

## PremierViewProHD-LED

### Professional HD Image Scaler for LED Displays

**PVProHD-LED** is a dedicated LED screen image scaler with true broadcast-grade processing featuring the award winning Realta chip. PVProHD-LED has proven itself to be the industry leading LED Image Scaler trusted and relied upon in the most demanding applications.

PVProHD-LED 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 for display on LED videowalls.

Fitting the image to suit the LED screen size is pure simplicity with drag and drop edge controls which automatically set scaling factors to suit the screen for all input formats. Pan, Zoom and Tilt functions are also available to display a particular area of interest and uniquely operate independently of the LED screen size controls.

Black crush removes black level noise without reducing peak-white intensity. Color calibration is supported with color gains and cut-offs adjustable at 10-bit accuracy and 16-bit gamma processing for excellent grayscale.

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 over film content is supported.

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 LED screens.

Processing modes include Genlock, Video I/O Track with automatic switch between 50Hz and 59.94Hz depending on input signal rate, I/O Lock to 50Hz/59.94Hz/60Hz where output vertically locks to input and asynchronous Free Run mode. All modes include frame buffering for time-base synchronization.



- Stunning HD performance, near-HD quality from SD
  - Simple fit-to-LED screen image sizing with edge drag and drop controls
  - Flexible LED videowall size support, right down to 64x48 pixels
  - Multiple-unit mode runs several LED screens as one very large videowall
  - Superb scaling even with extreme image resizing using 1024-tap filter
  - Picture in Picture (PiP)
  - Black crush, color and gamma controls
  - Automatic audio delay correction for video processing delay
  - 2D image detail enhancement, sharpness control, real-time unsharp mask
  - 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, MPEG noise reduction for SD
  - Genlock, Video I/O lock and I/O Track
  - Low-Latency Mode with Flicker Reduction Filter
  - Extreme Keystone correction, Image Flip L/R/U/D
  - Pan/Zoom/Tilt independent of LED screen picture sizing
  - Digital and Analog inputs, DVI, HDMI1.3 deep color, HDSOI, Component, Composite, S-Video, VGA
  - Seamless switching with last frame hold
- 
- Processing mode can be chosen for best picture quality and image enhancement or lowest latency. Audio delay is automatically corrected for video processing delays, via a versatile range of audio i/o connections.
  - Outputs are available in VGA analog and DVI 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 LED screen while the other runs a local monitor for applications where the LED 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 LEDs.
  - 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

Calibre UK Ltd,  
Cornwall House, Cornwall Terrace,  
Bradford, West Yorkshire  
BD8 7JS, England

T. +44 (0)1274 394125  
F. +44 (0)1274 730960  
E. [ledsales@calibreuk.com](mailto:ledsales@calibreuk.com)  
W. [www.calibreuk.com](http://www.calibreuk.com)

## PremierViewProHD-LED

### Professional HD Image Scaler for LED Displays

#### Inputs

1x HDMI 1.3 with audio & deep color, HDCP compatible  
 1x DVI-D, HDCP compatible  
 1x HD-SDI (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 HDSDI.  
 (NB DVI cannot be used for genlock if HDMI is displayed and vice-versa.)

#### Outputs

1x DVI-D, HDCP compatible, HDMI1.3 deep color capable,  
 dual-function output automatically switches between DVI, HDMI or  
 HDMI1.3 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 HD/SD-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 mode. (NB I/O lock mode only recommended for use with DVI/HDMI output,  
 not SVGA output)  
 (2) Low latency mode with non-motion adaptive reduced processing, includes  
 selectable vertical temporal recursive filtering for reduced flicker with interlaced  
 inputs.

##### 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-LED

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
HD-SDI Input	x	x	x	x
Genlock	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
Realita-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	

Calibre UK Ltd,  
 Cornwall House, Cornwall Terrace,  
 Bradford, West Yorkshire  
 BD8 7JS, England

T. +44 (0)1274 394125  
 F. +44 (0)1274 730960  
 E. ledsales@calibreuk.com  
 W. www.calibreuk.com