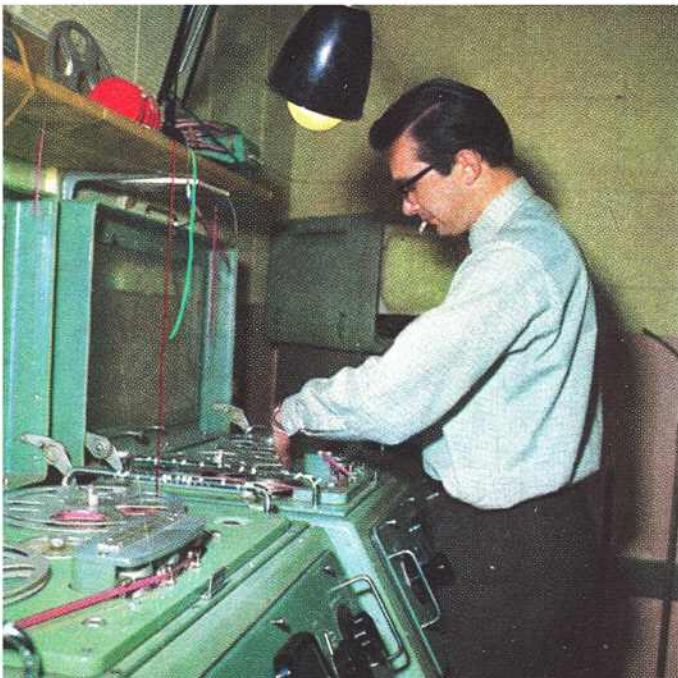


# Amateur Tape Recording

VIDEO & HI-FI

July 1966 Vol 7 No 12 2/6



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Sound for Television — *ATR* Exclusive — Page 6

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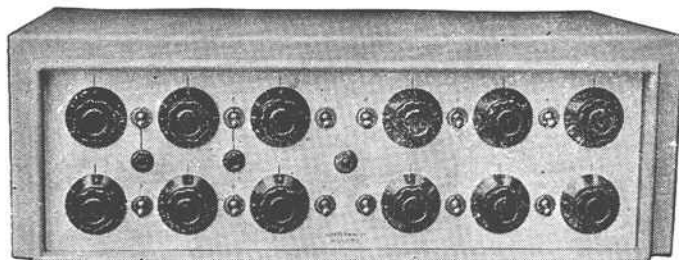


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The white engraved front panel permits of temporary pencil notes being made, and these may be easily erased when required. The standard input is balanced line by means of 2 point jack sockets at the front, but alternative 3 point connectors may be obtained to order at the rear.

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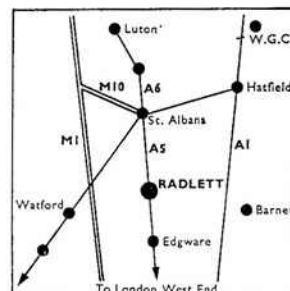
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# Amateur Tape Recording

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## EDITORIAL COMMENT

Earlier in the year (February *ATR*) I commented on pre-recorded tapes, their quality and their comparison with LP discs. This was taken up by our tape reviewer Russ Allen in the following issue which in turn produced a good deal of correspondence from readers and several manufacturers. The outcome of this is a special report by Russ Allen in this issue in which readers and pre-recorded tape distributors and manufacturers air their views. Some of the comments are about quality of reproduction and more especially signal to noise factor which takes me back to an observation I made last month about quarter and half-track recording versus full-track recording.

One tape recorder manufacturer suggested that as an advocate of full-track recording I was living in the past. He pointed out that a modern quarter-track recorder and ultra low noise tape such as that recently introduced by Scotch Tape could quite equal the performance of any full-track tape recorder with regard to signal quality and low noise. Now I don't deny that the overall performance of a modern quarter-track tape recorder with

the best quality tape will in fact put up quite a show, but equally a modern half-track or full-track recorder with the same best quality tape will put up an even better show. Many tape recording enthusiasts would like to have the best of both worlds, the advantages of development in tape recorders and tape plus the technical performance of wide-track recording.

On the other hand we have handled quite a few very expensive and very modern quarter-track tape recorders from which the noise level and distortion left much to be desired. It is not generally known that the distortion factor of even the highest quality tape recorders is rarely better than 2.0 or 3.0%, whereas almost any hi-fi amplifier through which we may play one of these very expensive high quality tape recorders will have a distortion factor better than at least 0.5%!

### About tape

By the time this appears in print I shall have been to Ludwigshafen in Southern Germany, the home of BASF tape, and will be reporting in the October and November issues of *ATR* on developments in tape manufacturing techniques, etc. Speaking of tape, however, reminds me of the little known fact that high grade

and specially tested professional recording tape is available for those who want the very best and are prepared to pay that little extra for it. It is usually supplied in 1000 meter lengths on NAB hubs which may mean transferring it to the usual domestic type tape spools. Such tape is generally capable of taking a much greater signal which means a better signal to noise ratio. It is worth thinking about if you want the ultimate in tape recording. Even if you do use a quarter-track tape recorder!

## FRONT COVER

The four pictures on our front cover this month deal with sound for television and are by courtesy of Rediffusion Television Limited.

- Top left The sound control room overlooking studio 5A where all sound mixing and balancing is carried out.
- Top right Making sound effects for TV in the effects studio.
- Lower left Recording and editing bay attached to the effects studio.
- Lower right A view of Studio 5A, one of the largest TV studios in the world.

# SOUND FOR TELEVISION



## A visit to Rediffusion Television Sound Effects Department with *ATR* Editor F. C. Judd

Many of us are looking forward to the day when amateur video tape recording complete with sound tracks becomes a reality. When it does we will find that the sound requires the same careful attention as it does now in sound only recording. During a recent visit to the sound effects section of Rediffusion Television studios at Wembley I discovered just how important sound is to television and not as some think merely secondary to the pictures. True, when we watch tv at home we tend to disregard the importance of good quality sound and judging by the sound reproduction from the average tv set many manufacturers do also!

You may say however, that since the quality of the sound reproduction from most tv sets is poor and as the sound is perhaps somewhat secondary to the pictures there is no point in the original sound, as transmitted, being of high quality anyway. If this were the case, the sound from the majority of tv sets would be pretty awful as any distortion, noise and loss of frequency response etc., would become even more noticeable. The tv broadcasters therefore go to a great deal of trouble to transmit really hi-fi sound and to achieve very careful balancing, especially with music.

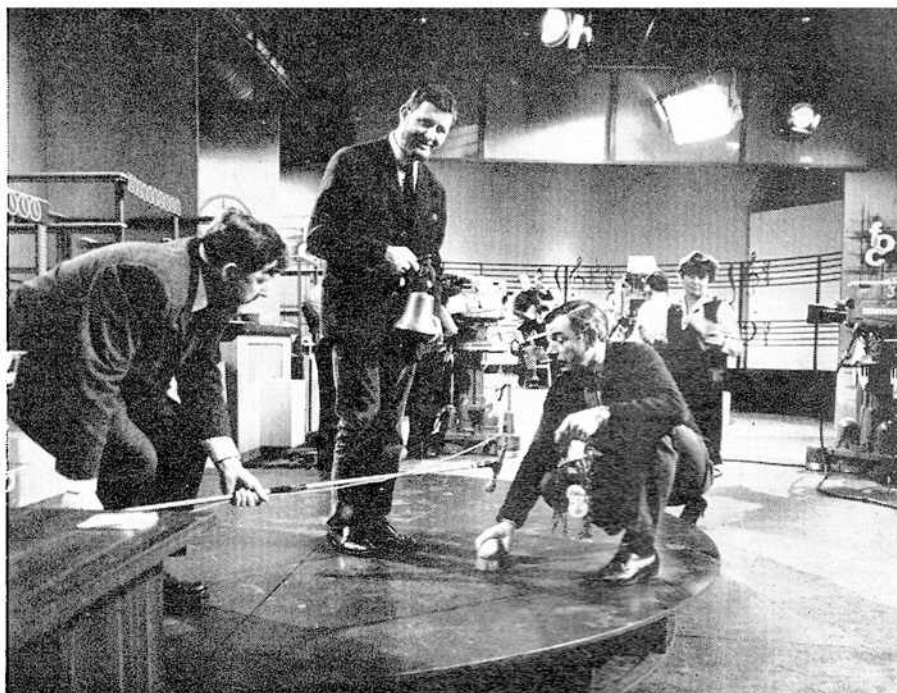
Having disclosed that tv sound transmissions are of high quality and many tape recording enthusiasts already know this, don't rush to connect your tape recorder to the tv set. Most tv sets have 'live' chassis ie, they are directly connected to one side of the mains supply. The direct connection of a tape recorder with any part of the tv set is therefore **dangerous and can in fact be lethal**. In any case the high quality sound signals can only be extracted from the sound detector stage which would entail special connections and an isolating transformer. To ensure high quality sound the tv broadcasters employ only the finest equipment – the best microphones, some of them costing hundreds of pounds, amplifiers and line equipment, professional 15 ips studio tape recorders, sound mixers, monitoring equipment and so on. Dozens of microphones may be used for any one production even to the

extent of a separate microphone for each member of a large orchestra. But to return to 'sound effects' for this was the real purpose of my visit to Rediffusion Television. The *effects department* are called upon for every conceivable kind of sound from 'silence' to roaring jet aircraft. Tucked away behind the high tv studios there is a sound effects library consisting of miles of tape recordings and hundreds of discs all indexed and catalogued for instant selection. Close by is the *effects store* containing the most amazing collection of items for producing on the spot sounds – bells of every shape and size – small drums, large drums, musical boxes, all kinds of small gadgets for percussive sounds, electric bells and buzzers, door bell chimes, each and every item selected for its 'authentic' sound.

All the sound effects required for a tv production are usually taped and introduced into the programme from tape. Effects may either be created in the

special sound effects studio, drawn from the library or specially recorded outside. But why not let a tv sound engineer, Mr W. Sutton of Rediffusion Television, tell you himself about the work of the sound effects department.

"Television may consist of pictures but pictures require the right sounds to go with them. This may not always be so easy as it might seem. For instance a Rediffusion drama director wanted a sound to represent *silence*, another recently requested the *sound of snow falling*. Other requests have included the sound of a *cat silently descending stairs* and the *sound of sunlight streaming into a room* and on the face of it these sound effects would seem to be nonsensical – impossible even. However, the director may not want the actual sounds to be reproduced faithfully but in fact really requires a sound to represent or suggest something and this is very different from



Members of the Sound Effects Department at work in a tv studio.



trying to make a sound recording of a snowflake crashing to the ground or a ray of sunlight blasting its way into a room.

### Recording Silence and Sunlight

Imagination far outweighs technical skill when creating sound effects, although some considerable technical knowledge is required in order to translate imagination into a gramophone record. How would one create a sound to represent silence for example? In a very quiet room the ticking of a clock or watch can be the most prominent sound. Ticking is not usually noticed unless there is an almost complete absence of background noise and so the use of a sound effect such as a clock ticking creates the impression of silence in the viewer's mind. Heartbeats also create the impression of silence but this is a much more emotional sound and the use of it heightens the dramatic effect enormously.

The impressionistic use of sound emphasises the abstract impression of an idea. Quite obviously sunlight streaming into a room makes no sound, therefore an impressionistic sound was required. After many experiments the best sound was found to be that made by a Chinese wind bell which is a kind of mobile made from small pieces of glass suspended on cords and which tinkle in a breeze. For another drama production a low moaning wind, very faint and a sound created by gently stroking the bass strings of a grand piano with feathers or the fingers and electronically treating the combination of the two sounds gave a very satisfactory effect.

### Special Sounds

There are a number of different types of sounds which particularly challenge the imagination and often take hours of work to produce. These are:

1. Sounds of obsolete machinery or prehistoric animals which actually existed but which can no longer be recorded.
2. Specialised sounds known only to a very few people, including the sounds made by *secret* devices.
3. Sounds of things which have never existed and are purely imaginary.
4. Specially created impressionistic sounds and musique concrète.

In the first group it is obvious that nobody knows exactly what sort of noise they made. However, it is possible to find out roughly what kind of sound a machine would probably have made by doing a little research into its construction and operation. In the case of a prehistoric animal similar research into its size and its habits will give a good idea of what sort of noise it might have produced. The sound can then be created from existing animal noises suitably treated.

In the second group, specialised sounds of electronic devices like cyclotrons, atomic reactors and machines such as artificial kidneys, heart lung machines or even frozen food packaging machines all have characteristic sounds known to only a very small number of people. Here it is necessary to go out and make recordings of the actual machines if those who are familiar with such sounds are not to be annoyed. In the third group nobody knows for example what a fleurisque

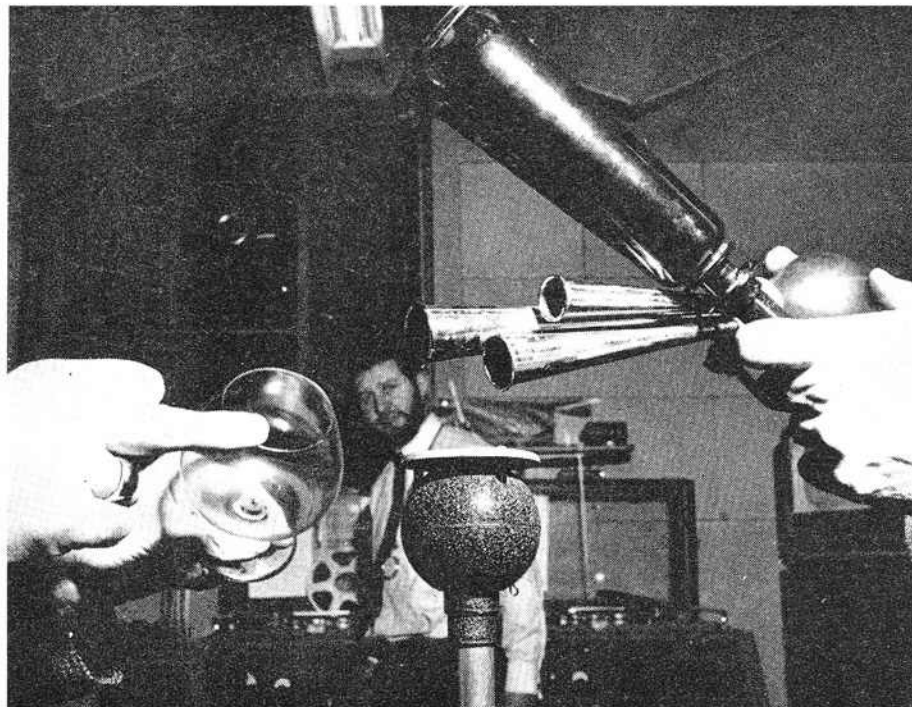


*Out with an EMI portable tape recorder and reflector microphone to capture the sound of a London bus.*

sounds like, or a magnimeter, or a cosmograph – all electronic devices used in a play produced by Rediffusion so of course no one can criticise the authenticity of the sound effects. Musique Concrète and compound sounds usually take a very long time to produce – they may be rhythmic or they may be combined with voices. Every individual sound which makes up the complete item must be produced separately.

The sources of these sounds are diverse, the crash of a dustbin lid the tinkle of a spinning penny, oscillations produced by rubbing a wet finger round the rim of a wine glass, electronic tones generated by an audio oscillator added to each other to build chords, the human voice and musical instruments of all kinds. The original sounds are usually altered electronically by adding artificial reverberation, reverse playing of the recording, using filter networks to remove high notes or low notes, deliberately adding distortion and various combinations of these methods, until the resulting sound bears no resemblance to the original. Each individual sound so produced is then joined to or mixed with another and so on until the desired sound effect or piece of musique concrète is produced. Other forms of compound sounds are the comic effects used in some light entertainment shows.

An electronic mousetrap for instance featured in one programme and was produced from about 25 different sound effects – cats, dogs, church bells, whistles, whirring machinery, running footsteps, cuckoo clocks, a donkey braying and so on. This is an example of a 'montage' sound effect which cannot conveniently be produced in the studio; it requires a separate sound recording session.



*Sounds for musique concrète can be created from a great variety of objects.*

### Sounds from many Sources

The sound effects used in Rediffusion productions are obtained from many sources. At the Wembley studios there are three commercially produced sound effects libraries, two American and one British. In addition there is the company's own collection which contains 160 continuous hours of sound effects. If a sound effect is requested by a director and it is not available in the library it is usually possible to make a special recording of the sound, for example, a Southern Region electric train coming to an emergency stop. The Southern Region very kindly laid on a complete train, empty of course, and arranged for the driver to perform his repertoire of emergency stops. The Army loaned a Centurian tank, with driver, for a morning on a test track at Chertsey. The RAF also offered facilities to record helicopters, jet and piston engined aircraft, V-bomber scrambles and so on. The French Lycee at Kensington arranged for a dozen French children to record their excited French chatter and French girls and boys at play.

For distant sounds, birdsong, trains and other moving sound sources such as racing cars, private cars and other vehicles and moving animals, a microphone fitted with a parabolic reflector is used. This helps to cut down any background noise present and concentrate

the required sound into the microphone. (It also provokes ribald comments from bystanders if there are any present.) All specially recorded sound effects are then transferred to a master tape which goes into the library after having been catalogued and given a reference number.

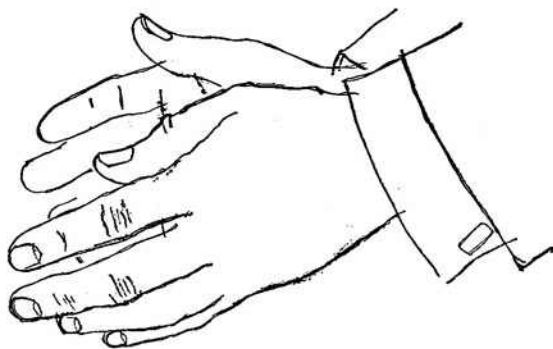
A 78 rpm record is also made of the sound, this also being catalogued and stored ready for use. All of which means, if the pun can be forgiven, that the people responsible for sound for tv have got the problem of sound effects pretty well taped.



*Studio 5A in action at the Rediffusion Television studios at Wembley.*



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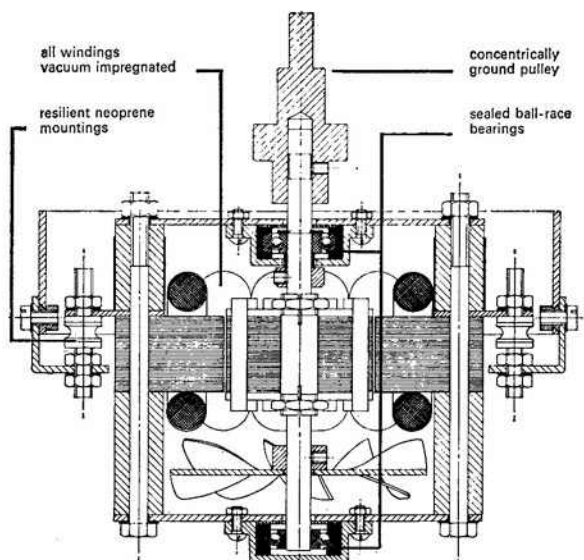
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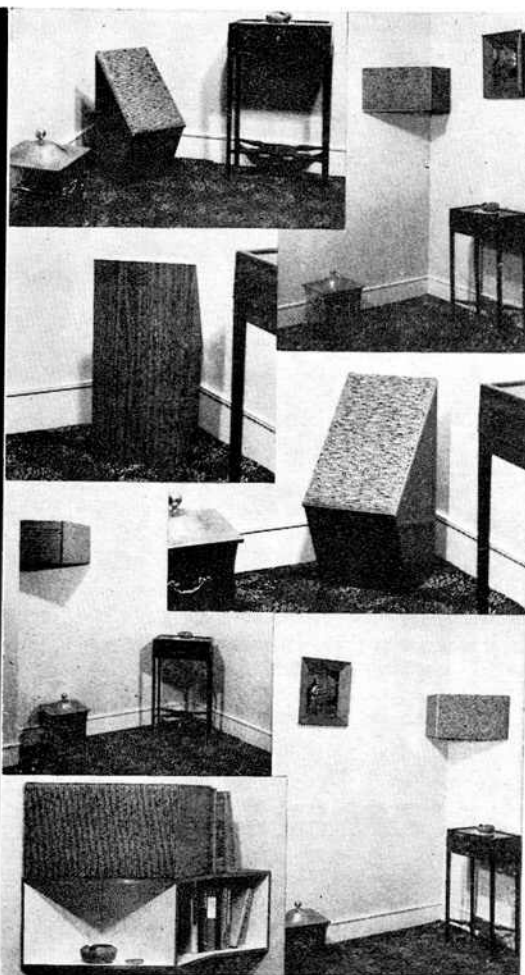
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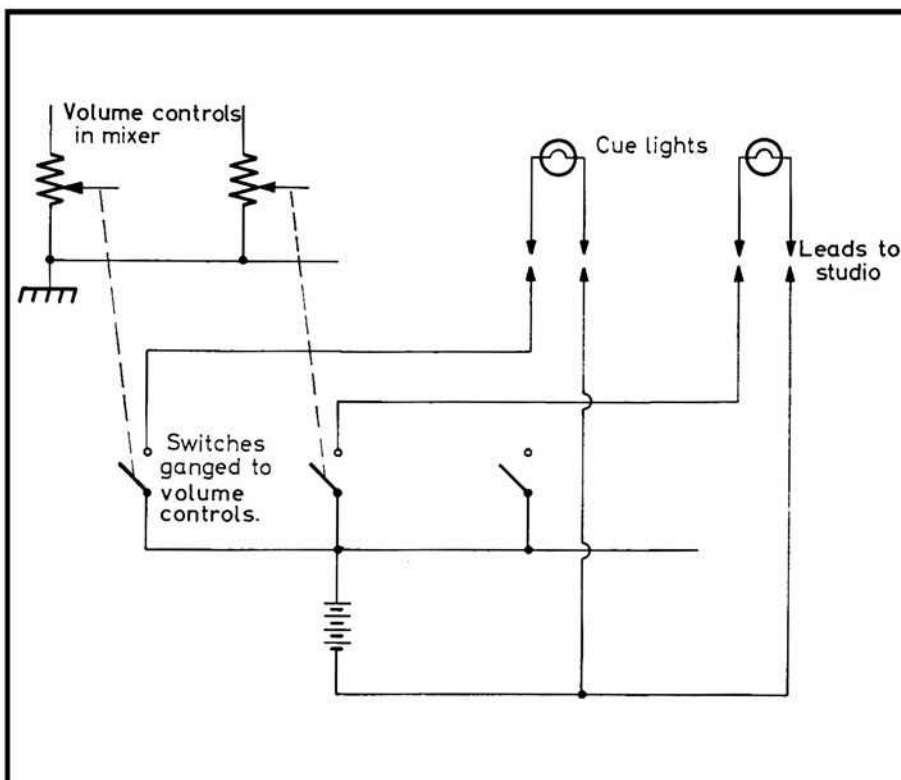
# TALKBACK AND PRE-FADER MONITORING SYSTEM

**Designed by R. F. Spriggs**

To obtain the best results when making a live tape recording it is advantageous to use one room as the studio and another to house the tape recorder and associated equipment. When this is done the problem arises of communicating between the studio and the control room, as it is necessary to give artists a signal to start and also give them verbal instructions. Both these problems can be easily overcome by having a friend to run between the two rooms with messages although even the closest of friends might become rather unenthusiastic after a few trips. To prevent the recordist losing friends the following circuits have been developed.

## Cue Lights

We will consider the problems in the order just mentioned. First, a method of giving the artist a cue when to start. If a mixer is being used the volume controls on the microphone channels can be replaced by ones of the same value with a single-pole switch. The switch is used to control a cue light in the studio and switches on the light as the volume control for the microphone channel in use is faded up. A six volt lantern battery could be used to supply six volt 0.04 amp bulbs or the power for the bulbs could be taken from the mixer power supply. If this method is used, care should be taken to ensure that the heater winding is able to supply the extra current. Leads carrying ac should be kept away from the signal circuits. The circuit for this modification is shown in Fig 1.



*Fig. 1. Cue light and switching circuit.*

Fig. 2. Main amplifier circuit

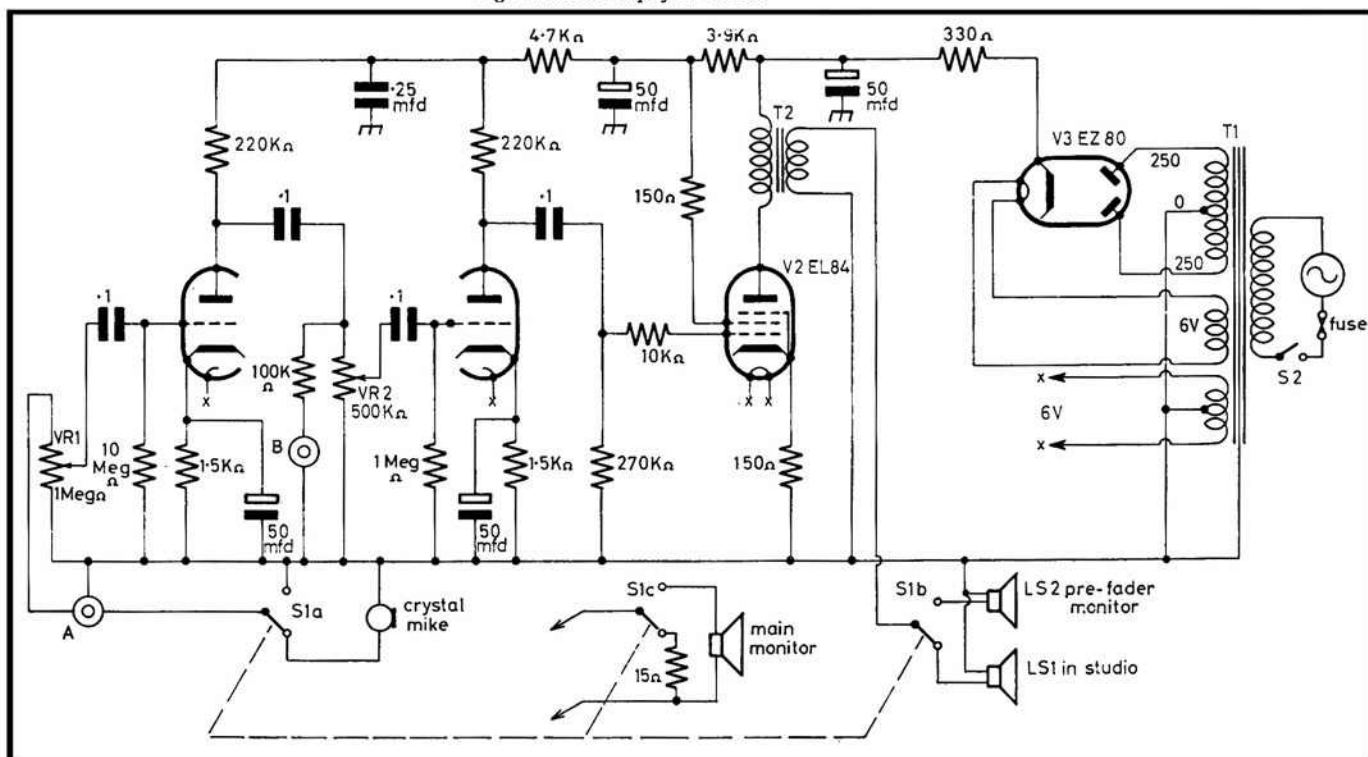




Fig. 5. Alternative pre-amplifier input switching.

We come now to the problem of giving instructions to the artist in the studio. The solution to this problem is rather more complicated, but knowing that the true enthusiast will want the best results no expense has been spared in the preparation of the talk back circuit shown in Fig 2. This circuit is basically a high gain amplifier which operates in conjunction with a microphone in the control room and a speaker in the studio. As the output from the studio will most likely be monitored on a loudspeaker in the control room, the output from the monitor must be suppressed while talking to the studio or feedback howl will result. Switch S1C disconnects the main monitor loudspeaker, and substitutes a load resistor in its place. The main monitor loudspeaker together with switch S1C is normally connected across the output of the monitor amplifier in place of S1B and LS1 and LS2 (see Fig 2.) Study of the circuit will, however, show that an additional input is fitted after the first stage, the purpose of this and S1B and LS2 will be described later. The layout of the amplifier is shown in Fig 3 and is largely self explanatory. Grid leads should be kept short and away from heater and other wires carrying ac. The switch S1 can be mounted away from the amplifier if required, near to the mixer for instance. To prevent instability, this switch should have two wafers, one for the input circuits and one for the loudspeaker switching. The power supply should be wired first, followed by the heater circuit and the rest of the amplifier.

There are many occasions when it is necessary to hear what is on a channel of the mixer before it is faded up. To overcome this problem professional equipment has a feature called *pre-fader listening* which by pressing a button allows the signal going into any channel to be heard without appearing at the main mixer output. The circuit shown in Fig 4 caters for the high level circuits of the mixer. The 2.2 megohm resistors prevent the signal source from being loaded by the transistor pre-amplifier which compensates for the attenuation which these resistors introduce. It should be noted that without the resistors crosstalk between channels can occur if two pre-fader buttons are pressed at the same time. An alternative method of channel selection is shown in Fig 5 and here a rotary switch is used allowing one pole for each channel. The last position of the switch is not used, thus providing an *off* position.

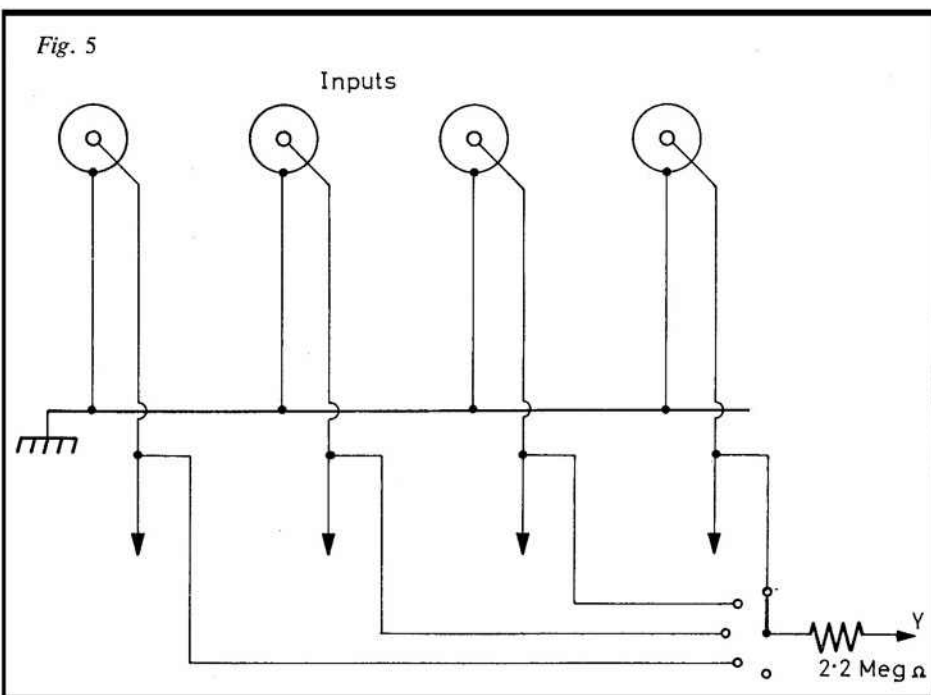


Fig. 6. Layout of pre-amplifier.

Fig. 7. Typical set-up of the system.

Fig. 8. Using an echo unit.

### The Pre-Amplifier

Fig 6 shows the layout of the transistor pre-amplifier and this is constructed on a seven-way piece of miniature tag board. This pre-amp is connected to input B on the main monitor amplifier shown in Fig 2. Care should be taken to ensure that the transistor, electrolytic capacitors and the battery are correctly wired with respect to polarity. As the pre-amplifier consumes only one milli-amp a small battery such as an Ever Ready PP3 will give many months use. To check operation a signal should be connected to one of the channels on the mixer and the corresponding pre-fader selector button pressed. The monitor amplifier volume control VR2 is then turned up until the signal can be heard at the required volume on the loudspeaker. LS2 (pre-fader monitor loudspeaker). The switch S1 (A and B) on the monitor amplifier is then switched to the *talk* position and VR1 adjusted until someone in the studio can easily hear what is being said in the control (recording) room. The switch S1 (A and B) should always be returned to the position where the control room loudspeaker LS1 is connected, otherwise the monitoring circuit will not be in operation.

The pre-fader facility has another use if a rotary selector switch is used instead of push-button switches. In this case a signal can be fed to another system from one particular channel. Fig 7 shows one such use. Here we might be recording a stage musical or a play, using a mixer and two microphones. Music or other effects being used are fed into the gram input on the mixer. The input socket on the public address amplifier for the hall is connected to the *output* of the transistor pre-amp. In this way the gram signal is played in the hall when the pre-fader selector is in the gram position and can at the same time be mixed straight onto the tape. Better recordings can be made this way than by picking the gram signal up by the microphone. One other use is shown in Fig 8. Here echo is required on one channel. The feed to the echo unit is from the mixer via the pre-fader selector, the output of the echo unit being fed back to another channel on the mixer. The proportions of direct to echo signal can be varied at will using the two faders.

If a non-returning push button is used for the pre-fader selector, the volume of the pre-fader monitor should be kept low or difficulty may be experienced when fading from one signal to another due to the pre-fader signal masking the main monitor signal.

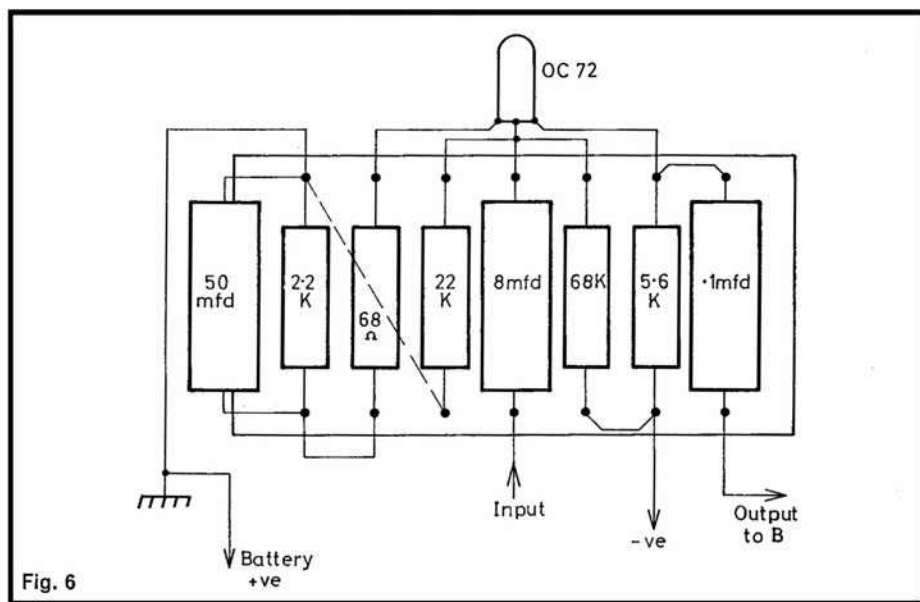


Fig. 6

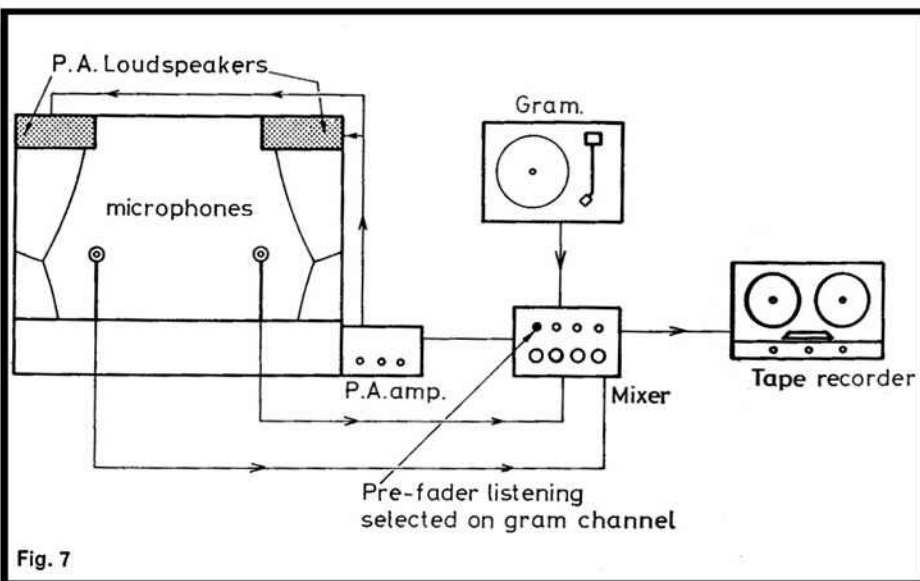


Fig. 7

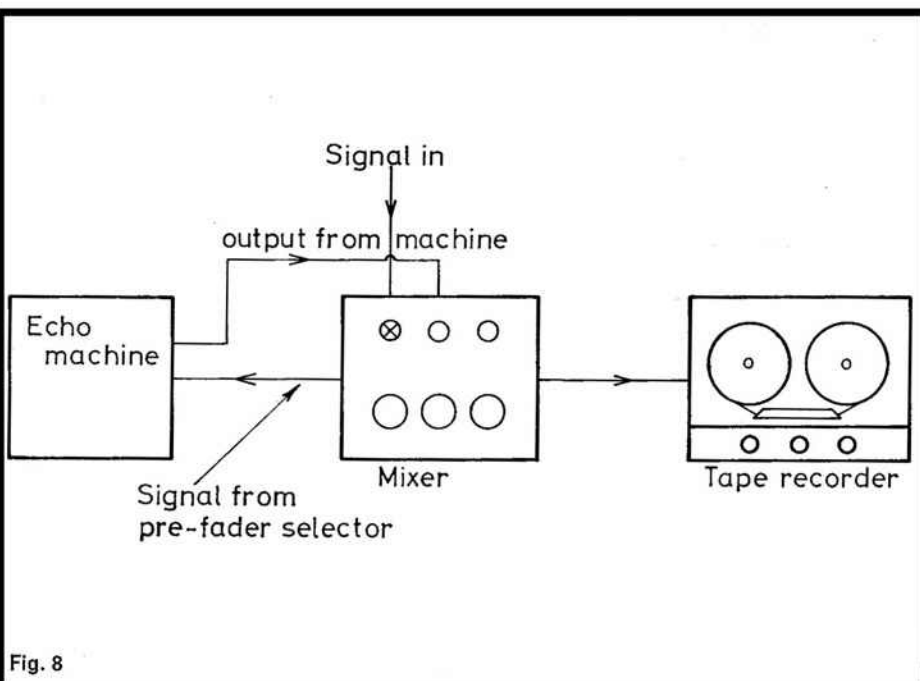
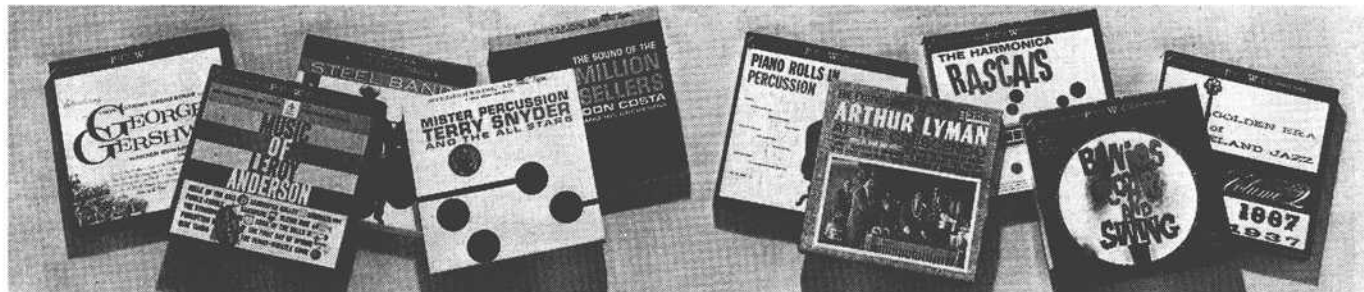


Fig. 8



# PRE-RECORDED TAPES

Russ Allen has some more to say about pre-recorded tapes *from the readers' point of view*



When I discussed my article *Pre-recorded Tapes* (March ATR) with a dealer he did not agree with my views and considered that I had grossly overstated the situation. However, I am delighted to be able to say that a great many readers did agree with me. Not only did they applaud my charter but have made further suggestions and amendments.

All who wrote complained of the poor quality generally of tape records and one reader, Mr Darryl C. Meredith of Chesterfield, had been sufficiently incensed, prior to my article, to take the recording companies to task personally. His major complaint is the difficulty of getting good stereo recordings of reputable artists and musicians. As he says: 'Those that were available were by unknown artistes and musicians'. He goes on to say 'EMI have entered the pre-recorded tape field but they are producing only mono tapes. One would think that Decca, Philips and Pye would have joined the market. I have written to Decca and EMI about the situation and Decca said they found my comments interesting but in view of company policy it was most unlikely that they would go into tape production. EMI completely evaded the issue and just said they did not make stereo tapes'.

Mr Meredith has made a real effort to get something going and he suggests a campaign to rouse the recording companies to action. I am sure too, that if more people wrote complaining to the companies concerned they, the companies, might become aware of their shortcomings. Digging still further Mr Meredith continues, 'In the USA every major recording company puts out its albums on 4-track stereo tape. Several like RCA, Columbia, CBS, Capitol Decca, actually manufacture the tapes themselves, and most or all the others have their albums taped and distributed under licence by the giant Ampex Corporation'.

The Ampex catalogue offers over 1500 different tapes from 38 labels.

A system of this kind could of course be followed in this country by Decca, Philips, Pye etc, and judging by the letters I've received and by what the dealers say, there is a market ready and waiting. Teletape say they are selling all the imported tapes they can get, even at the higher prices they have to charge.

Several readers disagreed with what I said about large spools in big boxes and felt that it would be better if certain British manufacturers adopted this practice of good packaging as they say that some of the tatty boxes in which the tapes are supplied offer no protection and fall to pieces far too quickly.

Whilst I agree that American packaging is mostly first class we must not forget that not all people have machines that will play the larger spools and I am sure that EMI and Recotape etc, have considered this in sticking to 5 in spools. Others pointed out that spools with large centre bosses can carry a label setting out the contents in the same way as a disc.

Certainly a very good idea this as it makes for easy identification although on the other hand EMI's practice of having their information on the leader is even better. It would be a great improvement if all tape manufacturers fitted leaders as they provide a suitable place for titles and prevent the tape itself from becoming tatty. On the subject of tape protection may I commend Recotape for their use of little plastic tape clips supplied with all their tapes. They are a really worthwhile innovation and so much better than nothing at all or a little sticky label that can only be used a few times before it falls off altogether.

Several readers complained of the lack of jazz available and two of them, G. C. Bennett of Greenford Middlesex and

Anthony Wellington of Tiverton, Devon, brought up the subject of the preservation of 78 rpm discs now deleted and which might now have a good sale if they were re-issued on tape for historical reasons. This has already been done with various LP's. In discussing the inferior quality of discs, Mr S. Edwin Benn of Southport, Lancs says that he bought his tape recorder because he got '...

so fed up with the large number of faulty disc records (surface faults, cracks, bangs, scratches, and pops etc). I have tried as many as six sets of some operas in trying to obtain perfect records!' Alas I have a feeling that Mr Edwin Benn is going to have similar trouble with tapes. Another reader who wrote said that he always found he could achieve much better results when he dubbed from disc to tape than ever he can get on manufacturers' tape records. Now I don't disbelieve him and whilst I am sure he is a highly competent tape recorder operator, it seems all wrong that he with a domestic tape recorder, can achieve more than a professional company with highly expensive equipment and facilities.

I would like to thank all those readers who responded to my article. If you feel like writing again please do but why not write to the recording companies as well and tell them your complaints and whatever else you like. There's nothing like going straight to the top. Have a go! After all, we pay a lot of money for our machines and a fair price for our tapes. We deserve to have value for money.

In conclusion may I say that if you do get faulty tapes don't hesitate to return them for exchange. No reputable company should refuse you this. As one reader said of a firm who shall be nameless 'At least they were only too happy to renew faulty tapes and they often are!'

*continued on next page*

# PRE-RECORDED TAPES

... being a continuation of Russ Allen's dissertation on the pre-recorded tape business *from the manufacturers' point of view.*



You, dear reader, have had your say and I too have waffled on a bit, so it's only fair that we should hear something from those worthy gentlemen at whom we've aimed our barbs. First of all, let's get down to some corrections and to begin with, EMI and stereo. Reader Meredith said that they don't do stereo and while this is presently true it's only half the story. EMI did of course produce stereo tapes at both  $3\frac{3}{4}$  and  $7\frac{1}{2}$  ips in 2 track but discontinued them quite some time ago although the recordings are still available through World Record Club. However I believe that they will soon be deleted from WRC lists though it may be possible to obtain certain titles while stocks last and I know that Teletape still have a few on their shelves.

Strong rumour has it that EMI will, probably this year, issue 4-track stereo while Philips on the Continent are producing pre-recorded tape in cassettes for their little machines and doubtless these will be available here before long. Also for Mr Meredith and for all those interested let it be known that the whole of the Ampex range together with a vast range of other tapes in 4-track stereo are imported by Transatlantic Music Tapes Ltd of 250 Grand Buildings, Strand, London WC2 and are of course available from most good dealers.

It seems certain that 2-track stereo will be unobtainable soon and everything will be 4 track at either  $3\frac{3}{4}$  or  $7\frac{1}{2}$  ips. This is despite the fact that some "technical bods" consider that best results are obtainable

from 2 track. Recording methods, machinery and of course playback equipment are improving all the time and I feel sure the changeover is generally for the better and especially does it remove at least one headache for the manufacturer. Recording in this country must of necessity be governed by economics. For example, a master playback machine and three slave tape recorders cost around £9000 and will produce probably less than 50,000 tapes per year whereas Ampex of America at their Hackensack plant alone turn out 3000 per day. Printing and packaging are particularly costly and it is not economic to print less than 3000 copies and quite a lot of specialised material does not sell quickly if at all. The record companies admit that they usually lose money on their prestige recordings. Jazz records and particularly historical re-issues and sometimes modern jazz recordings are often a complete loss. In fact, where tape is concerned in most cases it is cheaper to import from America than to produce here, despite a 25% duty plus surcharge. Tape manufacturers take every precaution in recording but still have to suffer from tape faults, bad adhesion of oxide, thin coating, uneven slitting and there is always the possibility of mechanical or electrical faults too. For economic reasons it is also impossible to test every tape although most firms probably test about 10%.

Despite what many readers wrote and despite the quite high percentage of faults that I've encountered the number returned to the manufacturers is very small. Teletape Ltd reckon it to be about

1%. Sadly I think this is not that I've been unlucky but that too many people will accept almost anything and quite a lot of people blame their machine or just don't have an ear for quality. Of one thing I am sure, reputable manufacturers are striving all the time to achieve perfection. Recotape for example are installing an entirely new bank of duplicators. All running masters which are not up to modern standards or originated from acetate discs are to be deleted or replaced. I believe that they also hold masters of all Decca, Philips and Pye titles and RCA (except those titles issued by EMI) and American Columbia will be available this year.

Larger hubs are definitely coming in because they give better playing results reducing the possibility of wow and flutter toward the end of the tape. Recotape are going to use 5 in reels with 3 in hubs and 7 in reels with 4 in hubs.

The 'Pre-Rec' business is growing up and will be revolutionised within the next five years. By that time people will not be buying radiograms but radiotapers, most probably with built-in facilities for taping programmes with a pre-set clock so that you need never have to rush home again for fear of missing your favourite programme. Then of course there'll be tv with built-in video recorders.

Make your next machine a 4-track stereo and if you are dissatisfied with any tape send it back.

May I in conclusion thank particularly Mr A. Campbell-Gifford of Transatlantic Music Tapes Ltd and Mr George Tughan of Teletape Ltd for being so helpful and so patient with me.



# TAPE RECORDER SERVICING

Part VIII of the series by Gordon J. King

## HF Oscillator Failure

One of the easiest faults to diagnose is failure of the hf oscillator. It is well known that this oscillator provides a signal for biasing the tape when recording while simultaneously delivering a fairly strong signal to the erase head. If the oscillator fails therefore, there will be neither erase of previously recorded material or proper recording of the new material. If a new tape is used on a machine with a defunct oscillator, the recording will be very distorted and almost unintelligible on playback, while if a tape on which there is something already recorded is used, the original recording will remain while the new recording will be superimposed in distorted form upon it.

In the case of a new tape, it may at first be thought that the distortion is resulting in the playback channel. This is soon disproved, however, by running a test tape or tape record through the machine, for the hf oscillator has no functional application on playback. Thus, even though the hf oscillator is defunct, playback will be unaffected provided the oscillator fault has no effect on the playback output stage.

It was shown last month that some of the popular domestic tape recorders are designed so that the playback output stage doubles as the hf oscillator in the record position. With such machines therefore, it is likely that complete failure of the hf oscillator would also seriously disturb the playback performance. Indeed, it is not unlikely that complete failure of replay would result. On the other hand, it is possible that the stage may operate correctly on playback yet fail completely as an oscillator in the record position.

Let us see how this may happen. In Fig 1 is the circuit of a typical playback output/hf oscillator stage. When switch S1 is in the playback position the control grid of the valve picks up signal from the playback channel. In the record position, however, the audio input circuit is disconnected and the grid is coupled to the oscillator coil L1 through C2. As the top of L1 is connected to the anode of the valve through C3 and the tap on L1 is virtually at chassis potential, an oscillator circuit is formed as shown in Fig 2.

This represents a modified Hartley oscillator, the ht supply for the anode passing through the primary of the output transformer which also acts as a 'hold-off' for the oscillator signal (see Fig 1). Oscillator signal is passed to the erase head through C4 and to the record/playback head through C5. The oscillator frequency is

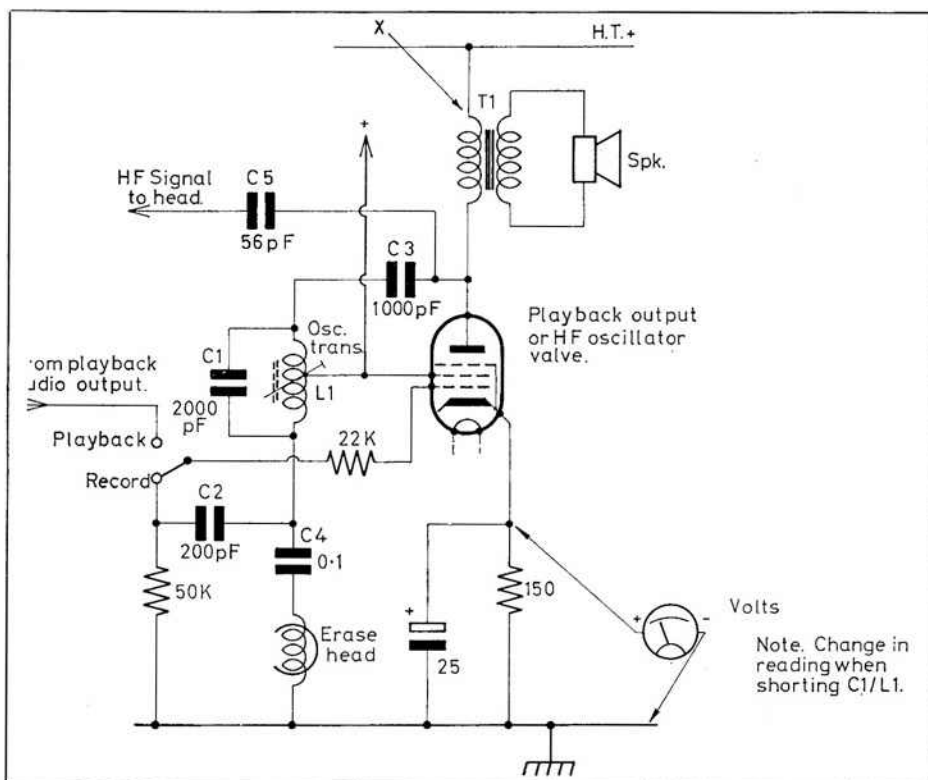


Fig. 1. A typical playback output/hf oscillator circuit. The tests that can be applied to this are explained in the text.

determined by the resonance of C1 and L1. From these circuits we can see that failure of several components would quell the oscillation while having no effect at all on the playback output stage. Trouble in L1/C1 for instance, would prevent the stage from oscillating, but these components have no connection with the stage as a playback amplifier.

The same applies to C2 and C3, failure of which would certainly cut off the hf signal. Most of the other components, excepting the feed capacitors to the erase head and record/playback head, are common to both functions, meaning that failure in these would upset the playback as well as record, as fully explained last month. If we come up against trouble of hf signal failure in a machine with a common playback output/oscillator stage, as shown in Fig 1 then we can be certain that one or other of the components mentioned is faulty if the machine plays back a test tape or tape record without distortion.

## Oscillator Tests

It is not a difficult matter, however, to be sure that the stage is failing to oscillate provided we have a testmeter or dc voltmeter available with a sensitivity of about 20000 ohms/volt or more. The testing

procedure is based on the fact that the current taken by the valve differs considerably between oscillating and non-oscillating conditions.

Let us suppose that the stage is oscillating, then we could measure the anode current by inserting a current meter (about 50mA full-scale deflection) at point 'X' in Fig 1. This means, of course, breaking the connection from the top of the transformer winding to the ht positive line and then completing the circuit again through the meter (negative of meter to the transformer winding side of the disconnection). The meter will register the anode current when the recorder is switched on.

Now, if we purposely cause the stage to stop oscillating by putting a short-circuit across L1 C1 for instance, the current reading will change substantially. This will definitely prove that the stage is oscillating. If there is no difference between the anode current with the tuned circuit shorted or un-shorted, one can be pretty sure that the stage is not oscillating. To avoid having to break the anode feed to insert a current meter, a voltmeter, as already mentioned, can be used to measure the voltage across the cathode resistor. The voltage present

continued overleaf 15





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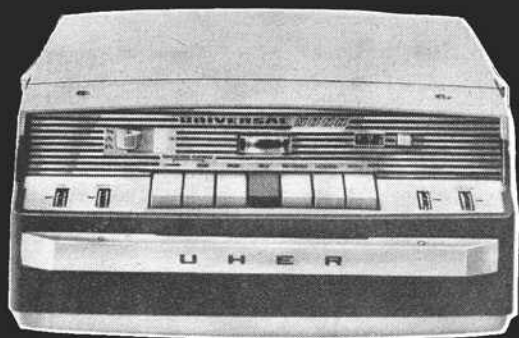
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# AUDIOVIEW NEW PRODUCTS

## Transistor Amplifier Kits

Now available from Tates Electronics Services Limited, 3 Waterloo Road, Stockport, Cheshire, are complete kits for building the 10 + 10 all transistor stereo amplifier system design by Mullard Limited. There are five different kits MA1 to MA5 which build into a fully integrated unit as shown in fig 1. The separate kits are as follows: MA1 pre-amplifier – MA2 main amplifier – MA3 controls – MA4 pre-amplifier and metal work – MA5 power supply and unit plates etc. The finished amplifier system caters for full stereo from pick-ups, tape and radio and delivers 10 watts output per channel. Frequency response is 30 to 20 000 c/s with less than 0.6% distortion at 10 watts. The complete set of five kits are supplied with a most comprehensive assembly instruction book. Printed circuits are used for the amplifiers etc. Further enquiries for price etc., should be made to Tates Electronic Services Limited at the address given above. With limited production in the early stages, the manufacturer is dealing with enquiries direct. As production increases the 10 + 10 will be available from selected wholesalers and approved retail outlets. Dealers who have not already applied are invited to do so.

## Electronic World Tapes

Electronic World have just issued a new list with details of their range of tapes, spools and other accessories. Catalogues on request from De Villiers Electronics Limited, 16-20 Strutton Ground, London SW1. Their range of accessories now includes tape splicers, tape head cleaning outfits, tape storage cassettes, a bulk eraser and pick-up cartridges.

## Grampian Ambiphonic Unit 666

The Grampian Type 666 Ambiphonic unit uses the same delay system as the type 636 reverberation unit and is primarily intended to be used as a means of increasing the reverberation time of high fidelity listening rooms, and small auditoria (the term Ambiphonic has been coined to describe a system in which reverberated signals are fed to a number of loudspeakers situated in various parts of the listening area).

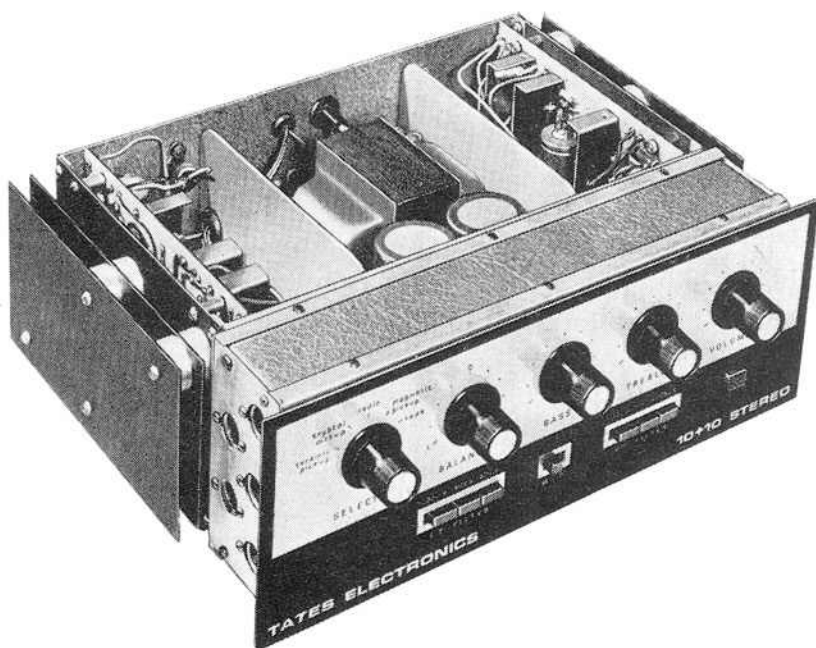


Fig. 1. The complete 10 + 10 stereo hi-fi amplifier built from a Tates Electronic Services kit.

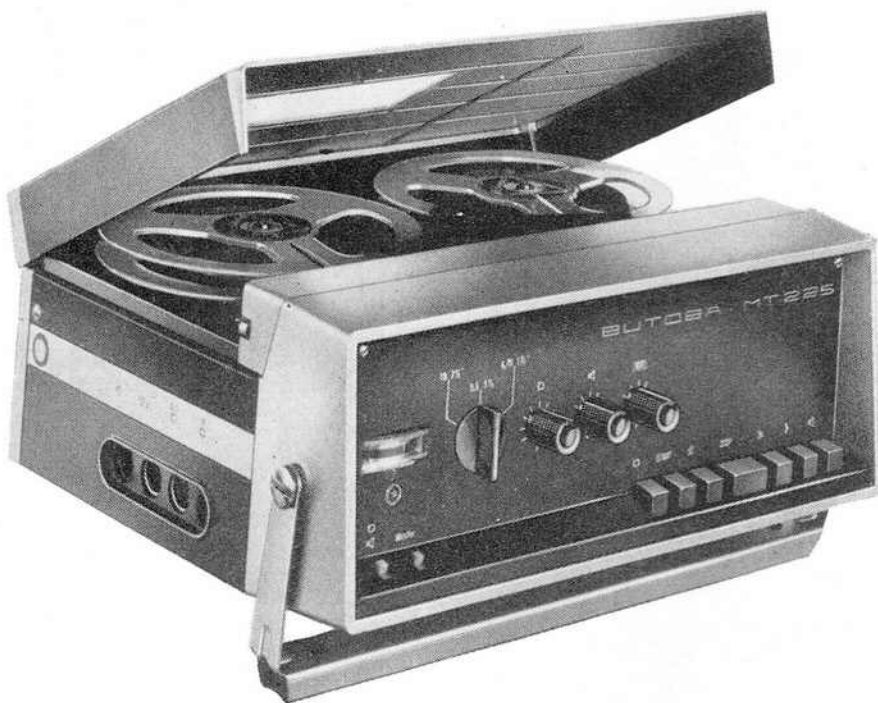


Fig. 2. The Butoba MT 225 all-transistor portable tape recorder.

The Type 666 is built to professional standards throughout. It is mains powered and contains its own three watt push-pull amplifier for driving the ambiphonic loudspeakers. It utilises germanium and silicon semiconductors and the circuits are constructed on plug-in printed wiring boards. The unit is arranged for mounting in a cabinet together with the other

equipment of the reproducing system. It has an aluminium front panel, less than six inches square (15 cms square) with only two controls—the mains switch and a knob for adjusting the amount of ambiphonic reverberation. Further details from Grampian Reproducers Limited, Trading Estate, Hanworth, Middlesex.



### New Butoba Recorder (fig 2)

The Butoba MT225 is an all transistor portable with studio quality and is entirely relay operated. The featherlight operation of the push button switches is made possible by the absence of mechanical linkage. The instrument is almost fool-proof to operate as no further function can be selected (except forward rewind) until the off button is touched. A double action record safety lock precludes accidental erasing. Comprehensive remote control facilities, including rewind, are effected by a unique switching and relay system. Maximum spool size  $5\frac{3}{4}$  in - 3 motors - 3 tape heads - 3 speeds. Two separate gain controls are provided in the record amplifier for mixing, echo and reverberation effects. The MT225 also has before and off-tape monaural monitoring through headphones, loudspeaker or separate amplifier to compare incoming and record signals. Other features are tone control operative only on playback, automatic switch off via metallic tape end, transformerless output stage and a 7 in loudspeaker.

Further details from Denham and Morley Limited, Denmore House, 173/5 Cleveland Street, London W1.

### Radio, Record-player and Tuner units

Braun hi-fi stereo radio record player and tuner units vary in price and performance as do their amplifier stereo units and loudspeakers with which they have to be used to produce complete music systems. All these items can be bought separately and there are various combinations which can be used to meet individual requirements.

Of the radio, record player and tuner units, the Audio 2 and the TC.20 are combined radios and record-players. The TS45 is a radio unit only and the CE16 a tuner unit. The Braun 1000 range - PS1000 turntable unit complete with stereo pick up, the CE1000 stereo tuner unit and the CSV 1000 stereo amplifier used with L1000 loudspeakers are also being distributed in this country by Fi-Cord International and are claimed by the manufacturers to form the most exclusive and finest high fidelity music system in the world. Other turntable units complete with stereo pick-up, are all plinth mounted and range from the PS2 at £18 to studio models to the PCS 52E at £185 - there being six other models within these prices.

Full details of all Braun hi-fi equipment can be obtained from Fi-Cord International Limited, Charlswood Road, East Grinstead, Sussex.

The Braun catalogue also includes the TG60 hi-fi stereo tape deck designed to match the rest of the Braun equipment in precision engineering and design styling. It operates in a horizontal or vertical position and is a record/replay half track stereo unit having replay pre-amplifiers but requiring external power amplifiers and loudspeakers for full replay services.



Fig. 3. Top view of the Braun PS 1000 hi-fi stereo record player, a unit of the Studio 1000 music system.

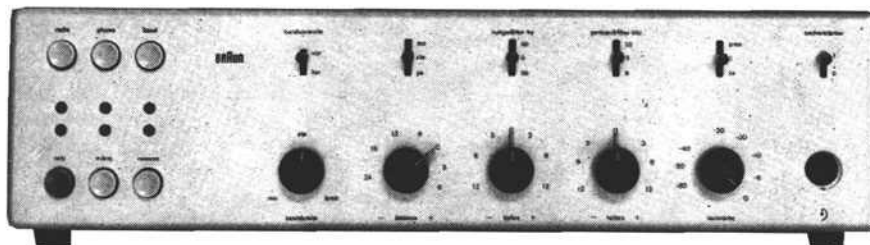


Fig. 4. Front panel of the Braun CSV hi-fi stereo control amplifier—another of the units in the Studio 1000 music system.

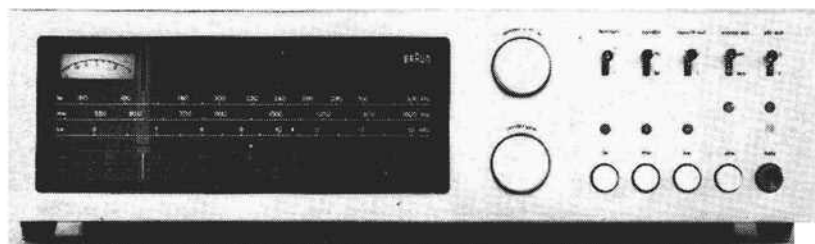


Fig. 5. Front panel of the Braun CE 1000 hi-fi tuner.

# ON TEST - THE UHER 724-L STEREO

Peter Knight

The Uher 724-L—of German manufacture—is a mains-powered, fully solid-state stereo model. It is neatly housed in a hybrid plastic-metal box measuring about 16 in × 14 in × 6½ in. A detachable lid encloses the deck when the machine is inactive and a tuck-under handle facilitates transportation. It has two inbuilt, small-size loudspeakers looking out through the sides of the case, one for each stereo channel. These are driven from transformer-coupled class B output stages of surprisingly early design. Each output stage, in fact, consists of a p-n-p driver transistor transformer-coupled to a pair of p-n-p output transistors in class B formation. These, in turn, are transformer-coupled to the speaker. Presets are provided to permit accurate adjustment to the quiescent current of the output stages as a means of keeping crossover distortion to a minimum. A series resistor-capacitor network is also connected across the primary of the output transformer to assist with the damping of this kind of distortion. Negative feedback is applied from the secondary of the output transformer back to the emitter circuit of the driver transistor. Sockets allow the easy connection of external loudspeakers. These are switched so that when the plug of the external speaker is inserted the internal speaker is cut out. This is necessary for better quality replay than that possible by the small internal speakers and for more satisfying stereo reproduction.

It is obvious from the circuit of the replay output stages that the machine was not designed with hi-fi quality in view. That is, at least, from its own internal speakers, for the output signal delivered by the voltage amplifier alone is pretty good and sounds well when passed through a hi-fi system. Nevertheless, it would appear that the machine wasn't designed specifically for partnering a hi-fi system, since the Uher *Hi-Fi 22 Special*, without speakers and playback output stages, is available for this specialised purpose. This model, incidentally, will be the subject of a future report in these pages.

In the *replay* position, the head signal is lifted by three transistor stages, looking into the three-transistor class B stage. Each channel thus contains six transistors (twelve in all) and there is additionally a transistor for the bias/erase oscillator and one on each channel for the recording level meter, making three more. The stages are nicely equalised with presets for adjustment should this be required. The two stereo channels each deliver

20

two watts of audio on playback which,



although not too high, is sufficient for working the small internal speakers and giving quite a reasonable volume on sensitive external speakers at somewhere below the *full-volume* mark, at lower than maximum distortion of the class B amplifiers.

#### Four Track

Four-track heads are employed and the machine is switchable to 3½ ips or 7½ ips tape velocity with fully corrective equalising. Spools up to 7 in diameter can be accommodated and the frequency range is from 40 to 18000 c/s (to the German DIN4511 standard) at top speed. The clean layout of the control panel and tape deck is shown above. The knob on the left closest to the spool not only switches the machine on and off but it also changes speed, since it moves up and down—up being for the low speed. The knob on the extreme left is playback volume, while that next to it serves as *tone* on playback and as *record level* in the *record* position. It is useful to have separate record level and volume controls. The knob on the extreme right-hand side is for track selection, and above it is an edge-operated *stereo balance* control.

The deck is operated by the key system below the recording level meter. The key on the right starts operations, it being

necessary to press a large red-surfaced button (next to the track selector knob) simultaneously to secure the *record* function. This is pretty fool-proof. The key on the opposite side gives a nice pause action, while the slim one right in front has a sliding action, giving the rewinds in the direction of movement. The largest key is the *stop* for cancelling previous programming.

A press-to-zero digital counter can be seen directly below the right-hand spool. The record level movement is placed at centre above the keys. Using the machine for a while suggests that much thought has been given to the placing of the various controls, and operation is remarkably simple, very little advanced tuition being required. The sample tested had a well balanced drive motor and capstan, the latter being adequately damped by a massive flywheel. However, it was found that the motor gave rise to mechanical vibration, especially when the machine was operated on floor boards or large wooden table. This was surprising in view of the apparently smooth nature of the drive generally.

#### Rigid Deck Casing

The capstan and head assembly, including the record level meter, are exposed by pulling off the plastic cover. Fig 1 shows



in detail what is seen with the cover removed. The erase and record/playback heads are clearly seen, as also is the azimuth adjusting screw. The deck is assembled on a rigid casting and, along with the amplifier boards and general circuitry, is suspended in a not too robust wooden material housing. This is probably adequate for the environments under which the machine will be applied.

Fig 2 shows what the bottom of the machine looks like with the base cover removed (four screws). The substantial deck casting is visible here, as also the drive motor (towards the top left-hand corner). The windings on this motor, incidentally, serve as the primary of a mains transformer, andappings provide for a range of supply voltages of 100V to 150V and 220V to 250V. A further winding is after the style of a mains transformer secondary. This connects across a bridge rectifier, the output of which supplies dc for the transistors. Quite a high degree of extra smoothing (and rectification) is used for pre-amplifier transistors, and without any doubt this works in keeping the hum at a very low level.

The printed circuit board amplifier strips and general solid-state electronics are also shown in Fig 2. The layout is not cramped and it seems as though a servicing exercise could be handled with reasonable comfort. Servicing is a point that is sometimes overlooked when contemplating the purchase of a new machine. The two small speakers are also revealed and, as the picture suggests, there is no attempt towards processing the internal acoustics. Towards the full two-channel four-watt output, one would expect odd things to start rattling within.

#### Adjustable Volume Record Monitor

As already mentioned, there are two sockets for the right and left external speakers. These are two-way type. With the plug inserted one way the internal speaker remains in circuit and when inserted the opposite way the internal speaker is muted. These sockets can also be used for monitor phones. When recording the internal speakers may be used to monitor the programme material, and the volume adjusted by the ordinary volume control, bearing in mind that the machine features a separate record level control. This facility is very useful.

There are two further DIN sockets, one for accepting a low-level microphone signal (two microphone signals on stereo) and the other for accepting high-level signals from another tape recorder, radio or record player and also for delivering high-level signals to a separate reproducing channel, such as a hi-fi set-up. Automatic switch-off is provided by switching studs that operate a relay when the foil end of a tape runs across them.

That then, about covers the essentials of the 724L although the Uher *Trick Key* (so-called in the instruction booklet) should be mentioned. This is truly in

simplest form and consists of a plastic strip shaped for insertion into the tape slot so that it comes between the active side of the tape and the erase head. Its insertion thus kills the erase function and permits a second recording to be made on the first!

To sum up: the machine is certainly simple to operate and is ideal for the enthusiast who is not too good at 'fiddling'. It has four tracks and stereo facilities all the way through, including speaker. By working it in the corner of the room, using the walls to reflect the sound, reasonable stereo is possible without external connections. For better quality work a stereo speaker system or two external speakers are desirable and, in spite of the class B design of the playback power amplifiers, such a partnership is not unduly sad. The internal class B outputs can of course be bypassed and the pre-amplifier signals fed out to a higher quality reproducing channel.

Results, then, are very encouraging.

The residual hum level is extremely low and little is fed through to a hi-fi system when the 724L is used as a programme source. The motor in the test sample appeared to be producing more noise than it ought – but this may not be a general characteristic. All-in-all, the machine seems a good all-rounder four-track stereo model and retails at 75 gns. The deck is solid and subsequent servicing would not be too much of a problem. It is indeed, versatile and should certainly be examined by anyone who contemplates going from mono to stereo. The makers give the following specification.

#### Specification

**Frequency Range:** 40–18000 c/s (to 14000 c/s at  $3\frac{1}{2}$  ips). **Volume Intensity Range:** 45 dB (German DIN45405 Standard). **Wow and Flutter:**  $\pm 0.2\%$  (German DIN 45511 Standard). **Power Output:** 2 watts per channel. **Power Input:** About 30 watts.

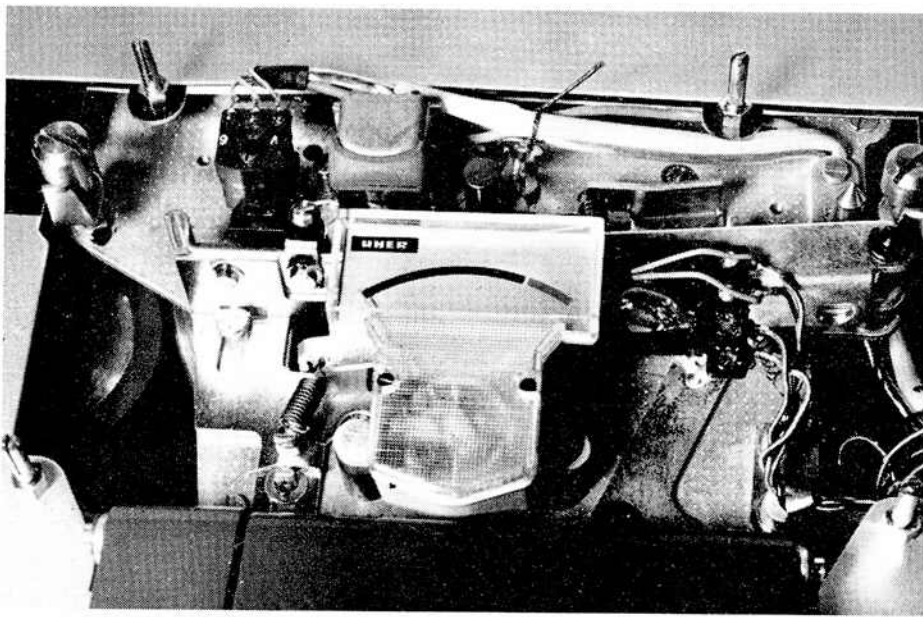
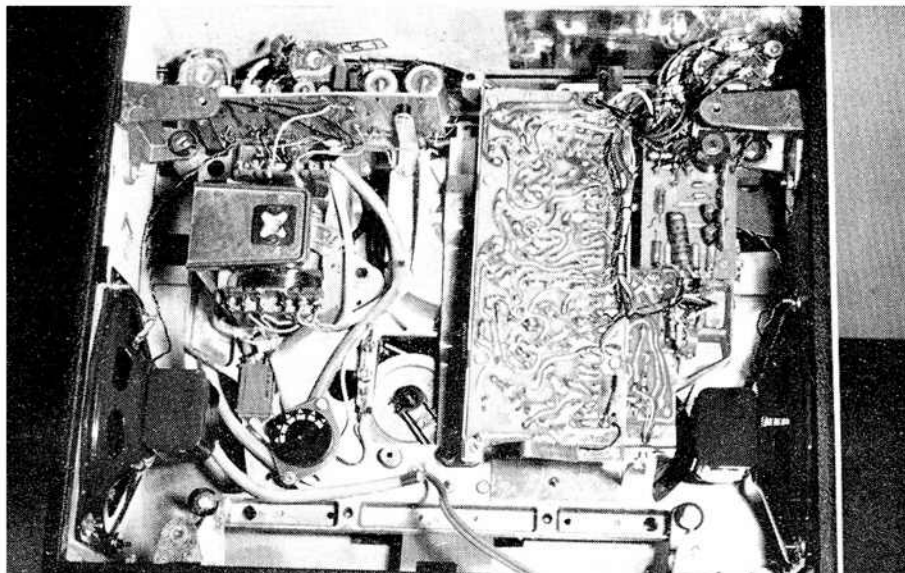


Fig. 1. (above). View underneath the plastic head cover, showing heads and recording level meter which, incidentally, shows the level of both channels simultaneously.

Fig. 2. (below). Underside view of the machine.





# DO-IT-YOURSELF EDUCATION

Graham Harris holds forth on the educational possibilities with tape and slides

If you have an idea and nothing else, putting sound to pictures can be a straightforward job. One gets the pictures, one collects the sounds, one puts them all together and – Bingo, Full House! At least it should be fairly easy to produce these things if you have been reading

ATR and specifically such features as *A Million Slides!* (April 1966).

The questions and answers previously published have been posed in a grand effort to improve the entertainments field, but what about education? Before you all shout 'Yechk!' and dash off in

pursuit of local comedians and dying street sounds, let us give some consideration to a further potential of you, your tape recorder and your camera. The charitable offer of hard-earned information to other people is a noble gesture and one that the tape recorder can present in glossy terms. It is only fair to point out that it is not a straightforward activity because tape slide shows and even pure sound programmes that have the odour of a documentary are doomed from the start with a biased reception. It probably comes from miserable school days when the term *educate* meant long spells of sheer boredom. If people do not actually mouth their feelings they might think that they haven't come along here to be educated. Like a modern text book, it depends on the beginning if your audience will take or leave it.

My first documentary was not a raving success. I don't quite know where it failed. It was probably due to a combination of things. It was a tape slide show that was supposed to simplify the explanation of science fiction. I took a series of black and white slides depicting things not quite of this earth. My brother fighting a mad bush, a friend running in mortal fear away from a tripod and myself being strangled by a vacuum cleaner's sucking hose. For other juicy items, I included my brother made up like Frankenstein's monster thrashing his friend about the head with a shattered chemistry set. Like an experimenter gone berserk I included negatives cut from old snap shots to enhance the whole weird effect.

From the sound point of view it seemed like a golden opportunity to put in all the off-beat noises that I could muster. *Musique Concrète* and home produced, self composed chords plucked from a stricken guitar made the background. The narration was a conversation between my brother and his friend on the merits of science fiction. Because I enjoy the local reputation of being a science fiction novelist, I thought my name would give the twelve and a half minutes some authority. The preview was received in silence and it never progressed beyond its *première!*

As said before, the failure was probably due to a combination of things. My audience was not ready for this sort of topic; I should have written the script before taking the slides (always a good idea) and should have modified the sound track



and used colour slides. The latter point, I keep open for question, still maintaining to the bitter end that black and white, when used properly, has a more dramatic appearance than colour! It's cheaper as well!

The next public educational scheme with which I was involved was a pure sound programme. A certain progressive councillor who was also a fanatical (tape) member of our society, had collected a hefty box of assorted sounds recorded in the town. It occurred to him that such sounds could and should be placed in some sequence and preserved for posterity. I was asked to produce a connecting script and used the conversation technique between two visitors together with the *voice* of the town. (I wouldn't claim originality on this, but I notice that a neighbouring film society is using the same technique for its own portrait of a town). The script was not dashed off, although the time limit for producing such an item was only two weeks. On the contrary, since my weakest subject was history, I was obliged to bury myself into the archives of research. *The Sounds of Warwick* lasts thirty minutes, tracing the history, traditions, legend and development through a year. Our sponsors tell us that copies of this tape have been received in Australia, America and Canada.

The third attempt to educate, I think, was the most successful, if self satisfaction is any measure. It was a tape slide show – or if you prefer it an *audiovisualepic* – de-

picting the history and ghostlore of Edgehill. (Considering that my history teacher at school gave up the ghost, as it were, it is surprising the quantity of historical subjects with which I seem to be entangled.) The show lasts twenty minutes and took twelve months, a staff of twelve and about twenty extras to complete it!

George, our chairman, started the project by producing a few slides of the Edgehill district. (It is a range of hills on the Oxfordshire and Warwickshire border where Charles the First and Lord Essex had the first battle in the Civil Wars of 1642.) He suggested – or someone suggested – that we should do a show on the reputed hauntings of this area. Given the job of writing the script, I once again buried myself in the archives of antiquity and piece by piece gathered the relevant facts. With this material at hand I put it to the group that we could almost stage a copy of the actual battle on tape. The problem was the pictures. The ghosts did not seem accommodating enough to perform whilst we were there and the cost to equip a few thousand people with weapons and like uniforms and to thrash each other into the Edgehill earth proved, on speculation, to be somewhat high. We chewed the problem over and finally agreed that we could experiment and whilst the battle raged on tape with an *eye witness* narration, we could show scenes that would symbolise the encounter. The question put by everyone in the group was, "Will the audience see

the connection?" The answer, in all its complexity, was that it remained to be seen.

Producing the battle on tape was one of the longest jobs we had ever tackled. From the start we had set ourselves a high standard which demanded authenticity. The research had resurrected pieces of conversations spoken at this time by some of the main characters like Charles, Lord Essex and Captain Kingsmill, who incidentally managed to lose a hand in the skirmish which I am sure reappeared when we were integrating the mass of sounds. I incorporated these conversational pieces into the script, to be yelled, to be whispered and to be sung above the clatter of steel and the boom of the ordnance.

Technically it involved the use of six tape recorders. Four mains machines and two battery portables. Horses thumping earth, clattering rock and jingling spurs were mixed in on the two independent tracks of a Sony machine. Ordnance was dubbed with the sounds of drums on a Ferrograph and the shouts and screams were mixed in from the portable Philips' machines. Another Ferrograph collected all of this and the sounds were finally edited, within the time limit, on to one of the tracks on the Sony. The second track of the Sony was then used to take up the narration thus enabling us to play both tracks together, dubbing the whole sequence on to a master tape. The two tracks on the Sony are equipped with independent controls and we were able to fade the voices and raise the volume of the battle up and down to a required standard. Of course we cheated! The yelling and shouting were real, so was the ordnance and so were the horses' hooves, but the military drum was made from fingers bouncing on the bottom of a brass flower vase. The shouting and screams were caught after a long period of trials and errors. It was essential, for the cause of authenticity, that they were made in the open and away from traffic. I had never expected to witness respectably married men rampaging across a field yelling their heads off, but under the plea of desperation such gentlemen volunteered to perform. It was the only way we could capture the real sounds that we wanted and I defy anyone to cheat along this line. These particular sounds were also backed on to the *conversation pieces* whilst on location. It afforded me the opportunity to direct the actors. Standing in a field surrounded by screaming gentlemen and a herd of bewildered cows trying to instil the right accents into the actors' mouths whilst they stepped through mounds of microphone wires, is an experience tantamount to any Cecil B. De Mille epic.

I was also landed with the part of the eye witness and to keep to the authenticity I recorded the part one Sunday morning 23



... 'I don't believe in ghosts, young man'.



in the same field – on my own. I should point out that I had gained permission from the land owner for the previous episode. All went well until this owner happened upon the scene and asked after my health. I explained to him that I was recording a part for the epic for which he had very kindly loaned his field the other evening and he seemed quite interested. I continued with the speech whilst he stood by his cows and looked on.

The rest of the show dealt with the aftermath of the battle. This battle sequence lasts for five minutes and this is followed by a short interlude in which we have tried to portray the fears of certain local shepherds who were casting eyes on their flocks during the Christmas Eve of 1642 and who claimed that they saw a great horde of angry ghosts on the Edgehill plains. Experimentally I incorporated English as it was spoken during that time and in that area. Seventeenth century Warwickshire and Worcestershire dialect is an almost alien language and for a few evenings I became a tutor of this archaic tongue to a small group of lads. It made me appreciate the work of those few tapists who are doing everything that they can to record and capture county dialects before they disappear into the cosmopolitan oblivion.

The last part of the show deals with the recorded interviews of local people who had something to say about the hauntings of Edgehill. Needless to say, these interviews had to be cut down so as to fit in with the pictures which of course governed the timing. We learned a hard lesson about interviewing locals. It results in one main tip. Let the interviewee do all the talking. It doesn't matter if he or she 'um's and 'ah's for about an hour. It is far easier to cut these out than cut the interviewer's voice out. It may be quite easy, at the time, to prompt the person into saying something that will bring them back to the subject. We found however that to *create* a smooth conversation is a painstaking job. For instance for a three-minute conversation we were obliged to listen to forty minutes of one man's voice a dozen or more times before we were able to extract the appropriate passages.

Like all the best laid plans of mice and men and all that, the *Spirit of Edgehill* did not flow along in quite the scheduled way that we had planned. Our chief interviewing officer, Edwin, George and I spent an afternoon in a copse near where the battle was fought, looking for the graves of the fallen. Even now it reeks with silence and I quite expected to be jumped upon by a raving mad parliamentarian and cleaved down the middle with a mighty rusty sword. George left the wood quicker than he entered it and Edwin was quite silent for the rest of the day. In spite of

there was the case of the lady who had lived at Edgehill for over sixty years. She, contrary to our expectations, spoke to us for about an hour and ended up by yelling, 'Ghosts? I don't believe in 'em!' It was a good twist and the end of our show. Of course talking about ghosts is always a good opportunity for the tape recordist to make hay with funny sounds. However, we had no desire to make the show 'skittish', so we decided to play down our basic instincts and not impregnate the whole sequence with whines and twangs. We accomplished a most excellent sound by using the track on which the battle sounds had been recorded. We used an ancient HMV recorder with the double record heads and echoed the track at half the original speed. George's Alsatian dog obliged us with a howl. The final sound was created from rifle shots played at 1½ ips from an original speed

of seven and a half. The result was muffled thunder.

The *Spirit Of Edgehill* is experimental in more ways than one. The sound track was specifically made so that it can be played with or without the slides. I don't know if it is saying much for the slides, but in many cases people have asked to hear the whole thing again without the pictures. We have heard no complaints about the symbolism we tried out in the battle scenes. By symbolism, I mean that we collected some swords and daggers and stuck them in the ground and took various angled shots of these. We lay on our backs and took slides of the hedgerows against the sky. We superimposed two slides of tree branches against a cloudy sky and so on. Still there's some fun to be gained from *education*, especially when it's putting the tape recorder to work.





# THE THINGS YOU SAY

Each month the writers of the most interesting letters selected from our post bag and published on this page will receive a useful accessory to tape recording. Letters for this page should be addressed to *Things You Say*, ATR, 9 Harrow Road, London W2.

## One Reader Agrees - Do You?

The licensing scheme announced by the Mechanical Copyright Protection Society (April ATR) is an excellent one - something that is really needed. I hope it will proceed and I shall be glad to have particulars in due course for which I have written.

Hastings

P. Overton

## Sprocketed Tape

For some years now I have been using perforated tape when adding sound to my own and club films with a Cinecorder and Eumig with tape coupler. Until recently the tape has cost £4 12s 0d per 7 in spool and now I am having to pay £6 for the same size spool!

Surely for what is really only standard play tape this is a bit unrealistic and I am sure other users, and there must be quite a number, are of the same opinion.

As this kind of tape (sprocketed tape) never seems to be advertised does it mean that tape manufacturers as a whole do not produce it and that only one source is available to users like myself? I would be interested to hear the opinion of other users... etc.

Selkirk

J. A. Kerr

(Synchrodek Limited who appear to be the only suppliers of sprocketed tape did announce that they would be marketing a sprocketing machine so that any kind of standard tape could be perforated by the user. We have to date received no further information from Synchrodek Limited) Ed.

## Tracking Ancient Folklore

There is indeed a wealth of material for people to record on *British folklore*. One major event not mentioned by Bob Danvers-Walker in his article (*Tracking Ancient Folklore - May ATR*) is the *Padstow Mayday* (1st May - Padstow, Cornwall). This is traditional and coupled with its own special song with intense rhythm, presents an unforgettable experience. More details on the 'when and where' to record English folklore customs etc., can be obtained from the English Folk Dance and Song Society, Cecil Sharp House, Regents Park Road, London NW1. Two articles on the *Haxey Hood Ceremony* have just appeared in *English Dance and Song* available from the above address at 2s per copy.

Weston Super Mare

John P. Pey

## Recorded lecture library

On the subject of tape clubs (*Things You Say - April ATR*) surely instead of speakers having to travel to the clubs, they could tape their lectures and send them to the clubs. The only cost would be that of the tape (returnable anyway) and the postage.

I know that the personal touch would be lost but surely the idea would prove cheaper in the long run. Perhaps a library of such tapes could be started and clubs could borrow them for a small fee which would help towards the cost of the tape. I am sure that clubs would appreciate this. I run a club myself and our club would be willing to start such a service. Would anyone who is willing to provide a recorded lecture please write to me.

Dymchurch, Kent  
Paul Markland  
(Well, Mr Markland has a good idea but a few years ago, as then Technical Editor of ATR, I put together a library of recorded lectures, complete with demonstration sound tracks all carefully edited into master tapes. The library also included many other interesting items connected with recording and was advertised in ATR for quite some time. It operated on the basis that any club could, by sending its own tape, have a copy made onto it of any lecture for the very modest charge of 7s 6d which also covered the return postage. Only one club ever applied for a taped lecture, so I eventually terminated this little service which had

involved me personally in much time and money. The idea is still a good one and I hope Mr Markland won't be disappointed with responses to his letter above. F.C.J.

## Satisfied Customer!

I was surprised and delighted to receive through the post a pre-recorded music tape for my contribution to your June post bag. Undoubtedly as a result of your intervention in this matter, I am pleased to say I have now received a brand-new Philips EL3301 tape recorder.

In addition to publishing a first-class magazine, your correspondence columns provide a valuable service.

Datchet, Bucks.

C. J. Street

## Help for the Disabled, Please

Following the report of a specially appointed 'ad hoc' sub-committee, the Cultural Society of the Disabled (see report in *Tape Club News*) is being completely reorganized. I have been given the job of reconstituting the Tape Reading Service.

I would welcome offers of help from

## SOUND EFFECTS RECORDS Now available from Amateur Tape Recording

Please allow two weeks for delivery

CASILE, 7" 45 rpm records, approximate playing time 10 minutes. Each contains selection of sound effects in separate tracks. Complete with sleeve and paper inner jacket. Sleeve includes description of each sound effect and playing time in seconds

**A ABX/1-BELLS AND SIRENS** Price 7/6  
Side 1-Fire engines with bells Fire engine-alarm and sirens  
S.S. Queen Mary siren. Factory siren Telephone bell Door bell  
Side 2-Clock chiming Alarm clock Westminster chime Bow bells

**B AFX/1-WILD ANIMALS** Price 7/6  
Side 1-Male and female lions Gibbons Chimpanzees Bell bird  
East-African Baboon Viper Emperor geese Fish eagles Mountain  
lion (puma) Kookaburra (laughing jackass)  
Side 2-Elephants Mississippi alligator Indian tiger Sea lions  
Male lion In the jungle (a background of typical sounds)

**C BGX/1-BACKGROUND SOUND EFFECTS** Price 7/6  
Side 1-Sea (breakers) Wind (howling-scare) Thunder (light rain)  
Side 2-Rain (heavy shower) Factory sounds (industrial) Traffic  
(busy street)

**D EFX/1-ELECTRONIC SOUNDS AND MUSIC** Price 7/6  
Side 1-Space ship-take off Space vehicle-imaginary take-off  
Space vehicle-imaginary landing Ring modulation-tonal Modulated tone glide (descending) Modulated tone glide (ascending)  
Side 2-Sibilant-white noise (pitch) Sibilant-white noise (pitch octave high) Three-tone modulation Filtered tone Stridor (tonal) Ring modulation and sibilant

**E EFX/2-ELECTRONIC THEMES AND MUSIC CONCRETE** Price 7/6  
Side 1-Delta F Study in Sixstones  
Side 2-Sound object Montage

**F HMFX/1-HAUNTED HOUSE, MYSTERY SOUNDS AND MUSIC** Price 7/6  
Side 1-Thunderstorm Mysterious Electronic Music  
Side 2-Spooky Intruder Creaks Fright Dungeon Ghosts Ghouls  
Mandac laughter

**G MFX/1-AUTHENTIC HIGH-FIDELITY SOUND EFFECTS** Price 7/6  
Side 1-Lion roaring Twin piston aircraft landing Building and debris falling Road drill and compressor Ship's siren Steam train leaving station Small steam loco and whistle Cell door, keys and locks  
Side 2-Police car and bell, chase Police launch and siren Steam goods train and whistle Car door slam, and starter Storm at sea, thunder, wind and gulls Tube train, stop, doors and start

**H MFX/2-AUTHENTIC HIGH-FIDELITY SOUND EFFECTS** Price 7/6  
Side 1-American police car with siren-arriving American police car with siren-departing American police car escort with siren-passing American police motor-cycle patrol with siren-stopping Appliances (hand clapping) Orchestra tuning up Car crash Glass breaking (repeated)

Side 2-City and Waterloo tube train-arriving City and Waterloo tube train-departing Footsteps (continuous tracks) In subway (mixed) In narrow streets (female) On pavement (mixed) Running in street (female) Running in street (male) Up and down (wooden stairs) Workmen hammering and sawing

**I MPX/1-MILITARY PARADE AND WARFARE SOUNDS** Price 7/6  
Side 1-March past-Guards and crowd sounds, etc. Royal Salute-Parade commands and National Anthem Drums and pipes-with parade commands  
Side 2-Aircraft-low level attack (bombs, machine-gun fire, aircraft) Artillery-tanks-rifle fire, etc.

**J TFX/1-AUTHENTIC BRITISH TRAIN SOUNDS** Price 7/6  
Side 1-Train departure-main line Train arrival-main line Express train passing-with whistle Fast goods train passing-with whistle Express train passing Small tank loco-passing  
Side 2-Local passenger-arrive and depart Fast goods train-passing Central London tube train-arrive and depart Train over points and crossing Slow goods train passing-with whistle

**K MFX/3-HORSES** Price 7/6  
(10 effects) Trotting Walking Jumping Composite recording of foxhounds, calls, horns, etc. Cows Cats Pigs Blacksmith's shop

**L LFX/1-SOUNDS OF LONDON** Price 7/6  
Guards, Bow Bells, River, Markets etc., etc., with linking commentary. Ideal for cine films and colour slides

**M RSX/1-ROAD SAFETY** Price 7/6  
With Jack Warner (Dixon of Dock Green) and Coco (Bertram Mills Circus) Documentary with sounds

Please send me the following records  
Please indicate with a tick in the appropriate squares.

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

I enclose postal order/cheque for ..... to cover the cost of record/s, plus 1s 2d post and packing for first record and 4d. for each additional record ordered.

NAME .....

ADDRESS .....

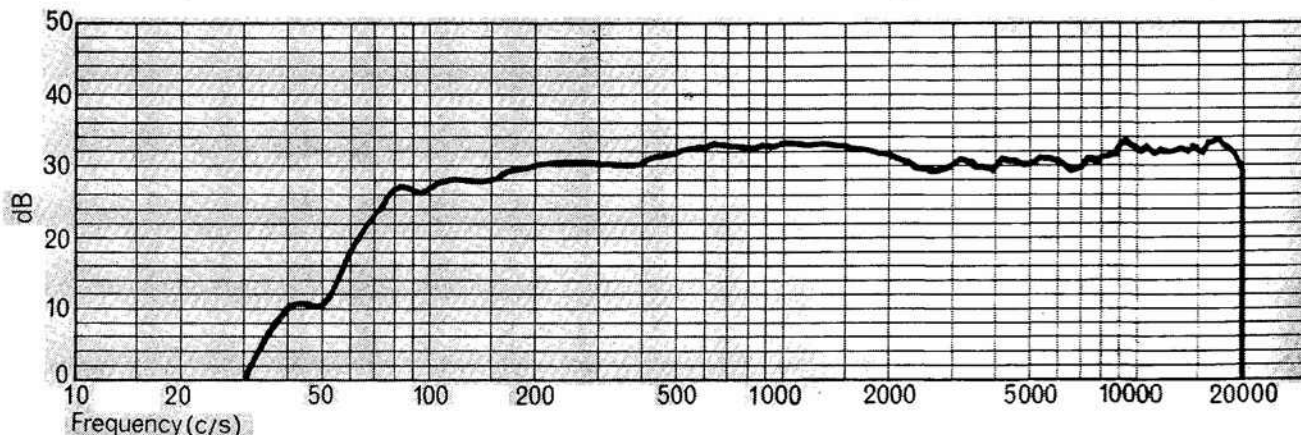
ATR7

ATR, HAYMARKET PRESS LTD,  
9 HARROW ROAD, LONDON W2

Please allow two weeks for delivery

# Don't buy a speaker

unless you have this Sonotone Challenge Chart with you—



This is the performance of the Solent, a new speaker by Sonotone, costing only £18 in a modern stylish veneered cabinet. You can easily pay £10 more for speakers which barely equal the performance of the Solent. Clip out this chart. Use it as your yardstick of value when you're shopping for speakers.

Hi-fi connoisseurs have long been familiar with Sonotone, as engineers of fine pick-up cartridges. Now this respected company has produced its own speaker. It's already the sensation of the Audio World. Read the facts. They may revise your thinking about what you should pay for a good quality speaker.

The problem with buying a speaker is knowing where to stop on price! Unless you are a sheepdog or an orchestra leader you may end up with refinements so acute you will rarely be able to appreciate them.

For some years Sonotone have been looking into the question of speakers and have set out to offer three important things:—

## Three Achievements

- 1). High enough performance to satisfy 99% of enthusiasts.
- 2). A unit of a suitable size to fit on a bookshelf.
- 3). A sensibly priced speaker.

It wasn't easy—but now Sonotone have achieved all three objects. But claims alone are not enough! Sonotone offer proof!

We don't think you will find a speaker that delivers so much commonsense value. And the ones that deliver this standard of performance will invariably cost you up to £10 more.

Why not write for more information to:—

# Sonotone

Technical Ceramics Limited, New Lane, Havant, Hants.

A member of Plessey Components Group.



## Attention all addicts

So far we've talked about the logic of this new speaker.

Now for the technical details:

Woofer: 6½", 10,000 gauss, 1" pole.

Free Air resonance: 50 c/s.

Tweeter: 3½"—acoustically loaded (i.e. custom made to the actual cabinet).

Frequency Response: 40 c/s—20 kc/s.

Sensitivity: 98 dB at 12 w. (microphone 6ft).

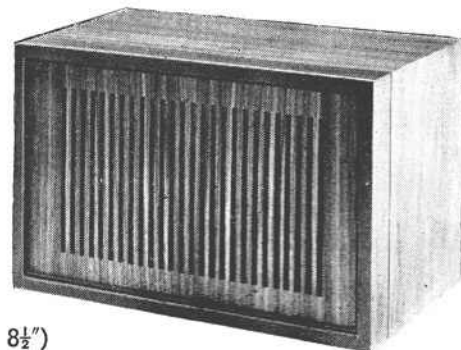
Power Handling: 12 w programme level.

Impedance: 8 ohm system suitable for 8-15 ohm valve or transistor amplifiers.

Drive units coupled with the cross over network have resulted in an outstanding and unusually smooth response. Due to the special design of the bass unit suspensions, linear restoring force against cone movement is ensured. This, coupled with a high degree of damping ensures a bass response free from resonances and other tonal colouration. The use of highly absorbent organic fibre to line the cabinet ensures a clean middle and upper response.

## NEW!

## Sonotone Solent £18



(14" × 9" × 8½")

# BBC VHF SOUND TRANSMITTING STATIONS

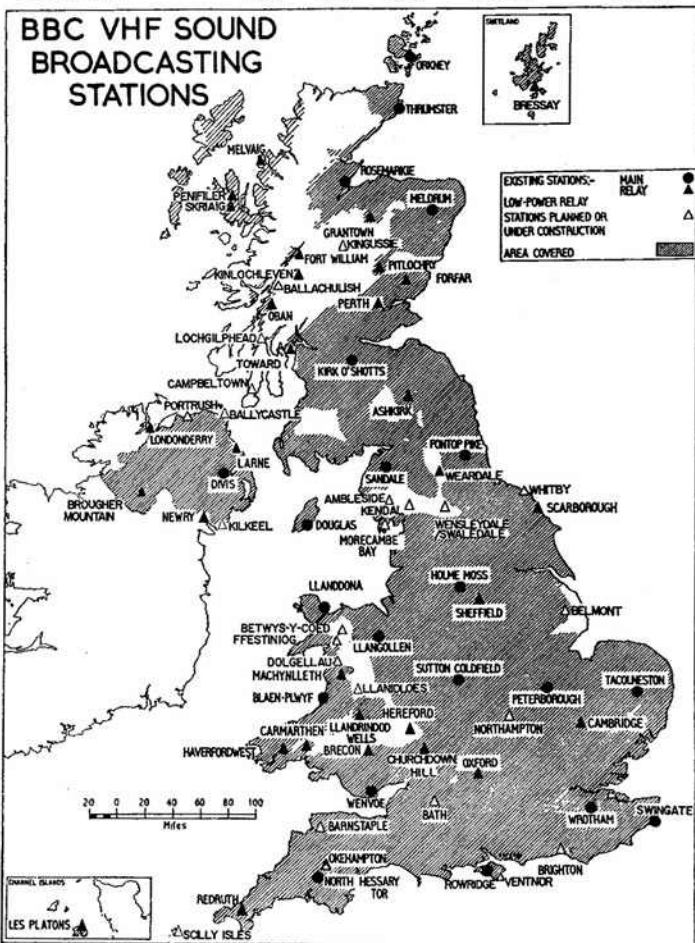
The following is an up-to-date list of BBC VHF frequency modulated sound transmitting stations now operating in the UK. As will be seen from the map showing the locations of most of these stations, England, Scotland and Northern Ireland are pretty well covered by the FM service.

	Frequencies (Mc/s)			Version of Home Service	Maximum ERP (each prog)
	Light	Third	Home		
†Ambleside					
Ashkirk	89-1	91-3	93-5	Scottish	18 kW*
†Ballachulish					
†Ballycastle	89-0	91-2	93-4	N. Ireland	
Barnstaple	88-5	90-7	92-9	West	148 W*
†Bath	88-8	91-0	93-2	West	36 W*
†Belmont	88-8	90-9	93-1	North	15-5 kW*
†Betwys-y-Coed					
Blaen-plwyf	88-7	90-9	93-1	Welsh	60 kW
Brecon	88-9	91-1	93-3	Welsh	9-7 W*
Bressay	88-3	90-5	92-7	Scottish	9 kW*
†Brighton	90-1	92-3	94-5	West	25 W*
Brougher Mountain	88-9	91-1	93-3	N. Ireland	2-5 kW
Cambridge	88-9	91-1	93-3	Midland	17 W*
†Campbeltown					
Carmarthen	88-5	90-7	92-9	Welsh	8-4 W*

Churchdown Hill	89-0	91-2	93-4	Midland	27 W*
Divis	90-1	92-3	94-5	N. Ireland	60 kW
†Dolgellau	90-1	92-3	94-5	Welsh	
Douglas	88-4	90-6	92-8	North	5-5 kW*
†Ffestiniog					
Forfar	88-3	90-5	92-7	Scottish	9-6 kW*
Fort William	89-3	91-5	93-7	Scottish	1-5 kW
Grantown	89-8	92-0	94-2	Scottish	360 W*
Haverfordwest	89-3	91-5	93-7	Welsh	10 kW*
Hereford	89-7	91-9	94-1	Midland	26 W*
Holme Moss	89-3	91-5	93-7	North	120 kW
†Kendal	88-7	90-9	93-1	North	23 W*
†Kilkeel					
†Kingussie					
Kinlochleven	89-7	91-9	94-1	Scottish	2 W
Kirk o'Shotts	89-9	92-1	94-3	Scottish	120 kW
Larne	89-1	91-3	93-5	N. Ireland	16 W*
Les Platons	91-1	94-75	97-1	West	1-4 kW*
Llanddona	89-6	91-8	94-0	Welsh	12 kW
Llandrindod Wells	89-1	91-3	93-5	Welsh	1-3 kW
Llangollen	88-85	91-05	93-25	Welsh	11 kW*
†Llanidloes					
†Lochgilthead					
Londonderry	88-3	90-55	92-7	N. Ireland	13 kW*
Machynlleth	89-4	91-6	93-8	Welsh	62 W*
Meldrum	88-7	90-9	93-1	Scottish	60 kW
Melvaig	89-1	91-3	93-5	Scottish	21-7 kW*
†Morecambe Bay	90-0	92-2	94-4	North	4-1 kW*
Newry	88-6	90-8	93-0	N. Ireland	28 W*
†Northampton	88-9	91-1	93-3	Midland	60 W*
North Hessary Tor	88-1	90-3	92-5	West	60 kW
Oban	88-9	91-1	93-3	Scottish	1-5 kW
†Okehampton	88-7	90-9	93-1	West	16 W*
Orkney	89-3	91-5	93-7	Scottish	20 kW*
Oxford	89-5	91-7	93-9	Midland	22 kW*
			95-85	West	
Penifler	89-5	91-7	93-9	Scottish	6-2 W*
Peterborough	90-1	92-3	94-5	Midland	21 kW*
Perth	89-3	91-5	93-7	Scottish	13-5 W*
Pitlochry	89-2	91-4	93-6	Scottish	200 W*
Pontop Pike	88-5	90-7	92-9	North	60 kW
†Portrush					
Redruth	89-7	91-9	94-1	West	9 kW*
Rosemarkie	89-6	91-8	94-0	Scottish	12 kW*
Rowridge	88-5	90-7	92-9	West	60 kW
Sandale	88-1	90-3	92-5	Scottish	120 kW
			94-7	North	
Scarborough	89-9	92-1	94-3	North	25-5 W*
†Scilly					
Sheffield	89-9	92-1	94-3	North	59 W
Skirraig	88-5	90-7	92-9	Scottish	9-6 kW*
Sutton Coldfield	88-3	90-5	92-7	Midland	120 kW
Swingtae	90-0	92-4	94-4	London	6-5 kW*
Tacolneston	89-7	91-9	94-1	Midland	120 kW
Thrumster	90-1	92-3	94-5	Scottish	10 W*
Toward	88-5	90-7	92-9	Scottish	238 W*
†Ventnor					
Weardale	89-7	91-9	94-1	North	100 W*
†Wensleydale/Swaledale					
Wenvoe	89-95	96-8	94-3	Welsh	120 kW
			92-125	West	
†Whitby					
Wrotham	89-1	91-3	93-5	London	120 kW

\*Directional aerial

†Station not in service at the time of going to press; where frequencies or ERP are not shown, these are not finalized.





# AKIHABARA

## Tokyo's Electronics Supermarket

By J. Wandres

*Akihabara opens earlier; closes later than the Ginza department stores; stays open until seven or eight on summer evenings.*



That 2 lb Sanyo Micropak tape recorder your friend brought back from Tokyo – ask him where he bought it and chances are he'll say: 'Along the Ginza somewhere.' Ask if he went to Akihabara first, and he'll probably say: 'Aki . . . what?'

It is not surprising that this part of Tokyo is not familiar to most visitors. There aren't any noted tourist attractions. And for shopping, it's the Ginza department stores with their English-speaking store guides which attract most shoppers. But five minutes away from the Ginza (on the Yamate Line) within the shadow of the Akihabara elevated train station is the largest electronics and hi-fidelity equipment market in Tokyo and probably in the whole of Japan. This is where shrewd shoppers go hunting for real bargains. Here, discounts start at 15% and have been known to go as high as 50% off!

As you get off the train at Akihabara and walk with the crowds to the market place, the din of a hundred television sets, hi-fi's, transistor radios and tape recorders almost drown the noise of the trains overhead. In a triangle about an acre in size are jammed half-a-dozen arcades containing the scores of little shops and stalls.

Clerks stand by their counters, dusting off their goods, and calling out: 'irashai-ma-seh . . . welcome in. Ah, yessir, we have lowest prices in Tokyo.' Don't be surprised to hear this more than once at Akihabara. During the humid Tokyo summer you will be invited to feel the *amazing cooling ability* of the four-speed, battery-operated fan. If you should come by during the winter

months, the *superior warming capacity* of the electric *Kotatsu* will be on display. The *Kotatsu* is Japan's answer to the problem of no central heating. It is basically a card table frame with shortened legs. On the underside of the table is mounted a heating element. A quilt which can reach the floor is put over the frame, and the table top placed over that. With electric heaters to keep their backsides warm, people sitting around the table in the Japanese fashion, ie, on floor cushions can, by pulling the quilt up over their knees, keep supremely warm.

Most of the shops carry the items for which there is a heavy popular demand: the 7 lb TV sets, matchbox-sized radios as well as £100 tape recorders, radio/phono combinations as big as a chocolate box and pocket-sized transceivers. In addition, many shops specialize in high fidelity sound equipment. If some of it looks familiar, it may be because it is marketed all over the world under different names and at very different prices. Other stalls sell fluorescent lighting, cookers, refrigerators, and household appliances. Still more handle more sophisticated items such as oscilloscopes, testing equipment, radar and sonar for pleasure boats, Geiger counters, and remote-control radios for model builders.

Since the Second World War, technological advances and the low cost of labour has made the manufacture of transistorized electronics one of Japan's leading industries. The low prices and tax-free-for-tourist laws practically dare a visitor not to spend money. Akihabara is essentially a discount market. And while haggling

(as many of the servicemen knew it) has died out, the shopkeepers will not always turn a deaf ear to a little bargaining *if it is done well*. On items of 3,000 yen to 5,000 yen (£3 to £5) the shopman will probably stand firm on his 15% off. But if you should be shopping around for £50 to £100 worth of tape decks, amplifiers, microphones and speakers, feel free to drive as hard a bargain as you can.

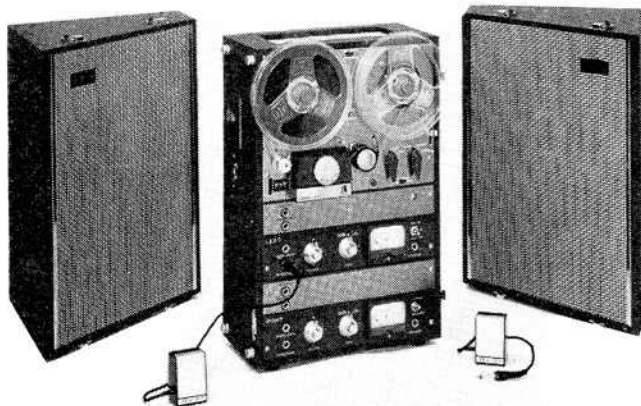
One of the great assets of the Akihabara merchants is their

spontaneous way of doing business. They are not like the mechanically polite hostesses who dot the downtown department stores. With their infectious sense of humour, they are a little of the wheeler-dealer, the supersalesman, and the family grocer all in one.

If they have any command of English, they will be most eager to speak it with you. But this 'command' can be deceptive. A sale on the verge of closure can easily stall from a simple misunder-



*In window after window, low prices and tax-free-for-tourist notices practically dare a person not to buy.*



*The Japanese-manufactured Akai stereo tape recorder distributed in the UK by Pullin Photographic Ltd.*



*The Sanyo all-transistor MR 101 Reporter-portable tape recorder made and sold in Japan and in the UK.*



# ON TEST

Here is a full list of the test reports on tape recorders and other equipment that have appeared in issues of *ATR* which are still available from the publishers. These issues may be ordered (price 3s each, post paid) by using the coupon below.

Akai 44 S stereo tape recorder	August 65
Akai X 4 stereo portable tape recorder	October 65
Armstrong 224 FM tuner and stereo decoder	June 65
Beocord 2000 T stereo tape recorder	February 66
Carol Cinesound film/tape synchronizer	March 66
Eumig Phonomatic projector for synchronizing with a tape recorder	March 66
Goodmans' Magnum K loudspeaker	April 66
Grampian Reverberation Unit	May 66
Grundig TK 23 A automatic tape recorder	March 65
Philips EL 3301 cassette tape recorder	December 65
Pye Achoic Stereo hi-fi system	January 66
Pye HFS 30 T hi-fi stereo amplifier	September 65
Saba TK 230 S 4-track stereo recorder	April 65
Scott 200B amplifier	July 65
Sony TC-250 A stereo record/replay unit	March 66
Sony-O-Matic TC-900 portable tape recorder	June 66
Tandberg Model 9 tape recorder	February 65
Telefunken 201 tape recorder	June 66
Topsonic converter - silent projector to stripe-sound unit	March 66
Truvox R 102 tape recorder	November 65
Wyndson Vanguard tape recorder	May 66

There are full test reports in every issue of *ATR*. Keep up to date with the latest equipment this easy way. Place a regular order for *ATR* by using the subscription coupon on page 37.

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Please send me, post free, the following back numbers of *ATR* at 3s per copy.  
I enclose cheque/postal order for.....  
to cover the cost.

MONTH	YEAR	MONTH	YEAR

Name.....  
Address .....

standing of a word or gesture. For this reason, if you are planning to spend a large sum, it will be wise to secure an interpreter for about 1,800 yen a day through the Japan Tourist Bureau or the Tokyo Chamber of Commerce. Your interpreter will be able to express your desires honestly and accurately, and do it in a manner familiar and acceptable between Japanese businessmen. If, after some bargaining, you feel the price isn't right, don't hesitate to visit two, three, or more shops. By quoting the price given by one shop in another, it may be possible to drive the figure down a little further. (There is the apocryphal story of the Japanese merchant after the war refusing to sell to a westerner because the westerner wouldn't bargain.)

From the time Akihabara opens at eight-thirty, an hour earlier than the downtown stores, to the time it closes (also later than downtown) at seven pm and later in the summer, there is a continual scene of happy confusion. Lorries and vans constantly unload cases of factory-sealed merchandise into the already crammed aisles. Whole families come and spend the day to select the new *tele-bee*. Department store buyers from all over Japan conclude enormous deals over little cups of green tea. And scores upon scores of people just stand around taking in the action. You can have your lunch while at Akihabara at one of the two restaurants in the department store built below the Akihabara Station platform. While you're at it, wander through the grocery department on the third floor which stocks many western food items, the toy department on the second floor, or the hard-to-pass bakery on the ground floor. Take along some money, and a smile ... and good hunting!



The Sony TC 777 A high fidelity tape recorder made in Japan and sold in the UK by Debenhams Ltd of Gloucester.



# SOUND SCENE

## BBC North Region

### 1966 Amateur Tape Recording Competition

Amateur tape recordists are invited to submit recordings on the theme of 'Summer'. These should be a combination of words and sounds.

#### Conditions

- 1 Competitors must be individuals or groups of individuals not engaged in sound recording as a profession. They may reside in any part of Great Britain.
- 2 Entries must not exceed eight minutes, although any competitor may submit up to three separate recordings. Recordings should be made on  $\frac{1}{4}$  in tape at a speed of  $3\frac{3}{4}$  ips or more, full or half-track. (Where half-track is used, the second track should be clean.)
- 3 The judges will look for imagination in the composition of the tape as well as for technical quality. Extreme technical skill, unaccompanied by imaginative effort, is unlikely to succeed.
- 4 At the start of each tape, competitors should record their name and address, the sub-title of the recording (if any) and the duration of the recording.
- 5 Whilst every care will be taken of the recordings while they are in the possession of the BBC, the BBC cannot accept liability for any loss or damage sustained by the recordings. Competitors requiring acknowledgement of their entries' safe arrival should attach a stamped, addressed postcard.
- 6 Material whose copyright is not owned by the competitor must not be submitted.
- 7 In addition to the prize money described below, the BBC will pay an appropriate fee for any recording which it broadcasts other than in a programme, at a date to be announced later, discussing the competition and announcing the results. The BBC does not, however, bind itself to broadcast any of the entries either in whole or in part.
- 8 Entries must reach the BBC not later than 30 September 1966, and be despatched to:  
BBC North Region Tape Recording Competition,  
Broadcasting House,  
Piccadilly,  
Manchester.  
Tapes will be returned as soon after the judging as possible.

#### Prizes

- 9 A first prize of £25 will be awarded. There will be a second prize of £10. In addition, a prize of £10 will be awarded to the best entry from a competitor residing in the North of England, that is, in the counties of Cheshire, Lancashire, Derbyshire, Nottinghamshire, Lincolnshire, Yorkshire, Westmorland, Cumberland, Northumberland, Durham or the Isle of Man.

#### Judges

- 10 There will be three judges—Mr Timothy Eckersley, Mr Douglas Brown and Mr David Scase, Director of Production, Liverpool Playhouse.  
The judges' decision is final and the BBC cannot enter into correspondence with competitors.

#### Guidance note

- 11 It will be seen that the judges hope to find evidence of the imaginative use of the tape recorder. The range of possibilities open to the modern, lightweight recorder is very great and the successful competitor is likely to be someone who exploits it fully. The theme of 'Summer' can be interpreted broadly to cover a great many different subjects, demonstrating character and atmosphere.

#### Fire!

The Bang & Olufsen factory at Struer in Denmark recently had a fire which extensively damaged their new buildings, only recently completed.

This fire seriously affected supplies and has caused a shortage of Bang & Olufsen products throughout the world. The manufacturers hope that production will soon be back to normal but in the meantime they ask customers to be understanding during this difficult period.



#### Winner of Agfa-Gevaert Competition

A piece of magnetic recording tape 3,582 ft 2 in long has won audio enthusiast George Singer (right) of Tunbridge Wells, Kent, a free weekend for two in Paris.

This was the prize offered by Agfa-Gevaert at the Audio Fair, where visitors to the stand were invited to guess the amount of Magnetron tape sealed in a 12 in transparent cube.

Mr Singer's guess, one of over 2,000 submitted by visitors to the Fair, was only 1 ft 7 in short of the true length of the tape.

Mr Singer has been an audio enthusiast for eight years. Part of his hobby is the production of special sound effects for theatre productions and much of his work is with the West Kent Youth Theatre Workshop.



# tape club news

## B-TRAC

As usual, members of the Birmingham TRAC assisted at the Midland Amateur Radio Society Annual Mobile Rally held recently at Trentham Gardens, Stoke-on-Trent. All incoming radio calls were recorded by Alan Crook, while other members supported the Midland Association's display of recording equipment.

In the clubroom the highlight of recent events was a visit from the South Birmingham Cine Society, who presented six excellent films. Also guests of the club for this very interesting programme were members of the Rugby and South Birmingham clubs.

The B-TRAC's AGM saw a few changes in the committee, and the officers elected were Terry Morris (Chairman), Laurie Watson (Vice-Chairman), Alan Bird (Secretary), Harry Marshall (Treasurer), with Alan Crook, Charles Horrel, Trevor Gilbert, and Dave Taylor as additional members.

The club's new Chairman had a very successful recording session when he took his Telefunken M 300 portable to record the City of Birmingham Police Male Choir at the Central Police Station. The results were well worth listening to and club members found it hard to believe that the voices flooding the clubroom belonged to the hard-working and efficient police officers who daily patrol the city.

## Brighton

Three new members have brought the total membership of the Brighton Tape Recording Club to 16. Publicity for the club still continues, the latest scheme being an open night. The main section of the evening was devoted to demonstrations of equipment and playback of recordings.

Great amusement was provided by the club's 'Sound Draw' at another recent meeting. Each member had to draw from a hat a piece of paper on which was written a subject on which the member had to produce a tape. The subjects included 'Crisps', 'Blue', 'Bank Robbery' and 'Sweets'.

## Cultural Society for the Disabled

Following a comprehensive report from the specially appointed *ad hoc* sub-committee, the Cultural Society for the Disabled is undergoing complete reorganization along new and better lines.

Services to members have slipped badly in recent years, but certain forward-looking proposals made by the committee, which are now in the course of being implemented,

indicate a much brighter future. A news sheet has been started and it is hoped to put this in tape form for blind members. The Tape Reading Service is also being reorganized and a wider variety of entertainment at the twice-monthly meetings in London will be introduced.

At a recent meeting Robin Barclay, Senior Press Officer of the RAC, gave a talk on his organization and played an amusing portion from one of the programmes available from the RAC film and tape library. Speakers from other organizations and entertainers will be visiting the Society and a programme of events will be published in advance to enable members to select the meetings they wish to attend. However, voluntary helpers (sighted) are still needed and anyone wishing either to join the club or volunteer assistance should write to the Hon Sec, c/o Westminster City Council, Welfare Dept, 10 Warwick Row, London SW1. However, it is stressed that membership is not confined to the London area.

## Derby

Members of the Derby TRC welcomed back two of their fellows at a recent club meeting – both had been in hospital, and for one it was first day out!

The club's monthly quiz was prepared by M. Nichols, and sent club members on a world tour to find the answers to his questions. Winners were Miss P. Buchan and Mr A. Jeffries. Prizes were provided by Mr Nichols. The round robin 'awkward situation' tape has now become a regular feature in the club's programme, with two being produced at a time – one by the male members and another by the ladies. The latest tape produced by the men, 'Lost in Space', proved such good entertainment that it was unanimously agreed that a copy should be placed in the club library.

## Friern Barnet

At a recent meeting of the Friern Barnet TRC eight members who had all individually pre-recorded some music broadcast by the BBC proceeded to cut each of their own tapes at the end of agreed bars of music. The task then was to take the eight sections from each and shuffle them around for splicing together again so that each member had a continuous recording of the music made up from one piece of each of the recordings. Names and makes of equipment were dubbed on to each section and the resultant playback provided some very interesting comparisons. This exercise can be heartily recommended as an hilarious spectacle for non-participants!

The club has recently accepted further new members, but there is still room for more. This is one of the few clubs serving the western side of North London, and those interested should get in touch with Secretary R. A. Longhurst of 72 Grosvenor Avenue, Barnet, Herts. Recent equipment acquisitions include a further Beocord 2000, an Akai X-IV and a Truvox PD 104. All very stereo minded!

## Furness

A rare get-together in the far northernmost reaches of the north-west has been planned by the Furness Soundtrack Club, acting as hosts to the Millom Tape Recording Club.

Apart from the three-weekly hospital record request programme, the busiest recording takes place when a 45-minute taped programme of music, quips, news and sketches is produced by each member in turn for the

Barrow, Furness and South Cumberland Society for the Blind Social Club. This activity prompted the club's secretary, Mrs Jane Rayner, to visit the local resident home for the blind at Ostley House, Barrow. As a result, the Matron there was very pleased to accept the offer of a member to visit each Thursday evening with another 45-minute tape composed mainly of short stories. The blind residents of the home also enjoy 'Sound Quizzes', again interspersed with short stories, but more material is needed for these. If any other club can help with scripts, Mrs Rayner, of 123 Abbey Road, Barrow in Furness, Lancs, would be delighted to know.

## Great Yarmouth

Among the recent meetings of the Great Yarmouth and District TRS has been a visit to the local Electricity Generating Station where members gained some idea of the amount of work involved in producing the electricity to run their recorders.

Frantic searching by club members prevented a near disaster when a hall booked for a live recording session was found to have been double booked. As a well-known local singer was to be the subject and had arranged for an accompanist to travel from Ipswich for the session, alternative accommodation had to be found at the last minute. Finally, members were able to use the lounge of a local pub, and in spite of the sudden change of plans the recording session was very successful and some excellent tapes were made. Knowing that many facts and figures will be needed in the near future, the club has appointed an Information Officer. Already a survey on the programmes of the last year has been carried out, and this year's programme is being arranged to give members more of the kinds of club activities that proved most popular last year. Chief among these were the 75-minute taped programmes produced by the members themselves, outside visits and live recording sessions. Although the club committee realizes that during the summer months attendance has to drop (a large number of members being tied up in their seasonal holiday businesses) it has been agreed that the club shall continue to meet through the summer months for the convenience of members who will be able to attend meetings.

## Harvey Grammar School

Response to the first tape competition organized by the Harvey Grammar School Tape Club proved somewhat disappointing, but notwithstanding the organizers are still continuing their work to get the club well established. Paul Markland demonstrated his battery portable at one meeting. Another member, Peter Hadlow, is continuing with the club's sound effects tape and secretary Van Heydinger is busy publicizing the club within the school. The boys are fortunate in having the assistance of two masters, one of whom uses a recorder in history classes.

## International Tape and Cine

ITACS recently had some valuable free publicity for the club broadcast by a radio station in the USA. Frank Clarke of Phoenix, besides being a member of the club, is also a well-known organist in Arizona, and has a regular programme on the local radio network. During a recent organ recital broadcast spot Frank made what was virtually an 'ad lib' for the club, offering to answer personally any telephone enquiries received at the station as a result of the broadcast. In fact at the ITACS



headquarters in the UK nothing was known of this until a tape was received from another member in the US who happened to be recording Frank's broadcast at the time. I understand the club has room for more enthusiastic members like Frank – even if they can't all provide free advertising! Anyone interested in joining the club should contact Secretary Roger Pirie at 83 Warrens Hall Road, Dudley, Worcs.

#### Leeds and District

One of the most interesting recording sessions enjoyed by members of the Leeds and District TRC was an outdoor session at Ripon. In brilliant sunshine and armed with battery portables, members recorded the Hornblower, an ancient ceremony during which a horn made from African buffalo is blown in the four corners of the town square at 9 pm every evening. Whilst club members were rigging up their equipment, including Akai, Butoba and Philips machines, a visitor asked them if they were from the BBC. The visitor turned out to be an American tourist who had come specially to see the Hornblower ceremony, so naturally out came the microphones for an interview. Most fascinating part of his trip to England turned out to be a ride on a double-decker bus! As the American turned out to be a hi-fi enthusiast with plenty of recording equipment himself, arrangements were made for a copy of the interview and the ceremony to be sent to him. Other outdoor recordings included a visit to Doncaster as guests of the club there, and the provision of PA and background music for a fashion show in a local school.

#### Leicester

Following the recent 'Leisure 66' exhibition in the Granby Halls, Leicester, in which the Leicester TRC took part, comments received from local residents and the press have been very favourable. Over 17,000 people visited the exhibition during the four evenings it was open. The club members erected their own stand and had various makes of recorders and equipment on view. A demonstration of tape editing was given continuously by club chairman Howard Dutson, while John Buckler, Bernard Britain and Alan Haywood manned the room in which films of the club activities were being shown.

At the meeting immediately following the exhibition a number of new faces were seen, and the evening was spent demonstrating a bulk eraser and other equipment, and in organizing a brains trust. The questions followed thick and fast, keeping the brains on their toes!

#### London

'Radiophones and Electronic Music' was the title of an illustrated talk given to members of the London TRC by prospective member Barry Mitchell. Barry used a Sony 521 stereo recorder with half and quarter track facilities in both mono and stereo.

Members are preparing their entries for the club's McManus Cup competition, which can be on any subject at all.

#### Merseyside

Sounds preserved in the Merseyside Tape Recording Society library now include those of the last Edge Hill to Southport steam train; massed bands of the Royal Artillery marching in Southport's Lord Street during the regimental 250th anniversary celebrations; and some fine and rare Swiss musical boxes.

After bringing back taped greetings from personalities met in London during the Audio Fair, Ted Elcock took his Stella cassette portable to Liverpool FC's ground to capture the Kop Choir, and ended up getting BBC's Kenneth Wolstenholme at the 'wrong' end of a microphone. Back in the clubroom, Ted, aided and abetted by Geoff Reynolds, also managed to produce some harmonica sounds that, I'm told, were very Martian, and guitarist members Brian Hanlon and Alan Willey gave a live multi-track build-up using £1,000-worth of equipment. An internal round robin 'The Spinning Spool' is circulating and will mark the first step towards an eventual sound magazine.

#### Montrose

Members of the Montrose and District TRC have been busily engaged on a series of live recordings. The first was a recording of a three-manual 2,064-pipe organ at St Mary's which has recently been renovated. The pipes of this instrument are positioned in such a manner as to make stereo recording very effective. Five machines and eight microphones were used.

Another organ was recorded, this time at St George's Church. However, the acoustics of the church were not suitable for stereo, but some good mono recordings were made.

Following this, club members travelled to Aberdeen to visit the Grampian TV studios. During the 24-hour visit members saw the recording studio and equipment as well as the department that is responsible for the actual transmission of programmes. Members came away with souvenir items of tape and film as well as with some more technical knowledge.

A tape of local affairs, much of which was made on location, has been sent to an ex-member of the club who is now living in Johannesburg, and more recordings were made for the local drama group.

#### North London

A draw held by the North London Tape & Hi-fi Club to supplement the funds of the Tape News Service for the Blind of Enfield fund raised £46 13s 0d, which after the deduction of expenses and the most of prizes left over £30 for the fund. The money has been used to purchase a master machine for the Enfield Microphone. This was made by club members Ron and Den Goodwin using a Brenell deck in a wood cabinet. The cost of this was £42, the remainder of the price being drawn from existing funds.

Scripts for playlets have been obtained and these will be rehearsed at future club meetings. A recording of choral and organ music at a local church brought out a variety of machines including John Wilson's Beocord stereo, Ron and Den Goodwin with the Enfield Microphone Brenell, and Stan Hoefling and Dave Barker with an STB 1 and a Mark V Series 2 respectively.

#### Northern

Founder member Tom Ingham was host at the recent AGM of the Northern Tape Club, which also celebrated the club's third year of existence. At the meeting it was decided to streamline administration by combining the duties of Chairman and Secretary, and Taylor C. Foggon, of Myrtle House, 5 Dale Street, Haltwhistle, Northumberland, was elected to this joint office. Treasurer is now R. Riley and Auditor is D. Lees. Among the items on the agenda that were discussed were plans for

expansion and a new look in general policy. It is proposed to set up regional groups to organize local activities.

In addition to the various sound magazines produced by the club is a printed journal, the *NTC Reporter*, which is circulated to all members. Although the club's title suggests that membership is for northerners, members from other parts of the country, and indeed from overseas, are always welcome.

#### Norwich

Another recent AGM was that of the Norwich TRS. Here the existing committee was re-elected *en bloc*, with the addition of Mr Percy Fenton. The treasurer's report was very well received, for a loss of over £2 in 1964/5 was turned into a profit of £8 16s 0d for 1965/6. Outside programmes arranged for the summer months include talks to two local clubs about recording, a live recording session of a Hammond organ recital, assistance at fetes and church festivals, and the recording of two weddings.

One of the wedding recordings was commissioned directly as a result of a goodwill tape prepared by the club some time ago for a lady in hospital to her daughter in Canada. Now the daughter is returning home to marry her Canadian fiancé, and the wedding is to be recorded for the mother.

#### Rugby

Following the tape sent by members of the Rugby TR Society to Anne Armstrong of Newbury who is confined to an iron lung, a reply tape has been received from Mrs Armstrong. Throughout the return tape her condition was emphasized by the continual background sound of the breathing apparatus. The latest tape received from member Joyce Lawson now in New Zealand contained an extract of the wedding of Joyce's daughter, as well as news of Joyce's nursing training and success in ballroom dancing competitions. Another tape received from NZ was that of the Palmerston North club, in which members gave their differing views of life in the growing city which could well become the chief city of New Zealand in years to come. Club membership now stands at 66.

#### Radio Scotland

Recent Monday-night sessions of the RCS have covered a variety of subjects to cater for all tastes. Johnny Crawford played a few recordings made at rehearsals of a local drama club, while on the screen John Knowles produced the second edition of RCS Newsreel. This included scenes of picturesque Loch Lomond in colour. 'What Price Happiness' was the title of a talk and demonstration of equipment given by Robert Craig. Two home-constructed speakers, an Armstrong tuner/amplifier and a good quality record player were all put to test in the clubrooms.

Plans for the first-ever 'Scottish Tape Convention' are being made well in advance of the big day, which is planned for 2 October. The centre for this gathering will be Perth, and further details are available from the RCS Secretary, John Wood, of 62 Kingarth Street, Glasgow S2.

#### South Devon

With a total of 101 points, Mr C. J. Block was the winner of the South Devon TRC 6th Annual Tape Contest. Mr Block's entry 'Never



## **TAPE CLUB NEWS** *continued*

Despair' described some of the difficulties of making a contest entry. He turned these difficulties to advantage and was awarded the club's Silver Spool trophy and 2,400 ft of double-play tape donated by BASF.

This club too has had its AGM and Don Aldous was again elected President. Gordon Furneaux, of 45 Kenwyn Road, Ellacombe, Torquay, remains as Secretary, and David Pletts remains as Chairman.

### **Southend Teenagers Recording Society**

Comparatively new to the ranks of tape clubs is the Southend Teenagers' Recording Society. The club has been co-ordinating its activities for almost a year now, and are at present busy preparing their competition entry for the BTRC.

During a recent visit to London the club

President Terry Mendoza managed to interview both John Borwick and ATR's own Russ Allen, and the results are now in the club's archives.

Now that many members are becoming proficient in the basic arts of recording, they are turning their eyes to new horizons. One member has steadily been building a collection of instruments for electronic music.

The club's membership still has room for expansion, and any teenagers below school-leaving age in the Southend area wanting to join should send full details and sae to V. Fisher, 4a Bournemouth Park Road, Southend-on-Sea.

### **Thornton Heath**

As mentioned briefly in last month's column, Thornton Heath TRC member Alan Brown is believed to be the first person to win the Duke of Edinburgh's Gold Medal with Sound Appreciation as one of the sections. His tape of Macbeth was played back to the club with technical details of how it was done. The club's work for the Chatwsworth Road church and for the Mayday hospital programme still continues, but difficulties are being experienced once again at Croydon General Hospital. Lack of co-operation from staff sometimes

means that no requests at all are passed on to the programme team, which is frustrating both for the members who put so much time and effort into the programme and for the patients who are disappointed. Nevertheless, team members are persevering in the hope that the situation will improve.

At the club's recent AGM the committee was re-elected *en bloc* with the addition of a separate Programme Organizer, R. Anderson, who is now overcoming his initial diffidence and taking command of the weekly meeting arrangements.

K.C.

## **SPECIAL NOTE**

**Will Club Secretaries please note that reports intended for the September issue should arrive by 14 July, and for the October issue by 11 August. Please address reports to ATR, 9 Harrow Road, London W2, and mark envelopes 'CLUB NEWS'.**

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# TAPE REVIEWS

by Russ Allen

## Berlioz: *Romeo and Juliet*, Opus 17.

(a dramatic symphony) *London Symphony Orchestra and Chorus with Regina Resnik, contralto, Andre Turp, tenor and David Ward, bass. Conducted by Pierre Monteux. Westminster Stereotapes 4 track 7 1/2 ips WTP 158. £6.*

Louis Hector Berlioz born near Grenoble in 1803 was the greatest figure in the French Romantic movement. Shakespeare was his passion and his inspiration for this magnificent work. In fact it probably owes its existence to Paganini who was so impressed by Berlioz' previous work that he wrote to him 'Beethoven is dead and Berlioz alone can revive him. I have heard your divine composition, so worthy of your genius and I beg you to accept a token of my homage, twenty thousand francs'. With such a sum of money he was able to concentrate solely on the writing of this unique opus. Incidentally, Richard Wagner, then 26, called it 'the revelation of a new world of music' while Franz Liszt hailed the author as an 'erupting crater of genius'.

As for the recording, I cannot find enough superlatives to describe its incredibly high quality. From the exciting *Introduction* to the last note it is fabulous. Crystal clear, fully dynamic, undistorted, grande stereo, faultless.

Six pounds may seem a lot of money to pay for a reel of pre-recorded tape but in this case it is nothing. If you will play it you will know just how exciting and perfect stereo tapes can be, so true to life that the music is being performed in your own room.

All praise too to the orchestra, chorus and soloists who, under the baton of Pierre Monteux, (who must have been about ninety at the time) have risen to such heights in so, one would think, uninspiring a venue as Walthamstow Assembly Rooms. Certainly the acoustics leave but little to be desired even if the name does sound ungrandiose. This whole recording from composer through musicians, conductor, balancing, engineers, recorders to manufacturers seems to have been inspired.

If I seem to go on a bit about this, please forgive me but there is so much to praise and I don't seem to have given sufficient plaudits to the soloists, especially David Ward, and to the superb chorus who blended so perfectly with the orchestra. Westminster who produced this must be

congratulated too for good packaging, good basic information on the box, with a plan of the disposition of performers, and for including a separate sheet within filled with information about the author, the work and more and giving the libretto complete with translation into English. To conclude may I say that if I had to be marooned on a desert island with just one reel of tape, then this would be my choice.

## Astrud Gilberto: *The Shadow of Your Smile* Verve 2 track 3 1/2 ips Mono TA-VLP 9107.

Miss Gilberto it seems is to Latin American music what Sandy Shaw is to pop. Both young ladies are highly decorative, both have had considerable success, much publicised and yet neither have what one can truly call a 'voice'. But both have, for me, a lot of charm. I think perhaps it is the untrained, unsophisticated simplicity of their husky little larynxes (?) that captivates. To concentrate on Astrud, let us note that her choice of tune is good, romantic and a little exotic. Items such as *Manha de Carnival* which you may remember as the catchy number from the film *Black Orpheus* and the popular *Fly Me to the Moon*. A really delicious tune is *The Gentle Rain* and a Desfilado type number *Non Stop to Brazil*. Musical accompaniments are mostly lush, stringy and of course exotically rhythmic. I like it very much in every way.

## Peggy Lee: *Mink Jazz and I'm a Woman*. Capitol Full Dimensional Stereo Tape. 4Track 3 1/2 ips. EMI Imported.

This is as warm and gorgeous as mink should be. Miss Lee can do no wrong for me. She sounds friendly and sings as if she enjoys every moment and, like Sinatra, has an uncanny knack of always picking tunes that are just right for her. What is more she has a little something for almost all tastes. She sings jazz, romantic, cheeky, wistful and downright fun songs and does them all extremely well.

There is nearly an hour of her on this tape and she presents twenty-three titles. Popular favourites like *I Left My Heart In San Francisco*, *Days of Wine and Roses*, jazzy, such as *Mack the Knife*, *As Long as I Live*, *There Ain't No Sweet Man Worth the Salt of My Tears*, a couple of great oldies, *Lady is a Tramp*, *I Won't Dance*. Oh! heck they're all good. Recording is superlative and goes to prove that as long as you have a good machine to play it back on, 3 1/2 ips stereo can be first rate. Obviously the masters and recording must be perfect in the first place and here they are.

A wonderful bumper bundle!

## Moussorgsky: *Pictures at an Exhibition*.

*The Nord Deutsches Symphony Orchestra conducted by Wilhelm Schuechter. Audio Spectrum 4 Track Stereo 7 1/2 ips. AST-316.* Written originally as a piano solo and inspired by an exhibition in St. Petersburg in 1874 of paintings by Victor Hartman, a friend of Mussorgsky's.

The work has been orchestrated by several people but is here the genius of Ravel. It is a highly descriptive tour of twelve pictures. While there are moments of light-heartedness, the chirpy *Ballet des Poussins dans Leurs Coques*, the sadly humorous duet

between *Samuel Goldenburg and Schmuyle*, and the gay scene in the market place *Limoges le March* the music mostly has a solemn reverent beauty that at times becomes momentarily aggressive. Perhaps the fact that the exhibition in 1874 was only a year after Hartman's death filled Moussorgsky with more sadness than the pictures portrayed. Whatever, the work is brilliant and if you've not already got it then this is an excellent recording. Sleeve notes on the box include descriptions of the pictures.

## At the Balalaika with Louis Alter and His Mandoliers. Recotape 4 Track Stereo 3 1/2 ips.

Perhaps not a feast of musical genius but I found that I enjoyed it more and more. Nostalgia of course. Once upon a time Lyons Corner Houses (in London at any rate) had at least one Gypsy band and they sounded much as this, gay and loud enough to cover the rattle of cutlery and china and the discontented mutterings of undertipped waiters.

Oh those gypsy bands, they would sit in splendid looking costumes eyeing the girls and surreptitiously reading the racing form on their music stand. While they were there as an attraction, they were not encouraged to play too often as otherwise customers might stay over long and so they would play a stirring air and then remain tacit for about ten minutes before bursting again into life.

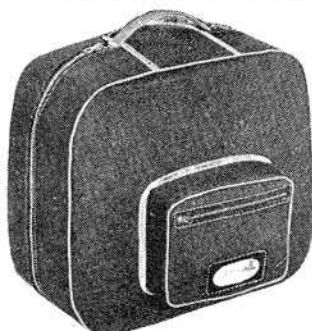
Nostalgia! For a short while I played double bass with a Gypsy Band and though I don't recall any balalaikas I do recall we played most of the tunes included here *Two Guitars, Hungarian Dance No. 5, Tango de Rose, Torna Sorrento*. I enjoyed it all very much but I must have looked a most unconvincing romany. Never mind, I don't suppose anyone really cared. Back to the tape before I get too carried away with my memories. It's very much O.K.

## In Concert. Pete Seeger and Big Bill Broonzy. Verve. TA-VLP 5006. Twin Track 3 1/2 ips Mono.

Seeger and Broonzy have a ball on this very spontaneous and unrehearsed affair. They indulge in cross-talk like patter, sing together, the audience joins in, they dance and they generally clown around and you'll surely enjoy it if you like unadulterated folk blues.

Technically all is not so hot, as they seem to get a little mixed up between the microphones and every now and again sway off the recording mike onto the house mike. Strangely, too, the applause comes in waves and particularly on *Mrs McGrath* when the audience joins in the singing the whole thing has the effect that you get when you put your hands over your ears and keep lifting them on and off. However if you don't object to these irregularities then this tape is to be much enjoyed. Top drawer folk artists such as Seeger and Broonzy together with corn belt humour and coupled with their instrumental dexterity as displayed by Seeger on banjo in his *Goofin' off Suite* and Broonzy's version of *Bill Bailey* will require a lot of beatin'. Anyways effen you all enjoys it as much as the recorded audience done then ah reckons youssell henjoy it fine too.

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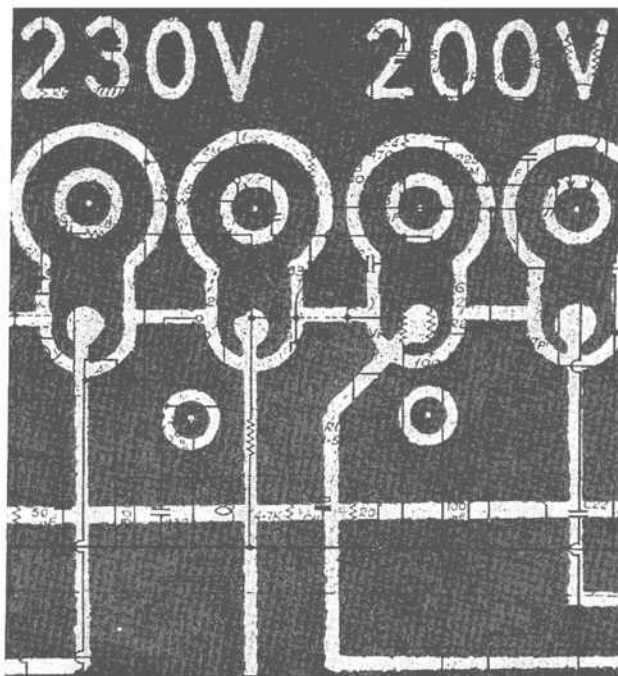
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4" 900' 17/6	4" 600' 10/9	4" 450' 7/6
5" 1,800' 23/9	5" 1,200' 15/9	5" 900' 11/6
5½" 2,400' 29/9	5½" 1,800' 19/9	5½" 1,200' 13/9
7" 3,600' 39/9	7" 2,400' 23/9	7" 1,800' 18/6

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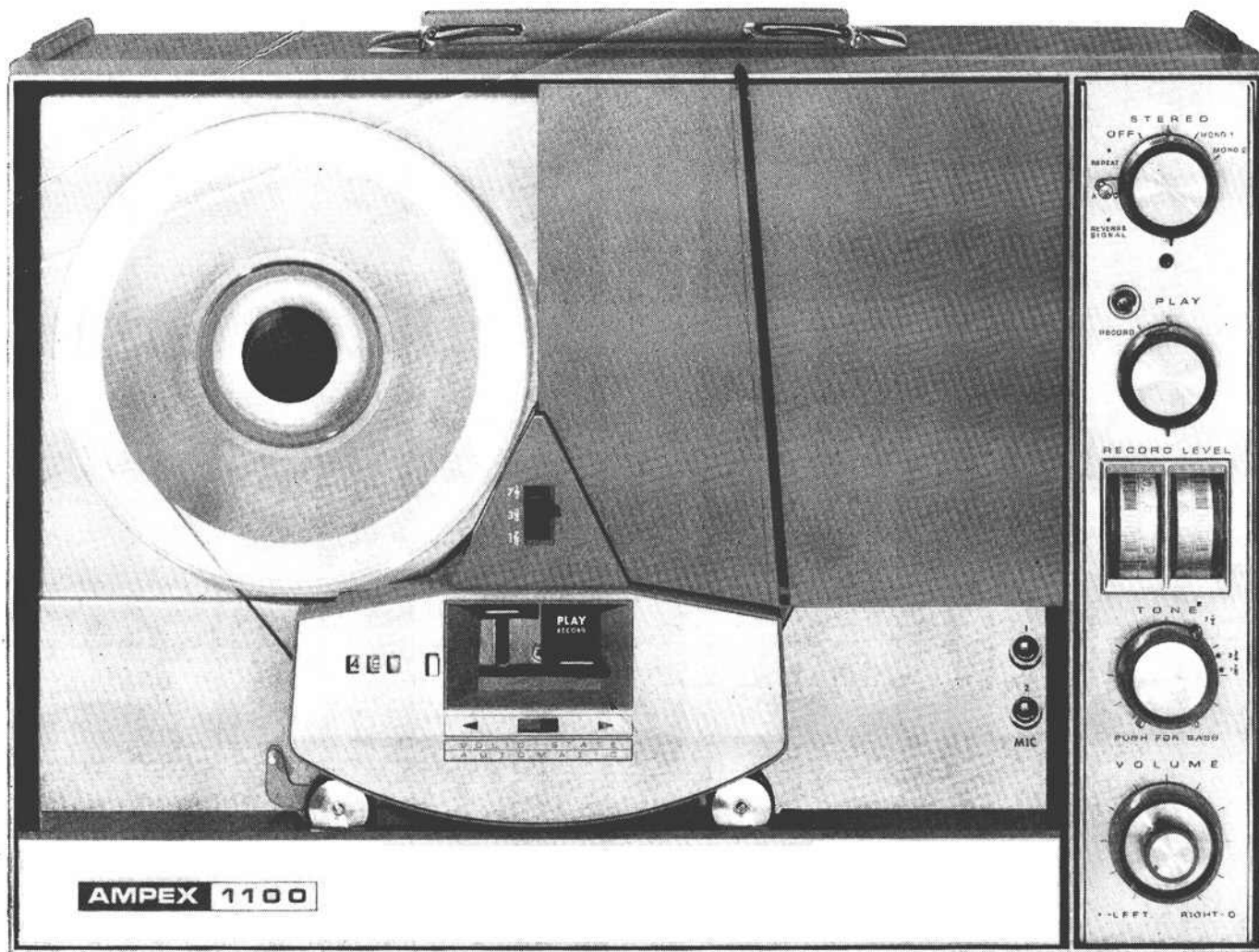
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has an automatic reverse (plays unattended for 9 hours) □ automatic tape threading □ 3 speeds □ accurate VU meters □ interlocked tape controls □ precise dual capstan drive □ life-long Ampex deep-cut heads and solid state electronics □ No head-wearing pressure pads are used in any Ampex recorder. Full warranty—of course.

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