



Sound Control Equipment

Type BD 582

THE SOUND CONTROL EQUIPMENT Type BD 582 is a seven-channel mixer for studio use and is very suitable for television sound applications.

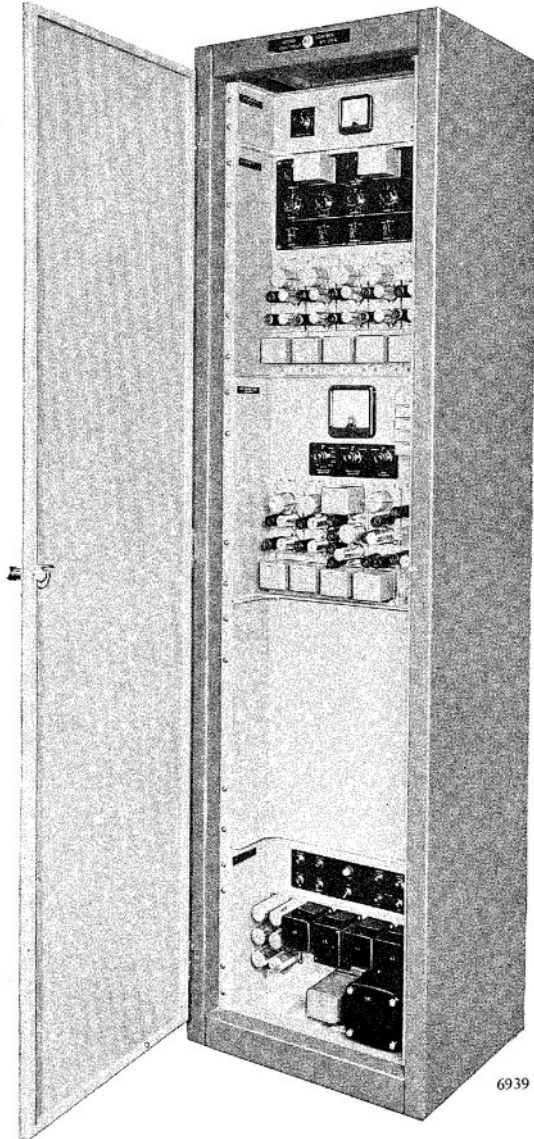
FEATURES

- Control of five low-level and two high-level inputs with high-level mixing.
- Variable pre-set level control on all input channels.
- Pre-fade listening on all input channels.
- Full aural monitoring facilities.
- VU or Peak Programme Meter for visual monitoring.
- Calibration and checking by means of a built-in tone source oscillator.
- 'On-the-Air' cueing on all channels.
- Two independent outputs are provided.
- Switched spare programme amplifier.

CONSTRUCTION

The equipment is mounted in a 7 ft cabinet and unit construction is employed throughout to give complete flexibility of arrangement. The amplifier assemblies are built up from small unit amplifiers measuring only 10 x 3 in.

The control console is remote from the cabinet, an arrangement which is particularly advantageous in television studio control rooms where space limitations are severe. It carries all essential controls including the quadrant faders, pre-set level controls, pre-fade listening keys, a programme meter and selector switches. The programme meter may be either a peak programme meter or a VU meter according to requirements.



CIRCUITS

By means of channel selector switches, any five of eleven low-level inputs and any two of five high-level inputs may be connected to appropriate input amplifiers or mixer channels. The low-level channels are each taken to a pre-amplifier and

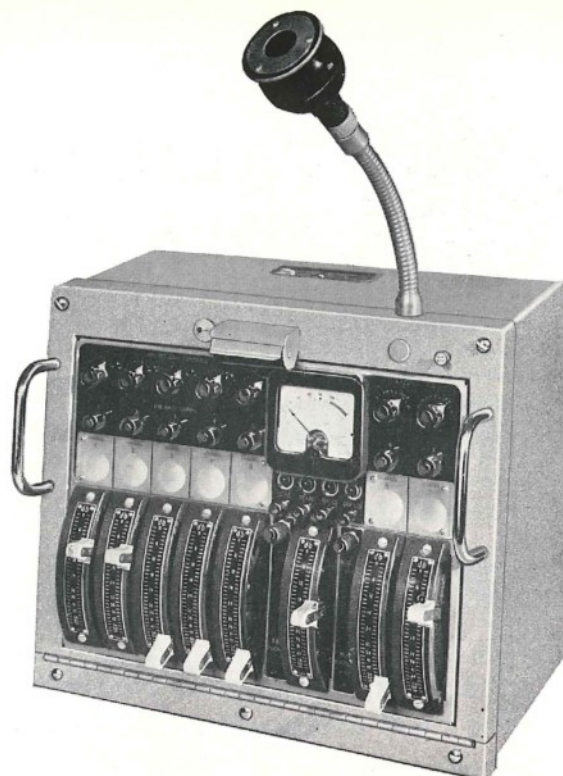
via a fader to the main fader. The high-level inputs are fed via balanced line transformers to the main fader; again each channel has its own fader. The level of the mixed programme can be adjusted by the main fader whose output feeds the programme amplifier. All amplifiers are identical Type BD 574 units. The programme amplifier feeds a dual channel trap-valve amplifier which has two isolated low-impedance outputs suitable for feeding 600 Ω lines.

Associated with each channel fader is a non-locking pre-fade listening key which permits any channel to be monitored before it is faded up. A spare programme amplifier is used for this purpose and this may be quickly switched into circuit in lieu of the other if required. The amplifier not in use is then automatically switched for pre-fade listening so this facility is not lost unless the amplifier fails completely.

A 900 c/s tone oscillator is included for checking and line-up purposes, and also a 2 W monitoring loudspeaker amplifier. All supplies, including those for relay operation and signalling purposes are provided by the power supply unit.

ADDITIONAL FACILITIES

When more complex arrangements are required,



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special editions can be supplied to provide echo and foldback facilities and the control of nine out of twenty-two low-level and four out of ten high-level sources.

DATA SUMMARY

Input impedance: 30 or 600 Ω balanced or unbalanced, low level; 600 Ω balanced or unbalanced, high level.

Output impedance: 75 Ω balanced or unbalanced for feeding 600 Ω lines.

Output level:

Normal working level +4 dBm.
Maximum working level +12 dBm.
Maximum peak output +20 dBm.

Distortion: Less than 0.5% at +10 dBm and less than 1% at +20 dBm, at 60 c/s. Less than 0.2% at +10 dBm and less than 0.5% at +20 dBm, at 1000 c/s.

Maximum power gain: 99 dB (microphone to line).

Frequency response: ± 2 dB from 30 to 15,000 c/s.

Noise level: Below -47 dBm for a working gain of 70 dB.

Power supplies: 95-117 V or 200-246 V, 40-60 c/s, single phase, AC mains.

Power consumption: 210 VA.

Dimensions:

	Height	Width	Depth	Weight
<i>Control unit</i>	10 in. (25 cm)	14 in. (36 cm)	7½ in. (19 cm)	37 lb (17 kg)
<i>Main cabinet</i>	7 ft 0¼ in. (214 cm)	23½ in. (60 cm)	26⅝ in. (68 cm)	

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