4x2 HDMI2.0 Matrix

Support 4K@60hz YUV4:4:4, 18Gbps,HDCP2.2

OPERATION MANUAL

Thank you for purchasing this product. For optimum performance and safety, please read these instructions carefully before connecting, operating or adjusting this product. Please keep this manual for future reference.

SURGE PROTECTION DEVICE RECOMMENDED

This product contains sensitive electrical components that may be damaged by electrical spikes, surges, electric shock, lightning strikes, etc. Use of surge protection systems is highly recommended in order to protect and extend the life of your equipment.

Table of Contents

Dear Customer

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1. Features

- 4×2 HDMI Matrix,4×HDMI Inputs,2×HDMI Output
- HDMI 2.0 version(Support 4K@60Hz YUV4:4:4)
- Bandwidth up to 18 Gbps
- HDCP 2.2/HDCP1.4 compliant
- Support Panel button,IR control
- With micro USB port for firmware upgrade
- Support Analog audio 2.0 extraction for HDMI output2 port
- Support Dolby Vision and HDR10
- Support OVP over voltage protection mode(When input voltage over DC 6V)
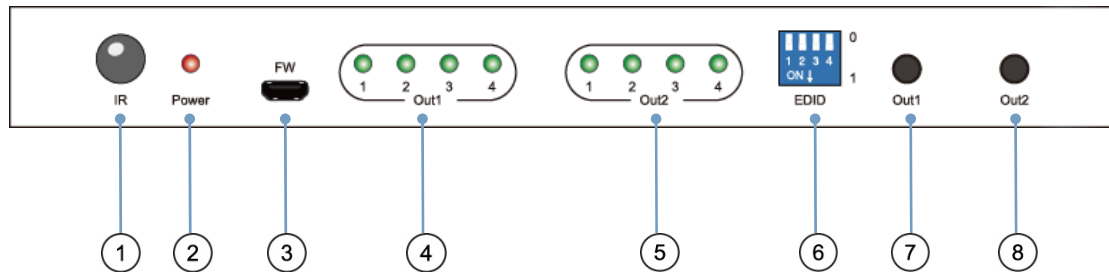- Unit size: L205XW103.8XH22mm

2. Package Contents

1). 1x HDMI Matrix
2). 1x 5V DC power supply
3). 1x Remote control
4). 1x CD

3. Specifications

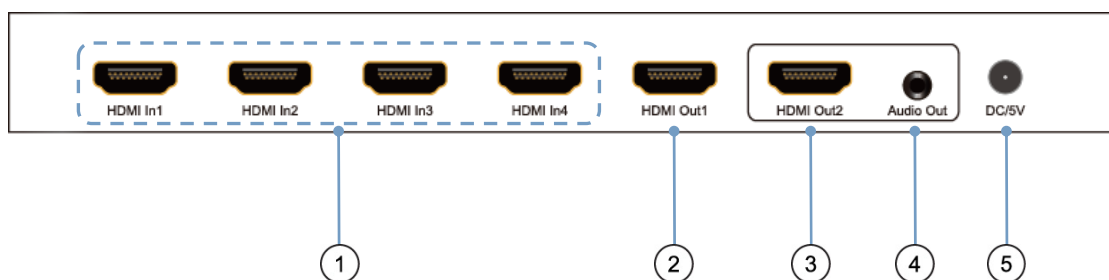| Bandwidth	18 Gbps
Resolution	480p@60hz,576P@50hz,720P@60hz, 1080P@24hz,1080P@50hz,1080P@60hz,4K@24hz,4K@30hz, 4K@60hz YUV4:2:0, 4K@ 60hz YUV4:4:4
Operating Temperature Range	-5 to +40°C (23 to +104°F)
Operating Humidity Range	5 to 90 % RH (no condensation)
Input Video Signal	0.5-1.0 volts p-p
Input DDC Signal	5 volts p-p (TTL)
Analog audio Ext port	1x3.5mm audio jack
Output Video	HDMI 2.0+HDCP1.4/2.2
Output Audio	Support PCM,analog audio 2.0(L/R) Support DTS-HD, Dolby-HD under EDID copy mode
Dimensions(WxHxD)	L205XW103.8XH22mm
Net Weight	0.61kg
Power consumption	2W(Max)

4. Panel Descriptions

4.1 Front Panel

① IR receive window

② Indicator of power supply

③ Micro USB port for upgrade firmware

④ Indicator of input1/2/3/4 for HDMI output1

⑤ Indicator of input1/2/3/4 for HDMI output2 (Or the indicator of EDID NO. in build-in EDID setting mode)

⑥ EDID DIP switch for HDMI input1/2/3/4 ("0"for EDID copy mode,"1"for build-in EDID mode)

⑦ HDMI out1 button,short press to select input1/2/3/4(Long press to enter build-in EDID mode,for more details,please see **8.3 Build-in EDID mode**)

⑧ HDMI out2 button,short press to select input1/2/3/4 (Or short press to select build-in EDID No.,for more details,please see **8.3 Build-in EDID mode**)
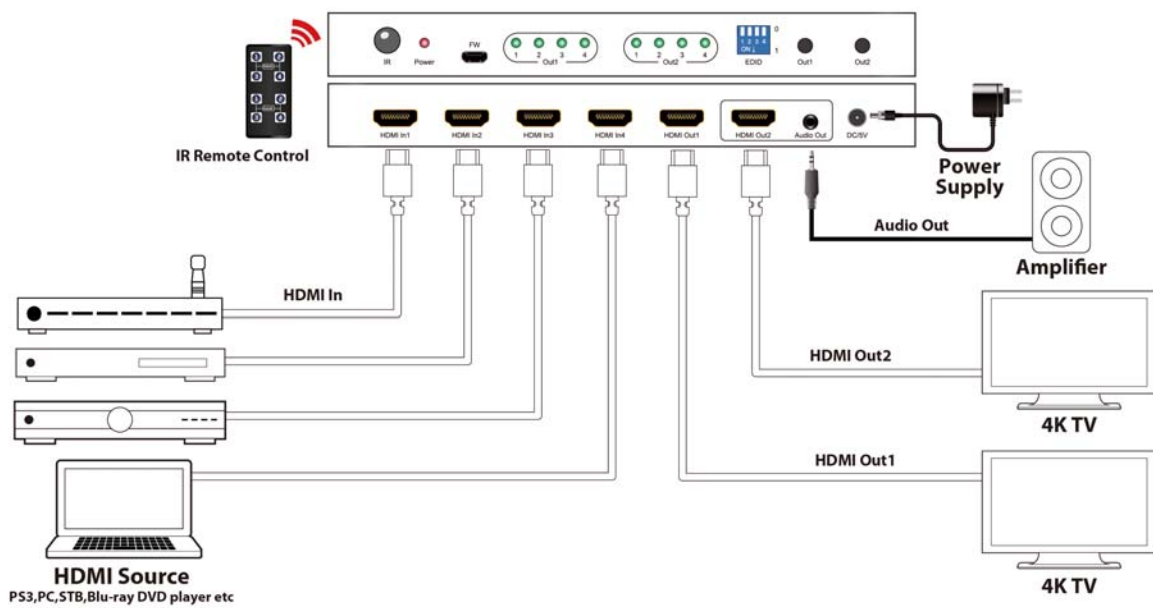
4.2 Rear Panel

① HDMI input port

② HDMI output1 port

③ HDMI output2 port

④ Analog audio out for HDMI out2

⑤ DC power input
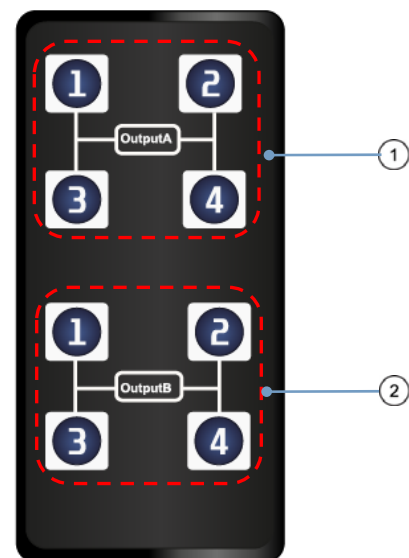
5. Connecting and Operating

1. Connect source devices to input ports of the matrix
2. Connect HDMI output ports to TV or other HDMI sink devices.
3. Connect 5V POWER supply to DC power socket.
4. Power on the matrix, HDMI sources and displays.

6. Application Diagram

7. Remote Control Description

① Short press to select HDMI input1/2/3/4 for HDMI out1

② Short press to select HDMI input1/2/3/4 for HDMI out2

8. EDID DIP Switch

8.1 DIP Switch function

DIP Switch include:EDID Copy mode and build-in EDID mode.
(DIP Switch 1 to 4 for HDMI input1 to input4)

8.2 EDID Copy mode

EDID DIP switch to "0",means using the EDID copy mode,when HDMI out1/ out2 port select any one channel of HDMI input,EDID input will copy and follow EDID of TV.
If HDMI out1 /out2 select same HDMI input,mix EDID would be auto generated according to TVs.

8.3 Build-in EDID mode

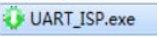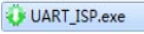EDID DIP switch to "1",means using the build-in EDID mode, there is four kinds of EDID for setting:

Indicator light of Out2	Build-in EDID NO.	Explanation of EDID
1	1	4K@60Hz,YUV4:4:4,30/36Bit,PCM
2	2	4K@60Hz,YUV4:2:0,30/36Bit,PCM
3	3	4K@30Hz,30/36Bit,PCM
4	4	1080P,30/36Bit,PCM

Operation steps:

1. Long press "Out1" button at front panel to enter build-in EDID mode setting,indicator light of out1 turn to quick flashing status.

2. Short press "Out1" button to select input channel for setting that you need(with indicator light on at panel out1 for selected input accordingly).

3. Short press "Out2" button to select the build-in EDID No. in above sheet(with indicator light on at panel out2 for selected EDID accordingly).

4. Then long press "Out1" button to save the setup and back to normal usage mode,indicator light turn back to normal.

5. At last,EDID DIP switch to "1" for the input that just set,then finish the setup of build-in EDID.

Note:When select build-in EDID No.1 (4K@60Hz,YUV4:4:4,30/36Bit,PCM) for input,it will auto downscale to suitable resolution if TV do not support HDCP2.2.
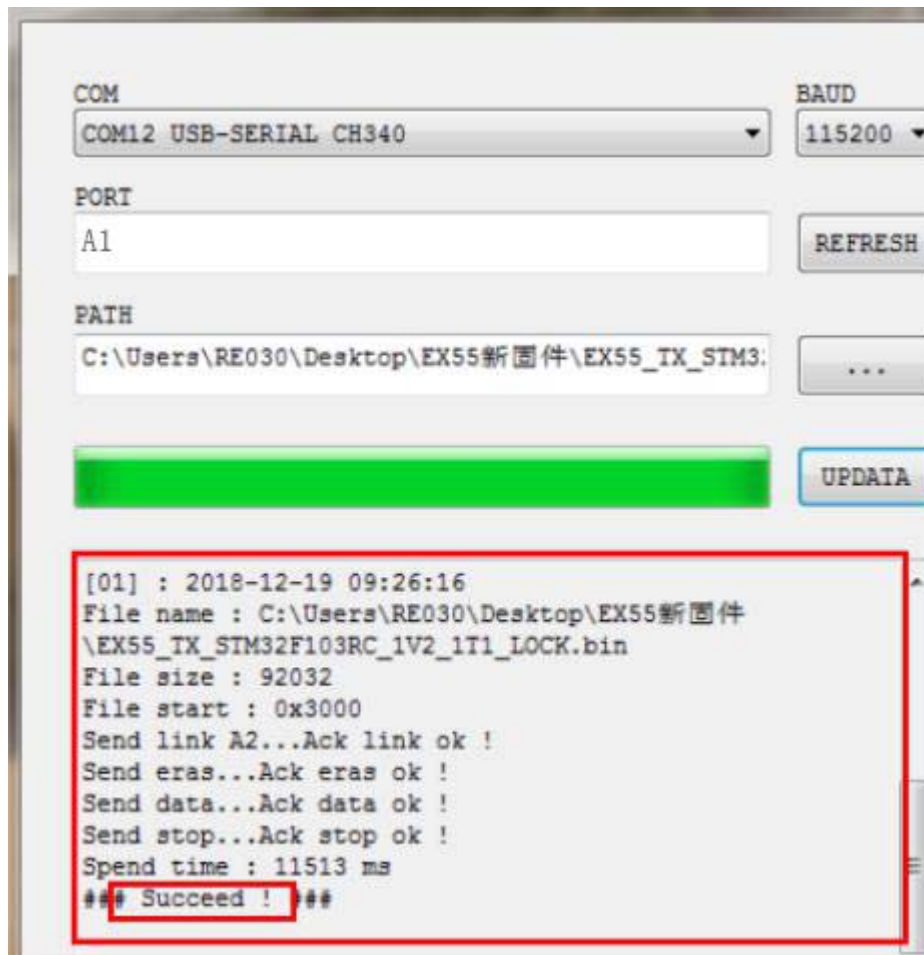
9.Firmware Upgrade

1). The user should use the CD in colorbox,read and install software [UART_ISP.exe] in PC;

2). Connect unit to PC with usb cable from micro usb port,click "REFRESH"button first,then click [UART_ISP.exe] software to select correct usb port:

COM	BAUD
COM4 USB-SERIAL CH340 ▼	115200 ▼
COM1 通信端口	

 (Note: if PC is unable to identify the correct usb port,please install the driver from CD first)

3). Set the same baud rate with PC host(default 115200)

4). Type in "A1" in PORT and select PATH with update file then click UPDATA wait for update till display "Succeed" in red frame:

Note:When update progress bar stop before successfully finish upgrade,please power off PC host and restart to continue the upgrade.

MAINTENANCE
Clean this unit with a soft, dry cloth. Never use alcohol, paint thinner of benzine to clean this unit.

PRODUCT SERVICE
（1）**Damage requiring service:**
   The unit should be serviced by qualified service personnel if:
      (a) The DC power supply cord or AC adaptor has been damaged;
      (b) Objects or liquids have gotten into the unit;
      (c) The unit has been exposed to rain;
      (d) The unit does not operate normally or exhibits a marked change in performance;
   The unit has been dropped or the cabinet damaged.

（2）**Servicing Personnel:** Do not attempt to service the unit beyond that described in these operating instructions.Refer all other servicing to authorized servicing personnel.

（3）**Replacement parts:** When parts need replacing ensure the servicer uses parts specified by the manufacturer or parts that have the same characteristics as the original parts. Unauthorized substitutes may result in fire, electric shock, or other Hazards.

（4）**Safety check:** After repairs or service, ask the servicer to perform safety checks to confirm that the unit is in proper working condition.

WARRANTY
If your product does not work properly because of a defect in materials or workmanship, our Company (referred to as "the warrantor") will, for the length of the period indicated as below, **(Parts(2)Year, Labor(90) Days)** which starts with the date of original purchase ("Limited Warranty period"), at its option either(a) repair your product with new or refurbished parts, or (b) replace it with a new of a refurbished product. The decision to repair or replace will be made by the warrantor. During the "Labor" Limited Warranty period there will be no charge for labor.
During the "Parts" warranty period, there will be no charge for parts. You must mail-in your product during the warranty period. This Limited Warranty is extended only to the original purchaser and only covers product purchased as new. A purchase receipt or other proof of original purchase date is required for Limited Warranty service.

MAIL-IN SERVICE
When shipping the unit carefully pack and send it prepaid, adequately insured and preferably in the original carton. Include a letter detailing the complaint and provide a day time phone and/or email address where you can be reached.

LIMITED WARRANTY LIMITS AND EXCLUSIONS
1) This Limited Warranty ONLY COVERS failures due to defects in materials or workmanship, and DOES NOT COVER normal wear and tear or cosmetic damage.
The Limited Warranty ALSO DOES NOT COVER damages which occurred in shipment, or failures which are caused by products not supplied by warrantor, or failures which result from accidents, misuse, abuse, neglect, mishandling, misapplication, alteration, faulty

installation, set-up adjustments, misadjustment of consumer controls, improper maintenance, power line surge, lightning damage, modification, or service by anyone other than a Factory Service center or other Authorized Servicer, or damage that is attributable to acts of God.

2) THERE ARE NO EXPRESS WARRANTIES EXCEPT AS LISTED UNDER "LIMITED WARRANTY COVERAGE". THE WARRANTOR IS NOT LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF THIS PRODUCT, OR ARISING OUT OF ANY BREACH OF THIS WARRNTY. (As examples, this excludes damages for lost time, cost of having someone remove or re-install an installed unit if applicable, travel to and from the service, loss of or damage to media or images, data or other recorded content. The items listed are not exclusive, but are for illustration only.)

3) PARTS AND SERVICE, WHICH ARE NOT COVERED BY THIS LIMITED WARRANTY, ARE YOUR RESPONSIBILITY.