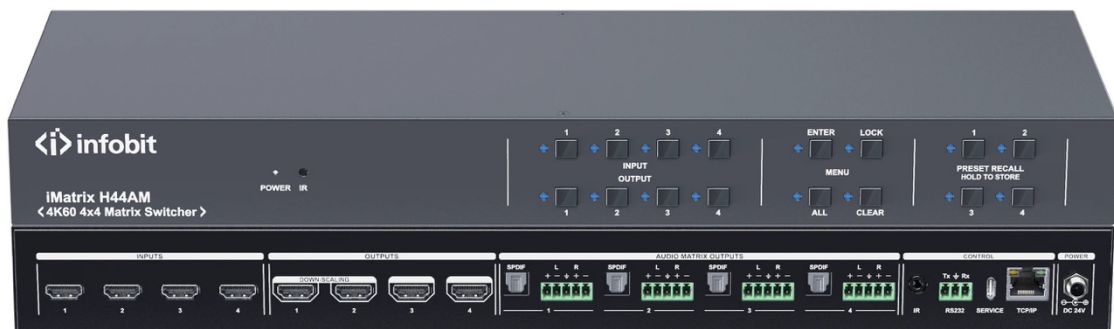


iMatrix H44AM_(v2)

4x4 HDMI Fast Switching Matrix Switcher

Datasheet V1.0



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1. INTRODUCTION

The **iMatrix H44AM** (V2) is a 4x4 HDMI matrix switcher that supports signals up to **4K@60Hz in 4:4:4** resolution. It features audio de-embedding, separating audio from the HDMI signal for independent audio and video outputs.

In addition, Output 1/2 supports automatic downscaling, dynamically matching the optimal resolution of the display device. It offers four control methods: front panel buttons, IR, RS-232 and web-GUI, to adapt to the user's control needs.

2. FEATURES

- 4x4 fast matrix switching up to 2-4 seconds.
- Video up to 18Gbps 4K@60 4:4:4.
- Supports audio de-embedded for all outputs.
- Output 1/2 supports automatic downscaling.
- Supports CEC control for source & sink.
- Built-in EDID, EDID learning and customized EDID.
- Control via front panel buttons, IR, RS-232 or TCP/IP.

3. PACKAGE LIST

1x iMatrix H44AM
1x RS-232 Cable
1x IR Receiver
1x Remote Control
1x Power Adapter (24V 1.25A)
2x Mounting Ears and 6x Screws
4x Rubber Feet
4x 5-pin Phoenix Connector
1x User Manual

Note: Please contact your distributor immediately if any damage or defect in the components is found.

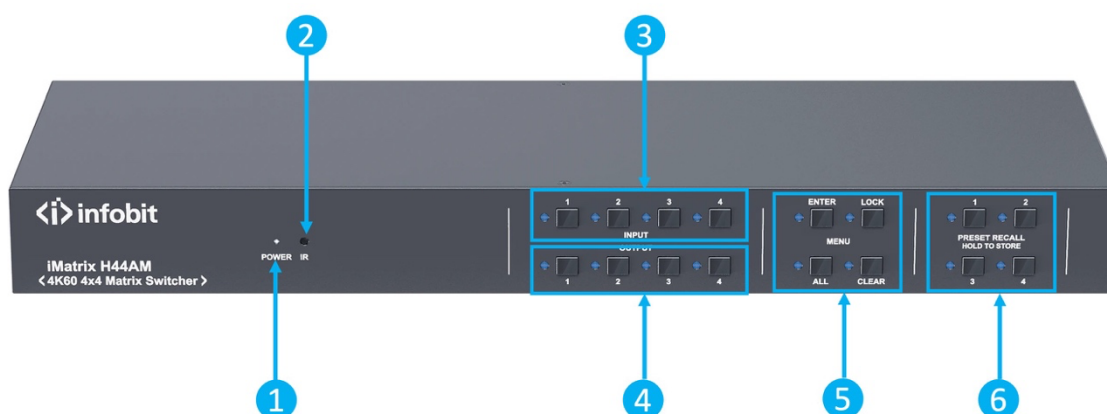
4. SPECIFICATION

Video Input	
Connector	4x HDMI Type-A
Version	HDMI 2.0
Resolution	Up to 4K@60Hz 4:4:4
Audio	LPCM 7.1 audio, Dolby Atmos®, Dolby® TrueHD, Dolby Digital® Plus, DTS:X™, and DTS-HD® Master Audio™
HDCP	HDCP 2.2 and backward compatibility
Video Output	
Connector	4x HDMI Type-A
Version	HDMI 2.0
Resolution	Up to 4K@60Hz 4:4:4
Audio	LPCM 7.1 audio, Dolby Atmos®, Dolby® TrueHD, Dolby Digital® Plus, DTS:X™, and DTS-HD® Master Audio™
HDCP	HDCP 2.2 and backward compatibility
Downscaling	Output1, Output2
Analog Audio	
Frequency Response	20Hz-20kHz
THD+N	<0.05%
SNR	>80dB
Crosstalk	<-80dB
Digital Audio	
Frequency Response	20Hz-20kHz
THD+N	<0.05%
SNR	>90dB
Crosstalk	<-70dB
Control	

RS-232	Via the RS-232 commands.
IR EYE	Via the third-party device.
IR	Via the remote control.
Web-GUI	Via the TCP/IP.
Button	Via the front panel buttons.
General	
Power Supply	24V 1.25A
Operation Temperature	-5°C ~ +55°C
Storage Temperature	-20°C ~ +70°C
Relative Humidity	0% ~ 80%
Standby Power Consumption	1.2W
Dimension (W*H*D)	436.4mm x 44mm x 160mm
Net Weight	1.76kg

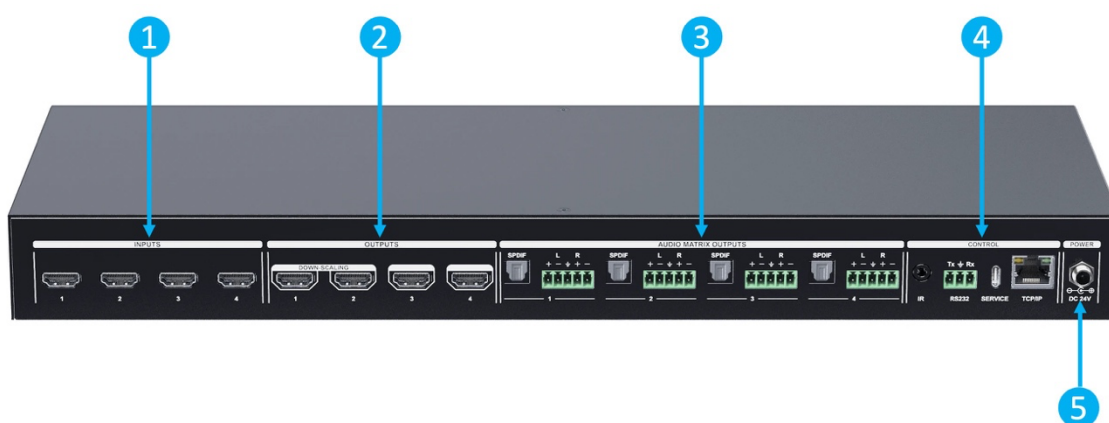
5. PANEL DESCRIPTION

5.1 FRONT PANEL



No.	Name	Description
1	POWER INDICATOR	1x green/ red LED, power input indicator. - Green on: device on. - Red on: device standby. - Red flash: FW upgrade. - LED off: device off.
2	IR	1x IR sensor, receive the IR signal from remote control.
3	INPUT	4x blue LEDs and 4x white buttons, which corresponding to input 1-4. Select the input source by pressing any input button.
4	OUTPUT	4x blue LEDs and 4x white buttons, which corresponding to output 1-4. Press any output button to switch the selected input source to the output channel.
5	MENU	4x blue LEDs and 4x white buttons, ENTER/LOCK/ALL/CLEAR. The MENU buttons will be described in detail in 6.1 Definition .
6	PRESET RECALL	4x blue LEDs and 4x white buttons, 4 scenes can be preset and recalled.

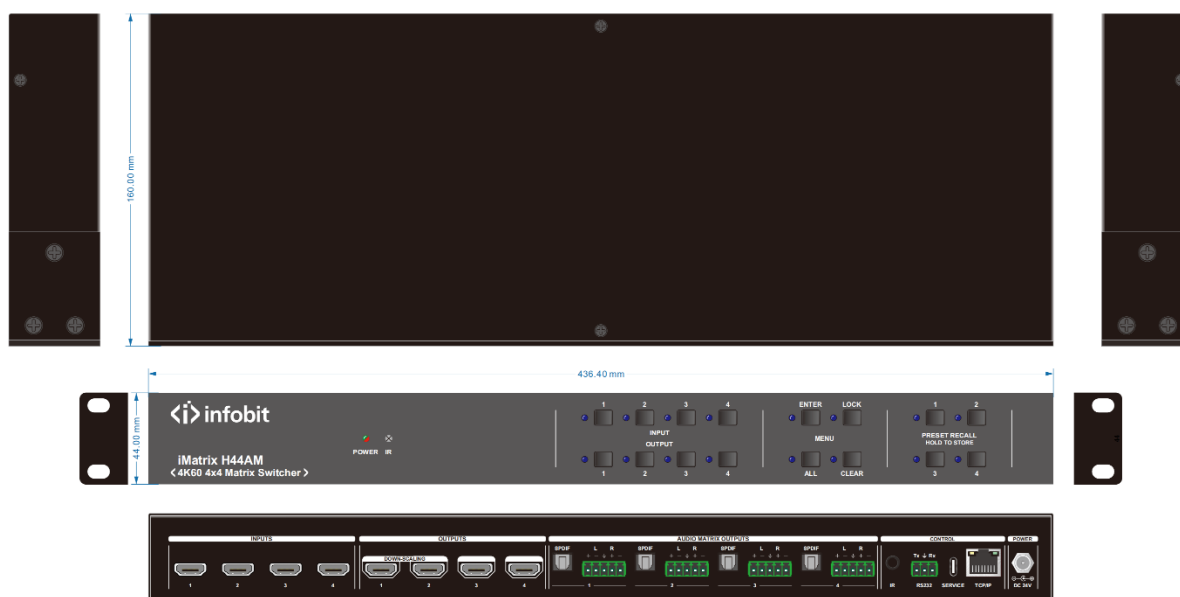
5.2 REAR PANEL



No.	Name	Description
1	INPUT	4x HDMI input, connect to the HDMI source device.
2	OUTPUT/DOWN-SCALING	4x HDMI output, connect to the HDMI display. Only output 1/2 supports downscaling.

3	AUDIO MATRIX OUTPUT	4x S/PDIF, connect to the digital audio device. 4x 5-pin phoenix socket, connect to the analog audio device.
4	CONTROL	- IR EYE: 1x 3.5mm mini jack, connect to the IR receiver and controlled by the third-party device. - RS232: 1x 3-pin phoenix socket, controlled by the RS232 commands. - FW: 1x USB-C, FW upgrade. - TCP/IP: 1x RJ45 with left yellow and right green LED, control the device via Web-GUI.
5	DC 24V	24V 1.25A

5.3 PANEL DRAWING



6. SYSTEM CONNECTION

6.1 USAGE PRECAUTION

1. Make sure all components and accessories included before installation.
2. System should be installed in a clean environment with proper temperature and humidity.

3. All of the power switches, plugs, sockets, and power cords should be insulated and safe.
4. All devices should be connected before power on.

6.2 SYSTEM DIAGRAM

