WallVIEW™ CCU HE100 WITH HSDS™

Featuring the Vaddio™ Quick-Connect™ CCU

The Vaddio WallVIEW CCU HE100 is built around the Panasonic® AW-HE100 high definition pan/tilt/zoom camera. Because Vaddio's WallVIEW CCU HE100 operates on 12 volts DC, it is easily integrated into projects because no AC outlet is required at the camera location. With three 1/3" CCDs and a 13x optical zoom lens, the WallVIEW CCU HE100 is an ideal choice for a wide range of high definition video applications. WallVIEW CCU HE100 allows the user to adjust color, gain, pedestal; gamma and iris functions on the camera (see Figure 1). These controls allow the camera to deliver a more accurate representation of the image that is being captured and color match and shade multiple cameras. User-defined adjustments may be stored using two Scene buttons.

The WallVIEW CCU HE100 uses high speed differential signaling (HSDS), an active video transmission system, to deliver high quality HD and SD video over standard Cat. 5 cabling. Adjustments allow the video to be extended up to 500 feet from the Quick-Connect CCU with virtually no loss in video quality or additional latency.

Figure 1: Quick-Connect CCU (top) 1-RU rack mount interface; (bottom) WallVIEW CCU HE100 System with AW-HE100 Camera, EZIM CCU and Wall Mount

The WallVIEW CCU HE100 is superb for a wide range of high definition shooting applications. It is also highly suitable for applications where adjusting the color and brightness levels of one or multiple cameras is critical, such as houses of worship, corporate boardrooms, live event production and distance-learning applications.

WHAT'S INCLUDED

- Panasonic AW-HE100 HD PTZ Camera (three 1/3" CCDs with 13x zoom lens)
- EZCamera Interface Module CCU (EZIM)
- EZIM HE100 HD CCU Break-out Cable
- Quick-Connect CCU (QCCU) 1-RU Rack Mount Interface
- Panasonic IR Remote
- EZCamera Protocol Adapter (RS-232 to RS-422)
- 36V PowerRite™ Power Supply
- Vaddio Thin Profile Wall Mount HE100
- Mounting Hardware
- Documentation

TECHNICAL FEATURES

CCU Controls

CCU controls on the product include: Red & Blue Gain; Detail; Pedestal, Gamma, Chroma; Auto & Manual Iris; Gain; Auto & One Push White Balance; and Scene Store A & B buttons.

Tally

A tally port is located on the back of the 1 RU interface. When connected, the Quick-Connect CCU's tally light on the front panel illuminates when the camera is live. In addition, the camera's built-in tally light will also illuminate when the camera is live.

TECHNICAL FEATURES (CONTINUED)

Gen Lock Over CAT-5

The WallVIEW CCU HE100 delivers Gen Lock signal over CAT-5 cabling, which eliminates the need to run an additional coax cable to the camera.

Simultaneous SD Output

Quick-Connect CCU allows both the HD component and SD composite signals from the HE100 to be transmitted from the camera at the same time.

EZCamera Interface Module (EZIM) CCU

The EZIM CCU is a small camera interface module that is installed in the wall mount. The EZIM uses a multi-pin connector and cable assembly for maximum flexibility. A Gen Lock gain adjustment allows the user to adjust the level of black burst delivered to the camera.

TECHNICAL IMAGES

Figure 2: Quick-Connect CCU (QCCU) interface front panel and rear panel diagrams with functional callouts.

Tally Light indicates when camera is live

Two-Line LCD Screen displays when CCU Control is active, and the value of the parameter that is being adjusted

CCU Control transfers RS-232 control between an external controller and QCCU

Scenes A & B allow manual settings of color, iris and other parameters to be stored in QCCU

Detail adjusts the sharpness of the image coming from the camera

Red & Blue Gain knobs for adjusting the camera's color levels

Auto White Balance (AWB) and One Push White Balance (OPWB) allow the user to select either of these modes, or manual by adjusting knobs

Pedestal, Chroma and Gamma adjustments allow these additional functions of the camera to be adjusted

Auto and Manual Iris settings for light intake

Gain adjustment for camera light sensitivity

36 VDC 2A Power Port

POWER RJ-45 Cat. 5 cable dedicated to supply power to camera

CONTROL RJ-45 Cat. 5 cable, which passes RS-232 commands through CCU to the PTZ camera

Tally & Gen Lock Inputs to for sending Tally and Genlock signals to the AW series cameras over Cat. 5 cable.

CAM SELECT is an 8-position dip switch that allows the user to select which camera is connected to the QCCU

Video Adjustments for Y-Gain and Distance (up to 500')

HD and SD Outputs (Simultaneous SD for HE100) on BNC Connectors

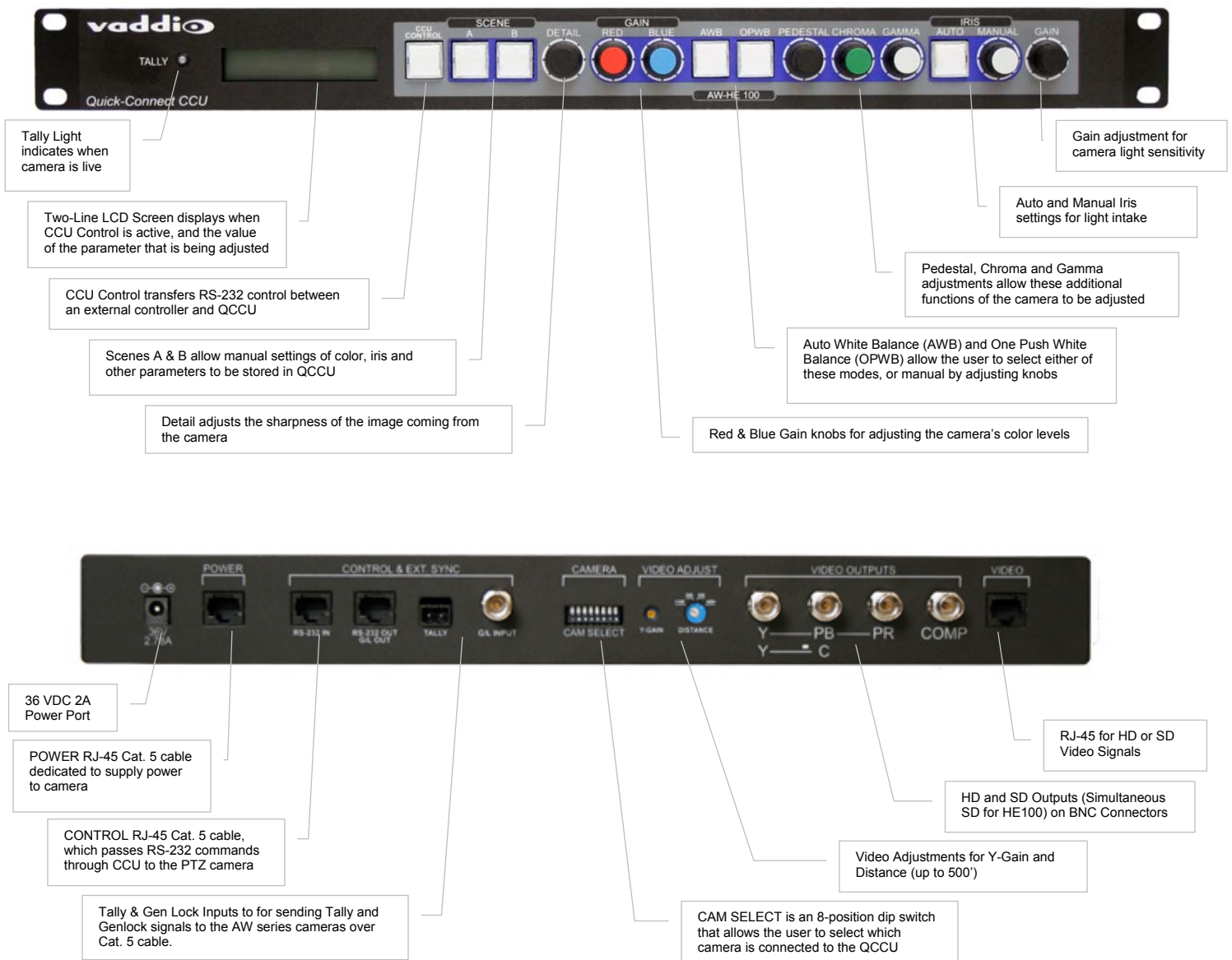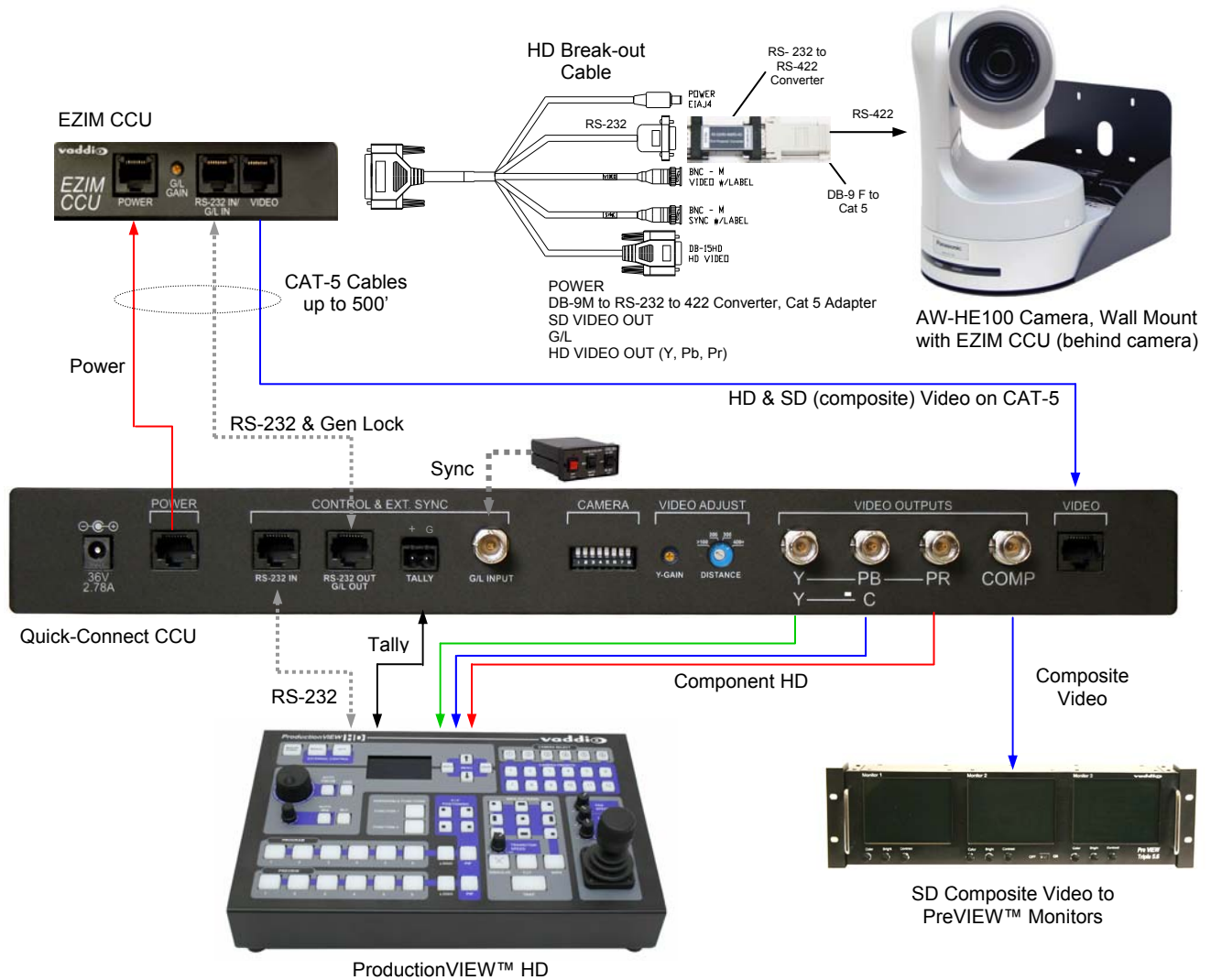RJ-45 for HD or SD Video Signals

Figure 3: EZCamera Interface Module CCU (EZIM) with three (3) RJ-45 connectors for POWER, RS-232 IN / GEN LOCK and VIDEO (HD or SD), Top View (left) and Isometric View (right).

RJ-45 Connectors for Video, Power, Control and Gen Lock Gain adjustment (for use on AW PTZ cameras)

Mounting Flange for securing the EZIM to camera mounts

DB-25 Connector for Camera Break-out Cable

EZIM ISO View

SYSTEM CONNECTIVITY

Figure 4:
Basic system connectivity of a WallVIEW CCU HE100 System and ProductionVIEW HD

EZIM CCU

HD Break-out Cable

RS- 232 to RS-422 Converter

RS-422

POWER EIAJ4

RS-232

BNC - M VIDEO w/LABEL

BNC - M SYNC w/LABEL

DB-15HD HD VIDEO

DB-9 F to Cat 5

CAT-5 Cables up to 500'

POWER
DB-9M to RS-232 to 422 Converter, Cat 5 Adapter
SD VIDEO OUT
G/L
HD VIDEO OUT (Y, Pb, Pr)

AW-HE100 Camera, Wall Mount with EZIM CCU (behind camera)

Power

RS-232 & Gen Lock

Sync

HD & SD (composite) Video on CAT-5

POWER

CONTROL & EXT. SYNC

CAMERA

VIDEO ADJUST

VIDEO OUTPUTS

VIDEO

36V 2.78A

RS-232 IN

RS-232 OUT G/L OUT

TALLY + G

G/L INPUT

Y-GAIN

DISTANCE

Y — PB — PR   COMP
Y — C

Quick-Connect CCU

Tally

RS-232

Component HD

Composite Video

ProductionVIEW™ HD

SD Composite Video to PreVIEW™ Monitors

TECHNICAL SPECIFICATIONS

WallVIEW CCU HE100	
Part Numbers	WallVIEW CCU HE100 999-6107-000 (NTSC) WallVIEW CCU HE100 999-6107-001 (PAL)
• **Panasonic AW-HE100**	
Image Device	1/3" CCDs x 3
Signal System	1080/59.94i or 720p/59.94p and 480/59.94i, (NTSC); 1080/50i or 720p/50p and 576/50i (PAL)
Lens	13x Optical Zoom
Focal Length	f=4.2 to 55mm
Horizontal Viewing Angle	5.1 to 60 degrees (16:9); 3.8 to 47 degrees (4:3)
Pan/Tilt Angle	-175 to +175 degrees (Pan), -40 to +210 degrees (Tilt)
• **Quick-Connect CCU Interface (QCCU)**	
Connectors	Power Connector: EIAJ4 Power RJ-45: Supplies 36V to EZCamera Interface Module Regulator Control In RJ-45: Accepts RS-232 from ProductionVIEW or other non-daisy-chain control systems Control Out RJ-45: Passes RS-232 and Sync video feed to camera EZIM Tally: 2-Pin Phoenix type spring cage connector Video Inputs: BNC Connector for Sync Video Outputs: BNC Connectors for HD Analog Component (Y,PB,PR) / SD (Y-C and Composite) Video RJ-45: Transports HD video from camera EZIM
Camera Select Switch	For future use
Video Adjustments	Y-Gain (luminance gain) for fine tuning over longer cable distances Distance Compensation: 100', 200', 300', 400'+
Cat. 5 Cable Distance	Up to 500' (152.4m)
Power Supply	36 VDC, 2 Amp
Dimensions	1-RU Rack Mount - 1.75" H x 19" W x 6" D (4.45 cm x 4.26 cm x 15.24 cm)
• **EZCamera Interface Module CCU (EZIM)**	
Connectors	Three (3) RJ-45 Connectors One DB-25 for Power, Video, Control & Gen Lock (n/a for HD1 camera)
Cable Assembly	For Panasonic HE100 Camera: DB-25M to DB-15HD/RJ-45/BNC x 2/EIAJ4 Power Connector
Power Regulator	Supplies 12VDC to Cameras
Dimensions	3" H x 4.5" W x 1.2" D (7.6 cm x 11.4 cm x 3 cm)
• **Thin Profile Wall Mount HE100**	
Materials	12-Gauge CRS with Black Powder Coat Paint
Dimensions	8" H x 8.75" W x 13.5" D (20.3 cm x 22.2 cm x 34.3 cm)
Weight	Approx. 6 lbs. (2.7kg)