



VLML-16X1H13

16x1 HDMI 1.3 Switcher with Seamless Switching and
Multiview



User Manual

VER 1.2

Thank you for purchasing this product

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

A Surge protection device is recommended.

This product contains sensitive electrical components that electrical spikes may damage, surges, electric shocks, lightning strikes, etc. The use of surge protection systems is highly recommended 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 a seamless switcher. It supports sixteen High-definition input sources displayed on one screen. As a switcher, it can also seamlessly switch the sixteen HD inputs freely. The product can be controlled in 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
- ☆ Supports 16 by 1 Quad Multi-viewer and seamless switch
- ☆ Supports scale up, scale down function
- ☆ Supports multiple output resolution
- ☆ Supports digital audio format LPCM/AC3/DTS
- ☆ Supports button and RS-232 control

3. Package Contents

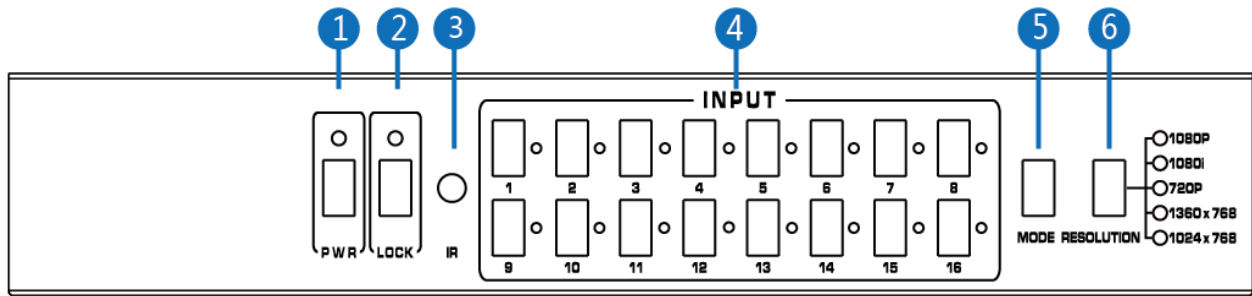
- ① 1× 16×1 HDMI Multi-Viewer
- ② 1× 12V/5A DC Power Adapter
- ③ 1× RS-232 Cable
- ④ 2× Mounting ears
- ⑤ 1× User Manual

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)
Dimensions	440mm(W) × 200mm(D) × 45 mm(H)
Weight	1.8KG
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

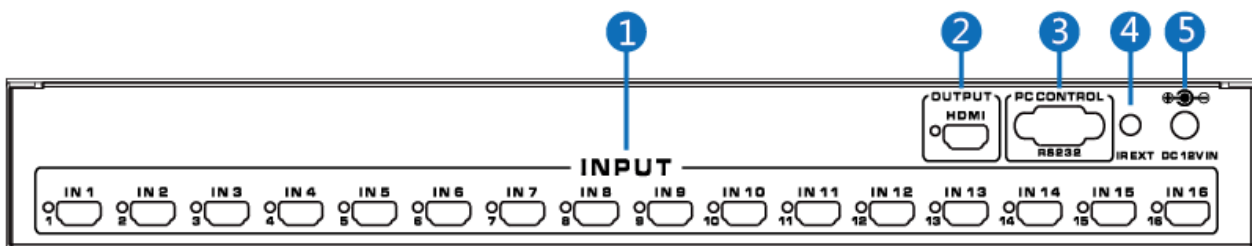
5.1 Front Panel



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 and red when it is in 'Standby' mode.
2	LOCK	Press this button to lock all the buttons on the panel, and press again to unlock. The red LED will illuminate when the button is locked. On the contrary, turn dark when opened.
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 the 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



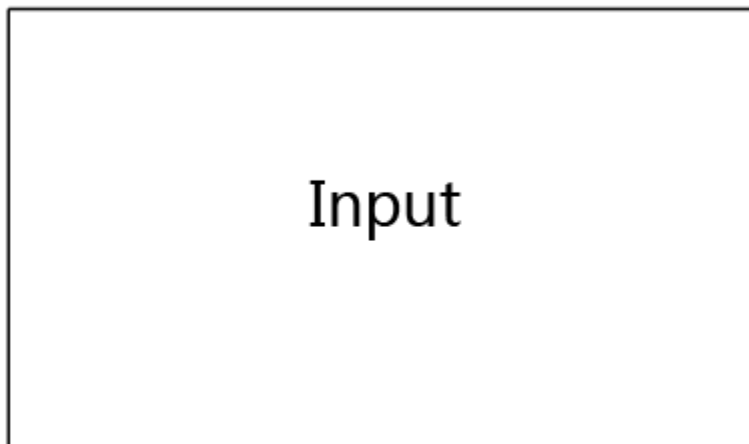
Number	Name	Function description
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1	HDMI INPUT Area	Connect HDMI sources. LED 1-16 illuminate when the HDMI signal plugs in the corresponding input port with the HDMI cable.
2	HDMI OUTPUT Area	Output for displays, AVR, etc. LED illuminates when the display plug in the corresponding output port with an HDMI cable.
3	RS-232	Connect to a PC or control system with a D-Sub 9-pin cable to transmit 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 has 4 display modes.

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



MODE1-16x1 Seamless Switcher

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

IN1	IN5
IN9	IN13

MODE2-4x1 Multi-Viewer

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

displays on one screen. And now, switch the input button on the front panel or IR remote, and the HDMI output audio will correspond to the selected input source.

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

MODE4-16×1 Multi-Viewer

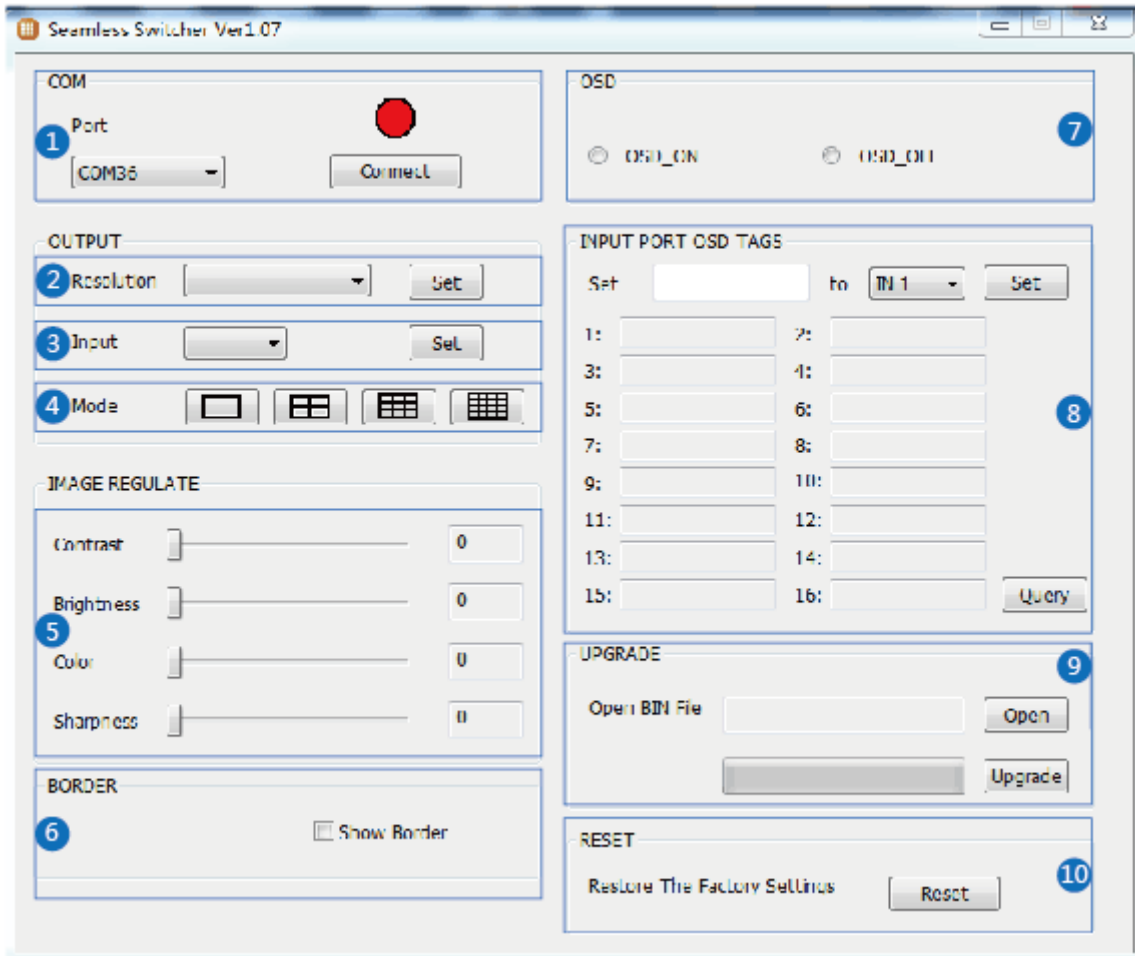
7. PC Controller User Guide

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 the PC to complete installation.

Preparation

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



① Select PC to 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 detailed description (chapter 6).

⑤ Adjust the HDMI output picture quality.

⑥ Display or hide the border.

⑦ Display or hide the OSD menu.

⑧ Input characters in the Set box (The maximum is 16 characters). The user selects the input port that needs to be set, then clicks the Set key on the right. The input port set is completed, and it has been saved in the following list box. Click the

Query key, and the corresponding list will display.

⑨ FW upgrades part: Click to open Firmware. Then click the upgrade button, and the new firmware will auto-download to the multi-viewer and restart it.

⑩ Press the Reset button, and the quad multi-viewer will reset to factory state.

8. Application Example

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