

# ANI-16-MV

16x1 HDMI Multi-Viewer w/ Seamless Switcher





## SAFETY INFORMATION



1. To ensure the best results from this product, please read this manual and all other documentation before operating your equipment. Retain all documentation for future reference.
2. Follow all instructions printed on unit chassis for proper operation.
3. To reduce the risk of fire, do not spill water or other liquids into or on the unit, or operate the unit while standing in liquid.
4. Make sure power outlets conform to the power requirements listed on the back of the unit. Keep unit protected from rain, water and excessive moisture.
5. Do not attempt to clean the unit with chemical solvents or aerosol cleaners, as this may damage the unit. Dust with a clean dry cloth.
6. Do not use the unit if the electrical power cord is frayed or broken. The power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords and plugs, convenience receptacles, and the point where they exit from the appliance.
7. Do not force switched or external connections in any way. They should all connect easily, without needing to be forced.
8. Always operate the unit with the AC ground wire connected to the electrical system ground. Precautions should be taken so that the means of grounding of a piece of equipment is not defeated.
9. AC voltage must be correct and the same as that printed on the rear of the unit. Damage caused by connection to improper AC voltage is not covered by any warranty.
10. Turn power off and disconnect unit from AC current before making connections.
11. Never hold a power switch in the "ON" position.
12. This unit should be installed in a cool dry place, away from sources of excessive heat, vibration, dust, moisture and cold. Do not use the unit near stoves, heat registers, radiators, or other heat producing devices.
13. Do not block fan intake or exhaust ports. Do not operate equipment on a surface or in an environment which may impede the normal flow of air around the unit, such as a bed, rug, carpet, or completely enclosed rack. If the unit is used in an extremely dusty or smoky environment, the unit should be periodically "blown free" of foreign dust and matter.
14. To reduce the risk of electric shock, do not remove the cover. There are no user serviceable parts inside. Refer all servicing to qualified service personnel. There are no user serviceable parts inside.
15. When moving the unit, disconnect input ports first, then remove the power cable; finally, disconnect the interconnecting cables to other devices.
16. Do not drive the inputs with a signal level greater than that required to drive equipment to full output.
17. The equipment power cord should be unplugged from the outlet when left unused for a long period of time.
18. Save the carton and packing material even if the equipment has arrived in good condition. Should you ever need to ship the unit, use only the original factory packing.
19. Service Information Equipment should be serviced by qualified service personnel when:
  - A. The power supply cord or the plug has been damaged.
  - B. Objects have fallen, or liquid has been spilled into the equipment.
  - C. The equipment has been exposed to rain.
  - D. The equipment does not appear to operate normally, or exhibits a marked change in performance.
  - E. The equipment has been dropped, or the enclosure damaged.

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**DEAR CUSTOMER**

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.

**INTRODUCTION**

The ANI-16-MV is a high performance 16x1 Multi-Viewer with seamless switcher. It supports (16) High definition input source displays on (1) screen. As a switcher, it can also seamlessly switch the (16) HD inputs freely. The product can be controlled in various ways, through the front panel button control and RS-232 control etc. This product has a 3 year warranty.

**PACKAGE CONTENTS**

Before attempting to use this unit, please check the packaging and make sure the following items are contained in the shipping carton:

- ANI-16-MV 16x16 HDMI Matrix Switcher
- 2V/5A DC Power Adapter
- RS-232 Cable
- (2) Mounting ears
- Users Guide

**IMPORTANT INFORMATION:**

If using a USB to RS-232 cable, you must use one that contains FTDI chipset. A cable that utilizes CH340 will not function correctly.

**SAFETY PRECAUTIONS**

Please read all instructions before attempting to unpack, install or operate this equipment and before connecting the power supply. Please keep the following in mind as you unpack and install this equipment:

- Always follow basic safety precautions to reduce the risk of fire, electrical shock and injury to persons.
- To prevent fire or shock hazard, do not expose the unit to rain, moisture or install this product near water.
- Never spill liquid of any kind on or into this product.
- Never push an object of any kind into this product through any openings or empty slots in the unit, as you may damage parts inside the unit.
- Do not attach the power supply cabling to building surfaces.
- Use only the supplied power supply unit (PSU). Do not use the PSU if it is damaged.
- Do not allow anything to rest on the power cabling or allow any weight to be placed upon it or any person walk on it.
- To protect the unit from overheating, do not block any vents or openings in the unit housing that provide ventilation and allow for sufficient space for air to circulate around the unit.

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## FEATURES

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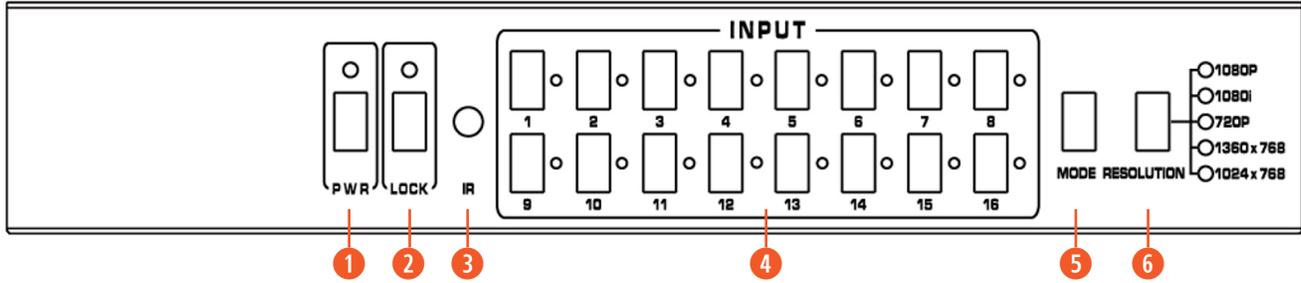
- HDMI 1.3a, HDCP 1.2 compliant
- Supports multiplexed HDMI (16) inputs and (1) output
- Supports up to 1080p High Definition resolution
- Supports (16) by (1) Quad Multi-viewer and seamless switch
- Supports scale up, scale down function
- Supports multiple output resolution
- Supports digital audio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

## SPECIFICATIONS

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- **Video Bandwidth:** 2.25Gbps
- **Input Ports:** (16) HDMI (Female type), (1) RS-232
- **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 Human Body Model:**
  - ± 8kV (air-gap discharge)
  - ± 4kV (contact discharge)
- **Power Supply:** 12V/5A DC (US/EU standards)
- **Dimensions (WxDxH):** 17.3 x 7.9 x 1.8 in (440x200x45mm)
- **Weight:** 4 lb / 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

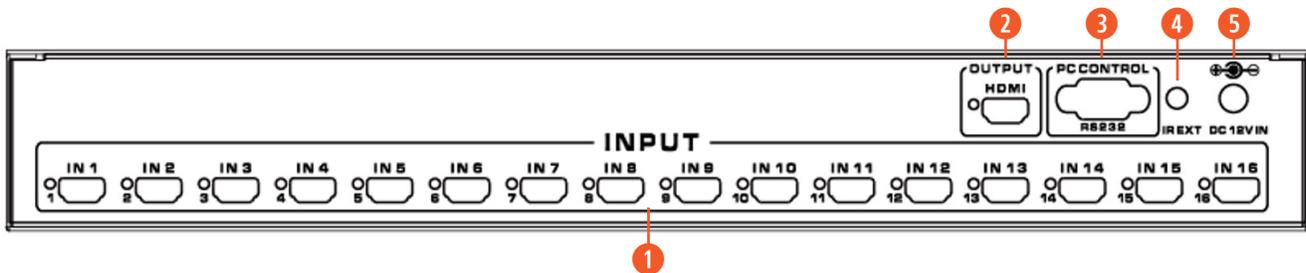
FRONT PANEL



- ❶ **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.
- ❷ **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.
- ❸ **IR RECEIVER WINDOW:** NOT USED
- ❹ **HDMI INPUT SELECTION:** Press to select the input from 1 to 16.
- ❺ **MODE:** Press the button to select display mode.
- ❻ **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 |

REAR PANEL



- ❶ **HDMI INPUT:** Connect HDMI sources. LED 1-16 illuminate when the HDMI signal plug in corresponding input port with HDMI cable.
- ❷ **HDMI OUTPUT:** Output for displays, AVR etc. LED illuminate when the display plug in corresponding output port with HDMI cable.
- ❸ **RS-232:** Connect to a PC or control system with D-Sub 9-pin cable for the transmission of RS-232 commands.
- ❹ **IR EXT:** NOT USED
- ❺ **DC POWER IN:** Plug the 12V/5A DC power supply into the unit and connect the adapter to an AC outlet.

**DESCRIPTION OF DISPLAY MODE**

The ANI-9-MV 16x1 multi-viewer have (4) display modes.



**MODE 1:** The 16x1 multi-viewer will separate display the (16) HD inputs, and now it is a seamless switcher.



|   |    |
|---|----|
| 1 | 5  |
| 9 | 13 |

**MODE 2:** The 16x1 multi-viewer divides the (4) HD input to the same size and displays them on one screen. Using the front panel input button, you can select the HDMI output audio that corresponds to the selected input source.



|   |    |    |
|---|----|----|
| 1 | 2  | 3  |
| 5 | 6  | 7  |
| 9 | 10 | 11 |

**MODE 3:** The 16x1 multi-viewer divides the (9) HD inputs to the same size and displays them on one screen. Using the front panel input button, you can select the HDMI output audio that corresponds to the selected input source.



|    |    |    |    |
|----|----|----|----|
| 1  | 2  | 5  | 6  |
| 3  | 4  | 7  | 8  |
| 9  | 10 | 13 | 14 |
| 11 | 12 | 15 | 16 |

**MODE 4:** The 16x1 multi-viewer divides the (16) HD inputs to the same size and displays them on one screen. Using the front panel input button, you can select the HDMI output audio that corresponds to the selected input source.

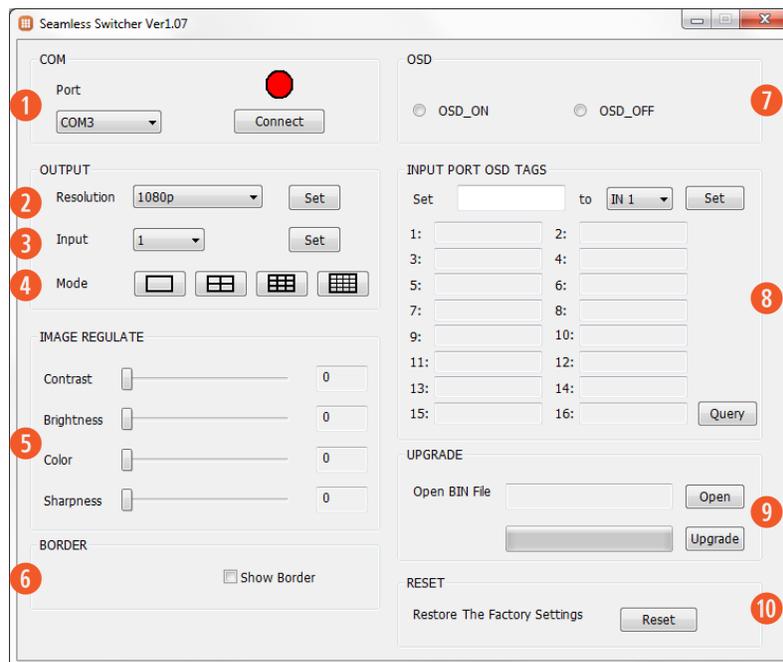
## PC SOFTWARE CONTROL

### INSTALLATION

The software can be downloaded from the product page off our website “ANI-16-MV PC Software.exe” The software is a standalone .EXE file requiring no installation. Download the file to your hard drive and double click the file name to start the program.

### PREPARATION:

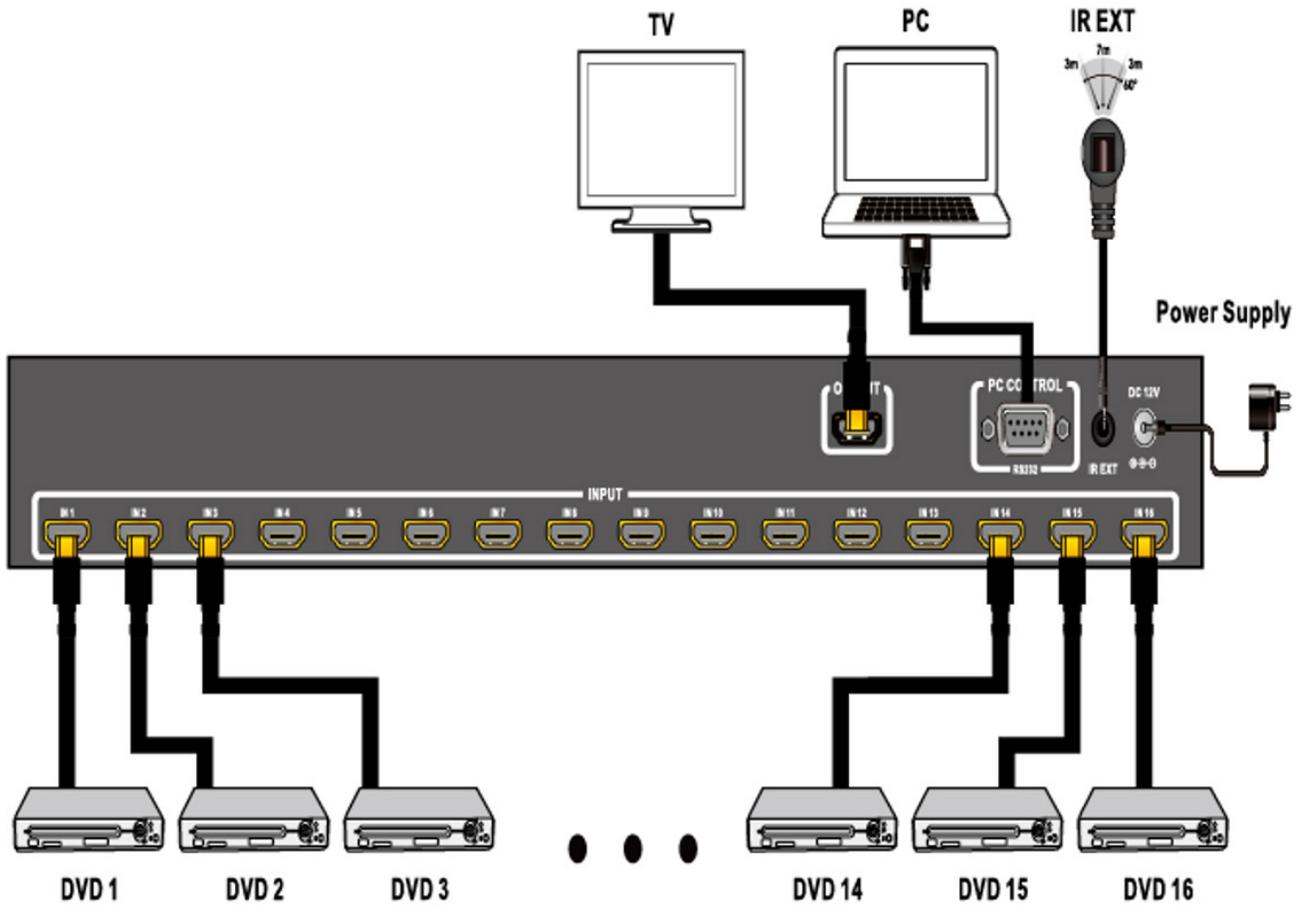
- 1 Connect PC and multi-viewer by RS-232 cable.
- 2 Power-up multi-viewer.
- 3 Double click “ANI-16-MV.exe” icon to run it.



- 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.
- 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 can select the input port that needs to be set, then click the Set key on the right. The input port selection is completed and will have saved to 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.

\*\* If using a USB to RS-232 cable, you must use one that contains FTDI chipset. A cable that utilizes CH340 **will not** function correctly.

APPLICATION EXAMPLE



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