

Ikegami[®]

3 FIT CCD Compact Color Camera

HC-240A



HC-240A

3 FIT CCD Compact Color Camera

Ikegami's vast accumulation of video technological know-how in broadcast-quality portable cameras is incorporated in the compact body of the HC-240A. The HC-240A is a top-of-the-line 1/2" 3 FIT CCD professional camera that delivers superior image quality in a full range of applications.

High performance FIT CCD sensors and a newly developed optical low-pass filter work together to yield 750 lines of horizontal resolution with a S/N ratio of 60 dB, as well as greatly reduced video artifacts, such as vertical smear, moire, and noise.

The HC-240A comes as standard with Y/C outputs, and it can be docked with a variety of compact VCRs, thus providing great potential for extensive system operations.

Optional accessories include a Remote Control Unit and a Camera Control Unit which provide further operational facilities to extend the use of this camera.

■ Studio conversion system



■ VCR dockable use



■ Video processing application



Features

A Culmination of Broadcasting Technology: Delivering High Image Quality Only Ikegami Can Offer

- Incorporating high performance 1/2" FIT CCD sensors with about 400,000 pixels, the HC-240A is designed to meet high specifications: 750 lines of horizontal resolution, high sensitivity of f5.6 at 2000 Lux., with a S/N ratio of 60 dB.
- The state-of-the-art FIT CCDs and the newly developed optical low-pass filter work to substantially reduce such CCD-induced signal artifacts such as smear and moire.
- Ikegami's superior video technology, such as an auto knee, contour correction (horizontal: two lines with a comb filter; vertical: 2H) and chroma aperture correction have been fully incorporated in this camera to achieve exceptional picture quality.
- **Super V**
The HC-240A incorporates a Super-V mode to achieve a vertical resolution of 450TVL for special application.



Dependable Hardware Design

The HC-240A is made of rugged die-cast aluminum. Ikegami's dependable design features include a completely dust-free optical block with a shielded filter change mechanism, and immunity to RF interference. Its camera head is modular in form and provides faithful video processing.



Compact and Lightweight: High Level of Operational Flexibility and Versatility

- The camera head weighs only 9.7 lbs. (4.4 kg), including the camera adapter, 1.5" viewfinder, lens, and

microphone. A substantial reduction in size and weight has been achieved by fully utilizing surface mount components.

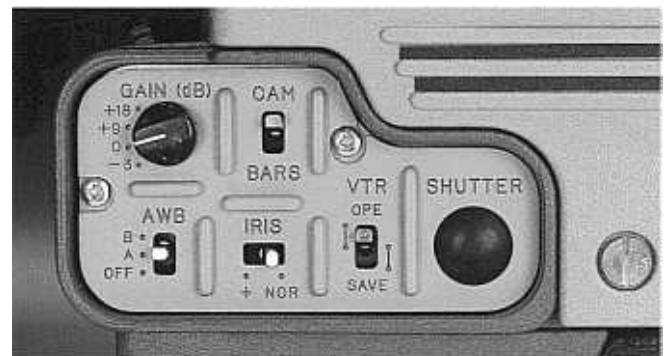
- The HC-240A can be docked with a variety of compact VCRs, such as S-VHS-C, S-VHS, MII, Betacam SP, and Hi-8 for easy use as a combined Camcorder.
- The HC-240A comes as standard with Y/C and composite signal outputs. When equipped with an optional module, the camera provides component and RGB signal outputs, as well as genlock capability.



Superb Functionality and Performance

● Video Gain Selection

The HC-240A is equipped with video gain selection. In addition to +9 dB and +18 dB positions, a -3 dB position is also available. This both improves the S/N ratio and allows a smaller depth of field.



● Auto White/Black Balance Control

The HC-240A incorporates Auto White/Black Balance circuits. A three-position white balance switch allows selection of one of two stored white balance data or a pre-set 3000° K.



●Electronic Shutter

The HC-240A comes equipped with a shutter with 6 speeds of 1/100, 1/120, 1/250, 1/500, 1/1000, and 1/2000 of a second. It can capture rapidly moving objects to deliver superb picture clarity with improved dynamic resolution.

●Auto Iris Capability

Auto Iris with a backlight compensation switch is a standard feature on the HC-240A. This provides the optimum iris setting for high-contrast scenes.

High Resolution 1.5" Viewfinder

A 1.5" high resolution viewfinder with 450 lines of horizontal resolution comes as standard on the HC-240A.



This VF features diopter correction in addition to 220° rotating, sliding, and flip-open eyepiece, all of which are designed to enhance the ease of camera operation.

Various status data required for camera shots are indicated by a character display, so that the cameraman can work under the optimum conditions at all times.

Unique Functions Tailored to Versatile Operation

●Remote Control

All the control items of the HC-240A can be remotely controlled by RCU-240 Remote Control Unit or MA-200 and MA-230A Camera Control Unit. By means of the character processing functions, it is possible to enter titles, characters, and other information such as the clock time into the picture. It is also possible to display messages in the viewfinder.

The RCU-240 and MA-230A include RS-232C digital control facility for interface to external computer system or control over an extended distance via modem.

●Signal Recording/Timer Recording

A VTR start/stop mode menu is provided which enables the operator to start and stop the VTR manually; to set automatic start and stop times, including, if desired, multiple start/stops where the length of recording and the interval between recordings may be set; and automatic start on a change of video level, when the change in video level may be set to one of eight values between 10% and 100%.

Specifications

Optical System	RGB prism type f1.4			
Image Sensor	3-chips 1/2" FIT CCD			
Effective Number of Pixels	492(V)×772(H)			
Sensitivity	Standard: f5.6 2000 lux (3000°K/reflecting ratio 89.9%) Minimum: f1.4 15 lux (+18dB GAIN UP)			
Signal-to-noise Ratio	60dB Typical			
Horizontal Resolution	750 TVL typical			
Lens Mount	1/2" Bayonet			
Optical Filter	1	2	3	4
	3000K	5600K +1/8ND	5600K	EFFECT
Shutter Speeds (seconds)	1/60 (OFF), 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000			
Detail Correction	2H system (with comb filtering)			
Auto White Balance	Preset 1, Memory 2			
Auto Black Balance	R, B, M-PED			
Auto Iris	R.G.B. NAM compensation system (with a counterlight compensation switch)			
Input Signal	External sync signal: VBS 1.0Vp-p 75Ω or (for genlock) BBS 0.45Vp-p 75Ω Return video signal: VBS 1.0Vp-p 75Ω Microphone input: -60dBm unbalanced High impedance: 10kΩ			
Output Signal	Composite signal VBS 1.0Vp-p 75Ω 2 outputs Y/C output: Y 1.0Vp-p 75Ω C 0.286Vp-p 75Ω each 1 output (VTR)			

Component output: *	Y 1.0Vp-p 75Ω
	PR/PB 0.7Vp-p 75Ω
	(0.525Vp-p adjustable) each 1 output (VTR)
RGB output: *	V 0.7Vp-p 75Ω
	each 1 output
Audio output:	-20dBm 600Ω balanced
	each 1 output (VTR)

Power Requirement	DC11V~16V
Power Consumption	14.0W or less (with 1.5" VF)
Operating Temperature	-10°C~+45°C, 14°F~113°F
Gain Selection	-3dB, 0dB, +9dB, +18dB
Dimensions (WHD)	96×138×155 mm (3.8×5.4×6.1 inches)
Weight	Camera head 9.2 lbs. (4.2 kg), (with lens, VF, MIC) Camera adapter 0.9 lbs. (0.4kg)

Remote Function	R. B GAIN IRIS R. B PED MASTER PED DTL LEVEL (-3, 0, +3dB, OFF) GAIN (-3, 0, +6, +9, +15, +18dB) ELECTRONIC SHUTTER SPEEDS (3 speeds selectable) COLOR BARS ON/OFF ABB AWB, AWB A/B R, G, B, VF CHARACTER AUTO SETUP
------------------------	--

*marked items are required optional modules.

HC-240A

3 FIT CCD Compact Color Camera

Variety of Accessories



●CA-230 Camera Adapter



- VCR Adapter Kit
- VA-230C Kit (for S-VHS-C IR-S420C)
- VA-230V Kit (for S-VHS BR-S410/411)
- VA-230A Kit (for S-VHS AG-7450)
- VA-230M Kit (for MII)
- VA-230S Kit (for Betacam SP)
- VA-230H Kit (for Hi-8)



●VF-4523 4.5 VF



●MA-230A
Camera Control Unit



●RCU-240 Remote Control Unit



●MRU-240
Local Remote Control Unit



●VDB-230
Video Distributor Box



●T-230 One Touch Mount



●MCC-10 (10m) MCC-50 (50m)
MCC-30 (30m) MCC-100 (100m)
Camera Cable



●Studio Conversion Kit



●RP-101/102 Rain Cover
RP-103/104 Dust Cover
RP-105/106 Cold Cover



●CJ-102 Cable Joint Box

Design and specifications are subject to change without notice.

9332CIS Printed in Japan

Ikegami IKEGAMI ELECTRONICS (U.S.A.), INC.

- HEADQUARTERS** 37 BROOK AVENUE, MAYWOOD, NJ 07607
Phone: (201) 368-9171 Fax: (201) 569-1626 Tlx: 219034 ITCNJ UR
- NORTHEAST OFFICE** 29 BROOK AVENUE, MAYWOOD, NJ 07607 Phone: (201) 368-9171 Fax: (201) 569-1626
- WEST COAST OFFICE** 23105 KASHIWA COURT, TORRANCE, CA 90505 Phone: (310) 534-0050 Fax: (310) 329-9582
- SOUTHWEST OFFICE** THREE DALLAS COMMUNICATIONS COMPLEX, 6309 NORTH O'CONNOR ROAD, SUITE 117,
IRVING, TX 75039-3510 Phone: (214) 869-2363 Fax: (214) 556-1057
- MIDWEST OFFICE** 747 CHURCH ROAD, UNITS C4 & C5 ELMHURST, IL 60126 Phone: (708) 834-9774 Fax: (708) 834-8689
- SOUTHEAST OFFICE** 5100 N.W. 33RD AVENUE, SUITE #152 FORT LAUDERDALE, FL 33309 Phone: (305) 735-2203 Fax: (305) 735-2227