

4x4 HDMI to Coaxial Matrix Switcher

Operation Manual

1.Introduction

The 4x4 HDMI to Coaxial Matrix Switcher connects four HDMI sources to four displays. Connect a Receiver to each of the Coaxial -Cable outputs to extend the HDMI signal up to 328ft/100m (RG6) for multi-room connectivity.It works with Blu-Ray players, Set-Top boxes, Home Theater PCs, and game consoles that connect to an HDMI display. Any source is accessible at all times by any display by selecting it via the supplied IR Remote Control, or by using the selection buttons on the front panel.

2.Features

- Compliant with HDMI1.3.
- Supports transmission distances up to 328ft/100m through RG6 coaxial cable.
- Supports 480i, 576i, 720p, 1080i or 1080p resolution.
- Supports wideband IR(30-60Khz) matrix system.
- The RS-232 for the firmware update.
- Supports RS-232, remote control, on-panel control and TCP/IP Control .
- Supports smart EDID management.
- Supports power-off memory.

3.Package Contents

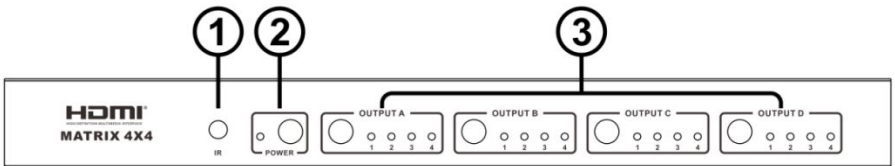
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|---------------------------------------|------|
| ● 4x4 HDMI to Coaxial Matrix Switcher | 1pcs |
| ● HDMI Coaxial Receiver | 4pcs |
| ● 12V/2.5A DC power adaptor | 1pcs |
| ● 5V/1A DC power adaptor | 4pcs |
| ● Operation Manual | 1pcs |
| ● Wideband IR Tx cable | 4pcs |
| ● Wideband IR Rx cable | 5pcs |
| ● HDMI Matrix IR Remote | 1pcs |
| ● Mounting ears | 2pcs |
| ● RS232 cable | 1pcs |

4. Specifications

Input Ports	4×HDMI, 1×RS-232, 1×RJ-45(Control), 1×IR EXT
Output Ports	4×BNC, 4×IR OUTPUT
Input Resolutions Support	Up to 1920x1080P@60Hz
Output Resolutions Support	Up to 1920x1080P@60Hz
Control	IR , RS-232 , TCP/TP , Buttons
ESD Protection	Human-body Model: ± 8kV (Air-gap discharge) ± 4kV (Contact discharge)
Power Supply	12 V/2.5 A DC (US/EU standards, CE/FCC/UL certified)
Dimensions	440mm (W)×200mm (D)×44.5mm (H)
Weight	2.265kg
Chassis Material	Metal
Silkscreen Color	Black
Operating Temperature	0 °C~40 °C/32 °F~104 °F
Storage Temperature	-20 °C~60 °C/-4 °F~140 °F
Relative Humidity	20~90 % RH (non-condensing)
Power Consumption	18 W(Max)/1.5W(Standby)

5. PANEL FUNCTIONS

5.1 Front Panel

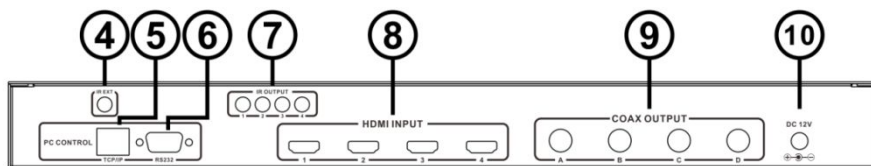


- Part 1. **IR:** IR Receiver window (accepts the remote control signal of this device only).
- Part 2. **POWER:** Press this button to power the device on/off. The

LED will illuminate green when the power is on, red when it is in 'Standby' mode.

Part 3. **OUTPUT A/B/C/D:** Press the OUTPUT A/B/C/D button to select the output corresponding input, and at the same time for the LED will light.

5.2 Rear Panel



Part4: IR EXT: if the panel sensor is obstructed or the unit is installed in a closed area out of infrared line of sight, the IR RX receiver included can be inserted into the IR EXT port at the rear to extend the IR sensor range and enable local control of the matrix.

Port5: TCP/IP: This port is the link for TCP/IP controls, connect to an active Ethernet link with an RJ45 terminated cable.

Port6: RS232: Connect to a PC or control system with D-Sub 9-pin cable for the transmission of RS-232 commands.

Port7: IR OUT: Super IR control system interface. For further details, please refer to the Super IR system control introduction.

Part8: HDMI INPUT

Connect to the HDMI input source devices such as a DVD player or a Set-top Box with HDMI cable.

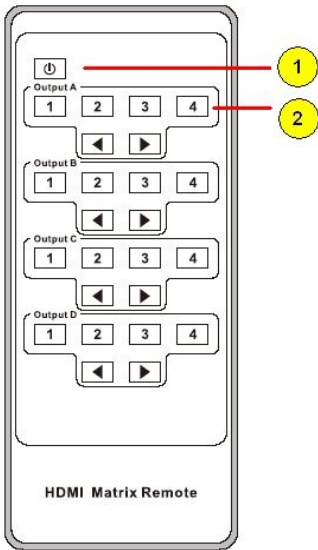
Part9: COAX OUTPUT

The COAX OUTPUT is connected to the Coaxial Receiver.

Part10: DC POWER INPUT

Plug the 12V/2.5A DC power supply into the DC12V power in.

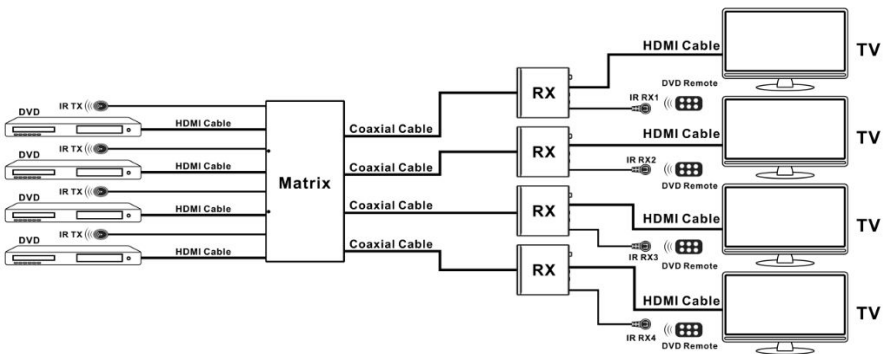
6. Remote Control



1. Press this button to power on the matrix or set it to standby mode.
2. Press these buttons to select output A,B,C,D for input 1,2,3,4 port.

7. IR Control system

The IR control from TV end to control source (Blu-ray DVD), and also IR channel switch with video switch. For example, four TV signals from the HDMI 1 source, so four on the Coaxial receiver IR RX can control the HDMI 1 source (Blu-ray DVD).



At Matrix end: Insert the 3.5mm jacks of the IR TX Emitters included with the unit into the IR TX Emitter ports at the rear of the matrix according to input. The IR signal is added to the HDMI of the input device so, for example, if the user is watching Blu-ray on input 1, the

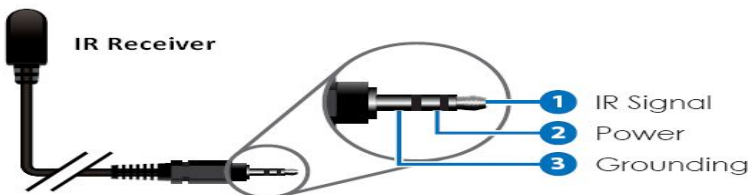
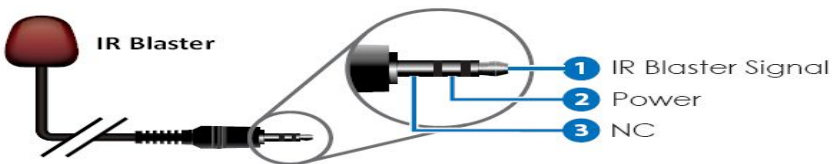
IR signal will be directed through the IR TX1 socket to control the device.

As each IR TX port is allocated to an individual HDMI input port, if the user is unable to establish IR control of the device, care should be taken to check firstly, that the IR emitter and HDMI input ports match (Input 1-TX1, Input2-TX2 etc.) with plugs secured in correct ports, and secondly, that the IR TX emitter sensors are firmly attached directly to the front of inputs and covering infrared sensor windows of the source devices. Some later adjustment may be needed to the location of the sensor to achieve the best performance results - sometimes moving the sensor to different areas on the source can improve IR performance.

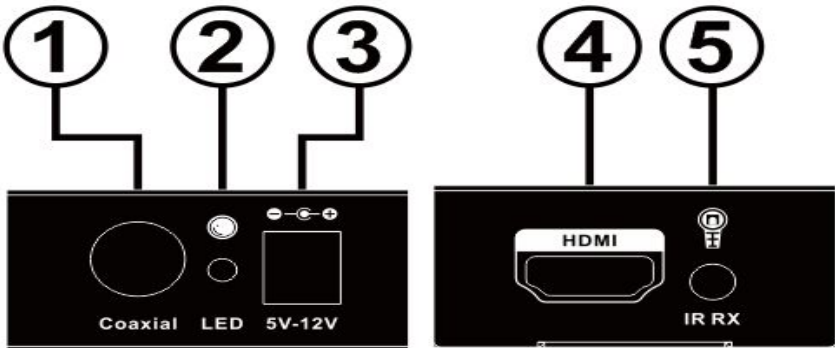
IR RECEIVER



IR BLASTER



8. Coaxial Receiver



1. **Coaxial IN:** This slot is where you connect the 4x4 HDMI to Coaxial Matrix output port with RG6 cable.
2. **POWER LED:** This red LED illuminate when the device is connected with power supply.
3. **DC IN:** Plug the 5V-12V DC power supply into the unit.
4. **HDMI OUT:** This slot is where you connect the HDTV or monitor with HDMI cable.
5. **IR RX:** Connect with Wideband IR Rx.

9. PC controller user guide

Installation

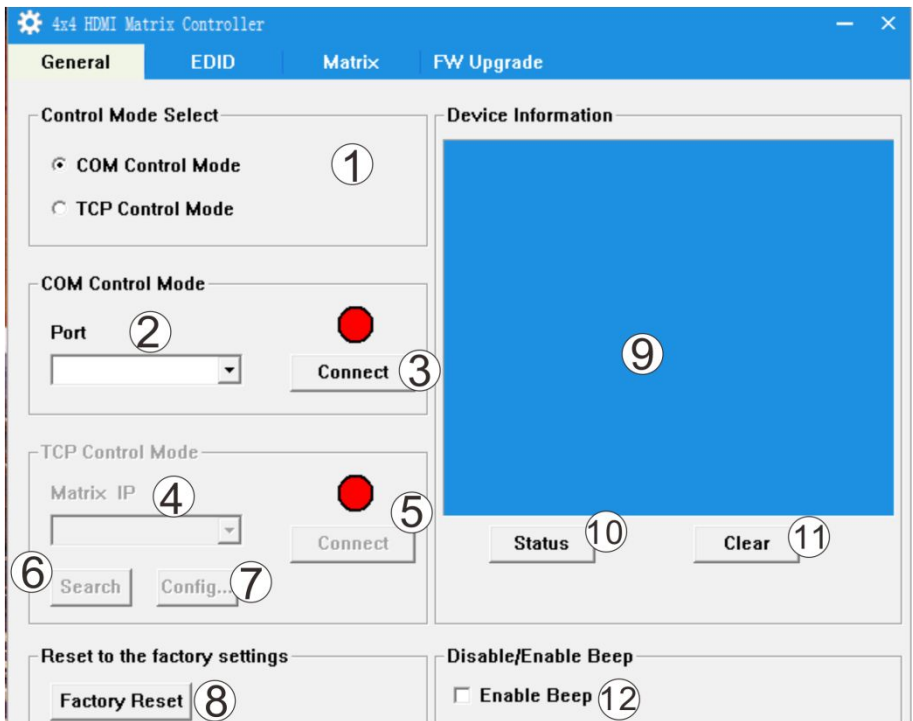
Matrix controller is a green software. Just copy MatrixController.exe to PC which is used to control the Matrix by RS232 COM port or TCP/IP to complete installation.

Preparation

- Connect PC and Matrix by RS232 cable (headers of both sides of cable should be FEMALE) or TCP/IP(local area network)
- Power-up Matrix
- Double click MatirxController.exe icon to run it

How to control Matrix

◆ “General” page



1. Select RS232 COM or TCP mode
2. Select RS232 COM port
3. Click to connect or disconnect PC and Matrix

4. Select Matrix IP
5. Connect to Matrix IP
6. Search Matrix IP
7. Configure Matrix IP and MAC
8. Click to reset to the factory settings
9. Device information display area
10. Click to refresh device status: include device information displayed in 9 area and Input/Output Settings on "Matrix" page
11. Click to clear device information
12. Enable or disable Beep
 - Configure TCP

After action of 7, edit form will pop-up as below:

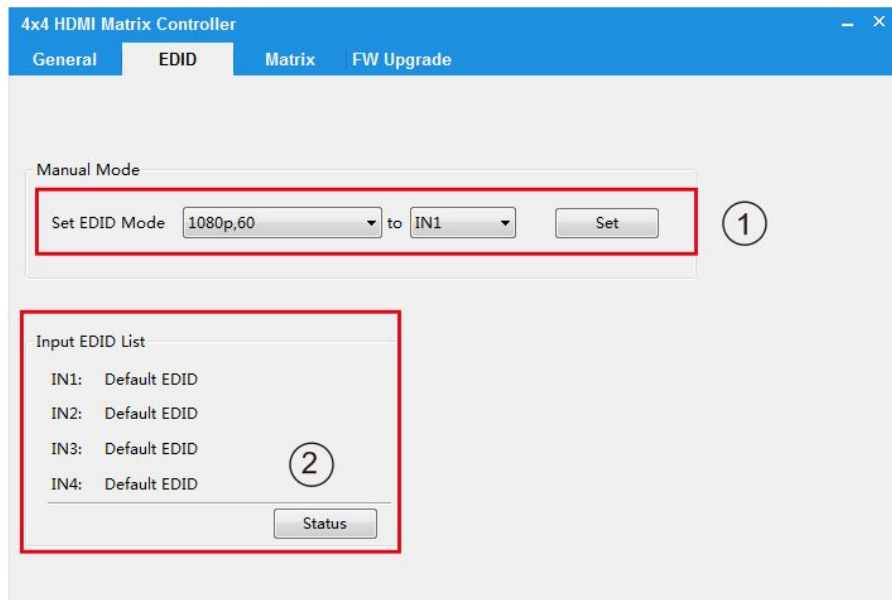
The image shows a 'TCP Configuration' dialog box. It features a blue title bar with the text 'TCP Configuration' and a close button (X). The main content area is titled 'Device Information' and contains the following elements:

- Two radio buttons: 'Auto IP' (selected) and 'Static IP'.
- A section labeled 'IP Address' with four input boxes for the IP address.
- A section labeled 'MAC' with six input boxes for the MAC address.
- Two buttons at the bottom: 'OK' and 'Cancel'.

Three red circles with numbers 1, 2, and 3 are overlaid on the image to highlight specific elements: circle 1 is around the 'Auto IP' radio button, circle 2 is around the first IP address input box, and circle 3 is around the first MAC address input box.

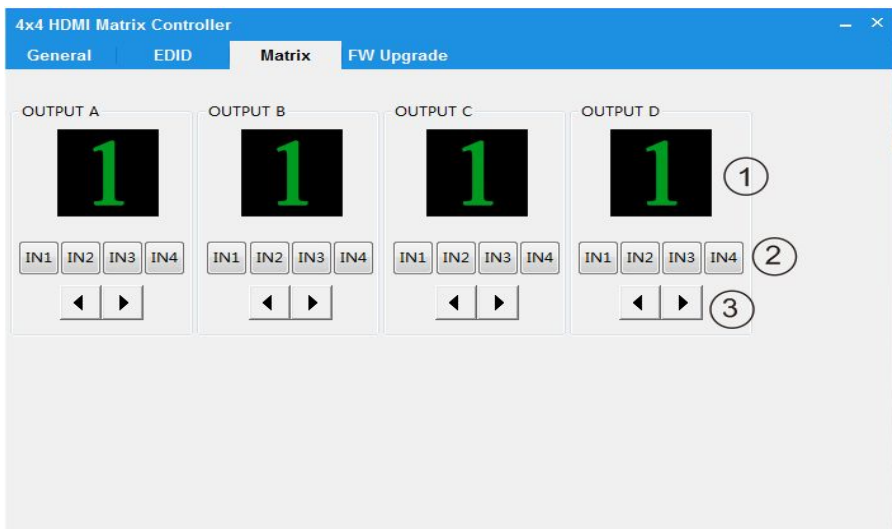
1. Select auto or static IP
2. Rewrite the Matrix IP
3. Rewrite the Matrix MAC

◆ “EDID control” page



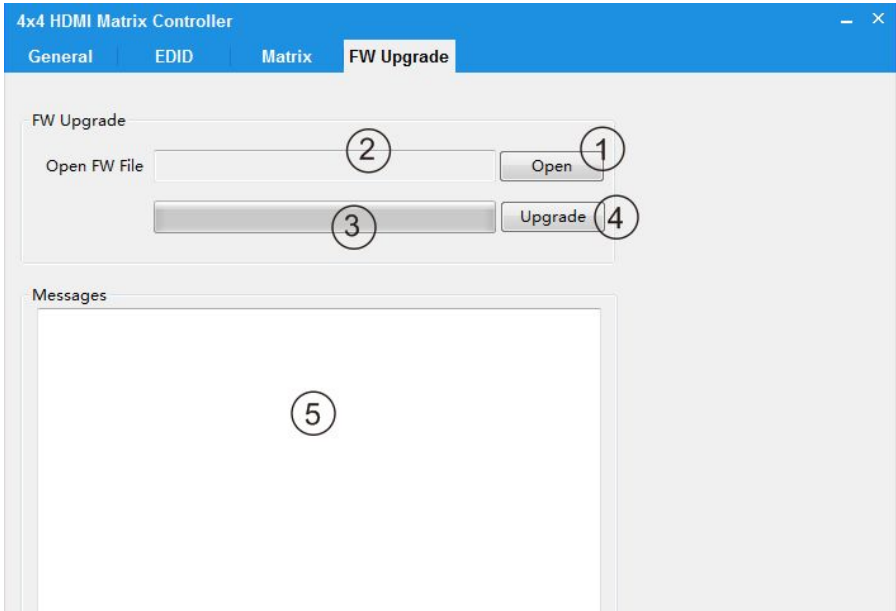
1. Select the needed EDID to input port and click set button the EDID will write to the selected HDMI input ports.
2. Click to Status Button can query each HDMI input EDID information.

◆ “Matrix” page



1. LED which display Input number for respective Output.
2. Click to select Input port for respective Output port.
3. Click to select previous or next Input port for respective Output port.

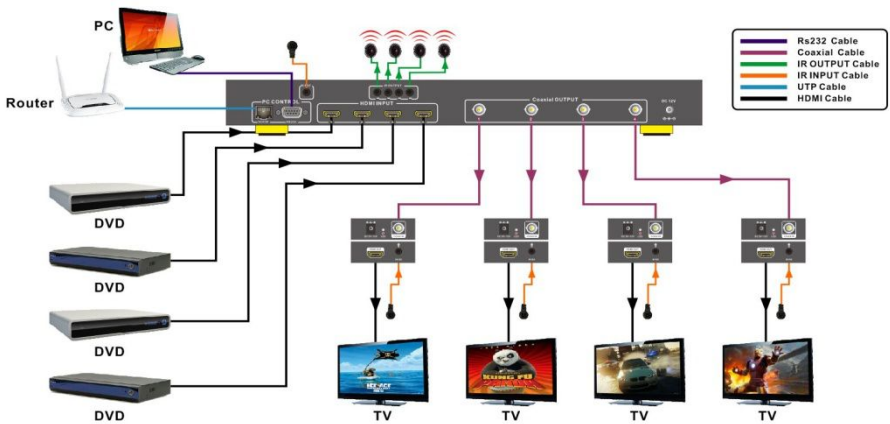
◆ “FW upgrade” page



1. Click to open FW file(file extension is “.fw”)
2. Display the FW file path
3. Displaying the progress of the software upgrade
4. Click to upgrade the Matrix software
5. Display the message of the software upgrade

Note: The matrix after software upgrade required again to power supply.

10. Connection and Installation



1. Connect up to 4 sources such as a Blu-Ray Player, game console, A/V Receiver, Cable or Satellite Receiver, etc. to the HDMI inputs on the unit. Insert and extract cables carefully with the power switch off. Connecting and disconnecting while the unit is powered can result in damage to circuitry.
2. Connect the Coax output connector to the Coaxial receiver, and connect the Coaxial receiver HDMI output connector to an HDMI equipped (for examples, projector or monitors).
3. OPTIONAL: Connect the IR receiving extender to the IR EXT port on the matrix.
4. OPTIONAL: Connect an Ethernet cable from the TCP/IP port on the matrix to a local Area Network.
5. OPTIONAL: Connect an RS-232 cable from the RS232 port on the matrix.
6. OPTIONAL: Connect the IR emission extender to the IR output port on the matrix, and the IR receiving extender to the Coaxial receiver IR RX port.
7. Connect the DC 12V Locking power supply to the power receptacle on the matrix.
8. Connect the power supply to an available electrical outlet.