



# HDC-2000 Series HD Camera

HDC-2500 Multi-format HD Camera HDC-2400

Multi-format HD Camera

## HDCU-2000

Full-rack-size Camera Control Unit

## HDCU-2500

Half-rack-size Camera Control Unit

Preliminary

# Sony's new flagship camera with state-of-the-art technologies

Sony introduces a powerful solution for HD studio operations with the HDC-2000 Series System Camera in two models: Sony's full-featured flagship model, the HDC-2500 and its basic model, the HDC-2400.

For use in a wide range of shooting applications, Sony offers two types of camera control unit (CCU) for connection with these cameras: the HDCU-2000 full-rack-size CCU and the HDCU-2500 half-rack-size CCU.

HDC-2000 Series cameras provide superior picture quality by incorporating a newly developed high-performance 2/3-inch CCD image sensor and a Digital Signal Processor (DSP) with 16-bit A/D converter. In addition, HDC-2000 Series cameras incorporate a 3G fiber transmission system as a standard feature.

With their innovative high performance and advanced operability, HDC-2000 Series cameras are outstanding acquisition tools for a broad range of HD production applications.



HDC-2500 / HDC-2400

# Excellent picture quality

HDC-2000 Series cameras are equipped with three new 2/3-inch-type CCD sensors, which deliver superior picture performance. They also incorporate a new DSP with 16-bit A/D converter.

Due to Sony's advanced sensor technologies, this imager provides sensitivity of F10 (1920 x 1080/59.94i mode) and F11 (1920 x 1080/50i mode), and a remarkable signal-to-noise ratio of 64 dB when the Noise Suppression function is activated.

A broad range of output formats are available for various shooting applications, such as sports and live production.

- 1080i/50, 1080i/59.94, 720p/50, 720p/59.94
- 1080p/23.98, 1080p/25, 1080p/29.97\*1
- -1080p/50, 1080p/59.94\*2
- 1080i/100, 1080i/119.88, 720p/100, 720p/119.88\*<sup>3</sup> as double speed capturing for slow motion
- RGB 4:4:4 output with user gamma capability\*4
- \*1 An optional software HZC-PSF20 is required for HDC-2400
- \*2 An optional software HZC-PRV20 is required for HDC-2400
- \*3 An optional software HZC-DFR20 is required for HDC-2400
- \*4 An optional software HZC-UG444 is required for HDC-2400

Sony's camera systems including the HDC-2500, HDC-2400, HDCU-2000, and HDCU-2500 offer a 3G capability as standard. This high-performance feature enables users to shoot in various capturing formats.

## Double-speed acquisition for excellent slow-motion picture\*1

HDC-2000 Series cameras can capture images at double speed. This function allows users to produce impressive slow-motion pictures, ideal for sports and various other creative shooting applications.

Acquisition is available at 1080i/100, 1080i/119.88, 720p/100, and 720p/119.88.

#### 3D production with 3G fiber transmission

The HDC-2000 Series is equipped with a 3G fiber transmission system as standard, ideal for 3G and 3D production.

\*1 An optional software HZC-DFR20 is required for HDC-2400

## 1080p/60 and 1080p/50 capturing capability

Breathtaking high-quality images can be captured with a 1080p/60 or 1080p/50 format mode.

This function is ideal for sporting events that include scenes with fast movement.

#### **Network Trunk interface**

This interface is extremely beneficial when building a new IT system, as it provides additional flexibility in live production.

#### Long-distance signal transmission

Sony's advanced signal transmission technologies allow for signals and power to be transmitted up to 4 km with the HDCU-2000 Camera Control Unit (CCU) or 1.8 km with the HDCU-2500 CCU.

Long-distance signal transmission is ideal for sporting events such as golf tournaments.

## Stylish and robust camera body

HDC-2000 Series cameras incorporate carbon fiber reinforced plastic (CFRP) in their outer panels to provide high rigidity within a stylish design.



# Variety of functions for any shooting conditions

The HDC-2000 Series also includes a wide range of camera functions that have been inherited and expanded from Sony's earlier successful cameras.

## Auto Lens chromatic Aberration Compensation function (ALAC)

With the newly designed digital signal processor (DSP) LSI, ALAC function automatically compensates for lens chromatic aberration.

The ALAC function for HDC-2000 Series cameras has been remarkably improved. This function works in both horizontal as well as vertical directions.

#### **Adaptive Matrix function**

When Adaptive Matrix function is activated, images with well-balanced detail can be reproduced even in strong monochromatic light conditions.

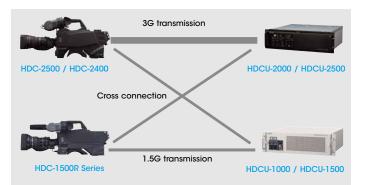
This function is highly beneficial for stage events with strong monochromatic light.

## Natural Skin-tone Detail function

The Natural Skin-tone Detail function improves upon Sony's powerful skin detail functionality, and is particularly effective in maintaining eyebrow fine detail.

#### Cross connecting capability with the HDC-1500R Series

Each camera can work with the other camera's CCU.



## **Specifications**

		HDC-2500	HDC-2400	
General				
Power requirement		240 V AC, 1.4 A (max.), 180 V DC, 1.0 A (max.), 12 V DC, 7 A (max.)		
Operating temperature		-4°F to +113°F (-20°C to +45°C)		
Storage temperature		-4°F to +140°F (-20°C to +60°C)		
Weight		9 lb 15 oz (4.5 kg)		
Camera section				
Pickup device		3-chip 2/3-inch type Progressive CCD		
Effective picture elements		1920 x 1080 (H x V)		
Signal format		1080i/50, 1080i/59.94, 720p/59.94, 720p/50		
		1080p/23.98, 1080p/24, 1080p/25, 1080p/29.97 *1		
		1080p/50, 1080p/59.94 *2		
		1080i/100, 1080i/119.88, 720p/100, 720p/119.88 *3		
		(For x2 Slow Motion Shooting)		
		RGB 4:4:4 Output *4		
Spectrum system		F1.4 prism system		
Built-in filters		A: CROSS, B: 3200 K, C: 4300 K,		
built-iff illiers	CC	D: 6300 K, E: 8000 K	—	
		1: CLEAR, 2: 1/4ND, 3: 1/8ND,	1: CLEAR, 2: 1/4ND, 3: 1/16ND	
	ND	4: 1/16ND, 5: 1/64ND	4: 1/64ND, 5: CROSS	
Sensitivity				
Sensitivity		F10 (1080i/59.94 mode), F11 (1080i/50 mode)		
Cinnel to pains only (horizon		(at 2000 k, 3200 K, 89.9% reflectance)		
Signal-to-noise ratio (typical)		Approx. 64 dB (with Noise Suppression)/ 60 dB (typical)		
Moduration depth (1080i typical)		Y: 50% at 27.5 MHz (800 TV lines with typical lens)		
Input/Output		RNC (v1) (2C / UD CDL output)		
SDI 1		BNC (x1) (3G / HD-SDI output)		
SDI 2		BNC (x1) (HD-SDI input / output)		
SDI monitor output		BNC (x1) (HD-SDI / SD-SDI)		
Prompter output / Genlock input		()		
Prompter output / Return input				
Test output		BNC (x1), 1 Vp-p, 75 Ω		
Mic input		XLR 3-pin (x1) (female)		
Audio input (Ch1, Ch2)		XLR 3-pin (x2) (female)		
Intercom 1 / Intercom 2		XLR 5-pin (x2) (female)		
Earphone output		Stereo mini-jack 3-pin (x1)		
Return control input		6-pin (x1)		
Tracker		10-pin (x1)		
Crane		12-pin (x1)		
Remote		8-pin (x1)		
Network TRUNK		RJ-45 (x1)		
Lens		12-pin (x1)		
Viewfinder		20-pin (x1)		
CCU		Optical / electrical multi-connector (x1)		
DC input		XLR 4-pin (x1)		
DC output		Mini type 4-pin (x1) (DC 10.5 V to 17V, max. 0.5 A)		
		2-pin (x1) (DC 10.5 V to 17V, max. 2.5 A)		
USB		Type A 4-pin (x1)		

#### Extensive accessory compatibility (HDC-1500R & HDC-2000 Series)

All accessories can be used for both the HDC-1500R Series and the HDC-2000 Series.



HDLA-1500 Series Large Lens Adaptor



HDVF-FI75 7.4-inch Color HD Viewfinder



HKC-T1500 HD CCD Block Adaptor

	HDCU-2000	HDCU-2500			
General					
Power supply	100 V AC to 240 V AC, 50/60 Hz				
Operating temperature	41°F to 104°F (5°C to 40°C)	14°F to 104°F (-10°C to +40°C)			
Storage temperature	-4°F to +140°F (-20°C to +60°C)				
Dimensions (W x H x D)	16 7/8 x 5 1/4 x 16 1/4 in	8 x 5 x 16 1/4 in			
(excluding protrusions)	(426 x 133 x 410 mm)	(202 x 127 x 410 mm)			
Weight	38 lb 9 oz (17.5 kg)	14 lb 12 oz (6.7 kg)			
Input/Output					
Camera	Optical / electrical multi-connector (x1)	Optical / electrical multi-connector (x1)			
	240 V AC power supply	180 V DC power supply			
Intercom/Tally/PGM	D-sub 25-pin (x1) female				
RCP/CNU	8-pin (x1)				
TRUNK A	12-pin (x1)				
TRUNK LINE	D-sub 9-pin (x1) female,				
	RS-232C/422 system	—			
Network TRUNK	RJ-45 8-pi	in (x1)			
LAN (RCP/MSU)	RJ-45 8-pin (x1)				
I/O port	D-sub 15-pin (x1)	—			
SDI return input	BNC (x4) (3G / HD / SD)	BNC (x3) (3G / HD / SD / VBS)			
VBS return input	BNC (x4), 1 Vp-p, 75 Ω	bive (x3) (307 Hb7 3b7 Vb3)			
Prompter input	BNC (x4), loop-through output, VBS, 1 Vp-p, 75 $\Omega$	BNC (x2), loop-through output, VBS, 1 Vp-p, 75 Ω			
Reference input	BNC (x2), loop-through output				
Audio output (Ch1, Ch2)	XLR 3-pin (x2) (male), 0 dBu / -20 dBu / +4 dBu				
Mic remote	D-sub 15-pin (x1)				
AES/EBU output	BNC (x1)	—			
Sync output	BNC (x1)	PNC (v1)			
Character output	BNC (x1)	BNC (x1)			
3G / HD-SDI output	BNC (x4)	BNC (x3)			
HD-SDI / SD-SDI output	BN	C (x4)			
HD TRUNK output	BN	C (x1)			
HD prompter input	BNC (x1)				
	ware HZC-PSF20 is required for HDC ware HZC-PRV20 is required for HDC				

\*2 An optional software H2C-PRV2U is required for HDC-2400 \*3 An optional software HZC-DFR20 is required for HDC-2400

\*4 An optional software HZC-UG444 is required for HDC-2400

#### Optional accessories

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Optional	accessories for HDC-2400			
HKC-DF20	: Dual filter unit (CC & ND)			
HZC-UG444	: RGB 444 output and user gamma function (optional software)			
HZC-PSF20	: 1080p/24.98, 24p, 25p, 29.97p signal format (optional software)			
HZC-PRV20	: 1080p/50, 59.97 signal format (optional software)			
HZC-DFR20	: Dual-speed scan for x2 slow motion (optional software, 1080i/100, 1080i/119.88, 720p/100, and 720p/119.88)			
Optional accessories for HDCU-2000 and HDCU-2500				
HKCU-1001	: SD Analog Interface unit			
HKCU-1003	: Multi Interface unit			

HKCU-2007 : 3G / Dual Link / HD output Interface unit

ISO 14001 **BUREAU VERITAS** 

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The HDC-2500, HDC-2400, HDCU-2000, and HDCU-2500 are produced at Sony EMCS Corporation's Tokai Technology Center, which has received ISO14001, the Environmental Management System certification.

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