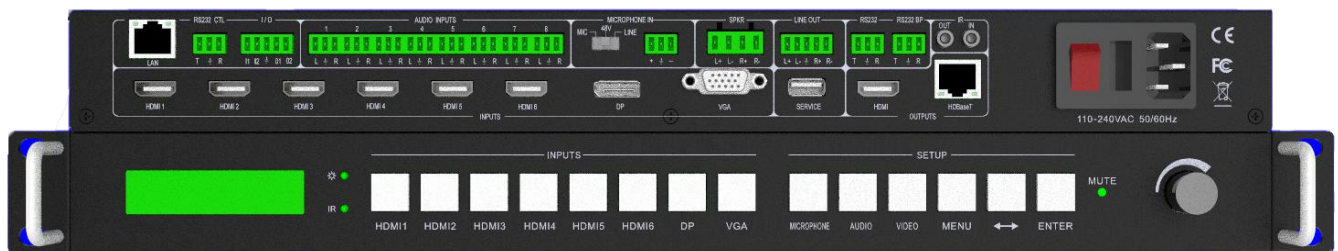# Seamless UHD Presentation Switcher

Model No. FL0802PS

⚠ Warning

- 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. **Introduction**

FL0802PS is a high-performance seamless Ultra HD presentation switcher with multi-format signal handling. This device scales the video, extract or embed the audio, and outputs the signal through one HDMI port and one HDBaseT port. For Audio out, there are 2x20W speaker output and balanced stereo audio output.

FL0802PS key features
- Seamless switching
- Support HDMI 2.0,HDCP 2.2,DP 1.2
- Mirrored output with HDMI and HDBaseT output ports
- HDBaseT transmission, 70 meters/1080P@60 and 45 meters/4K@60
- 8 video inputs – 6 HDMI ports, 1 DP port, 1 VGA port
- 9 audio source selections (LR1 to LR8 and embedded audio) for HDMI/DP input
  8 Audio source selections (LR1 to LR8) for VGA video input
- Microphone mixing or stand alone function
- 3 Microphone modes, 48V (Phantom supply)/Mic/Line
- 2x20W speaker output and balanced audio output
- Speaker and Microphone volume can be controlled by front panel or PC Tool
- Front panel,RS232,TCP/IP (LAN 10M/100M) control
- IR IN/OUT,RS232 IN/OUT superimposed on HDBaseT transmission
- EDID management， out resolution selection
- Additional IO function (2 outputs,2 inputs)

Note, When VGA input, there is no seamless switching for this source.

2. **Front Panel Control**

MICROPHONE
A. Press this button to switch on/off MIC input.
B. When switch on, the insight LED will be lighted
C. Long press MICROPHONE button, front LCM will indicate to enter MIC Volume controlling, then rotate the VOLUME Knob to adjust MIC volume

AUDIO
A. Press this button to switch on/off the current audio source except MIC
B. When switch on, the insight LED will be lighted

VIDEO
A. Press this button to switch on/off video input
B. When switch on, the insight LED will be lighted
C. When switch off, video output will be replaced with black screen and audio   input/output will continue
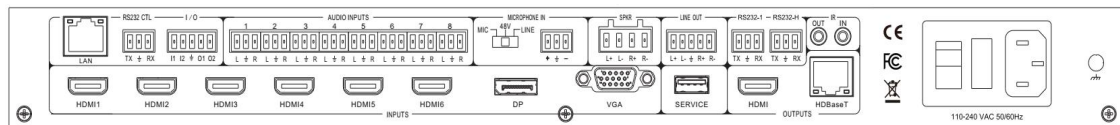
VOLUME Knob
A. Rotate this knob to adjust speaker volume (range 0…50)
B. Press this Knob to mute/unmute speaker.
C. When speaker is muted, the MUTE led on the front panel will be lighted
D. This Knob can also be used to control MIC volume, please refer to the description on MICROPHONE above

MENU, ↔,ENTER
A. These three buttons are combination buttons, user can use these button to adjust Output Resolution/EDID management/Audio source selection for each input port/Output HDCP mode
   MENU button to switch main menu, ↔ button to switch sub option, and ENTER button to confirm
B. Output resolution
   AUTO, 3840x2160@60, 3840x2160@50 ,3840x2160@30,
   1920x1200@60, 1920x1080@60, 1920x1080@50, 1600x1200@60,
   1360x768@60, 1280x720@60 , 1280x720@50,1024x768@60,
   When user select AUTO, the device will output the prefer resolution of displayer

C. EDID option

Auto, Manual,3840x2160@60, 3840x2160@30,

1920x1080@60,1280x720@60,1920x1200@60

When user select EDID AUTO, the device will copy the EDID of downstream displayer to each input port

When user select EDID MANUAL, the device will use the manual EDID which defined by PC Tool as current
EDID selection. Please refer to PC Tool section

D. Set Audio source

User can define audio source for each video input port

E. Output HDCP selection

HDCP AUTO, HDCP OFF, HDCP 1.4, HDCP 2.2

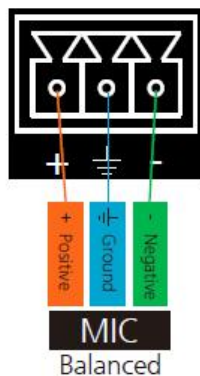Suggest HDCP OFF

3. Rear Panel

- **LAN(10M/100M)/RS232 CTL** are for PC control
- **I/O** 5Pin captive screw connector, I1 /I2 are for input level detect and O1/O2 are for output level setting. Please refer to PC Tool for I/O configure
- **LR** and **Microphone** inputs ,9x3 Pin male captive screw connectors
- **LINE OUT**, balanced audio output, 5 pin male captive screw connector for user to connect with external amplifier
- **MIC DIAL SWITCH**, according to different microphone conditions, there are three options for user to select,48V/MIC/LINE
- Speaker output, 4 pin male captive screw connector, 2x20W
- **IR IN/OUT**, 2x3.5mm jacks, transmitting IR signal superimposed on HDBaseT transmission
- **RS232-1**, 1x3 Pin male captive screw connector, just for future development
- **RS232-H**, 1x3 Pin male captive screw connector, transmitting a separate RS232 signal superimposed on HDBaseT transmission
- **HDMI OUT**, suggest use HDMI 2.0 cable to connect with displayer
- **HDBaseT OUT**, cat5e/cat6 cable, transmission distance 70 meters/1080p@60 and 45 meters/4K@60
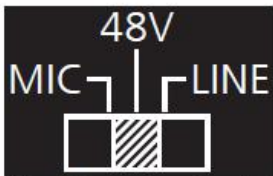- **Service Port**, it is for firmware upgrade
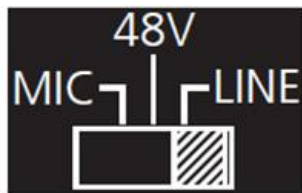
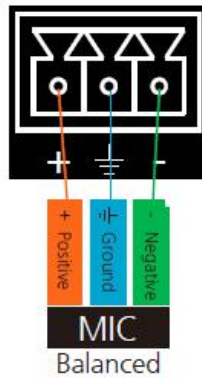## 4. Microphone Connection

MIC (Dynamic MIC)

Connect dynamic or self-powered microphones in this mode.

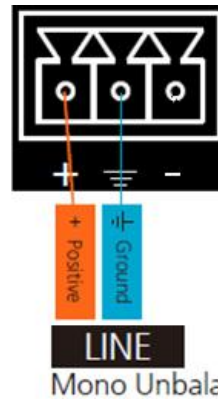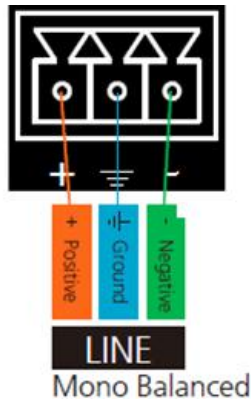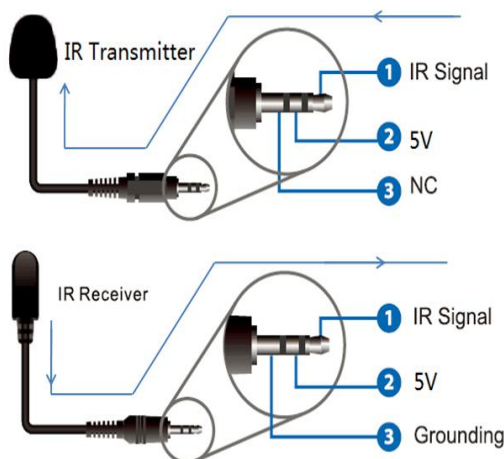Use this setting for phantom powered microphones. Supplies 48 volts.

MIC
Balanced

Connect wireless microphone receivers (or other sources) with line level outputs using this setting. Either balanced, unbalanced, mono, or two channel connections may be used.
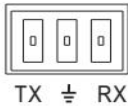
LINE
Mono Balanced

LINE
Mono Unbalance

5. 3.5mm IR connectors (option)

IR Transmitter

1 IR Signal
2 5V
3 NC

IR Receiver

1 IR Signal
2 5V
3 Grounding

6. RS232 and LAN Control
6.1. RS232 connector
- RS-232 control, baud rate 9600,male phoenix captive screw connector
- Pins configuration as bellow.

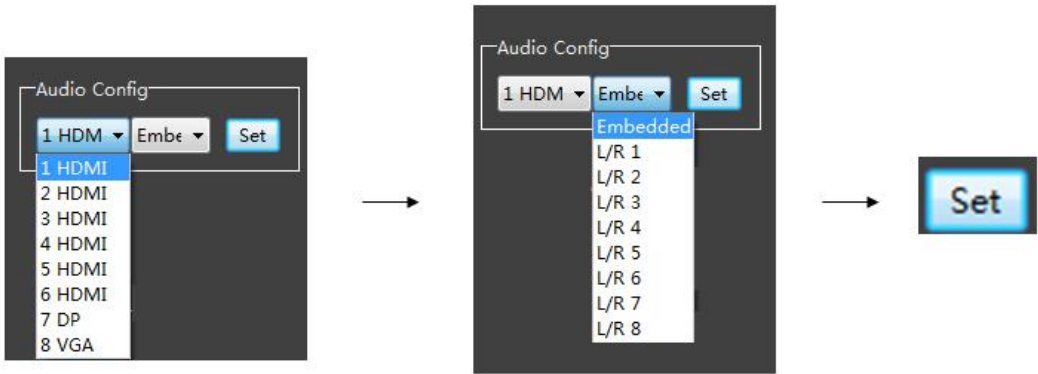| Pin	Description
TX	Switcher → PC
⏚	Ground
RX	Switcher ← PC

TX ⏚ RX

6.2. PC Tool

6.2.1. RS232 Control

Open the Presentation Switch PC Tool, select Ctrl mode **UART** and press connect

Special descriptions about some of PC Tool items

- **EDID MANUAL**

  User can read the EDID of displays or open one existing EDID file and write to input ports .
  This EDID data will be stored in device as manual EDID data

- **Audio Configure**

  This is used to configure audio source for each input port
  For example, set HDMI 1 audio with embedded audio, user can follow below steps
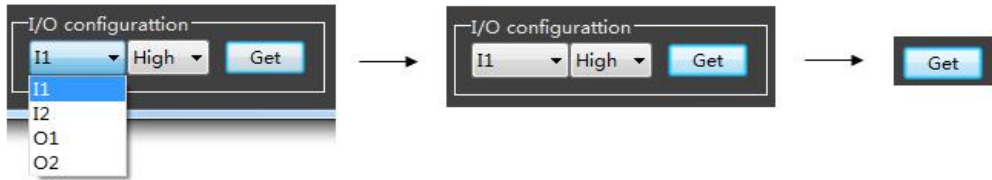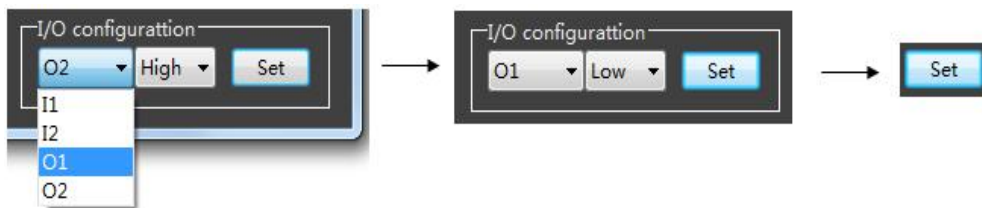
- **Auto Source**

  When activated, the device will auto switch to the last activated input

  Suggest not activate Auto Source function

- **IO Configure**

  This is used for some special control

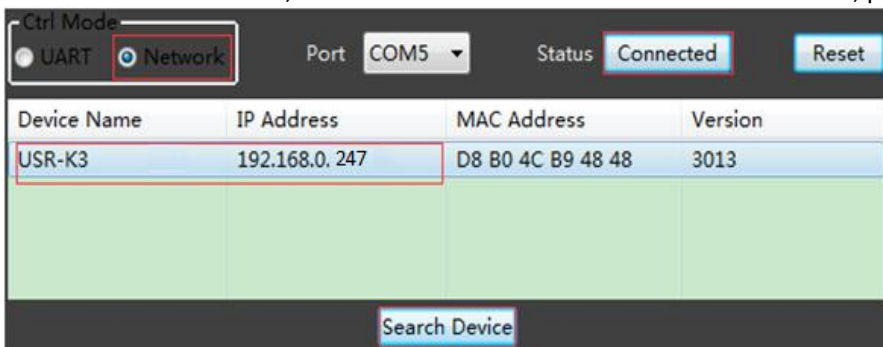 To get I1 level as below steps

  To set O1 level to low as below steps

6.2.2. LAN/WEB Control

A. Please select **Network** control mode

B. Press click **Search Device**, then click one item in the list to select the device, press connect to control via Network

Default IP address is 192.168.0.247

C. Open the web browser, enter IP address which you will get in the searching list, press enter, then will show

User Name: admin

Password: admin

D. Login IE browser to select the input source, and other control

7.   Electrical parameters

Interface	HDMI-A, DB-15, Screw Connectors, RJ45, Display Port
HDMI /DP /VGA Version	HDMI2.0,HDCP2.2,DP1.2,VESA
Bandwidth	18Gbps
Video Resolution	
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. Note: This Device does not support 4:2:0 Color space
Output	Auto, 3840x2160@60Hz, 3840x2160@50Hz, 3840x2160@30Hz,1920x1080@60Hz, 1920x1080@50Hz, 1280x720@60Hz, 1024x768@60Hz, 1360x768@60Hz,1600x1200@60Hz, 1920x1200@60Hz,
EDID option	Auto, Manual,3840x2160@60, 3840x2160@30, 1920x1080@60,1280x720@60,1920x1200@60
HDMI Amplitude	T.M.D.S +/- 0.4Vpp
Differential impedance	100±15ohm
RS232 control Baud rate and protocol	Baud rate：9600, data bit：8,
	stop bit：1,no parity checking
Ethernet	IE10.0+,HTML5
Max Power Consumption	60W, 110-240VAC
Mechanical dimensions, Size(mm)	430(L)X220(W)X44 (H)
Weight	4Kg
Operating temperature	0 to 40°C
Storage temperature	-20 to 70°C
Permissible humidity	10%-50%

8.   Package Contents

Item	Quantity
unit	1
User Manual	1
Bracket	2
5 pin female captive screw connector	1
3 pin female captive screw connector	12
4 pin female captive screw connector	1
AC Power Cord	1