

# Specification



LED / LCD

## HDMI Multi-Function Magic Controller

- Video Capture
- Video Matrix
- Quad Multi-Viewer
- Video Splicer

AMS-MTX\_4\*4

## Safety

This chapter illustrates safety of the HDMI Multi-Function Magic Controller MTX\_4\*4 to ensure the product's storage, transport, installation and use safety. Safety instructions are applicable to all personnel who contact or use the product. First of all, pay attention to following points.

- Read through the instructions.
- Retain all instructions.
- Comply with all instructions

### ■ Storage And Transport Safety

- Pay attention to dust and water prevention.
- Avoid long-term direct sunlight.
- Do not place the product at a position near fire and heat.
- Do not place the product in an area containing explosive materials and strong electromagnetic environment.
- Place the product at a stable position to prevent damage or personal injury caused by dropping.
- Save the packing box and materials which will come in handy if you ever have to store and ship the product. For maximum protection during storage and shipping, repack the product as it was originally packed at the factory.

### ■ Installation And Use Safety

- Only trained professionals may install the product.
- Plugging and unplugging operations are prohibited when the power is on.
- Ensure safe grounding of the product.
- Always wear a wrist band and insulating gloves.
- Do not place the product in an area having frequent or strong shake.
- Perform dust removing regularly.
- Contact Amoonsky for maintenance at any time, rather than have the product disassembled and maintained by non-professionals without authorization.
- Replace faulty parts only with the spare parts supplied by Amoonsky.

## ■ Overview

AMS-MTX\_4\*4 is a HDMI Multi-Function Magic Controller, which integrates the functions of Video Capture, Video Matrix, Quad Multi-Viewer and Video Splicer, and can be switching the function by pressing keys or remote control; The video capture function can be combined with the other three functions.

- **Input&Output Port** -- MTX\_4\*4 uses 4 HDMI video input, 4 channel of HDMI output, Support 4K and HDCP;
- **Support Remote Control** -- Used Infrared remote control, We can extend the infrared receiving head wire cable according to the actual demand (Note in advance before order);
- **Support One Key Black & One Key Freeze** -- When the image output needs to be closed during the performance, the black screen key can be used to realize fast black screen. During playback, it may be necessary to freeze the current picture to realize "pause" picture(combined with current functions);
- **Support Screen Rotation** -- In order to meet more splicing requirements, the spliced output image can be rotated 180 degrees;
- **Support Audio Sync Output, One Key Mute**-- HDMI audio and vide can be synchronized output. can select the corresponding video input source through the remote control or key, and output synchronously corresponding to different audio sources; And the audio output port is a independent interface;

## ■ Function Introduction

- **Video Capture:** The output interface < output 4 > can be used for real-time HDMI audio and video capture, that the audio and video signals can be transmitted to computers or intelligent phones for preview and storage, It is suitable for high-definition acquisition, teaching recording, medical video transcribe etc; Support most capture software, Such as VLA, OBS, Amcap, etc; Support windows, Android and MacOS; Comply with USB video UVC specification and USB Audio UAC specification;
- **Video Matrix:** Can seamlessly switching any input channel to any output channel for display by pressing the key or the remote controller, the remote can control the specified input channel to the specified output channel in real time for display. but if used the key to switching, the signal source will switching in turn;

- **Quad Multi-Viewer:** Multiple input signals can be displayed on one monitor at the same time according to the built-in template parameters, such as double Windows, four picture windows; The output channels of this function are output 1&4, and 1&4 channels are in copy mode; Output 2&3 channels, which can continue to use the matrix function by the remote control;
- **Video Splicer:** Divide the image signal of hdmi1 channel into n blocks and distribute them to n video display units (such as 2 splicing, 3 splicing and 4 splicing); In addition to the 1 & 4 splicing mode, the remaining redundant channels in the 2&3 splicing mode can continue to use the matrix function;

# Introduction

## Function Indicator

**CAP:** Video Capture

**MTX:** Video Matrix

**QMV:** Quad Multi-Viewer

**SPC:** Video Splicer

When the function is selected or turned on, the indicator light is always on; The default is off;

## Matrix Indicator

When the matrix function is turned on, the indicator light of the array starts to work, When the corresponding input signal is selected, the signal light is will on corresponding output channels;

## Input

**Input Key:** CH1-4 correspond to OUTPUT1-4 channel respectively. Click the channel button to switch HDMI1-4 input signal in turn and display it on the corresponding output channel;  
**RF:** Infrared receiving head;

## Function Key

**Audio:** Audio output switching;  
**Mode:** When the video splicer or quad multi-viewer function is on, press this button to switch different templates;  
**4K/2K:** Output resolution switching;  
**Window rotation button :** Effective under splicing function;  
**Fun:** Function switching button;

**Power Switch**

**USB Video Capture Interface**



**Power Interface**

**Antenna Interface Power Indicator**

**Input Interface Input Indicator**  
In the video splicer function, HDMI1 is a fixed input;

**Output Interface&Indicator**  
On the video splicing function, output1&4 are output channels;On capture function, which will collect OUTPUT4-channel of image data in real time;

**Audio Output**

**RS232 Control**

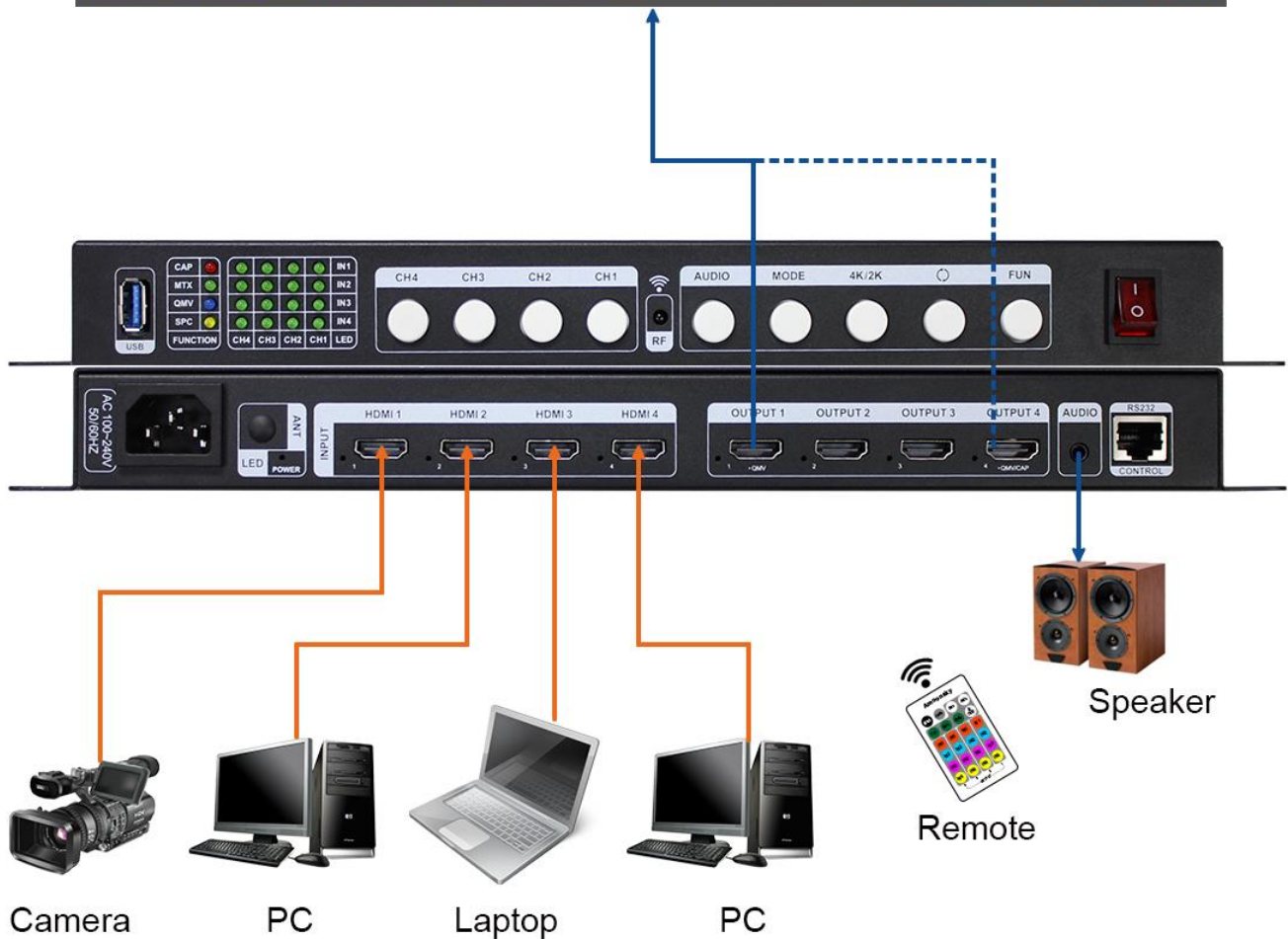


# Applications - Video Matrix



# Applications - Quad Multi-Viewer

Screen

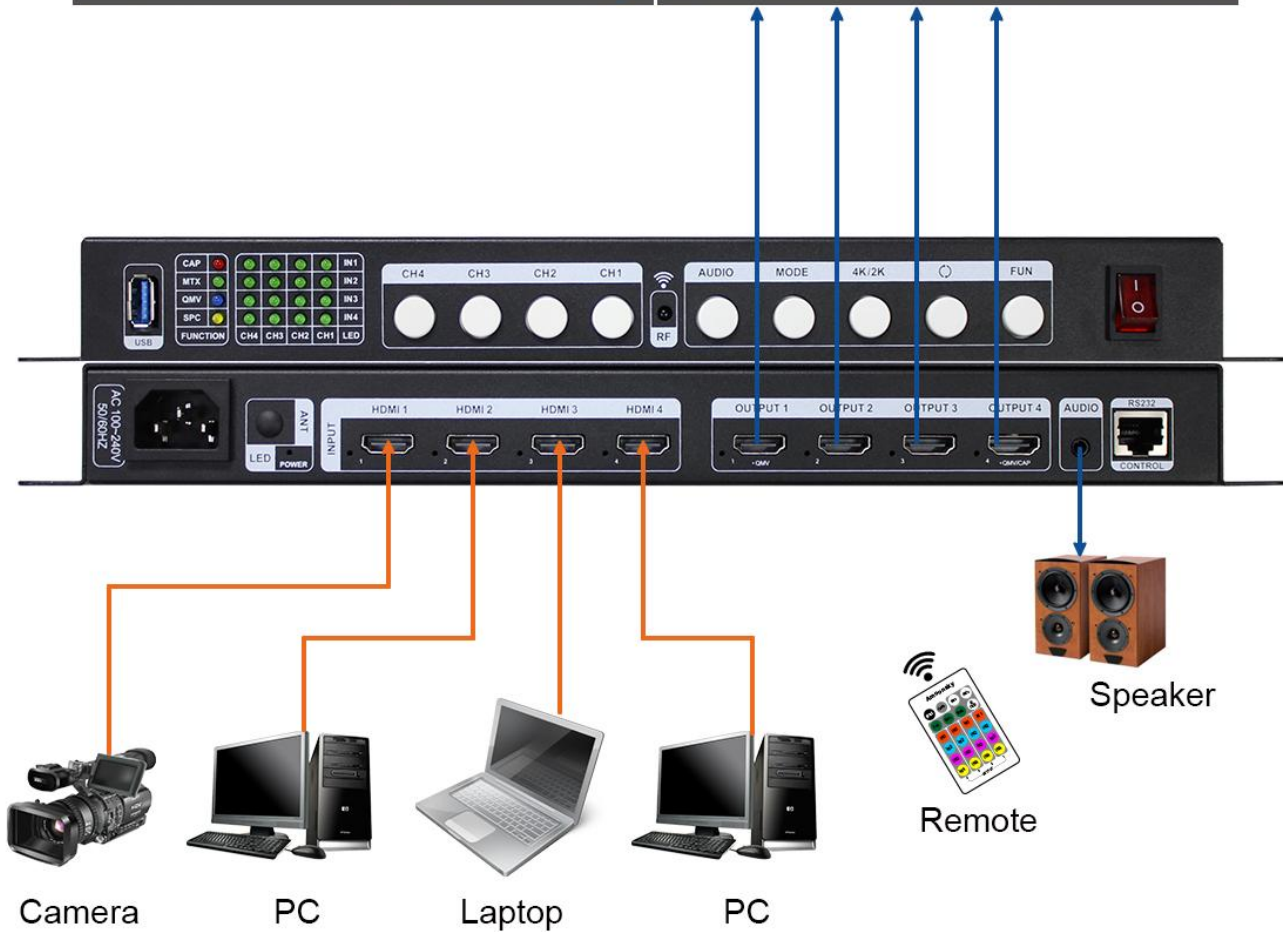


→ Input → Output



# Applications - Video Splicer

## 2\*2 Screen

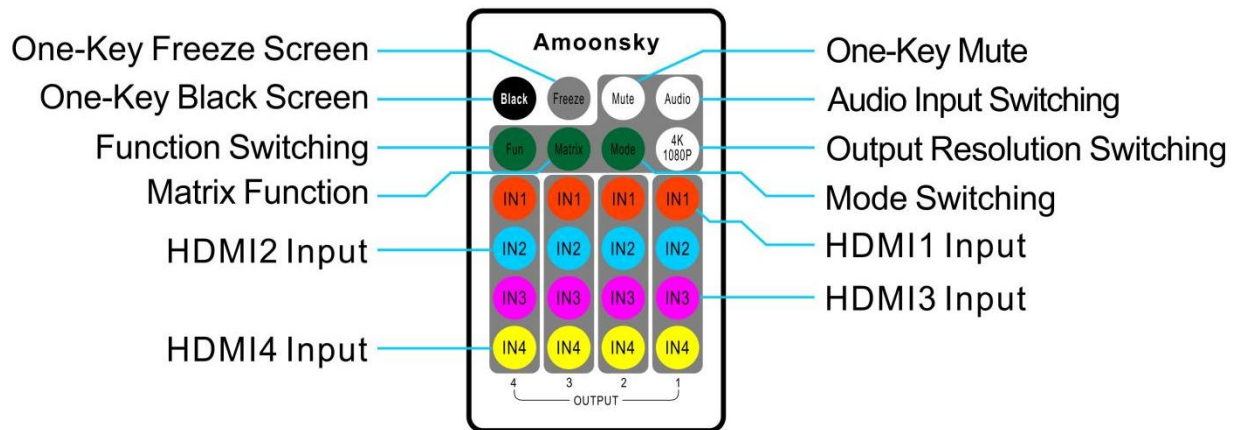


→ Input → Output

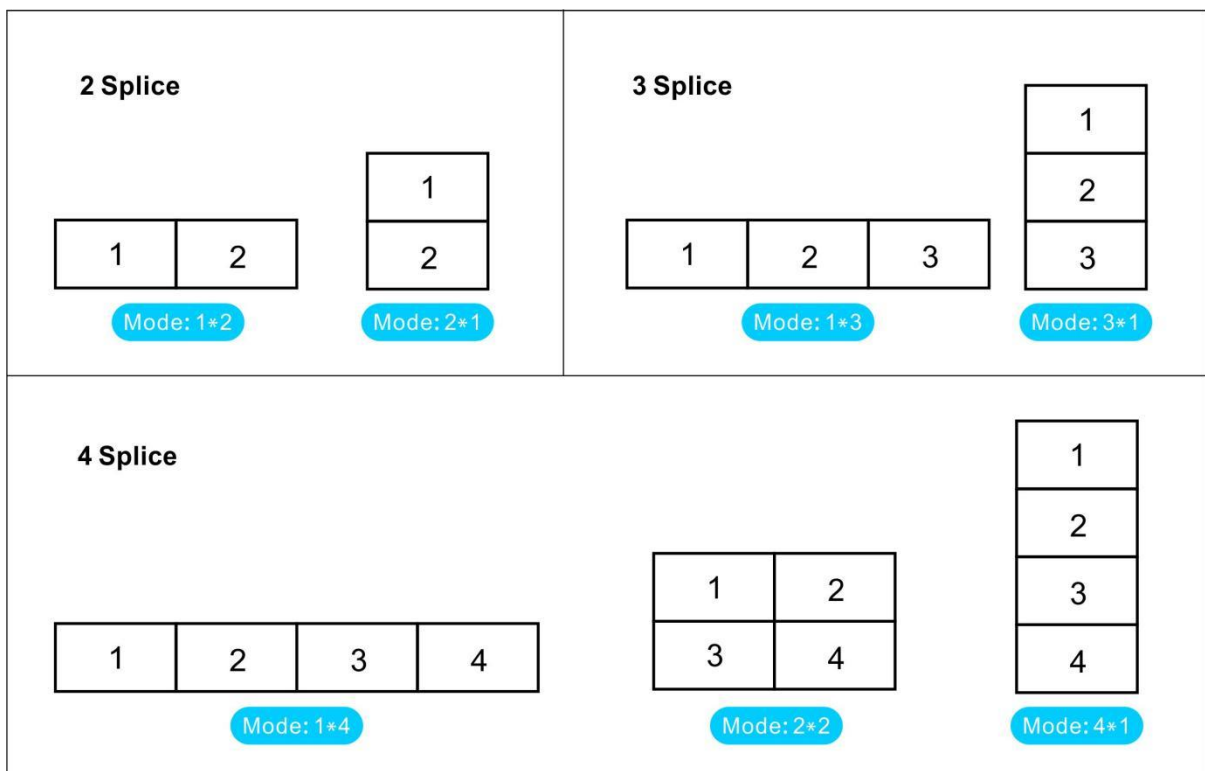


# Introduction

## ■ Remote



## ■ Splicing Mode



# Parameters

Port Specifications		
HDMI Port 4*HDMI INPUT 4*HDMI OUPUT	Interface Type: HDMI-A Socket Signal Standard: HDMI1.4 Backward compatible; Resolution: VESA Standard, ≤3840×2160p@30Hz;	
AUDIO OUT	Audio Output Interface, Dual Track;	
General Specifications		
Power Supply	Internal 100~240V AC, 50~60Hz ;	
Temperature	Storage: T: -40℃ ~ +80 ℃ 、 H: 10% ~ 90%, Non-condensing; Working: T: 0 ℃ ~ +60 ℃ 、 H: 10% ~ 90%, Non-condensing;	
Machine Size	370mm (Length) x 185 mm (Width) x 35mm (Height) <Including Ear Hook>	
Packing Size	420mm (Length) x 255 mm (Width) x 85mm (Height)	
Product Weight	Gross Weight : 2.0Kg ;	
Package Weight	Volume Weigh t:3.0Kg ;	
Warranty	1 Year; Note: All Rated Voltages Are On Average ±10%;	
Packing List		
Standard	Remote * 1; Power Cable * 1, Certificate * 1; Warranty Card * 1;	
Model AMS-MTX_4*4	Description Standard Model	P/N PN202111005