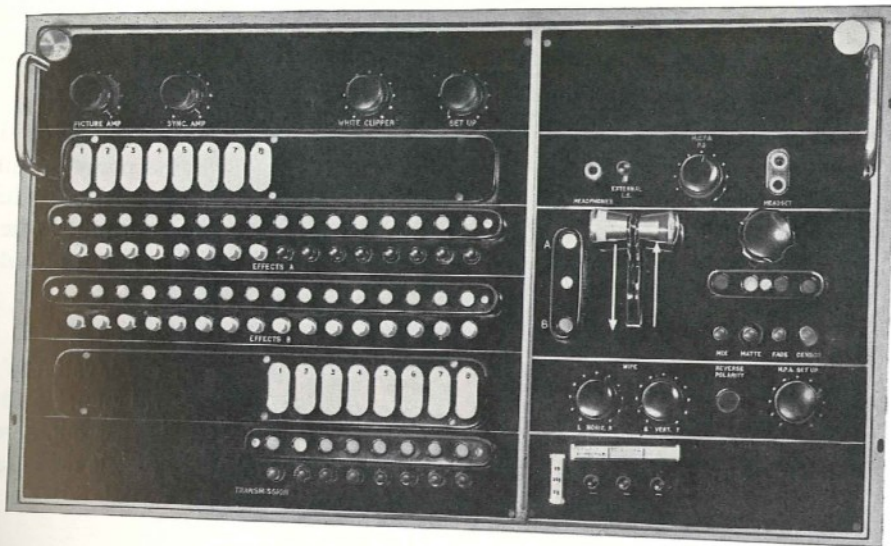




Relay Vision Mixer *Type BD 664*



6964

THIS RELAY-OPERATED vision mixer has been designed to provide the utmost flexibility in television studio control room planning. The standard version is capable of accepting seven inputs and provides three composite and one non-composite outputs. An attractive feature of the equipment is the ability to extend it at any time to provide for more inputs, outputs and facilities.

FACILITIES

- Cutting by push-button switching from one input to another.
- Fading out of one input and fading in of another.
- Mixing between any two composite inputs.
- Pre-setting of a superimposition between two inputs.
- Preview of any input including a pre-set superimposition.

Matte of two signals, providing a cut-out in one picture filled in by another, horizontal and vertical wipes. (An external Matte signal is required from either a Special Effects generator or Telecine slide.)

Censoring facility for use in emergency.

Provision for inclusion of talk-back equipment.

EQUIPMENT

The apparatus is made up of these basic units:

- (a) Control panel.
- (b) Relay switching unit.
- (c) Mixing amplifier.
- (d) Line clamp amplifier.
- (e) Cue director.
- (f) Preview and transmission monitors.
- (g) Power supply equipment.

A Negative Picture Amplifier Type 2116A provides remote switching facilities for reversing the polarity of the picture and is also available as a separate item.

The control panel is designed for mounting in the customer's own desk. All other units are housed in standard cabinets. There is no mechanical link between the control panel and the monitors, a feature which allows complete freedom in the arrangement of the control room. The preview and transmission monitors can be placed either above or to one side, out of the operator's line of view into the studio. Multi-core cables connect the control panel with the cabinet mounted equipment.

CONTROL PANEL

The control panel is an assembly of sub-units, complete flexibility of facilities thus being provided. Units of eight push-button switches, together with associated cue lights are assembled in three groups for cutting, previewing and setting up of effects respectively. The standard mixer contains one cut, two effects and one or two preview panels according to requirements. Appropriate designation indicators are assembled at the top of the panel.

The fader is mounted on a separate sub-unit conveniently situated on the right hand side and with it are the facility selection buttons for mixing, fading, matte or censor. A remote control unit for the line clamp amplifier may be incorporated. The panel is 24 $\frac{3}{8}$ in. (62 cm) long and 14 $\frac{3}{8}$ in. (36.5 cm) high.

RELAY SWITCHING UNIT

Each set of switches on the control panel is associated with a panel of relays in this unit, separate relay panels dealing with each of the facilities of cutting, effects and previewing. An isolation amplifier is included in each panel. The relay panels are mounted in a relay frame which is a cabinet-mounted pan-type chassis carrying terminations and the heater transformers for the valves of the isolation amplifiers.

MIXING AMPLIFIER

The mixing amplifier has two input channels and one output. Its maximum gain is unity and the channel gain is controlled by DC bias so that the two inputs can be mixed in any desired proportion by adjustment of the bias. The bias controls are the faders. The mixing amplifier is associated with the two effects relay panels.

LINE CLAMP AMPLIFIER

The line clamp amplifier into which the selected programme is switched is the Type BD 651 (see page 141). The amplifier produces a corrected and properly set-up signal for feeding to the line. When remote control facilities for this amplifier are incorporated in the control unit, a suitable monitor is used in conjunction. The line clamp amplifier provides four outputs, one of which is used to feed the transmission monitor.

CUE DIRECTOR

For the operation of the 'available' and 'on the air' cues on the control panel and appropriate cue lights on the cameras, a cue director is used. This consists of relay panels mounted in a frame arranged to suit the installation.

MONITORS

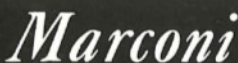
These may be selected from the following:

- 14-inch Picture Monitor, Type BD 819;
- Picture and Waveform Monitor, Type BD 627;
- 5-inch Waveform Monitor, Type BD 810;
- Line Strobe Waveform Monitor, Type BD 660 (see pages 121, 117, 123 and 125).

The choice will depend largely on the distance of the monitor from the operator.

POWER SUPPLIES

Relay supplies are provided by a Relay Power Supply Unit, Type BD 635 and HT for the amplifiers is obtained from a Regulated Power Supply Unit, Type BD 654 (see page 167).



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