

4K HDMI® to 12G SDI Converter

- Supports 12G / 6G / 3G / 1.5G / SD-SDI Signals
- 3G SDI Level A and Level B support
- 2x BNC and 1x optional Fiber SFP outputs
- 1x HDMI 2.0b input
- HDMI Embedded PCM Audio Passes Transparently
- HDMI present LED indication
- LynxCentraal and yelloGUI compatible for internal settings

The CHD 1402 is a compact HDMI to SDI converter. It is an ideal solution for any application which requires a broadcast quality SDI signal derived from an external HDMI source. Currently, PCM and AC3 audio present in HDMI stream are transparently passed through/ Embedded into the SDI output.

The module is also compatible with the yelloGUI and LynxCentraal control software, which provides access to additional internal settings.

An SDI fiber output is also provided with a selection of optional SFPs.

Note: For legal reasons, HDMI capture devices from LYNX Technik AG are designed not to capture, convert or transmit video or audio from HDCP copy-protected sources (e.g. Satellite receivers, Cable receivers, etc.).

SDI Fiber Transmitter Options

| Model | Description | Power |
|-------------------|--|--------|
| OH-TX-12G-LC | SFP Fiber TX - Singlemode - LC connector - 10km* | 0.5dBm |
| OH-TX-4-12G-LC | SFP Fiber TX - Singlemode - LC, ST or SC conn. - 40km* | 3dBm |
| OH-TX-12G-XXXX-LC | CWDM SFP Fiber TX - Singlemode LC Conn. - 10km* XXXX=Wavelength. 18 according to ITU T G692.2 1270 - 1610nm | 3dBm |

* Distance is an approximation

Video Output Resolution

The module does not have an internal scaler. If the input resolution does not match any of the supported SDI formats, the module by default will select an appropriate SDI standard with a similar number of line pixels and map the signal into the SDI output. This may result in some image cropping (cut) or boxing (blanking) of the overshot area. To change the output format, please connect the module to a PC or Mac via either yelloGUI or LynxCentraal.

| HDMI Input | SDI Output | | | | |
|---------------------|------------|-------|-------|-------|-------|
| | SDTV | 720p | 1080i | 1080p | 2160p |
| <auto> | | | | | |
| SDTV [720x 525/625] | N | B | B | B | B |
| 720p [1280x720] | C | N | B | B | B |
| 1080i [1920x1080] | C | C | N | N | B |
| 1080p [1920x1080] | C | C | N | N | B |
| 2160p [3840x2160] | C | C | C | C | N |
| VGA [640x480] | B | B | B | B | B |
| SVGA [800x600] | C | B | B | B | B |
| XGA [1024x768] | C | CV/BH | B | B | B |
| WXGA [1280x768] | C | CV | B | B | B |
| WUXGA [1920x1200] | C | C | CV | CV | B |
| WQXGA [2560x1600] | C | C | C | C | B |
| WQUXGA [3840x2400] | C | C | C | C | CV |



Shown with optional fiber SFP installed

Technical Specifications

| | |
|---------------------|--|
| HDMI Input | Type A 2.0b connector for up to 2160p60 Up to 8 channels embedded audio in HDMI is passed transparently |
| SDI Outputs | 2 x SDI video, 75 Ohm BNC (both have the same signal - NOT dual link) SMPTE 259M, SMPTE 292M, SMPTE 424M, SMPTE 2081-1, SMPTE 2082-1 Electrical Return Loss: to 1.5GHz to 3GHz to 6GHz to 12GHz >15dB >10dB >7dB >4dB |
| Fiber Output | Optional plug in SFP for optical SDI output (see fiber options table) |
| Power | +12V DC @ 9.3W nominal - (supports 10 - 24V DC input range) |
| Physical | Size (incl. connectors): 123mm x 90mm x 22mm (4.84" x 3.54" x 0.86") Weight: 186g (6.56oz) |
| Ambient | 5 - 40°C (41 - 104°F) 90% Humidity (non condensing) |
| Model # | CHD 1402 - (EAN# 4250479328129) |
| Includes | Module, AC power supply, HDMI + USB cable |



CAUTION: This is a high power module. If mounting the module in the RFR 1200 rack frame please leave an empty slot each side of the module to allow for adequate airflow to prevent the risk of overheating.

Legend

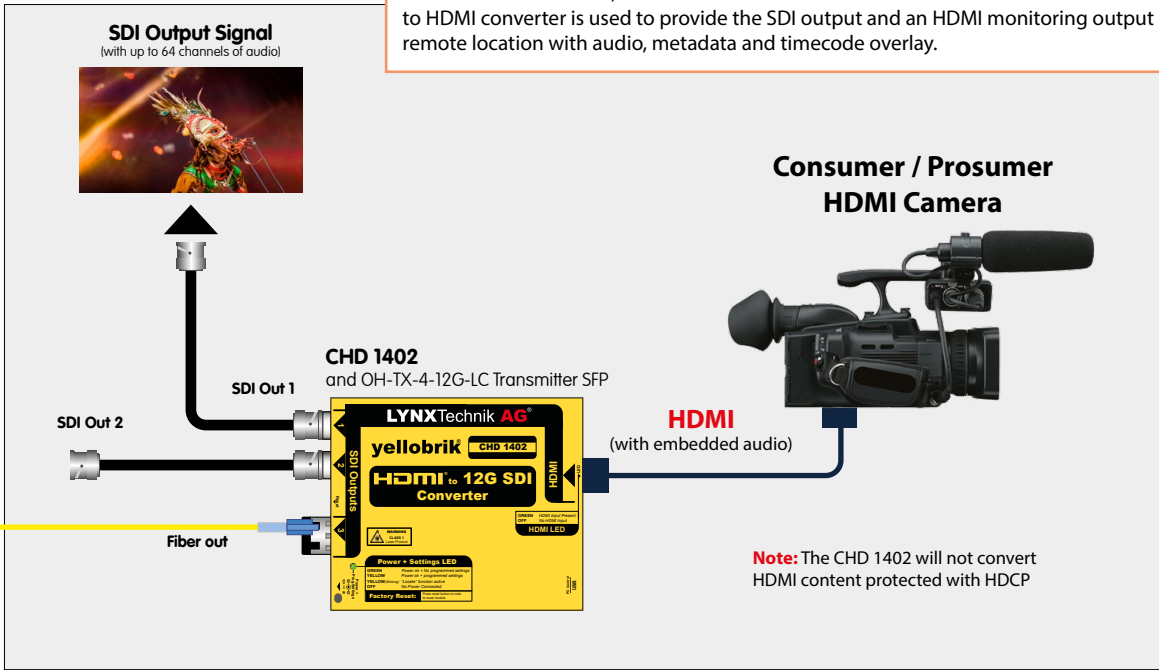
| | |
|-------|-------------------------------------|
| C | Cropping (Horizontal and Vertical) |
| B | Boxing (Horizontal and Vertical) |
| CV/BH | Crop: Vertical / Boxing: Horizontal |
| CV | Crop: Vertical |
| N | Output = Input |

CHD1402_DS_rev03 Specifications subject to change

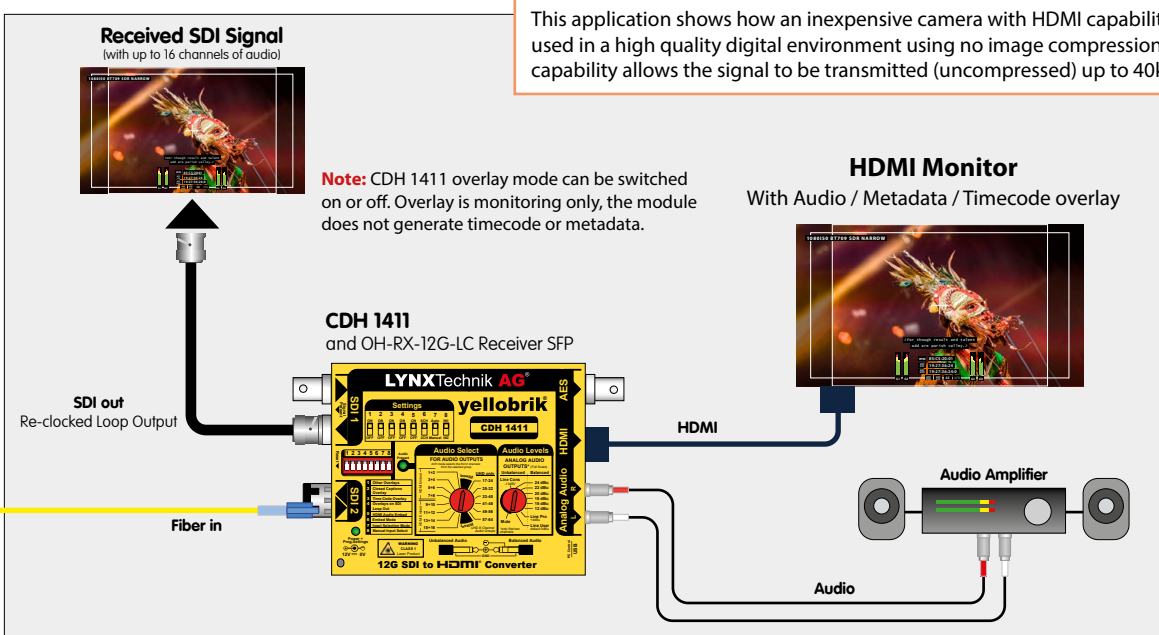


Application Example

An example application is shown below, using the CHD 1402 to convert the HDMI output from a video camera into SDI, and transmit the SDI over fiber to a remote location. A CDH 1411 SDI to HDMI converter is used to provide the SDI output and an HDMI monitoring output in the remote location with audio, metadata and timecode overlay.



Fiber Connection up to 40km (24.9 miles) @ 12Gbit/s with select SFP modules



This application shows how an inexpensive camera with HDMI capability can be used in a high quality digital environment using no image compression. Fiber capability allows the signal to be transmitted (uncompressed) up to 40km.

