VADDIO

CLEARVIEW™ HD-18
High-Definition Integrated Robotic PTZ Camera

With the ClearVIEW HD-18 integrated robotic PTZ camera, Vaddio continues to redefine image control. The camera is built around a 1.3 megapixel, 1/3" CCD with an 18x optical zoom lens, making it the ideal choice for a wide range of high definition video applications. In addition to the component HD output (720p, 1080i or 1080p), the camera comes with a simultaneous composite SD output (NTSC or PAL).

Because the camera is built around a CCD image sensor, the HD-18 is excellent in low-light situations, with a 1.8 lux rating. In addition, the video signal to noise ratio output of the camera is greater than 50dB, delivering clean, clear video.

The 7-element wide dynamic zoom lens allows ClearVIEW HD-18 to capture a wide angle of view (55.2°) enough to view everyone at a conference room table, as well as capture an individual from a long distance (3.2°). The zoom range provides greater flexibility for a wide variety of applications.

Pan range is +170 to -170 degrees, and Tilt range is -30 to +90 degrees. The camera is also invertible for ceiling-mount applications. A variety of accessories are available, allowing the camera to be installed in a variety of projects.

Figure 1: Front of ClearVIEW HD-18

The ClearVIEW HD-18 is and exceptional camera for a wide range of high definition shooting applications, such as houses of worship, corporate boardrooms, live event production and distance-learning.

WHAT'S INCLUDED

- Vaddio ClearVIEW HD-18 HD PTZ Camera
- IR Remote
- RJ-45 to DB-9 Adapter
- 12V PowerRite™ Power Supply
- Documentation

TECHNICAL FEATURES

1/3" CCD
The 1.3 megapixel CCD image sensor provides brilliant light gathering capability, providing excellent image reproduction.

Wide Dynamic Zoom
A multi-element 18x optical wide dynamic zoom lens provides great zoom range (3.2° in telephoto), along with a wide view (55.2° in wide) when zoomed out.

1080p, 1080i or 720p Output
ClearVIEW HD-18 provides three component HD output resolution options, for use with a greater variety of equipment on the market.

Simultaneous SD Output
Along with a choice of component HD output resolutions; there is a simultaneous composite SD output on the back of the camera. The SD output provides the option of sending an SD signal to either a low-cost SD monitor, or other peripheral equipment in letterbox, crop or squeeze.

Precision Motors
High-torque, micro stepper motors provide smooth and precise panning and tilting of the camera. Recalled preset camera positions are accurate across the entire range of pan and tilt.

Easy Integration
From the variety of HD resolutions, to the RJ-45 connector for RS-232, to the use of VISCA protocol, the ClearVIEW HD-18 is easily integrated for use with videoconference codecs, control systems such as AMX® and Crestron®, and the camera is compatible with Vaddio's ProductionVIEW HD, ControlVIEW XHD and Precision Camera Controller.

TECHNICAL FEATURES (CONTINUED)

Invertible

The added benefit of utilizing micro-stepper motors is that the camera can be inverted. This provides a greater range of installation options.

Accessories

A variety of accessories are available for the ClearVIEW HD-18, including WallVIEW systems, mounts, adapters and cables.

EZ-Port

Vaddio's unique EZ-Port Power/Video RJ-45 connector, integrated into the back of the camera, sends power out to the camera up to 100 feet, and returns component HD video back to the optional Quick-Connect SR (see the WallVIEW HD-18 system).

Part Numbers

999-6900-000 ClearVIEW HD-18 (North America)
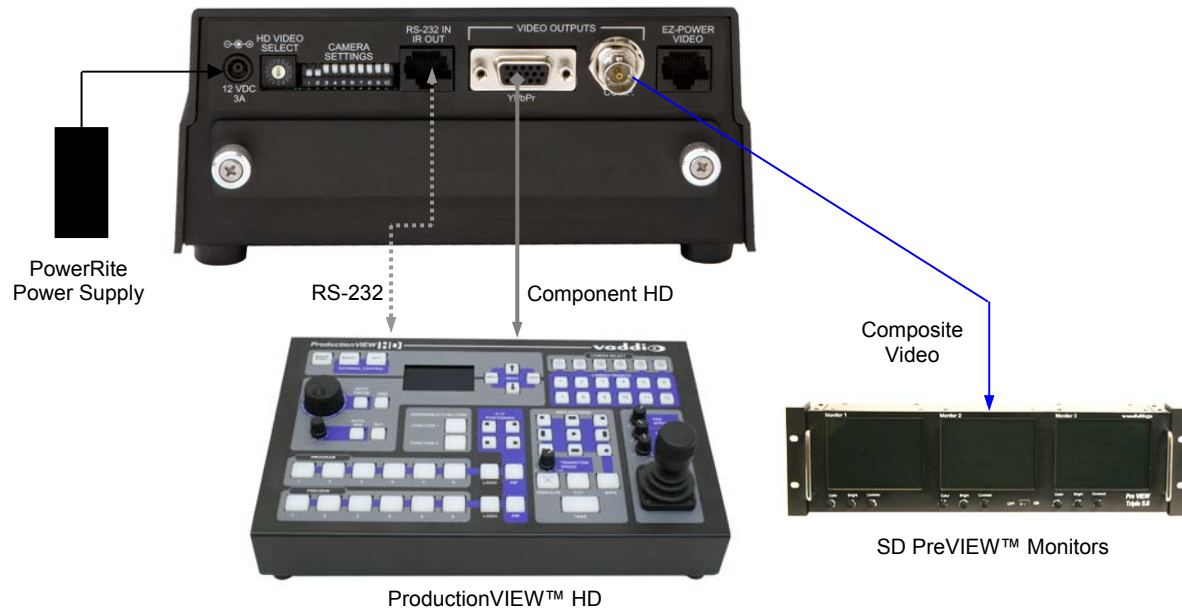999-6900-001 ClearVIEW HD-18 (International)

TECHNICAL IMAGES

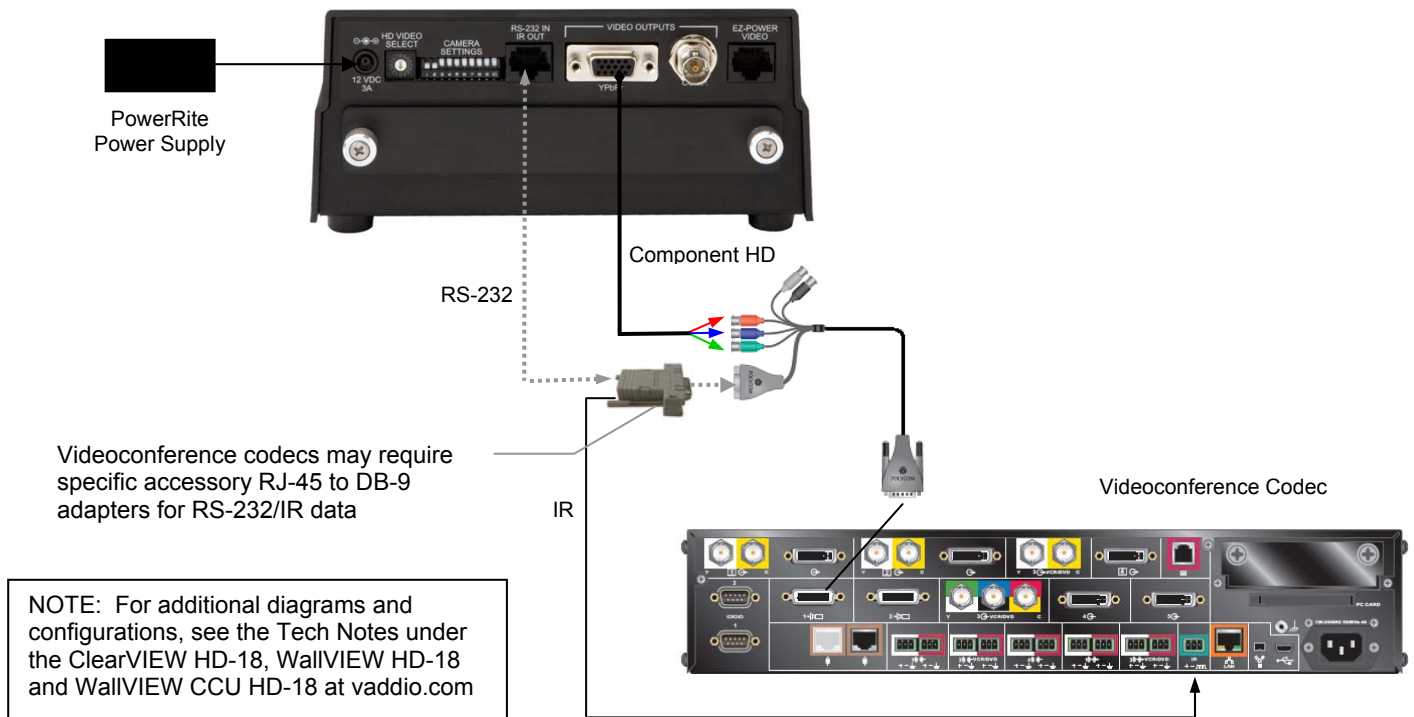**Figure 2:** ClearVIEW HD-18 front and rear diagrams with functional callouts.

18x Optical Zoom

IR Receivers

Tally Light

Power Light

RS-232 & IR Output

Component HD Video Output

Camera Settings Switches

Composite SD Video Output

HD Video Selector Switch

EZ Power/Video Input
(for use with optional Quick-Connect SR)

12 VDC Power Input

Slot for Optional Cards

SYSTEM CONNECTIVITY

Figure 3:
Basic system connectivity of a ClearVIEW HD-18 to a ProductionVIEW HD

PowerRite
Power Supply

RS-232

Component HD

Composite
Video

SD PreVIEW™ Monitors

ProductionVIEW™ HD

Figure 4:
Basic system connectivity of a ClearVIEW HD-18 to a Polycom HDX 9004 Codec as primary camera, with IR forwarding through HD-18

PowerRite
Power Supply

RS-232

Component HD

Videoconference codecs may require
specific accessory RJ-45 to DB-9
adapters for RS-232/IR data

IR

Videoconference Codec

NOTE: For additional diagrams and
configurations, see the Tech Notes under
the ClearVIEW HD-18, WallVIEW HD-18
and WallVIEW CCU HD-18 at vaddio.com

TECHNICAL SPECIFICATIONS

ClearVIEW HD-18	
Part Numbers	ClearVIEW HD-18 999-6900-000 (North America) ClearVIEW HD-18 999-6900-001 (International)
• **Vaddio ClearVIEW HD-18**	
Image Device	1/3" CCD
Picture Elements	1.3 Megapixels
Signal System	HD: 1080p, 1080i or 720p @ 59.94; 1080p @ 60; 1080p, 1080i or 720p @ 50 SD: Composite NTSC or PAL (simultaneous with HD output)
Lens	18x Optical Zoom
Focal Length	f=4.7 to 84.6mm
Horizontal Viewing Angle	3.2 to 55.2 degrees (16:9)
Frame Delay	1 frame
Video S/N Ratio	>50 dB
Invertible	Yes
Minimum Illumination	1.8 lux
Control Protocol	VISCA
Serial Communication	RS-232 (9600 or 38,400)
Pan Range	+170 degrees to -170 degrees
Tilt Range	+90 degrees to -30 degrees
Pan/Tilt Speed	0.25° to 60° degrees/second
Preset Positions	16 (internal), 6 recalled via IR Remote
Image Control	Red & Blue Gain, Detail, Chroma, Gamma, Pedestal, Iris and Gain (available through VISCA control)
Tally Light	Yes (available through VISCA control)
Interfaces	
Power Input	EIAJ-04 (12 VDC)
HD Video Output	D-Sub 15 pin: Component HD (Y, Pb, Pr)
SD Video Output	BNC: Composite
Camera Control	RJ-45: RS-232C (VISCA)
EZ Power/Video	For use with Quick-Connect SR Interface
HD Video Select	Rotary Switch – used to set the output resolution of HD video
Camera Settings	10 Dip Switch Settings for IR, SD Output, Image Flip
General Information	
Operating Temperature	32° to 104° F (0° to 40° C)
Power Consumption	Maximum 25 watts (without accessory card)
Dimensions (W x H x D)	6.75" x 8.5" x 7.7" inches (171 x 216 x 196 mm)
Weight	5.8 lbs. (2.63 kg.)

CLEARVIEW HD-18 OPTIONAL ACCESSORIES

The ClearVIEW HD-18 PTZ offers the following accessories for a complete, professional installation.
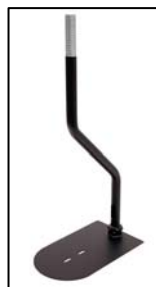
TANDBERG RS-232 Adapter
999-1002-232

Polycom RS-232 Adapter
999-1003-232

Polycom HDX 8000 Series Adapter
999-1006-232

15-pin to BNC output cable
440-5600-001(3 ft.) BNC-M
440-5600-002 (6 ft.) BNC-M
440-5600-003 (7 inch) BNC-F

ClearVIEW HD-18 Wall Mount
535-2000-230

Off-Set Drop Down Ceiling Mount
999-2225-296