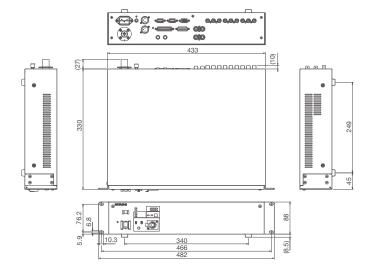
## **DIMENSIONS (RU-1500JY)**

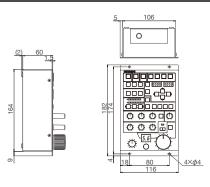
## **DIMENSIONS (CU-HD500)**

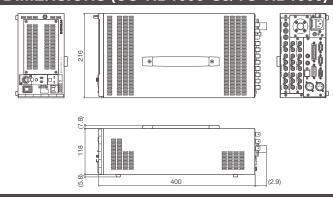
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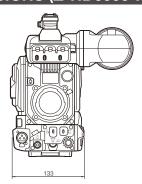
## DIMENSIONS (RU-1000VR)

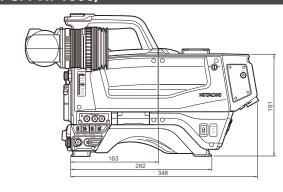
## DIMENSIONS (CU-HD1000-S8/TU-HD1000)

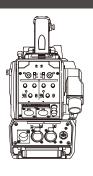




## DIMENSIONS (Z-HD6000 with CA-HF1000)







These Specifications are subject to change without notice.

## CAUTION: To ensure safe operation, please read the instruction manual before using this product.

## 

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## Hitachi Kokusai Electric

## **HITACHI**

# **Fully Digital HDTV Production Camera**

# **Z-HD6000**

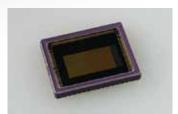




# 2.6 million pixel 3MOS sensor HDTV production camera

The Z-HD6000 is a high-performance HDTV portable production camera.

Hitachi has implemented the latest imaging technology by using newly developed 2.6 million pixel 3MOS sensors to create outstanding HD images for new achievements in high sensitivity and no vertical smear.



## Hitachi's advanced digital signal processing

Each essential part of the Hitachi Z-HD6000 camera system has its own DSP processor. Unique, independent DSP IC's are used for camera head processing, the transmission system and Camera Control Unit (CCU) processing. Hitachi's new, powerefficient digital signal processors are designed to work with future 2K imaging technologies, offering excellent return on investment. The Z-HD6000 achieves an outstanding signal-to-noise ratio specification of 60dB using Hitachi's proprietary low-noise circuit technology. Standard sensitivity is rated at F12 (59.94Hz)/F13 (50Hz) at 2000 lx. Clear images are obtained with little noise, even at high gain.

High horizontal resolution performance of 1100TVL (Luminance channel) is the pinnacle of picture sharpness and is an attribute of the most transparent signal processing path of any Hitachi digital camera manufactured to date.

## **Dockable design**

#### 2-Piece Chassis Design

Hitachi's 2-piece chassis allows the use of Digital Fiber, Digital Triax and Wireless camera adapters to offer the greatest flexibility of any camera in this price class.

#### **Streamlined Chassis**

The Z-HD6000 chassis is a fully integrated, 2-piece design with no dongles or external adapters making it a fully functional HDTV production camera.

# Digital signal transmission via Hybrid Fiber Optical Cable

The Z-HD6000 camera system utilizes industry standard Hybrid Fiber-optic cable (HFOC) connectors made of high-strength materials that insure durability and reliable performance under the most demanding TV production conditions. The maximum HFOC length with applied camera power and fully operational facilities is 4,000m (13,200 feet) with no utility power\*. It provides 10X the distance of Multicore cable. Optical power meters at the camera head (via engineering menu) and CCU front panel indicate the optical condition of both transmitting and receiving signals independently to accurately depict proximity to the "digital cliff" (maximum cable distance) or provide basic HFOC diagnostics.

\*HFOC distance with applied CCU power differs depending on system configuration. It is dependent on type of lens used, viewfinder, studio adapter, teleprompter and other accessories that may be connected thereby consuming power otherwise available for the camera head.





## Superb High Definition picture reproduction & enhancement tools

## **Real-time Lens Aberration Correction (RLAC)**

Modern HDTV lenses can still produce optical distortions. One of these called "Lateral chromatic aberration" can be reduced in certain lens models when used with the Z-HD6000 camera system. The Hitachi function is called RLAC (Real-time Lens Aberration Correction) and it dynamically corrects images using correction data provided by the lens, through a digital interface with the camera.



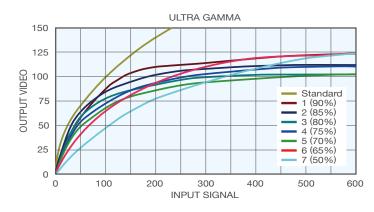
## **Luminance response tools**

#### **Black Stretch**

The Z-HD6000's Black stretch function allows for better reproduction of dark or underexposed areas by evenly raising the luminance response without changing the pedestal or white clip/knee settings. It is especially useful in high contrast image venues.

#### Ultra-Gamm

A new and useful function implemented in the Z-HD6000 is Ultra-Gamma, which provides seven different responses to dramatically increase exposure latitude of the camera in shooting conditions where lighting and scenery vary widely in intensity.



## **Color reproduction excellence**

## Triple-masking

The triple-masking function includes 12-vector, linear matrix and Skin tone masking providing users wide latitude in subject image color control. The 12-vector color corrector provides independent control of hue and saturation for six primary and six secondary combinations of colors. A 6-axis linear matrix provides overall color control for excellent, precise color rendition control. The Skin tone masking function provides "fine painting" (hue and saturation) of skin tones without affecting other colors in the scene.



Skin tone masking ON (Simulated image)

#### reset Masking

The Preset Masking function recalls known industry standard colorimetry values that are precisely calibrated at the factory. These color standards are: STANDARD (Hitachi standard) / ITU-709 / SMPTE240M /SMPTE-WIDE / NTSC / EBU.

### Picture sharpness enhancement

#### Skin tone Detail

The Skin tone Detail functions allow a flesh-color based softening of the image to achieve a more youthful look for on-camera personalities. Two individual memories exist as well as a function to automatically detect the hue, saturation and luminance of the Skin tone to be affected. Furthermore, the Skin tone Detail level can be adjusted to follow the lens' zoom to avoid 'rubber faces' in wide angle shots while using the function.



Skin tone Detail OFF

Skin tone Detail ON (Simulated image)

#### High-chroma detail

The High-chroma detail adjustments allow precise control of the detail level in highly color-saturated portions of the picture such as the petals of a rose or a colorful fabric.





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## **Other Useful Production Camera Features**

#### **Prompter and Floor Monitor Power**

The Z-HD6000 provides enough AC power to drive both a teleprompter and monitor through a Hybrid Fiber or Digital Triax CCU.

#### Floor Monitor Digital Video

The studio ON-AIR or Floor Monitor can be connected by SDI (digital) video directly from the camera head offering high quality critical viewing.

#### **Professional Audio Intercom Connectors**

Hitachi uses dependable XLR-professional type audio connectors for the 2 intercom and 2 MIC/LINE audio facilities.

#### **Focus Assist**

Focus Assist aids the camera operator in finding correct focus in the viewfinder. The Area Marker detects edges inside the area, while a focus indicator shows the actual detail level by a horizontal line.

#### **Gray-Scale Automatic Setup**

Z-HD6000 offers a Gray-Scale Auto-Setup function which automatically adjusts video parameters that can negatively affect images you are trying to capture and faithfully reproduce. Gain, Gamma, and Flare are corrected using a common 11-step gray scale chart and stored in memory.

RU-1500JY

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# Flexible Choice of Camera Control Units

## **Optical Fiber System**

The Z-HD6000 camera system can employ 2 different model control units to suit your budget for Studio and Field production.

The CU-HD1000-S8 and CU-HD500 optical fiber CCUs (camera control units) can be used worldwide due to their 50/60Hz switchable universal power supplies. They furthermore comply with RoHS/ WEEE directives\*.

The CU-HD1000-S8 additionally has the ability to output 1080i (50/59.94) or 720p (50/59.94) and is a half-rack size 3RU's high, weighing 8.5kg (approx.).

The CU-HD500 is 88mm high and, of 2-RU EIA 19-inch rack width, weighing 9kg. (approx.).

Both CCUs employ the same control panels, data cables, accessories and peripherals.

\*RoHS is abbreviation "Restriction of Hazardous Substances" in electrical and electronic equipment". It is a European Directive aiming to restrict the use of certain hazardous substances in the production commonly used in electrical and electronic equipment (EEE)

#### CU-HD1000-S8

Unique Optical Power Meter







CU-HD1000-S8 Rear Panel

#### **CCU Features and Benefits**

- Front panel Optical Power meter.
- Simultaneous HD-SDI and SD-SDI outputs with 2 channel embedded
- Analog RGB or Y, B-Y, R-Y component outputs. (CU-HD1000-S8)
- 4 auxiliary returns. (CU-HD1000-S8)
- Dedicated teleprompter channel and AC power.
- ARIB-type color bar output.
- 2 channel balanced analog Mic audio outputs.
- Genlock with composite or tri-level sync.
- 2-tally (Red/Green) system.
- 2-channel, 2W/4W intercom system.
- RS-232C remote control.

CX-HD1000 Triax adaptor

■ TCP/IP Network connectivity via RJ45. (CU-HD1000-S8)

### **CU-HD500**





CU-HD500 Rear Panel

TU-HD1000 Triax base station

## Hitachi's Digital Triaxial cable transmission system addresses two application requirements from our customers worldwide 1. It is the next best, completely digital, signal transport after fiber-optic

cable. No other HDTV triaxial cable transmission system comes close. 2. In applications where traditional triax is already in use, substantial

savings in cabling infrastructure costs can be realized. Hitachi's patented Digital Triax System consists of the camera head triax adaptor and the corresponding TU-HD1000 camera control unit.

The main advantages and characteristics are:

- Hitachi's patented, fully digital, bi-directional signal transmission
- Completely Digital Employs no RF modulation or modems.
- Little to no signal degradation.

**Digital Triax System** 

- Capitalizes on reduced costs and maintainability of triaxial cable & connectors
- CCU includes 1080i (50/59.94) / 720p (50/59.94) cross-converter for D-SDI outputs.
- Can also operate on simple Coax cable with local head power.
- Built in, high-performance SDTV up/ down converters.
- Similar IO's as the CU-HD1000.

# Remote Control Unit

- The RU-1000VR is a compact remote operation panel designed for easy operation of standard camera functions. Iris and master black adjustments employ "VR-type" rotary knob controls and commonly used controls and functions are directly and instantaneously accessible to the video control engineer.
- ■The RU-1500JY is a high performance touchscreen remote operation panel designed for ease of use. Easily adjustable using the 3.5" LCD touchscreen panel and rotary encoders, plus custom switches to further support the professional user in designing a personal workflow. The RU-1500JY provides an integrated SD card slot for transferring user setup and Scene File information, and Ethernet connectivity for control over an IP network.

# Studio and Field Production Viewfinders

The Z-HD6000 camera system offers three choices for Studio or Field production viewfinders. Model VF-L90HD is a color 9-inch TFT-LCD screen and Model HDF-700H is a color 7-inch TFT-LCD screen which are designed for critical color viewing of the image. The LCD screen offers a wide viewing angle and fast response time for a lag free, crisp image.



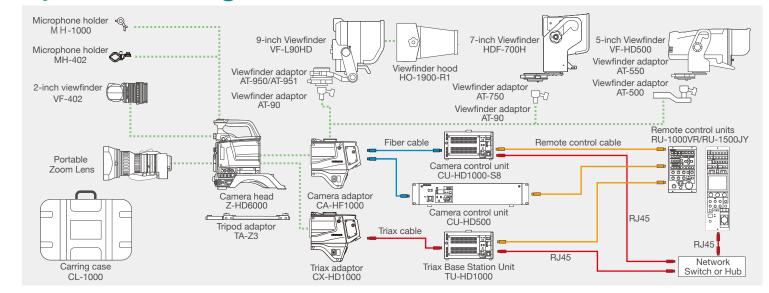
VF-L90HD Viewfinder HDF-700H Viewfinder





VF-HD500 Viewfinder /AT-550

# System configuration chart



# **Fully Digital HDTV Production Camera Z-HD6000**

#### Camera Head Z-HD6000 / Z-HD6000E Z-HD6000 Z-HD6000E 2/3-inch, MOS image sensor Total pixels: 2,270(H) × 1,144(V) 2.6 million pixels 1,920(H) × 1,080(V) / 59.94i | 1,920(H) × 1,080(V) / 50i Optical Filters 1x manual filter wheel w/4 filter positions Clear, Cross, 1/16ND, 1/64ND ECC (Electronic Color Correction) with 5 settings (3200K, 4300K, 5600K, 6300K, 8000K) F12 @ 2000 lx F13 @ 2000 lx (3200 K, 89.9% reflectance) (3200 K, 89.9% reflectance) gnal to Noise Ratio 60dB (1080i) (typical) 1100TVL 0.01 % (excluding lens characteristics) B4 bayonet-type \_ (low) -3, 0dB M (medium) 0, +3, +6, +9, +12, +15, +18, +21dB H (high) +3, +6, +9, +12, +15, +18, +21, +24dB 1/100, 1/250, 1/500, 1/1000, 1/60, 1/250, 1/500, 1/1000, 1/2000. AES 1/2000. AES wer consumption Camera head 16 W Head only (without VF) 133 (W) x 191 (H) x 262 (D) mm 2.1kg, 4.6lbs. Camera head Operating temp -10°C to +45°C, 14°F to 113°F 1x BNC HD-SDI VF out (Character ON/OFF) or HD-SDI RET out 4-pin Multi connector for remote control panel 20-pin Multi VF connector, 12-pin Multi LENS connector 3-pin XLR MIC-1 connector, SD Memory Card Slot

	o pin Azir Wilo i conflictor, ob Wildingry Card Clot
9-inch viewfinder VF-L90HD	
Construction	1080i/720p field frequency 59.94/50Hz
Number of pixels	1280(H) x 768(V) normal scan (16:9)
Color temperature	6500K
Input Signals	Analog Y/Pb/Pr/SYNC
Functions	BRIGHT, CONTRAST, PEAKING knob VR power on/off, tally on/off, Marker on/off, (center marker, 4 : 3 marker, area marker)
Internal tally	Red/Green
Dimensions	230(W) x 185(H) x 86(D)
Mass	1.6kg, 3.5lbs
Attachment (Option)	AT-951(mass: 1.6kg, 3.5lbs AT-90 (mass: 0.7kg, 1.54lbs)

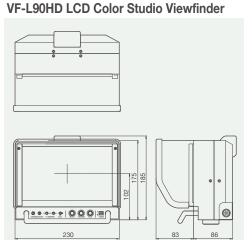
7-inch Viewfinder HDF-700H	
Picture Resolution	800 (H) x 480 (V)
Input Signals	Analog Y/Pb/Pr
Internal tally	Red/Green
Dimensions	195 (W) x 153 (H) x 50 (D)mm
Mass	1.0kg, 2.2lbs approx.

Teleprompter power output  1x 5-pin, 230VAC, 60W to 100W, external prompter Tally drive out (depending on configuration accessories)  Microphones  Chnl1 & 2 Line or MIC level select (MENU), with phantom power on/off  Return/ Aux switcher  2-channel, 4-input remote AUX/VF video select connector (RET control)  Video Inputs & Outputs  2x HD-SDI out, 1x SD analog teleprompter out shared with Genlock in  Other I/O  1x 5-pin script lamp +12VDC (1.0A max) 1x 6-pin VF AUX return (for use in cranes or extended Head/VF configurations) 1x 4-pin XLR, 12VDC, power input	Fiber Camera Adaptor CA-HF1000/CA-HF1000E	
SMPTE-274M  Intercom  2x channel, 5-pin each XLR, channel selection, MIC on/off, volume  2x, PGM audio level controls w/ Chnl1 & Chnl2 intercom mix Teleprompter power output  1x 5-pin, 230VAC, 60W to 100W, external prompter Tally drive ou (depending on configuration accessories)  Microphones  Chnl1 & 2 Line or MIC level select (MENU), with phantom power on/off  Return/ Aux switcher  2-channel, 4-input remote AUX/VF video select connector (RET control)  Video Inputs & Outputs  2x HD-SDI out, 1x SD analog teleprompter out shared with Genlock in  Other I/O  1x 5-pin script lamp +12VDC (1.0A max) 1x 6-pin VF AUX return (for use in cranes or extended Head/VF configurations) 1x 4-pin XLR, 12VDC, power input	CCU connector	
Program audio  2x, PGM audio level controls w/ Chnl1 & Chnl2 intercom mix Teleprompter power output  1x 5-pin, 230VAC, 60W to 100W, external prompter Tally drive ou (depending on configuration accessories)  Microphones  Chnl1 & 2 Line or MIC level select (MENU), with phantom power on/off  Return/ Aux switcher  2-channel, 4-input remote AUX/VF video select connecto (RET control)  Video Inputs & Outputs  2x HD-SDI out, 1x SD analog teleprompter out shared with Genlock in  Other I/O  1x 5-pin script lamp +12VDC (1.0A max) 1x 6-pin VF AUX return (for use in cranes or extended Head/VF configurations) 1x 4-pin XLR, 12VDC, power input	Video transmission system	i any arguar, or an obtromar, to our, the readment g,
Teleprompter power output  1x 5-pin, 230VAC, 60W to 100W, external prompter Tally drive out (depending on configuration accessories)  Microphones  Chnl1 & 2 Line or MIC level select (MENU), with phantom power on/off  Return/ Aux switcher  2-channel, 4-input remote AUX/VF video select connector (RET control)  Video Inputs & Outputs  2x HD-SDI out, 1x SD analog teleprompter out shared with Genlock in  Other I/O  1x 5-pin script lamp +12VDC (1.0A max) 1x 6-pin VF AUX return (for use in cranes or extended Head/VF configurations) 1x 4-pin XLR, 12VDC, power input	Intercom	
(depending on configuration accessories)  Microphones Chnl1 & 2 Line or MIC level select (MENU), with phantom power on/off  Return/ Aux switcher 2-channel, 4-input remote AUX/VF video select connector (RET control)  Video Inputs & Outputs 2x HD-SDI out, 1x SD analog teleprompter out shared with Genlock in  Other I/O 1x 5-pin script lamp +12VDC (1.0A max) 1x 6-pin VF AUX return (for use in cranes or extended Head/VF configurations) 1x 4-pin XLR, 12VDC, power input	Program audio	2x, PGM audio level controls w/ Chnl1 & Chnl2 intercom mix
with phantom power on/off  Return/ Aux switcher  2-channel, 4-input remote AUX/VF video select connector (RET control)  Video Inputs & Outputs  2x HD-SDI out, 1x SD analog teleprompter out shared with Genlock in  Other I/O  1x 5-pin script lamp +12VDC (1.0A max) 1x 6-pin VF AUX return (for use in cranes or extended Head/VF configurations) 1x 4-pin XLR, 12VDC, power input	Teleprompter power output	····   p···, === ····   ···   ···   ···   ···   p····   p····   ···   ···   ···
( RET control )  Video Inputs & Outputs  2x HD-SDI out, 1x SD analog teleprompter out shared with Genlock in  Other I/O  1x 5-pin script lamp +12VDC (1.0A max) 1x 6-pin VF AUX return ( for use in cranes or extended Head/VF configurations ) 1x 4-pin XLR, 12VDC, power input	Microphones	· · · · · · · · · · · · · · · · · · ·
with Genlock in  Other I/O  1x 5-pin script lamp +12VDC (1.0A max) 1x 6-pin VF AUX return ( for use in cranes or extended Head/VF configurations ) 1x 4-pin XLR, 12VDC, power input	Return/ Aux switcher	2-channel, 4-input remote AUX/VF video select connector ( RET control )
1x 6-pin VF AUX return ( for use in cranes or extended Head/VF configurations ) 1x 4-pin XLR, 12VDC, power input	Video Inputs & Outputs	
Mass 2 2kg 4 8lbs	Other I/O	1x 6-pin VF AUX return (for use in cranes or extended Head/VF configurations)
Lizitg, fiolog.	Mass	2.2kg, 4.8lbs.

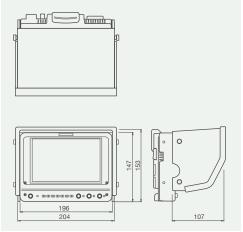
2-inch Viewfinder VF-402 (59.94Hz) / VF-402E (50Hz)	
Construction	Metal Die-cast chassis & mount
	2-inch BW 16:9 CRT
	Diopter (CRT Focus Ring)
	VF angle rotation
	X-Y mechanical movement
Resolution	650 TV lines
Functions	BRIGHT, CONTRAST, PEAKING knob VR (front facing)
Internal tally	Red/Green
Tally switch	Tally switch OFF
	NORMAL
	HIGH

B&W CRT Viewfinder VF-HD500 (59.94Hz) / VF-HD500E (50Hz)	
Construction	High-impact plastic
CRT	5-inch B&W 4: 3 CRT with removable hood
Resolution	750TVL
Functions	Bright, Contrast, Peaking, knobs VR front-facing
Internal Tally	Red/ Green, Front-facing high brightness lamp
Tally controls	Tally On/ Off
Mass	1.8kg, 4lbs
Power consumption	15W (approx.)

#### **HDF-700H LCD Color Studio Viewfinder** VF-HD500 B&W CRT Studio Viewfinder



DIMENSIONS



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Camera Control Unit	CU-HD1000-S8 (59.94Hz) / CU-HD1000E-S8 (50Hz)
Genlock	1x BNC, B-BST 0.45Vp-p/75Ω (loop through)
	HDTV tri-level sync 0.60Vp-p/75Ω (loop through)
Digital Return 1/2/3/4	4x BNC, HD SDI or SD SDI
Analog Return 1/2	2x BNC, VS or VBS 1.0Vp-p/75Ω (loop through)
Prompt	1x BNC, VS or VBS 1.0Vp-p/75Ω (loop through)
Intercom (Headset)	5-pin XLR, -60dBm
Communication	1x D-sub 25-pin,Incom,Tally
Intercom	0dBm / 600Ωat 4Wire,0dbu or -15dbu/200Ωat 2Wire
PGM	0dBm / 600Ω
R/G TALLY	DC or contact supply
Output signals	
ENCR	3x BNC, VBS 1.0Vp-p/75Ω
R-Y or	1x BNC, NTSC : 0.7Vp-p, PAL : 0.525Vp-p/ 75Ω
R	VS 1.0Vp-p/ 75Ω (Selectable)
Y or	1x BNC, VS 1.0Vp-p/ 75Ω
G	1x BNC, VS 1.0Vp-p/ 75Ω (Selectable)
B-Y or	1x BNC, NTSC : 0.7Vp-p, PAL : 0.525Vp-p/ 75Ω
	VS 1.0Vp-p/ 75Ω (Selectable)
Digital Out	3x BNC, HD-SDI (Embedded audio available)
	3x BNC, HD-SDI or SD-SDI selectable (Embedded audio available)
	HD-SDI or SD-SDI selectable PIX (Embedded audio available)
PIX (R,G,B,ENCR)	1x BNC, VS or VBS 1.0Vp-p/ 75Ω
WFM OUT (R,G,B,ENCR)	1x BNC, VS or VBS 1.0Vp-p/ 75Ω
MIC OUT 1	1x XLR, 3-pin, 0dBm/ 600Ω
MIC OUT 2	1x XLR, 3-pin, 0dBm/ 600Ω
Intercom (headset)	1x XLR, 5-pin, 0dBu Max +15dB
Remote 1	1x 4-pin, 1.5Vp-p or 1x D-sub, 9-pin RS-232C (Switchable)
Remote 2	1x 4-pin, 1.5Vp-p
TALLY OUT	1x D-sub 9-pin
R/G Tally	Contact or Voltage selectable
WFM control	1x D-sub 15-pin WFM 0-7, 0/5V,
Power supply voltage	CU-HD1000J AC100V @ 50/60Hz
	CU-HD1000U AC117V @ 60Hz
	CU-HD1000E AC230V @ 50Hz
HFOC maximum cable distance	4,000m (13,200 feet) with no utility power*
Operating temperature	0°C to 40°C, 32°F to 104°F
Mass	8.5kg, 19.1lbs.
Power consumption	210W approx. (AC operation, including SK-HD1000,
	VF-402 and AUX POWER OUT 100VA)

Camera Control Unit CU-HD500 (59.94Hz) /CU-HD500E (50Hz)
--

Genlock	1x BNC, B-BST 0.45Vp-p/75Ω (loop through)
	HDTV tri-level sync 0.60Vp-p/75Ω (loop through)
Digital Return 1/2	1x BNC, HD SDI or SD SDI
Prompt	1x BNC, VS or VBS 1.0Vp-p/75Ω (loop through)
Intercom (Headset)	5-pin XLR, -60dBm
Communication	1xD-sub 25-pin,Incom,Tally
Intercom	$0dBm / 600\Omega$ at $4Wire$ , $0dbu$ or $-15dbu / 200\Omega$ at $2Wire$
PGM	$0dBm / 600\Omega$
R/G TALLY	Contact or DC supply
Digital Out	2x BNC, HD-SDI (Embedded audio available)
	4x BNC, HD-SDI or SD-SDI selectable (Embedded audio available)
	HD-SDI or SD-SDI selectable PIX (Embedded audio available)
MIC OUT 1	1x XLR, 3-pin, 0dBm/ 600Ω
MIC OUT 2	1x XLR, 3-pin, 0dBm/ 600Ω
Intercom (headset)	1x XLR, 5-pin, 0dBu Max +15dB
Remote 1	1x 4-pin, 1.5Vp-p
Remote 2	1x 4-pin, 1.5Vp-p
MIC REMOTE	1x D-sub 15-pin MIC1.2 GAIN
TALLY OUT	1x D-sub 9-pin
R/G Tally	Contact or Voltage selectable
WFM control	1x D-sub 15-pin WFM 0-7, 0/5V
Power supply voltage	CU-HD500J AC100V @ 50/60Hz
	CU-HD500U AC117V @ 60Hz
	CU-HD500E AC230V @ 50Hz
HFOC maximum cable distance	,
Operating temperature	0°C to 40°C, 32°F to 104°F
Mass	9kg, 19.8lbs
Power consumption	300W approx. (AC operation, including SK-HD1000,
	VF-402 and AUX POWER OUT 100VA)

<sup>\*</sup> The maximum length of the cable supplying power to the camera varies with the camera system configuration and with the type of optical fiber cable.

raix Base Station	TU-HD1000 (59.94Hz) / TU-HD1000E (50Hz
Genlock	1x BNC, B-BST 0.45Vp-p/75Ω (loop through)
	HDTV tri-level sync 0.60Vp-p/75Ω (loop through)
Digital Return 1/2/3/4	4x BNC, HD SDI or SD SDI
nalog Return 1/2	2x BNC, VS or VBS 1.0Vp-p/75Ω (loop through)

1x BNC, VS or VBS 1.0Vp-p/75Ω (loop through)

5-pin XLR, -60dBm 1x D-sub 25-pin,Incom,Tally  $0dBm\,/\,600\Omega$  at 4Wire,0dbu or  $-15dbu/200\Omega$  at 2Wire0dBm/ 600Ω PGM R/G TALLY DC or contact supply

utput signals ENCR 3x BNC, VBS 1.0Vp-p/75 Ω 1x BNC, NTSC : 0.7Vp-p, PAL : 0.525Vp-p/ 75Ω

VS 1.0Vp-p/ 75Ω (Selectable) 1x BNC, VS 1.0Vp-p/ 75Ω 1x BNC, VS 1.0Vp-p/75Ω (Selectable) 1x BNC, NTSC : 0.7Vp-p, PAL : 0.525Vp-p/ 75Ω

VS 1.0Vp-p/ 75Ω (Selectable) gital Out 3x BNC, HD-SDI (Embedded audio available)

3x BNC, HD-SDI or SD-SDI selectable (Embedded audio available) HD-SDI or SD-SDI selectable PIX (Embedded audio available) IX (R,G,B,ENCR) 1x BNC, VS or VBS 1.0Vp-p/ 75Ω 1x BNC, VS or VBS 1.0Vp-p/ 75Ω

1x XLR, 3-pin, 0dBm/ 600Ω IIC OUT 2 1x XLR, 3-pin, 0dBm/ 600Ω 1x XLR, 5-pin, 0dBu Max +15dB 1x 4-pin, 1.5Vp-p or 1x D-sub, 9-pin RS-232C (Switchable 1x 4-pin, 1.5Vp-p TALLY OUT 1x D-sub 9-pin Contact or Voltage selectable

1x D-sub 15-pin WFM 0-7, 0/5V, TU-HD1000J AC100V @ 50/60Hz TU-HD1000U AC117V @ 60Hz

TU-HD1000E AC230V @ 50Hz 0°C to 40°C, 32°F to 104°F 7.9Kg,17.4lbs.

210W approx. (AC operation, including SK-HD1000, VF-402 and AUX POWER OUT 100VA) Triax Camera Adaptor CX-HD1000 (59.94Hz) / CX-HD1000E (50Hz)

CCO connector	1x-1nax connector
Video transmission system	Fully digital, bi-directional, 10-bit, 4 : 2 : 2 sampling, SMPTE-274M
Intercom	2x channel, 5-pin each XLR, channel selection, MIC on/off, volume
Program audio	2x, PGM audio level controls w/ Chnl1 & Chnl2 intercom mix
Teleprompter power output	1x 5-pin, 230VAC, 60W to 100W, external prompter Tally drive out ( depending on configuration accessories )
Microphones	Chnl1 & 2, Line or MIC level select (MENU), with phantom power on/off
Return/ Aux switcher	Remote AUX/VF video select connector ( RET control )
Video Inputs & Outputs	2x HD-SDI out (1x HD/SD-SDI Cam/Ret, SD-SDI PPT switchable) 1x SD analog out (VBS/PPT), Genlock (Tri-level sync) switchable
Other I/O	1x 5-pin script lamp +12VDC (1.0A max) 1x 6-pin VF AUX return ( for use in cranes or extended Head/VF configurations ) 1x 4-pin XLR, 12VDC, power input
Mass	2.6kg, 5.7lbs

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