# SONY

# **HDC-2400**

# 3G multi format HD system camera



# Overview

## Offers 3G 1080/50P transmission as standard

The HDC-2400 system camera is part of the HDC-2500 Series - successor to the HDC-1500R Series - and incorporates Sony's advanced technologies for studio cameras. A 2/3-inch CCD and the Digital Signal Processing (DSP) with 16 bit A/D converter provides amazing picture quality with minimal noise and high dynamic range.

#### Extra functions and enhanced body design

The HDC-2400 has a camera body designed for exceptional robustness and operational efficiency. The HDC-2400 also provides more flexibility on transmission due to its side panel that can be easily replaced for HD Wireless (3rd Party) or Triax transmission (availability TBC) systems.

### 3G capable

The HDC-2400 is 3G and a multi-format product (1080/50i,59.94i and 720/50p,59.94p). It can be fully updated to the HDC-2500 by adding option keys (23.97p/25p, 50p/59.94p, 100i/119.88i).

HDC-2400



#### **Features**

# Newly developed CCD and DSP

The CCD and DSP provides incomparable picture quality due to the new 2/3-inch CCD & 16bit A/D converter, improved S/N Ratio, better low light and highlights handling. This enables more creative capabilities from variety shows to DMC productions and more realistic rendering of sport events.

# 1080/50P and 3G single link

The HDC-2400 offers 3G capability and Beyond 1080/50P,59.94P format using the extra bandwidth: RGB 12bit output for creative shootings, 3D Transmission on one cable, extra fibre length up to 4km, double speed acquisition, gigabit Ethernet Trunk line, and more.

# High reliability and operational efficiency

The HDC-2400 has been designed for being more robust than ever for all kind of shooting conditions of Outside Broadcasters. It new carbon fibre body provides a more solid camera body for less weight and environmental footprint.

# Compatibility with HDC-1500R Series accessories

As the HDC-2400 is fully compatible with HDC-1500R Series cameras, it inherits their very wide choice of peripherals such as viewfinders (HDVF), Remote Control Panels (RCP) and the Sony unique Large Lens Adapters (HDLA) system.



# **Technical Specifications**

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	-20 °C to +45 °C (-4 °F to +113 °F)	
Storage temperature	-20 °C to +60 °C (-4 °F to +140 °F)	
Mass	4.5 kg (9 lb 15 oz)	

Camera		
Pickup device	3-chip 2/3-inch type CCD	
Effective picture elements (H x V)	1920 x 1080	
Signal format	1080/50i,59.94i 720/50p, 59.94p	
Spectrum system	F1.4 prism	
Lens mount	Sony bayonet mount	
Built-in filters CC	Electrical (CC optical filters are available with optional HKC-DF20)	
Built-in filters ND	1: CLEAR, 2: 1/4ND, 3: 1/16ND, 4: 1/64ND, 5: CROSS	
<ul> <li>Sensitivity</li> <li>(at 2000 lx, 3200K, 89.9% reflectance)</li> </ul>	F11 (1080/50i), F10 (1080/59.94i)	
Signal-to-noise ratio (1080i, typical)	-60 dB/-64 dB (w/NS max.)	
Horizontal resolution (1080i)	1000 TV lines (at center)	
Shutter speed selection	1/60, 1/125, 1/250, 1/500, 1/1000,1/2000 sec (50i) 1/100, 1/125, 1/250, 1/500, 1/1000,1/2000 sec (59.94i) 1/60, 1/125, 1/250, 1/500, 1/1000,1/2000 sec (50p) 1/100, 1/125, 1/250, 1/500, 1/1000,1/2000 sec (59.94p)	
Modulation depth (1080i, typical)	Y: 50% at 27.5 MHz (800 TV lines with typical lens), Pb/Pr: 80% at 12 MHz	

nput/output connectors	
Audio input (CH1)	XLR-3-pin (female) (x1), mic or line selectable
Audio input (CH2)	XLR-3-pin (female) (x1), AES/EBU or mic or line selectable
Mic 1 input	XLR-3-pin (female) (x1)
Return control input	6-pin (x1)
Prompter output/Genlock input/Return input	BNC (x1), 1.0 Vp-p, 75 Ω
Prompter	BNC (x1), 1.0 Vp-p, 75 Ω
DC input	XLR-4-pin (x1), 10.5 to 17 V DC
DC output	4-pin (x1), 10.5 to 17 V DC, 0.5 A (max.), 2-pin (x1), 10.5 to 17 V DC, 2.5 A (max.)
Test output	BNC (x1), 1.0 Vp-p, 75 Ω
SDI 1 output (with embedded audio)	BNC (x1) 3G-SDI, HD-SDI
SDI 2 output	BNC (x1) HD-SDI



SDI-MONI	BNC (x1) HD-SDI or SD-SDI selectable
Earphone output	Stereo minijack (1)
• CCU	Electro-optical connector (x1)
Tracker	10-pin (x1)
Crane	12-pin (x1)
Intercom 1	XLR-5-pin (female) (x1)
Intercom 2	XLR-5-pin (female) (x1)
Remote	8-pin (x1)
• Lens	12-pin (x1)
Viewfinder	20-pin (x1)

Supplied accessories	
•	Operation manual (1), Cable clamp belt (1 set), Camera number label (1), Screws (+B3x8) (2)

## **Accessories**

# **Camera Control Unit**



CNA-1

Camera control network adaptor

# **Control Panels**



#### HDFX-200

Digital Triax to Fiber Converter for HDC-2xxx & HDC-1xxx series



#### HDTX-200

Fiber to Digital Triax converter for HDC-2xxx & HDC-1xxx series



## HZC-UG444

RGB 4:4:4 software key for HDC Series cameras



#### MSU-1000

Master setup unit, multi camera remote control panel for HDC / HSC cameras (horizontal type)



## MSU-1500

Master setup unit, multi camera remote control panel for HDC / HSC cameras (vertical type)



#### HKC-DF20

Dual optical filter



#### HKC-T1500

CCD extension block adaptor (up to 50m) for HDC-1500R/1550R/1400R/1450R

# Viewfinders



#### HDVF-20A

2-inch Type HD B/W CRT Viewfinder



# HDVF-C550W

HD 5inch Colour Viewfinder for HD cameras



#### HDVF-C730W

6" Multi-format HD Colour LCD Viewfinder



## HDVF-EL20

OLED 0.7-inch colour HD viewfinder

# SONY



RCP-1000

Simple remote control panel with joystick type control



RCP-1500

Standard remote control panel with Joystick type control





HDLA-1500

HD Large Lens Adaptor



HDLA-1505

HD Large Lens Adaptor

**Option Boards and Modules** 



#### HDVF-EL30

OLED 0.7-inch colour Full HD viewfinder with 3.5-inch sub-



HDVF-EL70

7.4-inch OLED Viewfinder for studio cameras



#### HDVF-EL75

7.4-inch OLED Viewfinder for portable cameras



HDVF-L10

3.5" Colour LCD HD Viewfinder