

# PHILIPS



## Vidicon Camera

### Type LDM 71

**Completely solid-state, modular construction, employing separate mesh vidicon tube**

**Suitable for all high-definition applications**

**Aperture and gamma correction**

**Up to eight camera channels from one drive camera**

**Simplicity of operation**



The vidicon camera is a high resolution camera for closed circuit industrial applications, or as a caption camera and for similar functions in broadcast studios.

Equipment comprises a camera head which may be fitted with a range of attachments, and a camera control unit. Remote control panels are also available.

Built-in facilities are extremely comprehensive: positive/negative picture switching aperture and gamma correction controls, dark current

compensation, and ability of sync generator to lock to crystal mains or an external reference.

Installations may be simply a camera head, control unit and a monitor screen, or up to eight camera chains may be driven from one master control unit.

Protective housings can be fitted for industrial application where conditions demand protection, cleaning, etc.

Although the camera system is designed for

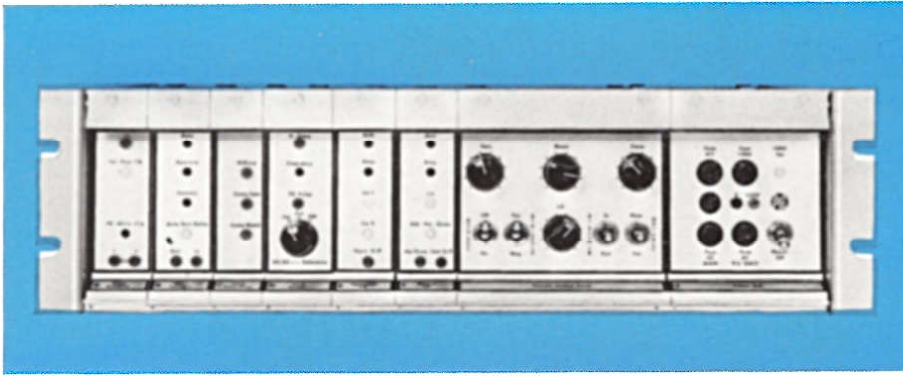
maximum flexibility of use, and provided generously with controls and test points, its operation is extremely simple. Ruggedness and reliability of operation have also been adequately catered for.

The camera head may be located up to 300 m (1,000 ft) from the camera control unit, all power and control circuits being carried by a single multi-core cable.



## Pye TVT Limited

The Broadcast Company of Philips



## ATTACHMENTS

### MANUAL FOCUS

Lens Plate Attachment is suitable for use when it is possible to operate the focus control manually, or when the camera is installed to observe a scene which is static. Any focal length lens may be used.

Focusing is effected by a knurled thumb-wheel at the rear of the camera. A locking device secures the focus position against vibration.

### REMOTE FOCUS

Remote Focus Attachment enables the operator to control the optical focus of the camera from a remote viewing point.

A key switch on the camera control panel operates a reversible a.c. motor working through a reduction gearbox to focus the lens. Limit switches prevent over-running.

The unit is suitable for use with any 16 mm 'C' mount lens.

## TECHNICAL DATA

### Scanning Standards

625 lines, 50 frames, or 525 lines, 60 frames, using internal or external synchronising pulses

### Bandwidth

3 dB to 10 MHz,  $\pm 1$ dB 8 MHz

### Picture Resolution

Exceeding 1000 picture points at centre of picture, to full 625 lines transmission standards

### Picture Geometry

No part of the picture will depart by more than  $\pm 2\%$  from a rectangle averaged over the picture

### Scanning Linearity

Less than  $\pm 2\%$  departure from the ideal

### L.F. Tilt

Less than 5% on a 50 Hz square wave

### Light Sensitivity

High definition pictures are obtained at 20 ft candles (200 lux) and upwards. Satisfactory pictures may be obtained at 5–10 ft candles (50–100 lux) at  $f/1.9$

### Automatic Sensitivity

500:1 minimum

### Operating Temperature

Maximum ambient 50°C. Camera temperature should not fall below 0°C

### Signal to Noise Ratio

Better than 40 dB unweighted p-p signal to r.m.s. noise for a linear 5 MHz channel and 300 nano-amp signal current

### Power Supply

100–125 V or 200–250 V a.c. at 47–63 Hz depending on standard used. Permissible voltage variation  $\pm 10\%$

### Power Consumption

68 W approx. 75 VA

## CAMERA HEAD UNIT

### Pick-Up Tube

For live applications:  
EEV type P849 or similar.

For caption applications:  
EMI type 9677/F1 or similar

Max. heater rating 6.3 V, 0.35 A.

## CAMERA

### Spectral Response

Similar to panchromatic film. Suitable for daylight or artificial light

### Lens Mounting

Standard 16 mm 'C' type (1" dia 31 t.p.i. fixing, rear focal register 0.69")

### Connectors

37-way plug:  
Cannon Type MS3102R-28-21P  
14-way socket:  
Cannon Type MS3102R-20-27P

### Dimensions

127 mm dia x 254 mm long (4" x 10") overall (excl. lens)

### Weight

With average (remote focus) attachment:  
3.1 kg (7 lb)

## CAMERA CONTROL UNIT

### Output Signals

1 volt p-p composite video signal of 70/30 picture/sync ratio (white positive) into 75 ohms, and/or 0.7 V non-composite from two separate output points

### Connectors

23-way socket:  
Painton 74/10/2356/10  
For Remote CCP if used  
37-way socket:  
Cannon Type MS3102R-28-21S  
Video Output:  
Films and Equipments Type SO-239  
Two outputs  
Sync-Out:  
Painton 8 W—S8MFS  
Sync-In:  
Painton 8 W—P8MFS

### Auxiliary Controls

14-way plug:  
Cannon Type MS3102R-20-14S

### Dimensions

482 mm long x 133 mm high x 460 mm deep (19" x 5 $\frac{1}{4}$ " x 18") (excluding plugs)

### Weight

Rack Mounting Type:  
13.6 kg (30 lb) approx

## ORDERING INFORMATION

Camera Head	LDM 0071/01
Manual Focus attachment	LDM 0093/01
Remote Focus attachment	LDM 0096/01
Camera Control Unit (CCU), rack mounted	LDM 0097/02
CCU, rack mounted for remote control	LDM 0097/22*
CCU, rack mounted for remote control and using external Syncs	LDM 0097/33*
CCU, rack mounted for remote control and using external Syncs with BNC connectors employed for Sync In, Sync Out and Video Out (for use in OB vans)	LDM 0097/34*
Desk mounting remote control panel (for use with items marked *)	3913 496 01740
Remote control cable (length as required)	8213 330 79000
30 m max on 110 V supply	
73 m max on 240 V supply	
Camera cable (length as required — max. 300 m):	
Straight connectors	8213 330 13000
Angled connectors	8213 330 14000
Straight plug — Angled socket	8213 330 15000
Straight socket — Angled plug	8213 330 16000
Set servicing accessories	LDM 1635/01

*Specification details subject to change without notice*



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