VADDIO™ PRODUCTIONVIEW™ PC EXPANDER
Video Scaler and PC Input for ProductionVIEW Consoles

Figure 1: ProductionVIEW PC Expander Front Panel Controls (top) and the Rear Panel Connections (bottom)

The ProductionVIEW PC Expander is a 1-RU rack mountable video scaler/switcher that expands the capabilities of the ProductionVIEW Series of video consoles and controllers. The PC Expander essentially adds a PC input to any ProductionVIEW system and scales the video output of the ProductionVIEW or ProductionVIEW FX up to the resolution of a PC for matched resolution display on large format projectors (image magnification systems). The PC Expander has a PC loop-through and video input (S-video, composite video and std. definition component) with a RGB/YP$_B$P$_R$ output and is controlled through RS-232, front panel or IR Remote. When connected to the camera control port six (6) of the ProductionVIEW console, the PC Expander is automatically recognized and control port 6 of the ProductionVIEW is automatically configured to switch the input of the PC Expander between video and the PC inputs on the MAIN bus.

The ProductionVIEW PC Expander can be used as a standalone scaler for scaling up S-Video, composite and std. definition video to RGBHV or YP$_B$P$_R$ HDTV resolutions. The PC input is a loop-through and is not processed so the original integrity and resolution of the PC signal is preserved.

The PC Expander is an easy and economical way of scaling up the video output of the ProductionVIEW or ProductionVIEW FX to match the resolution of a PC for use with large format display systems.

WHAT'S INCLUDED

The ProductionVIEW PC Expander,
Part Number 999-5400-000 includes:
- ProductionVIEW PC Expander
- 12VDC 1Amp Power Supply with AC Cord
- VGA Cable 15-PinHD to 15-PinHD
- HD-15 D-Sub to YPbPr 3-RCA Cable
- RCA to RCA Video Cable
- S-Video Cable
- 3-RCA to 3-RCA YP$_B$P$_R$ Cable
- 4 RCA-F to BNC Adapters
- RS-232 Control Adapter (DB-9M to RJ-45)
- IR Remote Control
- User Manual

TECHNICAL FEATURES

Supported Resolutions
The video inputs are de-interlaced and scaled up to the following PC resolutions; 640x480 (VGA), 800x600 (SVGA), 1024x768 (XGA), 1280x1024 (SXGA) and the following HDTV resolutions; 852x480p, 852x576p, 1280x720p (720p), 1920x1080i (1080i-interlaced). The maximum PC input supported is 1600 x 1200 (UXGA) and is not processed to retain the integrity of the PC signal.

The PC Expander Automatically accommodates NTSC and PAL signals. It has high performance adaptive 3D comb filter Y/C separator, per-pixel motion compensated de-interlacing algorithms to produce artifact-free progressive scan video signals and a built in adaptive film mode 3:2 pull-down provides clear and crisp de-interlacing of video originating from 24 fps film, such as DVDs. The OSD menu system also has adjustable controls for color, sharpness, brightness, tint (for NTSC) and contrast.

Control Options
The ProductionVIEW PC Expander can be controlled manually from the front panel of the unit and has an OSD (on-screen display) for easy set-up and access to the scaling parameters. The PC Expander can also be set-up and controlled with the provided IR Remote control.

ProductionVIEW Integration
When the PC Expander is connected to camera control port 6 of the ProductionVIEW or ProductionVIEW FX consoles, the console will automatically recognize and auto-configure for front panel control of the switching between the video inputs and PC from the MAIN bus assignment button. This feature allows the operator to quickly make a switch from a single integrated control surface for the whole system.

Stand-Alone Operation

The PC Expander can also be used in a system where a high quality scaler is required to de-interlace and scale standard definition S-Video, composite video or component video to PC resolutions or HDTV resolutions for display on large format displays where resolution matching is important
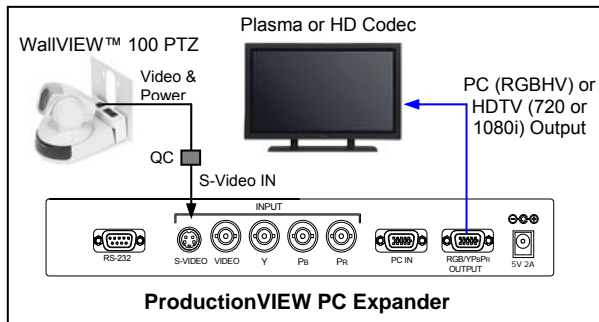
SYSTEM CONFIGURATIONS

Figure 3: Stand-alone operation with standard definition video source scaled up to PC or HDTV resolution.
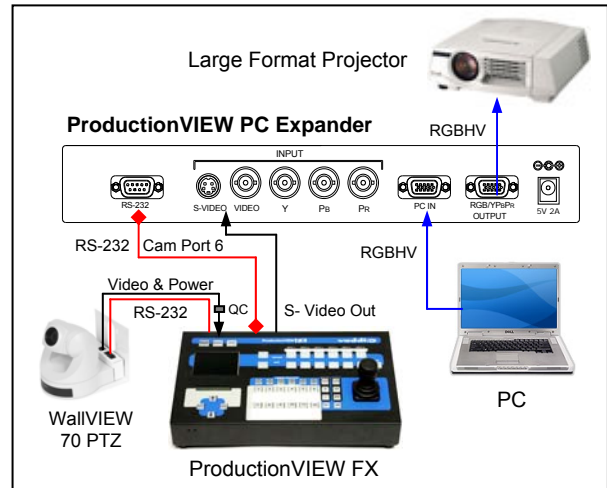

Figure 4: ProductionVIEW PC Expander integrated with ProductionVIEW FX is auto-sensed and auto-configured when plugged into camera control port six (6). The standard definition video sources are scaled up to the resolution of the PC for use with a large screen display system. In this configuration, the ProductionVIEW FX can switch between the S-Video and PC routed to the projector from the front panel of the ProductionVIEW console.

TECHNICAL SPECIFICATIONS

ProductionVIEW PC Expander				
PC Input (Loop)		RGBS (H&V), 1600 x 1200 Max Resolution		
PC Input Connector		15-Pin HD Female		
PC Input Signal Level		RGB @ 0.7V, H&V Sync @ TTL		
Video Inputs		Composite Video @ 1 Vp-p 75 ohm S-Video @ 1 Vp-p 75 ohm YP_BP_R: Y: 1 Vp-p 75 ohm, P_BP_R: 0.7 Vp-p 75 ohm		
Video Formats		NTSC and PAL		
Video Input Connectors		Composite: BNC S-Video: 4-Pin Mini Din Component: BNC		
Scaled Output Resolutions	PC Resolutions	VGA 640 x 480 SVGA 800 x 600 XGA 1024 x 768 SXGA 1280 x 1024	RGBHV RGBHV RGBHV RGBHV	Progressive Progressive Progressive Progressive
	HDTV Resolutions	16:9 - 1280 x 720p (720p) 16:9 - 1920 x 1080i (1080i) 852 x 480p (480p) 852 x 576p (576p)	YP_BP_R YP_BP_R YP_BP_R YP_BP_R	Progressive Interlaced Progressive Progressive
Scaled output vertical refresh rates & Horizontal scan rates		Output Resolution VGA SVGA XGA SXGA 480p 576p 720P 1080i	Vertical (HZ) 59.94 60.32 60.00 60.02 59.94 50 59.94 59.94	Horiz (HZ) 31.469 37.88 48.36 63.981 31.469 31.25 44.995 33.716
Control		Front Panel Buttons, IR Remote Control, RS-232 via Rear Panel DB-9F and ProductionVIEW Integrated Switching from MAIN Bus Assignment		
Video Adjustments		Brightness, Contrast, Color Saturation, Tint (NTSC), Sharpness		
Weight		2.2lbs (1 Kg)		
Dimensions		6" (154) Wide x 8" (204mm) Deep x 1.8" (46mm) Tall		
Power source		100~240VAC to 12VDC/1A Switching Power Supply		
Firmware Requirements		A Firmware upgrade will be required for existing ProductionVIEW consoles.		