

VIDICON TUBE TELEVISION CAMERA

Fully transistorized - "COMPACT T.V." model

* GENERAL FEATURES

- This camera is designed for use with a TH. 9806 vidicon tube, or similar
- Light weight camera, for studio and field purposes.
- Transistorized.
- Interchangeable printed wiring boards.
- Removeable TH.T 601 camera block, designed as a plug-in unit.
- Zoom lens. Zooming range 15/150 mm (19" to 5" 29/32).
- Single-button control for both optical focusing and zooming.
- Iris manual control.
- Removeable TH.T 602 electronic viewfinder with 7" rectangular kinescope.
- Image focusing current and supply voltages are regulated.
- Automatical adjustment of the target voltage.
- Easy accessibility to all circuitry.
- Incorporated intercom system.
- Operates on any world system (in present use).



* USE

The TH.T 600 Vidicon camera and the TH.T 610 camera control unit compose a video chain which permits to provide a video signal from a picked-up scene. This light and compact camera is one of the equipments that compose the "Compact TV station", which was specially devised by the Compagnie Française THOMSON-HOUSTON, to meet the increasing demand for a light, rugged, easily and securely operated equipment; this equipment is the perfect answer for nations and organisations intending to extend their scope of T.V. activity.

TH.T 600 CAMERA

* PARTICULAR FEATURES

MECHANICAL FEATURES

— Removeable and plug-in camera block and electronic viewfinder.

Optical system :

— Zoom lens : 15 - 150 mm (19/32 to 5" 19/32) - F number : 1.9.

— Optical focusing and zooming single-button control (separate slow variation knob).

— Manual iris control.

Dimensions : Width : 260 mm (10" 1/4).
Length : overall 600 mm (23" 27/32).
Height : 300 mm + handle 40 mm
(11" 13/16) + (1" 19/32).

Weight : 27 Kgs (with lens) - (60 lbs).

Construction: light alloy.

Finish : baked painting; camera chassis is two colours; optical parts are black.

ELECTRICAL FEATURES (COMPLETE CHAIN : CAMERA AND C. C. UNIT)

— The camera operates in conjunction with the TH.T 610 C.C. Unit.

— Fully transistorized (except for the video preamplifier first stage which uses a Novistor).

— Uses a TH. 9806 Vidicon tube, or similar (C.F.T.H. product).

— Lighting range : according to the type of Vidicon tube - for example : over 500 lux for the TH. 9806.

— Geometry and Scanning linearity : 2% departure from the theoretical value (in % of the picture diagonal).

— Large size electronic viewfinder (7") with overbright kinescope (12.5 Kv).

— Camera cable : maximum length : 1000 feet.

— Temperature : when the camera operates in a 40°C damp atmosphere, there is not any noticeable alteration on the picture.

Output level : The picture being the resolution test chart, the output level can be adjusted to its 1 V nominal value.

The video gain control permits to increase this output level up to 1.2 V PP.

Grey scale : All steps of the grey scale test pattern are distinguishable from each other.

Resolution : It is easy to distinguish on the resolution test chart the part referenced "600" on the picture center.

Very low frequency correction : the low frequency streaking, on the resolution test chart, is completely invisible for normal operating conditions of the monitor.

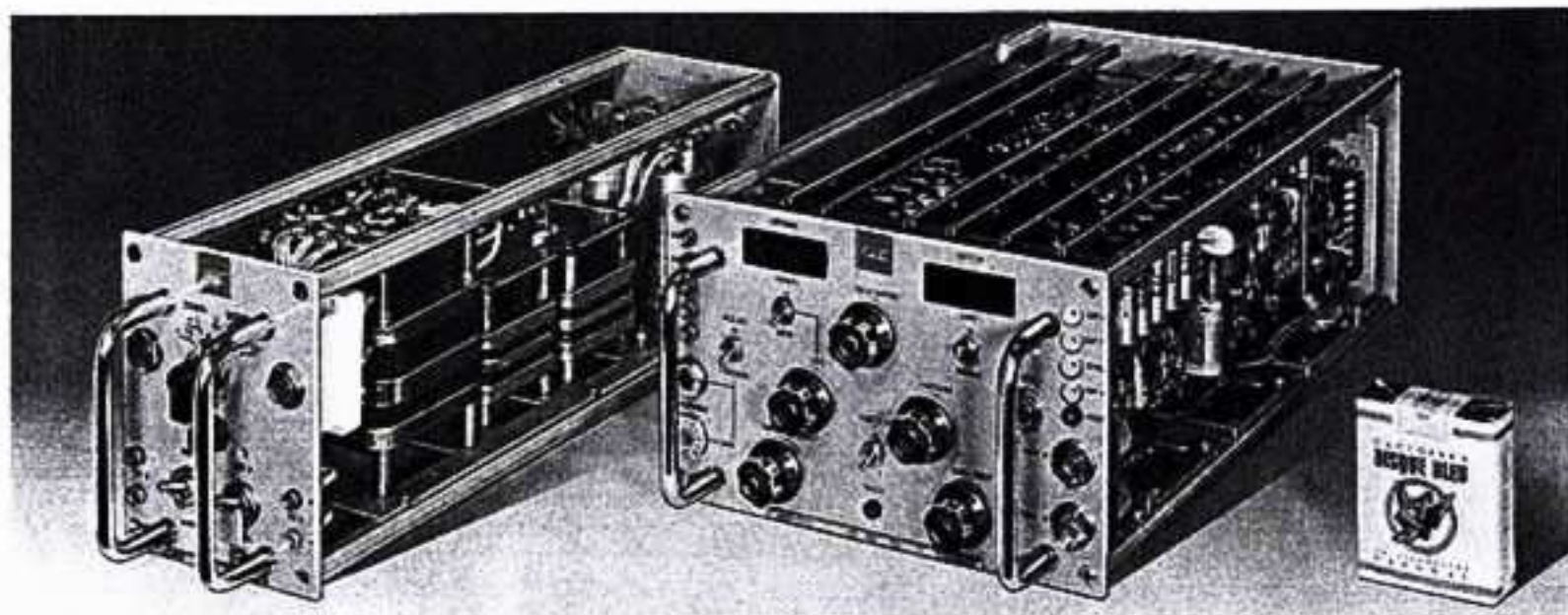
Black level stability : The camera is facing a white panel, having one vertical black reference border. When a black mask is horizontally slid on this panel, a variation of white area from 80 to 20% of the whole picture is obtained and the black level reference, measured on an oscilloscope, does not depart from more than 10% of the peak-to-peak signal amplitude.

Noise level : The ratio between the maximum peak-to-peak amplitude of a white-black signal, and the near peak-to-peak amplitude of noise is a voltage ratio below 18 dB (that is to say 34 rms dB). This result is obtained by measuring on an oscilloscope with a low-pass filter inserted between the C.C. Unit and the oscilloscope.

Power supply : It is delivered by a TH.T 740 ± 24 V power pack.

Variation of ± 6% of the AC 50 C/S 110 or 220 V mains voltage, which is supplying the equipment, does not alter the picture quality.

Total consumption of the video chain : 60 VA.



TH.T 610 Camera control unit and TH.T 740 24 V power pack
Indispensable subsidiary equipments of the TH.T 600 camera

CC Unit dimensions : width : 206 mm (8" 1/8)
height : 128 mm (5" 1/16)
depth : 354 mm + handle 40 mm
(13" 15/16 + 19/32)

Weight : 10 lbs.

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