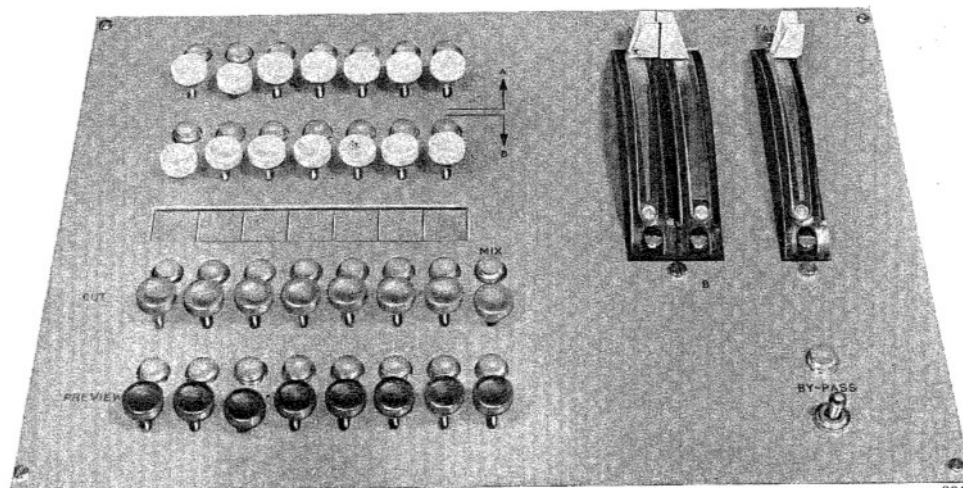




Mobile Vision Mixer Type BD 934



The control panel.

9055

THIS MIXER embodies all the improvements gained from experience with the successful mobile mixers produced by the Marconi Company in the past. It achieves the same standard of performance as can be obtained in a studio.

Features

Provision for 7 inputs and 4 outputs.
Transistors employed to their best advantage.
Passive control panel, operating a vision matrix.
Each cross point uses a highly reliable spring-wire contact relay.

CONSTRUCTION

The equipment consists of a vision matrix, a control panel and a mixer unit.

The vision matrix is housed in a standard mobile printed-wiring case. The same case also contains a 24V power supply for the transistor amplifiers and operation of the relays.

The control panel can be housed in a portable case or fitted into a suitable console. It uses latching push buttons. Quadrant faders are employed for both mixing and fading controls.

The electronic circuits used for sync. stripping, black and white clipping and also the output amplifiers are housed in a third unit.

OPERATION

All the inputs to the matrix are fed into buffer amplifiers which isolate the input lines from the capacity of the matrix.

The output rows are fed to an A/B mixing amplifier the output of which is returned to the matrix and permits the use of cross-fades and mixes. A mix button is provided for transmitting the A/B rows via the A/B mixing amplifier. Cutting can be carried out on the A/B rows provided that the mix button remains depressed and the fader controls are suitably positioned.

The third row in the matrix is used for cutting. Though lap cutting is used the performance of the relays used is excellent and the Type BD 934 mixer, in this respect, surpasses other Marconi mixers of similar type. The output of the cut row is fed to transmission via an isolation amplifier.

The fourth row is used for preview and has an output isolation amplifier which ensures interference-free use of the preview facilities at any time.

Provision for locking to a non-synchronous remote source is provided on inputs 6 and 7 of the matrix.

An emergency by-pass switch is provided which makes the preview row available for transmission in the event of failure of the associated electronic circuits. On-air cues are operated whenever any of the four rows are used 'on-air'.

Data Summary

HF response: ± 0.2 dB to 6 Mc/s. Not more than -3 dB at 10 Mc/s.

LF response: Tilt on a 50 c/s square wave less than 2%.

Input impedance: $75 \Omega \pm 2 \Omega$ to 5 Mc/s.

Output impedance: $75 \Omega \pm 5 \Omega$ to 6 Mc/s.

K rating: Not more than 0.5%.

Crosstalk: With 5 Mc/s fed to all inputs except one, and all outputs taking this one, the crosstalk measured on the one output will not be more than 50 dB.

Cross mixing: With the same standard-level signal fed to each channel the constancy of output during cross mixing will be maintained at better than $\pm 5\%$.

Dimensions:

| Height | Width | Depth | Weight |
|-------------|---------|-------------|-----------|
| 1 ft 6½ in. | 8⅝ in. | 2 ft 0½ in. | 56½ lb |
| (47 cm) | (22 cm) | (62 cm) | (25.7 kg) |

Vision matrix

| | | | |
|-------------|---------|-------------|-----------|
| 1 ft 6½ in. | 8⅝ in. | 2 ft 0½ in. | 56½ lb |
| (47 cm) | (22 cm) | (62 cm) | (25.7 kg) |

Control panel and case

| | | |
|-------------|-------------|---------|
| 1 ft 1½ in. | 1 ft 3½ in. | 9½ in. |
| (34 cm) | (39 cm) | (24 cm) |

Mixer processing unit

| | | | |
|------------|------------|------------|-----------|
| 1 ft 2 in. | 1 ft 7 in. | 1 ft 3 in. | 70 lb |
| (35 cm) | (48 cm) | (38 cm) | (31.7 kg) |

Marconi

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