# **HDMI Matrix (Router Type)**

## **Model No. SX-MX04**



#### Features

- Easy to use: install in seconds,.
- Allows up to four HDMI audio/video devices to be independently switched to four HDMI monitors, HDTVs, or projectors.
- The four outputs could show the same or different source simultaneously no matter the source is HDCP or not.
- Support high definition resolutions 1080p, 1080i, 720p and other standard video formats.
- Each port supports HDMI or DVI inputs.
- With extra infrared receiver extension.
- Two switching modes: panel buttons, local IR..
- HDCP compliant.
- HDMI 1.3 version.

#### Dear customer:

Thank you for purchasing this product. For optimum performance and safety, please read these instructions carefully before connecting, operating or adjusting this product. Please keep this manual for future reference.

#### Notice

Our reserves the right to make changes in the hardware, packaging and any accompanying documentation without prior written notice.

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# WARNING:

## TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK OR PRODUCT DAMAGE:

- DO NOT EXPOSE THIS APPARATUS TO RAIN, MOISTURE, DRIPPING OR SPLASHING AND THAT NO OBJECTS FILLED WITH LIQUIDS, SUCH AS VASES, SHALL BE PLACED ON THE APPARATUS.
- DO NOT INSTALL OR PLACE THIS UNIT IN A BOOKCASE, BUILT-IN CABINET OR IN ANOTHER CONFINED SPACE. ENSURE THE UNIT IS WELL VENTILATED.
- TO PREVENT RISK OF ELECTRIC SHOCK OR FIRE HAZARD DUE TO OVERHEATING, DO NOT OBSTRUCT THE UNIT'S VENTILATION OPENINGS WITH NEWSPAPERS, TABLECLOTHS, CURTAINS, AND SIMILAR ITEMS.
- 4) DO NOT INSTALL NEAR ANY HEAT SOURCES SUCH AS RADIATORS, HEAT REGISTERS, STOVES, OR OTHER APPARATUS (INCLUDING AMPLIFIERS) THAT PRODUCE HEAT.
- DO NOT PLACE SOURCES OF NAKED FLAMES, SUCH AS LIGHTED CANDLES, ON THE UNIT.
- 6) CLEAN THIS APPARATUS ONLY WITH DRY CLOTH.
- UNPLUG THIS APPARATUS DURING LIGHTNING STORMS OR WHEN UNUSED FOR LONG PERIODS OF TIME.
- 8) PROTECT THE POWER CORD FROM BEING WALKED ON OR PINCHED PARTICULARLY AT PLUGS.
- 9) ONLY USE ATTACHMENTS/ACCESSORIES SPECIFIED BY THE MANUFACTURER.
- 10) REFER ALL SERVICING TO QUALIFIED SERVICE PERSONNEL.

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### INTRODUCTION

SX-MX04 is a 4-by-4 DVI/HDMI true matrix. It allows any source (Blue-Ray player, HD DVD player, satellite receiver, game system, etc.) to be shown on the any of the four displays simultaneously, no matter the source is HDCP or not. Extra infrared receiver extension, IR emitter are supplied for the control.

SX-MX04 has the ability of equalization and amplification to ensure HDMI signal's transmission through long cable without quality loss.

SX-MX04 offers solutions for digital entertainment center, HDTV retail and show site, HDTV, STB, DVD and projector factory, noise, space and security concerns, data center control, information distribution, conference room presentation, school and corporate training environments.

## **PACKAGE CONTENTS**

- 1. Main unit. P/N SX-MX04.
- 5VDC Power Supply.P/N VDC0504
- 3. 1x Remote.
- 1x IR extension cable.
- 5. Operating Instructions. .
- \*PART NUMBER (Abbreviation as P/N).

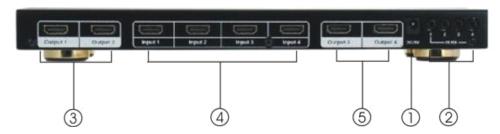
#### **PANEL DESCRIPTIONS**

# **Front panel**



- 1. Output selection and indicator of input for output port 1 to 4.
- 2. IR window.
- 3. Key lock button.
- 4. Indicator of locking status, when the output selection buttons are locked, LED inside lit.
- 5. Power switch.
- 6. IR TX OUTPUT 1TO4.
- 7. USB port for ISP.
- 8. DIP switch.

# Rear panel



- 1. Power input.
- 2. IR extension 1to 4.
- 3. Output 1 and 2 with HDMI.
- 4. Input ports 1 to 4 with HDMI.
- Output 3 and 4 with HDMI.

#### CONNECT AND OPERATION

- 1) Connect the HDMI input sources (such as HD-DVD, PS3, STB etc) into SX-MX04.
- 2) Connect the HDMI outputs (such as HD-LCD, HD-DLP) into SX-MX04.
- Connect the IR RX receiving cable into SX-MX04 extension and connect The IR TX cable into SX-MX04 emitter.
- Power on the input source you want to show. (Keep the unused input power off, otherwise it may interfere the normal display.)
- 5) Connect the power supply into SX-MX04 and turn on the display you want to watch.
- Use remote or push the button to choose input source. Extra infrared receiver extension, IR emitter, are supplied for remote control.
- 7) The IR signal of any IR extension will through "TX IR" port to send the signal out.
- 8) SOURCE-SINK AUTOFIT Function

This function applies to the situation when the source's HDMI version exceeds the sink's HDMI version. (This function can be used to fix the deepcolor, 1080P, 1080i, 2ch audio, multi channel audio issue.)

For example: When the TV is HDMI 1.2 version and PS3 source is HDMI 1.3 version, it will output HDMI 1.2 version.

- (1)Under default mode, this machine will output 1.2 version HDMI signal(1080P and stereo audio).
- (2) Under button mode.

There are two mode to update the EDID data according to the DIP setting. When the DIP is in default mode (0,0,0), the matrix will be in mix mode.

**A** , When the source is HDMI1.3, (e.g., HDMI output from PS3), OUTPUT1 to 4 both support HDMI1.3 displays, press "selection of OUTPUT1" and "lock key" simultaneously, the machine will output HDMI1.3 signals.

**B**、 When the source is HDMI1.3, (e.g., the HDMI output from PS3), OUTPUT 1 to 4 are connected to the displays that can only support HDMI 1.2 MAX, press "selection of OUTPUT1" and "lock key" simultaneously (no matter whether HDMI OUTPUT port is connected to the display that supports HDMI 1.3 or not), it will output HDMI 1.2 signals.

When the DIP is in default mode (0,0,0), the matrix will be in copy mode.

Note: The method to reset the machine to default EDID setting: Disconnect the input and output. Please press "selection of OUTPUT1" and "lock key" Simultaneously for at least 3 seconds, and EDID of all the four input ports will be reset to the default setting. The audio setting of the default EDID is stereo, it is suitable for TV sets.

# 9) DIP switch setting

Posit	ion ID		
1	2	3	
0	0	0	Mix the low version EDID.(default) (note 1)
0	0	1	reserved
0	1	0	reserved
0	1	1	reserved
1	0	0	Copy the EDID of the display which connected the OUTPUT1.(note 2)
1	0	1	reserved
1	1	0	reserved
1	1	1	reserved

Note1: The matrix will mix the EDID data of the sink devices. The mixed EDID data will use the lowest resolution of the video and the least channel number of the audio. For example, some sink device support 1080P, some sink device only support 1080i, some support 5.1 audio, but some only support stereo. Then the mixed EDID will be 1080i and stereo.

Note2: If user wants to just use one sink device's EDID data, this DIP setting can be used.

# **Attention:**

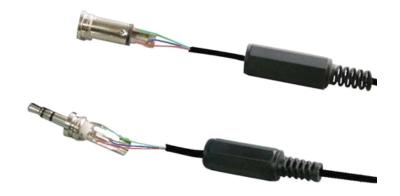
Please insert or extract cables gently.

SPECIFICATIONS	
Operating Temperature Range	-5 to +35°C (-41 to +95 °F)
Operating Humidity Range	5 to 90 % RH (no condensation)
Input Video Signal	0.5-1.0 volts p-p
Input DDC Signal	5 volts p-p (TTL)
Signaling Rate	2.25Gbit/s
Video Format Supported	DTV/HDTV:1080P/1080i/720P/576P/480P/576i/480i
Audio Format Supported	DTS-HD、 Dolby trueHD
Output Video	HDMI1.2 and HDMI 1.3
Maximum Transmission Distance	<15m (If needed, HDMI extender is optional)
Power Consumption	12wtts (Max)
Dimensions	290mmL×100mmW×26mmH /17.3''L×7.9''W×1.7''H
Mass (Main Unit)	0.7kg/4.4lb

<sup>\*</sup>Note: Specifications are subject to change without notice. Mass and dimensions are approximate.

# IR receiver cable extender jacks.

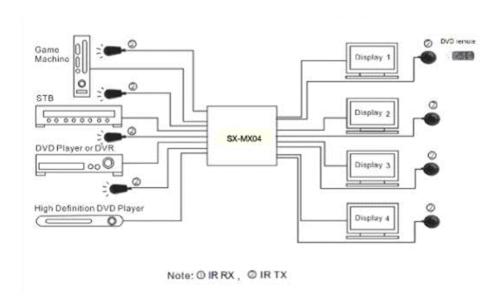
When the display device is not near to the matrix, the IR\_RX cable will be too short. There are a pair of jacks to extend the IR\_RX cable. Customer or installer can use the headphone cable or 4-line telephone cable to form the IR cable extender.



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Use the male jack and female jack to extend the IR\_RX cable like the picture below.

# **TYPICAL APPLICATION**



# **MAINTENANCE**

Clean this unit with a soft, dry cloth. Never use alcohol, paint thinner or benzine to clean this unit.









Shenzhen Shunxun Electronics Co., Ltd Tel: 86-755-27153022 27152661 Fax: 86-755-27152283

Web:www.foxun.com