



Monitor Regulated Power Supply Unit *Type BD653*



5652

THE MONITOR regulated power supply unit Type BD 653 provides a regulated DC output of 550 mA at 250 V and a low voltage centring supply. Part of the output can be taken as an unregulated supply of approximately 330 V and a low current regulated output at 150 V is also available. It has been designed especially for operation with a picture and waveform monitor Type BD 627 (see page 81), or a line strobe waveform monitor Type BD 660 (see page 105), and is suitable for assembly as an integral unit with such an item. When so assembled the whole may be housed in either a studio console or a mobile case as required (see page 109). Various editions are available and provide switching facilities as follows:

1. For normal studio use. Basic unit with on-off switching, metering facilities, etc.
2. With eight-way vision switching. Selection of any one of eight vision inputs by push-button control with associated cue indication.

3. With eight-way relay switching. Remote selection between eight inputs by push-button control having associated cue indication (see illustration).

4. For mobile use. As (1) but with tapping switch and voltmeter to permit mains-voltage adjustment.

CONSTRUCTION

The unit consists of a box chassis mounted by means of extensible runners upon a light cradle. At the rear of this cradle are fitted the plugs and sockets whereby connection is made both to the power supply unit and the associated monitor. The upper surface is arranged to accommodate and make connection with the picture and waveform monitor chassis or similar item.

Wiring between the rear connectors and the power supply chassis, which is withdrawable, is carried within a flexible rubber conduit which serves both to guide and protect these connections. All components are arranged to be directly accessible when the unit is withdrawn.

CIRCUIT

Separate single mains transformers provide heater and HT power for the three rectifier valves and for the various regulator and control valves. An on-off switch and mains fuse are provided.

The rectified AC secondary voltage is smoothed by a filter and applied to three series regulator

valves which are controlled by a double triode in conjunction with two gas-filled regulators.

A jack and selector switch are provided whereby the output voltage, total load current, and individual regulator anode currents may be read upon an external meter.

DATA SUMMARY

Inputs:

- (a) Mains power, 0.75 kVA at full load from 117 or 230 V AC supplies.
- (b) Line and field drive pulses at standard level if required by associated monitor. Bridging input.
- (c) Sync. at standard level, if required. 75 Ω input.
- (d) Vision signal at standard level.
- (e) Remote control signals for picture and waveform monitor, cue lights, and sync./drive, if required.

Outputs:

- (a) Mains power to heaters of associated units.
- (b) Regulated DC. At 250 V, 550 mA max, 300 mA min. At 150 V, 15 mA max.

- (c) Unregulated DC at 330 V approx.*
- (d) Centring supply. 550 mA max. according to load at 4 V nominal.
- (e) Power output for operation of Line Strobe Waveform Monitor Probe.
- (f) Selected vision signal or control voltages to vision relay switching system according to edition.

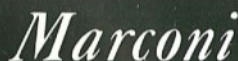
* Total load (regulated + unregulated) not greater than 550 mA.

Regulation: 1 Ω , maximum.

Ripple: Residual ripple not greater than 5 mV peak-to-peak.

Dimensions:

Height	Width	Depth	Weight
6 in.	14½ in.	25 in.	58 lb
(15 cm)	(36 cm)	(63 cm)	(26 kg)



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