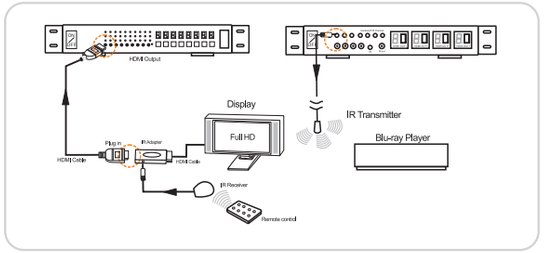
Quality Guarantee:

- This Limited Warranty only covers failures due to defects in materials or workmanship, and does not cover normal wear and tear or cosmetic damage. The Limited Warranty also does not cover damages which occurred in shipment, or failures which are caused by products not supplied by the warrantor, or failures which result from accidents, misuse, abuse, neglect,mishandling, misapplication, alteration, faulty installation, set-up adjustments, malad-justment of consumer controls, improper maintenance, power line surge, lightning damage, modification, or service by anyone other than a Factory Service center or other Authorized Service, or damage that is attributable to acts of God.
- There are no express warranties except as listed under “limited warranty coverage”. the warrantor is not liable for incidental or consequential damages resulting from the use of this product, or arising out of any breach of this warranty. (As examples, this excludes damages for lost time, cost of having someone remove or re-install an installed unit if applicable, travel to and from the service, loss or damage to media or images, data or other recorded content. The items listed are not exclusive, but are for illustration only.)
- No damage caused by accident, One year warranty for free repair and half way free transport.

Product Picture:

New Function:

Backward IR channel connection diagram



USER MANUAL

4x2 HDMI® Matrix Switch

INTRODUCTION

Thank you for purchasing this HDMI Matrix! For best results, please thoroughly read this manual and carefully follow the instructions. Please pay special attention to the safety warnings to ensure that no harm comes to you or your equipment. Please keep this manual for future reference.

FEATURES:

- 4x2 HDMI Matrix with 4x HDMI inputs and 2x HDMI outputs
- Full Matrix can simultaneously distribute any input to any or all outputs
- Extends HDMI signals up to 328 feet (100 meters) using a single Cat6 cable
- Extends 100Base-TX network connectivity along with the HDMI video
- Can be daisy chained up to six units deep
- Built-in bidirectional IR repeater
- Supports High Speed HDMI functions, including 3D video

SPECIFICATIONS:

• Supported Video:	High Speed HDMI with HDCP 1.2
• Supported Resolutions:	1080p, 1080i, 720p, 576p, 576i, 480p, 480i
• Color Support:	up to 12-bit/channel Deep Color (36-bit total)
• Audio Support:	LPCM, Dolby AC3, DTS 7.1, DSD
• Bandwidth/Data Throughput:	up to 10.2Gbps
• Operating Temperature Range:	+5 ~ +131°F (-15 ~ +55°C)
• Operating Humidity Range:	5 ~ 90% RH (no condensation)

CONTROLS AND CONNECTIONS

MATRIX FRONT

• ON/OFF: Power switch.
• HDMI Input (1-4): LED illuminates when a signal is present on the corresponding HDMI input port.
• IR1-4: 3.5mm jacks for connecting infrared transmitters to control the corresponding source device.
• HDMI Out: LED illuminates when a signal is being sent to the HDMI OUT channel.
• Link: LED illuminates when a valid connection exists between the Matrix and the HDMI Extender receiver.
• HDBase-T Out: LED illuminates when a signal is being sent to the HDBase-T OUT channel.
• HDMI-RX: 3.5mm jack for connecting an IR receiver bulb if an IR forward channel is desired for the HDMI OUT channel.
• HDBase-T-RX: 3.5mm jack for connecting an IR receiver bulb if an IR forward channel is desired for the HDBase-T OUT channel.
• RX Ext: 3.5mm jack for connecting an IR receiver bulb to control the Matrix when it is hidden from view.

• IR: The infrared receiving "eye" for the Matrix.
• CEC/IR: Switch determines whether the IR extender channel will be used for HDMI CEC signals or regular IR remote control signals.
• HDMI Out: Pushing the button cycles through the available HDMI inputs for sending to the HDMI OUT channel. The LED indicates which input is selected.
• HDBase-T Out: Pushing the button cycles through the available HDMI inputs for sending to the
• HDBase-T OUT channel. The LED indicates which input is selected.

MATRIX BACK

• HDMI In(1-4): HDMI input ports for connecting up to four source devices.
• HDMI Out: HDMI output port for the HDMI OUT channel.
• HDBase-T Out: RJ45 jack for the HDBase-T OUT channel. Connect a Cat5e or Cat6 cable to extend the HDMI signal to a remote HDBase-T Extender Receiver unit.
• LAN 100Base-T: Two RJ45 ports function as a network switch in conjunction with the LAN 100Base-T ports on the HDMI Extender Receiver unit. As long as one of the four LAN ports is connected to the local area network, the other three ports will carry that same connection. The yellow LED on the left side of the RJ45 port illuminates when a valid connection is in place and blinks when data is being transferred. The LED on the right illuminates in amber color when a 10Base-T connection is established and illuminates green when a 100Base-TX connection is established.
• SPDIF/Toslink: Optical digital audio output capable of supporting up to 7.1 channel audio signals. This output will produce the same audio as that sent to the HDMI OUT channel.
• Audio L/R: Stereo RCA jacks are capable of supporting stereo signals only. This output will produce the same audio signal as that sent to the HDMI OUT channel, as long as the audio source is 2-channel (stereo) only. If the audio source uses more than 2 channels, there will be no audio on output from the RCA jacks.
• DC 5V: Power input socket for use with the included AC adapter.

HDMI EXTENDER RECEIVER FRONT

• HDCP: LED illuminates when video content with HDCP copy protection is being transmitted to the receiver unit. The LED blinks when video content without HDCP copy protection is being transmitted to the receiver unit. The LED is off when no signal is being transmitted to the receiver unit.
• Link: LED illuminates when a valid link is established between the receiver and the matrix.
• Mode: LED blinks when the receiver is active.
• Power: LED illuminates when the receiver is powered on.
• IR-RX: 3.5mm jack for connecting an IR receiver bulb to allow control of a source device.
• IR-TX: 3.5mm jack for connecting an IR transmitter bulb to allow devices at the receiver end to be controlled from the Matrix location.

HDMI EXTENDER RECEIVER BACK

• DC 5V: Power input socket for use with the included AC adapter.
• HDBase-T: RJ45 jack for connecting the Cat5e or Cat6 cable used to connect the receiver to the matrix.
• HDMI Out: HDMI output port for connecting to the display device.
• LAN 100Base-T: Two RJ45 ports function as a network switch in conjunction with the LAN 100Base-T ports on the Matrix unit. As long as one of the four LAN ports is connected to the local area network, the other three ports will carry that same connection. The yellow LED on the left side of the RJ45 port illuminates when a valid connection is in place and blinks when data is being transferred. The LED on the right illuminates in amber color when a 10Base-T connection is established and illuminates green when a 100Base-TX connection is established.

INSTALLATION:

1. Using a High Speed HDMI cable (not included) for each source, connect the signal source devices to the input ports on the HDMI Matrix. Up to four input devices can be connected.
2. Using a High Speed HDMI cable (not included) connect the HDMI OUT port on the back of the matrix to an HDMI IN port on your display.
3. Using a High Speed HDMI cable, connect the HDMI OUT port on the receiver to the one of the HDMI IN ports on your remotely located display.
4. Using a Cat5e or Cat6 cable (not included) connect the output port on the Matrix to the input port on the Receiver.

NOTE: For best results we strongly recommend the use of Shielded (STP) Cat6 cable to connect between the Matrix and the receiver units.

5. (Optional) Decide if you want to use the IR repeater function. If you do, decide whether you want to control a device at the source end from the display location, or at the display end from the source location.
6a. If you want to control a device at the source end, plug the IR Receiver bulb into the IR-RX jack on the front of the remote receiver. Position the IR bulb so that it can be "seen" by your remote control. Plug the IR Transmitter bulb into the IR jack on the front of the Matrix, which corresponds to the device you want to control (IR1, IR2, IR3, or IR4). Position the bulb so that it can "see" the IR receiving "eye" on your source device.
6b. If you want to control a device at the display end, plug the IR Receiver bulb into the IR-RX jack on the front of the Matrix. Position the IR bulb so that it can be "seen" by your remote control. Plug the IR Transmitter bulb into the IR-TX jack on the receiver unit. Position the bulb so that it can "see" the IR receiving "eye" on your source device.
7. (Optional) Using a Cat5e or Cat6 cable (not included) connect your router, modem, or network switch to one of the 100Base-T RJ45 ports on the back of the Matrix or on the back of the receiver unit. The four 100Base-T ports in this system act as a single network switch. When one of the ports is connected to the network, the other three will provide a live network connection.
8. (Optional) Using a stereo RCA patch cable (not included) connect the Audio L/R jacks on the back of the Matrix to one of the audio inputs on your AV receiver/amplifier.

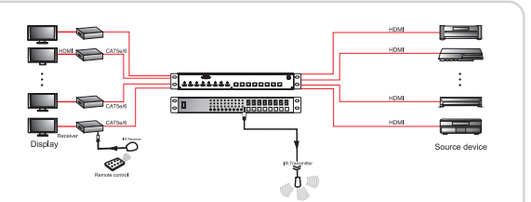
Note that this connection is tied to the HDMI OUT channel on the Matrix. Additionally, it will only produce audio when the source material is 2.0 channel (stereo). If the source material is 5.1 or 7.1, there will no analog audio output.

9. (Optional) Using an optical Toslink cable (not included) connect the SPDIF/Toslink jack on the back of the Matrix to a Toslink input on your AV receiver/amplifier.

Note that this connection is tied to the HDMI OUT channel on the Matrix and will duplicate any audio sent over the HDMI OUT port.

10. Connect the DC output of the 5VDC/3A AC Adapter to the Matrix then plug the adapter into an AC outlet.
11. Connect the DC output of the 5VDC/2A AC Adapter to the receiver unit then plug the adapter into an AC outlet.

CONNECTION DIAGRAM:



NOTE: This sample is for demonstration purposes only. Your connected devices may differ.

PACKAGE CONTENTS:

Please take an inventory of the package contents to ensure you have all the items listed below. If anything is missing or damaged, please contact us for a replacement.

- **1 x 4x2 HDMI Matrix**
- **1 x Receiver of HDBase-T**
- **1 X IR Transmitter**
- **1 x IR Receiver**
- **1 x IR Adapter**
- **2 x 5V DC power Adapter**
- **1 x User Manual**
- **1 x Remote Control**

SAFETY WARNINGS:

To avoid personal injury or damage to your equipment, please adhere to the following safety guidelines:

1. Do not expose this device to water or moisture of any kind. Do not place objects filled with liquids on or near this device.
2. Do not install this device in an enclosed space. Ensure that there is sufficient ventilation to keep the unit from overheating.
3. Do not place objects on this device or otherwise block the cooling vents.
4. Do not install near any heat sources, such as stoves, radiators, or fireplaces.
5. Do not place naked flames, such as candles, on or near this device.
6. Clean only with a dry cloth. Do not use liquid cleaners or solvents to clean this device.
7. Unplug the unit during lightning stores or when the unit will be unused for a long period of time.
8. Do not allow the power cords to be walked on, pinched, tripped over, or otherwise damaged.