

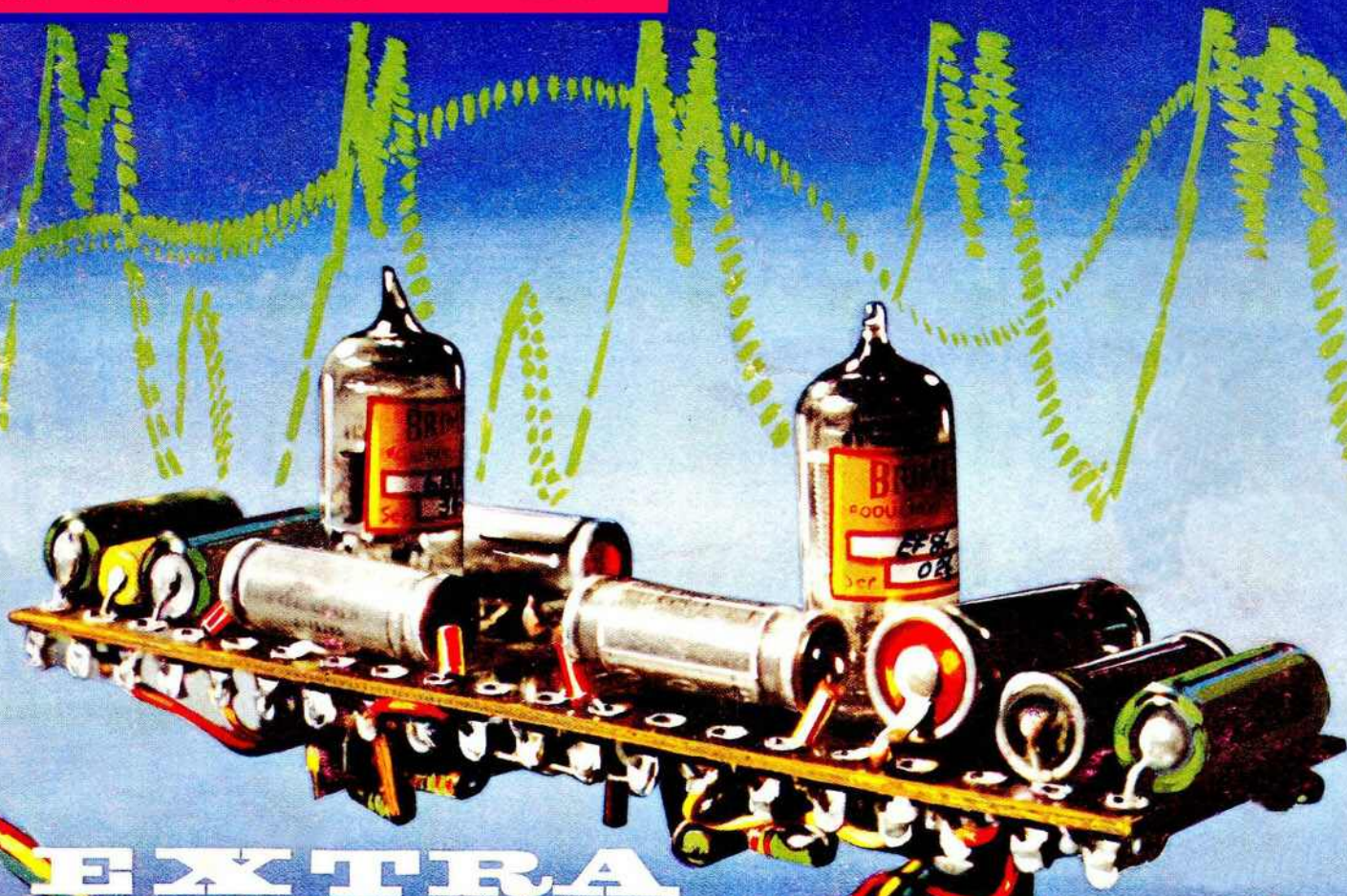
AMATEUR

TAPE RECORDING

VOL. 4 NO. 6

JANUARY 1963

PRICE 2/-

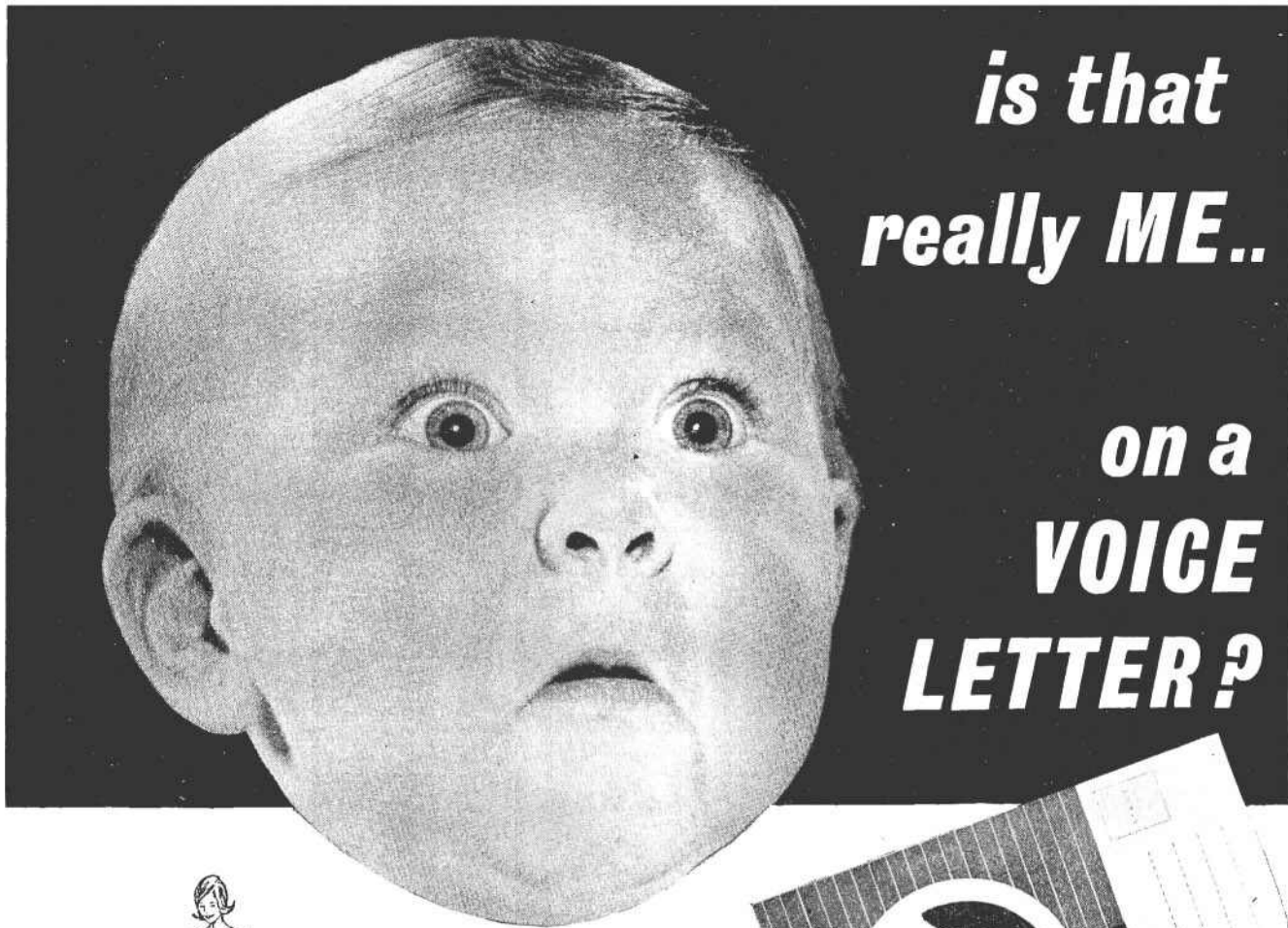


EXTRA

CONSTRUCTION BOOK NO. 2

**HOW TO BUILD THE ATR
HI-FI PREAMPLIFIER**

AND SPECIAL OFFER : SAVE £8



*is that
really ME..*

*on a
VOICE
LETTER?*



More and more people are getting their letter writing 'taped' with the Mastertape Voice Letter. Anywhere in the world far away friends and relations can receive and exchange a living, spoken message which can include the whole family—even down to the baby! Giving 20 minutes playing time at 3 3/4 i.p.s. on a twin-track recorder, the Mastertape Voice Letter, complete with box and ready-to-address envelope weighing only 2 ozs., costs only 5/3.



**British Mastertape
Makes Sound Sense**

Mastertape voice letter

obtainable from stockists everywhere !



M.S.S. RECORDING CO. LTD., COLNBROOK, BUCKS. Tel. Colnbrook 2431.

A MEMBER OF THE **BICC** GROUP OF COMPANIES

Amateur Tape Recording & Hi-Fi



WE ARE ONLY A PILLAR-BOX AWAY!

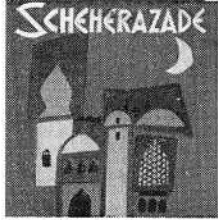
Wherever you live, you are only a 3d. stamp away from the biggest Specialists in the Country! We *guarantee* you our terms—which include **NO INTEREST CHARGES**—cannot be beaten.

Thinking of buying a Tape Recorder? Interested in saving money? Then write or phone us today for Free Brochures on all the good makes and Full Details of our Amazing Terms:

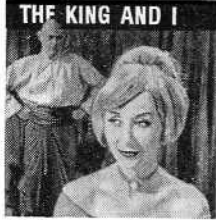
HOWARD

**218 HIGH ST.,
BROMLEY, KENT**
RAVensbourne 4000/4477

WORLD RECORD CLUB OFFERS YOU THE CHOICE OF ANY 3 PRE-RECORDED TAPES



31. Rimsky-Korsakov: Scheherazade. Sir Eugene Goossens conducts the LSO in a breathtaking performance of this rich and exotic masterpiece. **Also on disc: mono/stereo**



32. Star cast and orchestra stare all the famous songs: Getting to Know You, Hello Young Lovers, I Whistle a Happy Tune, Shall We Dance, etc. **Also on disc: mono/stereo**



53. These two suites, containing some of Bizet's most thrilling music, are given magnificent performances by the Sinfonia di London under Muir Mathieson. **Also on disc: mono/stereo**



63 Cuban Carnival, Yesterday, Blues in My Heart, and eight more great numbers played by George Shearing with vocals by Dakota Staton. **Also on disc: mono only**



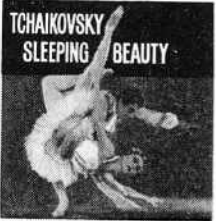
60 Chabrier's colourful Espana, with Suite Pastorale, Joyeuse Marche and Bourree Fantasque. Paul Bonneau conducts. Champs Elysees Theatre Orchestra. **Also on disc: mono/stereo**



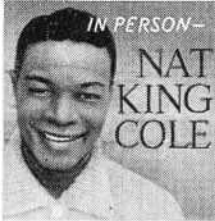
33. Beethoven 5th, plus Egmont, Josef Krips and LSO in a titanic interpretation which matches the tremendous power of this celebrated music. **Also on disc: mono/stereo**



30. Ian Carmichael, Joyce Blair, star cast/orchestra. As Long as He Needs Me, Consider Yourself, all the hit numbers from Lionel Bart's great show. **Also on disc: mono/stereo**



39. Great ballet conductor John Hollingsworth and the Sinfonia di London in a sparklingly fresh interpretation of Tchaikovsky's famous Ballet. **Also on disc: mono/stereo**



59 The silken voice of Nat King Cole in Walkin', Because You're Mine, You'll Never Grow Old, Baby Won't You Say You Love Me and 8 more. **Also on disc: mono only**



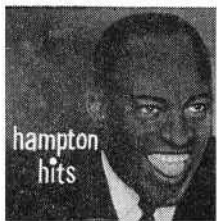
40. Superb singing by Bruna Rizzoli and Giuseppe Savio with the chorus of the Teatro Nuovo di Milano and orchestra conducted by Napoleone Annovazzi. **Also on disc: mono only**



52 Gracie Fields sings her favourite songs for you, including In My Little Bottom Drawer, Sally, Song of the Mountain and ten others. **Also on disc: mono/stereo**



25. Ian Wallace, Joyce Blair and chorus. Some Enchanted Evening, I'm In Love With a Wonderful Guy, and all the unforgettable songs from this great musical. **Also on disc: mono/stereo**



34. Stardust, How High the Moon, Nearer's of You, 'Round Midnight, King David — eight numbers by the vibraphone genius, Lionel Hampton. **Also on disc: mono/stereo**



48. Deep in My Heart, Drinking Song, Serenade—all the old favourites, fresher than ever with Marion Grimaldi, Linden Singers and Orchestra. **Also on disc: mono/stereo**



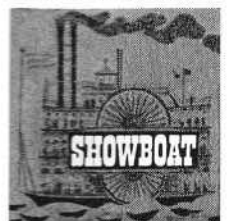
10 Tchaikovsky Violin Concerto, Tossy Spivakovsky with Walter Goehr and London Symphony Orchestra in a superb performance of this melodious work. **Also on disc: mono/stereo**



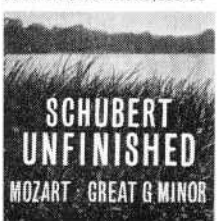
58 The fabulous dynamic Duke Ellington himself in eight great numbers including Stomping at the Savoy, In the Mood and Honey-suckle Rose. **Also on disc: mono only**



2. Grieg Piano Concerto, Alexander Jenner in an electrifying performance with the Bavarian State Radio Orchestra — conducted by Odd Gruner-Henpe. **Also on disc: mono only**



35. Ol' Man River, Bill, Make Believe, many more well-loved numbers from this famous musical memorably sung and played by full star cast. **Also on disc: mono/stereo**



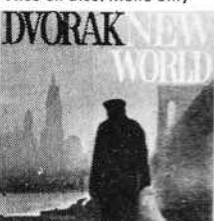
44. Leopold Ludwig and LSO combine brilliantly in an exciting 'double': two of the world's greatest symphonies receive vivid new interpretations. **Also on disc: mono/stereo**



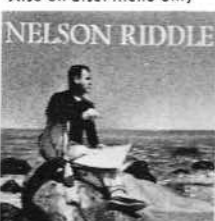
62 The best of Irving Berlin, Easter Parade, The Girl that I Marry, How Deep is the Ocean, What'll I do, 8 more. Raoul Poliak, his orchestra and chorale. **Also on disc: mono/stereo**



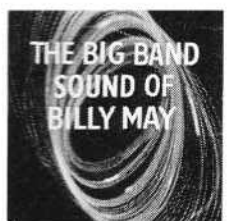
38. Hervey Alan, Ian Wallace, Marion Grimaldi and chorus sing the immortal favourites: Cobbler's Song, Robbers' Chorus, Chu Chin Chow, etc. **Also on disc: mono/stereo**



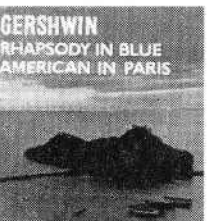
11 Dvorak Symphony No. 5—From the New World. Leopold Ludwig conducts the London Symphony Orchestra in a dramatic and moving performance. **Also on disc: mono/stereo**



71 The smooth sound of the Nelson Riddle Orchestra in Touch of Your Lips, Body and Soul, The Tender Touch, As You Desire Me—11 favourites in all. **Also on disc: mono only**



64 The unmistakable sound of the Billy May Band in a tremendous selection — It Happened in Monterey, Bye Bye Blackbird, Be Honest with Me, 9 more. **Also on disc: mono only**



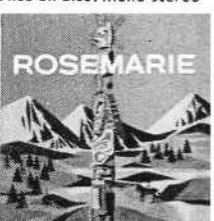
13 Gershwin's Rhapsody in Blue and American in Paris. Pittsburgh Symphony Orchestra conducted by William Steinberg. Jesus Maria Santoro, piano. **Also on disc: mono/stereo**



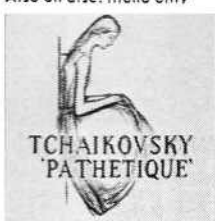
65. Our Love is Here to Stay, The Nearness of You, Guilty and nine more great hits, all with America's top vocal group, the fabulous Four Freshmen. **Also on disc: mono only**



61 The world's 3 greatest sonatas—Beethoven's Moonlight, Pathetique and Appassionata — superbly played by famous T.V. pianist Joseph Cooper. **Also on disc: mono only**



50. David Huges, Barbara Leigh, Andy Cole and chorus sing Indian Love Call, Rose Marie, and all the other tunes from Friml's well-loved musical. **Also on disc: mono/stereo**



54 Tchaikovsky's last and greatest symphony, is here given a splendidly moving rendering by the Sinfonia di London conducted by Muir Mathieson. **Also on disc: mono/stereo**



6 Full-cast production. Brand new arrangements. Star artists sing Stranger in Paradise, Baubles, Bangles and Beads, This is My Beloved, etc. **Also on disc: mono only**

FOR ONLY 30/-

THE GREATEST BREAKTHROUGH SINCE TAPE RECORDING!

Here is the greatest World Record Club introductory offer ever made . . . a unique offer never before matched by any record club or company anywhere in the world!

EVERY ONE OF WORLD RECORD CLUB'S UNRIVALLED RELEASES AS 12" LPs IS NOW AVAILABLE ON 3 3/4 ips TAPE!

Now you have the opportunity to play any WRC release on your tape recorder. Each of these 'tape records' runs at 3 3/4 ips, mono, on 5" spools and can be played on either 2 or 4 track recorders. New electronic techniques of tape-to-tape transfer give these 3 3/4 ips WRC pre-recorded tapes a standard of reproduction unattainable previously at less than 7 1/2 ips.

WORLD RECORD CLUB 7-POINT PLAN MEANS BETTER LISTENING FOR YOU!

1. AN UNPARALLELED INTRODUCTORY OFFER.

Choose now, any three of the superb 3 3/4 ips pre-recorded tapes shown here, for only 10/- each and number them on the attached coupon. (If you wish, of course, you can choose 12" LPs instead. Both disc and tape are the same price.) Please send no money until after you have received, played and approved them. We want you to prove to yourself, before paying, that our tapes are equal to the world's best.

2. THE OPPORTUNITY TO BUILD A UNIQUE TAPE COLLECTION.

The WRC programme, which you will receive with your 3 introductory tapes, offers you an exciting and varied annual repertoire of more than 60 selected releases, covering classics, jazz, shows, ballet music, light music and 'pops'. Every one is a superlatively recorded 3 3/4 ips mono tape (or 12" LP—mono and stereo). Each is offered to you at the

Don't miss this great opportunity. Send off the coupon today, for your 3 introductory selections for only 30/-.

privilege club price of 29/- (plus a small charge for post and packing)—much less than you would pay elsewhere for recordings of anything like this quality.

Your only obligation, as a Club member, is to agree to buy four more tapes (or 12" LPs) over the year. Beyond this, there is no subscription or membership fee.

3. A PLANNED PROGRAMME.

Every World Record Club release is hand-picked by an independent panel of Britain's top musical authorities. The Countess of Harewood, Lord Montagu of Beaulieu, Sir Arthur Bliss, Richard Attenborough, Cyril Ornadel, Ray Ellington, Leon Goossens, Malcolm Arnold, Steve Race, John Hollingsworth, Antony Hopkins—and, as special adviser on tape, Miles Henslow.

4. FREE MONTHLY MAGAZINE.

A monthly magazine, packed with fascinating musical articles, reviews, news and pictures, is issued free to all members.

5. SPECIAL CONCERT PRICE CONCESSIONS.

Many concert halls and theatres throughout the country (including the Royal Festival Hall) allow special concession rates to club members for many performances.

6. FREE BONUS TAPES.

The more you buy, the more you save! After fulfilling the minimum membership obligations, you earn another tape of your own choice free for every extra three you buy!

7. EXCLUSIVE EXTRA RELEASES.

In addition to the regular monthly selections, the club offers members exclusive extra tapes at the standard Club price.

World Record Club is unique—the first and greatest Record and Tape Club in Britain, with the largest show catalogue (on tape and mono/stereo disc) in the world. No other method of tape—or record—buying offers you so many additional benefits, so much freedom and variety of choice, with no 'high-pressure' selling. And, of course, there are no subscriptions or membership fees of any kind—only a small deposit of £1 (later refundable) when you become a tape member.

... AND IF YOU OWN A
STEREO TAPE RECORDER
hear the fantastic reproduction of
STEREO 21
THE NEWEST,
TRUEST SOUND
ON TAPE TODAY!

Revolutionary new STEREO 21 pre-recorded tapes (7 1/2 ips twin-track) are issued exclusively by World Record Club. But they are offered without membership commitments of any kind. The first list of all new STEREO 21 releases is now available. It features 30 superb stereophonic tapes ranging from Beethoven's Eroica with Josef Krips conducting the LSO, to a lavish full-cast production of Oklahoma.

As always, WRC prices present unparalleled value—all STEREO 21 releases cost either 50/- or 60/- depending on playing time (up to 50 minutes). STEREO 21 tapes are now obtainable through leading retailers or direct by post from World Record Club. Send for full catalogue now—STEREO 21 must be heard to be believed!

7-DAY FREE TRIAL OFFER—POST TODAY!

STEREO 21 FREE BROCHURE

To WORLD RECORD CLUB (Dept. ATR4) Box 11
PARKBRIDGE HOUSE, RICHMOND, SURREY.

SEND NO MONEY NOW

3 3/4 ips pre-recorded tapes	12" LPs
------------------------------------	---------

Tick which you want

Please send me, without obligation, on 7-day free trial, the three selections indicated. (Your 3 selections must be either all tape or all disc.) If satisfied, I will pay you 30/- plus 3/- postage, packing and insurance. Only at that stage may you enrol me as a full member of World Record Club, entitled to all the benefits described. My only obligation as a member would be to agree to purchase 4 more top quality 3 3/4 ips tapes (or 12" LPs) over a 12-month period at the special club price of 29/- each. If I am not completely satisfied with my 3 selections, I will return them to you within 7 days, in good condition, and owe you nothing.

NOTE I understand I will be asked to pay £1 deposit when I become a tape member (this does not apply to disc members). This deposit is refundable.

Signed.....
this offer applies in Gt. Britain and N. Ireland only.

MY 3-SELECTION 'PACKAGE' COMPRISES

Choice No. 1 Choice No. 2 Choice No. 3



(place tape/disc key numbers only in the circles)

Tick here if stereo 12" LPs are required where available

Mr/Mrs/Miss
(BLOCK CAPITALS PLEASE)

ADDRESS

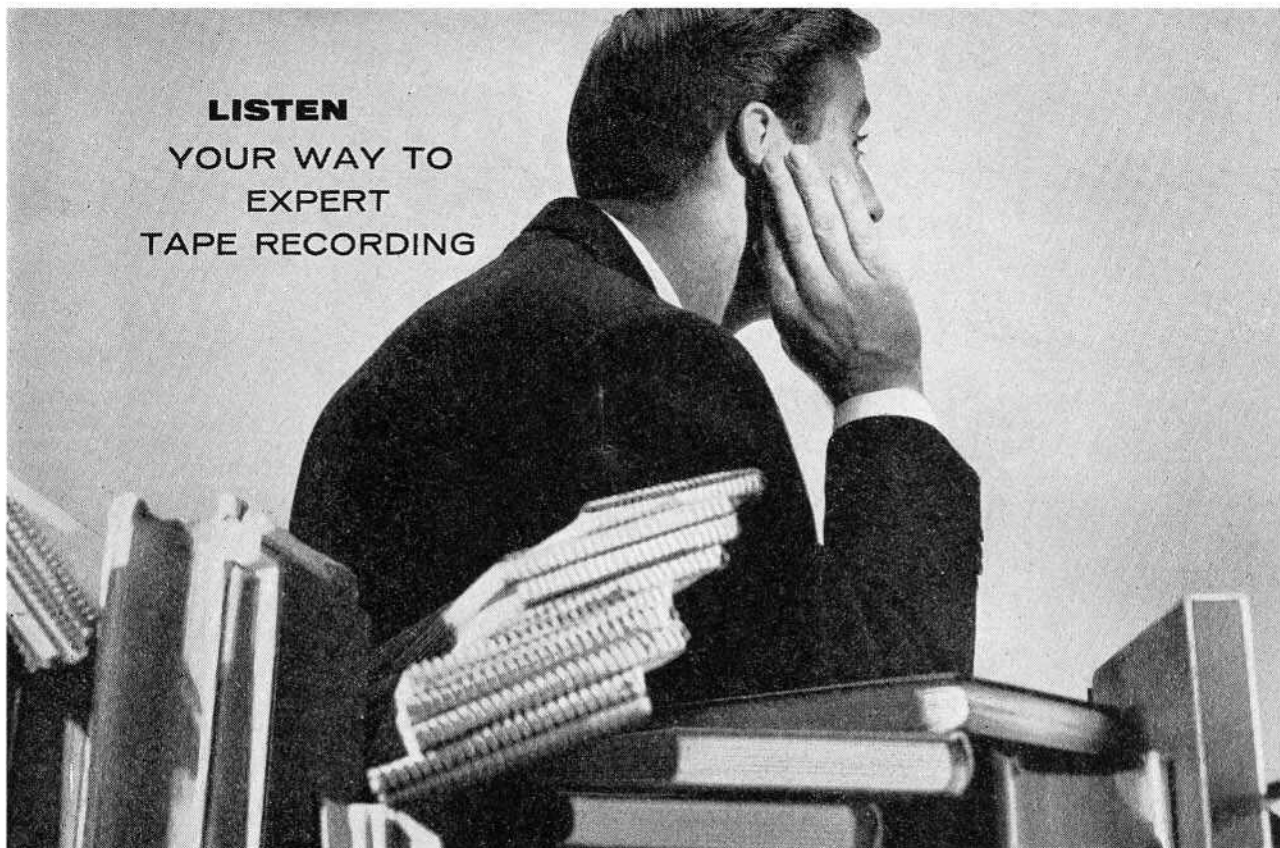
To WORLD RECORD CLUB (Dept ATR4)
Box 11 PARKBRIDGE HOUSE, RICHMOND, SURREY.

Please send me your free colour brochure, showing the full range of your new STEREO 21 releases.

NAME

ADDRESS

LISTEN
YOUR WAY TO
EXPERT
TAPE RECORDING



Emiguides guide where books can't take you

The newest (and easiest) way to learn about sound is *through* sound. Learn while you listen—with Emiguides.

These six instructional tapes were written and recorded by John Borwick. (At the instigation of the makers of Emitape.) All six of them make a unique introduction to expert recording. But each one is available separately, being completely self-contained. They are recorded full track at $3\frac{3}{4}$ " per second, can be used again for your own recording. You can get them at any radio or photographic shop, price 51/- the set of six (in a plastic tray), or separately at 8/6 each.

If you'd like to know more before you buy any—write to us for the Emiguide leaflet. Then put the books away!



To: E.M.I. TAPE LIMITED · HAYES · MIDDLESEX

Please send me further details of Emiguides.

NAME

ADDRESS

A.T.2.

Emitape

E.M.I. TAPE LTD · HAYES · MIDDLESEX · HAYES 3888

AMATEUR

Tape Recording & Hi-Fi

THE SOUND MONTHLY

In this issue

Special Supplement:

THE CONTINENTAL MARKET IN BRITAIN 9

Hi-Fi Without Tears 14

Get Your Idol Taped! 15

The Lure of the Organ 16

Tape Parade 16

16 pp. Pull-out Supplement:

Construction Book No. 2

THE ATR HI-FI PREAMPLIFIER

Hi-Fi Discs 25

The ATR Tape Club Contest -
News from the Clubs 26

The Swop Counter 28

The Sound Scene 29

The Things You Say 33

Classified Advertisements 38

Index to Advertisers 38

Editorial Office:

Room 532, Ulster Chambers,
168 Regent Street,
London, W.1. REGent 4833/5

Advertisement Office:

145 Fleet Street,
London, E.C.4. FLEet Street 7732/2110

Editor: Walter Gillings

Technical Editor: F. C. Judd, A.Inst.E.

Advertisement Manager: J. A. Pearce

ON THE COVER

HERE IS THE colourful chassis of the inexpensive ATR Hi-Fi Preamplifier, which you can build for yourself by following the instructions and diagrams in the pull-out Construction Book presented with this issue. Inside you will also find details of the Special Offer by which you can save more money in securing the complete kit of parts. Don't miss this wonderful opportunity!

Vol. 4, No. 6

January, 1963

The Commonsense Market

By THE EDITOR

THE revelation that up to £500,000 worth of transistor radios might be imported from Japan during 1963, with the entire approval of the British Government, was bound to cause some apprehension—in and out of the radio industry. The widely advertised offer of a transistor tape recorder at a 'believe it or not' price must, at first, also seem calculated to bring frowns to the brows of British manufacturers. Indeed, the response to this 'fantastic' offer was so enthusiastic that the people concerned confidently expected to sell 40,000 of these Japanese models before Christmas.

Is this further influx of low-price foreign goods a bad thing for the tape recording industry in Britain? In the long run, we estimate, it can do more good than harm. Thousands of young people—and their elders—who might never be introduced to the hobby through more expensive equipment may be persuaded to delve deeper into its pleasant mysteries—and, in due course, into their pockets. Almost every new motorist, sooner or later, buys a bigger, more expensive car. But very few Daimlers can be seen displaying 'L' plates . . .

STRENGTH FROM ABROAD

Some of the most impressive tape recorders which have appeared on the scene in the last two or three years have been made in Japan. None can deny the influence their presence has exerted on an industry which derived its first inspiration from Germany and the Continental countries, on which it still draws for much of its strength. Just how much is evident from the special supplement on *The Continental Market in Britain*, in this issue.

Tape recording, like amateur radio, is essentially international in its interests and applications. As such, it is playing an increasingly important part in breaking down the last remaining barriers between the nations. While British manufacturers can produce equipment of the kind they are offering today, and give the high standard of service to their customers which is equally important, they have nothing to fear from the removal of any trading restrictions—always provided they have equal opportunity to compete in the international market.

We know of at least one British firm which is selling its products, like coals to Newcastle, in Western Germany and is being encouraged to cater for the fastidious American market. And there must be at least a few thousand Japanese enthusiasts who would like to buy British, if they could . . .

The title *Amateur Tape Recording & Hi-Fi* is registered at Stationers' Hall, London. Contents are copyright and may only be reproduced by permission of the Proprietors. Signed articles represent the views of the authors and are not necessarily those of the Editor.

SUBSCRIPTION RATES: The subscription rate to *ATR* for all countries is 29s. (twenty-nine shillings) for 12 issues. Members of Tape Recording Clubs wishing to avail themselves of the special Club Subscription rate of 21s. per annum should apply to their local Club Secretary. All club orders must bear the Club Secretary's signature and be sent to the Subscription Dept., Amateur Tape Recording and Hi-Fi, Vernon Holding & Partners Ltd., 43/44 Shoe Lane, London, E.C.4, to whom all subscription orders should be addressed.

You'll be glad you chose
GEVASONOR

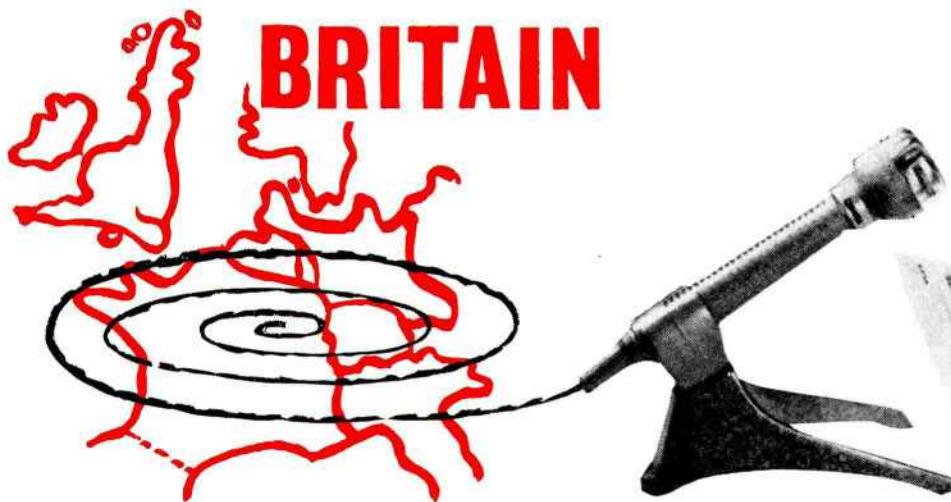
MAGNETIC RECORDING TAPE



GEVAERT LIMITED • GREAT WEST ROAD • BRENTFORD • MIDDX.

SINCE tape recording began, the inventive skills of many nations have contributed to its progress. The marketing genius, too . . . In these pages Amateur Tape Recording looks at some of the manufacturing firms which have established themselves in Britain after building their reputations on the Continent . . . makers of tape recorders, microphones and magnetic tape whose products have become an important part of the tape recording industry in this country.

THE CONTINENTAL MARKET IN BRITAIN



surveyed by **THOMAS SHERIDAN**

ASK any tape recording enthusiast to name a dozen different makes of machines now on the market, straight off the cuff, and see how many of them come from one or other of the Continental or Scandinavian countries. Just to make it more difficult, make him put them in alphabetical order and give the actual country of origin.

Belcanto—Denmark . . . Butoba—Germany . . . Optacord—Germany . . . Philips—Holland . . . Revox—Switzerland . . . Stuzzi—Austria . . . Tandberg—Norway . . . Telefunken—Germany . . . Uher—Germany . . .

That's nine—and the list is not complete, though it covers quite a lot of territory, and indicates the extent to which these six countries have contributed to the development of tape recording right from the very beginning. And if you include the manufacture of magnetic tape, you can add France, Belgium, and Italy to the list.

From Denmark

To the tyro, some of the names of Continental tape recorders are still unfamiliar, but most of the firms concerned have been around for some time.

Magnetic recording, as practically every schoolboy now knows, had its origins in the work of the Dane, Valdemar Poulsen. More than 60 years later the successors to this momentous achievement, the Danish firm of Bang and Olufsen (represented in this

TURN TO PAGE 11



ABOVE: The AKG D 19 BK microphone with table stand.

BELOW: The Belcanto tape recorder.



never before such compact versatility

4-Speed Versatility $\frac{1}{8}$, $1\frac{1}{2}$, $3\frac{1}{2}$ and $7\frac{1}{2}$ i.p.s.

4-Way Power Supply U2 Dry Cells, 'Dryfit'

Accumulator, A/C Mains and 6, 12 or 24 volt Car Battery. Concealed power unit combines unique mains system and re-charging device with built-in safety switch. The only Tape Recorder on the market with an accumulator which can be re-charged by a car battery.

Compact—Only $10\frac{1}{2}$ " x $8\frac{1}{2}$ " x $3\frac{1}{4}$ "—Weight without batteries 6 lb. approx. **5" Reels**—Up to 8 hours playing on one tape.

Frequency response—70 - 5,000 cps at $\frac{1}{8}$ ips, 50 - 11,000 cps at $1\frac{1}{2}$ ips, 50 - 18,000 cps at $3\frac{1}{2}$ ips, 50 - 22,000 cps at $7\frac{1}{2}$ ips.

Transistorised Motor Drive. Operates in any position with cover on—fully protecting reels. Twin Track to International Standard.

New modulation control by VU meter gives instant reading in bright sunshine.

Illuminated in the dark. New patented recording level control warning device.

Wow and Flutter plus or minus 0.15%. Signal to noise ratio 50 d.b.s. or better.

Push/pull output stage: 1 watt. Low Impedance Microphone input for extended microphone lead.

Remote control 'Reporters' microphone.

All-metal casing for maximum protection in all conditions. Operates direct from custom-built leather case.



Accessories
'Dryfit'
Accumulator
with Model 880
mains operated
power unit
and charger.
16 GNS.
Leather
carrying case.
9 GNS.

Price including
'Reporters'
microphone
and one 5"
reel of tape.

93
GUINEAS

UHER 4000 REPORT

never before such portable perfection

Small and neat as a new pin—the UHER '4000 REPORT' is an exceptionally fine tape recorder. Beautifully constructed, down to the last detail, it operates perfectly in any position—anywhere. See it, hear it, try it for yourself—at your nearest UHER dealer—today. Or write for full details to—

B O S C H L I M I T E D

LONDON SHOWROOM: RADIO & DOMESTIC APPLIANCE DIVISION,
205 GT. PORTLAND STREET, W.1. TELEPHONE: LANGHAM 1809/1800
Head Office: 20 Carlisle Road, The Hyde, Hendon, N.W.9. Telephone: COLindate 0161



THE CONTINENTAL

MARKET IN BRITAIN—from page 9

country by *Aveley Electric Ltd., South Ockendon, Essex*, can claim credit for the versatile little mains machine which, appropriately, starts the alphabetical list. Combining good appearance with portability, the **Belcanto** serves schools and colleges as well as amateur recordists.

Among the most serviceable of transistor portables—as countless outdoor recordists will testify—is the **Butoba MT5** (reviewed in *The Sound Scene*, August '62 issue). The same West German firm, which was founded in 1856 and made its first portable tape recorder with a precision spring motor in 1953, is responsible for the **Butoba MT7**, a smaller machine of elegant design which is specially suitable for cinefilm work. The two are marketed here by *Denham & Morley Ltd., London, W.I.*

The **Optacord** range is made by *Loewe-Opta*, a German firm which has enjoyed a world-wide reputation for more than 35 years and is represented here by *Highgate Acoustics, London, W.I.* Evidence of the ability of the **Optacord 412**, a transistor portable built like a brief-case, to withstand pretty rough treatment was forthcoming last summer from Lt.-Col. M. E. Banks, R.M., leader of the British Joint Services to Alaska. In a letter he wrote:

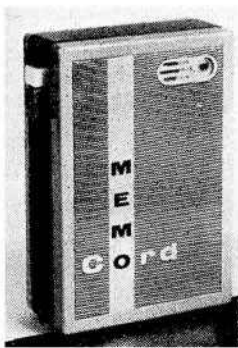
'The **Optacord 412** was a great success and stood up very well to the low temperatures and rough conditions. I myself found it extremely useful for keeping my diary while at base camp . . . We worked it very hard and it gave us excellent service.'

New ideas

Since the first 95L model of the **Uher** tape recorder was given a strenuous public test at the Dusseldorf Radio Fair in 1956, this company's constant endeavour to produce machines to meet the needs of their users has led to several 'firsts' in the field. It claims to have been first with a combined tape recorder and dictation machine—the **Uher Universal** (*The Sound Scene*, October '62).

With a tradition of precision engineering dating back many years, the present firm (represented here by *Bosch Ltd., London, W.I.*) relies on export business for half its increasing turnover. Its 500 employees are housed in a new factory at Munich where it plans to produce 11 different models following the success of the 4000 Report, a transistorised battery model which incorporates four speeds.

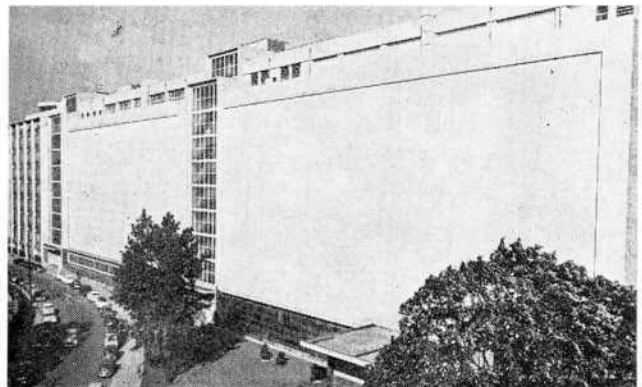
Probably the best known of all the machines imported from Germany are the **Telefunken Magnetophon** range manufactured in Hanover by the firm which can claim the distinction of having originated tape recording (see *40 Years of Tape Recording*, September '62). It has an enviable reputation for the design and construction



Stuzzi's Memo-Cord



Assembling the 4000 Report in the Uher factory at Munich.



View of the Gevaert factory at Antwerp, with windowless buildings of ultra-modern conception.

of equipment to suit both amateur and professional needs, which is distributed in this country by *The Welmec Corporation, London, W.C.2.*

German genius in this field has produced the **Sennheiser** microphones marketed here by *Tellux Ltd., Romford, Essex*. And from Austria comes the impressive range of **AKG** microphones, famous the world over. In the **AKG** factory in Vienna over 700 employees are engaged in producing something like half a million dynamic and condenser microphones per year; among them, hundreds of different versions made specially for manufacturers of Continental tape recorders. They are distributed here by *Politechna (London) Ltd., London, W.I.*

Pocket-size

From Vienna, too, comes the **Stuzzi Magnette**, the battery portable tape recorder which since its debut four years ago has found favour with enthusiasts in many countries. It has been used by royalty, leading politicians and explorers; by airline companies and the armed forces. Its success has been such that the business founded by Victor Stuzzi, a brilliant young

TURN TO PAGE 13

FOR
BEST RESULTS
USE

ferrania

MAGNETIC
RECORDING
TAPE



tape

For sound quality

that's way out front



The music running through your head, jazz, pops or proms sounds better on Agfa PE tape. Brilliant transients, clean undistorted lows, performance to delight the ear of musician or technician. On Agfa tape you hear the original sound, no more no less!

Long Play PE.31
Double Play PE.41
Triple Play PE.65

AGFA LIMITED

27 REGENT STREET · LONDON S.W.1 · TELEPHONE: REGENT 8581

THE CONTINENTAL

MARKET IN BRITAIN—from page 11

electrical engineer, in a small shop near his home 15 years ago has expanded out of all recognition.

The Stuzzi concern (represented in this country by *Recording Devices Ltd., London, W.10*), also produces the Tricorder and the Memo-Cord, a pocket-size machine with its own built-in microphone and loudspeaker designed for busy executives and journalists.

From Switzerland

The Swiss-made **Revox**, marketed here by *Revox (U.K. Concessionaires) Ltd., London, W.14*, is more in the professional class; a solid, reliable machine weighing all of 50 lbs., equipped with speeds up to 15 ips. and 10½ in. spools. It is in the same price range as the **Tandberg Series 6** (*The Sound Scene*, December '62), a stereo tape deck, to which has recently been added the Series 7 stereo tape recorder.

These highly efficient machines are made in a garden factory in Oslo. The man who heads its 500 workers, Vebjørn Tandberg himself, is a brilliant engineer, an expert in human relations and, above all, an idealist.

The welfare of his employees is one of his passions. Another is the Tandberg Radiofabrikk Foundation, which exists to foster research in electronics in Norway as well as to guide the fortunes of the Tandberg firm, which has doubled its size every ten years since 1933 and has markets in 50 countries. Its agents here are *Elstone Electronics Ltd., Leeds*.

The giant firm of **Philips**, which makes everything from lamp bulbs to cyclotrons and operates in 55 countries, is another which believes



A German girl displays the Optacord 409.

that a successful company must be a happy one. Started in 1891 with 20 employees, it now has 75,000 workers in the Netherlands alone. The main factory at Eindhoven employs more than 38,000 of the town's population of 170,000, and the company has built 12,000 houses for them to live in and provided them with a health centre staffed by 40 doctors.

Today, Philips tape recorders are Britain's biggest sellers, and their professional machines are used by the BBC. In the domestic field they were the first to adopt upright styling; they pioneered 4-track recording, and have jumped into the lead as far as tape economy is concerned by combining the system with a speed of ¾ ips.

The first tape

Of 20-odd brands of recording tape now on sale in Britain, at least five hail from the Continent. One of the most popular among amateur recordists is **BASF**, product of the Badische Anilin- und Soda-Fabrik, Ludwigshafen, which first supplied the iron powder for Pfeumer's paper tapes in the early days of experimentation with the Magnetophon.

When BASF advanced the idea of using cellulose acetate instead of paper, magnetic recording took a vital step forward. And when, in 1944, the firm produced the first tape which utilised Luvitherm as a backing material, it laid the foundations for the American and, later, the British tape recording industry.

The German firm of **Agfa**—a name known to all photographers—is now extending its reputation in Britain as a producer of magnetic recording tape, which has become avail-



The Tandberg factory at Oslo, set in spacious grounds.

able here during the past year. The quality of the professional tapes made in the firm's factory at Leverkusen has long been accepted in recording studios, and several of its special manufacturing techniques have been adapted for the benefit of the amateur recordist.

The introduction of 4-track recording has increased the demand for high quality tape, and the Agfa research laboratories are constantly working to keep up the improvements they have already effected, in anticipation of further refinements in tape recorder design.

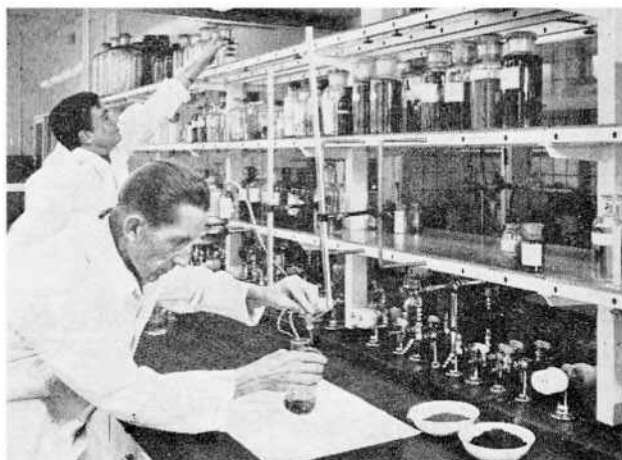
Passing the test

Over 65 years experience in making photosensitive coatings has enabled the Belgium firm of Gevaert to produce recording tapes which, in the last two or three years, have fulfilled the demands made upon them in many different spheres and as many parts of the world. So popular has **Gevasonor** become among users in this country that twice the footage has been sold this year as in the first nine months of 1961.

In the main factory near Antwerp, which covers 65 acres and employs 9,000 people, the bill for research is more than 5 per cent of the turnover. The thoroughness of this research is such that a complete studio has been equipped with different makes of tape recorders for the express purpose of testing tape on individual machines.

The Italian firm of **Ferrania**, which is also one of the world's biggest manufacturers of film base, houses its 4,000 workers in a complete village near Savena, with its own cinema, cafes and shops—and power station, which not only supplies the factories that work round the clock but power for street lighting and domestic needs. Most of the workers have cars, and can rent company flats with garages for £2 17s. a month, a fraction of the normal rent.

Under such ideal conditions, production of tape and film is rising rapidly. The distributors in this country are *Neville Brown & Co. Ltd., London, W.1*.



Chemists at work in one of the Agfa laboratories at Leverkusen.

A. LESTER RANDS

starts a new
beginner's
course in

HI-FI

WITHOUT TEARS



THE term hi-fi has been greatly misused. To many people it simply means any old record player or tape recorder that will churn out highly undesirable and distorted noise.

Some manufacturers and dealers have been quick to take advantage of this by labelling cheap record players, tape recorders, amplifiers and loudspeakers with the tag 'hi-fi.'

In its original conception the abbreviation referred to 'high fidelity'—and it is surprising how many are even unaware of this. High-fidelity simply meant that the equipment—a true hi-fi system embraces several items—was capable of sound reproduction at its best, and to an agreed standard of performance.

Only the best

First we must consider the original recording or radio broadcast, right from the microphone used in the studio.

Recording and broadcasting concerns have agreed to maintain quality of reproduction to the best known standard, and they do so by using expensive studio equipment. The record companies preserve this high quality right up to the final copy of the disc sold to the public. The broadcast companies maintain their quality right up to the transmitted radio wave.

Now, providing the equipment used to reproduce the record or radio programme is comparable with that used

initially in the studio, the quality of reproduction as heard by the listener will be of the same order. But cheap reproducing equipment cannot do this because it may introduce unwanted distortion, hum and noise, or it may reduce the wide frequency range necessary for the reproduction of the original sounds.

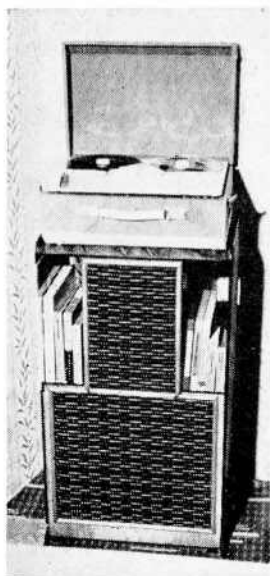
This means that the reproducing equipment—in fact, all equipment, from microphone to loudspeaker—must perform over the same frequency range as our natural hearing, or approximately 16 to 20,000 cps. A frequency range of 20 to 15,000 cps is more likely in practice.

Unwanted noise

Other factors are distortion of the original sounds and unwanted noise which may be added by amplifiers and other equipment in the reproducing chain. When one stops to consider the length of this chain and the amount of equipment and processes involved, it is not surprising that noise and distortion can easily be added to a very marked extent by one piece of equipment.

A faulty amplifier valve, or even maladjustment of a control, can introduce violent distortion and a cheap record player can add more than 20 per cent distortion to an otherwise almost flawless L.P. record. A poor tape recorder can do the same for a pre-recorded tape; though I hasten to add that not all pre-recorded tapes are by any means free of distortion. Few, in fact, compare with a good L.P. record, though they should be much superior. But that is another story . . .

In my next article in this series I will deal with the basic hi-fi system. Meantime, if you have doubts about the quality of reproduction from your 'hi-fi' record player or tape recorder, go along to one of the reliable dealers and ask them to demonstrate some really hi-fi equipment. I think that many owners of cheap equipment labelled 'hi-fi' are due for a shock when they hear the real thing.



▶ *A hi-fi loudspeaker can make all the difference to reproduction from a tape recorder. Here is a Robuk RK3 with an inexpensive home-built speaker of which details will be given later in ATR.*

ALL ABOARD FOR STEREO

A radio, TV and hi-fi installation aboard Mr. T. E. Sopwith's new yacht *Philante V* includes a Garrard transcription auto changer, a Philips 4-track tape recorder and a Chapman AM/FM tuner unit. The control unit is a new Expert pre-amplifier featuring Audiorama which, feeding into two 15 watt Expert amplifiers, provides full stereophonic sound throughout the yacht with the aid of seven pairs of 8in. speakers.

The new pastime . . .
do-it-yourself interviews

GET YOUR IDOL TAPED!

says RACHEL LINDSAY



What singing star could object to being interviewed by lovely identical twins Susan and Jennifer Baker, who, with their Grundig TK1, advanced on Michael Holliday from both sides?

oblige I'm sure you would too, if you went the right way about it.

Take a tip

Why not take a tip from these three smart girls? Aren't there lots of questions you would like to ask celebrities, that never seem to be asked by anyone else? For instance: what perfume does Lady Barnett prefer? And Helen Shapiro . . . does she sing in her bath? What do you want to know about your favourite actor or actress that you haven't seen in print somewhere?

Here's a chance for women who own tape recorders (or can borrow their husband's) to pluck up courage and take the initiative in doing their own interviewing of the people they admire.

Let me know how you get on, won't you?

A GROUP of enterprising young ladies I heard about the other day have set up their own interview service. It's such a good idea, with so many possibilities, that I thought you'd like to hear about it.

Whenever you read in a newspaper or magazine an interview with a famous personality, there always seem to be so many questions the interviewer didn't ask, so many things left unmentioned. So these girls, who work in the same office and talk over their elevenses and four o'clock teas, made a list of all the people they would like to interview and all the questions they would like to ask them.

Then they clubbed together and bought a tape recorder. The leader of the group wrote to the people they wanted to interview and made appointments to see them.

In one day

Luckily, the three celebrities chosen for the first interviews were all in London, in show business. And when the group's spokesman came up to town with her tape recorder, she was able to see all three people in the same day. She asked them all the questions which she and her friends wanted answered, and got it all down on tape.

Because the show business personalities were not being interviewed by the press but by their fans, they naturally gave a more uninhibited interview and answered frankly all the questions they were asked. When the amateur interviewer went back to the office, the girls had a gorgeous time listening to their idols on tape.

Real people

As one of them told me: 'We learned much more about these three personalities than we had ever learned before from reading about them. Now they are all the more real to us—not just as show people but as human beings. And we've got them on tape for keeps!'

And, of course, to play over to their friends and neighbours. Can you see the immense possibilities of the idea? You could build up a whole collection of such intimate interviews—a sound library of your favourites, who can talk to you in your own room just when you care to press the button. Much more exciting than collecting autographs!

Many of the amateur recordists who belong to tape clubs go out and get interviews with the stars who visit their local theatres, and use their material in the programmes they make up for the old folk and the blind. I gather they find them quite approachable and willing to

STRICTLY FEMININE

NEW FIRM TO PROMOTE LANGUAGE LABORATORIES

Electronic Classrooms Ltd., an associate company of Recording Devices Ltd., agents for Stuzzi tape recorders, has been formed to give advice and supply all necessary equipment for language laboratories in this country.

The company will work in close touch with one of the leading American firms which has 17 years' experience in electronic teaching methods. Dr. Paul King, who demonstrated the system in London to launch the new project, is a pioneer of language laboratories and adviser to

American government departments on language study problems.

At first most of the equipment used will be of American origin, but eventually some of it will be made in England.

Students sit in individual booths and communicate with the teacher through a microphone and earphones. The teacher operates a control panel through which he can contact any number of booths or address the whole class. Special attention can be given to slow learners without holding up the rest.

STAN WHITE responds to

The LURE of the ORGAN



Mike Slater at the console.

FAIR organs, church organs, theatre organs, electronic organs . . . and tape recorders. Somehow they go together. Certainly, where there's an organ of any sort you'll find a tape recorder—or somebody trying to get within microphone distance of it.

Since I first introduced the subject of recording the theatre organ in this magazine, many enthusiasts have written to me asking to be directed to one, and how to go about recording the pipeless electronic organ. So let's pull out a few stops . . .

Wherever the Theatre Organ Club meets up and down the country, you'll find a fair gaggle (and I fancy that's the word) of eager tape recordists. So long as they're fully paid-up members, they are at liberty to record the music played by virtue of the official card issued to them.

All in tune

The last club meeting I attended was at the Lyric Cinema, Wellingborough, which houses a Compton organ with two manuals and five pipe ranks, plus a melo-tone electro-static unit—a sort of electric organ extra. There are few of these units left in working order now, but the amplifiers had been rebuilt specially for this recital and the organ pipes tuned the week before.

The local press gave the number of people attending as over 300. At least half a dozen tape recorders were active, with microphones placed in position according to the whims of the recordists. Two of them had their mics slung in front of the organ chamber; two had them in the front stalls, and two made use of the balcony.

Three organists entertained, and the recordists captured a wealth of music at

that recital. The only thing they couldn't take away with them was the colourful console lighting effects; but perhaps by now they have built their own Home Chromasonics to accompany the music. And there are other opportunities coming up . . .

Next meeting of the club is on Sunday January 6 at the ABC Theatre, Buttermarket, Ipswich, Suffolk, when organists Mike Slater, Harold Flatman and Bob Simkins will perform on the Wurlitzer organ with its three manuals and eight pipe ranks. The recital starts at 2 p.m.

. . . but still likes that slurring sax sound

***Sorta May. Billy May and his Orchestra. World Record Club TT 180.** Twin-track mono, 3½ ips.

What a welcome release this is! Twelve numbers, nicely arranged and played by the orchestra which retains the essential trade mark established by Mr. May a decade ago. I mean that slurring sax sound . . .

Every number is standard, the selection including 'Chicago,' 'Deep Purple' and

featuring music and song from famous shows. With Grace Bumbry as Carmen, George Webb as Joe and Ena Babb as Cindy Lou, it is extremely well presented throughout this recording. Yet somehow I doubt its sales potential.

I feel it is hardly a suitable choice, in view of the other shows in the series featuring a similar cast. But, then, Carmen was never one of my favourites, so I could be wrong. Production-wise, it's just about perfect.

tape parade

'Just One of Those Things.' It's a tape that should be made welcome in any home where pleasant pop music is appreciated. In fact, a lot of people sorta may go for it.

***Carmen Jones. World Record Club TT 181.** Twin-track mono, 3½ ips.

Another in the series of WRC releases

***Vamp Till Ready. The Jo Jones Sextet. World Record Club TT 178.** Twin-track mono, 3½ ips.

The Sextet do an intriguing job of work here. The mainstream atmosphere prevails throughout, but it is rather more subdued than you might expect. Yet, though anyone can follow the tunes, there are some good jazz improvisations.

Besides being suitable for dancing, this lively music makes pleasant listening. 'Thou Swell,' 'Liza' and 'Royal Garden Blues' are some of the items. Yes, you'd do well to keep up with these Joneses . . .

RUSS ALLEN recommends

A SAMPLER OF JAZZ

and listens to some other new

HI-FI DISCS

FOLLOWING last month's debacle, I've been trying out some stylish equipment—a Thorens TD 124 Transcription Turntable with loads of intriguing features like built-in stroboscope, variable speed control and turntable clutch.

It's a beautiful, precision-made job and runs like a dream. With it was an Ortofon SMG 212 pick-up arm with a CG mono head, and once I'd successfully matched and screened it to my own pre-amp and speakers, it was a delight. I shall be most reluctant to part with it . . .

Incidentally, the demonstration stereo at Metro-Sound (who loaned me this equipment) is something really worth hearing. Costing round about £300, it's a knock-out! I'm tempted to sell the car and have a ball . . .

●If you read this before Christmas is upon you, may I suggest a splendid gift to initiate someone in modern jazz? It's **Riverside Giants of Jazz, Jet 1 A-B**. Two 12in. L.P.s for the price of one; seventeen tracks, all different groups. They've all been issued before, and this is a sort of sampler. There's everyone who's anyone from Cannonball Adderley to Monk, Bill Evans to Charlie Byrd. A genuine bargain.

●Continuing in the spirit of Yule, how about a musical show? Okay, let's go to **The Real Ambassadors, CBS (S)BPG 62083**. Written by Dave and Iola Brubeck, it features Louis Armstrong and his

Band, Lambert, Hendricks and Ross, and Carmen McRae.

This is a complete show inspired by Satchmo's State-sponsored visit to the Gold Coast. *Downbeat* magazine gave the disc their highest rating, and I quote: 'No jazz album released in the last year has made a more immediate impression of freshness, vitality and reality . . .'

●For a good British laugh you can't do better than **The Sounds of Hoffnung; Columbia SEL 1704**, a delightful extravaganza of musician's humour. Side 1 is a take-off of the erudite music jargonists, and too true to be anything but frightening is 'Punkt Contrapunkt.' Side 2 is Gerard talking about his tuba as only he could, and playing with three others an arrangement for four tubas of Chopin's *Mazurka No. 47 in A minor*. Beautiful!

●Also fun in its way is **Swinging all the Way with Frances Faye; Verve VLP 9007**, arranged and conducted by *Marty Paich* and featuring *Bud Shank*, alto; *Stu Williams*, trumpet; *Al Hendrickson*, guitarist.

I like Miss Faye. She isn't so much a singer as a narrator with music. Her voice has that hard, husky quality the best jazzers have and she delivers the lyrics in hard, shiny crystals, adding humour and superb timing for good measure. The Paich backing is the most.

●**Eric Dolphy**, originally hailed as another Ornette Coleman, has quickly been accepted (and applauded) by most of those who cried 'foo', and we see his name almost every month in some group or another. He heads



Russ Allen tries out the Thorens Transcription Turntable with Ortofon pick-up arm, by courtesy of Metro-Sound.

his own group on **At the Five Spot, Vol. 1; Esquire 32-173**. Dolphy, alto and bass-clarinet, the late *Booker Little*, trumpet, *Richard Davis*, bass, *Ed Blackwell*, drums.

An excellent set that swings all the way. Recorded live (July 16 '61), it's full of excitement and atmosphere. Dolphy is dissonant Dolphy; Little demonstrates his tremendous technique—wow!

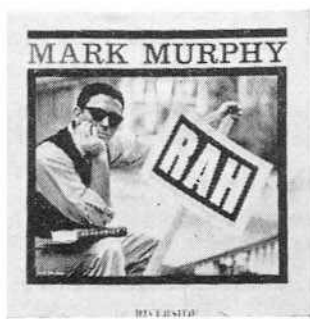
●At the other end of the scale, quiet, serene, tasteful and whimsical, is **Ramblin' with Mose Allison, Esquire 32-171** (recorded April 18 '58). Allison, piano and vocal, *Addison Farmer*, bass, *Ronnie Free*, drums.

Allison's an enigma. He's played in groups with Stan Getz, Al Cohn, Zoot Sims and others, yet often plays what is more or less 'tea music'; you know, sorta Teddy Boys' Picnic gear. Pretty, but unjazzy. However, he's a most entertaining rascal and I always enjoy his whimsy ways.

●**Rah! Mark Murphy. Riverside RLP 395**, Orchestra arranged and conducted by Ernie Wilkins. Recorded New York, September-October, '61.

Describing a new singer is difficult. Murphy is good—a bit of a male Annie Ross with a tinge of Eckstein and Tony Bennett. He's a lad that's with it, and Side 2 is mainly a vocal version of jazz instrumentals—'Milestones,' 'Doodlin', etc.

The brassy backing is good and swinging, never overriding. Rah-rah-rah! for Murphy—mark him down.



THORNTON HEATH WINS THE ATR CUP

AND NOW ... A BIG RECORDING CONTEST—JUST FOR THE CLUBS!

- ▶ **THORNTON HEATH** Tape Recording Club has won the *ATR* Club Challenge Cup. Despite strong opposition, it has held the No. 1 position in the Club League Competition for the past three months and has earned the title of Top Tape Club for 1962.
- ▶ **CAMBRIDGE** Amateur Tape Recording Society, which gained a record number of points in one month for staging its second Audio Exhibition, has been narrowly beaten to second place by Brixton Tape Recording Club, which has done much original and useful work in the past year.
- ▶ **SHARING FOURTH** place with Rugby comes Northampton, which for five months held top position in the League and might have won the Trophy had it not been obliged to postpone its attempt to organise a local exhibition in October.

Consistent effort counts

- ▶ **THE RESULTS** clearly show that it is the club which does consistently good work, particularly in drawing public attention to its pursuits and giving service to the community, that gains most points in the competition. The *ATR* Trophy will be presented to the successful club at a meeting in the near future.
- ▶ **WHAT OF 1963?** Many more clubs are expected to enter the contest, in which a new, exciting feature will be introduced. Points will still be awarded every month for outstanding effort, originality, promotion of tape recording, and useful service to charitable and other causes.
- ▶ **IN ADDITION, ALL CLUBS WILL BE ELIGIBLE TO ENTER THE ATR TAPE RECORDING CONTEST, IN WHICH SIX TROPHIES WILL BE OFFERED FOR THE BEST TAPE RECORDINGS IN AS MANY DIFFERENT CATEGORIES.** The points gained in this contest will be taken into consideration in the Club League competition for the *ATR* Challenge Cup.
- ▶ **THE SIX** extra trophies will be donated by leading manufacturers including **BASF** Chemicals Ltd., **Fi-Cord** Ltd., **Lustraphone** Ltd., **Philips** Electrical Ltd. and **Simon** Equipment Ltd. The contest will be judged by a special panel of experts whose names will be announced later.
- ▶ **THE ATR** Tape Recording Contest, like the Top Club competition of which it will form an important part, will be unique in its encouragement of healthy rivalry between the tape clubs. Further details will appear in subsequent issues.

Fairground music

BOSTON Soundhunters recorded Herbert Epton's fairground organ of 1912, which had stood unused for 20 years (except by rats) when he renovated it. Excellent mono and stereo tapes resulted. Two intensive sessions on tape editing were held, and members of the Skegness club paid a return visit.

On the run

Members of **Brixton Tape Recording Club** secured interviews with Billy Smart Jnr. and performers in his Circus during

its stay at Clapham Common. With a battery of portables strung along the route and other members tagging behind the leaders, the club also covered the Veteran Car Run from London to Brighton, where some of the drivers were interviewed.

New music

Doncaster club was joined by members from **Barnsley**, **Wakefield**, **Hull**, **Rotherham** and **Sheffield** when *ATR* Technical Editor F. C. Judd gave a talk on the making of sound effects and musique concrète. A most interested audience

THE LEAGUE POSITION

	Pts.
1. THORNTON HEATH	44
2. BRIXTON	39
3. CAMBRIDGE	38
4. NORTHAMPTON	37
4. RUGBY	37
6. SWANSEA	33
7. NORTH LONDON	32
8. HULL	29
9. WHITSTABLE	27
10. WALTHAMSTOW	23
11. SOLENT	18
11. SOUTH DEVON	18
13. MEDWAY	16
14. MIDDLETON	14
15. CARLISLE	12

heard him demonstrate how British and Continental composers were laying the foundations for the new music.

Midlands alliance?

The possibility of a special committee to form an alliance between Midlands clubs was discussed at a joint meeting between **Kidderminster** and **South Birmingham**. It was reported that 12 out of 16 clubs were already in favour of the idea, and it was agreed to obtain further views and try to settle differences of opinion on details.

For the archives

Leyton Tape & Audio Club held an open evening when members of **Walthamstow** and **Bethnal Green** clubs assisted in demonstrating tape recording to the general public. Most impressive dem was a tape loop which stretched along a corridor for about 40ft. and was looped over two direction signs!

The local council has invited the club to make a sound picture of the borough for its archives. As a first step towards this, members recorded the Armistice Day service at Harrow Green War

Memorial. Following requests by patrons of the programmes it presents to clubs and hospitals, the club also visited Woolwich to put the story of the Ferry on tape.

Songs of the villages

Leicester club members are engaged in recording the folk songs of the county, with the help of the oldsters of several villages. After discs are made from the tapes, the songs will be set down in manuscript and preserved in the city museum. The club's recording of the Freedom of the City ceremony when the honour was conferred on a local alderman will also be put on disc for the archives.

The fire brigade staged a mock turnout for the benefit of the club, when member W. H. Walker took a ride on the fire engine with his Butoba portable. A sound track is being added to an 8mm film about the club made by members.

Full programme

Since moving into new premises, the Middleton club has been occupied with a full programme including a sound hunt, lectures by members, and participation in the Oldham 'Leisure and Pleasure' Exhibition. Members were the guests of Oldham Gramophone Society at a film show which included the BASF film, *The Magic Tape*.

Following his resignation as secretary, energetic George West was elected to an advisory post to assist the chairman and the new secretary, John R. Witts, 119 Heywood Old Road, Middleton, Manchester.

Police! Fire...!

Finally settled in new premises, Northampton Tape & Cine Club resumed shooting its current production, *Friday the 13th*—with the help of the local police. Even the fire brigade turned out by special request...

Besides recording local concerts and presenting a fortnightly news round-up for the blind, the club has started a new service of Bible studies on tape.

'The Microphone'

Three new tape recorders bought with funds raised by local associations have

increased the number of blind listeners to the *Enfield Microphone*, North London's fortnightly tape news service, which has proved very popular. To gather material for its 45-minute editions club members have been covering public meetings and conducting interviews with local personalities.

Sight and sound

'How to do it' sessions are a regular feature at meetings of Reading Cine and Tape Recording Society, where members have been busy on their own interpretations of the title *Wheels*, both in film and tape.

A recent visitor was F. C. Judd, ATR Technical Editor, who illustrated the techniques involved in creating sound tracks for films and musique concrète.

Fully fledged

With some misgivings, being only four months old, Solent Tape & Audio Club accepted a commission by Gosport Council to provide sound coverage of the

DON'T MISS ANY POINTS

- Make certain that regular news of your club activities is sent to the Club News Editor, ATR, Room 532, 168 Regent Street, London, W.1.

opening of a new hospital wing at Northcott House old folk's home. Television was there too... A superb recording now rests in the council archives, and the club feels it has found its feet.

After presenting some recorded tapes to music appreciation classes at Brune Park High School, the club was invited to instruct local teachers in tape recording technique. A volunteer lecturer is also giving the club—now meeting three times a month—an 18 weeks' course in



These youngsters took an intelligent interest when Middleton Tape Club displayed their equipment at Oldham 'Leisure and Pleasure' Exhibition.

elementary electronics. Demonstrations have been given by Truvox and Fi-Cord, and the BBC's Southampton studios were visited.

Members are producing sound effects for two local drama groups and programmes for the Home for the Blind and the Children's Home, as well as for two old folk's homes.

Glorious Devon

South Devon started editing a tape entitled *The Holiday Trade in the West Country*, for which interviews with the Chief of Police, the Entertainments manager and visitors had been obtained by members during the summer.

Tapesponding

Urmston & District club members are tapesponding regularly with the Walsall club and finding it both enlightening and entertaining. Technical Advisor S. Wignall is giving short lectures answering members' queries at every meeting. First piece of equipment the club has acquired is a 4-channel microphone mixer with independent preamplifiers for each channel. A documentary tape, *The Sound of Manchester*, is gradually taking shape under producer Bob Corfield.

Boost for the club

A novel recruiting drive by the Walsall club relies on a five-minute 'commercial' distributed by a local trader—Mr. M. L. Chambers of Audio Electronics Ltd.—who presents it to purchasers of new

SEE NEXT PAGE

TOP TEN CLUBS FOR JANUARY

- | | |
|--------------|-----------------|
| 1. SOLENT | 6. NORTH LONDON |
| 2. LEICESTER | 7. WALSALL |
| 3. LEYTON | 8. WEST HERTS. |
| 4. MIDDLETON | 9. NORTHAMPTON |
| 5. BRIXTON | 10. URMSTON |

THE SWOP COUNTER

THERE'S a queue forming already at the *ATR* Swop Counter! 'Congratulations on this latest innovation,' writes **C. E. Herbert, 'Dingley Dell,' Morton, Nr. Sandown, I.o.W.,** who was one of the first to respond to the invitation in the December issue. He details some items he is prepared to exchange with any other reader for 'anything reasonable they have to offer.'

These are a brand-new E.M.I. jointing block and cutter in its original box; a Lustraphone C48 dynamic microphone on DIY ('quite good') floor stand; a brand new Haynorette 16mm animated cine editor (cost 15 gns.); and four WRC pre-recorded tapes used once only. Offers should be sent direct to Mr. Herbert—not to *ATR*.

G. H. Capes, 3 Esdelle Street, Norwich, NOR O4N, has for disposal a new Lustraphone crystal mic; a Lane tape amplifier in good order complete with tape deck (not working); a Leak LMS tuner and preamplifier with inputs for gram 78's, mic and mic transformer. He needs a portable battery tape recorder (need not be working) and a spare Ferrograph record head, mono or stereo.

In search of a good quality 2-track recorder is **E. C. W. Palmer, 16a The Terrace, Barnes**

Bridge, London, S.W.13. He offers in exchange a brand-new Mohican Heath full coverage receiver with ten transistors, telescopic aerial and tuning meter housed in strong steel green cabinet. It covers all short wave bands plus medium wavelengths (600 Kc/s to 30 Mc/s) and was listed at £50.

Maurice L. Chambers, 139 Goldthorne Avenue, Sheldon, Birmingham, 26, treasurer and organiser of Tape Programmes for the Blind, has a Philips EL3536 4-track stereo tape recorder, practically brand-new and seldom used, which his organisation would like to exchange for a 2-track model 'of equal calibre' for copying work; preferably a Ferrograph 4A/N in similar first-class condition.

A Lustraphone LD66 microphone, brand-new and unpacked, is offered by **R. East, 295 Burton Road, Lincoln,** in exchange for a Wearite de-fluxer or a 7in. (2400ft.) spool of BASF or Scotch DP tape in similar condition.

To effect an exchange, readers must write direct to the person offering the goods. If you have something to offer for something you need, and would like to use this free *ATR* service, write to: The Swop Counter, *ATR*, Room 532, 168 Regent Street, W.1.

NEWS OF THE CLUBS

—from page 27

machines. Besides giving examples of the uses of a tape recorder, it draws customers' attention to the club's activities, invites them to visit its headquarters and offers them six months' free membership.

At the club's AGM only the weekly meeting place and time remained unchanged. In a major shuffle among officers and committee members, Peter Lane took over as chairman and founder-secretary Mrs. Joan Walford gave place to Paul Clark, 20 Springvale Avenue, Parkhall, Walsall.

Safety first

At the request of Watford Home Safety Committee, the **West Herts** society produced a tape on fireworks dangers. Hemel Hempstead Cine Society visited the club to show films, including one of the local carnival for which members had made the sound track. The club, in turn, visited Hemel Hempstead Recorded Music Society for a demonstration of Tandberg stereo equipment.

NEW CLUB

Paignton: A Sound Society is holding fortnightly meetings at the Oakdene Hotel. The secretary is Alan S. Heather, 7 Gibson Road, Paignton, Devon.

for Professional Performance...

Tandberg

SERIES **6**
STEREO
TAPE DECK

- 3** SPEEDS
- 3** HEADS
- 4** AMPLIFIERS
- *4** TRACK

and 2 TRACK

- High and low level mixer inputs and cathode follower outputs.
- "On and off the Tape" monitoring.
- Sound-on-Sound simultaneous record and playback.

110 gns

Booklet of Technical Reviews on request.

Tandberg GB

ELSTONE ELECTRONICS LIMITED,
Edward St., Templar St., Leeds 2.
Telephone: Leeds 3-5111 (7 lines)

SERIES **7**
STEREO
TAPE
RECORDER

- 3** SPEEDS
- 2** HEADS

and 2 Power Amplifiers

- Two Indicators.
- Two Monitor Speakers.
- Two outputs for additional speakers or Hi-Fi.

***4** TRACK
and 2 TRACK

Send for leaflet.

BUILD-IT-IN OR CARRY-IT-AROUND!

4 track model 74
2 track model 72

(Luggage type carrying case. £7 1s 8d. extra).

93 gns

4-TRACK STEREO IS THE LATEST FROM GRUNDIG



*The Grundig TK46
Stereophonic
Tape Recorder*

A STEREOGRAPHIC 4-track tape recorder, the TK46, has been added to the Grundig range. With separate erase, recording and playback heads and separate amplifiers for recording and playback, it enables a second recording to be synchronised with an earlier one and allows for simultaneous or delayed monitoring.

Echo effects may be introduced, the delay being governed by the selected speed and the intensity by an internal feedback control. Superimposition is possible without erasing the earlier recording, and the output level from both channels can be controlled independently or by a single control. Output power is 3 watts from each channel.

Other features of the machine, priced at 99 gns., are a press button position indicator, tape cleaner, recording input selector, and facilities for remote control. Microphones available for use with it are the GDM 18 at 7 gns. and the GDSM 202—a special stereo mic—at 14 gns.

The TK41

Mechanical and electrical performance of the TK46 are similar to that of the TK41, which is also new from Grundig. Basically this is a twin-track version of the well-known TK40 (for review see *The Sound Scene*, *ATR*, June '62), but with the addition of a 7 watt push/pull output stage and separate bass and treble controls.

Besides facilities for superimposition and mixing, and for remote control connection, the TK41 provides inputs for telephone adaptor, radio and gram pick-up, and outputs for monitor amplifier, extension amplifier and loudspeakers. High and low impedance output sockets are fitted.

The machine will take up to 7in. spools, and switches off automatically at the end of a tape. Three speeds are available, the quoted frequency response at the maximum speed of 7½ ips being 60 to 18,000 cps ± 3 dB, and wow and flutter less than 0.2 per cent at 1½ ips. Signal to noise ratio is given as better than 50 dB.

Finished in two-tone grey and weighing 27½ lbs., the TK41 costs 75 gns., including microphone.

LOW-PRICE TAPES CLAIM TOP QUALITY

A new series of recording tapes is being marketed by Golden Tapes at remarkably low prices, with the added inducement of a further reduction if three reels are purchased. They are claimed to be the lowest priced top quality tapes on the market.

Standard and L.P. tapes of pvc are of British manufacture, and the D.P. variety, of fully tensilised Mylar, of American origin. All are available on 5in., 5½in. and 7in. spools. Three-inch message spools of D.P. are also offered.

ATR has tested a sample of Golden Tape supplied by the distributors and found it satisfactory. Further details and prices from Golden Tapes, 66 Wardour Street, London, W.1.

TRIPLE PLAY TAPE BY GEVASONOR

The range of Gevasonor Magnetic Tapes was recently extended by the addition of Triple Play, which is available in 3in. spools (450ft.) at 21s. 6d., 4in. spools (900 ft.) at 38s. 6d., and 5in. spools (1800ft.) at 65s. 6d. The stock numbers are Tr.P/137, 275 and 550, respectively.

Using a tensilised polyester base, the thickness of this tape is 17 microns, only one-third the thickness of the firm's standard tape, type M.

UNDER TEST :

THE CLARKE & SMITH TR634 TRANSISTORISED TAPE RECORDER

Reviewed by F. C. Judd, A.Inst.E.

THOUGH this tape recorder is intended for schools and other institutions where a rugged machine is required, it is of interest to all ardent recording enthusiasts. With a high standard of performance and some useful facilities not found on many domestic tape recorders, it was designed with the collaboration of British education authorities and is built to a rigid specification.

Fully transistorised and housed in a strong, yet not unattractive wood case, it should withstand the full treatment by the most ungentlemanly schoolboys. On the other hand, the deck layout and the various facilities have been carefully planned for complete ease of operation.

Wearite deck

The deck is the well-known Wearite, with two speeds—7½ and 3½ ips—its clock-type tape position indicator and autostop. The deck will take up to 8½in. diameter spools which, with L.P. and D.P. tape, will provide ample recording or replaying times.

TURN TO PAGE 31



connoisseurs

say

SIMON



... the connoisseur with an eye for a bargain chooses the **SIMON SP5** because no other tape recorder in the price range gives him so much at professional standards!

Unrivalled facilities of the **SIMON SP5** include uni-directional twin track recording, two speeds, 7-inch spools, dual channel mixing, master fader, monitoring through loudspeaker and level setting, controlled echo, track to track recording, controlled bias, recording level meter.

* You can buy the **SIMON SP5** as a stereo recorder, or in a monaural version ready wired and fitted for easy conversion to stereo.



SIMON SP5

Price from 95 gns

"Tape recording in the new age"



... the connoisseur with an ear for performance chooses the **SIMON Cadenza Ribbon Microphone** because he gets studio class results in the middle price range.

The **SIMON Cadenza Ribbon Microphone** is a popular and successful conception of ribbon and magnet arrangement... output is flat to close limits over the very wide range 50-12,000 c.p.s., new shell design eliminates resonant peaks and troughs—especially the "bass hump". Can be used in LZ or HZ condition... though the ribbon area is four times the normal size, dynamic impedance is negligible.



SIMON Cadenza Ribbon Microphone

Price 10 gns

"Makes a piano sound like a piano"

For full technical details of **SIMON** tape recorders and microphones, consult your dealer. In case of difficulty please write to:

SIMON EQUIPMENT LIMITED

48 GEORGE STREET LONDON W.1

Amateur Tape Recording & Hi-Fi

THE SOUND SCENE

—from page 29

Since the record/replay amplifiers are separate, a direct monitoring system has been made possible by fitting an extra replay head. One can therefore monitor either the incoming signal or the recorded version of it. Another useful facility is two-channel mixing, which permits microphone and external music sources to be smoothly mixed by separate gain controls. Inputs are provided for high or low impedance microphones and high-level signals such as those from a radio, gramophone pick-up or another tape recorder.

The controls

Apart from the input gain controls there are bass and treble controls which provide lift and cut, a monitoring switch for selecting either monitoring system, and a switch for cutting out the erase bias when superimposing or as a precaution against accidental erasure.

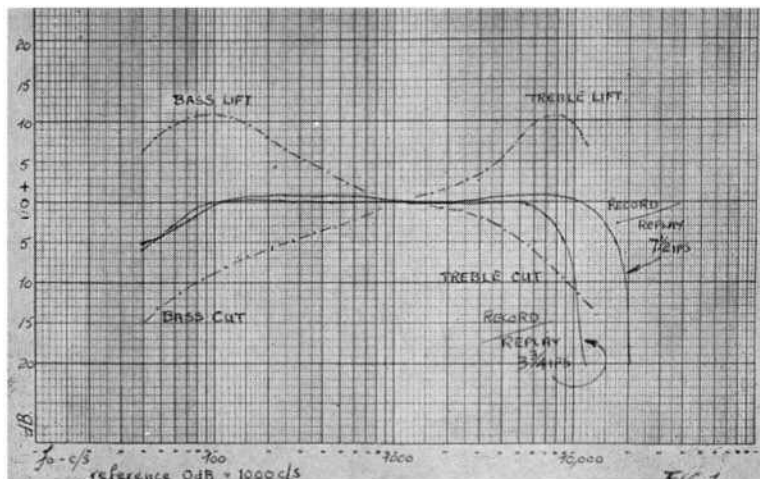
The recording level indicator is a moving coil meter type calibrated in percentage of tape modulated, with a prominent red calibration mark for 60 to 80 per cent as average recording level. There are three output sockets: one for an external amplifier, one for an external speaker and one—presumably 300 to 600 ohms—labelled 70 V line.

What teachers need

The machine submitted for test performed according to the specification. Besides testing it with the usual bench instruments I was able to demonstrate its virtues to a large assembly of schoolteachers, and from their comments it would appear that this is just the kind of tape recorder needed in schools. Though, from my conversations with many teachers around the country,



The Clarke & Smith Transistorised TR634.



Frequency response of the Clarke & Smith TR634. Record to playback—aux. input to output. Bass and treble controls response is that of replay amplifier.

very few schools have any tape recorder and most education authorities have little idea what can really be accomplished with suitable equipment.

Frequency response of the TR634 for the two speeds is more than adequate and, as the response curves show, was within 1 dB or so of the specification. The bass and treble controls provide ample modification of a recording during replay, and hum and noise—including that from erased tape—was well within the figures quoted. Replay noise was lower than that from virgin tape. Speed fluctuation was a little noticeable on steady tones at $3\frac{1}{2}$ ips, but within specification at $7\frac{1}{2}$ ips, a performance comparable with other standard Wearite decks.

Though this tape recorder may at first seem expensive it should be borne in mind that it has been designed to provide the best possible performance under conditions where it might get a good deal of rough handling. Supplied complete with a 1200ft. reel of tape and spare spool of the Ferrograph type, it retails at 103 gns.

A similar model with a Truvox deck can be supplied at 86 gns. Both are manufactured and distributed by the Clarke and Smith Manufacturing Co. Ltd., Melbourne Works, Wallington, Surrey.

ABRIDGED TECHNICAL SPECIFICATION

Wow and flutter: Less than 0.2 per cent at $7\frac{1}{2}$ ips; less than 0.3 per cent at $3\frac{1}{2}$ ips.

Re-wind time: Less than 1 min. for 1750ft. standard tape.

Track width: 0.095in.

Track sense: To international standards; upper track operative.

Rated output of power amplifier: 10 watts.

Distortion of power amplifier: Less than 1 per cent at 1 Kc. at 10 watts.

Frequency response: 50 to 15,000 cps ± 3 dB at $7\frac{1}{2}$ ips; 50 to 9,000 cps ± 3 dB at $3\frac{1}{2}$ ips.

Signal to noise ratio: 50 dB at $7\frac{1}{2}$ ips; 48 dB at $3\frac{1}{2}$ ips.

Inputs: 1, $1\frac{1}{2}$ mV at 300,000 ohms impedance; 2, 15 mV (suitable for 15 to 30 ohms impedance microphones); 3, 60 mV at 0.5 M.ohm impedance.

Outputs: 1, 15 ohms; 2, 70 V line; 3, 1 V at 5,000 ohms impedance.

You couldn't
ask for a better
tape ...



Whatever the type of programme you most enjoy you'll immediately recognise the consistent, uniform quality that you get from AUDIOTAPE... extra crispness at the top, extra depth of bass, all without loss of the essential middle tones. AUDIO-TAPE has only one standard of quality—the finest obtainable.

You cannot buy a better tape than

audiotape
—it speaks for itself.

Available in 5 different types to suit every requirement. All 5" and 7" reels of AUDIO-TAPE are supplied on the exclusive C-Slot Reel—the fastest threading tape reel ever developed.

audiotape
TRADE MARK

is your tape recorder's best friend

Manufactured by:
AUDIO DEVICES INC., New York, N.Y.
Concessionaires to the United Kingdom

LEE PRODUCTS (G.B.) LIMITED
10-18 Clifton Street, London, E.C.2. Telephone: BISHopsgate 6711.

When it's new from Brenell it's *NEWS!*

When Brenell introduce a new development in the tape recorder field you can be sure that it's worthy of your attention. As you well know the development of a new machine takes time but below are a few details to whet the appetite.

THE STB I

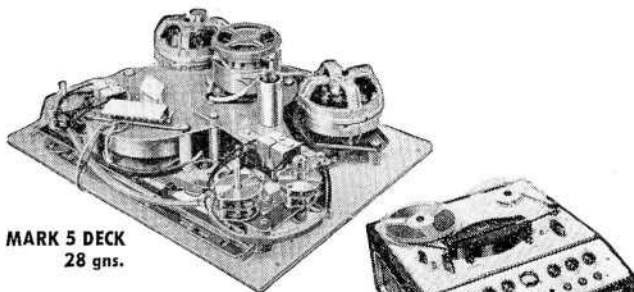
A four speed deck with twin recording and twin replay pre-amplifiers.

In addition to Stereophonic recordings, with or without tape monitoring facilities, different recordings may be made simultaneously or either track may be used for recording purposes (with tape monitoring if desired) whilst the other track is replaying.

Sound on Sound—so eagerly sought by the cine enthusiasts and keen musicians—is easily accomplished with perfect synchronisation between two or more recordings. This is the ideal unit for incorporating in your Stereo High Fidelity installation. Eminently suitable for language studies and other tutorial purposes.

Full information will be published shortly

Models available



MARK 5 DECK
28 gns.

Brief specification of Mark 5 Deck

Four speeds— $1\frac{7}{8}$, $3\frac{3}{4}$, $7\frac{1}{2}$ and 15 ips. Selective frequency correction . 3 independent motors . Interlocked controls . Fast rewind (1200 ft in 45 secs) . Up to $8\frac{1}{2}$ " reels . Pause control . Provision for extra heads (mono or stereo) . Mark 510 will accommodate $10\frac{1}{2}$ " N.A.B. spools (7 gns extra).



MARK 5
Type M
88 gns.

Other Models:
MARK 5 64 GNS.
MARK 5 Stereo £99.12.6

Write for details
to the sole
manufacturer

Brenell

BRENELL ENGINEERING CO. LTD.

1a DOUGHTY STREET, LONDON, W.C.1. Tel. HOLborn 7356 (3 lines)

The Things You Say . . .

Quick service

● Charles A. Brown, Harrow Weald, Middx., writes:

A GREAT deal has been said about dealers; how about manufacturers and the service they give? I had to take a Mk. 5 deck with a damaged wafer back to Brenell the other day, and I saw there what service really means. The deck was taken from me, repaired, checked and given back to me in 15 minutes—free of charge.

A representative of the firm told me they have a good name which they intend to preserve, and they do their utmost to effect any repairs as quickly as possible without lowering the standard of the work done. While I waited I was shown over the repair and testing departments and saw the demonstration room. I'll take off my hat to Brenell and all the name stands for, any day.

(Such glowing tributes as this are seldom paid—at least, on paper, though many more may be deserved. We are glad to help in airing Mr. Brown's satisfaction.—Editor.)

Unflagging interest

● J. Lewis, Highbury, London, N.5, writes:

I am writing as a new reader to say how much I enjoy your publication. I admit that it is the first one I have found interesting from beginning to end, and I hope it will continue this way.

I recently purchased an HMV 2202 tape recorder, and though a superimposition button is fitted I cannot find any way of monitoring music so that commentary can be added in the correct places. Is there any attachment that will enable me to do this?

I also wish to purchase a radio jack, either crystal or transistor. Can you recommend one and tell me where it can be purchased?

(Details of a record monitoring system appeared in Tape Without Tears in the November issue. Truvox Ltd., Neasden Lane, London, N.W.10, make a simple radio jack. Alternatively you could use a Stuzzi radio tuner, marketed by Recording Devices, 44 Southern Row, Kensington, W.10.—Technical Editor.)

Go to it!

● J. H. Robinson, Penarth, Glam., writes:

Congratulations on your magazine, which I find thoroughly interesting and educational. My first-ever attempt at construction was your Mixer unit which, thanks to the simple drawing of the layout, worked first time and is still working.

Now I am keen to have a go at something else. In the article on tape editing in the November issue, a bass/treble/volume unit is mentioned. Can you give details of this and, I hope, an article on how to construct it? Once again, many thanks for the pleasure I get from ATR.

(We trust you will have equal success with the construction project you ask for, which you will find in this issue.—Editor.)

January, 1963

3 OF THE BEST



**SPU-GT
STEREO
CARTRIDGE**

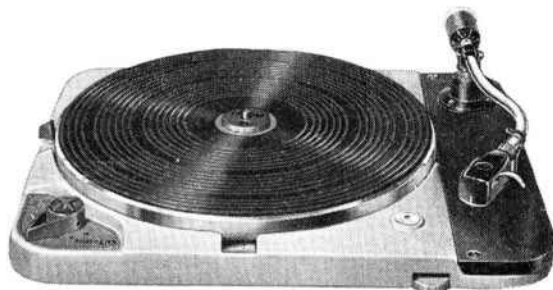
This high-fidelity cartridge has built-in transformers and will match into virtually all equipment without the need for pre-amplifier or other stages.

Channel Separation: 20-25 dB. Frequency Response: 20-20,000 c/s. Stylus Pressure: below 2 gms. Compliance: 10³ cm/dyne. The cartridge is fitted with a low mass (1 mg.) Diamond stylus.

Price £25 15 6 inc. P.T.

Model SPU-G, without built-in transformers, available at £23 4 0 inc. P.T.

from Metro-Sound



TD.124 TURNTABLE (shown with SMG.212 Pick-up Arm fitted)

The incomparable turntable which exceeds the most stringent requirements of broadcasting studios. The only turntable possessing all these outstanding features. ★ inbuilt levelling device ★ inertia-controlled drive system ★ 4-pole motor ★ two-step speed reduction ★ four speeds—with variable control (±3%) acting on all four speeds ★ integral stroboscope ★ turntable with clutch action ★ spring suspension.

Price, with SMG.212 Pick-up Arm and SPU-GT Stereo Cartridge £74 17 0 inc. P.T.

of course

CG (Mono) CARTRIDGE

This cartridge still holds its place as the world's finest monaural cartridge. It is now available in the Type "G" shell for use with Pick-up Arm SMG.212. All Ortofon cartridges in the Type "G" shell are suitable for use with the SME Arm.

Price £18 0 11 inc. P.T.



DISTRIBUTORS FOR THE U.K.
NEW SERVICE DEPARTMENT.
NATION-WIDE DISTRIBUTION

Write today for full descriptive literature

Metro-Sound (Sales) Ltd

19A BUCKINGHAM ROAD LONDON

CLIssold 8506/7

ELECTRONIC WORLD

is by far the cheapest
HIGH QUALITY TAPE
on the market

* **Acclaimed by experts**

Reprints of reviews available

* **Backed by our Guarantee**

If you are not completely satisfied with any purchase, we undertake to refund the full price plus your return postage

POST COUPON NOW!

DE VILLIERS (Electronic World) LTD.
16c STRUTTON GROUND · LONDON S.W.1

STANDARD PLAY (Acetate Base)

3in. 175ft. 4 for 18/- or 48/- per dozen
4in. 300ft. 4 for 26/-
5in. 600ft. 2 for 26/-
5½in. 850ft. 16/-
7in. 1,200ft. 19/-

ARCHIVE GRADE (SP Polyester)

7in. 1,200ft. 22/6

LONG PLAY (Acetate Base)

7in. 1,800ft. 28/-

LONG PLAY (Polyester Base)

3in. 225ft. 4 for 22/- or 60/- per dozen
4in. 450ft. 2 for 21/-
5in. 900ft. 2 for 35/-
5½in. 1,200ft. 24/-
7in. 1,800ft. 31/-

DOUBLE PLAY (Special polyester base)

3in. 375ft. 4 for 40/- or 108/- per dozen
4in. 600ft. 2 for 30/-
5in. 1,150ft. 27/-
5½in. 1,750ft. 35/-
7in. 2,400ft. 45/-

I enclose remittance for £ s. d. Post Free

Name

Address

BLOCK LETTERS PLEASE Cash with order



BRITISH MADE

QUALITY MICROPHONES

FOR ALL YOU WANT IN BETTER SOUND REPRODUCTION

There is a range of LUSTRAPHONE Microphones extending from simple sturdy moving-coil models for popularly priced domestic tape recorders to twin ribbon stereophonic microphones for highest professional use. The better quality and dependability afforded by LUSTRAPHONE make them to-day's foremost microphones with models for every requirement. From all good stockists.

MODEL VR/70 MICRO-MINIATURE RIBBON MICROPHONE

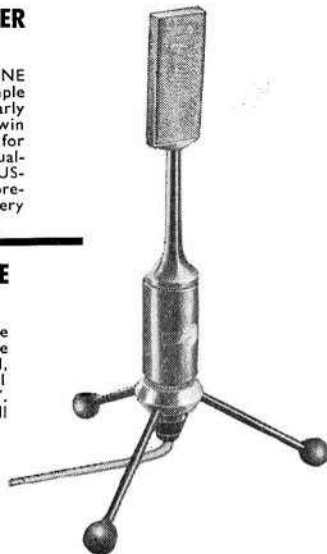
An amazing and original advance in microphone design. The instantly detachable tripod base permits the instrument to be held in the hand, stand mounted, etc. Actual head is less than 1 cu. inch in volume; total height on tripod—7½". With outstandingly good performance. In all impedances, from **10 gns.**

Descriptive literature on application

LUSTRAPHONE LTD.

ST. GEORGE'S WORKS

REGENTS PARK ROAD, LONDON, N.W.1 Phone: PRLmrose 8844



TAPE RECORDER COVERS



Smart, waterproof cover to give complete protection to your tape recorder. Made from rubberised canvas in navy, wine, tan, grey and bottle green with white contrasting pipings, reinforced base, handy zip microphone pocket and name panel.

GRUNDIG TK 5 with pocket	55/-
GRUNDIG TK 8 with pocket	63/-
GRUNDIG TK 20 with pocket	52/6
GRUNDIG TK 24 with pocket	55/-
GRUNDIG TK 25 with pocket	55/-
GRUNDIG TK 30 with pocket	60/-
GRUNDIG TK 35 with pocket	63/-
GRUNDIG TK 50 with pocket	60/-
GRUNDIG TK 55 with pocket	63/-
GRUNDIG TK 60 no pocket	75/-
GRUNDIG Cub with pocket	35/-
TELEFUNKEN 85 without pocket	60/-
TELEFUNKEN 85 with pocket	65/-
TELEFUNKEN 75/15 with pocket	55/-
TELEFUNKEN 76K with pocket	55/-
TELEFUNKEN 77K with pocket	55/-
PHILIPS 8108 with pocket	57/6
PHILIPS EL3538 with pocket	63/-
PHILIPS EL3542 with pocket	63/-
PHILIPS EL3536 without pocket	70/-
PHILIPS EL3515 with pocket	57/6
PHILIPS EL3541/15 with pocket	57/6
COSSOR 1602 with pocket	57/6
COSSOR 1601 with pocket	63/-
STELLA ST455 with pocket	63/-
STELLA ST454 with pocket	57/6
SAJA MK.5 with pocket	57/6
STUZZI TRICORDER with pocket	57/6
SABA with pocket	63/-
MOBILE 2 with pocket	63/-
WYNDSOR VISCOUNT without pocket	55/-

WYNDSOR VICTOR without pocket	60/-
ELIZABETHAN PRINCESS with pocket	60/-
ELIZABETHAN AVON with pocket	60/-
ELIZABETHAN ESCORT no pocket	57/6
ELIZABETHAN MAJOR with pocket	63/-
ELIZABETHAN FT 1 with pocket	63/-
ELIZABETHAN FT 3 with pocket	63/-
FI-CORD with pocket for Grampian mic, etc	52/6
KORTING (4 track stereo) with pocket	63/-
HARTING STEREO with pocket	66/-
FIDELITY ARGYLL no pocket	55/-
WALTER 101 with pocket	55/-
SIMON SP 4 no pocket	63/-
CLARION (complete with strap)	52/6
BRENELL MK. 5 with pocket	77/-
BRENELL 3 star with pocket	69/-
MINIVOX B	63/-
MINIVOX C	63/-

* Price to be Announced

CALL OR SEND MONEY WITH YOUR ORDER TO :-

A. BROWN & SONS LTD

24-28 GEORGE ST. HULL, TEL. 25412/3

NUSOUND RECORDING Co.
35 CRAVEN STREET, W.C.2. TELEPHONE TRA 2080

Ferrograph

(Appointed Dealer)

New Series 5
now on demonstration
also Models 422-424.

Accessories; Mixers, Tuners, Microphones, Stands,
by leading manufacturers.

It pays to deal with a specialist

Accessories for your **Ferrograph**

NUSOUND NUMIX Mk. 2

The 'NUMIX' 2 is a two-channel unit (Mic. and other source) low- or high-impedance feeds. The 'NUMIX' 2 can be used with ANY TAPE RECORDER WHICH WILL ACCEPT A HIGH-Z MICROPHONE. Near professional results are guaranteed.



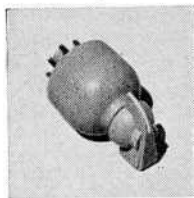
PRICE £6.10.0. complete

Write for leaflet on NUMIX 1, NUMIX 2,
and NUMIX 3 Transistor

NUSOUND MONITOR

Available for the following Ferrograph Recorders.
Models 'D', 2A, 3A, 4A.

The "Monitor" enables the user to listen through the internal loud-speaker of a Ferrograph (normally muted during recording) to programmes which are being recorded, at a listening level which may be adjusted independently of the recording level, with an "off" position.



Price: Monitor (black) 21/- (grey) 25/-

AMPEX 500 SERIES TAPE

	STANDARD PLAY TAPE	LONG PLAY TAPE	STANDARD PLAY TAPE MYLAR	LONG PLAY TAPE MYLAR	DOUBLE PLAY TAPE MYLAR
5"	15s.6d.	£1. 2s.6d.	£1. 1s.0d.	£1. 6s.6d.	£2. 2s.0d.
5 3/4"	£1. 2s.6d.	£1.10s.0d.	NOT AVAILABLE	£1.13s.6d.	£2.16s.0d.
7"	£1. 6s.6d.	£1.19s.6d.	£1.12s.6d.	£2. 5s.0d.	£3.12s.6d.

Cash with order for immediate despatch post free.
NUSOUND RECORDING COMPANY
35 CRAVEN STREET, TRAFALGAR SQUARE,
LONDON W.C.2 Telephone: TRA. 2080



The world-famous
easy-to-build kit-sets

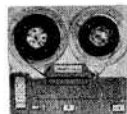
Enjoy yourself and save money
building your own equipment

TAPE AMPLIFIER UNITS, Models TA-1M and TA-1S. The mono version, TA-1M, can be modified to the stereo version, TA-1S, by the modification kit TA-1C. Special features include the provision of a bias level control; easy to read thermometer-type recording level indicators; large printed circuit boards. TA-1C £6.15.0. TA-1M £19.2.6. TA-1S (identical presentation) £24.10.0.



TAPE EQUIPMENT WITH PROFESSIONAL RESULTS

TRUVOX D83 & D84 TAPE DECKS. High quality mono/stereo Tape Decks. D83 2-track, for highest fidelity £31.10.0. D84 (identical presentation) 4-track for most economical use of tape. £29.8.0.



TRUVOX D83

COLLARO 'STUDIO' TAPE DECK. The finest 'buy' in its price range. Two tracks. 'Wow and flutter' not greater than 0.15% at 7 1/2 i.p.s. Long term speed stability better than 0.5% £17.10.0.



'STUDIO'

HI-FI FM TUNER, Model FM-4U. Available in two units which for your convenience are sold separately: Tuning unit (FMT-4U £32.0. inc. PT) and I.F. amplifier (FMA-4U £12.5.0.). Printed circuit for I.F. amplifier and ratio detector. Built-in power supply: 7 valves. Tuning range 88-108 Mc/s. Total price £15.8.0.

HI-FI AM/FM TUNER, Model AFM-1. Also available in two units as above: Tuning heart (AFM-T1 £5.5.6. inc. PT) and I.F. amplifier (AFM-A1 £20.13.0.). Printed circuit board; 8 valves; consecutive FM limiting and ratio detecting. Tuning range FM: 88-108 Mc/s; AM: 16-50 200-550, 900-2000 m. Wide and narrow AM bandwidth, own power supply. Total price £25.18.6.

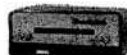


AM/FM TUNER

HI-FI STEREO 18W. AMPLIFIER, Model S-99. Within its power rating, this handsome looking amplifier is the finest available, regardless of price. U/L push-pull output. Printed circuit board construction £27.19.6.

HI-FI STEREO 6W. AMPLIFIER, Model S-33. Only 0.3% distortion at 2 1/2 w/chl. £13.7.6

NEW DELUXE STEREO AMPLIFIER, Model S-33H. A high sensitivity stereo/mono amplifier suitable for use with Decca Deram pick-up. Deluxe version of S-33 with two tone grey perspex panel. £15.17.6.



FM TUNER

CABINETS AND SPEAKER SYSTEMS



EQUIPMENT CABINETS. Equipment cabinets now available to meet differing needs of enthusiasts. All are easy to assemble and left 'in the white' for finish to personal taste. Why not send for full details? Prices from £11.12.6. to £18.10.0.

COTSWOLD & MFS SPEAKER SYSTEMS. Acoustically designed enclosures with 3 speakers covering full frequency range 30-20 000 c/s. Delivered complete with speakers, cross-over unit etc. Cotswold 26" x 23" x 14 1/2" £23.4.0. Cotswold MFS. Minimum floor space model. 36" high x 16 1/2" wide x 14 1/2" deep. £23.4.0.

HI-FI SPEAKER SYSTEM, Model SSU-1. Contains twin speakers and balance control in ducted port reflex cabinet, suitable for stereo or mono. (Legs 1/4 extra) £11.5.0.

Prices include free delivery in the U.K. Models also available assembled.

PACKAGED DEALS

See from our catalogue how these save you cash.

DEFERRED TERMS

available on all orders above £10.

Please send me **FREE HEATHKIT CATALOGUE SHOWING FULL DETAILS OF OVER 50 MODELS.**

Name.....

Address.....

DAYSTROM LTD. DEPT. AT.1
GLOUCESTER, ENGLAND



Alive to every sound

Like the ears of a wary fox, the Grampian DP4 microphone is sensitive to an extremely wide range of sounds. With its uniform frequency response from 50 to 15,000 c/s, the reliable, medium-priced DP4 will greatly improve the standard of your recordings.



Grampian DP4

—also for broadcasting, public address and call systems

Low Impedance microphone complete with connector and 18 ft. screened lead **£8.0.0**

Medium and high impedance models **£9.0.0**

A complete range of stands, swivel holders and other accessories is available.

GRAMPIAN—sounds like the real thing!

Write or phone for illustrated leaflet.

GRAMPIAN REPRODUCERS LTD

Hanworth Trading Estate, Feltham, Middlesex. Feltham 2657

★ LEARN ★

RADIO & T/V SERVICING for your OWN BUSINESS/HOBBY

by a new exciting no-maths-system, using practical equipment recently introduced to this country.

FREE Brochure from:—

RADIOSTRUCTOR

DEPT. G85, READING, BERKS.
(1-63)

Recording Machines Ltd

A SOUND name . . . a SOUND service
serving the South . . .

PORTSMOUTH—299 Commercial Road (23097)

SOUTHAMPTON—4 New Road (27092)

serving the North . . .

GLASGOW—60 St. Vincent St., C.2 (City 3847/8)

Everything for the TAPE RECORDER & HI-FI enthusiast. Leading stockists of Tape & Audio equipment. Studio facilities. Hire Service. Sales. Part Exchange. Full Trade Service.

FRANCIS OF STREATHAM

LEADING STOCKISTS OF EQUIPMENT FOR TAPE, DISC and RADIO

. . . and NO EXTRA FOR CREDIT TERMS

Minimum deposits. No interest or charges on H.P. up to 18 months.

FREE SERVICE DURING GUARANTEE PERIOD.

Prices quoted subject to alteration as advertised by the manufacturers

Akai Stereo M.6...	130 gns.	*Telefunken 85 de luxe...	83 gns.
Akai 69 de luxe	79 gns.	*Telefunken 95	59 gns.
*FERROGRAPH 424	110 gns.	*Telefunken 96 1/2 Tr.	69 gns.
*FERROGRAPH Series 5	85 gns.	*Telefunken 97 Stereo	95 gns.
Brenell Mk. V Model M	88 gns.	Truvox Series 80 2 Tr.	55 gns.
Brenell Mk. V	64 gns.	Truvox Series 80 4 Tr.	59 gns.
Brenell 3 Star	58 gns.	Truvox R7	82 gns.
Brenell 3 Star Stereo	89 gns.	*Uher Universal	83 gns.
Cossor 4 Tr. 1602	39 gns.	*Uher 4 Tr. Stereo	126 gns.
Cossor 4 Tr. 1601	59 gns.	*Vortexion WVA	£93.13.0
Cossor 4 Tr. 1603	28 gns.	*Vortexion WVB	£110.3.0
Elizabethan 'Popular'	24 gns.	*Vortexion C Stereo	£148.10.0
Ferguson 3200	26 gns.	*Vortexion CBL	£160
Ferguson 3202 2 Sp. 4 Tr.	33 gns.	Wyndson International	69 gns.
*Ferrograph 4AN	81 gns.	BATTERY PORTABLES	
*Ferrograph 4AN/S	88 gns.	Cossor 1620	25 gns.
*Ferrograph Series 5	83 gns.	Philips Portable	24 gns.
Fidelity Argyl	28 gns.	Loewe Opta 412	24 gns.
Fidelity Minor	22 gns.	Butoba	66 gns.
Grundig TK 14	35 gns.	Grundig TK.I	29 gns.
Grundig TK 23 4 Tr.	45 gns.	Clarion Phonotrix	39 gns.
Grundig TK24	55 gns.	Fi-Cord 202	66 gns.
Loewe-Opta 403 2 Sp.	43 gns.	Stella	25 gns.
Loewe-Opta 404 2 Sp. 4 Tr.	53 gns.	Stuzzi Memorcord	25 gns.
Philips 4 Tr. 3514	27 gns.	Optacord Batt/Mains 412	45 gns.
Philips 4 Tr. 3541	36 gns.	*Uher Professional	93 gns.
Philips 4 Tr. 3542	59 gns.	*Microphone extra	
*Reflectograph 'A' 1/2 Tr.	105 gns.	Mains Power Pack for	
*Reflectograph 'B' 1/2 Tr.	115 gns.	Philips or Stella	£5.0.0
Robuk	36 gns.	Grundig Mains Power Pack 8 gns.	
*Simon SP5	93 gns.	TRUVOX Decks with Pre-Amps	
Sony Stereo 4 Tr. 462	75 gns.	PD 82—Standard Twin Tr.	£42.0.0
Sony 521 Stereo	124 gns.	PD 85—Professional 4 Tr.	£52.10.0
Stellaphon 4 Tr.	39 gns.	PD 86—Professional 4 Tr.	
Stellaphon 4 Tr.	59 gns.	Stereo	£63.0.0
Stuzzi 4 Tr. Junior	28 gns.	Decks also by Brenell & Wearite	
Stuzzi Tri-Corder	63 gns.	● Tape to disc service	
*Tandberg VI Stereo	110 gns.	● Tape copy service	
*Tandberg 3B	76 gns.		

Grampian Reflector ... £5.15.0

● MICROPHONES, ETC.

Lustraphone VR/70	
Miniature Ribbon	£10.10.0
Lustraphone VR/64	£7.17.6
Lustraphone LFV/59	£8.18.6
Grampian GR. 2 as advertised	
Grampian DP/4 Dynamic	£8.0.0
Simon 'Cadenza' Ribbon	£10.10.0
Reslo Ribbon or Dynamic	£9.12.6
Reslo Cardiod	£9.12.6
AKG Stereo D.88	£19.19.0
AKG D.19 Mic.	£17.10.0
AKG Headphones, K.50	£7.10.0
TSL 3 Channel Mixer	£2.7.6
Grundig Mixer	£16.16.0

Also Acos, Film Industry, Telefunken Microphones.

Stands and bases of all types

All Walgain Products

● TAPES & ACCESSORIES

Standard, Double Play, Long Play and Triple Play in all sizes by all leading makers. Pre-Recorded by Columbia, H.M.V., SAGA, etc.

Splicers by Romagna, Bib, Bond; Matching Transformers; Plugs; Sockets, Cable, etc.

● PLEASE NOTE OUR ONLY ADDRESS AS BELOW

169-173 STREATHAM HIGH RD., LONDON, S.W.16

Between St. Leonard's Church and Streatham Station

STREATHAM 0466/0192

In Stock in our Hi-Fi Dept.

● STEREO & MONO

AMPLIFIERS by

Quad Rogers Tripletone
Leak Chapman Armstrong
Pye etc.

● TUNERS by

Quad Chapman Rogers Jason
Leak Pye Armstrong

● LOUDSPEAKERS by

Quad Kelly
W.B. Wharfedale
Goodmans Leak

● MOTORS, PICKUPS, by

Garrard Tannoy E.M.I.
Connoisseur Shure B. & O.
Philips Decca (fss
Ortofon Stereo)
Goldring Decca Deram
Acos SME MK.II

Hi-Fi Accessories, Styli, Dustbugs, etc.

● CABINETS

Record Housing
Leak 'Southdown'

A.T.R. APPROVED DEALERS

Bath Co-Operative Society Ltd.
TELEVISION CORNER,
SOUTHGATE STREET, BATH

★ **CITY & ESSEX
TAPE RECORDER CENTRES**

228 BISHOPSGATE, LONDON, E.C.2.
2 MARYLAND POINT STATION,
LONDON, E.15 (Head Office)
Telephone: MARYland 5879
205 HIGH STREET, EAST HAM, E.6
(Opposite East Ham Station)
Telephone: GRA 6543

CLYNE RADIO Limited

18 Tottenham Ct. Road, London, W.1.
MUSEum 5929/0095
162 Holloway Road, London, N.7.
NORTH 6295/617
9 Camberwell Church St., London, S.E.5.
RODney 2875

Extensive Tape Re-
corder Showroom.
Ferrograph, Grun-
dig, Philips, Bren-
ell, etc. Full range

Mics, Tape, Acces-
sories, Technical
Information and
Service.



★ **CUSSINS & LIGHT**
KINGS SQUARE, YORK. TEL. 55666

ENGLAND'S BIGGEST SPECIALISTS:

HOWARD TAPE RECORDERS

218 HIGH ST., BROMLEY, KENT
RAV. 4000 & 4477



Specialist supplier of all good tape recorders, microphones,
tapes and accessories. Official Ferrograph Agent. Hire Pur-
chase facilities available. Rapid Postal Service. Personal
Export. Well equipped Service Dept. 95 Liverpool Road,
Liverpool 23. Phone GREat Crosby 4012.

Good quality equipment welcome in part-exchange

MANCHESTER'S SOUND SPECIALISTS

All makes of Tape Recorders and Accessories
Appointed Ferrograph Stockists
Gramophone Record Library—includes Stereo

LANCASHIRE HI-FI
8 DEANS GATE, MANCHESTER
(Next to Grosvenor Hotel)

G. L. MORTON & CO. LTD.
12 OXFORD STREET,
NEWCASTLE-UPON-TYNE 1

★ **NUSOUND RECORDING CO.**

London Showroom: 35 Craven
Street, Trafalgar Square, London, W.C.2. Tel. TRA 2080
3/8 Brigstock Parade, London Rd., Thornton Heath, Surrey
Opposite T/Heath & T. Bus Depot. THO 7609

R.E.W. EARLSFIELD LTD.

PART EXCHANGE SPECIALISTS
266 UPPER TOOTING ROAD,
LONDON, S.W.17
Telephone: BAL 7710

C. SHARP & SON LTD.

4 PREBEND ROW,
DARLINGTON, CO. DURHAM

★ **SHEEN TAPE RECORDER CENTRE LTD.**

Personal Sales and Service by L. G. Francis
8 STATION PARADE, SHEEN LANE, SHEEN
LONDON, S.W.14. Showrooms: PROspect 0985
(Opposite Mortlake Station S.R.)

SOUTHERN RECORDER SERVICE

2 ST. GEORGE'S STREET,
WINCHESTER, HANTS

TAPE RECORDER CENTRE (HALIFAX)

Stock all the best Tape Recorders; Hi-Fi
Equipment; Tape; L.P. Records etc.,

Demonstrations daily by expert staff
2 Years Free Service on New Recorders over £35

30 King Cross Street, Halifax
Phone 66832

★ VISITED BY "AMATEUR TAPE RECORDING & HI-FI"

CBS TAPES

In all grades of
Acetate and Mylar

With leads and stop foils

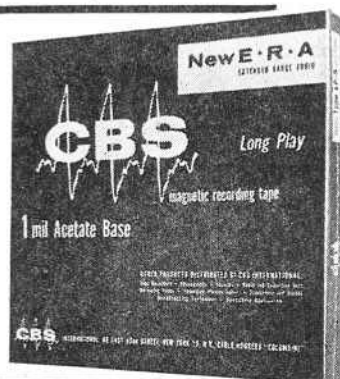
All reels sizes

Better Quality for Less Cost

Specially prepared fine magnetic iron oxide dispersion, precision and
uniformity in processing with quality control at all stages—these are
some of the features that result in world-famous C.B.S. Tapes giving you
extended frequency range, better wearing; better transients, excellent
signal/noise ratio and the chance to make magnificent recordings from
all sources even on quarter track stereo at 3 $\frac{1}{2}$ i.p.s.! Try them to-day!

STANDARD . LONG . DOUBLE . TRIPLE PLAY

CBS TAPES 12-16 Watling Street, London, E.C.4 Phone: CITY 2238



TAPE SPLICING, EASY, ACCURATE, with EASYSPLICE tape splicer, 5/6d. Easysplice, 30 Lawrence, Ealing.

RAPID RECORDING SERVICE. 78s and L.P.s. from your own tapes (48 hour service). Master Discs and pressings. Recording Studio. Mobile Recording Van. Associated Company: **EDUCATIONAL RECORDINGS LTD.**, Specialists in Sleep-learning and Audio-learning. Tapes on Mind Management; Positive Personality; Memory Training; How to Pass Examinations. Manufacturers of the 'Sleep-o-matic Unit' to be used with our Sleep-learning tape. Foreign language courses available for sleep-learning. Brochures on request from Rapid Recording Service, Dept. ATR, 21 Bishop's Close, Walthamstow, E.17. COP 3889.

TAPE RECORDERS. SAVE FROM 30% to 60% on the original price. Large stock of second hand, new, shop soiled machines. All guaranteed. Obtainable on our **NO INTEREST TERMS**. Best Part Exchange allowances on your existing equipment. Call, write, phone today for free list. Quotation and details. Our Mail Order Covers the whole Country. R.E.W. Earlsfield Ltd., 266 Upper Tooting Road, London, S.W.17. Balham 7710.

RECORDING TAPES. INCLUDING LARGE SPOOLS. REDUCED PRICE. Also Pre-Recorded Tapes including Stereo. List. "UHER" 524-4 Track Tape Recorders—New—Complete—List Price 77 gns. Offered £45. C. W. Sparkes, 69 Fortis Green, N.2.

TAPE TO DISC RECORDING—Finest Professional quality. 10 in. L.P. 35/-, 12 in. L.P. 40/-, 7 in. E.P. 17/6. 48 hour postal service. S.a.e. for leaflet to **Deroy Sound Service, 52 Hest Bank Lane, Lancaster.**

TAPE PROTECTORS—top quality shaped polythene bags with generous closure—protect your tapes from damp and atmospheric change and prevent 'sticking'. Per dozen, 3in.—1/6; 4in.—1/8; 5in.—1/9; 5½in.—2/-; 7in.—2/4; 8½in.—2/8. From your Dealer, or from **Swains Packaging Ltd., Dept. 28, Buckhurst Hill, Essex.**

Cheap Recording Tape for sale. **A. Marshall & Son (Metals) Ltd., 18 Cricklewood Broadway, N.W.2.**

TAPE/DISC/TAPE transfer, editing, duplicating. If quality and durability matter (especially with LPs from your precious tapes) consult Britain's oldest transfer service. Equipment supplied with free service guarantee at your home. 48 page photographically illustrated Hi-Fi Catalogue 2/6d. 1800ft. Columbia LP tape 28/- Sound News, 10 Clifford Street, London, W.1. Regent 2745.

PRE-RECORDED TAPES. Unique complete catalogue listing all makes. Mono, Stereo, 7½ and 3¼ i.p.s., including World Record Club tapes. Call for **FREE** copy or send 1/- mailing fee. Dept. TR.2, Teletape Ltd., 33 Edgware Road, W.2. PAD 1942.

CLASSIFIED ADVERTISEMENTS

9d. per word, minimum 7/6. Box Nos. 1/6 extra
Advertisements should be addressed to the Advertisement Manager, 'Amateur Tape Recording & Hi-Fi', 145 Fleet Street, London, E.C.4.

DUODE SOUND UNITS delight keen ears with the most *Natural* true to real life results from tape, disc or radio—because their famous, unique dual drive, built-in crossover and feedback, linen cone with graded compliance, produce 20 to 15,000 c.p.s. with smooth non-resonant, dead-beat crystal clarity. Buy **DUODE** for your lasting pleasure and finest long-term, good, sound investment. **T. Duode Ltd., 16 Brunswick Road, Sutton, Surrey.**

TAPE BARGAINS IN ALL SIZES. Example: Top Brand 5½in. 1200ft. 19/6d., P. & P. 1/3d. S.A.E. for list. Large choice of new and used Recorders. **E. C. Kingsley & Co., 132 Tottenham Court Road, London, W.1. EUS 6500.**

Put your Tape Recorder to its most exciting use. S.A.E. for particulars: **WORLDWIDE TAPETALK, 35 The Gardens, Harrow.**

Friendly Folk Association, Torquay (Established 1943). Members everywhere. Hobby Exchanges, Stamps, Photography, Viewcards, Tapesponding, Pen-Friends (165 countries).

Ask your dealer for American Ferrodynamics 'Brand Five' Recording Tapes—The Best tape value!

LANGUAGES BY TAPE RECORDER. Individual Postal Tuition. No tapes to buy. Details:—**Linguatape, Cheriton Fitzpaine, Crediton, Devon.**

**SHEEN TAPE RECORDER
AND HI-FI CENTRE**

Specialists in Tape Recorders—Accessories—Hi-Fi—Stereo
Your Centre for Friendly Help—Sales—Service
B.R.C. Approved Dealer for all Models and Repairs
Pre-recorded Tapes, Mics., Tuners, Amplifiers, Speakers Etc.

Details—With Pleasure—Call—Phone—Write
8 Station Parade **Open 10 a.m. until 7 p.m.**
Sheen Lane **Early Closing, Wed., 1 p.m.**
Sheen, London, S.W.14 Showrooms: **PROspect 0985**
(Opposite Mortlake Station S.R.)

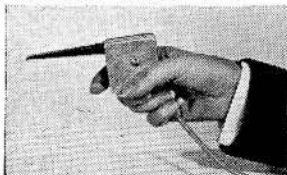
WELLINGTON ACOUSTIC LABORATORIES LTD.

Farnham Surrey (6461)

The **WAL D-MAG** head demagnetiser, long nylon covered probes. **£2.10.0.**

WAL GAIN booster pre-amps. Mono £5.10.0., Stereo £7.10.0., Hi-Gain (CCIR) £7.16.0. The **WAL** Tape Eraser £7.18.6.

Wholesalers: **A. C. Farnell Ltd., Leeds** and **Harris & Russell, Ltd., London.**



**WHEN REPLYING TO ADVERTISEMENTS
PLEASE MENTION AMATEUR TAPE
RECORDING AND HI-FI MAGAZINE**

ADVERTISERS IN THIS ISSUE

Agfa	12
BASF	40
Bath Co-operative Society	37
Bosch Ltd.	10
Brenell	32
Brimar	17
A. Brown & Sons	34
CBS Tapes	37
City & Essex TR Centres	37
Clyne Radio	37
Cussins & Light	37
Daystrom	35
De Villiers	34
Elstone	28
E.M.I.	6
Ferrania	11
Francis	36
Gevaert	8
Grampian	36
Howard	3, 37
Lambda Record Co.	37
Lancashire Hi-Fi	37
Lee Products	32
Lustraphone	34
Metro-Sound	33
G. L. Morton & Co.	37
M.S.S.	2
Nusound	35, 37
Radiostuctor	36
Recording Machines	36
R.E.W. Earlsfield Ltd.	37
C. Sharp & Son	37
Sheen T.R. Centre	37, 38
Simon	30
Southern Recorder Service	37
Tape Recorder Centre (Halifax)	37
Tellux	39
Wellington Acoustics	38
World Record Club	4, 5

THE SOUND OF **SONY**... A WONDERFUL SOUND



The **SONY** 521 Stereophonic Tape Recorder

Here is brilliant engineering in sound. The Sony 521. Here is perfection in dimensional recording and reproduction. The Sony 521. Here are the many extras usually reserved for professional instruments—built-in amplifiers and speaker units, two and four track play-and-record features and trouble-free synchronous motor drive. The Sony 521. Here are sensitive level meters and split-second stop lever, assuring true fidelity, precise cueing and editing. The Sony 521.

- * $7\frac{1}{2}$ + $3\frac{3}{4}$ tape speeds
- * tape index indicator
- * instant stereo/mono switch
- * tone control
- * automatic cut-off
- * additional line outlet
- * headphone monitor jack
- * professional mixing

124 gns. including 2 dynamic microphones and all accessories

SONY[®] RESEARCH MAKES THE DIFFERENCE

Detailed specifications on the range of Sony tape recorders are available from the

Sole U.K. Distributors: **TELLUX LIMITED** A member of the K.G. (Holdings) Group of Companies
AVENUE WORKS, GALLOW'S CORNER, COLCHESTER ROAD, ROMFORD, ESSEX. Telephone: Ingrebourne 43971

PRECISION SOUND —THE STORY



The BASF Tape Manual is the standard guide for those embarking upon the complexities of precision sound recording. The colourful, 76-page booklet covers the whole subject from the elementary principles to the intricacies of editing your own tapes. Whether expert or beginner, there is always something to learn about the fascinating art of precision recording. Send today for the BASF Tape Manual by filling in the coupon below.

PRECISION SOUND —THE STORAGE

Each recording you make is unique; but there are those cherished few which are quite irreplaceable. Keep them safe from dust and damage in BASF Library Boxes—tough, hard-wearing Polystyrol plastic containers which house three tapes (or 8 mm. films) in swivel-open cassettes for 3", 4", 4½", 5", 5½" and 7" spools. BASF LIBRARY BOXES—the modern, inexpensive way of storing, tabulating and protecting your tapes.



—SYMBOL OF
AUTHENTIC SOUND

BASF CHEMICALS LIMITED,

To: **BASF CHEMICALS LIMITED**, 5a Gillespie Rd., London, N.5.
Please send me a copy of the **BASF Tape Manual**.
I enclose Postal Order No. Value 1/6d.

NAME

ADDRESS

A.T.R.