DELTA
Digital Video

MODEL VTV/875

VIDEO-TO-VIDEO SCAN CONVERTER FAMILY

TECHNICAL SPECIFICATIONS

- Provides for conversion between RS-170, PAL, RS-343, and SVGA monochrome video

- Automatic detection of input standard

- Advanced scaling algorithm optimizes video quality

- Flexible packaging

- Internal test signal confirms proper operation or provides fault isolation

BENEFITS

- Versatile; single unit converts between four different video standards

- Conversion to RS-170 or PAL provides for recording using standard TV recorders

- Conversion provides for viewing different videos using a single monitor

- Provides for compression using standard video/TV codecs

The VTV/875 family of scan converters provides for the conversion of monochrome video between four video standards: RS-170/525-lines, PAL/625-lines, RS-343/875-lines and SVGA/800x600. High-resolution sampling, in combination with an advanced scaling algorithm, ensures a near-optimum-quality video output. The scaling is implemented using multi-tap FIR filtering and advanced interpolation, both horizontally and vertically. The VTV/875 auto-detects the video input standard, whereas the output standard is user selectable.

The VTV/875 units are available in the following four configurations: 1) Model VTV/875R is a rugged unit designed for airborne and ground-mobile applications 2) Model VTV/875RM is a rack-mount box 3) Model VTV/875H is a half-rack box and 4) Model VTV/875 is a Compact PCI module.

All units include an internal test signal generator, which can be used to confirm proper operation or to provide for fault isolation.

VIDEO-TO-VIDEO SCAN CONVERTER FAMILY

VIDEO INPUT

Ports	Three
Format	Composite/HD-SDI/VESA
Format	NTSC/PAL; RS-343; SMPTE-259/292; RGBHV
Connector	SMC/Circular-MIL (J1/J2)

VIDEO SCALING

Algorithm	Multi-tap Scaling w/ H & V Interpolation
Format	Interlaced & Progressive
Resolutions	525i/625i/875i/720p/1080i/ 1080p/800x600/1024x768
Frame Rate	29.97/25/30/50/59.94/60

VIDEO COMPRESSION

Algorithm	H.264 /MPEG-4 AVC (Part 10)
Format	H.264 High/Main/Baseline
Resolutions	1080p/1080i/720p/875i/576i/480i/p
Frame Rate	29.97/25/30/50/59.94/60
GOP Structure	Inter/Intra; Variable Size
Data Rate	256Kbps to 12Mbps
TS Protocol	MPEG-2 Transport Stream ISO/IEC 13818-1

VIDEO OUTPUT

Ports	Four
Format	Composite (2x)/HD-SDI/VESA
Format	NTSC/PAL; RS-343; SMPTE-259/292; RGBHV
Connector	SMC/Circular-MIL (J1/J3)

NETWORK

Ports	One
Format	10/100/1000 Ethernet IP
Configuration	DHCP or Static Address Selectable Ports Auto Sense Full/Half Duplex Unicast/Multicast
Connector	Circular-MIL (J4)

CONTROL

Ports	Two
Format	RS-232; TCP/IP
Protocol	Delta 's 3-character mnemonics Web Browser
Connector	Circular-MIL (J1/J4)

ENVIRONMENTAL

Temp/Alt (Op)	DO-160D, Section 4, Category D2 -40ºC to +70ºC
Temp/Alt (Non-Op)	DO-160D, Section 4, Category D2 -55ºC to +85ºC
Humidity	DO-160D, Section 6, Category B 5%-95% RH, non-condensing
Vibration	DO-160D, Section 8, Category S, Figure 8-3, Profile M
Shock	DO-160D, Section 7, Category A, Figure 7-2, Operational (6 g, 11ms, sawtooth)

EMI

MIL-STD-461E	CS101, CS114-116, RS103, RE102, CE-102
DO-160E	Section 18, AF Conducted Susceptibility Section 21, Conducted Emissions Section 22, Lightning Pin Injection Level 3, Waveform 5A

POWER

Volts	+28VDC
Watts	15W
Connector	Circular-MIL (J5)

SIZE / WEIGHT

Chassis	1.75 " H x 4.75 " W x 9 " D / 2.5lbs.

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