

User Manual

VLHDMIMAT4X4-V2 4x4 Fast Switch Matrix Switcher



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Version: VLHDMIMAT4X4-V2_2025V1.0

Preface

Read this user manual carefully before using the product. Pictures shown in this manual are for reference only. Different models and specifications are subject to real product.

This manual is only for operation instruction, please contact the local distributor for maintenance assistance. The functions described in this version were updated till July, 2025. In the constant effort to improve the product, we reserve the right to make functions or parameters changes without notice or obligation. Please refer to the dealers for the latest details.

FCC Statement

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. It has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a commercial installation.

Operation of this equipment in a residential area is likely to cause interference, in which case the user at their own expense will be required to take whatever measures may be necessary to correct the interference.

Any changes or modifications not expressly approved by the manufacture would void the user's authority to operate the equipment.



SAFETY PRECAUTIONS

- To ensure the best from the product, please read all instructions carefully before using the device. Save this manual for further reference.
- Unpack the equipment carefully and save the original box and packing material for possible future shipment.
- Follow basic safety precautions to reduce the risk of fire, electrical shock and injury to persons.
- Do not dismantle the housing or modify the module. It may result in electrical shock or burn.
- Using supplies or parts not meeting the products' specifications may cause damage, deterioration or malfunction.
- Refer all servicing to qualified service personnel.
- To prevent fire or shock hazard, do not expose the unit to rain, moisture or install this product near water.
- Do not put any heavy items on the extension cable in case of extrusion.
- Do not remove the housing of the device as opening or removing housing may expose you to dangerous voltage or other hazards.
- Install the device in a place with fine ventilation to avoid damage caused by overheat.
- Keep the module away from liquids.
- Spillage into the housing may result in fire, electrical shock, or equipment damage. If an object or liquid falls or spills on to the housing, unplug the module immediately.
- Do not twist or pull by force ends of the optical cable. It can cause malfunction.
- Do not use liquid or aerosol cleaners to clean this unit. Always unplug the power to the device before cleaning.
- Unplug the power cord when left unused for a long period of time.
- Information on disposal for scrapped devices: do not burn or mix with general household waste, please treat them as normal electrical wastes.

Table of Contents

| | |
|----------------------------------|----|
| 1. Product Introduction..... | 1 |
| 1.1 Features | 1 |
| 1.2 Package List | 1 |
| 2. Specification | 2 |
| 3. Panel Description..... | 4 |
| 3.1 Front Panel..... | 4 |
| 3.2 Rear Panel..... | 4 |
| 4. Panel Drawing | 5 |
| 5. System Connection..... | 5 |
| 5.1 Usage Precaution | 5 |
| 5.2 System Diagram | 6 |
| 6. Front Panel Control..... | 6 |
| 6.1 Definition..... | 6 |
| 6.2 Usage | 7 |
| 6.2.1 I/O..... | 7 |
| 6.2.2 Scene | 7 |
| 6.2.3 Query..... | 7 |
| 6.2.4 Cancel | 7 |
| 7. IR Control..... | 8 |
| 7.1 I/O..... | 8 |
| 7.2 Cancel | 8 |
| 7.3 EDID | 8 |
| 8. Web-GUI Control | 9 |
| 8.1 Video | 10 |
| 8.2 Audio..... | 10 |
| 8.3 Configuration | 11 |
| 8.4 RS232..... | 11 |
| 8.5 CEC..... | 12 |
| 8.6 Network | 13 |
| 8.7 Security..... | 14 |
| 8.8 Diagnostics | 15 |
| 9. RS-232 Control | 16 |
| 9.1 RS-232 Control Software..... | 16 |
| 9.2 RS-232 Command | 17 |
| 9.2.1 Power Commands | 17 |
| 9.2.2 AV Commands..... | 17 |
| 9.2.3 RS-232 Commands | 20 |
| 9.2.4 Network Commands | 20 |
| 9.2.5 CEC Commands..... | 21 |
| 9.2.6 System Commands | 23 |
| 10. Customer Service | 24 |

1. Product Introduction

The VLHDMIMAT4X4-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.

1.1 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.

1.2 Package List

1x VLHDMIMAT4X4-V2
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 Male Connector
1x User Manual

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

2. Specification

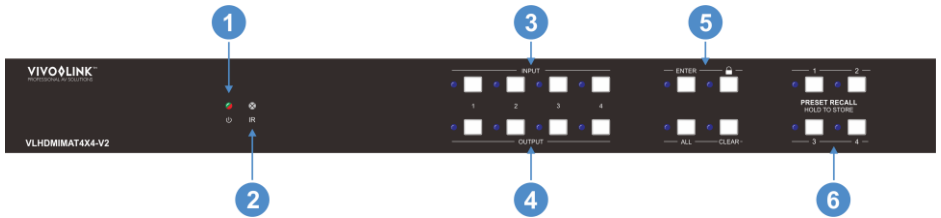
| Video Input | |
|----------------------|---|
| Connector | 4x HDMI Type A |
| Version | HDMI 2.0 |
| Resolution | Up to 4K@60Hz 4:4:4 |
| Audio | LPCM 7.1 audio, Dolby Atmos®, Dolby® TrueHD, Dolby Digital® Plus, DTS:X™, and DTS-HD® Master Audio™ |
| HDCP | HDCP 2.2 and backward compatibility |
| Video 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 |

4x4 Fast Switch Matrix Switcher

| Control | |
|---------------------------|------------------------------|
| RS-232 | Via the RS-232 commands. |
| IR EYE | Via the third-party device. |
| IR IN | 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 |

3. Panel Description

3.1 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, for input status. |
| 4 | OUTPUT | 4x blue LEDs and 4x white buttons, for output status. |
| 5 | MENU | 4x blue LEDs and 4x white buttons, for function status. |
| 6 | PRESET RECALL | 4x blue LEDs and 4x white buttons, for scene status. |

3.2 Rear Panel



| No. | Name | Description |
|-----|---------------------|---|
| 1 | INPUT | 4x HDMI input, connect to the HDMI source. |
| 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. |

4x4 Fast Switch Matrix Switcher

| | | |
|---|---------|---|
| 4 | CONTROL | <ul style="list-style-type: none"> ● 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 |

4. Panel Drawing

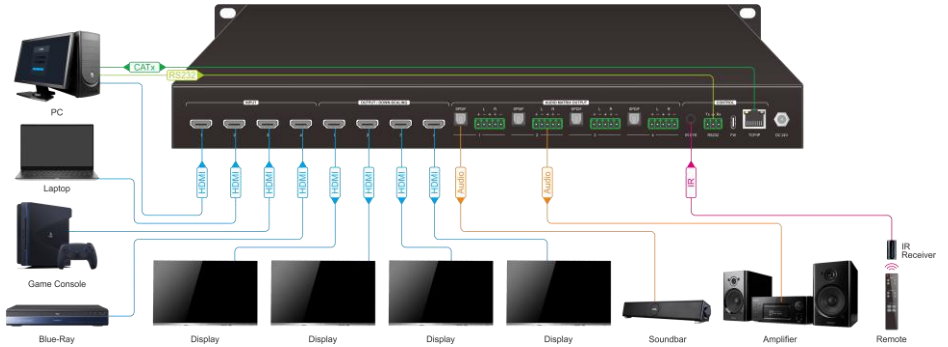


5. System Connection

5.1 Usage Precaution

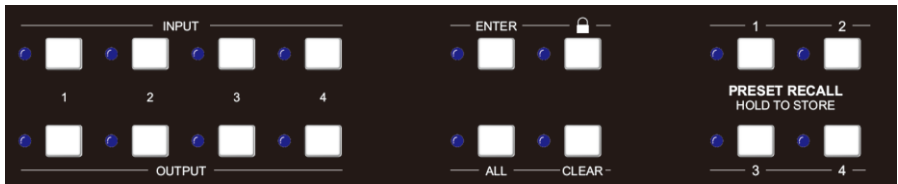
1. Make sure all components and accessories included before installation.
2. System should be installed in a clean environment with proper temperature and humidity.
3. All of the power switches, plugs, sockets, and power cords should be insulated and safe.
4. All devices should be connected before power on.


5.2 System Diagram



6. Front Panel Control

6.1 Definition



- INPUT: input channel
- OUTPUT: output channel
- ENTER: execute the current settings.
-  : lock/unlock the front panel buttons, press and hold for 3 seconds.
- ALL: select all input/output channel.
- CLEAR: cancel all unconfirmed settings and reverts to the previous state.
- PRESET RECALL: save the current scene or recall the preset scene.

6.2 Usage

6.2.1 I/O

- 1 input to 1 output
Example: INPUT 1 to OUTPUT 2
Operation: press INPUT 1 + OUTPUT 2 + ENTER
- 1 input to 2/3 outputs
Example: INPUT 1 to OUTPUT 2 and OUTPUT 3
Operation: press INPUT 1 + OUTPUT 2 + OUTPUT 3 + ENTER
- 1 input to all output
Example: INPUT 1 to ALL OUTPUT
Operation: press INPUT 1 + ALL + ENTER

The LED corresponding to the pressed button will keep on. After pressing ENTER, all LEDs will flash 3 times and then off.

6.2.2 Scene

- Preset the scene
Example: save the current scene INPUT 1 to OUTPUT 2 as the first preset scene.
Operation: press the 1 button for 3s. The LED will flash 3 times to indicate success and then off.
- Recall the scene
Example: recall the first preset scene.
Operation: press the 1 + ENTER. After pressing ENTER, all LEDs will flash 3 times and then off.

6.2.3 Query

- Query the current channel
Operation: press any output button. The LEDs of corresponding channel will keep on and off after 8s.

6.2.4 Cancel

- Manual cancel
Operation: press the CLEAR to cancel the operation before ENTER and all LEDs will off.
- Auto cancel
Operation: If there is no operation for 8 seconds after pressing INPUT/OUTPUT, the operation will be automatically canceled and all LEDs will off.

7. IR Control

7.1 I/O

- 1 input to 1 output
Example: INPUT 1 to OUTPUT 2
Operation: press INPUT 1 + OUTPUT 2 + ENTER
- 1 input to 2/3 outputs
Example: INPUT 1 to OUTPUT 2 and OUTPUT 3
Operation: press INPUT 1 + OUTPUT 2 & 3 + ENTER
- 1 input to all output
Example: INPUT 1 to ALL OUTPUT
Operation: press INPUT 1 + ALL + ENTER

7.2 Cancel

- Manual cancel
Operation: press the CLEAR to cancel the operation before ENTER.
- Auto cancel
Operation: If there is no operation for 8 seconds after pressing INPUT/OUTPUT, the operation will be automatically canceled.

7.3 EDID

- EDID learning
Example 1: learn the EDID of output 1 to adjust input 1
Operation: press EDID + INPUT 1 + OUTPUT 1 + ENTER
Example 2: learn the EDID of output 1 to adjust all inputs
Operation: press EDID + ALL + OUTPUT 1 + ENTER



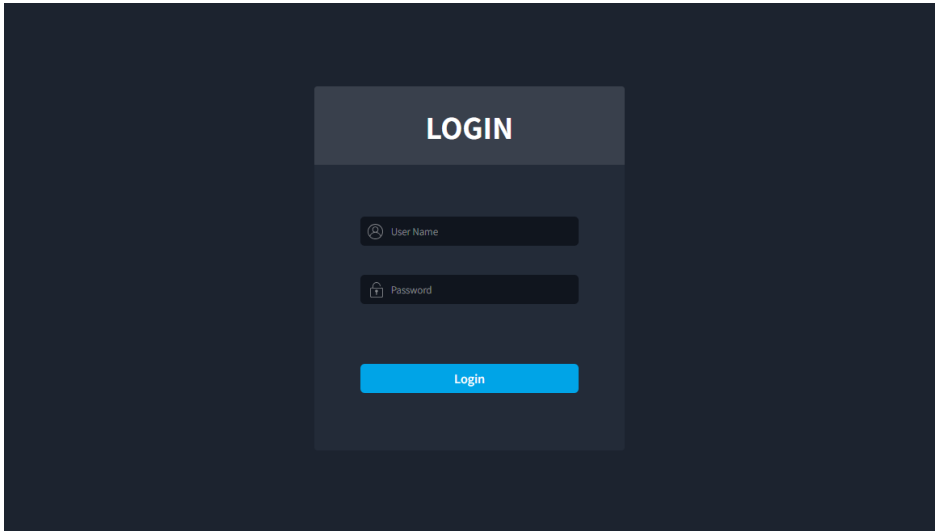
8. Web-GUI Control

Connect the TCP/IP port of the VLHDMIMAT4X4-V2. TCP/IP supports static IP by default.

If connect the device directly to the PC or using the static IP, please enter the TCP/IP:
192.168.0.178

If it is DHCP, please use the assigned IP address.

Please type the IP address in the address bar of the browser to enter the Web-GUI login interface.



Then type the User Name and the Password. The login information is as follows:

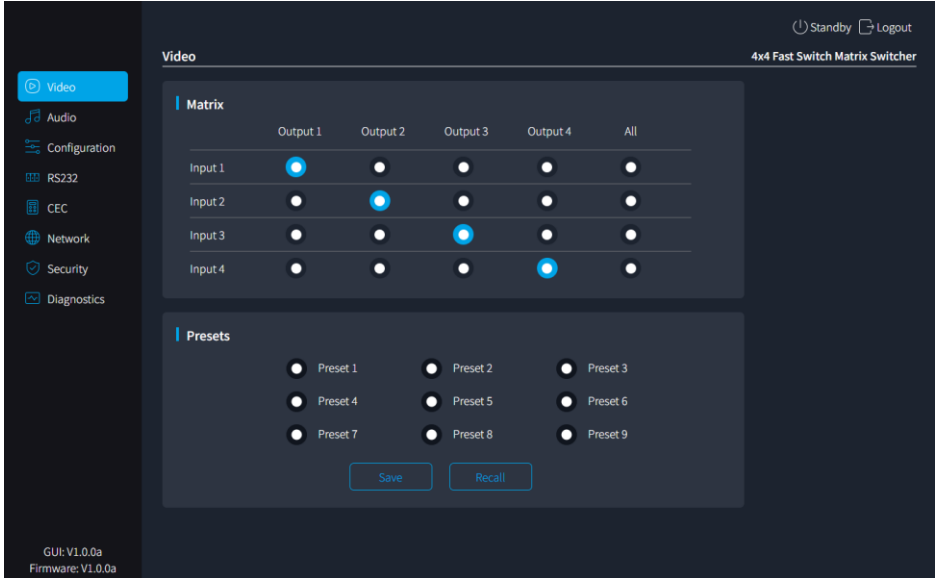
User Name: admin

Password: Admin123@

Last, click Login to enter the main interface.

Note: To protect the safety of the device, please change the default password in time.

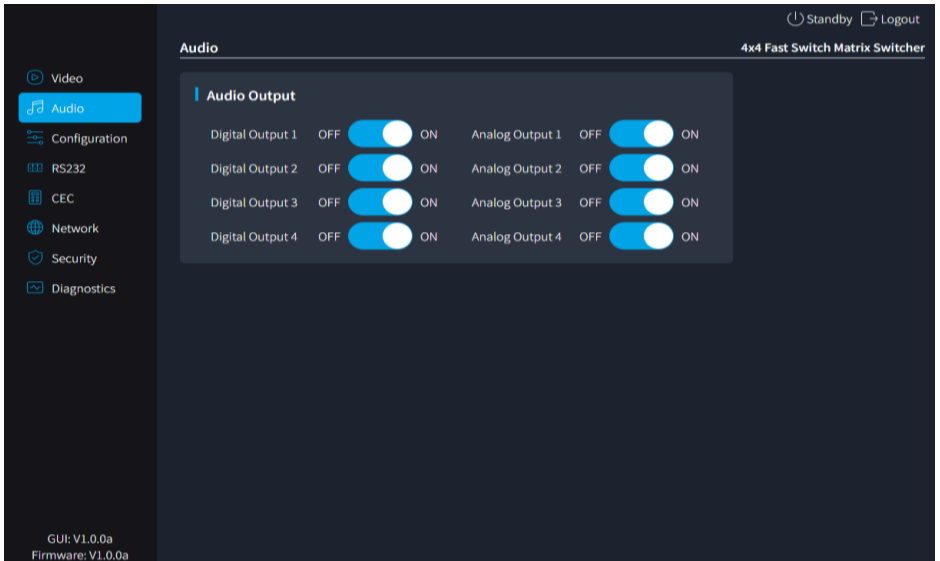
8.1 Video



Matrix: select the input source and output channel.

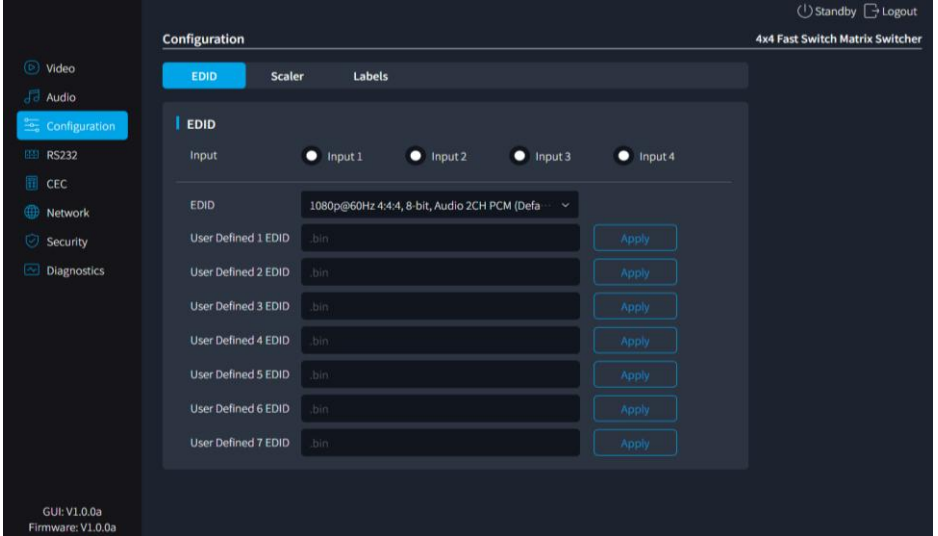
Presets: 9 preset scenes can be saved and recalled.

8.2 Audio



Audio Output: turn on/off the digital or analog audio.

8.3 Configuration

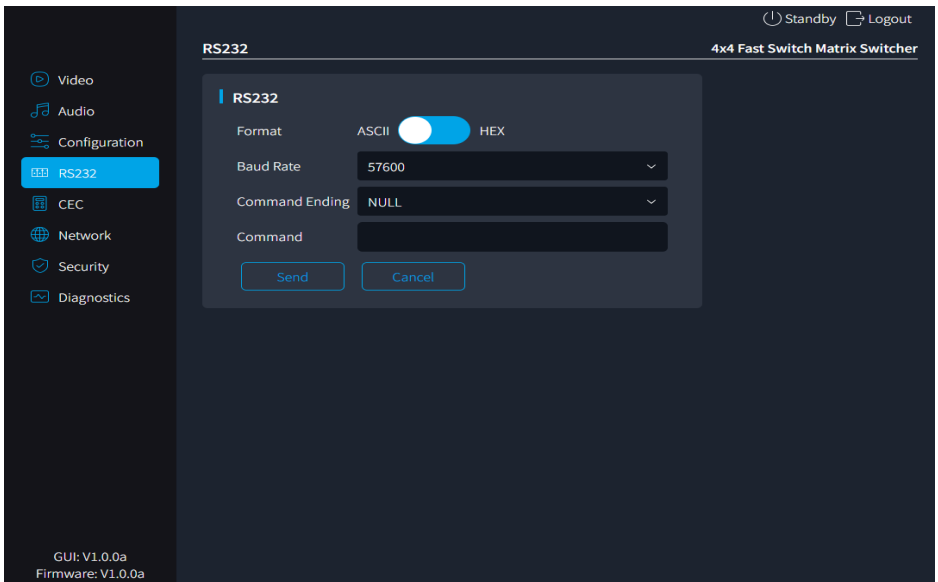


EDID: switch the EDID of input via drop-down bar.

Scaler: enable output1/2 downscaling.

Labels: rename the labels of input/output/preset.

8.4 RS232



RS232: control the device by sending RS-232 commands.

8.5 CEC

The screenshot shows the CEC control interface. At the top right, there are 'Standby' and 'Logout' buttons. The title 'CEC' is on the left, and '4x4 Fast Switch Matrix Switcher' is on the right. A sidebar on the left contains menu items: Video, Audio, Configuration, RS232, CEC (highlighted), Network, Security, and Diagnostics. The main area is divided into two sections: 'Input' and 'Output'. Each section has a 'Source' or 'Display' dropdown, an 'Enable' toggle, and a grid of function buttons. The 'Input' section includes buttons for Volume -, Menu, Volume +, On, Off, Stop, Back, Up, Enter, Previous, Next, Pause, Left, Down, Right, REW, FF, and Play. The 'Output' section includes buttons for On, Off, Source, Mute, Volume-, and Volume+. Below the function grids are two 'Trigger' fields, each with a 'Send' button. The bottom left corner shows 'GUI: V1.0.0a' and 'Firmware: V1.0.0a'.

Input: control source device via CEC.

Output: control sink device via CEC.

8.6 Network

The screenshot displays the Network configuration interface for a 4x4 Fast Switch Matrix Switcher. The main page is titled "Network" and includes a sidebar menu with options: Video, Audio, Configuration, RS232, CEC, Network (highlighted), Security, and Diagnostics. The top right corner shows "Standby" and "Logout" buttons. The "IP Setting" dialog box is open, showing the following configuration:

| Field | Value |
|-------------|-----------------------------|
| MAC Address | 50-43-10-2D-73-57 |
| IP Mode | DHCP (selected) / Static IP |
| IP Address | 192.168.0.178 |
| Subnet Mask | 255.255.255.0 |
| Gateway | 192.168.0.1 |

At the bottom of the dialog box, there are "Confirm" and "Cancel" buttons. The bottom left corner of the main page displays "GUI: V1.0.0a" and "Firmware: V1.0.0a".

IP Setting: configure as DHCP or Static IP as required.

8.7 Security

Standby Logout

4x4 Fast Switch Matrix Switcher

Security

Password

Old Password

New Password

Confirm Password

Password must have a minimum of 8 characters, including at least 1 number, 1 lower case, 1 upper case and 1 special character.

Confirm Cancel

Firmware Upgrade

Firmware Upgrade MCU Switch IC Bypass IC

FW File Path Confirm

Front Panel Lock

Setting OFF ON

Auto Standby

Setting OFF ON

Time Min (1 ~ 180 min)

Factory Default

Factory Default

GUI: V1.0.0a
Firmware: V1.0.0a

Password: change the password according to password policy.

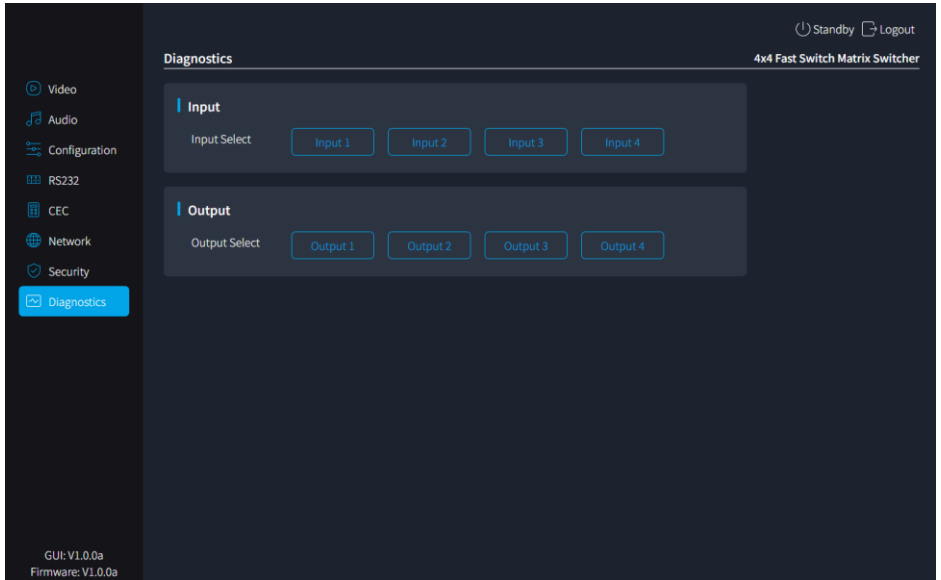
Firmware Upgrade: upload the file to upgrade MCU/Switch IC/Bypass IC

Front Panel Lock: enable/disable the buttons of front panel.

Auto Standby: enter standby mode if no signal input within 15 minutes.

Factory Default: restore factory settings.

8.8 Diagnostics



Input: Select input to check the relevant information.

Output: Select output to check the relevant information.

9. RS-232 Control

9.1 RS-232 Control Software

Installation: Copy the control software file to the control PC

Uninstallation: Delete all the control software files in corresponding file path.

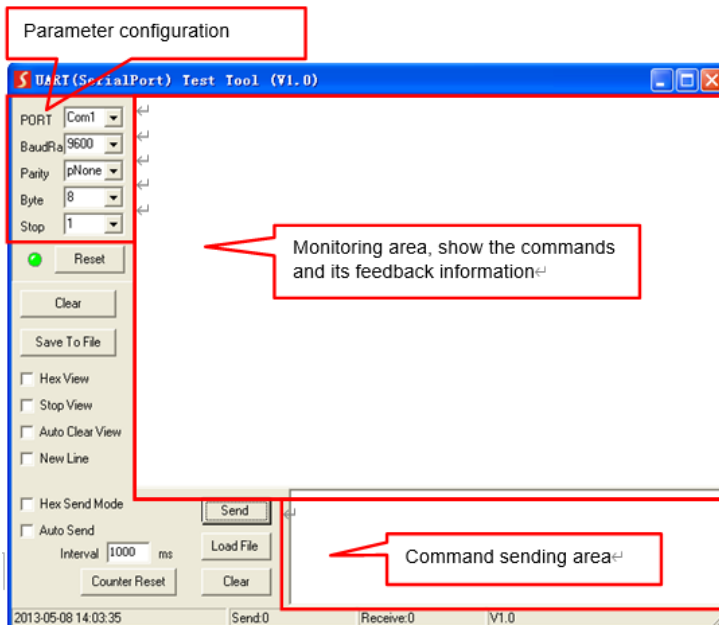
Basic Setting:

Connect the switcher kit with all input devices and output devices needed, then to connect it with a PC which is installed with RS-232 control software. Double-click the software icon to run this software.

Here takes the software CommWatch.exe as example:



The main view is shown as below:



Please set the parameters of COM number, bound rate, data bit, stop bit and the parity bit correctly, and then you are able to send command in command sending area.

For related parameters, please refer to 9.2 RS-232 Command.

9.2 RS-232 Command

Baud rate: 57600 (default)

Data bit: 8

Stop bit: 1

Parity bit: NONE

Command terminator: <CR><LF>

Error command feedback code: <Command Error
<Out Of Range

Note:

1. Commands are not case sensitive and can automatically identify mixed case commands;
2. The "0" in front of the valid value can be ignored, for example: 01 and 1 inputs are both normal variable values;
3. The space between the command and the variable can be ignored, for example: >SetVideo01 and >SetVideo 01 commands can be sent effectively.

9.2.1 Power Commands

| Command | Function | Example & Feedback |
|-------------------------|--|-------------------------------------|
| >SetPower xx | Enter/exit standby mode xx = On,Off Off - standby mode off On - standby mode on | >SetPower On or >SetPower Off |
| | | <Power On or <Power Off |
| >SetAutoStandby xx | Enable/Disable auto power function xx = On,Off Off - Disable On - Enable | >SetAutoStandby On |
| | | <AutoStandby On |
| >GetAutoStandby | Get the auto power function status | >GetAutoStandby |
| | | <AutoStandby On |
| >SetAutoStandby Time xx | Set auto standby time xx = 1 ~ 180 min | >SetAutoStandbyTime 15 |
| | | <AutoStandbyTime 15 |
| >GetAutoStandby Time | Get auto stanby time | >GetAutoStandbyTime |
| | | <AutoStandbyTime 15 |

9.2.2 AV Commands

| Command | Function | Example & Feedback |
|--------------------|--|---------------------------|
| >SetVideo xx To yy | Switch an input Video signal to one or more outputs xx = input channel yy = output channel | >SetVideo 01 To 01 |
| | | <Video OUT 01 IN 01 |
| >GetVideo | Get the current Video switching status of input or output channel | >GetVideo |
| | | <Video OUT 01 02 03 04 |

4x4 Fast Switch Matrix Switcher

| | | IN 01 02 03 04 |
|-------------------|---|--|
| >SetEDID xx To yy | Set the EDID mode xx = 01, 02, ... - Input channel yy = 00 ~ 25, EDID mode 00 - HDMI 1080p@60Hz, Audio 2CH PCM (Default) 01 - HDMI 1080p@60Hz, Audio 5.1CH DTS/DOLBY 02 - HDMI 1080p@60Hz, Audio 7.1CH DTS/DOLBY/HD 03 - HDMI 4K@30Hz 4:4:4, Audio 2CH PCM 04 - HDMI 4K@30Hz 4:4:4, Audio 5.1CH DTS/DOLBY 05 - HDMI 4K@30Hz 4:4:4, Audio 7.1CH DTS/DOLBY/HD 06 - HDMI 4K@60Hz 4:2:0/4K@30Hz 4:4:4, Audio 2CH PCM 07 - HDMI 4K@60Hz 4:2:0/4K@30Hz 4:4:4, Audio 5.1CH DTS/DOLBY 08 - HDMI 4K@60Hz 4:2:0/4K@30Hz 4:4:4, Audio 7.1CH DTS/DOLBY/HD 09 - HDMI 4K@60Hz 4:4:4, 8-bit, Audio 2CH PCM 10 - HDMI 4K@60Hz 4:4:4, 8-bit, Audio 5.1CH DTS/DOLBY 11 - HDMI 4K@60Hz 4:4:4, 8-bit, Audio 7.1CH DTS/DOLBY/HD 12 - HDMI 4K@60Hz 4:4:4, HDR 10-bit, Audio 2CH PCM 13 - HDMI 4K@60Hz 4:4:4, HDR 10-bit, Audio 5.1CH DTS/DOLBY 14 - HDMI 4K@60Hz 4:4:4, HDR 10-bit, Audio 7.1CH DTS/DOLBY/HD 15 - HDMI 4K@60Hz 4:4:4, HDR 12-bit, Audio 2CH PCM 16 - HDMI 4K@60Hz 4:4:4, HDR 12-bit, Audio 5.1CH DTS/DOLBY 17 - HDMI 4K@60Hz 4:4:4, HDR 12-bit, Audio 7.1CH DTS/DOLBY/HD 18 - User EDID 1 19 - User EDID 2 20 - User EDID 3 21 - User EDID 4 22 - User EDID 5 23 - User EDID 6 24 - User EDID 7 25 - EDID pass-through (copy from Sink 1) | >SetEDID 01 To 01 |
| | | <EDID IN 01 STA 01 |
| >GetEDID | Get the EDID mode | >GetEDID |
| | | <EDID IN 01 02 03 04 STA 01 01 01 01 |
| >SetEDIDMInit | Set All EDID To Default | >SetEDIDMInit |
| | | <EDID IN 01 02 03 04 STA 00 00 00 00 |

4x4 Fast Switch Matrix Switcher

| | | |
|----------------------------|--|--|
| >SetUpdateEDID | Upload the user defined EDID EDID Via Rs232 Send To Matrix xx = [01,18] : User EDID 1 [02,19] : User EDID 2 [03,20] : User EDID 3 [04,21] : User EDID 4 [05,22] : User EDID 5 [06,23] : User EDID 6 [07,24] : User EDID 7 | >SetUpdateEDID |
| | | <User EDID Ready,Please Send EDID Data In 10s. or <SetUpdateEDID_True/False or <Time Out To Send EDID |
| >SetScaler xx On/Off | Set the output channel scaler mode xx = [01-02] : Output channel xx = [00] : All output channel On : Auto Downscaling Off : Bypass | >SetScaler 01 On or >SetScaler 01 Off |
| | | <Scale OUT 01 STA ON |
| >GetScaler | Get the output channel scaler mode xx = [01-02] : output channelRun command success | >GetScaler |
| | | <Scale OUT 01 02 STA On On |
| >SetAudioMute xx On/Off | Enable/Disable audio mute xx = [A01-A04] : Analog Audio Output Channel xx = [D01-D04] : Digital Audio Output Channel xx = [00] : All Output Channel | >SetAudioMute A00 Off/On or >SetAudioMute D00 Off/On |
| | | <AudioMute AUD A01 A02 A03 A04 STA Off Off Off Off |
| >GetAudioMute | Get audio mute status | >GetAudioMute |
| | | <AudioMute AUD A01 A02 A03 A04 D01 D02 D03 D04 STA On Off Off Off Off Off Off Off |
| >SavePreset xx | Save output-input relationship setting xx = 01 ~ 09 setting ID | >SavePreset 1 |
| | | <Preset 1 Video OUT 01 02 03 04 IN 01 02 03 04 |
| >RecallPreset xx | Call output-input relationship setting xx = 01 ~ 09 setting ID1: None 2: Even 3: Odd Param4 = string | >RecallPreset 1 |
| | | <Preset Video OUT 01 02 03 04 IN 01 02 03 04 |
| >GetPreset xx | Get output-input relationship setting xx = 01 ~ 09 setting ID | >GetPreset 1 |
| | | <Preset Video OUT 01 02 03 04 IN 01 02 03 04 |

9.2.3 RS-232 Commands

| | | |
|--------------------------------|--|-----------------------------------|
| >SetRS232Baud xx | Set the RS232 baud rate xx = 1 2400, 2 4800, 3 9600, 4 19200, 5 38400, 6 57600 (Default), 7 115200 | >SetRS232Baud 6 |
| | | <RS232Baud 57600 |
| >GetRS232Baud | Get the RS232 baud rate | >GetRS232Baud |
| | | <RS232Baud 57600 |
| >SendChar_RS23 2,xx,yy:zz.. | xx : Ending 1 NULL, 2 CR, 3 LF, 4 CR+LF yy : 1=2400, 2 4800, 3 9600, 4 19200, 5 38400, 6 57600 (Default), 7 115200 zz : The Command To Send(ASCII Format) | >SendChar_RS232,4,6:12345 6789 |
| | | 123456789 |
| >SendHex_RS2 32,xx,yy:zz | xx : Ending 1 NULL, 2 CR, 3 LF, 4 CR+LF yy : 1 2400, 2 4800, 3 9600, 4 19200, 5 38400, 6 57600 (Default), 7 115200 zz : The Command To Send(Hex Format) | >SendHex_RS232,4,6:30 31 32 33 |
| | | 0123 |

9.2.4 Network Commands

| | | |
|---|---|---|
| >SetIP <xxx.xxx.xxx.xxx> <yyy.yyy.yyy.yyy> <zzz.zzz.zzz.zzz> | Set the GUI IP address xxx = 0 ~ 255(IP address) yyy = 0 ~ 255(subnet mask) zzz = 0 ~ 255(gateway) | >SetIP <192.168.0.178> <255.255.255.0> <192.168.0.1> |
| | | <DHCP Off <IP: <192.168.0.176> <255.255.255.0> <192.168.0.1> |
| | | >GetIP |
| | | <IP: <192.168.0.178> <255.255.255.0> <192.168.0.1> |
| >SetDHCP ON/OFF | SetDHCP Enable/Disable | >SetDHCP ON |
| | | <DHCP On <IP: <192.168.0.5> <255.255.255.0> <192.168.0.1> |
| | | >GetDHCP |
| >GetDHCP | Get DHCP enable status | <DHCP ON |
| >SetMAC AA-BB- CC-DD-EE-FF | Set the MAC address of the device AA-BB-CC-DD-EE-FF = the MAC to set | >SetMAC 10-22-33-AA-BB-CC |
| | | <MAC: AA-BB-CC-DD-EE- FF |
| >GetMAC | GetMAC enable status | >GetMAC |
| | | <MAC:10-22-33-AA-BB-CC |

9.2.5 CEC Commands

| | | |
|----------------------|---|---|
| >SetCECSrcEnable xx | xx = 01~04 : Input HDMI channel | >SetCECSrcEnable 01 |
| | | <CECSrcSta <IN 01 <STA Off |
| >SetCECSrcDisable xx | xx = 01~04 : Input HDMI channel | >SetCECSrcDisable 01 |
| | | <CECSrcSta <IN 01 <STA Off |
| >GetCECSrcSta | Get The Source CEC Status | >GetCECSrcSta 01 |
| | | <CECSrcSta <IN 01 02 03 04 <STA On On On On |
| >SetCECSrcMenu xx | Send CEC Menu command to source xx = 01~04 : Input HDMI channel | >SetCECSrcMenu 01 |
| | | <CECSrcMenu 01 |
| >SetCECSrcUp xx | Send CEC UP command to source xx = 01~04 : Input HDMI channel | >SetCECSrcUp 01 |
| | | <CECSrcUp 01 |
| >SetCECSrcDown xx | Send CEC DOWN command to source xx = 01~04 : Input HDMI channel | >SetCECSrcDown 01 |
| | | <CECSrcDown 01 |
| >SetCECSrcLeft xx | Send CEC LEFT command to source xx = 01~04 : Input HDMI channel | >SetCECSrcLeft 01 |
| | | <CECSrcLeft 01 |
| >SetCECSrcRight xx | Send CEC RIGHT command to source xx = 01~04 : Input HDMI channel | >SetCECSrcRight 01 |
| | | <CECSrcRight 01 |
| >SetCECSrcBack xx | Send CEC BACK command to source xx = 01~04 : Input HDMI channel | >SetCECSrcBack 01 |
| | | <CECSrcBack 01 |
| >SetCECSrcEnter xx | Send CEC OnTER command to source xx = 01~04 : Input HDMI channel | >SetCECSrcEnter 01 |
| | | <CECSrcEnter 01 |
| >SetCECSrcOn xx | Send CEC On command to source xx = 01~04 : Input HDMI channel | >SetCECSrcOn 01 |
| | | <CECSrcOn 01 |
| >SetCECSrcOff xx | Send CEC Off command to source xx = 01~04 : Input HDMI channel | >SetCECSrcOff 01 |
| | | <CECSrcOff 01 |
| >SetCECSrcStop xx | Send CEC STOP command to source xx = 01~04 : Input HDMI channel | >SetCECSrcStop 01 |
| | | <CECSrcStop 01 |
| >SetCECSrcPlay xx | Send CEC PLAY command to source xx = 01~04 : Input HDMI channel | >SetCECSrcPlay 01 |
| | | <CECSrcPlay 01 |
| >SetCECSrcPause xx | Send CEC PAUSE command to source | >SetCECSrcPause 01 |

4x4 Fast Switch Matrix Switcher

| | | |
|--------------------------|---|--|
| | xx = 01~04 : Input HDMI channel | <CECSrcPause 01 |
| >SetCECSrcPrev xx | Send CEC PREV command to source xx = 01~04 : Input HDMI channel | >SetCECSrcPrev 01 |
| | | <CECSrcPrev 01 |
| >SetCECSrcNext xx | Send CEC NEXT command to source xx = 01~04 : Input HDMI channel | >SetCECSrcNext 01 |
| | | <CECSrcNext 01 |
| >SetCECSrcRewind xx | Send CEC rewind command to source xx = 01~04 : Input HDMI channel | >SetCECSrcRewind 01 |
| | | <CECSrcRewind 01 |
| >SetCECSrcFastForward xx | Send CEC fast-forward command to source xx = 01~04 : Input HDMI channel | >SetCECSrcFastForward 01 |
| | | <CECSrcFastForward 01 |
| >SetCECSrcVOLPlus xx | Send CEC volume increase command to source xx = 01~04 : Input HDMI channel | >SetCECSrcVOLPlus 01 |
| | | <SetCECSrcVOLPlus 01 |
| >SetCECSrcVOLMinus xx | Send CEC volume decrease command to source xx = 01~04 : Input HDMI channel | >SetCECSrcVOLMinus 01 |
| | | <SetCECSrcVOLMinus 01 |
| >SetCECDisplayEnable | Enable the CEC switch of the display xx = 01~04 01~04 - Output HDMI | >SetCECSrcEnable 01 |
| | | <CECDisplaySta <OUT 01 <STA On |
| >SetCECDisplayDisable | Disable the CEC switch of the display | >SetCECDisplayDisable 01 |
| | | <CECDisplaySta <OUT 01 <STA Off |
| >GetCECDisplaySta | Get the CEC switch of the display | >GetCECDisplaySta |
| | | <CECDisplaySta <OUT 01 02 03 04 <STA On On Off Off |
| | | |
| >SetCECDisplayOn xx | Send CEC ON command to display xx = 01~99 01~99 - Output HDMI | >SetCECDisplayOn 01 |
| | | <CECDisplayOn 01 |
| >SetCECDisplayOff xx | Send CEC OFF command to display xx = 01~99 01~99 - Output HDMI | >SetCECDisplayOff 01 |
| | | <CECDisplayOff 01 |

4x4 Fast Switch Matrix Switcher

| | | |
|---------------------------|---|---------------------------------------|
| >SetCECDisplaySource xx | Send CEC SOURCE command to display xx = 01~04 01~04 - Output HDMI | >SetCECDisplaySource 01 |
| | | <CECDisplaySource 01 |
| >SetCECDisplayMute xx | Send CEC MUTE command to display xx = 01~99 01~99 - Output HDMI | |
| | | |
| >SetCECDisplayVOLPlus xx | Send CEC volume plus command to display xx = 01~99 01~99 - Output HDMI | >SetCECDisplayVOLPlus 01 |
| | | <CECDisplayVOLPlus 01 |
| >SetCECDisplayVOLMinus xx | Send CEC volume minus command to display xx = 01~99 01~99 - Output HDMI | >SetCECDisplayVOLMinus 01 |
| | | <CECDisplayVOLMinus 01 |
| >CEC <xx,yy,zz,ww> | Send user cec command xx = [01-08] 01 : HDMI IN 1 02 : HDMI IN 2 03 : HDMI IN 3 04 : HDMI IN 4 05 : HDMI OUT 1 06 : HDMI OUT 2 07 : HDMI OUT 3 08 : HDMI OUT 4 yy = DEVICE ADDRESS zz = OPCODE ww = COMMAND | >CEC <1,04,44,46> |
| | | <CEC send to HDMI Input 1:04,44,46 |

9.2.6 System Commands

| Command | Function | Example & Feedback |
|---------------------|---------------------------------|--|
| >GetFirewareVersion | Get the firmware version | >GetFirewareVersion |
| | | <V1.0.0 |
| >GetStatus | Get system status | >GetStatus |
| | | <4x4 4K HDMI 2.0 Matrix Switcher <VLHDMIMAT4X4-V2 <FW Version:V1.0.0a <GUI Version:V1.0.0a <Switch IC Version:V1.0.0f <Bypass IC Version:V1.0.0a <KeyLock On <Video OUT 01 02 03 04 IN 01 01 01 01 ... |
| >FactoryReset | Factory config reset to default | >FactoryReset |
| | | <FactoryReset |

4x4 Fast Switch Matrix Switcher

| | | |
|----------------|--|--|
| >Reboot | Reboot the system | >Reboot <Reboot |
| >Help xx | Get the command details xx = the command to query | >Help SetVideo >SetVideo param1 To param2,... Switch an input Video signal to one or more outputs param1 = input channel param2 = output channel |
| >SetKeyLock xx | Lock/unlock the keypad xx = On,Off Off : Unlock On : Lock | >SetKeyLock On or >SetKeyLock Off <KeyLock On or <KeyLock Off |
| >GetKeyLock | Get the keypad locking status | >GetKeyLock <KeyLock Off |

10. Customer Service

The return of a product to our Customer Service implies the full agreement of the terms and conditions hereinafter. These terms and conditions may be changed without prior notice.

1) Warranty

The limited warranty period of the product is fixed three years.

2) Scope

These terms and conditions of Customer Service apply to the customer service provided for the products or any other items sold by authorized distributor only.

3) Warranty Exclusions:

Factory applied serial number has been altered or removed from the product.
Damage, deterioration or malfunction caused by:

- ✧ Normal wear and tear.
- ✧ Use of supplies or parts not meeting our specifications.
- ✧ No certificate or invoice as the proof of warranty.
- ✧ The product model showed on the warranty card does not match with the model of the product for repairing or had been altered.
- ✧ Damage caused by force majeure.
- ✧ Servicing not authorized by distributor.
- ✧ Any other causes which do not relate to a product defect.

4) Documentation:

Customer Service will accept defective product(s) in the scope of warranty coverage at the sole condition that the defeat has been clearly defined, and upon reception of the documents or copy of invoice, indicating the date of purchase, the type of product, the serial number, and the name of distributor.

Note: For further assistance or solutions, please contact your local distributor.