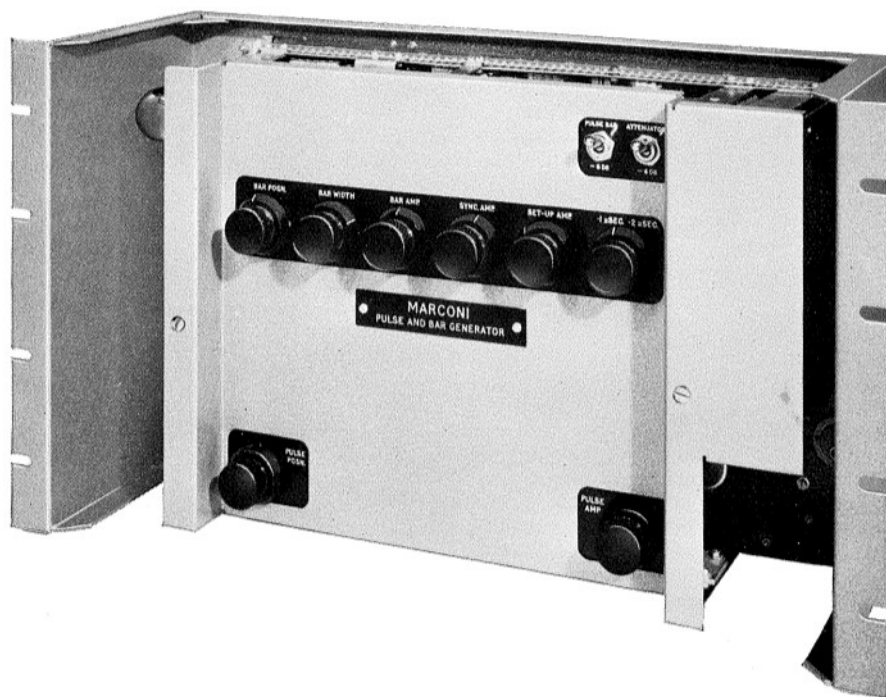




Sine-squared Pulse and Bar Generator Type 5157



7915

THIS generator is particularly useful for the testing of circuits carrying television signals over long distances. It produces the test waveform known to the British Post Office as 'Pulse and Bar' and otherwise as 'C.M.T.T. Test Signal No. 2'.

The generator is a single recessed-type unit compactly designed for mounting in a standard 19 in. (48 cm) rack-cabinet.

Features

Test waveform is intended for displaying on a fast timebase at a point remote from the generator.

Pulse and bar accurately timed with respect to the synchronizing pulse so as to minimize 'jitter' distortion.

Composite television waveforms produced when driven from standard pulses.

The conventional 'spike' of 2 μ s duration and placed at mid-line position can be produced.

Shaping filters easily changed according to the standards of working, typical characteristics being as follows:

	Standard	405-line	525-line*	625-line
Filter T	0.17 μ s			0.1 μ s
		H.A.D.		H.A.D.
Filter 2T	0.33 μ s			0.2 μ s
		H.A.D.		H.A.D.

(H.A.D. = half amplitude duration.)

* No special standard adopted.)

Bar width adjustable without affecting amplitude. Rise time of bar equal to 0.97 of the H.A.D. of the pulse.

Variable sit-up permits small signals of say 20% of black/white to be located at mid-grey or elsewhere for testing VSB transmitters, which minimizes confusion due to quadrature distortion.

Data Summary

Inputs:

- 100–125 V or 200–250 V, 50 or 60 c/s AC.
- 250 V regulated HT, at 200 mA.
- Mixed (or line) sync. 1.5 V to 6 V p-p. negative-going. Bridging input.
- Mixed (or line) blanking 1.5 V to 6 V p-p negative going. Bridging input.

Output: One 75 Ω output giving standard level.

Pulse: Range of position, 5 μ s to 12 μ s from the lagging edge of sync. Amplitude, 0.4 to 0.9 V (or via 6 or 12 dB attenuation). Position jitter, less than 1 m μ s.

Bar: Range of position, 20 μ s to 50 μ s from the lagging edge of sync. Duration, 1.5 μ s to 40 μ s. Amplitude, 0.4 to 0.9 V (or via 6 or 12 dB attenuation). Position jitter, less than 2.5 m μ s.

Sync. amplitude range: Zero to 0.35 V.

Sit-up amplitude range: Zero to 0.5 V.

Dimensions:

Height 10½ in. (27 cm)
Width 19 in. (48 cm)
Depth 9¾ in. (24 cm)
Weight 25 lb (11 kg)

NOTE: C.M.T.T. Test Signal No. 1 is produced by the Black/white Generator Type 3391 (see page 85) and C.M.T.T. Test Signal No. 3 by the Grey Scale Generator Type BD 867 (see page 83).

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