


European and American Television Cameras

	Make :	Marconi
	Model :	MkVII A&B B3205
	Country	UK
	Camera Type : Studio Colour, lead oxide tubes.	
	Camera Description : Large 4 Leddicon design with prominent handles on both sides.	

Data

Tube details 4 x 30mm. Lead Oxide
Len details Zoom, pulley wheel mnt I.O. format
Sig. to Noise 44dB. Green channel
Sensitivity 1500 Lux @ f8
Resolution 400L 100%
Viewfinder 7" tilts B3102 (later B3128)
Camera cable BICC G101 2000ft. maximum
Power supply 100-125 & 200-250v 50-60Hz.920VA Used by

Data

Line standards 625/50 525/60
Colour standards RGBY outputs
Drives or locking Sync, Blanking, H, V, drives
Weight * 156 lbs. 70.7Kg.
Colours Grey & Light Gray
Dimensions * 460H x 340W x 670L mm.
Date designed 1965
Used by BBC, TTV, ABC TV, ITV
 *Excluding Lens & Viewfinder

Associated equipment

CCU B3207, PSU B3210, Aperture corrector B3371, Colour coder B3370, Control panels B3208 & B3209, and a full range of studio equipment.

Developments

Extensive use of thick film modules to give stable circuit performance. Later B version had FET head amps, separate mesh tubes and improved yokes. The MkVII uses a swinging mirror in the optical colour splitter for monochrome operation. This improves sensitivity in monochrome operation. There was also a telecine version available with a choice of vidicon or lead oxide tubes.

General Description

A large, well built and substantial 4 tube camera with handles along both sides. The viewfinder tilts and has quick release mechanism. The construction style matches the MkV and the MkVI cameras. It is solid state apart from the tubes, EHT rectifiers and stabilizers. It is interesting to note that the MkVII was described as "one of the smallest and lightest colour cameras in production in the world". The CCU and PSU were very large as well, the camera channel needed a separate aperture corrector and coder. This made a total of 23U. 107 were sold in the UK and 223 exported a total of 330.

References

Marconi 1966 product Catalogue. WW page 58 February 1966. There is a good description of this camera channel on page 803, 24 Dec. 1965 of "Engineering"

Notes

Television August 1966 reports that the BBC has ordered 13 Marconi MkVII's for the opening of the colour TV service.

The 7" viewfinder, B3128, is used on the MkV, MkVI, MkVII, and with some updating on the MkVIII and MkIX cameras. It has a high brightness of 2150 lumens and can resolve over 600 lines. It has proved to be reliable in service considering they are all 30+ years old now. Some of the early CRTs have a defect with the tube faceplate bonding. This leads to spots between the tube and the front glass, in bad cases the tube is unusable.

Surviving cameras

NMFFTV, Chelmsford and Essex Museum, There are several in private collections.