

Whitehorse™ is a complete video processing system for professional video and high-end home theater systems. Based on Silicon Optix' award-winning Realta HQV single-chip video processor, Whitehorse delivers performance matching or exceeding that of the \$60,000 Teranex Xantus system adopted extensively in the professional broadcast and post-production markets.

The Realta chip combines Teranex's trillion operation per second broadcast quality video processing with Silicon Optix's proprietary geometric scaling technology to create a new standard for image quality – 'Hollywood Quality Video', or HQV.

Whitehorse isn't just another video processor. Its core technology includes Teranex software algorithms that have been refined through 100,000 hours of content verification over the past six years by hundreds of the most demanding customers world-wide – the "Golden Eyes" of Hollywood post production and broadcast including NBC, CBS, ABC, FOX, WB and Turner networks. Furthermore, Realta's fully programmable architecture allows consumer electronics manufacturers to keep pace with newly developed content and optimize image quality for different display technologies.



FEATURES

- HQV True 1080i to 1080p De-interlacing: Rather than discarding half the resolution of high-definition (HD) images as today's image processors typically do, HQV technology maintains full resolution to provide superior clarity and detail.
- HQV SD/HD Multi-Directional Diagonal Filter (MDDF): A true 10-bit diagonal interpolator that removes "jaggies" and stair-stepping artifacts from de-interlaced video sources without blurring the image.
- Fully programmable video DSP processor: The incredible processing power of Realta's proprietary video processor, performing over a trillion operations per second, provide the basis for implementing Teranex's award-winning algorithms. This software-driven approach enables flexibility and upgradeability unmatched by other more traditional hardware-based processors, essentially future-proofing Realta-based systems.
- HQV Noise Reduction: A fully automatic per-pixel adaptive algorithm for detecting and reducing the analog and MPEG compression noise common to DVD and broadcast sources.
- HQV Detail Enhancement: Improves image detail on a pixel-by-pixel basis, delivering crisp SD video that approaches HD quality.
- HQV Automatic Film Mode Cadence Processing: A quantum improvement in automatic handling of film and video sources such as 3:2 and 2:2 sequences, plus the industry's only fully automatic support for "Vari-Speed" (i.e., 3:2:3:2:2, commonly used for movies broadcast on television) and animation (5:5, 6:4, and 8:7) cadences.
- HQV Automatic Per Pixel Video/Film Detection: HQV technology delivers cinema-like quality for mixed film and video sequences, precisely processing film pixels as film and video pixels as video.
- HQV 16- to 1024-Tap Adaptive Scaling: Realta delivers unprecedented image scaling quality with the industry's first 16- to 1024-tap adaptive scaling engine, using up to 1000 input pixels for determining each output pixel.
- True 10-Bit Processing: Complete input to output 10-bit or better internal data path, enabling the rendering of over 1 billion colors.
- Adjustable audio delay to correct for system audio latency (lip sync delay).



SPECIFICATIONS

Inputs:

Analog RGB (1400x1050)	Resolutions up to SXGA+
DVI	Supports resolutions up to QXGA
HDMI	SD/HD resolutions up to 1080i Graphics resolutions up to XGA@75
Composite	NTSC, PAL
S-Video	NTSC, PAL
Component	SD/HD resolutions up to 1080i, YPrPb, RGBHV (3,4, and 5 wire)
S/PDIF Audio	
Toslink Audio	
SD-/HD-SDI	Up to 1080i (WH-100-PRO)

Outputs:

Analog RGB	Support for VESA resolutions up to UXGA@60, 720p and 1080p
HDMI	SD/HD resolutions up to 1080p Graphics resolutions up to XGA@75
DVI	Supports resolutions up to QXGA
S/PDIF Audio	
Toslink Audio	

Control:

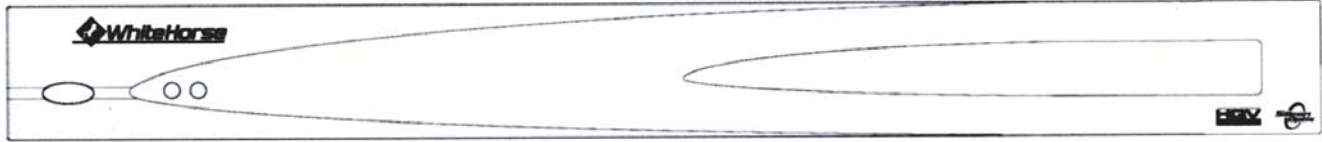
- RS232
- USB 2.0
- Ethernet
- IR Remote

Processing:

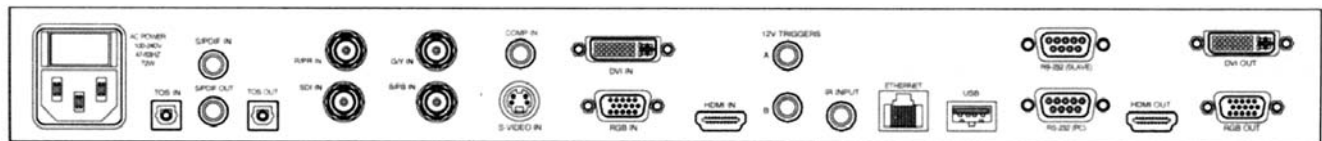
- HQV True 1080i to 1080p De-interlacing
- HQV SD/HD Multi-Direction Diagonal Filter (MDDF)
- HQV Detail Enhancement
- HQV Noise Reduction
- HQV 16 to 1024-tap Adaptive Scaling
- True 10-Bit Processing
- Audio Delay



WHITEHORSE FRONT PANEL

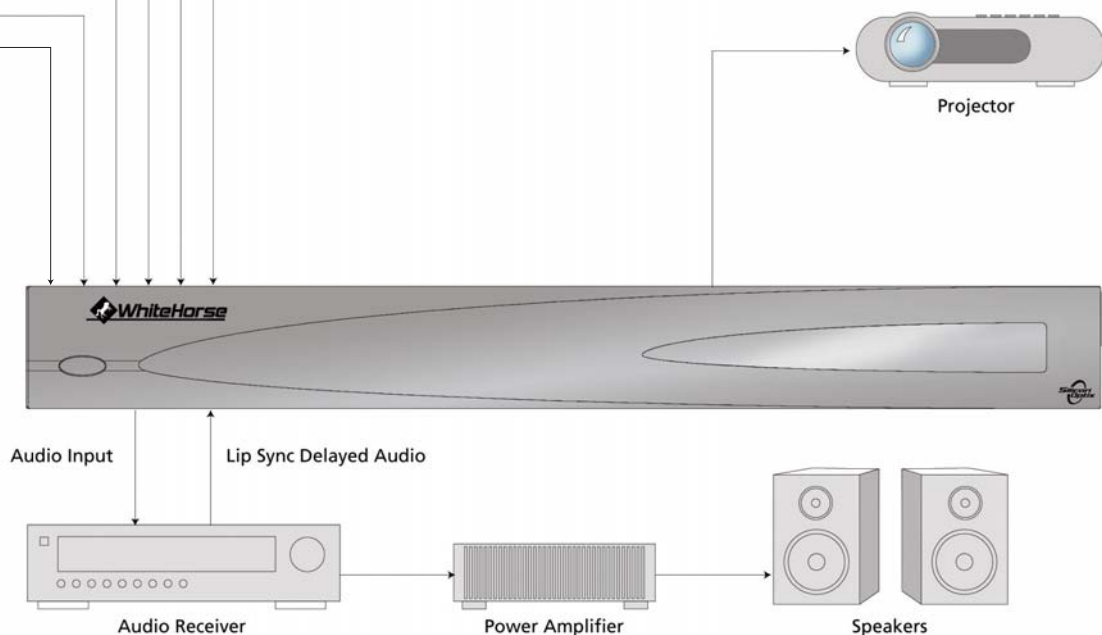


WHITEHORSE BACK PANEL



TYPICAL WHITEHORSE APPLICATION

NTSC/PAL
PC
HDTV
SD/HD-SDI
HDMI
DVI



ORDERING OPTIONS

WH-100	Video-Graphic-Scaler, Eingang: CV, YC, YUV, HDTV, RGBHVI, DVI, HDMI, S/PDIF und Toslink; Ausgang: RGBHV, DVI, HDMI, S/PDIF u. Toslink, max. Auflösung bis 1080p, RS232, USB2.0, IP, IR Remote	8612-0007-01
WH-100-PRO	Video-Graphic-Scaler PRO, Eingang: CV, YC, YUV, HDTV, RGBHV, HD-SDI, DVI, HDMI, S/PDIF und Toslink; Ausgang: RGBHV, DVI, HDMI, S/PDIF u. Toslink, max. Auflösung bis 1080p, RS232, USB2.0, IP, IR Remote	8612-0006-01

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Ein Vertriebsprodukt von:

VIDELCO – Professionelle Audio-, Video-, Medien-Technik!

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