European and American Television Cameras



Make	RCA
Model	TK-60 (A)
Country	USA

Camera Type:

Studio monochrome, full facilities

Camera Description:

Large camera with 4 lens turret, prominent caring handles and fixed viewfinder. Note the cooling fan housing on the top of the camera.

Data		Data	
Tube details	4.5" Image Orthicon type 7295-A	Line standards	625/50 525/60
Lens details	4 x TV88 mount lenses.		
Sig. to Noise	36-38dB in 4.5 MHz B/width	Drives or locking	LD, FD, MB, MS 4 volt pulses
Sensitivity		Weight *	68Kg.
Resolution	700 lines picture center, limiting	Colours	Silver and Blue
Viewfinder	8.5" fixed type 8HP4	Dimensions *	495H x 381W x 902L mm.
Camera cable	Cannon LK-R24C-22, cable = MI-94-	N Date introduced	1963
Power supply	90-130 180-260V. 50-60Hz. 900W.		

*Excluding Lenses

Associated equipment

Processing amplifier type 26072 (60Hz.) 556072 (50Hz.), Remote control panel 26217, Power supply WP-16B, Centering supply plug in module, Master monitor TM-6C. Field cases were available for the Processing amplifier and power supply units.

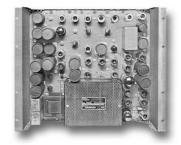
<u>Features</u>

This camera was designed as the TK-12 which was developed into the TK-60. By this time Image Orthicon camera design was mature and this camera has all the stability and features you would expect. The camera makes extensive use of the Nuvistor valves, mostly the RCA triode type 7586. There are also some transistors used in the power supply, the intercom and other circuits.

General description

The TK-60 has an interesting arrangement with the focus action. One of the design problems with 4.5" I.O. cameras is the weight of the scanning yoke. This becomes a problem when the camera tilts up or down and the, now out of balance, yoke makes the focus knob/lever very hard to move. Indeed the yoke could career catastrophically to the end of its travel! RCA solution to this problem was to counterbalance the yoke by moving the electronic chassis on the other side of the camera in the opposite direction! The TK-60 has an improved wedge mount system.

The modules in the TK-60A are interchangeable with the TK-60, except for the improved Iris motor and servo amplifier.



Processing amplifier (for the earlier TK-12/32)

References

"Television Broadcasting Camera Chains" by Harold Ennes, 1971, Samms. The Camera Handbook.

Notes

A report in "Engineering 6 August 1965" describes a film camera attachment for simultaneous recording of the programme. A 16mm Gemini system of MGM telestudios Inc. is shown fitted to the TK60, with 1200ft. film magazines giving 33 minuets recording at 24 FPS. In colour or black and white. The main advantage of this is the interchangeability of film between countries with different TV standards.