

# Vaddio™ ClearVIEW™ HD-20SE

## OVERVIEW

The exciting new ClearVIEW HD-20SE HD PTZ Camera quite literally combines all of the best features of the ClearVIEW HD-18, HD-19 and HD-20 HD PTZ cameras into ONE! The innovation of the HD-18 EZCamera™ Cat-5 interfaces, the low light capability of the HD-19 and the FULL HD performance of the HD-20 are all represented, and improved upon with the ClearVIEW HD-20SE. It may be just a little bit cheesy to say, "One camera to rule them all," but the HD-20SE is clearly the best ClearVIEW ever, and here's why.

The HD-20SE is a native 1080p/60 camera using the latest 1/2.8-Type Exmor® high-speed, low noise CMOS image sensor technology with 2.38M total pixels and 2.14M effective pixels. The ISP (image signal processor) is off-the-hook, not only providing fast, razor-sharp auto-focus routines with incredible detail, realistic textures and vivid colors, it also has an impressive low-light performance of 0.3 Lux (color) and 0.03 Lux (B/W). The lens is a 20X optical zoom multi-element glass lens with an impressive horizontal field of view of 63° on the wide end to 3.47° on the tele end. The outputs are simultaneous HDMI, YPbPr and HSDS™ (differential video for use with Quick-Connect™ Interfaces) and supports both drop frame and non-drop frame HD video resolutions of 1080p/60/59.94/50/30/25, 1080i/60/59.94/50 and 720p/60/59.94/50.

So to recap, latest technology, awesome ISP, superb low-light performance, powerful yet wide angle lens, lots and lots of video outs, drop and non-drop frame video, Full HD and there's more!

The ClearVIEW HD-20SE can be used stand-alone or with one of four Quick-Connect Interface options. The Quick-Connect SR (YPbPr out), Quick-Connect DVI/HDMI-SR (HDMI or DVI-D and YPbPr outs) and the Quick-Connect USB (USB 2.0 or IP-H.264 streaming with simultaneous HDMI and YPbPr outputs) will all extend video, power and control over two (2) Cat-5/5e/6 cables up to 100' (30.48m). The flagship interface, Quick-Connect Universal CCU, extends video, power and control over three (3) Cat-5/5e/6 cables up to 500' (152.4m) and provides unparalleled control over color correction (painting) and camera matching (shading) for multi-camera integrations where the image quality is critical and the environment is without uniform lighting.

The ClearVIEW HD-20SE is an exceptional value and a remarkable camera for even the most demanding HD video applications including House of Worship productions, pro A/V system integration, distance learning classrooms, live events, IMAG systems, UCC applications, videoconferencing, distance learning and lecture capture. To top it all off, the ClearVIEW HD-20SE cameras are available in black or arctic white.



ClearVIEW  
HD-20SE  
(Black)

ClearVIEW  
HD-20SE in  
Arctic White  
(AW)

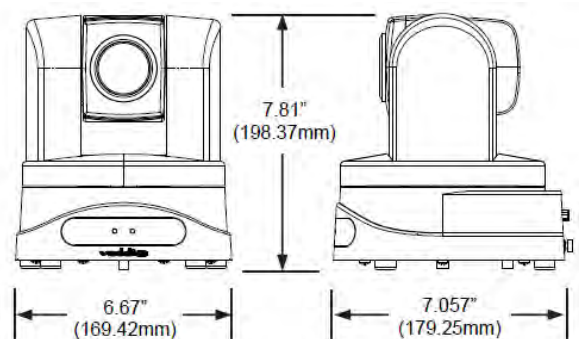
## WHAT'S INCLUDED

The stand-alone ClearVIEW HD-20SE camera system includes the following items:

- One (1) ClearVIEW HD-20SE, HD PTZ Camera
- One (1) Vaddio IR Remote Commander
- One (1) EZCamera Control Adapter (RJ-45F to DE-9F)
- One (1) 12 VDC, 3.0 Amp Switching Power Supply
- One (1) AC power cord set
- Int'l models include the Euro and UK cords.
- One (1) Quick-Start Guide (1-pager)

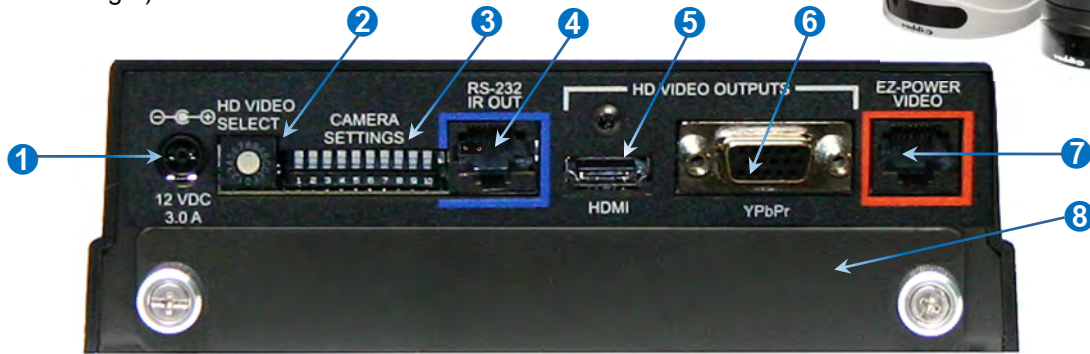
**Note:** Full length manuals and drawings can be downloaded free of charge at [support.vaddio.com](http://support.vaddio.com).

## DIMENSIONS



## TECHNICAL IMAGES

### HD-20se Rear Panel Connections (Numbered left to right)



- 1 12 VDC, 3.0 Amp EIAJ-04 Coaxial Power Connector with 5.5mm OD and 3.4mm ID and positive center.
- 2 HD Video Select Rotary Switch for choosing the camera's output (HDMI and YPbPr) resolution.
- 3 Camera Settings 10-position DIP switches for setting IR Freq., Image Flip, Baud Rate & Color Space (YCbCr or sRGB).
- 4 RS-232 Control Port for joysticks and control systems. IR Out for IR Forwarding with the SR Series Quick-Connects.
- 5 HDMI or DVI-D output on HDMI Connector. Use YCbCr Color Space for HDMI and sRGB Color Space for DVI-D.
- 6 Analog Component (YPbPr) Output on DE-15 Connector.
- 7 EZ-POWER VIDEO RJ-45 Port to supply power and return HSDS video (high speed differential) to the Quick-Connects.
- 8 Slot Card Port for EZIM CCU and HD-SDI Slot Cards (blank cover plate shown).

## CLEARVIEW HD-20se CAMERA SYSTEMS (AW after the part number denotes the Arctic White Camera Version)

- ClearVIEW HD-20se QSR:** Includes HD-20se Camera, Quick-Connect SR Interface, IR Remote, Power Supply, CONCEAL Wall Mount & mounting hardware and EZCamera Control Adapter.  
**PN: 999-6985-000 (NA), 999-6985-001 (Int'l), 999-6985-000AW (NA), 999-6985-001AW (Int'l)**
- ClearVIEW HD-20se QDVI:** Includes HD-20se Camera, Quick-Connect DVI/HDMI-SR Interface, IR Remote, Power Supply, CONCEAL Wall Mount & mounting hardware and EZCamera Control Adapter.  
**PN: 999-6986-000 (NA), 999-6986-001 (Int'l), 999-6986-000AW (NA), 999-6986-001AW (Int'l)**
- ClearVIEW HD-20se QUSB:** Includes HD-20se Camera, Quick-Connect USB Interface, IR Remote, Power Supply, CONCEAL Wall Mount & mounting hardware and EZCamera Control Adapter.  
**PN: 999-6989-000 (NA), 999-6989-001 (Int'l), 999-6989-000AW (NA), 999-6989-001AW (Int'l)**
- ClearVIEW HD-20se QCCU:** Includes HD-20se Camera, Quick-Connect Universal CCU Interface, IR Remote, Power Supply, CONCEAL Wall Mount & mounting hardware and EZCamera Control Adapter.  
**PN: 999-6987-000 (NA), 999-6987-001 (Int'l), 999-6987-000AW (NA), 999-6987-001AW (Int'l)**

## CLEARVIEW HD-20se SPECIFICATIONS

Part Numbers: Stand-alone Camera Packages	999-6980-000 (North America), 999-6980-001 (Int'l) - Black Camera Version 999-6980-000AW (North America), 999-6980-001AW (Int'l) - Arctic White Camera Version
Image Sensor	1/2.8-Type Exmor, high-speed, low-noise CMOS Image Sensor with, 2.38 Megapixels (2.14M effective).
Zoom	20X Optical Zoom with Multi-element Glass Lens
Field of View	Horizontal: 63° Wide End to 3.47° Tele End, Vertical: 36.8° Wide End to 1.85° Tele End, (16:9 Aspect Ratio)
Lens Focal Length	f=4.44mm to 89mm / F1.6 - F3.4
Minimum Illumination	Color: 0.3 Lux (F1.6, 1/30 sec, 50 IRE), B/W: 0.03 Lux (F1.6, 1/30 sec, 50 IRE)
Video Resolutions	HD: 1080p/60/59.94/50./30/25, 1080i60/59.94/50 and 720p/60/59.94/50, HD Video Resolutions Only
Video Output Formats	HDMI, Analog Component, HSDS (Differential Video, Power and Control for Quick-Connects)
Signal to Noise Ratio	Greater than 50 dB (AGC: Off)
Compatible Quick-Connects	Quick-Connect SR, Quick-Connect DVI/HDMI SR, Quick-Connect USB and Quick-Connect Universal CCU
Pan Range	Pan: +170 degrees to -170 degrees, Tilt: +90 degrees to -30 degrees
Preset Positions	16 (internal), 6 recalled via IR Remote
Control Methods	RS-232, IR Remote Commander and OSD (on screen display)
Tally Light	Available through RS-232 Control
HD Video Select	16-Position Rotary Switch: Used to set HD Video Resolution Output of both HDMI and YPbPr signals
Camera Settings	10-Position Dip Switch: Settings for IR Select, Baud Rate 9600, Image Flip, Color Space etc...
Accessory Slot Cards	EZIM CCU Slot Card PN# 999-6900-006 - For Use with Quick-Connect CCU Only
Dimensions/Weight	7.81" (198.37mm) H x 6.67" (169.42mm) W x 7.057" (179.25. mm) D / 5.6 lbs. (2.63083595643 kg.)

Learn more about our cameras, audio devices and controllers at 800-572-2011 or vaddio.com

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