

MP-SUH42D-MV
4K@60Hz Collaboration & Presentation Switcher
User Manual V1.1



The Meaning of Symbols

■ Safety instructions

For your safe and correct use of equipment, we use a lot of symbols on the equipment and in the manuals, demonstrating the risk of body hurt or possible damage to property for the user or others. Indications and their meanings are as follow. Please make sure to correctly understand these instructions before reading the manual.

	This is A level product, which may cause radio interference in the living environment. In this case, users may need to take the feasible measures to get around the interference.
	Remind users that the dangerous voltage without insulation occurring within the equipment may cause electric shock.
	CE certification means that the product has reached the directive safety requirements defined by the European Union. Users can be assured about the use of it.
ISO9001-2000	This product has passed ISO9001 international quality certification.
	Warning: in order to avoid electrical shock, do not open the machine cover, nor is the useless part allowed to be placed in the box. Please contact the qualified service personnel.
	The grounding position of the device shell, which can shield interference, protect the device and personal safety.
	Contains heavy metal elements. It is forbidden to put it into the trash can and must be recycled professionally.

■ General information instructions

	It lists the factors leading to the unsuccessful operation or set and the relevant information to pay attention.
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Important Notes



Warning

In order to ensure the reliable performance of the equipment and the safety of the user, please observe the following matters during the process of installation, use and maintenance:

The matters needing attention of installation

- ◆ Please do not use this product in the following places: the place of dust, soot and electric conductivity dust, corrosive gas, combustible gas; the place exposed to high temperature, condensation, wind and rain; the occasion of vibration and impact . Electric shock, fire, wrong operation can lead to damage and deterioration to the product, either;
- ◆ In processing the screw holes and wiring, make sure that metal scraps and wire head will not fall into the shaft of controller, as it could cause a fire, fault, or incorrect operation;
- ◆ When the installation work is over, it should be assured there is nothing on the ventilated face, including packaging items like dust paper. Otherwise this may cause a fire, fault, incorrect operation for the cooling is not free;
- ◆ Should avoid wiring and inserting cable plug in charged state, otherwise it is easy to cause the shock, or electrical damage;
- ◆ The installation and wiring should be strong and reliable, contact undesirable may lead to false action;
- ◆ For a serious interference in applications, should choose shield cable as the high frequency signal input or output cable, so as to improve the anti-jamming ability of the system.

Attention in the wiring

- ◆ Only after cutting down all external power source, can install, wiring operation begin, or it may cause electric shock or equipment damage;
- ◆ This product grounds by the grounding wires .To avoid electric shocks, grounding wires and the earth must be linked together. Before the connection of input or output terminal, please make sure this product is correctly grounded;
- ◆ Immediately remove all other things after the wiring installation. Please cover the terminals of the products cover before electrification so as to avoid cause electric shock.

Matters needing attention during operation and maintenance

- ◆ Please do not touch terminals in a current state, or it may cause a shock, incorrect operation;

- ◆ Please do cleaning and terminal tighten work after turning off the power supply. These operations can lead to electric shock in a current state;
- ◆ Please do the connection or dismantle work of the communication signal cable , the expansion module cable or control unit cable after turning off the power supply, or it may cause damage to the equipment, incorrect operation;
- ◆ Please do not dismantle the equipment, avoid damaging the internal electrical component;
- ◆ Should be sure to read the manual, fully confirm the safety, only after that can do program changes, commissioning, start and stop operation.

Matters needing attention in discarding product

- ◆ Electrolytic explosion: the burning of electrolytic capacitor on circuit boards may lead to explosion;
- ◆ Please collect and process according to the classification, do not put into life garbage;
- ◆ Please process it as industrial waste, or according to the local environmental protection regulations

Preface

This manual mainly describes the use, performance parameters and troubleshooting of MP-SUH42D-MV 4K@60Hz Collaboration & Presentation Switcher.

If the technical parameters and system usage in this manual are changed, the manufacturer will update the version of the manual. Please use the latest user manual.

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Version	Update	Date
1.0	Released	2026.06.15
1.1	Added KVM hotkeys and updated network commands	2026.07.24

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1. Product Overview

The MP-SUH42D-MV is a versatile collaboration and presentation switcher designed for unified meeting spaces. It features three HDMI inputs and one full-function USB-C port supporting bidirectional audio/video transmission and 65W power delivery. With USB 3.0 connectivity, USB cameras, microphones, and other peripherals can be integrated for output to Microsoft Teams® and Zoom™, enabling laptop-based BYOM conferencing. The built-in KVM seat management platform allows four computers to be controlled via a single display, keyboard, and mouse, supports USB peripheral sharing and multi-view display, and enables local content sharing via HDMI or USB-C with simultaneous USB video output to remote conferences, providing a complete BYOD solution.

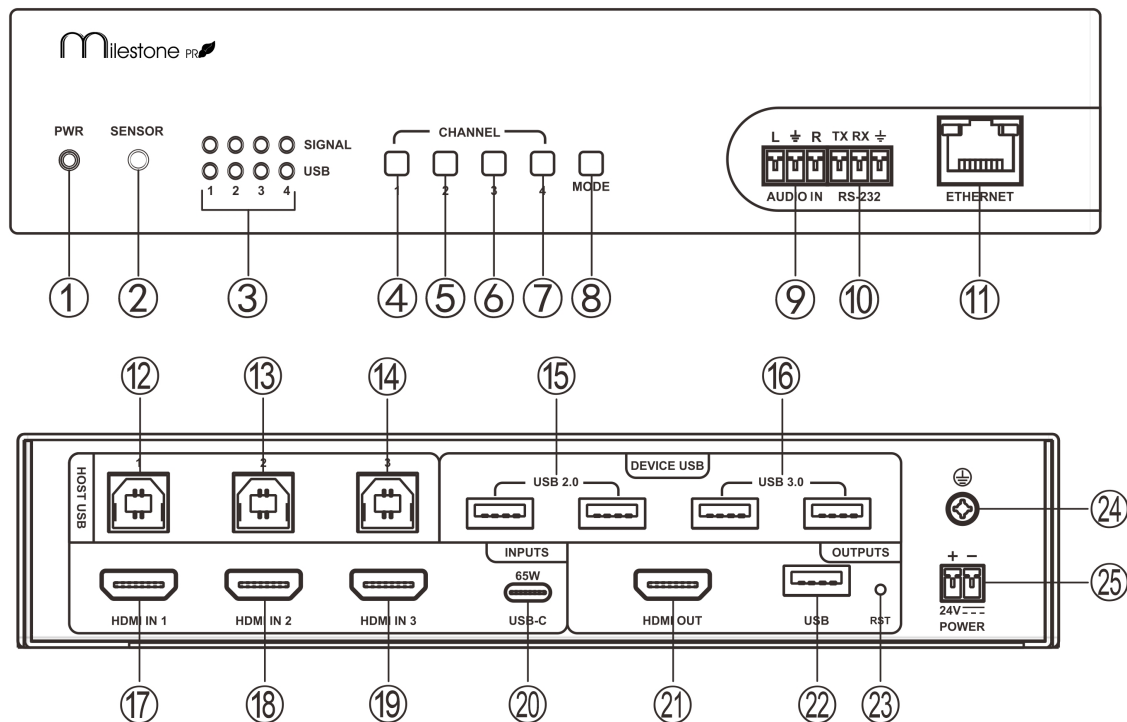
2. Features

- 3× HDMI inputs and 1× HDMI output, supporting up to 4K@60Hz (4:4:4), compliant with HDMI 2.0 and HDCP 2.2;
- Full-function USB-C interface, supporting up to 4K@60Hz (4:4:4) input, DP 1.2, PD 3.0, and up to 65W fast charging, with bidirectional video capture and output;
- Seamless switching with no flicker, black screen, or visual artifacts for smooth presentation;
- Multi-view display, enabling simultaneous viewing of local content and remote video;
- Customizable output layouts, allowing flexible multi-window configuration via a web-based canvas;
- USB 3.0 video output, transmitting HDMI audio and video to PCs, smartphones, or tablets for preview or capture in Microsoft Teams®, Zoom™, and other conferencing platforms;
- USB device management, supporting external USB cameras and microphones to seamlessly integrate room devices and laptop signals for unified conferencing output;
- Seat collaboration (KVM) management, enabling one keyboard and mouse to control multiple computers, with smooth cross-screen operation and USB data

sharing;

- Input labeling, allowing custom source names with support for any language and font;
- One-touch output freeze and unfreeze;
- One-touch output on/off control;
- Flexible switching logic, with configurable input priority for automatic source switching and true plug-and-play operation;
- Multiple control options, including RS-232, IR remote control, web interface, and front-panel buttons;
- Input test pattern generation for system commissioning and troubleshooting;
- Output test pattern generation to verify display and output connectivity;
- Intelligent HDMI output analysis, automatically selecting the optimal resolution based on display EDID;
- Output scaling modes supporting auto full-screen and aspect ratio preservation;
- Real-time device status monitoring via the web interface;
- Supports analog audio de-embedding;
- Supports input volume adjustment and multi-source audio mixing;
- Provides +5V DC / 250mA power for external HDMI peripherals;
- HDMI input equalization, actively compensating for signal loss caused by long or low-quality cables;
- Advanced EDID management, with multiple built-in EDID options and EDID file upload support;
- Supports control via Android and iOS mobile applications;
- Web-based one-click firmware upgrade for simplified maintenance.

3. Panel Introduction



- ① **Power Indicator:** Lights green when powered on.
- ② **IR Indicator:** Receives infrared remote control signals.
- ③ **Signal & USB Indicators:**

Upper SIGNAL LEDs 1–4 correspond to HDMI 1–3 and USB-C on the rear panel; when a signal is detected, the corresponding LED lights red.

Lower USB LEDs 1–4 correspond to HOST USB 1–3 and the USB-C input; when a USB device is connected, the corresponding LED lights red.
- ④ **Channel 1 Button:** Press repeatedly to cycle Channel 1 input from HDMI 1–3, USB-C and close channel.
- ⑤ **Channel 2 Button:** Press repeatedly to cycle Channel 2 input from HDMI 1–3, USB-C and close channel.
- ⑥ **Channel 3 Button:** Press repeatedly to cycle Channel 3 input from HDMI 1–3, USB-C and close channel.
- ⑦ **Channel 4 Button:** Press repeatedly to cycle Channel 4 input from HDMI 1–3, USB-C and close channel.
- ⑧ **Mode Button:** Cycle switching multiview modes; 8 preset modes by default, with additional custom modes via built-in Web page.
- ⑨ **Analog Audio Input:** 3-pin Phoenix terminal for microphone, PC, or media

player input.

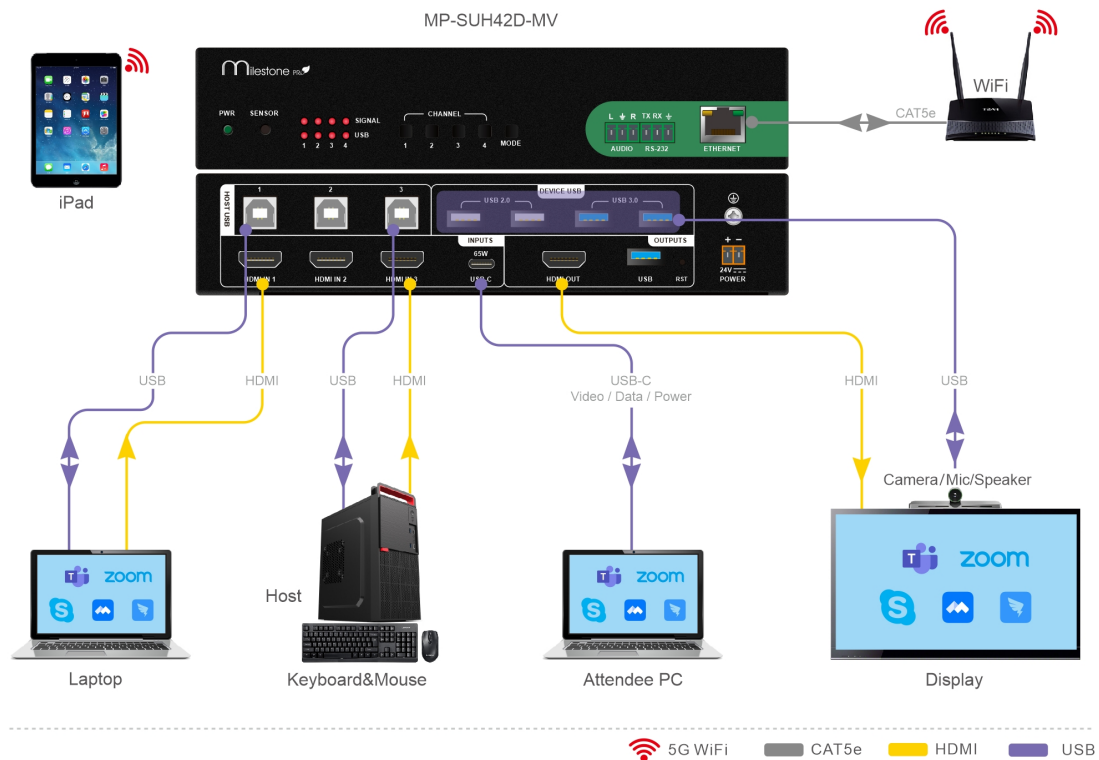
- ⑩ **Bi-directional RS232:** Supports TX/RX communication for central control via command.
- ⑪ **RJ45 Port:** Ethernet port for PC or switch connection; green indicates link, orange flashing indicates data transfer; supports firmware upgrade.
- ⑫ **HOST USB-B 1 Port:** Connects to PC 1 USB port, paired with HDMI IN1 for keyboard/mouse control.
- ⑬ **HOST USB-B 2 Port:** Connects to PC 2 USB port, paired with HDMI IN2 for keyboard/mouse control.
- ⑭ **HOST USB-B 3 Port:** Connects to PC 3 USB port, paired with HDMI IN3 for keyboard/mouse control.
- ⑮ **USB 2.0 Port:** 2 ports for keyboard/mouse; enables cross-screen control of connected PCs.
- ⑯ **USB 3.0 Port:** Connects external USB devices such as cameras, microphones, and speakers etc.
- ⑰ **HDMI IN 1:** Connects to PC 1 for audio/video input.
- ⑱ **HDMI IN 2:** Connects to PC 2 for audio/video input.
- ⑲ **HDMI IN 3:** Connects to PC 3 for audio/video input.
- ⑳ **USB-C:** Connects to PC 4 for audio/video I/O, data transfer, and keyboard/mouse control (equivalent to HDMI IN + USB-B). Supports 65W fast charging for laptops.
- ㉑ **HDMI Output:** 1× HDMI output for quad-view preview on display.
- ㉒ **USB Output:** Outputs audio/video from HDMI OUT quad-view for video conferencing display.
- ㉓ **Reset Button:** Press and hold for 3 seconds to restore factory settings.
- ㉔ **Grounding Screw:** Connectable to grounding wire to prevent leakage.
- ㉕ **DC Power Input:** Main power input, supports DC 24V.

4. Performance Parameters

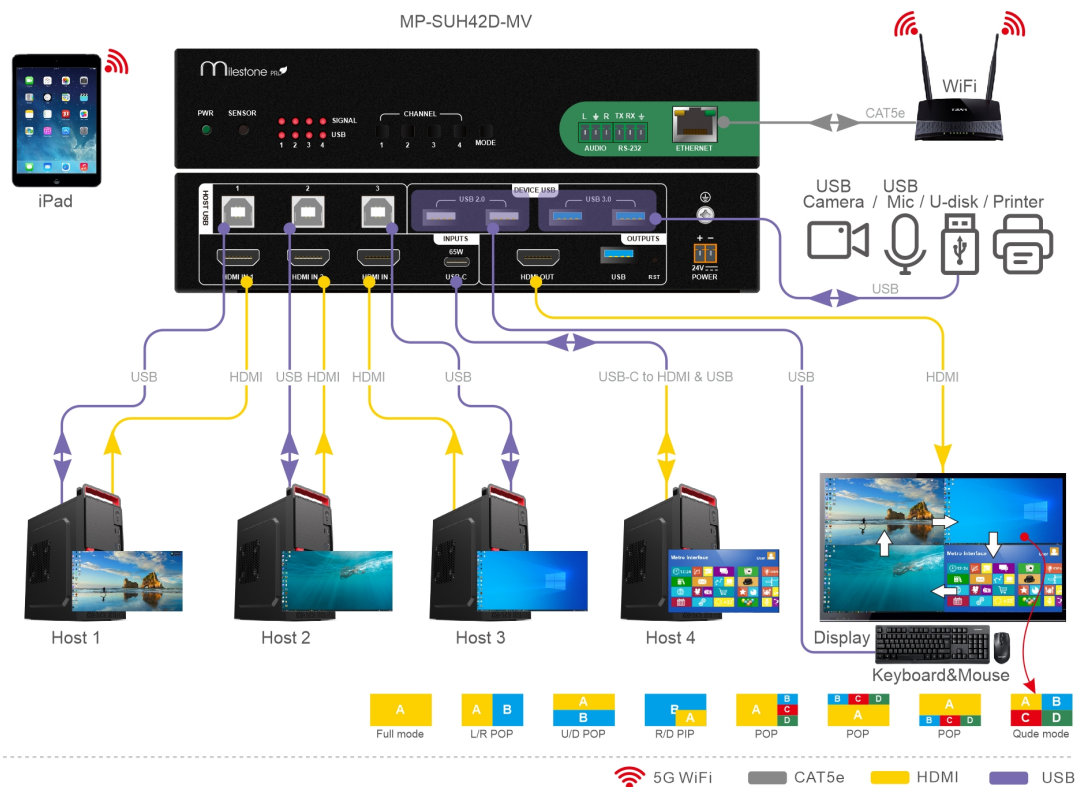
Model	MP-SUH42D-MV
HDMI Input	HDMI 2.0, HDCP 2.2
USB-C Input	DP 1.2, PD 3.0, up to 65W fast charging
HDMI Output	HDMI 2.0, HDCP 2.2
USB Output	USB 3.0 (Video Streaming) Mode: YUV422: 4096×2160@25Hz MJPEG: 4096×2160@60Hz RGB: 1920×1080@60Hz NV12: 3840×2160@30Hz USB 2.0 Mode: YUV422: 1920×1080@10Hz MJPEG: 1920×1080@60Hz
USB Host	3×USB 3.0, Type-B
USB Device	2× USB 2.0 (supports automatic keyboard/ mouse cross-screen control) 2× USB 3.0
Maximum Power Consumption	100W
Storage Environment	Temperature: -20°C~70°C; Humidity: 10%~90%
Power Supply	DC 24V
Size (W×D×H)	213×173×44 mm
Compliance	CE, ROHS
MTBF (Mean Time Between Failures)	Up to 100,000 hours
Warranty	3 Years

5. System Diagram

BYOM Diagram



KVM Diagram



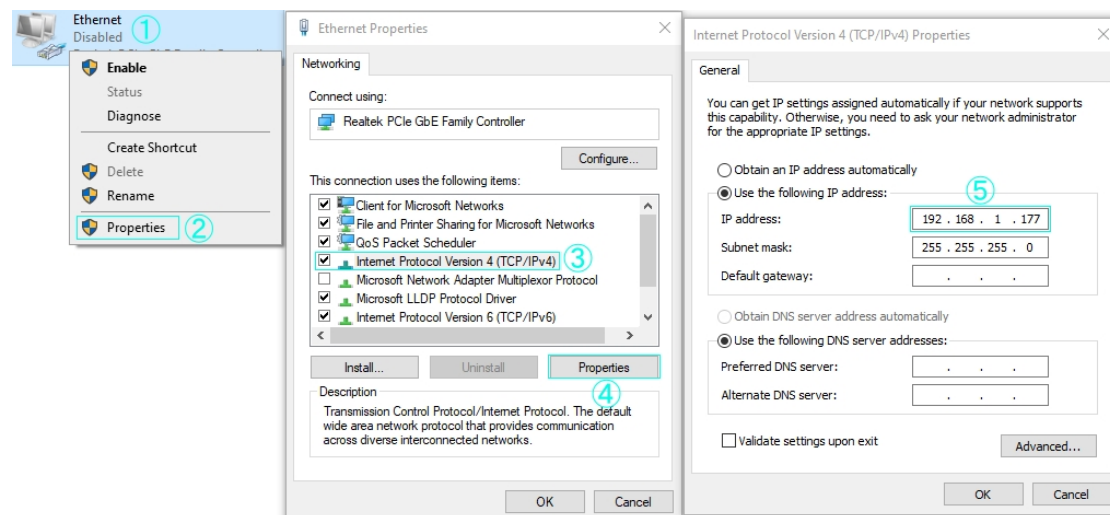
6. Web Control

6.1 Connection

Connect the PC to the switcher via an Ethernet cable for TCP/IP communication. The default IP address of the switcher is 192.168.1.191, and the default port is 6666.

6.2 IP Address Configuration

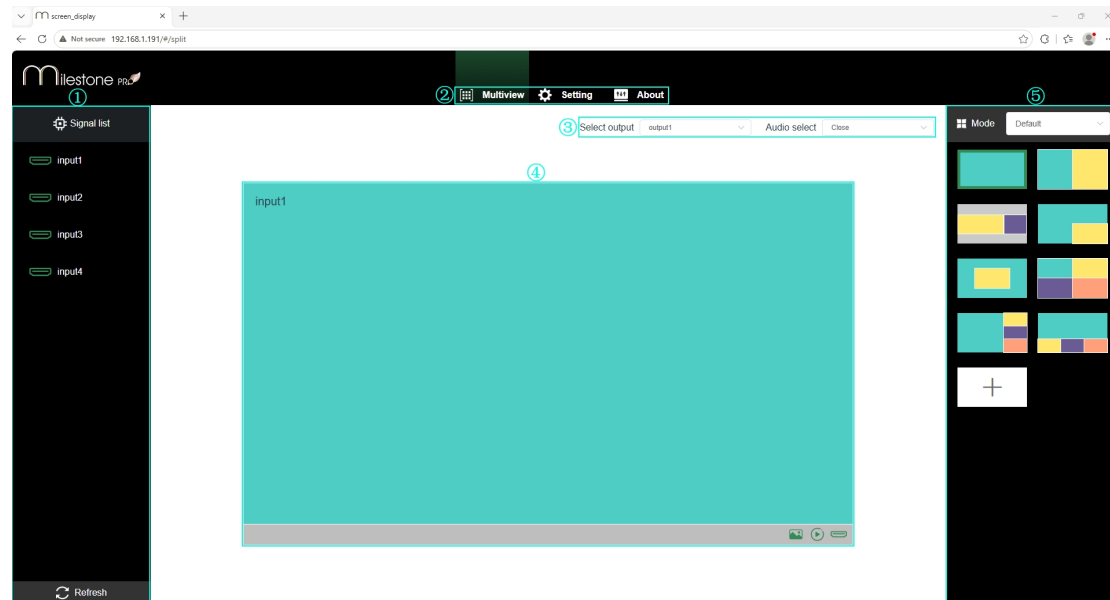
Open the **Control Panel**, click "**Network and Internet**", then "**Network and Sharing Center**", and select "**Change adapter settings**" to enter the **Network Connections** interface; locate Ethernet, right-click "**Properties**", double-click "**Internet Protocol Version 4 (TCP/IPv4)**" to enter the IP settings page, and assign an IP address in the same subnet as the switcher.



6.3 Web Login and Overview

Open a mobile or PC browser and enter the splicing switcher IP address:

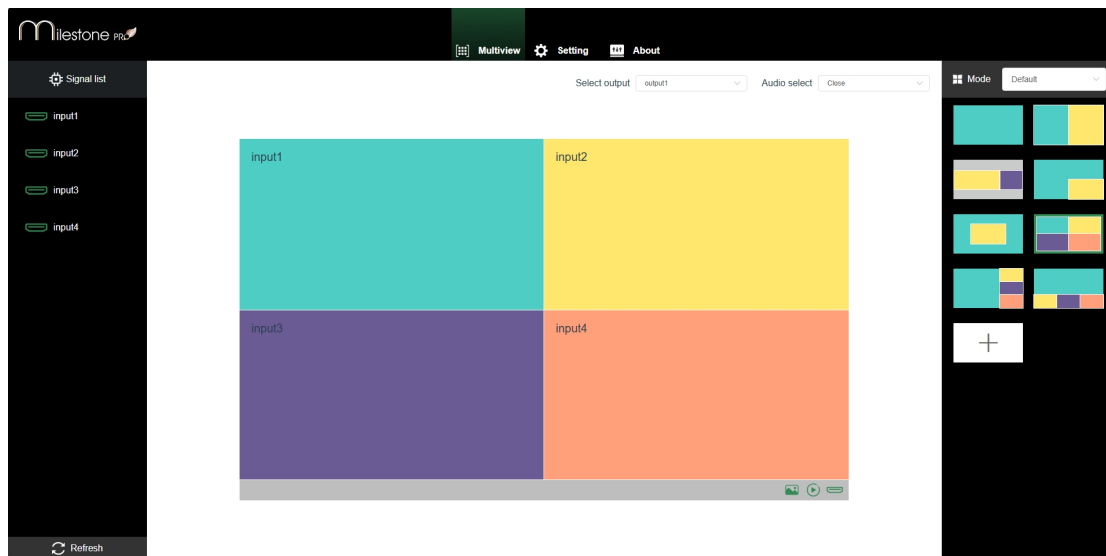
192.168.1.191 to access the Web management interface for display control and management.



- ① **Input Source List:** Displays the connection status of 4 input sources; **gray** indicates no signal or device power off, **green** indicates normal connection. Tap **Refresh** to update status.
- ② **Menu Bar:** Navigation for all functional modules of the web interface.
- ③ **Toolbar:** Display available tool options for the current functional module.
- ④ **Main Display Area:** Displays output signals and screen preview.
- ⑤ **Multiview Mode List:** Display 8 preset modes by default and supports custom modes.

6.3.1 Multiview

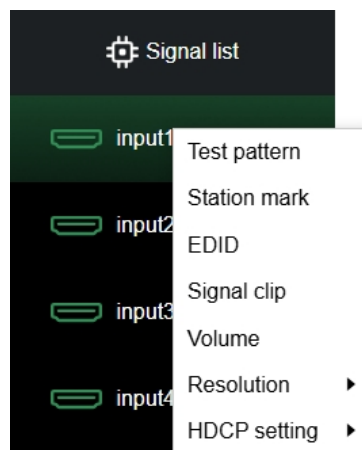
Click the  Multiview button in the menu bar to enter the multiview interface.



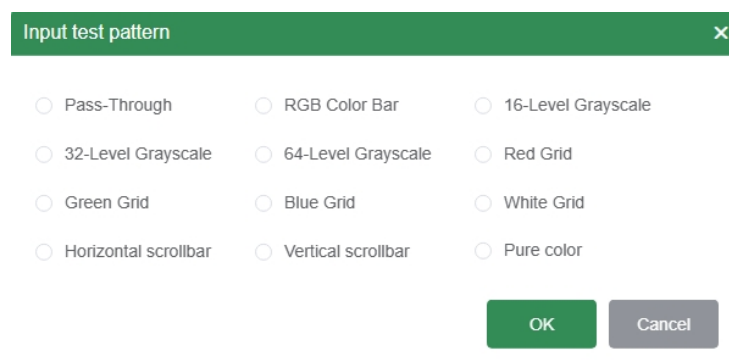
6.3.1.1 Signal List Right-Click Functions

Select any source from the signal list, then right-click to open the function menu.

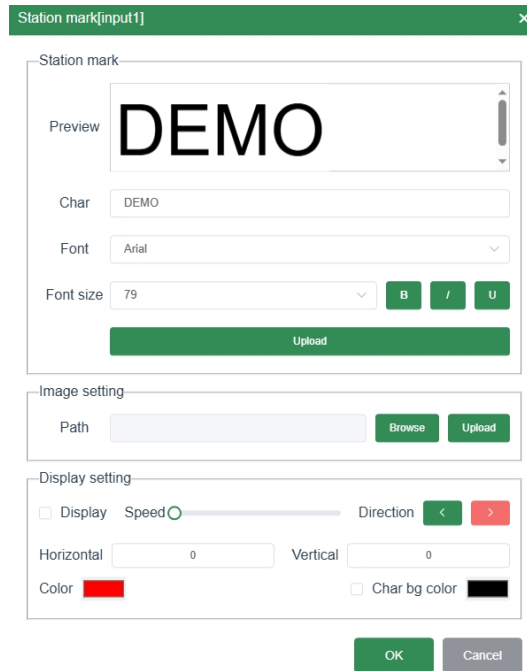
EDID can be adjusted, and the input source resolution can be viewed.



- 1) **Test pattern:** Engineering debugging, supports pass-through, non-pass-through, and pure color modes to verify input and output signals.



- 2) **Station mark:** Uploads a station mark to the output window for the current input signal port.



The dialog box is titled "Station mark[input1]" and contains three main sections:

- Station mark:** Includes a "Preview" window showing the text "DEMO", a "Char" input field with "DEMO", a "Font" dropdown menu set to "Arial", a "Font size" dropdown menu set to "79", and three buttons: "B" (Bold), "I" (Italic), and "U" (Underline). A large green "Upload" button is at the bottom.
- Image setting:** Includes a "Path" input field, a "Browse" button, and an "Upload" button.
- Display setting:** Includes a "Display" checkbox (unchecked), a "Speed" slider (set to 0), a "Direction" section with left and right arrow buttons, "Horizontal" and "Vertical" input fields (both set to 0), a "Color" dropdown menu (set to red), and a "Char bg color" checkbox (unchecked) with a black color selection.

At the bottom right are "OK" and "Cancel" buttons.

- ① **Preview:** Preview the configured Station Mark style.

Char: Enter the text to be uploaded as the station mark.

Font: Set the font style of the text to be uploaded.

Font size: Set the font size of the text to be uploaded.

B (Bold): Set whether the text is bold.

I (Italic): Set whether the text is italicized.

U (Underline): Set whether the text has an underline.

Upload: Upload the configured text to the selected port.



Set character style and size before uploading; changes require re-uploading a new character.

- ② **Image setting:** Click **Browse** to select an image file, then click **Upload** to complete.

- ③ **Display setting**

Display: Turn the station mark display on or off for the selected port.

Speed: Set the moving speed of the station mark for the selected port. 0 for static, 10 for maximum speed.

Direction: Set the moving direction of the station mark.

Horizontal: Adjust the horizontal position of the station mark. Vertical

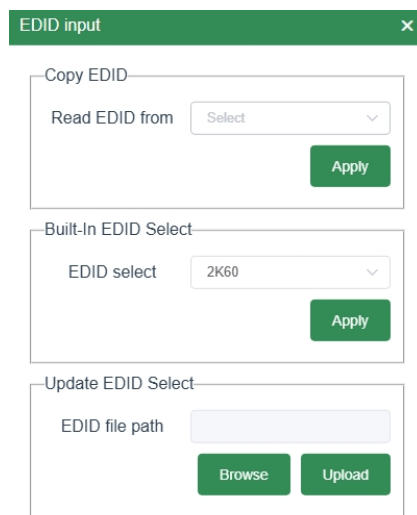
adjustments are visible only when speed is 0.

Vertical: Adjust the vertical position of the station mark.

Color: Set the color of the station mark text.

Char bg color: Set the background color of the station mark and control its display on/off.

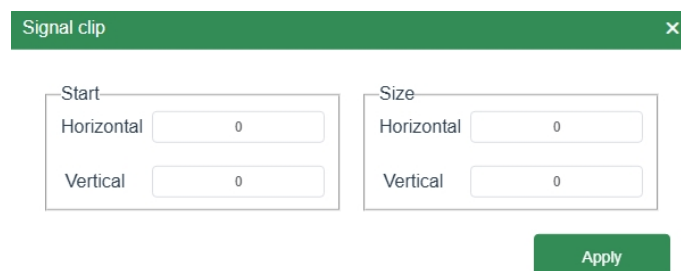
- 3) **EDID:** Ensures resolution and format compatibility between the signal source and display device, guaranteeing proper signal display.



The 'EDID input' dialog box contains three sections:

- Copy EDID:** A 'Read EDID from' dropdown menu with a 'Select' button and an 'Apply' button.
- Built-In EDID Select:** An 'EDID select' dropdown menu with '2K60' selected and an 'Apply' button.
- Update EDID Select:** An 'EDID file path' text input field with 'Browse' and 'Upload' buttons.

- ① **Copy EDID:** Read EDID from, copy the EDID from the display to the signal source to ensure signal compatibility.
 - ② **Built-in EDID Select:** Select internal EDID resolutions, including 4K30, 2K60, DVI and 1080p.
 - ③ **Update EDID Select:** Supports EDID updating and customization (contact the manufacturer for configuration) to resolve display issues or compatibility problems. If an update file is available, click **Browse** to select the EDID file, then click **Upload** to complete the EDID update.
- 4) **Signal clip:** User-defined cropping of the input image. Size 0,0 indicates full-screen cropping; start 0,0 and size 0,0 indicate no cropping.



The 'Signal clip' dialog box contains two sections:

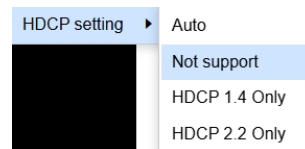
- Start:** 'Horizontal' and 'Vertical' input fields, both set to 0.
- Size:** 'Horizontal' and 'Vertical' input fields, both set to 0.

An 'Apply' button is located at the bottom right.

- 5) **Volume:** Adjusts the volume of the current input source.

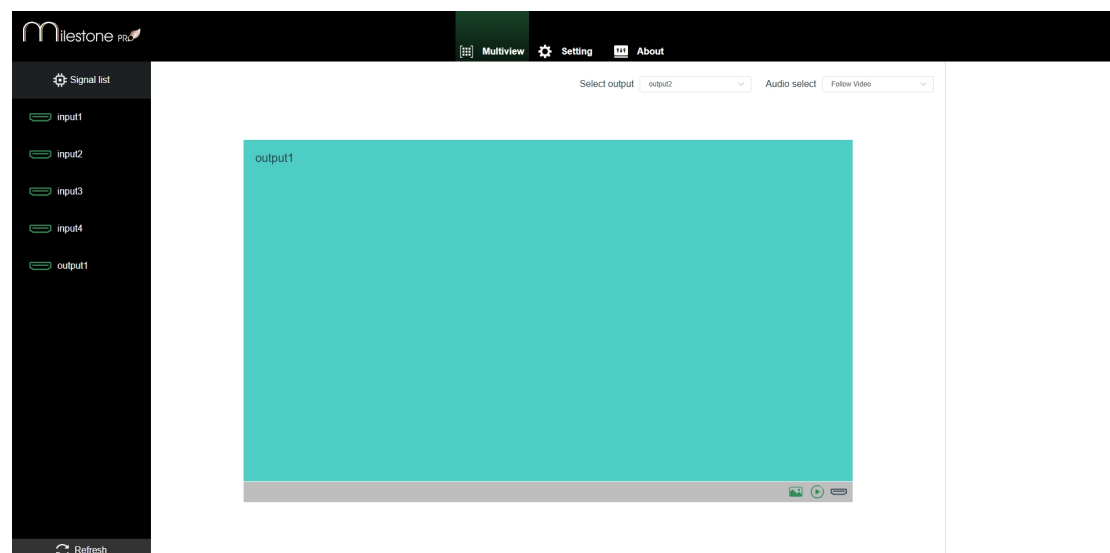


- 6) **Resolution:** Displays the current effective resolution of the input source.
- 7) **HDCP setting:** Configure the HDMI HDCP version to ensure compatibility between the source and display. Four options are available:
Auto: Automatically selects the most compatible version.
Unsupported: Disables HDCP; 1.4/2.2 sources may result in a black screen.
HDCP 1.4 only: Forces HDCP 1.4 protocol.
HDCP 2.2 only: Forces HDCP 2.2 protocol.



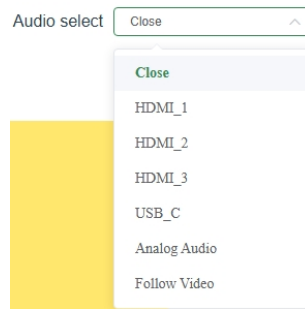
6.3.1.2 Select Output

Supports dual-channel output: Output 1 for large screen display, output 2 for video conferencing (e.g. Zoom). A single signal selected from the signal list or output 1 can be simultaneously output for synchronized conferencing.



6.3.1.3 Audio Select

Set the source for the analog audio output, selectable from Close, HDMI _1~3, USB_C, Analog Audio or Follow Video.



 **Follow Video:** The analog audio output follows the HDMI audio of the currently selected input on Output Channel 1.

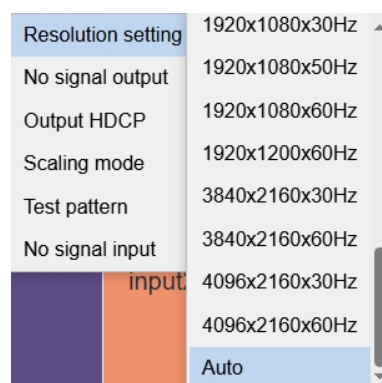
6.3.1.4 Output Window Management

Adjust the output resolution, scaling mode, on-screen display status, and video freeze status etc.



- 1) **Resolution setting:** Right-click the window to set the output resolution.

Supported multiple mainstream resolutions or auto resolution.



- 2) **No signal output:** When the signal is disconnected, pass-through, non-pass-through, or pure color mode can be selected for display.

No signal output
✕

☐ Pass-Through

☐ RGB Color Bar

☐ 16-Level Grayscale

☐ 32-Level Grayscale

☐ 64-Level Grayscale

☐ Red Grid

☐ Green Grid

☐ Blue Grid

☐ White Grid

☐ Horizontal scrollbar

☐ Vertical scrollbar

☐ Pure color

OK

Cancel

- 3) **Output HDCP:** HDCP output on/off control for compatibility with different signal sources and display devices.

Output HDCP

Enable

Disable

- 4) **Scaling mode:** Set the window to maintain the correct aspect ratio or squeeze into frame (distortion).

Scaling mode
✕

☒ Squeeze into frame(Distortion)

☐ Correct aspect ratio

OK

Cancel

- 5) **Test pattern:** Engineering debugging, supports pass-through, non-pass-through, and pure color modes to verify input and output signals.

Output test pattern
✕

☐ Pass-Through

☐ RGB Color Bar

☐ 16-Level Grayscale

☐ 32-Level Grayscale

☐ 64-Level Grayscale

☐ Red Grid

☐ Green Grid

☐ Blue Grid

☐ White Grid

☐ Horizontal scrollbar

☐ Vertical scrollbar

☐ Pure color

OK

Cancel

- 6) **No signal input:** When the input signal is disconnected, the device can be set to standby or no standby.

No signal input

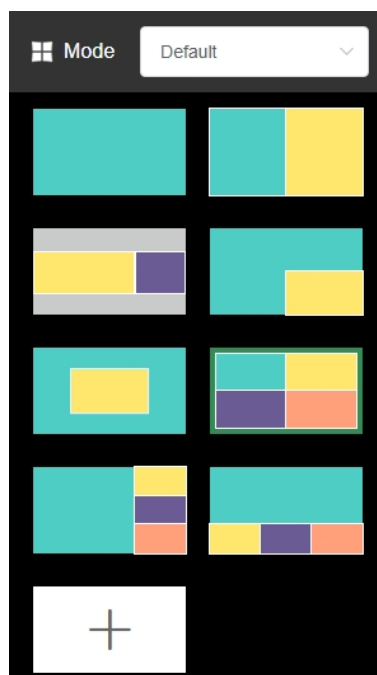
No standby

Standby

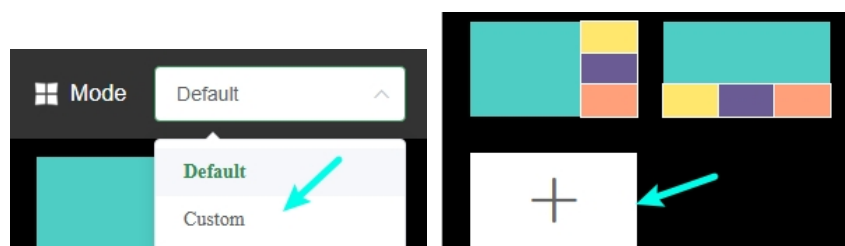
- 7) **Display Status:** Controls the output signal display of the screen window. When the  display icon is green, the signal is shown normally; when  gray, the signal is disabled and the screen outputs black.
- 8) **Video Status:** Controls video playback and freeze of the output window. When the  play icon is green, video plays normally; when the  pause icon is gray, the current image is frozen.
- 9) **Output Signal Status:**  Gray indicates the display is not connected or power off;  green indicates normal connection and power status.

6.3.1.5 Multiview Mode

Used to configure the output layout of the video wall. The system provides 8 default preset multiview modes and supports custom mode creation and editing.

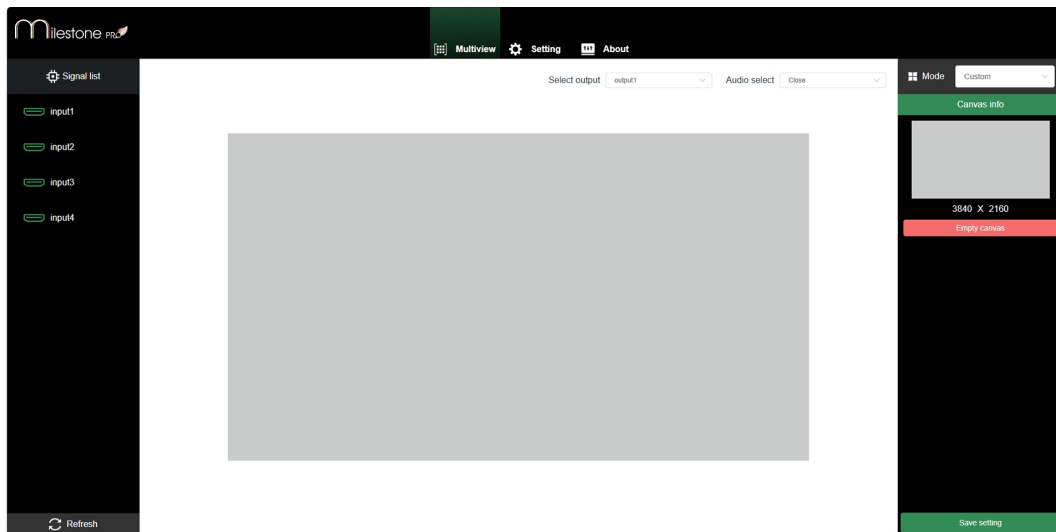


- 1) There are two ways to add a custom mode. Select the **Custom** option in the mode selection box, or click the **Add** button under the default modes to enter the custom canvas editing interface and complete the new mode addition.

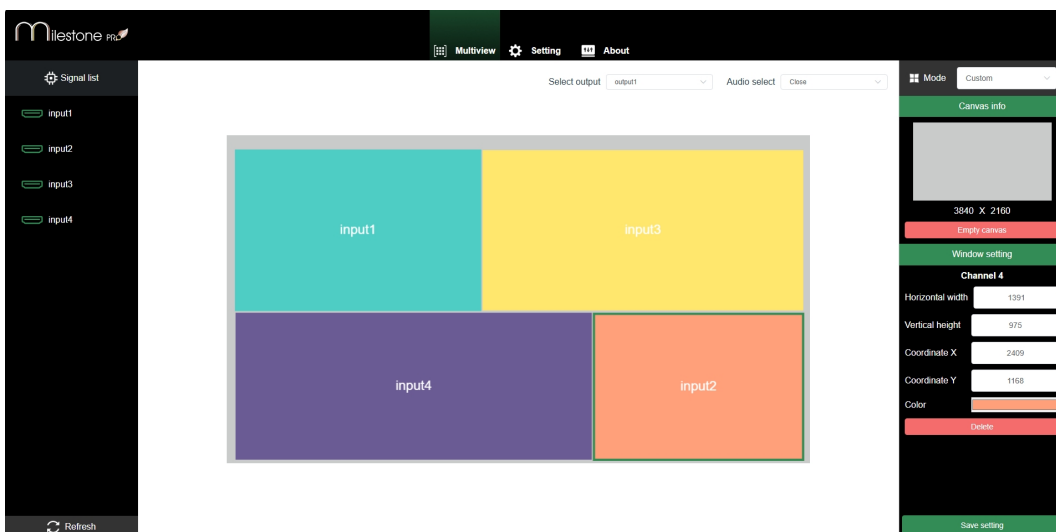


- ① On the blank canvas, the size is fixed at 3840×2160 and cannot be changed.

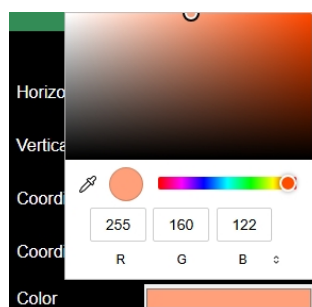
When the cursor changes to “+”, windows can be opened anywhere on the canvas, up to 4 windows without overlap. Click a window to edit or adjust it.



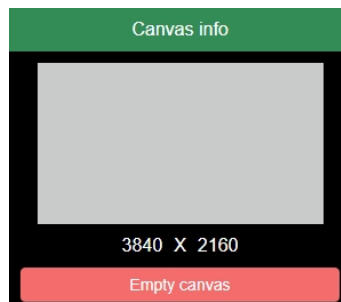
- ② **Window editing:** Select the window to be edited. The window settings function will appear below the canvas information on the right side, displaying parameters such as the window's size, position, and color. These parameters can be adjusted.



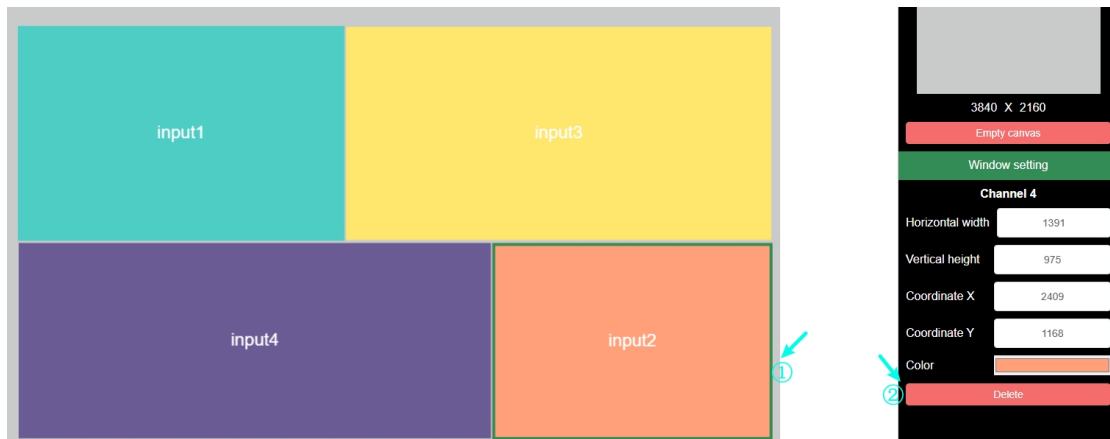
- ③ **Window color adjustment:** Click the window color bar to open the color picker, allowing color adjustment for the window. Supports RGB, HSL, and HEX color mode editing.



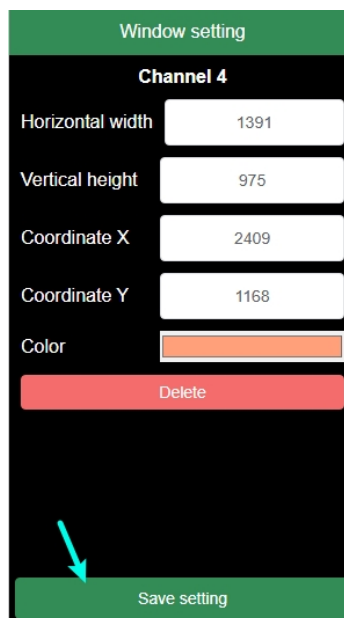
- ④ **Empty canvas:** Clears all currently opened windows on the canvas.



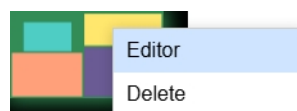
- ⑤ **Delete:** Deletes only the currently selected window.



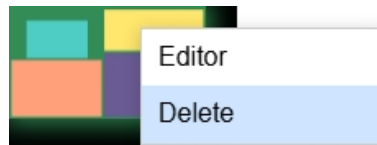
- ⑥ **Save setting:** After editing the canvas, click Save Setting to complete template creation. The custom template will be displayed in the Default Mode.



- 2) **Editor template:** In Default Mode, right-click the custom template and select Edit to enter the canvas interface for template modification. Only custom templates can be edited; default templates are not editable.

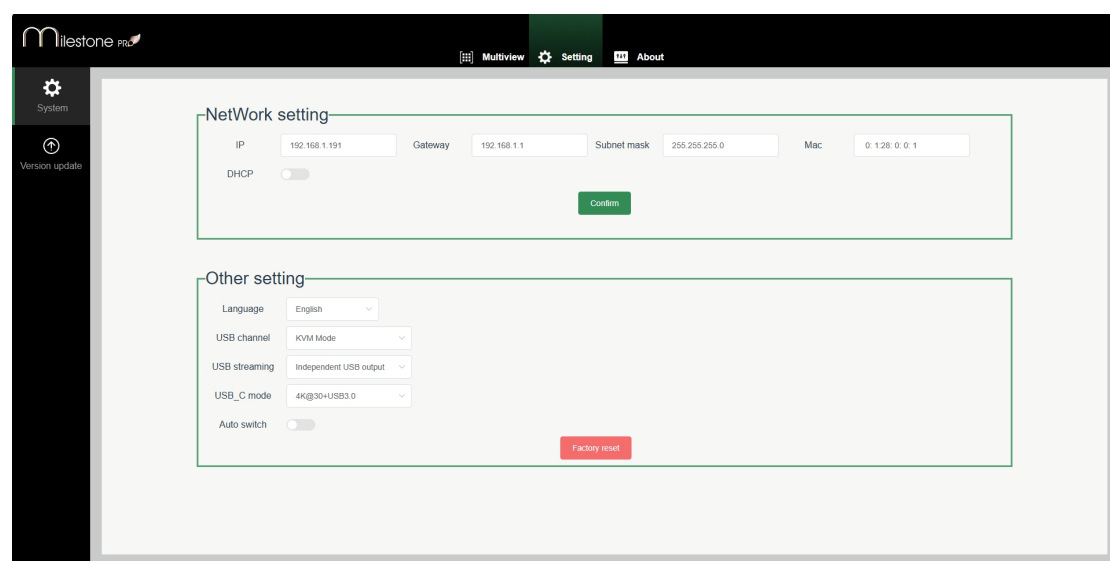


- 3) **Delete template:** The currently selected template cannot be deleted (i.e., templates already applied to the main display). Only unselected custom templates can be deleted. Default templates cannot be deleted.

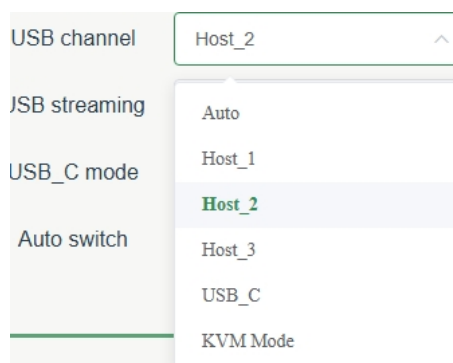


6.3.2 Setting

6.3.2.1 System



1. **Network setting:** Select DHCP or manually set IP address, subnet mask, and gateway, then click OK to apply.
2. **Other setting:** Supports language, USB channel, streaming, USB-C mode, auto switching, and factory reset.
 - 1) **Language:** Switch interface language.
 - 2) **USB channel:** Switch keyboard/mouse control, streaming, and external USB devices across four PCs.



- ① **Auto:** In Multiview mode, single-screen output follows the selected input signal,

with keyboard, mouse, and USB device control assigned to the corresponding PC.

In multi-screen mode, control is switched only via Channel 1 window.

- ② **Host_1~3 & USB_C:** 4 input channels (HOST USB + INPUTS) support DEVICE USB connection for keyboard, mouse, and USB devices, switchable across channels.
- ③ **KVM Mode:** Supports keyboard hotkeys to switch USB 3.0 device control and data transfer; press the keyboard (e.g., [Num]+[Num]+[1~4]) to switch among 4 channels.



When using MP-SUH42D-MV hotkeys, keyboard & mouse must be connected to USB 2.0.

Keyboard Hotkey Configuration	
Hotkey Mode	Scroll Mode (Default) Num Mode Caps Mode Ctrl+Shift Mode
Scroll Mode (Default)	
[Scroll]++[Scroll]+[1~4]	Switch to 4 corresponding channels (HOST USB + INPUTS)
[Scroll]++[Scroll]+[↑or↓or←or→]	Switch to the previous or next channel
[Scroll]++[Scroll]+[K]	Enable/disable hotkey
[Scroll]++[Scroll]+[ESC]	Restore factory default
[Scroll]++[Scroll]+[Num]	Switch to Num Mode ([Num]++[Num] hotkey control)
[Scroll]++[Scroll]+[Caps]	Switch to Caps Mode ([Caps]++[Caps] hotkey control)
[Scroll]++[Scroll]+[Ctrl]	Switch to Ctrl+Shift Mode ([Ctrl]+[Shift] hotkey control)
Num Mode	
[Num]++[Num]+[1~4]	Switch to 4 corresponding channels (HOST USB + INPUTS)
[Num]++[Num]+[↑or↓or←or→]	Switch to the previous or next channel
[Num]++[Num]+[K]	Enable/disable hotkey
[Num]++[Num]+[ESC]	Restore factory default
[Num]++[Num]+[Scroll]	Switch to Scroll Mode ([Scroll]++[Scroll] hotkey control)
[Num]++[Num]+[Caps]	Switch to Caps Mode ([Caps]++[Caps] hotkey control)
[Num]++[Num]+[Ctrl]	Switch to Ctrl+Shift Mode ([Ctrl]+[Shift] hotkey control)
Caps Mode	

[Caps]++[Caps]+[1~4]	Switch to 4 corresponding channels (HOST USB + INPUTS)
[Caps]++[Caps]+[↑or↓or←or→]	Switch to the previous or next channel
[Caps]++[Caps]+[K]	Enable/disable hotkey
[Caps]++[Caps]+[ESC]	Restore factory default
[Caps]++[Caps]+[Scroll]	Switch to Scroll Mode ([Scroll]++[Scroll] hotkey control)
[Caps]++[Caps]+[Num]	Switch to Num Mode ([Num]++[Num] hotkey control)
[Caps]++[Caps]+[Ctrl]	Switch to Ctrl+Shift Mode ([Ctrl]+[Shift] hotkey control)
Ctrl+Shift Mode	
[Ctrl]+[Shift]+[1~4]	Switch to 4 corresponding channels (HOST USB + INPUTS)
[Ctrl]+[Shift]+[↑or↓or←or→]	Switch to the previous or next channel
[Ctrl]+[Shift]+[K]	Enable/disable hotkey
[Ctrl]+[Shift]+[ESC]	Restore factory default
[Ctrl]+[Shift]+[Scroll]	Switch to Scroll Mode ([Scroll]++[Scroll] hotkey control)
[Ctrl]+[Shift]+[Num]	Switch to Num Mode ([Num]++[Num] hotkey control)
[Ctrl]+[Shift]+[Caps]	Switch to Caps Mode ([Caps]++[Caps] hotkey control)

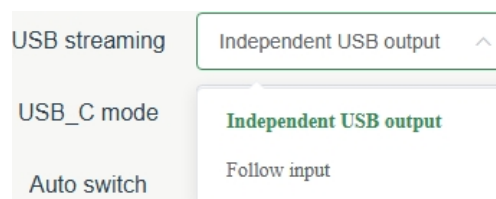


"++" indicates a double key press. For example, [Scroll]++[Scroll]+[1] requires pressing Scroll twice rapidly, followed by key 1. The second Scroll press must be within 2 seconds of the first, otherwise the hotkey is invalid.



To switch modes, press the current mode hotkey to enter the target mode, then use the target mode hotkey combination.

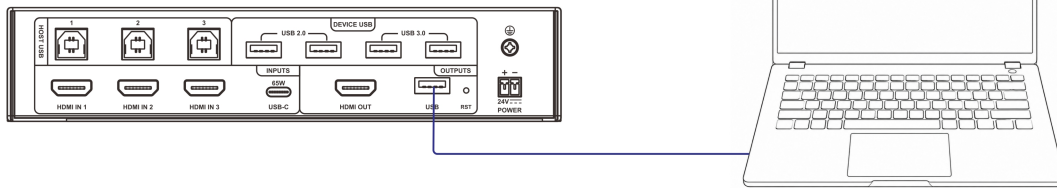
- 3) **USB streaming:** Uploads the output video to a connected PC for display, supporting **Independent USB output** or **Follow input mode**.



① Independent USB output

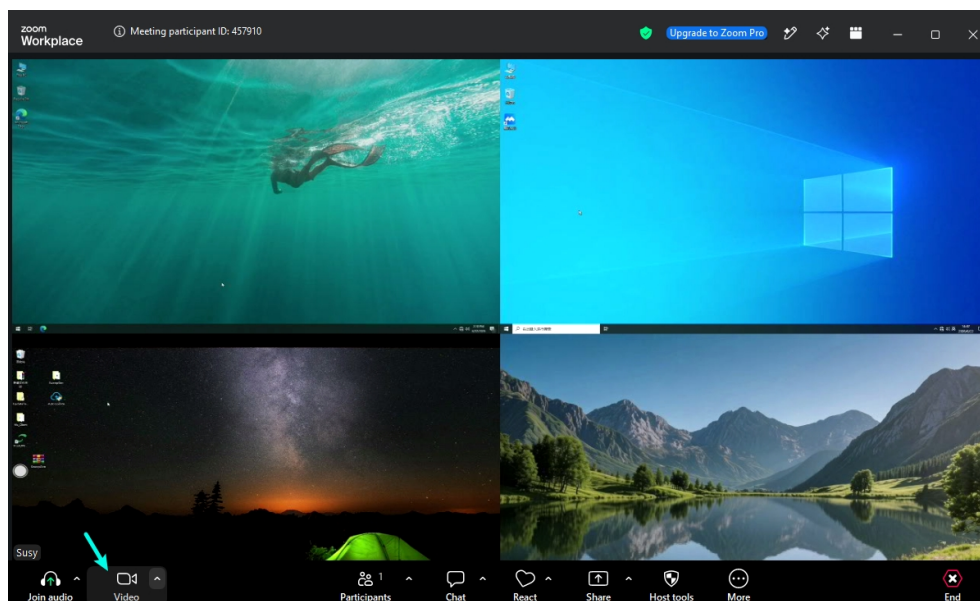
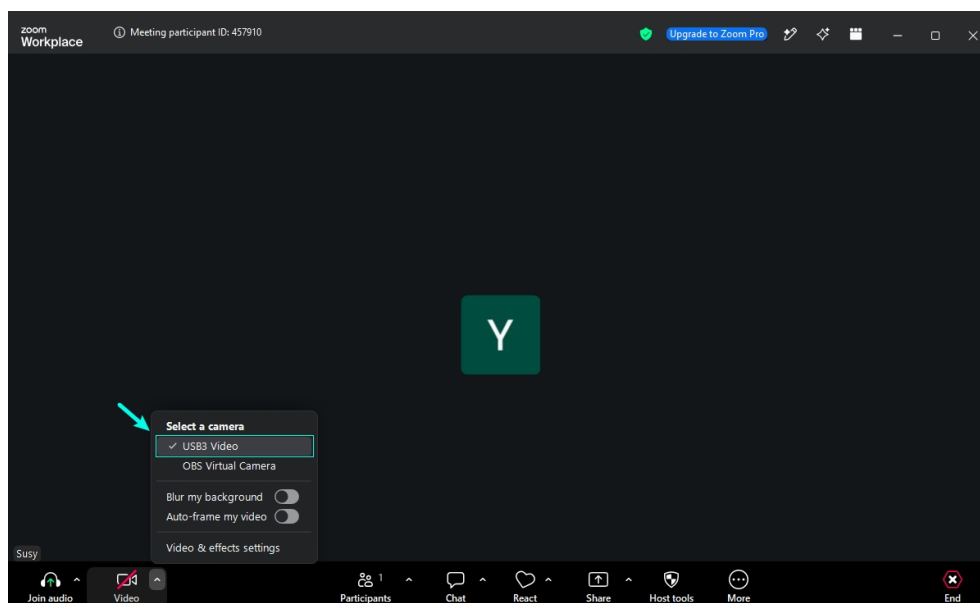
Output 2 must be connected via a USB 3.0 AV cable from the MP-SUH42D-MV OUTPUTS USB port to the PC USB port. After starting the video conference, a single input signal or the main display can be synchronized to the conferencing software. Steps (e.g., Zoom Meeting):

- Connect the MP-SUH42D-MV OUTPUTS USB port to the PC.



- b. Open Zoom Meeting, start a meeting, select USB3 Video, and enable video to display the large-screen in the conference.

 USB streaming is uploads the output video to a connected PC channel for display.



② Follow input

When set to follow input, output 2 can be synchronized to any of the four input channels (HOST USB + INPUTS). The output automatically switches with the

selected input signal, enabling keyboard/mouse control and USB 3.0 device sync.

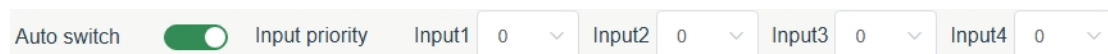
The switched-out PC loses display output.

 Follow input mode works with USB channel selection to switch control to the corresponding PC. In KVM mode, press hotkey to switch USB 3.0 control and data transfer across 4 channels.

- 4) **USB_C mode:** Fixed output mode supporting 4K@30+USB 3.0 or 4K@60+USB 2.0. Resolution is tied to USB speed; no auto switching.



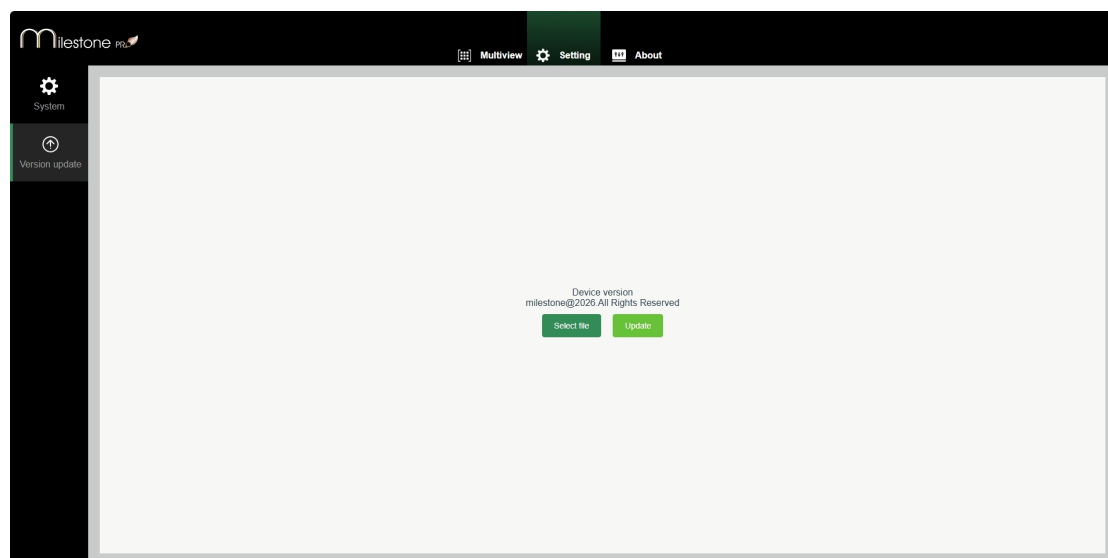
- 5) **Auto switch:** In single-screen mode with priority enabled, higher input channel values have higher switching priority.



- 6) **Factory reset:** Restores all parameters to default.

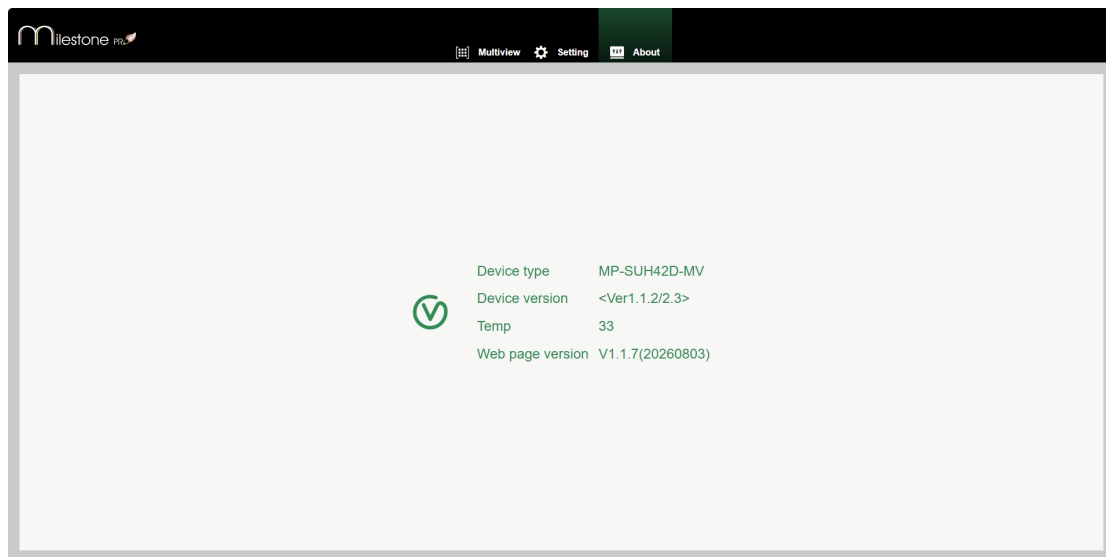
6.3.2.2 Version Update

Upgrade Process, obtain the upgrade package from the manufacturer. In the Version Upgrade interface, click Select file to open the folder and locate the upgrade package, upload it, then click Update to complete the upgrade.



6.3.3 About

Device information includes type, device version, and web page version.



7. Network Protocol

Protocol: TCP, IP: 192.168.1.191, Port: 6666



Parameters in [] should not be included when entering commands.

System Settings:

Order	Function description	Parameter description	Sample	Return information
/^Version;	Device model/ version	None	/^Version;	<Version:Ver1.1.2/2.3> <Temp:0.2> <Device:4_2> <Model:MP-SUH42D-MV> <Resolution:3840x2160@60Hz>
[x]VIDEO[y].	Switch video, input [x] to output [y]	Multiview outputs is channels 101~104; Output 2 corresponds to channel 1.	1VIDEO102.	VIDEO:[x] -> [y]; <VIDEOy/x>
[x]AUDIO[y].	Switch audio, input [x] to output [y]	Output fixed to channel 1 Analog input as channel 5 Follow video switching as channel 6	2AUDIO1.	AUDIO: [x] -> [y]; <AUDIOy/x>
<#Splice_mode[x]>	Multi-view mode selection	[x]:0-11	<#Splice_mode2>	<Splice_mode[x]>

<^NET>	Query network parameters		<^NET>	<SIPR:192.168.1.191> <GAR:192.168.1.1> <SUBR:255.255.255.0> <SHAR: 6:17:22:5:44:59> <SPORT:6666>
<#SIPR[192].[168].[1].[191]>	Set the network IP		<#SIPR192.168.1.191>	<SIPR:[X1].[X2].[X3].[X4]>
<#GAR[192].[168].[1].[1]>	Set the network gateway		<#GAR192.168.1.1>	<SUBR:[X1].[X2].[X3].[X4]>
<#SUBR[255].[255].[255].[0]>	Set subnet mask		<#SUBR255.255.255.0>	<GAR:[X1].[X2].[X3].[X4]>
<#SHAR[00]:[01]:[28]:[00]:[00]:[01]>	Set network MAC address (Hex)		<#SHAR0:01:28:00:00:01>	<SHAR:[X1]:[X2]:[X3]:[X4]:[X5]:[X6]>
<#DHCP_On>	Open DHCP			<DHCP_On>
<#DHCP_Off>	Close DHCP			<DHCP_Off>
\$Default!	Factory Reset			<System has been restored!>
<#Scaler_Mode[x]/[y]>	Scaling mode selection	x:output channel y: 0:full 2:black 3:tailor	<#Scaler_Mode1/2>	<Scaler_Mode[x]/[y]>
<#Frozen[x]/[y]>	Freeze / Unfreeze	x:output channel y: 0:freeze; 1:unfreeze	<#Frozen1/1>	<Frozen[x]/[y]>
<#Input_HDCP[x]/[y]>	Input HDCP settings	x: input channel 1~8 y: 0:auto 1:not supported 2:HDCP 1.4 only 3:HDCP 2.2 only	<#Input_HDCP1/1>	<Input_HDCP[x]/[y]> <Resolution/1/In/noinput> <Resolution/1/In/1920x1080x70Hz!> <Resolution/1/In/1920x1080x60Hz!>
<#VolumeIn[x],[y]>	Input volume	x:input channel y:volume level 0~100	<#VolumeIn2,50>	<VolumeIn[x],[y]>
<^VolumeIn[x]>	Query volume	x:input channel y:volume level 0~100	<^VolumeIn2>	<VolumeIn[x],[y]>

<#Output_Standby[x]/[y]>	y: input output 0: no standby 1: standby	Output standby status	<#Output_Standby1/1>	<Output_Standby[x]/[y]>
<#VideoMuteOn[x]>	x: channel	Output video open	<#VideoMuteOn1>	<VideoMuteOn[x]>
<#VideoMuteOff[x]>	x: channel	Output video close	<#VideoMuteOff1>	<VideoMuteOff[x]>
<#AudioMuteOn[x]>	x: channel	Output audio open	<#AudioMuteOn[x]>	<AudioMuteOn[x]>
<#AudioMuteOff[x]>	x: channel	Output audio close	<#AudioMuteOff[x]>	<AudioMuteOff[x]>
<#HDCP_Off[x]>	Output channel[x] off			<HDCP_Off[x]>
<#HDCP_On[x]>	Output channel[x] on, follows input HDCP version.			<HDCP_On[x]>
<^Get_sysinfo>		Get system information	<^Get_sysinfo>	<DHCP_Off> <Login/true>
<#UsbSel[x]>	Select USB channel 1~4.	x: Host USB 1~3 or USB-C channel via keyboard.		<UsbSel[x]>
<#UsbAuto>	USB auto-switch follows main display.			<UsbAuto>
<#Priority[x],[y]>	Input signal priority	x: input y: output 1~4 4: highest priority)	<#Priority2,4>	<Prior[x],[y]>
<#Auto_SW[x]>	Priority enable/disable; when enabled, select input source by priority level.	x: 0: off 1: on	<#Auto_SW1>	<Auto_SW[x]>
<#USB_Pushing[x]>	USB streaming settings.	0: independent USB output 1: follow input		<USB_Pushing[x]>
<#USB_C_Mode[x]>	USB-C mode.	0: 4K@30+USB 3.0 1: 4K@60+USB 2.0		<USB_C_Mode[x]>

Custom multiview settings:

Order	Function description	Parameter description
<#Set_canvas_size[x],[y]>	Set canvas size	
<#Add_cus_mode>	Create custom layout	

<#CustomizeMode[ch],[x1],[y1],[x2],[y2]>	New window in custom layout	ch: channel 1~4 x1, y1: starting coordinates x2, y2: horizontal and vertical lengths
<#Del_cus_win[chn]>	Delete window from custom layout	ch: channel id
<#CustomizeFinish[ch]>	Save custom layout	
<#Change_cus_mode[id]>	Modify custom layout	id: custom layout index, starting from 0
<#CustomizeChange[ch],[x]>	Complete custom layout modification	ch: channel number x: id

Input Char:

Order	Function description	Sample	Return information
SetOSD[x].	Set input channel [x] char parameters	Returns current port character status; meanings match settings.	<OSD Closed> <Color255,0,0> <CharSize0> <CharPos0,0> <OSD Bgcolor Closed> <BgColor0,0,0> <CharSpeed0> <CharDir0>
CharOpen.	Char display on		<Set Succeed!>
CharClose.	Char display off		<Set Succeed!>
<#CharColorR,G,B>	Char color setting		<CharColorR,G,B>
<#CharPos[x1],[x2]>	Char position setting		<CharPos[x1],[x2]>
CharBgOpen.	Char background on		<Set Succeed!>
CharBgClose.	Char background off		<Set Succeed!>
<#CharBgColorR,G,B>	Char background color setting		<CharBgColorR,G,B>
<#CharSpeed[x1]>	Char scroll speed (0 = stop)		<CharSpeed[x1]>
<#CharDir[x1]>	Char scroll direction	1:left 2:right	<CharDir[x1]>
<CharErase>	Clear current channel character display		<Set Succeed!>

EDID:

Order	Function description	Sample	Return information
[R]EDIDTo[T].	Copy the EDID of output [R] to input channel [T]	1EDIDTo1.	<Set EDID succeed!> <Resolution/1/In /noinput> <Resolution/1/In

			/1920x1080x60Hz!>
UpdateEDID[x].	Update the EDID of input channel [x]		<Update EDID start!>
UpdateEnd.	Update completed		
EDIDSel[x]/[y].	Select built-in EDID x: channel y:EDID type y values: 0:4K60 1:4K30 2:2K60 3:DVI 4: recommended 4K30	EDIDSel2/0.	<Set Succeed!> <Resolution/2/In /noinput> <Resolution/2/In /3840x2160x60Hz!>
<#TestColor[x],[y],[z],[r],[g],[b]>	Port [y] graphic test mode [x]: 1:input, 2:output [y]: channel [z]: 0x00: pass-through 0x01: RGB color bar 0x02: 16-level grayscale 0x03: 32-level grayscale 0x04: 64-level grayscale 0x05: red grid 0x06: green grid 0x07: blue grid 0x08: white grid 0x09: horizontal scrollbar 0x0A: vertical scrollbar 0x0B: pure color (based on RGB value)	<#TestColor1,1,01,0,0,0>	<TestColor[x],[y],[z],[r],[g],[b]>
<#SignalMode[x],[y],[z],[r],[g],[b]>	Outputs test pattern when no graphic input is detected (input is pure color only). [x]: 1:input, 2:output [y]:channel [z]: 0x00: normal video 0x01: RGB color bar 0x02: 16-level	<#SignalMode1,1,02,0,0,0>	<SignalMode[x],[y],[z],[r],[g],[b]>

	grayscale 0x03: 32-level grayscale 0x04: 64-level grayscale 0x05: red grid 0x06: green grid 0x07: blue grid 0x08: white grid 0x09: horizontal scrollbar 0x0A: vertical scrollbar 0x0B: pure color (based on RGB value)		
--	--	--	--

Resolution Settings:

Order	Function description	Sample	Return information
<#OutputAuto[x]>	Set output [x] to auto resolution	<#OutputAuto1>	<Set Resolution Succeed!>
\$[x]->2560x1080x25 Hz!	Set output [x] resolution to 2560x1080x25Hz	\$1->2560x1080x25Hz!	<Set Resolution Succeed!>
\$[x]->2560x1080x30 Hz!	Set output [x] resolution to 2560x1080x30Hz	\$1->2560x1080x30Hz!	<Set Resolution Succeed!>
\$[x]->3840x2160x25 Hz!	Set output [x] resolution to 3840x2160x25Hz	\$1->3840x2160x25Hz!	<Set Resolution Succeed!>
\$[x]->3840x2160x30 Hz!	Set output [x] resolution to 3840x2160x30Hz	\$1->3840x2160x30Hz!	<Set Resolution Succeed!>
\$[x]->4096x2160x25 Hz!	Set output [x] resolution to 4096x2160x25Hz	\$1->4096x2160x25Hz!	<Set Resolution Succeed!>
\$[x]->4096x2160x30 Hz!	Set output [x] resolution to 4096x2160x30Hz	\$1->4096x2160x30Hz!	<Set Resolution Succeed!>
\$[x]->3840x2160x60 Hz!	Set output [x] resolution to 3840x2160x60Hz	\$1->4096x2160x60Hz!	<Set Resolution Succeed!>
\$[x]->4096x2160x60 Hz!	Set output [x] resolution to 4096x2160x60Hz	\$1->4096x2160x60Hz!	<Set Resolution Succeed!>

8. Common Faults and Solutions

Fault Symptoms	Solutions
Device cannot power on (Power indicator off)	Check whether the power adapter is securely connected; replace with a DC 24V power adapter for testing; confirm the power outlet is working properly.
No HDMI output	Check whether the input/output devices are connected.
	Confirm the connected devices are powered on.
Abnormal display	Input source resolution is incompatible; input equalization is insufficient; EDID settings are incorrect.
Web page inaccessible	Confirm the PC and device are on the same IP subnet.
	If DHCP is enabled, check the assigned IP address via command.
Audio abnormality	Check whether the analog audio cable is connected correctly.
	Confirm the input source has audio output.
Unable to resolve the fault	Restart the device or restore factory settings.

