

SIMPLIFIED  
MFG

**MV2**



User Manual

**VER 1.0**

## **Thank you for purchasing this device**

The Simplified Manufacturing MV2 is designed to provide years of reliable service. At Simplified MFG, we want the experience with this device to be the best possible and are committed to helping achieve that experience.

## **Surge protection device recommended**

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

## Table of Contents

1. Introduction .....	<b>Error! Bookmark not defined.</b>
2. Features .....	3
3. Package Contents .....	<b>Error! Bookmark not defined.</b>
4. Specifications .....	4
5.Operation Controls and Functions.....	6
5.1 Front Panel .....	6
5.2 Rear Panel .....	7
6. Display Modes .....	9
7. Remote Control .....	10
8. Application Example.....	122
9. Warranty.....	12
10.Contact.....	13

## 1. Introduction

The MV2 is a “frameless” four inputs to two parallel outputs (1 HDMI & 1 VGA) switch that features the ability to process the inputs into four different multi-view formats. Four 1080p inputs can be shown simultaneously on a 4K display (up to 4K @30Hz.). In multi-view mode, the analog audio output can be switched to output any of the pictures in the multi-view.

## 1. Features

- “Frameless” instant switching
- Automatic resolution sensing/scaling  
(480p~4K 30Hz., 800x600~4K30Hz.)
- HDMI1.4b/HDCP1.4 up to 10.2Gbps capable
- 5 viewing modes
- HDMI output can be set to 5 different outputs including 720p, 1080p, and 4K @ 30Hz.
- VGA output can be set to 4 different outputs up to 1920 x

1200. Please note VGA will not support 4K

- Compact size
- Audio breakout is 3.5mm minijack (stereo)
- Control functions are via supplied remote and IR signals and front panel switching

## 2. Package Contents

- 1 x MV2 Switch with multi-view
- 1 x 12V/1A DC Power Supply
- 1 x IR Remote Control
- 2 x Mounting brackets
- 1 x User manual

## 3. Specifications

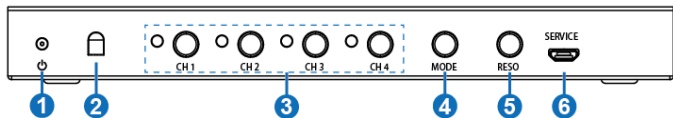
Technical	
HDMI Compliance	HDMI 1.4b
HDCP Compliance	HDCP 1.4
Video Bandwidth	10.2Gbps

Video Resolutions	3840x2160@30Hz, 1920x1080@50/60 Hz, 1280x720@50/60Hz, 1920x1200@60Hz, 1024x768@60Hz
Color Depth	8-bit
Color Space	RGB, YCbCr 4:4:4, YCbCr 4:2:2
Analog Audio Formats	LPCM2.0 44.1KHz 48KHz
ESD Protection	Human-body Model:  ±8kV (Air-gap discharge) , ±4kV (Contact discharge)
<b>Connections</b>	
Inputs ports	4x HDMI Type A [19-pin female]  1x SERVICE [Micro USB, Update port]
Outputs ports	1x HDMI Type A [19-pin female]  1x VGA [VGA-D]  1x Audio [3.5mm Stereo Mini-jack]
<b>Mechanical</b>	
Housing	Metal Enclosure
Color	Black
Dimensions	185mm (W)×128mm (D)×20mm (H)

Weight	595g
Power Supply	Input: AC100~240V 50/60Hz, Output: DC12V/1A  (US/EU standards, CE/FCC/UL certified)
Power Consumption	7.68W (max)
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)

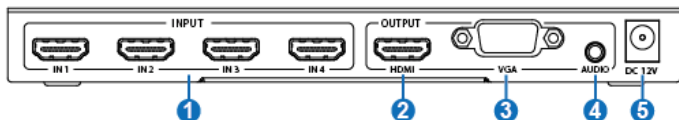
## 5.Operation Controls and Functions

### 5.1 Front Panel



Number	Name	Function description
1	POWER LED	The LED will illuminate green when the unit is working, red when the unit is in standby mode.
2	IR	IR receiver window. It accepts the remote control signal of this device only.
3	CH1/CH2/CH3/CH4 button	Selects input channel button (Please see "6. Display Modes" detail description).
4	MODE button	Press this button to cyclical selection display mode output (Please see "6. Display Modes" detail description). Press this button up to 5s, the output screen is full screen and equal proportion display.
5	RES.	Cycling select different output resolution. Press this button up to 5s to opening or closing window display frame.
6	SERVICE port	Firmware update used. (Manufacture use only.)

## 5.2 Rear Panel

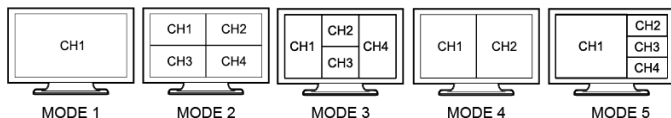




Number	Name	Function description
1	HDMI INPUT	HDMI input ports for the four sources that this device will switch/multiview
2	HDMI OUTPUT	Connection for display up to 4K @ 30Hz.
3	VGA OUTPUT	VGA output port that is in parallel with HDMI output (does not support 4K)
4	AUDIO OUTPUT	Analog audio output port. (Note: If the HDMI output is MODE 1, the audio output follows the video content. If the HDMI output is MODE 2/3/4/5, press CH1/CH2/CH3/CH4 up to 5s to selecting audio output or using remote control to cyclical selection audio output. The default status is CH1 screen audio output.)
5	DC 12V	Plug the 12V/1A DC power supply into the unit and connected the adapter to an AC outlet.

## 6. Display Modes

The MV2 has 5 display modes. Please see the below;

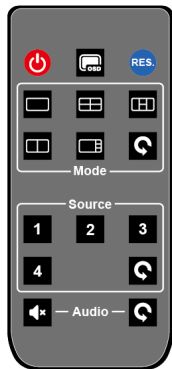


**MODE 1:** The MV2 will display each input separately. Press the CH1/CH2/CH3/CH4 buttons on-panel or using IR remote control to select the source. The LED indicators will indicate which source is selected.

**MODE 2:** The MV2 divides four HD inputs into a “quad” view on the screen. The LED indicator “4” is on. In the CH1 window, you can press the CH1 button on-panel or use the remote control to cyclical input position in the quad view. In the CH2 window, you can press the CH2 button on-panel or use the remote to cycle input 2’s source, etc. The rest can be done in the same manner.


**MODE 3:** The MV2 divides four HD inputs and display on a screen. The LED indicator “4” is on. Operation method is the same as MODE 2.


**MODE 4:** The MV2 divides two HDMI inputs with same size and display on a screen. The LED indicators CH1/CH2 light are on. In the CH1 window, you can press the CH1 button on-panel or using IR remote control the Source 1 button to cyclical selection four inputs source. On the CH2 window, you can press the CH2 button on-panel or using IR remote control the Source 2 button to cyclical selection four inputs source.



**MODE 5:** The MV2 divides four HD inputs and display on a screen. The LED indicator “4” is on. Operation method is the same as MODE 2.


## 7. Remote Control

 : Press to toggle power

 : Press this button to open or close display window to toggle positions with cycle button


**RES.** : Press this button to cycle through output resolutions.

### *Mode:*


: Press these buttons to select output display mode.

### *Source:*

1/2/3/4: Press these buttons to select the input source.

: Press this button to cycle the input source (This button can be used only at the MODE 1).

### *Audio:*

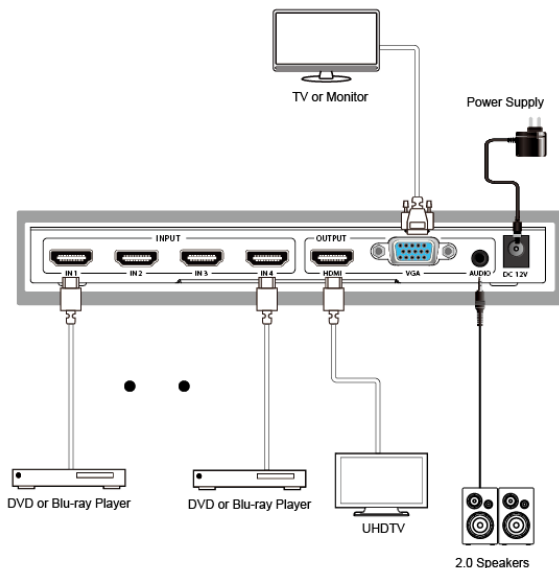
: Press this button to cycle input source audio (This button can be used at the MODE 1 only).

### *Audio:*

: Mute button.

: Press this button to cycle through audio output.

## 8. Application Example



## 9. Warranty

Should you feel that this product does not function adequately due to defects in materials or workmanship, we (referred to as “the warrantor”) will, for the length of the period indicated below (starting from the original date of the purchase) either a) repair the product with new or

refurbished parts. Or b) Replace the product with new or refurbished product. All Simplified MFG products are covered by a 3-year PARTS and LABOR warranty. During this period there will be no charge for unit repair, replacement of unit components or replacement of the product if deemed necessary. The decision to repair or replace is made by the warrantor. The purchaser must mail in the product during the warranty period. This limited warranty only covers the product purchased as new and is extended to the original purchaser only. It is non-transferrable to subsequent owners, even during the warranty period. A purchase receipt or other proof of purchase date is required for the limited warranty service.

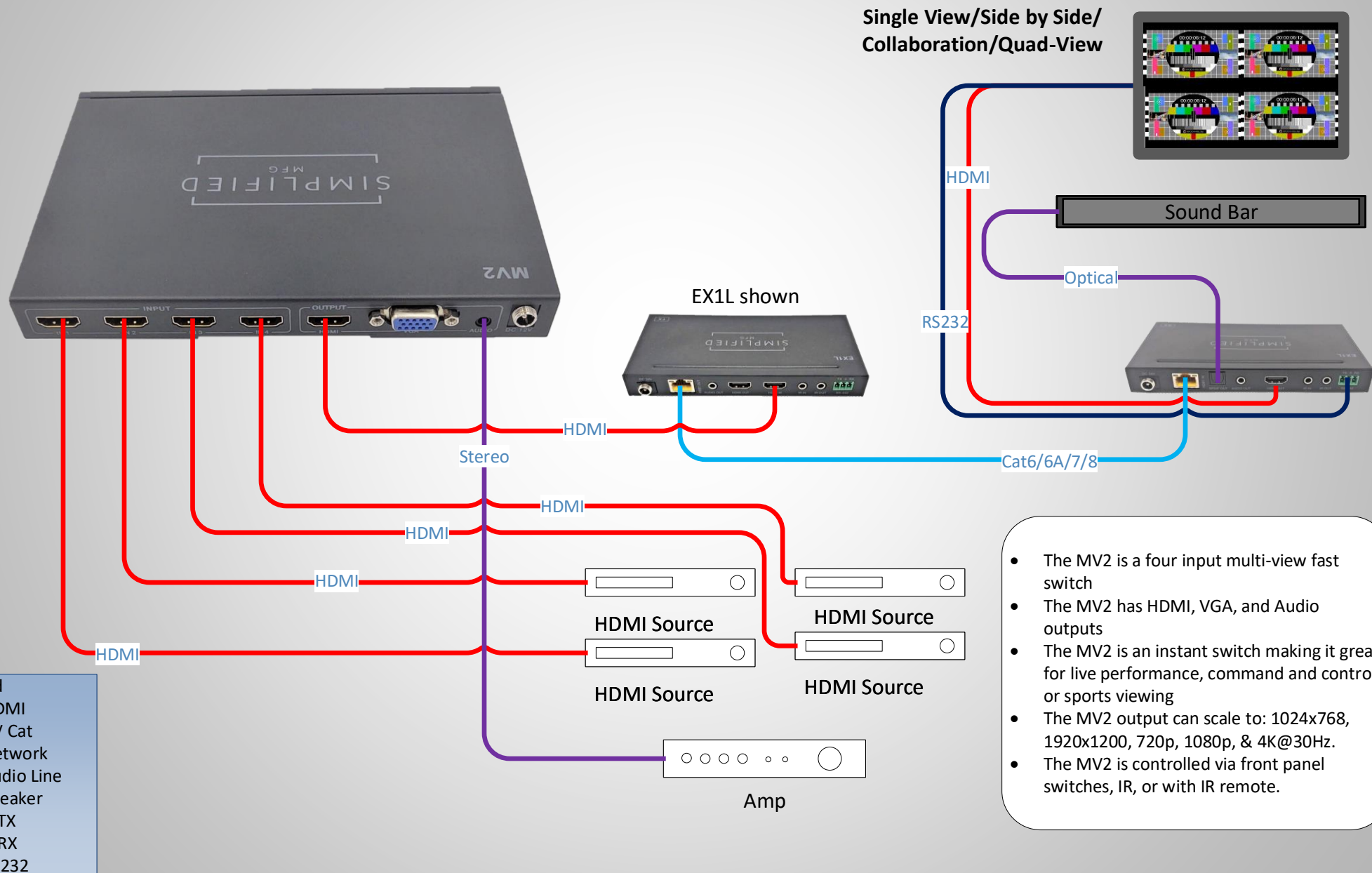
## 10.Contact

Sales and Tech Support:

P. 833-HDMI-411 (833-436-4411) E. [info@simplifiedmfg.com](mailto:info@simplifiedmfg.com)



Simplified MFG • 550 W Baseline Rd Ste 102-121 • Mesa AZ 85210



- The MV2 is a four input multi-view fast switch
- The MV2 has HDMI, VGA, and Audio outputs
- The MV2 is an instant switch making it great for live performance, command and control, or sports viewing
- The MV2 output can scale to: 1024x768, 1920x1200, 720p, 1080p, & 4K@30Hz.
- The MV2 is controlled via front panel switches, IR, or with IR remote.

# MV2

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## 1080p Frameless Switch with 4K Multiview



The MV2 is a compact 4 input to one output “frameless” switch. The MV2 has 4 HDMI Inputs and 1 HDMI Output. Switching can be accomplished by included IR remote or with IR commands from a third party control system. Switching is instantaneous. Output in quad mode is 4K. There are five output modes; single view, quad view, offset quad view, side by side, and a collaboration view as well.

## Features:

- Instantaneous switching
- 4K output in quad mode
- Five output options
- Audio breakout (3.5mm mini-jack)
- HDMI and VGA outputs
- Compact design
- 3-Year Warranty

## Specifications:

Technical	
HDMI Compliance	HDMI 1.4b
HDCP Compliance	HDCP 1.4
Video Bandwidth	2.25Gbps
Video Resolutions	In: 480i/p, 576i/p, 720p, 1080i/p, 800x600, 1024x768, 1280x720, 1920x1080 Out: 1080p and 4K 30Hz.
Color Space	RGB, YCbCr 4:4:4, YCbCr 4:2:2
Color Depth	8 Bit
HDMI Audio Formats	LPCM 2 Channel
ESD Protection	Human body model — ±8kV (air-gap discharge) & ±4kV (contact discharge)
Connections	
Inputs	4x HDMI Type A [19-pin female] 1x Micro USB Service port
Outputs	1x HDMI Type A [19-pin female] 1x VGA 1x 3.5mm [mini jack]
DC Power	1x 12V Screw Down connector
Mechanical	
Housing	Metal Enclosure
Color	Black
Dimensions	185mm [W] x 128mm [D] x 20mm [H] 7.28"x 5" x .75"
Weight	595g /21 Oz.
Power Supply	Input: AC100 - 240V 50/60Hz Output: DC 12V/2.5A (US/EU standards, CE/FCC/UL certified)
Power Consumption	7.6W
Operation Temperature	32 - 104°F / 0 - 40°C
Storage Temperature	-4 - 140°F / -20 - 60°C
Relative Humidity	20 - 90% RH (no condensation)