vertiginous, fleetingly terrifying TV series for the BBC broadcast here on public television several years ago. It had its admirers, of which I was one. But, since Mr. Potter is English and the scene was set in England, the recordings he chose as wry commentary on his drama were those popular there in the Thirties. It made for a bit of a gap in transatlantic empathy and even in comprehension at times when the going got indecipherably quaynte.

For the big-screen American incarnation, MGM backstroked to the extravagant style of a prodigal past to mount its first musical in over a decade, and *Pennies from Heaven*, starring Steve Martin (Arthur) and Bernadette Peters (Eileen), emerged as an elegantly extraordinary film about ostentatiously ordinary people trapped with little money and less hope in Chicago in the middle of the Depression. They try (or scheme) hard to Make It, but the vital spark of self-confidence is lacking, and they flee instead into the easily available fantasy of popular songs, per-

suading themselves that their lives actually move to the endlessly upbeat, reality-defying rhythms of their glittering

PENNIES FROM HEAVEN.

Original-soundtrack recording. Elsie Carlisle: *The Clouds Will Soon Roll By*. Sam Browne and the Carlyle Cousins: *Yes, Yes!* Connie Boswell: *I'll Never Have to Dream Again*. Fred Latham: *Roll Along Prairie Moon*. Bing Crosby: *Did You Ever See a Dream Walking?* Arthur Tracy: *Pennies from Heaven*. The Boswell Sisters: *It's the Girl*. Ida Sue McCune: *Love Is Good for Anything That Ails You*. Rudy Vallee: *Let's Put Out the Lights and Go to Sleep*. Dolly Dawn: *It's a Sin to Tell a Lie*. Helen Kane: *I Want to Be Bad*. Walt Harrah, Gene Merlino, Vern Rowe, and Robert Tebow: *Life Is Just a Bowl of Cherries*. Irving Aronson: *Let's Misbehave*. Ronnie Hill: *Serenade in the Night*. Jack Buchanan and Elsie Randolph: *Fancy Our Meeting*. Fred Astaire: *Let's Face the Music and Dance*. Steve Martin: *Pennies from Heaven*. Lew Stone: *The Glory of Love*. WARNER BROS.: 2HW 3639 two discs \$14.98, © AH5 3639 \$14.98.

dreams. As Noël Coward, who wrote a good deal of the stuff himself, has Amanda say to Elyot in his 1932 play *Private Lives*, "Strange how potent cheap music is."

Just how potent, addictive, and eventually destructive it can be is mercilessly traced in the film as Arthur and Eileen sink ever deeper into the very sordidness they've tried to escape. When Arthur is refused a loan at the bank, he turns reality upside down in a glorious production number synched to Sam Browne and the Carlyle Cousins performing *Yes, Yes!* When Eileen is forced into admitting that perhaps she *did* want Arthur to seduce her, her understanding extends no farther than Helen Kane's boop-boop-a-doop rendition of *I Want to Be Bad*. When Arthur's wife fantasizes about murdering him, she does so to the strains of Dolly Dawn singing *It's a Sin to Tell a Lie*, and when the pimp (in a brilliant dance performance by Chris Walken) is trying to convince Eileen of the delights of street life, he struts his stuff to Irving Aronson and His Commanders' version of *Let's Misbehave*. All stunningly effective, but also tacky, tawdry, and pathetic, as if life has nothing more felicitous, meaningful, or serious to offer than the verse on a greeting card. Nonetheless, time's softening distance has given such ephemera as *Love Is Good for Anything That Ails You*, sung by Ida Sue McCune, and *I'll Never Have to Dream Again*, performed by Connie Boswell, an almost overwhelming nostalgic charm when they are heard in this context.

Only four of the eighteen songs used can be called standards: *Did You Ever See a Dream Walking?*, in an ineffable Bing Crosby performance; *The Glory of Love*, by Lew Stone and His Band; *Let's Face the Music and Dance*, in the

"... The music was a kind of theme song for the end of the best of all possible worlds."



Above, Bernadette Peters and class provide the visuals for the song *Love Is Good for Anything That Ails You* in Warner Bros.' *Pennies from Heaven*, and Steve Martin and company do as much for *Yes, Yes!* below. (Photos courtesy Metro-Goldwyn-Mayer)



immortal Fred Astaire version (taken in its nearly eight-minute entirety from the soundtrack of *Follow the Fleet*); and the title song, *Pennies from Heaven*, sung first by Arthur Tracy and then briefly toward the end of the film by Steve Martin.

Several minor miracles of sound technology were accomplished in tailoring all these old recordings to the needs of the film. Many of the original tracks had to be lengthened and more fully orchestrated by Billy May and Marvin Hamlisch so as to accommodate the intricate production numbers Ross devised. In order to keep the sound uniform throughout—a slightly tubby, compressed “studio” sound in period mono, to be sure—their additions were recorded through equipment surviving from the era. Amazingly enough, it works and the spell remains effectively unbroken.

As a film, *Pennies from Heaven* will doubtless cast a long shadow on movie musicals of the future. As an album it has caught a sobering aspect of the popular music of the Thirties we have not seen before. The music has been glamorized, romanticized, even parodied, but it has never before been revealed as the probably unintentional but still heartless deception it apparently was, a kind of theme song for the end of the best of all possible worlds. Americans had, up until the Depression and despite World War I, been childish dreamers, and they had to grow up fast. Irving Berlin, typically, was the one to put his finger on the problem in *Let's Face the Music—and Dance*. That's fine irony, but not, as we know, any kind of solution.

—Peter Reilly

The Charm of the Unexpected: Four Song Cycles by Two New England Composers

NORMA Farber is a New England poet who writes taut, tidy verses about the Charles River in Boston, about sycamore trees, flowers, birds, and crickets. Her imagery is luminous, her prosody clean and unpretentious, her rhythmic pulse quick and sure. The results may not be the profoundest poems in the world, but they are certainly lovely. A new record issued by Northeastern University, Boston, con-



ERIC FENBY: a very special authority

tains settings of a number of them, in the form of four song cycles, by two composers who live, teach, and write music in Massachusetts.

Daniel Pinkham is a formal gardener among composers, setting out his intricate designs with economy and grace in patterned pastels, introducing amid the musical flowerbeds a daring modern accent here, a splash of vivid color there, but never really disturbing the understated tonal structure. His settings of the Farber poems, most notably of the series called *Company at the Crèche*, with its adroit descriptions of such unlikely guests at the manger as storks, caterpillars, and porcupines, is exceptionally ingratiating. So translucent and delicate is the gossamer accompaniment for piano and glockenspiel woven around the vocal harmonies in Pinkham's treatments of these poems (the echoes of medieval madrigals in *Love Can Be Still* are particularly entrancing) that, by contrast, Leo Snyder's also strongly formal approach to *Love Is a Language*—despite the skill of the writing—sounds a bit tame and conventional.

The performances throughout the program are impeccable, with tenor Richard Conrad adroitly leading the meticulously prepared singers in the Pinkham portion and soprano Elena Gambulos handling a difficult assignment with aplomb in the briefer segment allotted to the settings by Snyder. Complete texts are provided. Proof again that the better half of charm is unexpectedness.

—Paul Kresh

LOVE CAN BE STILL—*Music on Verses by Norma Farber*. Pinkham: *Time of Times*; *Company at the Crèche*; *Love Can Be Still*. Patti Dell, Barbara Wallace (sopranos); Pamela Gore (contralto); Richard Conrad (tenor); Bryan McNeil (baritone);

Robert W. Cross (glockenspiel); Gary Wedow (piano). Snyder: *Love Is a Language*. Elena Gambulos (soprano); Donald Palumbo (piano). NORTHEASTERN NR 201 \$8.98 (from Northeastern Records, University Publishing Group, Northeastern University, Boston, Mass. 02115).

Delius' Late Works in Well-nigh Perfect Re-creations by Conductor Eric Fenby

THOSE who have seen the Ken Russell television film depicting the last years of Frederick Delius or who know the remarkable volume *Delius As I Knew Him* will sense at once the importance of the release of a two-disc set of ten Delius works conducted by the remarkable musician who was amanuensis to the blind and paralyzed composer in his last years.

Fittingly subtitled “The Fenby Legacy,” the Unicorn-Kanchana album covers the Delius works with orchestra that Fenby took down *in toto* or completed from dictation, plus his arrangements of the *La Calinda* dance episode from the opera *Koanga* and the pair of unaccompanied choruses, *To Be Sung of a Summer Night on the Water*, that became the *Two Aquarelles* for string orchestra. The one actual recording première here is the quirky, mazurka-like *Fantastic Dance*. In terms of the feeling and the special authority of Fenby as conductor-interpreter of this



Merle Watson and T. Michael Coleman with Doc up front

music, however, the whole set, the vocal pieces especially, might well be considered "first" recordings. Fenby's sensitivity to Delian color and harmonic texture is matched only by the composer's great champion, Sir Thomas Beecham. Major additional factors in this set are the choice of ideal recording locales and the employment of digital tape-mastering technology. Add to this a first-rate group of soloists and a superbly trained chorus, intelligent and informative program notes by Delius authority and project originator Christopher Palmer, and you have the makings of a well-nigh perfect release.

Those who are not dyed-in-the-wool Delians may, despite the strategically placed "orchestral interludes," find the musical content of the Walt Whitman-based *Songs of Farewell* and *Idyll* (a kind of post-Wagnerian *Liebesnacht*) a bit rich for the palate—rather like going on a sherry binge. For such newcomers I recommend listening in small

doses. The economy of line and texture encountered in *A Late Lark* (to lines by W. E. Henley) is a most welcome antidote. True Delius buffs, however, should not miss a note of these performances. Felicity Lott and Thomas Allen are wonderfully fresh-voiced protagonists in the *Idyll*, and Allen avoids the slightest trace of self-pity in handling the celebrated Ernest Dowson lines in *Cynara*. And certainly Anthony Rolfe Johnson is a great improvement in *A Late Lark* over the tenor heard in the 1976 Unicorn issue conducted by the late Bernard Herrmann.

If the Ambrosian Singers lack some of the precision of the choristers in Sir Malcolm Sargent's 1965 recording of the *Songs of Farewell*, they do bring more of the Delian concept of the chorus as a coloristic element in the total tonal fabric. It is in this latter area where digital tape mastering plays a crucial role; for once, with a combination of ideal acoustic ambiance and in-

telligent microphone placement, Delius' densely packed, harmonically rich climaxes do not verge on stridency. Of course, Fenby's conducting has much to do with this as well. —David Hall

DELIUS: *Songs of Farewell, for Chorus and Orchestra; Idyll, for Soprano, Baritone, and Orchestra; Cynara, for Baritone and Orchestra; Caprice and Elegy, for Cello and Small Orchestra; Fantastic Dance; A Song of Summer; Koanga, La Calinda; Irmelin Prelude; Two Aquarelles; A Late Lark, for Tenor and Small Orchestra.* Felicity Lott (soprano); Anthony Rolfe Johnson (tenor); Thomas Allen (baritone); Julian Lloyd Webber (cello); Ambrosian Singers; Royal Philharmonic Orchestra, Eric Fenby cond. UNICORN-KANCHANA DKP 9008/9 two discs \$28 (with a copy of Fenby's book, *Delius As I Knew Him*, \$32, plus \$1.50 for postage and handling, from Euroclass Record Distributors, 155 Avenue of the Americas, New York, N.Y. 10013).

Doc and Merle Watson's "Red Rocking Chair": Strong Tunes and Some Amazing Flat-picking

DOC AND MERLE WATSON seem right at home on the Flying Fish label (which is stocking up on folkies as if it knows something), and Doc Watson feeling at home while he picks is awesome. The Watsons' first Flying Fish album, "Red Rocking Chair," is stuffed with strong down-home tunes and rife with the quiet spectacle of Doc's amazing flat-picking, but it's also an ensemble album that includes brief but effective appearances by Tom Scott on clarinet, Charlie Musselwhite on harmonica, and Al Perkins on pedal steel.

The material, as usual, is rural heartland Americana, supplemented with (among other things) lovely instrumentals written by bass player T. Michael Coleman, who's been traveling with the Watsons for several years. Some of the tunes are maybe a trifle *too* familiar, except that Doc keeps justifying them with spectacular runs such as the one he fits into *Smoke, Smoke, Smoke*, starting with the bass strings and rippling upward. And then some of them, such as the two Jimmie Rodgers songs, *California Blues* and *Any Old Time*, are things I always wanted Doc to record. The former, incidentally, needs a little more instrumental muscle than it

DANIEL PINKHAM: a formal gardener among composers





Clive Barde/EMI Ltd.

Above, the Tosca recording session: James Levine, the Philharmonia Orchestra, chorus, and soloists at Kingsway Hall, London, July 1980

Angel Presents the First Digital Tosca, the Opera's Best Recorded Performance Since 1963

gets here, but *Any Old Time*, with Scott brought in to provide a bona fide Creole sound, has probably never been played this well before.

Leroy Carr's *How Long Blues*, with Musselwhite sitting in, is another high point, and still another (speaking of recycled chestnuts) is *Down Yonder*. You can occupy yourself for several minutes comparing this version to the one in the "Will the Circle Be Unbroken" album (this one is more textured) and completely forget that you're supposed to be tired of the song in the first place.

The Watsons take music that isn't supposed to be relevant any more and then prove that it is. They do this by making an honest, straightforward presentation—and by having an ungodly amount of talent. Any record onto which even a smidgeon of that is translated is going to be a good one, and this one is.

—Noel Coppage

DOC AND MERLE WATSON (with T. Michael Coleman): *Red Rocking Chair*. Doc Watson (vocals, guitar, harmonica, banjo); Merle Watson (guitar, slide guitar, banjo); T. Michael Coleman (vocals, bass, guitar); other musicians. *Sadie*; *Fisher's Hornpipe/Devil's Dream*; *Along the Road*; *Smoke, Smoke, Smoke*; *Below Freezing*; *California Blues*; *John Hurt*; *Mole in the Ground*; *Any Old Time*; *Red Rocking Chair*; *How Long Blues*; *Down Yonder*. FLYING FISH FF 252 \$8.98.

I LOVE *Tosca*, the public loves *Tosca*, opera managers love *Tosca*—but nobody loves *Tosca* more than record companies, who have brought us a bewildering profusion of competitive versions during the past decade. Quite a few of them were not worth the effort, but a new Angel release—incidentally, the opera's first digital recording—stands out from the crowd, the best *Tosca* since Karajan's 1963 version (now on London 1284). Interestingly enough, James Levine approaches the music somewhat in the Karajan manner, favoring leisurely but logically interrelated tempos; he is also keenly responsive to the opera's tension and passions, revealing the beauties of Puccini's orchestral writing in almost clinical detail. Once again we are reminded that *Tosca* is a lot more than a mere "singer's opera."

But the singing too is quite good here. This is Plácido Domingo's second recorded Cavaradossi, and I can make no preferential comparisons between this and his earlier effort for RCA. He is outstanding in both: secure, rich in sound throughout the range, admirably musical, and equally convincing as ardent lover, impetuous rebel, and suffering patriot. Renato Bruson, another ad-

mirable artist, is a suavely sinister Scarpia who can convey malice and menace without ever resorting to bel-lowing. A sound *bel canto* technique enables him to articulate his phrases with clarity and meaning. In the *Te Deum*, though, he is somewhat over-powered by the orchestra.

There is much to admire in Renata Scotto's portrayal of the title role. She captures the character's volatility, jealousy, and deep religious conviction with sensitivity and intelligence, and she pays careful attention to Puccini's markings. Her *dolcissimo* response, "È tanto buona," to Cavaradossi's playful comment about the Madonna in the first act is a good case in point. So is her impressive handling of textual nuances in the passage preceding "O dolci mani" in Act III. Vocally, however, she is inconsistent, frequently strident in tone and wavery in the high reaches. In my view, her positive attributes outweigh the negative ones in this instance, but listeners demanding tonal perfection must look elsewhere.

The minor roles are handled well enough without calling for special praise. Itzhak Perlman, in his recording debut as a singer, intones the middle E-naturals of the Jailer with authority. The overall recorded sound is magnificent, but the balances are not consistently perfect. As a consequence, the *Te Deum*, always a thorny engineering problem, suffers, and the Sacristan does not have enough presence in his first scene.

All things considered, this is an excellent *Tosca*. But now, ladies and gen-

tlemen of the recording industry, "Enough already!" —George Jellinek

PUCCHINI: Tosca. Renata Scotto (soprano), Tosca; Placido Domingo (tenor), Mario Cavaradossi; Renato Bruson (baritone), Baron Scarpia; John Cheek (bass), Cesare Angelotti; Renato Capecchi (baritone), Sacristan; Andrea Velis (tenor), Spolletta; Paul Hudson (bass), Sciarrone; Itzhak Perlman (bass), Jailer; Dominic Martinez (treble), Shepherd Boy. Ambrosian Opera Chorus; Philharmonia Orchestra, James Levine cond. ANGEL ◉ DSBX-3919 two discs \$22.96, ◉ 4XS-3919 \$22.96.

Art Blakey and the New Jazz Messengers: The Class of '81 Graduates with Honors

FEW bandleaders have been as consistently in demand over the years as Art Blakey, whose metamorphic Jazz Messengers have been weaving themselves into the jazz fabric for so long that they now seem to be part of the original pattern. One has but to note that there are some *thirty* Blakey albums in the current catalog to supply quick proof of his continued popularity. That is a staggering number of recordings, and it does not include the many sessions on which Blakey has appeared as a sideman. Now yet another set, "Straight Ahead," recorded last summer during an engagement at San

Francisco's Keystone Korner, makes it thirty-one.

This is Concord Jazz's second set featuring Blakey at Keystone, the first being "In This Korner" (CJ-68), released in 1978. Not surprisingly, there have been personnel changes in the interim, and only pianist James Williams remains, but that is par for the course Blakey has charted for himself over the years: he has made a habit of spotting budding talent, giving it a chance to blossom, and offering the bouquet to a jazz world starved for fresh talent. The list of great players who bloomed within a Jazz Messengers group is long and impressive, and I will be surprised if the group heard on the present album does not add some more to the list. James Williams continues to play with flourish and drive, and trumpeter Wynton Marsalis has both the technique and musicality to soar above any jazz ground. Tenor saxophonist Bill Pierce has a fluent, probing style that I find particularly effective on a breakneck rendering of Bud Powell's *Webb City*. I am even more impressed with the work of altoist Bobby Watson, who maintains a very high level throughout. Blakey himself needs no accolades from me, but I might mention that his extraordinary drum work gets fitting support from bassist Charles Fambrough. The class of '81 should graduate with full honors.

—Chris Albertson

**ART BLAKEY AND THE JAZZ MESSEN-
GERS: Straight Ahead.** Art Blakey and the Jazz Messengers (instrumentals). *Webb City; My Romance; E.T.A.; Falling in Love with Love; How Deep Is the Ocean; The Theme.* CONCORD JAZZ CJ-168 \$8.98.

THE JAZZ MESSENERS: left to right, Charles Fambrough, Bobby Watson, Bill Pierce, Art Blakey, James Williams, Wynton Marsalis



BEST OF THE MONTH: RECENT SELECTIONS YOU MAY HAVE MISSED

CLASSICAL

- ◻ **Francisco Araiza: Opera Recital.** EURO-DISC SQ 26 163 KR. "A distinguished solo debut." (February)
- ◻ **J. S. Bach: The Notebook of Anna Magdalena Bach.** NONESUCH DB-79020. "An album to be treasured." (February)
- ◻ **Brahms: Piano Trios Nos. 1-3.** HARMONIA MUNDI FRANCE HM 1063/64. "Remarkably intense interpretations . . . richly recorded." (March)
- ◻ **Purcell: Choral Works.** ARCHIV 2723 076. ". . . not only exquisitely performed but brilliantly recorded." (March)
- ◻ **Ravel: Daphnis et Chloé.** LONDON LDR 71028. ". . . the finest recording yet of this music." (January)
- ◻ **Schoenberg: Erwartung; Six Orchestral Songs, Op. 8.** LONDON LDR 71015. "Revelatory performance of one of the landmarks of twentieth-century music." (March)
- ◻ **Tippett: Symphony No. 4; Suite for the Birthday of Prince Charles.** LONDON LDR 71046. "Rich and complex in kaleidoscopic color and dramatic transformation." (February)

POPULAR

- ◻ **Lindsey Buckingham: Law and Order.** ASYLUM 5E-561. ". . . a contemporary version of Walt Whitman's barbaric yawp." (February)
- ◻ **George Jones: Same Ole Me.** EPIC FE 37106. "Honkytonk singing that will just flat astonish you." (March)
- ◻ **King Crimson: Discipline.** WARNER BROS. BSK 3629. "A seminal band back better than ever." (February)
- ◻ **Amanda McBroom: West of Oz.** SHEFFIELD LAB 15. "Popular singing with intelligence and humor." (January)
- ◻ **Mark Murphy: Bop for Kerouac.** MUSE MR 5253. "May be the vocal jazz album of the year." (March)
- ◻ **Pieces of a Dream.** ELEKTRA 6E-350. "A teenage trio serves up gentle jazz and polished funk." (February)
- ◻ **Neil Young and Crazy Horse: Reactor.** REPRISE HS 2304. ". . . a textbook on how to make music out of the sounds of a scrap yard." (March)

Concord Jazz/Tom Copi

Popular Music Briefs



Columbia Records

GUITARIST **Al Di Meola** has been admitted to *Guitar Player* magazine's Gallery of the Greats, a distinction conferred on those who win in their category for five straight years in the publication's readers' poll. Di Meola, who at twenty-seven is the youngest artist to

be so honored, was voted best jazz guitarist from 1977 to 1981 and picked up five additional "bests" in other categories. His sixth album for Columbia is "Electric Rendezvous," released in time to coincide with his national tour early this year. □

THERE is, depending on your point of view, some perhaps disquieting news from Stockholm, where, according to just-released government tax figures, it has been officially calculated that the rock group **ABBA** now has substantially more money than the King of Sweden. Each of the four members of the group has a declared personal fortune greater than four million dollars, not counting group investments and those of manager Stig Anderson. The poor king is worth only \$5.4 million, and, to paraphrase Babe Ruth, how many records has *he* sold lately? □

It is probably no secret that I am a fan of **Richard Thompson**. For my money he is about

the best songwriter/guitarist, in any genre, currently working in England. Recently this elusive folk-rock legend made one of his rare solo appearances at New York's Bottom Line (he last appeared on these shores back in 1972, playing behind the late Sandy Denny), and I got to hear him live for the first time.

Thompson has made a series of utterly brilliant albums over the years with his wife Linda (at home right now expecting a baby) and a group of back-up musicians out of the Fairport Convention floating musical crap game, but this appearance was to be solo and acoustic, without even an opening act, and I had some misgivings about it. I have long felt that, for sheer unpleasantness,

few things in life—spinal meningitis, fingernails on a blackboard, finding your girl in sexual congress with your best friend—can compare to a whole evening of folk music performed by one folk on an acoustic guitar. But this was quite another story. Thompson was riveting and magnificent for nearly two hours, and I would gladly have stayed for another two.

Far from being the cranky, doom-obsessed depressive his records suggest, he was funny, relaxed, and eager to please. He ran through a marvelous, eclectic selection of his greatest hits, some old Hank Williams tunes, even a Duke Ellington instrumental. His acoustic guitar work is as magisterial as his electric playing, his gruff working-class voice is as expressive an instrument as I've ever heard, and I was near tears on more than one occasion. It was, in short, easily the best show I've seen in over a year.

Thompson will be touring for real (that is, with Linda and his band) by the time this appears, in support of his new Hannibal album, "Shoot Out the Lights" (1303), and I suggest you hock



Paul Koff

your Adidas (if need be) to buy tickets if he shows up in your neighborhood. —S.S.

SOMETIMES it pays to be dead: witness the recent posthumous comeback successes of Buddy Holly and the Doors' Jim Morrison. Now comes the latest entry in the Graveyard Grammys, a release by MCA Records' English division of *Everyone Says I Love You*, the first-ever single by . . . the Marx Brothers! Producer Alan Warner edited the record from the soundtrack of the brothers' 1932 classic *Horse Feathers*. The A-side features vocals by Groucho and Chico, while the flip is an instrumental performance by Harpo (naturally). We await the disco remix with some trepidation. □

WOULD you like to see Suzi Quatro's bass-guitar collection? Do you care who invented the Mellotron? Are you infatuated with a Ring Modulator? If you answered yes to any of the above, we have a book for you. It is **Rock Hardware: The Instruments, Equipment, and Technology of Rock**, edited by Tony Bacon (Harmony, \$12.95). Lavishly illustrated with diagrams, charts, and terrific old photos, it is a comprehensive historical and technical overview of just about every electronic innovation ever harnessed to rock, from Adolph Rickenbacker's 1931 "frying pan" Hawaiian guitar to the latest in polyphonic synthesizers. A terrific browse.

That's more than can be said for John G. Fuller's **Are The Kids All Right? The Rock**

Generation and Its Hidden Deathwish

(Times Books, \$13.50), as preposterous a piece of socio-journalism as I've ever encountered. Actually, it's more like two books. The first is a no-nonsense, straightforward account of the tragic Who concert in Cincinnati where eleven young people were crushed to death. Fuller is very good at this sort of thing, as anyone who has read any of his earlier books (*Incident at Exeter*, for example) can attest. His research is thorough, he's got a nicely dramatic prose style, and this is certainly a story worth telling on the cautionary level. Unfortunately, Fuller fleshes out his account with some crackpot pseudo-science purporting to prove that rock-and-roll is a subtle form of brainwashing that necessarily leads to violence, that tragedies like the one in Cincinnati are endemic to the music and therefore inevitable. This despite the fact that in Cincinnati the concert hadn't even started, and not a note of music had been sounded, when the crush came. (One wonders what Fuller makes of the similar deaths that occurred during the Pope's world tour only a few months later, or of the high risk inherent in being in the audience at a Brazilian soccer game.)

What's interesting about Fuller's thesis is not that he can advance it with a straight face (after all, it's not much different from the kind of hysterical psy-

chobabble educators used to dish out in the Fifties), but rather that it found a home in the book-publishing arm of the august *New York Times*, whose anti-rock bias is notorious. If you didn't already know it from Sidney Zion's 1981 *Times* Sunday Magazine piece (the thrust of which was that rock is a twenty-five-year cultural aberration, a superannuated fad), this book might tell you that the *Newspaper of Record* is still patiently awaiting the return of Good Music. Dream on, guys.

Finally, we have **Rock on Film**, by David Ehrenstein and Bill Reed (Delilah, \$9.95), a lively critical survey of nearly every rock-and-related film ever made (there are a lot more of them than you might think). The bulk of the book consists of alphabetical capsule reviews (complete with credits) of everything from *ABBA The Movie* to *Zachariah* prefaced by think pieces of a more general nature. The authors, who appear to have a healthy appetite for trash, come up with some fairly astonishing bits of information. Did you know, for example, that the film *Teenage Millionaire* starred Zazu Pitts, "co-star of TV's *Oh Susanna*, star of Eric von Stroheim's masterpiece *Greed*, and author of the only posthumously published combination autobiography and candy cookbook, *Pitt's Hits* (1964)"? Or that Fay Spain, in Roger Corman's *Teenage Doll*, actually uttered

Gary Gerehoff



GRACENOTES: Veteran English rock group **Jethro Tull** (they've been at it since 1968) are recording their umpteenth album in the company of producer Paul Samwell-Smith. Samwell-Smith, who has not been heard from much lately, produced the early Carly Simon LPs but is best known as bass player for the legendary Sixties band the Yardbirds. Meanwhile, Tull's head honcho **Ian Anderson** has become the Lox King of Rock; the flute-playing Anderson recently revealed that he has invested \$1.2 million in a smoked-salmon plant in Scotland. . . . Polydor Records threw a bash at the Canadian Consulate in Manhattan to celebrate the success of **Bob and**

Doug McKenzie's "Great White North" album. Shown in the photo above are Bob and Doug (a.k.a. SCTV's Dave Thomas and Rick Moranis) in the company of Ken Taylor, the daring Canadian diplomat who snuck those trapped Americans out of Iran. . . . And finally, professional buffoon **Ozzy Osbourne**, former Black Sabbath lead singer, was hospitalized in Des Moines, Iowa, where he underwent treatment for possible rabies. Seems the irrepressible Osbourne bit the head off of a dead bat thrown to him by a member of the audience at a recent concert. Health officials have yet to discover the whereabouts of the rest of the unfortunate mammal. —S.S.

the following line of dialogue: "I'm gonna change my name, move to Phoenix, and learn to scuffle!"? I certainly didn't, so I enjoyed the book thoroughly.

It's scrupulously fair, extremely well researched, and more than a little insightful. All that, and reproductions of great old movie posters too. —S.S.

Disc and Tape Reviews

By CHRIS ALBERTSON • NOEL COPPAGE • PHYL GARLAND • PAUL KRESH
MARK PEEL • PETER REILLY • STEVE SIMELS • JOEL VANCE

Ⓢ = stereo cassette

Ⓢ = eight-track stereo cartridge

Ⓛ = digital-master recording

Ⓛ = direct-to-disc

Ⓛ = quadrasonic disc

Ⓛ = monophonic recording

The first listing is the one reviewed; other formats, if available, follow.

MOE BANDY: Rodeo Romeo. Moe Bandy (vocals); instrumental accompaniment. *Rodeo Romeo; She's Playin' Hard to Forget; You've Still Got It; Daily Double; Someday Soon; The Photograph*; and four others. COLUMBIA FC 37568, Ⓢ FCT 37568, Ⓢ FCA 37568, no list price.

Performance: **Solid**
Recording: **Good**

Back in his high-school days Moe Bandy was a rodeo rider (not, as he says in one of his first hits, a clown), and when his music goes outdoors—outside the honkytonk, that is—it usually hangs around the chutes. The two best songs here, the title song and Ian

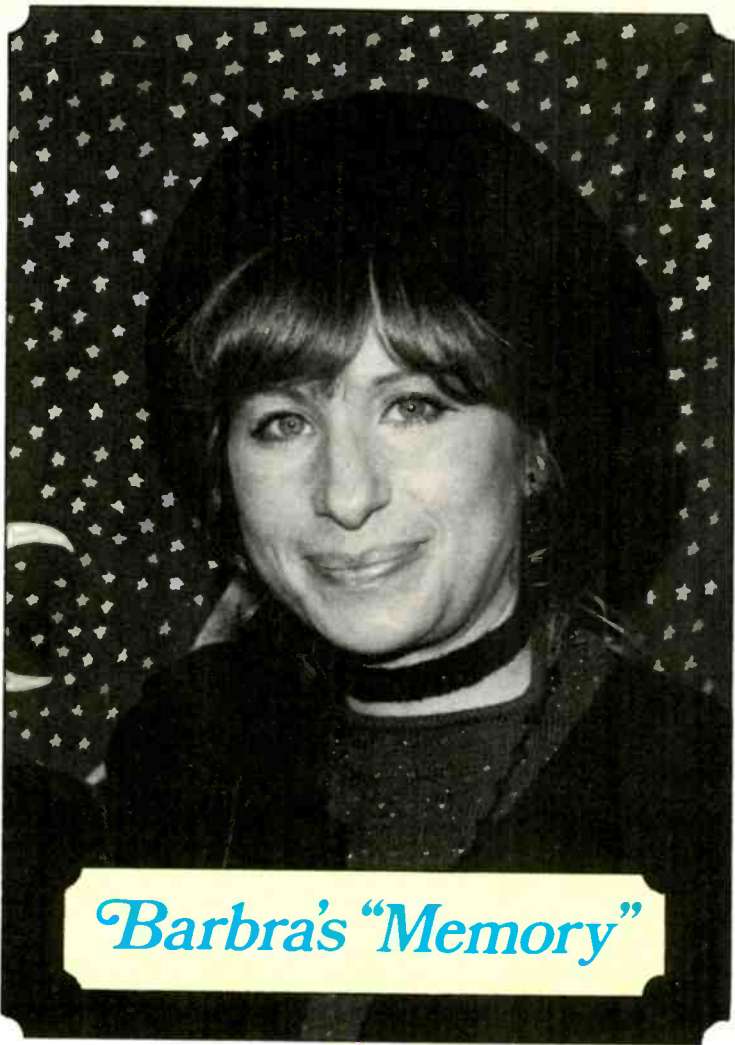
Tyson's *Someday Soon*, are about rodeo people. Bandy is one of the plainest country singers around and one of the most conservative about "keeping it country," but he hits the notes squarely, keeps good time, has exemplary diction, and sounds believable. His albums tend to strike me as hit-and-filler types, and this one is no exception; the lesser songs are utterly unmemorable. But they're dressed nicely, with Charlie McCoy, Pig Robbins, Ray Edenton, and other Nashville stalwarts turned loose on them. Any record collection should contain at least one Moe Bandy album. If you've been neglecting the hard-country section of yours, "Rodeo Romeo" will do. N.C.

RECORDING OF SPECIAL MERIT

GEORGE BENSON: The George Benson Collection. George Benson (vocals, guitar); vocal and instrumental accompaniment. *Turn Your Love Around; Love All the Hurt Away; Give Me the Night; On Broadway; Nature Boy*; and twelve others. WARNER BROS. 2HW 3577 two discs \$16.98, Ⓢ 2H5 3577 \$16.98, Ⓢ 2H8 3577 \$16.98.

Performance: **A cornucopia**
Recording: **Very good**

There are two George Bensons, though lately the image of the pop artist Benson has far
(Continued on page 69)



Walter McBride/Retna

Barbra's "Memory"

BARBRA STREISAND's new album, "Memories," poses something of a dilemma for the average record buyer, particularly in these days of economic recession. What Columbia (and/or the Streisand management) is asking is that you plunk down anywhere from six to nine dollars (depending on your good luck at retail) for an album that contains only one second over eight minutes of newly recorded material. Something over four minutes of that is devoted to *Comin' In Out of Your Life*, a slick and expert performance of an only slightly better than average pop song, but the remaining three minutes and fifty-two seconds encompass perhaps the greatest triumph yet in a career filled with triumphs.

Memory is a song from the current London smash musical *Cats*, by Andrew Lloyd Webber (*Evita*), T. S. Eliot (!), and Trevor Nunn, and to say that Barbra Streisand's performance of it is one of the finest things she's ever done will, I think, be a simple statement of fact for anyone who hears it. Fan and simple admirer, detractor and merely disinterested listener will alike have to acknowledge that she's pulled off another singing and acting coup on the scale of *People* or *Cry Me a River*.

The current word in the film industry is

that Barbra Streisand, Bette Midler, and Diana Ross are not the invincibly bankable superstars they were only a few years ago. The reason, they say, is that all three, and particularly Streisand, are so much larger than life that they cannot be slipped into any already conceived project, that everything must be tailored to them individually. Such custom tailoring has, to be sure, been done in the past, but at the moment there simply isn't enough money around to develop proper vehicles for these superstars and to ensure that the material is consistently up to the level of their talents. Which is why Streisand has been lending herself to all sorts of claptrap during the last several years, some of which has sold spectacularly but none of which constituted any real challenge for her.

One can imagine, then, if from nothing else but the orgasmic result, with what joy she must have encountered Webber's *Memory*. In this performance she seizes upon it with the kind of hypnotic intensity that has been her particular strength from the first days of singing old standards in scuzzy Greenwich Village clubs (because no one wanted to write for her and she refused to sing the simple-minded junk that kids her age were supposed to be singing).

Memory is, among other things, a commercial triumph, which is to say that it will appeal enormously to an enormous number of people. Those who find the very idea of such popularity anathema will say that the song exploits our least admirable sentimental weaknesses shamelessly, using the whole arsenal of unprincipled musical cheap shots, and further that the lyric is not one of which T. S. Eliot could be proud (it is loosely drawn—a few lines, a few rhymes, but mostly atmosphere—from the poet's *Rhapsody on a Windy Night* and the first of the four *Preludes*). I say that it is a beautifully crafted, meltingly lovely, almost operatic reverie, that the composition, arrangement, and production by Andrew Lloyd Webber are flat-out superb. My reaction to it was strong, immediate, and totally positive. I found it . . . well, like listening to the *Liebestod* as it might have been written by Puccini and orchestrated by Ravel (the melody, by the way, is rather more than vaguely reminiscent of the aria "Addio del passato" from Giuseppe Verdi's *La Traviata*).

What happens when larger-than-life Streisand sails into this ecstatic, heart-pounding material is probably why record vinyl was invented in the first place. Allied at last with a composing, arranging, and producing talent that matches her own, she comes through like a thoroughbred. For the first time in years she takes the kind of emotional risk that shatters the high-gloss lacquer laid down over her performances for so long. Instance: parts of the song lie uncomfortably low for her voice, but instead of changing anything she *acts* her way over the vocal hurdles, using them to add to the meaning. Instance: there are several showy (and most effective) crescendos cunningly stitched into the song, and she holds back on them each time until the tension is almost unbearable—and, of course, the release all the more effective. Instance: the Eliot-inspired language offers the temptation to "poeticize" or emote portentously, but she holds to a straight-ahead, no-nonsense diction that rings with sincerity. Proof of her musical taste, dramatic judgment, and galvanic acting ability runs through the whole like a gold thread through russet velvet. *Memory*, in short, is one of those achievements that have the unmistakable stamp of the classic on them.

BUT back to your dilemma. Are eight minutes and one second of new music worth six to nine dollars to you? You'll have to figure that out for yourself. All I know is that I'd be willing to pay as high as fifty for the almost four minutes of *Memory*. It's like a Rolls, y'know—it's got to appreciate in value.
—Peter Reilly

BARBRA STREISAND: *Memories*. Barbra Streisand (vocals); orchestra. *Memory*; *Comin' In Out of Your Life*; *You Don't Bring Me Flowers* (with Neil Diamond); *The Way We Were*; *No More Tears* (with Donna Summer); *Evergreen*; *My Heart Belongs to Me*; *New York State of Mind*; *Lost Inside of You*; *The Love Inside*. COLUMBIA TC 37678, © TCT 37678, © TCA 37678, no list price.

outshone that of the jazz instrumentalist Benson. Admirers of the latter are bound to be a little disappointed by this set, but they should be sophisticated enough to understand why it was released and to appreciate its cornucopia of the pop Benson's finest achievements.

Here are seventeen of the best pop songs George Benson has ever recorded, including most of the ones we remember best and want to play at parties or in intimate, private moments. It's all irresistibly enticing, from the lush sentimentality of *This Masquerade* (the song that really made Benson's pop career) to the lilting flamenco shadings of *White Rabbit* to the shimmering delicacy of *Here Comes the Sun* to the buoyant effervescence of *Breezin'*. There's also a rendition of *Nature Boy* that reminds us how much Benson's career has paralleled that of his crossover predecessor Nat "King" Cole, a brilliant tribute to fellow Pittsburgher Eddie Jefferson—one of the greatest scat singers of all time—on *Moody's Mood*, and, of course, the special bonus of his sensational duet with Aretha Franklin on *Love All the Hurt Away*, one of the best songs either of them has ever done.

"The George Benson Collection" may not offer a full picture of this artist's varied talents, but what it does preserve are truly moments to remember. P.G.

RECORDING OF SPECIAL MERIT

TOM BROWNE: *Yours Truly*. Tom Browne (trumpet); vocal and instrumental accompaniment. *Fungi Mama/Bebopafunkadiscolypto*; *Bye Gones*; *Charisma*; *Can't Give It Away*; *Lazy Bird*; and four others. ARISTA GRP 5507 \$8.98, © ACT 5507 \$8.98.

Performance: **Delightfully versatile**
Recording: **Very good**

Here is a delightful potpourri of music that crosses categories, mixes styles, and fuses funk with fun so marvelously that it should appeal equally to followers of both contemporary r-&-b and jazz—and perhaps even those who sway to Caribbean rhythms. The talented Tom Browne has achieved a real mastery of the trumpet. His interpretation of John Coltrane's *Naima* has all the lyrical sensitivity, technical facility, clarity of expression, and restraint that this modern jazz classic demands, and his straight-ahead approach to *Lazy Bird*, another Trane composition, charges forth with all the power and rhythmic drive of the best post-bop music. He is also amazingly versatile, making an equally strong impression on the wildly eclectic opening track, *Fungi Mama/Bebopafunkadiscolypto*, which meshes chicken cackles, thunderous synthesizer bass notes, and a handclapping, chanting chorus into a calypso ditty that is as much fun as a swirling street dance during Goombay Summer in the Bahamas.

Still another side of Browne is displayed in such danceable pop numbers as *Come for the Ride*, *Bye Gones*, and *My Latin Sky*. The arresting melodies and clever changes, plus the energetic and thoughtful performances, lift these cuts well above the uninspired work in the same genre being passed off these days by many better-known artists. With "Yours Truly," Tom Browne seems to have hit his stride in producing fu-



WHAT TYPE ARE YOU?

Power has its price. Unfortunately, with many receivers, you usually end up paying for a lot of power you may not necessarily need in order to get the computerized features you want.

At Kenwood, we don't think that's playing fair.

Which is why every one of our new Hi-Speed™ receivers offers a host of very intelligent engineering advances.

Like Direct Coupled, Hi-Speed amplifier circuitry for absolutely brilliant musical clarity, down to 0Hz.

And microprocessor controlled Quartz PLL Synthesizer tuning to give you perfect, drift-free FM reception.

We've even included the convenience of our computerized AutoScan tuning. And instant, automatic computer-memory tuning of 6 AM and 6 of your favorite FM stations.

But best of all, we didn't restrict all this intelligence to just our new KR-850 Hi-Speed receiver.

You can also find it on our new KR-830.

And our new KR-820.

And even our new Slimline KR-90.

Examine all the possibilities at your Kenwood dealer. With all the choices we offer, you'll find the computerized receiver that's exactly your type.

At your type of price.

 **KENWOOD®**
The audio company that listens.

P.O. Box 6213, Carson, CA 90749



Polygram Records/Jim Houghton

Ray, Goodman & Brown

RAY, GOODMAN & BROWN just might be the best r-&-b vocal group to emerge in the past five years. That's pretty surprising, for their music looks more to the past than the future, they employ no modernistic gimmicks, and there is nothing in their approach that is fundamentally different from much of what has come before. But they have mastered the technique of updating styles prominent during the Fifties and Sixties—the golden age of rhythm-and-blues—to suit today's audience.

Indeed, some of the selections on RG&B's new album, "Stay," borrow such "ancient" (by music-biz standards) elements as full-bodied arrangements and falsetto shouts, and one golden oldie, *Only You (And You Alone)*, pays open tribute to the roots of their art. Another cut, *Lovers Night (Rain in May)*, clearly stems from the Fifties, but the performance is for the Eighties. "Stay" is a superior album distinguished by

singing so sweet and so finely meshed that it evokes a deep response too rarely triggered these days. Everything here sounds twenty-four carat, and the title song and *Till the Right One Comes Along* are real treasures. Ray, Goodman & Brown's previous album was excellent, and "Stay" is even better. This is one new group I hope will stay around for a long time to come.

—Phyl Garland

RAY, GOODMAN & BROWN: *Stay*. Ray, Goodman & Brown (vocals); instrumental accompaniment. *Stay; Good Ole Days; How Can Love So Right (Be So Wrong); Pool of Love; Till the Right One Comes Along; Heaven in the Rain; Only You (And You Alone); Midnight Lady; When the Lovin' Goes Out of the Lovin'; Lovers Night (Rain in May)*. POLYGRAM PD-1-6341 \$8.98, © CT-1-6341 \$8.98, © 8T-1-6341 \$8.98.

sion music that is both artistically valid and appealing to a wide variety of tastes. P.G.

JIMMY CLIFF: *Give the People What They Want*. Jimmy Cliff (vocals); vocal and instrumental accompaniment. *Son of Man; Give the People What They Want; Experience; Shelter of Your Love; Majority Rule*; and five others. MCA MCA-5217 \$8.98, © MCAC-5217 \$8.98, © MCAT-5217 \$8.98.

Performance: **Return to form**
Recording: **Good**

Jimmy Cliff's disappointing output since "The Harder They Come" has been one of reggae's unsolved puzzles, so this release must count as one of the year's first major

surprises: a full album's worth of solid reggae from an artist many had given up on. While it may be a long-awaited breakthrough for Cliff, "Give the People What They Want" is really a return to safer ground, for it cleaves to the reggae roots he foolishly abandoned through much of the Seventies. The songs generally have religious, political, or social themes, though they're developed with a strange mellowness; they seem intended as sincere reflections, not Third World policy statements. Cliff's voice has thinned a little with time, but its characteristic intensity and brave vulnerability have endured. He gets solid support from Kingston's reigning studio kings, including Earl "Chinna" Smith, Robbie Shakespeare, Sly Dunbar, Sticky

Thompson, and Michael Rose and Ducky Simpson of Black Uhuru (to name only a few of the thirty or so musicians who contribute). Particularly effective use is made of the horns and congas, which are mixed down a bit to give the album a subtle but insistent pulse. A welcome return to form for an artist who deserves much of the credit for bringing reggae to the U.S. M.P.

RECORDING OF SPECIAL MERIT

ANDRAÉ CROUCH: *Don't Give Up*. Andraé Crouch (vocals, piano); vocal and instrumental accompaniment. *Waiting for the Son; Don't Give Up; I Can't Keep It to Myself; Hollywood Scene; Handwriting on the Wall*; and four others. WARNER BROS. BSK 3513 \$8.98, © M5 3513 \$8.98, © M8 3513 \$8.98.

Performance: **Excellent**
Recording: **Very good**

During the Seventies, Andraé Crouch, an accomplished singer-pianist who composes just about all his own material, favored an eclectic style that mixed elements of traditional inspirational music with traces of country and hefty portions of black gospel with r-&-b embellishments. "Don't Give Up" suggests that he has moved decidedly toward the r-&-b side of that spectrum. Regardless of what you call it, though, this is highly gratifying, finely crafted music capable of arousing deep feelings—including a desire to jump up and dance.

Only the lyrics separate the sacred from the secular here. The songs have the pronounced percussive rhythms and swinging background vocals we have come to associate with plain old pop, and many of the accompanying musicians—among them percussionist Paulinho da Costa, keyboardist Joe Sample of the Crusaders, and Louis Johnson of the Brothers Johnson—are familiar from jazz or pop records. Like some of Stevie Wonder's finer creations, Crouch's upbeat songs carry messages on the themes of love and concern for humanity. Though Crouch is not as musically inventive as Wonder, his *Hollywood Scene*, a tale of a kid from Georgia who is transformed into an empty-eyed night creature, is nearly as affecting as Wonder's memorable *Living for the City*. And when Crouch slows down the tempo and slips into the familiar "preaching" style common to both gospel and r-&-b singing, he can set some special waves in motion. The closing track is called *Start All Over Again*, and that's probably just what you'll want to do with this record after you hear it. P.G.

SHEENA EASTON: *You Could Have Been with Me*. Sheena Easton (vocals); vocal and instrumental accompaniment. *A Little Tenderness; You Could Have Been with Me; Just Another Broken Heart; I'm Not Worth the Hurt; Savoir Faire*; and five others. EMI AMERICA SW-17061 \$8.98, © 4XW-17061 \$8.98, © 8XW-17061 \$8.98.

Performance: **Chart-bound**
Recording: **Excellent**

Sheena Easton sings with the quavering emotion that thin voices—particularly when double-tracked—always seem to achieve in their upper registers, as if obeying some natural law. Her talent is undeni-

able but unexceptional. She's a hit in Britain, probably because she looks and sounds so American. But "You Could Have Been with Me" is so single-mindedly aimed at the Top-10 that I just can't generate much enthusiasm for it. The ten songs here were written by eight different songwriters or songwriting teams. They're good pop songs, each one a competently crafted mold into which to pour canned studio energy or ready-mix emotions, and Easton delivers them with loads of feeling. But it's the kind of four-square-before-the-footlights feeling you'd put into a big-chance audition with a top A&R exec, not the kind that comes from the heart. So what we get are ten pop songs climbing all over one another in a scramble for the charts. Only two—*A Letter from Joey* and *Telephone Lines*, both about long-distance heartbreak—are likely to stop you long enough to listen. M.P.

RECORDING OF SPECIAL MERIT

EMMYLOU HARRIS: *Cimarron*. Emmylou Harris (vocals, guitar); instrumental accompaniment. *Rose of Cimarron*; *Spanish Is a Loving Tongue*; *If I Needed You*; *Another Lonesome Morning*; *The Last Cheater's Waltz*; *Born to Run*; and four others. WARNER BROS. BSK 3603 \$8.98, © M5 3603 \$8.98, © M8 3603 \$8.98.

Performance: **Lovely**
Recording: **Very good**

The first half of this album has a folk—as opposed to a country-rock—flavor, and if that prevailed throughout it would be another aesthetic blockbuster for Emmylou Harris. Instead, the second half is a collection of odds and ends. *Son of a Rotten Gambler* is in there, and so are *Born to Run* (not the Bruce Springsteen song, by the way, but a new one) and *Tennessee Waltz*. It isn't that Harris doesn't define some things about *Rotten Gambler* that Anne Murray didn't, or that her *Tennessee Waltz* compares unfavorably with Lacy Dalton's 6/8 version; it's just that I've heard enough of those songs for one lifetime.

But back to the good news. Harris' delicious phrasing works just fine with some good stuff that was apparently lying around waiting for her to record it: Rusty Young's heretofore hardly noticed *Rose of Cimarron*, *Spanish Is a Loving Tongue*, Townes Van Zandt's *If I Needed You* (a Utah Phillips-type ballad recorded by Doc Watson several years ago but generally overlooked), and Sonny Throckmorton's *The Last Cheater's Waltz*. The ensemble sound behind her is tasteful, as always, with some striking work done in laconic spurts by Frank Reckard on guitar and Ricky Skaggs on fiddle. You can always hear the acoustic instruments, and there is a nice feeling of space in the instrumentation. One of my colleagues—Chet Flippo, I believe it was—has called Emmylou Harris the Ice Queen, but from my point of view her restraint, reminiscent of Joan Baez's, helps keep her from cheapening the emotion, especially in such songs as *If I Needed You* and Springsteen's *The Price You Pay*. All I want her to do is find even more good and previously overlooked songs than she does. As far as singing goes, she is a giant. N.C.

(Continued overleaf)

Protect Your Stereo System and Maintain Its Sound



The SC-2™ Stylus Care System

SC-2 fluid with the exclusive nylon fibered brush effectively loosens and wipes away stylus contamination, a major contributor to record wear.



The D4™ Record Care System

The highly active D4 fluid and unique directionally fibered pad removes harmful microdust and debris that can cause permanent damage to your recordings.



The Discwasher® O4 Record Care System and the Discwasher SC-2 Stylus Care System are available separately or together as DiscSet™. For a free copy of our "Guide to Record Care" write to Discwasher.

discwasher
PRODUCTS TO CARE FOR YOUR MUSIC

1407 North Providence Road, Columbia, MO 65201 USA
A DIVISION OF JENSEN an E3MARK Company

**fact: there's a Shure
cartridge
that's correct
for your system
—and your
checkbook:**



V15 Type IV—The perfectionist's pickup—overcomes such ever-present problems as warp, static electricity and dust. Ultra-flat response. Reduced distortion. Unprecedented trackability. $\frac{3}{4}$ to 1 $\frac{1}{4}$ grams tracking. Premium-priced.



V15 Type III-HE—The Super-Track cartridge that earned the respect of the world. Now available with the distortion-reducing Hyperelliptical stylus. Tracking force: $\frac{3}{4}$ to 1 $\frac{1}{4}$ grams.



M97HE—Features the Dynamic Stabilizer, the Hyperelliptical stylus for reduced distortion, and SIDE-GUARD stylus protection. Tracking force: $\frac{3}{4}$ to 1 $\frac{1}{2}$ grams.



M95HE—New mid-priced cartridge with distortion-reducing Hyperelliptical stylus. Flat response. $\frac{3}{4}$ to 1 $\frac{1}{2}$ grams tracking.



M70 Series—Modestly priced cartridges with truly noteworthy performance. 1 $\frac{1}{2}$ to 3 grams tracking. Biradial or Spherical styli.



M30—The low-cost cartridge that began it all nearly two decades ago. 3 to 6 grams tracking. Replacement styli still available, as they are for virtually all Shure stereo cartridges ever made.

Shure Brothers Inc.
222 Hartrey Ave., Evanston, IL 60204

In Canada: A.C.
Simmonds & Sons Limited

Manufacturer of high fidelity components, microphones, loudspeakers, sound systems and related circuitry.

JOAN JETT AND THE BLACKHEARTS: *I Love Rock 'n Roll.* Joan Jett (vocals, guitar); vocal and instrumental accompaniment. *Love Is Pain; Nag; Crimson and Clover; Victim of Circumstance; Bits and Pieces; Be Straight; You're Too Possessive; Little Drummer Boy;* and two others. BOARDWALK NBI-33243 \$8.98, © NWT-33243 \$8.98, © NWA-33243 \$8.98.

Performance: **Incorrigible**
Recording: **Punk**

Dear Mr. and Mrs. Jett:

I think I've found your runaway daughter Joan. Made contact with the alleged young lady through the enclosed record album. Before you play it, I should warn you about a couple of things. The three young men in black leather she's pictured with are rock-and-roll musicians, although if I hadn't told you, after hearing them play you'd probably guess they were chainsaw operators with the Forest Service. The shrieks you hear on the record are your daughter's, but don't worry, she's okay. She's singing. It's her job, apparently. Judging from the record, Joan's main interests now are beating young men senseless and abandoning herself to the procreative urge. She seems to use the "music" as a kind of stimulant.

Once you've listened to this album, I think you'll understand why I'm resigning from the case. Maybe I'm just getting too old for this kind of thing, but if you ask me, you need more than a detective. You need a whole police department. *M.P.*

DELBERT McCLINTON: *Plain' from the Heart.* Delbert McClinton (vocals, harmonica); vocal and instrumental accompaniment. *Be Good to Yourself; A Fool in Love; Heartbreak Radio; I've Got Dreams to Remember; In the Midnight Hour; Sandy Beaches;* and four others. CAPITOL ST-12188 \$8.98, © 4XT-12188 \$8.98, © 8XT-12188 \$8.98.

Performance: **Very good**
Recording: **Very good**

If you like Delbert McClinton's stage act, you'll like this album, since it has essentially the same sound and spirit. Some of the attention McClinton's getting now is a result of his being a rarity, although ten years ago a white boy leading a blues band was fairly common. But he's pretty good and deserves a fair amount of attention. His songs are not genuine-article, first-generation blues—the lyrics don't contain many sly symbols and double-entendres—but some of them capture the feel of the real thing (*I've Got Dreams to Remember*, for example). His band is a sort of nondescript big-city blues band with echoes of Kansas City, Chicago, and his native Texas. He has a somewhat limited emotional range inside a somewhat limited context, but if you compare these songs to everything else that's going on now, you can see how McClinton is worth keeping around. He's still doing what he wants to do, popularity or no, and this album suggests that he's keeping his standards up. *N.C.*

DON McLEAN: *Believers.* Don McLean (vocals, guitar); vocal and instrumental accompaniment. *Castles in the Air; Isn't It Strange; Left for Dead on the Road of Love; Believers; Sea Man; Love Hurts;*

Love Letters; and four others. MILLENNIUM BXL1-7762 \$8.98, © BXK1-7762 \$8.98, © BXS1-7762 \$8.98.

Performance: **Very good**
Recording: **Good**

This release is interesting, but it seems a bit of an oddball among Don McLean's albums. Its most popular song, *Castles in the Air*, is on its second go-around; McLean first recorded it twelve years ago. The album is further fleshed out with his versions of some oldies (*Love Hurts, Love Letters, Sea Cruise*), his recent success with oldies no doubt being a factor in that. In between are some new songs he has written that seem designed to show his range and eclecticism rather than to present Don McLean in much depth. Some of them are impressive. *Jerusalem* has a fine, restrained gospel feel behind an unrestrained, rocking, secular, hand-clapping rouser of a tune. And the title song, harking back to the days when folkies fulminated, has some chilling lines, including the refrain, "In a world that don't believe in nothin' anymore." *Crazy Eyes*, on the other hand, is a self-distancing, glass-clinking song, and a well-built one.

But too much of it is easier to admire than to enjoy, and I keep wanting McLean to go deeper into certain things, partly because he's one of the few troubadours working now who seems able to. At the same time I wouldn't want to discourage the spirit of experimentation behind "Believers." You see my dilemma. *N.C.*

MELBA MOORE: *What a Woman Needs.* Melba Moore (vocals); orchestra. *Let's Stand Together; Your Sweet Lovin'; Piece of the Rock; Each Second; Take My Love;* and three others. EMI/AMERICA ST-17060 \$8.98, © 4XT-17060 \$8.98, © 8XT-17060 \$8.98.

Performance: **Slick**
Recording: **Supportive**

Slick as a new plastic whistle and as glossy-sounding as high-power arrangements and production can make her, Melba Moore offers some mild entertainment on her new album. Most of the tracks are in the disco-tinged, easy-listening category, and Moore doesn't try very hard to make more of them than just that. When she does get ambitious, as in *Piece of the Rock* (an excellent production by Kashif, one of several producers involved here), she's still very careful not to blur her Beautiful-Person-with-Soul image. She's been working on that image ever since her sensational debut in *Purlie* all those years ago. Precisely why is hard to fathom; perhaps it helps promote her new line of Melba Moore designer jeans. Better she should have stuck with Melba Moore's singing genes. *P.R.*

OLIVIA NEWTON-JOHN: *Physical.* Olivia Newton-John (vocals); orchestra. *Land-slide; Stranger's Touch; Make a Move on Me; Falling; Physical; Silvery Rain;* and four others. MCA MCA-5229 \$8.98, © MCAC-5229 \$8.98, © MCAT-5229 \$8.98.

Performance: **Clever**
Recording: **Excellent**

At a time when the newly impoverished pop music industry is wandering around in

dazed confusion wondering what *happened*, when many of her contemporaries are thinking of new careers in auto repair or stenography, Olivia Newton-John, the thinking man's ingenue, sails serenely along creating commercial hits. This album and the title song from it have both been smashes. It really shouldn't come as any surprise, because ever since her arrival on the pop scene more than a decade ago Newton-John has cannily and cleverly ridden the crest of each pop wave as it has rolled in. (Her only near misstep was the film *Xanadu*, which didn't quite make it.)

For the early Eighties, Newton-John is combining the current national passion for physical fitness by featuring a series of eye-popping album-cover photographs of herself in the midst of various strenuous exercises and by singing a collection of semi-disco, semi-pop hard-breathers on the record itself. She's at her commercial best in the title song, in which she comes pretty close to some free-style, sexy grunting and groaning. In the rest of the material she reverts to her more or less demure, cheery self. No question that she's a clever, accomplished performer, or that she'll go on turning out hits for as long as she wants to. We've learned over the years that what Olivia wants, Olivia gets. *P.R.*

RECORDING OF SPECIAL MERIT

HENRY PAUL BAND: *Anytime*. Henry Paul Band (vocals and instrumentals); instrumental accompaniment. *Living Without Your Love*; *Hollywood Paradise*; *Keeping Our Love Alive*; *Anytime*; *Outa My Mind*; *Crazy Eyes*; and four others. ATLANTIC SD 19325 \$8.98, © CS 19325 \$8.98, © TP 19325 \$8.98.

Performance: **Fieri**
Recording: **Good**

One of the great things about music is that a listener can tell just about how passionate a performer is about it. Oh, I suppose *some* listeners are faked out by the Tony Orlando, but even they will perk up when they hear the genuine article. Playing with fire, as Jerry Reed calls it, is the only thing that distinguishes the Henry Paul Band in this album, but it's quite a bit. "Anytime" demonstrates that old-time midstream (that is, "hard") rock can still generate some excitement if the enthusiasm behind a reasonable amount of technical prowess is real.

These guys, having put together a sound vaguely like that of the Allman Brothers but denser, less crystalline, don't do anything new or unexpected, and their material is not particularly strong beyond having an infectious drive to it. But it works. The opening cut, *Living Without Your Love*, has a sheen on it that foretells good times ahead, and several of those arrive right on schedule (the boys' muscular way with Van Morrison's *Brown-Eyed Girl* is maybe half a minute late), and in the end the word that keeps coming to mind is "integrity." Fancy that: integrity, rock, and the early Eighties all together. *N.C.*

RECORDING OF SPECIAL MERIT

PRINCE: *Controversy*. Prince (vocals and instrumentals); vocal and instrumental ac-
(Continued on page 76)

2 OZ. PRODIGY



If you think lightweight headphones mean lightweight sound, prepare to be amazed.

They're the incredible new HD40, Sennheiser's latest—and lightest—Open-Aire® model. With the electrifying clarity and definition that earned their forerunners world renown. Plus the wide frequency response and natural dynamic range that are Sennheiser trademarks.

Come hear Sennheiser's latest triumph at your dealer today. The price is so modest, you won't feel anything but the music.

SENNHEISER

ELECTRONIC CORPORATION
10 West 37th Street, New York 10018 (212) 239-0190
Manufacturing Plant: Bissendorf/Hannover, West Germany

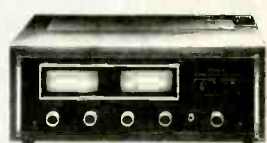
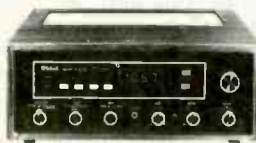
Sennheiser Electronic Corporation (N.Y.)

CIRCLE NO. 45 ON READER SERVICE CARD

FREE

McIntosh STEREO CATALOG and FM DIRECTORY

Get all the newest and latest information on the new McIntosh stereo equipment in the McIntosh catalog. In addition you will receive an FM station directory that covers all of North America.



**SEND
TODAY!**

McIntosh Laboratory, Inc.
East Side Station P.O. Box 96
Binghamton, N.Y. 13904-0096

SR

NAME _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

If you are in a hurry for your catalog please send the coupon to McIntosh.
For non rush service send the Reader Service Card to the magazine.

The Future of Janis Joplin



Elliott Landy/Retna

BACK in 1975 one of the record-business trade magazines asked in a headline, "What Is the Future of Nostalgia?" It seemed a contrived and cynical witticism at the time, but it turns out to have been prescient. The past *did* have a future, and we're living in it. The long-awaited Next Big Thing has turned out to be the Last Big Thing instead. Or, to put it another way, necrophilia is big business.

The signs are everywhere: a best-selling book on the late Jim Morrison and the subsequent resurrection of the Doors' LPs, the *déjà vu* Stones tour, the Creedence boom-let... and on and on. Committed New Wavers explain the phenomenon as a form of reactionary backlash, people lusting after the Good Old Days (That Never Were). While that analysis may have just a grain of truth in it, I've begun to think there's something more going on. It's a matter of context: right now virtually *all* current popular music (more accurately, popular *product*), whatever the genre, sounds essentially the same. We're surrounded by sonic wallpaper devoid of feeling, surprises, or rough edges of any sort. Intelligent listeners have real difficulty distinguishing between the country pop of Kenny Rogers and the MOR pop of Sheena Easton or Air Supply, the black pop of the Commodores and the mainstream rock of Styx and REO Speedwagon.

Since nothing new gets on the radio if it contains the slightest suggestion of a threat to the status quo, the least hint of wit, vulgarity, or (especially) sex, it's obvious that the only chance kids today have to hear music with those qualities (and in this economy, who's going to buy a record without hearing it first?) is when a station programs "safe" oldies from the Sixties. Is it any surprise, then, that so many prefer dead legends to bland contemporary performers?

These reflections are prompted by Columbia's release of "Farewell Song," a soon-to-be-platinum "new" album by Janis Joplin, a Sixties icon who's been dead for more than a decade and whose first record was released before many of the kids who

make up the bulk of today's pop record market and AM radio audience were even born. The Joplin cult, like the Morrison one, has been based more on the sordid but romanticized details of her life than on her music as such. She's been turned into a sort of *Head Comix* Judy Garland, a tragic, fragile free spirit battered down by sexism, drugs, greed, and the Impossible Plight of the Artist in America. You know the story (if not, check out Bette Midler's nonstop crying jag as the Joplinesque star of *The Rose*). But what about the music?

Unlike Morrison, Joplin made relatively few records, and most of them don't catch her very faithfully. Country Joe McDonald (Joplin's boy friend before the rot set in) claims, in his rather angry liner notes for "Farewell Song," that her much-maligned back-up band through 1968, Big Brother and the Holding Company, was actually a great garage/punk ensemble before its time. As an old fart who heard them live in their heyday, I can testify that the recording technology of the Sixties was hopelessly inadequate to document them. Live, their sound was overwhelming, but on their first album and on "Cheap Thrills" they sound tentative and puny.

Most of "Farewell Song" is previously unreleased stuff originally recorded for "Cheap Thrills," and its sound is as inept and inapt as what was approved for that album. Supervising producer Elliot Mazer did what he could to beef up the old tapes, but most of the cuts sound kind of cheesy, with Joplin way up front and the band cat-erwauling somewhere off in the distance. Two of the post-Big Brother cuts are even worse in this respect, but at least they're soon over. *One Night Stand*, a late track done with the Paul Butterfield Blues Band, is better both technically and musically. It's a reasonably strong song that Joplin obviously identified with, and she turns in a sympathetic, believable performance.

None of the Big Brother material is first-rate (by Big Brother's standards), but Joplin sounds quite a bit less mannered than I

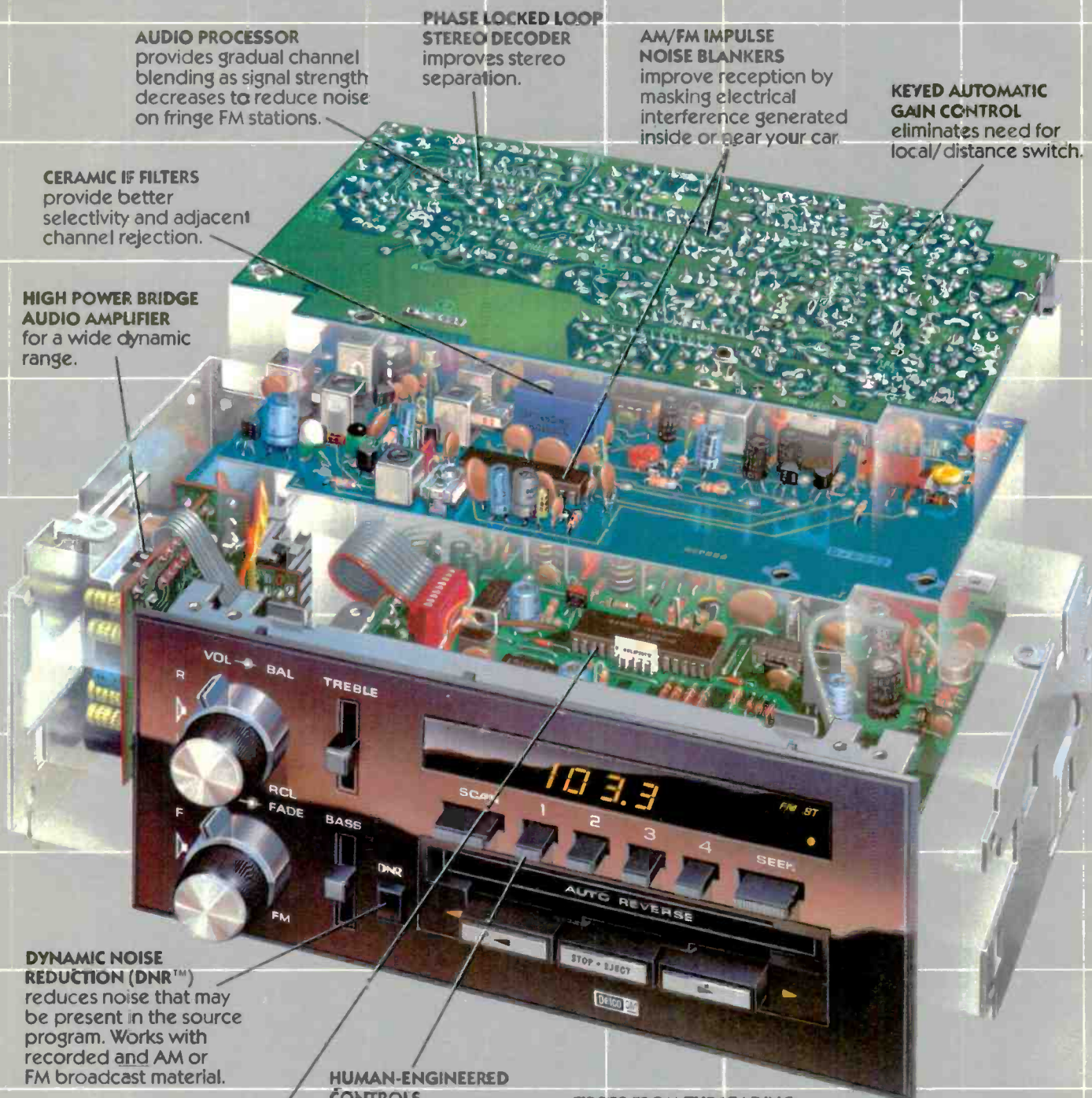
remembered her being. Her singing is, in fact, remarkably controlled and expressive, especially on the title tune and *Misery'n*. Listening to this early work (even through the murk of the original production) helps one understand why people flipped over Joplin the first time: she was a genuine white soul singer, and before her personal problems nudged her into overripe emotionalism she was terrific. And McDonald is right about the foreshadowing of punk: *Harry*, a fifty-six-second bit of Dadaist noise mongering, sounds exactly like something you might hear in 1982 at a SoHo art gallery performed by a bunch of intense young men with Frankie Avalon haircuts and outside overcoats.

YET, even granted all this, "Farewell Song" is not a particularly enjoyable album to listen to, at least if you were around at the time these recordings were made. Joplin was such an unhappy, even pathetic, character toward the end that thoughts of the anguish and waste of her life can't help but intrude. I don't see why anyone would want to subject himself to what are, after all, outtakes of very slight aesthetic substance—unless, of course, you're a kid who's surfeited with the pap that dominates the air waves. If I were sixteen today, I might also take "Farewell Song" as a shattering revelation, proof that music can actually be a vehicle for communicating human emotion. Come to think of it, even at my advanced age it's good to be reminded of that now and again.

—Steve Simels

JANIS JOPLIN: *Farewell Song*. Janis Joplin (vocals); Big Brother and the Holding Company, Paul Butterfield Blues Band, Kozmic Blues Band, Full Tilt Boogie Band (vocals and instrumentals); other musicians. *Tell Mama; Magic of Love; Misery'n; One Night Stand; Harry; Raise Your Hand; Farewell Song; Amazing Grace/Hi Heel Sneakers; Catch Me Daddy*. COLUMBIA PC 37569, © PCT 37569, no list price.

THE INSIDE STORY FROM THE LEADING AUTO SOUND SPECIALIST.



AUDIO PROCESSOR
provides gradual channel blending as signal strength decreases to reduce noise on fringe FM stations.

PHASE LOCKED LOOP STEREO DECODER
improves stereo separation.

AM/FM IMPULSE NOISE BLANKERS
improve reception by masking electrical interference generated inside or near your car.

KEYED AUTOMATIC GAIN CONTROL
eliminates need for local/distance switch.

CERAMIC IF FILTERS
provide better selectivity and adjacent channel rejection.

HIGH POWER BRIDGE AUDIO AMPLIFIER
for a wide dynamic range.

DYNAMIC NOISE REDUCTION (DNR™)
reduces noise that may be present in the source program. Works with recorded and AM or FM broadcast material.

MICROCOMPUTER-CONTROLLED-FREQUENCY SYNTHESIZED TUNER
locks to a predetermined frequency standard for drift-free automatic fine tuning.

HUMAN-ENGINEERED CONTROLS.
Easy to see and operate while driving. Built-in microcircuitry eliminates many home hi-fi switches that become impractical with auto sound.

FIRSTS FROM THE LEADING AUTO SOUND SPECIALIST.
First Electronically Tuned Receiver (ETR™) with digital clock. First car radio with integrated circuits. First factory-installed car radio with Dynamic Noise Reduction (DNR).
Delco Electronics Division of General Motors.

Delco GM

MILES AHEAD IN SOUND EXPERIENCE.

DNR is a trademark of National Semiconductor Corporation.

companion. *Controversy*; *Sexuality*; *Private Joy*; *Let's Work*; and four others. WARNER BROS. BSK 3601 \$8.98, © M5 3601 \$8.98, © M8 3601 \$8.98.

Performance: **For mature audiences**
Recording: **Good**

When it comes to sheer moxie, George Clinton can't hold a candle to Prince. After two polished, capable, but not particularly incendiary solo albums, Prince left disc jockeys, record buyers, and his own label slack-jawed with last year's "Dirty Minds," an album that added new meaning to the word "funky."

Now comes "Controversy," an album that ingeniously asks, "What's all the fuss about?" If this becomes the hugely successful party album I think it's going to be, it could erase twenty years of work by Planned Parenthood. From the title cut, which breaks into a breathy disco version of the Lord's Prayer, to the steamy *Do Me, Baby* to the naïve but well-intentioned *Ronnie*, *Talk to Russia* to the macabre *Annie*

Christian, Prince demonstrates how a funky synthesizer, a wailing guitar, and snapping percussion can serve the causes of sex, peace, justice, and more sex. "Controversy" is certainly not for every taste, but I find it more fun-loving than really lascivious—a funky, danceable exercise in First Amendment rights. *M.P.*

MITCH RYDER: *Live Talkies*. Mitch Ryder (vocals); vocal and instrumental accompaniment. *It's All Over Now*; *Corporate Song*; *Take Me to the River*; *Ain't Nobody White*; *Subterranean Homesick Blues*; *Red Scar Eyes*; *Er Ist Nicht Mein Präsident*; *True Love*; and six others. LINE/TELEFUNKEN ● 6.30123 DX three discs \$16.98.

Performance: **Hostile**
Recording: **Good, but...**

I met Mitch Ryder in the late Sixties when he was coming off three hits in a row but his career was about to take a dive. He was going through a terrible time with his producer, and his professional affairs were in a

mess. Yet he was polite and soft-spoken, even courageous in his display of grace under pressure. He went on to further hard times, and his recording career has been very spotty for the last decade, but here, suddenly, is a three-disc set from a recent Hamburg session, two digitally mastered LPs and a direct-to-disc "maxi-single."

Ryder was always worshipful of rhythm-and-blues and has remained so, but his sound has altered to take in elements of heavy-metal belligerence and punk cynicism. He still sings in an affected voice trying to sound black, and he still garbles lyrics, but what is unmistakable in his present vocals is rage. Whether this is anger over his past mishaps or results from a bleak view of the world's prospects, I can't say. I do know that these songs should be taken in small doses. While some of them are exciting, they are nearly all negative, as if Ryder were either a hanging judge or a defendant hearing the death sentence.

Though the sound on both the digital and direct-to-disc sides is good, it's not as good

America's driving machines.



Expressive Dodge Mirada

All 1982 Dodges are designed for outstanding performance on the road. All are manufactured under rigorous standards of quality at the factory. But otherwise each is different—meant for different purses, purposes and personalities.

Charger 2.2—a lot of go without the guzzle. The front-wheel-drive Dodge

Charger goes from 0 to 50 in 5.98 seconds. That beats Porsche 924 and Toyota Celica Supra* Charger's 41²⁶† mileage stats beat most of the big names in sports cars too. And when you consider that you can get a well-equipped, well-instrumented Dodge Charger for \$7472^{††} it's no wonder that this hot

car is selling like hot-cakes.

Dodge 400—America's personal driving machine. 400 brings the thrill of performance to the world of personal luxury. With front-wheel-drive, rack-and-pinion steering and MacPherson struts, you discover driving rewards not possible in ordinary personal luxury cars. Yet at the same time, 400

as it should be, probably as a result of poor microphone placement and a "heavy" mix. But what the album lacks in audio clarity it makes up for in emotional power. Ryder's rage may be even more effective for being somewhat stifled sonically, and his band can really rock out. *J.V.*

RECORDING OF SPECIAL MERIT

SHALAMAR: *Go for It*. Shalamar (vocals); vocal and instrumental accompaniment. *Go for It; You've Got Me Running; Sweeter As the Days Go By; Talk to Me; Rocker*; and four others. SOLAR BXL1-3984 \$8.98, © BXK1-3984 \$8.98, © BXS1-3984 \$8.98.

Performance: **Masterly**

Recording: **Super**

Shalamar's new album is simply terrific modern pop music that should help define the new sound for the Eighties. Jody Watley, Jeffrey Daniel, and Howard Hewett are exciting singers who can punch out lyrics or croon them with the best. They are intense-

ly energetic, and, more important, they are *musical*; they pick songs with real tunes and work with producers—such as Leon Sylvers III, who produced three of the cuts here—who aren't afraid of taking chances.

Highlights of "Go for It" include Watley's sultry, laid-back vocal on *Appeal*, a hypnotic ballad that suggests a Stevie Nicks song given a contemporary-funk arrangement; the surprisingly straight pop song *The Final Analysis*, beautifully sung in a soft-focus falsetto by Daniel; and *Talk to Me*, one of Sylvers' productions. Uptempo like most of the album's cuts, *Talk to Me* builds on tight Chic-like vocal harmonies and two instrumental bridges—one all strings, the other all percussion—that each increase the excitement another notch. A choice disc. *—Irving Cohn*

DEL SHANNON: *Drop Down and Get Me*. Del Shannon (vocals, guitar); Tom Petty and the Heartbreakers (vocals and instrumentals); other musicians. *Sea of Love; Life Without You; Sucker for Your Love;*

To Love Someone; Drop Down and Get Me; and four others. ELEKTRA 5E-568 \$8.98, © TC5-568 \$8.98, © ET8-568 \$8.98.

Performance: **Below par**

Recording: **Good**

I'm a Del Shannon fan of long standing (hell, I was in junior high when I first succumbed to his immortal debut single, *Runaway*), and I can't think of a pre-Beatles rocker who so richly deserves a comeback shot. The guy has made a fairly astonishing amount of good music, obscure as some of it may be, over the last twenty years (if you doubt me, check out his bargain-price double album "The Vintage Years" on Sire). On this new Tom Petty-produced LP, Shannon sounds as good as ever (his high, tense tenor remains one of the uniquely American voices), and Petty's Heartbreakers make tasteful noises behind him, but unfortunately nothing ever really catches fire. There's a nice remake of the Stones' venerable *Out of Time* (Shannon was one of the first to cover Jagger/Richards songs back in the Sixties),

Fast
Dodge Charger 2.2

Personal
Dodge 400

provides extraordinary mileage: 40 [26].† One non-luxury feature of the 400 coupe is the base sticker price: \$8043†† As shown, \$8253††

Mirada—pleasure, power, performance. Mirada is engineered for driving excellence and driving ease, with an expressively styled exterior and a lush, plush interior. This all-

American driving machine makes short work of long distances. And Mirada provides more of the standard features Americans want than any other car of its class. Base sticker price: \$8619†† As shown, \$9650††

If you're looking for a high performance driving machine at a low price, buy or lease a 1982 Dodge.



America's
Driving Machines



Jessica Harper and Cliff de Young as Janet and Brad Majors

Shock Treatment

TWENTIETH CENTURY-FOX is billing *Shock Treatment* as an "outrageous new musical" and fully expects it to be taken up by the youth of America as the next big cult movie. Judging from the score, a collaboration between screenwriter Richard O'Brien and composer Richard Hartley, they are probably right. It's a lurid mixture of pop and rock that certainly has its wits about it. A good deal of it is no more than exuberant commotion, but suddenly the raucous, raunchy sound will die down and out will step a really clever set of lyrics. Consider, for instance, *Look What I Did to My Id* or a male-chauvinist-pig ballad with

the wonderful line "Men should be the misters and the masters of their sisters."

Shock Treatment is a kind of sequel to O'Brien's *The Rocky Horror Picture Show*, the most successful cult musical of all time. *Rocky Horror* began in 1973 as a theatrical production in London. An American version appeared in Los Angeles and then on Broadway, and the film version was released here in 1975. Still shown at midnight screenings across the U.S., *The Rocky Horror Picture Show* has a huge following of teenagers who attend time and again, dressed as the characters and performing in the theater along with the film.

Two of the main characters of *Rocky Horror* are a couple of innocents called Brad and Janet Majors, who wander into what looks like a Fifties horror-movie set during a transvestite convention. In *Shock Treatment*, Brad and Janet find themselves in a mythical town called Denton, U.S.A., where life has turned into an interminable television series. Caught in a melée of soap operas, hospital dramas, and game shows, the Majors are snatched out of the audience to participate in *Marriage Maze*, a daytime marriage-counseling show. They become victims of the evil schemes of the station/town's sponsor, fast-food tycoon Farley Flavors.

THE role of Brad is taken this time by Cliff de Young ("I modeled Brad after David Eisenhower," he says), who also plays the villain Flavors, an arch-Machiavellian master manipulator. Janet is played by Jessica Harper, a veteran of *Hair* and a splendid singer and dancer. Harper's singing style is particularly ingratiating, and it's fun to hear De Young alternating personalities as the innocent Brad in *Looking for Trade* and as the fiendish Farley in *Farley's Song*. They both get plenty of professional support from a large, energetic singing cast in the big production numbers. Seldom has an original-soundtrack recording made me eager to see the movie it came from, but this one certainly did. I just hope I'm not too old for them to let me into the theater.

—Paul Kresh

SHOCK TREATMENT. Original-soundtrack recording. Cliff de Young, Jessica Harper, Barry Humphries, Charles Gray, Patricia Quinn, Richard O'Brien, others (vocals); instrumental accompaniment. WARNER BROS. LLA 3615 \$8.98, © M5 3615 \$8.98.

but the originals here have a fairly tired, *pro forma* air to them. They make all the right moves, but somehow they lack the old anarchic spark. Not a bad record, but something of a letdown. S.S.

SPINNERS: *Can't Shake This Feelin'.* Spinners (vocals); vocal and instrumental accompaniment. *Can't Shake This Feelin'; Knack for Me; You Go Your Way (I'll Go Mine); Didn't I Blow Your Mind;* and five others. ATLANTIC SD 19318 \$8.98, © CS 19318 \$8.98, © TP 19318 \$8.98.

Performance: **Among their best**
Recording: **Good**

If there were an award for longevity and perseverance despite mediocre material, changes in public taste, and the countless vicissitudes that plague musical performers, the Spinners, once the crown princes of r-&b, would be very much in the running. Somehow they keep on churning out records, though too many are misses rather than hits these days. On this latest release, the Spinners offer an assortment of songs well above the level of most of their recent albums, and they sing with a robustness and

freshness that hark back to earlier days. The spirited *Knack for Me* highlights the first side, and the old Thom Bell/William Hart standard *Didn't I Blow Your Mind* sets the second side to glowing with some truly fine ensemble singing. P.G.

TIERRA: *Together Again.* Tierra (vocals and instrumentals). *Ordinary Fellow; La La Means I Love You; Barrio Suite; Night Creatures;* and four others. BOARDWALK NBI-33244 \$8.98, © NBT-33244 \$8.98, © NBA-33244 \$8.98.

Performance: **Very good**
Recording: **Very good**

Tierra is a Spanish-American octet from East Los Angeles with an easygoing manner and an almost kittenish playfulness with musical styles. The album includes two oldies (the Delfonics' early Seventies ballad *La La Means I Love You* and the Champs' Fifties roustabout instrumental *Tequila*), and the new material by the band mixes Latin, jazz, and black music into a most ingratiating blend. Among the high spots are *Night Creatures*, *Ordinary Fellow*, and the happy *Celebrate with Tierra*. Tierra's good humor

is infectious. They evidently mean to please, and they do. J.V.

DOC AND MERLE WATSON: *Red Rocking Chair* (see Best of the Month, page 63)

STEVIE WOODS: *Take Me to Your Heaven.* Stevie Woods (vocals); vocal and instrumental accompaniment. *Fly Away; Just Can't Win 'Em All; Take Me to Your Heaven; Steal the Night;* and four others. COTILLION SD 5229 \$8.98, © CS 5229 \$8.98, © TP 5229 \$8.98.

Performance: **An r-&b Mathis**
Recording: **Good**

Stevie Woods sounds amazingly like Johnny Mathis—or the way Mathis might have sounded if he had plunged into the funkier milieu of rhythm-and-blues during his formative years. Not only does Woods have an impressive voice, he knows how to handle it. Though the songs here are not top quality—the best are *Fly Away* and the title song—Woods approaches them all with a keen sense of rhythmic play. If he can sound this good with mediocre material, he should be sensational with special handling. P.G.



THEATER • FILMS

RECORDINGS OF SPECIAL MERIT

BEN BAGLEY'S KURT WEILL REVISITED. Paula Lawrence, Ann Miller, John Reardon, Chita Rivera, Arthur Siegel, Jo Sullivan (vocals); chorus and orchestra, Dennis Deal cond. *Vive la Différence; One Touch of Venus; That's How Much I Love You; Very Very Very; This Time Next Year; Dr. Crippen;* and nine others. **PAINTED SMILES PS 1375 \$8.98.**

BEN BAGLEY'S KURT WEILL REVISITED, VOL. 2. Nancy Andrews, Ellen Burstyn, Nell Carter, Blossom Dearie, Tammy Grimes, Estelle Parsons, John Reardon, Arthur Siegel, Jo Sullivan (vocals); chorus and orchestra, Dennis Deal cond. *Come to Paris; Love Is My Enemy; The Little Naked Boy; You're Far Too Near Me; Nana's Song; Sing Me Not a Ballad; What More Do I Want?;* and nine others. **PAINTED SMILES PS 1376 \$8.98.**

Performances: **Marvelous**
Recordings: **Very good**

Well, Ben Bagley has done it again. These two albums of the more recondite songs from the stage scores of the immensely gifted Kurt Weill are a pair of high-class, hummable programs I wouldn't let out of my collection for anything. I find it hard to forgive Mr. B. for leaving *Speak Low*, one of the loveliest numbers ever written for a Broadway musical, out of the *One Touch of Venus* medley, but at least what is left—*Vive la Différence, That's How Much I Love You, Very Very Very*, and the jaunty title song—are all worth hearing again. So are the other numbers from the same score that turn up later on, including the still hilarious *Way Out West in Jersey* with its top-drawer Ogden Nash rhymes, *Dr. Crippen*, a spooky ballad based on an actual murder case of the period (1943), and *Love in a Mist*, which got lost, but shouldn't have, while the show was being reworked for Mary Martin after Marlene Dietrich dropped out of it. Then there's *Poor Mrs. Peachum*, added to *The Threepenny Opera* for Yvette Guilbert when she appeared in the Paris production, and *Italy in Technicolor*, which should never have been cut from Weill's opera *Street Scene*, songs from *Firebrand of Florence* (1945) and *Love Life* (1948) with clever lyrics by Alan Jay Lerner, and lots more.

But what I want to know is how Bagley gets so many stars to sing these songs for him. For these albums he has managed to bag, among others, Ann Miller, John Reardon, Nell Carter, Tammy Grimes, Paula Lawrence, and Jo Sullivan. The only disappointment is the very talented—but not as a singer—Ellen Burstyn, whose half-sung,

half-spoken dramatic treatment of the *Ballad of the Nazi Soldier's Wife* only made me want to hear the late Lotte Lenya break my heart with it again.

The Bagley regulars—Arthur Siegel, Estelle Parsons, Nancy Andrews, Blossom Dearie—are all quite up to the mark as usual. *Plus* there's Chita Rivera, with whom Bagley seems to have a settled a long-standing feud, since she turns up here animatedly singing both *Dr. Crippen* and *You Understand Me So*. In short, a couple of winners. **P.K.**

PENNIES FROM HEAVEN (see *Best of the Month*, page 60)

SOUPY SALES: *Still Soupy After All These Years*. Soupy Sales (monologues); orchestra. *So You Don't Like Cats; Pachalafaka; White Fang in Chicago; My Ugly Sister-in-Law;* and eighteen others. MCA MCA-5274 \$8.98, © MCAC-5274 \$8.98, © MCAT-5274 \$8.98.

Performance: **Funny**
Recording: **Live and klunky**

Years ago Soupy Sales was host of a kiddie TV show that not only amused the kids but drew a cult following of adult super-hip types, including Frank Sinatra. His most famous scam was to urge the watching tots to sneak into their parents' bedroom, take out whatever money they could find in pocket or purse, and mail it to Uncle Soupy. The resulting publicity gave him a short but intense super-stardom with the accompanying spin-off comic books, records, and marionettes. The Muppet-like furor died down fairly quickly, but Soupy stayed in the business and became a regular on several TV game and talk shows, where his flaky warmth and self-effacing manner contrast nicely with the mechanical formats he finds himself in.

This new album, recorded live in what you'd guess was the back of a 1964 VW van parked at an intersection but was actually the New York night club The Other End, is, despite the klunky sound, very funny indeed. Soupy has courage: he blithely tells jokes that were old when Hector was an embryo; he whips off one-liners that even Henry Youngman would be ashamed of, and in *Somebody Knockin' at My Door* he unblushingly does fifteen variations on the same joke with each punchline hokier than the last. Why, then, did I laugh at all this cornball nonsense? Your guess is as good as mine, but I did.

A couple of the set pieces here are, however, genuinely inspired. One is *My Father Wants His Dollar Back*, based on the aforementioned TV scam, and the other is a six-minute, surreal, lunatic tale entitled *White Fang in Chicago*. In it he is invited to dinner by a Chicago friend who owns a large dog, White Fang, that not only talks but mixes drinks (inquiring whether one wants a twist or an olive), cooks a full-course dinner, and gladly runs to the store with a \$10 bill to buy a package of cigarettes. Why the last chore takes him so long leads to the hilarious punchline, but even funnier is Soupy's acting in all three parts, especially the obsequious, phumphering White Fang. Welcome back, Soupy. Let's have more. **P.R.**

(Continued overleaf)

WE CAUGHT THE POLICE IN THE ACT.

Now these pop artists are available on dbx discs:

- THE POLICE: *Zenyatta Mondatta* (Nautilus/A&M). PS-1043
- SUPERTRAMP: *Even In The Quietest Moments* (A&M). PS-1055
- MOODY BLUES: *On The Threshold Of A Dream* (Nautilus/Decca). PS-1048
- OSCAR PETERSON: *Digital At Montreux* (Pablo). GS-2045
- PABLO CRUISE: *Worlds Away* (Nautilus/A&M). PS-1044
- PROCOL HARUM: *Broken Barricades* (A&M). PS-1061
- HEART: *Dreamboat Annie* (Mushroom). PS-1001
- BLOOD, SWEAT AND TEARS: *Blood, Sweat & Tears* (Direct Disc Labs/MCA). PS-1013
- HERB ALPERT: *Rise* (A&M). PS-1022
- JOAN BAEZ: *Diamonds And Rust* (Nautilus/A&M). PS-1040
- DON MENZA BIG BAND: *Burnin* (Real Time). PS-1064
- COUNT BASIE ORCHESTRA: *On The Road* (Pablo). GS-2048
- CAT STEVENS: *Tea For The Tillerman* (A&M). PS-1058

dbx discs give you the full dynamic range of a live performance with none of the surface noise of conventional records.

The result is clarity, impact, and sonic realism like you've never heard before—even on digital "audiophile" records. dbx discs. Demand them by name.



Music can't live without us.

dbx, Incorporated, 71 Chapel Street, Box 100C, Newton, Mass. 02195 U.S.A. Tel. (617) 964-3210, Telex: 92-2522. CIRCLE NO. 9 ON READER SERVICE CARD

John McLaughlin

JOHN McLAUGHLIN is on a roll. Beginning with "Shakti" and continuing through last year's "guitar summits" with Al Di Meola and Paco de Lucia, McLaughlin has won back much of the serious jazz audience and the critical acclaim he had lost with his last, bloated Mahavishnu Orchestra recordings. With "Belo Horizonte" on Warner Bros. he continues to ride a hot streak.

The album has a sticker on the cover crediting McLaughlin with launching "something new: acoustic guitar in an electric band." That bit of hype, aside from ignoring a sizable chunk of the ECM catalog, doesn't really do justice to this outstanding album. Synthesizers do figure prominently, but the overall effect of "Belo Horizonte" is *not* electric. Besides McLaughlin's guitar, the bass, violin, and tenor and alto saxophones are acoustic, and the synthesizers are frequently programmed to sound like acoustic instruments (flute, for instance).

All but one of the album's compositions are by McLaughlin, the exception being the lovely Bill Evans ballad *Very Early*. They draw on fusion, Latin, and, to a lesser extent, Indian influences, and most are showcases for the composer: McLaughlin soloing, McLaughlin in duets with either Augustin Dumay on violin or Paco de Lucia on guitar, McLaughlin soaring above the sweeping, Weather Report-like synthesizer textures of *One Melody* and *Stardust on Your Sleeve*. His playing is as fast as ever, but it's also infused with the emotional power that has come to characterize his mature guitar work. More than just a master of the fretboard, McLaughlin commands the soul of his instrument, and "Belo Horizonte" is proof.

—Mark Peel



Warner Bros.

JOHN McLAUGHLIN: *Belo Horizonte*. John McLaughlin (guitar); instrumental accompaniment. *Belo Horizonte: La Baleine; Very Early (Homage to Bill Evans); Stardust on Your Sleeve; Waltz for Katia; One Melody; Zameir; Manitas d'Oro (for Paco de Lucia)*. WARNER BROS. BSK 3619 \$8.98, © M5 3619 \$8.98.

JAZZ



ART BLAKEY AND THE JAZZ MESSENGERS: *Straight Ahead* (see Best of the Month, page 65)

RECORDING OF SPECIAL MERIT

PAUL DESMOND: *East of the Sun*. Paul Desmond (alto saxophone); Jim Hall (guitar); Percy Heath (bass); Connie Kay (drums). *Greensleeves; Time After Time; For All We Know; I Get a Kick Out of You;* and three others. DISCOVERY DS-840 \$8.98.

Performance: **Superb**
Recording: **Good**

In 1960, when Warner Brothers released this album under the title "Paul Desmond and Friends" (W 1356), the Dave Brubeck sound was as common on American college campuses as ivy, and Desmond's somewhat detached alto was as important to that sound as anything created by Brubeck himself. The years have not diminished the impact of Desmond's supercool reading of such standards as *For All We Know* and *You Go to My Head*. With the solid support of guitarist Jim Hall and half the Modern Jazz Quartet (bassist Percy Heath and drummer Connie Kay), this smooth, bouncy record is as up-to-date as it ever was. *C.A.*

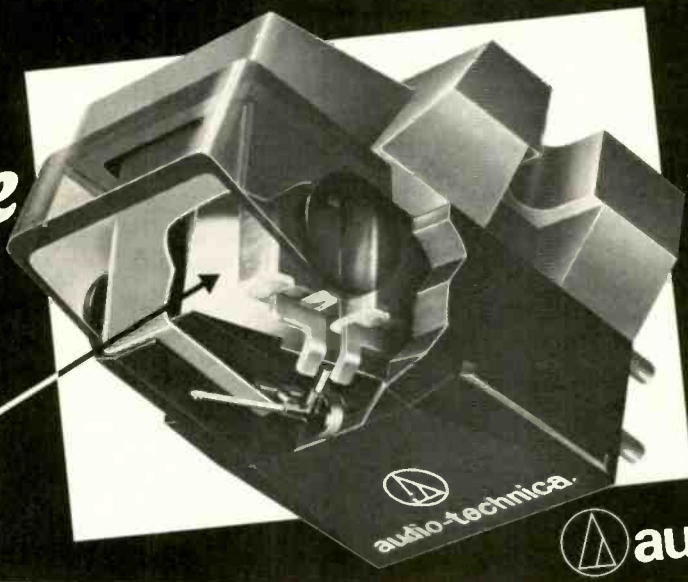
RECORDING OF SPECIAL MERIT

RICKY FORD: *Tenor for the Times*. Ricky Ford (tenor saxophone); Jack Walrath (trumpet); Albert Dailey (piano); Rufus Reid (bass); Jimmy Cobb (drums). *Christ-*

Our Invisible Shield!

MuMetal Shield between independent magnetic systems.

Model AT155LC illustrated.



Deep within each new Audio-Technica Dual Magnet™ cartridge are TWO separate, completely independent magnetic systems. Separate magnet, pole pieces, and coils for each stereo channel. Now, to insure the ultimate in stereo separation, we've installed a magnetic barrier between the two systems. It's the thoughtful, innovative extra step typical of every Audio-Technica design. Hear the Audio-Technica difference today.

 **audio-technica**

CIRCLE NO. 4 ON READER SERVICE CARD

mas Cheer; *Arcadian Eclipse*; *Saxaceous Serenade*; *Orb*; and three others. MUSE MR 5250 \$8.98.

Performance: **Superb**
Recording: **Good**

The great tenor tradition that began with Coleman Hawkins and, some believe, fizzled out during the past couple of decades has found renewed life in a young man named Ricky Ford. Although you can hear the past in Ford's playing, you can also detect a healthy measure of originality, which gets extra exposure on his aptly named album "Tenor for the Times" because he also wrote all the tunes.

Ford's rich tone and articulate, bouncy style get fine support from a rhythm section headed by pianist Albert Dailey. Dailey is at his best on this album, playing with imagination and admirable rhythmic dexterity both up front and behind Ford. The quartet becomes a quintet when trumpeter Jack Walrath joins in on *Portrait of Love*.

Ford has a deep-rooted modern approach that needs no gimmicks to make it stand out. He will probably never achieve the popularity of, say, Grover Washington, Jr., but his music should prove more durable than a lot of what is being produced now. I hope he makes many more albums that are as satisfying as this one. **C.A.**

RECORDING OF SPECIAL MERIT

DEXTER GORDON: *Resurgence*. Dexter Gordon (tenor saxophone); Richard Boone (trumpet); Martin Banks (trombone); Charles "Dolo" Coker, Charles Green (piano); Lawrence Marable (drums). *Home Run*; *Dolo*; *Lovely Lisa*; *Affair in Havana*; and two others. PRESTIGE MPP-2511 \$5.98.

Performance: **Very good**
Recording: **Excellent**

Dexter Gordon's triumphs since his return to the United States a few years ago after a protracted stay in Europe have prompted this reissue of a 1960 session that was itself a comeback album of sorts, Gordon having gone unrecorded for some years back then due to changing styles. A "cool" and dispassionate sound had prevailed in jazz in the late Fifties, and as a result Gordon, a fiery and emotional horn, had been shut out. But Julian "Cannonball" Adderley's hit *This Here* had brought jazz funk back into favor. It was Adderley who produced "Resurgence," and Gordon reveled in the freedom he was given; his burly, burgeoning, blazing sax completely dominates the set, making his capable back-up sound overly cautious.

Although this album was recorded twenty-one years ago, the sound is amazingly fresh, almost leaping from the speakers. Wally Heider was the original recording engineer, and the remastering by George Horn retains the pristine sound that complements Gordon's timeless playing. **J.V.**

RECORDING OF SPECIAL MERIT

WOODY HERMAN: *Woody and Friends*. Woody Herman and His Orchestra; Dizzy Gillespie, Woody Shaw (trumpets); Slide Hampton (trombone); Stan Getz (tenor saxophone). *Better Git It in Your Soul*; *Count Down*; *Woody 'n You*; *Caravan*; and

three others. CONCORD JAZZ CJ-170 \$8.98, © CJ-170C \$8.98.

Performance: **First-rate**
Recording: **Very good remote**

Recorded at the long-ago 1979 Monterey Jazz Festival, this new Woody Herman release turns out to have been well worth the wait. Herman is not the only leader from the big-band era who has continued fronting a large orchestra, but, to a greater degree than anyone else I can think of, he has kept up with the times. Furthermore, Herman has kept intact the respect and friendship of those who worked for him over the years, and all this came together at Monterey in September of '79. Forty-six and a half minutes of it are splendidly preserved on this album, which has Herman's Young Thundering Herd living up to its name, splashing musical canvases with intriguing tone colors and providing perfectly composed settings for such distinguished guests as Dizzy Gillespie, Woody Shaw, Slide Hampton, and Stan Getz. The last, of course, was a mere slip of a lad when his cool tenor voice first rose ethereally from the most celebrated of the Herman Herds some thirty-five years ago. Here he interprets Michel Legrand's *What Are You Doing the Rest of Your Life* with the same detached voice, now familiar throughout the world. Gillespie is heard to characteristic advantage on *Manteca* and *Woody 'n You*, a bop classic he wrote for the Herman band more than three decades ago but not actually performed by Herman until Slide Hampton contributed the arrangement heard here. There are also fine solos by Hampton and trumpeter Woody Shaw. But even without these distinguished guests the Herman Herd can hold its own, and it does so with fire and elegance. **C.A.**

RECORDING OF SPECIAL MERIT

OLD AND NEW DREAMS: *Playing*. Don Cherry (trumpet, piano); Dewey Redman (tenor saxophone, musette); Charlie Haden (bass); Ed Blackwell (drums). *Happy House*; *Rushour*; *Broken Shadows*; and three others. ECM ECM-1-1205 \$9.98, © M5E-1-1205 \$9.98.

Performance: **Fine**
Recording: **Excellent remote**

The players in this quartet are no strangers to each other—nor, for that matter, to quality music. Their new album is a concert recording made in Austria a couple of summers ago. It offers six selections, half of which are compositions by Ornette Coleman, a man each member of this group can closely identify with. All perform superbly, but trumpeter Don Cherry—Coleman's original front-line partner—is particularly impressive, and his fiery work on *Happy House* is an extraordinary display of jazz improvisation. Saxophonist Dewey Redman also soars to wonderful heights here, especially on his own composition, *Rushour*, and the rhythm section (Charlie Haden and Ed Blackwell) is splendid. **C.A.**

ITZHAK PERLMAN/ANDRÉ PREVIN: *It's a Breeze*. Itzhak Perlman (violin); André Previn (piano); Shelly Manne (drums); Jim Hall (guitar); Red Mitchell (Continued on page 83)

Hear the music — not the medium!



The Fulton Kinetic Barrier captures and dissipates the traveling intermodulation distortion products present in your discs. Caused not only by the mechanism used to revolve your platter but also by your stylus returning additional vibrations to the discs during playback, these distortion products destroy your re-creation of the live performance.

Years of research and development have perfected this product to eliminate, for the very first time, the ringing, smearing and excessive brightness while allowing for subtle entrances and still maintaining the original clarity and tightness. It provides optimum coupling for your turntable components to bring out the maximum potential of your system. Call or write for the name of your local dealer carrying Fulton audio equipment and accessories.

FULTON™

4204 Brunswick Avenue North
Minneapolis, MN 55422
(612) 537-7076

Call 800-328-4815 Toll Free.

Move up to Fulton and experience the difference!

CIRCLE NO. 14 ON READER SERVICE CARD



BIG JOE WILLIAMS: a real man who made real blues

Blues Reissues

FANTASY has released three double-disc sets of reissued recordings by great bluesmen—"Walking Blues" by Big Joe Williams, "California Blues" by Sonny Terry and Brownie McGhee, and "How Many More Years I Got" by Lightnin' Hopkins—and even before I listened to them my memories provoked certain expectations. When I first heard Williams' Thirties Bluebird sessions in 1966, I found his wild vocals and nine-string guitar, played Hawaiian style, exciting but primitive, best taken in small doses. Faced with the new set of remastered 1961 recordings originally issued on Prestige/Bluesville, I doubted that I would remain excited throughout four LP sides. Similarly, having heard quite a few Terry/McGhee albums, I expected the remastered version of two 1957 Fantasy albums to be polished but routine and planned to dismiss it with a few polite words. But I really looked forward to hearing the Hopkins sessions, having fond memories of his fuzzy, intimate baritone and impressive acoustic-guitar playing on albums dating from 1958-1960. I expected that this selection from three Prestige/Bluesville albums recorded in 1962 would show him at the top of his form.

Well, surprise, surprise: my expectations were just about the opposite of the truth. The Williams set not only sustained my interest but stuck with me afterward; it is full of low-down, intense, tremendously exciting music. The Terry/McGhee duets, the first they recorded together, turned out to be unusually fiery and emphatic—perhaps the best work they ever did. The eagerly anticipated Hopkins sessions turned out to be sloppy and boring.

In large part, I fault the producers for the failure of the Hopkins set. Sam "Lightnin'" Hopkins was an erratic talent, and it took a businesslike producer to squeeze the best out of him. The co-producer of these recordings was Mack McCormack, a folklorist who was clearly fascinated by Hop-

kins' personality and mystique. McCormack's liner notes would have you believe that he knew when Hopkins was faking, but the recorded evidence belies it.

Only on the last cut on side three does Lightnin' begin to sound as if he's found a groove with *Happy Blues for John Glenn*, recorded the afternoon the astronaut splashed down from his historic flight. *Sinner's Prayer* on side four is loaded with Hopkins' cynical humor, and the concluding *Have You Ever Been Mistreated* is at least straightforward. The question "How Many More Years I Got?" has, by the way, already been answered: Lightnin' Hopkins died in February.

No producer ever had to be much concerned about what he was going to get from Sonny Terry and Brownie McGhee. They were always thoroughly professional musicians who arrived in the studio with their material well rehearsed—maybe sometimes too well rehearsed to allow for enough spontaneity. But when these recordings were made they were still experimenting; their work together had not yet been smoothed into the predictable act it later became. Terry's harmonica, then as now, was thorough rather than passionate, though always with surprising bursts of emotion. His vocals, the first he had ever done (McGhee told him, "If you want half the money, you got to learn how to sing"), are rough-edged but convincing. McGhee's guitar playing is more clearly country-based than when it had become streamlined by his city experience, and his vocals are urgent instead of merely professional. The consistent charm of this set lies in the balance between the partners, each complementing the other. The particular selections matter little.

Big Joe Williams, who more than once literally played his way out of trouble, was fifty-nine when he made these recordings, but he sang with the power of a man twenty years younger. A classic blues shouter, he nonetheless had an immediately identifiable

sound with his nine-string guitar. He never changed his natural, passionate, and sincere style, though the advent of electrified r-&-b put him out of business temporarily until the folk boom made him an active recording artist again.

Williams' accompanists on this 1961 New York date were a twenty-two-year-old harmonica player (and apartment-house superintendent) named Larry Johnson and, as bassist, the prolific blues composer Willie Dixon. Niceties of tuning and rehearsal were disregarded—Williams wanted to *play*. Although some of the uptempo numbers become chaotic, the chaos aptly reflects that of life in general and Williams' own in particular. He would not have understood or been capable of the sophistication of Terry and McGhee, but he would also have been incapable, unlike Hopkins, of giving less than his best. He had ego but no guile. He was a real man who made real blues, and both are hard to come by these days. —Joel Vance

BIG JOE WILLIAMS: *Walking Blues*. Big Joe Williams (vocals, guitars); Willie Dixon (bass); Larry Johnson (harmonica). *Levee Camp Blues*; *Low Down Dirty Shame*; *Gambling Man*; *Ain't Gonna Rain No More*; *Feel So Good*; *Prowling Ground Hog*; *Back Home Again*; *Sugar Babe*; *Tell Me Mama*; *Studio Blues*; *I'm a Fool About My Baby*; *38 Pistol Blues*; *Pearly Mae*; *Walking Blues*; *Highway 45*; *Meet Me at the Bottom*; *Skinny Mama*; *Jockey Ride Blues*; *Coal and Iceman Blues*; *Army Man Blues*; *Black Gal*; *Pallet on the Floor*. FANTASY F-24724 two discs \$8.98.

SONNY TERRY AND BROWNIE MCGHEE: *California Blues*. Sonny Terry (vocals, harmonica); Brownie McGhee (vocals, guitar). *I Got Fooled*; *No Need of Running*; *I Feel So Good*; *Thinkin' and Worrying*; *I Love You, Baby*; *California Blues*; *Walkin' and Lyin' Down*; *First and Last Love*; *Christine*; *I Have Had My Fun*; *Whoppin' and Squallin'*; *Water Boy Cry*; *Motherless Child*; *Sportin' Life*; *John Henry*; *I'm a Stranger*; *Cornbread and Peas*; *Louise*; *I Done Done*; *Meet You in the Morning*; *Poor Boy from Home*; *Hudy Leadbelly*; *Something's Wrong at Home*; *Take This Hammer*; *Baby's Gone*; *Lose Your Money*. FANTASY F-24723 two discs \$8.98.

LIGHTNIN' HOPKINS: *How Many More Years I Got*. Sam "Lightnin'" Hopkins (vocals, guitar); Buster Pickens (piano); Donald Cooks (bass); Spider Kilpatrick (drums); Billy Bizer (vocals, harmonica). *How Many More Years I Got*; *Walkin' This Road by Myself*; *The Devil Jumped the Black Man*; *My Baby Don't Stand No Cheatin'*; *Black Cadillac*; *You Is One Black Rat*; *The Fox Chase*; *Mojo Hand*; *Mama Blues*; *My Black Name*; *Prison Farm Blues*; *Ida Mae*; *I Got a Leak in This Old Building*; *Happy Blues for John Glenn*; *Worried Life Blues*; *Sinner's Prayer*; *Angel Child*; *Pneumonia Blues*; *Have You Ever Been Mistreated*. FANTASY F-24725 two discs \$8.98.

(bass). *It's a Breeze; Rain in My Head; Catgut Your Tongue; It's About Time;* and four others. ANGEL ● DS-37799 \$10.98, © 4XS-37799 \$10.98.

Performance: **Pretty**
Recording: **Excellent**

In a previous album, "A Different Kind of Blues," André Previn corralled violinist Itzhak Perlman, drummer Shelly Manne, guitarist Jim Hall, and bass-player Red Mitchell into what must have proved to be a highly lucrative enterprise. They played jazz pieces Previn had composed for the occasion, and, although Previn is one of my favorite conductors, I felt then that the boys in the band were having far more fun than I was, as a mere listener, as they noodled away with much skill and ingenuity at weightless little pieces that never really got anywhere. In "It's a Breeze" the gang is back for an encore, with results scarcely more intoxicating than they were the first time. These are really musical games, tame and cozy, good at conveying a jaunty, jazzy mood here (*It's a Breeze*), a bluesy one there (*Rain in My Head*), or a sense of pleasurable tranquillity (*A Tune for Heather*—and who is Heather?) elsewhere. But there's nothing remarkable or memorable here. Perlman speaks of the Previn compositions in this collection as "terrific jazz tunes." "Evanescent" would perhaps be a more descriptive adjective. *P.K.*

RECORDING OF SPECIAL MERIT

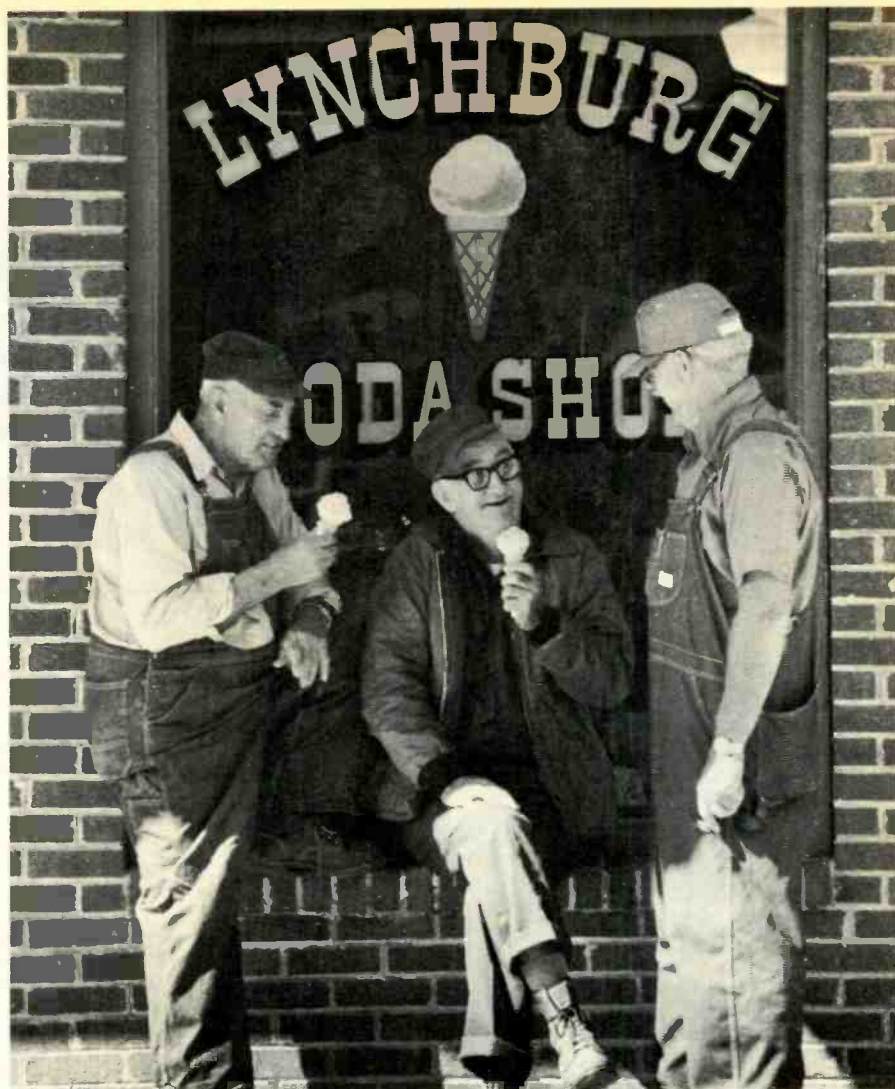
BOB WILBER AND THE BECHET LEGACY. Bob Wilber (soprano saxophone, clarinet); Glenn Zottola (trumpet); Mark Shane (piano); Chris Flory (guitar, banjo); Phil Flanigan (bass); Chuck Riggs (drums); Pug Horton (vocals). *Down in Honky Tonk Town; Si Tu Vois Ma Mère; Stop Shimmying Sister; Lazy Blues; If I Let You Get Away with It; Roses of Picardy;* and six others. BODESWELL BW 103 \$8.98 (from Bodeswell Records, P.O. Box 624, Brewster, Mass. 02631).

Performance: **Excellent**
Recording: **Good**

Bob Wilber was a student of the great soprano saxophonist and clarinetist Sidney Bechet (1897-1959) and remains his primary disciple. Like his mentor and idol, Wilber has a thrilling, singing tone on the soprano sax and a robust and fluid sound on the clarinet. What could be more appropriate than for Wilber and his band, the Bechet Legacy, to record a live album at Bechet's, a New York club named in honor of the titan? The program consists of Bechet compositions, *Petite Fleur* being the most famous, and other titles that Bechet recorded in his long career (it began in the Twenties). The ensemble sound is as smooth as a cat's purr, and Wilber guides the group with grace and fervor.

Bechet's ballads, such as *Chant in the Night* and *Si Tu Vois Ma Mère*, are lovely and dignified, but there's also plenty of slam-bang jazz propelled by the group's dynamo rhythm section, especially *Stop Shimmying Sister*, with a sultry vocal by Pug Horton, and *Kansas City Man*, with a boiling exchange of choruses between Wilber and trumpeter Glenn Zottola. Maestro Bechet would have been pleased. *J.V.*

APRIL 1982



If you'd like to know some other unusual things about Lynchburg, drop us a line

WHEN GOOD FRIENDS GET TOGETHER in downtown Lynchburg, you'll never see a glass of Jack Daniel's.

The county where we make our whiskey is dry. (It voted that way in 1909.) So when folks have a friendly chat, it's usually over ice cream or soda. Of course, we hope the law isn't as binding in your hometown. And that, at your next friendly get-together, a glass of Jack Daniel's will be somewhere in the picture.



CHARCOAL
MELLOWED
DROP
BY DROP

Tennessee Whiskey • 90 Proof • Distilled and Bottled by Jack Daniel Distillery
Lem Motlow, Prop., Inc., Route 1, Lynchburg (Pop. 361), Tennessee 37352

Placed in the National Register of Historic Places by the United States Government.

Classical Music Briefs



Gary Gerehoh

FOR those who'd like to think they know how mink coats are usually acquired, superstar flutist **James Galway** would like to announce that this one was bought and paid for by himself, and, no matter how much it might become his legend or help him get recognition at airports, he has never endorsed any product for advertising. Finding the stage of Avery Fisher Hall at Lincoln Center drafty during a concert this winter, Galway trotted out his fur, which he continued to wear afterwards at a party for his forty-second birthday.

In February, Galway was soloist with the Los Angeles Philharmonic in the world première of *The Pied Piper Fantasy*, a flute concerto written for him by John Corigliano. RCA will record the piece, probably when Galway plays it in London next summer. Before that is released, you can expect to see (and hear) a country album he has been working on with Tom Collins, Barbara Mandrell's producer, in Nashville. It contains Crystal Gayle's *Don't It Make Your Brown Eyes Blue?* Well, no, it don't. Ours are still green with envy for that coat. □

JEROME BUNKE is a large, affable man and an outstandingly good clarinetist. He is also one-third of an unusual trio, the

Ariel Ensemble, whose other members are Julia Lovett, who is a soprano, and Michael Fardink, who plays the piano. Their

first record, for Orion, is reviewed on page 101 of this issue. Connoisseurs will recognize the instrumental combination as the complement called for by Schubert's *Der Hirt auf dem Felsen*, and that ten-minute masterpiece does cap the disc. But why else get such a group together?

"I suppose the ensemble had its genesis in my seeing myself as a vocalist," says Bunke. "When I was at Juilliard [he is a graduate of Juilliard and has a Ph.D. from New York University] I did a lot of work with Jennie Tourel, and I started thinking about the clarinet as a kind of extension of the voice." It certainly works that way in Schubert. "And, contrary to what one might think, there really is a wonderful repertoire for us to play. There are the six songs by Ludwig Spohr for the same combination as the Schubert, and works by Seymour Barab, Arthur Butterworth, Robert Starer, William Mayer, and Jack Gottlieb, some of which were written especially for us. And when we break down into duos we have Vaughan Williams' pieces for voice and clarinet and the whole repertoire of music for soprano and piano and for clarinet and piano."

Bunke enrolled for a time at Juilliard as a violinist so he could get into the chamber-music classes. He studied clarinet with a number of different teachers. "I was fortunate," he says, "to have had a number of influences that were very compatible with one another and with me." But, when he speaks of influences, the names Bunke drops go far beyond clarinetists: Lipatti, Bjoerling, Rubinstein, Fischer-Dieskau and Ger-

ald Moore, Oistrakh, early Heifetz. "Being influenced by other artists gets you past instrumental technique to the essence of music. Proficiency is fine, but the real task facing musicians is to find our own means of expression." —J.G.

WHEN the tango was exported from the brothels of Buenos Aires to the fashionable ballrooms of Paris, London, and New York just before World War I, it had a very naughty reputation at home and abroad. It has now become quite respectable in Argentina and is regarded as the most significant expression of that country's popular art. In 1980 the secretary of culture of the Municipality of Buenos Aires formed the **Orquesta del Tango de Buenos Aires**, a twenty-five-piece ensemble which is featured on a recording just issued by the Organization of American States (how's that for respectability?). The record (OAS-013), on which the orchestra plays eight tangos including the famous *La Cumparsita*, can be ordered for \$5.00 postpaid from Inter-American Musical Editions, Organization of American States, 1889 F Street N.W., Washington, D.C. 20006.

There are also signs that the rest of the world may be in for another tango revival. None-such is about to release an album of instrumental versions of famous tangos played by a trio or quintet, and **Piaçido Domingo** has recorded an album of classic Argentine tangos from the Twenties and Thirties for Deutsche Grammophon. A big hit in Argentina, where it was re-

leased last summer, Domingo's album is the fastest seller DG has ever had in this country.

Industry optimists are hopeful that a tango revival will give the record business the kind of shot in the arm it got from the ragtime revival ten years ago, and worldwide sales of up to a million have been projected for Domingo's album. Why not? Georgia Gibbs' *Kiss of Fire*, an adaptation of the tango *El Choclo*, sold a million copies back in the Fifties, and perhaps a new appetite for Latin music has been stimulated by the show *Evita*, which is set in Argentina. Its hit tune *Don't Cry for Me Argentina* is, after all, a tango too. □

STAGING an opera is so expensive that joint productions financed by and shared by companies in different cities are becoming common. But the production of Giuseppe Verdi's comic masterpiece *Falstaff* to be unveiled this month in Los Angeles is the result of complicated international negotiation. It is a co-production of the Los Angeles Philharmonic, London's Covent Garden, and the Teatro Comunale of Florence, Italy.

The eight performances on April 13, 17, 19, 21, 24, 27, and 29 and May 1 at the Dorothy Chandler Pavilion will be conducted by the Los Angeles Philharmonic's music director Carlo

Maria Giulini, who is returning to staged performances of opera for the first time in fourteen years. The Italian baritone Renato Bruson will sing the title role, and the cast includes Katia Ricciarelli, Barbara Hendricks, Lucia Valentini-Terrani, Dalmacio Gonzalez, and Leo Nucci. Sets are by Hayden Griffen, costumes by Michael Stennett, and Ronald Eyre directs.

And, yes, Deutsche Grammophon is recording it for worldwide distribution. □

To the surprise of no one who knows the record business, the best-selling classical albums of the last year were mostly those with a crossover connection—some relation to the world of popular music or pop culture. Angel has André Previn and Itzhak Perlman jazzing it up in "A Different Kind of Blues." RCA has James Galway's "Annie's Song" and the disco album "Hooked on Classics," which went platinum in January and is still selling well. CBS Masterworks has flutist Jean-Pierre Rampal playing with jazz pianist Claude Bolling, and London has that large media event known as Luciano Pavarotti.

So in these hard times, when you've really got to hustle to sell anything, smart A&R persons are looking for crossover artists and repertoire. Deutsche Grammophon has come up with a



Photogram: Claude Delorme

flute and accordion duo, the Cambridge Buskers. When questioned about the sales of their first U.S. record, a usually dignified DG spokesperson said, "It's a dynamite seller. A real wax to watch." But are you ready for a Romanian virtuoso on the panpipes?

Well, *get* ready. The Philips division of PolyGram Classics has just launched one on the Mercury label with the March release of "Zamfir, King of the Panflute." It features panflutist **Gheorghe Zamfir** playing pieces by Bach, Mozart, Telemann, and Vivaldi plus some compositions of his own with

organ accompaniment by Nicolae Licaret.

Zamfir's sales in Europe have brought him gold records in several countries, and his album "The Lonely Shepherd" is *double* platinum in Canada. He gives part of the credit to the appeal of his ancient instrument. "The panflute is the oldest instrument in the world," Zamfir says. "It's the universal instrument, and you can play anything on it." But there's no denying that he brings something special to it, and we think you're going to be hearing more panflute playing this year than ever before. —W.L.

Disc and Tape Reviews

By RICHARD FREED • DAVID HALL • GEORGE JELLINEK • PAUL KRESH
STODDARD LINCOLN • ERIC SALZMAN

Ⓢ = stereo cassette

Ⓢ = eight-track stereo cartridge

Ⓢ = digital-master recording

Ⓢ = direct-to-disc

Ⓢ = quadraphonic disc

Ⓢ = monophonic recording

The first listing is the one reviewed; other formats, if available, follow.

BARTÓK: Piano Music (see *Going on Record*, page 46)

BARTÓK: Sonatas Nos. 1 and 2 for Violin and Piano; Rhapsodies Nos. 1 and 2 for Violin and Piano; Contrasts for Violin, Clarinet, and Piano. BARTÓK (arr. Székely); **Romanian Folk Dances.** Sergiu Luca (violin); Paul Schoenfeld (piano); David Shifrin (clarinet, in *Contrasts*). NONESUCH Ⓢ DB-79021 two discs \$23.96, Ⓢ D2-79021 \$23.96.

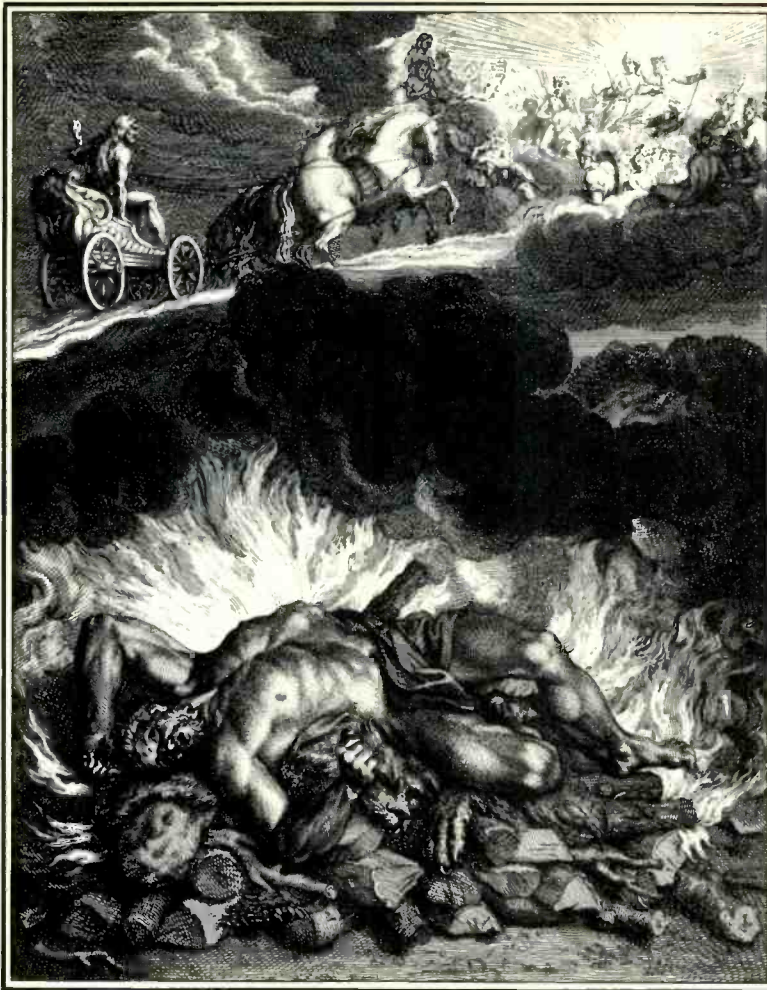
Performance: **Good to very good**
Recording: **Excellent**

This set is labeled "The Complete Music for Violin with Piano," but Sergiu Luca and

Paul Schoenfeld do not play exactly the same music as that on the recent Hungaroton recording by György Pauk and Péter Frankl (SLPX 12318/19, reviewed in these pages in December 1981). Both teams omit the sonata Bartók composed in 1903 and withheld from publication (once recorded by André Gertler and Diane Anderson on Supraphon); Pauk and Frankl include the little Andante of 1902 and, instead of the popular *Romanian Folk Dances*, whose violin-and-piano setting was prepared by Zoltán Székely with no help from Bartók, they play the *Hungarian Folk Songs*, arranged by Tivadar Országh and Bartók himself from some of the pieces in the piano cycle *For Children*. While neither set is re-

ally quite "complete," the Hungaroton is a little closer to the mark; but no one is going to be terribly concerned over the alternatives just cited, and the *Contrasts* in the Nonesuch set is a very substantial bonus. This work is represented on records far less abundantly than one might expect, and it receives a really splendid performance here, as do the *Romanian Folk Dances* (as one would expect, of course, from the Romanian-born Luca, who opts for the ending in the original piano version instead of the one in Székely's arrangement). Nonesuch lists the dances on both the jacket and the label by their tempo markings only; their specific titles are to be found only in Michael Stein-

(Continued on page 87)



The Death of Hercules (B. Picart)

The Granger Collection

despite the French trappings. The drama and characterizations are vividly conveyed through swift-moving recitatives and emotionally charged melodies. The ensemble writing displays a contrapuntal side to Cavalli's art missing in his Venetian operas, and the massed choruses remind us that he wrote many splendid liturgical works for St. Marks. *Ercole Amante* shows Cavalli's genius at its fullest.

ONE of the best features of this recorded performance is that it presents Cavalli's music in a form close to what he actually wrote rather than slickly arranged as in earlier recordings. The orchestra is used mostly for ritornellos and sinfonias, as Cavalli indicated, thus throwing most of the burden for the vocal accompaniments on the basso continuo. The edition used is by Luciano Sgrizzi, who also plays harpsichord in the recording, and he has imaginatively realized the continuo with a plethora of instruments including not only harpsichord but also harp, lute, and organ. The constantly varying sonorities underscore the drama, and when the full instrumental forces are called on, the effect is most telling.

Michel Corboz's reading is paced for grandeur, but it never becomes pompous or stodgy. The dramatic line constantly flows, with an interplay of tenderness, pathos, and comedy. The colossal choral and instrumental sections never interrupt the action but rather frame it.

In general, the singing is superb. Yvonne Minton's portrayal of the raging Juno and Keith Lewis' tender Hyllas are outstanding. The most complex character is Iole, and thanks to Felicity Palmer we readily understand her changing emotions. Ulrik Cold's interpretation of Hercules, however, is curious. Listening to his *sotto voce* and portamentos reminds one less of the hero of the Twelve Labors than of a simpering swain. The powerful bass John Tomlinson, cast here as Neptune, would have been a better choice.

THE English Bach Festival Chorus sings with accuracy and power. All traces of the English cathedral style were banished for this secular occasion. The Festival Orchestra too, using old instruments, achieves a sumptuous resonance, eschewing any mannerisms that might mar the colossal character of the work. The recording itself is also sumptuous. Last, but not least, among the set's virtues are the informative notes by Jean-Louis Martinoty outlining the French political and literary context of this, Cavalli's most monumental work.

—Stoddard Lincoln

CAVALLI: *Ercole Amante*. Yvonne Minton (mezzo-soprano), Juno; Felicity Palmer (soprano), Iole; Patricia Miller (soprano), Dejanira; Colette Alliot-Lugaz (soprano), Venus; Ulrik Cold (bass), Hercules; Keith Lewis (tenor), Hyllas; Michel Corboz (tenor), Mercury; John Tomlinson (bass), Neptune; others. English Bach Festival Chorus and Baroque Orchestra, Michel Corboz cond. ERATO/RCA STU 71328 three discs \$26.94.

Cavalli: "Hercules in Love"

FRANCESCO CAVALLI (1602-1676) wrote his monumental opera *Ercole Amante* (*Hercules in Love*)—which has received a stunning first recording on Erato under the direction of Michel Corboz—to celebrate the marriage of Louis XIV of France to Austria's Maria Theresa, the Infanta of Spain. The work was conceived as an allegorical "machine opera" to show off the stage equipment available at the Sun King's court, and the plot is complicated.

Hercules is in love with Iole, who disdains him because he has murdered her father and she is in love with Hyllas, Hercules' son. Siding with Hercules, the goddess Venus tries to unite him with Iole, but Juno, enraged by such injustice, contrives to have Iole murder Hercules. The plot misfires, and blame falls on Hyllas and Dejanira, Hercules' wronged wife. They are banished, and Iole is forced to marry Hercules in order to save Hyllas' life. At the wedding, Hercules receives a magic shirt from Dejanira; when he dons it, he is consumed by fire. But he is translated to heaven where he marries Beauty, and they send their blessings to the young Louis and his bride.

All this is, of course, a stage designer's dream. The action moves around from earth to heaven to hell, gods and goddesses descend or rise in every scene, ships sink, tombs burst asunder, and so on. But despite the classical plot elements, the constant appeals to magic, and the incessant groaning of the machinery, the characters are convincing in their motivations and emotions. Iole's love and hate, Hyllas' frustration, Dejanira's jealousy, and Hercules' blind passion are real no matter how their situations have been manipulated magically. Their emotions keep the story alive and give scope for Cavalli's powerful sense of drama and musical abilities.

Those listeners familiar with Cavalli's *La Calisto*, *L'Ormino*, and *L'Erismena* will be surprised by *Ercole Amante*. Instead of a three-act opera consisting almost entirely of solos, Cavalli, catering to French taste, wrote a five-act opera with a prologue and filled it out with massive choruses, duets, trios, and quartets. (The original production included a ballet with music furnished by Lully, but that has been omitted in the recording.) Yet the music is pure Cavalli

berg's annotation, which is perhaps the most stunning feature of this set.

The sonatas and rhapsodies are also performed well by Luca and Schoenfield (can we possibly be spelling this name correctly, Nonesuch?)—the rhapsodies especially so—but without the feeling of "total immersion" idiomatic identity with the music that Pauk and Frankl exude in their more expansive performances or the electrifying quality David Oistrakh and Sviatoslav Richter brought to the First Sonata (CBS M 36712). The *Contrasts* and *Romanian Folk Dances* are so persuasive in the new set that I wish Nonesuch had thought of coupling them on a single disc with that early, unnumbered sonata. Although the digital recording is superior to Hungaroton's analog sound, the latter is a good deal more than adequate, and between the two sets the import is the one whose overall appeal is stronger and more durable. *R.F.*

BEETHOVEN: *Seven Bagatelles, Op. 33; Für Elise (WoO 59); Fantasia in G Minor, Op. 77; Rondo a Capriccio, Op. 129* ("The Rage over the Lost Penny"); *Variations on "God Save the King" (WoO 78)*. Elyakim Taussig (piano). MOSS MUSIC GROUP MMG 1135 \$7.98, © CMG 1135 \$7.98.

Performance: **Highly musical**
Recording: **Good to fine**

Elyakim Taussig is a thirty-eight-year-old Czech-born Canadian from whom, if the present recording is truly representative, we shall surely be hearing more. These "Beethoven Miniatures," as the jacket proclaims them, are not merely well played but set forth with uncommon regard for their respective individual character—and yet without a trace of over-characterization or the sort of interpretive overlay that can (and too often does) inflate or otherwise distort such pieces. (The only sort of distortion evident is a slight one occasionally affecting the upper reaches of the instrument in this otherwise fine English recording.) One of the nicest surprises here is the stature assumed by the battered old *Für Elise* in Taussig's elegantly straightforward performance, with lovely singing tone but no effusiveness and no condescension. The entire program offers the most solid pleasure, and the Canadian pressing is as quiet as can be. *R.F.*

BLOCH: *Violin Sonata No. 1. ENESCO: Violin Sonata No. 3, in A Minor, Op. 25* ("In the Romanian Folk Style"). Kees Kooper (violin); Mary Louise Boehm (piano). GOLDEN CREST ● CRDG-4199 \$9.98.

Performance: **Just fine**
Recording: **Comfortably realistic**

This is a most imaginative coupling and a fine pair of performances. While Yehudi and Hephzibah Menuhin have a special claim on the Enesco sonata because of Yehudi's association with the composer, Kees Kooper and his wife, Mary Louise Boehm, are hardly less persuasive, and it is a decided advantage to have as coupling so deep-felt a performance of the Bloch (there is Indian music on the other side of the Menuhins' Angel disc, S-36418). The Koopers' Bloch is rather more in the vein of the expansively idiomatic Stern/Zakin performance on CBS (AMS 6717) than the

SA-X. High Bias Is Richer For It.



©1981 TDK Electronics Corp.

CIRCLE NO. 41 ON READER SERVICE CARD

The greatest honor a cassette can receive is to be held in higher esteem than the one now setting the high bias standard. SA-X has already gone beyond SA in frequency response, sensitivity, and resolution. It was intended to.

With its ultra refined dual layer of Super Avilyn and the Laboratory Standard Mechanism, nothing less was possible. TDK believes sound reproduction should have no set barrier. No limit.

For us, high bias was a limit to be surpassed. SA-X has won three international audio awards to date. It will doubtless win others.

But we take awards philosophically. They represent our continuing effort to create the machine for your machine. In that, we could not be happier with SA-X.



TDK
THE MACHINE FOR YOUR MACHINE

"Okay. So where's the band hiding?"

Our new dbx Model 3BX Series Two Dynamic Range Expander will give you up to 50% more music from records.



tapes and FM stereo. Not more volume. More music.

It does that by restoring the natural dynamics of live music lost in recording. You get music so big there's just no hiding from it. And if that doesn't beat the band, what does?

dbx. Music can't live without us.

dbx, Inc. 71 Chapel St. Box 100C, Newton, Mass. 02195 USA Tel. 617-964-3210. In Canada: BSR (Canada) Ltd.

taut, more austere, but unarguably impressive one by Heifetz with Emanuel Bay that last circulated in RCA ARM4-0947. The sound is comfortably realistic rather than showy, and Kees Kooper's annotations add to the pleasure of the performances. *R.F.*

BOLCOM: Piano Quartet. FINNEY: Piano Trio No. 2. American Trio; David Ireland (viola). COMPOSERS RECORDINGS, INC. CRI SD 447 \$7.95.

Performance: **Excellent**
Recording: **Very good**

This recording is in every way a production of the University of Michigan and a notable example of the creative musical activity

there. Ross Lee Finney was professor of music at U.M. from 1949 to 1973, when he was succeeded by William Bolcom. Two members of the American Trio teach at the university, and these recordings—both excellent—were made there.

Bolcom is, of course, best known for performances of American popular music with his wife Joan Morris and by himself, but he is also a prolific composer and his music is widely played. He has a strong background in European music and in the avant-garde, but sometimes it seems that his heart really lies in the theater and in American pop. More than a bit of that ambivalence comes through in his Piano Quartet. When a waltz of consummate sentimentality emerges in

the wake of bleak modernity, you don't know whether to laugh or to cry. But I find this music interesting for the way it indulges in outrageousness and for what it has to say about the state of our culture.

Finney is a Midwesterner who studied with Nadia Boulanger, Alban Berg, and Roger Sessions; he is surely the only composer who can name those three as teachers. His Piano Trio No. 2 is a fine example of his symphonic modernism—serious, touched by the great trends of modernism, but fundamentally in the European romantic tradition. Altogether an interesting and attractive record. *E.S.*

CHOPIN: Études, Opp. 10 and 25. François-René Duchable (piano). ERATO/RCA STU 71406 \$8.98.

Performance: **Cool**
Recording: **Intimate**

One might expect from François-René Duchable, who is only twenty-eight years old, a youthfully hot-blooded reading of the Chopin Études similar to Vladimir Askenazy's. Instead, this performance is more in the classical manner of Maurizio Pollini—with an extra measure of Gallic dryness. Duchable's formidable musicianship is displayed to fine effect in such things as his handling of the inner voices of Op. 10, No. 1, and his dexterity in the tricky Op. 10, No. 4. The "Aeolian Harp" Étude that leads off Op. 25 lacks a bit of its intrinsic poetry in Duchable's hands, but Nos. 5, 6, and 7 of the set fare superbly, notably in the great lyrical simplicity of the last. The three concluding études in Op. 25 also come off as the truly dramatic and climactic pieces they are.

Duchable's readings may be a bit cool and calculated for some tastes, but on their own terms they are masterly. The recording of the Bösendorfer piano is clear as a bell, but I would have liked a shade more warmth in the acoustic surround. I would also have liked something better than the miserably translated frippery provided as liner notes. *D.H.*

DEBUSSY: Ibéria (see RIMSKY-KORSAKOV)

DELIUS: Songs of Farewell; Idyll; Cynara; Caprice and Elegy; Fantastic Dance; A Song of Summer; La Calinda; Irmelin Prelude; Two Aquarelles; A Late Lark (see Best of the Month, page 62)

ENESCO: Violin Sonata No. 3, in A Minor, Op. 25 (see BLOCH)

FINNEY: Piano Trio No. 2 (see BOLCOM)

RECORDING OF SPECIAL MERIT

FROBERGER: Lamentation Faite sur la Mort Très Dououreuse de Sa Majesté Impériale, Ferdinand III. Suites: No. 1, in E Minor; No. 2, in A Major; No. 3, in G Minor; No. 4, in A Minor; No. 5, in D Major; No. 6, in C Major. Kenneth Gilbert (harp-sichord). ARCHIV 2533 419 \$10.98.

Performance: **Noble**
Recording: **Great**

Synthesizing elements from Frescobaldi and the French clavecinists, Johann Jacob

"Polk offers an uncommon amount of superior sound at a moderate price." Stereo Review

"Polks are vastly superior to the competition." Musician Magazine

The Experts Agree!

Polk speakers will give you the highest quality sound and the most listening pleasure for your money. They will deliver amazingly life-like, boxless, three dimensional sound with breathtaking clarity and detail in your listening room from your hifi system.

Polk speakers are affordably priced from about \$100 to \$500 each. Simply use the free reader service card to receive detailed information, copies of the expert's rave reviews and the location nearest you for auditioning the **Incredible, Affordable Polks.** Polk Audio, Inc. 1915 Annapolis Rd., Baltimore, MD. 21230



Polk high technology and 100% quality control ensure better sound for you.

The Polk Audio Monitor Series



Froberger forged a highly individual harpsichord style noted both for its dignity and for its profound feeling. Complex in detail and intricate in ornamentation, the music is difficult to hold together and to project in performance. No such problems, however, seem to bother Kenneth Gilbert, who has mastered the style and projects these suites in all their autumnal glow.

Thanks to Howard Schott's new edition (his jacket notes here are exemplary), the dances have been returned to their original order in the suites, with the gigue second and the sarabande at the end. The effect is profound, for now the pieces climax in the noblest of the dance forms, one that sums up the essence of Froberger's art. Froberger's style has long puzzled many musicians, but this revised order of movements together with Gilbert's remarkable performances dispels any doubts about the style or the quality of Froberger's writing. He can now be heard for what he is: one of the greatest harpsichord composers of the seventeenth century. S.L.

GLAZUNOV: *The Kremlin, Op. 30; Stenka Razin, Op. 13; In Memory of Gogol, Op. 87.* Bamberg Symphony Orchestra, Aldo Ceccato cond. ARABESQUE 8091 \$7.98, © 9091 \$7.98.

Performance: **Very good**

Recording: **A bit too reverberant**

Among the best records of an earlier Arabesque release was an Aldo Ceccato album of Glinka with the Bamberg Symphony Orchestra that featured the little-known and hitherto unrecorded (in complete form) *Prince Kholmky* incidental music. Now we find Ceccato offering us "the unknown Glazunov," the *Stenka Razin* symphonic poem being, to my knowledge, the only previously recorded item on this disc. Actually, *Stenka Razin*, largely a working over of *The Song of the Volga Boatmen*, is the least interesting of the three works, and I must confess also that the three tableaux that make up *The Kremlin* strike me as hand-me-down Rimsky-Korsakov. The short symphonic prologue *In Memory of Gogol* is something else again, though, vital and original with some striking gestural music that looks forward in a way to Janáček. The notes are not very informative about the piece or its background, but the 1909 date suggests that it was written in honor of the centenary of the birth of the great Russian writer. The performances are good and do ample justice to Glazunov's post-Lisztian orchestral style, but some of the finer details of the music tend to get lost in the rather reverberant recording ambiance. D.H.

HANDEL: *Concerti Grossi, Op. 3. Concerto Grosso in C Major ("Alexander's Feast")*. Deutsche Bachsolisten, Helmut Winschermann cond. ARABESQUE 8089-2 two discs \$15.98, © 9089 \$15.98.

Performance: **Festive**

Recording: **Lucid**

The typical Baroque concerto grosso was usually in three movements and scored for a set number of soloists throughout. Not so with Handel's: his concertos range from two to six movements and include everything from French overtures to fugues to all manner of dances. As for the soloists in his de-

El Virtuoso Supremo!



MORENO TORROBA
HOMENAJE A LA SEGUIDILLA
CASTELNUOVO-TEDESCO
GUITAR CONCERTO IN D, OP. 99

ANGEL ROMERO
FEDERICO MORENO TORROBA
conducting the English Chamber Orchestra

DIGITAL



DS-37880

NEW! **R&C5 PLUS™**

**CLEANS RECORDS
ELIMINATES STATIC
REDUCES
NOISE**



THE ALL-IN-ONE CLEANER

Terminal Drive, Plainview,
New York 11803

STANTON
THE CHOICE OF THE PROFESSIONALS

We're Blowing 'Em Away!

Because we built a better speaker, people are switching to Acoustat.

Here's why:

“After listening for weeks to other speakers in stores (Klipschorn's, Dahlquist's, Infinity's, ADS's, etc...) none compare for clarity and realistic sound. Outstanding!”

Jeffrey W. Baker
Dover, DE

“I've had KLH-9's, Magneplanars, Quad's... but Acoustat's Model Three puts all the 'bests' together.”

J. Brooks Breeden
Columbus, OH

“Compared to Audiostatic, Snell, Rogers, B&W 801 and others... Acoustat is cleaner, faster, flatter and more musical...”

George M. Walsh
Yorktown Hgts, NY

“Best speakers I've heard anywhere near this price. A bargain. A super product!”

Stephen P. Hopkins
Indianapolis, IN



ACOUSTAT

BRINGING MUSIC TO LIFE

3101 Southwest First Terrace
Fort Lauderdale, Florida 33315
Phone: 305/462-6700

Toll Free: 1-800-327-3136

Dimensions of Model shown: 59" x 28" x 3 1/2"



Raimond Fleischer, Volker Sprang, Eberhard Klemmstein, and Thomas Kanitz

The Reger Quartet

WE seem to be in the middle of some sort of salon-music revival. The latest example to come my way is the Reger String Quartet's excellent Turnabout album "Les Vendredis" ("The Fridays"). The title refers to the musical soirées held every Friday during the season in the last two decades of the last century at the St. Petersburg home of the Russian music publisher Mitrofan Petrovich Beliaev (more familiarly transliterated as Belaieff). Beliaev played the viola, and his amateur string quartet was the centerpiece of these evenings (at least until the sumptuous midnight dinner was served). But their principal significance was the presence of the leading lights of Russian music—not only in attendance but often represented by works specially written for the occasion. Many of the pieces were eventually published by Beliaev under the title "Les Vendredis," and that is what the Reger Quartet has recorded here, along with Glazounov's *Novelletes*, Op. 15, of the same time and spirit.

Beliaev's Friday soirées were different from other salons in that they were fundamentally musical rather than social events and were patronized almost exclusively by serious musicians and students. Nevertheless, the music composed for them has a distinct salon flavor modified only by a somewhat academic, late-Romantic neo-Classicism. *Les Vendredis* were musically conservative, dominated by the academician Glazounov and the by-then professorial Rimsky-Korsakov and well insulated from the cold winds of change blowing outside. Yet the ideals and music of this circle in-

fluenced Stravinsky, not only (as is pointed out in Malcolm Hamrick Brown's excellent album notes) through its neo-Classicism but also in its salon tastes. Works such as Stravinsky's *Serenade in La* are perfect modernizations of salon Classicism, and there are places in this set where only a few "wrong notes" are needed to arrive at the style of Stravinsky's *Apollo*.

THE profusion of material on these two discs, variations in some of the transliterations from the Russian, the two separate listings of the selections in different orders, and, worst of all, a label mistake all serve to make the contents a bit tricky to sort out. But the performances and recording are excellent, and there is a great deal of old-world, *ancien régime* elegance throughout. The best pieces are a wonderful Borodin scherzo and one by Nikolai Vasilievich Sokolov that also belongs to the surging mainstream of the Russian national school. The rest is minor music, but it is presented with skill and charm.

—Eric Salzman

REGER STRING QUARTET: *Les Vendredis*. Glazounov: *Novelletes*, Op. 15; *Courante*; *Prelude and Fugue*. Sokolov/Glazounov/Liadov: *Polka*, *Les Vendredis*. Artsibushchev: *Serenade*. Liadov: *Sarabande*; *Mazurka*; *Fuga*. Borodin: *Scherzo*. Rimsky-Korsakov: *Allegro*. Blumenfeld: *Sarabande*. Sokolov: *Scherzo*; *Canon*; *Mazurka*. Wihtol: *Menuet*. Kopylov: *Polka*. Maximilien d'Osten-Sacken: *Berceuse*. Reger String Quartet. TURNABOUT 2-TVC 37015 two discs \$11.96.

lightful Op. 3, one never knows which instrument will pop out of the ensemble to dazzle us with its virtuosity. In the first of these concertos, for instance, two solo oboes start the festivities, then a violin joins in for a dialogue with one oboe or the other—never

with both, as one might be led to expect. In the second movement two recorders emerge from nowhere. The oboes and violin return for the final movement, but suddenly two bassoons put on a clown act and are never heard from again. And so it goes through-

out until we are startled by an organ solo in the final movement of the last concerto. (This record includes the six concertos of Op. 3, with two different versions of Concerto No. 4, as well as *Alexander's Feast*.)

The festive quality of the music is beautifully caught by the Deutsche Bachsolisten as they vie for the spotlight. Although crisp articulation and constant détaché bowings bring a contagious bounce to the ubiquitous spun-out sequences, the style does some violence to the long lyric lines of the slow movements. Nonetheless, a fine Handelian romp is had by all, and the album is well worth acquiring. *S.L.*

HONEGGER: *Concerto da Camera for Flute, English Horn, and String Orchestra*. **R. STRAUSS:** *Duet-Concertino for Clarinet, Bassoon, String Orchestra, and Harp*. David Shostac (flute); Allan Vogel (English horn); David Shifrin (clarinet); Kenneth Munday (bassoon); Los Angeles Chamber Orchestra, Gerard Schwarz cond. NONE-SUCH ● D-79018 \$11.98, © D1-79018 \$11.98.

Performance: **First-rate**
Recording: **Excellent**

More than thirty years ago Capitol issued an early microgroove coupling of these two titles performed by the same orchestra as the one here (or at least one with the same name) conducted by Harold Byrns. I can't recall another recording of either work since then. It is not too surprising that they now reappear together, for the two works, introduced in Switzerland within thirteen months of each other, obviously have a great deal in common. Neither is very consequential, perhaps, but both are pleasant enough. The *Duet-Concertino*, completed in December 1947, less than two years before Strauss' death, is an overtly autumnal piece in much the same vein as the Oboe Concerto completed a year or so earlier and by no means less appealing than that more frequently performed work. The somewhat slighter *Concerto da Camera*, while not a valedictory gesture on Honegger's part, is cast in a similarly gentle, nostalgic mood and seems to reminisce on the lovely *Pastorale d'Été* of 1920 in the first two of its three movements. Both performances on the new disc strike me as quite sympathetic, with first-rate work by all four soloists—who sound, however, perhaps just a bit more forward than would be ideal. *R.F.*

MAHLER: *Symphony No. 5, in C-sharp Minor; Five Rückert Songs*. Hanna Schwarz (contralto); Chicago Symphony Orchestra, Claudio Abbado cond. DEUTSCHE GRAMMOPHON 2707 128 two discs \$21.96, © 3370 040 \$21.96.

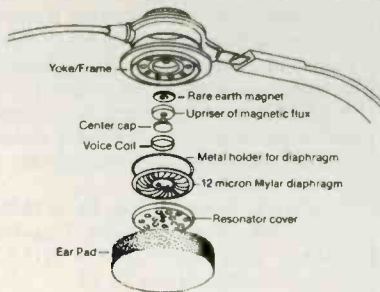
Performance: **Lyrical**
Recording: **Very good**

The Mahler Fifth, with its tough and gnarly polyphonic textures relieved only by the tender adagietto, presents such a conductor as Claudio Abbado with a special challenge: integrating its essence with his own essentially Italianate lyrical temperament. For those who find most of the Mahler Fifth a bit too much in terms of textural density, Abbado's rather *sfumato* lyrical treatment will have a special appeal. For me it does

Before now, all ultra lightweight headphones rolled off at 150-200 Hz.

Not so the Mura RED SET VII.

In addition to using samarium cobalt magnets, RED SET VII incorporates unique magnetic uprisers to increase the already high



magnetic flux density in the voice coil gap. The result is superb low frequency response, with 33 Hz response, only 3 dB down from the 1,000 Hz reference point. Overall frequency response is 20-20,000 Hz (30-20,000 Hz at the 6 dB point down from the 1 KHz reference level). Sensitivity is 98 dB at 1 milliwatt.

A 4 ft. cord with a 3.5mm stereo plug and an included 8' extension cord with a 1/4" stereo plug makes RED SET VII ideal for both portable and home hi fi listening.

Mura RED SET VII... the one lightweight that gives you all the bass the music has to offer.

MURA®
You'll be hearing from us.™

A lightweight with full bass response



RED SET and Mura are registered trademarks of Mura Corp. ©1982 Mura Corporation, Westbury, N.Y. 11590

CIRCLE NO. 28 ON READER SERVICE CARD

DON'T BLAME YOUR STEREO!

Your stereo system may be a marvel of advanced technology. But can you say the same thing about the records and tapes you subject it to?

You can if you own Original Master Recordings. They are state-of-the-art Lp's and cassettes that dramatically improve the performance of your sound system.

Each one is a hand-crafted Limited Edition, exclusively transferred by Mobile Fidelity Sound Lab from the original recording studio master tapes of your favorite artists. Every note and nuance is faithfully

reproduced exactly as they were first recorded.

The natural sound quality will amaze you. The complete freedom from surface noises will soothe you as never before.

Original Master Recordings span the musical spectrum, from The Beatles, Chicago Symphony and George Benson to Pat Benatar, Liza Minnelli and Judy Garland. More than 60 different Limited Edition titles, available now at discriminating audio and record stores.



mobile fidelity
SOUND LAB
a division of MFL, INC.

ORIGINAL MASTER RECORDINGS™

FOR A FREE COPY OF OUR NEW 1982 COLOR CATALOGUE PLUS EXCLUSIVE INFORMATION ON UPCOMING NEW RELEASES,™ CIRCLE THE READER RESPONSE CARD AT THE BACK OF THIS MAGAZINE OR WRITE: Mobile Fidelity Sound Lab, Dept. SR4, P.O. Box 919, Chatsworth, CA 91311

DIRECT HOT LINE



1-800-327-0596 Ext. 2

FOR PRICES ON SONY,
JVC, PANASONIC, RCA &
other famous Mfgs.

COLOR TV'S



SONY COLOR TV'S			
SONY KV-4000 (17" screen)	\$ 449	SONY KV-1813 (19" screen)	\$ 489
SONY KV-1217 (12" screen)	\$ 389	SONY KV-1948R (19" remote)	\$ 589
SONY KV-1221R (12" remote)	\$ 469	SONY KV-1949RS (19" remote)	\$ 649
SONY KV-1515 (15" screen)	\$ 519	SONY KV-2149RS (21" remote)	\$ 739
SONY KV-1715R (17" remote)	\$ 519	SONY KV-2647RS (26" remote)	\$ 995
SONY KV-1748R (17" remote)	\$ 539	SONY KV-2848RS (28" remote)	\$1150

BIG SCREEN TV'S

RCA PRR-100 (50" screen)	\$2395	SONY KP-5020 (50" screen)	\$2195
PANASONIC CT-1450 (45" screen)	\$2695	SONY KP-7202 (72" screen)	\$2595
MTSUSHISHI S20UJ (50" screen)	\$3395	SONY KP-9040 (90" screen)	\$2995
MTSUSHISHI S20UD (W/ Doors)	\$3695	ADVENT VR-125 (50" built-in)	\$2295
QUASAR VR-4600 (W/ Doors)	\$2795	ADVENT VR-225 (72" 2-pack)	\$2295

We also carry the complete line of
PANASONIC, JVC, RCA, SANYO & HITACHI
Call 1-800-327-0596 for lowest prices.



HOME VIDEO RECORDERS

SONY SL-5000 Betamax	\$ 599	PANASONIC PV-1770 VHS Recorder	\$1095
SONY SL-5400 Betamax	\$ 749	SANYO VTC-9100A Beta Recorder	\$ 525
SONY SL-5800 Betamax	\$ 995	RCA VFT-190 VHS Recorder	\$ 595
JVC HR-8700 VHS Recorder	\$ 695	RCA VFT-290 VHS Recorder	\$ 695
JVC HR-7300 VHS Recorder	\$ 745	QUASAR 5019 VHS Recorder	\$ 569
PANASONIC PV-1770 VHS Recorder	\$ 599	QUASAR 5210 VHS Recorder	\$ 695
PANASONIC PV-1370 VHS Recorder	\$ 769	QUASAR 5310 VHS Recorder	\$ 895
PANASONIC PV-1470 VHS Recorder	\$ 849	QUASAR 5610 Wireless Remote	\$1050

VIDEO CAMERAS



SONY HVC-2200 Betamax color	\$995	HITACHI VKC-600 Auto Focus	\$995
PANASONIC PV-2161 1 lens color	\$759	HITACHI GPC-D Color Camera	\$575
PANASONIC PR-801 61 lens color	\$895	RCA CC010 Color Camera	\$695
PANASONIC PV-700 Auto Zoom lens	\$575	RCA CC011 Color Camera	\$995
JVC EX-180 Color video	\$695	QUASAR VR-720 Color Camera	\$649
JVC EX-66 w/ Elec. View	\$675	QUASAR VR-721 Color Camera	\$699

We also have available a complete line of
industrial cameras.

PORTABLE VIDEO RECORDERS

SONY SL-2000 Betamax	\$ 849	HITACHI VT6500A VHS w/ Tuner	\$ 995
SONY TT-2000 Tuner Inter	\$ 795	RCA VFR-170 VHS w/ Tuner	\$ 995
PANASONIC PV-4100 VHS Recorder	\$ 949	ZENITH VR-8000 VHS w/ Tuner	\$1195
PANASONIC PV-435P Tuner Inter	\$ 995	QUASAR VP-5610 VHS Recorder	\$ 695
PANASONIC PV-4510 VHS w/ Tuner	\$ 995	QUASAR VA-530 Tuner Inter	\$ 269
JVC HR-2200 VHS w/ Tuner	\$ 895		

VIDEO TAPES

We carry video tapes by SONY, FUJI, JVC,
MAXELL, MEMOREX, RCA, PANASONIC,
SCOTCH & TDK.
Any L-900 \$19.50 Any L-750 \$12.95
Any L-430 \$14.95 Any T-120 \$12.95

CAR STEREOS

The complete line of SONY SANYO &
SHARP CAR STEREO are available. Call for
lowest prices.

SPECIALS

ATARI CE-2800 Computer game \$139
Most carts available from \$13.95
SONY WALKMAN \$139

We also carry

PANASONIC, AKAI, SHARP, BLAUPUNKT,
HITACHI, ATARI, SANYO, FUJII, BRAUN,
JVC, ADVENT, and much more.

For more information send for a free catalog
and enclose \$2.00 for postage and handling.

Order by phone or by mail, send money or
certified check. Two week delay on personal
checks, when paying by charge include card
number and expiration date. Shipping charges
will be added on to credit card.

Not responsible for typographical errors.
Prices subject to change.

International Wholesalers OF MIAMI, INC.

17866 IPCO ROAD • (N.E. 5th AVE.)
MIAMI, FL 33162

For FREE 192 pg. catalog send \$2.00 for postage
and handling.

Name Seth G. Jakel

Address 25 Westman Drive, NJ
West Orange, NJ

CIRCLE NO. 18 ON READER SERVICE CARD

work well in the finale, but not in the stern
and steely combined funeral march and al-
legro at the beginning.

In the Rückert songs, Hanna Schwarz, an
excellent *comprimaria* contralto in a num-
ber of opera recordings, does not exactly ef-
face memories of Dame Janet Baker's real-
ization of these gem-like masterpieces on
Angel with the late Sir John Barbirolli. I
must say, however, that there is a certain
element of piercing beauty in her renditions
of *Ich Bin der Welt Abhanden Gekommen*
and the climactic *Um Mitternacht*. D.H.

MOZART: *Serenade No. 10, in B-flat Major*
(K. 361). Wind ensemble, Jean-François
Paillard cond. ERATO/RCA STU 71335
\$8.98, © MCE 71335 \$8.98.

Performance: **Stylish**
Recording: **Handsome**

Jean-François Paillard has always been a
reliable Mozartean, stylish in the best sense
and never trivializing the so-called entertain-
ment music. Here he acknowledges the
very considerable stature of the "Gran Par-
tita." He has a lot going for him: splendid
playing by some of France's finest wind
players, a very handsome recording (made
in one of Erato's long-favored "studios," the
Church of Notre-Dame du Liban) in which
the double bass lends just the right sort of
body to the ensemble, and scrupulous re-
gard for the most authentic text. The
French pressings, too, are flawless. What
keeps me from affixing the "Special Merit"
banner here is that tempos in two or three
movements struck me as less than comfort-
able. The sublime Adagio comes off super-
bly, but the penultimate movement, the
Theme and Variations, seems just a bit too
fast in most of its sections to allow the lovely
phrases to breathe, or to afford the desired
contrast with the rollicking final Rondo—
which also seems just short of breathless-
ness. A similar observation might be made
of the opening movement, in which Paillard
may have been concerned with avoiding
"monumentalism" and tumbled into a rather
matter-of-fact presentation. I would not
want to exaggerate any of these fleet tem-
pos as outright flaws; many listeners may
be more comfortable with these speeds than I
was. I know I'll want to hear this record
again, but I would not choose it over De
Waart and the Netherlands Wind Ensem-
ble (Philips 839 734), the Collegium Au-
reum's endearing "original instruments"
version (Quintessence PMC-72125), or the
convincingly monumental and surprisingly
well recorded Klemperer version (Angel
S-36247).

R.F.

RECORDING OF SPECIAL MERIT

MOZART: *String Quartets: No. 14, in G*
Major (K. 387); No. 15, in D Minor (K. 421);
No. 16, in E-flat Major (K. 428); No. 17, in
B-flat Major (K. 458, "Hunt"); No. 18, in A
Major (K. 464); No. 19, in C Major (K. 465,
"Dissonant"). Melos Quartet. DEUTSCHE
GRAMMOPHON 2740 249 three discs
\$32.94.

Performance: **Outstanding**
Recording: **Excellent**

It is good to be reminded of the Stuttgart
foursome's exceptional persuasiveness in
(Continued on page 95)

SANSUI JVC
QUARTZ LOCK STEREO
AM/FM TUNER CASSETTE DECK



TU-S7 209. KD-D2 113.

OVER 100 BRANDS OF HOME
AND CAR STEREO EQUIPMENT

1-800-545-5188

CALL US TOLL FREE

SANTA FE

EXPRESS

P.O. BOX 7578

ALB. N.M. 87194

CIRCLE NO. 34 ON READER SERVICE CARD

BIG SAVINGS

NOW YOU CAN OWN ALL

TOP BRAND

STEREO COMPONENTS AT THE SAME PRICE MANY

DEALERS PAY!

120,000 Customers Coast-to-Coast
CALL TODAY 9 A.M. to 9 P.M.

FOR FULL COLOR BROCHURES OR
PLACE YOUR ORDER FOR

SAME-DAY DELIVERY

COD OR CHARGE CARD

ASK ABOUT OUR "NO-LEMON" GUARANTEE

CALL

1-800-638-8806

OR 1-301-488-9600

OR SEND FOR BROCHURE WITH
LINES AND PRICES AND TIPS
ON BUYING BY MAIL TO...



INTERNATIONAL
HI-FI
DISTRIBUTORS, Inc.
MORAVIA CENTER
INDUSTRIAL PARK
BALTIMORE MARYLAND
21206

CIRCLE NO. 17 ON READER SERVICE CARD

STEREO CORPORATION OF AMERICA

TRY & BEAT OUR PRICES!

OR CALL TOLL-FREE

800-221-0974

AND LET US BEAT ANY PRICE YOU CAN FIND!

RECEIVERS

PIONEER SX-7 \$355
 TECHNICS SA-222 \$205
 MARANTZ SR-7100
 CALL FOR PRICE!

CASSETTE DECKS

TECHNICS RS-M270X \$310
 JVC KD-04 \$215
 AKAI GX-F-71 \$297
 TECHNICS RS-M240X \$205
 MARANTZ SD-2030
 CALL FOR PRICE!

BLANK TAPE

BASF PRO II C90 box 10 \$26
 TOK SAX-C90 box of 10 \$36
 TOK SA-C90 box of 10 \$29
 MAXELL UO-XL2-C90
 box of 12 \$39

WRITE OR CALL FOR LOW PRICES ON SONY & SANSUI

VIDEO

PANA. PV-1270 CALL FOR LAST
 JVC HR-7300 MINUTE
 RCA VFT-650 LOW
 PANA. PK-751 PRICES!

Call Toll-Free!
800-221-0974
 (Ex. N.Y., AK., HI.)
 Monday - Friday
 9Am - 5:30 Pm
 Thurs. til 9Pm
 Sat. 9Am-5Pm EST
 OR CALL
 (212) 253-8888

TURNTABLES

TECHNICS SL-D202 \$104
 TECHNICS SL-DL-1 \$224
 PIONEER PL-7 \$135
 DUAL CS-627Q \$164

CARTRIDGES

SHURE V15-IV \$90
 SHURE M95HE \$32
 SHURE M97HE \$48

PERSONAL STEREO

SONY WALKMAN-1 \$79
 AKAI PM-01 \$129
 AIWA CS-J1 \$159
 PANA. RQ-J6 \$119

CAR STEREO

JENSEN RC-518 \$264
 JENSEN J-1033 pr. \$90
 SANYO FT-590 \$247
 PIONEER UKP-4200 \$133
 PIONEER TS-695 pr. \$88
 PIONEER TS-168 pr. \$73

CALL FOR PRICES ON SONY CAR STEREO!

Use Our Special Night-Owl Line!
 Call Toll-Free!
800-327-1531
 Monday - Friday
 5:30 - 10Pm E.S.T.

Write or call for FREE catalog!

AMERICA'S #1 SOUND CHOICE!

STEREO CORPORATION OF AMERICA

Dept. 104
 1629 Flatbush Avenue
 Brooklyn, New York 11210
 MASTERCARD & VISA ACCEPTED

CIRCLE NO. 39 ON READER SERVICE CARD

the six famous quartets Mozart dedicated to Haydn. These three discs originally came out singly some four or five years ago (K. 387 and 421 on DG 2530 898, K. 428 and 458 on 2530 800, K. 464 and 465 on 2530 981); they asserted their musical and sonic supremacy then, and they have since been the versions to which I return most frequently, with ever deepening pleasure. The performances' high degree of polish never rules out warmth of heart, elegance, and spirit; vigor and sweetness go hand in hand here, together with some exciting dynamic contrasts which are by no means mere show but very much to the point. The recording itself is excellent in terms of balance and richness, allowing Peter Buck's warm-toned cello to be heard to great advantage, though never out of proportion to the whole. "Before God and as an honest man," to adapt Haydn's remark to Mozart's father when he received the dedication of these works, I can think of no other recordings of them, individually or collectively, that are quite as satisfying. They are, of course, no less so in a boxed set than on three separate discs, and it might be felt that the cumulative effect of the six works together in such performances does become a bit more than the sum of even their wonderful parts. R.F.

PINKHAM: Time of Times; Company at the Crèche; Love Can Be Still (see Best of the Month, page 62)

PROKOFIEV: Symphony No. 1, in D Major, Op. 25, "Classical" (see SHOSTAKOVICH)

PUCCHINI: Tosca (see Best of the Month, page 64)

RIMSKY-KORSAKOV: Capriccio Espagnol. DEBUSSY: Iberia. TURINA: Orgia. Dallas Symphony Orchestra, Eduardo Mata cond. TELARC □ DG-10055 \$17.98.

Performance: **Good**
 Recording: **Sensational**

Spanish music by a Russian, a Frenchman and a Spaniard make up this program of familiar spectaculars, the main justification for which is how gorgeous they all sound in the Soundstream digital recording. Rimsky-Korsakov's *Capriccio Espagnol* was originally planned as a "Fantasy for Violin and Orchestra on Spanish Themes," and it retains some of the feeling of a violin concerto. With its shifting rhythms, alluring melodies, and colorful orchestration, it is still a rouser. Debussy's *Iberia* (and nothing could be more Iberian, though the composer spent only about an hour on Spanish soil in his life) is a subtler work, yet its brilliant musical brush strokes manage to evoke the sights and sounds of a Spanish street, the atmosphere of an Andalusian night, the color and bustle of a holiday procession. Turina's music, some of it unaccountably neglected on records of late, is a more direct kind of tone painting, but nobody could convey the atmosphere of his beloved Seville more seductively, and it is good to hear at least one of his *Danzas Fantasticas* on this superbly engineered program. The sound, in fact, is so full-bodied that I can forgive Eduardo Mata some of his hasty tempos in *Iberia* (though the final procession is exhib-

(Continued on page 97)

CALL BY PHONE
ORDER TOLL FREE
800-638-0935
 We will meet or beat any price!

HI-FI BUYS

JENSEN CABE IN DASH WITH RADIO	JVC	PORTABLES w/headphone
R302 \$89	CONCORD	SONY SRP40 \$75
R435 \$155	AIWA	SONY Walkman WM1 \$135
R408 \$197	CONCORD	MURA HISTEPPIER \$39
R512 \$236	AIWA	AFWA HSP1 \$99
	CONCORD	AFWA CS11 \$109
	AIWA	ELF 90L0 \$179
SPEAKERS Priced Per Pair	KENWOOD	HOME AUDIO
J1032 829 Triax II \$82	TDK	PIONEER SE2700 Rec. \$218
J1077 829 Coax II \$82	BASF	TECHNICS SA222 Rec. \$205
J1086 829 Triax \$82	JENSEN	SONY STR V34 Rec. \$289
J1089 829 Coax \$82	MURA	PIONEER S28 Rec. \$259
J1042 5/8 Coax II \$54	PHENEXER CABE IN DASH WITH RADIO	PIONEER PL7 Triax \$119
J1174 5/8 Triax \$62	EPH500 \$173	PIONEER CTPR Deck \$308
	EPH500 \$155	DUAL 1284 Changer \$109
	EPH500 \$170	DUAL 1284 Changer \$173
	EPH500 \$108	VIDEO & VIDEO TAPES
	EPH500 \$114	ATARI
	AD 30 \$86	ATARI
	AD 50 \$135	maxell
	AD 980 \$105	maxell
	BLAUPUNKT	SONY
CR301 \$479	CR301 \$229	SONY L500 Tape \$12
CR301 \$239	CR310 \$289	SONY L750 Tape \$16
SEA-00 \$107	SEA-00 \$180	FURU T120 Tape \$15
		TDE T120 Tape \$15
		CARTRIDGES HEADPHONES
		SHURE V15 IV \$99
		SHURE M95HE \$32
		SHURE M97HE \$48
		SHURE M91ED \$119
		AUDIO TECH AT15SLC \$109
		AUDIO TECH AT15MFC \$65
		AUDIO TECH AT7H \$69
		AUDIO TECH AT7H3 \$39
		MURA RED SET \$25
		SEMPERSENER HD420 \$53
		SEMPERSENER HD416 \$49
		SEMPERSENER HD400 \$87
		SONY MDR 707 \$49
		SONY MDR IT \$24
		SONY MDR 2 \$29
		SONY MDR 6L15 \$32
		SONY MDR E33 \$29

All orders shipped in factory sealed cartons with full manufacturers warranty. Visa MasterCard and C.O.D. orders accepted. Shipping charges are 4% or \$3 min. Call for exact quotes and availability. Prices subject to change.

Call (301) 434-5573 - Customer Service
 To Order call 800-638-0935

1362 HOLTEN LANE
 LANGLEY PARK, MD
 ZIP CODE 20783
 (301) 434-5573

CIRCLE NO. 15 ON READER SERVICE CARD

80 PAGE RECORD & TAPE CATALOG

ALSO, VIDEO CATALOG VHS/Beta



- LISTS THOUSANDS OF RECORDS & TAPES
- LOW LOW PRICES FAST SERVICE
- CLASSICAL OPERA POP JAZZ C&W
- AND NOW VIDEO CASSETTES (IN SEPARATE CATALOG)

International Record & Tape Club Dept. SR-700
 315 WEST 36th St. NYC NY 10018

PLEASE SEND ME YOUR SPECIAL 80-PAGE RECORD & TAPE CATALOG!

PLEASE ALSO SEND ME YOUR VIDEO CASSETTE CATALOG!

I'VE ENCLOSED \$1. FOR EACH CATALOGUE CHECKED — REFUNDABLE IN EACH CASE WITH MY FIRST ORDER.

NAME _____

ADDRESS _____

CITY _____

STATE _____ ZIP _____

WILLEM MENGELBERG:
the old romantic style

Tchaikovsky: Mini-festival on Disc



TCHAIKOVSKY'S orchestral works are ever popular among record producers and the buying public alike, so I am not surprised to find myself reviewing a half-dozen new and reissued Tchaikovsky recordings this month. The eight works included on these discs run the gamut of performance styles and recording approaches. Curiously, one of the most satisfying both musically and technically is also the oldest, Willem Mengelberg's 1928 recording of the Fifth Symphony with the Amsterdam Concertgebouw, reissued in a two-disc Pearl set together with his 1929 recording of the Fourth Symphony and another from 1928 of the *Valse* movement of the *Serenade in C Major*.

The controversial Mengelberg and his Concertgebouw Orchestra were at their peak in the late Twenties when these recordings were made. I grew up with these performances on Columbia Royal Blue records back in the early Thirties, and it was fascinating to rehear them with fifty years of experience intervening. I found the first movement and the pizzicato scherzo of the Fourth and *all* of the Fifth (despite the extensive cuts in the finale) as exciting as I remembered them. The serenade movement can only be described as deliciously insinuating. The slow movement and the finale of the Fourth are as willful as can be in terms of freewheeling phrasing, but you can still sense that Mengelberg's control over his players was as absolute as that enjoyed by Stokowski in Philadelphia during the same period. If you want to hear the older (pre-Toscanini), romantic style of orchestral performance as it really was, here is your chance.

The sound quality of these British discs is, however, distressingly uneven. The transfers of the Fifth Symphony and the serenade movement—both done in, of all places, Cape Town, South Africa—are triumphs, superbly capturing the sound of the 1928 Concertgebouw as I heard it on the old 78s. These were magnificent recordings in their day, and the ambience has been beautifully preserved here. But the Fourth Symphony, an even better original recording, was ama-

teurishly botched in the transfer. The mid-range is pre-emphasized and the bass shorn away, resulting in a painfully anemic sound.

Turning to the new recordings, we find Eugene Ormandy and the Philadelphia Orchestra completing their Tchaikovsky symphony cycle for RCA with the most balletic one, the five-movement Third, in D Major, called the *Polish* by virtue of its polonaise finale. This is not a work Ormandy has played a hundred times before, and thus, as one might expect, he and his players come through with a realization notable for its beauty, lyrical refinement, and essential vitality. I would have liked only a bit more *élan* in the allegro main body of the opening movement. I would guess that the recording locale was the Scottish Rite Cathedral favored by RCA. Though it was analog mastered, the sound quality compares favorably with many of the best digitally mastered recordings that have come my way. Only Lorin Maazel's recording with the Vienna Philharmonic on London offers a superior reading of the work, but that disc has a low-frequency background hum.

HAROLD LAWRENCE was my successor as classical producer for Mercury, and there are more than a few items from his tenure there of which I have said, "I wish I had done that!" So I expected a great deal of the new digitally mastered Delos recording of the Tchaikovsky Fifth (surprisingly, the first for this work) with Ormandy and the Philadelphia produced under his direction. Alas, this release only proves, as have a number of Angel discs, that the "Old Met" opera house in Philadelphia is a less than ideal recording locale that tends to dampen the glow of the Philadelphia Orchestra strings in their upper reaches. The sound here is clean, a bit closely miked, but it lacks sparkle. The same, unfortunately, goes for the Ormandy reading—another case of going to the well too often. Everything is in place, and there is some lovely work by the first-chair players, but the zest and lilt of the Third Symphony reading are lacking.

With Lorin Maazel and the Cleveland Orchestra in two thrice-familiar works, *Romeo and Juliet* and the *Nutcracker Suite*, Telarc has repeated the miracle of its 1978 Mussorgsky/Ravel *Pictures at an Exhibition*, also digitally recorded in the same locale, Cleveland's Masonic Auditorium. Quite simply, for my taste, this is how an orchestra should sound on records. Rather than wasting precious space trying to describe it, I simply advise you to listen for yourself. Musically, the *Romeo and Juliet* performance also has everything one could want—snap, dash, and drama. Maazel's *Nutcracker* is a mite too "straight" for my taste, but the sound is exquisite.

Varèse Sarabande has released a disc of the Tchaikovsky *Pathétique* with Enrique Bátiz conducting the London Symphony Orchestra in Watford Town Hall. The digitally mastered sound has something of the character of Telarc's Cleveland recording, but it is exaggerated to the point that the long decay time obscures fine details, a problem exacerbated by additional reverberation on the timpani. I regret to add that the forty-year-old, Mexico-born conductor simply loses control of this prevailingly hectic performance, and in the editing even an egregious trombone clinker at the first climax of the 5/4 movement was allowed to pass.

I DON'T expect that many readers will have either the desire or the opportunity for comparative listening to all of these discs, but for me they offered a splendid object lesson in the importance of good luck in the choice of a recording locale combined with intelligent and minimally complicated microphone placement. That is certainly, if unexpectedly, what the 1928 Amsterdam Concertgebouw recording of the Fifth Symphony and the 1981 Cleveland recording of *Romeo and Juliet* have in common.

—David Hall

TCHAIKOVSKY: *Symphony No. 4, in F Minor, Op. 36; Symphony No. 5, in E Minor, Op. 64; Serenade for Strings in C Major, Op. 48, Second Movement (Valse)*. Amsterdam Concertgebouw Orchestra, Willem Mengelberg cond. PEARL © GEMM 212/3 two discs \$21.96 (from Qualiton Records, Ltd., 39-28 Crescent Street, Long Island City, N.Y. 11101).

TCHAIKOVSKY: *Symphony No. 3, in D Major, Op. 29 ("Polish")*. Philadelphia Orchestra, Eugene Ormandy cond. RCA ARL1-4121 \$9.98, © ARK1-4121 \$9.98.

TCHAIKOVSKY: *Symphony No. 5, in E Minor, Op. 64*. Philadelphia Orchestra, Eugene Ormandy cond. DELOS ● DMS 3015 \$17.98.

TCHAIKOVSKY: *Romeo and Juliet, Overture-Fantasy; The Nutcracker, Suite, Op. 71a*. Cleveland Orchestra, Lorin Maazel cond. TELARC ● DG-10068 \$17.98.

TCHAIKOVSKY: *Symphony No. 6, in B Minor, Op. 74 ("Pathétique")*. London Symphony Orchestra, Enrique Bátiz cond. VARÈSE SARABANDE ● VCDM 1000.140 \$15.

arating) and a tendency to overemphasize musical color at the expense of elegance.

P.K.

RECORDING OF SPECIAL MERIT

D. SCARLATTI: Harpsichord Sonatas (K. 124, 99, 201, 87, 46, 95, 204a, 490, 491, 492, 520, 521, 513). Trevor Pinnock (harpsichord). VANGUARD VSD-71250 \$8.98.

Performance: **Fabulous**
Recording: **Excellent**

Domenico Scarlatti was one of the first composers to use contrasting moods within a single movement. Thus, one of his sonatas might pit lyricism against militant dissonance or elements of Spanish dance against fiery passage work. Many harpsichordists fail to project these contrasts, and many others exaggerate them by means of registration. Trevor Pinnock is a master of mood and gesture. Realizing that Scarlatti's harpsichord probably had only one manual and limited registrational possibilities, Pinnock achieves contrast by purely musical means: rhythm, articulation, and pacing. Although the sonority of his harpsichord remains essentially the same throughout the record, every nuance of mood is boldly projected through gesture.

Pinnock has always had a brilliant technique, and sometimes he has displayed it for its own sake. Scarlatti's music invites such display, but Pinnock has not succumbed to the temptation here. In these sonatas he achieves brilliance through clarity and precision, not speed, a sign of mature musicianship that puts him among the finest harpsichord players today.

S.L.

RECORDING OF SPECIAL MERIT

SCHUMANN: Spanish Love Songs, Op. 138. Kathleen Battle (soprano); D'Anna Fortunato (mezzo-soprano); John Aler (tenor); Dominic Cossa (baritone); Charles Wadsworth, Richard Goode (piano). *Andante and Variations for Two Pianos, Two Cellos, and Horn.* Richard Goode, Charles Wadsworth (pianos); Leslie Parnas, Laurence Lesser (cellos); John Barrows (French horn). MUSICMASTERS MM 20007 \$8.98.

Performance: **Very good**
Recording: **Very good**

This is an interesting combination of works by Robert Schumann using the piano duo for underpinning. Although the *Andante and Variations* is better known in its revised form for two pianos only, I am inclined to agree with annotator Nancy Hager that the original version is "far superior." Its melancholy introduction and logically constructed ending provide a very effective frame for the piece, and the horn adds an unexpected rustic touch in one of the variations, creating a welcome contrast absent in the abbreviated two-piano version.

The *Spanish Love Songs (Spanische Liebeslieder)* cycle derives from a collection translated by Emanuel Geibel that was also the source for the *Spanish Song Book* of Hugo Wolf some forty years later. Schumann attempted to add some touches of local color—*bolero* tempo in the piano prelude, guitar-like accompaniment for one of the songs—but the style remains unmistak-



SAVE • MONEY • TIME • FREIGHT ON NAME BRANDS

AKAI CASSETTE DECKS

MODEL GXF-35 GX HEAD DECK \$ TOO LOW
MODEL GX-F80 SOLENOID CASS DECK TO SHOW

ADC SOUNDSHAPE EQUALIZERS

MODEL SS-110 IC NEW EQUALIZER • \$150.00
MODEL SS-2 IC - 12 BAND EQ \$217.00
MODEL SS-3 IC - TOP OF THE LINE 329.00

B•I•C SPECIALS

MODEL TFR-200 TOWER LOUDSPEAKER \$ 90.00
MODEL TFR-400 TOWER LOUDSPEAKER 150.00
DUAL TURNTABLES - LOW MASS UNITS!

MODEL 506 SEMI-AUTO BELT DRIVE \$ 99.00
MODEL 606-55 DD TABLE W/CART. • WRITE
WRITE OR CALL FOR ALL OTHER DUALS!!!!!!

JVC ELECTRONICS - DECKS - ETC.

MODEL DD-5 NEW DECK W/ Dolby B SWRITE
LA-31 NEW TURNTABLE BARGAIN ! CALL!

KENWOOD DEALS - WRITE FOR OTHER MODELS!

KR-6050 SUPER RECEIVER DEAL ... \$269.00
KX-2060 TOP CASSETTE DECK DEAL • 410.00

MARANTZ SPECIALS!!

SR-6000 SUPER RECEIVER DEAL ... \$350.00
SD-6000 TOP CASSETTE DECK 340.00
SD-8000 PROGRAMABLE CASSETTE • 425.00

PIONEER DEALS

SX-7 NEW DIGITAL RECEIVER \$341.00
SX-3700 SUPER RECEIVER DEAL..... \$219.00
HPM-500 LOUDSPEAKER SYSTEM CALL!!!

SANSUI ELECTRONIX

3900Z DIGITAL RECEIVER DEAL \$WRITE
8900Z-DB RECEIVER W/ DOLBYNR .. WRITE

SONY SUPERDEALS!!!

STR-V55 RECEIVER CLOSEOUT! \$329.00
RSX-65 TURNTABLE CLOSEOUT ! ... 254.00
WRITE OR CALL FOR NEW 1982 MODELS AND \$

TEAC CASSETTE DECK DEALS!!

MODEL CX-400 SUPERDEAL CASSETTE 199.00
MODEL A-770 3 HEAD DOLBY® NR • 260.00
MODEL V-3RX NEW DBX® RECORDER • 305.00

TECHNICS ELECTRONICS

MODEL RSM-240X DBX CASSETTE DK. 232.00
RSM-260 NEW 3 HEAD CASSETTE DK. 237.00
SLB-101 NEW BELT TURNTABLE 71.00
SLD-202 SEMI AUTOMATIC TABLE • 109.50
SEE A BETTER PRICE ? LET US KNOW !!!!!!!

CASSETTE TAPE

SONY SHF-90 STANDARD BIAS TAPE.... \$26.00/10
SONY FHF-90 HIGH BIAS TAPE 27.00/10
SONY FER-90 HIGH BIAS PREMIUM 28.00/10
TKK HA-C90 METAL CASSETTE TAPE ... \$48.50/10
TKK SAX-C-90 NEW PREMIUM TAPE 36.00/10
TKK OD-C-90 OPTIMUM STD. BIAS 30.00/10
TKK SA-C90 SUPER AVALIN TAPE 29.50/10
TKK C-90AD NEW AUDA TAPE 22.00/10
BASF PERFORMANCE C-90 QUALITY TAPE \$18.00/10
BASF PRO II OR III C-90 SPECIFY •• 26.00/10
MAXELL C-90 LN LOW NOISE TAPE ... \$23.50/12
MAXELL C-60UD ULTRA DYNAMIC 23.00/12
MAXELL C-90UD ULTRA DYNAMIC 29.50/12
MAXELL UD-XL-C90 TYPE I OR II 29.50/12
MAXELL UD-XL C-90 TYPE I OR II 39.50/12
SCOTCH C-90 MASTER TYPE 2 OR 3 ... 31.50/10

REFL TO REFL TAPE

TTK LX-35-90 NEW 7IN. \$80.00/10
TTK LX-35-180M NEW 10 1/2 IN 170.00/10
MAXELL UD-35-90 ULTRA DYNAMIC 7" 57.50/10
MAXELL UD-35-180 SAME ON 10 1/2" 153.00/10
MAXELL UD-XL-35-90R RACKDATED XL 89.50/10
MAXELL UD-XL-180R SAME ON 10 1/2 198.50/10
SCOTCH 207R-90 POLY-RESTRAK ... 55.00/10
SCOTCH 207 R-180 10 1/2 IN 170.00/10

VIDEO TAPE

FUJI L-500 BETA TYPE \$110.00/10
FUJI L-750 BETA TYPE 145.00/10
SCOTCH T-120 VIS TYPE 140.00/10

AUDIO TECHNICA CARTS.

MODEL 155-LC \$105.00
MODEL 140-LC 65.00
MODEL 125-LC 44.00

SHURE CARTRIDGES

V-15 TYPE 4 WRITE! 110.00
V-15 TYPE 3HE 70.00
M-97 HE 48.00
SHURE 9096FD \$22 WITH TURNTABLE PURCHASE !!!

AUTOMOTIVE STEREO

PIONEER KP-2100 ELECTRONIC READOUT \$WRITE!
PIONEER KP-8500 AM-FM CASSETTE ... 140.00
TS-895 6x9 3-WAY SRK. SYSTEMS... 82.00
TS-896 6x9 2-WAY SRK. SYSTEMS... 64.00
WRITE FOR ALL PIONEER AUTOMOTIVE PRICES !!!!!
JENSEN R-405 AM-FM IN DASH CASS. •• \$188.00
JENSEN J-1033 6x9 TRIAX® II SRKRS 79.00
JENSEN J-1037 6x9 CO-AX II® SRKRS 60.00
WRITE OR CALL FOR OTHERS INCLUDING SONY!!!!!!

HEADPHONES

KOES MODEL HV-X STEREOHEADPHONES \$41.50
KOES PRO-4X NEW 2-WAY SYSTEM 49.50
SENNHEISER HD-224 LIGHTWEIGHT 81.00
SENNHEISER HD-414 HEADPHONES 45.00
SONY MDR-50T NEW SUPERHEADPHONES 33.00



Phone Now
(312)
664-0020
TOLL FREE
(800)
621-8042



12 E. Delaware Pl., Chicago 60611

—send for free catalog—

Name _____
Address _____
City _____
State _____ Zip _____

ADCOM® GFA-2. POWER- FULL VALUE.



You say you can't afford a really good stereo power amplifier—One with 100 watts of power, less than 0.05% THD and 0.01% IM distortion? You don't have the money for an amplifier with individual power supplies and associated circuitry for complete power consistency in each channel?

You think an amp with a double-differential FET front end for low noise and extreme stability is too expensive?

You feel an amplifier with auto-reset multistage protection circuitry to eliminate turn-on and off transients, protect against overheating and DC leakage, as well as excessive clipping, is out of your reach? If you think all of this sounds extravagant, you haven't heard about the GFA-2 Stereo Power Amplifier from Adcom.

For under \$360, it gives you all the features, quality, performance and reliability of the much more expensive brands. *Amazing!*

Because at Adcom, we believe that first class doesn't have to mean a high price.

Call or write for the name of an Adcom dealer near you and hear our quality line of electronics.

*RMS, 20Hz to 20kHz, both channels driven into 8 ohms.
† All prices stated are manufacturer's suggested retail prices.

ADCOM®

9 Jules Lane, New Brunswick, NJ 08901, USA
(201) 828-8590

©1982 ADCOM

CIRCLE NO. 3 ON READER SERVICE CARD

ably his own. There are five solo songs, two duets, and two quartets. All are charming; *Flutenreicher Ebro*, the one with the simulated guitar accompaniment, is irresistible. I have only praise for all the performers, with special compliments for Kathleen Battle. Texts are provided. *G.J.*

SCRIABIN: *Symphony No. 3, in C Minor, Op. 43 ("The Divine Poem")*. Warsaw Philharmonic Orchestra, Jerzy Semkow cond. STOLAT SZM 0118 \$5.98.

Performance: **Exuberant**
Recording: **Handsomely spacious**

Though Scriabin's *Divine Poem* dates from 1905, two years after the Fourth Piano Sonata, this fifty-minute work in three uninterrupted movements exhibits none of the highly compressed writing of the sonata. It is, rather, grandiose, impassioned stuff that goes on about ten minutes longer than necessary. But if you don't mind a juicy, post-Wagnerian, post-Tchaikovskian idiom fraught with eroticism, you may find the frequently brilliant orchestral writing to your taste. Certainly Jerzy Semkow, whose fine recording of the Scriabin Second Symphony was issued by Columbia during the 1969-1970 Scriabin revival, does an impressively persuasive job here, and he is backed to the hilt by his Warsaw Philharmonic compatriots. The sonics are brilliant and open, and at the budget price the disc is a first-class bargain compared with the Yevgeny Svetlanov recording of the work on Melodiya/Angel. *D.H.*

SHOSTAKOVICH: *Piano Concerto No. 1, Op. 35*. **PROKOFIEV: *Symphony No. 1, in D Major, Op. 25 ("Classical")***. Carol Rosenberger (piano, in Shostakovich); Stephen Burns (trumpet, in Shostakovich); Los Angeles Chamber Orchestra, Gerard Schwarz cond. DELOS ● DMS 3008 \$17.98.

Performance: **Fine Shostakovich**
Recording: **Transparent**

No one is likely to suggest that Shostakovich's early Concerto for Piano, Strings, and Trumpet is a great work, but it is a piquant and vastly entertaining one, with enough substance to withstand, and perhaps even benefit from, a variety of interpretive approaches. Both the composer himself, in his Paris recording with André Cluytens (Seraphim M 60161), and, to a lesser degree, Eugene List, who has given more performances of it than anyone else anywhere (his second recording of the concerto, with the composer's son Maxim conducting, is on CBS M 35116), have tended to emphasize the music's driving, sardonic, and acerbic qualities. Carol Rosenberger takes a somewhat more expansive, more openly romantic approach, and it works too. Not only is the superb quality of Delos' digital sound—wide open but not obtrusively lush—ideally suited to this sort of work, but it suggests that a good deal of the aforementioned acerbity may have been little more than a matter of pinched sonics in earlier recordings. In any event, this lyrical performance, with the slow sections convincingly caressed and the fast ones filled with wit rather than empty bluster, makes for most agreeable listening. Conductor Gerard Schwarz and his soloist see eye to eye on every detail, and

Stephen Burns puts just the right sort of edge on his well integrated contribution.

Shostakovich's Second Concerto would have been a more welcome coupling than Prokofiev's *Classical Symphony*, which is not only rather short weight for a full side (a little over thirteen minutes) but by no means as engagingly performed as the concerto. Here Schwarz seems to be looking for special points to make and lets the flow go hang; the Gavotte in particular is so cut-sided up it made me squirm. A pity, for the playing itself is absolutely first-rate, the tempos just about ideal, and the sound as transparent and well balanced as on the Shostakovich side. *R.F.*

RECORDING OF SPECIAL MERIT

SIBELIUS: *Symphony No. 1, in E Minor, Op. 39*. Melbourne Symphony Orchestra, José Serebrier cond. RCA AGL1-4093 \$5.98, © AGK1-4093 \$5.98.

Performance: **Excellent**
Recording: **Impressively spacious**

José Serebrier's strong reading of Sibelius' impassioned E Minor Symphony puts this recording in competition with the excellent and comparably priced Seraphim disc by the Finnish conductor Paavo Berglund (who in addition offers the Op. 25 *Scènes Historiques* as filler). Serebrier brings a personal touch to the performance, taking the scherzo at a fast clip, which keeps the Australian woodwind players right on their toes, and giving a decidedly more portentous tone than usual to the finale's introductory pages.

The Melbourne Orchestra is highly responsive, the recording locale is spacious and brilliant, and the sonics have more than ordinary depth. And, for all the spacious quality of the sound, both presence and detail are remarkably preserved throughout. A bargain. *D.H.*

SNYDER: *Love Is a Language* (see Best of the Month, page 62)

JOHANN STRAUSS JR.: *Cinderella Ballet; Ritter Pásmán, Ballet Music*. National Philharmonic Orchestra, Richard Bonyngne cond. LONDON ● LDR 72005 two discs \$25.96.

Performance: **Very good**
Recording: **Splendid**

Johann Strauss Jr. died before he could finish the music for a full-length ballet on the Cinderella story to be called *Aschenbrödel*. He completed a rough draft, however, and much of the orchestration for the first act. This work was reshaped by one Joseph Bayer, and in 1901 the ballet was staged at the Royal Opera in Berlin, with the Kaiser in the audience. It wasn't a big hit, but it fared better in Vienna seven years later despite the disparagement of Gustav Mahler (he didn't believe the music was by Strauss). A revival in Manchester in 1979 by the Northern Ballet Theatre was highly successful, and the score as edited and revised by Douglas Gamley is full of goodies for Strauss lovers. At times the Straussian effervescence gets lost in the rather heavy orchestration, but it's hard to resist such things as the *Dance of the Cupids* or the march just before the heroine is named

Queen of the Ball. There are even a couple of measures from *The Blue Danube* played by an organ grinder and a wonderfully sparkling divertissement when the hero and heroine are finally married.

For all its charms, though, *Cinderella* is no match for the marvelous ballet music from a failed opera by Strauss called *Ritter Pásmán*. It takes place at a royal wedding in a Hungarian palace and is perfectly gorgeous, the music whirling to a dazzling climax at the end in a spectacular *czárdas*. It is good to have both these works on disc, and both are very well played and splendidly recorded. P.K.

R. STRAUSS: Duet-Concertino for Clarinet, Bassoon, String Orchestra, and Harp (see HONEGGER)

SUK: A Fairy-Tale, Op. 16; Fantastic Scherzo, Op. 25. Josef Suk (violin, in Op. 16); Prague Symphony Orchestra, Jiří Bělohlávek cond. SUPRAPHON □ 1410 2699 QG \$9.98 (from Qualiton Records, Ltd., 39-28 Crescent Street, Long Island City, N.Y. 11101).

Performance: **Affectionate**
Recording: **Very good**

Josef Suk (1874-1935), Dvořák's pupil and son-in-law, composed a marvelous Serenade for String Orchestra at the age of eighteen, and nothing else of his that I have heard comes near to matching its ingratiating tunefulness and warm spontaneity—except that little polka Frederick Stock and the Chicago Symphony Orchestra recorded some fifty-five years ago (it was reissued in 1944 as the filler in their 78-rpm album of Dvořák's overture *In Nature's Realm*). The polka, actually titled "Playing at Swans and Peacocks," is the second and shortest of the four movements of the suite *A Fairy-Tale*, which Suk assembled in 1900 from his incidental music to Julius Zeyer's play *Radúz and Mahulena*. The other three movements are a good deal more serious, as well as much longer, and have little folk flavor in them, but they are extremely well wrought and have some very affecting passages for solo violin, played in this recording by the composer's distinguished grandson.

The later *Fantastic Scherzo*, an expansive and imaginatively colored piece somewhat akin to Dvořák's *Scherzo Capriccioso* but not as richly endowed with strong tunes, is less consequential than the Op. 16 suite but pleasant enough. Both works are performed with great affection and authority, and the recording is very good, with silent surfaces. The English translation of the annotation could be better ("overhear" is given as an aural equivalent of "overlook"), but it does inform us that one of the themes in *A Fairy-Tale* recurs in Suk's *Asrael* Symphony, which is a reminder that a new recording of that work would be especially welcome now. R.F.

TALLIS: Antiphons, Motets, and Responds (see TAVERNER)

RECORDING OF SPECIAL MERIT

TAVERNER: Mass, The Western Wind; Mater Christi. TALLIS: *Sancte Deus; Audivi Vocem de Caelo; Honor, Virtus et Potestas; O Sacrum Convivium; Salvator Mun-*

APRIL 1982

IT'S HERE!

Stereo Discounters

new Spring 1982

Buying Guide is here!

It's bigger and better than ever, offering you page after page of famous name brand Hi-Fi & Home Entertainment equipment. It's full of manufacturer's specifications and illustrations of the latest in sight and sound, home information and entertainment, for your home and your car. From car stereo to home computers, Stereo Discounters has it all for less!

STEREO DISCOUNTERS

6730 SANTA BARBARA CT.
Baltimore, MD. 21227



CALL TOLL FREE
1-800-638-3933
for price quotes only

1-800-638-3920
for our catalog
of the latest in
audio & video
equipment!

Astonishing.



"The sound of this diminutive speaker is nothing less than astonishing.

"Listen to the Four if you possibly can. It is worth hearing — even if you are not shopping for a speaker — just for a demonstration of how good a small box can sound."

STEREO REVIEW June, 1978.
Copyright Ziff-Davis Publ. Co.

For literature and information call
(800) 225-4791 or send coupon.

The Allison: Four — costs \$280 each in oiled walnut, \$290 in oiled oak cabinet.

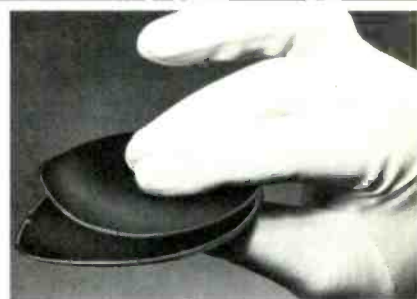
ALLISON ACOUSTICS

Seven Tech Circle/Natick, MA 01760, U.S.A.

Name _____

Address _____

City _____ State _____ Zip _____



Off the record...

...That's where fingers belong. Records are expensive, and nothing destroys them faster than fingerprint oils. Our patented Butler solves the problem by cleanly transporting records between sleeve and turntable. Slip *The Butler* into the sleeve and press lightly — *The Butler's* velvet lining gently cradles the disk. Normally \$5.00, we're making this special offer of just \$2.95 to acquaint you with buying directly from us. Why not send for *The Butler* today? We'll include our unique catalog of fine audio accessories, free.
Thank you.

ORDER TODAY! We insist on your satisfaction. Comes in one color, tuxedo black — naturally!

YES, I want to protect my records. Please rush my own *Butler*, and your latest catalog. Enclosed is my check for \$2.95 plus \$.37 first-class postage (\$3.32 total):

My name is _____

I live at _____

in _____

Zip _____

Herrington

Fine Audio Accessories by Mail

Dept. 14, 7265 Shadowbrook, Kirtland, OH 44094

di. Choir of New College, Oxford, Edward Higginbottom cond. VANGUARD HM 78 SD \$5.98.

Performance: **Luminous**
Recording: **Splendid**

John Taverner's *Western Wind* Mass is typical of English church music written at the beginning of the sixteenth century in that it weaves an intricate contrapuntal web of long flowing lines scored for full chorus alternating with solo trios and duets. The contrasts of varying combinations of soloists with full chorus give the music an almost concerto-like aspect in which the several forces vie with each other for prominence. The Choir of New College spins out the

carefully contoured melodies seamlessly. The solo sections are exquisitely sung, and the clear sonorities of the full chorus are luminous.

Unlike Taverner, Thomas Tallis built his compositions on points of imitation and homophonic textures. More harmonically oriented than his predecessor, he used chord progressions that are frequently startling, especially those that employ the cross relationships so loved by English composers. In the antiphons, motets, and responds here, the choir displays a full-bodied sound that is so supple that the inner voices are still clearly heard. This disc offers music from England's Golden Age sung in the finest English tradition. S.L.

TELEMANN: *Trio Sonatas in B-flat Major, F Major, A Major, and G Minor; Quartet in G Minor*. The Musical Offering (Kathleen Lenski, violin; Allan Vogel, oboe; Kenneth Munday, bassoon; Frederick Seykora, cello; Patricia Maybee, harpsichord). NONESUCH D-79022 \$11.98.

Performance: **Razor-sharp**
Recording: **Excellent**

TELEMANN: *Trio Sonata in E-flat Major; Quartets in E Minor and G Minor; Concerto in D Major*. Aulos Ensemble (Anne Briggs, flute; Linda Quan, violin; Myron Lutzke, cello; Marc Schachman, oboe; Charles Sherman, harpsichord; Richard Taruskin, viola da gamba). MUSICMASTERS MM 20009 \$8.98.

Performance: **Suave**
Recording: **Very good**

Here is an excellent opportunity to compare topnotch performances of Telemann played on modern and on period instruments. The Musical Offering clearly demonstrates the validity of playing Baroque music on modern instruments. Baroque articulation has been beautifully transferred to contemporary strings and winds, and the music is subjected to a modern sense of rhythmic drive that lends it a razor-sharp quality.

Using period instruments, the Aulos Ensemble produces a mellow sound that is utterly charming. Besides using Baroque articulations, which naturally fit the old instruments, the Aulos makes the most of Baroque temporal expression, and its performances are marked by an engaging rhythmic flexibility. Both of these records are well worth hearing, and together they provide a wonderful example of how good music making transcends the choice of instruments and historic orientation. S.L.

RECORDING OF SPECIAL MERIT

TIPPETT: *Shires Suite*. Leicestershire Chorale; Leicestershire Schools Symphony Orchestra, Peter Fletcher cond. YOUNG: *Virages—Region One*. Rohan de Saram (cello); Leicestershire Schools Symphony Orchestra, Douglas Young cond. UNICORN UNS 267 \$11.98 (from Euroclass Record Distributors, Ltd., 155 Avenue of the Americas, New York, N.Y. 10013).

Performance: **Splendid**
Recording: **Excellent**

The schools in Leicestershire, England, have had quite an ambitious music program since the late Forties. The fine student orchestra was created in 1948 by Eric Pinkett, who conducted it not long ago in a recording of Havergal Brian's Twenty-first Symphony, and over the years the students have had opportunities to work with a number of prominent composers—the most prominent, and perhaps the most active in this project, being Sir Michael Tippett. As conductor, Tippett drilled the youthful orchestra in his own works and some by Charles Ives; as composer, he was stimulated by his contact with the Leicestershire program to create the *Shires Suite* in the late Sixties. The work is quite a compliment, for it is in no way condescending; it does not "make allowances." In fact, it helped to usher in the new character that was then beginning to make itself apparent in Tippett's larger-

A LASER MONITOR FOR THE PRIVILEGED FEW.

The new Celestion SL-6 is like no other loudspeaker in the world.

Designed with a laser, a computer and a blank sheet of paper by a new generation of engineering talent, it began with something never seen before. The microscopic vibrations of drivers in action, frozen in time. Scanned and plotted in exquisite three-dimensional detail by the laser-computer system we call ULTRA.TM*

With the knowledge ULTRA gave us, we could discard the misconceptions and guesswork of conventional speaker design. The results: Two radically different transducers with precise, perfect-piston response. A crossover network of unique simplicity, because the drivers are so perfectly matched. And an enclosure of incredible rigidity.

What's more, the SL-6 is the first compact loudspeaker of studio monitor quality. Smaller than many "bookshelf" units,

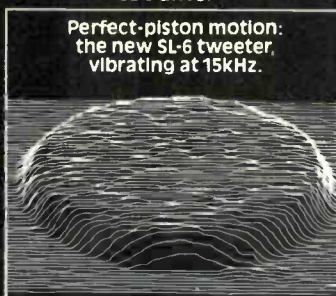
Conventional driver



yet effortlessly handling up to 200 watts per channel.

There is much more to tell. But the most eloquent way to hear it is musically, from the SL-6 itself.

SL-6 driver



But first, a word of caution: only a limited number are planned for production. Which means its pleasures are limited to a privileged few. That select group of music lovers with the sensory and, yes, the financial resources to appreciate it. If the idea of being among them intrigues you, write or call for more information.

*Ultra-accurate Laser Topographic Response Analysis.



celestion speakers

AND PROFESSIONAL DRIVERS

You'll know... in an instant

Celestion Industries, Inc., Kuniholm Drive, Box 521, Holliston, MA 01746 (617) 429-6706. In Canada, Rocelco, Toronto

CIRCLE NO. 6 ON READER SERVICE CARD

scale works (for instance, in the Third Symphony and the opera *The Knot Garden*) through the use of jazz elements, pop instruments (electric guitar), abruptly contrasting lyrical and angular passages, etc. One would hardly expect such things in a work based largely on music by William Byrd and Henry Purcell, but the treatment is extremely freewheeling. The suite comprises a prologue on *Sumer Is i-Cumen In*, two orchestral interludes based on *The Silver Swan* and *Great Tom Is Cast*, a central "cantata" built on canons by Byrd, Purcell, and Alexander Goehr, and an epilogue on Byrd's *Non Nobis, Domine*. The uninhibited work requires the most assured and imaginative commitment on the part of the performers, and that is what it receives here.

Douglas Young (born 1947) was composer in residence at Leicestershire five years ago. He describes the half-hour work recorded here, the first part of a trilogy for cello and orchestra, as "not a concerto in the usual sense," but a sort of "musical landscape in which the cello leads us along various musical paths..." It is a slow-starting piece in which momentum builds subtly and various sonic sunbursts and pointillist effects contribute to the color, along with the use of silence. A diagram on the jacket shows the unusual seating arrangement for the orchestra. Instead of the usual choirs, individual instruments and small groups are scattered about more or less according to range: four double-basses lined up with the solo cello along the front of the stage; three trombones and three horns in the row behind them spaced out by a trumpet, a bassoon, a cello, and a viola; four trios of violins and the high percussion along the rear of the stage; and dozens of little islands of instruments filling the intervening space. Frankly, the piece seems a bit long, but it has its interesting moments, and Rohan de Saram plays the devil out of his cello.

Someone once suggested that student orchestras can cope with complex modern scores so well because they haven't had enough experience to know how frightening they are. In any event, the Leicestershire Schools Orchestra digs in with relish here and does both composers proud. The record is encoded for "Ambisonic" four-channel playback. I had no opportunity to hear it that way, but it is quite impressive in regular two-channel stereo. R.F.

TURINA: *Orgia* (see RIMSKY-KORSAKOV)

YOUNG: *Virages—Region One* (see TIP-PETT)

COLLECTIONS

THE ARIEL ENSEMBLE. Barab: *Bits and Pieces*. Gottlieb: *Downtown Blues for Uptown Halls*. Starer: *The Ideal Self*. Vaughan Williams: *Three Vocalises for Soprano and Clarinet*. Schubert: *Der Hirt auf dem Felsen, Op. 129 (D. 965)*. Ariel Ensemble. ORION ORS 81411 \$8.98.

Performance: **Begulling**
Recording: **Very good**

The Ariel Ensemble must be unique in comprising a soprano (Julia Lovett), a clarinetist (Jerome Bunke), and a pianist (Michael

CONSTANTLY BETTER

PIONEER KE5100
In Dash Cassette with Digital Supertuner



\$193

PIONEER A9
Top of the Line



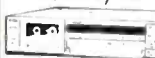
\$466

RCA VFT190
VHS 2-4-6 Hr. Programmable



\$539

AKAI GXF71
3 Head w/Dolby C.



\$275

SONY STJX5
Digital Quartz Call For Price



JVC T120
VHS Video Tape



\$12

TOLL FREE 800-356-9514 Weekdays 9-9
Saturdays 9-5

Over 100 Brands like:

Technics	Maxell	Sony	Cerwin	Acutex
Pioneer	Empire	Teac	Vega	Craig
Marantz	Altec	Akai	Onkyo	Scotch
Kenwood	Sharp	Dual	Audio	B.I.C.
Sansui	Phillips	Koss	Technica	Stanton
Jensen	Shure	TDK	Clarion	Pickering

WDS

WISCONSIN DISCOUNT STEREO

2417 w. badger rd. madison, wi 53713

608 271-6889

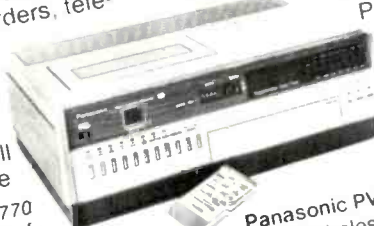
CIRCLE NO. 44 ON READER SERVICE CARD

CALL FOR THE BEST PRICE.

Call P.R.I.C.E. for big savings on video cassette recorders, car stereo, home stereo, portable radio and tape recorders, tele-phone answering machines, video games, tapes, and movies.

offer on in-stock items. Just pick up the phone, dial our toll-free number, and ask for P.R.I.C.E. quotes. (Or ask us to send you our P.R.I.C.E. list.)

P.R.I.C.E. is what you want.



P.R.I.C.E. will beat any legitimate Panasonic PV-1770 illustrated.

Sony XR-25 4 watt per channel auto-reverse car deck **\$154**

Jensen RE-512 5 watts/channel, mini chassis, Digital, car deck ... **\$239**

Pioneer TS-695 6 x 9" three-way car speakers (pair) **\$81.95**

Onkyo 3000 45 watt/channel, servo-lock, stereo receiver **\$239**

Atari 800 home computer system with professional keyboard **\$719**

Panasonic PV-1770 Panasonic's best VCR, wireless remote, 14-day programmable. **Call for price**

JVC KD-D4 2-head, SUPER ANRS® Dolby® cassette deck **\$209**

Aiwa CSJ1 portable cassette recorder with FM and headphones ... **\$154**

Prices subject to change after 4/30/82.

PRICE.

27 Teed Dr., SRE0482, Randolph, MA 02368.

AMERICAN AUDIO

WE WILL "BEAT" ANY PRICE
IN THIS MAGAZINE!!!

CALL **TOLL FREE**

(800) 526-2290

Offer Expires 30 Days From Pub. Date
Merchandise Must Be In Stock.



← AFFIX OLD LABEL →

If you have no label handy, print OLD address here:

Name _____ (please print)
Address _____ Apt. _____
City _____
State _____ Zip _____

NEW ADDRESS HERE 8COA

Name _____ (please print)
Address _____ Apt. _____
City _____
State _____ Zip _____

Foreign postage: Add \$1 a year for Canada, \$5 a year (cash payment in U.S. currency only) for other countries outside U.S. and possessions. Please allow 30 to 60 days for delivery of first issue.

MOVING?



Please let us know 8 weeks in advance so you won't miss a single issue of **STEREO REVIEW**.

Attach old label where indicated and print new address in space provided. Also include your mailing label whenever you write us about your subscription. It helps us serve you promptly.

Write to: P.O. Box 2771, Boulder, CO 80322, giving the following information:

- Change address only
- Extend subscription Enter new subscription
- 1 year (12 issues) \$9.98 Bill me later
- Payment enclosed (You get 1 extra BONUS issue—13 issues in all!)

SEND FOR OUR NEW
**FREE 40 PAGE
HI-FI DISCOUNT
CATALOG No. 60**

- Lowest prices on audio components!
- Fast service!
- Fully insured!
- In factory sealed cartons!



SOUND REPRODUCTION, INC.
(201) 227-6720

CLIP & MAIL TODAY!

Sound Reproduction, Inc.
7 Industrial Rd., Fairfield, N.J. 07006

Please rush your free Hi-Fi Discount Catalog

Name _____

Address _____

City _____

State _____ Zip _____

CIRCLE NO. 38 ON READER SERVICE CARD

CONSUMERS CO. TAPES — DISCOUNTS — STEREO

Min. Order — 10 Audio or 5 Video Tapes, or assorted

TDK			
SAC-90	2.99	DC-45	1.09
SAC-60	2.25	DC-60	1.19
ADC-90	2.39	DC-90	1.57
ADX C-90	3.59	DC-120	2.25
ODC-90	2.99	DC-180	3.25
SAX C-90	4.19	LX 35-90	5.59
MAC-90	5.89	Demagtr	14.89
VHS-VIDEO — VT 120	12.85	HGT 120	16.99

SONY			
Metal C-60	4.98	EHF C-90	2.79
Metal C-90	6.69	EHF C-60	1.79
FECC C-90	2.89	LNX C-90	1.69
FECC C-60	2.49	LNX C-60	1.19
VIDEO BETA — L-500	10.69	L-750	13.75
		L-830	15.95

maxell — BASF — FUJI			
MAX'L XL III C-90	3.30	FUJI ME C-90	5.29
MAX'L LNC-90	1.89	FUJI FX II C-90	2.85
BASF Pro III C-90	2.79	FUJI VT-120	12.98
BASF Per C-90	1.69	MEM'X HI-BI C-90	2.99

HOME & CAR STEREO SPECIALS			
JENSEN SPEAKERS		SANYO CAR STEREO	
J1033 TRI II 6x9	89.98	FT C-2 Mini	51.90
J1041 CO II 5 1/2	49.98	FT C-4 F. Rev.	58.50
J1065 TRI 6x9	64.98	FT C-6 Auto Rev.	73.95
J1089 CO 6x9	44.90	FT C-8 Vert/Hzt	96.90
TECHNICS		FT C-26 Push Btn	96.90
SA-203 Rcvr.	184.95	FT C-12 Digital	109.90
RSM-225 Cass dk	178.95	FT C-15 Push Btn	133.50
SLB 202	96.95	FT C-16 Metal	147.90
PICKERING CART G'S		FT-240 Dolby	133.90
XSV 4000	75.95	FT-20 Mt. Dgl.	142.95
XSV 3000	53.95	FT-30 Auto Rev.	179.95
EMPIRE CARTRIDGES		CRAIG CAR STEREO	
2000 E III	18.99	T690	214.95
400 TC	23.95	T692	169.95
ATARI — Game		T619	189.95
CX 2000	147.95		

All merchandise fresh, manufacturer guaranteed.

For ORDERS ONLY, Call TOLL FREE
(800) 431-2932
For Customer Service Call (914) 664-2909

For prompt delivery, use M.O., Cert. Check or Credit Card. Shpg&hdg: add 5% of order with \$3.50 min. N.Y.S. res. add 4% tax. Person'l checks 2 wk del. No. COD's. Free Catalog.

CONSUMERS CO.
P.O. Box 550 Dept. SR-482 Mt. Vernon, N.Y. 10551

CIRCLE NO. 7 ON READER SERVICE CARD

Fardink), but its repertoire is by no means limited to the familiar work with which this recorded program concludes. The song cycles by Seymour Barab and Jack Gottlieb were both composed for these performers, who give them authoritative and persuasive presentations. Barab's customary fluency is shown in brief settings of verses by Ben Jonson, Thomas Moore, Harry Graham, Blake, Yeats, Robert Graves, and good old Anon. Gottlieb wrote his own texts for his three songs (*Big Little Girl, Impulsive, Neon Night*), with an image in his mind, "the advises, of a well-worn cinematic device, "the ubiquitous neon sign flashing in the city night outside an unfriendly hotel room, and its association with loneliness." The atmosphere thus symbolized, if not the symbol itself, is most effectively evoked.

Robert Storer surrounds the text by his frequent collaborator Gail Godwin with an improvisational-sounding prologue and epilogue for clarinet and voice (without words). The Vaughan Williams pieces too omit both text and piano, and they might also be described as improvisational since the performers had to supply their own phrasing and dynamics in the absence of the composer's indications (Vaughan Williams died before he could enter these markings). As for the well-loved Schubert song, it receives a performance of uncommon brightness and affection without indulgence. Altogether, a handsome and imaginative program, beguilingly performed and very well recorded. **R.F.**

BÉLA BARTÓK: Centenary Edition of Bartók's Records (see *Going on Record*, page 46)

RECORDING OF SPECIAL MERIT

THE PLAY OF ST. NICHOLAS. New York Ensemble for Early Music, Frederick Renz cond. MUSICAL HERITAGE SOCIETY MHS 824437 two discs \$15.50 (plus \$1.60 postage and handling charge from the Musical Heritage Society, 14 Park Road, Tinton Falls, N.J. 07724).

Performance: **Sure-fire**
Recording: **Fine**

By putting together the four surviving medieval liturgical dramas concerning the ever popular St. Nicholas and reconstructing the music with imagination and a keen sense of drama, Frederick Renz has created a work of medieval pageantry that far outstrips *The Play of Daniel* and *The Play of Herod* in brilliance and excitement. The constituent dramas—*The Son of Getron*, *The Three Daughters*, *The Icon of St. Nicholas*, and *The Three Students*—involve a remarkable variety of characters and situations. The characters range from kings to thieves as St. Nicholas returns a son to his grieving family, supplies three impoverished beauties with dowries and handsome husbands, restores stolen treasure to a wronged Jew, and restores life to three innocent, foully murdered students. In each episode the locale is deftly set, the personalities quickly portrayed, the action swiftly dispatched, and praise of the saint joyously offered.

Choosing from a rich battery of medieval Western and Oriental instruments, Renz

(Continued on page 105)

STEREO REVIEW

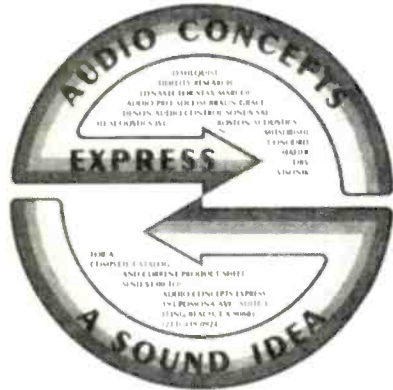
STEREO REVIEW CLASSIFIED

CLASSIFIED RATES: Per Word, 15 Word Minimum. **COMMERCIAL:** \$3.70. **EXPAND-AD®:** \$5.55. **PERSONAL RATE:** \$2.00. **DISPLAY:** 1" x 2 1/4", \$450.00. 2" x 2 1/4", \$900.00. 3" x 2 1/4", \$1,350.00. Ads set in all Bold Type (α 20% Premium. Ads set with Background screen (α 25% Premium. **GENERAL INFORMATION:** Frequency rates and prepayment discounts available. Payment must accompany order except credit card — Am. Ex., Diners, MC, VISA (include exp. date) — or accredited ad agency insertions. Copy subject to publisher's approval; must be typewritten or printed. First word set in caps. Advertisers using P.O. Boxes **MUST** supply permanent address and telephone number. Orders not acknowledged. They will appear in next available issue after receipt. Closing date: 5th of the 2nd month preceding cover date (e.g., Mar. issue closes Jan. 5th). Send order & remittance to: Classified Advertising, **STEREO REVIEW** Magazine, 1 Park Avenue, New York, NY 10016. Direct inquiries to Rose Lynch, (212) 725-7686.

EQUIPMENT

DIAMOND NEEDLES and STEREO CARTRIDGES at DISCOUNT PRICES for SHURE, PICKERING, STANTON, EMPIRE, GRADO, AUDIO TECHNICA, ORTOFON, ACUTEX and ADC. SASE free catalog. LYLE CARTRIDGES, Dept. S., Box 69, Brooklyn, NY 11218. For fast COD service Toll Free 800-221-0906. N.Y. State (212) 871-3303. 9AM - 8PM except Sunday.

WHOLESALE PRICES on stereo/esoteric components, cartridges, tonearms, tapes. Free Catalog. Audio Unlimited, 1798 Technology Drive, San Jose, CA 95110. (408) 279-0122 1-6 M-Th.



TOP QUALITY SPEAKERS AND KITS. Send \$2.00. Speaker Warehouse, 801 North Route 441, Hollywood, FL 33021.

LOWEST PRICES. BOSE. NAKAMICHI, HAFLER, and MORE. Dynamic Sound, Box 168(A), Starkville, MS 39759. (601) 323-0750. 1 P.M.-9 P.M.

Stereo Express CALL NOW (714) 594-5749

CALL US WITH YOUR BEST PRICE
Most Orders Shipped Same Day

AUDIO
YAMAHA • ADS • BOSE • ONKYO
SONY • HAFLER • H.K. • BRAUN
PHASE LINEAR • DBX • ADCOM • SAE
JBL • AR • JVC • CONCORD • AIWA
ORTOFON • TECHNICS • MICRO SEIKI
AND MANY MORE

VIDEO
SONY • RCA • JVC
VCR'S • CAMERAS • BLANK TAPES
ATARI & MATTEL VIDEO GAMES
Call or Write For Price Quotes
709 Brea Canyon Rd., Suite 9, Walnut, CA 91789

BEST IN THE WEST! Hafler, Nakamichi, Dahlquist, DCM, Magneplanar, Beveridge, APT, Threshold, Polk, Oracle, Harmon Kardon, B&W. Adcom. Rocky Mountain Hi-Fi, 812 Central, Great Falls, MT 59401. (406) 761-8683.

ACCURATE. QUALITY AUDIO: Reasonable Prices. Car/Home. Denco, P.O. Box 6104-R, El Monte, CA 91734. (213) 961-6158 Evenings. Weekends. Monthly Specials.

HAFLER IN STOCK TRADES ACCEPTED Morel Electronics, 57 Park Place-SR, New York, NY 10007. (212) 964-4570.

3D ACOUSTICS, N.A.D., Mission, Amber, etc. Shipping paid. Audio File, 1202 South Congress, Austin, Texas 78704. (512) 443-9295.

HAFLER, FRIED kits, SAE, CARVER, SONY, KLIPSCH, more. In stock. Immediate, FREE shipping! READ BROTHERS STEREO, 593-B King Street, Charleston, South Carolina 29403. (803) 723-7276.

The Kit Option.

Our finished speakers are recommended by Hi-Fi reviewers everywhere but some people want the savings and satisfaction that comes with building and finishing their own. Hence our kit option. Write us for our free catalog.



speakerlab

Dept. CSR24, 735 N. Northlake Way
Seattle, Washington 98103

PHILIPS, AUDAX AND DYNAUDIO LOUDSPEAKERS in stock with good prices and competent service. Crossover components also. MADISOUND SPEAKER COMPONENTS, 8982 Tablebluff, Box 4283, Madison, WI 53711. (608) 767-2673.

BEFORE YOU BUY — CHECK OUR PRICES. Send for free catalog featuring audio and video equipment and accessories at discount prices. Discount World, P.O. Box 191, Mneola, NY 11501.

WE HAVE IT ALL! Audio and Video Tape, Accessories, Recording Equipment, Fine Audio Components. KNOWLEDGEABLE Staff! COMPETITIVE Prices! FREE Buyers Guide! SOUND IDEAS, Dept. SR, Box 671, Cary, NC 27511-0671. (919) 467-8462.

PROTECT AUDIO EQUIPMENT, TV, VCR and Records from "pops", "buzz" and "hash" caused by motors, appliances, tools. Pugs into any outlet. (1250 watt-Model KW-33S) \$50.95 ppd. SASE for brochure. ELECTRONIC SPECIALISTS, INC., 171 S. Main, Natick, MA 01760. (617) 655-1532, MC VISA accepted.

HIGH MAIL ORDER PRICES? NOT AT STEREO VILLAGE! Offering you the best prices on the top names in audio, video, television and car stereo. Call around, then call us last! STEREO VILLAGE INC., 3021 Peachtree Rd. NE, Atlanta, GA 30305. CALL 404-233-5346. (10:30AM-7PM EST). Stores in Atlanta and New Orleans.

HARMAN/KARDON HIGH TECHNOLOGY separates, receivers, cassette decks; Electro-Voice Interface A,B,C,D speakers; Thorens turntables. In stock, immediate shipment. East: (904) 262-4000; West: (213) 243-1168.

AMATEUR MICROWAVE T.V. ANTENNAS. Receive uninterrupted movies, full guarantee. Also in Kit form. For information and plans send \$8.00 to: MDS Specialist, P.O. Box 67-B, Southaven, MS 38671.

CONNECTICUT: ADVENT APT-Holman, B&O, Carver, Dahlquist, DCM Time Windows, Polk, Hafler, Mitsubishi, Nakamichi, Ortofon, Micro-Acoustics, N.A.D., Stax, Cizek, Signet, QED, Teac, Marcoff, Boston Acoustics, will ship prepaid. Sounds Incredible, 39 Federal Road, Brookfield, Conn. 06804. Call Ira for quote (203) 775-1122.

CROWN DISTINCTION SERIES, COMPONENTS. Best prices - in stock - immediate shipment to any destination. (213) 467-5725.

AUTOMOTIVE AUDIOPHILES TAKE NOTE: MIAH sells and installs all premium brands including ADS, Mitsubishi, Infinity, Concord, Dahlquist, Alpine, Sony, Altec, Lansing, JBL, Visonik, Blaupunkt, EPI, Bose, Linear Power, Monster Cable and many more. Call toll free. MIAH, 6660 Busch Boulevard, Columbus, Ohio 43229. 800-848-7383, 614-885-5298. VISA/MC/AMEX ACCEPTED.

AUDIO DISCOUNTS offers a quality selection of audio components at DISCOUNT PRICES. For speakers, receivers, cassette decks to turntables, cartridges, etc. or a new car stereo. Great prices and service. Our friendly sales staff will be glad to assist you. For more information, Mon-Sat, please call (301) 593-8244/301-593-8224 or write to: AUDIO DISCOUNTS, 1026 McCeney Ave., Silver Spring, MD 20901. We honor VISA, M/C or C.O.D. for your convenience.

SAVE 60% TO 75%, BUILD YOUR OWN SPEAKER SYSTEM. P/C Crossovers, Woofers, Mids, Tweeters, instructions. Complete selection, Hi-Fi, M.I., Pro, disco and auto systems. Send \$2.00 for catalog. Refundable with purchase. DKI AUDIO, Box 284, Davis, IL 61019.

CALL TOLL FREE 1-800-826-0520 for Acoustal, Carver, NAD, Polk; 3D, Onkyo, AudioControl, B&W, Amber, Bedini, Micro-Seiki, Dahlquist, Hafler, dbx, Tandberg, Vandersteen, DCM, Grace and more! THE SOUND SELLER, 1706 Main St., Marinette, WI 54143. (715) 735-9002.

HIGH-END RAW SPEAKERS, kits and auto systems. Audax, Dalesford, Dynaudio, JVC Ribbons, Becker, Philips, SEAS, Peerless polypropylene, GAL. Free price list. A&S SPEAKERS, Box 7462S, Denver, CO 80207. (303) 399-8609.

SHERWOOD MICRO CPU tuner CLOSE-OUT. Used demos, \$400-500. (Originally \$2000) Limited quantity. Phone 6-8pm weekdays. AUDIO CALIBRATION, Box 250, Westminster, MA 02473. (617) 874-0706.

UNDERGROUND SOUND Audiophile stereo. A.R. turntable modification available. 2125 Central Ave., Memphis, TN 38104 (901) 272-1275.

ANNIS Han-D-Mag IS THE BEST Demagnetizer for magnetic tape equipment. Price is \$29.70. "Demagnetizing Notes" and literature on request. Annisco, 1101 N. Delaware, Indianapolis, Indiana 46202.

STILL... THE ONE, THE ONLY DIRECT DISCOUNTS LTD. Your one-stop shopping place for mid-fi to esoteric audio components, cartridges, video (incl. large-screen TV) and car stereo. Please call us at 516-549-1211 or write to DDL, 2 Lee-field Gate, Melville, N.Y. 11747. We accept M/C, VISA, AMEX, COD. No sales tax charged to out-of-state customers. (Recommended by Playboy's Guide To Electronic Entertainment, "The Best of the Catalogs," fall '80).

SPEAKER PARTS AND KITS - Polypropylenes Ribbons, Domes, Coils, Capacitors, and complete kits. Send \$1.00 for Catalog. Soundbox, Dept. S. 411 S. Carlisle, Philadelphia, PA 19146.

FREE!
DISCOUNT CATALOG
SUBSCRIPTION.

Write today for the latest edition of the Saxitone Catalog, America's most complete buying (and saving) guide to tape recording. Brand name cassettes, open-reel & videotape, tape decks & recorders, personal stereo units and more always at discount prices. \$2 shipping on most orders. 24-hour shipping with MasterCard, Visa & Choice. (202) 462-0800.

America's Tape Recording Specialists
SAXITONE
TAPE SALES

1776 Columbia Rd NW Washington DC 20009-2896

ATTENTION NAD OWNERS! Kindel Audio modifications for NAD 1020, 3020 & 7020 offer sonic superiority at reasonable cost. Free info: Kindel Audio, 1710 Newport Circle, Suite O, Santa Ana, CA 92705.

AUDITION NOW IN A FRIENDLY AND COMFORTABLE ATMOSPHERE - Adcom, Allison, Alpine, Amber, Aparture, Audible Illusions, Audio Control, Audiopro, Beyer Dynamics, Boston Acoustics, Cizek, Counoisser, D.N.R., D.C.M., Dynavector, Fried, Grace, Isobase, L.A.S.T., Luxman, Mobile Fidelity, Monster Cable, Mordaunt Short, N.A.D., Nagatronics, Niles Audio, Nitty-Gritty, Plexus, Pyramid, Jim Rogers, Sound Connections, Spectre Audio, Spectre Acoustics, Stax, S.T.D., 3D Acoustics. Prompt, courteous service. FREE shipping in U.S.A. - Feel free to call for information. **SOUND STAGE AUDIO**, 184-10 Horace Harding Expressway, Fresh Meadows, NY 11365. (212) 762-3220 Exit 25 (Utopia Parkway) L.I.E., MC VISA.

CLARION CAR AUDIO			
2100R (i-car)	125.00	300 EOB (6-bands, 70watts LED s)	149.00
2500R (i-car)	239.00	150 EOB (5-bands, 80 watts)	120.00
3100R (150R (AM-FM cass w/FF)	95.00	100 EOB (5-bands, 40 watts)	79.00
3500R (550R (Auto rev. improved FM)	130.00	180A (180 watt AMP)	239.00
3700R (dash buff. loud. improved FF)	139.00	800A (80 watt AMP)	239.00
3100R (150R (Auto rev. improved FM)	147.00	400A (40 watt AMP)	55.00
3500R (550R (Auto rev. improved FM)	184.00	PE81 (fordash cass. FF tone)	55.00
3700R (dash buff. loud. improved FF)	184.00	S839C (6.5" coax, 200w mag.)	58.00
3100R (150R (Auto rev. improved FM)	246.00	S844C (5/4" coax, 100w mag.)	47.00
3500R (550R (Auto rev. improved FM)	265.00	S855C (4inch full range, 35watt)	35.00
9300T (digital tuner only, full)	342.00	hand held CB trvsrwr. 40 ch	135.00

For same day shipment send money order, cert check, cashiers check, master/visa (include card # & exp. date) all orders shipped via UPS in factory cartons with manuf. warranty. Please add 3% or 3.00 minimum for shipping, call or write for orders or add info. long dist. telephone credit for orders placed.

SQUARE STEREO, 1031 HEMPSTADT TRP. FRANKLIN SQUARE, NY 11010 tel # (516) 352-2220

WOOFERS-MIDS-TWEETERS-X-OVERS. ALL NEW 1982 CATALOG featuring the largest selection of brand name speaker components and accessories in U.S. Computer Assisted Designs for Subwoofers, Satellites, Polyprop/Ribbon Towers and many more. Complete cabinet plans included in catalog. Send \$1.00 to: SRC AUDIO, Dept. SR824, 3238 Towerwood Dr., Dallas, Texas 75234-2376.

DISTRIBUTOR PRICING! Hafner, RGR, ARC, H.K., Onkyo, Vandersteen, Snell, Pascam, E.V. P.K. AUDIO, 4773 Conventon Street, Baton Rouge, LA 70806 (504) 924-1001.

FREE! 1982 CATALOGUE. 1001 bargains - speakers - parts - tubes - high fidelity components - record changers - tape recorders - kits - Everything in electronics. Parcel post and packing fee \$1.25, write: McGEE RADIO & ELECTRONICS, 1901 McGee Street, Kansas City, MO 64108-1891.

Fuzzbuster Superhet	199.00	Maxell UDXL1 or 2C90	3.49
Whistler 770	99.00	Maxell UDXL15 or 25 C90	4.25
Whistler Q1000	229.00	Fuji FX1 or 2C90	2.95
Whistler Q1000 Remote	269.00	Audio Technica AT130E	39.00
Sony Walkman 2	129.00	Audio Technica AT125L	40.00
Sony Walkman 3	139.00	Sony Car Audio XR35	179.00
Sony TC5310 Record	129.00	Sony Car Audio XR50	199.00
Toshiba KT51 Cass w/FM	129.00	Sony Car Audio XME7	129.00
Toshiba KTR2 Cas w/Rec FM	139.00	Sony Car Audio XM45	69.00
Awaa CS-11 FM Cas w/Rec 150.00		Sony Car Audio XM120	209.00

DISCOUNT WORLD P.O. BOX 191, MINEOLA, NY 11501 516-294-6136
Shipping charges are 4.00 per order except orders destined for Puerto Rico, Alaska, Hawaii, APO and FPO (these orders require shipping charges of 8.00 per order)

QUALITY AUDIO / LOW PRICES
Get the best in advice, service and price!
Send \$1.00 for our catalogue and handbook.

The Audio Advisor, Inc.
Box 6202, G.R., MI 49506 — 616-451-3868
Visa and MasterCard gladly accepted.

GENE RUBIN AUDIO: PS, Naim, NAP, Acoustat, Thiel, LS3/5A, Linn Sondek, Rega & more. Pre-paid shipping. 213-571-1299.

USED HI FI. Buy, Sell, Trade: Broker. Bob Heenan, Box 782, Brookline Village, MA 02147. (617) 969-2727. Wanted McIntosh, Marantz: Western Electric Tube Equipment.

SO WHAT'S NEW?? Consider the following - DIRECT SOUND MARKETING can provide you with virtually any brand of audio or video components (including the esoterics) at extremely competitive pricing, on an in-stock basis. Moreover, we maintain a complete service facility to handle any service problems. So, if you're looking for price, selection, fast shipments, in-house service and competent advice we have it all, and more. Before you buy anything please call us at 404-233-9500 for more information. Or write to DIRECT SOUND MARKETING, 3095 Bolling Way, N.E., Atlanta, GA 30305. For your convenience use your M/C, Visa or AMEX for fastest service. Sales tax charged to Georgia residents only.

TAPES & RECORDERS

OPEN REEL TAPES. Pre-recorded. Catalogue. \$1.00. Barclay-Crocker, Room 1470-S, 11 Broadway, NYC 10004.

OPEN REEL TAPE - Mostly Ampex, used once, unspliced, unboxed. 1800' or 2400' 50 Feet: \$65.00. Sample \$2.00. Ten 3600' 10 1/2 reels: \$25.00. Sample \$2.50. C-60 premium cassettes (New) Sample \$1.00. AUDIO TAPES, Box 9584-K, Alexandria, VA 22304.

Quality Tapes

Quality Tapes at Wholesale Prices!

Maxell UDXL1 or II C-90	\$3.09	TDK SA C-90	\$2.79
Maxell UDXL1 or II C-60	2.45	TDK SA C-60	2.15
Maxell XL I or II S C-90	3.89	TDK SAX C-90	3.99
Maxell UD C-90	2.39	TDK AD C-90	2.19
Maxell UD 35-90	5.39	TDK D C-90	1.56
Maxell UDXL 35-90B	6.59	TDK D C-60	1.18
Maxell Cass. Demag (ME-44)	16.49	TDK LX35-90	5.35
Discwasher Complete System	10.50	TDK LX35-90B	5.85
Discwasher D-4 15 or retr.	10.50	TDK GX35-90B	7.99
Discwasher Disket	32.95	TDK Cass. Demag HD-01	14.75
Discwasher Zerotast Gun	15.00	** VIDEO RIOT **	

STEREOS THAT GO

Sony Walkman I	\$76.99	TDK I-120	\$13.40
Sony Walkman II	125.99	TDK HG T-120	18.96
Sony Walkman TCS-310	145.99	Maxell HG T-120	15.75
Awaa CS-11	169.99	Panasonic T-120	12.65
Awaa PM-01	164.99	Scotch T-120	12.35
Koss Music Box	\$7.99	Maxell L-750	12.46
		Aisop Head Cleaner Beta VHS	14.95

Order now—while supplies last! Please add correct shipping charges—\$3.50 minimum. Send money order or check. Credit Cards only add 3% handling, send number and signature or CALL 212-434-1722. Prices subject to change without notice.

QUALITY TAPES
664 East 7th Street, Dept. MS, Brooklyn NY 11230

OLD TIME RADIO — original broadcasts on quality tapes. Free catalog. Carl R. Froelich, Route One, New Freedom, Pennsylvania 17349.

1-800-245-3986 TAPE WORLD			
TDK SA-C90	2.89	TDK VAT-120 L-750	12.79
TDK SAX-C90	3.99	TDK MAR-C90	7.49
TDK AD-C90	2.39	TDK LX35-90B	5.89
TDK AOK-C90	3.29	TDK GX35-90B	7.99
TDK SA-C60	2.19	SONY UXCS-90	3.49
TDK D-C90	1.59	Maxell H-Grade	CALL
Maxell MC-C90	4.99	TDK HD-01(Cass. Head Demag.)	14.89
TDK VAT-HG120 L750HG	15.99	BASF PRO LITHIUMC90	2.99
SONY I-880	15.49	Fuji FX I or II C-90	2.79
MAXELL LOGAN	CALL	Scotch 207-7R1800	5.59

3.50 shipping on any size order in US. Visa, MC, COD no extra charge. PA 6% sales tax. We will honor any price in this book. Dealers Welcome.
220 Spring St. Butler, PA 16001 412-283-8621

LIVE OPERA TAPES. Incredible Variety. Free Catalogue. LIVE OPERA Tapes, Box 3141, Steinway Station, L.I.C., NY 11103.

AMPEX 1800' 7" REEL TAPES. New in boxes. 10 reels \$19.95. 20/\$35.00. Add \$3.50 shipping. Tower, Dunkirk, MD 20754-0213.

FABULOUS OLD TIME RADIO PROGRAMS. On tape. Hear again literally thousands of broadcasts you had thought lost forever. Detailed, annotated catalog \$2.95. THE GREAT RADIO SHOWS, Box 254-B, Woodlawn, Washington 98072.

RECORDS, TAPES, IMPORT, Cutout, oldies, catalogs, \$2.00. NERT, Box 268-SR, Lawrence, MA 01842.

1930-1962 RADIO PROGRAMS. Beats Television!! Tapes, \$1.00 Home!! Established esteemed dealer. Informative 250 page catalog, \$1.25. AM Treasures, Box 192SR, Babylon, N.Y. 11702.

RAVI SHANKAR MUSIC CIRCLE. The finest Indian classical music on L.P. and stereo cassette. Free catalog: 7911 Wiloughby Ave., Dept. S, Los Angeles, CA 90046.

WE'LL FIND THE RECORDS you are looking for. Save time and Money. We carry domestic and international catalogs. Deliveries around the world. Write: A&A Records, P.O. Box 4347 Grand Central, New York, NY 10163.

RECORDS

SHOW ALBUMS, Rare, Out-of-Print LP's. 64 pg. list, \$1.00. Broadway/Hollywood Recordings, Georgetown, Conn. 06829. STORE: 68 Sugar Hollow (Route 7) Danbury, Conn.

COLLECTORS' Soundtracks. Mint. 75 cents (refundable). Jemm's, P.O. Box 157, Glenview, IL 60025.

OLDIES oldies. 45rpm. Also current hits. Free Catalog. Corry's Record Shop, Box 166B, Mason, Ohio 45040.

RARE ORIGINAL RECORDS, all kinds, mostly mint. 5000 list \$2.00, refundable. Carl, Box 828, Princeton, NC 27659.

RECORD HOUND, Box 88, Eagleville, PA 19408. Fills "want-lists"? DOGGONE RIGHT!! 33-1/3 Specialist. Fast, Friendly Service.

FREE RECORD CATALOG. New releases at discount prices and huge selection of classical, soundtrack, popular and jazz special values. Rose Records, Dept. R, 214 S. Wabash, Chicago, IL 60604.

DIRECT — DISC, DIGITAL, half-speed mastered, DBX encoded, and YSL Japanese Pressings. Send \$1.00 for catalog. DISConnection, P.O. Box 10705, Tampa, FL 33679.

RECORD COLLECTORS SUPPLIES plain cardboard, replacement jackets 35¢. Plastic lined sleeves 15¢. Postage \$2.00. Opera boxes, 78 sleeves. Free catalog. Cabco, 400-2, Box 8212, Columbus, Ohio 43201.

PROTECT your LP's — Poly sleeves for jackets 12 cents; Round Bottom Inner Sleeves 10 cents; Square Bottom 6 cents; Poly lined paper 15 cents; white jackets 35 cents. Postage \$2.00. Record House, Hillburn, N.Y. 10931.

THOUSANDS of like new LPs and prerecorded tapes catalogue \$2.50. Records, Hillburn, New York 10931.

GILBERT & SULLIVAN by D'Oyly Carte Opera Company. Choose: Pirates of Penzance/Mikado/HMS Pinafore/Gondoliers/Iolanthe. Librettos included. 2 LP sets \$15.96; 2 Cassette sets \$17.96. Specify. Add .95¢ post. FREE Complete Catalogue: MUSICAL CONCEPTS, Box 535RA, Cedarhurst, NY 11516.

CRYSTAL RECORDS, Inc., Free Catalog featuring exceptional fine Brass and Woodwind recordings. Sedro Woolley, Washington 98284.

SELLING PRIVATE COLLECTION complete operas, operettas, vocal recitals, guitar, piano, Spanish. Many European or out-of-print. Lists \$1 refundable. SIERLE, 88 Boulevard, Suite 203, Passaic, NJ 07055.

SOUND TRACKS, Shows, Personalities, Jazz. List \$1.50. RECORDS. 3973 Glenfeliz, Los Angeles, CA 90039.

VIENNESE OPERETTA RECORDS, INC. Extensive range, superb vocal performances, on currently available LP's. Free list. P.O. Box 50-A, Dover, MA 02030.

OUT-OF-PRINT LP's (no rock/classical) - Free list. Davidson, 6114 Gist, Baltimore, MD 21215.

HARD-TO-FIND JAZZ LPS and discographies. William Craig, P.O. Box 943, El Dorado, AR 71730.

RECORD COLLECTORS BEWARE!! Buying records elsewhere means paying more! 450+ pages of LPs and tapes. Send for free info! SQUARE DEAL RECORDS, Box 1002, Dept. S, San Luis Obispo, CA 93406.

GOLDEN AGE RADIO — Your best source for radio tapes. Free catalog. Box 25215-T, Portland, Oregon 97225.

TUBES

TV and Radio Tubes 49 cents. Free 48 page color catalog. Cornell, 4215-H University, San Diego, California 92105.

WANTED

GOLD, silver, platinum, mercury, tantalum wanted. Highest prices paid by refinery. Ores assayed. Free circular. Mercury Terminal, Box 191, Norwood, MA 02062.

CASH FOR YOUR Unwanted LP's and Prerecorded Reel to Reel Tapes. Reader, Box 323S, Hillburn, NY 10931.

TOP PRICES paid for: AUDIO RESEARCH, MARANTZ, McINTOSH, Box 18009, Seattle, WA 98118. (206) 323-4987.

TOP DOLLAR PAID for good condition LP's. All types, quantities. FESTOON'S, 15 Whitney, New Haven, CT 06510. (203) 789-8210.

BUSINESS OPPORTUNITIES

STEREO REPRESENTATIVES NEEDED!! Lowest Possible Prices!! Over 100 Brands!!! Krasco-Rep SR, 998 Orange Ave., West Haven, Conn. 06516.

ERASE DEBTS with little-known law — CREATE wealth! Details FREE — Blueprints, No. DD4, La Grangeville, NY 12540.

BORROW BY MAIL! \$500.00 — \$50,000.00. No collateral, bad credit no problem!! Write: Gelco Financial Services, Box 34293-BJ, Indianapolis, IN 46234.

BORROW \$25,000 "OVERNIGHT." Any purpose. Keep indefinitely! Free Report! Success Research, Box 29070-RD, Indianapolis, Indiana 46229.

MAKE MONEY IN COLLEGE: Sell Audio/Video/Car Stereo on campus - 70 brand names - 10,000 items in stock. Dealer catalogue 220 pages. Ask for Kathy 800-241-6270.

BORROW \$30,000 without interest! All eligible. Repay anytime. Free details. Infohouse, Box 1004-S4, New York, NY 10003.

FREE BOOK "2042 Unique, Proven Enterprises." Fabulous "unknowns," second inflation income. Haylings-M, Carlsbad, CA 92008.

STEREO SALESMEN sell name brands to friends and co-workers, good commissions, free training. Call toll free 1-800-638-8806 or 1-301-1488-9600. Mr. Murray or Mr. Krizman.

COLLEGE DEALERS. Write for details on College Programs, Fast Shipments, Low Prices, Specify College. Sound Reproduction, Reproduction, 7 Industrial Rd., Fairfield, NJ 07006.

INSTRUCTIONS

YOUR OWN RADIO STATION AM, FM, Cable, licensed, unlicensed, low cost transmitters! Free information. BROADCASTING, Box 130-R4, Paradise, CA 95969.

GOVERNMENT SURPLUS

JEEPS, CARS, FROM \$35.00! - 700,000 ITEMS! - GOVERNMENT SURPLUS - Most comprehensive directory available tells how, where to buy - YOUR AREA - \$3 - MONEYBACK GUARANTEE. SURPLUS INFORMATION SERVICES, Box 3070-EC42, Santa Barbara, California 93105.

ELECTRONICS

ELECTRONICS BARGAINS, Closeouts, Surplus! Parts, stereo, industrial, educational. Amazing values! Fascinating items unavailable in stores or catalogs anywhere. Unusual FREE catalog. ETCO-014, Box 762, Plattsburgh, NY 12901.

MOVIE FILMS/VIDEO TAPES

16mm SOUND Features, Shorts, New, Used for Sale. Free Catalog. National Cinema, P.O. Box 43, Ho-Ho-Kus, NJ 07423.

VIDEOTAPES - 8MM/16MM MOVIES. TWO 72 page catalogs \$1.00 each. Both \$1.50. Reelimages, Box 137SR, Monroe, Connecticut 06468.

MUSICAL INSTRUMENTS

MUSICAL INSTRUMENTS HOT LINE! Incredible prices: Amps, PA gear. All instruments. Huge selection. Sam Ash, established 1924. 800-645-3518. NYS: (212) 347-7757.

BOOKS & MAGAZINES

PUBLISHERS' OVERSTOCK. BARGAIN BOOKS 2,000 titles, all subjects! Free catalog: Hamilton's, 98-58 Clapboard, Danbury, CT 06810.

EDUCATIONAL OPPORTUNITIES

LEARN WHILE ASLEEP. Hypnotize! Astonishing details, strange catalog free! Autosuggestion, Box 24-ZD, Olympia, Washington, 98507.

FOR INVENTORS

INVENTIONS WANTED

FREE CONSULTATION • NO IDEA TOO SMALL

Disclose registration. Potential cash or royalties from manufacturers seeking new ideas. For free information on how to register your ideas, call or write:

AMERICAN INVENTORS CORP.

59 Interstate Dr. Dept SR
West Springfield, MA 01089 (413) 737-5376
A Fee Based Marketing Company

FOR SALE

HAFLER DH-101 SUPERMOD. Audio Gram says for the here and now, this is the one. Brochure available. Musical Concepts, 1060 Fifth Plaza, Dept 2, Flossant, MO 63031. (314) 831-1822.

FANTASTIC AQUARIUM Fish. Filters. Medicines. -25%. Catalog 50c (Refundable). 313-627-2877. Aquadiscout, 33516 Mill, Ortonville, MI 48462.

PERSONALS

MAKE FRIENDS WORLDWIDE through International correspondence. Illustrated brochure free. Hermes-Verlag, Box 10660/Z, D-1000 Berlin 11, W. Germany.

PENFRIENDS - ENGLAND - USA. Through correspondence. Send age, interests. Free reply. Harmony, Box 89SR, Brooklyn, New York 11235.

CORRESPONDENCE FOR FRIENDSHIP IN PHILIPPINES, MALAYSIA. Free information. AACC-(SR), Box 1542, Canoga Park, CA 91304.

CORRESPONDENCE for friendship! Mexico, Philippines, Europe, USA. Free information. International, Box 1716-RV, Chula Vista, CA 92012.

RUBBER STAMPS

RUBBER ADDRESS STAMPS, BUSINESS CARDS. Free Catalog—Fast Service. Jackson's, Brownsville Road-E-101, Mt. Vernon, Ill. 62864.

1982 GOLF DIRECTORY

The 1982 Golf Directory—Winter Edition includes over 750 product listings and over 250 golf resorts. complete with specs and information.

TO ORDER, send \$3.95 (\$2.95 plus \$1.00 postage and handling—\$5.00 outside the USA) to Golf Directory, PO Box 340, Broomall, PA 19008.

*Residents of CA, CO, DC, FL, IL, MA, MI, MO, NJ, NY State, OH, SC, TN, and VT add applicable sales tax.



assigns each character and mood its own particular sound: vielles accompany lamentations, processions are marked by bagpipes and percussion, recorders portray the young students, and St. Nicholas enters to bells. Departing from precedents set by earlier recordings of medieval dramas, Renz draws on Middle Eastern timbres. Perhaps he goes a little too far in his wild, almost bellying-dancing music for the Jew and the thieves, with its Kabuki-like percussion and glissandos, but the effect is powerful.

The performance, with an all-male cast, is lively and dramatic. Wilbur Pauly, as Saint Nicholas, is effective in each of his disguises; this is no platitudinous saint, but a man of action. As the robbed merchant, Patrick Mason whines and snarls with Eastern yelps and nasal sounds, and Peter Becker displays his usual artistry in Euphrosina's moving lament for her lost son.

Although historians might well dispute some of Renz's reconstruction, no one can fault his work as music drama. The New York Ensemble for Early Music has here re-created an ambiance of medieval liturgical drama in a work that is also a valid operatic experience. S.L.

TWENTIETH-CENTURY AUSTRIAN MUSIC FOR VIOLIN AND PIANO. Wellesz: *Five Miniatures*. David: *Three Canzonas*. Rappf: *Sonata*. Urbanner: *Five Pieces*. Leopold La Fosse (violin); James Avery (piano). ORION ORS 81400 \$8.98.

Performance: **Excellent**
Recording: **Good**

Although the birth dates of the composers included here range from 1885 to 1936, the selections represent Austrian music in the aftermath of the so-called Second Viennese School (Schoenberg and his disciples). Egon Wellesz, who is best known as an Oxford musicologist, was actually a pupil of Schoenberg. These *Five Miniatures*, written in 1965 when he was eighty, have an impressively ultra-serious, introspective, Old World flavor. Erich Urbanner's 1961 pieces are vigorous and expressive exercises in serial composition, but Kurt Rappf's 1976 sonata is in an older, more traditional, free-swinging expressionist line.

All the foregoing pieces sound mainstream nowadays but with a pronounced romantic flavor. Thomas Christian David's canzonas represent another line of musical thought. He is the son of the somewhat better-known Johann Nepomuk David, an Austrian traditionalist of an earlier generation who was once quite popular in Austria, though little known outside. The older David upheld the traditions of the Austrian old school against the incursions of the Schoenberg modernists. Today the situation is reversed. The Schoenbergians appear as the mainstream while the Davids, father and son, occupy a side channel. The canzonas here are attractive neo-Classical music, and, without much knowledge of the father's work, I would say that the son's style sounds individual enough.

Leopold La Fosse is a first-class violinist with a lot of sympathy for all this music—especially the expressionist variety. He has an able partner in James Avery, and the recording is satisfactory. E.S.

WE'LL LURE YOU WITH OUR PRICES... AND WIN YOU WITH OUR SERVICE... THIS MONTH'S SUPER SPECIALS VIDEO & AUDIO

ORDER TOLL FREE (800) 221-8180

11 Westport 12131 732-9600

RATED NO. 1 FOR SERVICE & RELIABILITY

SONY MDR 3 MICRO HEADPHONES
SUPER LIGHTWEIGHT
ONLY **23.90** EACH

VIDEO RECORDERS
JVC HR-750 (Hi-Fi) \$1199
PANASONIC PV-1270 (VHS) \$559
RCA VTI-170 (Port. VHS) \$949
RCA VTE-656 (VHS) \$919
SONY SL-200D (Port. Beta) \$875
SONY LT-2000 (Laser Disc) \$689

VIDEO CAMERAS
AKAI VC-1 (Auto Focus) \$849
RCA CC01 (Manual) \$669
VITACHI VTC-1000 (Lubeless) \$1449
SONY VCC-2100 (L. 200mm) \$959
TOSHIBA KC-1900 (B. 200mm) \$649

VIDEO ACCESSORIES
VIDEOTAPE DFTALER II \$105
VIDEOTAPE DFTALER III \$195
VIDEOTAPE STABILIZER \$9.95
VIDEOTAPE PROOC AMP \$34.90

COLOR T.V.
SONY KV-1515 (15" Screen) \$398
SONY KV-1768 (17" Remot.) \$519
SONY KV-1914 (19" Screen) \$655
SONY KV-1969 (19" Remot.) \$669
SONY KV-1948 (21" Remot.) \$719
NOTE: ALL COLOR TELEVISIONS SHIPPED FREIGHT COLLECT.

CAR STEREO
IN-DASH CASSETTE WITH RADIO
SANYO FT-276 (Auto Reverse) 104.90
PIONEER PL-950D 139.50
PIONEER KE-1100 174.50
PIONEER KE-270 214.90
PIONEER KE-1100 (Clock) 209.50
PANASONIC UO-900 (Clock A/R) 327.90
PIONEER RS-518 278.50
JENSEN RE-512 265.90
CLARION 7500 (PB A/R) 209.90
MARANTZ CAR-817 259.50

CAR SPEAKERS
JENSEN J-2033 (6x9 Trunk II) 99.90
JENSEN J-1069 (6x9 Coil) 44.90
SHURE M97-40 (6x9 Trunk) 69.90
JENSEN J-2126 (5 1/4" Coil III) 53.90
JENSEN J-2041 (5 1/4" Coil II) 54.90
PIONEER TS-608 (6x9 3-way) 99.90
PIONEER TS-695 (6x9 Trunk) 89.90
PIONEER TS-168 (6 1/2" W) 79.90
PIONEER TS-16 (6 1/2" W) 24.90
PANASONIC EAB-920 104.90

RADAR DETECTORS
FOX XX \$199
FOX REMOTE \$59
FOY SUPERFOX \$139
FUZZBUSTER (Superhet) \$199
FUZZBUSTER ELITE \$119
FUZZBUSTER III \$59

ELECTRONICS
CANON P-7D PALMPRINTER
CALCULATOR
ONLY **52.90**
CALCULATORS
CASIO CP-100 (Small Calc. Printer) \$64
CASIO CA-90 (Calc. Game) \$58
CASIO M-12 (Melody Watch) \$44
CASIO M-30 (Covers Watch) \$33

TELEPHONES
GTE FLEPHONE II \$39
FREEDOM PHONE 3500 (Mini Cordless) \$225
MEMOREX 400 (Wearless 500 Range) \$159
WEBCOR 722 (2-line) \$135
COBRA CP-280 (Wearless 600 Range) \$139

BLANK CASSETTES
MAXELL HGT-120 or TDK HGT-120 VIDEO TAPE
ONLY **17.50** EACH

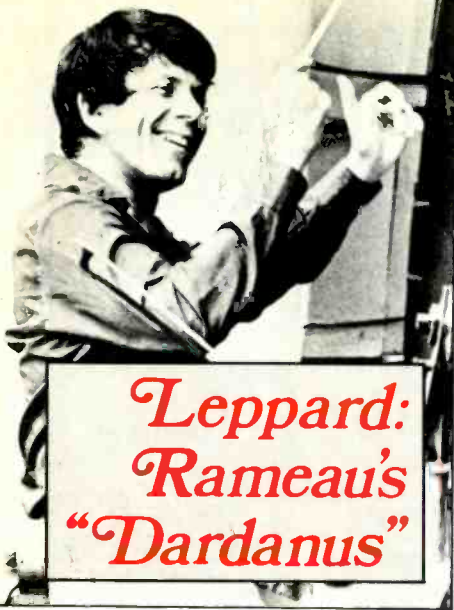
AUDIO VIDEO
WE CARRY TAPES BY AMPEX, BASF, FUJI, JVC, MAXELL, MEMOREX, PANASONIC, ALL BETA I-500, ALL BETA L-750, ALL VHS I-120 (Except HD), MATTEL, Intellivision Game, 239.95, ALL MATTEL GAME CARTRIDGES, 24.50, SONY VCC-2000 (L. 200mm) 164.95, TDK HD-01 (Head Demagnetizer) 16.99, TDK D-C60 1.25, ATARI ASTERODISK 27.50, TDK AD-C90 2.45, ATARI SPACE INVADERS 24.50, TDK MA-C90 5.99, MEMOREX T-120 12.95, TDK SA-C90 4.75, MAXELL T-120 13.99, MAXELL UD-LR (UD-LR C-60) 2.49, MAXELL UD-LR (UD-LR C-90) 3.29, AMPEX T-120 12.95, AMPEX L-500 9.95, MAXELL UD-C90 2.49, FUJI UD-LR 15.95, FUJI L-500 10.49, MAXELL UD-150 2.99, BASF L-500 (Pure Chromium) 8.95, MAXELL UD-M 110 (Ward Demag) 9.95, BASF L-120 (Pure Chromium) 13.95, MAXELL UD-M (Cassette Demag) 16.95, ATARI Video Game CP-950 144.95, NORTONICS Video Bulk Eraser 34.99

ADDITIONAL 5% DISCOUNT ON 100 OR MORE ASSORTED TAPES
WE STOCK B&W, COLOR TVS, VHS AND BETA VIDEO RECORDERS AND HOME MOVIES FROM ALL MAJOR HOLLYWOOD STUDIOS. SEND FOR FREE CATALOG. WE WILL MEET OR BEAT ANY COMPETITOR'S PRICE IF HE HAS THE MERCH ON HAND.

HOW TO ORDER BY MAIL: FOR PROMPT AND COURTEOUS SHIPMENT SEND MONEY ORDER, CERTIFIED CHECK, CASHIER'S CHECK, MASTERCARD, VISA include card number. Interbank, no expiration date and signature. DO NOT SEND CASH PERSONAL AND BUSINESS CHECKS MUST CLEAR (BANKS BEFORE PROCESSING SHIPPING, HANDLING, & INSURANCE CHARGE IS 5% OF TOTAL ORDER WITH A \$4.95 MINIMUM (Shipping charge to Canada, Alaska, Hawaii & Puerto Rico is 10% with 9.95 minimum). NEW YORK STATE RESIDENTS ADD 4% SALES TAX. ALL OTHERS ADD 6%.

ALL MERCHANDISE IS BRAND NEW, FACTORY FRESH AND 100% GUARANTEED.
MUSIC & RECORDS WORLD
23 PARK ROW, DEPT. SR4, NYC 10038
SEND FOR FREE 280 PAGE AUDIO/VIDEO CATALOG

CIRCLE NO. 19 ON READER SERVICE CARD



Colbert Artists Management, Inc.

Leppard: Rameau's "Dardanus"

Poor Jean-Philippe Rameau. He didn't get around to writing operas until he was fifty, and when he did, he was first opposed (by partisans of the old school of Lully) for being too innovative and then, almost immediately, for being too old-fashioned (by partisans of Pergolesi and the new Italian comic opera). He had to contend with the limitations of French singers, and his operas never traveled very well abroad. Finally, the success of Gluck and the new Classical style gave them a knockout blow from which they never really recovered. There has been some revival of interest in these works in modern times, but the continuing decadent state of French opera performance has made it difficult. Judging by photographs of the Paris Opéra production of Rameau's *Dardanus* on which a new Erato recording was based, I am content just to have heard the records. Poor Rameau!

The recording, at any rate, is outstanding. Raymond Leppard's conducting is brilliant, clear, precise—and yet moving. Leppard is very much a master of the Baroque style and has succeeded in arranging this difficult and trouble-ridden work so that it functions. He has found an admirable cast of singers who are either native French speakers or outlanders who can handle the language with conviction. And he has helped both singers and musicians to find a legitimate-sounding style without sacrificing to antiquity anything in the way of vigor, pathos, mystery, or enchantment.

French opera descended through Lully from the early Florentine and Venetian masters: Caccini, Monteverdi, Cavalli, Cesti. It was, therefore, in a sense *always* old-fashioned, but it was also modern in that it held onto and carried forward the original ideals of music drama which had died out elsewhere. The early free Italian style lent itself very well to translation into a fluid French idiom, and French opera did not surrender to the later four-square Italian and German operatic styles until the period

of Ambroise Thomas. In the eighteenth century it was the French—Lully, Rameau, and Gluck—who carried the torch for music drama.

Dardanus first appeared in 1739, and it caused a sensation. Wags complained that the orchestra was kept so busy that the musicians didn't even have time to sneeze. Solos, chorus, orchestra, and dance are closely integrated in a real music-theater manner. The recitative is fluent, expressive, and melodic, shading off gracefully into the airs. The sinfonias and ritornellos paint stage pictures and present characters and emotions as vividly as any music before Berlioz and Wagner; Rameau was the first real master of orchestration.

Rameau was also one of the handful of great musical dramatists—in the company of Monteverdi, Mozart, late Verdi, and Wagner. His operas' shortcomings are literary. He thought he could set anything—even the newspaper—and ennoble and dramatize it. He was *almost* right. *Dardanus* is as silly a piece of operatic nonsense as was ever perpetrated on the stage—a sort of absurd rococo magical mystery tour—and yet it was revived (and revised) over and over.

For the Paris production and recording, Leppard in effect selected gems from the various extant versions of the work, cut much presumably extraneous matter, and streamlined the opera overall. But everything incorporated here is in some sense "authentic" Rameau. It's also superb Rameau, every bit worth saving. The music is not only wonderful but, in spite of all the work's dramatic weakness, always real and powerful *stage* music.

If there is a standout member of the cast, it is probably José van Dam as the magician Isménor. The vocal level otherwise is generally solid. The Americans Frederica von Stade and Michael Devlin are strong; only tenor Georges Gautier, in the title role, is somewhat weak. Leppard coaxes a certain liveliness, an articulation and intensity, out of everyone—soloists, chorus, and orchestra alike—that is very engaging and *à propos*. The music, even in the least melodic recitative—and certainly in the airs, ritornellos, choruses, and dances—takes the ear with a grace and (as they used to like to say) an affective humor that are charming, often moving, always delightful.

The recording quality is excellent—clear and beautifully balanced. Text, translation, and notes are provided. Along with the old-instruments recording of *Castor et Pollux* by the Concentus Musicus, this album is an essential documentation of Rameau's art. Perhaps someday these operas will even get the modern stagings they deserve.

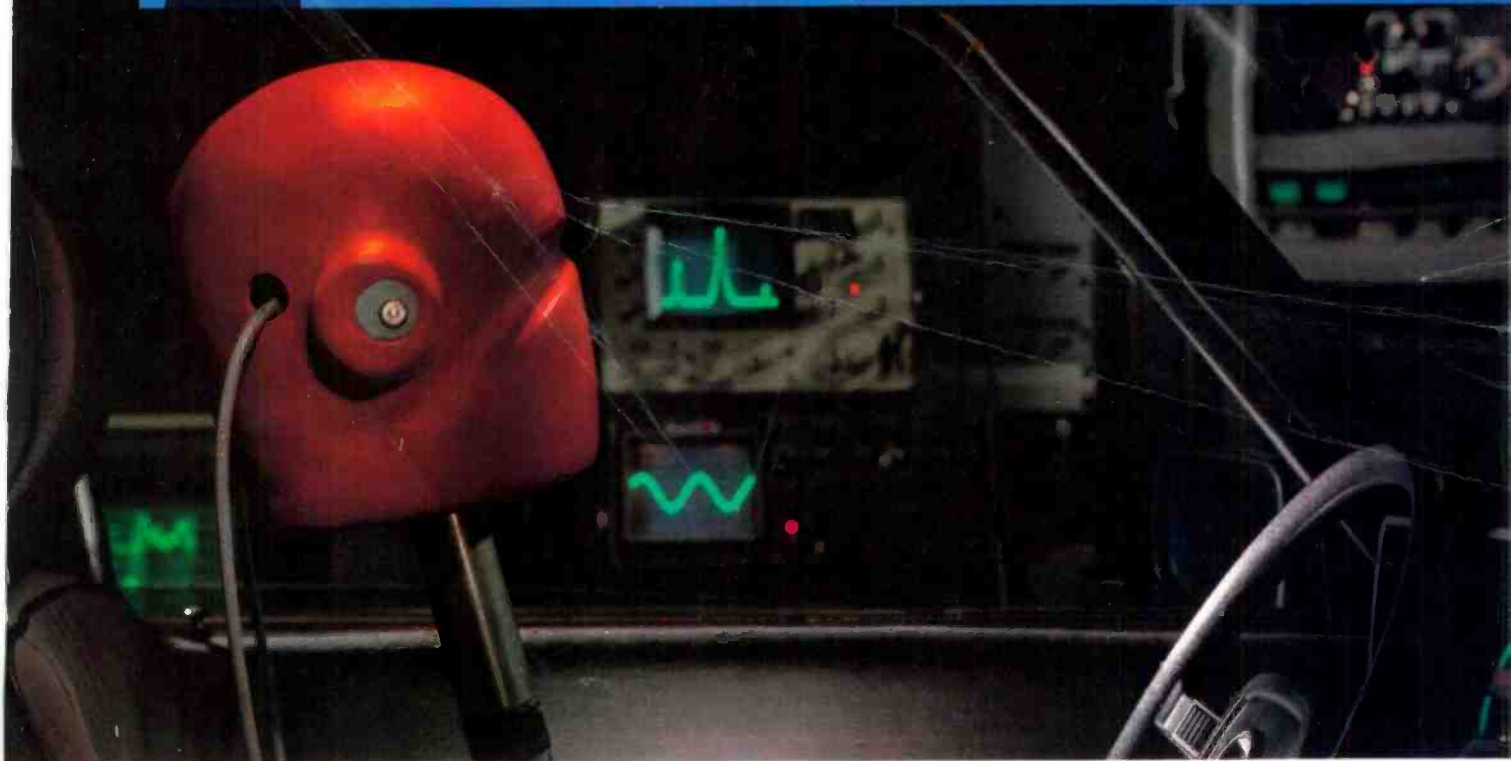
—Eric Salzman

RAMEAU: *Dardanus*. Christiane Eda-Pierre (soprano), Vénus; Frederica von Stade (soprano), Iphise; Georges Gautier (tenor), Dardanus; Michael Devlin (bass-baritone), Anténor; Roger Soyer (bass-baritone), Teucer; José van Dam (bass), Isménor; Chorus and Orchestra of the Paris Opéra, Raymond Leppard cond. RCA/ERATO STU 71416 two discs \$21.98.

STEREO REVIEW ADVERTISERS' INDEX

READER SERVICE NO	ADVERTISER	PAGE NUMBER
1	Acoustat Corp.	90
2	Acoustic Research	25
3	Adcom	98
	ADS	15
	Allison Acoustics	99
	American Audio	102
	Angel/EMI Records	89
4	Audio-Technica U.S. Inc.	80
48	B.E.S.	46
	Bose Corporation	Cover 3
	Brown & Williamson Tobacco Corp.	9
5	Carver Corporation	23
6	Celestion Industries, Inc.	100
	Chrysler Corporation	76,77
7	Consumer's Company	102
8	Crown International	20
9	dbx, Inc.	79
10	dbx, Inc.	87
	Delco Electronics Division	75
11	Denon America Inc.	12
12	Discount Music Club	18
13	Discwasher	71
	Fuji Photo Film, USA	17
14	Fulton Electronics	81
	Herrington's	99
15	Hi-Fi Buys	95
	Illinois Audio	97
17	International HiFi Dist.	92
	International Record & Tape Club	95
18	International Wholesalers	92
	Jack Daniel's	83
19	J & R Music World	105
20	JBL	37
21	Jensen/Automotive Div.	10
	Kenwood Electronics	69
22	Koss Corporation	Cover 4
23	Loran	31
24	Magnavox Corp.	41
	Marlboro	35
	Maxell Corp. of America	39
25	Maxell Corp. of America	73
26	McIntosh Laboratory, Inc.	91
27	Mobile Fidelity Sound Labs	91
28	Mura Corp.	91
29	U.S. Pioneer	32,33
30	Polk Audio	88
31	P.R.I.C.E.	101
33	Proton Corporation	7
47	Radio Shack	2
	R.J. Reynolds/Camel	43
	R.J. Reynolds/Winston	26
	Ron Rico Rum	45
32	Sansul Electronics	29
34	Santa Fe Express	92
45	Sennheiser Electronic Corp.	73
35	Sherwood Electronic Labs., Inc.	Cover 2,1
36	Shure Brothers	72
37	Sony Corp.	21
38	Sound Reproduction, Inc.	102
46	Stanton	89
39	Stereo Corp. of America	95
	Stereo Discounters	99
40	TDK Electronics	4
41	TDK Electronics	87
42	Teac Corporation of America	19
56	Technics by Panasonic	11
44	Wisconsin Discount Stereo	101

2 The Second Fundamental Difference



Active Equalization in the Bose® Car Stereo System.

The Bose Car Stereo System is fundamentally different from conventional car stereo components. It is designed as an integrated system. It is tested to withstand the demanding requirements of the automotive environment. And it is engineered to include innovations like Direct/Reflecting® Speakers and Active Electronic Equalization.

This is the second in a series examining each of the fundamental differences more closely.

The dummy head in the photograph was an important part of Bose's study of automotive sound. High-resolution microphones in



each "ear" analyzed the acoustics of more than 50 different cars and vans to determine how various combinations of seating, upholstery, window shape and placement affect the quality of reproduced music.

This information was processed by a computer to develop the sophisticated Active Electronic

Equalization circuitry in the Bose 1401™ Car Stereo. This circuitry, in combination with two simple controls, enables you to compensate for these acoustical effects with exceptional accuracy. It works together with four separate power amplifiers and four full-range speakers to give your music clarity and detail that can only be compared to a live performance.

Get a live demonstration of the Bose® 1401/CRC Direct/Reflecting® Car Stereo System. Compare it to even the most expensive conventional components. The difference is fundamental.

For more information, contact your local authorized Bose sales representative or write Bose Corporation, The Mountain, Framingham, Massachusetts 01701.

BOSE
Better sound through research.

Kossfire and Dyna*Mite. An explosive duo from Koss.



What a duo the Kossfire/210 and Dyna*Mite M/80 loudspeakers make. Each is an explosion of sound and design innovation that sets them apart from all other speakers in their class.

Take the 4-driver Kossfire loudspeaker, for example. Kossfire's unique dual tweeter design doubles the power handling capability over the all-important treble range while virtually eliminating distortion. There's a big 12-inch woofer and a 5-inch midrange. Even a built-in automatic circuit breaker. And it's all wrapped up in a beautiful pecan-veneer, 80-liter, cabinet. No wonder the Kossfire/210 is the first loudspeaker to live up to its promise.

Or take the Koss Dyna*Mite M/80 mini speakers. Unlike other mini speakers, the Dyna*Mite M/80 features a unique 3-driver system with perfect mid-tor-image performance whether it's standing up or lying down. With dual 4½-inch woofers and a 1-inch dome tweeter, the Dyna*Mite M/80 will turn any music into a dynamite experience. And its natural, hand-rubbed walnut veneer cabinet make it as beautiful to look at as it is to listen to.

Ask your audio dealer to show you the explosive duo from Koss. We think you'll find them both a dynamite experience. And that's a promise!

© 1981 Koss Corp.

KOSS® Stereophones/Loudspeakers/K4DS Digital Delay System

hearing is believing

KOSS LIMITED, 4112 South Service Road, Burlington, Ontario L7R 3X5

CIRCLE NO. 22 ON READER SERVICE CARD