

## TMX-HDMI/VGA2SDI HDMI/VGA to SDI Converter

Excellent solutions for conferences



### ■ OSD菜单

根目录下，依次按MENU按键，将循环出现OSD菜单项，再通过←/→按键选择相关参数，OSD菜单包含如下各项：

- 1- OSD状态：选择是否实时显示输入输出状态，包括输入信号类型及分辨率、输出分辨率等。
- 2- 输入类型：可选择HDMI或VGA输入。
- 3- 输出类型：可选择HDMI或SDI输出。
- 4- 线路输入灵敏度：调节模拟音频输入灵敏度，可选择mute， -12 dB、-9 dB、-6 dB、-3 dB或0 dB。
- 5- VGA水平位置偏移：选择VGA输入时，调节画面的水平偏移量，范围为1 - 254。
- 6- VGA垂直位置偏移：选择VGA输入时，调节画面的垂直偏移量，范围为1 - 254。

### ■ OSD menu

Under the root menu, press the MENU button will display the OSD items in file, then select the corresponding parameters by the ←/→ button:

- 1- OSD status: select if display the status of input/output real time or not, include input signal type and resolution, output resolution and so on.
- 2- input: select the type of input signal, HDMI or VGA.
- 3- output: select the type of output signal, HDMI or SDI.
- 4- Line input sensitivity: adjust the sensitivity of analog audio input, includemute, -12 dB, -9 dB, -6 dB, -3 dB and 0 dB.
- 5- VGA H position: adjust the horizontal position of image when the input signal is VGA, the range is 1 to 254.
- 6- VGA V position: adjust the vertical position of image when the input signal is VGA, the range is 1 to 254.

## 技术参数 / Technical Specifications

### 视频

输入.....1路HDMI输入  
 .....1路VGA, 15针HDF接口  
 输出.....2路SDI输出, 75 Ω BNC接口  
 .....1路HDMI输出 (不支持CEC、HDCP)  
 SDI输入输出码率.....1.485 Gb/s和2.97 Gb/s

### 音频

音频输入.....1个3PIN凤凰头, 非平衡L+R  
 输入阻抗.....> 10 k Ω  
 正常输入电平.....7.4 dBu (1.8Vrms)  
 最大输入电平.....14.26 dBu (4Vrms)  
 模拟输入灵敏度.....mute, 0 - 12 dB, 步长3 dB  
 频响.....30 - 20 kHz (±4 dB)

### 规格

电源.....9 - 12 V DC  
 温度:  
 工作温度.....0°C - +50°C  
 储存温度.....-20°C - +70°C  
 湿度.....<70%  
 尺寸.....150×100×40 mm  
 重量.....0.4 kg

### Video

Input.....1 HDMI  
 .....1×VGA 15-pin HDF connector  
 Output.....2×SDI 75 Ω BNC connectors  
 .....1 HDMI (unsupport CEC and HDCP)  
 Input/output data rate.....1.485 Gb/s and 2.97 Gb/s

### Audio

Input.....1 3-pin Phoenix (L+R), unbalanced  
 Impedance.....> 10 k Ω  
 Normal input level.....7.4 dBu (1.8Vrms)  
 Max. Input level.....14.26 dBu (4Vrms)  
 Analog input sensitivity...mute, 0 - 12 dB, step:3 dB  
 Frequency response.....30 - 20 kHz (±4 dB)

### General specs

Power supply.....9 - 12 V DC  
 Temperature  
 Operating.....0 °C to + 50°C  
 Storage.....-20°C to + 70°C  
 Humidity.....<70%  
 Dimensions.....40×150×100 mm  
 Weight.....0.4 kg

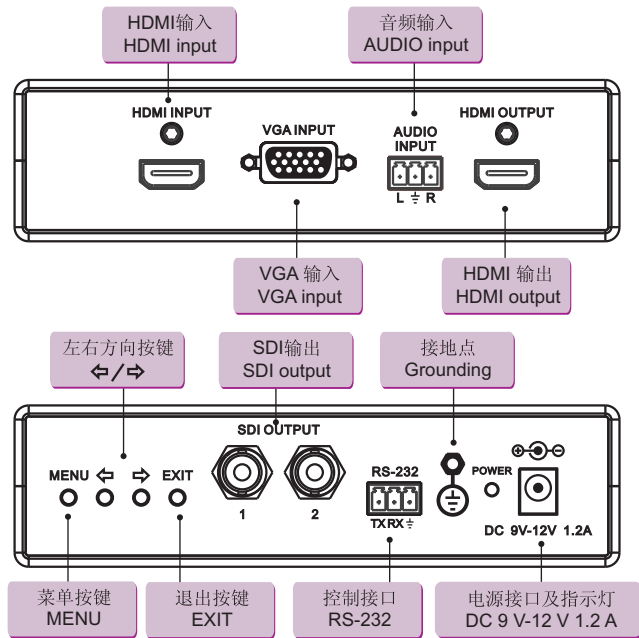
## HDMI/VGA to SDI 转换器

## User's Manual

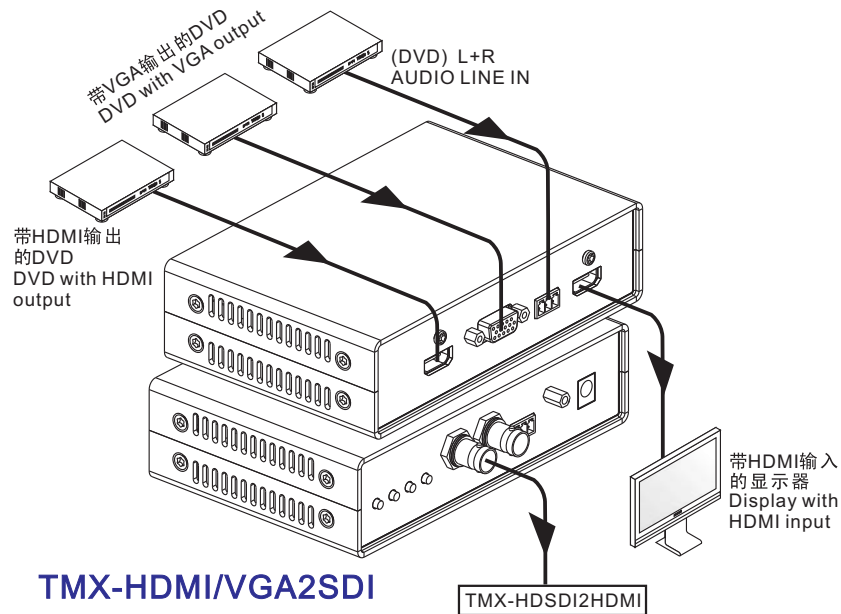
### 用户手册

### V 1.0

## 功能指示 / Functions and Indications



## 系统连接图 / System Connection



## 设置及操作 / Setup and Operation

TMX-HDMI/VGA2SDI转换器将HDMI或VGA视频输入信号经视频DSP处理后再编码成带音频嵌入的SDI或HDMI码流输出。

TMX-HDMI/VGA2SDI transfers HDMI or VGA input into SDI or HDMI signal as digital audio and video output.

### ■ 设置

1. 根据需求连接好相应设备后，接上电源即可，此时电源指示灯亮起。
2. 根目录下，可通过 $\leftarrow/\rightarrow$ 按键选择输出分辨率：  
SDI 输出: 1280×720p50/60, 1920×1080i50/60, 1920×1080p30/50/60;  
HDMI 输出: (包括以上SDI输出分辨率)  
800×600p60/75, 1024×768p60/75, 1280×1024p60, 1360×768p60, 1400×1050p60, 1920×1080p25, AUTO.
3. 同时按住MENU和 $\leftarrow$ 按键开机，约1s后松开按键将恢复出厂设置，即输入类型为HDMI，输出类型为SDI，HDMI输出分辨率为AUTO，SDI输出分辨率为1280x720p60Hz，模拟音频输入灵敏度为0 dB，OSD信号状态为OFF。

### ■ Setup

1. Connect to the devices and power on, the indicator of the power will be turn on.
2. Under the root menu, use the  $\leftarrow/\rightarrow$  button to select the resolution of output:  
SDI output: 1280×720p50/60, 1920×1080i50/60, 1920×1080p30/50/60;  
HDMI output: (includes the resolutions of SDI)  
800×600p60/75, 1024×768p60/75, 1280×1024p60, 1360×768p60, 1400×1050p60, 1920×1080p25, AUTO.
3. Press the MENU and  $\leftarrow$  buttons at the same time for about 1 second when power on to set the input type as HDMI and the output type as SDI, HDMI output resolution as AUTO and SDI output resolution as 1280x720p60Hz; and set the sensitivity of audio input/output to be 0 dB and the OSD status to be OFF.

4. 转换器能自动识别输入视频的格式，当输入的视频格式发生变化时，在1—5秒钟之内，系统会根据新的输入视频的格式来配置参数，以适应新的输入视频格式。视频丢失时显示屏将提示“Video loss!”，并将视频冻结或显示蓝屏。  
TMX-HDMI/VGA2SDI支持多种视频输入格式：  
HDMI输入: HD 720p: 30,50,60;  
HD 1080i: 50,60;  
HD 1080p: 30;  
Full HD 1080p:50,60;  
VGA输入: 800×600p60, 1024×768p60, 1280×1024p60, 1440×900p60.

4. The converter can recognize the type of video input automatically, system will configure corresponding parameters in 1 to 5 seconds when the type of video input is changed. When the video signal lost, “Video loss!” will be displayed on the screen and the video image will be froze or a blue screen will be displayed.  
TMX-HDMI/VGA2SDI supports manifold types of video input:  
HDMI input: HD 720p: 30,50,60;  
HD 1080i: 50,60;  
HD 1080p: 30;  
Full HD 1080p:50,60;  
VGA input: 800×600p60, 1024×768p60, 1280×1024p60, 1440×900p60.

### ■ 音频

1. 当输入的HDMI信号中包含音频信号时，则其第一组数字音频I2S0作为SDI/HDMI音频输出。
2. 当选择VGA输入时，将同步选择模拟音频输入。

### ■ Audio

1. When the HDMI input signal includes audio signal, the first group of digital audio I2S0 will be output as SDI/HDMI audio signal.
2. When select the VGA input, the analog audio input will be selected esynchronously..

注意：请使用原厂提供的专用电源适配器。

Note: Please use the specific power adapter only.

## 分辨率优选配置表 Commendatory Assignment of Reslution

### 1、HDMI输入，SDI输出 / HDMI input, SDI output

Output Input	HDMI to SDI			
	1280×720p50	1280×720p60	1920×1080p50	1920×1080p60
1280×720p60		√		√
1280×720p50	√		√	
1920×1080i60		√		√
1920×1080i50	√		√	
1920×1080p60		√		√
1920×1080p50	√		√	
1920×1080p30				

### 2、HDMI输入，HDMI输出 / HDMI input, HDMI output

Output Input	HDMI to HDMI				
	AUTO	1280×720p50	1280×720p60	1920×1080p50	1920×1080p60
1280×720p60	√		√		√
1280×720p50	√	√		√	
1920×1080i60	√		√		√
1920×1080i50	√	√		√	
1920×1080p60	√		√		√
1920×1080p50	√	√		√	
1920×1080p30	√				

### 3、VGA输入，HDMI输出 / VGA input, HDMI output

Output Input	VGA to HDMI				
	AUTO	1280×720p50	1280×720p60	1920×1080p50	1920×1080p60
800×600p60	√		√		√
1024×768p60	√		√		√
1280×1024p60	√		√		√

### 4、VGA输入，SDI输出 / VGA input, SDI output

Output Input	VGA to SDI					
	1280×720p30	1280×720p50	1280×720p60	1920×1080p30	1920×1080p50	1920×1080p60
800×600p60			√			√
1024×768p60			√			√
1280×1024p60			√			√