

Ikegami[®]

CCD High Quality Portable Camera

HL-43





Taking full advantage of 2/3" IT CCD sensors with low smear and reduced FPN, the HL-43 delivers a horizontal resolution of 850 lines, achieved with newly devised pixel offset and processing technology, SHBA (Super High Band Aperture). The HL-43 provides outstanding image quality by use of state-of-the-art video processing technology, including newly developed "Super Color", as well as chroma aperture, black stretch/press, soft detail, and Super V. Its triax transmission to the base station is a new two channel (luminance, chrominance) type with an ultrahigh bandwidth of 8 MHz. This helps achieve high resolution for the total system configuration including the base station. The HL-43 can be docked with a Betacam SP VCR for operation without adapter. And it can be also combined with MII, S-VHS, Hi-8, and Pro Betacam with the aid of available adapters. In addition, this camera features a simple design with user-friendly controls.

Features

●SHBA (Super High Band Aperture)

The HL-43 incorporates 400,000-pixel IT CCD sensors with substantially reduced FPN and smear. A precision pixel offset and processing technology, SHBA (Super High Band Aperture), achieves a horizontal resolution of 850 TVL.

●Super Color

Improved auto knee and flare correction circuits, "Super Color" circuitry, reduce the "washed-out" appearance that may occur when shooting a colorful subject with very high brightness.

●Black Stretch/Black Press

The Black Stretch function enhances the shadow areas of high contrast scenes. The Black Press function emphasizes only bright areas of images so that shadow areas in the background look darker. The black press function will improve the contrast of a hazy low contrast scene.

●Chroma Aperture

In addition to the conventional mix DTL system, the camera incorporates a chroma aperture circuit which operates on objects containing no green component. Thanks to this circuit, high resolution can be maintained even when shooting an object in red, blue, or magenta which could not be previously corrected by traditional image enhancement systems.

●Soft DTL

The Soft DTL clips DTL edges at a fixed level so high contrast images may not be excessively edged. Soft DTL reduces harsh edges of a subject and provides for smooth and natural edge compensation.

●Super V

The HL-43 comes equipped with Super V capability to improve vertical resolution.

●Triax Transmission System

●The HL-43 employs a new cost effective two channel (luminance/chrominance) triax transmission system. In addition to composite signals, R/G/B, Y, P_R, and P_B can be simultaneously output at the base station. The cable between the base station and the camera can be extended to 1000m (when the cable diameter is 14.5mm).

- The HL-43 Triax system achieves 8MHz bandwidth for the luminance signal to provide a resolution of about 750 TV lines at the base station output, dramatically enhancing the resolution of the entire system.

●Multifunctional VF

- A newly developed 1.5" VF employs a quick-start tube which requires no preheating. VF DTL is added to the 550 line CRT monitor to offer clear viewfinder images.
- VF DTL, an "edge compensation circuit" dedicated to the viewfinder signal provides superior edge compensation unattainable with conventional peaking schemes. This results in improved resolution for the viewfinder.
- A lens-illuminating light is provided in the bottom of the viewfinder to facilitate the monitoring of lens IRIS, ZOOM, or FOCUS displays during shooting in a dark place.
- 4.5" and 6" viewfinders are also available for use as a studio/field camera.

●Electronic Shutter

In addition to 1/100, 1/120, 1/250, 1/500, 1/1000, and 1/2000 preset-speed electronic shutters, this camera is equipped with a variable-speed electronic shutter. This allows the shutter speed to be continuously varied by the OCP panel control to quickly respond to specific scene content including shooting a PC display monitor.

●Dockable with VCR

- The HL-43 can dock directly with a Betacam SP VCR without any adapter. It can also dock with MII, S-VHS, S-VHS-C, Hi-8, and Pro Betacam formats, with the adapters.
- Equipped with a sliding shoulder pad, the HL-43 achieves optimum balance on the shoulder of the cameraman, even when docked with a variety of VCRs and adapters with different weights.

●+48V Phantom Power

A +48 V phantom microphone power output is supplied as standard. Switching can be performed between the +48V phantom power and the +12V AB power to cover various types of microphones.



Specifications

Optical System	RGB prism type f1.4
Image Sensor	2/3" IT CCD
Effective Number of Pixels	Approx. 380,000 pixels (H768 × V497) (Total: Approx. 400,000 pixels)
Input Signal	Genlock signal 1 input (SYSTEM) Audio signal..... 1 input (XLR) Remote
Output Signal	Composite signal..... 3 outputs (BNC, SYSTEM, REMOTE) Component signal..... 1 output (SYSTEM) Y/C signal..... 1 output (SYSTEM) RGB signal..... 2 outputs (REMOTE SYSTEM) Audio..... 1 output (SYSTEM)
Lens Mount	B4 Bayonet
Optical Filter	3000K, 5600K+1/8ND, 5600K, Effect
Shutter	1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000 fixed speeds, and continuously variable speed range from 1/60.2 to 1/117.3
Horizontal Resolution	Luminance signal: 850 TV lines (at center) (DTL off)
S/N	-62dB (GAMMA, DTL off)
Illumination	2000 lux f5.6
Gain Selection	-3/0/+3/+6/+9/+12dB or -3/0/+6/+9/+15/+18dB
DTL Correction	H: Both rise and fall (with comb filter) Also CHROMA APERTURE V: Both rise and fall (2H system) SMPT E Bar
Color Bar	*Auto White Balance (with 2ch memory) *Auto Iris
Automatic Functions	*Auto Black Balance *Auto Knee

Power Consumption	16W approx. (include 1.5" VF)
Ambient Temperature	-20~45°C (-4~113.0°F)
Dimensions (WHD)	Camera Head: 107×282×182mm (4.2×11.1×7.2 inches)
Weight	Camera Head: 3.5kg (7.7 lbs.) approx. (include 1.5" VF) Camera Adapter: 1.3kg (2.9 lbs.) approx.
[Base station]	
Input Signal	External sync signal..... VBS bridge input Q • TV Video signal..... VBS bridge input RET-1 Video signal..... VBS bridge input RET-2 Video signal..... VBS bridge input Intercom RTS • Cleacom system RS-232C terminal Remote terminal
Output Signal	Composite signal..... 2 outputs Component signal..... 1 output each RGB signal..... 1 output each PM out..... 1 output R, G, B, R+G+B, Y, ENC WFM out..... 1 output R, G, B, SEQ, Y, ENC Audio..... 1 output 600Ω balanced 0dBm Intercom RTS • Cleacom system RS-232C terminal
Power Consumption	120VA approx. (include camera)
Dimensions (WHD)	483×132.5×410mm (19.0×5.2×16.1 inches)
Weight	22kg (48.5 lbs.) approx.

■ System Accessories



BS-40 Base Station

VF6-6U 6" VF**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