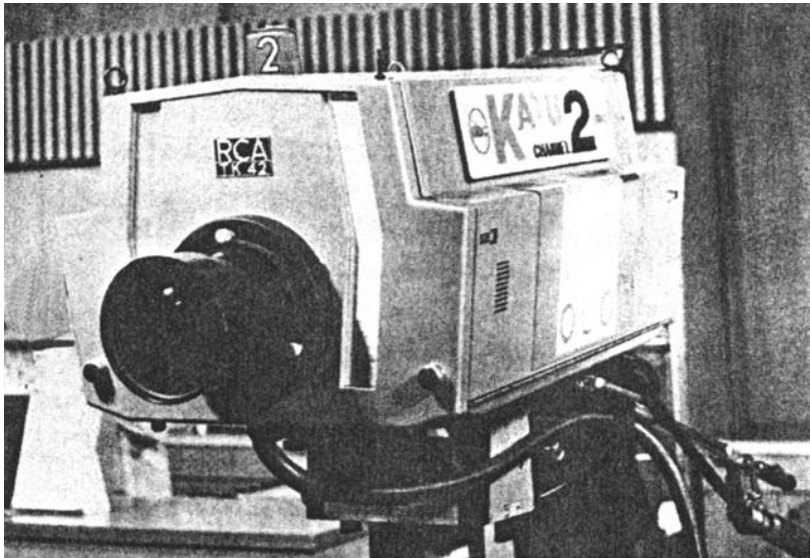


European and American Television Cameras

	Make	RCA
	Model	TK-42
	Country	USA
	Camera Type : Studio colour	
	Camera Description : Large low profile camera with stepped sides, built in viewfinder and recessed lens.	

Data		Data	
Tube details	1 x 4.5inch I.O. + 3 x 1inch Vidicons	Line standards	625/50 525/60
Lens details	Integral zoom 5:1 with 4 range ext'd	Colour standards	PAL/NTSC
Sig. to Noise	36-38dB in 4.5Mhz bandwidth.	Drives or locking	Sync, blank, bGate & subcarrier
Sensitivity		Weight	127Kg.
Resolution	700 lines claimed in center.	Colours	Gray with rainbow colour stripes
Viewfinder	8 inch 150 ft. lamberts. Fixed.	Dimensions *	419H x 580W x 837L mm.
Camera cable	1000ft studio 2000ft field. (1)	Date introduced	About 1962-5?
Power supply	90/130v 180/260v 47-63Hz. 750 watts		

*Excluding Lens

Associated equipment

CCU and PSU with remote control panel and colour balance panel.

Features

Uses a separate High resolution I.O. tube for luminance, claimed to give comparable pictures equal to the best monochrome cameras. The three vidicons providing the colour information. It was fully transistorized except for the high voltage components. The Lens was built-in and had 4 range extenders that gave a total range of 1.6 to 40 inches. There are a large number of set up controls behind a panel at the rear of the camera.

General description

A Big 4 tube camera by any standards, it used a 4.5 inch Image orthicon tube for the luminance and 3 1 inch vidicons for the three colours. The three vidicons are parallel, one above the other on the right hand side of the camera and the I.O tube down the other side. The lens is recessed into the camera body and I think that the tubes faced the rear of the camera with the light splitter mirror assembly at the rear of the camera.

References

RCA catalog, B.2000. "Television Broadcasting Camera Chains" by H. Innes, pub. Sams.

Innovations

Use of I.O tube and three vidicons, at the time it was designed, this was one of the limited choices available before the invention of the Plumbicon tube. EMI experimentally built this layout, but as far as I know RCA was the only manufacturer of a production model.

Notes

(1) 79 cores + 6 co-axes. With Cannon Plug??.



TK 42 with covers open