



Shenzhen Amoonsky Technology Co., Ltd.

LCD Video Wall

LED Display Screen

-- English

User Manual

LCD · LED Video Matrix



Serve Customers • Achieve Value

www.amoonsky.com

Safety Instructions



This Symbol Prompts User, The Device User Manual Has Important Operating And Maintenance Instructions.



This Symbol Warns The User Of The Equipment Inside The Enclosure Exposed To Hazardous Voltages, There Is The Risk Of Electric Shock.

Note

Read The Manual • Read And Understand All Safety And Operating Instructions Before Using The Equipment.

Save Manual • The Safety Instructions Should Be Kept For Future Reference.

Follow Warnings • Follow All Warnings And Instructions Marked On The Device Or In The User Information.

Avoid Attachments • Do Not Use The Tools Or Attachments That Are Not Recommended By The Equipment Manufacturer Because They May Be Hazardous.

Warning

Power Sources • This Equipment Should Be Operated Only From The Power Source Indicated On The Product.

This Equipment Is Intended To Be Used With A Main Power System With A Grounded (Neutral) Conductor. The Third (Grounding) Pin Is A Safety Feature, Do Not Attempt To Bypass Or Disable It.

Power Disconnection • To Remove Power From The Equipment Safely, Remove All Power Cords From The Rear Of The Equipment, Or The Desktop Power Module (If Detachable), Or From The Power Source Receptacle (Wall Plug).

Power Cord Protection • Power Cords Should Be Routed So That They Are Not Likely To Be Stepped On Or Pinched By Items Placed Upon Or Against Them.

Servicing • Refer All Servicing To Qualified Service Personnel. There Are No User-Serviceable Parts Inside. To Prevent The Risk Of Shock, Do Not Attempt To Service This Equipment Yourself Because Opening Or Removing Covers May Expose You To Dangerous Voltage Or Other Hazards.

Slots And Openings • If The Equipment Has Slots Or Holes In The Enclosure, These Are Provided To Prevent Overheating Of Sensitive Components Inside. These Openings Must Never Be Blocked By Other Objects.

Statement

This Document Is Intended To Help You Understand And Use The Product. For Accuracy And Reliability, Our Company May Make Improvements And/Or Changes To This Document At Any Time And Without Notice. Any Problem In Use Or Any Good Suggestion, Please Contact Us Through Ways Provided In The Document. We Will Do Our Utmost To Solve The Problems And Adopt The Suggestions After Evaluation As Soon As Possible.

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Contents

Overview	5
Application	5
Panel Introduction	6
Front Panel	6
Rear Panel	7
Menu System	8
Standby Menu	8
Main Menu	8
Sub-Menu	9
Output Setting	9
Splice Setting	9
Input Setting	10
Function Setting	10
Mode Setting	12
System Setting	13
Keypad Lock / Factory Reset / Language	13
Upper Computer Control	14
Control Method	14
Web Upper-PC • Login	14
Web Upper-PC • Basic Operation	14
Web Upper-PC • Advance Operation	17
Web Upper-PC • System	18
Web Upper-PC • Status	19

■ Overview

AMS-MTX_16*16 Is A Seamless Switching Matrix That Supports 4K Input And Output, Flexible Management Of Multiple Signals, Supports A Maximum Resolution Of 3840* 2160@30Hz, The Device Is Bulti-in Meanwell Power Supply, Used Crystal Buttons And Fullcolor LCD Screen, Easy To Operate, The Control Methods Include Panel Buttons, Web Version Upper Computer, Serial Port Protocol, Etc;

The Product Supports Multi Screen Management, Supports One Click Black Screen, Has 11 Sets Of Test Graphics Cards And Intelligent Edid Management To Ensure Compatibility With Signal Sources And Operations In Various Scenarios.

The Series Of Products Is Widely Used In Integrated Display And Control Scenarios, Such As Multimedia Conference Rooms, Lecture Halls, Multifunctional Halls, Stage Performances, Education And Teaching, Exhibitions, Command Centers, Security Monitoring, etc.

■ Application



■ Panel Introduction

➤ Front Panel



Video Matrix · Front Panel

- »» **LCD Screen** -- Display The Menu And Parameters Of Configuration.
- »» **Operating Button** -- Operate The Menu System.
 - **OK:** "Confirm";
 - **ESC:** "Exit Operation" or "Return";
 - **Knob:** Press Down Is "OK",
Turn Right "+" Turn Left "-" Is Adjust The Parameters On Menu.
- »» **INPUT** -- The Area Includes "1 - 16" Numeric Keys, "All"; Among Them, 1 - 16 Correspond To Input Signal Sources 1 - 16, Pressing The Key Will Select The Corresponding Input Source To Output, Press "All" Will To Select All Input Sources; When The 0-9 Key Lights Are All On, The Key Is Numeric Input Key, And Selecting The Corresponding Key Will Input The Corresponding Number;
- »» **OUTPUT** -- The Area Includes "1 - 16" Keys, "All"; When The Input Source Has Been Selected, The Key 1 - 16 Correspond To Output Channels 1 - 16 Respectively. Pressing One Of The Key Will Select The Corresponding Output; If There Is No Key Light On In The Input Area, The Output Selection Will Be Invalid!
- **Signal Switching, Must Select The Input Channel First, And Then Select The Channel, If There Is No Selection Input, Pressing The Output Key Will Be Invalid.**
- »» **F_Function** -- 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



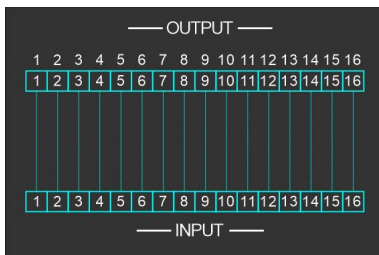
Video Matrix · Rear Panel

- »» **Power Connector** -- Including Switch, Fuse And IEC Standard Power Cable, Input Voltage Support 100-240 VAC, 50 -60Hz;
- »» **INPUT** -- 16 Input Channels, Signal Source Resolution Support 4K@30Hz And Backward Compatibility;
- »» **OUTPUT** -- 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)
- »» **CONTROL** -- Control Area
 - **RS-232:** Used To Connect Control Ports Such As Central Control Devices, Refer To The Provided Upper Computer Communication Protocol;
Support Serial Port Control Cascade, RS232-IN As Input, RS232-OUT As Loop Output;
 - **USB:** Type-A, Used For Upgrading Internal Programs Of The Machine;
 - **NET:** The Computer Is Connected To The Machine Network Interface Through The Network Cable To Realize The Web Version Upper Computer Control;
 - **EXT、ANT:** As A Backup Expansion Interface, Not Currently Enabled.

■ Menu System

➤ Standby Menu

Standby Menu As Follows, Click The "Ok" Button To Enter The Main Menu;



Standby Menu

»» **Menu Icon:** The Following Icons Are Not Displayed By Default. Once The Corresponding Function Is Enabled, They Will Be Displayed In Real-Time In The Standby Menu. If Cancelled, They Will Not Be Displayed;



Time& Tasks: The Icon Indicates That The Scheduled Tasks Function Is Enabled;



Keypad Lock: The Icon Indicates That The Keypad Is Locked, And Can Be Unlocked Or Locked By Long Pressing The "Esc" Key For 2 Seconds;



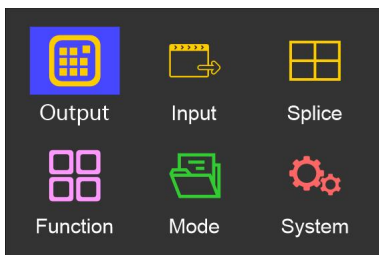
Freeze: The Icon Indicates That The Display Freezing Function Is Enabled;



Black: The Icon Indicates That The Black Screen Function Is Enabled;

➤ Main Menu

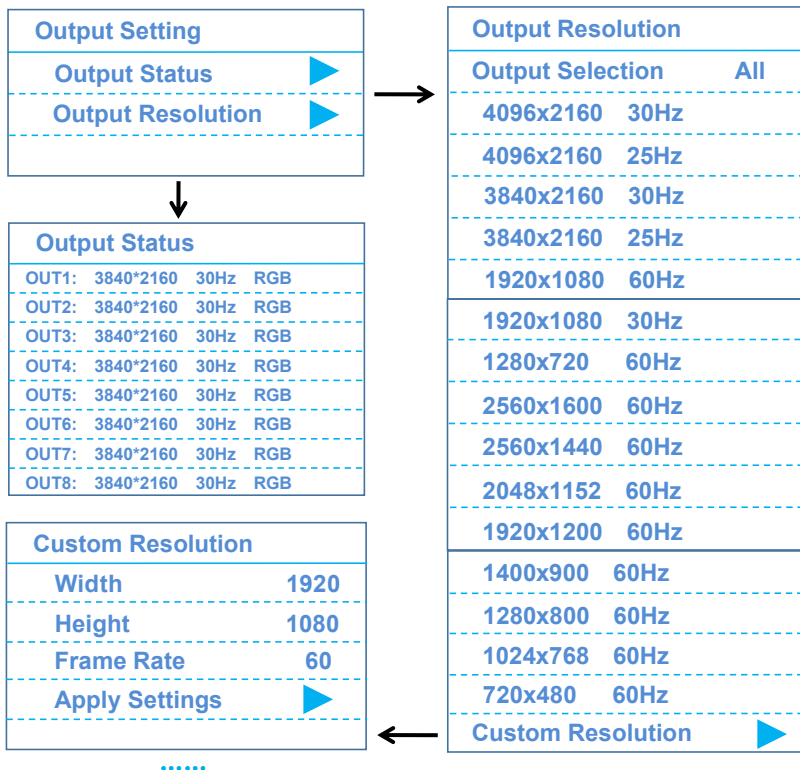
Main Menu As Follows, Click The "Ok" Key Or Press The Knob Can Enter The Sub Menus, By Rotating The Knob Can Setting The Parameters;



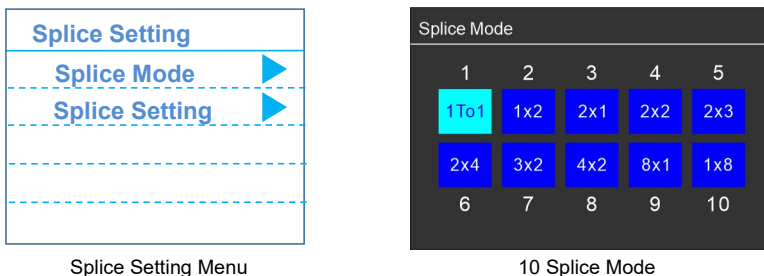
Main Menu

➤ Sub Menu

● **Output Settings** (Select "Output" In The Main Menu, Click The "Ok" Button Or Press The Knob To Enter The Interface Shown In As Below)



● **Splice Settings** (Select "Splice" In The Main Menu, Click The "Ok" Button Or Press The Knob To Enter The Interface Shown In As Below)



Splice Setting Menu

10 Splice Mode

Splice Setting	
Output Selection	All
Splice OnOff	Off
Splice Mode	Equal
H Units	1
V Units	1
Position	1

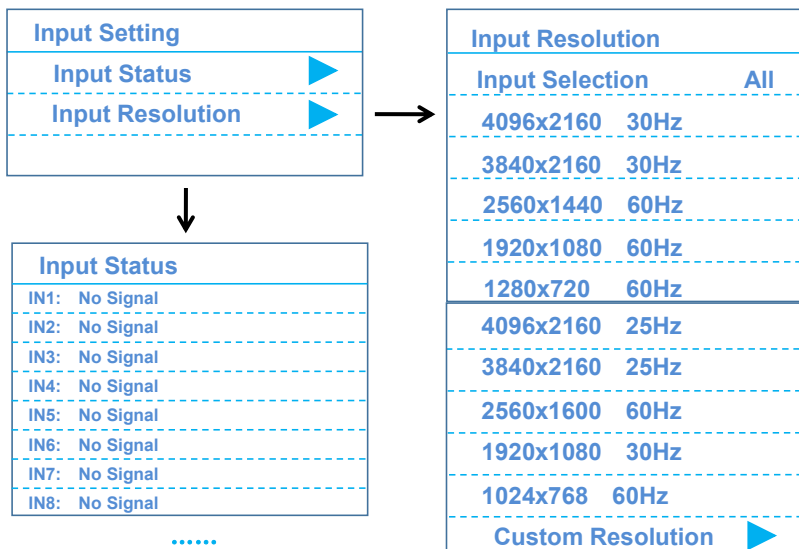
Output Selection: Select "1 - 8" Or "All";

Splice Switch: Select "On" Or "Off";

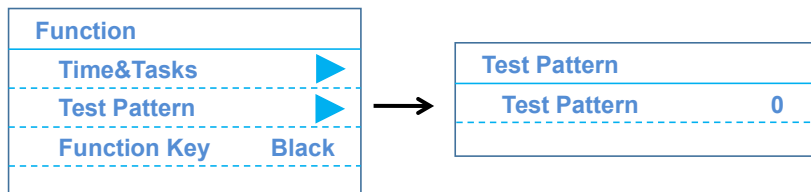
H Units • V Units: According To Actual Settings, The Maximum Value Is 8;

Position: Please Select The Output Channel First, And Match The Position According To The Actual Situation;

● **Input Settings** (Select "Input" In The Main Menu, Click The "Ok" Button Or Press The Knob To Enter The Interface Shown In As Below)



● **Function Settings** (Select "Function" In The Main Menu, Click The "Ok" Button Or Press The Knob To Enter The Interface Shown In As Below)



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:

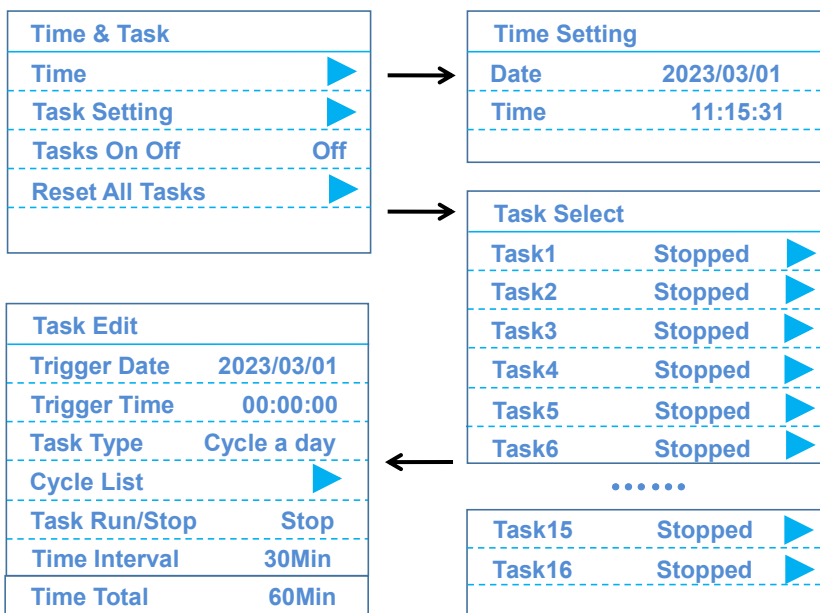
In The Menu Options Select Black Screen, Press The **"BLACK"** Key , When The Key Indicator Light Is On, All Outputs Will Be Black Screen;

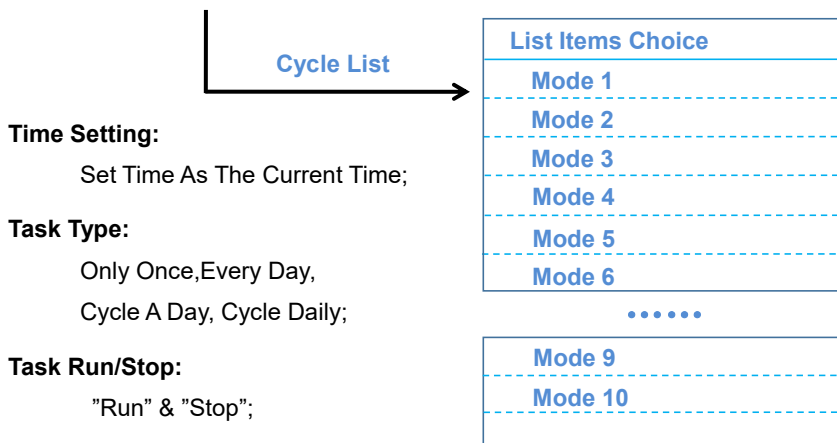
In The Menu Options Select Freeze, Press The **"BLACK"** Key, When The Key Indicator Light Is On, All Outputs Will Retain The Last Frame Of The Screen;

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

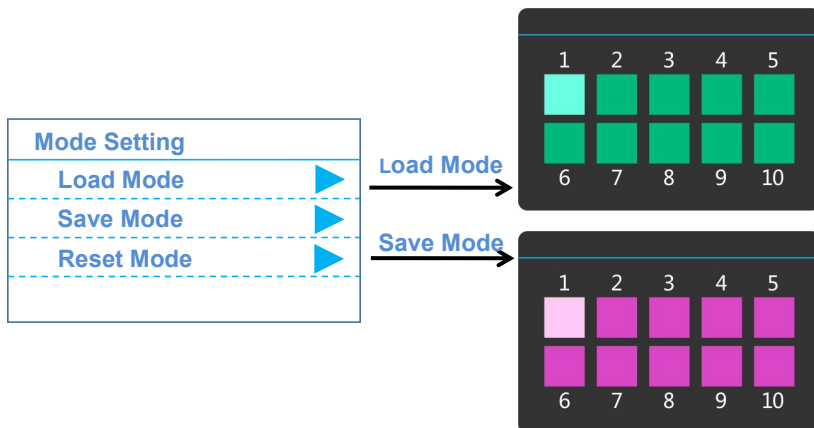
Select Time&Tasks, Can Achieve Timed Switching Mode, Timed Signal Source Switching Or Black Screen Switching .etc ;

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" In The Main Menu, Click The "Ok" Button Or Press The Knob To Enter The Interface Shown In As Below)



Load Mode: Enter The Load Interface And Press The "Number Key" To Load The Preset Mode;

Save Mode: Enter The Save Interface To Save The Current Preset Mode;

Reset Mode: Clear The Preset Mode Saved By User.

The Above Function Can Be Directly Load Mode And Save Mode Through The Panel Shortcut Keys !

● **System Settings** (Select "System" In The Main Menu, Click The "Ok" Button Or Press The Knob To Enter The Interface Shown In As Below)

System Setting		
语言/Language	▶	→
Network Config	▶	
System Info	▶	
Keypad Lock	▶	
Factory Reset	▶	→
Beep Duration	25	

Network Config	
Connect-Type	Static
IP Address	192.168.1.111
Subnet Mask	255.255.255.0

System Info	
SW: AMS_MX_X8_V1.37	
FW: AMS_MX_88_V1.36	

Keypad Lock: In The Device's Working Mode, Enabling The Function Can Effectively Prevent And Avoid Misoperation;

Buzzer Duration: Install The Buzzer, When The Device Switching The Signal, Audio Reminder Is Indicating Successful Switching; If The Numerical Value Set To 0, The Sound Will Be Turned Off;

Factory Reset: If Click OK, The Device Will Reset To Factory Parameters;

Factory Reset	
OK	▶
Cancel	▶

Language: English, Simplified Chinese, Traditional Chinese, Korean, Vietnamese, Thai, Spanish, Portuguese, Russian.etc;

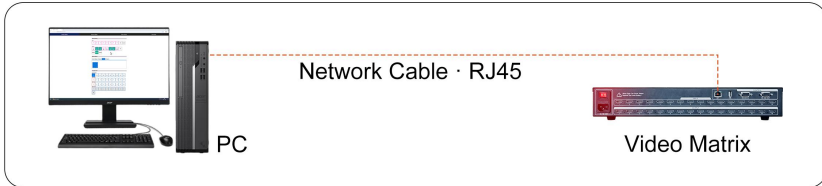
Language	
简体中文	▶
English	▶

If Need The Corresponding Language, Please Contact Our Sales And Make A Note Before Placing The Order.

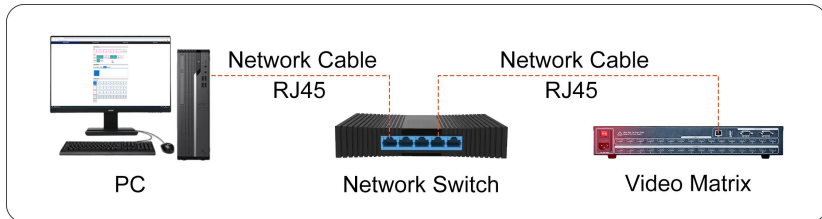
■ Upper Computer Control

➤ 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 • Login**

- Connect The Device Correctly According To The Connection Method And Retrieve The IP Address On The Device LCD Screen;
- Enter The IP Address Directly In Browser To Enter The Login Interface;

Login

Account

Password

Account: admin
Initial Password: admin
Lowercase

If Need
Authorization Managemen,
Please Contact Our Sales!!!

- Modify The Web Upper Computer To The Corresponding Language:
Support Chinese And English;

高级设置
系统设置

Language/语言

语言选择 简体中文 ▼

English

输出设置 简体中文

Advanced
System

Language/语言

Language Selection English ▼

English

Output Setting 简体中文

➤ Web Upper-PC · Basic Operation

● Matrix Switching

Matrix Switching

Input

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

Output

1 IN1	2 IN2	3 IN3	4 IN4	5 IN5	6 IN6	7 IN7	8 IN8	9 IN9	10 IN10
11 IN11	12 IN12	13 IN13	14 IN14	15 IN15	16 IN16	All			

The Switching Method Is Equivalent To Device Panel Key Operation, First Selecting The Input Source, And Then Selecting The Output; Instant Response Switching!

● Screen Setting

Splicing

Screen Setting

Rows Columns

By Adding Screen, Multi Screen Management Can Be Achieved;
 According To The Actual Situation, First Select The Unit That Matches And
 Splices The Corresponding Output Channel, And After Successful Setting, Can Add
 A Screen To Save It;

If There Is A New Screen, It Can Be Completed By Adding A Screen!

Screen Setting

Screen1

1	2
3	4

● Mode Setting

Load Splice Mode:

Include General Universal Splicing Mode, Can Splice Individual LCD
 Video Wall Splicing Screen Units Together;

Load Preset Mode:

Can Recall A Saved Preset Mode, And The Mode If Saved, The Preset
 Box Show Color Will Turn Purple;

Save Preset Mode:

Can Save The Current Parameters To The Preset Mode, Which
 Successfully saved Will Take Effect Immediately;

Delete Preset Mode:

Can Delete Saved Parameter Mode;

Mode

Splice Mode

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

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 & Output Setting

Output Setting

Output Select All Outputs ▼

Resolution 4096x2160 30Hz ▼ Confirm

Custom Resolution 1920 1080 60 Confirm

Input Setting

Input Select Input1 ▼

Preset 4096x2160 30Hz ▼ Confirm

User 1920 1080 60 Confirm

The Operation Method Is Equivalent To Menu Operation
 Operation Takes Effect Immediately!

- **Other Setting**

Other SettingBlack Screen ☐Freeze ☐Test Pattern

**The Operation Method Is Equivalent To Menu Operation
Operation Takes Effect Immediately!**

➤ **Web Upper-PC · System**

Network StatusNetwork Type IP Address Subnet mask Gateway DNS: **Beep**Duration (ms): **Reset Settings****Account Settings****System Information**

Master version: SW: AMS_MX_X16_V1.37

Input Version: 1.5

Output Version: 1.5

Can Change The Account And Password Through Account Settings!

➤ **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

Can View The Input And Output Information Through Device Status!