

USER MANUAL

BRIDGE X TS



Variety IN/OUT
Signal Converting



A/V Installation, Repair
and Maintenance



Audio MUX/DEMUX



Touch Display

Summary

Bridge X TS is a device that supports a variety of inputs and outputs. This device can be used in the installation construction, maintenance service of video or audio signal. You can see the signal status to the LCD panel. Even if any one of the input signal, the converted signals are all output. Also this device has the ability to measure the built-in SDI Jitter and Cable length.

Feature

- Up/Down/Cross/Scan converter
- Multiple standard Video / Audio signal
- (CVBS, AES/EBU, SDI, VGA, COMPONENT, Analog audio, HDMI)
- Analog audio MUX / DEMUX
- User selectable output format
- Test Pattern Generator (Stop screen and Moving Box screen)
- Menu OSD function
- Audio level check (Most 8 channels are monitored)
- Touch Screen LCD Built in For Input signal monitoring (5 Inch 800x480)
- External Battery (Option)



Product Composition(hard case)



- 1 of hard case
- 1 of X_TS main body
- 1 of adaptor
- 1 of Holder
- 1 of Battery tap(sony)
- 1 of VGA to Component jack
- 1 of analog audio jack
- 1 of HDMI cable
- 1 of SDI cable

Product Composition(hard case)

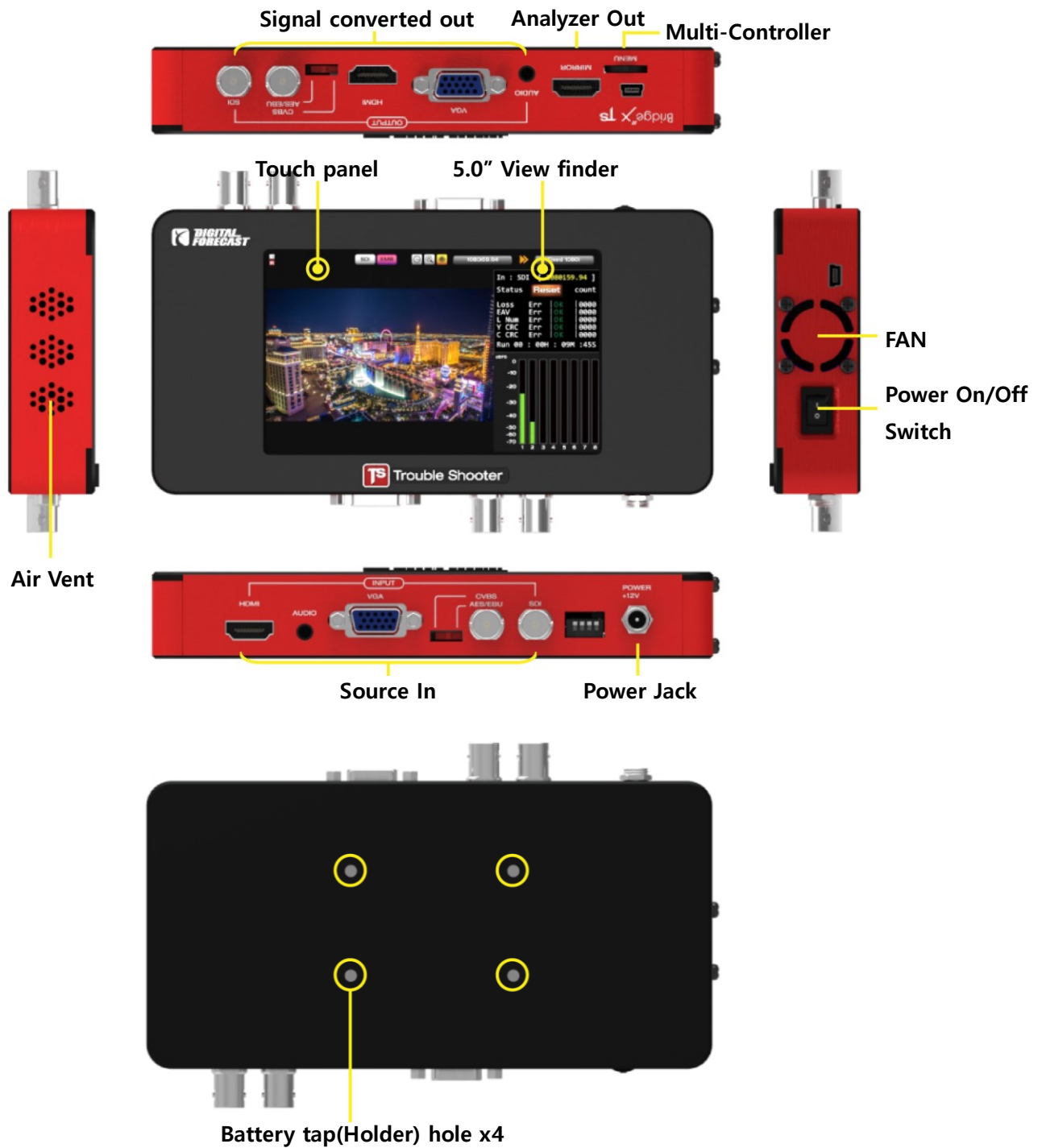


Product Composition(basic)



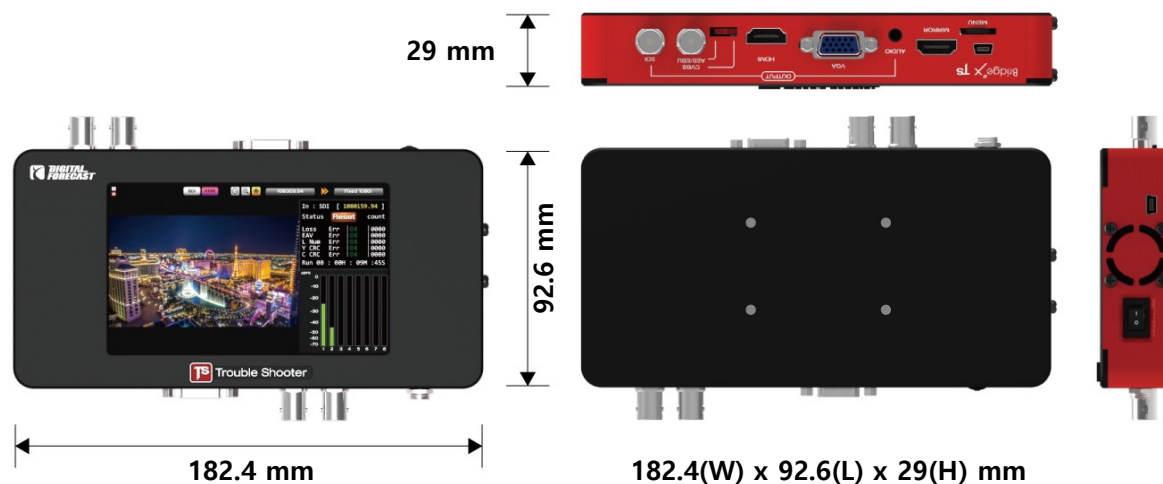
- 1 of basic case
- 1 of X_TS main body
- 1 of adaptor
- 1 of VGA to Component jack
- 1 of analog audio jack

The name and the function of each product part



The standard and the performance

Physical



Size (W x H x D)	182.4 x 92.6 x 29 (mm)
weight	530 g
Supply Power	+ 12 VDC
Power Consumption	13 Watts (Maximum: 15Watts)
Operation temperature	0°C ~ 70°C
humidity	0% ~ 95% RH, Non-condensing

Digital Video Specs

- HDMI v1.3 format Support
- Multi-rate SDI format Support
- SD format : 525/19.97(NTSC), 625/25(PAL), 480P, 576P
- HD format : 720P(24/25/30/50/59.94/60)
1080i(50/59.94/60)
1080p(24/25/30/sf24/50/59.94/60)

LCD Display Specs

- Size: 5.0 Inch
- Resolution : 800 x 480
- Pixel area : 0.135mm(W) x 0.135mm(H)
- Display area : 108mm(W) x 64.8(H)

Application



Use method

1. Menu explanation

When a menu button is pressed for more than 2 seconds and a touch screen is pushed, the menu is indicated



1. IN/OUT : The kind of input signals and the resolution of the output signal and the pattern can be setup
2. OUT SET : OUT PUT mode setting
3. Measure : It can be indicated to choose YCbCr, RGB waveform and Audio, Vector Scope
4. Config : It can be set as a screen that audio and automation go off, and version information is indicated
5. Exit : The menu screen is ended
6. FULL/SPLIT : A display mode of a screen (the whole/division) can be chosen
7. STATUS : A state window of the screen upper row is indicated and isn't indicated
8. HDCP : When HDCP is activated at HDMI signal input, it's indicated

2. The addition menu explanation

2.1 IN/OUT



- INPUT : The signal which consists of SDI, HDMI, COMP, VGA, CVBS, Pattern, Audio AUTO, Audio AES, Audio L/R and inputs can be chosen
- AUTO Embed : Video signal is SDI/HDMI to Embedded. COMP/VGA/CVBS to Analog L/R.
- OUTPUT : It's possible to setting the output resolution
and the kind of patterns can be chosen
When pressing a SET button after choosing the output format, it's applied

Test pattern



SMPTE Color Bar



Pathological



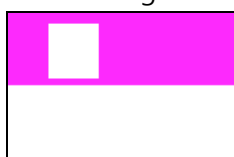
Gray



Black



SMPTE + Move



Pathological + Move



Gray + Move



Black + Move

2.2 OUT SET



- Color Mode : It's possible to setting the output color mode.
- ARC Mode : Aspect Ratio Converter.

※ Notes

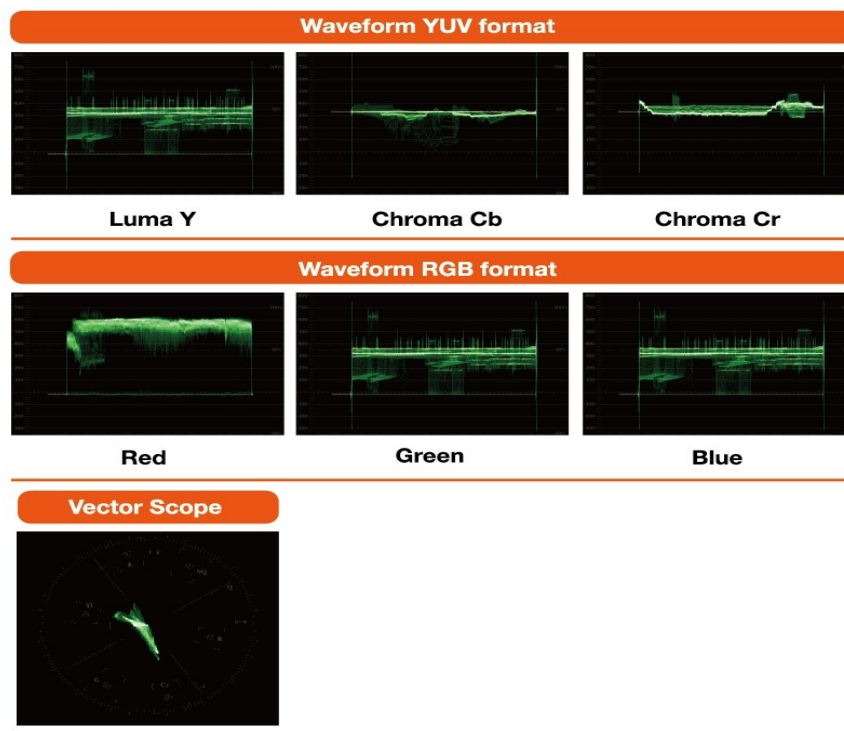
This feature is only used when you want to use the VGA output mode
SDI and CVBS, COMPONENT is YUV422 modes are supported, so as to change the
RGB444 output mode normally does not come out.

2.3 Measure



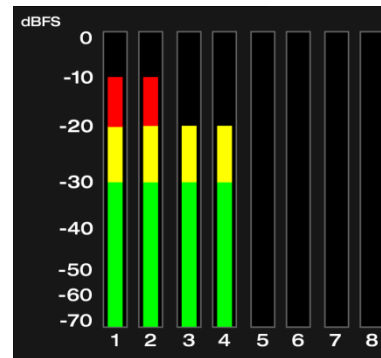
- Waveform : It can be indicated to choose YCbCr or RGB waveform at the bottom left
- Measure Window : It can be indicated to choose Audio, Vector scope, Jitter on window in split mode

NEO signal Analyzer View



1) Audio level display

- It is indicated to at most 8 channels
- Indication by a video input source
- It is indicated as the dbFS reference



2) Vector Scope

- It is indicated as the vector scope

3) Length (Option)

- Indication a input SDI cable length
- Indication by Good, Normal, Bad



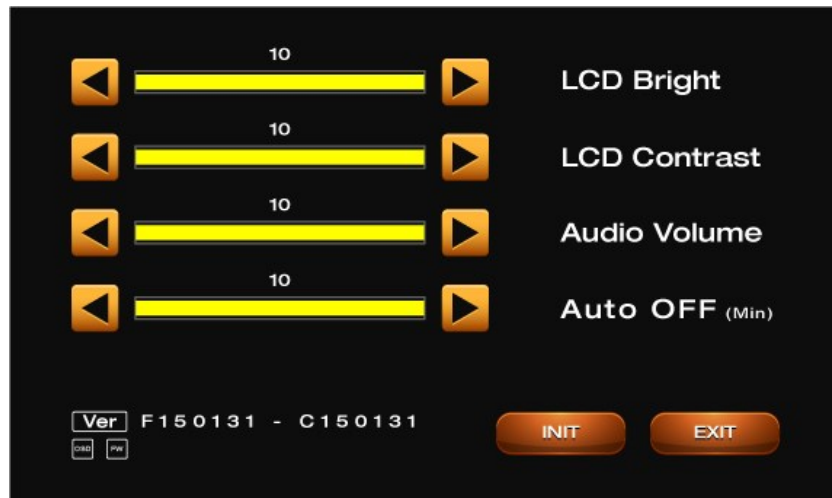
4) Jitter (Option)

- Indication a pseudo eye pattern with jitter
- Peak to Peak Jitter :
Simulated Physical Eye jitter
- Max 1 UI Check
- Indication by Good, Normal, Bad



< Pseudo EyE Picture >

2.4 Config



- LCD Bright : The brightness of the LCD screen can be controlled
- LCD Contrast : Contrast of a LCD screen can be controlled
- Audio Volume : The volume of sound output by a terminal of earphones can be controlled
- Auto OFF(min) : The timer which to turn off a LCD screen can be setup
- Ver : Version information on a system is indicated

2.5 FULL/SPLIT



- FULL : A image is indicated on the whole screen
- SPLIT : A image is indicated with three division screens, and monitoring information is shown to the right side

2.6 STATUS



1. An audio signal (1 Group 1,2 Channel L/R Signal) is indicated.
2. Audio L/R level bar Display (1 Group L/R Signal).
3. The selected of Input video/audio status.
4. Auto OFF Activating/deactivating Icon.
5. Input resolution indication
6. Direction of conversion indication
7. Resolution of output
- 8.

3. Monitoring information display

In : SDI [1080i59.94]				In : HDMI [1080P59.94]			
Status	Reset	count		Status	Reset	count	
Loss Err	Err	0001		Sync Err	OK	0000	
EAV	OK	0000		Hactive		1920	
L Num	Err	0001		Vactive		1080	
Y CRC	OK	0000		MODE		HDMI	
C CRC	OK	0000		HDCP		ON	
352M	85:06:00:01			AUD Freq		48 Khz	
Run 00:00H:09M:45S				Run 00:00H:09M:45S			

1. An input source and input format information are indicated
2. When pressing a reset button, an error count and Run time are initialized
3. When an error occurs by item, it is count and displayed
4. Display sequence of an execution time is day, hour, minute, seconds

● SDI information display	● HDMI information display
- Loss Err : A signal Loss error is displayed	- Sync Err : A Sync error is displayed
- EAV Err : A EAV error of a TRS signal is displayed	- H active : Horizontal resolution is displayed
- L Num Err : Line number marking error is displayed	- V active : Vertical resolution is displayed
- Y CRC Err : A CRC error of Y signal is displayed	- MODE : HDMI and DVI mode are displayed
- C CRC Err : A CRC error of Cb,Cr signal is displayed	- HDCP : A check of HDCP support is displayed
- 352M : SMPTE352M Payload is displayed	- AUD Freq : Audio sampling frequency is displayed