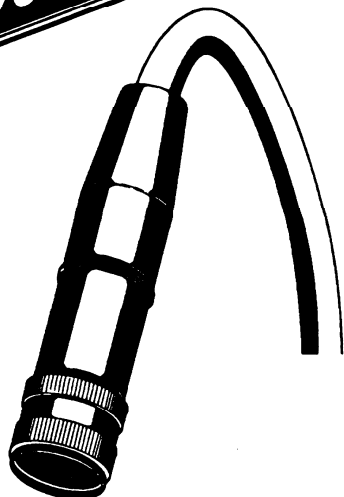


θam cam



ULTRA COMPACT COLOUR CAMERA

PV-7/7A

OPERATION MANUAL

Ikegami®

1. OUTLINE

The **PV-7/7A** is a single chip CCD ultra compact colour camera employing the DIGITAL processor for the signal processing. This **θam cam** series is available in two versions, the **PV-7A**(2-piece type) and the **PV-7**(1-piece type).

The **PV-7A** connects the thumb-sized camera head through 3.5m camera cable while the **PV-7** incorporates the camera head into the CCU.

Adopting an approx. 410,000 pixel(total picture elements) super sensitive 1/2" CCD as an image sensor allows high sensitivity, excellent S/N ratio as well as lifelike colorimetry at the same time.

The most featured advantage of this new-designed camera is to have enabled realization of dramatical small-sizing while maintaining the fundamental performance of the current successful model, the **THD-100** CCD colour camera.

We can show you how the **PV-7/7A** is miniaturized, taking the CCU for example.

The literally pocketable CCU size (135 × 76 × 26 mm) of the **PV-7/7A** is achieved due to approx. 1/14(=7%) volume ratio and the weight ratio of the **THD-100** CCU by comparison.

In addition, the GEN-LOCK function, which is indispensable for a system applications, is provided as standard.

(The **PV-7/7A** with no GEN-LOCK function is also available on special order.)

Employing the REAL TIME AWB(Auto White Balance), the **PV-7/7A** camera offers you much easier operating along with its switchless external construction.

Therefore, it is only necessary for you to connect the power cord and control the lens in order to obtain pictures.

With respect to a camera head, the same ϕ 15.6mm one as the **THD-100** can be used.

Ikegami Tsushinki Co., Ltd.

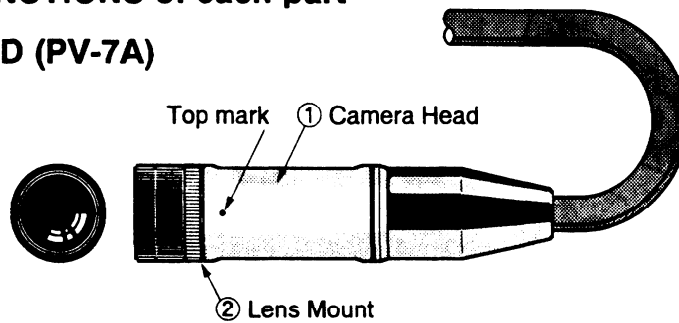
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2. NAMES and FUNCTIONS of each part

2-1 CAMERA HEAD (PV-7A)



① CAMERA HEAD

In the PV-7A the camera head and its CAMERA cable are united in one body. Various kinds of attaching adaptors are prepared in accordance with the respective applications. In the PV-7, the camera head and the CCU are united in one body.

② LENS MOUNT

Accepts the lens designed exclusively for the PV-77A and the THD-100.

C-mount lens is also available by using a C-mount adaptor. (However, all the C-mount lenses are not available. Refer to the specifications to see whether the C-mount lens is available or not).

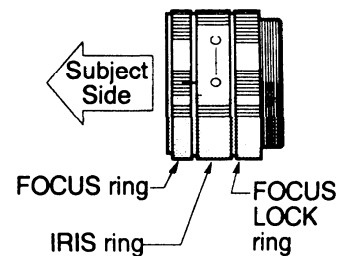
③ LENS

(1) Iris Setting

Iris can be adjusted from **O**(OPEN) to **C**(CLOSE) continuously. Optimize the iris, monitoring the pictures.

(2) Focus Setting

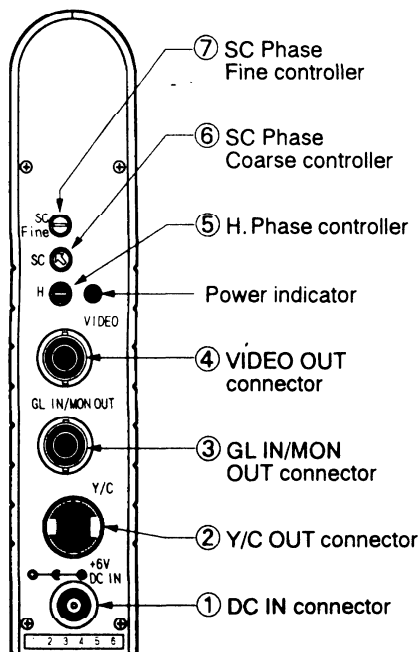
Focus is set by rotating the entire body of the lens. Loosen the FOCUS LOCK ring and adjust the focus by rotating the front end of the lens. After adjusting the focus, fasten the FOCUS LOCK ring to fix. In the case of the standard lens, focus is adjustable from the infinity(∞) to close-up shooting of approx. 40 mm.



NOTE

- * When adjusting focus, especially in close-up shooting, be extremely careful not to drop out the lens by rotating the lens excessively.
- * When rotating the IRIS ring or the FOCUS LOCK ring, be sure to hold the front end of the lens.

2-2 CCU(Camera Control Unit)



① DC IN connector

Inputs DC 6V power. By inputting it, the POWER indicator light up green to show the CCU is powered. It operates within the range of 6V to 9V. Normally use the AC adaptor (option).

② Y/C OUT connector

Used to output the S-VIDEO signal of the commercial use.

③ GL IN/ MON OUT connector

Inputs the GENLOCK signal normally. External synchronization is obtained by inputting the VBS signal or the BBS signal. At this time, perform the adjustments of ⑤, ⑥ and ⑦.

When the setting inside the CCU is changed, this connector can be used as an output terminal for MONITOR with the VIDEO output signals.

For further information on this change, contact your local **Ikegami** dealer.

④ VIDEO OUT connector

Outputs the COMPOSITE VIDEO signal.

⑤ H. PHASE controller

In the genlock operation, controller so that the horizontal phase of the screen can be same as that of the external, monitoring a waveform monitor.

⑥ **SC PHASE COARSE controller**

In the genlock operation, controller so that the phase of the CHROMINANCE signal can be almost same as that of the external, monitoring the phase of the BURST through a vector scope.

This COARSE controller provides 90°-step switching at 1 click. After this coarse adjusting, perform the next fine adjustment.

⑦ **SC PHASE FINE controller**

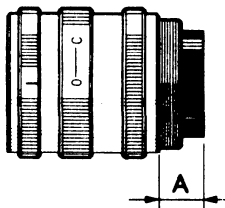
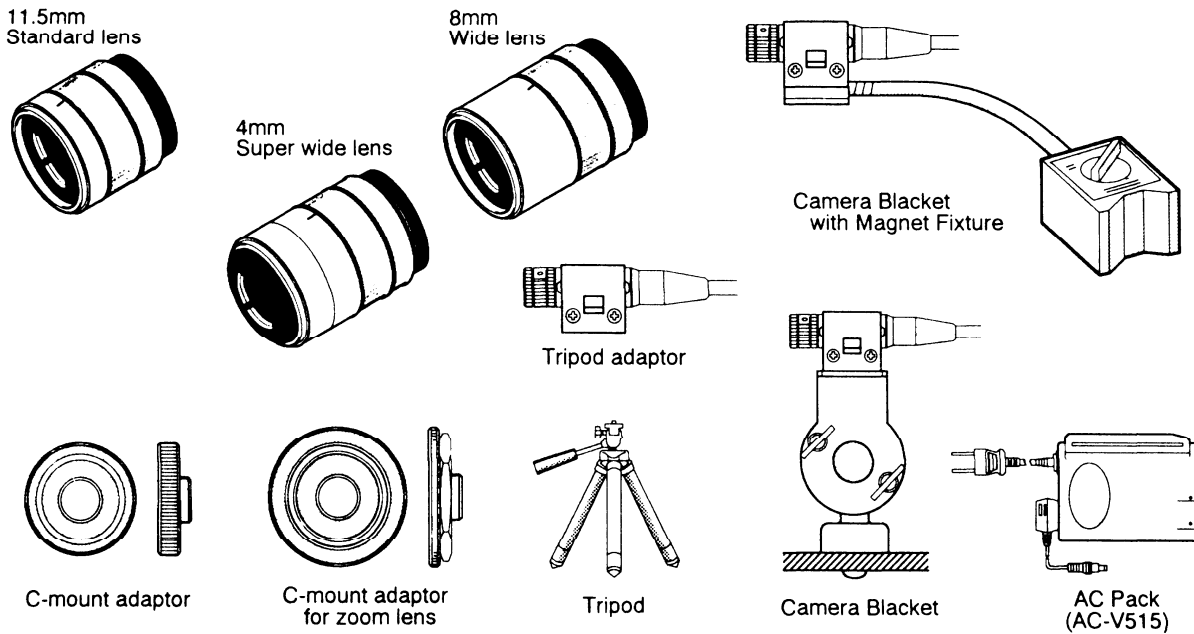
After completing the setting of ⑥, adjust the phase of BURST precisely with this controller.

* The settings of ⑤, ⑥ and ⑦ have no effect on the VIDEO signals in the non-genlock operation.

3. SPECIFICATIONS

Pick-up device	1/2 inch CCD image senser (total picture elements approx. 440,000 \approx 752H \times 582V)
	Screen size : 6.4(H) \times 4.8(V)mm
Synchronization	Built-in SYNC signal / External SYNC signal(BBS or VBS)
Resolution	H : 480TV lines V : 420TV lines(At center area of screen)
S/N ratio	48dB or more (in Gamma, Chroma, and DTL : OFF, Fc and Fsc : ON, HPF : 100kHz)
Sensitivity	2000 lux F8.0(3200K)
Video out signal	Y/C signal : 1 output VIDEO signal: 1 output MONITOR signal: 1 output(GL signal is not used)
Power requirement	+6~9V 4.5VA
Environment temperature	0~50°C
Size and Weight	PV-7 (1-piece type) 135(H) \times 76(W) \times 26(D)mm 228g PV-7A (2-piece type) Camera head : ϕ 15.6 \times 33(D)mm 28g(without lens and cable) CCU: 135(H) \times 76(W) \times 26(D)mm 200g

4. Optional Accessories



C-mount adaptor

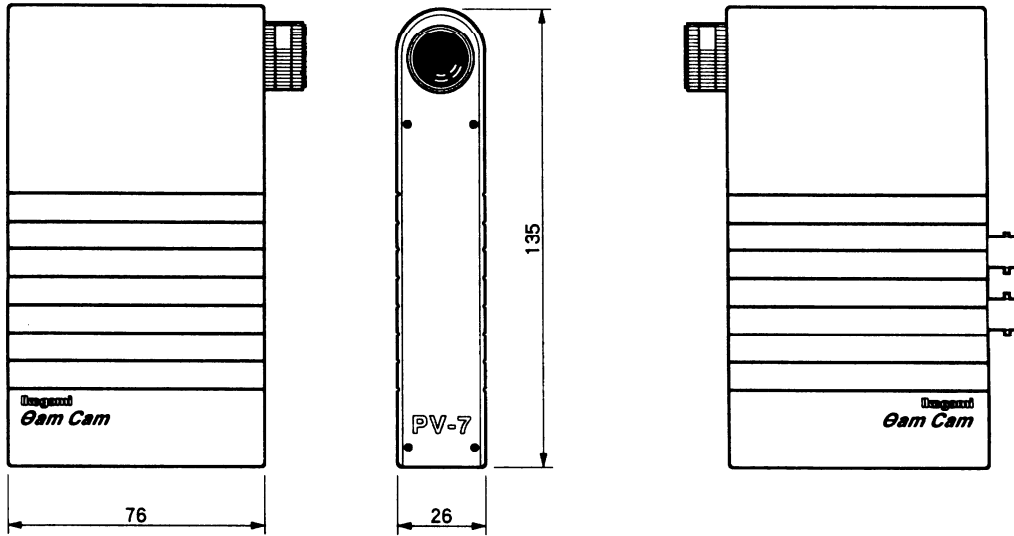
The C-mount lens whose height from the mount surface to the projection including screws (see the left-A portion) is 5.1mm or more cannot be attached to the C-mount adaptor.

In the case of 4.5mm or more, it can be used only for the C-mount adaptor of zoom lens.

When the C-mount adaptor for zoom lens is used, the lens is rotatable and the lens back focus is adjustable.

4. EXTERNAL VIEW

PV-7 (1-piece type)



PV-7A (2-piece type)

