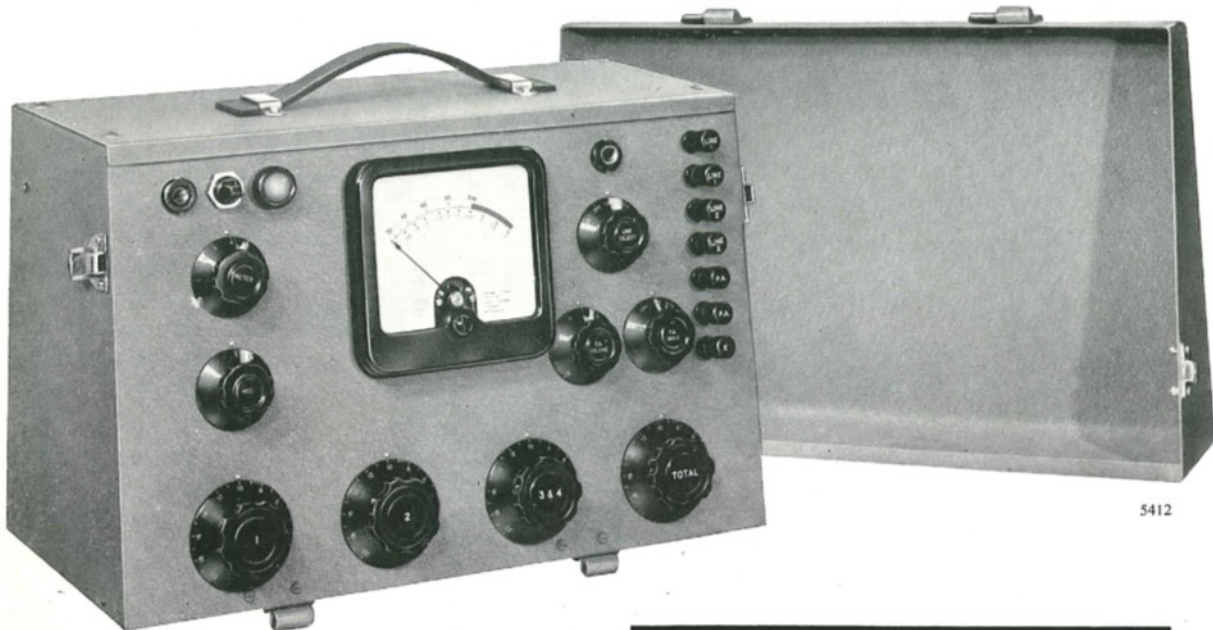




## Portable Amplifier and Mixer Type BD 510



5412

THE AMPLIFIER AND MIXER Type BD 510 forms a portable control console which is easily and quickly brought into operation. This equipment, although designed principally for use on outside broadcasts can also form an attractive and efficient permanent control position in small studio schemes. The console incorporates a high-fidelity three-channel unit which amplifies the input from local microphones or disc reproducer units to the level required for transmission to the studio over telephone lines or a radio link. When the equipment is used in a studio, its output is sufficient for directly feeding a local transmitter.

The portable loudspeaker Type BD 527, illustrated overleaf (see also page 73), has been specially designed to work with this equipment and is contained in a similar case.

### FACILITIES

*Control of four low-level inputs.* Two inputs are fed to separate single-stage pre-amplifiers and the remaining two are fed to the third pre-amplifier through a changeover switch.

*High-level mixing* is carried out by separate potentiometers in the coupling circuits between the three input stages and the programme amplifier.

*High-fidelity programme amplifier.* This incorporates the main gain control and consists of a three-stage circuit with negative feedback applied to the last two stages.

*Two outgoing programme lines.* One line is normally used for the programme and the other

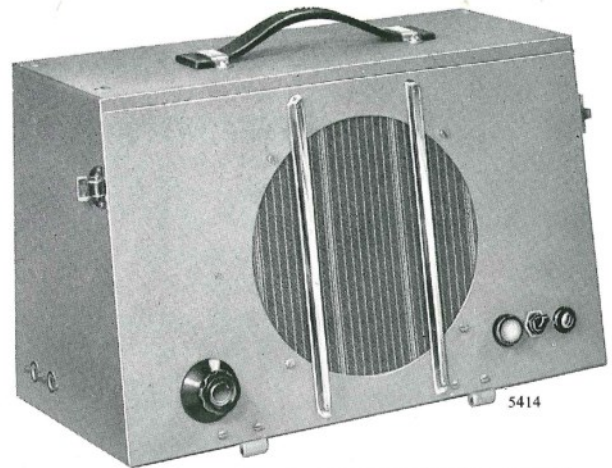
as a cue line. The output circuit contains a line matching network.

*Simultaneous output for feeding a public address amplifier.* A balanced fader is fitted so that the signal to the PA amplifier can be varied independently of the line output.

*Aural and visual monitoring of output.* Two headphone jacks are connected in parallel across the output transformer and a third 'cue jack' is automatically switched across the line not being used for the programme. The VU meter has an adjustable attenuator pad which enables the sensitivity of the meter to be varied.

*VU meter can be used to check valve currents.* A meter selector switch is mounted on the front panel.

*AC mains or battery operation.* The 12-pin input plug is arranged so that the internal AC power pack can be isolated and the amplifier operated from batteries by simply changing the mains lead for a battery lead. A separate battery box, Type BD 511, can be supplied if this facility is required.



Loudspeaker Monitor Type BD 527

### CONSTRUCTION

The amplifier and power pack are built on a single chassis. Two covers fitted with quick release fasteners give access to the valves and components, and the hinged front cover protects the meter and controls when the equipment is not in use. Two clips inside the front cover provide a carrying position for the mains cord. Spare fuses and valves are fitted inside the top cover.

### DATA SUMMARY

**Source impedance:** 30 or 150  $\Omega$ . Balanced or unbalanced.

**Load impedance:**

Line; 150  $\Omega$  or 600  $\Omega$ .

Public address; 600  $\Omega$ .

**Maximum input level:** -30 dbm.

**Maximum output level:** +15 dbm.

**Maximum gain:** 90 db.

**Frequency response:**  $\pm 1$  db from 30 to 15,000 c/s.

**Total distortion:** Less than 1% at an output level of +15 dbm from 60 to 15,000 c/s.

**Noise level (single channel):**

-20 dbm at maximum gain.

-45 dbm at 65 db gain.

(This corresponds to a signal/noise ratio of 60 db at maximum output.)

**Power consumption:** 25 W from 200-250 V 50 c/s single-phase AC mains, or 10 mA from 270 V and 1.5 A from 6 V DC supplies.

**Dimensions:**

Height	Width	Depth	Weight
9 $\frac{3}{4}$ in.	15 $\frac{1}{2}$ in.	10 in.	30 lb
(25 cm)	(39.5 cm)	(25.5 cm)	(14 kg)

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