

Cablesson HDelity 4x4 CAT5/6 HDMI Matrix

User Manual



 SAFETY AND NOTICE

The Cablesson HDelity 4x4 HDMI Deep Colour & full 3D over Single CAT.X Matrix has been tested for conformance to safety regulations and requirements, and has been certified for international use.

However, like all electronic equipment, the Cablesson HDelity should be used with care. Please read and follow the safety instructions to protect yourself from possible injury and to minimize the risk of damage to the unit.

- Follow all instructions and warnings marked on this unit
- Do not attempt to service this unit yourself, except where explained in this manual
- Provide proper ventilation and air circulation and do not use near water
- Keep those objects away that might damage the device and assure that the placement of this unit is on a stable surface
- Use only Power Adapter, Power Cords and Connection Cables designed for this unit
- Do not use liquid or aerosol cleaners to clean this unit. Always unplug the power to the device before cleaning.

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“we believe in creating
thoughtful products for you”

The Cablesson HDeIity 4x4 HDMI Deep Colour & Full 3D over single CAT.X Matrix with Bi-Directional IR provides the most flexible and cost effective solution in the market to route high definition video sources plus multi-channel (up to 7.1-channel) Digital Audio from any of the four HDMI sources to the remote displays at the same time. Through only one low cost CAT-5/5e/6 LAN cable, not only high quality video and audio can be transmitted to the display sites, but also users can switch among four HDMI sources using the Push-in button or Remote control. Furthermore, the built-in IR extension function makes users at display site access the DVD Player, PS3 or any HDMI supported devices directly!

Cablesson HDeIity 4x4 HDMI CAT.X MATRIX

- Supports HDMI Deep Colour & Full 3D
- HDCP compliant
- Allows any source to be displayed on multiple displays at the same time
- Allows any HDMI display to view any HDMI source at any time
- Supports 7.1 channel Digital Audio
- Supports default HDMI EDID and learns the EDID of displays
- Bi-Directional IR path
- The Matrix Master can switch every output channel to any HDMI input by Push-in button, IR Remote control, RS-232 Control
- Allows controlling local HDMI sources such as DVD and TiVo by attached IR Extender from Remote Receiver to Matrix Master
- Extends video signal up to 35m (115 feet) over single CAT.X at 1080p and likely longer with better HDMI source device (such as PS3), better grade HDMI display (such as Sony X-Series HDTV), and better quality solid CAT6 cable
- Easy installation with rack-mounting and wall-mounting designs for Master and Receiver respectively
- Fast response time – 2~5 seconds for channel switch
- Colour: Black

“a product that exceed
beyond your expectations”

TECHNICAL SPECIFICATIONS

Cablesson HDelity 4X4 MATRIX		
Technical	Cablesson HDelity	Cablesson HDelity
Role of usage	True 4x4 Matrix Switcher Transmitter [TX]	Receiver [RX]
HDMI compliance	HDMI Deep Colour & Full 3D	
HDCP compliance	Yes	
Video bandwidth	6.75Gbps	
Video support	480i / 480p / 720p / 1080i / 1080p60 36-bit Colour	
Audio support	Surround sound (up to 7.1ch) or Stereo Digital Audio	
HDMI over CAT5 transmission range	Full HD (1080p): 115ft (35M) [CAT.X] HD (720p/1080i): 165ft (50M) [CAT.X]	
HDMI equalization	N/A	8-level digital rotary control
Input TMDS signal	1.2 Volts [peak-to-peak]	
Input DDC signal	5 Volts [peak-to-peak, TTL]	
ESD protection	[1] Human body model — ±15kV [air-gap discharge] & ±8kV [contact discharge] [2] Core chipset — ±8kV	
Input	4x HDMI / 1x RS-232 / 5x IR Socket for IR Receiver	1x RJ-45 / 1x IR Socket for IR Receiver
Output	4x RJ-45 / 4x HDMI / 5x IR Socket for IR Blaster	1x HDMI / 1x IR Socket for IR Blaster
HDMI Input selection	Push-in button/IR Remote control/RS-232 Control	IR Remote control
HDMI source control	Controllable via IR Pass-through from IR Receiver at RX to IR Blaster at TX	
IR remote control	Electro-optical characteristics: π = 25°/Carrier frequency: 20-60kHz	
HDMI connector	Type A [19-pin female]	
RJ-45 connector	WE/SS 8P8C with 2 LED indicators	
RS-232 connector	DE-9 [9-pin D-sub female]	
3.5mm connector	Earphone jack for IR Blaster [All IR Out] IR control on all source devices [IR1~IR4] IR control on individual source device Earphone jack for IR Receiver [System IR] Receives IR commands from Remote control [IR1~IR4] Receives IR commands from individual Remote control	Earphone jack for IR Blaster [IR] IR control on individual display device Earphone jack for IR Receiver [IR] Receives IR commands from Remote control

MECHANICAL SPECIFICATIONS

Cablesson HDelity 4X4 MATRIX		
Mechanical	Cablesson HDelity	Cablesson HDelity
Enclosure	Metal case	
Dimensions (H x W x D)	Model	44 cm x 5.2 cm x 16.3 cm
	Package	10.5 cm x 4.4 cm x 5.9 cm
	Carton	TBA
Weight	Model	2.5 KG
	Package	1.1 lbs
Fixedness	1RU rack-mount with ears Wall hanging holes	Wall-mount with screws
Power supply	12V DC 5A	5V 2A DC
Power consumption	20 Watts [max]	1 Watt [max]
Operation temperature	32~104°F [0~40°C]	
Storage temperature	-4~140°F [20-60 C]	
Relative humidity	20~90% RH [no condensation]	

PACKAGE COARENTENTS

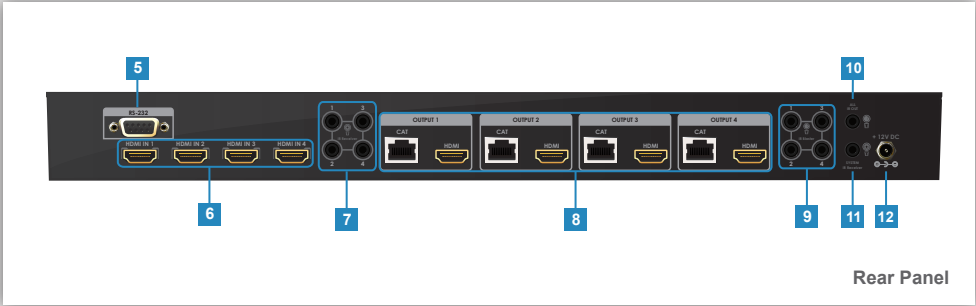
- HDelity HDMI 4x4 CAT-5e/6 Matrix Switch
- HDelity 3D CAT5/6 HDMI Matrix Receiver x 4
- Rack Mounts x 2
- IR Receivers x 5
- IR Blaster
- IR Remote Control
- Power Supply (DC 12V 5A)
- USB Power Supply (DC 5V 2A) x 4
- CD ROM containing Documentation, PC Configuration Utility, Discrete IR Codes and Serial Protocol
- 1 x User Manual

i Additional IR Remote Controllers and IR Blasters can be purchased as optional accessories to control the HDMI sources located separately.

PANEL DESCRIPTIONS FOR TRANSMITTING UNIT

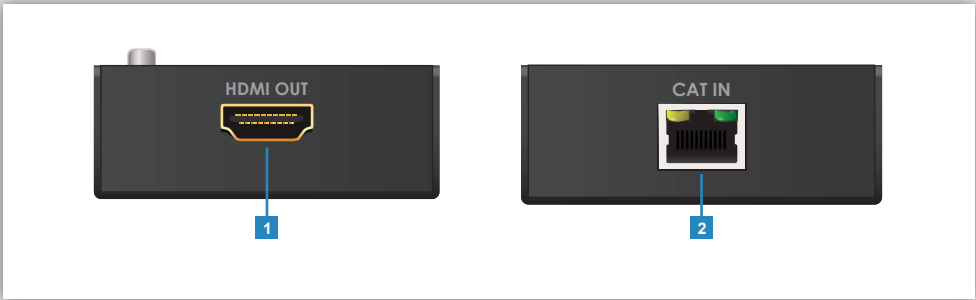


- 1. **Source Status:** Input source indicator LED
- 2. **IR Sensor:** IR sensor for receiving the IR commands from IR Remote
- 3. **Output Push Button & 7-Segment LED:** Front panel push buttons used to select the number of display channel & LED display for output ports
- 4. **Input Push Button & 7-Segment LED:** Front panel push buttons used to select the number of input source & LED display for input channels



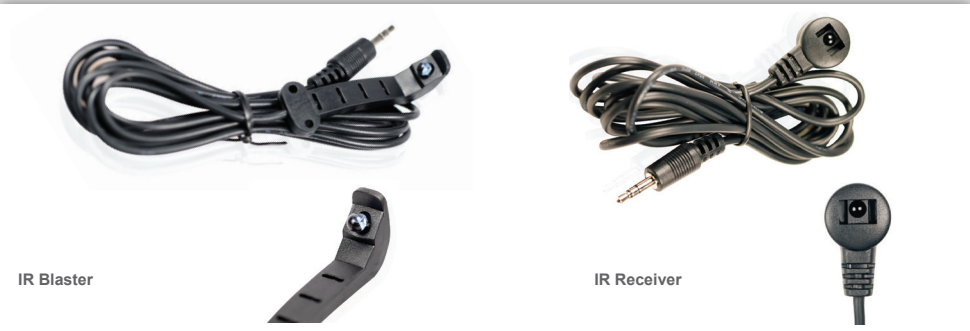
- 5. **RS-232:** RS-232 control port
- 6. **INPUT 1-4:** HDMI inputs
- 7. **IR Receiver 1-4:** Infrared 3.5mm socket for plugging in the extension cable of IR Receiver
- 8. **Output Port 1-4:** RJ-45 & local loop-out HDMI outputs for each output channel
- 9. **IR Blaster 1-4:** 3.5mm IR Blaster socket for individual HDMI source control
- 10. **All IR Output:** 3.5mm IR Blaster socket for HDMI source control on all 4 inputs
- 11. **System IR Receiver:** Ext. IR Receiver
- 12. **+12V DC:** 12V DC power jack

PANEL DESCRIPTIONS FOR RECEIVING UNIT



- 1. **HDMI Output:** Connect to HDTV with HDMI cable
- 2. **CAT In:** Plug-in CAT.X cable

IR EXTENDERS



IR SOCKETS

Cablesson HDelity 4X4 MATRIX

All IR Out: The default location for IR Blaster to transmit all IR command signals received from any of the four Remote receivers to all of the HDMI sources.

IR Blaster 1-4: IR Blaster connected here can only transmit IR command signals from the remote receivers that are set at respective input channel from 1 to 4.

System IR: Receives IR commands from Remote control

IR Receiver 1-4: Receives IR commands from individual Remote control

Cablesson HDelity MATRIX RECEIVER

IR Blaster: IR control on individual display device

IR Receiver: IR Receiver connected here can receive all IR command signals from the IR Remote controls of Cablesson HDelity 4x4 Matrix and all other HDMI source devices.

DEFINITION OF IR EARPHONE JACK



! Incorrect placement of IR Blaster and Receiver may result into the failure of IR Extenders. Please check carefully before plugging-in the IR Extender to the respective IR sockets. Warranty will not cover the damage.

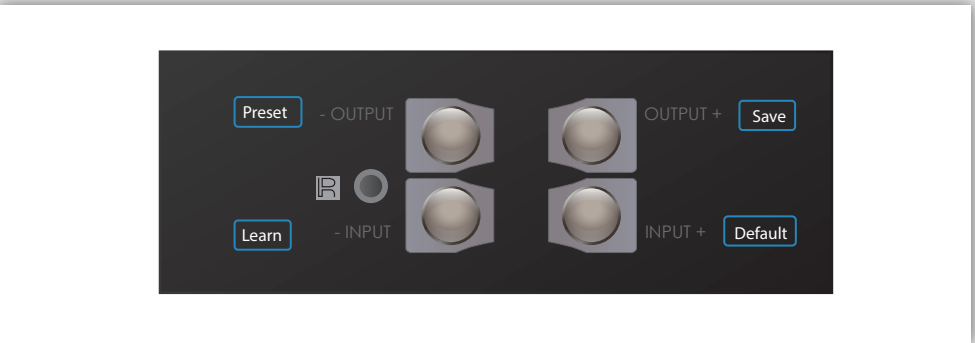
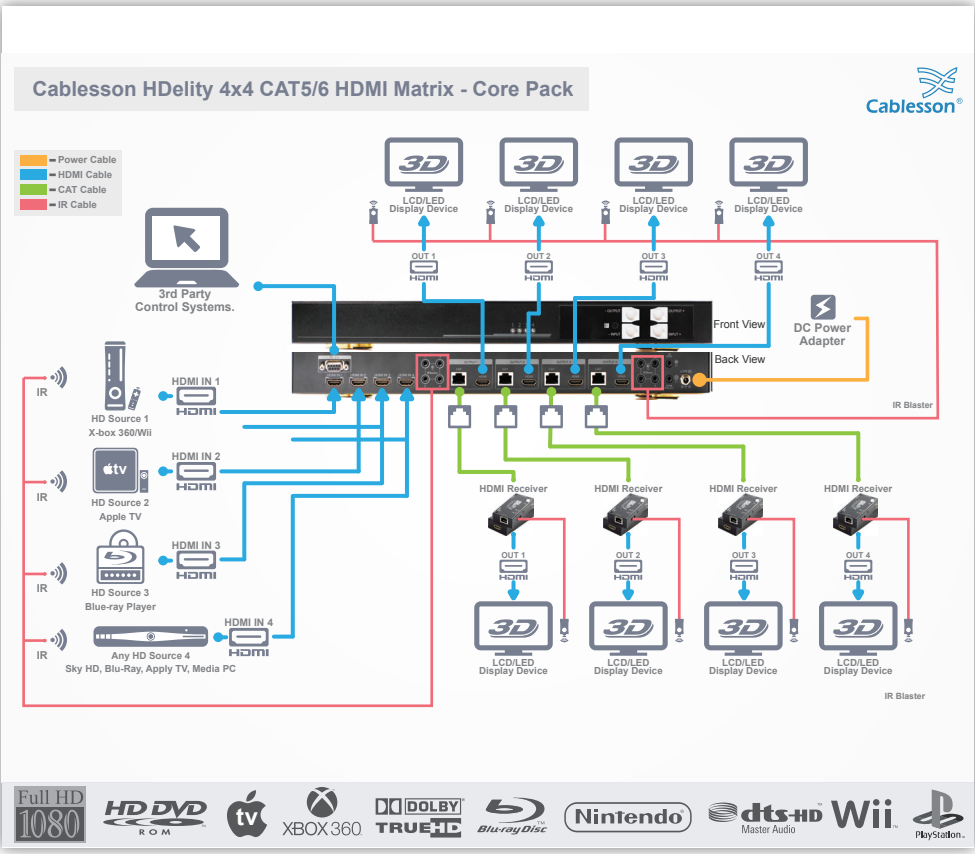
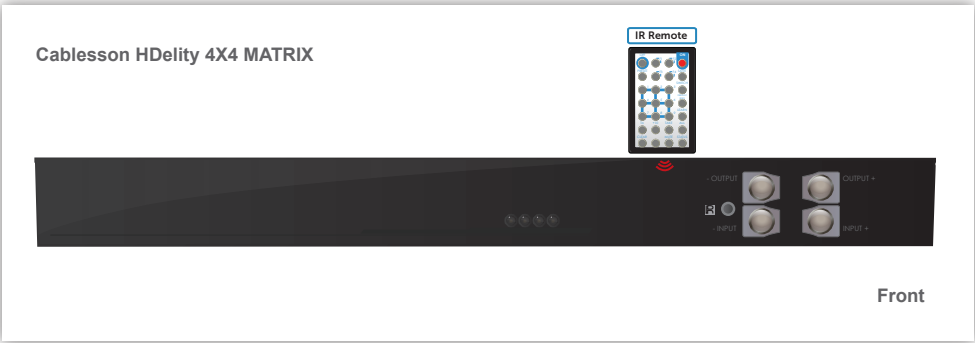
i You can buy any IR Extension cable in the market that is compatible to the definition of IR sockets for the Matrix if necessary for replacement use. However, IR cables longer than 2m (6 ft.) may not work.

Cablesson HDelity 4X4 MATRIX AS MASTER

1. Connect all sources to HDMI Inputs on the 4x4 HDMI over CAT.X Matrix Master - Cablesson HDelity 4x4 Matrix
2. Connect each CAT.X output port on the Cablesson HDelity 4x4 Matrix to respective CAT.X input on the Remote receiver - Cablesson HDelity Matrix Receiver
3. Connect IR Blaster to the Cablesson HDelity 4x4 Matrix and direct the IR Blaster to point towards the built-in IR Receiver of the HDMI source devices
4. Connect the +12V 5A DC power supply to the Cablesson HDelity
5. Power on all HDMI sources

Cablesson HDelity MATRIX RECEIVER AS RECEIVER

1. Connect each HDMI output to HDMI displays.
2. Connect the CAT.X input on the Cablesson HDelity Matrix Receiver to the CAT.X output port on the Cablesson HDelity Matrix Receiver
3. Connect IR Receiver and place the IR Receiver at the appropriate position that can receive the IR signals sent from the users
4. Dial the 8-Level rotary control switch to adjust the HDMI signal level until the picture and sound are clear. It is recommended to dial from weakest to strongest to find the optimal visual experience.



1. IN/OUT Map

- A. Use the "+" or "-" output push button to select the number of display
- B. Use the "+" or "-" input push button to select the number of input source:
 - "+" : Change selected input/output port in ascending order
 - "-" : Change selected input/output port in descending order

After you select the desired input/output port, the LED will blink twice and setting will be effective.

2. Save Mapping Mode

- A. Keep pushing "Putut+(Save)" button until the output LED shows "D." to enter the Save Mapping Mode
- B. Use the "+" or "-" input push button to select the mapping configuration (0~7) which you want to save current input/output mapping
- C. After you select the desired mapping configuration number, the LED will blink twice and the mapping setting will be saved.
- D. If you push the "Output-(Preset)" button before the mapping setting is saved, the LED will show "—" to quit the Save Mapping Mode.

3. Preset Mapping Mode

- A. Keep pushing "Output-(Preset)" button until the output LED shows "P." to enter the Preset Mapping Mode
- B. Use the "+" or "-" input push button to select the saved mapping configuration (0~7) which you want to recall
- C. After you select the desired mapping configuration number, the LED will blink twice and the mapping setting will be effective.
- D. If you push the "Output+(Save)" button before the mapping setting is effective, the LED will show "—" to quit the Preset Mapping Mode.

METHOD A: PUSH-IN BUTTON

4. Default EDID Mode

- A. Push "Input+(Default)" button to select the input channel which you want to Learn Default EDID and then keep pushing "Input+(Default)" button when you select your desired input channel.
- B. Push the "+" or "-" output push button and then the LED will show "E" "D" one time to enter Learn Default EDID Mode
- C. Use "+" or "-" output push button to select the Default EDID mode (1~8)
- D. Release "Input+(Default)" button after selecting the desired Default EDID mode, and then the LED will blink twice and the setting will be effective
- E. It will quit the Learn Default EDID Mode if you push the "input-(learn)" button before the setting is effective
- F. The LED will show "0" "0" if the setting is success
The LED will show "F" "F" if the setting is failure

5. EDID Learning Mode

- A. Push "Input-(Learn)" button to select the input channel which you want to Learn EDID from HDMI output and then keep pushing "Input-(Learn)" button when you select your desired input channel
- B. Push the "+" or "-" output push button and then the LED will show "E" "L" one time to enter Learn Output EDID Mode
- C. Use "+" or "-" output push button to select the output port number
- D. Release "Input+(Default)" button after selecting the desired output port number, and then the LED will blink twice and the setting will be effective
- E. It will quit the Learn Output EDID Mode if you push the "input+(default)" button before the setting is effective
- F. The LED will show "0" "0" if the setting is success
The LED will show "F" "F" if the setting is failure

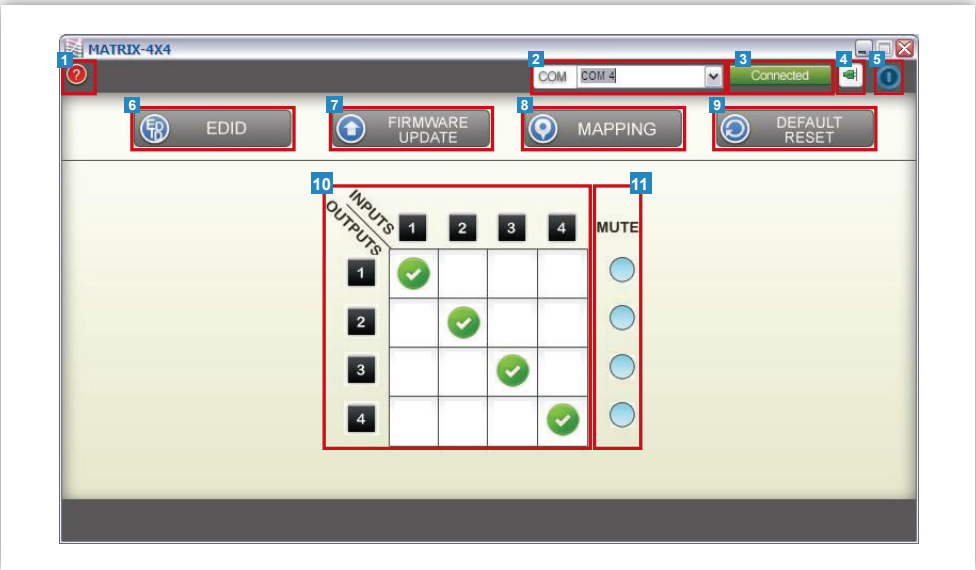
METHOD B: IR REMOTE CONTROL

Button	Function
ON	Power-on the Matrix Switcher
OFF	Stand-by mode
PRESET	Preset mapping mode
SAVE	Save current mapping mode
Number Buttons 1-9	Select a number
+10	Reserved
TO	Transfer key
TAKE	Trigger the previous setting
SWITCH	Begin input and output selection
DEFAULT EDID	Begin default EDID selection
LEARN	Begin EDID learning from one output
ALL	Select all inputs or outputs
CLEAR	Clear the previous IR operation procedure
MUTE	Turn-off output's video and audio
STATUS	Preset output status
F1	Reserved
F2	Reserved
F3	Reserved
F4	Reserved



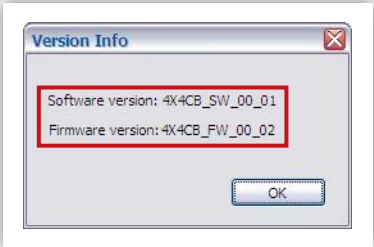
Operation		Procedure	7 Segment LED	
In/Out Switch		Switch + Number (Input) + To + Number (Output) + Take		
Ex: Input 3 to Output 4	1. Press "SWITCH" button	-		
	2. Press number key "3" to select Input	3		
	3. Press "TO" button	3		
	4. Press number key "4" to select Output	3		
	5. Press "TAKE" button	3		
		Switch + Number (Input) + To + Number (Output) + Take		
Ex: Input 3 to Output All	1. Press "SWITCH" button	-		
	2. Press number key "3" to select Input	3		
	3. Press "TO" button	3		
	4. Press "ALL" to select All Output	3		
	5. Press "TAKE" button	3		
Output Status		Status + Number (Output) + Take		
Ex: Output 4 (input 2)	1. Press "STATUS" button	-		
	2. Press number key "4" to select Output	4		
	3. Press "TAKE" button	2		
Factory Reset		Status + Status + Status + Take		
	1. Press "STATUS" button	-		
	2. Press "STATUS" button	d		
	3. Press "STATUS" button	d		
	4. Press "TAKE" button	1		
Learn Default EDID		Default EDID + Number (1-8 Default EDID) + To + Number (Input) + Take		
Ex: Default EDID 2 Input 3	1. Press "DEFAULT EDID" button	E		
	2. Press number key "2" to select default EDID	d		
	3. Press "TO" button	d		
	4. Press number key "3" to select Input	3		
	5. Press "TAKE" button	0	F	
		0 (Success)	F (Fail)	
		Default EDID + Number (Output) + To + All (Input) + Take		
Ex: Default EDID 2 Input All	1. Press "DEFAULT EDID" button	E		
	2. Press number key "2" to select default EDID	d		
	3. Press "TO" button	d		
	4. Press "ALL" to select All Input	A		
	5. Press "TAKE" button	0	F	
		0 (Success)	F (Fail)	

Operation		Procedure	7 Segment LED	
Learn Output EDID		Learn + Number (Output) + To + Number (Input) + Take		
Ex: Learn Output 2 Input 3	1. Press "LEARN" button	E		
	2. Press number key "2" to select Output	L		
	3. Press "TO" button	L		
	4. Press number key "3" to select Input	3		
	5. Press "TAKE" button	0	F	
		0 (Success)	F (Fail)	
		Learn + Number (Output) + To + All (Input) + Take		
Ex: Learn Output 2 Input All	1. Press "LEARN" button	E		
	2. Press number key "2" to select Output	L		
	3. Press "TO" button	L		
	4. Press "ALL" to select All Input	A		
	5. Press "TAKE" button	0	F	
		0 (Success)	F (Fail)	
Save Current Mapping		Save + Number (1-8 Storage Site) + Take		
Ex: Save current mapping to 5	1. Press "SAVE" button	d		
	2. Press number key "5" to select the storage site	5		
	3. Press "TAKE" button	-		
Preset Mapping		Preset + Number (1-8 Storage Site) + Take		
Ex: Preset saved mapping from 5	1. Press "PRESET" button	-		
	2. Press number key "5" to select the storage site	d		
	3. Press "TAKE" button	d		
Mute Output		Switch + Mute + To + Number (Output) + Take		
Ex: Mute Output 3	1. Press "SWITCH" button	-		
	2. Press "MUTE" button	-		
	3. Press "TO" button	0		
	4. Press number key "3" to select Output	3		
	5. Press "TAKE" button	0		
		Switch + Mute + To + All (Output) + Take		
Ex: Mute All Output	1. Press "SWITCH" button	-		
	2. Press "MUTE" button	-		
	3. Press "TO" button	0		
	4. Press "ALL" to select All Output	A		
	5. Press "TAKE" button	4		



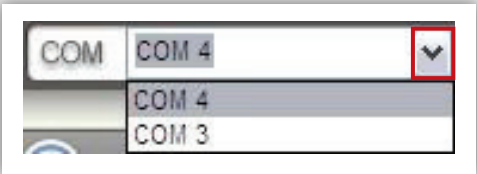
- | | |
|----|---------------------------|
| 1 | FW/SW Version Button |
| 2 | COM Port Selection |
| 3 | Connection Status |
| 4 | Connect/Disconnect Button |
| 5 | Power On/Off Button |
| 6 | EDID Button |
| 7 | Firmware Update Button |
| 8 | Mapping Button |
| 9 | Default Reset Button |
| 10 | In/Out Switch Button |
| 11 | Mute Output Button |

1. Click "?" button to show version information



2. COM Port Selection

Click "v" button to select COM Port



3. Connection Status

A) Connected Status:



B) Connecting Status:



C) Disconnected Status:



4. Connect/Disconnect Button

Click this button "v" to change connection status



5. Power ON/OFF Button

Click this button to ON/OFF the power

"i" Power ON Status (Blue)

"i" Power OFF Status (Red)

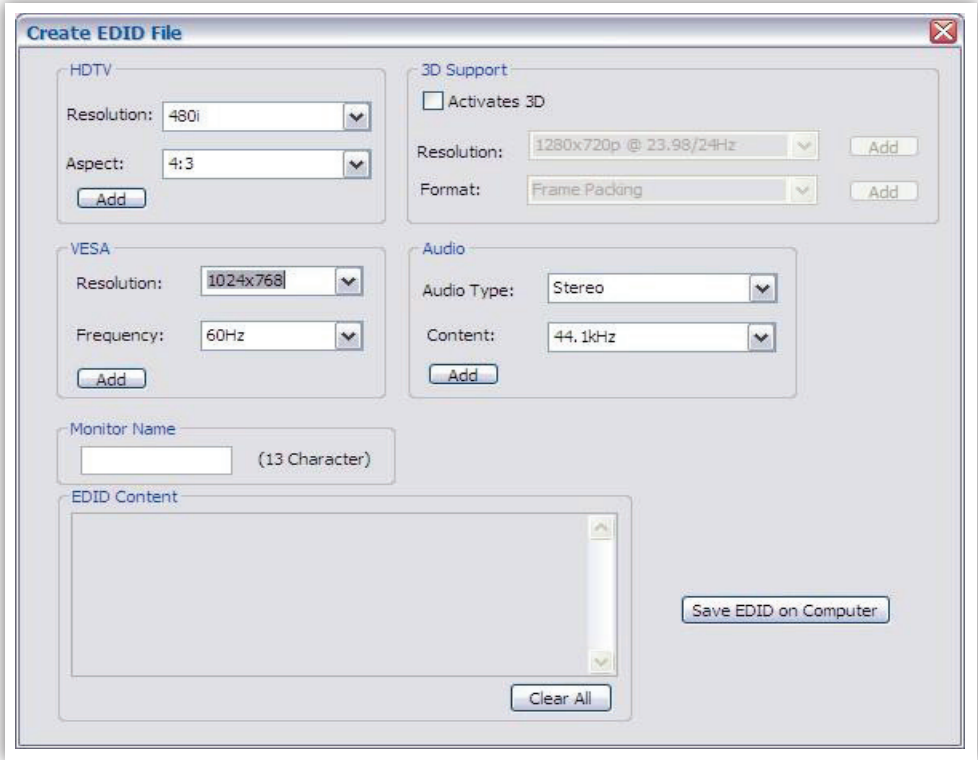
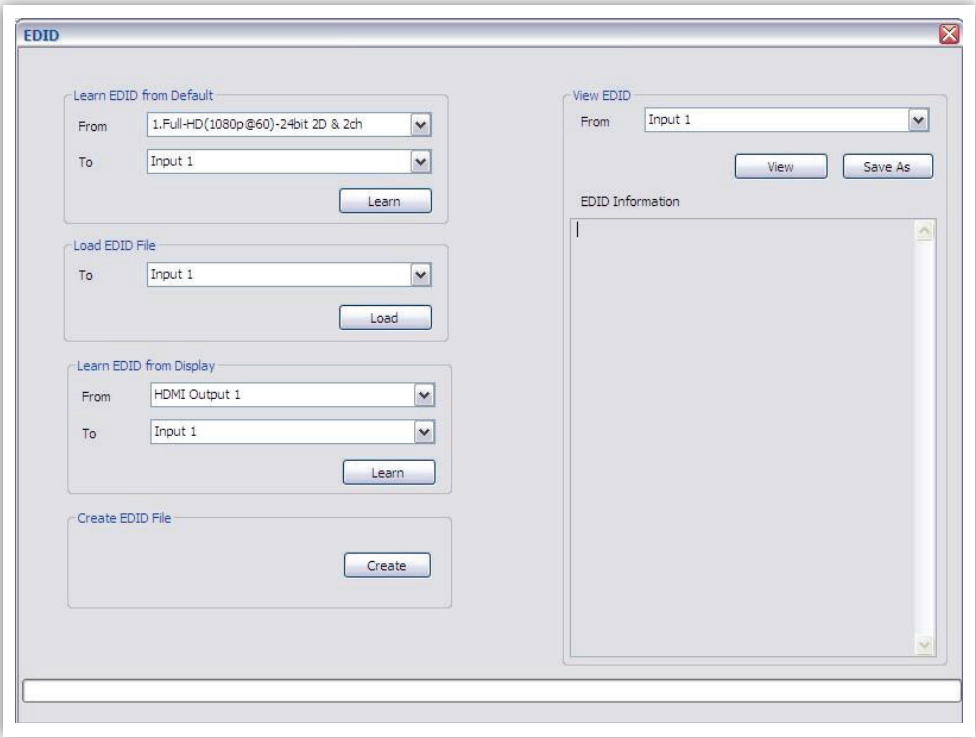


6. EDID Button

A. Learn EDID from Default

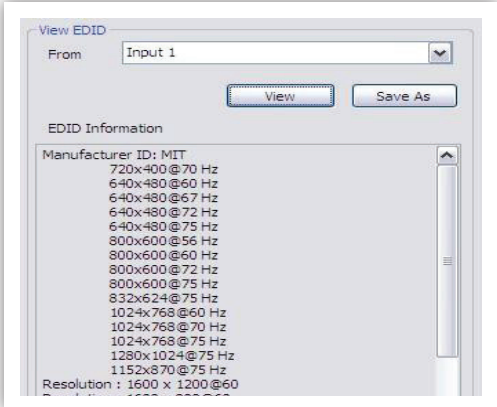
- a) Select Default EDID (1-8 default EDID)
- b) Select Input
- c) Click "Learn" button to Learn Default EDID

EDID Button

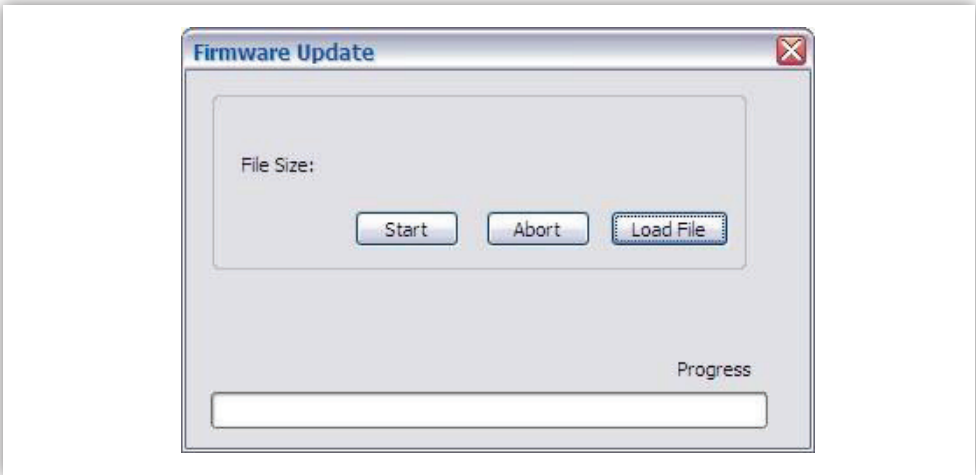


E. View EDID File

- a) Select Input, HDMI Output or From File
- b) Click "View" button to read the EDID and Analysis
- c) Click "Save As" to save the read EDID as a file on computer

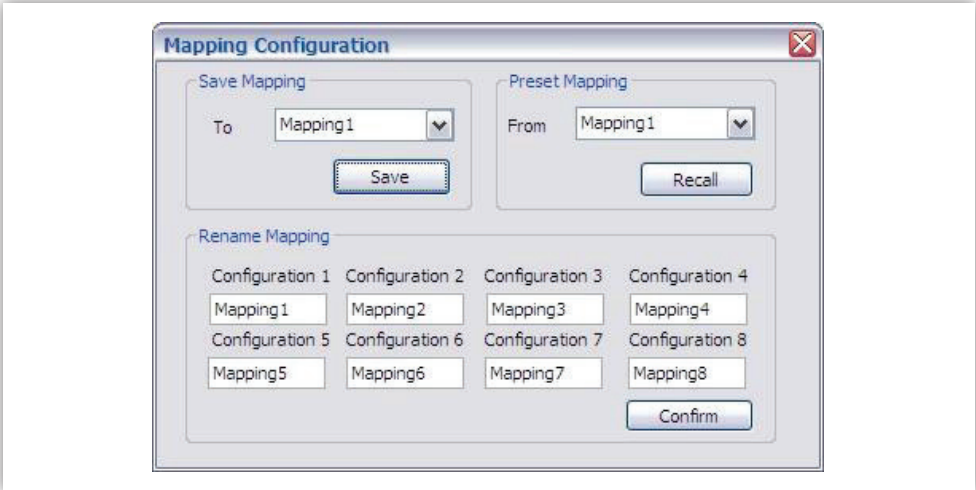


7. Firmware Update Button



- A. Click "Load File" to select the firmware file which you want to update
- B. Click "Start" button to begin the update
- C. Keep pushing the "Input-" button of the front panel when you do the firmware update
- D. Quickly remove and reconnect the power input connector
- E. Release "Input-" button after the firmware update is completed

8. Mapping Button



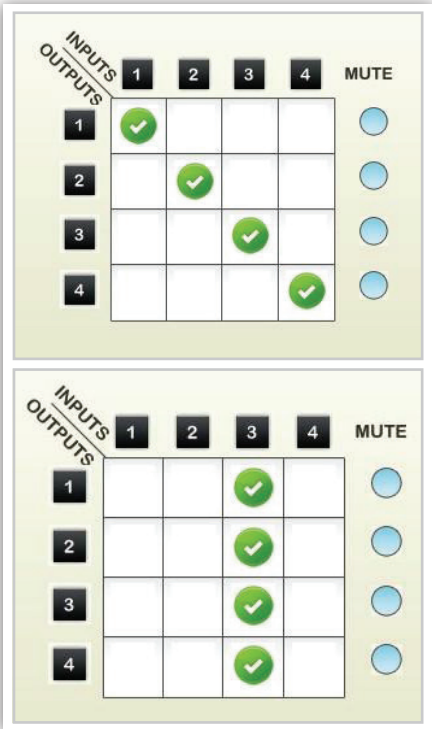
- A. **Save Mapping**
 - a) Select mapping 1-8
 - b) Click "Save" button to save current mapping
- B. **Preset Mapping**
 - a) Select mapping 1-8
 - b) Click "Recall" button to recall previous mapping which are saved
- C. **Rename Mapping**
 - a) Rename the mapping (mapping 1-8)
 - b) Click "Confirm" button to confirm the change

9. Default Reset Button

- A. Click this button to do Factory Default Reset
- B. The Default Reset process will take about 80~90 seconds

10. In/Out Switch Button

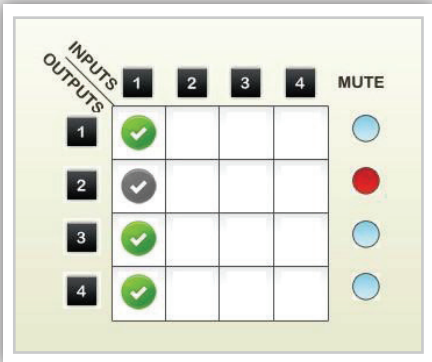
- A. Click the button on the checkerboard to select Input and Output port



- B. User can click the Input button to let all outputs select the same input
Ex. All outputs select input 3

11. Mute Output Button

- A. Click the circle button to turn-off output's video and audio
Ex. Mute output 2



EDID LEARNING

The EDID Learning function is only necessary whenever you encounter any display on the HDMI output port that cannot play audio and video properly. Because the HDMI Source devices and Displays may have various level of capability in playing audio and video, the general principle is that the source device will output the lowest standards in audio format and video resolutions to be commonly acceptable among all HDMI displays. In this case, a 720p stereo HDMI signal output would be probably the safest choice. Nevertheless, the user can force the Matrix to learn the EDID of the lowest capable HDMI display among others to make sure all displays are capable to play the HDMI signals normally.

There are **THREE** methods to do EDID Learning as below,

1. **Front Panel Push-in Button:** Please refer to the **Operation Approach\Method A: Push-in Button**
2. **IR Remote Control:** Please refer to the **Operation Approach\Method B: IR Remote Control**
3. **Software Control:** Please refer to the **Operation Approach\Method C: Software Control through RS-232 port**

There are Eight embedded Default EDID as below:

1. Full-HD (1080p@60) - 24 bit 2D & 2 ch
2. Full-HD (1080p@60) - 24 bit 2D & 7.1 ch
3. Full-HD (1080p@60) - 24 bit 3D & 2 ch
4. Full-HD (1080p@60) - 24 bit 3D & 7.1 ch
5. HD (1080i@60) (720p@60) - 24 bit 2D & 2 ch
6. HD (1080i@60) (720p@60) - 24 bit 2D & 7.1 ch
7. Full-HD (1080p@60) - 36 bit 2D & 2 ch
8. Full-HD (1080p@60) - 36 bit 2D & 7.1 ch

1. The quality of output video is not good enough, what can I do?

Please adjust the 8-level equalization on the receiver units. The HDMI signal level varies from 0 (strongest) to 7 (weakest) for respective transmission length from longest possible range to short distance. It is recommended to switch from 7 to 0 to find the optimal visual experience.

2. Can I use any kind of LAN cable?

Please check the NOTICE section for more information about how to pick up a suitable cable.

3. Can every TV work with the HDMI Matrix?

Basically, the answer is YES. But if your TV can not support 1080p, please refer the EDID LEARNING section to learn EDID from your TV.

4. What is EDID? Why do I need to learn EDID?

EDID contains the whole information of the display such as the Resolution and Audio Setting which this display can support. Therefore, based on the EDID information, media player will pick up the most suitable resolution and audio setting to the display. In order to faithfully transmit the EDID information from display to the media player, learning EDID from display to this device is necessary.

5. What should I do to learn EDID for the Matrix?

Due to the limitation of HDMI, the source device can only output one format of video and audio. In other words, the source device cannot output 720p and 1080p video at the same time, or output stereo and surround sound at the same time. Therefore, you may need to manually setup each HDMI input for desirable audio/video output format. The mechanism of EDID Learning is to pick up the HDMI display with the lowest capability among the ones you would use for this input source.

For example, if user would like to play the Input-2 upon output-2, output-3 and output-4, and only output-3 cannot support 1080p (support up to 720p only), please learn the EDID from the display connected to the output-3 at the Input-2 port. Of course, if output-3 would get the HDMI signals from every HDMI input, please learn EDID information from output-3 to all four HDMI inputs. For more information about EDID Learning, please refer to EDID LEARNING section.

6. My TV can support 1080p, but why there is no audio?

The Factory Default EDID of this device is 1080p & 2ch audio. However, there would be a problem after you change to use 1080p & 7.1ch if the TV cannot support 7.1ch audio. Please use the Default EDID, 1080p & 2ch audio.

7. When I set an Audio Amplifier (AV Receiver) between TV and the Matrix to extract 7.1ch audio, but why there is still no audio?

Basically, the Default EDID of the chosen input can support 7.1ch audio, but the problem is that the EDID of the Amplifier still cannot match the default setting. Therefore, the best method is to learn EDID from the Amplifier directly. Please refer to EDID LEARNING section and follow the steps to learn EDID. When learning EDID from the Amplifier, user just needs to connect the Matrix and Amplifier. *Please don't connect HDMI cable between Amplifier and TV when the EDID Learning is proceeding.*

8. When I play the same content upon multi-displays, why only the TV equipped with Amplifier can have 7.1ch audio, and the others don't have 7.1ch audio even no stereo?

Due to the limitation of HDMI, the source only can choose one video and one audio format to play, which can be either 1080p and 7.1ch or 1080p and stereo audio. It means when the user sets the Matrix at 1080p and 7.1ch, the source will only play the content under this format. Therefore if the TV cannot decode 7.1ch audio, there is definitely no audio.



NOTICE

1. If DVI or HDMI device requires the EDID information, please use EDID Reader/Writer to retrieve and provide the DVI/HDMI EDID information.
2. All HDMI over CAT5 transmission distances are measured using Belden 1583A CAT5e 125MHz LAN Cable and ASTRODESIGN Video Signal Generator VG-859C & VG-870B.
3. The transmission length is largely affected by the type of LAN cables, the type of DVI sources, and the type of DVI display. The testing result shows solid LAN cables (usually in bulk cable 300m/1000ft form) can transmit a lot longer signals than stranded LAN cables (usually in patch cord form). Shielded STP cables are better suited than unshielded UTP cables. A solid UTP CAT5e cable shows longer transmission range than stranded STP CAT6 cable. For long extension users, solid LAN cables are the only viable choice.
4. EIA/TIA-568-B termination (T568B) for LAN cables is recommended for better performance
5. To reduce the interference among unshielded twisted pairs of wires in LAN cable, one can use shielded LAN cables to improve EMI problems, which is worsen in long transmission.
6. Because the quality of the LAN cables has the major effect on how long the transmission limit can achieve and how good is the received picture quality, the actual transmission range is subject to one's choice of LAN cables. For desired resolutions greater than 1080i or 1280x1024, a CAT6 cable is recommended.
7. If your HDMI display has multiple HDMI inputs, it is found that the first HDMI input (HDMI input #1) generally can produce better transmission performance among all HDMI inputs.
8. Additional IR Remote controls and IR Blasters can be purchased as optional accessories to control the HDMI sources located separately.



PERFORMANCE GUIDE FOR HDMI OVER CATEGORY CABLE TRANSMISSION

Performance Rating		Type of Category Cable		
Wiring	Shielding	CAT5	CAT5e	CAT6
Solid	Unshielded (UTP)	★★★	★★★★	★★★★★
	Shielded (STP)	★★★	★★★	★★★★
Standed	Unshielded (UTP)	★	★★	★★
	Shielded (STP)	★	★	★★
Termination		Please use EIA/TIA-568-B termination (T568B) at any time		

WARRANTY

The SELLER warrants the **Cablesson HDeIity 4x4 HDMI & Full 3D support over CAT.X Matrix with IR Pass-through** free from defects in the material and workmanship for 1 year from the date of purchase from the SELLER or an authorized dealer. Should this product fail to be in good working order within 1 year warranty period, The SELLER, at its option, repair or replace the unit, provided that the unit has not been subjected to accident, disaster, abuse or any unauthorized modifications including static discharge and power surge? This warranty is offered by the SELLER for its BUYER with direct transaction only. This warranty is void if the warranty seal on the metal housing is broken.

Unit that fails under conditions other than those covered will be repaired at the current price of parts and labour in effect at the time of repair. Such repairs are warranted for 90 days from the day of reshipment to the BUYER. If the unit is delivered by mail, customers agree to insure the unit or assume the risk of loss or damage in transit. Under no circumstances will a unit be accepted without a return authorization number.

The warranty is in lieu of all other warranties expressed or implied, including without limitations, any other implied warranty or fitness or merchantability for any particular purpose, all of which are expressly disclaimed.

Proof of sale may be required in order to claim warranty. Customers outside Taiwan are responsible for shipping charges to and from the SELLER. Cables and Power Adapters are limited to a 30 day warranty and must be free from any markings, scratches, and neatly coiled.

The content of this manual has been carefully checked and is believed to be accurate. However, The SELLER assumes no responsibility for any inaccuracies that may be contained in this manual. The SELLER will NOT be liable for direct, indirect, incidental, special, or consequential damages resulting from any defect or omission in this manual, even if advised of the possibility of such damages. Also, the technical information contained herein regarding the **Cablesson HDeIity 4x4 Matrix** features and specifications is subject to change without further notice.