PRODUCTIONVIEW™ HD

Camera Control Console with HD, RGBHV and SD Video Switching, Video Mixing Transitions and Automated Control Functionality

In our relentless drive to redefine camera control, Vaddio introduces the ProductionVIEW HD multi-camera control system. Designed to handle the most demanding live broadcast or staging events, it's still simple enough to allow a novice to shoot like a pro. ProductionVIEW HD integrates PTZ camera control and multi-format HD/SD live switching with real-time graphics and effects into one easy-to-use control console.

Figure 1: ProductionVIEW HD Camera Control Console

The completely redesigned control surface gives system users real-time knobs and buttons to control functions, as opposed to an endless programming menu. Because ProductionVIEW HD is a live broadcast production console, not a computer, the entire system produces only one frame of delay which is a critical requirement for live production where image magnification is used.

The system's multi-format 6 x 2 switcher accepts any combination of input signals from HD component video, RGBHV and SD video (HD at component 1080p, 1080i and 720p; SD video Y/C or composite; and RGBHV up to UXGA resolutions). All inputs feature both up/down conversion capabilities with each input having its own user selectable output resolutions.

A wide variety of transitions, including cuts, dissolves and wipes, can be achieved through user-selectable buttons built into the control surface. Furthermore, a new Lower Screen Graphic (LSG) function allows users to overlay graphics onto their video output.

Additional lens features include a large production-style Manual Focus wheel, an Iris control knob allowing for live manual adjustments, push control buttons for auto iris and focus, and a Zoom Speed knob to control the speed of the electronic zoom lens.

Camera control elements include a broadcast-style 3-axis/1-button Hall Effect Joystick with twist handle zoom control, as well as separate Pan, Tilt and Speed control knobs. There are six discrete auto-sensing RS-232 camera control ports and 12 camera pre-sets per camera for storing frequent shots.

PTZ cameras that are compatible with ProductionVIEW HD include Vaddio, Panasonic, Sony and Canon.

ProductionVIEW HD is the ideal switcher and camera control system for a variety of applications, including houses of worship, local government, live event production and other situations where high definition video is required.

Figure 2: ProductionVIEW HD with key features highlighted

KEY FEATURES

- **1 Frame of Delay:** A single frame of delay between input and output means image magnification (IMAG) for a live event won't be an issue.
- **Anything In, Anything Out:** ProductionVIEW HD will accept a variety of HD, RGBHV and SD signals and scale or scan convert them. See the Technical Specifications for a complete listing.

1. **Focus and Iris Controls**: Focus and Iris can be adjusted from knobs on the control surface for real-time control of these critical functions.
2. **Dual Bus Switching:** ProductionVIEW HD can be configured as Program and Preview buses or as discrete video outputs -- one for high resolution IMAG and the other for delivery to a recording or streaming device. In addition, both buses can switch between inputs with a wipe, cut or dissolve.
3. **Lower Screen Graphics:** Insert "lower third" and other graphics, through our unique LSG function. A variety of sizes and transparency levels are available through buttons on the console.
4. **Picture-In-Picture:** Insert video in any corner of the program video output to add impact to your live production.
5. **Wipe, Fade, Cut, Transition Speed and Fade to Black:** Select a variety of wipe patterns, fade or cut from buttons on the control console. The Fade to Black (FTB) feature allows the Program output to fade to black. Transition Speed allows a wipe or fade transition to be adjusted up to 4 seconds.
6. **Take Button:** Pressing the Take button switches the input selected from Preview to Program.
7. **Joystick PTZ Camera and Speed Controls:** Vaddio, Panasonic, Sony and Canon PTZ cameras can be controlled via the 3-axis/1-button Hall-Effect joystick built into ProductionVIEW HD. Adjustable knobs for Pan, Tilt and Zoom speeds. Pressing the button sends the selected camera to its "Home" position
8. **Camera Selector and Presets:** Select a camera with the top bus, and program up to 12 preset shots per camera, using the camera preset control user interface.
9. **Menu and LCD Screen:** The internal menu allows the user to configure the resolution on the Preview and Program outputs, as well as other parameters built into the console.
10. **Manual and Automatic Modes:** In addition to a manual or "operator" mode there is an Automatic Camera Switching mode for PTZ camera presets assigned to Vaddio input triggers like the StepVIEW™ mats, AutoVIEW™ IR or TouchVIEW™ buttons.

WHAT'S INCLUDED

The Vaddio ProductionVIEW HD includes the following items:
ProductionVIEW HD Video Control Console
PowerRite™ 18 VDC Power Supply
AC Cord Set
Documentation

TECHNICAL FEATURES

Master RS-232 Control Port

The master control port allows connection to other control systems for complete access to the internal functions of the ProductionVIEW HD.

Compatible Cameras

The ProductionVIEW HD is capable of identifying by auto-sensing each camera attached. Control codes for most of the following cameras are built-in (see manual for list):
Vaddio WallVIEW™ Series Cameras
Vaddio HideAway™ & CeilingVIEW™ Cameras
Panasonic AW-HE100 PTZ Camera
Sony EVI & BRC Series of Cameras

Vaddio Part Numbers
999-5600-000 - ProductionVIEW HD (NTSC)
999-5600-001 - ProductionVIEW HD (PAL)

Figure 3:
Back panel section of ProductionVIEW HD

Vaddio Accessory Cables

440-5600-000 – 15-pin to SD (Y-C / CVBS) breakout cable (female BNCs - 1' / .035m)
440-5600-001 – 15-pin to HD Component (YPbPr/RGBHV) breakout cable (male BNCs - 3' / .914m)
440-5600-002 – 15-pin to HD Component (YPbPr/RGBHV) breakout cable (male BNCs - 6' / 1.829m)
440-5600-003 – 15-pin to HD Component (YPbPr/RGBHV) breakout cable (female BNCs - 7" / 177.8mm)

Figure 4: Optional SD Accessory Cable
(Y-C & Composite)

Figure 5: Optional HD
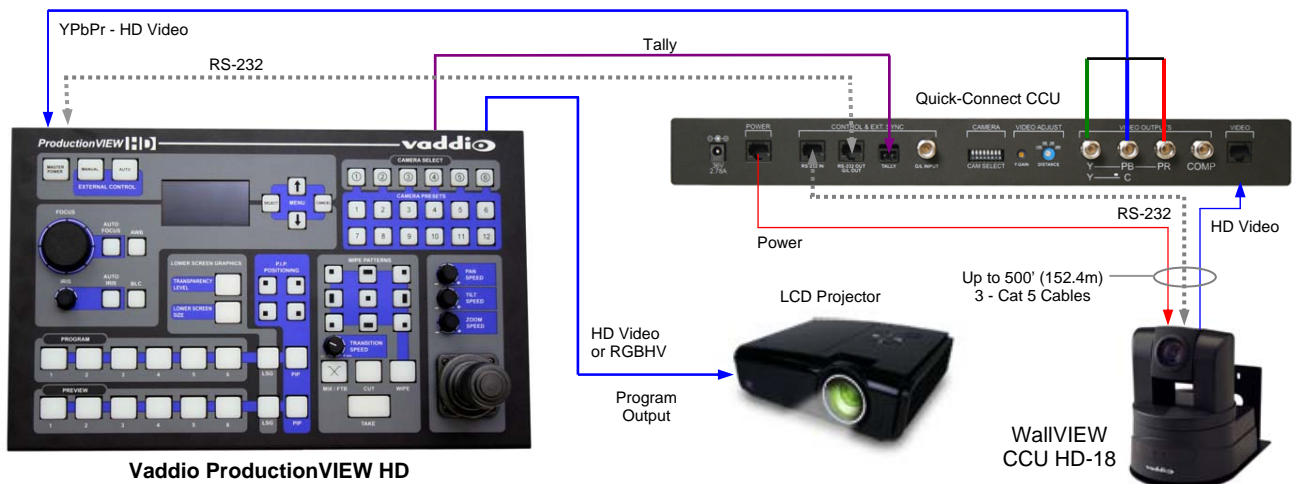Accessory Cable
(3 or 6 foot length)

vaddio

TECHNICAL SPECIFICATIONS

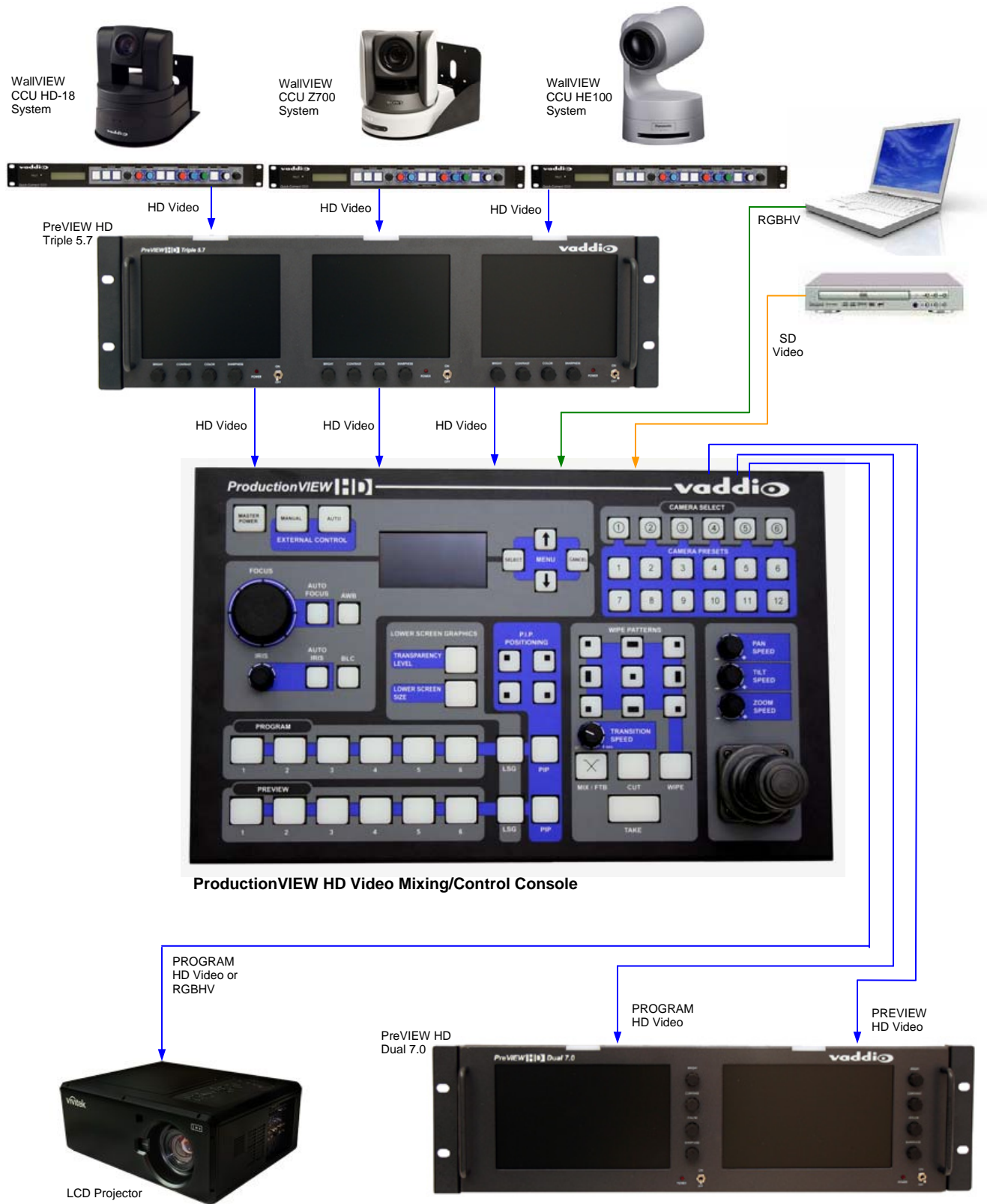| ProductionVIEW HD	
Part Numbers:	999-5600-000 (NTSC) 999-5600-001 (PAL)
Compatible Cameras:	Vaddio, Panasonic, Sony & Canon (See Manual for Specific Models)
Video Formats Supported:	NTSC and PAL
Video Switcher:	6 x 2 (or Two 6x1)
Video Transitions:	Cross Fade, 9 Wipe options and Straight Cuts, Fade to Black
Video Inputs:	Six (6 - DE-15): RGBHV, HD Component (YPbPr), or Y-C & Composite using adapter cables
Preview Output:	Two (2 - DE-15) Preview Outputs: RGBHV, HD Component (YPbPr), or Y-C & Composite using adapter cables - Same resolution on each output
Program Output:	Two (2 - DE-15) Preview Outputs: RGBHV, HD Component (YPbPr), or Y-C & Composite using adapter cables - Same resolution on each output
Camera Control Ports:	Six (6) RS-232 on RJ-45F
Control Interface:	One (1) RS-232 on DB-9
LCD Display:	8-line backlit LCD display
Power Requirements:	PowerRite 18 VDC, 2.78 Amp
Control Inputs for Auto Mode (input 1 & 2):	Cameras 1 & 2 have 6 presets each or Camera 1 can have 12
Tally Output:	Tally outputs for each of the six video inputs
Weight:	9.5 lbs. (4.32kg) – approximate weight
Dimensions (H x W x D):	16" (40.64cm) x 10" (25.4cm) x 4" (10.16cm)

Video Resolutions: All Inputs and Outputs	
HD Resolutions: 1080p (59.94/50)* 1080i (59.94/50) 720p (59.94/50) *With monitor support on YPbPr input.	**RGBHV Resolutions:** 640 x 480 @ 60Hz - VGA 640 x 480 @ 75Hz - VGA 800 x 600 @ 60Hz - SVGA 1024 x 768 @ 60Hz - XGA 1024 x 768 @ 75Hz - XGA
SD Resolutions (Y-C and Composite): 480i (720 x 486 @29.97Hz) NTSC 576i (720 x 576 @ 25Hz) PAL	1280 x 1024 @ 60Hz - SXGA 1280 x 768 @ 60Hz 1400 x 1050 @ 60Hz – SXGA+ 1366 x 768 @ 60Hz - WXGA 1600 x 1200 @ 60Hz – UXGA 1920 x 1200 @ 60Hz - WUXGA**w/Reduced Blanking **WUXGA Available on Outputs Only (with monitor support on VGA input)

SYSTEM CONNECTIVITY

Figure 6:

Basic connectivity of ProductionVIEW HD with a WallVIEW CCU connected (including Tally) to an LCD projector on the Program Output

Vaddio ProductionVIEW HD

Figure 7:
Multiple WallVIEW CCU camera systems, laptop and DVD player connected to ProductionVIEW HD, with PreVIEW™ HD monitors and LCD projector using 5 of the 6 inputs.

WallVIEW CCU HD-18 System

WallVIEW CCU Z700 System

WallVIEW CCU HE100 System

HD Video   HD Video   HD Video   RGBHV

PreVIEW HD Triple 5.7

SD Video

HD Video   HD Video   HD Video

ProductionVIEW HD Video Mixing/Control Console

PROGRAM HD Video or RGBHV

PROGRAM HD Video

PREVIEW HD Video

PreVIEW HD Dual 7.0

LCD Projector

Figures 8, 9, 10 & 11:
Simulated pictures of Lower Screen Graphics feature.

Lower Screen Graphic covering one-quarter of the screen, with a transparency level of 50%

Lower Screen Graphic covering one-third of the screen, with a transparency level of 50%

Lower Screen Graphic covering one-half of the screen, with a transparency level of 75%

Lower Screen Graphic covering the entire screen, with a transparency level of 50%