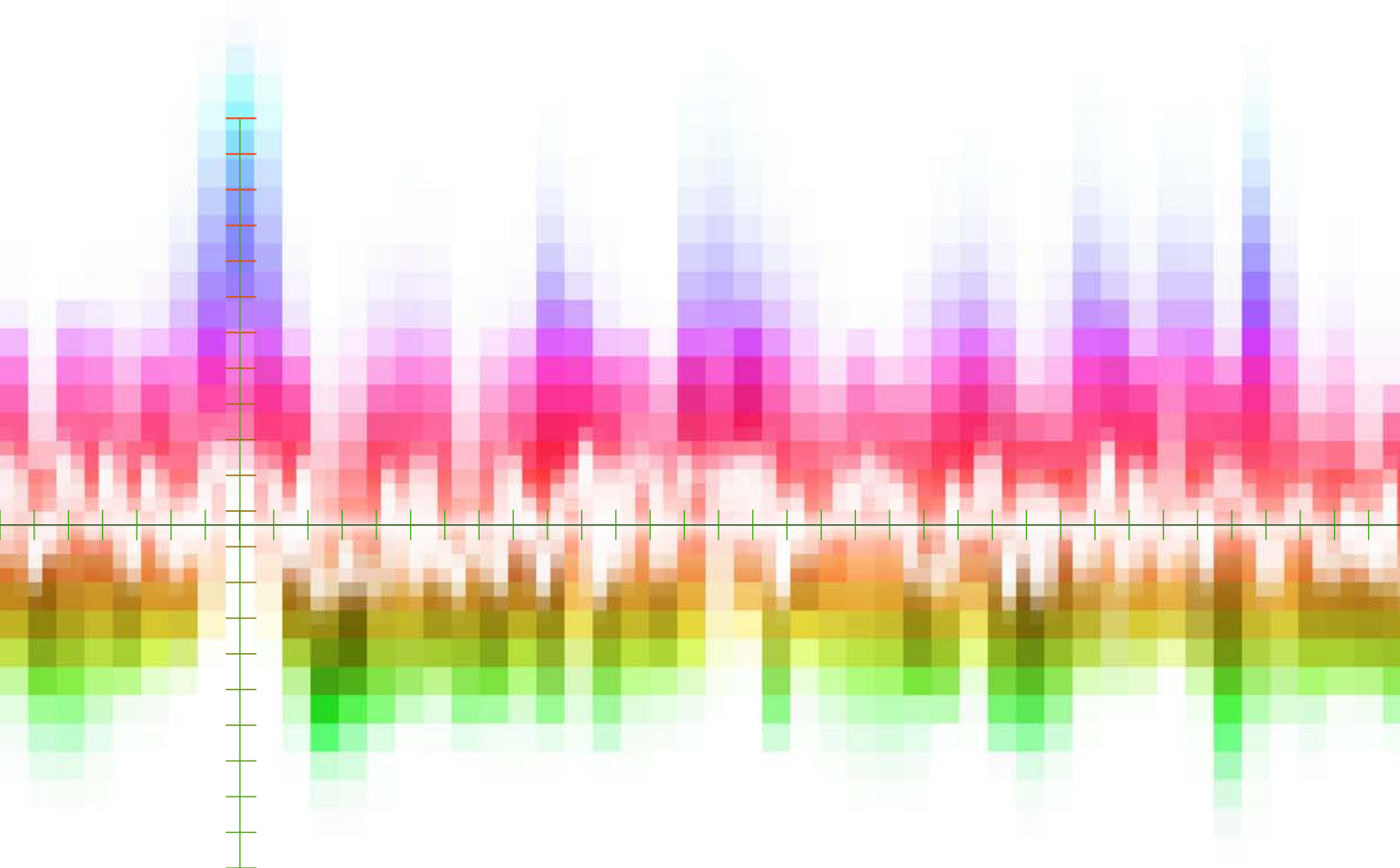


NuMedia 3Genie



3Genie

The introduction of 3G SDI (SMPTE 425M) has created a requirement for test and measurement equipment to verify signal integrity and compliance. Whilst there is a growing number of products offering generator and measurement capability, they do not address problems related to the interchange and production monitoring of 3G SDI signals.

The 3Genie series of adaptors has been designed specifically to simplify working with the new 3G SDI standards when used to transport full HD images at 10 bit resolution. The 3Genie range comprises a 3G test generator and a 3G converter.

Both versions of the 3Genie have monitoring DVI outputs that will drive any display that has a native resolution of 1080 lines. Full HD 1080P inputs transported on 3G SDI Level A/B or Dual-Link are converted to DVI and output as digital GBR to the display.

Non 1080 HD-SDI standards such as SD and 720p are pixel mapped

and centred so they appear as a window within the 1080p raster.

This avoids the need to up-convert the signals which would introduce distortion as a result of digital re-sampling.

Both versions of the 3Genie have a monitoring optical S/PDIF output and De-embedder to allow any of the embedded stereo pairs to be monitored that are carried in any SDI input.

Input standard detection is fully automatic for all SD, HD and 3G SDI standards. When the input is full HD 1080p, the output format can be set to either 3G SDI Level A/B or Dual-Link as required.

Parameters can be controlled locally or remotely via Ethernet by connecting the unit to a laptop or PC and opening up the resident web page and browser. Each unit is supplied with a fixed IP address but can be configured to accept a DHCP address if required.

3Genie

Applications

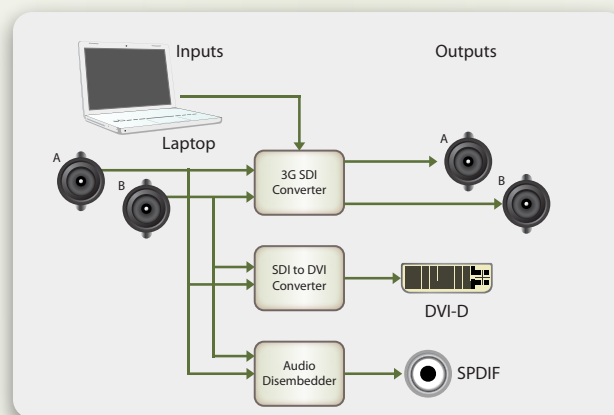
- Dual-link to 3G-SDI conversion
- 3G-SDI to Dual link conversion
- 3G-SDI/Dual-Link Live Production Monitoring
- 3G-SDI/Dual-Link Format Interchange
- 3G-SDI Fibre Bridge

Converter Features

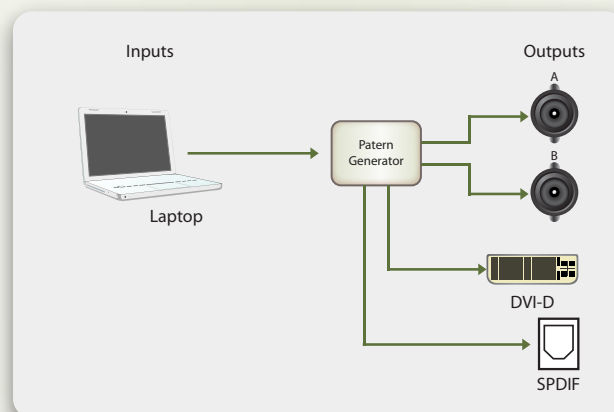
- Automatic standard detection SDI/HD/3G
- 3G-SDI Format Interchange
- Monitoring DVI/HDMI
- Monitoring S/PDIF Optical Toslink
- Remote Control using TCP/IP
- Retains configuration setting when powered down
- Ethernet Browser Control

Generator Features

- Fully Customisable Zone Plate Generator
- Zone Plate Templates for 1D and 2D sweeps
- Fully Programmable 16 channels audio tone generator
- Supplied with a large suite of like and frame patterns
- Standard UYVY download format
- Monitoring DVI/HDMI
- Monitoring S/PDIF Optical Toslink
- Horizontally scrolling line and frame patterns
- Remote Control using TCP/IP



3Genie Converter Functional Diagram



3Genie Generator

Specifications

Video Formats:	1080p/50/59.94/60 SMPTE 425MAB Dual-Link 1080p/50/59.94/60 SMPTE 372M 1080i59.94/50/60, 1080P23.98/24/25/29.97/30 Hz SMPTE 274M 1080psF23.98/24/25/29.97/30 Hz RP211 720p/23.98/24/25/29.97/30/ 5059.94/60 Hz SMPTE 296M 525i59.94,625i50 SMPTE 259M 3G SDI Level A and B are supported.	Control	Web-based HTTP server with resident web page and tab selection for each rack module. Fixed IP address (default) or automatic DHCP assignment.
		Protocols:	HTTP FTP SNMP v2
		Power Supply Converter (3G-GenieC):	12V DC at 1.25A
Audio Formats:	SMPTE 272M (SD), SMPTE 299M (HD) Uncompressed 16 channels 24bit Dolby E AC-3	Power Supply Generator (3G-GenieG):	12V DC at 1.25A
Outputs:	BNC x 2 SD/HD/3G/Dual-Link DVI DVI-D Female Digital GBR 8-bit	Power Connector:	Locking 2.1mm jack
Monitoring Audio Output: Digital AES-3 SPDIF		Power Requirement:	15W (Integrated Unit {3G-Genie}) with external 12V PSU (Supplied)
Connector:	Optical TOSLINK	Dimensions:	W144 D130 H37mm
		Weight:	425 grams
		Operating Temperature:	0 to +45 Deg C
Network Interfaces:	100/1000 Base-T Ethernet	Storage Temperature:	-20 to +70 deg C
Network Protocols:	TCP/UDP IEEE 802.3	CE Compliance:	EN55022:1998 IT equipment EN61000-3 EN61000-4
Control & Management:	10/100 Base-T Ethernet RJ45	Safety:	EN60950-1

Ordering Information

3G-100C 3Genie Converter
3G-100G 3Genie Generator



Features and specifications subject to change without notice. All photographs are generic examples only and may not fully represent the product delivered.

NuMedia

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