

HDC-4300L

4K and HFR Live Camera System



Overview

4K and HFR Live Camera System

The HDC-4300L is the world's first 2/3" CMOS Full 4K Sensor camera. The camera is an extention of our HD camera line up and a compliments to the S35mm based F554KLIVE camera system. The camera produces breathtaking 4K, HD and HD HFR (High Frame Rate) images (with the appropriate software packages). The new Sony built 2/3" full 4K imagers and optical system covers a wide color gamut, supporting ITU-R BT.2020.

Highlights

- Flexible, no-compromise production in 4K and HD The HDC-4300 puts you in total control of your content. For the first time, one camera platform is all you need to handle 4K, HD and super slow motion helping you generate maximum returns on today's production budgets. Delivering uncompromised image quality, the HDC-4300 integrates seamlessly with HD infrastructures and accessories as well as the world's most advanced 4K live production workflows. Optional software upgrades let you add amazing HD 8x super slow motion and 4K image capture to standard HD outputs. All the flexibility and control you demand are right there in a single high-performance platform.
- Seamless integration with existing workflows The HDC-4300 joins Sony's widely acclaimed HDC Series family of live production solutions. Operation is reassuringly familiar to

operators and cameramen, so you're up and running faster without expensive re-training. The HDC-4300 is fully compatible with a wide range of existing products and workflows, including viewfinders, large lens adaptors and camera control units. There's no need for investment in additional accessories, keeping costs and inventory down.

• Amazing color and imagery with next-generation innovation Featured in the HDC-4300, cutting-edge Sony technological innovation and unparalleled hands-on live production experience are crystallised in the design of the world's first three 2/3-inch 4K imaging device. This advanced optical system supports the next-generation ITU-R BT.2020 color gamut, enabling more precise color reproduction in live broadcasts. You'll see the difference with vibrant, true-to-life images that make viewers feel as if they're actually there.

Features

Direct installation of B4-mount lenses

Thanks to the 2/3-inch camera mount, the HDC-4300 works directly with B4 lenses. The B4-mount supports both HD and 4K lenses, allowing you to use B4-mount high power large lenses to capture sports scenes with a deep depth of field.

Superb 4K capability with wide dynamic range and wide color space

With optional software the HDC-4300 has the function of capturing 4K images. For the HDC-4300, Sony has brought together its leading-edge technologies and deep experience to design and build the world's first three 2/3-inch 4K imagers with ultra-precision alignment technology used to mount the chips to a newly developed prism. This new optical system supports the wide color gamut of ITU-R BT.2020*1, enabling more precise color reproduction in live broadcasts.

*1 ITU-R BT.2020 is the specification of video format defined by ITU-R.

High-frame-rate HD capture for 8x super slow motion

The HDC-4300's real 4K imagers capture at four times the resolution of HD. In HD shooting, this can be used to achieve extreme high-speed image capture at a maximum of 479.52/400 fps with the optional software upgrade. Capture rates of 59.94/50, 119.88/100 and 179.82/150 fps are available as standard. The full digital process is applied to each frame even at high-frame rates in the BPU-4000, producing the same quality in the images as one at the normal speed. Both the high-speed image and the normal-speed image can be adjusted by individual paint parameters. Captured images can be recorded to the PWS-4500 4K/HD multi-port AV storage unit for super slow motion replay*.

* Some third party manufacturer servers may also be used. For 8x slow motion replay, the PWS-4500 system requires software upgrade V1.4. and the BPU-4000 requires optional software SZC-4002

HD cutout function for clear images*

Sony's innovative software technology enables a full HD image to be cut out from a 4K picture in real-time. Two modes are available: you can select either Zoom & Perspective mode or Simple HD mode. Keeping the camera in a fixed position, any portion of the captured image can be cropped to provide a close-up HD image to viewers as if the camera had been panned. In Zoom & Perspective mode, one portion can be cut out while performing perspective transformation, according to the lens focal length. In Simple HD mode, two portions can be cut out at the same time.

*with optional software, SZC-2001 for BPU-4000

Smooth and easy migration from HD to 4K

The HDC-4300 is designed to fit into the growing Sony 4K live production environment alongside the PMW-F55 and F65 live camera configurations. With an optional software upgrade, the

HDC-4300 enables 4K capture for multiple 4K and HD outputs, working directly with the BPU-4000 baseband processor unit and the HDCU-2000 or HDCU-2500 camera control units.

Seamless integration into Sony HD workflows

The HDC-4300 is part of Sony's acclaimed and widely adopted HDC Series family of live production solutions and benefits from direct compatibility with its wide range of accessories, including viewfinders, large lens adaptors, remote control panels and camera control units.

Specifications

Camera Specifications

Built-in-Filters	ND: 1 : CLEAR, 2 : 1/4ND, 3 : 1/8ND, 4 : 1/16ND, 5 : 1/64ND CC: A : CROSS, B : 3200K, C : 4300K, D : 6300K
Horizontal Resolution	2000 TV lines (at center) in 4K, 5% or higher modulation
Pickup Device	3-chip 2/3-inch type CMOS
Sensitivity	F8.0 (2000 lx, 89.9% reflection)
Spectrum System	F1.4 prism

General Specifications



Operating Temperature	-4°F to +113°F
Power Requirements	AC 240 V, 1.4 A (max.), DC 180 V, 1.0 A (max.), DC 12 V, 7 A (max.)
Storage Temperature	-4°F to +140°F

Input Connectors Specifications

Audio Input	(CH1, CH2) XLR-type 3-pin, female (1 each) For MIC: -60 dBu (can be set to a value up to -20 dBu using the menu or from the HDCU2000/2500), balanced For LINE: 0 dBu, balanced
DC IN	XLR-type 4-pin (x1), DC 10.5 V to 17 V
Genlock/Return IN	1 Vp-p, 75 Ω
Return Control	6-pin (x1)

Input/Output Connectors Specifications

Crane	12-pin (x1)
Intercom	
	XLR-type 5-pin, female (1 each)



Prompter	BNC (x1), 1 Vp-p, 75 Ω BNC (x1), 1 Vp-p, 75 Ω
Remote	8-pin (x1)
Tracker	10-pin (x1)
Viewfinder	20-pin (x1)

Inputs and Outputs	s Specifications
DC In	XLR-type 4-pin (x1), DC 10.5 V to 17 V
DC Out	4-pin (x1), DC 10.5 V to 17 V, 0.5 A (max.) 2-pin (x1), DC 10.5 V to 17 V, 2.5 A (max.) (Limitations may apply, depending on the load and input conditions.)
Earphone	Stereo mini jack (x1)
Lens	12-pin (x1)
MIC In	XLR-type 3-pin, female (x 1)
SDI In	BNC (1 each)
Test Out	BNC (x1)
USB	USB 2.0, Type A, 4-pin (x1)

Related products





HDCU-2000L

Camera Control Unit for HDC-2000 Series Camera

PWS-100PR1

Production Control Workstation

PWA-RCT1

Recording control software for PWS-4500, HKCU-REC55 and HKCU-REC50

Gallery

