SC&T

HDMI® Extender

User Manual

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Model: **SDI01E-12G**

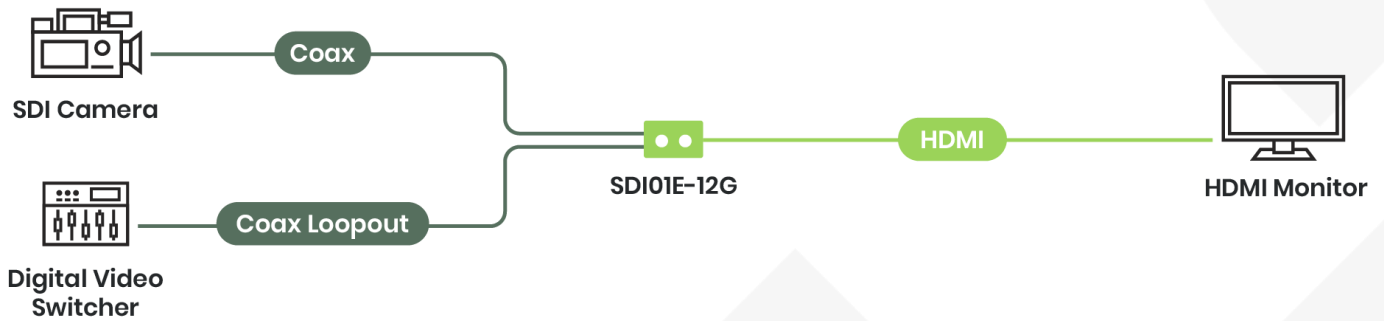**12G-SDI to 4K60Hz HDMI® Compact Converter with Loop Out**

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Introduction

SDI01E-12G is a 12G-SDI to HDMI® 2.0 converter that allows you to monitor 12G-SDI video using a cost-effective HDMI® display. This small and compact converter has a built-in SDI loop-out port to send the input SDI signal to an extra SDI device.
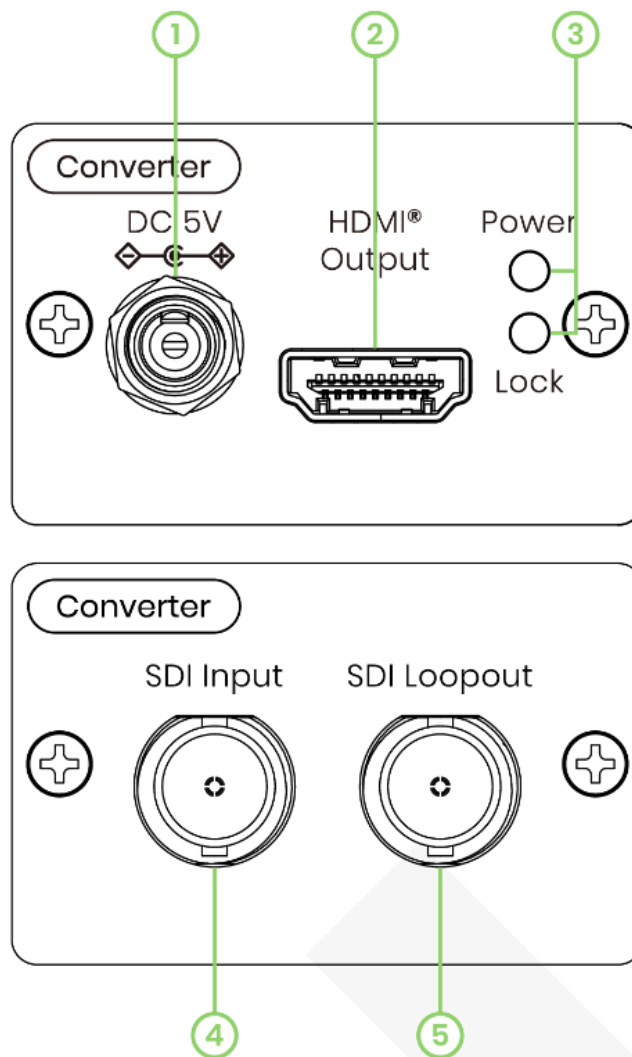
Features

- 12G-SDI input compatible with 6G/3G/HD-SDI
- HDMI® output resolution up to 4K60Hz
- The power input is designed with a locking mechanism to prevent pulling or detachment
- Small, compact, easy to install
- Multiple mounting options: Walls, racks, or DIN rails

Application Diagram

SDI Camera — Coax

Digital Video Switcher — Coax Loopout

SDI01E-12G — HDMI — HDMI Monitor

Panel View

No	Interface	Description
1	DC Jack (with lock)	To plug in a DC 5V power adapter
2	HDMI® Output	To connect to a monitor or TV
3	Power/Lock LED	Refer to *LED Indication (p. 3)*
4	SDI Input	To connect to an SDI source
5	SDI Loopout	To connect to an SDI display or digital video switcher

LED Indication

LED Color	LED Status	Description
Power (Green)	On	Power On
	Off	Power Off
Lock (Blue)	On	SDI signal locked and HDMI® signal ready to transmit
	Off	No SDI signal

Resolution

Resolutions Supported		
SDI Format	HDMI® Format	Frequency
12G-SDI	4096x2160p	50/59.94/60Hz
	3840x2160p	50/59.94/60Hz
6G-SDI	4096x2160p	23.98/24/25/29.97/30Hz
	3840x2160p	23.98/24/25/29.97/30Hz
3G-SDI	1920x1080p	50/59.94/60Hz
HD-SDI	1920x1080p	23.98/24/25/29.97/30Hz
	1920x1080i	50/59.94/60Hz
	1280x720p	50/59.94/60Hz

Notice: Since SDI01E-12G does not support scaling functions, ensure that the HDMI® monitor supports the same resolution as the SDI input format.

Transmission Distance

Condition		
Resolution	Distance (m)	Cable Used
12G-SDI 4K60 4:2:2 10-bit	50m	Belden 1694A RG-6

Cautions

1. This product is designed for indoor applications. If outdoor use is necessary, please additionally install a waterproof protective case and surge protector to prevent damage caused by lightning.
2. Do not place any objects on the power or transmission cables, and avoid stepping on all connection cables.
3. Do not place this product in damp or high-temperature environments. Avoid nearing water or high-temperature devices such as radiators, stoves, etc.
4. Immediately turn off the power and disconnect all connected devices when the following events occur:
    A. When water or other liquids penetrate the product.
    B. When the product is damaged due to external force.
    C. When the product cannot be used normally as described in the manual.
5. If any of the above events occur, please contact us for assistance.
6. It is recommended to use certified Premium HDMI® cables for high-resolution video transmission.
7. It is recommended to use certified coaxial cables for high-resolution video transmission.
8. This converter does not support SD-SDI and 3G-SDI level B.
9. HDMI® 4K60Hz color depth supports up to 4:2:2 10bit.
10. This converter does not support scaling functions. If the input source is detected as 12G-SDI, the HDMI® monitor must support a resolution of at least 4K60Hz.

Package Includes

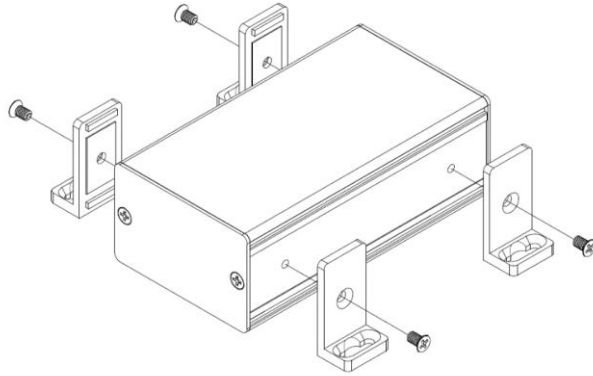| Item	Amount
SDI01E-12G	1 pc
DC 5V2A Power Adapter	1 pc
Mounting Screw pack	1 bag

Technical Specification

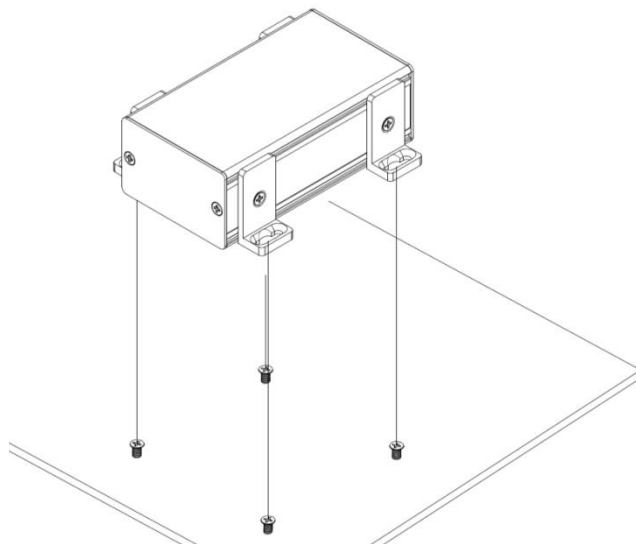|	
Model	SDI01E-12G
Compliance	

Input Resolution	12G: SMPTE 2082@11.88 and 11.868Gb/s
	    4096 x 2160p@60/59.94/50/30/29.97/25/24/23.98Hz
	    3840 x 2160p@60/59.94/50/30/29.97/25/24/23.98Hz
	
	6G: SMPTE 2081@5.94 and 5.934Gb/s
	    4096 x 2160p@30/29.97/25/24/23.98Hz
	    3840 x 2160p@30/29.97/25/24/23.98Hz
	    1920 x 1080p@60/59.94/50Hz
	
	3G-A: SMPTE 424@2.97 and 2.967Gb/s
	    1920 x 1080p@60/59.94/50/30/29.97/25/24/23.98Hz
	    1920 x 1080i@60/59.94/50Hz
	    1280 x 720p@60/59.94/50Hz
	
	HD: SMPTE 292@1.485 and 1.435Gb/s
	    1920 x 1080i@60/59.94/50Hz
	    1920 x 1080p@30/29.97/25/24/23.98Hz
	    1280 x 720p@60/59.94/50Hz
	
	※ Does not support SD-SDI and 3G-SDI level B

Output Resolution	4096 x 2160p@60/59.94/50/30/29.97/25/24/23.98Hz 3840 x 2160p@60/59.94/50/30/29.97/25/24/23.98Hz 1920 x 1080p@60/59.94/50/30/29.97/25/24/23.98Hz 1920 x 1080i@60/59.94/50Hz 1280 x 720p@60/59.94/50Hz ※ 8/10/12 bit color depth (4K60Hz format max support 4:2:2 10-bit)
Audio Format	PCM 2CH、5.1CH、7.1CH
Ports & Interfaces	
Input	1 x BNC
Output	1 x HDMI® Type A 1 x BNC
Power	
Power Supply	DC 5V 2A
Power Consumption	4.5W
Power Saving	1W
Ambient Temperature	
Operation	0 to 55°C
Storage	-40 to 85°C
Operating Altitude (Max.)	2000m
Humidity	Up to 95%
Physical Characteristics	
Dimension	50 x 93 x 32mm
Weigh	155g

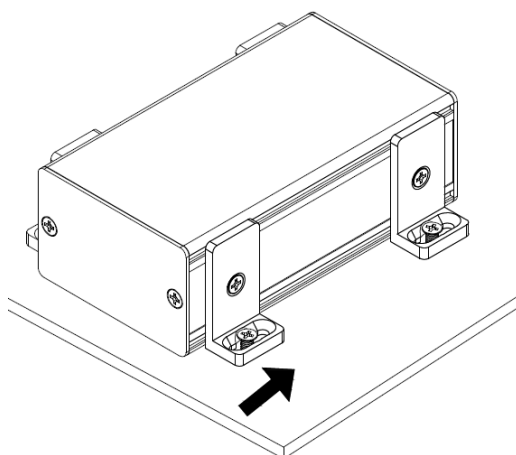## Installation Instructions

Install on a Platform

Step 1 Use machine screws to fix the angle brackets on both sides of the product

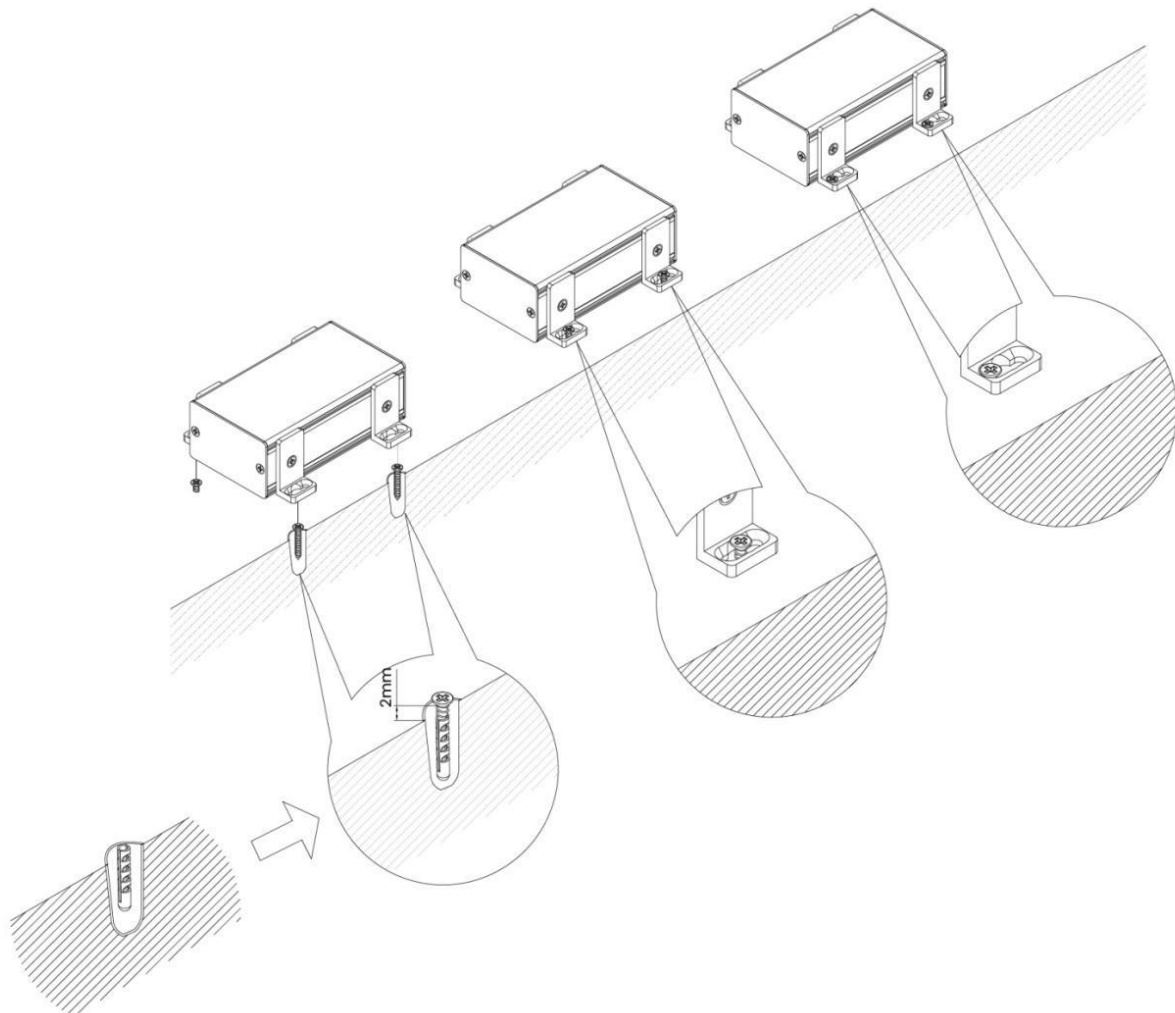**Step 2** Use self-drilling screws to fix the product on a platform

Step 3 Move the product to get fixed and then lock the screws
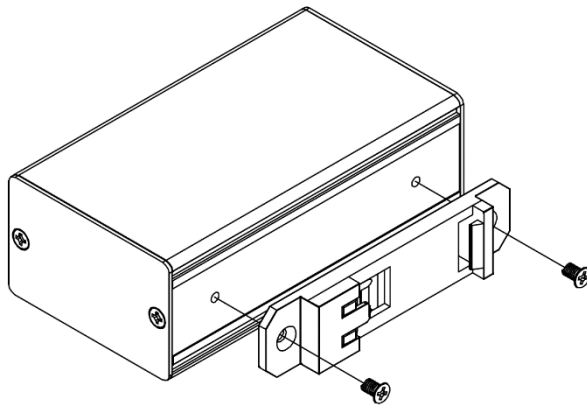
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Install on a Wall

Step 1 Follow Step 1 in **Install on a Platform** to fix the angle brackets. Use self-drilling screws to fix the product on a wall, leaving a 2mm gap protruding from the surface. Align and attach the angle brackets to the protruding screws
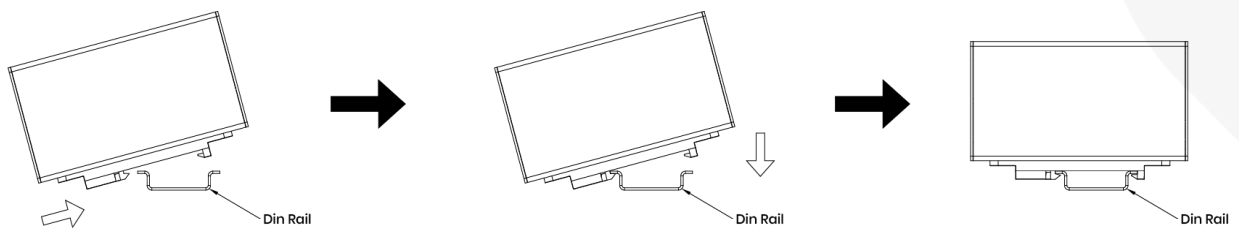
2mm

Install on a DIN Rail

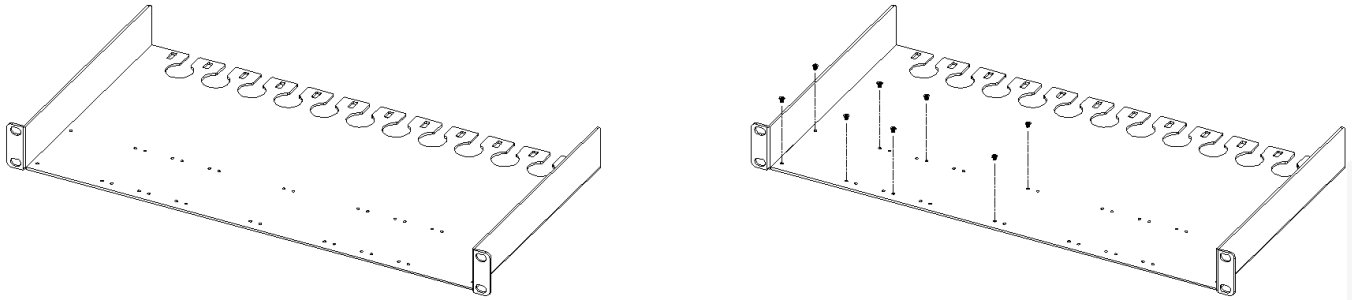**Step 1** Screw the DIN rail mount onto the side of the product

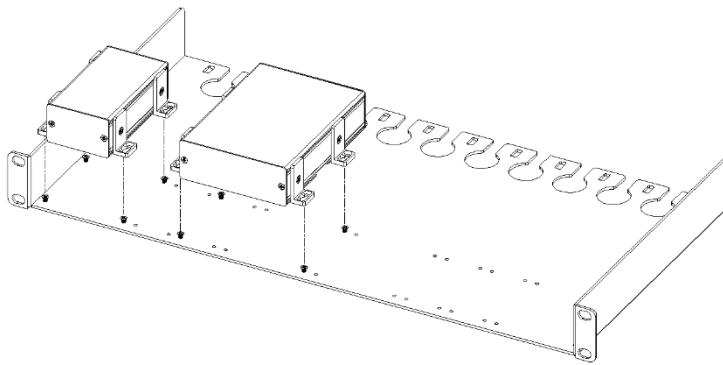**Step 2** Refer to the diagram to mount the product onto the DIN rail
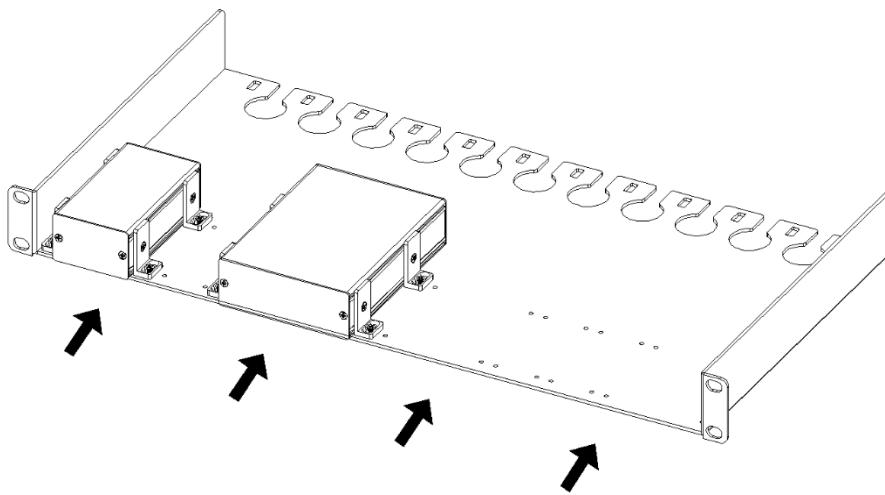
Install on a Rack

Step 1 Lock the machine screws onto the rack

Step 2 Align and attach the angle brackets on the product to the screws

Step 3 Align the products with the edge of the rack

Step 4 Install the rack into a cabinet