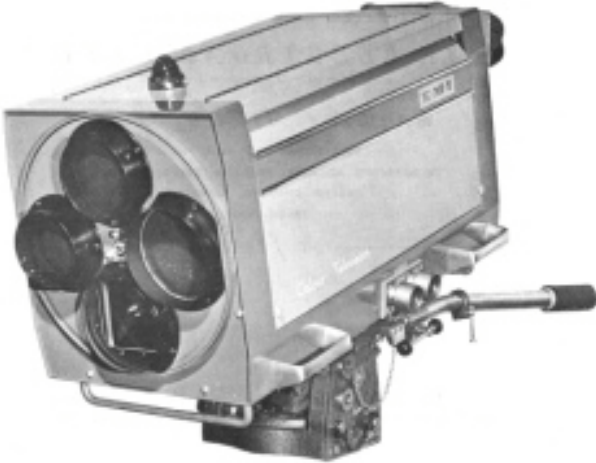


## European and American Television Cameras

	<b>Make</b>	<b>EMI</b>
	<b>Model</b>	<b>204</b>
	<b>Country</b>	<b>UK</b>
	<b>Camera Type :</b> Studio Colour for medical, Industrial and Broadcast use.	
	<b>Camera Description :</b> Large body with turret and 4 fixed lens. Matches EMI 203 style. Two BICC Mk4 camera cable connectors.	

Data		Data	
Tube details	3 x 1 inch vidicons EMI 10667/SC	Line standards	405/50 625/50 525/60
Lens details	4 Special Integral lens	Colour standards	RGB + Y outputs
Sig. to Noise	35dB. At 6mhz. Bandwidth	Drives or locking	4 Drive pulses at 2or 4 volts
Sensitivity	150 ft. Candles at f1.4	Weight	60Kg.
Resolution	400 lines per picture height	Colours	Two tone green
Viewfinder	7" Fixed internal	Dimensions	400H x 380W x 760L mm.
Camera cable	Two BICC Mk4b cables	Date introduced	1958
Power supply	90-140 or 205-255V. 50/60Hz. 2KVA		

### Associated equipment

PSU type 229, CCU type 218, Channel amplifier type 247, remote control panel type 217. Synchronizing generator type 294. EMI had a full range of studio equipment.

### General description

The optical system is novel as it uses a narrow angle (9 deg.) objective lens for each vidicon tube. The dichroic mirrors and reflecting mirrors are placed in front of the objective lens where the narrow angle of field keeps the angle of incidence over the mirrors fairly constant and astigmatic errors are avoided. The turret lenses have a 6, 18, or 29 degree field of view. A high light level was needed for operation. The EMI 204 used two camera cables, a total of 74 conductors. The complete 204 camera channel used 126 valves!

### References

Television Oct. 1960 reports that a colour camera (a 204 I assume) was shown at the International Medical Exhibition at Olympia. BBC Engineering training supplement No. 14 page 37.

### Photo Reference

Facing page 51 "Colour TV" Cant & Townsend. Ilffe

### Innovations

Early production colour camera. Even though small 1" vidicon tubes were used the camera was large. An unusual turret arrangement of 3 fixed lenses and 1 blank (open hole) with the one rear element. Each vidicon had its own 9 degree objective lens.

### Used By

Industrial colour, Plessy, BOAC, Medical research