



## Colour Television Camera Channels

### Image Orthicon Colour Camera Channel Type BD 848

THIS camera channel is suitable for studio, outside-broadcast and closed-circuit applications. It employs three image orthicon tubes which, due to their high sensitivity, produce good-quality pictures at incident light levels down to approximately 250 ft lamberts.

#### Camera

Light enters the camera through one of four turret-mounted lenses and is split into the three primary colours by means of dichroic filters. The spectral response of each light channel is shaped by a combination of dichroic colour filters and astigmatism correctors to overcome any distortion which the filters might introduce.

The optical system includes a remotely operated iris to control the overall gain of the channel.

The focusing and deflexion yokes are made to close tolerances, and the provision of individual as well as common controls in each channel enables a very high degree of registration of the three component images to be obtained.

Focusing and turret indexing controls are normally operated from the rear of the camera, the focus control being incorporated in the panning handle.

An 8½ in. viewfinder is fitted to the camera to enable the operator to select the composition of his picture and to bring it sharply into focus. The viewfinder may be adjusted to suit the stature of the camera-man and the angle at which the camera is tilted.

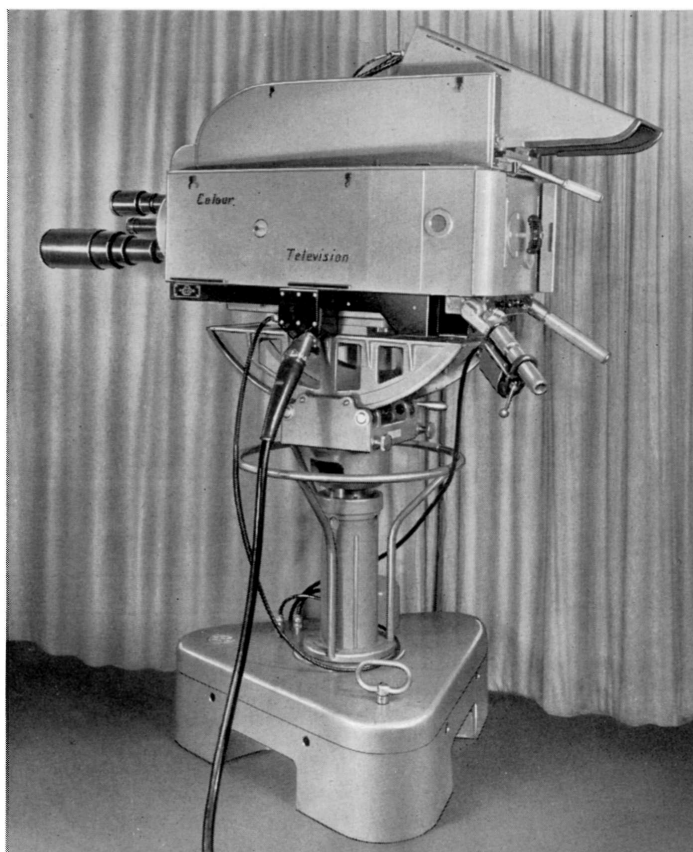
Cameras are normally provided with a special suspension, enabling them to be left in any desired position, without the use of counterweights, springs or friction pads.

#### Operating console

The operating console houses all the units necessary for the camera control operator to control the signal processing. It includes:

- (a) Picture and waveform monitor
- (b) Camera control unit
- (c) Remote control unit
- (d) Vision signal processing amplifiers.

Operating controls have edge illuminated



8442

*Colour camera mounted on a special-duty head.*

scales for ease of operation in low light levels.

### Vidicon Colour Camera Channel Type BD 877

Where a higher level of scene illumination is available, a vidicon camera channel may be employed. This channel will provide good-quality pictures with a light level of 300 ft lamberts, a sensitivity which makes it suitable for outside shots in all but the duller weather. It is intended mainly for closed circuit use, but may also be used for a certain number of broadcast applications. For this purpose it may be fitted with an 8½ in. viewfinder. The longer storage characteristic of the vidicon tube also renders it suitable for telecine use, the need for fast pull-down projectors and synchronous running being eliminated.

The camera is of an advanced design permitting a high order of accuracy in the alignment of the three component images. Although less sensitive in operation than the image orthicon, the operation and maintenance is less complex and the running costs are somewhat lower.

Among the more specialized uses envisaged for the channel are:

- Medical (surgical and clinical) use.
- Microscopy and Endoscopy
- Monitoring of hazardous operations.
- Telecine.
- News room and 'commercials'.

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