MT-305A

3G/HD/SD-SDI to HDMI & Audio Scaler Converter with 3.5" LCD Monitor & local loopout

User Manual

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rev: 200827
Made in Taiwan

INTRODUCTION

The **MT-305A 3G/HD/SD-SDI to HDMI & Audio Scaler Converter with 3.5" LCD Monitor & local loopout** is an advanced SDI monitor with multi-format and multi-pattern support. Not only receiving SDI signal, MT-305A can also bypass SDI input to SDI output. It is equipped three buttons and 3.5" panel to ease the control. With 3.5" panel, the output signal can be monitored and controlled through OSD, such as the resolution and image adjustment. This device can also be used as a tool for scanning eye diagram to check the quality of input SDI cable. In addition, it provides a variety of test patterns, which can be used as a simple SDI pattern generator. MT-305A provides a cost effective way to monitor video devices and displays.

FEATURES

- OSD control interface
- Push button for control
- SDI loop-out
- Supports eye diagram scanning
- Supports audio level bars
- Supports the cable length indicator
- Supports output test patterns
- Input bandwidth 2.970Gpbs
- Output maximum pixel rate : 165MHz
- Output video resolutions support multiple VESA standards
- Deinterlacer supported
- Supports nosie reduction and video enhancement features
- Video H/V mirror supported
- Active video area adjustment supported
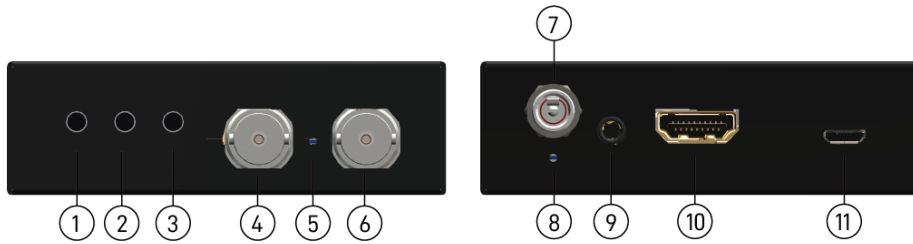- USB firmware upgradable for expanding compatibility

PACKAGE CONTENTS

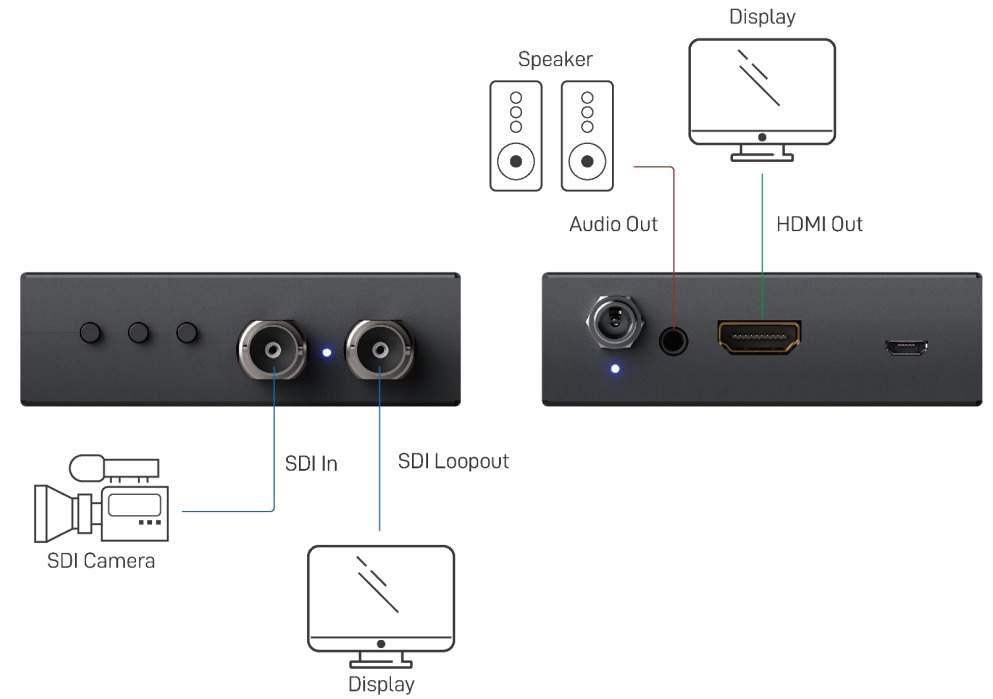- 1x MT-305A
- 1x DC 5V 2A
- 1x User Manual

SPECIFICATIONS

Model Name	MT-305A
Technical	
Role of usage	SDI to HDMI Converter with 3.5" LCD monitor
SDI standards	SD-SDI, HD-SDI & 3G-SDI
Input Video bandwidth	2.970 Gbit/s, 2.970/1.001 Gbit/s
Input Video support	[3G] 1080p @50/59.94/60Hz (4:2:2) [HD] 720p @50/59.94/60Hz, 1080i @50/59.94/60Hz, 1080p @24/30Hz [SD] NTSC @59.94Hz, PAL @50Hz
Output Video Frequency bandwidth	165MHz
Audio support	PCM (48KHz only up to 8 channel)
ESD protection	[1] Human body model — ±19kV [air-gap discharge] & ±12kV [contact discharge] [2] Core chipset — ±2kV
PCB stack-up	4-layer board [impedance control — differential 100Ω; single 50Ω]
Firmware update	Feasible via USB Port
CEC Channel	N/A
Input	1x BNC [SDI]
Output	1x HDMI + 1x BNC [SDI loop-out] +1x 3.5mm(Stereo)
BNC connector	3G 75Ω inter-locked socket
HDMI connector	Type A [19-pin female]
USB connector	Micro USB
Mechanical	
Housing		Metal enclosure
Dimensions [L x W x H]	Model	144 x 82 x 24mm [5.6" x 3.2" x 0.9"]
	Package	264 x 170 x 77mm[10.3" x 6.7" x 3"]
	Carton	430 x 358 x 291mm[1'4" x 1'2" x 11.5"]
Weight	Model	236g [8.3 oz]
	Package	546g [1.2 lbs]
Fixedness		Wall-mounting case with screws
Power supply		5V DC
Power consumption		5 Watts [max]
Operation temperature		0~40°C [32~104°F]
Storage temperature		-20~60°C [-4~140°F]
Relative humidity		20~90% RH [no condensation]

PANEL DESCRIPTIONS

1. **PUSH BUTTON:** OSD up or Volume up (for stereo out) button
2. **PUSH BUTTON:** OSD down or Volume down (for stereo out) button
3. **PUSH BUTTON:** OSD Menu or selection button
4. **SDI IN:** Connect to a 3G/HD/SD-SDI source
5. **LED INDICATOR:** Input signal indicator LED
6. **SDI LOOPOUT:** Connect to a 3G/HD/SD-SDI display
7. **POWER JACK:** 5V DC power
8. **POWER LED:** Power LED indicator
9. **STEREO AUDIO OUT:** Connect to analog stereo audio speaker
10. **HDMI OUT:** Connect to a HDMI display
11. **MICRO USB:** F/W update

CONNECTION DIAGRAM

OSD MENU

Menu	Item	Remark
1. Output Setup	Output Format	Bypass, 600x480, 800x600, 1024x768, 1152x864, 1280x768, 1280x1024, 1360x768, 1440x900, 1600x1200, 1680x1050, SD (480p, 576p, 480i, 576i), HD (720p, 1080i, 1080p)
	Test Pattern	Disable, Diagonal, W-VRamp, W-HRamp, H-Ramp, Window, Gray, Color, Hatch, Cross, White
	Audio Mute	Off, On
2. Image	Contrast	0~255 of Contrast Level
	Brightness	0~255 of Brightness Level
	Saturation	0~255 of Saturation Level
	Hue	0~255 of Hue Level
	Gamma Adjust	Off, 1.1, 1.3, 0.7, 0.9
	Color Tone	Off, Green, Skin
	Edge Enhance	Off, Max, Mid, Min
3. H/V Mirror	H-Mirror	Off, On
	V-Mirror	Off, On
	H-Shift	0~200 of H-Shift Level
	V-Shift	0~100 of V-Shift Level
4. System	Input Format	Input Format information
	F/W Version	Firmware Version information
	Factory Rest	No, Yes
	Eye Diagram	Quit, Scan
	OSD Enabled	All Enabled, All Disabled, Only Audio, Only Format, Format & Audio, Format & Range*
5. Exit		

> ⊙ * The display of Range depends on the characteristics, length and quality of the coaxial cable. Take the Belden 1694A coaxial cable as an example. For the length of 1m, 5m, 50m, 100m, the range will display short, short, long and long.

WARRANTY

The SELLER warrants the **MT-305A 3G/HD/SD-SDI to HDMI & Audio Scaler Converter with 3.5" LCD Monitor & local loopout** to be free from defects in the material and workmanship for 1 year from the date of purchase from the SELLER or an authorized dealer. Should this product fail to be in good working order within 1 year warranty period, The SELLER, at its option, repair or replace the unit, provided that the unit has not been subjected to accident, disaster, abuse or any unauthorized modifications including static discharge and power surges.

Unit that fails under conditions other than those covered will be repaired at the current price of parts and labor in effect at the time of repair. Such repairs are warranted for 90 days from the day of reshipment to the BUYER. If the unit is delivered by mail, customers agree to insure the unit or assume the risk of loss or damage in transit. Under no circumstances will a unit be accepted without a return authorization number.

The warranty is in lieu of all other warranties expressed or implied, including without limitations, any other implied warranty or fitness or merchantability for any particular purpose, all of which are expressly disclaimed.

Proof of sale may be required in order to claim warranty. Customers outside Taiwan are responsible for shipping charges to and from the SELLER. Cables are limited to a 30 day warranty and cable must be free from any markings, scratches, and neatly coiled.

The content of this manual has been carefully checked and is believed to be accurate. However, The SELLER assumes no responsibility for any inaccuracies that may be contained in this manual. The SELLER will NOT be liable for direct, indirect, incidental, special, or consequential damages resulting from any defect or omission in this manual, even if advised of the possibility of such damages. **Also, the technical information contained herein regarding the MT-305A features and specifications is subject to change without further notice.**