

HD1200 – HD Camera System

Small, 2/3 inch Professional, CMOS POV Remote Head Camera with 1080i@50/59.94, 1080p and 720p at 23.98/24/25/29.96/30/59.94/60 Resolution, Enhanced Hardware deBayering, Remote Controllable C Mount Lens with Iris and Focus Control, Multi Format White and Black Balance, Full Shutter Control, Built in Test Signals, Separate Horizontal and Vertical Detail, Preset Memory for Parameters, and Tri-Level Sync. Outputs 12/10 Bit HD-SDI WeissCam Format. Optional 3D Rig for 3D HD Video.



Features

- Brand new 2/3" CMOS Thomson Xensium sensor
- Resolutions
 - 1080i@50/59.94
 - 1080p/720p@23, 98/24/25/29, 96/30/59, 94/60
 - 625i/525i 50/60
- Output: Simultaneous dual and single-link HD-SDI, analog progressive RGB, or interlaced component, down-converted SDI, composite, and HDMI
- Enhanced real time de-Bayering
- Dynamic range up to 60 dB in linear mode, up to 120 db in High Dynamic Mode
- RAW Data @ 12 bit /10 bit HD-SDI WeissCam Format
- Single coax camera cable
- 3D support with internal multiplexer
- Remote lens control with camera control unit
- Optional wireless remote control
- Optional Motorized/Manual 3D Rig
- Includes eight HD test patterns
- Ultra Compact – Less than 1.66 inches wide

Applications

- Live Events – Sports, concerts, etc.
- Electronic News Gathering
- Digital Cinema
- Portable applications
- 3D HD video – with two HD1200 cameras and optional 3D rig

Overview

The HD1200 is one of the smallest “true HD” remote camera systems for sports, shows, concerts and many other imaging applications. It provides impressive performance and robust features in a small housing, offering unbelievable possibilities for spectacular views. The camera can be controlled remotely from a distance of up to 40 Meters (131 feet).

The 2/3 inch, 2.1 Megapixel high end CMOS sensor safeguards spectacular video quality in progressive resolution up to 1080p/60 fps. Dual and single-link HD-SDI, analog progressive RGB, or interlaced component, down-converted SDI, composite, and HDMI are directly and simultaneously provided by the compact Camera Control Unit, which also provides RAW Data in 12 to 10 bit compressed HD-SDI WeissCam format at the same time.

Excellent FPN (fixed pattern noise) correction is guaranteed through DDS (Digital Double Sampling up to 30fps) and digital CDS for 50/60 fps. The optional professional Remote Control Panel offers full studio control over long distances. The HD-SDI Sync input ensures accurate timing – and in cooperation with the internal multiplexer, full 3D control is available including fast switch and dissolve.



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Camera Control Unit



Accessories



Remote Control Panel



Motorized/Manual 3D Rig

Ordering Information

HD1200 HD Camera

Accessories:

Remote Control Panel

Motorized/Manual 3D Rig (for use with two cameras)

Specifications

Technical

Output Signals	HD-SDI interlaced (2x BNC), HD-SDI Dual Link progressive, SDI, CVBS, analog RGB/HV progressive or Y/B-Y/R-Y interlaced, HD-SDI RAW Data in 12/10 bit WeissCam format, HDMI (1x Mini-HDMI)
HDMI Out	Camera picture in output format or multiplexed line-by-line in 3D mode
Analog HD Out	RGB/HV progressive or YUV interlaced

Features and Controls

Hard Drives	Thomson Xensium Color 2/3 Inch CMOS, 2.1 Megapixel, 2048 x 1148 total pixels
Resolution	1968 x 1108 active pixels
Aspect Ratios	16 : 9 or 4 : 3
Readout	Progressive scan 1920 x 1080, @ 60 frames per second
Image Direction	Horizontal/Vertical flip without latency
Dynamic Range	Linear mode: 60 dB High dynamic mode: up to 120 dB
Sensitivity	F 11/2000 lx at nominal gain
S/N Ratio	56 dB (Y) at 0 dB gain
Gain Control	0 dB, +3 dB, +6 dB, +12 dB
Cable Length	up to 40m with coax Cable (4 mm Belden 1865A)
Data Format Between Head & CCU	LMP Multiplex containing Power 12V DC, 2.7 Gbit Sensor Data, bi-directional RS232
Genlock	Analog Tri-level HD-SDI with 3D function
White Balance	Automatic or manual YRGB, preset 3200°/5600°/7200°
Gamma	Manual Y-R-G-B
Black Balance	Manual Y-R-G-B
Saturation	0 to 120 % nominal 75%
Gain	0 dB(default), +3 dB, +6 dB, +12 dB
Color Matrix	4 presets, 2 user defined
Detail	Separate horizontal and vertical detail
Shutter	5 steps up to 1/1000 Auto shutter with adjustable exposure
Test Signals	8 HD test patterns
SD Format	According HD frame rate
Analog Genlock Range	Tri-level sync, +/- 2 lines in steps of 1 pixel
Digital Genlock	HD-SDI fixed pixel by pixel
Iris Control	Speed and direction
Focus Control	Speed and direction
Serial Control	Duplex / Simplex RS 485 Duplex / Simplex RS 232USB 2.0 TTL 1 MBaud
Remote Control	Hardware Remote Panel Windows® Based GUI
Lens Control	Direct drive by serial control
System Calibration	Automatic black/shading, FPN correction
3D Controls	Mix-/multiplexing between camera & HD-SDI genlock
Presets	4 direct presets of main controls

Physical & Power

Dimensions	Camera Head: 38x42x42 mm (1.5x1.65x1.65 inches) CCU: 140x120x30 mm (5.51x4.72x1.18 inches)
Weight	Camera Head: 140 grams (4.9 ounces) Light version: 310 grams (10.9 ounces)
Lens Mount	C-Mount, adjustable Back-Focus adaptors for B4-Mount, Nikon, Arri PL
Power	8-15V DC, 15 Watt