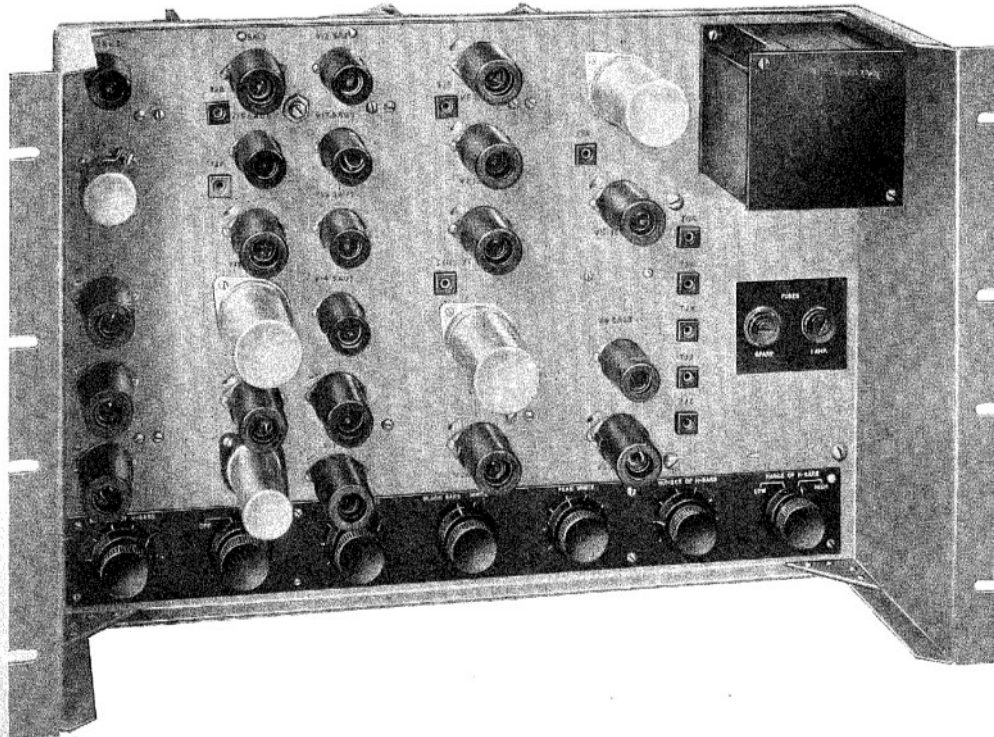




Grating and Dot Generator Type BD659



6106

THE GRATING AND DOT GENERATOR provides a vision signal which has the appearance – when displayed on a picture tube – of either (a) a grating formed by a series of horizontal and vertical bars or (b) a series of dots arranged in horizontal and vertical rows. The bars and dots are of uniform duration and spacing in terms of time. Any departure of the pattern from uniformity is therefore a measure of the non-linearity of the deflection circuits of the display device concerned. In order to facilitate measurement the numbers of bars or dots are variable in both directions. The vision signal has the same form as the standard blanked picture signal and

so may be inserted into a television system in the same manner on the output of a normal camera channel. Alternatively a self-contained test equipment may be set up by the use of a synchronising generator and synchronising mixer. The output signal may consist of

- (a) Black bars on a white background
- (b) White bars on a black background or
- (c) White dots on a black background.

The different output signals may be selected by a front-panel rotary switch. When switched to condition (c) the generator is of great use for adjustments to tri-colour cathode-ray tubes in colour monitors and receivers.

CONSTRUCTION

The unit is assembled upon a conventional pan-type chassis suitable for mounting in any rack or cabinet having standard relay-rack drillings. Valves and controls are mounted on the front face of the unit. All small components and wiring are at the rear of the unit together with the power connector and the output and input coaxial connectors. The latter are provided in duplicate to facilitate the interconnection of equipment requiring drive and blanking pulses.

The horizontal bars or rows of dots are

controlled by both field drive and line drive pulses: the vertical bars or rows of dots are controlled by line drive. The two sets of pulses representing the horizontal and vertical elements are mixed together. The signal passes through a double-ended clipper before reaching the output cathode follower. Synchronising pulses are added in the cathode of the output stage, if required.

All power supplies for the generator are obtained from a Type BD 654 Regulated Power Supply which is fully described on page 169.

DATA SUMMARY

Inputs:

Line Drive Pulses	} at standard levels, according to system. High impedance bridging inputs
Field Drive Pulses	
Mixed Blanking Pulses	
Mixed Synchronising Pulses	
Mains and DC supply (from Type BD 654 regulated power supply unit), 44 VA at 117 or 230 V, 50-60 c/s AC.	

Outputs: At standard level according to system, composite or non-composite, to feed into 75 Ω load. Grating output switchable to

either black bars on white background, or white bars on black background. Dot output, white dots on black background.

Number of bars or dots:

Horizontal: 5 to 32, adjustable in two ranges.
Vertical: 4 to 35, for 525 and 625 line systems
6 to 54, for 405 line system.

Dimensions:

Height	Width	Depth	Weight
12 $\frac{1}{4}$ in.	19 in.	9 $\frac{1}{2}$ in.	20 $\frac{1}{2}$ lb
(31 cm)	(48 cm)	(24 cm)	(9.3 kg)

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