



SYN-TOUCH10 v3

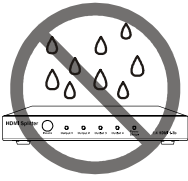
Touch Panel

User Manual

Version: 1.0.0



Important Safety Instructions



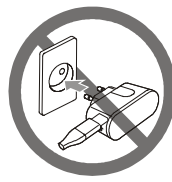
1. Do not expose this apparatus to rain, moisture, dripping or splashing and that no objects filled with liquids, such as



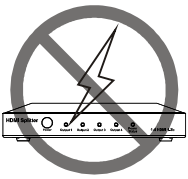
6. Clean this apparatus only with dry cloth.



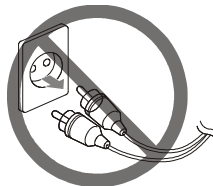
2. Do not install or place this unit in a bookcase, built-in cabinet or in another confined space. Ensure the unit is well



7. Unplug this apparatus during lightning storms or when unused for long periods of time.



3. To prevent risk of electric shock or fire hazard due to overheating, do not obstruct the unit's ventilation openings with newspapers, tablecloths,



8. Protect the power cord from being walked on or pinched particularly at plugs.



4. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers)



9. Only use attachments / accessories specified by the manufacturer.



5. Do not place sources of naked flames, such as lighted candles, on the unit.



10. Refer all servicing to qualified service personnel.

Contents

Introduction	4
Overview	4
Features	4
Package Contents	4
Specifications	4
Panel Overview	5
Installation	6
Physical Installation	6
Wiring	7
Configuring the Touch Panel	8
Launching the Synergy Touch App	8
Introduction of the Synergy Touch APP	8
Creating a Configuration File	9
Create a new configuration file	9
Create a standard layout for the device.	10
Create a Slide Layout	12
Create a Custom Layout	17
Types of Buttons	19
Transferring the Configuration File	30
Exporting the Configuration File	30
Tranfering the Configuration File	30
Upgrading the APP on the Touch Panel	31
Other Configurations	32
Device Management	32
Trigger Management	33
ICON Management	34
System Settings	35

Introduction

Overview

This 10.1-inch touch panel features a high-quality TFT LCD with G+FF touch screen technology and an anti-fingerprint coating for a smooth and clean user experience. This touch panel is ideal for single-room applications, providing integrated and user-friendly control of devices in conferencing rooms through a loaded configuration file.

Features

- Built-in Synergy Touch APP to fulfill control requirements.
- 10.1-inch TFT LCD, G+FF touch screen, anti-fingerprint oil layer.
- Four-way linear array microphone, and 8 ohm 1W dual speakers.
- POE or DC 9V-24V power supply.
- Built-in proximity sensor support dark screen wake-up and brightness sensor to automatically adjust screen brightness according to different surroundings.
- Support one-key screen off, shutdown and restart device.
- Support standard wall-mounted wall box installation.
- 1 LCD ON/OFF push button and RS485 communication.

Package Contents

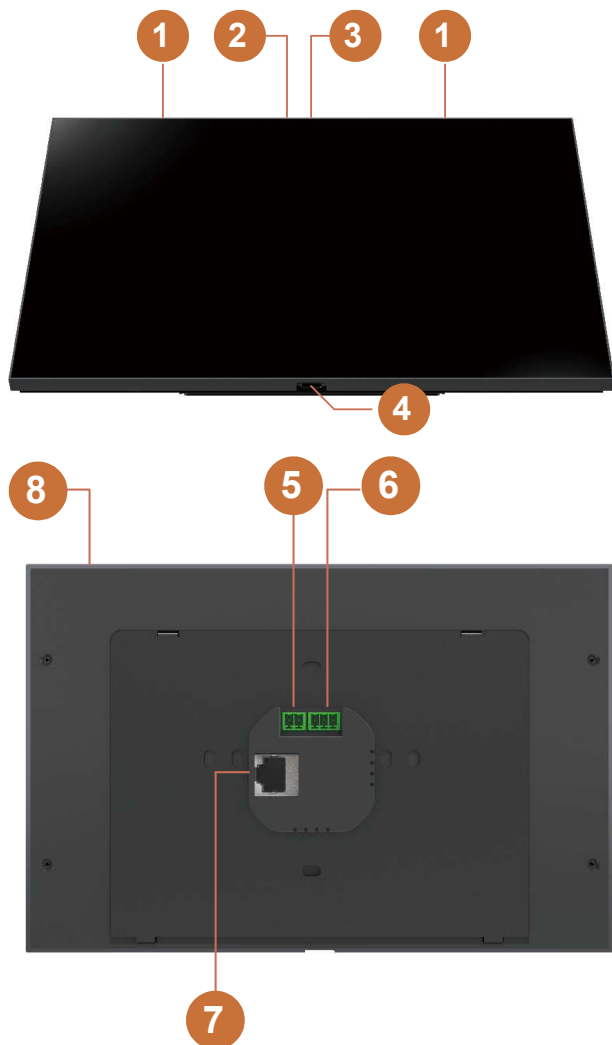
- 1 x Touch Panel (with Support Base Installed)
- 1 x RS485 Phoenix Connector (3.81mm, 3-Pin)
- 1 x RS485 Phoenix Connector (3.81mm, 2-Pin)
- 2 x Countersunk Head Tapping Screw, KA3×14.5
- 2 x Countersunk Head Machine Screw, KB4×24

Specifications

Technical	
CPU	Rockchip, RK3566 Quad-core Cortex-A55
RAM	LPDDR4, 2G
ROM	EMMC, 32G
Screen Size	10.1"
Panel Type	Capacitive, G+FF Process
Resolution	Up to 1280 x 800
Wired Connector	RJ485: 3P, 3.81mm phoenix connector, half-duplex RJ45: 10/100Mbps USB: USB 2.0 type-C
Brightness	270 cd/m ²
Audio	4 Mics array

General	
Operating Temperature	0°C ~ 40°C (32°F to 104°F), 10% to 90%, non-condensing
Storage Temperature	-10°C ~ 60°C (-14°F to 140°F), 10% to 90%, non-condensing
Power Supply	POE / DC 9V-24V
Power Consumption (Maximum)	12W
Dimension (Width x Height x Depth)	240.4mmx159mmx37.4mm/9.45" x 6.26" x 1.47" (with power base)
Net Weight	1.05kg / 2.31lbs(with support base and power base)

Panel Overview



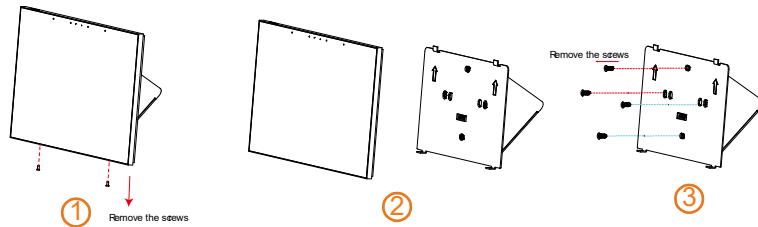
#	Name	Description
1	Microphone	4 x microphones for picking up audio.
2	Proximity Sensor	Reserved. For detecting object distance or proximity status
3	Light Sensor	Reserved. For detecting the environment light.
4	USB Type-C Port	For debug.
5	Power Input	2-Pin phoenix connector for connecting power supply (9V~24V).
6	RS485	Reserved. For serial communication.
7	LAN (POE)	Connect to a network switch. If the Ethernet switch supports POE function, it can supply power for the device.
8	Power Button	Press to power on/off the panel.

Installation

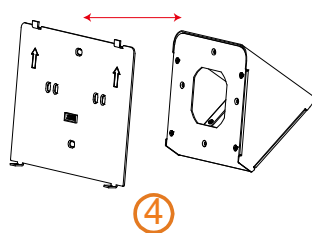
Physical Installation

Note: Before installation, ensure the device is disconnected from the power source.

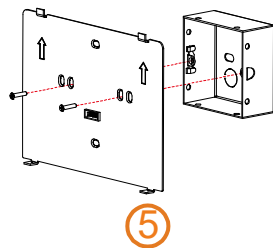
1. The device comes with a pre-installed base, so you can place it directly on the table for use.
2. You can also install it on the wall, steps are as follows:
 - 1) Unscrew the base and remove the base.



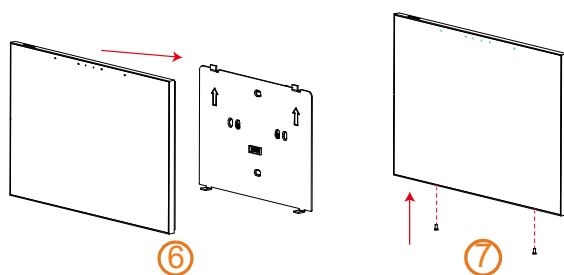
- 2) Separate the support base from the power base.



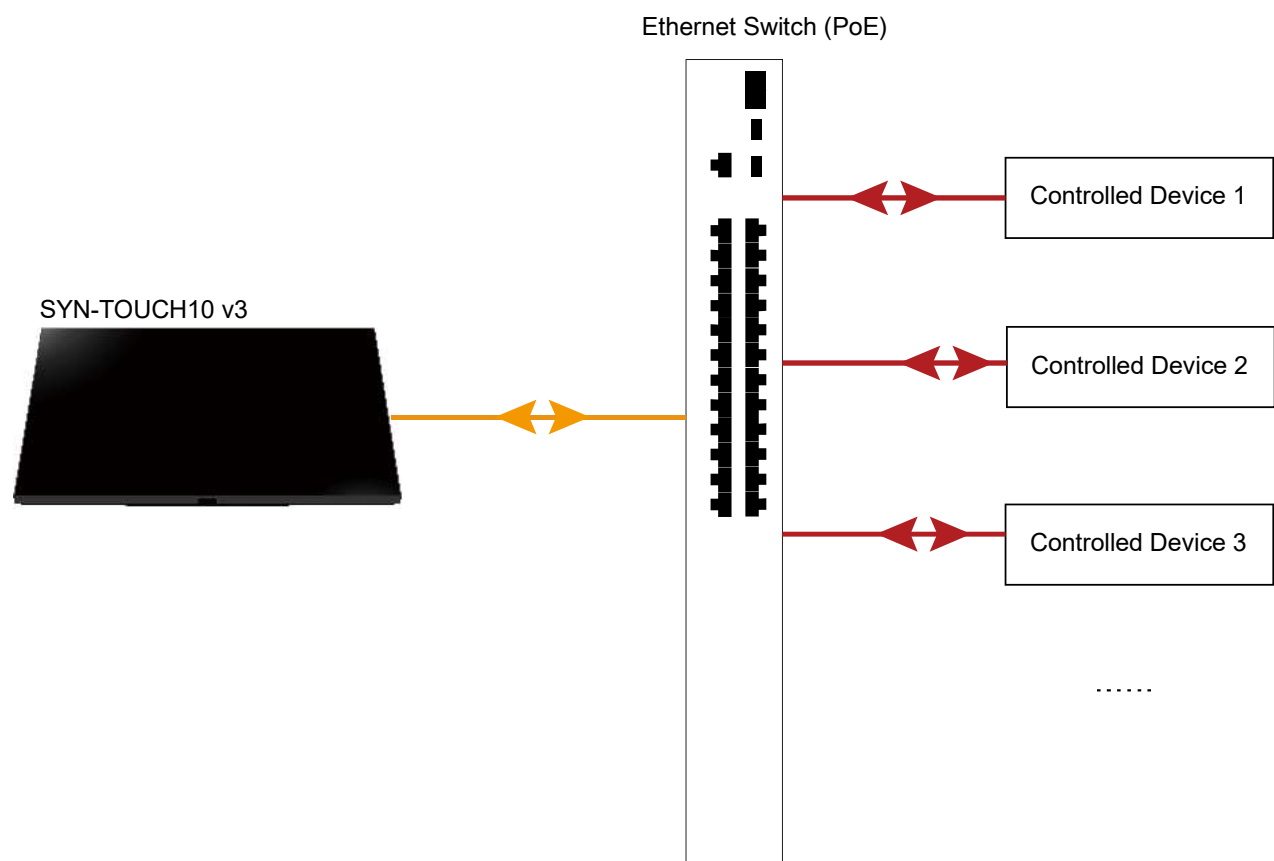
- 3) Install the power base into the wall box and fix it with the two screws (Countersunk Head Machine Screw, KB4×24).



- 4) Mount the panel onto power bracket and secure with the screws (Countersunk Head Tapping Screw, KA3×14.5).



Wiring



Features

The connection shown above is merely a simplified diagram illustrating one method of use. As long as there is network connectivity between the control panel and the controlled device, the control panel can operate the device via the touchscreen according to the configuration.

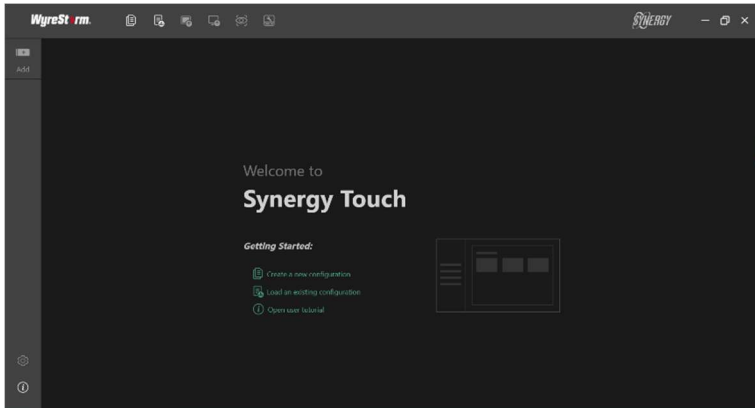
Configuring the Touch Panel

Before using the touch panel for controlling devices in the system, you need to create a configuration file for the controllable devices through the Synergy Touch App on your PC.

Launching the Synergy Touch App

Three versions of the Synergy Touch App are provided – Windows, MacOS and Andriod. This document takes the Windows version for example.

1. Download Synergy Touch App of Windows version to your PC. Ensure your PC are in the same network segment as the system. Recommended software version: V2.0.0 or above.
2. Install and launch Synergy Touch App on your PC. The following welcome screen pops up.



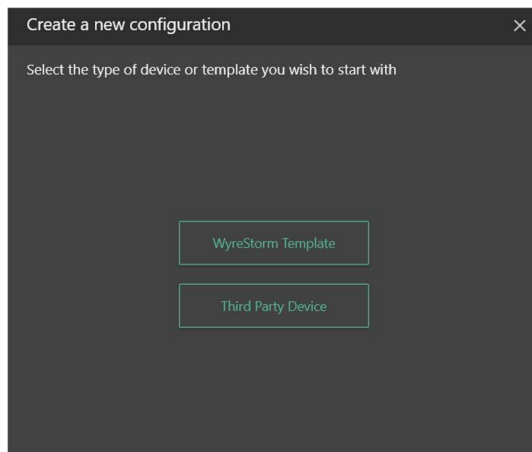
Introduction of the Synergy Touch APP

UI Elements	Description
	Click to upload a WyreStorm template or start new configuration project.
	Click to load a saved configuration file (.touch10).
	Click to export current configuration as a .touch10 configuration file.
	Click to export current configuration as a template file (.template).
	Toggle between Edit view and Preview view.
	For device and trigger management.
	Click to add a layout or a button for the current configuration project.
	Advanced settings for the current configuration project, such as changing the theme color, logo, background image, transparency or changing the network for touchpad. It also can set whether the touch panel to power off when there's no operation on it.
	Displays the software version.
	Click to upload a WyreStorm template or start new configuration project.
	Click to load a saved configuration file (.touch10).
	Click this button to walk you through a series of steps for creating a configuration project.

Creating a Configuration File

Create a new configuration file

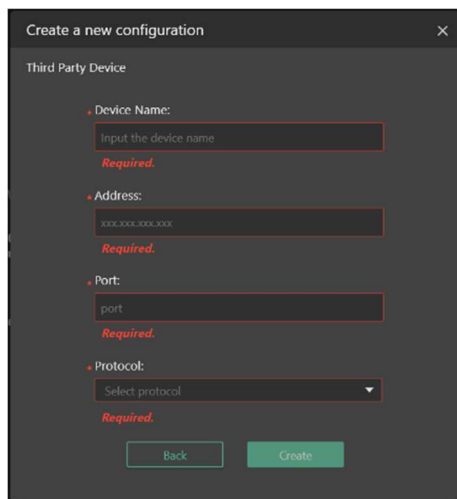
Click  button or "Create a new configuration" to create a new configuration project, and select the type of device you want to control.



The dialog box titled "Create a new configuration" has a close button (X) in the top right corner. It contains the instruction "Select the type of device or template you wish to start with". Below this instruction are two buttons: "WyreStorm Template" and "Third Party Device".

Note: If the target device is one of Wyrestorm products, please select WyreStorm Template, which can be downloaded from Wyrestorm official website; if you want to customize functions for other devices, select Third Party Device.

In the following window, complete the form, especially the required fields marked with red asterisks, and click Create, an empty configuration project is created successfully.

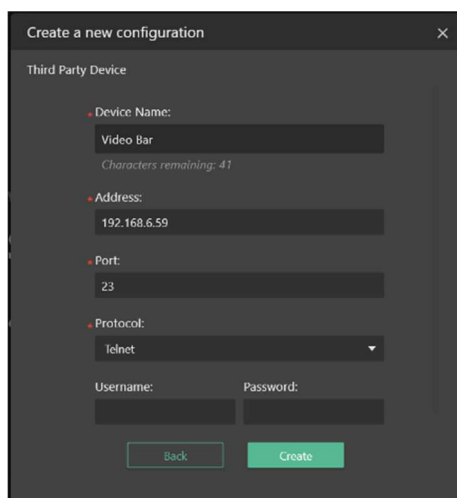


The "Create a new configuration" dialog box is now titled "Third Party Device". It contains the following fields, each with a red asterisk indicating it is required:

- Device Name:** A text input field with the placeholder "Input the device name".
- Address:** A text input field with the placeholder "xxx.xxx.xxx.xxx".
- Port:** A text input field with the placeholder "port".
- Protocol:** A dropdown menu with the placeholder "Select protocol".

At the bottom of the form are two buttons: "Back" and "Create".

For example:



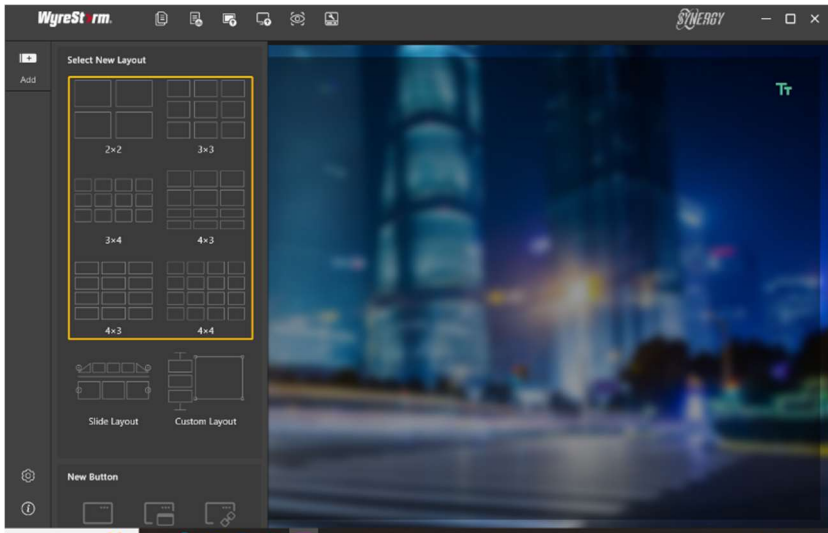
The "Create a new configuration" dialog box is now titled "Third Party Device". It contains the following fields, each with a red asterisk indicating it is required:

- Device Name:** A text input field containing "Video Bar". Below the field, it says "Characters remaining: 41".
- Address:** A text input field containing "192.168.6.59".
- Port:** A text input field containing "23".
- Protocol:** A dropdown menu with "Telnet" selected.

Below these fields are two more input fields: "Username:" and "Password:". At the bottom of the form are two buttons: "Back" and "Create".

Create a standard layout for the device.

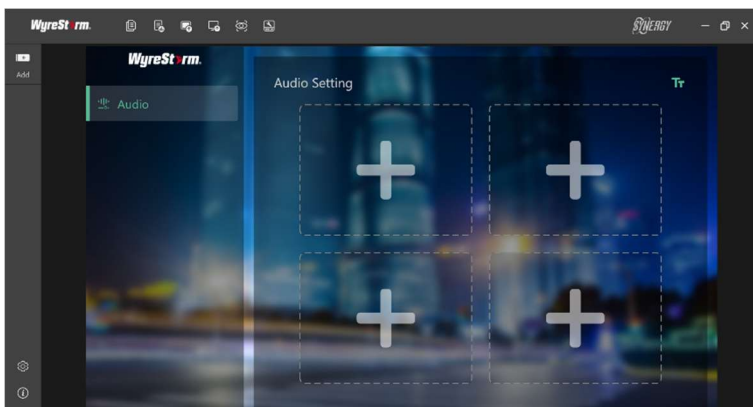
1. Click  button to select a new layout, select a standard layout among the six preset layout modes (inside the yellow box in the figure below), and then fill in the basic information of the layout.



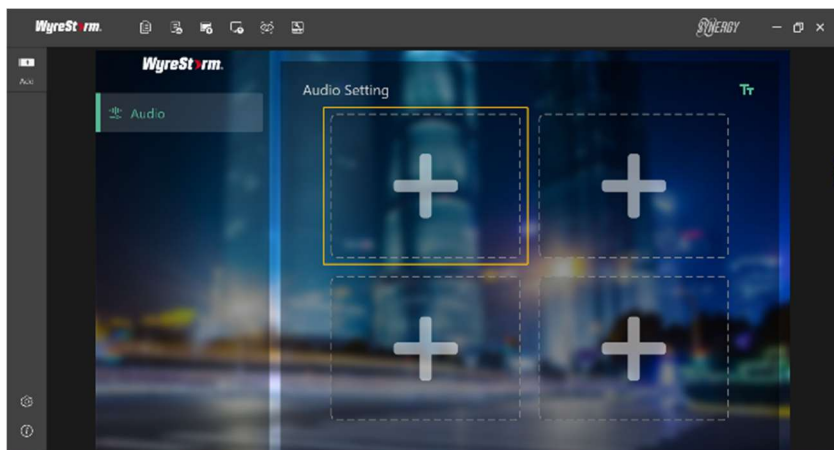
Take 2x2 layout as an example:

For example:

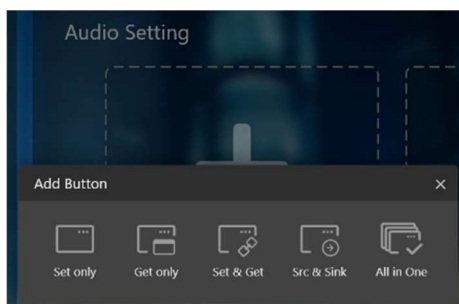
Click "Save" to create a 2x2 layout.



2. Add a new button for the layout.
- 1) Now the layout created appears in the layout list, click any placeholder frame in the workspace to add new buttons.



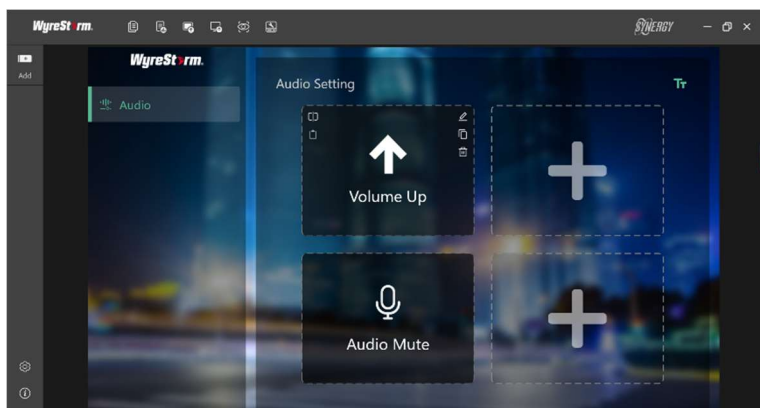
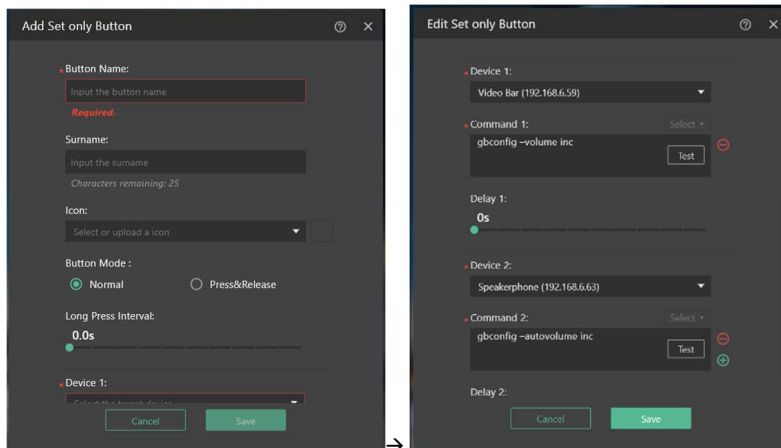
- 2) In the dialog box that appears, select one button type you want from the following options. For more information about the use of specific buttons, see "Types of Buttons" section.



3. Fill in the form item for the selected button.

Fill in the required fields, and click Save to complete setup of this button.

The following uses "Add Set only Button" as an example.



Create a Slide Layout



1. Click **Add** button, and click "Slide layout" icon to create a Slide Layout. Then fill in the basic information of the layout.

Add Slide Layout

Friendly Name:
Input friendly name
Required.

Tab Name:
Input the tab name
Required.

Tab Icon:
Select or upload a icon

Cancel

Save

Friendly Name: The title that appears at the top right of the workspace.

Tab Name: The tab label to be displayed in Layout List.

Tab Icon: Select or upload an icon for the layout tab. If this field is empty, no icon is displayed. If the icon is given a color, the Tab Name will also use that color.

2. After clicking "Save," you will proceed directly to the interface for creating the buttons.

Create Special Matrix Buttons

Step 1: Create source buttons.

Source Button List Name
Source Button List
Characters remaining: 7

Select number of pages per page
6

Button Size:
Fixed

Button Name 1:
Source-1
Characters remaining: 17

Value 1:
Input the source value
Required.

Color 1:
White

Icon 1:
In

Link 1:

Note: You can create 1/18 Source Buttons.

Cancel

Next

Note: Click on the up-right corner to obtain button setting page introduction.

The Special Matrix Button in the slide layout is for matrix pairing or source switching.

It has two roles:

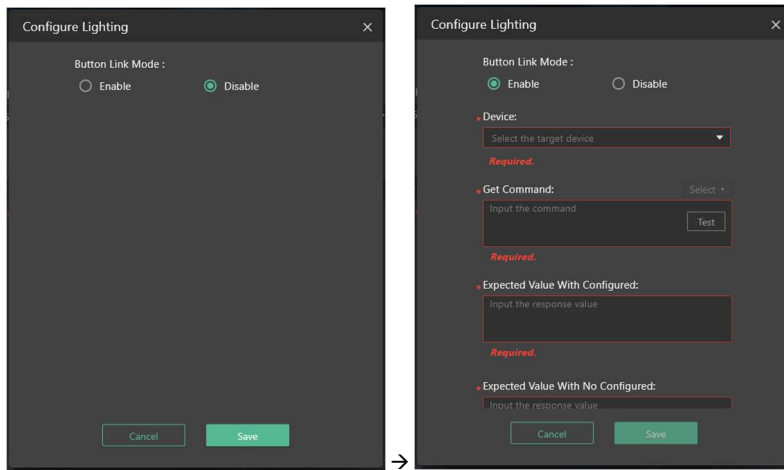
- For the Source role, it is responsible for providing a Value and a Color.
- For the Sink role, it is responsible for interacting with the target device with the Value obtained from a Source button, and then determining the association relationship with the Source. When the association is established, it will display the Color held by the Source button.

Step 1: Create source buttons

UI Elements	Description
Source Button List Name	Input a source button list name.
Select number of pages per page	Select the number of pages from the drop-down menu. Default: 6.
Button Size	Select the button size between Fixed or Variable. Default: Fixed.
Button Name	The label to display on the button.
Value	The value that is held. When the button for the Source role is dragged to the button for the Sink role, the value associated with the Source button is transferred to the Sink button.
Color	The color that is held. When a Sink role button is associated with a Source role button, the border color of the Sink button is displayed as the color held in that Source button.
Icon	The icon displayed on the button. If you do not need to display the icon, leave it blank.
Link	Enable/disable the link to the actual port signal status. Default: Disable. : Link disabled; : Link enabled.
	Drag over this button to sort the Source buttons.

Click on the left to add a new button, or to remove one.

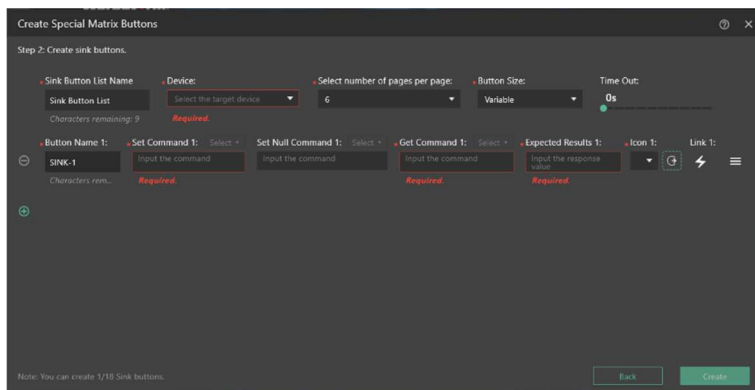
Click “” to enter the following dialog:



When enabled:

UI Elements	Description
Device	Select the target device to link to.
Get Command	Input the command to get the signal status. Test: Click to test if the input command is take effect. Select: If preset device command in “Device Management” part, you can also click to select corresponding commands.
Expected Value with Configured	Input the response value if the signal is active.
Expected Value with no configured	Input the response value if the signal is inactive.

Step 2: Create sink buttons

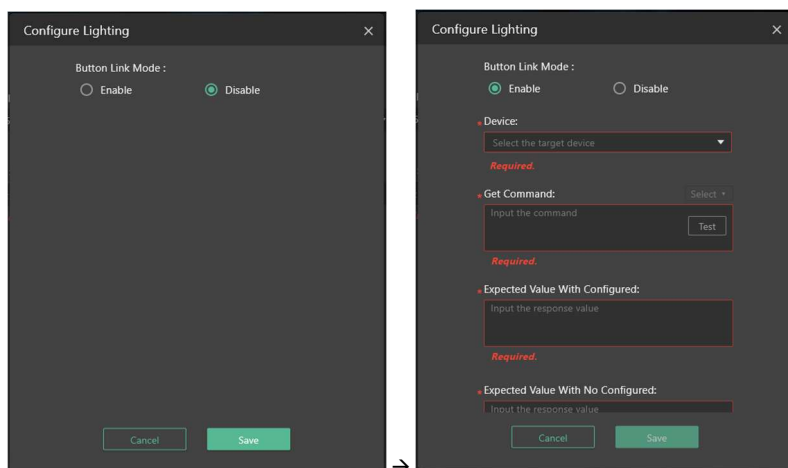


UI Elements	Description
Source Button List Name	Input a source button list name.
Device	To select a target device to which the command is to be sent. You can add or edit a device in the Device Management dialog, which is accessed from the toolbar.
Button Size	Select the button size between Fixed or Variable. Default: Fixed.
Time Out	Set timeout period. Default: 0.
Button Name	The label to display on the button.
Set Command	An instruction that will be sent to the target device to establish an association with a Source button. The \$SRC wildcard can be used in this directive, which will eventually be replaced with the Value obtained from the Source button.
Set Null Command	When a Sink button is directly pressed without pressing the Source button in advance, this command will be sent to the target device to cancel the previously established association. This field is optional. If it's not set, the association cannot be canceled.
Get Command	After sending Set Command or Set Null Command, this command is sent to the target device to check if the association has been established. You can also use \$SRC in this command.
Expected Results	The expected response when the Get Command is sent to the target device. The association is considered to have been established successfully only if the Expected Result is consistent with the actual response.
Icon	The icon displayed on the button. If you do not need to display the icon, leave it blank.
Link	Enable/disable the link to the actual port signal status. Default: Disable.  : Link disabled;  : Link enabled.
	Drag over this button to sort the Sink buttons.

Click  on the left to add a new button, or  to remove one.

About Link:

Click  to enter the following dialog:



When enabled:

All instructions of the setting items are same as the link of source link, but the commands is configured the connection to the Sink.

For example:

If you want to create pairing buttons for a 4 x 4 Matrix, complete the following:

A. Obtain API commands.

To assign an input source to an output sink:

Command Structure:	
SET SW <i>in out</i>	
Parameter	Range
<i>in</i>	IN1, IN2, ...IN4, IN0
<i>out</i>	OUT1, OUT2, ...OUT4
Example	Feedback
SET SW IN1 OUT1	N/A

To query which source is assigned to an output sink:

Command Structure:	
GET MP <i>out</i>	
Parameter	Range
<i>out</i>	OUT1, OUT2, ...OUT4
Example	Feedback
GET MP OUT1	MP IN1 OUT1
GET MP OUT1	MP IN0 OUT0

To query the signal status about the input ports and output ports:

Command Structure:	
GET VIDIN_SIG <i>in</i>	
GET VIDIN_SIG <i>out</i>	
Parameter	Range
<i>in</i>	IN1, IN2, ...IN4
<i>out</i>	OUT1, OUT2, ...OUT4
Example	Feedback
GET VIDIN_SIG IN1	VIDIN_SIG IN1 valid (IN1 has valid signal)
GET VIDOUT_SIG OUT2	VIDOUT_SIG IN1 no (out2 has no signal)

B. Create special matrix buttons

Step 1: Create source buttons.

Source Button List Name: Source Button List
Characters remaining: 7

Select number of pages per page: 6

Button Size: Variable

Button Name 1: Source-1 Value: in1 Color: White Icon: HDMI Link: 1
Characters remaining: 17

Button Name 2: Source-2 Value: in2 Color: White Icon: HDMI Link: 2
Characters remaining: 17

Button Name 3: Source-3 Value: in3 Color: White Icon: HDMI Link: 3
Characters remaining: 17

Button Name 4: Source-4 Value: in4 Color: White Icon: HDMI Link: 4
Characters remaining: 17

Note: You can create 4/18 Source buttons.

Cancel Next

If enable source link:

Configure Lighting

Button Link Mode :
☒ Enable ☐ Disable

Device:
Matrix (10.0.0.16)

Get Command:
GET VIDIN_SIG IN1
Test

Expected Value With Configured:
VIDIN_SIG IN1 valid

Expected Value With No Configured:
VIDIN_SIG IN1 no

Cancel Save

Step 2: Create sink buttons.

Sink Button List Name: Sink Button List
Characters remaining: 9

Device: Matrix (10.0.0.16)

Select number of pages per page: 6

Button Size: Variable

Time Out: 0s

Button Name 1: SINK-1 Set Command 1: SET SW OUT1 \$SRC Set Null Command 1: SET SW OUT1 \$SRC Get Command 1: GET SW OUT1 Expected Results 1: SW OUT1 \$SRC Icon 1: Link 1: 1
Characters rem...

Button Name 2: SINK-2 Set Command 2: SET SW OUT2 \$SRC Set Null Command 2: SET SW OUT2 \$SRC Get Command 2: GET SW OUT2 Expected Results 2: SW OUT2 \$SRC Icon 2: Link 2: 2
Characters rem...

Button Name 3: SINK-3 Set Command 3: SET SW OUT3 \$SRC Set Null Command 3: SET SW OUT3 \$SRC Get Command 3: GET SW OUT3 Expected Results 3: SW OUT3 \$SRC Icon 3: Link 3: 3
Characters rem...

Button Name 4: SINK-4 Set Command 4: SET SW OUT4 \$SRC Set Null Command 4: SET SW OUT4 \$SRC Get Command 4: GET SW OUT4 Expected Results 4: SW OUT4 \$SRC Icon 4: Link 4: 4
Characters rem...

Note: You can create 4/18 Sink buttons.

Back Create

If enable display link:

Configure Lighting

Button Link Mode :
☒ Enable ☐ Disable

Device:
Matrix (10.0.0.16)

Get Command:
GET VIDOUT_out1
Test

Expected Value With Configured:
VIDOUT_SIG out1 valid

Expected Value With No Configured:
VIDOUT_SIG out1 no

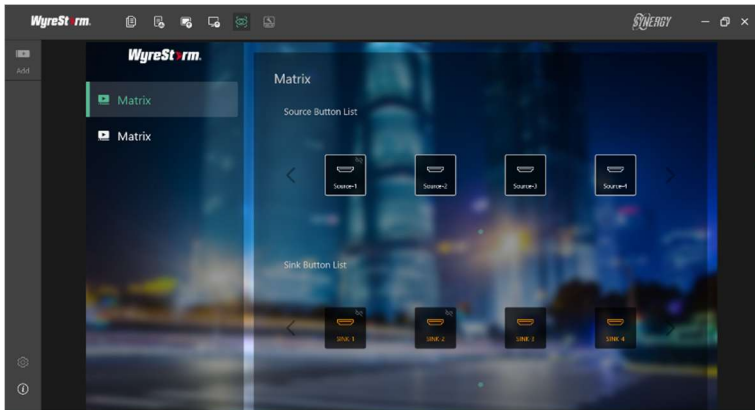
Cancel Save

When **LINK** is enabled for a source or sink, a gray link icon appears in the top-right corner of the corresponding button.

 : The corresponding port has active signal.

 : The corresponding port has no active signal.

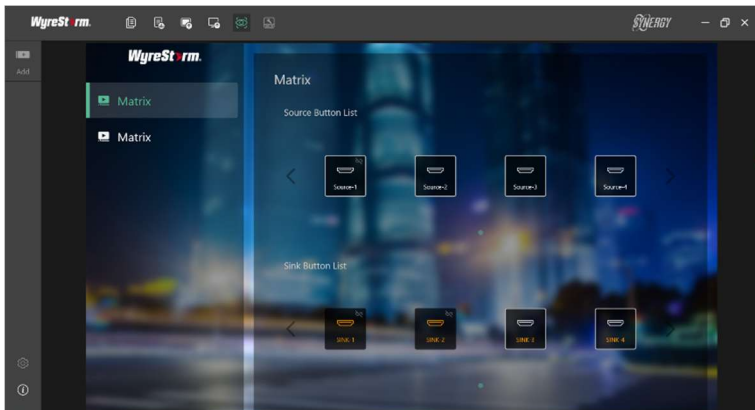
3. Click “Save” to create a matrix pairing layout.



4. Click “Preview” button to preview the operation.

5. Perform matrix switching.

If you want to assign Source-3 and Source-4 to Sink-3 and Sink-4 respectively, drag Source-3 and Source-4 buttons to Sink-3 and Sink-4 buttons respectively, if the operation is successful, the Sink-3 and Sink-4 buttons icons change to Source-3 and Source-4 buttons' icons.



Create a Custom Layout

1. Click  button to select a new layout and click "Custom Layout" icon to create a custom Layout. Then fill in the basic information of the layout.

Add Custom Layout

Friendly Name:

Input friendly name

Required.

Tab Name:

Input the tab name

Required.

Tab Icon:

Select or upload an icon

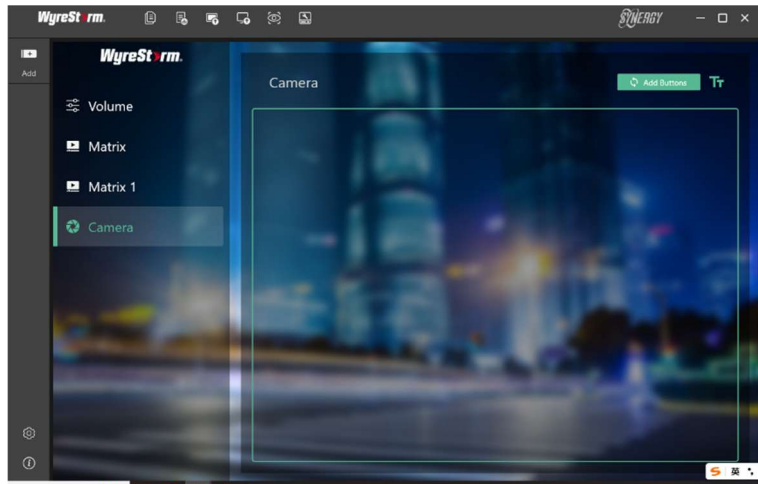
Cancel

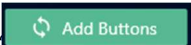
Save

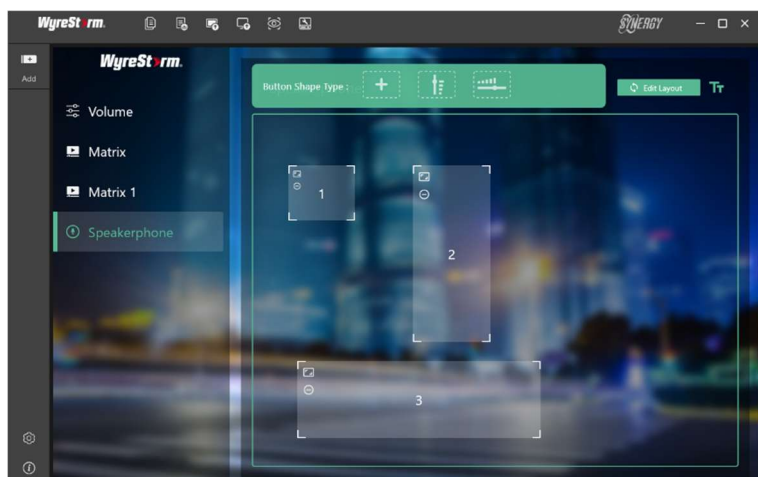
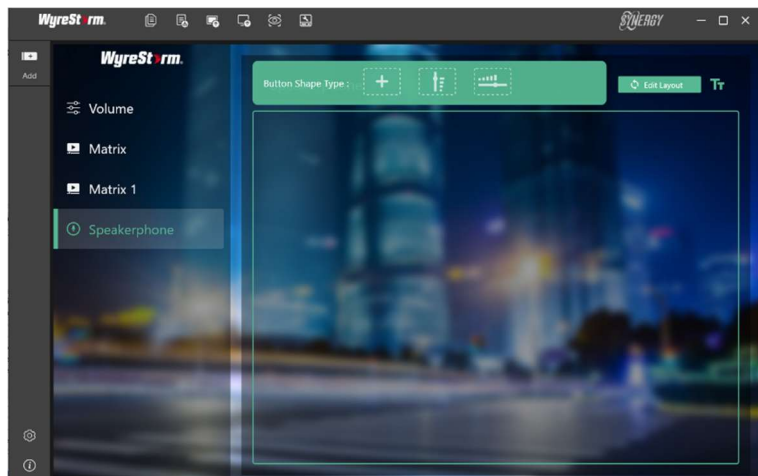
Friendly Name: The title that appears at the top right of the workspace.

Tab Name: The tab label to be displayed in Layout List.

Tab Icon: Select or upload an icon for the layout tab. If this field is empty, no icon is displayed. If the icon is given a color, the Tab Name will also use that color.

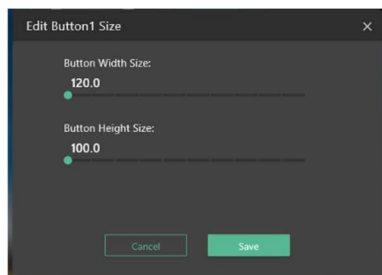


2. Click , and drag a button from Button Shape Type volume to the window.



In edit layout mode:

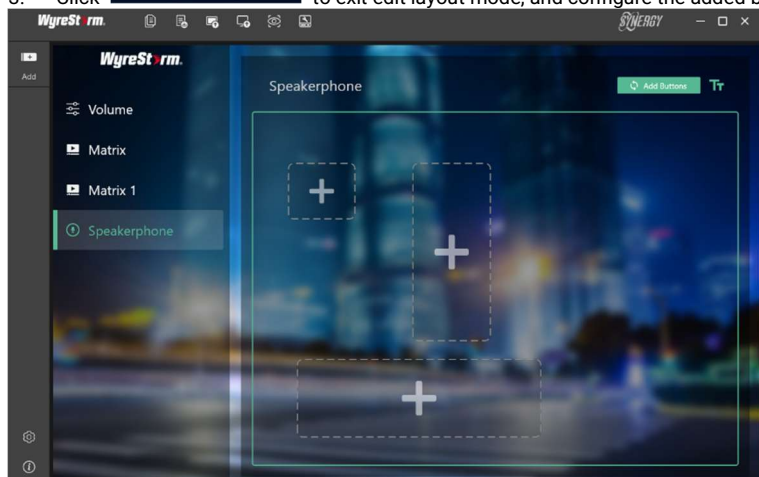
: Click to enter set button size page.



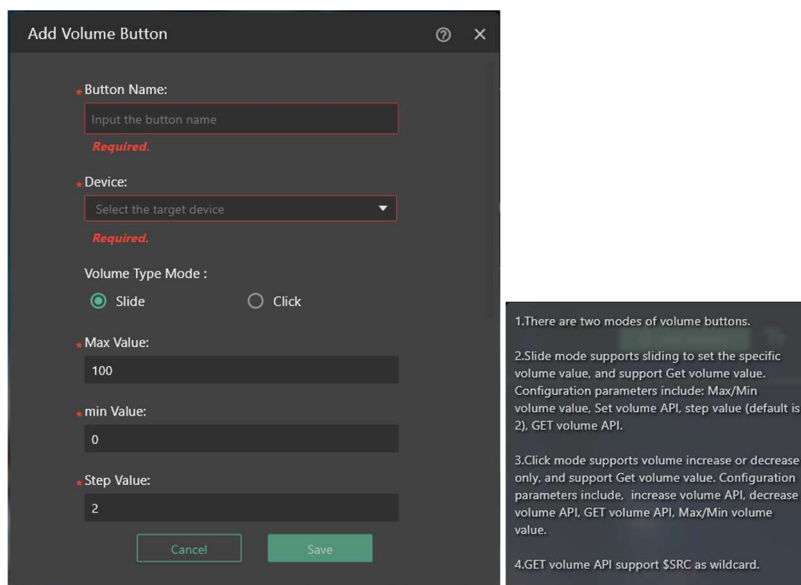
: Click to remove the button.



3. Click "Edit Layout" to exit edit layout mode, and configure the added button or sliders.



The settings about buttons are same with the standard layout mode, and the slider settings are as follows:

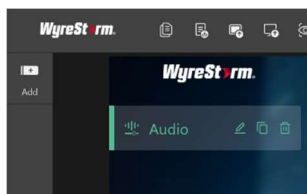


There are two modes of volume buttons.

- Slide mode supports sliding to set the specific volume value, and support Get volume value.
- Configuration parameters include: Max/Min volume value, Set volume API, step value (default is 2), GET volume API.
- Click mode supports volume increase or decrease only, and support Get volume value. Configuration parameters include, increase volume API, decrease volume API, GET volume API, Max/Min volume value.
- GET volume API support \$SRC as wildcard.

Tips:

Edit, Copy and Delete the created layout:



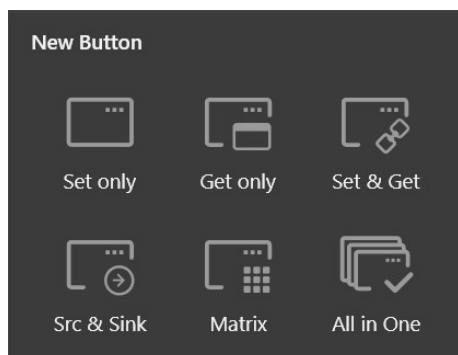
Move the mouse to the layout name area:

UI Elements	Description
	Click to enter edit layout window to change layout settings.
	Click to copy the current layout as a new layout.
	Click to delete the current layout.

Types of Buttons

This section prepares you to create and set up appropriate buttons for your devices in the system.

Six types of buttons are provided: Set only, Get only, Set & Get, Src & Sink, Matrix and All in One.



Button	Description
Set only	Choosing this button allows you to send commands to one or more target devices without waiting for or processing any response.. For example, a volume up/down button.
Get only	Choosing this button gives you the ability to get information or status about a device. For example, a volume indication button.
Set & Get	Choosing this button allows you to send a command and receive a response of sending that Command. An example will be an on/off toggle or switch.
Src & Sink	This type of button is typically used for matrix switching scenarios as this could be set to receive response of which Source/Input is currently selected to an Output/Display.
Matrix	A wizard dialog comprising of two steps to create Source and/or Sink buttons in batches. This is mostly used for pairing between sources and sinks of a matrix as well.
All in One	A button to implement commands of all buttons in one layout with one click. For example, a button to run commands for turning off display and muting microphone sequentially.

Note: Click on the up-right corner to obtain button setting page introduction.

1. Set only Button

Add Set only Button

Button Name:

Required.

Surname:

 Characters remaining: 25

Icon:

Button Mode :
☒ Normal ☐ Press&Release

Long Press Interval:

Device 1:

Introductions to each form item:

Button Name: The label to display on the button.

Surname: An alias or short prompt that appears on the button.

Icon: The icon displayed on the button. If you do not need to display the icon, leave it blank.

Press and Release: This is a composite command. It's needed to configure the command to be sent at Press the button and the command to be sent at Release respectively. Commonly used in PTZ operation of PTZ Camera.

Device: To select a target device and command is sent to that. You can add or edit a device in the Device Management dialog, which is accessed from the toolbar.

Command: The content of the instruction sent to the target device.

Set only Button is a button that sends commands to a target device only and does not care about the response. It is able to send specified commands to corresponding devices one by one. It is mostly used to send configuration or action commands to one or more target devices.

UI Elements	Description
Button Name	The label to display on the button.
Surname	An alias or short prompt that appears on the button.
Icon	The icon displayed on the button. If you do not need to display the icon, leave it blank here.
Button Mode	Select the button mode between Normal and Press&Release. Press&Release: This is a composite command. It's needed to configure the command to be sent at Press the button and the command to be sent at Release respectively. Commonly used in PTZ operation of PTZ Camera.
Long Press Interval	Long press on the button is used to send commands continuously to a device at a defined interval. Long Press Interval is for defining the interval between sending successive commands to a target device during the long pressing of the button. Value range: 0 - 2 seconds. Default Value: 0. "0" indicates the Long Press function is unavailable.
Device	To select a target device to which the command is to be sent. You can add or edit a device in the Device Management dialog, which is accessed from the toolbar.
Command	The content of command to be sent to the target device. Select: If you configure the commands on the Device Management dialog, which is accessed from the toolbar, you can select the command by clicking the drop-down menu. Test: Click to verify if the command was sent successfully.
Delay	To define the interval between when button is being pressed and when the command is to be sent.

Tips:

Add and Remove devices and commands:

UI Elements	Description
	Click to add a group of device, command and delay input fields.
	Click to remove the current group of device, command and delay input fields.

Example:

If you want to add a volume up button for speakers, e.g. APO-210-UC and VX20, perform the following:

1) Obtain the API command for increasing speakers' volume from their manual.

For APO-210-UC:

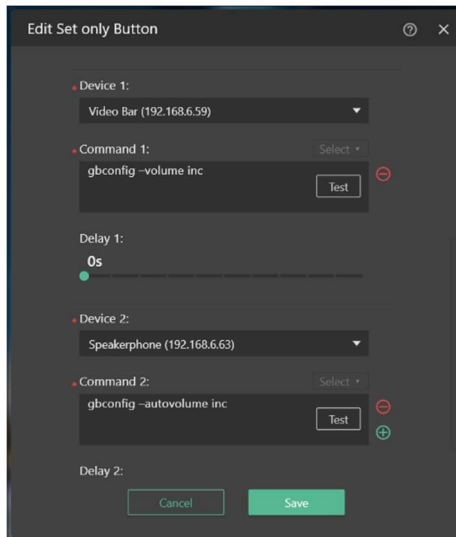
Command Structure:	
<code>gbconfig -volume {inc / dec}</code>	
Example	Feedback
<code>gbconfig -volume inc</code>	N/A

For VX20:

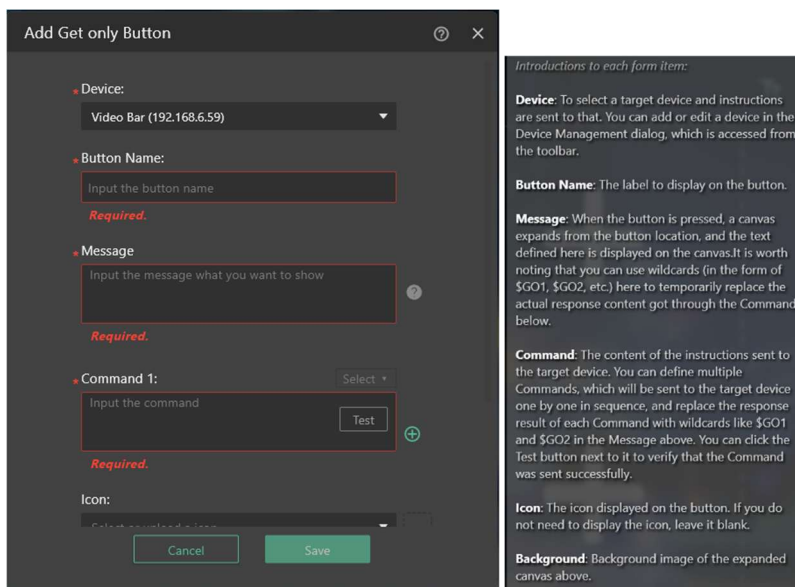
Command Structure:	
<code>gbconfig -autovolume {inc / dec}</code>	
Example	Feedback
<code>gbconfig -autovolume inc</code>	N/A

2) Fill in the "Edit Set only Button" form.

If you want to add more devices for this button, click the icon  to add a new device and input the command content for it. Finally, click **Save** to confirm setup of this button.



2. Get only Button



Introductions to each form item:

Device: To select a target device and instructions are sent to that. You can add or edit a device in the Device Management dialog, which is accessed from the toolbar.

Button Name: The label to display on the button.

Message: When the button is pressed, a canvas expands from the button location, and the text defined here is displayed on the canvas. It is worth noting that you can use wildcards (in the form of \$GO1, \$GO2, etc.) here to temporarily replace the actual response content got through the Command below.

Command: The content of the instructions sent to the target device. You can define multiple Commands, which will be sent to the target device one by one in sequence, and replace the response result of each Command with wildcards like \$GO1 and \$GO2 in the Message above. You can click the Test button next to it to verify that the Command was sent successfully.

Icon: The icon displayed on the button. If you do not need to display the icon, leave it blank.

Background: Background image of the expanded canvas above.

Get only Button is used to retrieve information from the target device and assembles it into specified message text for displaying on the Synergy Touch, for example, displaying prompt instruction about how to connect to or interact with the target device.

UI Elements	Description
Device	To select a target device for the commands to be sent. You can add or edit a device in the Device Management dialog, which is accessed from the toolbar.
Button Name	The label to display on the button.
Icon	The icon displayed on the button. If you do not need to display the icon, leave it blank here.
Message	When the button is pressed, a window appears from the button location and the text defined here is displayed on the window. Note that you can use wildcards (in the form of \$GO1, \$GO2, ..., \$GO(n), etc.) here to temporarily replace the actual response content of the Command below. \$GO1 corresponds to the response of Command 1, \$GO2 corresponds to the response of Command 2, ..., \$GO(n) corresponds to the response of Command (n).
Command	The content of the command to be sent to the target device. You can define multiple commands which will be sent to the target device one by one in sequence. The actual response of each command will be replaced by the wildcards \$GO1, \$GO2, ... in the Message field above. Select: If you configure the commands on the Device Management dialog, which is accessed from the toolbar, you can select the command by clicking the drop-down menu. Test: Click to verify if the command was sent successfully.
Icon	The icon of the button that displays on the button. If you do not want to show the icon, leave it blank here.
Command	The content of command to be sent to the target device. Select: If you configure the commands on the Device Management dialog, which is accessed from the toolbar, you can select the command by clicking the drop-down menu. Test: Click to verify if the command was sent successfully.
Background	Background image of the popup window that displays content specified in the Message field above.

Tips:

Add and Remove devices and commands:

UI Elements	Description
	Click to add a group of device, command and delay input fields.
	Click to remove the current group of device, command and delay input fields.

Example:

If you want to add a button for obtaining information for Miracast casting to the Video Bar (e.g. device name and access code), complete the following:

1) Obtain the API command.

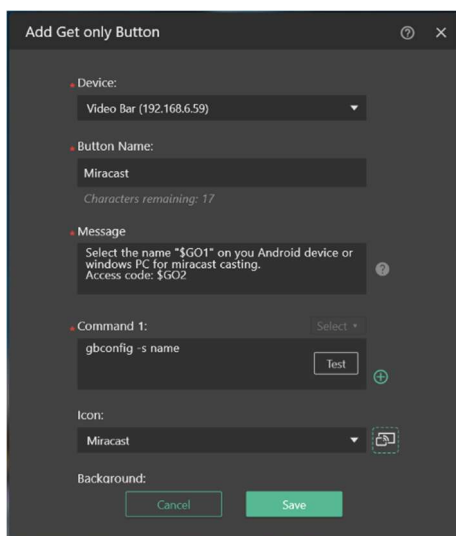
To get the device name:

Command Structure:	
<code>gbconfig -s name</code>	
Example	Feedback
<code>gbconfig -s name</code>	<i>Video Bar</i>

To get the device's access code:

Command Structure:	
<code>gbconfig -s access-code</code>	
Example	Feedback
<code>gbconfig -s access-code</code>	<i>4025</i>

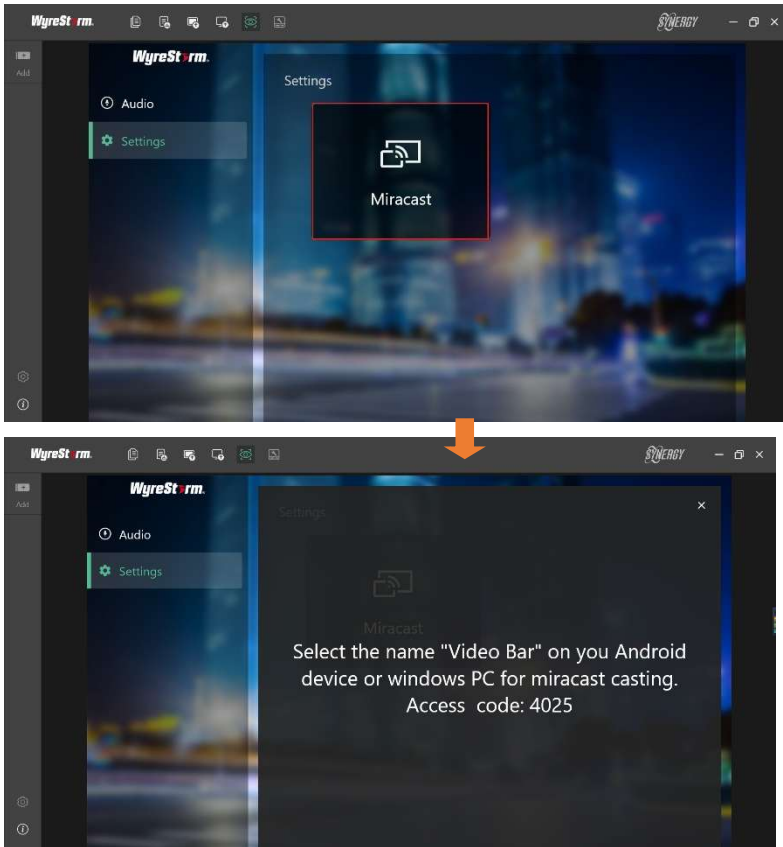
2) Fill in the "Edit Get only Button" dialog box with required information, and click "Save" to confirm the setup.



The screenshot shows a dialog box titled "Add Get only Button". It contains the following fields and options:

- Device:** A dropdown menu showing "Video Bar (192.168.6.59)".
- Button Name:** A text input field containing "Miracast". Below it, it says "Characters remaining: 17".
- Message:** A text area containing the text: "Select the name \"\$GO1\" on you Android device or windows PC for miracast casting. Access code: \$GO2".
- Command 1:** A dropdown menu showing "gbconfig -s name". There is a "Test" button next to it.
- Icon:** A dropdown menu showing "Miracast". There is an icon selection button next to it.
- Background:** A field for selecting a background image.
- At the bottom, there are "Cancel" and "Save" buttons.

- 3) Go back to the workspace, click  on the toolbar to enter Preview mode and tap the new button, a window conveying texts that defined in step 2 opens in the following.



3. Set & Get Button

Introductions to each form item:

Device: To select a target device and instructions are sent to that. You can add or edit a device in the Device Management dialog, which is accessed from the toolbar.

Button Name: The label to display on the button.

Get Command: The instruction used to get the actual status.

Icon for Unmatched Status: Default icon to display when there is no matching status.

Set Command: An instruction used to set a state.

Expected Result: The expected response to match the status, which should be the text of the actual response after sending the Set Command for that status followed by the Get Command.

Icon for Status: Icon displayed when the actual response of the Get Command matches the Expected Result of this status.

Set and Get Button is a button to set status for the target device, and update its icon based on the latest status. This button is suitable for some state-related scenarios, such as whether the microphone is mute or not. Set and Get Button is a button to set status for the target device, and update its icon by getting the latest status.

Every time the button is pressed, it sends a Set Command for the next status to the target device and then sends the Get Command to get the latest status from the target device. If a Expected Result for one status matches the actual response, the icon of the corresponding status is displayed. If no Expected Result is matched, the Icon for Unmatched Status is displayed.

A maximum of 5 states are supported. You can click the  button to add a new status or click the  button to remove one.

UI Elements	Description
Device	To select a target device for the commands to be sent. You can add or edit a device in the Device Management dialog, which is accessed from the toolbar.
Button Name	The label to display on the button.
Get Command	The instruction used to get the actual status.
Long Press Interval	Long press on the button is used to send commands continuously to a device at a defined interval. Long Press Interval is for defining the interval between sending successive commands to a target device during the long pressing of the button. Value range: 0 - 2 seconds. Default Value: 0. "0" indicates the Long Press function is unavailable.
Surname for Unmatched Status	Default icon for display when there's no matching status.
Icon for Unmatched Status	The icon of the button that displays on the button. If you do not want to show the icon, leave it blank here.
Set Command	A command used to set a state.
Expected Result	The expected response to match the status, which should be the text of the actual response after sending the Set Command for that status followed by the Get Command.
Delay	To define the interval between when the button is being pressed and when the command is to be sent.
Time Out	Set time out time.
Icon	Icon displayed when the actual response of the Get command matches the Expected Result of this status.

Example:

If you want to toggle between mute and unmute for the Video Bar's microphone and verify whether the action takes effect, complete the following:

- 1) Obtain the API commands for mute/unmute the microphone.

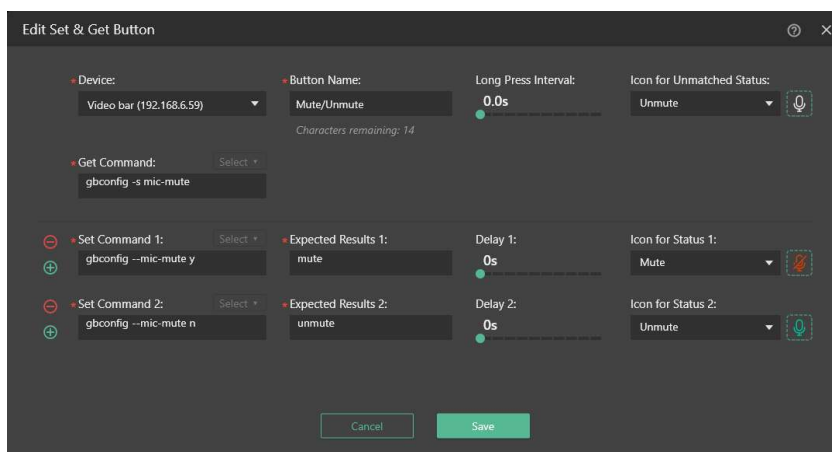
To mute/unmute the microphone:

Command Structure:	
<code>gbconfig --mic-mute {n / y}</code>	
Example	Feedback
<code>gbconfig --mic-mute y</code>	N/A
<code>gbconfig --mic-mute n</code>	N/A

To get the microphone status:

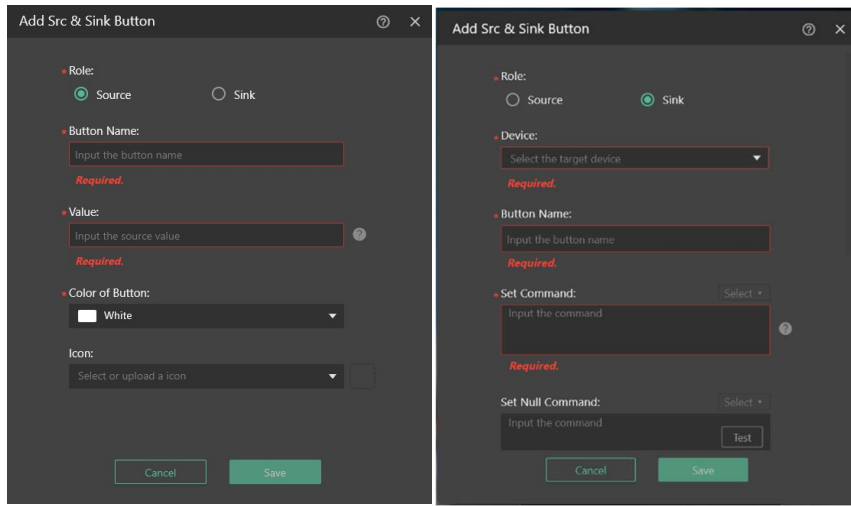
Command Structure:	
<code>gbconfig -s mic-mute</code>	
Example	Feedback
<code>gbconfig -s mic-mute</code>	<i>mute</i> (or <i>unmute</i>)

- 2) Fill in the "Edit Set & Get Button" dialog box with required information, and click "Save" to confirm the setup.



- 3) Enter preview mode. The initial state for the microphone is "unmute"; click the button, the microphone will be toggled between "mute" and "unmute".

4. Src & Sink Button



Source Button Form Items

Sink Button Form Items

The Src & Sink Button is a special button for matrix pairing.

It has two roles, Source and Sink.

- For the Source role, it is responsible for providing a Value and a Color.
- For the Sink role, it is responsible for interacting with the target device with the Value obtained from a Source button, and then determining the association relationship with the Source. When the association relationship is established, it will display the Color held by the Source button.

For Source role:

UI Elements	Description
Role	The role of the button.
Button Name	The label to display on the button.
Value	The parameter value that represents the source. When a Source role button is pressed and another Sink role button is pushed later, the value for the Source button will be passed to that Sink button.
Color of Button	When a Sink role button is associated with a Source Role button, the border color of the Sink button is displayed as the Color held in that Source button.
Icon	The icon displayed on the button. If you do not need to display the icon, leave it blank here.

For Sink role:

UI Elements	Description
Device	To select a target device to which the commands are sent. You can add or edit a device in the Device Management dialog, which is accessed from the toolbar.
Button Name	The label to display on the button.
Set Command	A command used to set a state.
Set Null Command (Optional)	When a Sink button is directly pressed without pressing the Source button beforehand, this command will be sent to the target device to undo the previously established association. If it's not set, the association cannot be undone.
Test	Click to send the command to the target device to test if it takes effect.
Get Command	After sending Set Command or Set Null Command, this command is sent to the target device to check if the association is established. You can also use \$SRC in this command.
Expected Command	The expected response when the Get Command is sent to the target device. The association is considered to have been established successfully only if the Expected Result is consistent with the actual response.
Time Out	Use the slider to set time out value. Default: 0; Range: 0~60s.
Icon	The icon displayed on the button. If you do not need to display the icon, leave it blank here.

Example:

If you want to create pairing buttons for a 6 x 6 Matrix, complete the following:

A. Obtain API commands.

To assign an input source to an output sink:

Command Structure:	
SET SW <i>in out</i>	
Parameter	Range
<i>in</i>	hdmiin1, hdmiin2, ..., hdmiin6, hdmiin0
<i>out</i>	hdmiout1, hdmiout2, ..., hdmiout6
Example	Feedback
<i>SET SW hdmiin1 hdmiout1</i>	N/A

To query which source is assigned to an output sink:

Command Structure:	
GET MP <i>out</i>	
Parameter	Range
<i>out</i>	hdmiout1, hdmiout2, ..., hdmiout6
Example	Feedback
<i>GET MP hdmiout1</i>	<i>MP hdmiin1 hdmiout1</i>
<i>GET MP hdmiout1</i>	<i>MP hdmiin0 hdmiout1</i>

B. Create a Source button.

Dialog box titled "Edit Src & Sink Button".

- Role: ☒ Source ☐ Sink
- Button Name: Source1 (Characters remaining: 18)
- Value: hdmiin1
- Color of Button: Teal
- Icon: In
- Buttons: Cancel, Save

C. Create a Sink button.

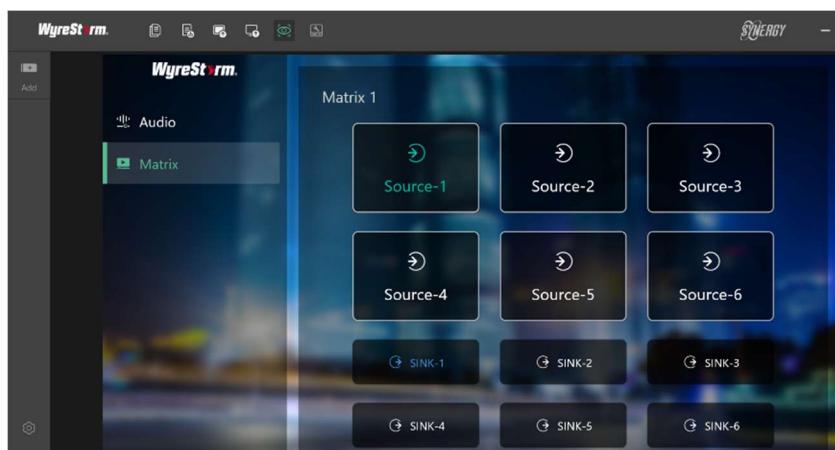
Dialog box titled "Add Src & Sink Button".

- Role: ☐ Source ☒ Sink
- Device: Matrix (192.168.6.71)
- Button Name: SINK-1 (Characters remaining: 19)
- Set Command: SET SW \$SRC hdmiout1
- Set Null Command: SET SW \$SRC hdmiout1 (Test button)
- Get Command: (empty)
- Buttons: Cancel, Save

D. To create more input and output buttons, repeat the operations in steps 2 and 3. Once all buttons are completed, go back to the workspace to enter preview mode.

E. Perform matrix switching.

If you want to assign Source 1 to Sink 2, tap Source 1 button followed by Sink 2 button, then the Source 1 will be routed to Sink 2.



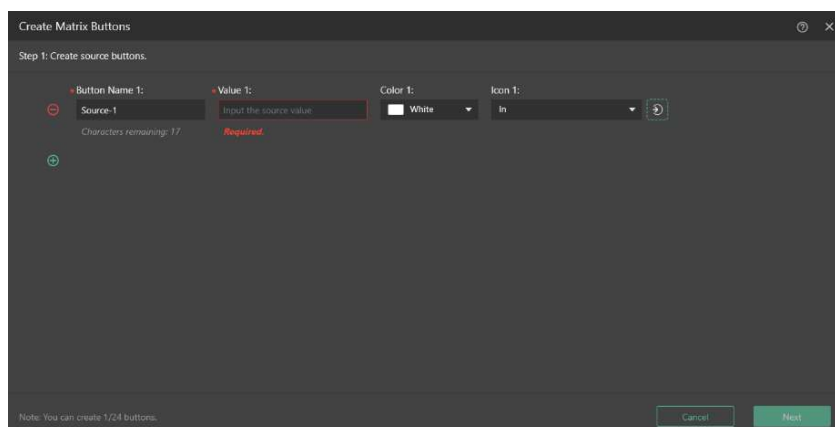
5. Matrix Button

Matrix button allows you to create multiple Source and/or Sink buttons at a time for a Matrix.

It consists of two steps.

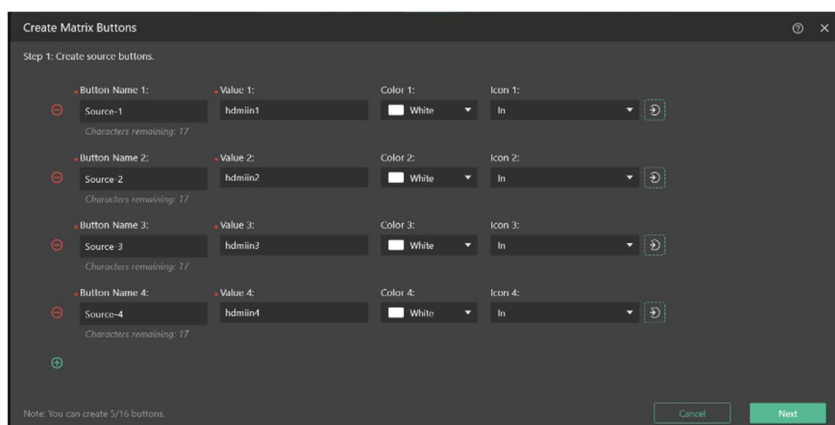
Step 1: To create Source buttons.

Click  on the left to add a new button, or  to remove one.



Note: The bottom-left corner of the window indicates the total number of buttons that can be created.

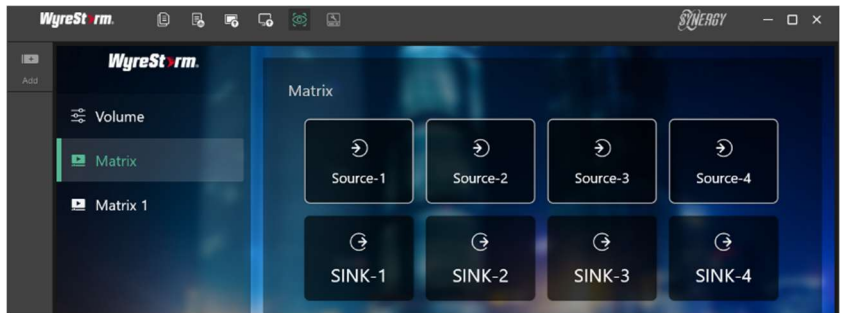
For example:



Step 2: To create Sink buttons.

For example:

After all source and sink buttons are created successfully, the actual effect for the examples listed above will be the following:



Note:

- The form filling rules for Matrix buttons are as same as the Src & Sink Button, for more information refer to the Src & Sink Button section.
- The maximum number of buttons created in steps 1 and 2 is 24, which actually depends on the layout you selected. For example, if a 4 x 3 or 3 x 4 layout is selected, the total number of buttons in steps 1 and 2 shall not exceed 12; for a 2 x 2 one, the number shall not exceed 4.

6. All in One Button

All in One button provides the function to automatically implement all the buttons in one layout with one click. By default, they will be implemented in order with no delay. It is possible to manually adjust the delay between the previous and next buttons..

All In One Button integrates multiple buttons together to automatically implement these buttons in a certain order within one layout with one click.

Note: After excluding Button Mode as Press&Release, At least two buttons need to be placed on the selected page.

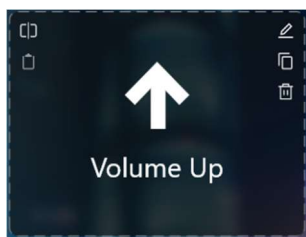
Customize Notice: When enabled,

- Notice Content: Input the showing notice content when implement the button before this created notice.
- Duration Time: The interval between the previous and next buttons are being implemented. Default Delay Time is 0.
- : Drag over this button to sort the Command buttons.

Tips:

About Button operation:

Move the mouse to the created button:



UI Elements	Description
/	Click the icon to split one button to two buttons. Click the icon to restore from two button to one button. Note: When splitting a single button into two, both buttons are configured as standard buttons.
	Click to remove the current group of device and command input fields.
	Click to copy the button.
	After copying one button, click this button to paste the copied one as a same button.
	Click to delete the current button configurations.

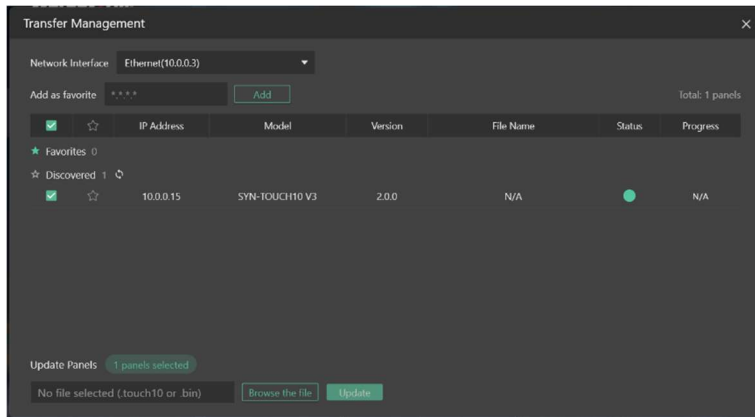
Transferring the Configuration File

Exporting the Configuration File

After you have completed all items of the configuration project, export it to a (*.touch10) file.

Tranfering the Configuration File

Click “” and select “Transfer Management”.



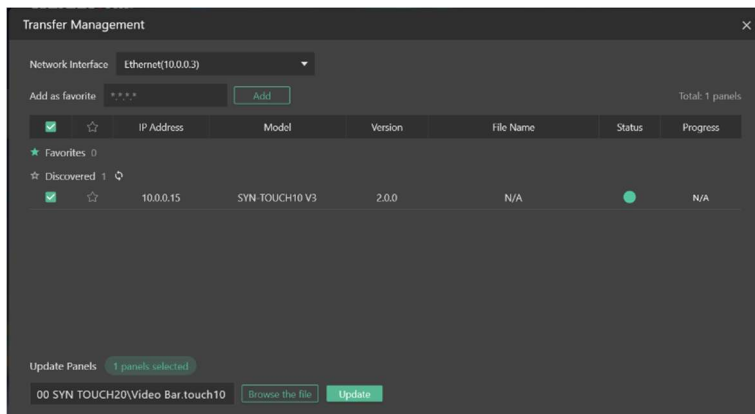
Network Interface: Select the network interface the touch panel connected.

Add as favorite: Input the touch panel’s IP address, and click “Add” button to add this panel as the favorite, and it will display in the favorite row of the middle table.

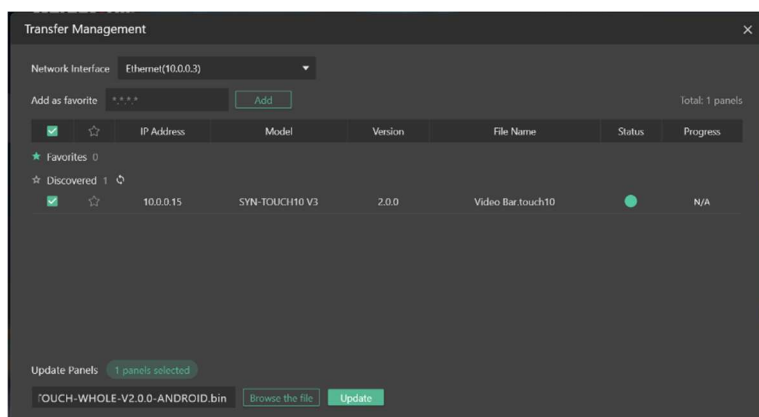
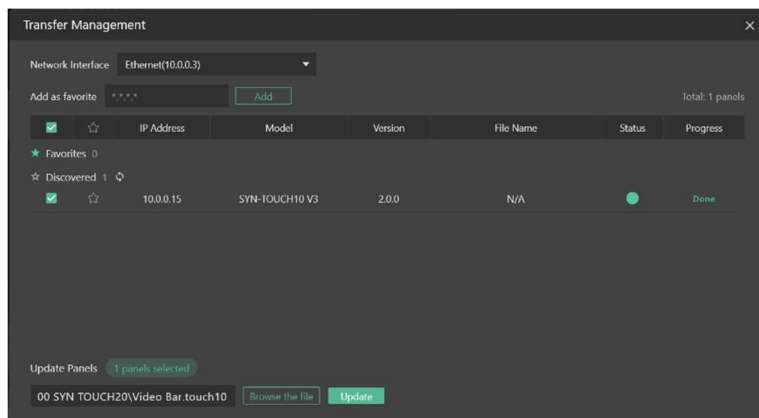
UI Elements	Description
Network Interface	Select the network interface the touch panel connected.
Add as favorite	Input the touch panel’s IP address, and click “Add” button to add this panel as the favorite, and it will display in the favorite row of the middle table.
Touch panel table	• Favorites: Shows the touch panel added as “favorite”. Click “” to cancel adding it as favorites. • Discovered: Shows the discovered touch panels in the current network. ○ Click “” icon to refresh the discovered touch panels. ○ Click “” icon to add the touch panel as the favorite, and this touch panel will display on favorites part. ○ IP Address: Shows the IP address of the touch panel. ○ Model: Shows the panel model. ○ Version: Shows the APP version on this touch panel. ○ File Name: Shows the file name transferred to the touch panel. ○ Status: : The touch panel is online. : The touch panel is offline. ○ Progress: Shows the transfer progress or upgrading process.
Update Panels	Shows the touch panel number selected to transfer configuration file. • Browse the file: Click to upload a configuration file (*.touch10) or a App (installed on the touch panel) upgrade file. • Update: Click to transfer the configuration file to the touch panel or upgrade the App installed on the touch panel.

Transfer configuration file steps:

- 1) Click the checkbox before the touch panel you want to transfer.
- 2) Click “Browse the file” to select a configuration file (*.touch10) from local computer, and click “Update”.

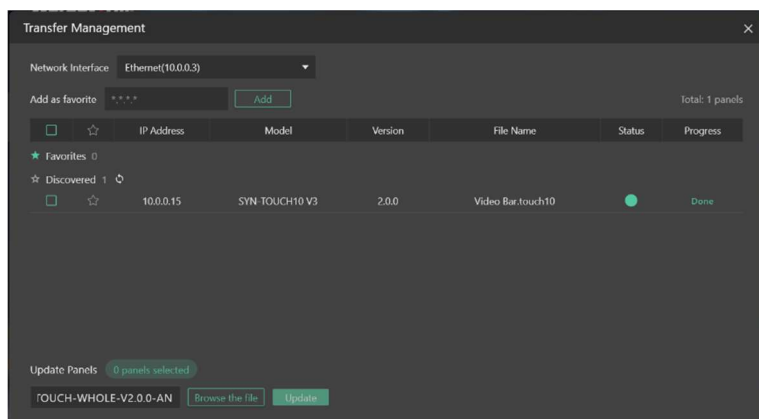


- Upload progress displays on Progress column. When the upload was successful, the status column displays the following. And then File Name will shows the upload configuration file name.



Upgrading the APP on the Touch Panel

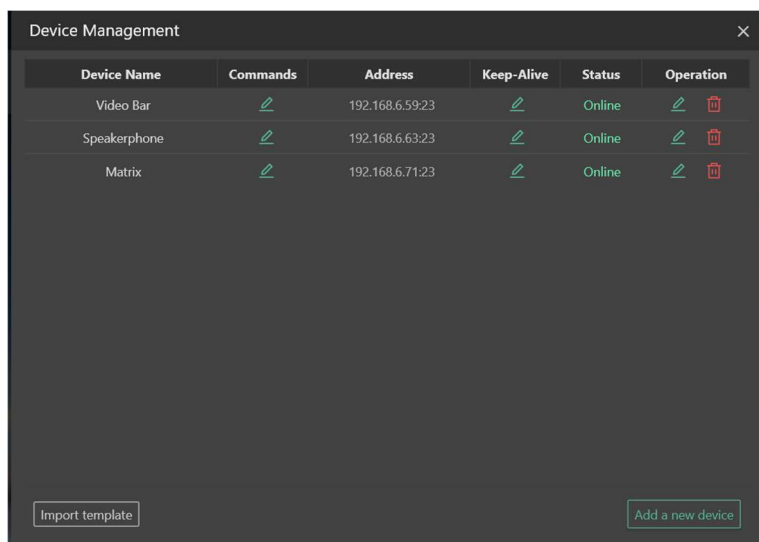
- Click the checkbox before the touch panel you want to transfer.
- Click "Browse the file" to select the upgrade file (*.bin) from local computer, and click "Update".
- Upgrade progress displays on Progress column. When the upgrading was successful, the status column displays the following.



Other Configurations

Device Management

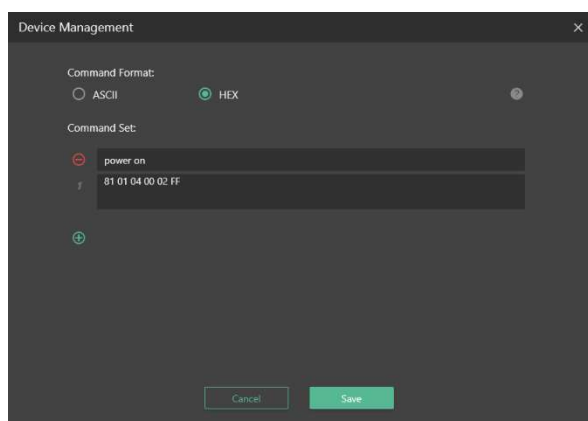
Click  and select "Device Management".



Device Management is used to manage and configure devices.

The Commands  button is used to configure the command format between ASCII and HEX, and restore the commands you input for the target device.

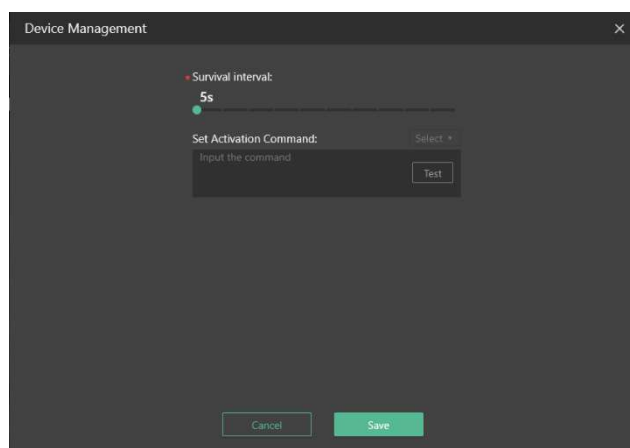
You can click the  button to add a new command or click the  button to remove one.



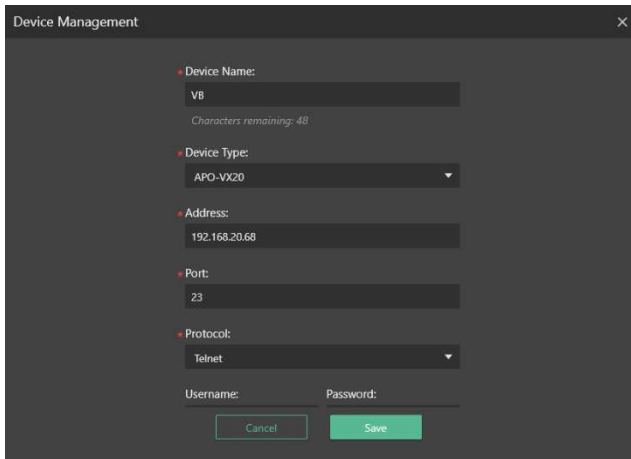
The Keep Alive  button is used to configure an activation command for a device.

- Activation Command: The command that is sent to the target device at a certain interval to keep it active. If you do not want to set the command, leave it blank here.
- Survival interval: The interval between two Activation Commands that are being sent.

Available range: 5 to 60 seconds. Default setting is 5 seconds.



The Operation  button is used to add and configure a device.



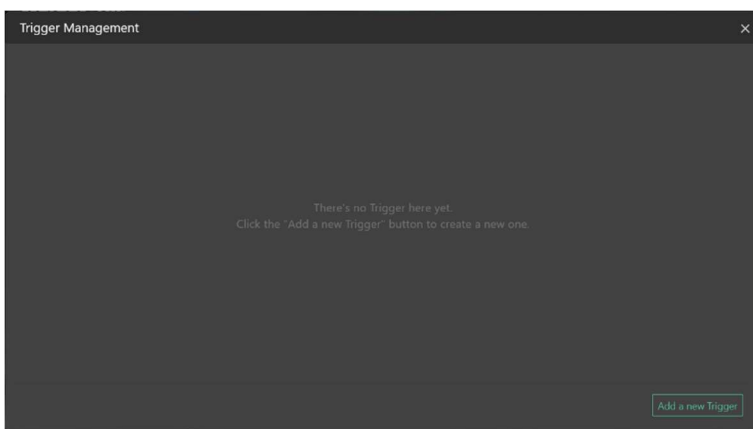
The Device Management dialog box is a dark-themed window with a title bar containing the text "Device Management" and a close button (X). The main area contains several form fields:

- Device Name:** A text input field containing "VB". Below it, a small grey text label reads "Characters remaining: 48".
- Device Type:** A dropdown menu showing "APO-VX20".
- Address:** A text input field containing "192.168.20.68".
- Port:** A text input field containing "23".
- Protocol:** A dropdown menu showing "Telnet".
- Username:** An empty text input field.
- Password:** An empty text input field.

At the bottom of the dialog are two buttons: "Cancel" (light grey) and "Save" (green).

Trigger Management

Click  and select "Trigger Management".



The Trigger Management dialog box is a dark-themed window with a title bar containing the text "Trigger Management" and a close button (X). The main area is mostly empty, with a message in the center:

There's no Trigger here yet.
Click the 'Add a new Trigger' button to create a new one.

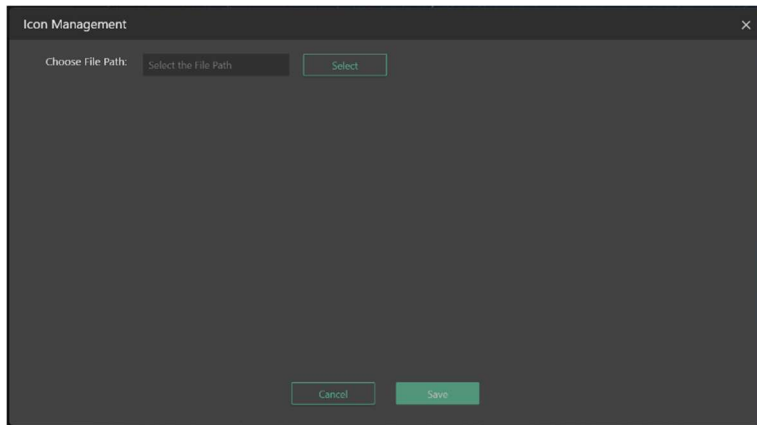
At the bottom right of the dialog is a button labeled "Add a new Trigger".

Trigger Management is used to trigger SYN TOUCH10 v3 on receiving an expected command from a third-party device to automatically send a sequence of commands to target devices. It can be accessed through the  button on toolbar.

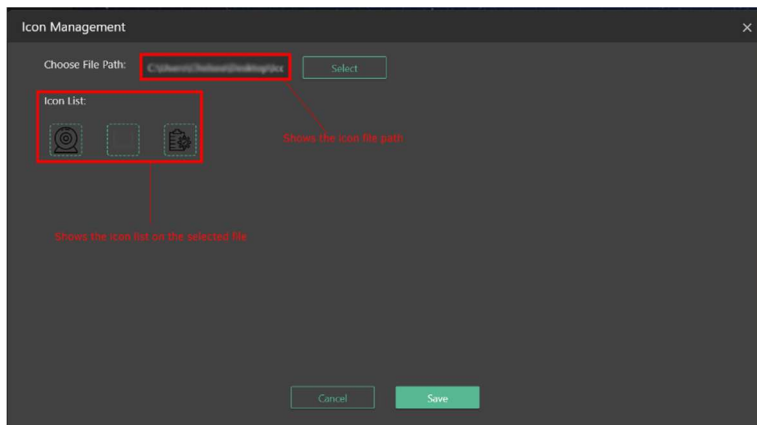
This feature is suitable for the scenarios where sensors are deployed for activating a series of events (e.g. lights on/off, TVs on/off, curtains up/down) on detecting changes of states (e.g., changes of volume, motion, temperature, humidity, etc.).

ICON Management

Click  and select "ICON Management".



- 1) Click "Select" to select an Icon file from local computer.

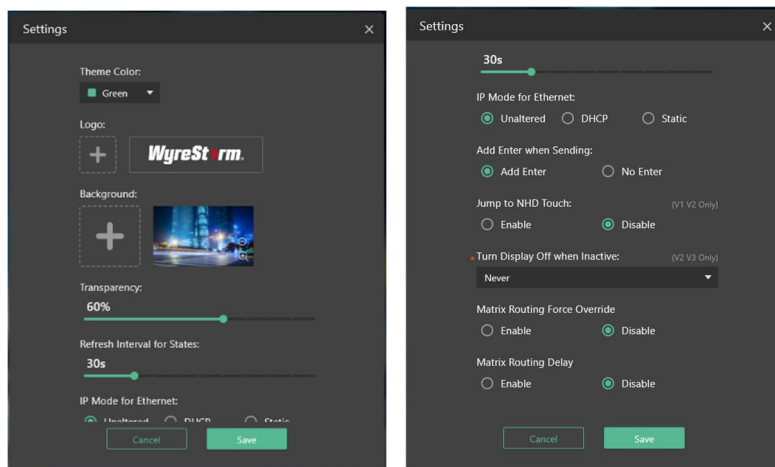


Note: The icons in the file must be in .png format.

- 2) Click "Save" to upload the icon file, and the uploaded icons will display on icon setting library.

System Settings

Click  to enter Settings page to



UI Element	Description
Theme Color	Set the theme color for the touch panel interface.
Logo	Uploads a custom logo displayed on the Touch Panel interface.
Background	Uploads a custom background image for the Touch Panel interface.
Transparency	Adjusts the transparency level of the background image. Higher values make the background more visible.
Refresh Interval for States	Sets how often the Touch Panel refreshes and updates device status information.
IP Mode for Ethernet	Configures the Ethernet network mode. Available options include Unaltered, DHCP, and Static. Default: Unaltered. - Unaltered: Keeps the current network configuration unchanged. - DHCP: Automatically obtains an IP address from a DHCP server. - Static: Allows manual configuration of network parameters such as IP address, subnet mask, and gateway.
Add Enter when Sending	Determines whether a carriage return (Enter) is automatically appended to commands sent to controlled devices.
Jump to NHD Touch	Enables or disables automatic navigation behavior for supported NHD Touch systems. Available on V1 and V2 models only.
Turn Display Off when Inactive	Sets the inactivity timeout for automatically turning off the touch panel. Available on V2 and V3 models only.
Matrix Routing Force Override	Allows new matrix routing commands to overwrite existing routes.
Matrix Routing Delay	Adds a delay before executing matrix routing commands to improve routing stability.

