



## HQView410

### HQV™ Scaler–Switcher with Geometry Correction & Edge Blend



Harnessing the power of the Reon™ video processor running state of the art HQV™ algorithms with expertly designed hardware and firmware from Calibre, HQView410 is a highly flexible image scaler which provides stunning image quality for professional, broadcast and corporate AV users.

HQView410 includes 4-sided soft edge blend for seamless blending of multiple projectors and includes flexible geometry correction functions able to correct image shape and projector misalignment by dragging and dropping each image corner, or by pin/barrel & rotation, or by keystone & rotation. It also has an inbuilt portrait mode able to extract a portrait format image from a landscape input which it then automatically rotates by 90 or 270 degrees.

- Best in class professional image processing in a compact affordable 1U format
  - Use as a routing switcher and universal interface for DVI or HDMI switching and distribution systems, projectors and displays
  - Improve video image quality with better detail and clarity
  - Superior de-interlacing reduces image flicker and artefacts
  - Remove picture noise from poor quality video sources
  - Powerful geometry correction for off-axis projection, pin/barrel and image rotation
  - 4-Sided soft edge blend for tiling multiple projectors to produce large images
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- HDMI, DVI, VGA Analog, Component YPbPr, RGBS/RGsB, Composite, S-Video & HD-SDI inputs with signal compatibility up to 1080p & WUXGA
  - HDMI/DVI & VGA Analog outputs
  - PIP (Picture in Picture), POP (Picture on Picture), PAP (Picture alongside Picture)
  - Motion adaptive per pixel video de-interlacing, HD & SD
  - Multi-directional diagonal de-interlace filter
  - Automatic 3:2 & 2:2 pull-down detection with automatic film, video and video over film detection
  - Chroma and Luma transient improvement
  - Edge anti-aliasing
  - 4-field full resolution SD & HD processing
  - 4D Motion, Noise Adaptive HQV noise reduction for spatial and temporal noise
  - Codec noise reduction for mosquito and block compression noise
  - Direct input selection keys allow input selection without using menu system
  - Flexible color calibration controls
  - Gamma controls
  - 10-bit signal inputs, 12-bit accurate internal processing
  - Selectable processing versus latency: best picture and low latency modes
  - Latency as low as 0.25-frame progressive inputs, 1.25-frames interlaced inputs
  - USB port for in-field firmware updates
  - Programmable customer logo on menu
  - TCP/IP remote control and Web Server
  - Easy to navigate self-explanatory OSD menus
  - Powerful geometry correction capabilities
  - Image rotation, pin/barrel correction
  - 4-Sided soft edge blend

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#### Inputs

2x Composite Video CVBS (NTSC, PAL & SECAM),  
1x via BNC jack and 1x via Cinch/RCA  
1x YC/S-Video via 4 pin mini DIN  
1x Component analog video YPbPr(S) or RGBS/RGSB via  
3 or 4 x BNC jack  
1x HDMI with HDCP, 8/10/12 bit video compatible 10-bit  
internal processing depth. Audio strip-off of SPDIF  
compatible formats  
1x DVI with HDCP  
1x VGA Analog via 15HDD  
1x HD-SDI, accepts SD and HD SDI signals via BNC

#### Supported video formats:

HD 720p, 1080i, 1080psf (psf digital only)  
1080p23.97/24/30, 1080p30, 1080p50, 1080p59.94,  
1080p60  
ED 480p, 576p (not via SDI)  
SD625i (576i), 525i (480i)  
Common VESA graphics formats from 640x480 to  
1920x1200 (with reduced blanking for 1920x1200 and  
1600x1200 modes)

Multi standard support for CVBS & YC in PAL, NTSC,  
SECAM formats with selectable 3D comb for composite

#### Outputs

1x DVI/HDMI with HDCP  
(HDMI with deep color 8/10/12 bit support, via DVI connector)  
1x VGA Analog via 15HDD  
1x S/PDIF digital audio via RCA  
NB: VGA Analog output is disabled with HDCP-encrypted input

#### Supported Output formats:

Common VESA formats from 640x480 to 1920x1200, 720p, 1080p  
Selectable I/O lock mode, or frame rate conversion mode  
Selectable aspect ratio conversion

#### User Controls

Remote control via RS232, TCP/IP API and Web Server.  
Keypad for direct input selection and control of common adjustments  
as well as OSD menu access  
USB port for uploading software updates and new features

#### Power Requirements

100-264VAC, 30W typical

#### Warranty

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

*Note: PIP and edge blend are mutually exclusive so cannot be used simultaneously*

HQView model >	100S	200S	210	300S	310	320	325	400S	410	420	500S	510	520	530
Front LCD menu or OSD control	OSD	OSD	OSD	OSD	OSD	OSD	OSD	OSD	OSD	OSD	OSD	OSD	OSD	LCD
DVI/HDMI Inputs				X	X	X	X	X	X	X	X	X	X	X
Component Input				X	X	X		X	X	X	X	X	X	X
Composite/S-Video Inputs	X							X	X	X	X	X	X	X
VGA Analog Input				X	X	X		X	X	X	X	X	X	X
HD-SDI Input								X	X	X				
3G-SDI Input		X	X								X	X	X	X
DVI/HDMI Output	X	X	X	X	X	X	X	X	X	X	X	X	X	X
VGA Analog Output								X	X	X				
3G-SDI Output											X	X	X	X
3G-SDI Audio embed/de-embed											X	X	X	X
HQV Processing	X	X	X	X	X	X	X	X	X	X	X	X	X	X
PIP/POP/PAP								X	X	X	X	X	X	X
TCP/IP Control	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Low Latency Mode	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Flicker Filter for Interlaced Output Modes											X	X	X	X
Geometry Correction, 4-Corner, Rotate			X		X	X	X		X	X		X	X	X
Genlock (V-Lock)											X	X	X	X
Pan, Zoom, Tilt	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Edge Blending					X	X	X		X	X		X	X	X
Edge Blend Black Level Correction							X					X	X	X
Auto pan/zoom/tilt of content for blending					X	X	X		X	X		X	X	X
Warp Mapping						X	X			X			X	X



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