Arctic White Version 999-6940-000AW - NA 999-6940-001AW - Int'l



# CLEARVIEW<sup>™</sup> HD-19

## **High Definition Integrated Robotic PTZ Camera**

The extraordinary Vaddio<sup>TM</sup> ClearVIEW HD-19 high definition integrated robotic PTZ camera features a 19X optical zoom lens and is built around a 1/3-Type progressive scan, high-speed, low noise CMOS image sensor with a total of 1.3 Megapixels for precise and vibrant HD color video images.

The HD-19 uses an increased pixel aperture size, high speed, high signal to noise and column-parallel A/D conversion method to create images containing more detail than ever before. It combines the speed of the CMOS sensor with advanced-quality image sensor technologies amassed through the development of CCDs.

The HD-19 achieves improved picture quality even in low light environments requiring a minimum illumination rated at an astonishing 0.7 LUX (F1.6 - 50IRE).



**Black Version** 999-6940-000 - NA 999-6940-001 - Int'l



The HD-19 is available in Black and in Arctic White and is equipped with a slip-clutch mechanism for smooth pan/tilt operation and control. The HD-Zoom lens allows HD-19 to capture a wide angle of view (58.1°) to view everyone at a conference room table, as well as capture an individual from a long distance (3.2°) in a larger room. The zoom range provides great flexibility for a wide variety of applications.

The HD-19 outputs HD video (YPbPr at 1080p/60/59.94/50/30/25, 1080i/59.94/50, 720p/59.94/50, 480i/30fps and 576i/25fps) and SD video (CVBS at NTSC and PAL) simultaneously. Overall, the HD-19 is an exceptional camera for a wide range of HD video applications such as houses of worship, videoconferencing, corporate boardrooms, live events and distance-learning.

# **WHAT'S INCLUDED**

#### The ClearVIEW HD-19 includes the following items:

- ClearVIEW HD-19 HD PTZ Camera
- Vaddio IR Remote Commander
- RJ-45 to RS-232 Control Adapter
- 12 VDC, 3.0A PowerRite<sup>™</sup> Power Supply
- Documentation

# **TECHNICAL FEATURES**

## **HD Analog Component and SD Outputs:**

The ClearVIEW HD-19 has simultaneous HD YPbPr (analog component) and SD video outputs on the rear of the camera for use in A/V presentation environments, DV capture systems and videoconferencing applications.

The ClearVIEW HD-19 YPbPr high definition DE-15 (15-pin HD) connector has output resolutions 720p, 1080i and 1080p with SD resolutions of 480i and 576i also available. SD output resolutions (CVBS in 480i/NTSC and 576i/PAL) are available on the BNC output.

#### **Quick-Connect Compatibility:**

The HD-19 is compatible with the Quick-Connect SR Interface, the Quick-Connect DVI/HDMI Interface (up to 100'/30.4m over Cat-5e) and the Quick-Connect CCU Interface (up to 500'/152.4m over Cat-5e) in several different packages. The HD-19 also has slot card options, which include the EZIM CCU Slot Card for the CCU package and the HD-SDI Slot Card.

## **Precision Motors:**

High-torque, micro stepper motors provide for extremely smooth panning and tilting of the camera. Recalled preset camera positions are highly accurate across the entire pan and tilt range. A smooth slip-clutch mechanism has been included to further enhance movement. The pan range is +170 to -170 degrees, and tilt range is -30 to +90 degrees. The camera is also invertible for ceiling mount applications using the IN-Ceiling Half-Recessed Enclosure and DomeVIEW™ HD Indoor Flush Mount and Pendant Mount domes.



## **TECHNICAL FEATURES (CONTINUED)**

### **Easy Integration:**

Using a modified RS-232 protocol (VISCA®) the ClearVIEW HD-19 is easily integrated for use with videoconferencing codecs and control systems such as Crestron® and AMX®. And of course, the HD-19 is compatible with all Vaddio camera controllers.

## **Advanced Digital Signal Processing:**

The HD-19 has an advanced DSP that allows the user to set a luminance target, where the iris, shutter and (AGC) gain will work together to maintain the target luminance while reducing overall noise.

## Advanced CMOS Image Sensor:

The HD-19 uses a 1/3" high speed, low noise CMOS image sensor which is some of the newest technology available for CMOS sensors. The image sensor is high speed, high frame rate and high signal to noise while requiring a minimum illumination rating of only 0.7 LUX.

### Made in the USA:

The ClearVIEW HD-19 HD PTZ camera is made in the USA, at Vaddio, in the greater Minneapolis, Minnesota area.

# **TECHNICAL IMAGES**

## Rear Panel Connections (left to right):

- 1) 12 VDC Coaxial (EIAJ-04) Power Connection
- 2) HD Video Select Rotary Switch
- 3) 10-Position Dip Switch for Camera Settings
- 4) RJ-45 Jack for RS-232 Communication and IR Out to Quick-Connect SR Systems
- 5) YPbPr Analog Component Output on DE-15
- 6) SD (CVBS) Out on BNC Connector
- EZPower/HD Video RJ-45 for use with Quick-Connect SR Systems
- Blank Slot Card Cover (covers slot card input when no slot cards are present)



# **TECHNICAL SPECIFICATIONS**

| ClearVIEW HD-19 High Def | inition PTZ Camera  |
|--------------------------|---|
| Part Numbers             | ClearVIEW HD-19 North America 999-6940-000 (Black), 999-6940-000AW (Arctic White)   |
|                          | ClearVIEW HD-19 International 999-6940-001(Black), 999-6940-001AW (Arctic White)  |
| Image Sensor             | 1/3-Type Exmor High-speed, Progressive Scan CMOS Sensor with 1.3 Megapixels   |
| Video Output Resolutions | HD: 1080p/60/59.94/50/30/25, 1080i/59.94/50, 720p/59.94/50  |
|                          | SD: 480i/NTSC & 576i/PAL (Crop, Squeeze or Letterbox mode)  |
| Lens/ Focal Length       | 19X Optical Zoom, F=4.5mm wide to 85mm tele (F1.6-F2.9), Min. Focus Distance 1.0m   |
| Horizontal Viewing Angle | 58.1° Wide End to 3.2° Tele End - 16:9 Format   |
| Video S/N Ratio          | >52 dB  |
| Minimum Illumination     | 0.7 LUX (F1.6, 50IRE)   |
| Serial Control Protocol  | RS-232 (Modified VISCA)   |
| Pan Range                | Pan: +170 degrees to -170 degrees, Tilt: +90 degrees to -30 degrees, Invertible for Ceiling Mount   |
| Preset Positions         | 16 (internal), 6 recalled via IR Remote   |
| Tally Light              | Available through RS-232 Control  |
| Connectors               | <ul> <li>12 VDC Power Input: EIAJ-04 Coaxial Power Connector</li> <li>HD Video Outputs: YPbPr on DE-15 (D-Sub 15-pin HD)</li> <li>SD Video Output: BNC Connector</li> <li>RS-232/IR Out: RJ-45 Jack (RS-232 Communication and IR Out (with Quick-Connect -SR Interfaces)</li> <li>EZ Power HD Video: RJ-45 Jack, for use with Quick-Connect SR Interface or Quick-Connect DVI/HDM SR Interface. Supplies power to the camera and returns HD video from the camera to the Quick-Connect - SR Systems.</li> </ul> |
| HD Video Select          | 16-Position Rotary Switch: Used to set HD Video Resolution Output   |
| Camera Settings          | 10-Position Dip Switch: Settings for IR Select, Baud Rate 9600, Image Flip, SD LB and SQ, Test Bars OSD (On Screen Display) for fine tuning   |
| Accessories              | Thin Profile Wall Mount 535-2000-230 (Black), 535-2000-230W (White) EZIM HD-SDI Slot Card PN# 998-6900-007 EZIM CCU Slot Card PN# 999-6900-006 - For Use with Quick-Connect CCU Only  |
| General Information      |   |
| Operating Temperature    | 32° to 104° F (0° to 40° C) / 20% to 80% Relative Humidity  |
| Dimensions (H x W x D)   | 8.5" (215.9mm) H x 6.75" (171.45mm) W x 7.7" (195.58mm) D   |
| Weight                   | 5.79 lbs. (2.625635463kg.)  |