

Operating Instructions

Thanks for purchasing our product.

Please be sure to read this instruction manual carefully before using our product.



Model: HKTM0204MH4



Model: HKTM0402MH4

Notice:

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

Warning

To reduce the risk of fire, electric shock or product damage:



1. 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.



6. Clean this apparatus only with dry cloth.



2. Do not install or place this unit in a bookcase, built-in cabinet or in another confined space. Ensure the unit is well ventilated.



7. Unplug this apparatus during lightning storms or when unused for long periods of time.



3. 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.



8. Protect the power cord from being walked on or pinched particularly at plugs.



4. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.



9. Only use attachments / accessories specified by the manufacturer.



5. Do not place sources of naked flames, such as lighted candles, on the unit.



10. Refer all servicing to qualified service personnel.

Contents

CONTENTS	3
■ PRODUCT OVERVIEW	1
■ FEATURES	1
■ PACKAGE CONTENTS	1
■ SPECIFICATIONS	2
■ PANEL DESCRIPTIONS	3
■ CONNECTIONS AND OPERATIONS	6
■ EDID MANAGEMENT	8
■ TROUBLESHOOTING AND MAINTENANCE	9
■ WARNING AND PRECAUTIONS	9

■ Product Overview

HKTM0204MH4 is a matrix with 4K x 2K@30Hz - 2 input and 4 output, which has 2 HDMI Input, 4 HDMI Output. HKTM0402MH4 is a matrix with 4K x 2K@30Hz - 4 input and 2 output, which has 4 HDMI Input, 2 HDMI Output. It can be switched between the input and output channels whether HDMI Input source is encrypted or not. It supports Local IR Extension, EDID Management. For easy operation, it is widely applied in home, theatre, shopping mall, school, conference, hotel installation industry.

■ Features

- Support up to 4K x 2K@30Hz.
- Support local IR extension.
- Support Bi-directional IR: IR transport channels to control Source device and Display.
- Support HDCP 1.3 version 3D and EDID Management.
- HKTM0204MH4 Support 12V power supply, 2 HDMI Input, 4 HDMI Output.
- HKTM0402MH4 Support 9V power supply, 4 HDMI Input, 2 HDMI Output.
- HKTM0402MH4 Support analog stereo outputs and a TOSLINK fiber optical digital audio output.
- Easy installation and operation.

■ Package Contents

HKTM0204MH4:

- ① Main unit:HKTM0204MH4
- ② Operating instructions
- ③ 1x 12V/2A power supply
- ④ 1x AC Power Cord

⑤ 1x IR Receiver (38KHz for IR local control)

⑥ 1x IR Remote(with Button Cell)

HKTM0402MH4:

① Main unit:HKTM0402MH4

② Operating instructions

③ 1x 9V/2A power supply

④ 1x AC Power Plug

⑤ 1x IR Receiver (38KHz for IR local control)

⑥ 1x IR Remote(with Button Cell)

■ 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)
Video Format Supported	4K x 2K /1080p/1080i/720p/576p/480p/576i/480i
Output Video	HDMI 1.4
Output Audio	Support DTS-HD, Dolby-HD
Transmission Distance	4K x 2K ≤8m, 1080P≤15m
Power Supply	HKTM0204MH4: DC 12V HKTM0402MH4: DC 9V
Power Consumption	HKTM0204MH4: 18Watts HKTM0402MH4: 9Watts
Dimensions	317mmLx156mmWx28mmH
Net Weight (Main unit)	1.3Kg

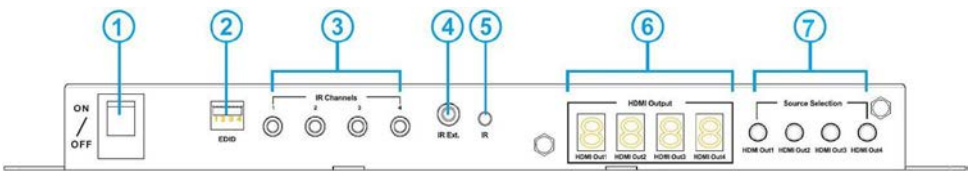
■ Panel Descriptions

HKTM0204MH4:

TOP Panel

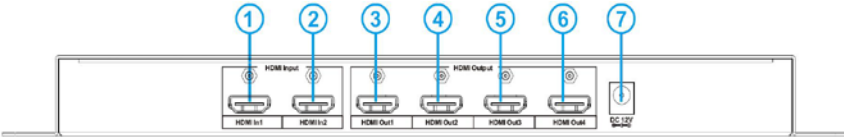


Front Panel



- ①: Power Switch
- ②: EDID Management
- ③: IR Channels
- ④: Local IR Extension Port
- ⑤: Local IR Control
- ⑥: LED Digital Display
- ⑦: Source Selection

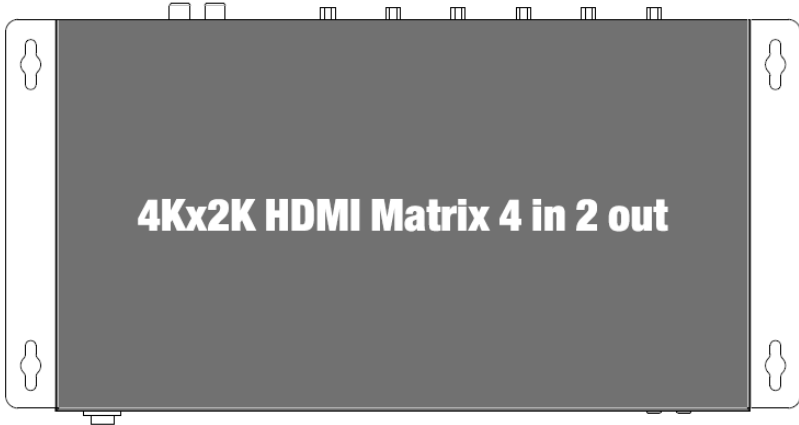
Back Panel



- ①. ②: HDMI In1 - HDMI In2
- ③. ④. ⑤. ⑥: HDMI Out1 - HDMI Out4
- ⑦: Power Input Port (DC12V/2A)

HKTM0402MH4:

TOP Panel

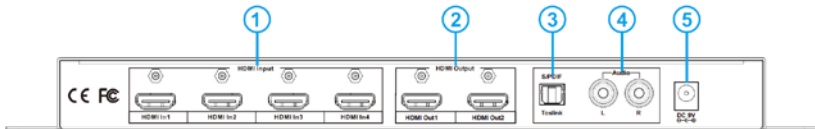


Front Panel



- ①: Power Switch
- ②: Local IR Control
- ③: Local IR Extension Port
- ④: IR Channels
- ⑤: HDMI input LED indicator
- ⑥: HDMI output LED indicator
- ⑦: EDID Management
- ⑧: LED Digital Display
- ⑨: Source Selection

Back Panel

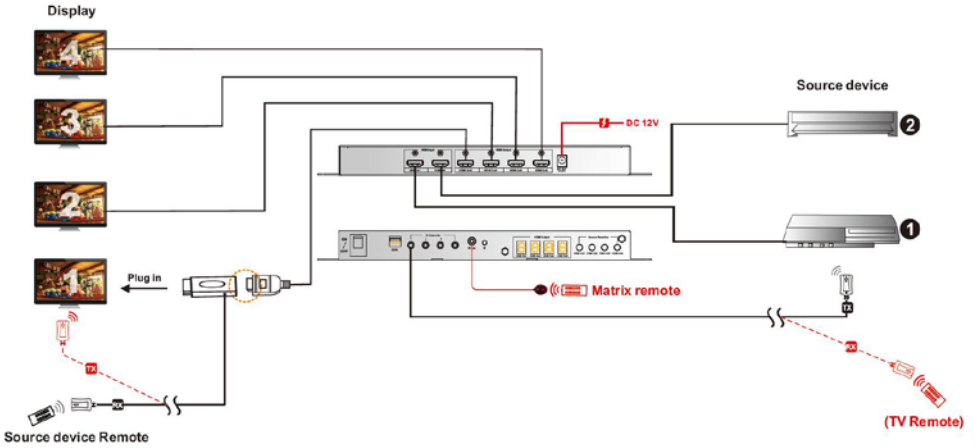


- ①: HDMI in
- ②: HDMI out
- ③: TOSLINK
- ④: Audio L/R input
- ⑤: DC9V input

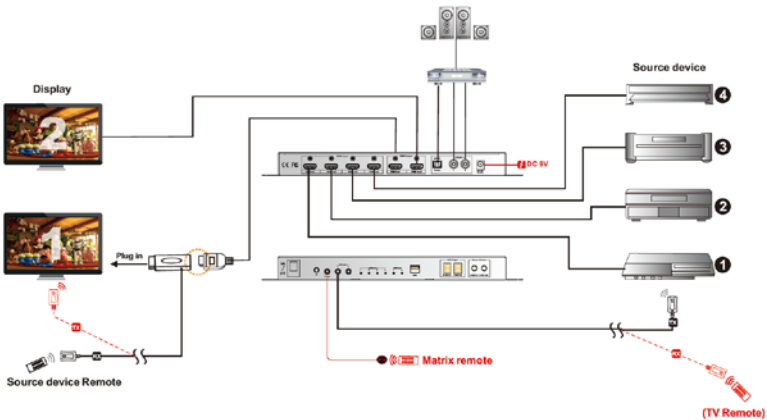
■ Connections and Operations

1. Connection diagram:

HKTM0204MH4:



HKTM0402MH4:



2. Installation:

- ①. Connect the Matrix's HDMI Input to signal source (eg. DVD, STB) with HDMI cable.
- ②. Connect the Matrix's HDMI Output to display device (eg. TV set) with HDMI cable.
- ③. Turn on DVD, TV set and HKTM0204MH4 or HKTM0204MH4 matrix.
- ④. Switch and select the Input source by button or IR remote.

3. Operation

- ① **Manual Control:** You can operate HDMI source switching manually by using the buttons labeled "HDMI out" located on the front panel. Press the button that corresponds to the output that you want to change the HDMI source on and toggle through until the desired HDMI input source video is being displayed. A numerical LED indicates which HDMI source is being shown on each output. On the HKTM0402MH4, long press the "HDMI out1" button long than 3 seconds, the analog audio outputs and TOSLINK fiber optical digital audio output will be open and the audio output provides audio from source device used by Output 1. long press the "HDMI out1" button long than 3 seconds again, the analog audio outputs and TOSLINK fiber optical digital audio output will be close.
- ② **Remote Control:** Included with the Matrix is a remote control. The remote control can be control the matrix by pointing it at the front of the matrix. Targeting the integrated IR receiver labeled IR. IR uses line-of-sight between the remote control (or IR-TX) and the receiver. The angle which the remote will work is at about a 15 degree angle in either direction to the receiver. If the receiver is positioned such that there is not line-of-sight, the port labeled "IR EXT." accepts an optional IR receiver. The receiver enables line-to-sight if the matrix is out of position.

■ EDID Management

HKTM0204MH4 EDID Information:

DIP switch4	DIP switch3	DIP switch2	DIP switch1	EDID Information
X	0	0	0	reserve
X	0	0	1	1080p/60hz 24bit 2d 2.1ch
X	0	1	0	1080p/60hz 24bit 2d 7.1ch
X	0	1	1	1080p/60hz 36bit 2d 7.1ch
X	1	0	0	1080p/60hz 36bit 2d 2.1ch
X	1	0	1	4K*2K
X	1	1	0	1080p/30hz 1080i/60hz 720p/60hz 24bit 2d 2.1ch
X	1	1	1	Press and hold the button for more than 3 seconds after the release, that is, the copy of the current output port of EDID

HKTM0402MH4 EDID Information:

MODE	DIP SWITCH 21	EDID INFO
0	00	copy output1
1	01	1080p/60hz 24bit 2d 7.1ch
2	10	1080p/60hz 24bit 2d 2ch
3	11	4kx2k 24bit 3d 5.1ch

MODE	DIP SWITCH 43	EDID INFO
------	---------------	-----------

0	00	copy output2
1	01	1080p/60hz 24bit 2d 7.1ch
2	10	1080p 60hz 24bit 2d 2ch
3	11	4kx2k 24bit 3d 5.1ch

■ Troubleshooting and Maintenance

- 1) If the connected display devices around have noise, it should be the wire quality issue, please use Cat6.
- 2) If colour distorted or no video signal output: a) check the corresponding input signal, if there is no input signal, please check the wire connection. B) check the output interface is consistent with the right controlled one.
- 3) If the front panel digital light is with no shine and operating unresponsive, please ensure the power input is in well-connected.
- 4) Clean this unit with a soft, dry cloth. Never use alcohol, paint thinner or benzene to clean this unit.

■ Warning and Precautions

- 1) Away from the heat source and avoid direct sunlight.
- 2) To ensure proper heat dissipation, avoid poorly ventilated spaces and do not block the vents.
- 3) To prevent electrical shock and fire, do not keep the machine in rain or wet places.
- 4) Do not connected to power supplies when installation or moving the device.
- 5) Do not touch the power adapter plug with wet hands.
- 6) Do not spill liquid on the machine, as it may cause internal short circuit or fire.
- 7) Do not attempt to open the cabinet. Please contact qualified service personnel for maintenance.