



**BRENELL
STB 2**

Right: Skilled fitters who work to the rule "quality before quantity" assembling decks in a corner of the Assembly Shop.

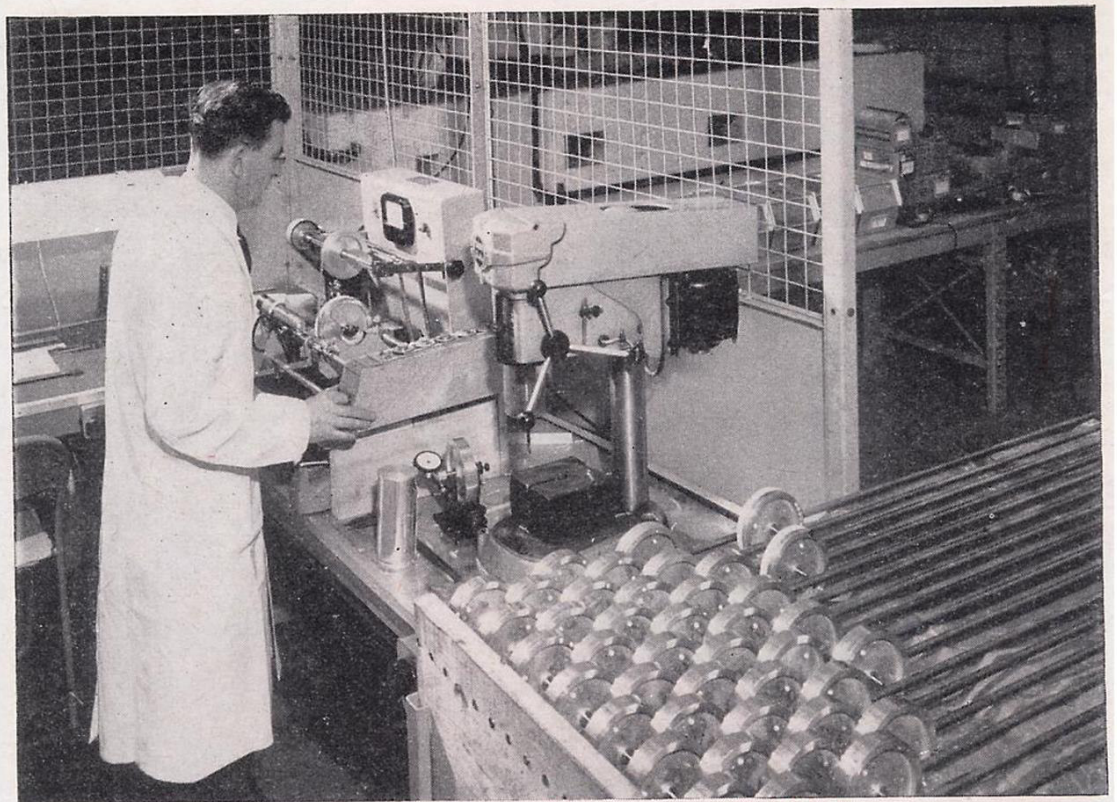


SUCCESS IN STEREO

by DAVID VICKERS

Reprinted from 'Amateur Tape Recording, Video & Hi-Fi', April 1965.

THE accumulation of superb technical knowledge and skill that has culminated in Brenell's latest model, the STB 2, is based on many years' experience in the field of tape recording. Brenell Engineering Co. Ltd. had already established a high reputation for precision engineering when, in 1950, some of the leading British radio manufacturers asked them to design a tape deck in kit form. This was a follow-up to the radio trade's highly successful television receiver kit, the Viewmaster. Brenell were faced with the difficult task of designing and manufacturing the component parts for a tape deck which could be easily assembled by an unskilled person and still give good results. Having produced the prototype, Brenell were then commissioned to manufacture the tape deck under the name 'Soundmaster.' This was an outstanding success; the 'Soundmaster' was responsible for introducing the new creative hobby of tape recording to thousands of people, and its performance and reliability played a large part in gaining the confidence and interest of the public. The high quality of these machines has been proved by the number still in use today by some of the early enthusiasts.



Above: One of the secrets of low wow and flutter is contained in the extreme accuracy of balance of the flywheel. Brenell pay particular attention to this operation.

However it became apparent that not everyone had either the knowledge or desire to build their own deck, and Brenell were inundated with requests for factory-assembled equipment at reasonable cost. They introduced a factory-built and tested tape deck to be used in conjunction with either an amplifying kit, especially designed by leading electronic engineers, or an assembled amplifier made by Brenell themselves. The idea of making the two main items for a tape recorder for incorporation into one's own hi-fi system was another feather in Brenell's cap.

As interest grew in creative recording, the natural development for Brenell to follow was to manufacture the complete tape recorder assembled and ready for use. This was the first Brenell tape recorder, the popular Mk. II. The high quality of this instrument gained them an excellent name with all those associated with recording at home and abroad. They continued developing tape recorders, incorporating new ideas and features culminating in the latest range of the Mark 5 Series 3 and the Mark 5 Type M Series 3 for mono and the STB 2 for stereo.

The STB 2 in particular, has many new features to

attract enthusiasts. It may be used for recording stereophonically or monaurally from radio, microphone, amplifier and pick-up. Its four input channels (two per track on stereo and four per track on mono) have pre-set sensitivities to enable the correct recording levels to be obtained from a wide variety of input signal levels (even pick-up compensation is incorporated). The tape monitoring facility is a boon to busy recording engineers and A-B switching enables the recorded quality to be immediately compared with the input signal. Track-to-track transfer is accomplished with very little deterioration, and the machine is a joy to use for adding perfectly synchronised extra recordings, i.e., playing a duet with oneself or adding speech and sound effects to background music for film work. Four tape speeds and the ability to replay 1/2, 2/2, 1/4 and 2/4 track tapes makes this machine one of the most versatile available.

Such a high quality machine deserves high quality associated equipment, and the high fidelity enthusiast need have no qualms about combining it into his most prized collection of equipment. The playback termination is designed for use with external pre-amplifiers and



Above: Every machine undergoes a rigorous testing procedure to ensure that it meets the high specification, both mechanically and electrically.

Below: A well equipped demonstration room is at the disposal of dealers and tape club members who wish to examine and have demonstrated the current range of Brenell tape recorders.



amplifiers, but should the unit (comprising deck, recording and replay pre-amplifiers) be required as a complete tape recorder there are available the necessary power amplifiers and speakers for easy installation into the cabinet.

Brenell's North London factory where these machines are produced is a spacious, clean, well-lit building and it is obvious that the emphasis is on the high quality of manufacture and assembly and not on production rates. The basic 4-speed tape deck which is used on all the current models will accommodate four heads and tape reels up to 8 $\frac{1}{4}$ " diameter. A special model which takes reels up to 10 $\frac{1}{2}$ " diameter has proved extremely popular, not only with the enthusiastic amateur recordist but with recording and broadcasting studios, research departments of industry and universities, etc. Brenell machines have a world-wide market and are used by education authorities, cinemas, shipping lines, supermarkets, H.M. Forces and Police, etc.

For the convenience of visitors to London and tape clubs, Brenell have an excellent demonstration room with accommodation for twenty-four people and demonstrations can be arranged at short notice without any obligation or sales pressure.

Brenell

The tape recorders made for enthusiasts-by enthusiasts

Everyone concerned with the manufacture of Brenell tape recorders is an enthusiast, taking infinite care and patience with each facet of production. Constant research ensures that every possible, worthwhile, refinement is incorporated and that each Brenell machine is built to the stringent specifications laid down. This is why the name Brenell is synonymous with quality and reliability.

Features common to all Brenell models :-

4 tape speeds $1\frac{7}{8}$, $3\frac{3}{4}$, $7\frac{1}{2}$ and 15 ips · 3 Papst outer rotor motors (hysteresis synchronous for capstan drive) frequency correction at all speeds · pause control · monitoring and superimposing · $8\frac{1}{2}$ " dia. reels · fast rewind (1200 ft. in 60 secs.) · all deck switches interlocked · unique, reliable braking system · digital rev. counter hinged decks.

STB 2/5/2



A NEW model—The STB 2/5/2

This versatile mono/stereo recorder has numerous features which will delight the advanced amateur or the professional. Here is a brief specification :-

Especially designed for use with high fidelity stereo installations adjustable attenuators on all input channels to ensure perfect matching with all auxiliary equipment · dual concentric recording level and playback level controls · cathode follower output four channel mixing on mono programme sources · twin recording and twin playback pre-amplifiers · comparison of original and recorded signal · adjustable bias level · recording facilities for 1/2 and 2/2 track · playback facilities for 1/2, 2/2, 1/4 and 2/4 track · sound on sound facilities · two edgewise meters for recording level, tape output level and bias level · optional extra:- stereo power amplifiers and monitoring speakers.

ALTERNATIVE MODEL STB 2/510/2 has special deck to accommodate $10\frac{1}{2}$ " N.A.B. reels.

MARK 5 Series 3



Narrow gapped record/playback head for extended frequency response · double gapped ferrite erase head to minimise erase noise · magic eye recording level indicator (meter at extra cost) high quality amplifier (can be used independently of tape recorder) headphone monitoring.



MARK 5 Type M Series 3

All the features of the Mark 5/3 plus:- Separate record and playback heads · separate record and playback amplifiers · recording level meter · mixing of input signals · tape monitoring whilst recording · separate bass and treble controls.

For full details of these recorders write to the sole manufacturers:-

Brenell

BRENNELL ENGINEERING CO. LTD.
231/5 Liverpool Road, London, N.1
Telephone: NORTH 8271 (5 lines)