

MP-SD-HD2

SDI to HDMI Converter



PRODUCT OVERVIEW

The MP-SD-HD2 converts 3G/HD/SD SDI input signals to HDMI or DVI output. It also separates audio from the SDI signal and provides both analog and optical digital audio outputs, while maintaining synchronized audio and video. The unit supports SDI looping for distributing one input to multiple displays.

KEY FEATURES

- HDTV-compatible transmission up to 1920×1080.
- Supports 3G, HD and SD SDI signal modes.
- 2.97Gbps maximum data speed and 148.5MHz maximum pixel clock.
- Selectable HDMI or DVI output.
- One SDI looping output for cascading additional converters.
- One analog stereo audio output and one optical digital audio output.
- LED indicators provide real-time operating and signal status.
- Aluminum metal enclosure suitable for wall or desktop mounting.

TECHNICAL SPECIFICATIONS

Category	Parameter	Specification
Video Input	Input / Connector	1 × SDI / 1 × BNC
Video Input	Input Signal	SD / HD / 3G SDI
Video Output	Output / Connector	1 × SDI + 1 × HDMI / 1 × BNC + 1 × HDMI Female
Video Output	Output Signal	SD / HD / 3G SDI; HDMI / DVI
Video General	Resolution Range	1080P 1920×1080; 1080I 1920×1080; 720P 1280×720; 480I (NTSC); 576I (PAL)
Video General	Maximum Data Speed	2.97Gbps
Video General	Maximum Pixel Clock	148.5MHz
Video General	Video Impedance	75Ω
Video General	Gain / I/O Level	0dB / 0.5V–2.0Vp-p
Video General	HDCP	Compliant with HDCP
Audio Input	Input / Connector	1 × SDI / 1 × BNC
Audio Output	Outputs	2 stereo audio + 1 digital audio
Audio Output	Connectors	1 × RCA + 1 × SPF fiber connector

Category	Parameter	Specification
Audio General	Input Impedance	>10K Ω
Audio General	Output Impedance	50 Ω /stereo
Audio General	Stereo Channel Separation	>80dB @ 1kHz
Audio General	Frequency Response	20Hz–20kHz
Audio General	CMRR	>90dB @ 20Hz–20kHz
General	Temperature	–20 to +70°C
General	Humidity	10%–90%
General	Power Supply	DC 5V
General	Power Consumption	65W
General	Dimensions	W100 × H100 × D26 mm
General	Product Weight	0.4kg

PANEL & INTERFACE DETAILS

Front / rear interfaces shown in the manual include status LEDs, analog AUDIO OUT, optical DIGITAL AUDIO, HDMI OUT, HDMI/DVI selector, SDI IN, SDI LOOP and DC 5V power.

Interface	Function
PWR LED	Red when normal power is on; off when power is off.
LOCKED LED	Flashes when an input signal is detected and stays on when the signal is locked.
HDMI LED	Green when output is HDMI; off when output is DVI.
3G / HD / SD LEDs	Indicate detected SDI signal mode.
AUDIO OUT	Left/right analog audio output; supports mono output through the audio channel connection.
DIGITAL AUDIO	Optical digital audio output for long-distance transmission.
HDMI OUT	Outputs the converted SDI signal as HDMI/DVI.
Dial Switch	Key 1 selects HDMI or DVI; Key 2 is reserved for future extension/update.
SDI IN	Input for stable SDI source signal.
SDI LOOP	Looping SDI signal output.
DC 5V	DC 5V power input.

SUPPORTED SDI SIGNAL MODES

Mode	Supported Formats
3G	1080P @60Hz/59.94Hz; 1080P @50Hz/49.95Hz
HD	1080I @60Hz/59.94Hz; 1080I @50Hz/49.95Hz; 1080P @30Hz/29.97Hz; 1080P @25Hz/24.975Hz; 1080P @24Hz/23.976Hz; 720P @60Hz/59.94Hz; 720P @50Hz/49.95Hz
SD	480I @60Hz; 576I @50Hz

SYSTEM CONNECTION

The system diagram on page 3 of the manual shows an HD-SDI camera feeding the converter, with HDMI video routed to an HD-SDI HDTV/projector screen, analog audio routed to a speaker, and optical digital audio routed through an optic-fiber acceptor.

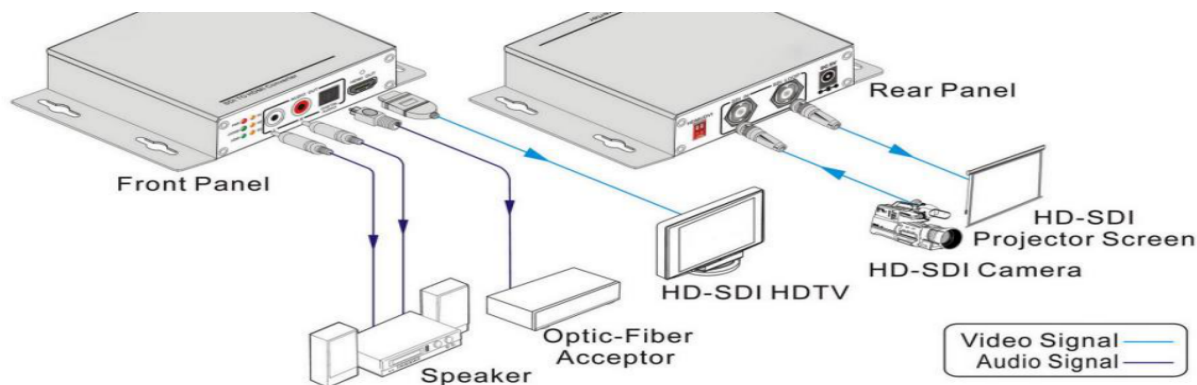


Figure 2 System Diagram

3.2. Connection Procedure

Please reference to the system diagram before your system installation. A detailed installation procedure is shown as follows.

Step1. Connect the input SDI signal (such as SDI camera) to the **SDI IN** port on the rear panel of the MP-SD-HD2 by using a SDI cable.

If you need two outputs, please connect the **SDI LOOP** port on the rear panel of the MP-SD-HD2 to the **SDI IN** port of another MP-SD-HD2.

LOOPING OUTPUT

The SDI LOOP output can feed the SDI IN of another MP-SD-HD2, allowing one SDI input signal to be distributed to several output/display devices. With 3G-SDI signals, the manual specifies that only two converters can be used in a looping connection.

CONNECTION PROCEDURE

- Connect the SDI source to SDI IN using an SDI cable.
- Use SDI LOOP to connect to another converter when additional outputs are required.
- For long-distance digital audio, connect DIGITAL AUDIO to an optical-fiber receiver/acceptor.
- Connect AUDIO OUT L/R to the audio device for analog audio.
- Connect HDMI OUT to the display device with an HDMI cable.
- Ensure all fiber connections are made before applying power.

PACKAGE CONTENTS & WARRANTY

Item	Quantity
MP-SD-HD2	1
Power Adapter	1 × DC 5V, 3A
Mounting Ears	2
Mounting Screws	4 × KM 3×6mm stainless steel
User Manual	1

Warranty: The manual states a three-year product warranty from the purchase date, subject to its stated warranty conditions.

Source: MP-SD-HD2 User Manual, Version MP-SD-HD2_2016V1.0. Product image and system diagram are taken from the supplied manual.