

# INSTRUCTION MANUAL



## **WolfPack 4K 30 Hz 16x16 Seamless HDMI Matrix with Video Wall Splicing & Splitter Modes**

Part Number: HDTV16x16AMSMTX

Before using the product, please carefully read  
the manual and safekeep it.

HDTV Supply, Inc  
Los Angeles, CA



*24-Year Global Home  
For Audio & Video Products*

# SAFETY REMINDERS

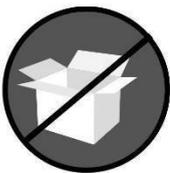
To protect the device and operating personnel from electrostatic discharge, ensure that the device is properly grounded before powering it on. Please observe the following guidelines when installing, using, or maintaining this equipment.



Keep the apparatus away from moisture and liquids to prevent damage.



Clean the apparatus using only a dry cloth.



Ensure proper ventilation and avoid placing the unit in confined spaces.



Disconnect from power during storms or prolonged periods of non-use.



Do not obstruct ventilation openings to prevent overheating and potential hazards.



Prevent the power cord from being damaged by pressure or excessive bending.



Keep the unit away from heat sources to maintain safe operation.



Use only manufacturer-approved accessories.



Avoid placing open flames near or on the unit.



Seek professional servicing when required.



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## FORWARD

- Thank you for choosing our product. We appreciate your support. For your safety and to ensure proper operation of the equipment, please read this manual carefully before use.
- Please safeguard the product’s warranty label. The label affixed to the unit serves as proof of warranty and must be preserved.
- This manual is intended for operational guidance only and does not cover maintenance or repair services. Any future changes to features or specifications will be noted in updated documentation.
- Refer to this manual first if you encounter any questions while using the product. It provides detailed instructions for operation and should be followed closely. If you require further assistance, please contact our support team—we’re committed to providing you with prompt and helpful service.
- **Note:** This manual is subject to change without prior notice.

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## Important Safety and Installation Guidelines

To ensure reliable operation and the safety of personnel, please carefully observe the following instructions during installation, use, and maintenance of this equipment:

- Do not use the product in hazardous environments, such as areas with dust, oil smoke, conductive particles, corrosive or flammable gases, excessive heat, moisture, rain, wind, vibration, or impact. Exposure to these conditions may lead to electric shock, fire, or equipment malfunction.
- Keep the ventilation areas clear of any foreign objects or packaging materials (e.g., contact paper). Obstructed airflow may cause overheating, fire hazards, or malfunction.
- Avoid handling cables (connecting, unplugging, or rewiring) while the equipment is powered on. This may cause electric shock or damage the circuitry.
- Ensure all installation and wiring connections are secure and reliable. Loose connections may lead to faulty operation.
- In high-interference environments, use shielded cables for all high-frequency signal input/output connections to maintain proper system performance. Only perform installation or wiring after the external power supply is completely shut off to prevent electric shock or damage.
- Proper grounding is essential. This device must be grounded using the power line's grounding conductor. Ensure grounding is complete before connecting any input or output terminals to avoid the risk of electric shock.
- Do not touch terminals while the device is powered, as this may cause electric shock or unintended operation.
- Do not clean or service the equipment (e.g., tightening terminals) while it is powered on. Doing so may result in electric shock.
- Do not connect or disconnect communication cables, expansion modules, or control unit cables while the power is on. This may lead to equipment damage or malfunction.
- Do not disassemble the equipment, as internal components may be damaged.
- Thoroughly read this manual before performing any changes, trial operations, maintenance, or shutdowns. For issues that cannot be resolved, please contact our support team for assistance.

## OVERVIEW



The **HDTV16x16AMSMTX** is a seamless switching matrix that supports 4K input and output, offering flexible management of multiple signals. It supports a maximum resolution of 3840×2160@30Hz and features a built-in MEAN WELL power supply, crystal buttons, and a full-color LCD screen for easy operation. The device can be controlled through various methods, including panel buttons, a web-based interface, serial port protocol, and more.

This product supports multi-screen management, one-click black screen functionality, and includes 11 built-in test patterns. It also features intelligent EDID management to ensure compatibility with a wide range of signal sources and reliable performance in diverse application scenarios.

The HDTV16x16AMSMTX is widely used in integrated display and control environments such as multimedia conference rooms, lecture halls, multifunctional halls, stage performances, educational and training settings, exhibitions, command centers, and security monitoring systems.

## APPLICATION



TV



LCD Video Wall



LED Display



Laptop



Computer



Game Consoles



TV Box

## FRONT PANEL



<b>LCD Screen</b>	Displays the configuration menu and system parameters.
<b>Operating Button</b>	Operate The Menu System
OK	Confirm
Knob	Press Down Is "OK". Turn Right "+" Turn Left "-" Is Adjust The Parameters On Menu
ESC	Exit Operation or Return
<b>Input</b>	This area includes numeric keys 0-16 and an "ALL" button. Keys 1-16 Corresponds to input signal sources 1 through 16. Pressing any of these keys selects the corresponding input source for output. Pressing "ALL" selects all input sources simultaneously. When the indicator lights for keys 0-16 are all on, the keys function as numeric input buttons, allowing you to enter values directly by pressing the corresponding key.
<b>Output</b>	This area includes keys 1-16 and an "ALL" button. Once an input source has been selected, keys 1-16 correspond to output channels 1 through 16. Pressing any of these keys routes the selected input to the corresponding output channel. Pressing "ALL" applies the input to all outputs.  Note: If no input source is selected (i.e., no key light is on in the input area), output selection will be invalid. For signal switching to work properly, you must first select an input channel, then select the output channel. Pressing an output key without selecting an input will have no effect.
<b>F_Function</b>	The Area Includes "LOAD", "SAVE", "BLACK"
Load	Mode Loading Shortcut Button Can Directly Recall The Pre-Set Mode
Save	Mode Save Shortcut Button, Can Directly Save The Current Set Parameters To Pre-Set Mode
Black	One Key Black Screen Button, When The Button Is Selected, All Outputs Are Black Screen

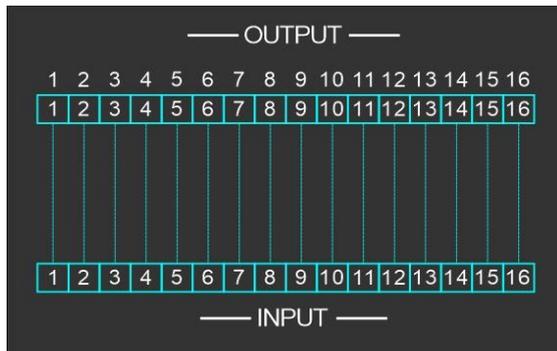
## REAR PANEL



<b>Power Connector</b>	Including Switch, Fuse And IEC Standard Power Cable, Input Voltage Support 100-240 VAC, 50-60 Hz
<b>Input</b>	16 Input Channels, Signal Source Resolution Support 4K@30Hz and Backward Compatibility
<b>Output</b>	16 Output Channels, Output Resolution Support 3840*2160@30Hz 4K@30Hz And Backward Compatibility, Support Custom Resolution  (All Output Channels Must Have Consistent Output Resolution)
<b>Control</b>	Control Area
RS-232	Used to connect control ports such as central control systems. Refer to the provided upper computer communication protocol. Supports serial port control cascade, with RS232-IN as the input and RS232-OUT as the loop output.
USB	(Type-A), Used for upgrading the machine's internal firmware.
NET	Connects the machine to a computer via a network cable to enable control through the web-based interface.
EXT、ANT	Reserved for future expansion; currently not in use.

## STANDBY MENU

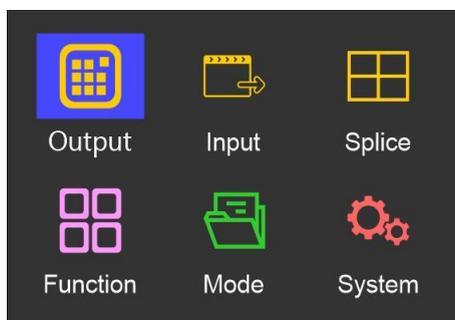
The main menu is shown below. Press the 'OK' button to enter the main menu.



<b>Menu Icons</b>	The following icons are not displayed by default. Once the corresponding functions are enabled, the icons will appear in real time on the standby menu. If the functions are disabled, the icons will no longer be displayed.
Time & Tasks	This icon indicates that the scheduled tasks function is enabled.
Keypad Lock	This icon indicates that the keypad is locked. It can be locked or unlocked by pressing and holding the "ESC" key for 2 seconds.
Freeze	This icon indicates that the display freeze function is enabled.
Black Screen	This icon indicates that the black screen function is enabled.

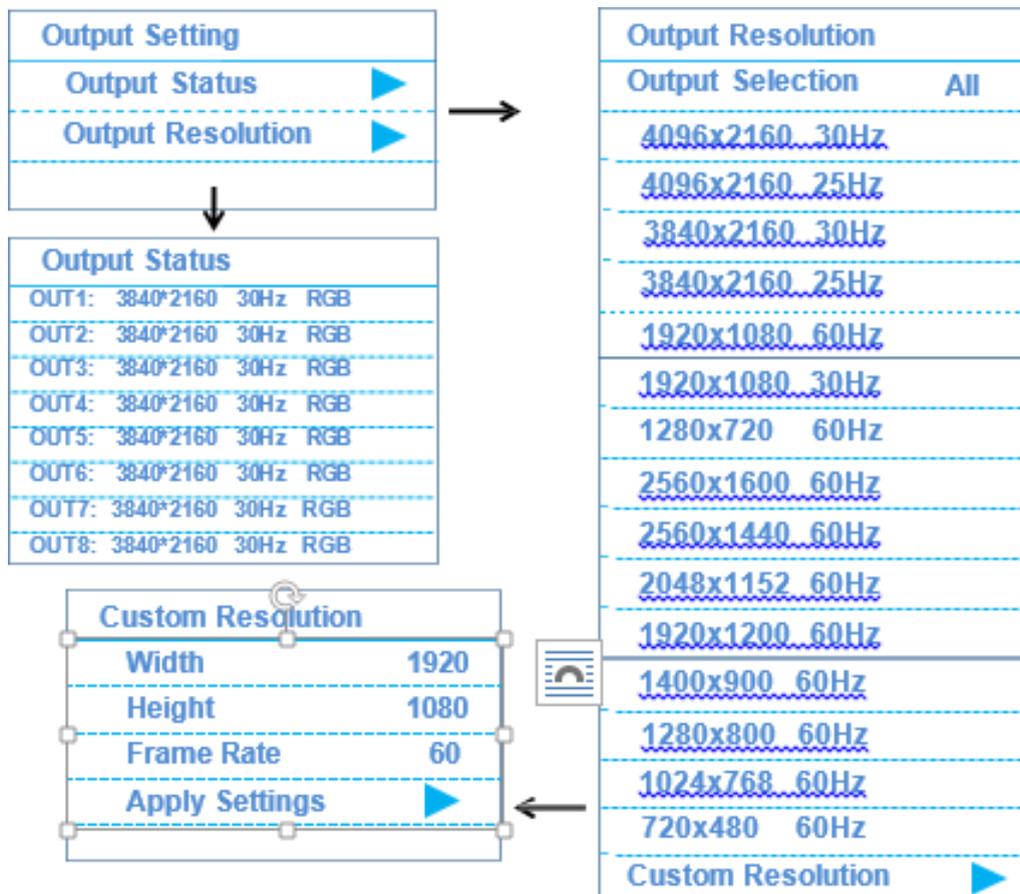
## MAIN MENU

The main menu is shown below. Press the 'OK' key or push the knob to enter the sub-menus. Rotate the knob to adjust the parameters.

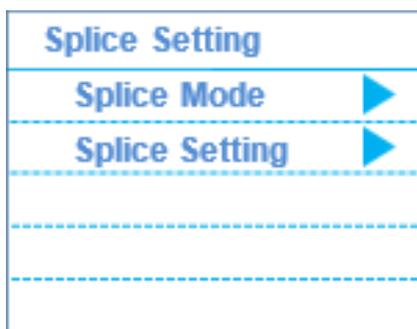


## SUB MENU

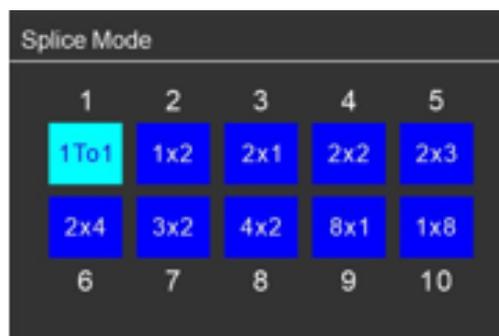
**Output Settings:** Select 'Output' from the main menu, then press the 'OK' button or push the knob to enter the interface shown below.



**Splice Settings:** Select 'Splice' from the main menu, then press the 'OK' button or push the knob to enter the interface shown below.



Splice Setting Menu



10 Splice Mode

<b>Splice Setting</b>	
Output Selection	All
Splice OnOff	Off
Splice Mode	Equal
H Units	1
V Units	1
Position	1

**Output Selection:** Choose **1-16** or **All**.

**Splice Switch:** Toggle **On** or **Off**.

**H Units / V Units:** Set the horizontal and vertical splice unit values; maximum for each is 8.

**Position:** First select the output channel, then adjust the splice position to suit your layout.

**Input Settings:** Select "Input" from the main menu, then press the "OK" button or push the knob to enter the interface shown below.

<b>Input Setting</b>	
Input Status	▶
Input Resolution	▶



<b>Input Status</b>	
IN1:	No Signal
IN2:	No Signal
IN3:	No Signal
IN4:	No Signal
IN5:	No Signal
IN6:	No Signal
IN7:	No Signal
IN8:	No Signal

<b>Input Resolution</b>	
Input Selection	All
4096x2160	30Hz
3840x2160	30Hz
2560x1440	60Hz
1920x1080	60Hz
1280x720	60Hz
4096x2160	25Hz
3840x2160	25Hz
2560x1600	60Hz
1920x1080	30Hz
1024x768	60Hz
Custom Resolution	▶

**Function Settings:** Select "Function" from the main menu, then press the "OK" button or push the knob to enter the interface shown below.

<b>Function</b>	
Time&Tasks	▶
Test Pattern	▶
Function Key	Black



<b>Test Pattern</b>	
Test Pattern	0

**Test Pattern:** Test Screen Without Input Of Signal Source, Test Pattern:0-10; Upon Entering The Menu, The Test Pattern Function Will Automatically Turn On; Upon Exiting The Menu, The Test Pattern Function Will Automatically Turn Off;

**Function Key:**

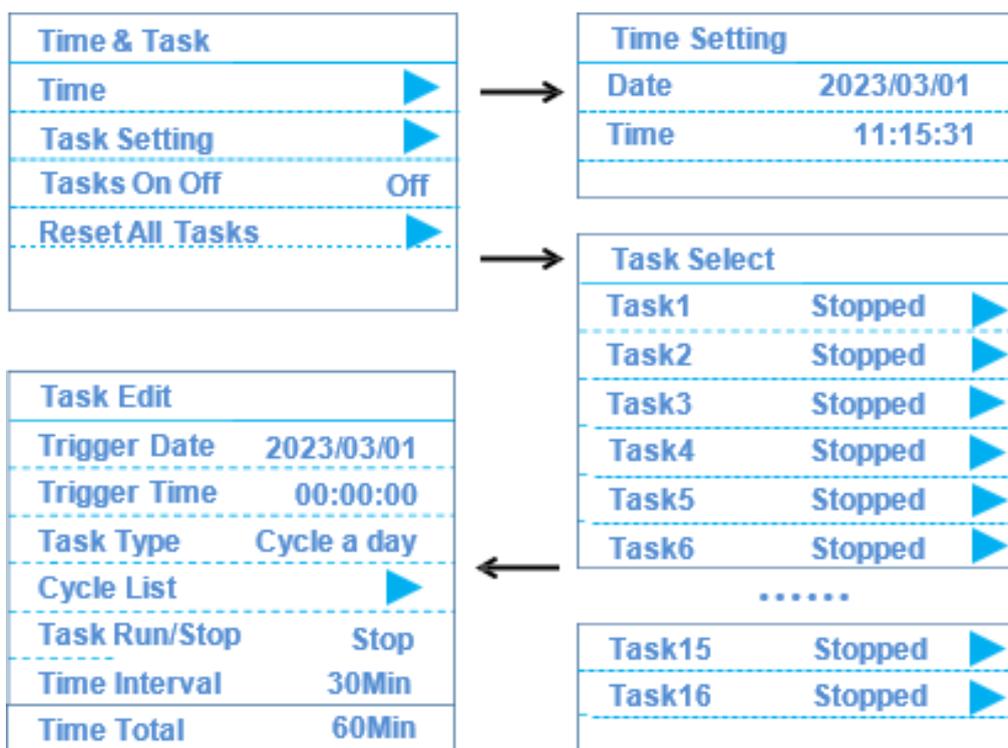
In The Menu Options Select Black Screen, Press The "BLACK" Key , When The Key Indicator Light Is On, All Outputs Will Be Black Screen.

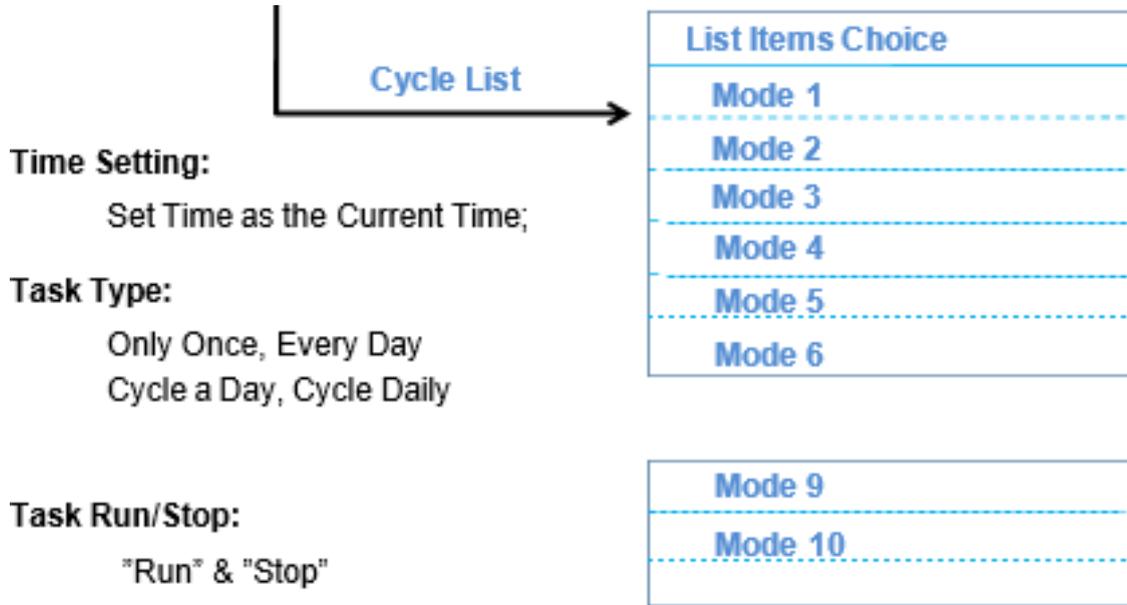
In The Menu Options Select Freeze, Press The "BLACK" Key, When The Key Indicator Light Is On, All Outputs Will Retain The Last Frame Of The Screen.

**Time & Task** (Select "Advance" In Main Menu, Enter The Sub-menu And Select "Time&Tasks" Press "OK" To Enter The Interface Below).

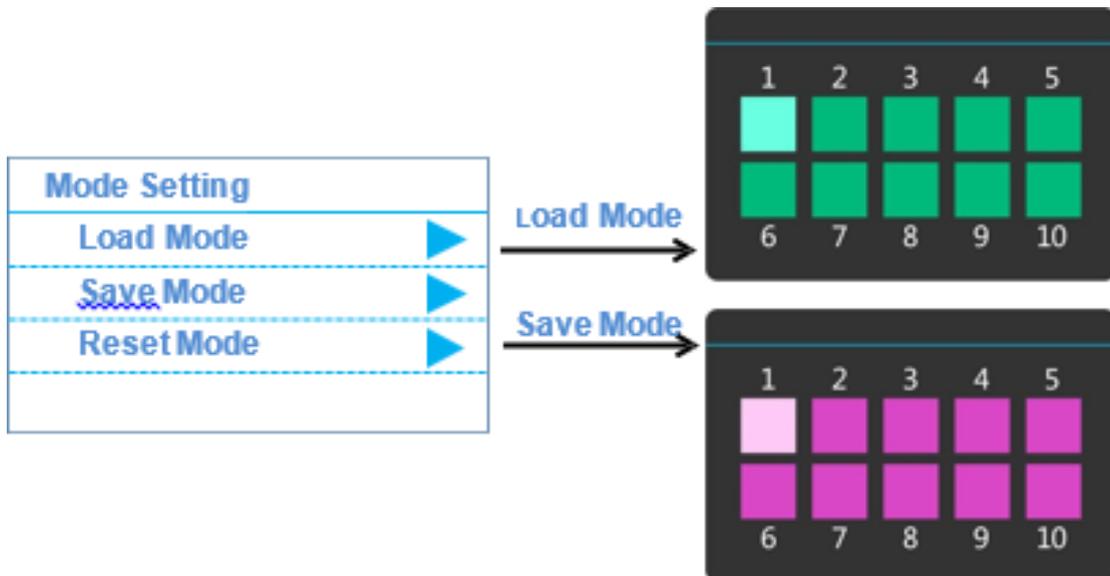
Select Time&Tasks, Can Achieve Timed Switching Mode, Timed Signal Source Switching Or Black Screen Switching etc.

**Note:** If Need Enabled The Feature And Effectively Activated, Please Check And Ensure That The Mainboard Has A Lithium Battery And The Battery Is Charged!





**Mode Settings:** Select "Mode" from the main menu, then press the "OK" button or push the knob to enter the interface shown below.



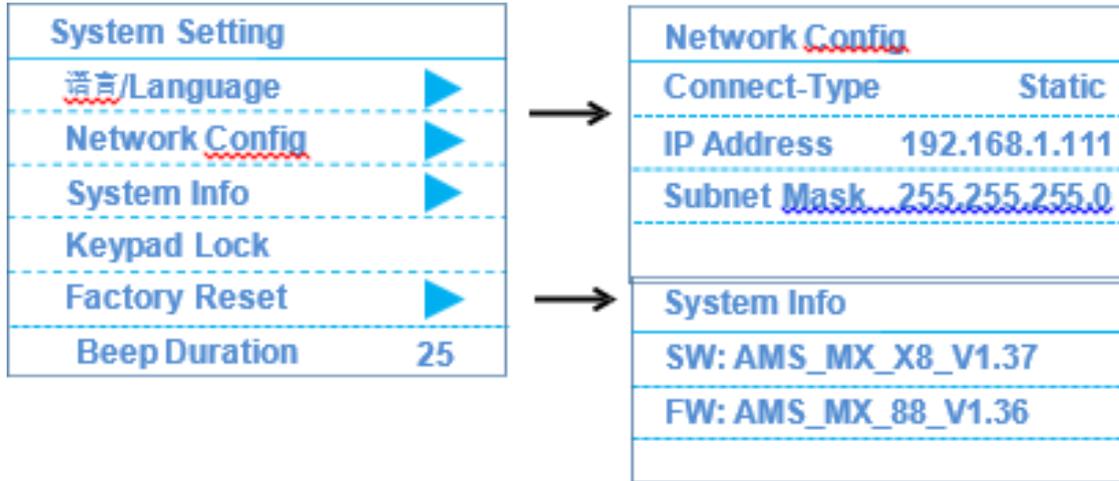
**Load Mode:** In the Load interface, press a numeric key to recall the corresponding preset mode.

**Save Mode:** In the Save interface, press a numeric key to store the current settings as a preset mode.

**Reset Mode:** Clears the user-saved preset mode from memory.

**Note:** Load and Save functions can also be executed directly via the panel shortcut keys.

**System Settings:** Select "System" from the main menu, then press the "OK" button or push the knob to enter the interface shown below.



- **Keypad Lock:** When enabled in operating mode, this function prevents accidental key presses.
- **Buzzer Duration:** Specifies the length of the audio beep when a signal switch occurs. Setting the value to 0 disables the buzzer.
- **Factory Reset:** Press OK to restore all device settings to their factory defaults.
- **Languages:** English, Simplified Chinese, Traditional Chinese, Korean, Vietnamese, Thai, Spanish, Portuguese, Russian, etc.

Factory Reset	
OK	▶
Cancel	▶

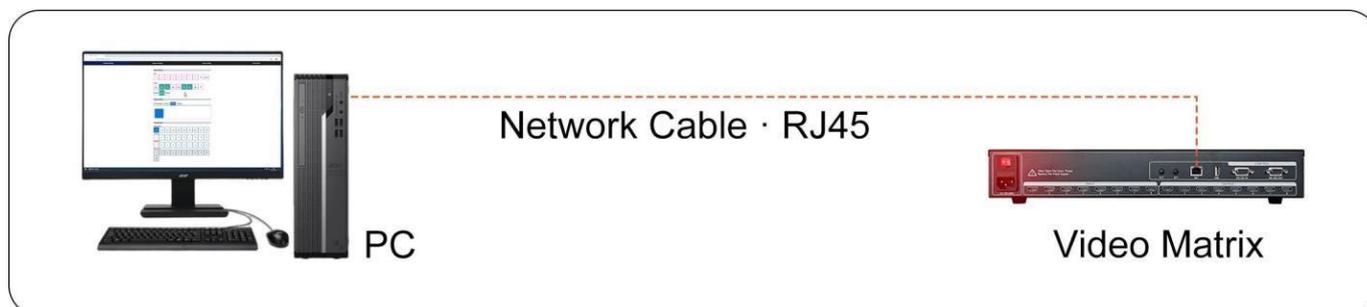
Language	
简体中文	▶
English	▶

**Note:** If you require an additional language, please contact our sales team and specify your preference when placing your order.

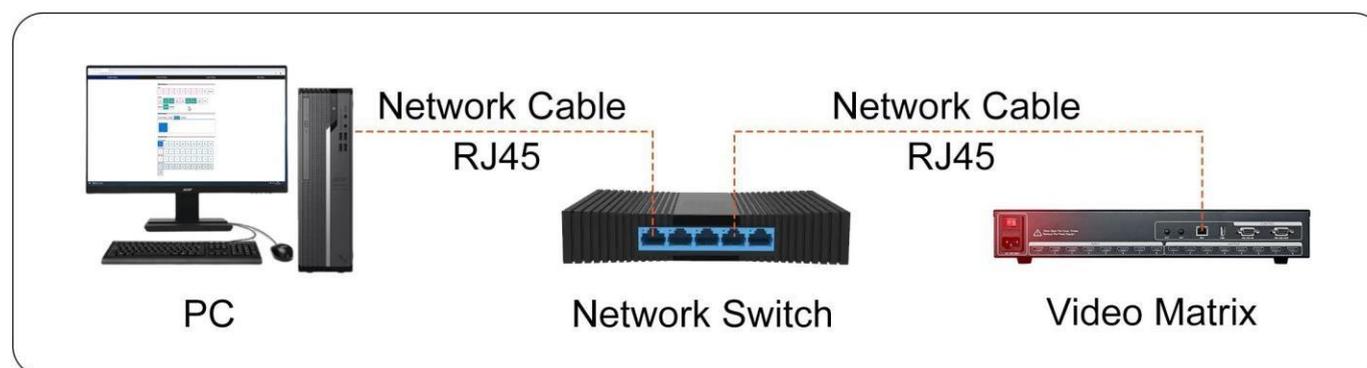
## CONTROL METHOD

- **RS232 Control** -- AMS-MTXSeries Upper-PC Control Protocol
- Network Cable Control • RJ45 -- **Web Version** Upper Computer

### A. Network Cable Direct Connection • **Static IP**



### B. Through the **Network Switch** • DHCP IP



## WEB UPPER-PC LOG IN

- Connect the Device according to the specified connection procedure, and note the IP address displayed on the device's LCD screen.
- Access the Web Interface by entering the noted IP address into a web browser's address bar to reach the login page.

**Login**

Account

Password

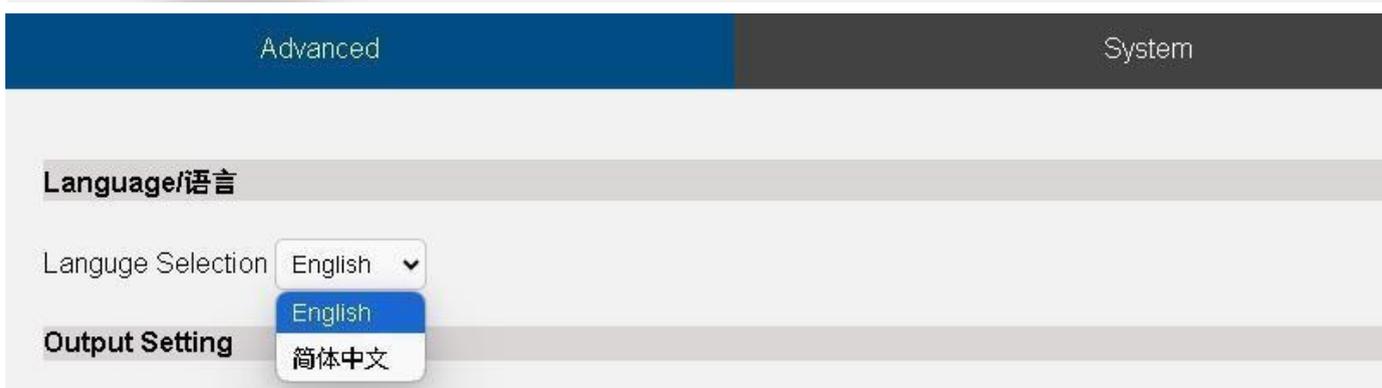
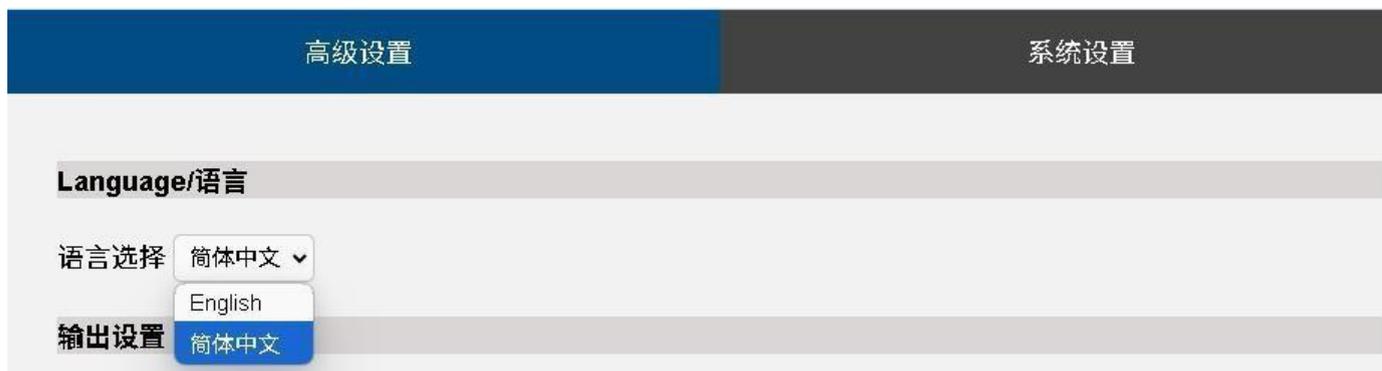
Login

Account: **admin**

Initial Password: **admin**  
(lowercase)

Authorization Management: For custom user roles or permissions, please contact our sales team.

- **Web Interface Language:** Switch between English and Simplified Chinese within the web control interface.



## WEB UPPER-PC BASIC OPERATION

- **Matrix Switching**



The web interface switching method mirrors the device panel operation: first select the input source, then select the output channel for instant switching.

- **Screen Setting**

Splicing

Screen Setting

Rows  Columns


Multi-screen management is achieved by adding screens. First, select the appropriate unit and configure its corresponding output channels for splicing; once the configuration is successful, add the screen and save the settings. To include a new screen, simply use the "Add Screen" function.

Screen Setting **Screen1**

1	2
3	4

**Load Splice Mode:** Provides a general, universal splicing configuration—allowing you to combine individual LCD video-wall units into a single display.

**Load Preset Mode:** Recalls a previously saved preset. When successfully loaded, the corresponding preset slot is highlighted in purple.

**Save Preset Mode:** Stores the current configuration parameters to a preset slot. Saved presets take effect immediately.

**Delete Preset Mode:** Removes a saved preset from memory.



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# UPPER COMPUTER CONTROL

## Mode

### Splice Mode

1To1	1x2	2x1	2x2	2x3	2x4	3x2	4x2	8x1	1x8
------	-----	-----	-----	-----	-----	-----	-----	-----	-----

### Load Preset

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----

### Save Preset

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----

### Delete Preset

1	2	3	4	5	6	7	8	9	10
All									

## WEB UPPER-PC ADVANCE OPERATION

- Input and Output Setting**

### Output Setting

Output Select

Resolution

Custom Resolution

### Input Setting

Input Select

Preset

User



# UPPER COMPUTER CONTROL

**Note:** The operation procedure mirrors the menu interface, and changes take effect immediately.

- **Other Setting**

**Other Setting**

Black Screen

Freeze

Test Pattern

**Note:** The operation procedure mirrors the menu interface, and changes take effect immediately.

## WEB UPPER-PC SYSTEM

**Network Status**

Network Type

IP Address

Subnet mask

Gateway

DNS:

**Beep**

Duration (ms):

**Reset Settings**

**Account Settings**

**System Information**

Master version: SW: AMS\_MX\_X8\_V1.37

Input Version: 1.36

Output Version: 1.36



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# UPPER COMPUTER CONTROL

**Note:** You can change the username and password via the Account Settings menu.

## WEB UPPER-PC STATUS

### Input Status

Input1: No signal

Input2: No signal

Input3: No signal

Input4: No signal

Input5: No signal

Input6: No signal

Input7: No signal

Input8: No signal

Input9: No signal

Input10: No signal

Input11: No signal

Input12: No signal

Input13: No signal

Input14: No signal

Input15: No signal

Input16: No signal

### Output Status

Output1: 1920x1080 60Hz

Output2: 1920x1080 60Hz

Output3: 1920x1080 60Hz

Output4: 1920x1080 60Hz

Output5: 1920x1080 60Hz

Output6: 1920x1080 60Hz

Output7: 1920x1080 60Hz

Output8: 1920x1080 60Hz

Output9: 1920x1080 60Hz

Output10: 1920x1080 60Hz

Output11: 1920x1080 60Hz

Output12: 1920x1080 60Hz

Output13: 1920x1080 60Hz

Output14: 1920x1080 60Hz

Output15: 1920x1080 60Hz

Output16: 1920x1080 60Hz

**Note:** You can view input and output information in the Device Status menu.



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# INQUIRIES AND AFTERSALES SUPPORT



## HDTV Supply, Inc

### **Inquiries and Aftersales Support**

For any inquiries or assistance related to this product, including aftersales service, please contact our customer support team. We are committed to providing you with the highest level of service.

#### **Contact Details:**

- Phone: 833-WOLFPACK (833-965-3722)
- Email: [customerservice@hdtvsupply.com](mailto:customerservice@hdtvsupply.com) | [support@hdtvsupply.com](mailto:support@hdtvsupply.com)
- Website: [www.hdtvsupply.com](http://www.hdtvsupply.com)

Our team is ready to assist with any questions or concerns you may have.