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User Manual

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Model: SDI02E-12G

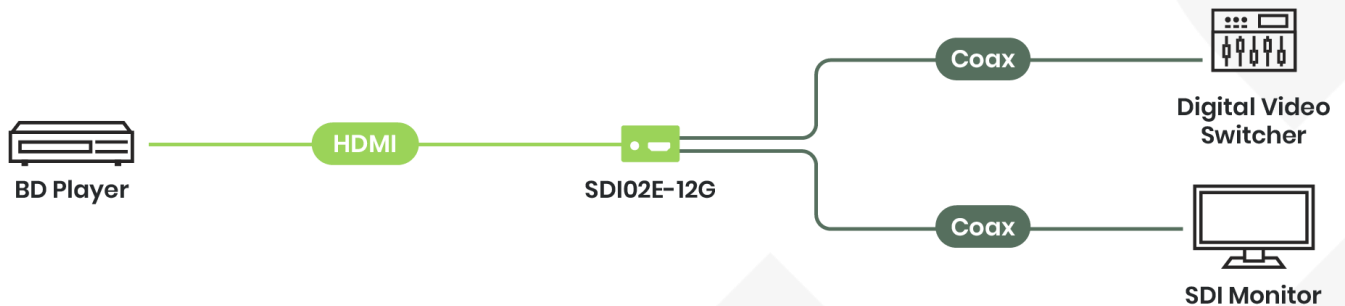## 4K60Hz HDMI® to 12G-SDI Compact Converter with Dual Outputs

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Introduction

SDI02E-12G is an HDMI® 2.0 to 12G-SDI converter that turns consumer HDMI® into SDI signals for broadcast applications. This small and compact converter has two SDI output ports, which can operate at the same time.
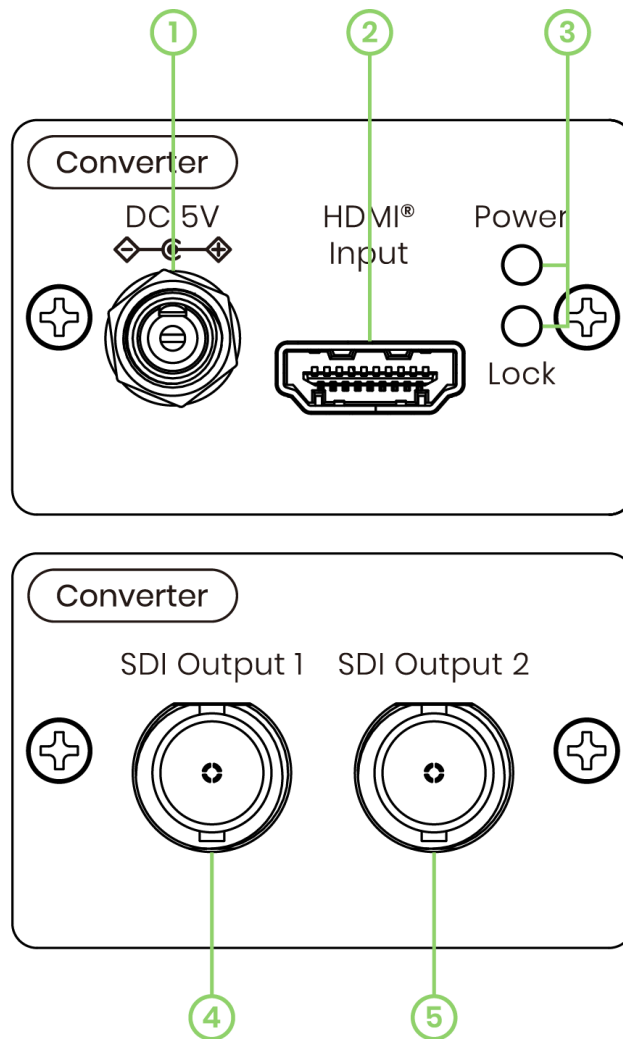
Features

- HDMI® input resolution up to 4K@60Hz
- 12G-SDI output compatible with 6G/3G/HD
- 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
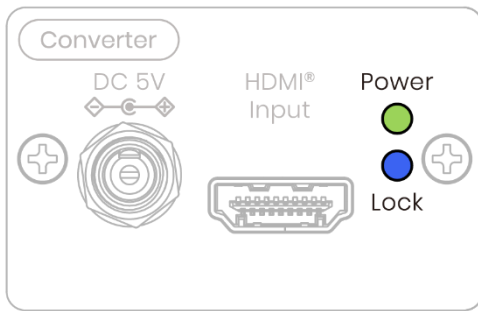
Application Diagram

Panel View

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

LED Indication

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

Resolution

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

Caution

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. Color formats RGB and YCbCr 444 will be converted to YCbCr 422.
10. If connected to a PC or laptop (graphic cards) that supports 4K60Hz resolution, the default output resolution will be 3G 1080p. The resolution can be manually adjusted to 4K60Hz on the PC.
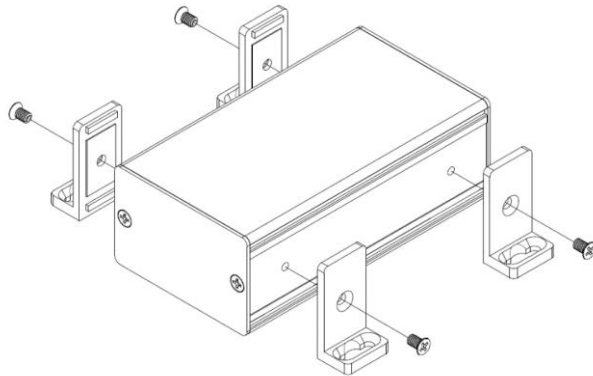
Package Includes

Item	Amount
SDI02E-12G	1 pc
DC 5V2A Power Adapter	1 pc
Mounting Screw pack	1 bag

Technical Specification

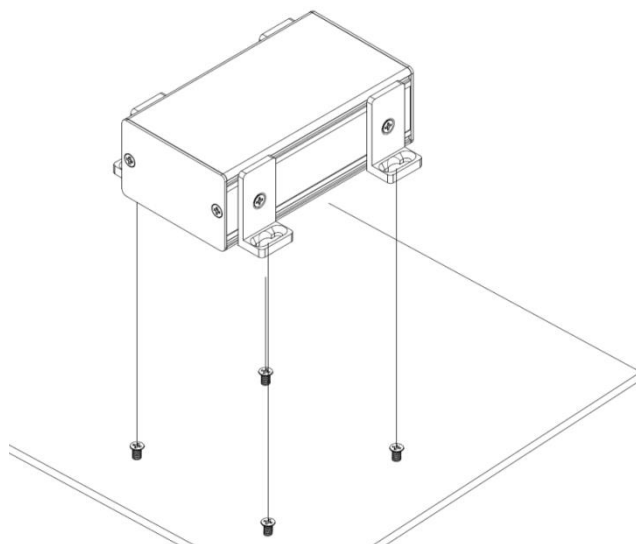| Model	SDI02E-12G
Compliance	
Input Resolution	4096 x 2160p@60/59.94/50/30/29.97/25/24/23.98Hz 3840 x 2160p@60/59.94/50/30/29.97/25/24/23.98Hz 1920 x 1080p@60/59.94/50/30/29.97/25/24/23.98Hz 1920 x 1080i@60/59.94/50Hz 1280 x 720p@60/59.94/50Hz

Output 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
	   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

Audio Format	PCM 2CH、5.1CH、7.1CH
Ports & Interfaces	
Input	1 x HDMI® Type A
Output	2 x BNC
Power	
Power Supply	DC 5V 2A
Power Consumption	5W
Power Saving	2W
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	158g

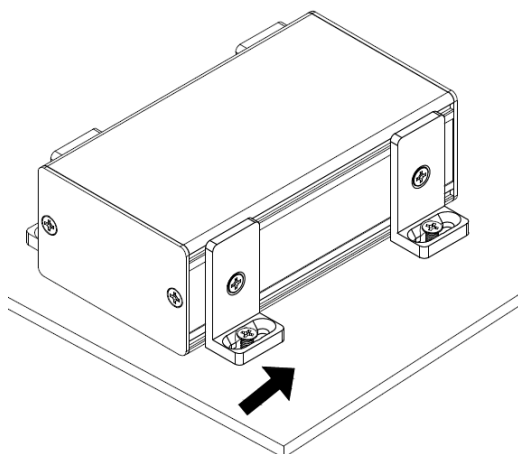## Installation Instructions
Install on a Platform

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

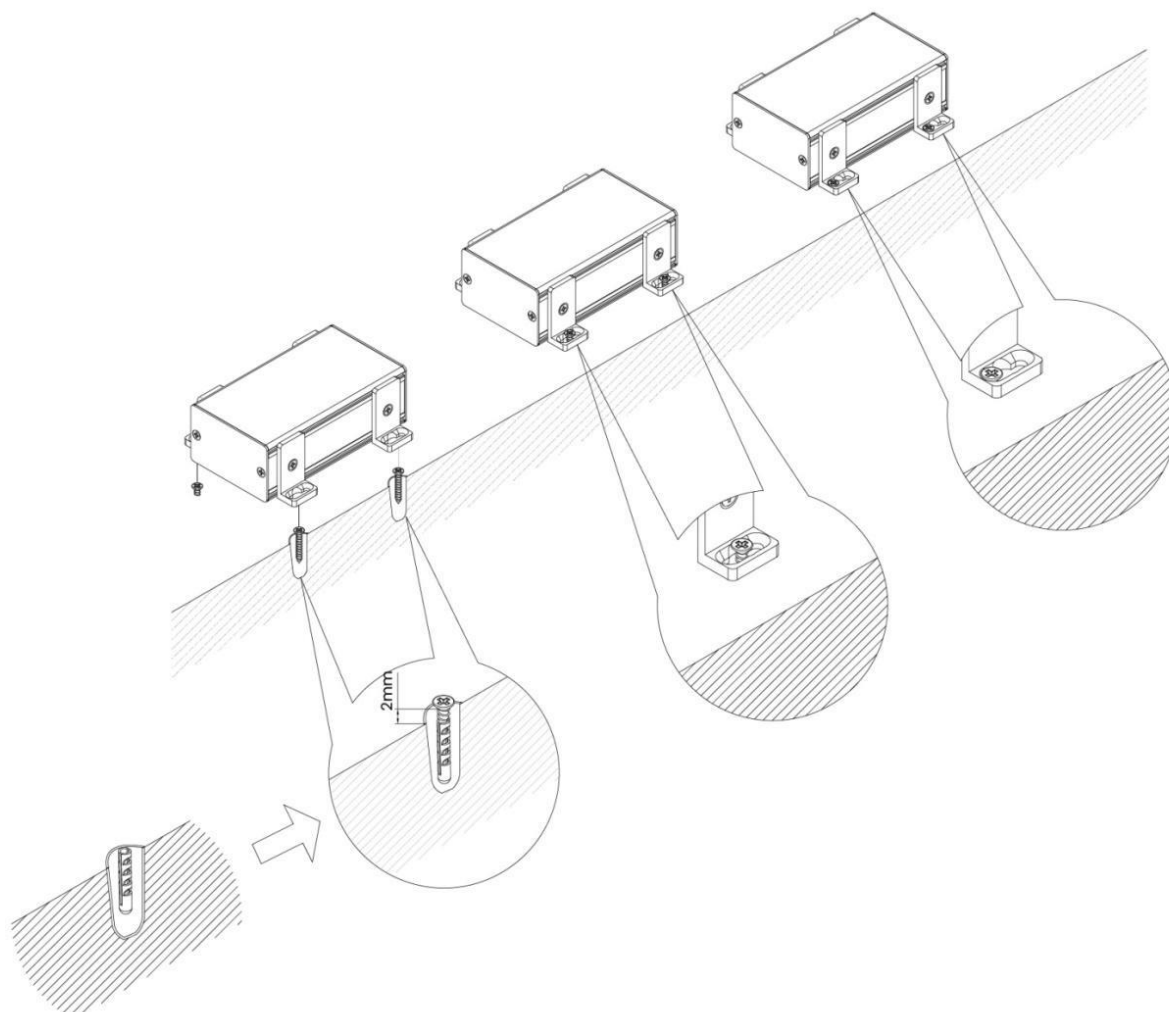**Step 2** Use self-drilling screws to fix the product on a platform

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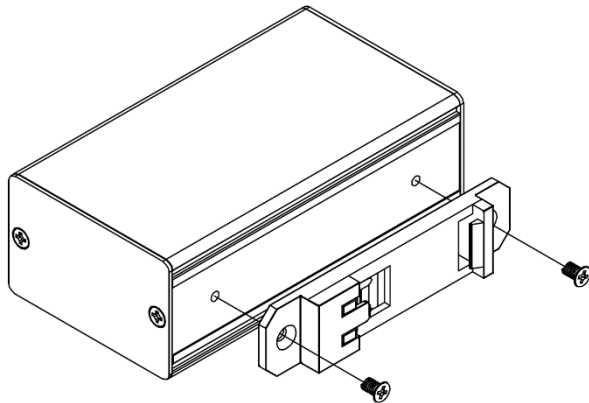
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Install on a Wall

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
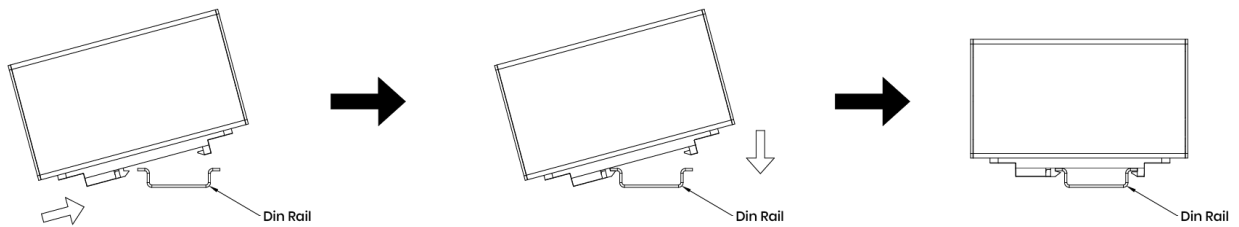
Installed on a DIN rail

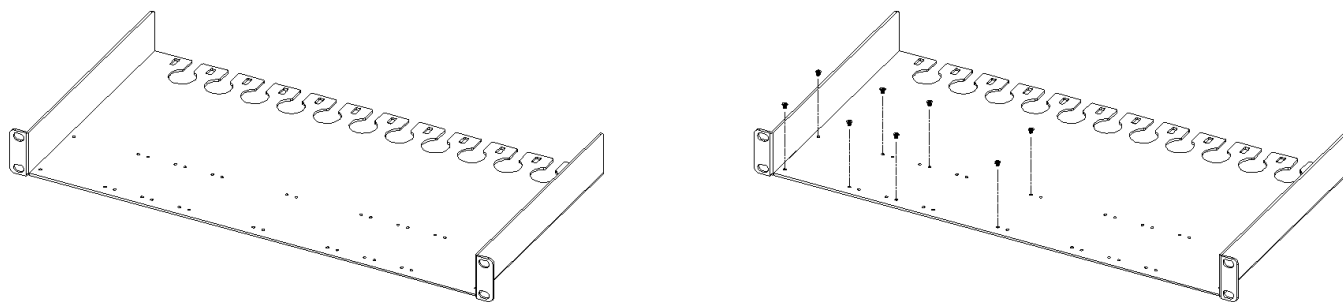**Step 1** Screw the DIN rail mount onto the side of the product

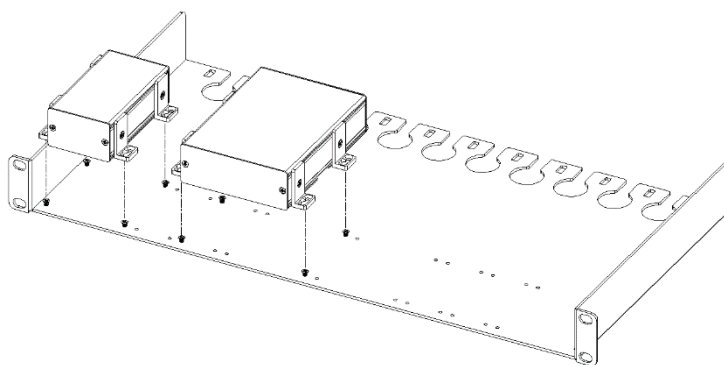**Step 2** Refer to the diagram to mount the product onto the DIN rail

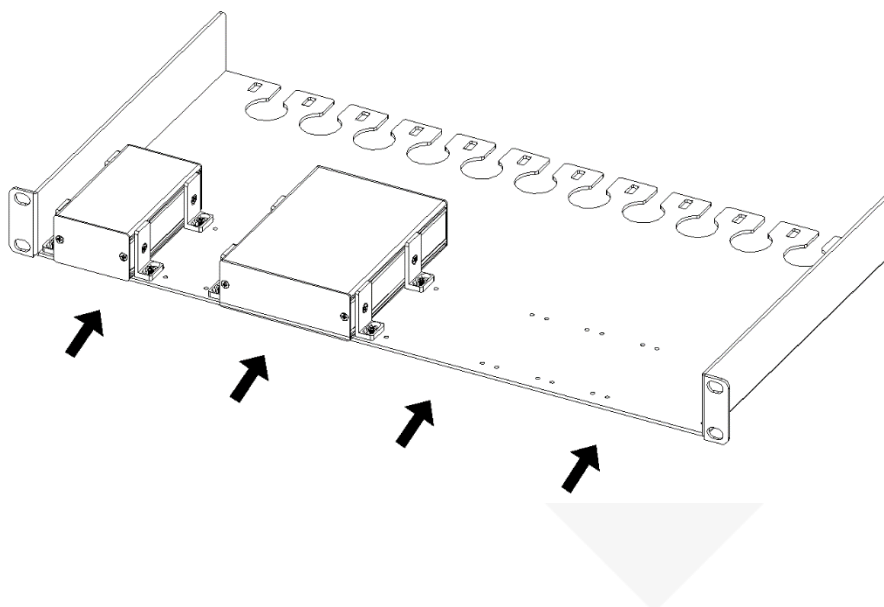Din Rail   Din Rail   Din Rail

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