

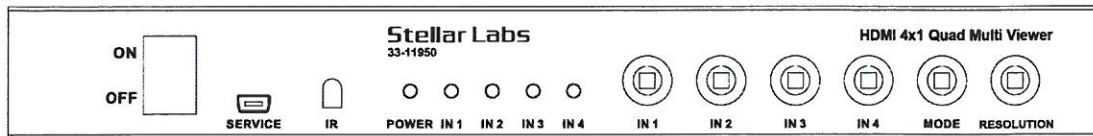
HDMI 4x1 Quad Multi Viewer

Model #33-11950

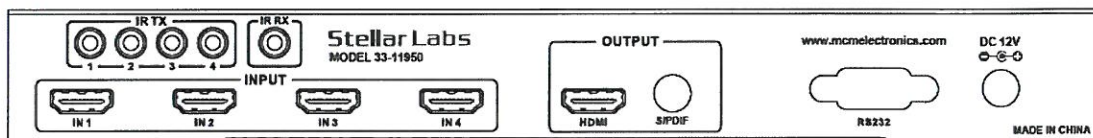


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Operation Manual



FRONT



REAR

1. Introduction

This product is a high performance 4 by 1 quad screen multi viewer with seamless input switching. It supports simultaneous viewing of four separate high definition input sources on one screen, with three different multi-view modes. The tremendous amount of processing power required to accomplish this also enables this device to act as a seamless four-input HDMI switcher. It offers various methods of control, including front panel push button, IR remote and external RS232 control. The product provides both HDMI and coaxial S/PDIF outputs. The S/PDIF output is standard female RCA type and supports two channels of uncompressed PCM audio or compressed 5.1/7.1 surround sound, such as DTS.

Features

- Compliant with HDMI 1.3a, HDCP 1.2
- Supports multiplexed HDMI 4-input and 1-output
- Supports up to 1080p High Definition resolution
- Supports 4 x 1 Quad multi-viewer and seamless switching
- Supports scale up/down function
- Supports multi output resolution

- Supports digital audio formats LPCM / AC3 / DTS
- Supports front panel button, IR and RS232 control

2. Package Contents

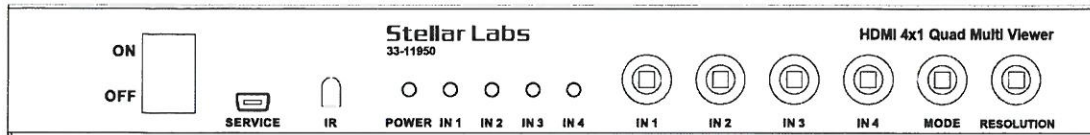
- HDMI Quad Multi-Viewer 1pc
- 12V / 2.5A DC power adapter 1pc
- IR Remote Control 1pc
- Wide-band IR Receiver 1pc
- Wide-band IR Emitters 4pcs
- RS232 Cable 1pcs
- Operation Manual 1pcs

3. Specifications

| | |
|------------------------------|---|
| Video Bandwidth | 2.25Gbps |
| Input Ports | 4 × HDMI (Female type), 1 x RS232 |
| Output Ports | 1 × HDMI (Female type) |
| Audio output | PCM2, 5.1, 7.1CH, Dolby 5.1, DTS5.1 |
| Input Resolution | 480i 60Hz, 480p60Hz, 576i 50Hz, 576p 50Hz, 720p 50/60Hz, 1080i 50/60Hz, 1080p 24/30/50/60Hz ,800x600@60Hz, 1024x768 @60, 1280x720@60, 1920x1080@60; |
| Output Resolution | 1080p, 1080i, 720p, 1024x768, 1360x768 |
| ESD Protection | Human Body model: ±8 kV (air-gap discharge) ±4 kV (contact discharge) |
| Power Supply | 12VDC, 2.5A (US/EU standards, CE/FCC/UL certified) |
| Dimensions | 1.25" (H) x 9.84" (W) x 4.65" (D) |
| Weight | 1.6 lbs |
| Chassis Material | Metal |
| Silkscreen Color | Black |
| Operating Temperature | 0 ~ 40 °C / 32 ~ 104 °F |
| Storage Temperature | -20 ~ 60 °C / -4 ~ 140 °F |
| Relative Humidity | 20~90 % RH (non-condensing) |
| Power Consumption | 10W |

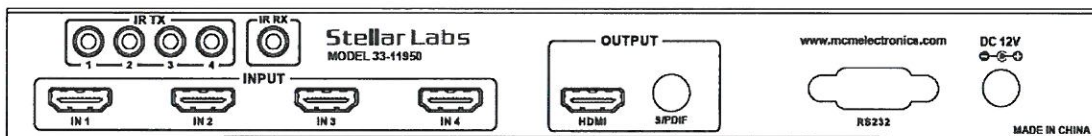
4. Operation and Functions

5.1 Front panel



1. **ON/OFF:** Power on/off switch
2. **SERVICE:** For factory use only
3. **IR :** Remote control receiver window
4. **POWER LED:** Red LED indicates device power is ON
5. **IN 1 / 2 / 3 / 4 LED:**
 - a) In SWITCH mode, this identifies which source is being fed to the output
 - b) In QUAD mode, this identifies which source is the primary screen as well as which audio is passing through
6. **INPUT BUTTON:** Selects the input source
7. **MODE BUTTON:** Selects the multi-view display mode
✕see the detail description below (section 5.7)
8. **RESOLUTION BUTTON:** Selects HDMI output resolution

5.2 Rear panel



1. **Input:** HDMI source connections from your DVD, Blue Ray, PS3, set-top box, laptop etc.
2. **HDMI OUTPUT:** Output being fed to your HDTV monitor or projector
3. **S/PDIF OUTPUT:** Female RCA output provides digital audio connection for connection to separate home theater components. The audio sent to this connector follows that of the HDMI output.
4. **IR RX:** Connect to the IR Receiver for IR signal reception. Ensure that remote being used is within the direct line-of-sight of the IR receiver.
5. **IR TX:** Connect the IR Blaster cable included in the package for IR signal transmission. Place the IR blaster in direct line-of-sight of the equipment to be controlled.
6. **RS232:** Connect the RS232 port to the PC or notebook by RS232 Cable.
7. **DC 12V:** Plug the 12V DC power supply into the unit and connect the adaptor to AC wall outlet.

5.3 Connection and Operation

1. Connect sources such as Blu-Ray Player, Play Station 3, audio/video receiver, satellite receivers and computers equipped with HDMI output interfaces with a short high-speed HDMI cable to the HDMI Switcher inputs.
2. Connect the HDMI output to a high-definition display such as HD-LCD, HD-DLP or HD projector, or HD television with HDMI input. Use high-speed HDMI cables that are recommended for the distances that are required for each connection.
3. The Switcher is powered by an external power supply which is included. Connect power first to the source, then to the Switcher and then to HD TV or projector.
4. The input sources can be controlled from the location of the television monitor. This is accomplished by using the included IR Receiver, connected to the IR RX input on the rear of the unit. The IR Emitters are then connected to the IR TX outputs, on the rear of the unit, and placed near the IR sensors of each of your four input devices.

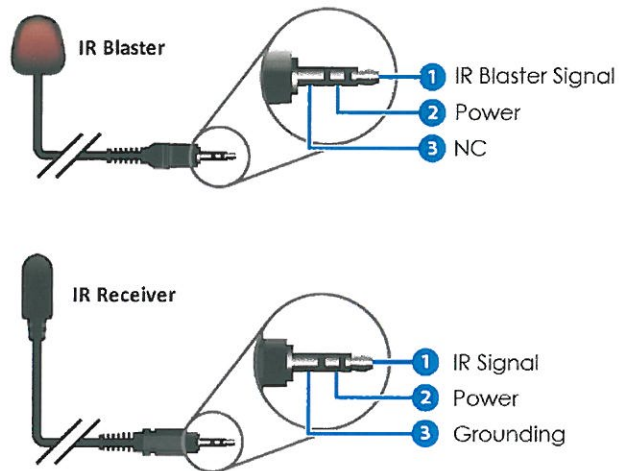
5.4 Wideband IR(30KHz---60KHz) introduction

IR RECEIVER



IR BLASTER





IR BLASTER (TX)

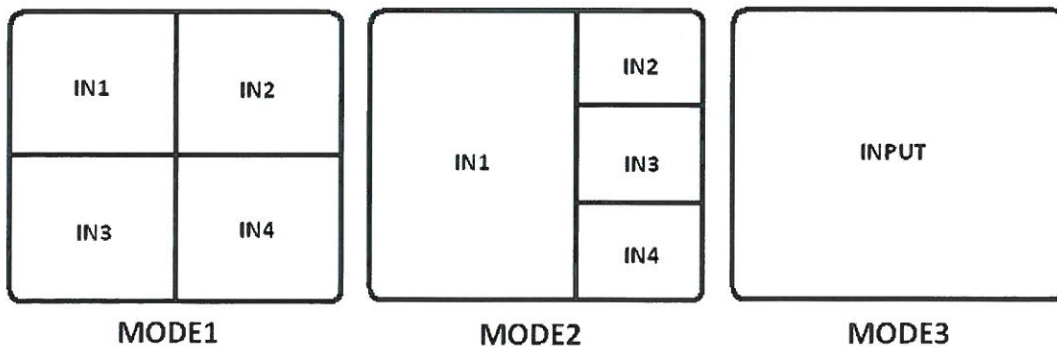
To control the source: Plug IR Blaster into IR TX port of transmitter unit; place blaster in front of the IR eye of the source.

IR RECEIVER (RX)

To control the source: Plug IR Receiver into IR RX port of receiver unit; place receiver at or near display.

5.5 Display modes

The quad multi-viewer has three display modes:

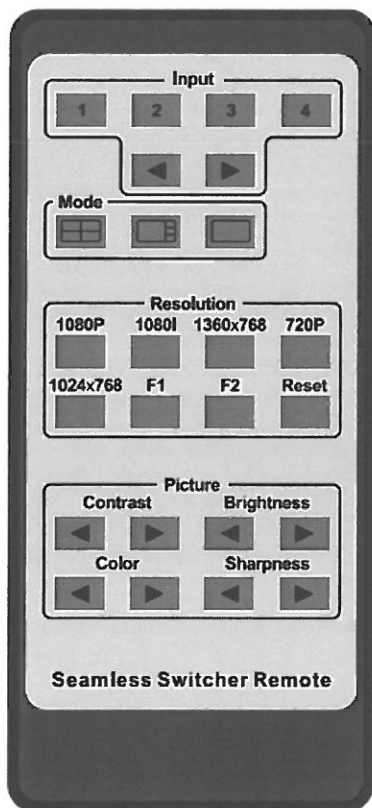


MODE1: The quad multi-viewer divides the screen into four equal parts, one for each HDMI input. Pressing INPUT buttons 1, 2, 3 or 4 on the controller or IR remote will have no effect on the picture, but will impact which audio is passed to the HDMI output.

MODE2: The quad multi-viewer divides the screen into one large and three small pictures as shown above. Pressing INPUT buttons 1, 2, 3 or 4 on the controller or IR remote will determine which of the inputs is fed to the large screen (any can be selected). The remaining inputs will be shown in numerical order on the three smaller pictures. Audio will follow the source on the larger screen.

MODE3: The quad multi-viewer now acts as a standard four input switcher. Audio and video will follow whichever of the four inputs was last selected.

6.Remote Control



1. **Input select button:** Selects the corresponding input source. The front panel LED will indicate the selected input source status.

2. **Mode select button:** Selects the Quad Viewer mode as described above.

3. **Resolution button:** Selects HDMI output resolutions, 1080p, 1080i, 720p, 1024x768, 1360x768.

F1 and F2 expand for user defined functions.

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

Picture button: Adjusts picture contrast, brightness, color and sharpness.

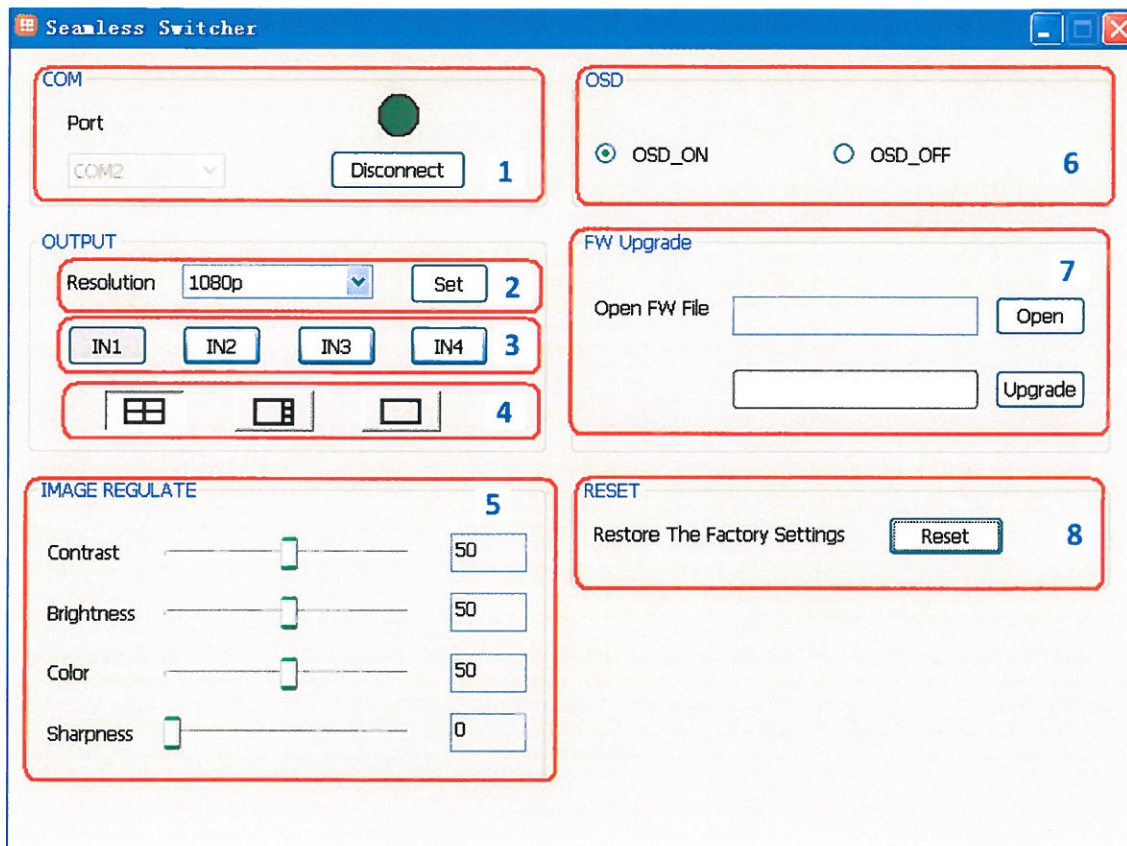
7. PC controller user guide

Installation

The PC controller is green software. Just use a cable to connect the PC via RS232 port and copy "Quad multi-viewer.exe" to PC to complete installation.

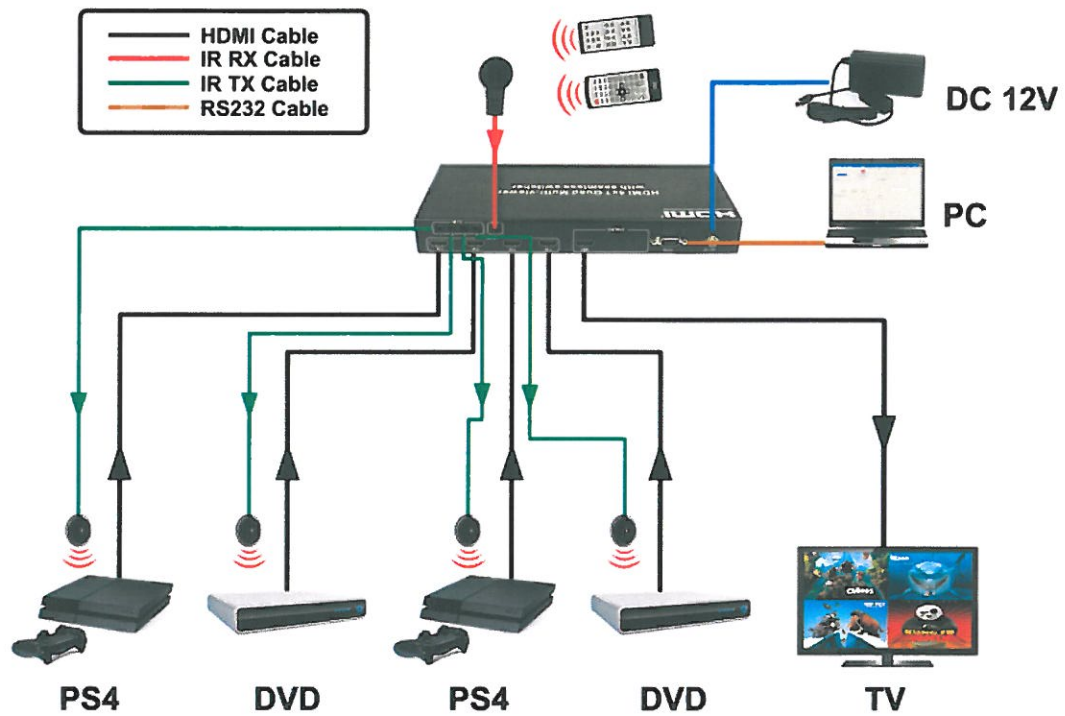
Preparation

1. Connect PC and multi-viewer by RS232 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



- Select PC connect COM port, Click to connect or disconnect PC and multi-viewer.
- Select the HDMI output resolution.
- Select the input source.
- Select the output mode, see the detail description(chapter 5.7).
- Adjust the HDMI output picture quality.
- Display or hidden the OSD menu.
- FW upgrade part: Click to open Firmware. Then click the upgrade button, the new firmware will auto download to the multi-viewer and restart.
- Press the Reset button, the quad multi-viewer will reset to factory state.

8. Connection Diagram



Warranty

This device is warranted against manufactures defects for a period of 1 year from the original date of purchase. This warranty covers all internal components and the cost of labor to either repair or replace the unit. This warranty covers only the unit, and does not cover connected equipment, or any loss that may occur, regardless of cause. It will be the sole discretion of MCM Electronics to determine the applicability of said warranty, and determination as to whether the unit will be repaired or replaced. Questions regarding application, use, or problems with this unit should be directed to MCM Electronics Tech Support, which can be found at www.mcmelectronics.com.

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