

# **16x1 HDMI Multi-Viewer with Seamless Switcher**

**User Manual**

**VER 1.2**

## 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.

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## 1. Introduction

This product is a high performance 16 by 1 Multi-Viewer with seamless switcher. It supports sixteen High definition input source display on one screen. As a switcher, it can also seamlessly switch the sixteen HD input freely. The product can be controlled by various ways, through the front panel button control and RS-232 control etc.

## 2. Features

- ☆ Compliant with HDMI 1.3a, HDCP 1.2 ;
- ☆ Supports multiplexed HDMI 16-input and 1-output ;
- ☆ Supports up to 1080p High Definition resolution ;
- ☆ Support 16 by 1 Quad Multi-viewer and seamless switch ;
- ☆ Support scale up, scale down function ;
- ☆ Support multiple output resolution ;
- ☆ Support digital audio format LPCM/AC3/DTS
- ☆ Support button and RS-232 control ;

## 3. Package Contents

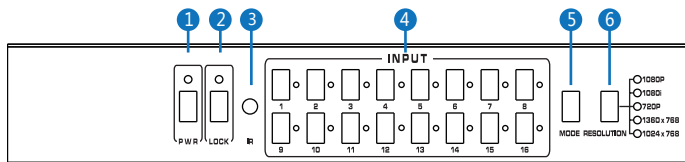
- ① 1× 16×1 HDMI Multi-Viewer
- ② 1× 12V/5A DC Power Adapter
- ③ 1× User Manual
- ④ 1× RS-232 Cable
- ⑤ 2× Mounting ears

## 4. Specifications

Technical	
Video Bandwidth	2.25Gbps
Input Ports	16 × HDMI (Female type), 1x RS232
Output Ports	1 × HDMI (Female type),
Audio output	PCM2, 5.1, 7.1CH, Dolby 5.1, DTS5.1
Input Resolution	480i60Hz, 480p60Hz, 576i50Hz, 576p50Hz, 720p50/60Hz, 1080i50/60Hz, 1080p 24/30/50/60Hz, 800x600@60, 1024x768@60, 1280x720@60, 1920x1080@60;
Output Resolution	1080p, 1080i, 720p, 1024x768, 1360x768
ESD Protection	±8kV (Air-gap discharge), ±4kV (Contact discharge)
Power Supply	12V/5A DC (US/EU standards, CE/FCC/UL certified)
Dimensions	440mm(W)×200mm(D)×45 mm(H)
Weight	1800g
Chassis Material	Metal
Silkscreen Color	Black
Operating Temperature	0°C ~ 40°C / 32°F ~ 104°F
Storage Temperature	-20°C ~ 60°C / -4°F ~ 140°F
Relative Humidity	20~90% RH (non-condensing)
Power Consumption	24W

## 5. Operation Controls and Functions

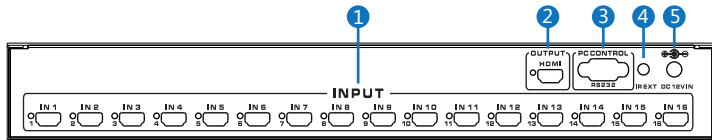
### 5.1 Front Panel



Number	Name	Function description
1	POWER	Press this button to power the device on/off. The LED will illuminate green when the power is on, red when it is in 'Standby' mode.
2	LOCK	Press this button to lock all the buttons on the panel, press again to unlock. The red LED will illuminate when the button is locked. On the contrary, turn dark when unlock.
3	IR receiver window	Receive the IR from the remote controller.
4	HDMI input selection button area	Press to select the input from 1 to 16.
5	MODE	Press the button to select display mode.
6	RESOLUTION	Press the button to select the output resolution.

NO.	RESOLUTION
1	1080P, Main image audio
2	1080I, Main image audio
3	720P, Main image audio
4	1360x768, Main image audio
5	1024x768, Main image audio

### 5.2 Rear Panel

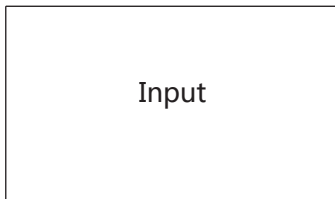


Number	Name	Function descriptions
1	HDMI INPUT Area	Connect HDMI sources. LED 1-16 illuminate when the HDMI signal plug in corresponding input port with HDMI cable.
2	HDMI OUTPUT Area	Output for displays, AVR etc. LED illuminate when the display plug in corresponding output port with HDMI cable.
3	RS-232	Connect to a PC or control system with D-Sub 9-pin cable for the transmission of RS-232 commands.
4	IR EXT	IR extender receiver port, connect with IR receiver cable.
5	DC POWER IN	Plug the 12V/5A DC power supply into the unit and connect the adapter to an AC outlet.

## 6. Detail description of display mode

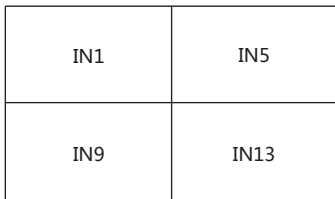
The 16x1 multi-viewer have 4 display modes.

**MODE1:**The 16x1 multi-viewer will separate display the sixteen HD input, and now it is a seamless switcher.



**MODE1-16×1 Seamless Switcher**

**MODE2:** The 16x1 multi-viewer divides the four HD input to the same size and display on one screen. And now switch the input button on front panel or IR remote, the HDMI output audio will corresponding to the selected input source.



**MODE2-4×1 Multi-Viewer**

**MODE3:** The 16x1 multi-viewer divides the nine HD input to the same size and display on one screen. And now switch the input button on front panel or IR remote, the HDMI output audio will corresponding to the selected input source.

IN1	IN2	IN3
IN5	IN6	IN7
IN9	IN10	IN11

**MODE3-9x1 Multi-Viewer**

**MODE4:** The 16x1 multi-viewer divides the sixteen HD input to the same size and display on one screen. And now switch the input button on front panel or IR remote, the HDMI output audio will corresponding to the selected input source.

IN1	IN2	IN5	IN6
IN3	IN4	IN7	IN8
IN9	IN10	IN13	IN14
IN11	IN12	IN15	IN16

**MODE4-16x1 Multi-Viewer**

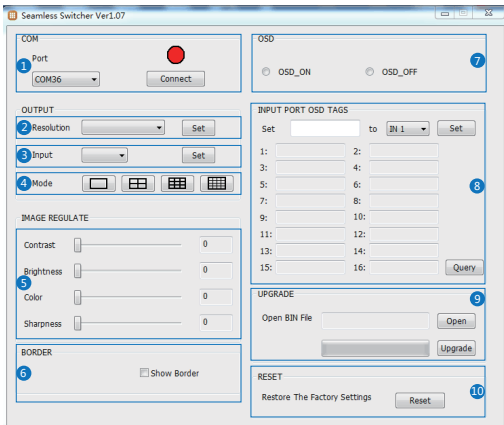
## 7. PC Controller User Guide

### Installation

The PC controller is green software. Just use a cable to connect the PC via RS-232 port and copy "Quad Multi-Viewer.exe" to PC to complete installation.

### Preparation

- ① Connect PC and multi-viewer by RS-232 cable (headers of both sides of cable should be FEMALE).
- ② Power-up multi-viewer.
- ③ Double click "Quad Multi-Viewer.exe" icon to run it.



- ① Select PC connect COM port , Click to connect or disconnect PC and multi-viewer and the corresponding light will display.
- ② Select the HDMI output resolution.
- ③ Select the input source.
- ④ Select the output mode, see the detail description (chapter 6).
- ⑤ Adjust the HDMI output picture quality.
- ⑥ Display or hidden the border.
- ⑦ Display or hidden the OSD menu.
- ⑧ Input characters in the Set box (The maximum is 16 characters). The user select the input port that needs to be set, then click the Set key on the right. The input port set are completed and it have saved in the following list box. Click the Query key and the corresponding list will display.
- ⑨ FW upgrade part: Click to open Firmware. The click the upgrade button, the new firmware will auto download to the multi-viewer and restart it.
- ⑩ Press the Reset button, the quad multi-viewer will reset to factory state.



## 8. Application Example

