

The PYE Mk7 Broadcast Camera (842116 LDM53)

Designed in about 1963-4, this camera represents to final development of the Image Orthicon camera by Pye TVT. It was not very successful (1) in this country as the imminent arrival of colour TV inhibited the UK's broadcasters from investment, but Pye had the benefit of a world wide sales team and many were sold overseas.

It is fully transistorised, except for the HV rectifiers and it uses the 4.5" IO tube with the latest Elcon target material, Elcon stands for "electronic conducting" and it removed the stickiness problem of earlier tubes.

It featured a 5-position filter wheel, and the front folded down to access the filters and tube face plate. The temperature of the I.O. tube was thermostatically controlled. The tube was changed from the rear of the camera. Operation on the three different line standards, 405 & 525/625 was by switches and a different plug in Line Scan unit was needed. The camera weighed a modest 45Kg.

Operation was possible up to 1000ft away from the camera control unit (CCU) with the BICC Mk4 camera cable. For distances over this an "in line brick" was fitted in the camera cable as a booster.

The camera channel featured an auto test signal, stable design with operational use of the new Joystick Iris and lift control. The tube voltages are generated by an inverter and supplied to a transformer in the control panel.

A range of Zoom lenses were available using the "pulley wheel mount" and these could be changed quickly.

The Image Orthicon tube was quite sensitive and good pictures could be obtained even in poor light.

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(1) Used by YTV and ATV in the UK