SEETEC

FTD100-12G

12G-SDI ↔ HDMI2.0 Bi-Directional Converter



User Manual

Thank you for choosing our product!
This User Manual is designed to show you how to use this 12G converter quickly and make use of all the features. Please read all directions and instructions carefully before using this product.

⚠ Cautions

- To prevent the risk of falling or damage, do not place this device on an unstable cart, stand, tripod, bracket, or table.

- Operate the device only with the specified power supply voltage.

- Disconnect the power cord by holding the plug or connector. Do not pull on the cable itself.

- Do not place or drop heavy objects or sharp objects on the power cord. A damaged power cord may cause fire or electric shock hazards. Regularly inspect the power cord for signs of excessive wear or damage to prevent potential fire or electric shock risks.

- Ensure the device is properly grounded at all times to reduce the risk of electric shock.

- Do not operate this device in hazardous or potentially explosive environments. Doing so may result in fire, explosion, or other serious hazards.

- Do not use this device in or near water.

- Do not allow liquids, metal objects, or other foreign materials to enter the device.

- Handle the device with care during transportation and avoid excessive shock or vibration, which may cause malfunction. When transporting the device, use the original packaging materials or other suitable protective packaging.

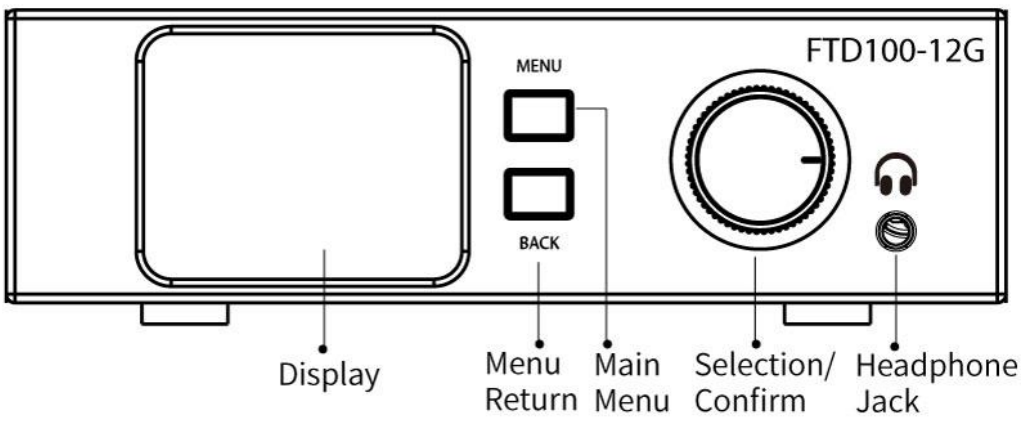
- Do not remove covers, panels, housings, or access internal circuits while the device is powered on. Always turn off the power and disconnect the power cord before opening the device. Internal servicing or adjustments must only be performed by qualified personnel.

- In the event of abnormal operation or malfunction, turn off the device immediately. Disconnect all connections before moving the device.

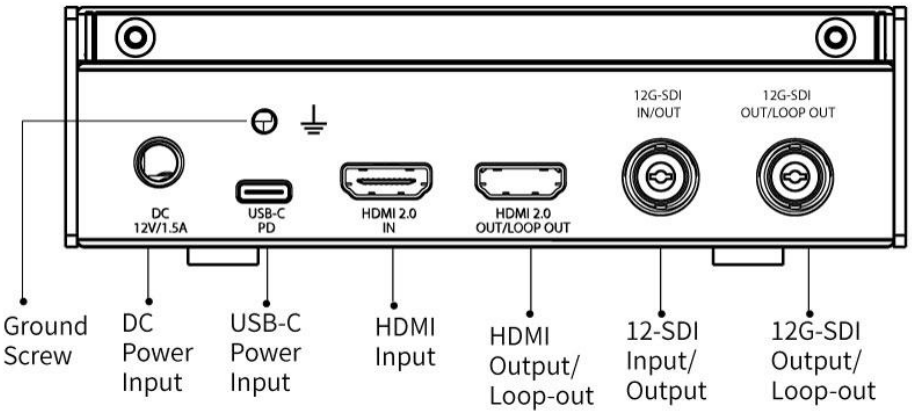
Key Features

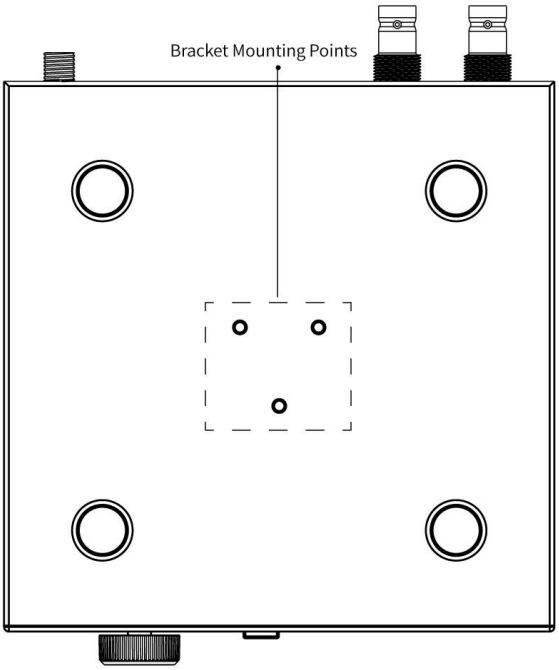
- Bidirectional conversion between 12G-SDI and HDMI 2.0
- Built-in 2.0-inch LCD screen for direct preview of input video signals
- Full 4K signal processing capability with built-in format conversion
- Built-in multi-format test pattern generator
- Dual power options via DC and USB-C, ideal for both fixed installations and field applications
- USB connectivity for configuration and parameter settings via computer
- 3.5mm headphone output with local volume adjustment
- Rack-mountable design, ideal for broadcast racks and monitoring systems, helping resolve signal compatibility and recognition issues

Product Overview




SEETEC
12G SDI
BiDirectional
12G Converter


DC
12V/1.5A
USB-C
PD
HDMI 2.0
IN
HDMI 2.0
OUT/LOOP OUT
12G-SDI
IN/OUT
12G-SDI
OUT/LOOP OUT
Ground
Screw
DC
Power
Input
USB-C
Power
Input
HDMI
Input
HDMI
Output/
Loop-out
12-SDI
Input/
Output
12G-SDI
Output/
Loop-out


Bracket Mounting Points

Power Supply

This converter supports two power supply methods:

A. **DC Power Input**
The rear panel is equipped with a **DC 12V/1.5A power input port**. Use a **DC 5.5 × 2.1mm power plug** and the included power adapter to supply power to the device. The power input polarity is shown below:



B. USB-C (PD) Power Input
The rear panel also features a **USB-C power input port** that supports the **USB Power Delivery (PD) fast charging protocol**, allowing the device to be powered by a compatible **USB-C PD adapter**.

Menu and Button Operation

After the converter is properly connected to the power supply, it will automatically power on and display the main menu.

- **Rotate the knob** to select menus or functions, and press the knob to confirm.
- **Press the MENU button** to quickly access the main menu.
- **Press the BACK button** to return to the previous menu level.

Parameters

Display	2.0-inch
Material	Aluminum
Control Way	Knob、PC software
Input	HDMI2.0, 12G-SDI
Output/loop-out	HDMI2.0, 12G-SDI
Audio Output	3.5mmHeadphone Jack
Power Input	DC 12V/1.5A; USB-C(PD)

Input Resolution	**HDMI** 720(50/59.94/60) 1080i(50/59.94/60) 1080p(60/59.94/50/30/29.97/25/24/23.98) 3840x2160p (60/50/30/25/24) **12G-SDI** 720(60/50/30/25/24) 1080i(60/50) 1080p(60/50/30/25/24) 3840x2160p (60/50/30/25/24)
Output Resolution	**HDMI** 720(24/25/30/50/60) 1080i(50/60) 1080p(24/25/30/50/60) 3840x2160p (60/50/30/25/24) **12G-SDI** 720(25/30/50/60) 1080i(50/60) 1080p(24/25/30/50/60) 3840x2160p (60/50/30/25/24)
HDMI 2.0 TO 12G-SDI Format Conversion	4K to 2K Progressive Conversion Unit 4K to 2K Interlaced Conversion Unit 2K Interlaced to 4K Conversion Unit 2K Progressive to 4K Conversion Unit
12G-SDI TO HDMI2.0 Format Conversion	4K to 2K Progressive Conversion Unit 4K to 2K Interlaced Conversion Unit 2K Interlaced to 4K Conversion Unit 2K Progressive to 4K Conversion Unit
Color Sampling	4:2:2
Color Space	YUV

SDI Standard	SMPTE 292M，SMPTE 296M，SMPTE 424M，SMPTE 425M, SMPTE 2081-1, SMPTE2081-10，SMPTE2082-1, SMPTE2082-10, SMPTE2084, SMPTE 2108-1
Non-Standard SDI Formats	LEVEL A, LEVEL B
SDI Bit Rate	1.5G、3G、6G、12G
Working Temperature	0°~40° C
Storage Temperature	-20° C~60° C
Humidity	10% ~ 90% RH
Unit Size	140x140x41mm
Unit Weight	750g