

HDC-P1/A

Three 2/3-inch Power HAD FX CCD sensors full HD compact system camera with HD-SDI output



Overview

Uncompromising, Full-HD performance from compact camera

There is increasing demand for small "Box"-type or "Point-Of -View" cameras with the flexibility to shoot from almost anywhere while still delivering highest quality full-HD pictures for use standalone or in seamless integration with content from full-size cameras. The HDC-P1 delivers unprecedented picture quality thanks to its full use of the technologies from Sony's flagship HDC Series studio cameras. Three 2/3"-inch type Power HAD FX CCDs offer a sensitivity of F11 at 1080/50i or F10 at 1080/59.94i. A wide range of formats are supported, including 720/50P, 59.94P, and 1080 50/59.94P, 23.98PsF, 24PsF, 25PsF, and 29.97PsF capabilities available via optional software upgrades.

It is also the first camera of its class to feature dual ND/CC filters, both of which are servo controlled, and its ultra-narrow, 86mm body makes it ideal for applications such as 3D. Other applications include a range of unmanned and point-of-view HD applications, such as stadiums, conference rooms and schools. It can also be used as a "companion" camera in automated broadcast studios.

- **Compromise-free HD Picture Quality**

Despite its diminutive dimensions, the HDC-P1 delivers outstanding quality, full-HD images. Three 2/3-inch type full HD "Power HAD FX" CCDs offer a sensitivity of F11 at 1080 50i and a high signal-to-noise ratio of -58 dB.

- **Shoot Anywhere**

Compact and lightweight, the HDC-P1 is ideal for capturing HD-quality images in locations and from angles where bulky production HD cameras cannot be installed. Weighing only 1.7 kg (3 lb 12 oz) enables easy installation in space-constrained and awkward areas such as on a crane head or helicopter. The supplied tally unit can be easily detached from the camera body, minimizing the camera size to be fitted in, for example, a pan/tilt head or an underwater housing.

Easily integrated with your existing systems

- The HDC-P1 camera is fully compatible with Sony's current master set-up units (MSU) and remote control panels (RCP). This flexibility makes it easy to integrate with everything from extensive multi-camera systems or simple point-to-point systems.

Features

- **2/3" full HD "Power HAD FX" CCDs**

Three 2/3"-inch type Power HAD FX CCDs offer a sensitivity of F11 at 1080/50i or F10 at 1080/59.94i. A wide range of formats are supported including 23.98PsF, 24PsF, 25PsF, and 29.97PsF capabilities available via optional software upgrades.

- **Compact and Lightweight Design**

The HDC-P1 weighs only 1.7 kg (3 lb 12 oz) and its dimensions are a compact 86mm(W) x 130mm(H) x 189mm(D), allowing easy installation in space-constrained and awkward areas such as on a crane head or helicopter.

- **Two remote control optical filters**

The HDC-P1 is the first camera of its type with two optical filters - Neutral Density (ND) and Colour Correction (CC) - to provide more flexibility under changing lighting conditions and easier picture matching with full size system cameras. Both filters are servo driven so they can easily be controlled remotely.

- **Equivalent picture quality and control system as standard Sony HD camera system**

The HDC-P1 camera not only delivers comparable picture quality to a full-size Sony system camera, it is also fully compatible with Sony's current Master Set-up Units (MSU) and Remote Control Panels (RCP) using 700 Protocol - the same control system as HDC Series Cameras. This flexibility allows for comprehensive camera systems or simple point-to-point systems.

Technical Specifications

General	
● Operating temperature	-20 to +45 °C (-4 to +113 °F)
● Mass	Approx. 1.7kg (3 lb 12 oz, without VF and lens)

Camera	
● Pickup device	3-CCD 2/3-inch type 16:9
● Effective picture elements (H&V)	1920 x 1080
● Spectrum system	F1.4 prism system
● Built-in filters	1: Clear, 2: 1/4ND, 3: 1/16ND, 4: 1/64ND A: CROSS, B: 3200K, C: 4300K, D: 6300K
● Servo filter control	Yes
● Lens mount	Sony 2/3-type bayonet mount
● Sensitivity	F11 at 2000 lx (3200K, 89.9% reflectance)
● Signal-to-noise ratio	Typical -58dB (NS Max. -64 dB)
● Horizontal resolution	1000 TV lines (at Centre)
● Shutter speed selection	1/100, 1/125, 1/250, 1/500, 1/1000, 1/2000 s (1080/59.94i) 1/60, 1/125, 1/250, 1/500, 1/1000, 1/2000 s (1080/50i)
● Modulation depth	45% or more horizontally (800 TV lines at centre, 27.5 MHz, with typical lens), Pb/Pr: 80% of 12 MHz

Input connectors	
● Genlock input	BNC type (1), 1.0 Vp-p, 75Ω HD: SMPTE-274M, tri-level sync, 0.6 Vp-p, 75Ω SD: Black burst (NTSC: 0.286 Vp-p, 75Ω/PAL: 0.3 Vp-p, 75Ω)

Output connectors	
● BNC type (2), 3G/HD/SD-SDI	BNC type (2), HD-SDI/SD-SDI selectable
● VBS out	BNC type (1)

Input/output connectors	
● EXT I/O	D-sub 15Pin (female)
● Lens	12-pin
● Remote	8-pin
● LAN	RJ-45 (1), 10Base-T/100Base-TX

Supplied Accessories	
● Operation Manual	
● Tally number plate	

Control Panels



HZC-CSM10

PC Master Setup Unit for system cameras



HZC-RCP5

Remote control software for HXC-D70, HXC-100 and HSC-300 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)



RCP-1000

Simple remote control panel with joystick type control



RCP-1001

Simple remote control panel with encoder type control



RCP-1500

Standard remote control panel with Joystick type control



RCP-1501

Standard remote control panel with encoder type control



RCP-1530

Slim remote control panel with joystick type control



RM-B170

Affordable handheld remote control unit for Sony studio cameras and camcorders

Option Boards and Modules



HZC-PSFP1

Software license for shooting HD 422 1080/23.98PsF, 24PsF, 25PsF and 29.97PsF with HDC-P1 camera