

**FEATURES**

- ▷ Excellent Value
- ▷ Compact Size
- ▷ Rugged Steel Enclosure
- ▷ Highest of Quality Components

**APPLICATIONS**

- ▷ Live Broadcast
- ▷ Arenas and Stadiums
- ▷ Shared Control Rooms
- ▷ Campus Facilities



Rear Panel



Front Panel

**NB2-12G-HDMI**

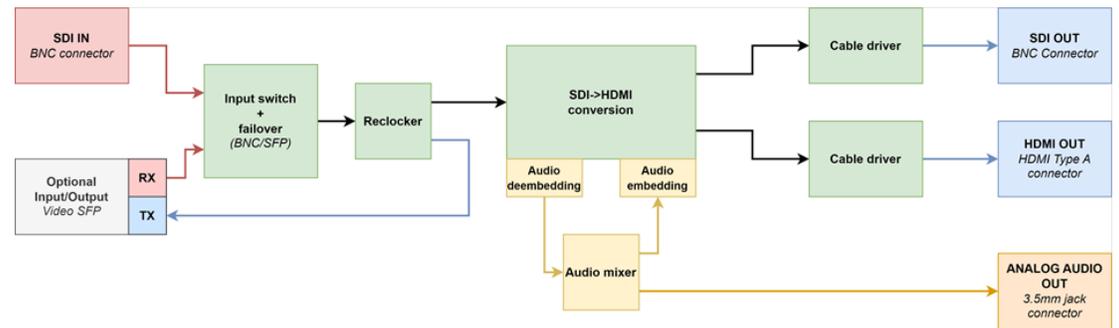
The NanoBrix NB2-12G-HDMI from MultiDyne converts 12G-SDI to HDMI 2.0 signals. This makes it an ideal cost-effective monitoring solution to display professional 12G-SDI signals on LED monitors with HDMI 2.0 inputs. In addition, the unit provides external audio outputs that can be routed to powered speakers. Audio outputs are DIP switch selectable to be either a stereo pair or a Lt/Rt multichannel downmix allowing for 5.1 audio to be mixed down to stereo. Providing a comprehensive audio and video monitoring solution in a compact and rugged form factor.

The NB2-12G-HDMI accepts a single link SDI input ranging from HD up to 12G-SDI with a reclocked SDI output to feed downstream equipment.

Optional fiber SFP equipped models are available including the NB2-12G-HDMI-OE-LC receiver, which can receive an SDI signal over distances up to 10KM on a single LC fiber connector. The NB2-12G-HDMI-OEEO-LC provides both an input and regenerated fiber output on a duplex LC fiber connector. And finally, there is the NB2-12G-HDMI-OE-ST which accepts an SDI signal on a single ST fiber connector.

Power to the unit is provided by an AC adapter with a locking DC power connector. Backup power and firmware updates are possible using the USB-C connector.

**BLOCK DIAGRAM**



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Analog Audio Output, HDMI Output, SDI Loop, SDI Input, Locking DC Connector for AC Adapter

USB-C Backup Power and Firmware Update Link, Optional SFP RX/TX, Audio/Video Selectable DIP Switch Control

### TECHNICAL SPECIFICATIONS

#### Coaxial Serial Data Input/Output

Connector	75-ohm BNC
Bit Rate	270 Mbps – 12 Gbps
Standards	SMPTE 424M, 292M, 2082-1
Return Loss	< 15dB @ 5 MHz – 1.5 GHz < 10dB @ 1.5 GHz – 3.0 GHz
Level	800 mVp-p nominal
Alignment Jitter	< 0.3 UI
Acoustic Noise (Average)	34 dB-A

#### Cable Auto Equalization

Configuration	NB2-12G-HDMI-OEEO-LC [m]	NB2-12G-HDMI [m]
Belden 4694R @ 3 Gbps	152m	170m
Belden 4694R @ 6 Gbps	80m	95m
Belden 4694R @ 12 Gbps	58m	65m
Belden 4855R @ 6 Gbps	45m	45m
Belden 4855R @ 12 Gbps	35m	40m

#### Mechanical, Electrical, Environmental

Length/Width/Height	4" x 2.625" x 0.825"
Approx. Weight	8oz
Voltage	5-15VDC, (Power Supply Included, 90-240VAC)
Power	7.5W max
Operating temperature	-20 to +45°C (-4 to +113°F)
Storage temperature	-40 to +70°C (-40 to +158°F)
Operation Humidity	Max. 90% (noncondensing)

### ORDERING INFORMATION

Part #	Description
NB2-12G-HDMI	12G/6G/3G/HD-SDI to HDMI 2.0 Converter. Includes Power Supply. <b>Optional SFP sold separately.</b>
NB2-12G-HDMI-OE-LC	12G/3G/HD-SDI to HDMI 2.0 Converter. Includes Power Supply & MDOPT02978 12G-SDI Video OE Receiver SFP. LC connector
NB2-12G-HDMI-OEEO-LC	12G/3G/HD-SDI to HDMI 2.0 Converter. Includes Power Supply & MDOPT02974 12G-SDI Video OEEO Transceiver SFP. LC connectors
NB2-12G-HDMI-OE-ST	12G/3G/HD-SDI to HDMI 2.0 Converter. Includes Power Supply & MDOPT02978 12G-SDI Video OE Receiver SFP. ST connector
NB2-ST-ADAPTER	Standard ST adapter to convert SFP to 1 ST
MDOPT02974	12G-SDI SFP Transceiver, 1310nm, MSA, CDR, Supports Pathological, LC connectors
MDOPT02978	12G SFP SINGLE RX, NON MSA, CDR, Pathological