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HQView520
Universal HQV™ Scaler–Switcher-Scan Converter with Warp, Edge Blend & 3G-SDI In/Out

Harnessing the power of the Reon™ video processor from IDT, running state of the art HQV algorithms with expertly designed hardware and firmware from Calibre, HQView520 is a highly flexible image scaler and scan converter which provides stunning image quality for professional, broadcast and corporate AV users.

HQview520 features 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 and rotation.

Full warp mapping is also supported by HQView520. A PC application is included for easy warp map creation or third-party generated warp maps can also be processed from automatic image alignment systems making HQView520 ideal for dual overlaid projector alignment in 3D systems.

HQView520 has 3G-SDI input and out connectivity with backwards compatibility with HDSDI and SD-SDI. A Genlock input is provided for studio/staging, compatible with bi or tri-level sync or black & burst.

- Best in class professional image processing in a compact affordable 1U format
- Use as a routing switcher and universal interface for 3G-SDI, HD-SDI, 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, image rotation
- 4-Sided soft edge blend for tiling multiple projectors to produce large images
- Flexible warp mapping for curved screen projection, simulation and 3D alignment
- Genlock and I/O Lock for in-camera and edge blend use

- 3G-SDI, HDMI, DVI, VGA Analog, Component YPbPr, RGsB/RGBS, Composite & S-Video inputs with signal compatibility up to 1080p & WUXGA
- 3G-SDI, HDMI/DVI & VGA Analog outputs
- 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
- I/O Lock, Genlock/Frame Sync and Free Run selectable output modes
- Flicker filter for interlaced output modes
- 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
- Pan, Zoom, Tilt
- Image rotation, pin/barrel correction
- 4-Sided soft edge blend
- Flexible warp mapping

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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 RGsB/RGBS
via 3 or 4 x BNC jack
1x HDMI1.3 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
1 x 3G-SDI, accepts 3G, HD and SD SDI signals via BNC
supports 4:2:2 and 4:4:4 formats with audio de-embed

1x Genlock input via BNC, accepts bi-level, tri-level sync or black
& burst, 50/59.94/60Hz formats

Supported video formats

HD 720p, 1080i, 1080psf (psf digital only), 1080p23.97/24/25/30,
1080p30, 1080p50, 1080p59.94, 1080p60
ED 480p, 576p (not via SDI)
SD 625i (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 3G-SDI
1x DVI/HDMI with HDCP (HDMI1.3 with deep color 8/10/12 bit support, via DVI connector)
1x VGA Analog via 15HDD
1x S/PDIF digital audio via RCA
NB: 3G-SDI and VGA Analog outputs are disabled with HDCP-encrypted input. Not all outputs are
available simultaneously

Supported Output formats:

DVI/VGA common VESA formats 640x480 to 1920x1200, 720p, 1080p
3G-SDI in SMPTE formats 480i, 576i, 720p, 1080i, 1080p with selectable
audio embed
Selectable Genlock, I/O lock or frame rate conversion mode
Selectable aspect ratio conversion
Selectable vertical temporal filter for flicker reduction of interlaced outputs
(edge blend not available in this mode)

User Controls

Remote control via RS232, TCP/IP API and Web Server.
PC-based Warp Map Generator tool
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, 35W typical

Warranty

1-year 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	400S	410	420	500S	510	520
DVI/HDMI Inputs				x	x	x	x	x	x	x	x	x
Component Input				x	x	x	x	x	x	x	x	x
Composite/S-Video Inputs	x						x	x	x	x	x	x
VGA Analog Input				x	x	x	x	x	x	x	x	x
HD-SDI Input							x	x	x			
3G-SDI Input		x	x							x	x	x
DVI/HDMI Output	x	x	x	x	x	x	x	x	x	x	x	x
VGA Analog Output							x	x	x	x	x	x
3G-SDI Output										x	x	x
3G-SDI Audio embed/de-embed										x	x	x
HQV Processing	x	x	x	x	x	x	x	x	x	x	x	x
PIP/POP/PAP							x	x	x	x	x	x
TCP/IP Control	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
Flicker Filter for Interlaced Output Modes										x	x	x
Geometry Correction, 4-Corner, Rotate			x		x	x		x	x		x	x
Genlock										x	x	x
Pan, Zoom, Tilt	x	x	x	x	x	x	x	x	x	x	x	x
Edge Blending				x	x		x	x		x	x	x
Auto pan/zoom/tilt of content for blending				x	x		x	x		x	x	x
Warp Mapping				x				x				x