

SDI to HDMI® Converter

- Support for SDI video inputs up to 3Gbit/s (1080P)
- Support for single link 3D formats
- Automatic input standard and format detection
- Fiber input and output options
- HDMI video output with embedded audio
- Analog and AES audio outputs
- Selectable burn in windows
- 16 channel on screen audio meters
- H/V delay and safe area markers
- yelloGUI compatible: Gain access to additional features



The CDH 1813 is a versatile, compact SDI to HDMI converter designed to combat a host of monitoring and display applications in broadcast, post production and pro A/V markets. Convert any SDI video signal, including 3D formats into an HDMI signal for monitoring and display. Fiber connectivity options add SDI fiber transmission and/or SDI fiber reception using the integrated fiber SFP socket.

Two channels of audio can be de-embedded providing digital AES and analog audio outputs. Analog audio outputs have selectable full scale range presets. The two selected audio channels can also be embedded into the HDMI output. In addition 8 channels selected from the input signal (channels 1-8 or 9-16) can be embedded into the HDMI output. Various burn in features make the CDH 1813 a true monitoring tool. Timecode burn in, 16 channel audio metering, safe area markers and Metadata display are just a few of the on-screen monitoring features. The yelloGUI software provides support for a host of additional settings and features which are accessed using a PC and the USB port on the module.

Technical Specifications

SDI Input	1 x SDI video on 75 Ohm BNC connector SMPTE ST 259M (SDTV) SMPTE ST 292-1 (HDTV 1.5 Gb/s) SMPTE 424 M (3Gb/s) supporting ST 425-1 Level A and ST 425-2 <small>For a detailed list of supported formats please refer to the article in our knowledge base (www.lynx-technik.com > support > tech.support)</small> Support for 'single link' 3D modes: "side by side", "top-bottom" and "dual stream (SMPTE ST-423-2)" Return Loss: > 15dB to 1.5GHz and > 10dB up to 3GHz Automatic cable EQ (Belden 1694A cable) 340m @ 270Mbit/s, 150m @ 1.5Gbit/s, 120m @ 3Gbit/s
Fiber Input	1 x fiber optic SDI input. SMPTE 297M - 2006 (Optional- see fiber options table)
SDI Output	1 x reclocked SDI video output on 75 Ohm BNC connector
Fiber Output	1 x reclocked fiber optic SDI output. SMPTE 297M - 2006 (Optional- see fiber options table)
HDMI Output	10 bit HDMI 1.4a support including 3D, deep color and embedded audio Type A connector. 3D modes supported: "side by side" + "top and bottom" + "frame packing" 24 bit (3 X 8bit) and 30bit (3 x 10bit) deep color (R,G,B / Y,Cr,Cb / X,Y,Z) 2 or 8 channel audio embedding (selectable) Balanced mode with 24,22,20,18,15,12 dBu full scale (selectable) Unbalanced mode with (line level) at -10 dBv 1/4 inch Jack plug (phono) to RCA connection adapters supplied
AES Output	AES3id on 75 Ohm BNC, 2 channels (selectable)
Audio Output	Left and right analog audio using 1/4 inch jack sockets (phono sockets) Balanced mode with 24,22,20,18,15,12 dBu full scale (selectable) Unbalanced mode with (line level) at -10 dBv 1/4 inch Jack plug (phono) to RCA connection adapters supplied
USB	Standard USB port for yelloGUI interface and firmware updates (Mini Type "B" plug)
Power	+12VDC @ 3.7W nominal - (supports 10 - 14VDC input range)
Physical	Size: 138mm x 90mm x 22mm (5.13" x 3.54" x 0.86") including connectors Weight: 230g (8.11oz)
Ambient	5 - 40°C (41 - 104°F) 90% Humidity (non condensing)
Model #	CDH 1813 - (EAN# 4250479359833)
Includes	Module, AC power supply, RCA adapters, HDMI + USB cable, transport case

SDI Fiber Transmitter Options			
Model	Description	Power	
OH-TX-1-LC / ST / SC	SFP Fiber TX - Singlemode - LC, ST or SC conn. - 10km	-5dBm (1310nm)	
OH-TX-0-850-MM	SFP Fiber TX- Multimode - LC conn. - 300m	-5dBm (850nm)	
SDI Fiber Receiver Options			
Model	Description	Sensitivity	
OH-RX-1-LC / ST / SC	SFP Fiber RX - Singlemode - LC, ST or SC connector	-16dBm	
OH-RX-0-MM	SFP Fiber RX- Multimode - LC connector	-15dBm	
SDI Fiber Transceiver Options			
Model	Description	Power	Sense
OH-TR-1	SFP Fiber RX/TX - Singlemode, LC Connector - 10km	-5dBm	-18dBm
OH-TR-0-850	SFP Fiber RX/TX - Multimode, LC Connector - 300m	-5dBm	-15dBm
SDI CWDM Fiber Transmitter Options			
Model	Description	Power	
OH-TX-4-XXXX	CWDM SFP Fiber TX - Singlemode LC Conn. - 40km XXXX=Wavelength. 18 according to ITU T G692.2 1270nm through 1610nm	-1dBm	
SDI CWDM Fiber Transceiver Options			
Model	Description	Power	Sense
OH-TR-4-XXXX	CWDM SFP Fiber RX/TX - Singlemode LC Conn. - 40km XXXX=Wavelength. 18 according to ITU T G692.2 1270nm through 1610nm	-1dBm	-20dBm

Monitoring Features

The CHD 1813 is ideal for regular transparent image monitoring, providing a clean 1:1 HDMI conversion of the SDI input signal. There are also a number of other HDMI monitoring options available. These monitoring modes are activated using the module dip switch and can be used individually or as combined monitoring modes.

Clean Feed

- Direct conversion of input SDI Stream
- The CHD 1813 does not scale the image, therefore the HDMI output format is the same as the native SDI input resolution and frame rate.



Burn in Windows

- Display up to three timecode values (if present) (VITC , LTC, DVITC)
- SDI input format, bit depth and color scheme
- AFD present and format code
- 16 audio level meters
- Closed Caption, WSS and VI metadata presence



Safe Area Markers

- SMPTE Safe Action (default)
(default can be changed using yelloGUI)
- Center cross marker
- Fully programmable with yelloGUI



H / V Delay

- View horizontal and vertical blanking

