

DIGIWAVE DSC-151i

Multi-Standard Converter, Frame Synchronizer, Time Base Corrector, Noise Reducer and Transcoder



- TV Standards conversion PAL, PAL N, PAL M, NTSC, NTSC 4.43 and SECAM (*); 525/60 to 625/50 and 625/50 to 525/60.
- Enhanced 8-point interpolator, 2-field, 4-line, with conversion apertures selection.
- Five-line high performance adaptive comb filter. Bandwidth 6 MHz.
- 12 bit A/D and D/A conversion and 10 bit processing.
- Digital adaptive noise reducer for luminance and chrominance, with frame recursive filter.
- Composite video, Y/C (S-Video), and serial digital SD-SDI input and output (SDI option) (*).
- Horizontal and vertical enhancer (aperture correction) with adjustments.
- User friendly control panel with lighted display, keyboard, and extensive selection and enhancement facilities.
- Separate storage of adjustments in non-volatile memory for each input.
- Genlock with digital adjustments and "loop-through" input.
- Selection of output signal in the event of input signal loss: last valid field, color bars, black, switch to alternative video input or to stored image.
- Test signal generator.
- Remote control through Ethernet port.

TECHNICAL SPECIFICATIONS

GENERAL

A/D Conversion	12 bit, 54 MHz (4X oversampling)
D/A Conversion	12 bit, 216 MHz (16X oversampling)
Processing:	10 bit, 4:2:2
Interpolation:	8 point, 2-field, 4-line, with conversion aperture selection
Analog Input TV Standard	PAL, PAL N, PAL M, NTSC M / J / 4.43, SECAM
Analog Output TV Standard	PAL, PAL N, PAL M, NTSC M / 4.43
Conversion	Bidirectional: 525/60 to 625/50 and 625/50 to 525/60
Comb filter	Five-line adaptive, for PAL, PAL N, PAL M and NTSC M / J
Noise Reducer	Frame recursive adaptive for luminance and chrominance
Frame Synchroniser	Infinite window
Display	LCD, with backlight

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PERFORMANCE

Luminance bandwidth	6 MHz, composite video, comb filter
Differential gain	< 1 %
Differential phase	< 0.7 %
Signal to noise ratio	> 65 dB, weighted
Transient response	< 0.5 %, K 2T factor
Luma / chroma delay	< 10 ns
SC/H phase	< 3°

CONTROLS AND ADJUSTMENTS

Direct Selection

Luma	- 6 to +3 dB
Black	± 100 mV
Chroma	± 6 dB
NTSC Hue (Tint)	± 30°
Non volatile memory	Store, Recall, Preset
Freeze	Interpolated frame freeze
By-Pass	Bypasses CVBS1 input with CVBS1 output

Menu Selection

Input selection	CVBS In1 - CVBS In2 - S-Video (Y/C) - SDI (1)
Analog input TV standard	Auto, PAL, PAL N, PAL M, NTSC M, NTSC 4.43, NTSC J, SECAM
Analog output TV standard	PAL, PAL N, PAL M, NTSC M, NTSC 4.43
Horizontal enhancer	± 4 dB
Vertical enhancer	0 dB to +5 dB
Noise reduction mode	Auto-low, Auto-medium, Auto-high, Manual, Off
Noise reduction, manual	0 to 12 dB
Genlock selection	Auto, Off
Genlock controls	Horizontal and vertical timing, SCH phase
Decoder controls	Video AGC, Chroma AGC, Comb, Notch, Chroma delay, V-lock
Encoder controls	Pedestal NTSC, Chroma BW, H-Blank
Test signals	Color bars, Matrix, Ramp, Chroma noise, 5 steps, Multiburst, Composite, Off
No signal output	Autofreeze, Pass-through, Bars, Black, Autoswitch, Image
VBI blanking	Pass, Blank
Conversion aperture	Fast, Slow
Remote control	Ethernet (ETH opt.), Off

INPUT AND OUTPUT

FORMATS

CVBS In / Out	1 Vpp / 75 ohms, BNC
Y/C (S-Video)	1 Vpp Luma, 0.3 Vpp Chroma / 75 ohms, mini DIN
Genlock	1 Vpp / 75 ohms, loop-through BNC
SDI In / Out	270 Mb/s, SMPTE 259M, EBU Tech 3267, BNC (SDI opt.)
USB update port	Receptacle type B
Ethernet remote control	10/100 Mbit Ethernet, RJ-45 (ETH opt.)

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PHYSICAL AND POWER

Power Supply: 100 to 240V, 50/60 Hz, 30 W
Dimensions: 1RU, rack mounting, 483 mm (W) x 44 mm (H) x 300 mm (D)
Cooling: Forced air
Weight: 3.5 kg

VERSIONS

DSC-151i Standards Converter, TBC and Noise Reducer.
Composite video and Y/C (S-Video) I/O.

OPTIONS

ETH Remote control by Ethernet port.
SDI Serial digital SD-SDI input and output.

Specifications are subject to change without notice due to continuous product development and improvement.
(*) Secam only for input standard. (1) See versions and options.

October 19, 2012