

**Ikegami**

*One-Piece DVCPRO HD Digital Camera*

# ***HDL-V90***



**Integrated Leading-Edge Digital Processing LSI  
12bit Full Digital Processing/  
2.2 Million Pixel 1080i FIT CCD**

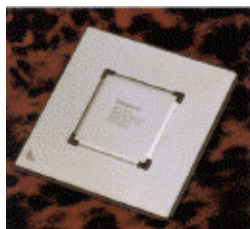
The HDL-V90 is an integrated DVCPRO HD digital camera, using 2.2 million pixel 1080i CCDs. With leading-edge next generation digital processing LSI (ASIC), resulting from Ikegami's advanced digital technology experience, this digital camera produces high-quality pictures through full digital processing including 12-bit A/D conversion. With a body as small and light as an SDTV camera, low in power consumption, high functionality, and integrated DVCPRO HD, this digital camera ensures the best performance in image reproduction as well as recording in HDTV.

**One-Piece DVCPRO HD Digital Camera**

# HDL-V90



## A small, light body and high-quality pictures are made possible with Advanced digital technology



■ Next-generation digital process ASIC 0.18 $\mu$  m

### ■ Integrated leading-edge next generation digital processing LSI (ASIC)

- Integrated cutting-edge next generation digital processing LSI (ASIC) with advanced signal processing capabilities uses the 0.18  $\mu$  m design rule.
- The boost frequency band can be set for a profile correction (DTL) circuit.
- This digital camera brings you higher quality pictures under any circumstances, and is as portable as an SDTV camera.
- Equipped with a DTL function that produces wide-band edging, the camera realizes high frequency images and a higher resolution in fine pictures.
- The Clear VF DTL function provides image enhancement in the viewfinder, only when the subject is in precise focus, differentiating it from subjects slightly out of focus.

#### Wide-band DTL function

This function improves edging of fine details in the pictures. Especially for wide angle shots, the image will have a higher resolution. Because of the broad image bandwidth of 30MHz for an HDTV image, with the standard DTL system it is hard to enhance the entire resolution. Now cutting-edge ASIC produces edging in a wider band, and brings out high frequencies and enhanced resolution, even on a small subject.

#### Clear VF DTL function

Improved VF DTL added to the image in the viewfinder makes the precise point of focus easier to find and makes it easier for the camera person to focus.

### ■ Full Digital

- Digital image processing is achieved through 12-bit A/D conversion and internal processing at a maximum of 38 bits.
- Digital nonlinear image processing is used for white shading correction and Gamma correction for consistent high-quality pictures and high level of reliability.

### ■ Small and light weight, with low power consumption

- Camera body weighs 4.8 kg.
- Power consumption is a low 35W when recording (28W in the REC pause mode)



## As easy to operate as a SDTV camera

### ■ Easy to operate, sophisticated functions



#### ■ Rotary encoder

A rotary encoder for establishing the camera settings is attached at the side so the operator can adjust or maintain the camera without a remote panel.



#### ■ Memory card function

Status information for operating the camera can be stored in a memory card (Smart Media: SSFDC 8MB). You can easily establish the camera settings by retrieving the stored data.



#### ■ P. FUNC function

This camera has a personal function switch that enables the operator to choose the available external control functions, depending on the usage.

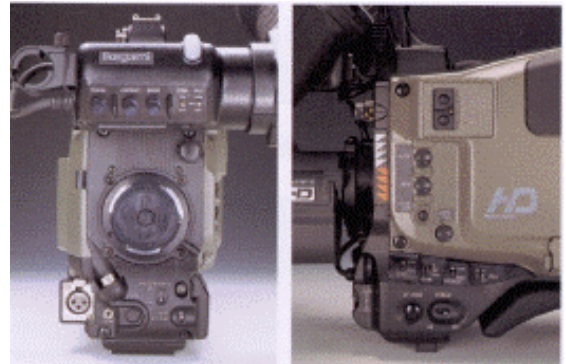
\*Functions to be set : +IRIS CORR, BLACK PRESS/STRETCH, etc.

#### ■ AHD (Auto Hue Detect)

This function detects flesh tone colors to be processed for Skin DTL, at the touch of one button. Skin DTL can be used in the field easily.

#### ■ VF Marker function

Markers of 4:3, 13:9 and 14:9 can be displayed in the viewfinder. You can create pictures as close as the final ON AIR pictures when down-converting and putting them on air.



### ■ Enhanced multipurpose functions

- In addition to self-contained operation, various remote control units can be used giving subjective control over a complete range of camera settings.

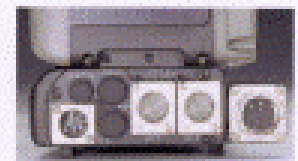


- Lens mounting is compatible with the 2/3 inch BTA S-1005B standard. The camera can be used with portable lens for SDTV as well as with HDTV lens.

- REC, PLAY, FF, REW can be controlled for VTR through a Remote Control Panel RCP-50.
- Pictures(B/W) with time code are available from Monitor OUT.
- With a VTR adapter connected and component signals output, the camera can be connected with various separate VTRs, compliant to BTA-1005S standard.
- A small VTR mechanism and a lower balance design provide a lower center of gravity for improved stability on the shoulder.
- Stereo microphone (XM-244) available as optional accessories.



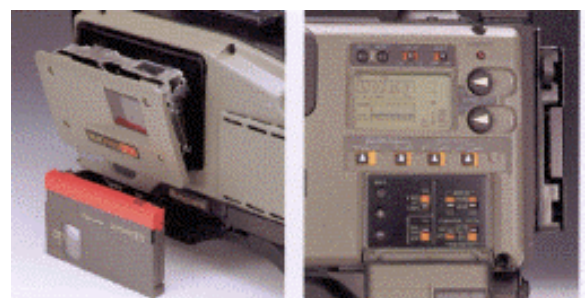
■ RCP-50



■ VTR Adapter

## Introducing DVCPRO HD VTR

- With this technology, high-quality pictures and sound can be digitally recorded for long periods with eight channels of 48kHz/16bit digital audio (two channels)
- You can record a 46-minute compact cassette tape.
- Full-color pictures (HD SDI output) and sound can be played back without an adapter.



## One-Piece DVCPRO HD Digital Camera

# HDL-V90



### Ratings / Performance

#### ■ Camera Section

Scanning System	1080i (59.94Hz)
CCD Image Sensor	2/3-inch FIT CCD x3
Picture Element	1920(H)x1080(V), 2,200,000pixels
Optical System	2/3-inch 3CCD f1.4
Lens Mount	2/3-inch BTA S-1005B
Optical Filter	CC: 3200K, 4300K, 6300K, CROSS
	ND: 100%, 25%, 6.2%, 1.6%
Shutter	OFF(1/60), 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000(sec.)
Quantization Bit	12 bit
Sampling Frequency	74.25/1.001MHz
GAIN	-3dB, 0dB, +3dB, +6dB, +12dB, +18dB, +24dB, +30dB
GAMMA	OFF, 0.35, -.4, 0.45
Electric Color Temperature	5600K
Viewfinder	2-inch Black & White Viewfinder
Input Signals	EXT Sync: PS/S 0.6Vp-p
	Audio : Line +4dBu, Mic -60dBu
Output Signals	Video : HD SDI (BNC 1ch)
	Y, Pb,Pr (26P 1ch: Option)
	VTR : HD SDI (sw itching video signals)
	Monitor : Y or R or G or B 1ch
Sensitivity	2000 lux/f8.0
Minimum Illumination	2 lux (f1.4, +30dB)
S/N	54dB
Smear	-130dB
Modulation Depth	Approx. 40% (800TV lines 27.5MHz)
Limiting Resolution	1000 TV lines
Registration Error	Less than 0.02% (excluding lens aberration)
Contour Correction	Vertical: 2H
	Horizontal: Boost Frequency
	17MHz ~ 22MHz

#### ■ VTR Section

Recording Time	Max 46min.
Tape	DVCPRO HD metal tape (L cassette)
Fast-Forward/Rewinding Time	Approx. 3min.

#### ● Video

Quantization Bit	8bit
Sampling Frequency	Y: 74.25/1.001MHz
	Pb Pr: 37.125/1.001MHz
Compress Rate	1/6.7
Quantization Bit Rate	100Mbps

#### ● Audio

Sampling Frequency	48kHz
Quantization Bit	16bit
Frequency Response	20Hz ~ 20kHz ± 1dB
Dynamic Range	90dB (1kHz, emphasis OFF, "A" weighted)
Head Room	20DB/18dB

#### ■ Common Section

Ambient Temperature	0°C ~ +40°C (+32°F ~ +104°F)
Relative Humidity	25% ~ 85% (Non-Condensing)
Power	Camera/Recorder
	Approx. 35W (REC mode/without VF)
	Approx. 28W (REC pause mode/without VF)
	2" Viewfinder: Approx. 5W
External Dimensions	W122.8 x H200 x L326 mm
	(W 4.83 x H7.87 x L12.83 inches)
Weight	Camera Head:
	Approx. 4.8kg (10.58 lbs)
	Without lens and VF
	2" VF: 780g (1.72 lbs)

Design and specifications are subject to change without notice.

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