

Ikegami

Advanced Technology

14-bit Full Digital High-End SDTV Camera System

HK-399PW



The HK-399PW is a high performance full digital portable camera employing 14-bit A/D Converter.

Evolutionary High Quality

- 0.18 μ m Digital Process with 14-bit A/D Conversion - first camera in the world
- AIT (Advanced Interline Transfer) CCD
- S/N -68dB
- Triple filters

Flexible and Easy Operation

- Full Auto Setup
- Low Power Consumption
- System Expander for Studio Lens Application

Sophisticated features with digital technologies

- Variety of DTL functions
- Super-Knee
- Universal Color Control (Custom Color Effect)

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14-bit Full Digital High-End SDTV Camera System

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Evolutionary High Quality

■ **0.18μm Digital Process with 14-bit A/D Conversion - first camera in the world**

Using a newly developed digital process ASIC, precision designed at 0.18μm process, the video signals are digitized with 14-bit A/D conversion and up to 38-bit internal digital processing circuit.

Since non-linear processing such as gamma correction is performed digitally, consistent and repetitive high picture quality and stable reliability is assured.

■ **AIT(Advanced Interline Transfer) CCD**

Newly developed AIT CCDs offer high sensitivity of f11 and very low smear level of -135dB measured with 100,000 times lighting condition.

■ **S/N 68dB**

A high S/N ratio of 68dB for NTSC and 66dB for PAL is achieved. Superb high-quality pictures, with excellent S/N ratio, are obtained during all operating conditions since processing such as white shading, gamma, and DTL are all performed digitally.

■ **Triple filters**

The HK-399PW provides two built-in optical filter wheels and ECC (Electronic Color Compensation) Filter compliment is as follows. All filters are servo with remote control from the OCP and MCP.

- (1) ND (100%, 25%, 6.2%, 1.6%)
- (2) EFF (Clear, Cross, Snow Cross, Soft Focus)
- (3) ECC (3200K/4300K/6300K/8000K)

Flexible and Easy Operation

■ **Full Auto Setup**

By performing FULL AUTO SETUP, the total setup for video including lens, optical prism block, and CCDs can be made automatically. Additional auto setup routines include LEVEL AUTO adjusting only for video level and QUICK AUTO not requiring an external chart. As such, this camera is equipped with precise and automatic camera maintenance functions.

■ **Low Power Consumption**

The power consumption is only about 10W thanks to the latest Digital Process IC and signal processing.

■ **System Expander for Studio Lens Application**

For the requirement of a studio type camera, the System Expander SE-S500 is available. This unit will mount a large studio lens and 7" VF to the portable camera, providing operation comparable to a conventional studio type camera. It is easy to remove or install the portable camera in the SE.

Sophisticated features with digital technologies

■ **Variety of DTL functions**

A variety of DTL functions including New Slim DTL for thinner detail edges, New Skin DTL for increased range in softening the talent's facial complexion, Soft DTL for more natural picture, Diagonal DTL for cross color suppression and reduced moiré, Variable 8-step boost frequency for horizontal edge, and H/V balance control are incorporated. Also a newly developed "FINE DTL" prevents the increase of non-natural edges, and it contributes to an increase of edges on fine portions of the picture.

■ **Super-Knee**

The color reproduction in high luminance areas is improved since the high luminance signal is digitally processed with a Super-Knee system working from linear signals.

This system retains the color in the highlight area where it is washed out in conventional cameras.

■ **Universal Color Control (Custom Color Effect)**

Hue, saturation, and brightness on particular colors can be corrected subjectively. Two particular colors can be corrected. This can be used for Skin Tones by detecting the skin color and then adjusting its hue, saturation, and brightness.

■ **Compatible Base Station**



BS-388



BS-593

Specifications / Performance

CCD image sensor	2/3-inch 520,000 pixel AIT CCD
DSP Conversion	14-Bit A/D (Internal Max. 38-Bit)
Lens mount	BTA S-1005B (Standard)
Power Consumption	Approx. 10.W (w/o VF and TA)
Ambient Temperature	-20°C to 45°C (-4°F to 113°F)
Relative humidity	25% to 85% (No Condensation)
Weight	Camera head without lens, VF, and TA(Approx. 2.3kg./5.1lbs.)
Dimensions	W115XH200XD143.5 mm
(Camera head)	(4.53X7.87X 5.65 inches)
Sensitivity	F11 @ 2,000 lux
S/N	68dB (NTSC) / 66dB (PAL)
Modulation depth	80% or more (5MHZ at 16:9)
Limiting resolution	750 TV lines
Smear level	-135dB (real ability, measured with 100K times video)
Gain Control	-3, 0, +3, +6, +9, +12, +18, +24, +30, +36, +42, +48dB (selectable)
Minimum illumination	0.12 lux (48dB) / 0.004 lux (48dB + Optional frame accumulation module)
Electric Shutter	Preset 1/60(OFF), 1/100, 1/120, 1/250, 1/1000, 1/2000 Variable NTSC: 2H (1/7867sec) to 260H (1/60.5sec)
Lens file memory	Yes (8 lens)
Scene file memory	Yes (8 scene)
Memory card system	Smart media card

Design and specifications are subject to change without notice.

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