CALIBRE

PremierViewProHD-AV
Professional 2K/HD Image Scaler and Switcher with Geometry Correction

PVProHD-AV **is a professional grade image scaler for use with large venue projectors. It features superb scaling and broadcast grade de-interlacing, outstanding noise reduction and image enhancement. PVProHD provides true broadcast grade image processing using the award winning Realta chip together with Calibre's custom firmware and hardware platform**

PVProHD-AV processes professional and consumer content from HD and SD sources such as DVD, satellite/cable receivers, Betacam, Digibeta, PC/media servers, videogames and hard disk recorders, BluRay plus most other sources.

Video image stability and motion performance are outstanding with per pixel motion adaptive de-interlace for SD and HD. 3:2, 2:2 and non-standard cadence pull-down correction is supported with automatic adaption. Video, film and video over film content is automatically processed.

Per pixel motion adaptive noise reduction and image enhancement techniques not only improve HD sources but can make SD sources near-HD quality for large screen projection.

Pan, Zoom and Tilt functions allow display of a particular area of interest. Color calibration is supported with color gains and cut-offs adjustable at 10-bit accuracy.

Processing modes include Genlock to component, 3G/HD/SD-SDI or DVI/HDMI with broadcast-grade output stability, or use Video I/O Track where the processor will automatically switch between 50Hz and 59.94Hz depending on the input signal type, I/O Lock to 50Hz/59.94Hz/60Hz where the output accurately locks to the input and Free Run mode where input and output are asynchronous. All modes include frame buffering for time-base synchronization. Automatic 24Hz or 48Hz output is also selectable for 24p or 24sfp HD sources.

- Stunning HD performance with near-HD quality from SD
- Picture in Picture (PiP)
- Color and Gamma controls, RGB Gain and Cut-off controls
- Automatic Audio Delay Correction for video processing delay
- Aspect Ratio Conversion
- 2D image detail enhancement and sharpness control, real-time unsharp mask, stunning HD performance, near-HD from SD
- Broadcast grade motion adaptive SD & HD de-interlacer with 3:2, 2:2 and non-standard/variable cadence detection with video over film support
- Temporal/film noise filtering HD & SD, MPEG2 noise reduction for SD
- Genlock, Video I/O lock and I/O Track
- Digital and Analog inputs, DVI, HDMI deep color, 3G-SDI, Component, Composite, S-Video, VGA
- Geometry correction for extreme keystone with 4-corner warping/pinning
- Image flip L/R/U/D
- Seamless switching with last frame hold

- Outputs are available in VGA analog and DVI/HDMI digital formats, both of which can support up to 10-bit signal depth. For non-HDCP input signals both outputs can be used simultaneously so that one output can drive the projector while the other runs a local monitor for applications where the projection screen is not visible from where the scaler is situated.

- System control is via a front-panel LCD menu controlled using rugged front panel keys with inbuilt status indication Projections.

- Four user-programmable fast input select keys are provided together with "live feed" indication via the input status key.

- Remote control via TCP/IP or RS232 using an easy to use PC application is provided, or via API for integration with third party control systems

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Inputs

1x HDMI with audio & deep color, HDCP compatible
1x DVI-D, HDCP compatible
1x 3G-SDI (HD/SD-SDI compatible)
2x Composite Video via BNC (NTSC/PAL/SECAM)
2x S-Video via MiniDIN (NTSC/PAL/SECAM)
2x Component video YPbPr/YPbPrS/RGB/RGBS HD/ED/SD via BNCs
1x SVGA via 15HDD

2x SPDIF coaxial digital audio via RCA
2x Toslink fiber-optic audio
4x Stereo analog audio pair via 2 RCAs

Genlock

Genlock to house sync, component input, HDMI/DVI, SVGA or 3G-SDI.
(NB DVI cannot be used for genlock if HDMI is displayed and vice-versa.)

Outputs

1x DVI-D, HDCP compatible, HDMI deep color capable, dual-function output automatically switches between DVI or HDMI depending on display device connected.
1x SVGA via 15HDD *(NB: SVGA is blanked when the HDMI or DVI input is HDCP encrypted, this is due to HDCP licensing rules).*
1x SPDIF coaxial digital audio via RCA
1x Toslink fiber-optic audio
1x Stereo analog audio pair via 2 RCAs

Display Modes

640x480, 800x600, 852x480, 853x480, 1024x768, 1280x720, 1280x768, 1360x768, 1365x768, 1366x768, 1368x768, 1400x768, 1366x1024, 1400x1050, 1600x1200, 1920x1080, 1920x1200, 2048x1080 *and custom user configurable output modes*

User Controls
Control/Ports
Front panel controls with character LCD display
4 user configurable presets
Programmable soft keys for faster input switching
Remote control via RS232 serial port
Remote control via TCP/IP
IR remote control (optional)
USB port for firmware update
PC control software included

Signal Paths
10-bit ADCs for composite, S-Video
12-bit ADCs for component video
10-bit HDMI, 8-bit DVI support
10-bit 3G-SDI

Modes of Operation
(1) Full image processing and filtering, with or without I/O frame rate tracking, or I/O lock mode or Genlock (V-Lock) mode. *(NB I/O lock mode only recommended for use with DVI/HDMI output, not SVGA output)*
(2) Low latency mode with reduced processing

Power
Integral PSU, 100-240VAC 50/60Hz, power via IEC connector.
Rear-mounted power switch.
Front standby/on control key.
Premium-grade cooling fan for reliable installation in equipment racks

Mounting Information
Extremely rugged, professional 19" (2U) Rack case with carrying handles. Case color: Black

Warranty
3-year return to base warranty covers parts and labor, shipping excluded.

Product Code
PVProHD-AV

PVProHD model >	AV	DC	IW	LED
DVI/HDMI Inputs	x	x	x	x
Component Inputs	x	x	x	x
Composite/S-Video Inputs	x	x	x	x
VGA Analog Input	x	x	x	x
3G-SDI Input	x	x	x	x
Genlock (V-Lock)	x	x	x	x
DVI/HDMI Output	x	x	x	x
VGA Analog Output	x	x	x	x
Programmable Audio Follow Video	x	x	x	x
Audio in via L/R analog, SPDIF, Toslink optical or HDMI	x	x	x	x
Realta-based HQV Processing	x	x	x	x
PIP	x	x	x	x
TCP/IP Control	x	x	x	x
Low Latency Mode (system setting)	x		x	x
Low Latency Mode (per signal format, per input channel)		x		
48-bit per pixel edge blend			x	
Optimized for 2K/1080p outputs, 2K input capable		x		
Seamless switching, last frame hold	x	x	x	x
Extreme image shrink, edge-based window size controls				x
Black crush (coring)				x
Edge Blending			x	
Auto pan/zoom/tilt of content for blending/tiling with multiple units			x	x
4-Corner embedded warp	x	x	x	
Warp Mapping		x	x	