

VIS-UHD0808-VW 8x8 Seamless 4K UHD Matrix and Video Wall Processor

User Manual Version 3.0





- Do not expose this device to Rain, Moisture, and Dripping
- Only use accessories specified by the manufacture
- Unplug this device during Lightning Storms
- Product specifications may be subject to technical upgrades without further notice

- 1 - VISSONIC ELECTRONICS LIMITED

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1 Introduction

is a high-performance seamless UHD matrix switcher with 8x HDMI inputs and 8x HDMI outputs. Audio extract or insert can also be enabled on this device. IR matrix routing on this video matrix is followed with video routing. support one or more video wall with RS232 command

key features:

- Support HDMI 2.0/HDCP 2.2
- Support seamless switching
- Support video wall
- Support IR matrix
- Support HDMI audio extract
- Support external LR audio insert on HDMI stream
- Support EDID management
- HDMI video output resolution up to 3840x2160@60
- Front panel,RS232,TCP/IP (LAN 10M/100M) control

2 Front Panel Control

| Ultra High Definition Video Matrix out | POWER | O LOCK | | 2 | 3 | | 5 | 6 | 7 | 8 | | RES | EDID | NEXT | |
|---|-------|-----------|--------|---|---|------|-----|---|---|---|------|--------|-------|------|--|
| | | | \sim | | | INPI | л — | | | | SAVE | RECALL | CLEAR | TAKE | |

• OUTPUT/INPUT buttons

- Press buttons OUTPUT n + INPUT m+ TAKE by sequence, switch matrix input n to output m
 Press button POWER and hold for 5 seconds, to make the matrix enter standby state.
- Press button POWER and hold for 1 seconds to power on the matrix
- Press button LOCK more than 2 seconds and less than 6 seconds, to lock or un-lock front buttons. When locked, the Lock LED lighted;
 Press button LOCK more than 6 seconds, enter into the input output lock menu, then press IN n Or OUTPUT button to toggle the input or output lock status, then press TAKE to set,

Press CLEAR to exit.

- Press buttons ALL + INPUT m + TAKE by sequence, to switch input m to all the outputs
- Press button SAVE + OUTPUT n to save current routing scene as scene n. The maximum available scene No. is 8
- Press button RECALL + OUTPUT n to recall routing scene n as current routing
- Press button RES + OUTPUT n + NEXT + TAKE, to change output resolution of OUTPUT n Resolution options: 3840x2160@60, 3840x2160@50, 3840x2160@30, 3840x2160@25, 1920x1200@60,1920x1080@60, 1920x1080@50, 1600x1200@60, 1400x1050@60, 1366x768@60,1360x768@60,1280x1024@60, 1280x768@60,1280x720@60, 1280x720@50, 1024x768@60

 Press buttons EDID + INPUT m + NEXT + TAKE, change the EDID mode of port INPUT m EDID option: Manual, 3840x2160@60, 3840x2160@30, 1920x1200@60, 1920x1080@60, 1280x1024@60, 1280x720@60, 1024x768@60
 Manual EDID is loaded by PC Tool

3 Rear Panel



- LAN(10M/100M), RS232 are for PC control
- Analog Audio IN/OUT ports bind to corresponding HDMI ports.

For example:

If HDMI 1 audio source is selected with External LR by PC Tool, then analog AUDIO IN LR1 (with ϕ 3.5mm jacket) will be selected to replace the embedded audio of the HDMI input 1 data stream. If HDMI 1 audio source is selected with AUTO by PC TOOL, then will use the original embedded audio of input HDMI 1 as its audio data stream.

If the input is DVI signal, no matter how it is set up, system will get external analog audio input. Analog AUDIO OUT n will always output the same audio content with HDMI OUTPUT n Analog Audio IN/OUT connection



• IR IN and IR OUT

IR IN/OUT is for remote control routing, and follow the video routing. For example, if input HDMI m is routed to output HDMI n1 and n2 ports, then IR IN n1 and n2 ports will be routed to IR OUT m port. Please refer bellow illustration. Relationship between video and IR routing

| Video routing | OUT:HDMI n1 |
|----------------------|-------------|
| IR routing IR OUT: m | IR IN: n1 |

IR extender connectors (not as accessories)



4 RS232/LAN Control

4.1 RS232 connector

- RS-232 control, baud rate 9600, DB9 connector
- Port RS232-1 is DB9 female connector, Pins layout as bellow. User need use the corresponding cable, directly/straight RS232 cable



| Ι | Pin |
|---|------------------------------|
| 1 | N/u |
| 2 | Tx(Matrix \rightarrow PC) |
| 3 | $Rx(Matrix \leftarrow PC)$ |
| 4 | N/u |
| 5 | Gnd |
| 6 | N/u |
| 7 | N/u |
| 8 | N/u |
| 9 | N/u |



• RS232-2 and IR-EXT ports are reserved for future development

4.2 Ethernet control and connection



Note: Factory default network setting:

| IP Туре | Static IP 🔻 |
|-------------|---------------|
| Static IP | 192.168.0.247 |
| Subnet Mask | 255.255.255.0 |
| Gateway | 192.168.0.1 |

5 PC tool user guide

5.1 Account's authentication

When you run the PC tool, there needs password to authenticate.

| Account | Administrator • |
|---------------|-----------------|
| Password | |
| Login | Cancel Modify |
| ard Authentic | ation |
| Account | User 🔹 |

Default password of Administrator (access to all features): 111111

Default password of User (access to all features, except OSD function): 000000 NOTE: In case of password lost, there's a super password to login and modify password: Smartsecuri@2010

5.1.1 Password modification

- 1. Click drop-down list to select account: Administrator or User
- 2. Input current password, then click the 'modify' button to authenticate
- 3. Input new password twice, then click the 'modify' button

| Account | Administrator |
|-----------|---------------|
| NewPasswd | ••••• |
| Confirm | ••••• |
| Login | Cancel |

5.2 Connect with PC tool

1. The default PC tool's UI style as bellow

| | Advance | ed Switch | Signal | Setting | FineTune | TV W | all Netv | vork Sett | ing | | | | | E | in |
|--|--------------|------------------------|---------|---------|-----------------|--|-----------------------|---------------|-----------------------|---|--|--|----|-------|----|
| Input Output Name | Name | Input1 | Input2 | Input3 | Input4 | Input5 | Input6 | Input7 | Input8 | | | | | | |
| Output1 | 01 | | | | | | | | | | | | | | |
| Output2 | 0 2 | | | | | 1 | | | | | | | | | |
| Output3 | 03 | 1 | | | | 1 | | | | | | | | | |
| Output4 | 04 | | | | | | Ĭ | | | | | | | | |
| Output5 | 0 5 | | | | | | | | | | | | | | |
| Output6 | 0 6 | | | | | | | | | | | | | | |
| Output7 | 07 | | | | | 1 | | | | | | | | | |
| Output8 | 08 | | | | 1 | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| Allset Input1 - Ctrl Mode — | . | Reca | ill Mod | el 🔻 | Sa | veAs <mark>Mo</mark> | de1 | | EDID | l | | | S | vitch | U |
| Nilset <mark>Input1</mark> •Ctrl Mode — ⊙UART ⊙ | • Network | Reca | ill Mod | el 🔹 | Sa Sta | veAs <mark>Mo</mark> itus <mark>Disc</mark> | de1 | - I d I | EDID Reset | | | | St | vitch | U |
| Allset Input1 - Ctrl Mode — • O UART • Device Name | • Network | Reca Port | III Mod | el 🔻 | Sa Sta | veAs <mark>Mo</mark> utus Disc C Addre | de1 connecte | - d Ver | EDID Reset | | | | S | vitch | U |
| Allset Input1 - Ctrl Mode — © UART © Device Name | • Network | Reca Port IP Add | III Mod | el 🔻 | Sa Sta MA | veAs <mark>Mo</mark> Itus Disc C Addre | de1 connecte ss | d Ve | EDID Reset sion | | | | S | vitch | U |

- 2. User can select UART (with RS232 cable) or Network to connect, baud rate is 9600 bps
- 3. Network control (with cat5/6 cable, default IP address, 192.168,0.247), follow below steps:
 - a) Query IP address info via UART, please refer to Appendix A
 Or query IP address info via Network, please refer to Appendix B
 - b) Set IP info via UART, please refer to Appendix COr set IP info via Network, please refer to Appendix D
 - c) Set IP address on Windows 7/XP, please refer to Appendix E
 - d) User can directly connect via Ethernet cable (please refer to Appendix F), Or connect via network route/switch (please refer to Appendix G)
 - e) Click Connected button to setup link and connect
- 4. When connect with PC Tool, User sometimes may encounter connection failure, please refer to **Appendix H**, Troubleshoot with Network control to fix

5.3 Matrix Switch page

| | Advance | ed Switch | Signal | Setting | FineTune | TV W | all Netwo | ork Sett | ing | English |
|--|--------------|-------------------------|-----------------------|---------|-----------------|---------------------------------|-------------------|----------|---------------|--|
| Input | Name | PC | Input2 | Input3 | Input4 | Input5 | Input6 | Input7 | Input8 | |
| Dutput Name | | 01 | 0 2 | 03 | • 4 | 0 5 | 6 | 07 | 8 | |
| Dutput1 | 01 | | | | 1 | | | | | |
| Dutput2 | 2 | | | | | | | | | |
| Dutput3 | 03 | | | | | | | | | |
| Output4 | .4 | | | | | | | | | |
| Dutput5 | • 5 | | | | | | | | | |
| Dutput6 | 6 | | | | | | | | | |
| Dutput7 | 07 | | | | | | | | | |
| Output8 | 08 | | | | | | | | | |
| | | | | | | | | | | |
| liset Input1 | • | Reca | Mod | e1 🔻 | Sa | veAs Mo | de1 🔻 | | EDID | Switch UI |
| lset <mark>Input1</mark> Ctrl Mode — Ə UART © | • Network | Reca | II Mod | e1 • | Sa Sta | veAs <mark>Mo</mark> atus Co | de1 👻 | | EDID Reset | Switch UI Reading: Output Board7Signal Type success Reading: Output Board7Signal Resolution success |
| liset Input1 Ctrl Mode O UART O Device Name | • Networi | Reca Port IP Add | COM COM | e1 • | Sa Sta MA | veAs Mo atus Co C Addre | de1 • onnected | Ver | EDID Reset | Reading: Output Board7Signal Type success Reading: Output Board7Signal Resolution success Reading: Output Board7Signal Resolution success |
| Ilset Input1 Ctrl Mode — @ UART @ Device Name | Network | Reca Port IP Addi | II Mod COM ress | e1 🔻 | Sa Sta MA | veAs Mo atus Co C Addre | de1 • onnected | Ver | EDID Reset | Reading: Output Board7 -> Signal Type success Reading: Output Board7 -> Signal Resolution success Reading: Output Board7 -> Signal Resolution success Reading: Output Board8 -> Signal Type success Reading: Output Board8 -> Signal Type success |
| llset Input1 Ctrl Mode — © UART © Device Name | Network | Reca | COM ress | e1 • | Sa St: MA | veAs Mo atus Co C Addre | de1 • | Ver | EDID Reset | Reading: Output Board7>Signal Type success Reading: Output Board7>Signal Resolution success Reading: Output Board7>Signal Resolution success Reading: Output Board8>Signal Type success Reading: Output Board8>Signal Type success Reading: Output Board8>Signal Resolution success |
| liset Input1 Ctrl Mode — O UART O Device Name | Network | Reca Port IP Addi | COM ress | el 👻 | Sa St: MA | veAs Ma atus Ca | de1 • | Ver | EDID Reset | Reading: Output Board7>Signal Type success Reading: Output Board7>Signal Resolution success Reading: Output Board7>Signal Resolution success Reading: Output Board8>Signal Type success Reading: Output Board8 ->Signal Resolution success Reading: Output Board8>Signal Resolution success |
| Iset Input1 Ctrl Mode – O UART O Device Name | Network | Reca Port IP Add | COM ress | e1 • | Sa St: MA | veAs Ma ntus Ca C Addre | de1 • | Ver | EDID Reset | Switch UI Reading: Output Board7Signal Type success Reading: Output Board7Signal Resolution success Reading: Output Board7Signal Resolution success Reading: Output Board8Signal Type success Reading: Output Board8Signal Type success Reading: Output Board8Signal Resolution success Reading: Output Board8Signal Resolution success Reading: Output Board8Signal Type success Reading: Output Board8Signal |

- 1. There are 3 options for Matrix Switch page, user can press Switch UI button to change the UI style. Suggest use the default one
- 2. There is a shortcut button to switch one input port to all output ports, that is Allset,
- 3. For example, switch input 1 to all outputs, user can select



- 4. Recall mode: Recall a inputs/outputs routing scene which already be saved before. The device supports maximum 8 scenes.
- 5. Save mode: Save current inputs /outputs routing in one index. Maximum 8 modes supported. Note:Save/Recall here button here works the same with front panel save/recall control
- 6. System reset: The PC tool support reset system to recover to factory configuration.
- 7. EDID Control: Click the 'EDID' button on Matrix Switch page, then opens a EDID control window



- a) Read EDID: Select the output port, then click the 'Read 'button to read EDID
- b) Write EDID: First read a EDID from output port, or open a EDID file that saved before, then select
- c) the input port, and click the 'Write' button to write EDID
- d) Save EDID : After reading EDID successfully, Click 'Save' button to save
- e) This EDID for one input port is act as the Manual EDID, which can be selected or deselected
- f) by the front panel

5.4 Signal Setting page

| Aatrix | Switch Advar | iced Switch Signa | al Setting | FineT | une TV Wall | Network Setting | | | | | | | |
|--------|--------------|-------------------|------------|--------|-------------|-----------------|------|-------|-------------|--------------|-------------|---------------|-----|
| Input | Board-Rea | d All | | | | | | Outpu | t Board-Rea | d All | | | |
| abel | Input Type | Input Format | Audio | Select | Output Type | Output Format | | Label | Input Type | Input Format | Output Type | Output Format | 1 |
| 1 | UHD-HDI - | No Signal | Auto | • | | * | Read | 1 | | | UHD-HDI - | 4K2Kp30 - | Rea |
| 2 | UHD-HDI - | No Signal | Auto | • | | v | Read | 2 | | | UHD-HDI - | 4K2Kp30 - | Rea |
| 3 | UHD-HDI - | No Signal | Auto | • | | Ψ. | Read | 3 | | | UHD-HDI - | 4K2Kp30 - | Rea |
| 4 | UHD-HDI - | No Signal | Auto | • | | * | Read | 4 | | | UHD-HDI - | 4K2Kp30 - | Rea |
| 5 | UHD-HDI - | No Signal | Auto | • | | + | Read | 5 | | | UHD-HDI - | 4K2Kp30 - | Rea |
| 6 | UHD-HDI - | No Signal | Auto | • | | * | Read | 6 | | | UHD-HDI - | 4K2Kp30 - | Rea |
| 7 | UHD-HDI - | No Signal | Auto | • | | · · · · · | Read | 7 | | | UHD-HDI - | 4K2Kp30 - | Rea |
| 8 | UHD-HDI - | No Signal | Auto | - | | v | Read | 8 | | | UHD-HDI - | 4K2Kp30 - | Rea |

1. Audio Select

There are two options for input Audio Select

- a) Auto: If the input source is HDMI signal, system will get the embedde audio, and if the input source is DVI signal, the system will get the corresponding analog audio
- b) External: System will get the corresponding analog audio

2. Output type

There are four options for input Output Type:

- A. UHD-HDMI (HDCP OFF): HDCP Off
- B. UHD-DVI
- C. UHD-HDCP-1.4,
- D. UHD-HDCP-2.2

3. Output Format

User can set output resolution here

- 1) 3840x2160@60
- 2) 3840x2160@50
- 3) 3840x2160@30
- 4) 3840x2160@25,
- 5) 1920x1200@60
- 6) 1920x1080@60
- 7) 1920x1080@50
- 8) 1600x1200@60
- 9) 1400x1050@60
- 10) 1366x768@60
- 11) 1360x768@60
- 12) 1280x1024@60
- 13) 1280x768@60
- 14) 1280x720@60
- 15) 1280x720@50
- 16) 1024x768@60

5.5 FineTune

User can read and set the brightness/contrast/saturation/sharpness of each output.

| Select PQ FineTune Port Output2 | Select Position FineTune Port Input1 |
|---------------------------------|--|
| Brightness 50 | Read the input source Read |
| Contrast 50 | Read Input board: CVBS or Component picture position adjus |
| Saturation 50 | Reset H Start +1 -1 |
| Sharpness 50 | V Start +1 -1 Read |
| Temperature Cool Read | H Size +1 -1 Reset |
| R-Gain | V Size +1 -1 |
| G-Gain | VGA input position adjust |
| B-Gain | H Start +1 |
| R-Offset | V Start +1 -1 Read Reset |
| G-Offset | H Size +1 -1 |
| B-Offset | Reset ON OFF |

NOTE :

If none special occasions, do not change the default settings; If there is a problem after the change, click Reset to return to the factory settings.

5.6 TV Wall

Set the TV wall display quantity , how many rows and columns of panels to be layout

| Matrix-PC-tool-v5.0.182 | | | | | - | × |
|--|-------------|----------------|--------------|----------|---|---|
| Matrix Switch Advanced Switch Signal Setting | FineTune:PQ | Video Wall Net | work Setting | | | |
| Rows 2 | Video Wall | | | | | |
| Columns 4 Available 8 Set Read | Screen 1 | Screen 2 | Screen 3 | Screen 4 | | |
| Bezel Setting Type: | Screen 5 | Screen 6 | Screen 7 | Screen 8 | | |
| Right(Pixels) Top(Pixels) Bottom(Pixels) Set | | | | | | |
| Scene Save/Load | | | | | | |

5.6.1 Build a wall

Select one screen, right click, can see a menu as the following picture shows:

- Input Select: Select the input port, for the displayer to display (Input 1 ~ Input 8);
- Output Select: Set the output port that connect to the display, need set according to the TV wall connect status; It means which output port connect to the display;
- Output Format: Set the output resolution;

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| VideoWall Setting Video Wall Rows 2 Columns 4 - Available 8 - Set Read Set Read Set Read Streen 1 Not In Screen Stitching Input Select Input 1 Output Select Output 1 Output Type UHD-HDMI-1.4 Output Type O Fixel Top(Pixels) O Fixel Bottom(Pixels) O Pixel | trix Switch Advanced Switch Signa | al Setting FineTune:P | Q Video Wall | Network Setting | | | |
|--|---------------------------------------|-----------------------|---------------|-------------------------|----------|--|--|
| Rows 2 | VideoWall Setting | Video Wall | | | | | |
| Columns 4 Available 8 Set Read Set Read Screen 1 Screen 2 Screen 3 Screen 4 Screen 1 Screen 3 Screen 4 Screen 1 Not In Screen Stitching Input Select Input 1 Output Select Output Select Output Select Output 1 Output Select Output Select Output Select Output 1 Output Select Output Se | ows 2 | | | | 10 and | | |
| Available 8 Set Read Bezel Setting Input Select Input Select Input Select Input 1 Output Select Output 1 Output Format 1280x720@60 Left(Pixels) O Pixel Right(Pixels) O Pixel Bottom(Pixels) O Pixel | olumns 4 | Screen 1 | Screen | 2 Screen 3 | Screen 4 | | |
| Set Read Bezel Setting Screen 1 Not In Screen Stitching Input Select Input Select Input 1 Output Select Output 1 Output 1 Output Format 1280x720@60 Left(Pixels) Left(Pixels) O Pixel Right(Pixels) Sottom(Pixels) O Pixel Bottom(Pixels) | vailable 8 | | | | | | |
| Screen 1 Not In Screen Stitching Screen 1 Not In Screen Stitching Type: A B Utput Select Output 1 Output Select Output 1 Output Type UHD-HDMI-1.4 Output Format 1280x720@60 Left(Pixels) O Pixel Right(Pixels) O Pixel Bottom(Pixels) O Pixel | Set Read | | | | | | |
| Bezel Setting Input Select Input 1 Screen 8 Type: A B Output Select Output 1 Left(Pixels) Output Type UHD-HDM1.4 Right(Pixels) D Left(Pixels) 0 Pixel Bottom(Pixels) D Pixel Bottom(Pixels) 0 Pixel | | s | icreen 1 | Not In Screen Stitching | | | |
| ivpe: A B Output Select Output VHD-HDMI-1.4 Output Format 1280x720@60 Left(Pixels) O Pixel Right(Pixels) O Pixel Top(Pixels) O Pixel Bottom(Pixels) O Pixel Bottom(Pixels) O Pixel | Bezel Setting | Screen I | nput Select | Input 1 | Screen 8 | | |
| Left(Pixels) Output Format 280x7200°60 Night(Pixels) Left(Pixels) 0 Pixel Top(Pixels) Opixel Top(Pixels) Bottom(Pixels) 0 Pixel | /pe: 💿 A 🔿 B | | Output Select | Output 1 | | | |
| Right(Pixels) Left(Pixels) 0 Pixel Fop(Pixels) 0 Pixel Top(Pixels) 0 Pixel Bottom(Pixels) 0 Pixel Bottom(Pixels) 0 Pixel | eft(Pixels) | | Output Format | 1280x720@60 | | | |
| Fop(Pixels) Right(Pixels) 0 Pixel 3ottom(Pixels) 0 Pixel Bottom(Pixels) 0 Pixel | ght(Pixels) | L | eft(Pixels) | 0 Pixel | | | |
| Bottom(Pixels) 0 Pixel Bottom(Pixels) 0 Pixel | pp(Pixels) | F | light(Pixels) | 0 Pixel | | | |
| | attem(Bivele) | I I | op(Pixels) | 0 Pixel | | | |
| | | L. | ottom(nxens) | | _ | | |
| | | | | | | | |

Click to select the screen, then drag, select the screens to splice, right-click, and click Screen Stitching to splicing;

| Matrix-PC-tool-v5.0.182 | | | | | | | - | × |
|---|---------------|------------------|---------------|---|----------|--|---|---|
| Matrix Switch Advanced Switch Signal Settin | g FineTune:PQ | Video Wall Ne | twork Setting | | | | | |
| VideoWall Setting | Video Wall | | | | | | | |
| Rows 2 | | | | | _ | | | |
| Columns 4 | Screen 1 | Screen 2 | Screen 3 | | Screen 4 | | | |
| Available 8 | | | | | | | | |
| Set Read | | Screen Stitchin | 9 | | | | | |
| | | Cancel Stitching | 9 | | | | | |
| Bezel Setting | Screen | Screen 1 - Can | cel Stitching | | Screen 8 | | | |
| Type: A OB | | Input Select | | • | | | | |
| Left(Pixels) | | Output Select | | • | | | | |
| Right(Pixels) | | Output Type | | • | | | | |
| Top(Pixels) | | Output Format | | • | | | | |
| Bottom(Pixels) | | | | | | | | |
| Set | | Sync lock | | | | | | |
| Scene Save/Load | | | | | | | | |
| | | | | | | | | |
| Load scene | | | | | | | | |

If user want to cancel one TV WALL, first select the wall which is splicing, right click, then select **Cancel Stitching**.

5.6.2 Bezel adjust

There are two options to set bezel

Type A with pixels setting, maximum number is 255, see below:

| Beze | I Setting |
|----------------|-----------|
| Туре: 💿 А | ⊙в |
| Left(Pixels) | 100 |
| Right(Pixels) | 100 |
| Top(Pixels) | 100 |
| Bottom(Pixels) | 100 |
| | Set |

Type B with millimeter setting, see below:



5.6.3 One more TV wall

support several TV walls at the same time, for example it support one 2x2 wall and one 2x1 wall.

| I WIGHT | x-FC-1001-V. | 0.0.102 | | | | | | | |
|---------------|-----------------|----------------|-------------|----------------|--------------|----------|----|--|--|
| Aatrix Switch | Advanced Switch | Signal Setting | FineTune:PQ | Video Wall Net | work Setting | | | | |
| | oWall Setting — | Vi | deo Wall | | | | | | |
| Rows 2 | -0 | | | 1 | | | l. | | |
| Columns 4 | -0 | | Screen 1 | Screen 2 | Screen 3 | Screen 4 | | | |
| Available 8 | r | -0 | | | | | | | |
| Set | Read | | | | | | | | |
| | | | | | | | | | |
| В | ezel Setting | | Screen 5 | Screen 6 | Screen / | Screen 8 | | | |
| Type: O A | A OB | _ | | | | | | | |
| Out Width(m | m) | | | | | | | | |
| Inner Width(i | mm) | | | | | | | | |
| Out Height(n | 1m) | | | | | | | | |
| Inner Heighti | (mm) | | | | | | | | |
| | Set | | | | | | | | |
| - Scen | e Save/Load - | | | | | | | | |
| Sava ccar | | | | | | | | | |
| save scer | Load scen | <u> </u> | | | | | | | |

Each wall has its own bezel setting. Click one wall and then set bezel one by one

5.6.4 Multi View with TV Wall

| atrix Switch | Advanced Switch | Signal Setting | FineTune:PQ | Video Wall | Netw | vork Setting | |
|---------------------------------|-----------------|----------------|-------------|----------------------------------|----------|--------------|----------|
| - Video Rows 2 | oWall Setting - | Vi | deo Wall | | | | |
| Columns 4 Available 8 Set | Read | | Screen 1 | Screen | 2 | Screen 3 | Screen 4 |
| в | ezel Setting | | Screen 5 | Screen | 6 | Screen 7 | Screen 8 |
| ype: 🔿 A Dut Width(mi | M | | | Screen Stitchi Cancel Stitchi | ng ng | | |
| nner Width(r | mm) | | \sim | Screen 5 - Ca | incel S | titching | |
| Out Height(m | 1m) | | 1 | input Select | | + | |
| Inner Height(| .mm) | _ | | Output Select | E) | * | |
| | Set | | | Output Type | | * | |
| — Scen | e Save/Load - | | 4 | Output Forma | at | * | |
| Cause and | load scen | | | Sync lock | | | |

Above is one 2x2 wall, for example. If want screen 5 to separately display another video source, user can select **Screen 5 - Cancel Stitching**, then select the same or another video source for screen 5 to display. This separate screen is a full display screen





Multi View with Video Wall

5.6.5 Save scene/ Load scene

On the TV wall page, user can save or load one splicing wall scene , including input/output routing and wall layout

5.7 Advanced route switch page

Please refer to Appendix I for this section.

6 Control via Web

- 1) Directly Input the IP address in the web browser, then press 'Enter' key
- 2) Input the username: admin
- 3) Input the password: admin
- 4) Login and then you can control the matrix switch function use the website;
- 5) Please note, on website control, user only can control basic operation.

7 Electrical parameters

| Electrical parameter | |
|------------------------------|--|
| | |
| Interface | HDMI-A |
| HDMI /DP /VGA Version | HDMI2.0,HDCP2.2 |
| Bandwidth | 18Gbps |
| Input | 800x600@60Hz,1024x768@60Hz, 1280x768@60Hz, 1280x800@60Hz,1280x1024@60Hz,1360x768@60Hz, 1366x768@60Hz,1400x1050@60Hz,1440x900@60Hz, 1600x1200@60Hz,1680x1050@60Hz, 1920x1200@60Hz,480p,576p,720p,1920x1080i, 1920x1080p,3840x2160@24Hz/25Hz/30Hz/50Hz/60Hz, 4096x2160@24Hz/25Hz/30Hz/50Hz/60Hz. |
| Output | 3840x2160@60Hz, 3840x2160@50Hz, 3840x2160@30Hz, 3840x2160@25Hz, 1920x1200@60Hz,1920x1080@60Hz, 1920x1080@50Hz,1600x1200@60Hz, 1400x1050@60Hz,1366x768@60Hz, 1360x768@60Hz, 1280x1024@60Hz, 1280x768@60Hz, 1280x720@60Hz, 1280x720@50Hz, 1024x768@60Hz |
| HDMI Amplitude | T.M.D.S +/- 0.4Vpp |
| Differential impedance | 100±150hm |
| RS232/Ethernet control | |
| Baud rate and protocol | Baud rate : 9600, data bit : 8, |
| | stop bit : 1,no parity checking |
| Ethernet | IE10.0+,HTML5 |
| Power | |
| Max Consumption | 100W, 110-240VAC |
| Matrix Mechanical dimensions | |
| Size(mm) | 430(L)X300(W)X44 (H) |
| Weight | 5Kg |
| Operating temperature | 0 to 40°C |
| Storage temperature | -20 to 70°C |
| Permissible humidity | 10%-50% |

7. Package Contents

| Item | Quantity |
|---------------|----------|
| unit | 1 |
| User Manual | 1 |
| AC Power Cord | 1 |

8 Appendix A: Query IP info via UART

Method A: After connected to the device via UART, Click the 'Find via UART' button at 'Matrix Switch' page to read the IP information.

| Device Name | IP Address | MAC Address | Version |
|-------------|----------------------|-------------------|---------|
| USR-K3 | STATIC,192.168.0.247 | D8 B0 4C B9 47 DF | V1.1.0 |

Method B: After connected to the device via UART, Click the 'Find via UART' button at 'Network Setting' page to read the IP information.

| | | | | Select config port | | |
|-----------------------------------|------------------------------|---------------------|-------------|--------------------------|-----------------------|---|
| Search Lis <mark>t (</mark> Click | device to load configuration | on) | | Port 0 Port 1 | O Port 2 | |
| Device Name | IP Address | MAC Address | Version | Baud Rate | 9600 | - |
| USR-K3 | STATIC,192.168.0.247 | D8 B0 4C B9 47 DF | V1.1.0 | Parity/Data Bit/Stop Bit | None + 8 + 1 | - |
| | | | | Stream Control | None | - |
| | | | | Device Port | 23 | |
| | Search Device Open Web | site Find via LIART | | PC Port | 0 | |
| | Search Device Open wer | This via CART | | PC IP/Domain | 192.168.0.201 | |
| Basic config | | | | Work Mode | TCP Server | - |
| JPNP Port | i432 | Device Name USR-K | (3 | TCP Server connect col | 8 | - |
| HTTP Port 8 | 0 | MAC Address D8 B0 | 4C B9 47 DF | TCP Server style | Transparent transmise | - |
| Device ID | | IP Type Static | Ib 🔺 | ModbusTCP | None | * |
| Device ID Type 🛛 | | Static IP 192 . | 168.0.247 | Package time(ms) | 0 | |
| Jser Name a | idmin ! | Subnet Mask 255 . | 255.255.0 | Package Length(Byte) | 0 | |
| assword a | idmin (| Gateway 192 . | 168, 0, 1 | Sync BaudRate(RFC22 | 217 similar) | |
| - | | | | | | |

9 Appendix B: Query IP address info via Network

After connecting to the device via network, we can query information as follows.

Method A: Switch to 'Matrix Swtich ' page, then click 'Search Device' button to query IP address information.

| Device Name | IP Address | MAC Address | Version |
|-------------|---------------|-------------------|---------|
| USR-K3 | 192.168.0.247 | D8 B0 4C B9 47 DF | 3013 |

Method B: After switching to 'Network Setting' page, click 'Search Device' button to search devices, then click one device in the result list to load its IP address information.

| | | | | | Select config port | | |
|-----------------|----------------------------|------------------|-----------|----------|--------------------------|----------------------|-----|
| Search List (Cl | ick device to load configu | iration) | | | Port 0 Port 1 | O Port 2 | |
| Device Name | IP Address | MAC Addre | ss | Version | Baud Rate | 9600 | - |
| USR-K3 | 192.168.5.247 | D8 B0 4C B | 9 47 DF | 3013 | Parity/Data Bit/Stop Bit | None • 8 • 1 | + |
| | | | | | Stream Control | None | * |
| | | | | | Device Port | 23 | |
| | 1 Search Device Open | Website Find via | UART | | PC Port | 23 | |
| | Copen Copen | | | | PC IP/Domain | 192.168.0.201 | |
| Basic config | | | | | Work Mode | TCP Server | * |
| UPNP Port | 6432 | Device Name | USR-K3 | | TCP Server connect cou | 8 | - |
| HTTP Port | 80 | MAC Address | D8 B0 40 | B9 47 DF | TCP Server style | Transparent transmis | ž 🔻 |
| Device ID | 1 | IP Type | Static IP | • | ModbusTCP | None | * |
| Device ID Typ | ¢ 0 | Static IP | 192.16 | 8.0.247 | Package time(ms) | 0 | |
| User Name | admin | Subnet Mask | 255.25 | 5.255.0 | Package Length(Byte) | 0 | |
| | admin | Gateway | 192,16 | 8.0.1 | Sunc RaudRate(PEC) | 117 cimilar) | |

10 Appendix C: Set IP info via UART

After connected to the device via UART, switch to 'Network Setting' page:

- 1. Click 'Find via UART' button to read IP information
- 2. Modify IP address type to Static IP or Auto IP(DHCP). If IP address type modified to Static IP, then input IP address, subnet mask and gateway information.
- 3. Click 'Save Config' button to save.
- 4. Click 'Find via UART' button again to read IP information to make sure the modification is successful.

11 Appendix D: Set IP info via Network

After connecting to the device via network, we can query information as follows.

- a) Setp A: Switch to 'Network Setting' page, then click the 'Search Device' button to search devices
- b) Setp B: Click the device you want to configure in the result list (When you click it, the software will read the network configuration of the device automatically)
- c) Setp C: Modify the IP address or the IP address type or other configuration.
- d) Step D:Click the 'Save Config' button to save data
- e) Setp E:When the software shows a message of 'Success', click 'Search Device' button to load configuration again to make sure your modification is saved successfully.

12 Appendix E: Set IP address on Windows 7 or XP

1. Windows 7: Open 'Network and Sharing Center':



Modify static IP address: (e.g. 192.168.0.1):

| Local Area Connection Network 5 1. Right Click | Local Area Connection Properties | Internet Protocol Version 4 (TCP/IPv4) Properties |
|--|---|---|
| Inte Sole Status Diagnose Bridge Connections Create Shortcut Delete Rename Properties 2.Click | Networking Connect using: Intel(R) PRO/1000 MT Network Connection Configure This connection uses the following items: Image: Client for Microsoft Networks Image: Client for Microsoft Version 6 (TCP/IPV6) Image: Client for Microsoft Version 6 (TCP/IPV6) Image: Client for Microsoft Version 6 (TCP/IPV6) Image: Client for Microsoft Version 4 (TCP/IPV6) | General You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings. Obtain an IP address automatically Obtain an IP address automatically Use the following IP address: IP address: 192 . 168 . 0 . 1 Subnet mask: 255 . 255 . 0 Default gateway: 192 . 168 . 0 . 1 Obtain DNS server address automatically |
| | Install Uninstall Properties Description Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks. 6 OK Cancel | Ose the holding of set of addresses. Preferred DNS server: Alternate DNS server: Validate settings upon exit Advanced OK Cancel |

2. Windows XP: Open 'Network Connections:



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| ork Connections | | | -Lo | al Area Connecti | ion Properties | ? 🛛 | Internet | Protocol (TCP/IP) | Properties | | ? |
|---|---|--|--|---|--|---|---|--|----------------|-----------------------|--------------|
| : View Favorites To | ols Advanced Help | | Gene | ral Advanced | | | General | | | | |
| 0.01 | Search 😥 Folders 🚦 | II - | Cor | nect using: | | | You ca | n get IP settings assigne | ed automatica | lly if your networ | supports |
| Network Connections | | | щ. | VMware Accelerate | ed AMD PCNet Ad | Configure | the app | propriate IP settings. | ideu io dak yo | Jui network auni | Istrator for |
| ork Tasks 🛞 | LAN or High-Speed | 1.Right Click | Thi | s connection uses the | following items: | | 00 | btain an IP address auto | omatically | 4. Input | P addr |
| sate a new | Local Area Connected | Connection Franking | | Client for Microso | oft Networks | the | - 🕑 U | se the following IP addre | BSS: | | |
| nnection t up a home or small | | Disable Status | | QoS Packet Sch | nduler | | : IPa | ddress: | 195 | 2.168.0. | |
| fice network lange Windows | Personal Area Netw | or Repair | _ | Internet Protocol | (ICEAP) 3. Doub | le Click | Subi Defa | net mask: wit gatewar | 200 | 5.205.205. 2.168 0 | |
| rewall settings sable this network | Bluetooth N | Bridge Connections | | Install | Uninstall | Properties | | an gaonay. | 100 | | - |
| evice epair this connection | Bluetooth E | ev Delete | D | escription ransmission Control Pr | rotocol/Internet Protocol | he default | 0 0 | btain DNS server addres se the following DNS se | ss automatical | lly. | |
| mame this connection | | Rename | | vide area network prot across diverse intercon | ocol that provides commun nected networks. | ication | Pref | erred DNS server: | | | |
| mection | | Properties 2, 12110 | | Show icon in notification | on area when connected | | Alter | mate DNS server: | | | |
| ige settings of this iection | | | | Notify me when this co | onnection has limited or no | connectivity | | | | _ | |
| | | | | | | | | | | 6 | dvanced |
| | | | | | 6 OK | Cancel | | | 5 | ОК | Cance |
| | | | | | | | | | | | |
| ix-PC-tool-v5.0.12 Switch Advanced | 5 Switch Signal Setti | ng FineTune:PQ&P | osition OSE |) CTRL TV Wa | II Network Settin | 9 | | | | × | |
| rix-PC-tool-v5.0.12 Switch Advanced | 15 I Switch Signal Setti | ng FineTune:PQ&P | osition OSE |) CTRL TV Wa | II Network Settin | g fig port | | | | × | |
| ix-PC-tool-v5.0.12 Switch Advanced Search List (Click | 5 I Switch Signal Setti device to load config | ng FineTune:PQ&P juration) | osition OSE |) CTRL TV Wa | II Network Settin Select con @ Port 0 | g fig port Port 1 | Port 2 | | - 0 | × | |
| ix-PC-tool-v5.0.12 Switch Advanced Search List (Click Device Name | 15 I Switch Signal Setti device to load config IP Address | ng FineTune:PQ&P juration) MAC Addre | osition OSE |) CTRL TV Wa | II Network Settin -Select con @ Port 0 Baud Rate | g fig port Port 1 | Port 2 9600 | + | _ | × | |
| ix-PC-tool-v5.0.12 Switch Advanced Search List (Click Device Name USR-K3 | 5 I Switch Signal Setti device to load config IP Address 192.168.0.247 | ng FineTune:PQ&P juration) MAC Addre D8 B0 4C E | ess V 939 47 DF 3 | ersion | II Network Settin Select con @ Port 0 Baud Rate Parity/Date | g fig port Port 1 Bit/Stop Bit | 9600 None + | * | _ 0 | × | |
| ix-PC-tool-v5.0.12 Switch Advanced Search List (Click Device Name USR-K3 | 5 I Switch Signal Setti device to load config IP Address 192.168.0.247 | ng FineTune:PQ&P juration) MAC Addre D8 B0 4C E | ess V 99 47 DF 3 | CTRL TV Wa | II Network Settin Select con @ Port 0 Baud Rate Parity/Data | g Port 1 Bit/Stop Bit | Port 2 9600 None * | * 8 * 1 * | _ 0 | × | |
| ix-PC-tool-v5.0.12 Switch Advanced Search List (Click Device Name USR-K3 | 5 I Switch Signal Setti device to load config IP Address 192.168.0.247 | ng FineTune:PQ&P juration) MAC Addr D8 B0 4C E | ess V 99 47 DF 3 | ersion 013 Matrix-PC-toc | II Network Settin Select con © Port 0 Baud Rate Parity/Data | g Fig port Port 1 Bit/Stop Bit | Port 2 9600 None * None | * 8 * 1 * * | _ | × | |
| ix-PC-tool-v5.0.12 Switch Advanced Search List (Click Device Name USR-K3 | 15 I Switch Signal Setti device to load config IP Address 192.168.0.247 | ng FineTune:PQ&P juration) D8 B0 4C E | ess V 39 47 DF 3 | ersion 013 Matrix-PC-toc | II Network Settin Select con @ Port 0 Baud Rate Parity/Data Chrosson Co | g Fig port Port 1 Bit/Stop Bit | Port 2 9600 None * 23 | + 8 + 1 + + | | × | |
| ix-PC-tool-v5.0.12 Switch Advanced Search List (Click Device Name USR-K3 | 5 I Switch Signal Setti device to load config IP Address 192.168.0.247 Search Device Ope | ng FineTune:PQ&P juration) D8 B0 4C E n Website Find via | ess V 19 47 DF 3 | ersion 013 Matrix-PC-toc | II Network Settin Select con @ Port 0 Baud Rate Parity/Data Shrv5.0.125 | 9 Fig port Port 1 Bit/Stop Bit | 9 Port 2 9600 None ¥ 23 23 | * 8 * 1 * * | _ | x | |
| x-PC-tool-v5.0.12 Switch Advanced Search List (Click Device Name USR-K3 | 45 I Switch Signal Setti device to load config IP Address 192.168.0.247 Search Device Ope | ng FineTune:PQ&P juration) MAC Addre D8 B0 4C B | ess V 19 47 DF 3 | ersion 013 Matrix-PC-toc | II Network Settin Select con @ Port 0 Baud Rate Parity/Data SI-v50.125 | 9 Port 1 Bit/Stop Bit | Port 2 9600 None * 23 23 192.168.0.20 | * 8 * 1 * * | | x | |
| ix-PC-tool-v5.012 Switch Advanced Search List (Click Device Name USR-K3 Basic config | 15 I Switch Signal Setti device to load config IP Address 192.168.0.247 Search Device Ope | ng FineTune:PQ&P juration) MAC Addre D8 B0 4C E n Website Find via | ess V 99 47 DF 3 | ersion 013 Matrix-PC-too | II Network Settin Select con @ Port 0 Baud Rate Parity/Data Di-v5.0.125 | 9 Fig port Port 1 Bit/Stop Bit | Port 2 9600 None * 23 23 192.168.0.20 TCP Server | * 8 * 1 * * | | × | |
| ix-PC-tool-v5.012 Switch Advanced Search List (Click Device Name USR-K3 Basic config UPNP Port | 15 I Switch Signal Setti device to load config IP Address 192.168.0.247 Search Device Ope | ng FineTune:PQ&P juration) MAC Addre D8 B0 4C E n Website Find via Device Name | ess V 99 47 DF 3 | ersion 013 Matrix-PC-too | II Network Settin Select con @ Port 0 Baud Rate Parity/Data Ol-v5.0.125 | 9 Fig port Port 1 Bit/Stop Bit SX SX Cot | Port 2 9600 None * 23 23 192.168.0.20 TCP Server 8 | * 8 * 1 * * | | × | |
| ix-PC-tool-v5.012 Switch Advanced Search List (Click Device Name USR-K3 Basic config UPNP Port 6 HTTP Port 8 | 15 I Switch Signal Setti device to load config IP Address 192.168.0.247 Search Device Ope | ng FineTune:PQ&P juration) MAC Addre D8 B0 4C E Nebsite Find via Device Name MAC Address | ess V 9 47 DF 3 ULART USR-K3 DB B0 4C | ersion 013 Matrix-PC-too | II Network Settin Select con @ Port 0 Baud Rate Parity/Data Ol-v5.0.125 | 9 Fig port Port 1 Bit/Stop Bit SX Cot. | Port 2 9600 None * 23 23 192.168.0.20 TCP Server 8 Transparent | * 8 * 1 * * 1 * transmist * | | × | |
| ix-PC-tool-v5.012 Switch Advanced Search List (Click Device Name USR-K3 Basic config UPNP Port 6 HTTP Port 8 Device ID 1 | 4 Switch Signal Setti device to load config IP Address 192.168.0.247 Search Device Ope | ng FineTune:PQ&P juration) MAC Addre D8 B0 4C E Nac Addres Device Name MAC Address IP Type | ess V 9947 DF 3 USR-K3 D8 B0 4C Static IP | ersion 013 Matrix-PC-too | II Network Settin Select con Port 0 Baud Rate Parity/Data Net50.125 ve Config: success Ref ModbusTC | 9 Fig port Port 1 Bit/Stop Bit Stock Col. | Port 2 9600 None * 23 23 192.168.0.20 TCP Server 8 Transparent None | * 8 * 1 * * 1 * transmis: * | | × | |
| ix-PC-tool-v5.012 Switch Advanced Search List (Click Device Name USR-K3 Basic config UPNP Port 6 HTTP Port 8 Device ID 1 Device ID 1 | 4 Switch Signal Setti device to load config IP Address 192.168.0.247 Search Device Ope | ng FineTune:PQ&P juration) MAC Addre D8 B0 4C E NaC Addres Device Name MAC Address IP Type Static IP | ess V 19 47 DF 3 USR-K3 D8 B0 4C Static IP | ersion 013 Matrix-PC-toc | II Network Settin Select con ④ Port 0 Baud Rate Parity/Data Di-v50.125 ve Config: success 確認 | 9 Fig port Port 1 Bit/Stop Bit 22 23 col. P re(rec) | Port 2 9600 None * 23 23 192.168.0.20 TCP Server 8 Transparent None | * 8 * 1 * * 1 * transmis: * | - | × | |
| rix-PC-tool-v5.012 Switch Advanced Search List (Click Device Name USR-K3 Basic config UPNP Port 6 HTTP Port 8 Device ID 1 Device ID Type 0 | 15 I Switch Signal Setti device to load config IP Address 192.168.0.247 Search Device Ope 432 0 | ng FineTune:PQ&P juration) MAC Addre D8 B0 4C E NaC Addres Device Name MAC Address IP Type Static IP Subset Mack | ess V 19 47 DF 3 10 40 ART USR-K3 D8 80 4C Static IP 192, 168 255, 255 | ersion 013 Matrix-PC-toc 013 Sav | II Network Settin Select con Port 0 Baud Rate Parity/Data Parity/Data Ve Config: success We Config: success ModbusTC Package tin Package tin | 9 Fig port Port 1 Bit/Stop Bit 28 20 col. p ne(ms) | Port 2 9600 None * 23 23 192.168.0.20 TCP Server 8 Transparent None 0 | * 8 * 1 * * 1 * transmis: * | | × | |
| rix-PC-tool-v5.012 Switch Advanced Search List (Click Device Name USR-K3 Basic config UPNP Port 6 HTTP Port 8 Device ID 1 Device ID 1 Device ID Type 0 User Name 6 | 45 device to load config IP Address 192.168.0.247 Search Device Ope 432 0 dmin | ng FineTune:PQ&P Juration) MAC Addre D8 B0 4C E NaC Addres Device Name MAC Address IP Type Static IP Subnet Mask | ess V 19 47 DF 3 USR-K3 D8 B0 4C Static IP 192.168 255.255 | ersion 013 Matrix-PC-too 013 Sav | II Network Settin Select con Port 0 Baud Rate Parity/Data Parity/Data Ve Config: success We Config: success ModbusTC Package ti Package Li | 9 Fig port Port 1 Bit/Stop Bit Store Col. P ne(ms) ngth(Byte) | Port 2 9600 None * 23 23 192.168.0.20 TCP Server 8 Transparent None 0 0 | * 8 * 1 * * 1 * transmis: * | | × | |
| rix-PC-tool-v5.012 Switch Advanced Search List (Click Device Name USR-K3 Basic config UPNP Port 6 HTTP Port 8 Device ID Type 0 User Name 8 Password 8 | 15 I Switch Signal Setti device to load config IP Address 192.168.0.247 Search Device Ope 432 0 dmin dmin | ng FineTune:PQ&P Juration) MAC Addre D8 B0 4C E NaC Addres Device Name MAC Address IP Type Static IP Subnet Mask Gateway | ess V 19 47 DF 3 19 47 DF 3 USR-K3 D8 B0 4C Static IP 192, 168 255, 255 192, 168 | ersion 013 Matrix-PC-too 0 , 247 255 , 0 , 0 , 1 | II Network Settin Select con Port 0 Baud Rate Parity/Data Ver Config: success We Config: success ModbusTC Package Li Package Li Sync Bau | 9 fig port Port 1 | Port 2 9600 None * 23 23 192.168.0.20 TCP Server 8 Transparent None 0 0 17 similar) | * 8 * 1 * * 1 * transmis: * | | × | |

Modify IP address of 'Local Area Connection': (e.g. 192.168.0.1):

NOTE :

- 1. When selecting the device, it will display the matrix's network board information. User can edit the device's name, in order to better identify matrix. User can set dynamic IP/ static IP, subnet mask, gateway and other network information. At the same time, user can also set the device port. Serial port baud rate is 9600 (the user cannot change the baud rate, otherwise it will lead to the network control failed).
- 2. Configuration via UART only support modify IP address or IP address type. If you want to modify other configuration, please configure it via Network

13 Appendix F: Direct connect via Ethernet cable

Operation steps are as follows:

- 1) Connect the PC and device directly via an Ethernet cable
- 2) Manually setting up the IP address of the PC, and the IP address of the PC and the device should be in a same network segment (The default IP address of the device is 192.168.0.247, and the default network mask of the device is 255.255.255.0).
- 3) Run the PC control software (If the IP address of the PC changed after running the software, you should close it and run it again)
- 4) Click to switch 'Ctrl Mode' to 'Network'
- 5) Click the 'Search Device' button
- 6) Click the device you want to control in the result list (When you click it, the software will read the network configuration such as network port and so on of the device automatically)
- 7) Click the 'Disconnected' button (which is right to 'Status') to connect to the device
- 8) After connected successfully, the button right to 'Status' will be 'Connected' (If you click it now, it will disconnect from the device)

| LIADT | 6 Maturale | Davat | | Causing Discourses and |
|-------|------------|-------|-----|------------------------|
| UARI | Inetwork | Port | 200 | Status Disconnected |

Note : The default IP address is 192.168.0.247, and the default subnet mask is 255.255.255.0

14 Appendix G: Connect via network route /switch

Operation steps are as follows:

- 1) Connect the PC and the device to a same network router
- 2) Setting up the IP address of the PC. Either manual (Static) mode or automatic (DHCP) mode
- 3) Just make sure the IP address of the PC and the device are in a same network segment(When the IP type is obtain automatically, the network router that PC and device connected to should support HDCP function)
- 4) Run the PC control software(If the IP address of the PC changed after running the software, need close it and run it again)
- 5) Click to switch 'Ctrl Mode' to 'Network'
- 6) Click the 'Search Device' button
- 7) Click the device you want to control in the result list (When you click it, the software will read network configuration such as network port and so on of the device automatically)
- 8) Click the 'Disconnected' button (which is right to 'Status') to connect to the device
- 9) After connected successfully, the button right to 'Status' will be 'Connected' (If you click it now, it will disconnect from the device)

| UART | Network | Port | • | Status | Disconnected |
|------|---------|------|---|--------|--------------|

NOTE: If the IP type of the device is Dynamic (DHCP) mode, the network route or switch must support HDCP function, otherwise the device will not be able to obtain a valid IP address and this will cause device not be found If the device can be found but not able to connected successfully, please make sure the IP address of the PC and the device are in a same network segment. (e.g. when subnet mask is 255.255.255.0, then 192.168.0.1 and 192.168.0.2 are in a same network segment)

15 Appendix H: Troubleshoot with Network control

- 1) Can't find any devices:
 - a) Cause A: The IP address type of the device is obtain automatically (DHCP), but currently connected direct via Ethernet cable or connected to a network device(router or switch and so on) which not support HDCP function.

Solution A: Setting up the IP address type of the device to static mode, or connecting the device to a network router which support HDCP function.

- b) Cause B: The device is not power on.Solution B: Please power on the device.
- c) Cause C: The Ethernet cable is bad contact.Solution C: Check the Ethernet cable's connection whether is ok.
- d) Cause D: The IP address type of the PC is obtain automatically(DHCP), but currently connected direct via Ethernet able or connected to a network device(router or switch and so on) which not support HDCP function.

Solution D: Setting up the IP address type of the PC to static mode, or connecting the device to a network router which support HDCP function.

e) Cause E: Unknown

Solution E: When using direct connection via Ethernet cable, please setting up the IP address type both of the PC and the device to static mode, and the IP address of the both should be in a same network segment. Or when using connection via LAN, connect the PC and the device to a same network router which support HDCP function.

- 2) The software show a message of 'device response timeout' after connected to the device.Cause A: The IP address of the PC and the device are not in a same network segment.Solution A: Setting up the IP address of the both, make sure the IP address are in a same network segment.
- 3) The software show a message of 'TCP connection failed! Error Code: xxxx' after connected to the device.
 - a) Cause A: The IP address of the PC and the device are not in a same network segment.
 - b) Solution A: Setting up the IP address of the both, make sure the IP address are in the same network segment.
 - c) Cause B: Firewall is enabled and PC tool is not admitted to pass through.
 - d) Solution B: Disable firewall or add PC tool to white list so can be admitted to pass through.

Note: If the device's IP address type is Auto (DHCP), we can connect to the device via UART firstly, then click the 'Find Via UART' button to read the device's IP address. If the IP address of the device is 255.255.255.255 by this way, it means that the network device (the device connected to) does not support HDCP function.

16 Appendix I: Advanced routing switch

PC tool support automatically switch the input source periodically for the output port in order to facilitate the demonstration functions needed in some scenaries.

Operation guide is as follows:

1. Click the output port that need configure (Also we can press 'Ctrl' or 'Shift' first ,then click to select more output ports)

| latrix Sv | witch | Advanced Switch | Signal Setting | g FineTun | e TV Wa | all Network | Setting |
|-----------|-------|---------------------|----------------|------------|-----------|--------------|--------------|
| Jsage i | note: | 1. Add input to out | tput 2. Tick o | output and | then star | t sending lo | oop |
| Input | | Custom nam | e (| Dutput | Cu | stom name | Input Signal |
| Input | 1 | - | E | Output | 1 | + | |
| Input | 2 | - | E | Output | 2 | + | |
| Input | 3 | - | | Output | 3 | 2 | |
| Input | 4 | - | | Output | 4 | | |
| Input | 5 | | E | Output | 5 | - | |
| Input | 6 | - | E | Output | 6 | + | |
| Input | 7 | - | E | Output | 7 | - | |
| Input | 8 | ÷. | E | Output | 8 | - | |

2. Press 'Ctrl' or 'Shift' first, then click to select input ports

| latrix Switch | Advanced Switch | Signal Setting | FineTune | TV Wall | Network | Setting | |
|---------------|---------------------|-----------------|------------|--------------------------|-----------|--------------|--|
| Usage note: | 1. Add input to out | put 2. Tick out | put and th | nen <mark>start</mark> s | ending lo | op | |
| Input | Custom nam | e Out | put | Custo | om name | Input Signal | |
| Input 1 | | | Dutput 1 | | ÷ | | |
| Input 2 | ÷ | | Output 2 | | - | | |
| Input 3 | 4 | | Output 3 | | - | | |
| Input 4 | ÷ | | Output 4 | | ~ | | |
| Input 5 | - | | Output 5 | | - | | |
| Input 6 | 14 | | Output 6 | | - | | |
| Input 7 | - | | Dutput 7 | | - | | |
| Input 8 | - | | Output 8 | | - | | |

3. Click "-->" button to add the input ports selected in step 2.

| Input | | Custom nam | e Ou | tput | Custo | m name | Input Signal | |
|-------|---|------------|------|----------|-------|--------|-------------------|--|
| Input | 1 | - | | Output 1 | | + | Input 1,2,3,4,6,8 | |
| Input | 2 | | | Output 2 | | - | | |
| Input | 3 | ÷ | | Output 3 | | ÷ | Input 1,2,3,4,6,8 | |
| Input | 4 | + | | Output 4 | | + | Input 1,2,3,4,6,8 | |
| Input | 5 | - | | Output 5 | | - | | |
| | | | | Output 6 | | | | |
| Input | 7 | + | | Output 7 | - | | | |
| Input | 8 | - | | Output 8 | | - | | |

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4. Check the output ports that need to automatically switch input source periodically.

| Matrix Sv | vitch | Advanced Switch | Signal Setting | FineTune | TV Wall | Network | Setting |
|-----------|-------|---------------------|----------------|-------------|----------------------------|-----------|-------------------|
| Usage i | note: | 1. Add input to out | put 2. Tick o | utput and t | hen sta <mark>r</mark> t s | ending lo | ор |
| Input | | Custom nam | e O | utput | Custo | om name | Input Signal |
| Input | 1 | - | | Output 1 | | +: | Input 1,2,3,4,6,8 |
| Input | 2 | - | | Output 2 | | 4 | |
| Input | 3 | ÷ | | Output 3 | | + | Input 1,2,3,4,6,8 |
| Input | 4 | ÷ | | Output 4 | | + | Input 1,2,3,4,6,8 |
| Input | 5 | | | Output 5 | | - | |
| Input | 6 | - | | Output 6 | | - | |
| Input | 7 | * | | Output 7 | | - | |
| Input | 8 | ÷ | | Output 8 | | - | |

5. Configure automatically switch

Swtich frequency: default 2000ms

All outputs send combine: default not checked

- a) unchecked: Switch all output ports one by one.
- b) checked: Switch all output ports' input at the same time in a switch operation.
- c) NOTE: Switch one input one by one if there're many input ports selected.

Wait others finished then start next loop: Only can be set when 'All outputs send combined' is checked.

- a) unchecked : When the number of the selected input ports of some output is not the same, immediately start next loop when one output finished a switching loop.
- b) checked: All output start a new loop together. When the number of the selected input ports of some output is not the same, not start next loop until other outputs finish the current switching loop.

Send cmd only one loop: stop automatically switch when a loop is finished.

Select all outputs: Quickly check or uncheck all output ports

| Send cmd periodly a | t 2000 | ms |
|----------------------|------------|-----------|
| All outputs send com | nbined | |
| Wait others finished | then start | next loop |
| Send cmd only one l | оор | |
| Select all outputs | | |
| Start Stop | | |

- 6. Click 'Start' button to start automatically periodically switch.
- Automatically periodically switch is ongoing... Click 'Stop' button to stop automatically periodically switch if needed. If 'Send cmd only one loop' is checked, it will stop after one loop is finished.

17 Appendix J: Change List (VS V2 version)

- a) Add more output resolution
- b) Add Multi View function with TV wall
- c) Add another mode (Type B) to configure Bezel setting with TV wall
- d) Add separately Lock function with front buttons control
- e) Move Advanced routing switch section to Appendix I
- f) Change front POWER button action feature