

# Vunit 3000

## Professional Control Processor



User Manual

## Change History

Document Version	Release Date	Description
V1.0.0	2024-03-20	First release

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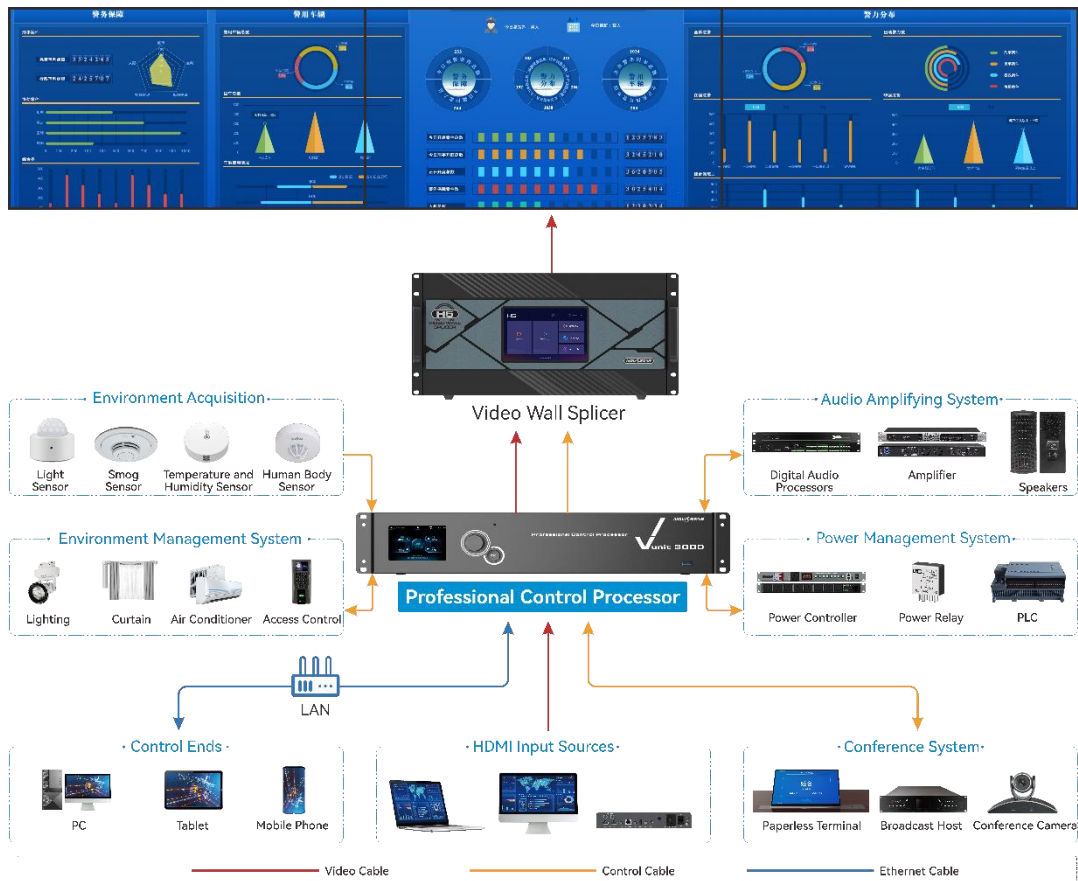
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# 1 Control Connections

## 1.1 Control Connections

Figure 1-1 Device control connections



## 1.2 Software Installation

### 1.2.1 Obtaining

You can obtain the installation package of BCTools via the following two ways.

- Obtain the installation package from the device provider and copy it to your computer.
- Contact your sales engineer or our technical support engineer to obtain the installation package and copy it to your computer.

## 1.2.2 Installation

Uncompress the software package to your computer, and then double click the installation package named **BCTools.exe**. Follow the instructions to complete the installation.

You can install BCTools on Windows 7 or later only.

## 2 Menu Operations

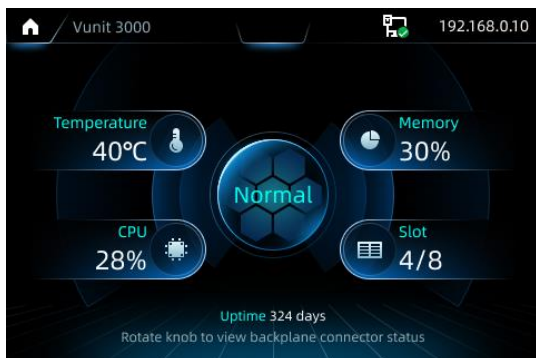
Operating Instructions:

- Knob:
  - On the home screen, press the knob to enter the operation menu screen.
  - On the home screen, rotate the knob to view the device overall status and backplane connector status.
  - On the operation menu screen, rotate the knob to select a menu item and press the knob to confirm the selection or enter the submenu.
  - When a menu item with parameters is selected, you can rotate the knob to adjust the parameters. Please note that after the adjustment, you need to press the knob again to confirm the adjustment.
- **ESC**: Exit the current menu or cancel an operation.
- Hold down the knob and ESC button simultaneously for 3s or longer to lock or unlock the front panel buttons.

### 2.1 Switch Screen

After the device is successfully powered on, the device status is displayed by default as shown in [Figure 2-1](#). Rotate the knob to view backplane connector status as shown in [Figure 2-2](#).

Figure 2-1 Device status



The device IP address is displayed at the top right of the screen. The default IP address is 192.168.0.10.



Figure 2-2 Backplane connector status



Descriptions for the connector status:

- Green: The connector is connected normally.
- White: The connector is not connected.

The empty card slot indicates that no card is installed.

## 2.2 Menu Functions

Press the knob to enter the main menu screen.

Figure 2-3 Main menu

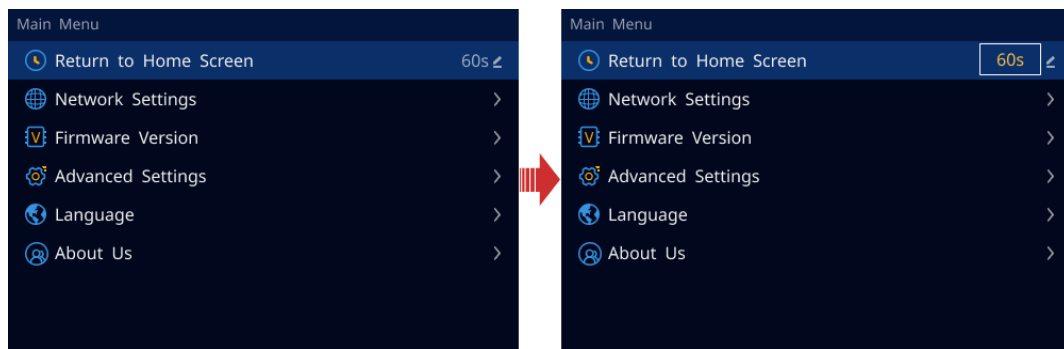


### 2.2.1 Return to Home Screen

You can set the period when the system stays at the current screen before returning to the homepage automatically when no operation is performed.

On the main menu screen, select **Return to Home Screen** and press the knob to confirm. Rotate the knob to select the desired duration and press the knob to confirm. The value ranges from 60s to 3600s.

Figure 2-4 Return to home screen

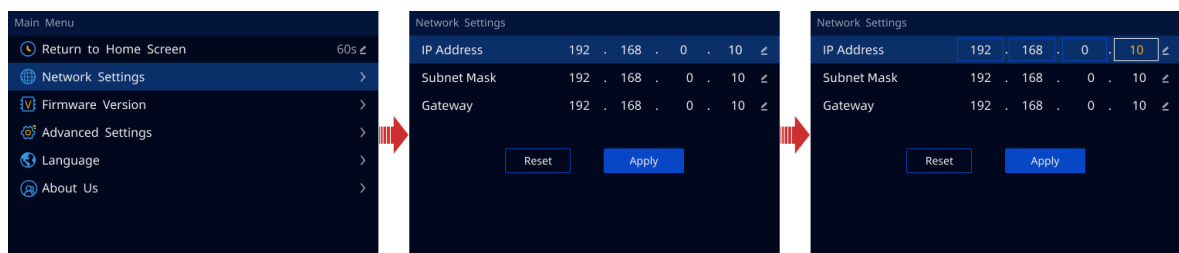


## 2.2.2 Network Settings

When a control PC is used for device control, ensure that the device and the control PC are on the same network segment and the device IP address must not conflict with the IP address of the control PC.

- Step 1 On the main menu screen, rotate the knob to select **Network Settings** and press the knob to enter the corresponding screen.
- Step 2 Rotate the knob to select **IP Address** and press the knob to enable IP address settings.
- Step 3 Rotate the knob to set the fourth section of the device IP address and press the knob to confirm.
- Step 4 Set other sections of the IP address.

Figure 2-5 Network settings



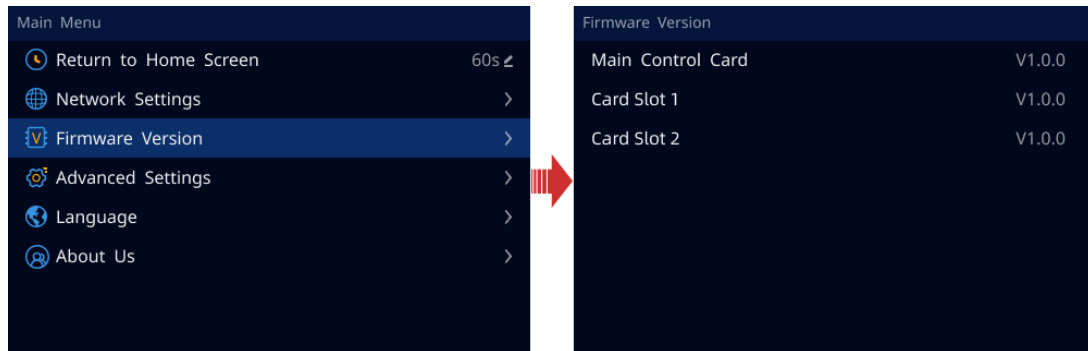
- Step 5 Set the subnet mask and gateway respectively.
- Step 6 Rotate the knob to select **Apply** to make the settings take effect.

## 2.2.3 Firmware Version

Under this menu item, you can view the firmware versions of the main control card and other cards.

On the main menu screen, rotate the knob to select **Firmware Version** and press the knob to show the relevant information.

Figure 2-6 Firmware version



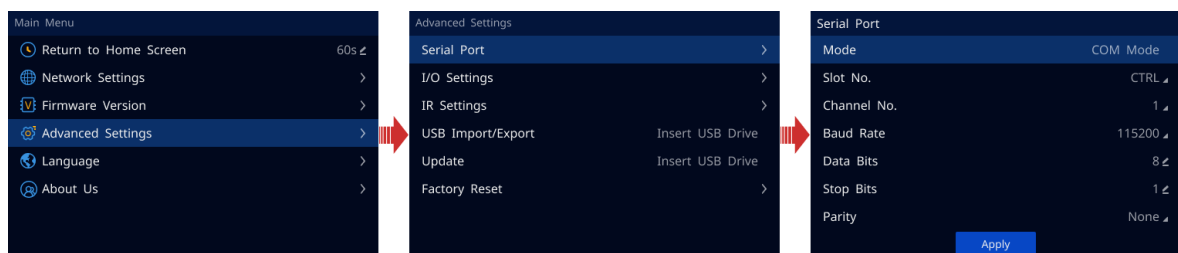
## 2.2.4 Advanced Settings

The advanced settings allow you to set the serial port, I/O port, IR, device update, factory reset and USB import/export.

### 2.2.4.1 Serial Port Settings

- Step 1 On the main menu screen, rotate the knob to select **Advanced Settings** and press the knob to enter the advanced settings screen.
- Step 2 On the advanced settings screen, rotate the knob to select **Serial Port** and press the knob to enter the serial port settings screen.

Figure 2-7 Serial port settings



- Mode: View the work mode of the serial port. The supported options include **COM Mode** and **Modbus-ASCII Mode**. The mode can be only read from the device and cannot be set on the screen.
- Slot No.: Select the slot number of the corresponding card where the COM port is located.

CTRL: Main control card

- Channel No.: Select the channel number of the corresponding card where the COM port is located.
- **Baud Rate, Data Bits, Stop Bits and Parity**: Set the communication parameters between the COM port and the controlled device. Please refer to the relevant parameters of the controlled device for configuration.

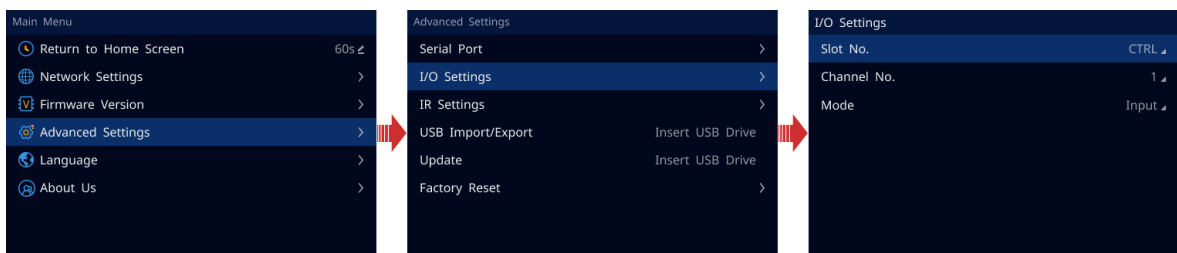
Step 3 Rotate the knob to select **Apply** and press the knob to confirm.

### 2.2.4.2 I/O Settings

Step 1 On the main menu screen, rotate the knob to select **Advanced Settings** and press the knob to enter the advanced settings screen.

Step 2 On the advanced settings screen, rotate the knob to select **I/O Settings** and press the knob to enter the I/O settings screen.

Figure 2-8 I/O settings



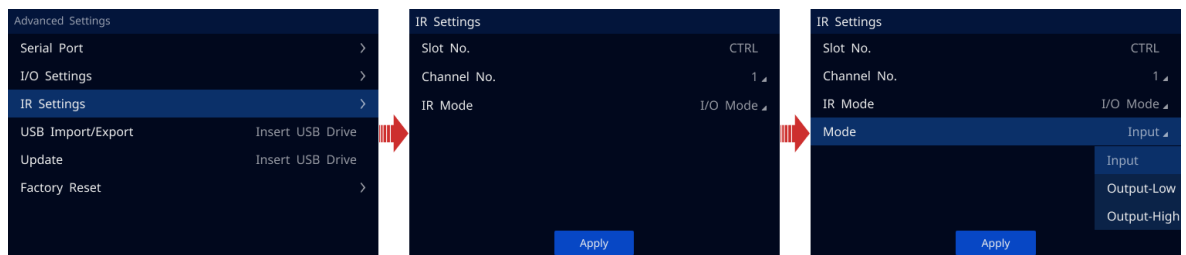
- Slot No.: Select the slot number of the corresponding card where the I/O port is located.  
CTRL: Main control card
- Channel No.: Select the channel number of the corresponding card where the I/O port is located.
- Mode: The supported modes include **Input, Output-High, Output-Low**. Select one of the modes according to the connected device.
  - When the I/O connector is connected to the device for signal input, such as smoke sensors, and temperature and humidity sensors, you need to set the I/O mode to **Input**.
  - When the controlled device is connected and the I/O connector is used for control, you need to set the mode to **Output-High** or **Output-Low** according to the signal received by the controlled device.

Step 3 Press the **ESC** to exit the current menu and apply the configuration.

### 2.2.4.3 IR Settings

- Step 1 On the main menu screen, rotate the knob to select **Advanced Settings** and press the knob to enter the advanced settings screen.
- Step 2 On the advanced settings screen, rotate the knob to select **IR Settings** and press the knob to enter the IR settings screen.

Figure 2-9 IR settings



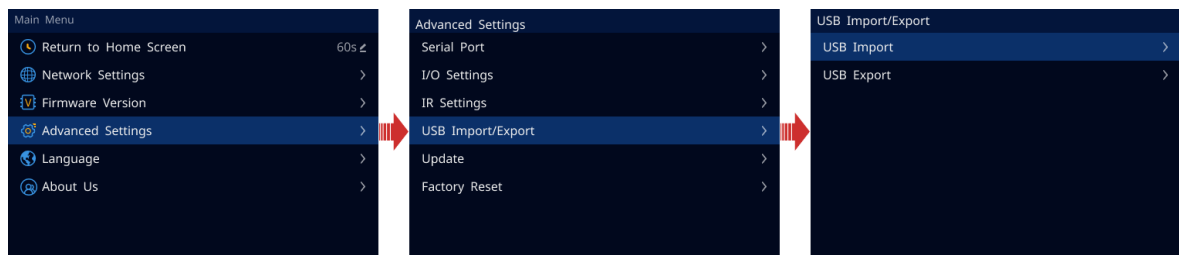
- Slot No. Select the slot number of the corresponding card where the IR port is located.  
CTRL: Main control card
- Channel No.: Select the channel number of the corresponding card where the IR port is located.
- IR Mode: If the selected IR port is located on the main control card, you can set the IR mode to **IR Mode** or **I/O Mode**. If the selected IR port is not located on the main control card, only **IR Mode** is supported.
  - IR Mode: The current connector is used for the IR port only.
  - I/O Mode: Set the current connector as the I/O port.
- Mode: When the IR mode is set to **I/O Mode**, you need to select the connector mode for each connected device.

### 2.2.4.4 USB Impot/Export

You can export the configuration information to your local computer via a USB drive, or import the configuration file saved in the USB drive to the device for quick configuration.

On the main menu screen, go to **Advanced Settings > USB Import/Export** and press the knob to enter the corresponding screen.

Figure 2-10 USB import/export



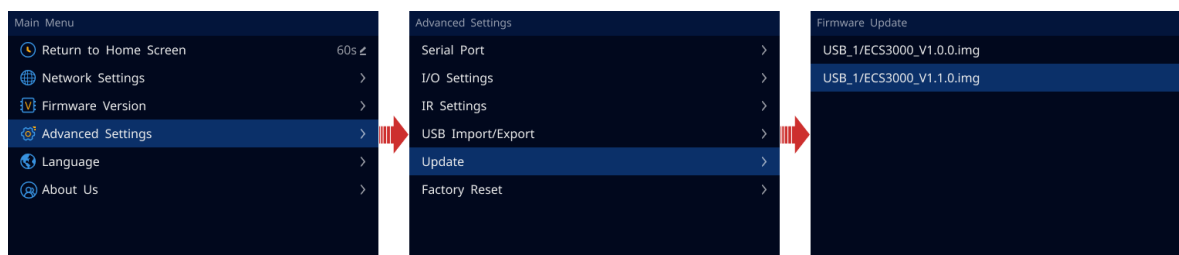
- Import: Import the configuration file saved in the USB drive to the Vunit 3000.
- Export: Export the configuration information to the USB drive.

### 2.2.4.5 Firmware Update

The Vunit 3000 allows you to update the device via a USB drive. Before updating, you need to save the update program to the root directory of the USB drive.

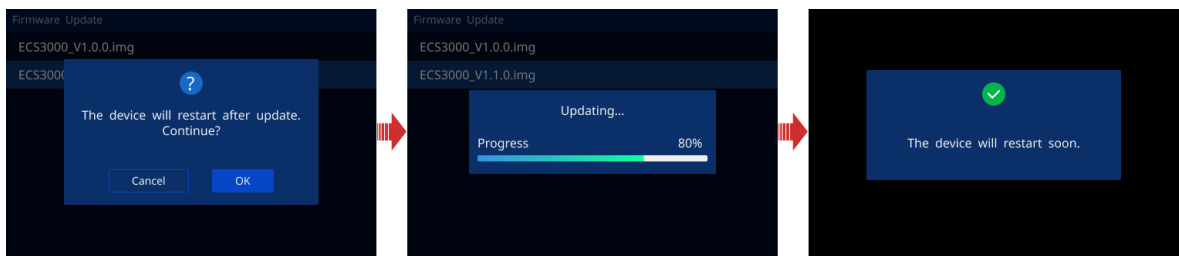
- Step 1 Insert a USB drive into the USB port on the device front panel or the USB port on the main control card.
- Step 2 Press the knob to enter the main menu screen.
- Step 3 Go to **Advanced Settings > Update** and press the knob to enter the firmware update screen.
- Step 4 Rotate the knob to select the desired update program saved in the USB drive.

Figure 2-11 Firmware update



- Step 5 Press the knob to enable the firmware update function.
- Step 6 Carefully view the prompt message, rotate the knob to select **OK** and press the knob to confirm. The firmware will be updated automatically.

Figure 2-12 Updating firmware



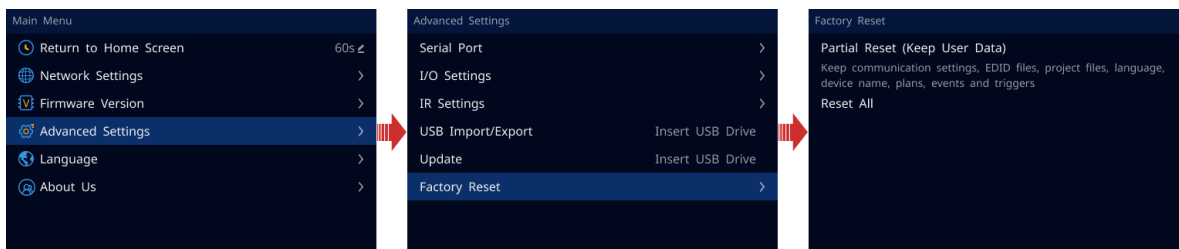
After the firmware is updated successfully, the device will restart automatically. After the restarting is complete, rotate the knob to select **Firmware Version** and press the knob to enter the corresponding screen where you can view the device and card versions.

### 2.2.4.6 Factory Reset

Factory reset function allows you to reset all the parameter settings of the device to factory defaults after the device update or when you think the parameters are improperly set.

On the main menu screen, go to **Advanced Settings > Factory Reset** and press the knob to enter the factory reset screen.

Figure 2-13 Factory reset

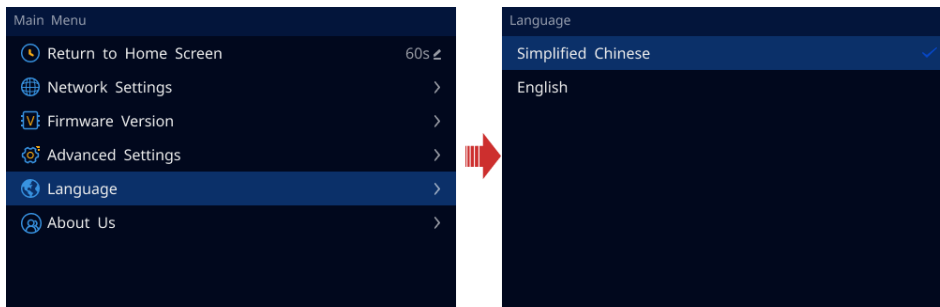


- **Partial Reset (Keep User Data):** Reset the parameter settings to factory defaults, except for the communication settings, EDID files, project files, language, device name, plans, events and triggers.
- **Reset All:** Reset all the parameter settings to factory defaults.

### 2.2.5 Language

The language options include **English** and **Simplified Chinese**. You can switch to your preferred language.

Figure 2-14 Language switching



## 2.2.6 About Us

Under this menu item, you can view the official website and email address. On our official website, you can check the latest device information and the updates for this device. You can also send your feedback or suggestion to us for improvements via the supplied email address.



## 3 Device Connections

### 3.1 Connect Devices

#### Prerequisites

The Vunit 3000 and control PC must be on the same network segment.

#### Operating Procedure


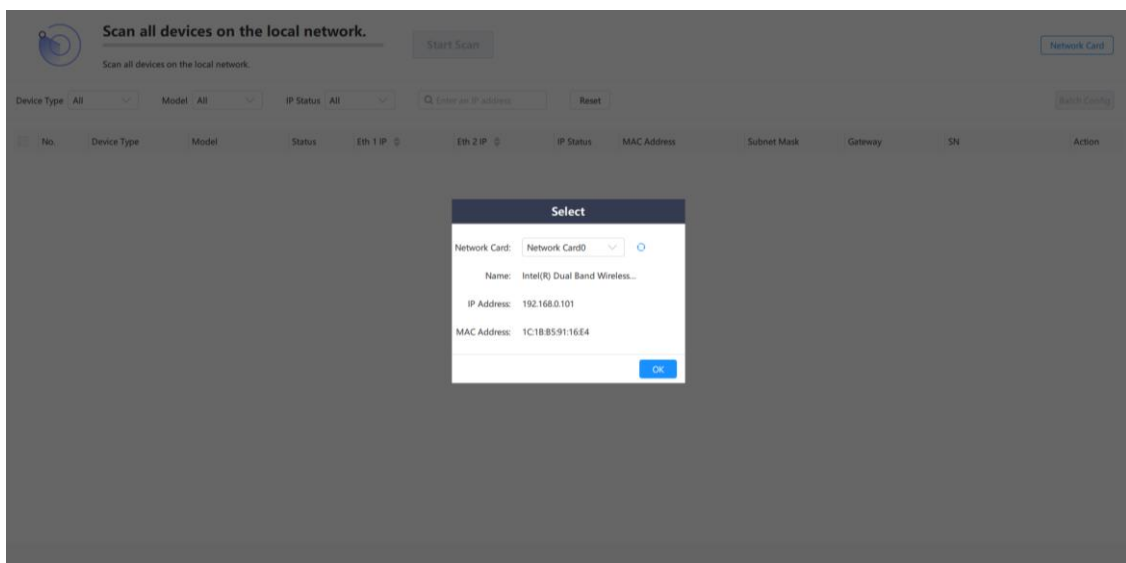
- Step 1 Double click the BCTools shortcut icon  to run the control end.
- Step 2 In the popup window, select the network card that is installed on the control PC.

Figure 3-1 Select network card

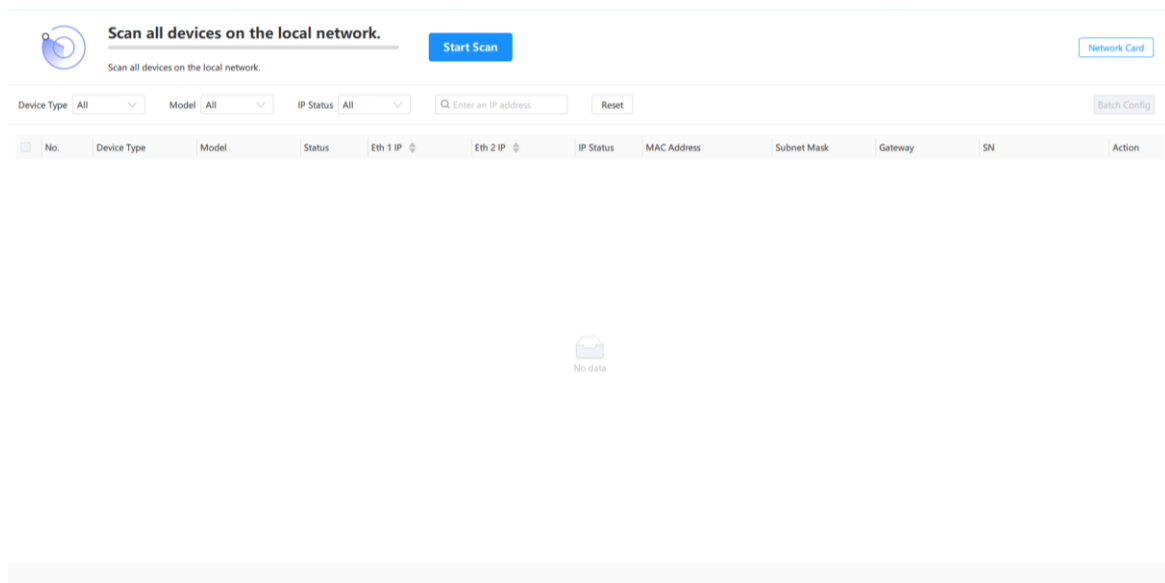


#### Notes:

- If only one network card can be connected to the control PC, there is no need to set the network card.
- You can also open the network card selection window by clicking **Network Card** at the top right corner.

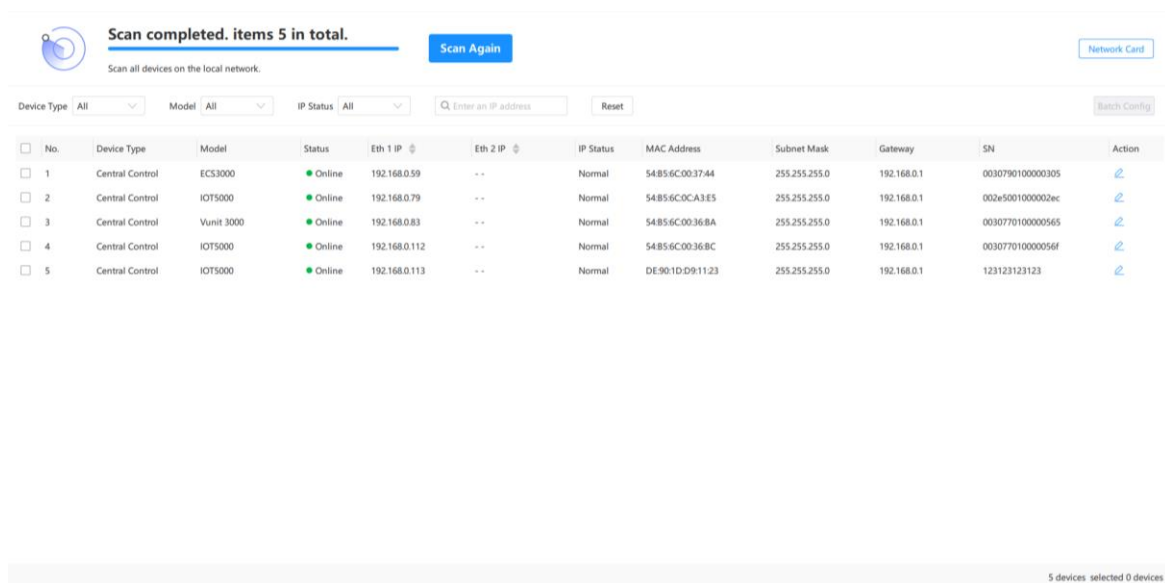
- Step 3 Click **OK** to complete the connected network card settings.

Figure 3-2 Network card set successfully



Step 4 Click **Start Scan** and the system will automatically scan the MAC addresses of all the Vunit 3000 on the current network segment, and then display the scanned devices.

Figure 3-3 Scan devices



## 3.2 Change IP Information

### Prerequisites

The device is connected in BCTools.

## Operating Procedure


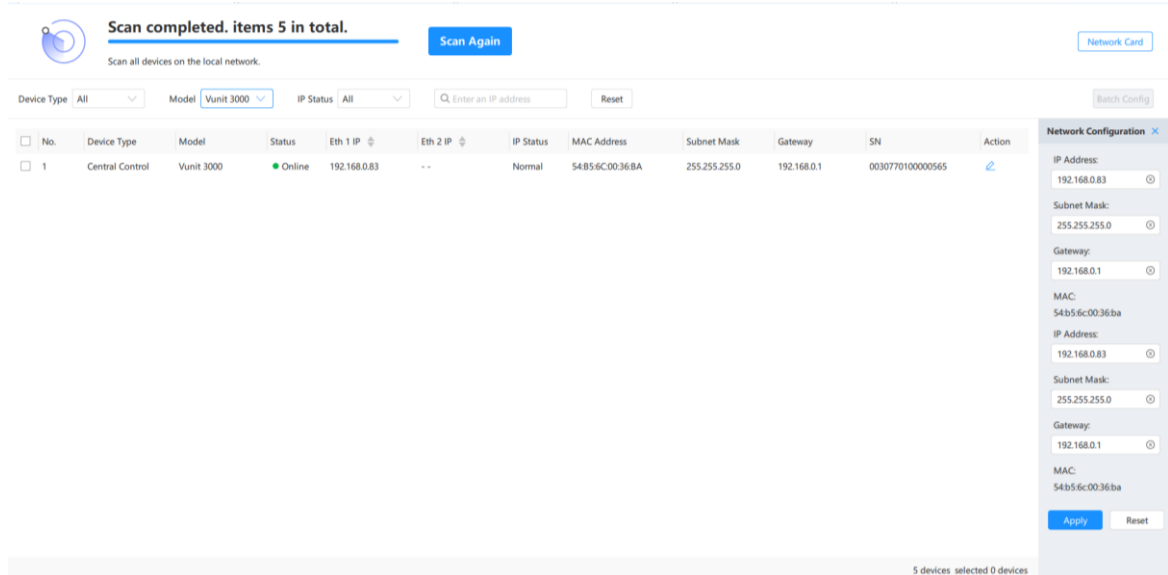
- Step 1 In the device list, click  in the column of **Action** to expand the **Network Configuration** pane.

Figure 3-4 Network configuration



The screenshot displays the Vunit 3000 network configuration interface. At the top, it indicates "Scan completed. Items 5 in total." and provides a "Scan Again" button. Below this, there are filters for Device Type (All), Model (Vunit 3000), and IP Status (All), along with a search bar for IP addresses and a "Reset" button. The main table lists one device with the following details:

No.	Device Type	Model	Status	Eth 1 IP	Eth 2 IP	IP Status	MAC Address	Subnet Mask	Gateway	SN	Action
1	Central Control	Vunit 3000	Online	192.168.0.83	--	Normal	54b56c00368a	255.255.255.0	192.168.0.1	0030770100000565	

The 'Network Configuration' pane on the right shows the following settings:

- IP Address: 192.168.0.83
- Subnet Mask: 255.255.255.0
- Gateway: 192.168.0.1
- MAC: 54b56c00368a
- IP Address: 192.168.0.83
- Subnet Mask: 255.255.255.0
- Gateway: 192.168.0.1
- MAC: 54b56c00368a

Buttons for "Apply" and "Reset" are visible at the bottom of the pane. At the bottom of the main window, it shows "5 devices selected 0 devices".

- Step 2 Set the device IP address, subnet mask and gateway.

The IP address you set must not conflict with IP addresses of other devices on the current network segment.

- Step 3 Click **Apply** to complete and apply the change.

## 3.3 Batch Change IP Information

You can batch change the IP information of the connected Vunit 3000 units in BCTools.

### Prerequisites

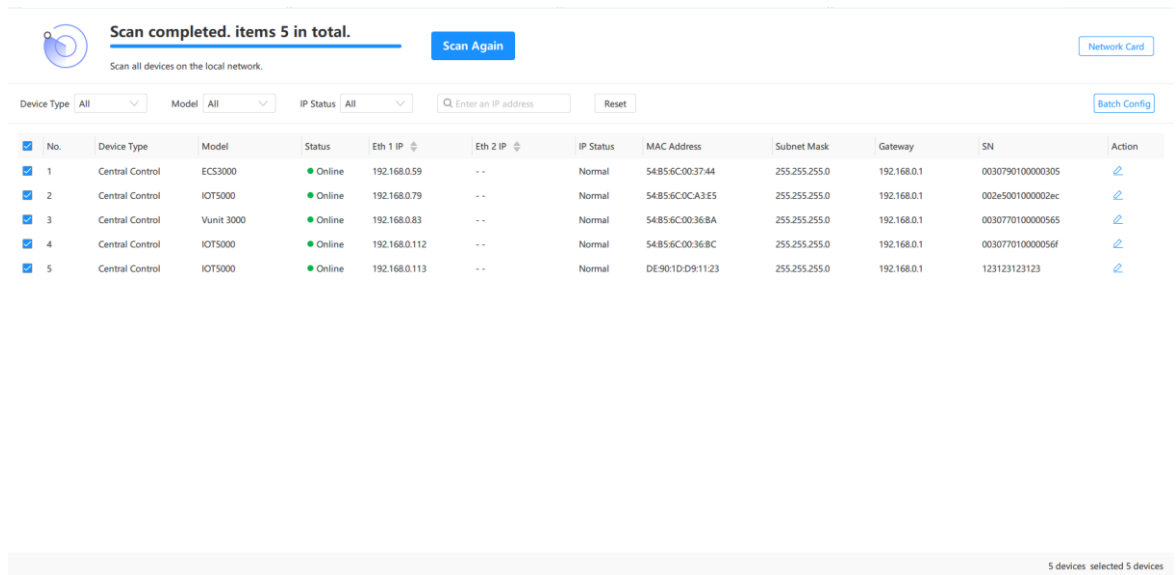
The device is connected in BCTools.

## Operating Procedure

- Step 1 Check the boxes in front of the desired devices.

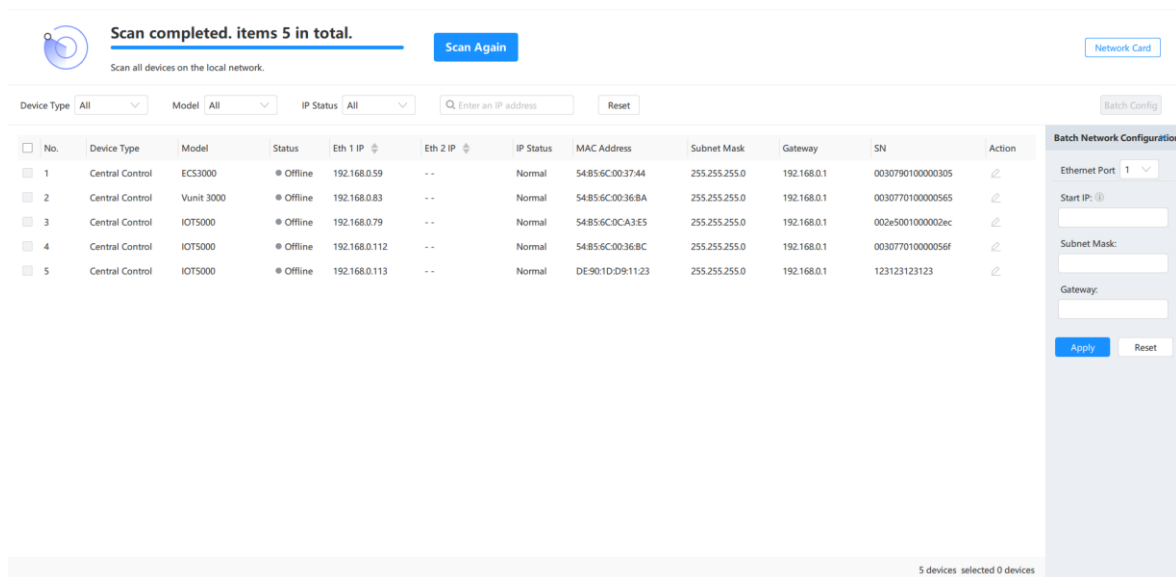
Check the box in front of **No.** to select all the connected devices.

Figure 3-5 Batch select devices



Step 2 Click **Batch Config** to expand the **Batch Network Configuration** pane.

Figure 3-6 Batch network configuration



Step 3 Enter the device start IP address in the text box below **Start IP**.

After the start IP address is set successfully, the IP addresses of other devices are increased sequentially by one according the order of the device.

For example, the start IP address is 192.168.0.10, and the IP address of the second device in the device list is 192.168.0.11.

Step 4 Set the subnet mask and gateway respectively.

Step 5 Click **Apply** to complete and apply the configurations.

## 4 Configure Devices

### 4.1 Change Device Names

After the devices are connected successfully, their default names are the same. You can change the device name to distinguish different devices.

#### Change Single Device Name

Step 1 Click the **Device Configuration** tab to enter the device configuration page.


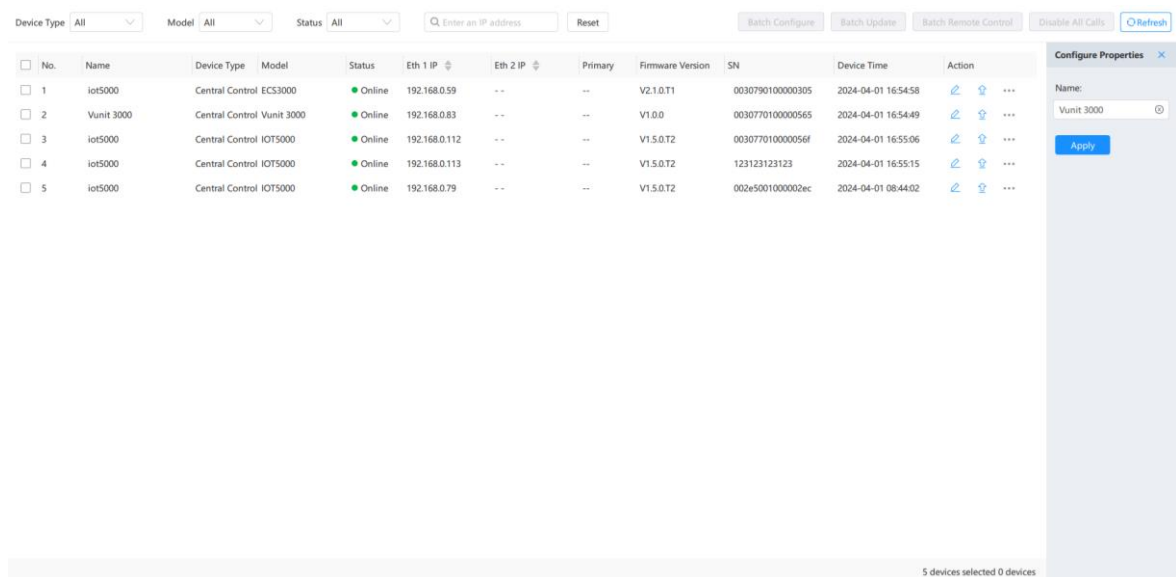
Step 2 Click  in the column of **Action** to expand the **Configure Properties** pane where you can change the target device name.

Figure 4-1 Change device name



The screenshot shows a web interface for device configuration. At the top, there are filters for Device Type (All), Model (All), and Status (All), along with a search bar for IP addresses and a Reset button. Below these are buttons for Batch Configure, Batch Update, Batch Remote Control, Disable All Calls, and Refresh. The main area is a table with columns: No., Name, Device Type, Model, Status, Eth 1 IP, Eth 2 IP, Primary, Firmware Version, SN, Device Time, and Action. Five devices are listed, all with a status of 'Online'. The 'Action' column for each device contains a pencil icon, a lock icon, and a three-dot menu icon. On the right side, a 'Configure Properties' pane is open for device 2, showing a text box with the current name 'Vunit 3000' and an 'Apply' button. At the bottom right of the table, it says '5 devices selected 0 devices'.

No.	Name	Device Type	Model	Status	Eth 1 IP	Eth 2 IP	Primary	Firmware Version	SN	Device Time	Action
1	iot5000	Central Control	ECS3000	Online	192.168.0.59	--	--	V2.1.0.T1	0030790100000305	2024-04-01 16:54:58	
2	Vunit 3000	Central Control	Vunit 3000	Online	192.168.0.83	--	--	V1.0.0	0030770100000565	2024-04-01 16:54:49	
3	iot5000	Central Control	IOT5000	Online	192.168.0.112	--	--	V1.5.0.T2	003077010000056f	2024-04-01 16:55:06	
4	iot5000	Central Control	IOT5000	Online	192.168.0.113	--	--	V1.5.0.T2	123123123123	2024-04-01 16:55:15	
5	iot5000	Central Control	IOT5000	Online	192.168.0.79	--	--	V1.5.0.T2	002e5001000002ec	2024-04-01 08:44:02	

Step 3 Enter a new name in the text box.

Step 4 Click **Apply** to complete and apply the change.

#### Batch Change Device Names

Step 1 Click the **Device Configuration** tab to enter the device configuration page.

Step 2 Check the boxes in front of the desired devices.

Check the box in front of **No.** to select all the connected devices.

Step 3 Click **Batch Configure** to expand the **Batch Configure** pane where you can batch change the target device names.

Figure 4-2 Batch change device names

The screenshot shows a web interface for managing Vunit 3000 devices. At the top, there are filters for Device Type (All), Model (All), and Status (All), along with a search bar for IP addresses and a 'Reset' button. A 'Batch Configure' button is highlighted. Below the filters is a table of devices with columns for No., Name, Device Type, Model, Status, Eth 1 IP, Eth 2 IP, Primary, Firmware Version, SN, Device Time, and Action. The table contains five rows of devices, all with a status of 'Online'. To the right of the table is a 'Batch Configure' pane with a 'Name' input field containing 'Vunit 3000' and an 'Apply' button.

No.	Name	Device Type	Model	Status	Eth 1 IP	Eth 2 IP	Primary	Firmware Version	SN	Device Time	Action
1	iot5000	Central Control	ECS3000	Online	192.168.0.59	--	--	V2.1.0.T1	0030790100000305	2024-04-01 16:54:58	⚙️ 🔍 ⋮
2	Vunit 3000	Central Control	Vunit 3000	Online	192.168.0.83	--	--	V1.0.0	0030770100000565	2024-04-01 16:54:49	⚙️ 🔍 ⋮
3	iot5000	Central Control	IOT5000	Online	192.168.0.112	--	--	V1.5.0.T2	003077010000056f	2024-04-01 16:55:06	⚙️ 🔍 ⋮
4	iot5000	Central Control	IOT5000	Online	192.168.0.113	--	--	V1.5.0.T2	123123123123	2024-04-01 16:55:15	⚙️ 🔍 ⋮
5	iot5000	Central Control	IOT5000	Online	192.168.0.79	--	--	V1.5.0.T2	002e5001000002ec	2024-04-01 08:44:02	⚙️ 🔍 ⋮

Step 4 Enter a new name in the text box.

Step 5 Click **Apply** to complete and apply the change.

After the device name is set successfully, other device names are followed by a serial number starting from 1.

For example, if you enter Vunit 3000 in the text box, the name of the first device in the device list is Vunit 3000-1 and the name of the second one is Vunit 3000-2.

## 4.2 Update Firmware

You can update the whole device or the desired card in BCTools.

After the whole device or main control card is updated, the device will restart automatically.

### 4.2.1 Update Single Device

#### Prerequisites

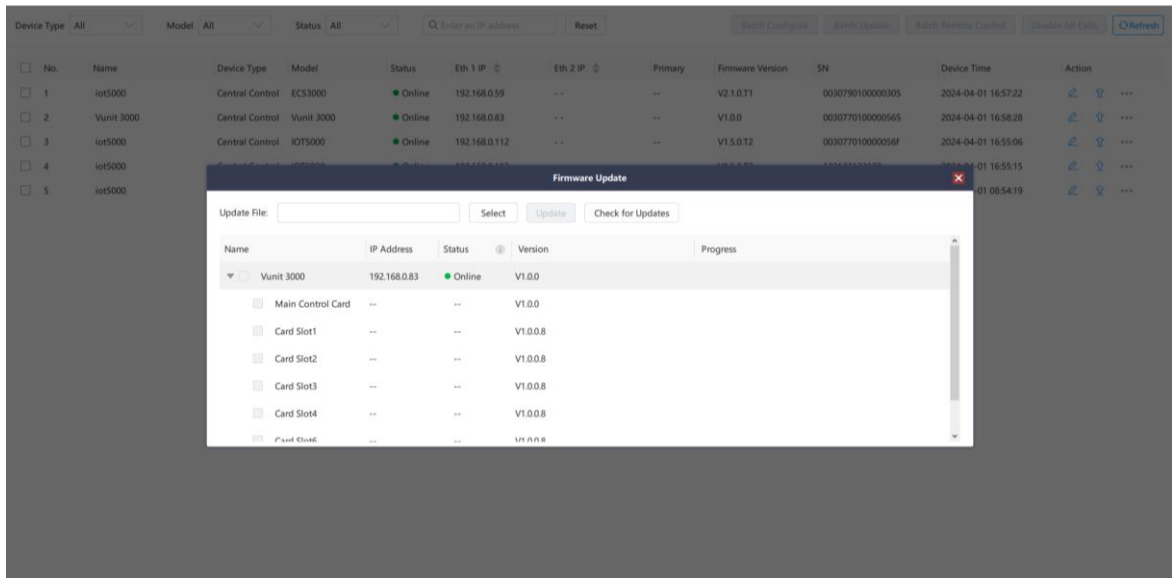
You have obtained the update package.

## Operating Procedure

Step 1 On the **Device Configuration** page, select the desired device from the device list.

Step 2 Click  in the column of **Action** to open the firmware update window.

Figure 4-3 Firmware update



Step 3 Click **Select** and then select the obtained update package.

Step 4 Check the box in front of the desired card or device.

If you want to update the main control card or other corresponding cards, only check the box in front of the desired card slot number.

Step 5 Click **Update** and the system will automatically update the selected device or card.

### 4.2.2 Batch Update

#### Prerequisites

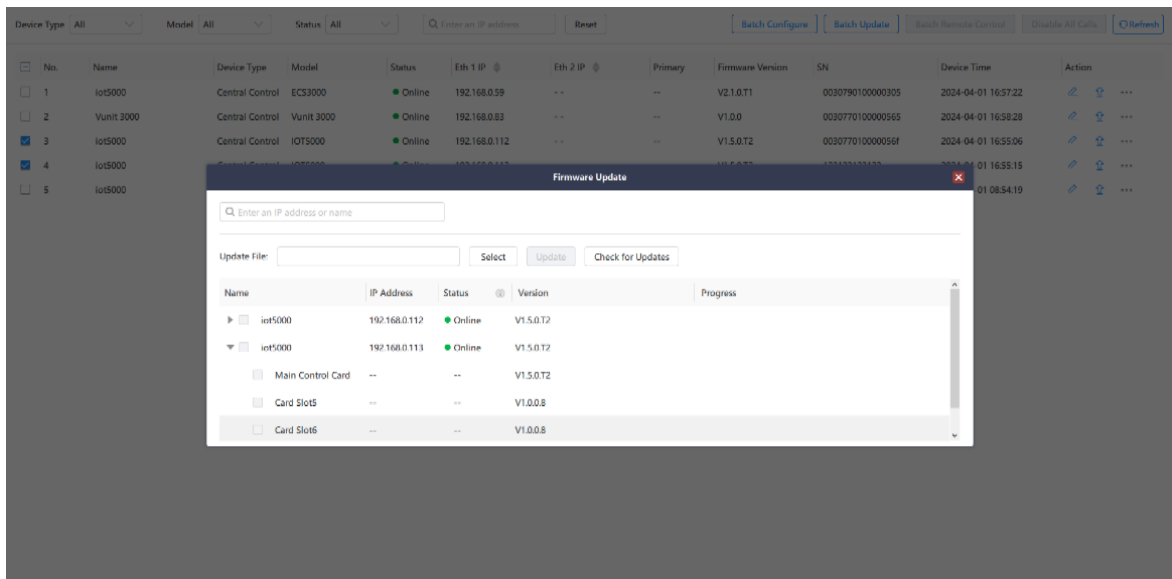
You have obtained the update package.

#### Operating Procedure

Step 1 On the **Device Configuration** page, check the boxes in front of the desired devices.

Step 2 Click **Batch Update** to open the firmware update window.

Figure 4-4 Batch update



Step 3 Check the boxes in front of the desired devices or corresponding cards installed on the devices.

Step 4 Click **Update** and the system will automatically update the selected devices or cards.

Click **Check for Updates** to read back the device version information, which can be used to check the version before and after update.

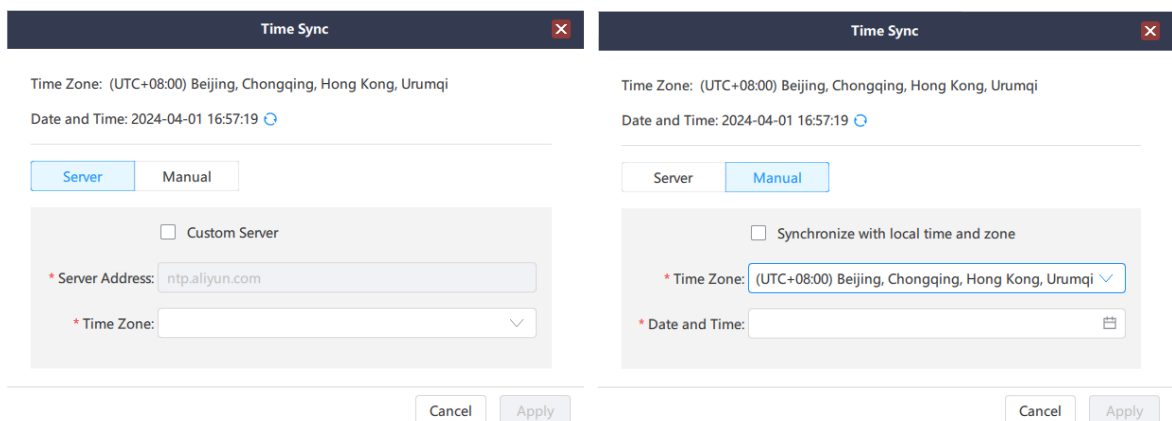
### 4.3 Synchronize Device Clocks

When you schedule the events based on time, make sure the device reference time is accurate to guarantee precise execution of the events.

Step 1 On the **Device Configuration** page, select the desired device from the device list.

Step 2 Click **\*\*\*** in the column of **Action** to open the time sync window.

Figure 4-5 Time synchronization





You can synchronize the device clock via two methods, including **Server** and **Manual**.

- **Server:** When you synchronize the device clock via a server, make sure the communication between the device and server used for time synchronization is normal.
  - a. Select the time zone where the device is located from the drop-down list next to **Time Zone**.
  - b. Enter the IP address of the server used for time synchronization in the text box next to **Server Address**.
- **Manual**
  - c. Select the time zone where the device is located from the drop-down list next to **Time Zone**.
  - d. Click the date/time picker on the right side of the text box next to **Date and Time**.

Step 3 Click **Apply** to complete and apply the configurations.

## 4.4 Run Diagnostics

Diagnose the device and send the test result to our technical support staff for confirming and fixing the problems as soon as possible.

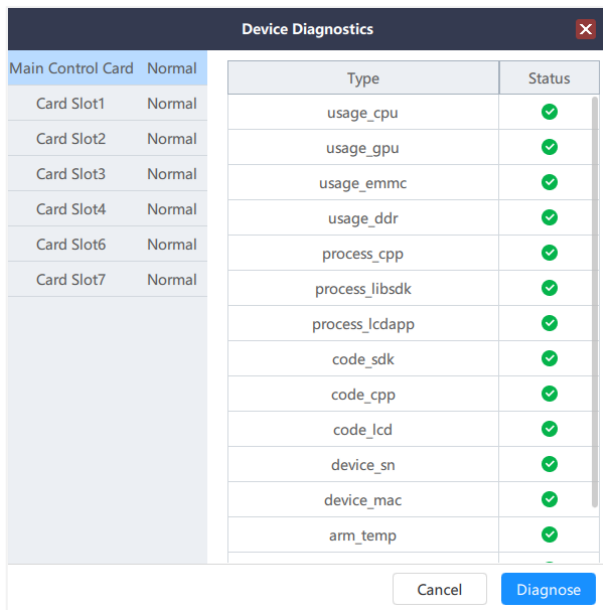
Step 1 On the **Device Configuration** page, select the desired device from the device list.

Step 2 Click **⋮** in the column of **Action** and then select **Diagnose**.

Step 3 Click **OK** in the popup window and the system will automatically run diagnostics.

Step 4 After the diagnostics is complete, the test result will be displayed.

Figure 4-6 Run diagnostics



Step 5 Send the test result to our technical support staff for confirming and fixing the problems as soon as possible.

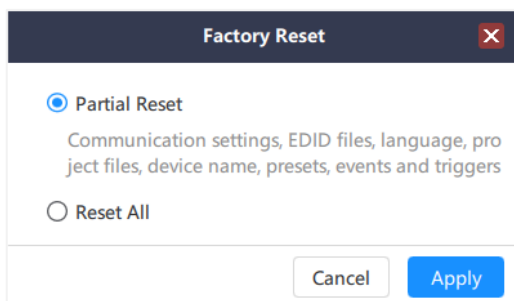
## 4.5 Factory Reset

When you need to reconfigure or change the control device, you can quickly clear the saved information using the factory reset function.

Step 1 On the **Device Configuration** page, select the desired device from the device list.

Step 2 Click **...** in the column of **Action** and then select **Reset** to open the factory reset window.

Figure 4-7 Factory Reset

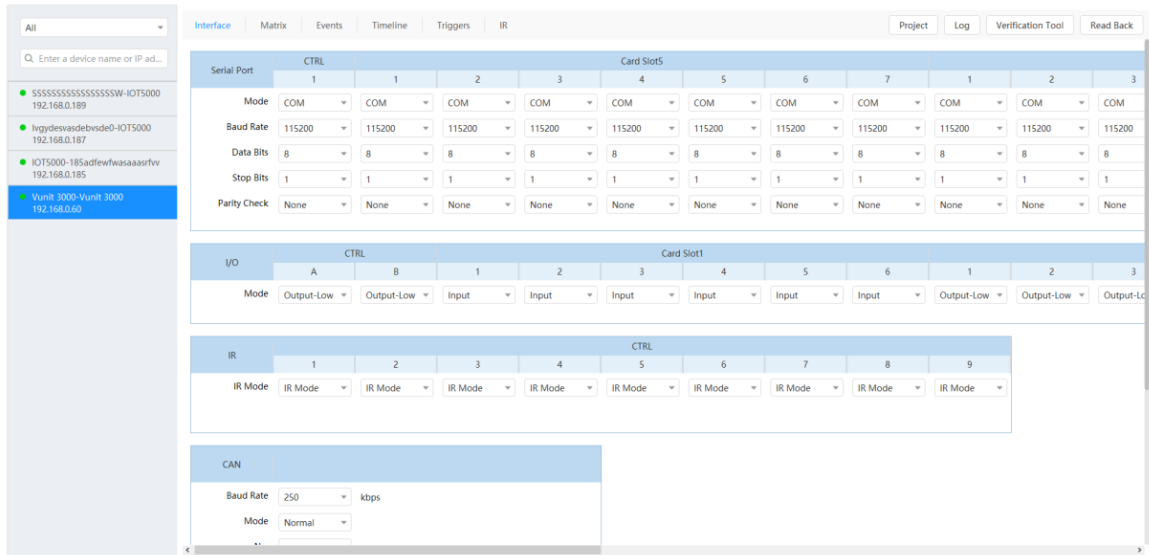


- **Keep User Data:** When you reset the device, the following information will still be kept in the system, including the communication settings, EDID files, project files, device name, presets, events and triggers.
- **Reset All:** Reset all the parameters to factory defaults.

## 5 Configure Central Control Devices

Click the **Central Control Configuration** tab to enter the corresponding page.

Figure 5-1 Central control configuration



### 5.1 Read Back Device Information

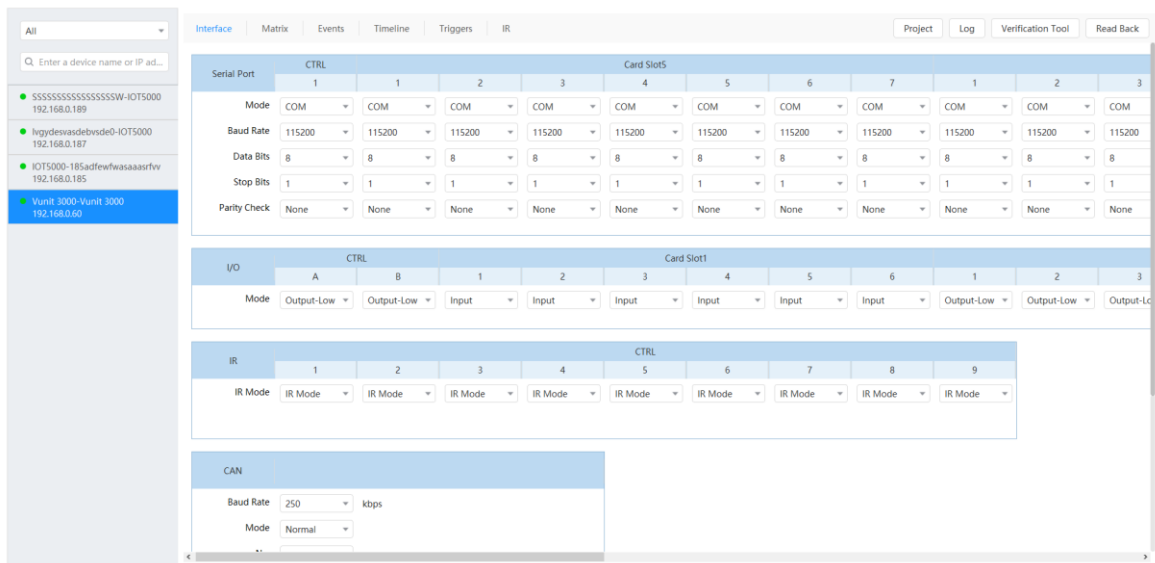
After the device is connected in BCTools, the device related information will be automatically read back. When multiple users are editing the device, the device information can be manually read back.

- Step 1 On the **Central Control Configuration** page, select the desired device form the device list on the left.
- Step 2 Click **Read Back** and the system will automatically re-read the device information and display the latest information.

### 5.2 Configure Connector Parameters

- Step 1 Click the **Central Control Configuration** tab to enter the corresponding page.  
The connector parameters are displayed by default.
- Step 2 Select the desired device form the device list on the left.
- Step 3 Click **Apply** to complete and apply the configurations.

Figure 5-2 Configure connector parameters

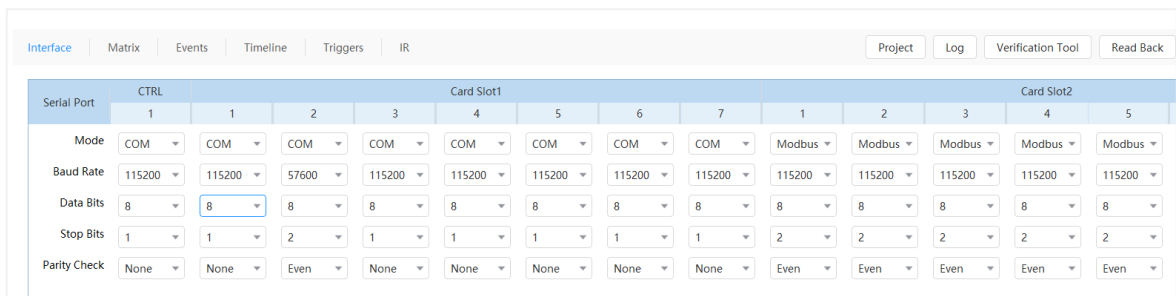


### 5.2.1 Configure Serial Port Parameters

When the Vunit 3000 is connect to the control device via a serial port, you need to configure the communication parameters of the serial port and control device to ensure normal communication.

The supported communication modes include **COM**, **Modbus** and **DMX**. Select one of the modes according to the control protocol supported by the controlled device.

Figure 5-3 Configure serial port parameters



The parameters of COM and Modbus modes are the same, including the baud rate, data bits, stop bits and parity check. All the parameters need to be the same as the controlled device.

The supported options of the baud rate include 1200, 1800, 2400, 4800, 9600, 19200, 38400, 57600 and 115200 (default).

### 5.2.2 Configure I/O Modes

The supported I/O modes include **Input**, **Output-High** and **Output-Low**. Select one of the modes according to the connected device.

When the I/O connector is connected to the device for signal input, such as smoke sensors, temperature and humidity sensors, you need to set the I/O mode to **Input**.

When the controlled device is connected and the I/O connector is used for control, you need to set the I/O mode to **Output-High** or **Output-Low** according to the signal received by the controlled device.

Figure 5-4 I/O modes

I/O	CTRL						Card Slot1			
	A	B	1	2	3	4	5	6	1	2
Mode	Output-Low	Output-Low	Input	Input	Input	Input	Input	Input	Output-Low	Output-Low

IR	CTRL								
	1	2	3	4	5	6	7	8	9
IR Mode	IR Mode	IR Mode	IR Mode	IR Mode	IR Mode	IR Mode	IR Mode	IR Mode	IR Mode

The IR connector on the main control card supports **IR Mode** and **I/O Mode**. When **I/O Mode** is selected, you can set the input and output mode of the I/O connector.

### 5.2.3 Configure CAN Modes

When the Vunit 3000 is connect to the controlled device via a CAN port, you need to configure the communication parameters of the CAN port and control device to ensure normal communication.

Figure 5-5 Configure CAN ports

CAN

Baud Rate: 250 kbps

Mode: Normal

No.: 0

Enable: Disable

Mode: List    0    0

- **Baud Rate:** You can customize the baud rate value, which ranges from 3 to 1000 Kbps and defaults to 250. The unit is Kbps.
- **Mode:** The supported options include **Normal** (default) and **Loopback**.
- **No.:** The value is an integer from 0 (default) to 15.
- **Enable:** The supported options include **Enable** and **Disable** (default).
- **Mode:** The supported options include **List** and **Mask**.
  - When you set the mode to **List**, the values of **List-High** and **List-Low** need to be set.
  - When you set the mode to **Mask**, the values of **Mask-High** and **Mask-Low** need to be set.

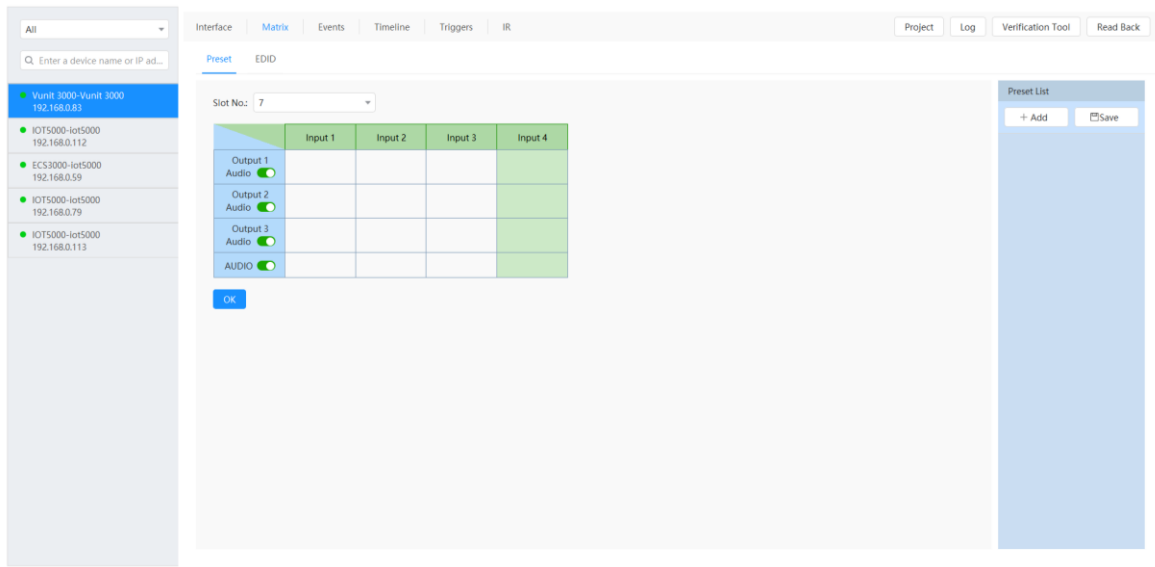
## 5.3 Configure Matrixes

The Vunit 3000 is equipped with the VIT\_4xHDMI2.0 IN + 3x HDMI2.0 OUT card that can function as a small matrix with 4 inputs and 3 outputs. On the **Matrix** page, you can set the relationship between the input and output. The one-to-one and one-to-many relationships are supported.

### 5.3.1 Set Input and Output Relationships

- Step 1 Click the **Central Control Configuration** tab to enter the corresponding page.
- Step 2 Select the desired device from the device list on the left.
- Step 3 Click the **Matrix** tab to enter the matrix configuration page.

Figure 5-6 Matrix configurations

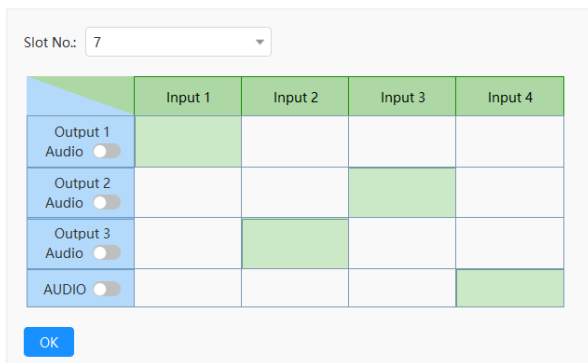


Step 4 Select the desired card slot number from the drop-down list next to **Slot No.**. The matrix configuration table will be automatically displayed.

Step 5 Click the matrix cells to relate or unrelate the inputs with the outputs.

For example, if output 2 is used to output the image of input 3, you need to click the matched cells of input 3 and output 2.

Figure 5-7 Output the image of input 3 via output 2



Step 6 Click the desired cell in the row of **AUDIO** to configure the output audio.

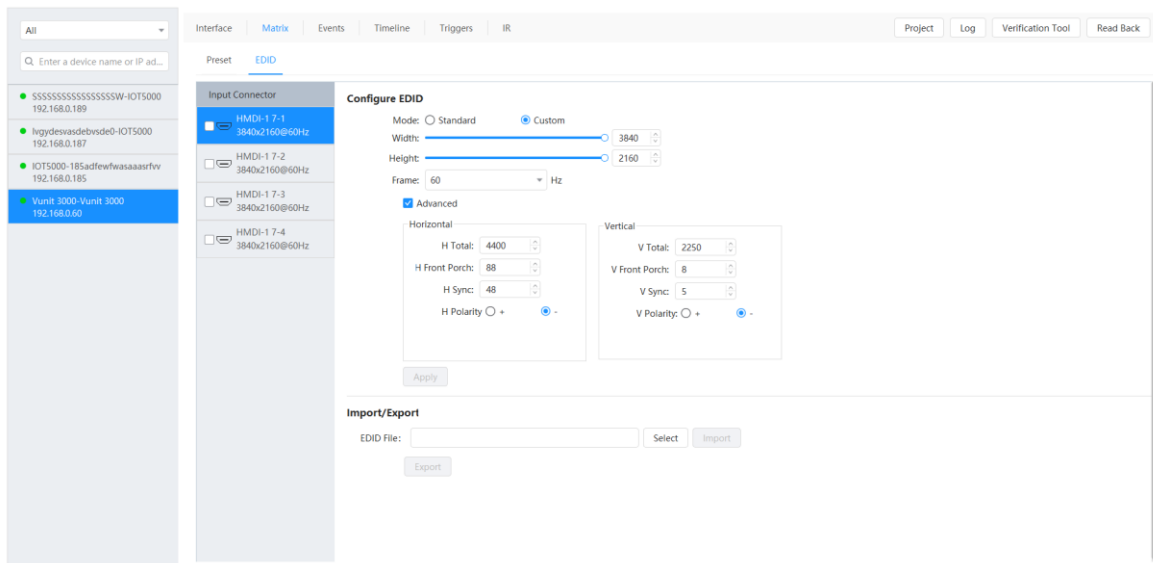
As shown in [Figure 5-7](#), the input 4 cell in the row of **AUDIO** is selected and the audio of input 4 will be output.

Step 7 Click **OK** to complete the settings.

### 5.3.2 Configure EDID

- Step 1 Click the **Central Control Configuration** tab to enter the corresponding page.
- Step 2 Select the desired device from the device list on the left.
- Step 3 Click the **Matrix** tab to enter the matrix configuration page.
- Step 4 Click the **EDID** tab to enter the EDID settings page.

Figure 5-8 EDID settings



- Step 5 Check the box in front of the desired input connector.

You can set the input connector resolution through the following three ways.

- Standard

Select an input resolution from the drop-down list next to **Standard**.

- Custom

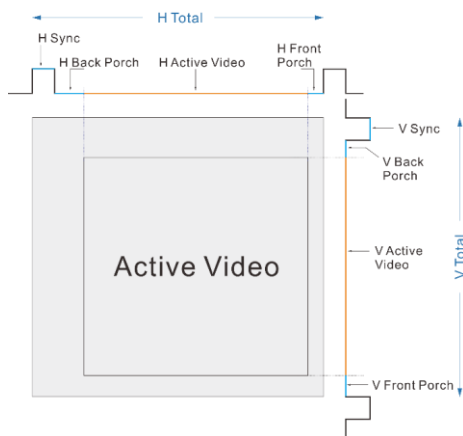
Set the width, height and frame rate for the input connectors, and then click **Apply** to complete and apply the settings.

- Advanced

Under custom mode, you can select **Advanced** to enable the advanced EDID settings function. It is recommended personnel who are familiar with the EDID settings adopt this method. The parameters for advanced EDID settings are shown as follows.



Figure 5-9 Parameters for advanced EDID settings



- Import/Export

Export the configured resolution parameters file for future use, or import an existing EDID configuration file.

- Export EDID: Only the input or output resolution of a single connector can be exported.
- Import EDID: Import the configuration file to multiple connectors of the same type.

Step 6 Click **Apply** to complete and apply the settings.

### 5.3.3 Save Presets

After the input and output relationship is set successfully, you can save it as a preset for quick change and loading in the future. This enables seamless switching between input and output with one click.

### Prerequisites

You have set the input and output relationship.

### Operating Procedure

Step 1 In the preset list on the right, click **Add** and the system will automatically add a new preset.

Step 2 Hover the mouse over the added preset and click  to change the preset name.

## Other Operations

- Change the preset.

Click the desired preset to load it. In the matrix configuration table on the left, change the relationship between the input and output. Click **Save** to complete and apply the change.

- Turn on/off the audio.

In the matrix configuration table, toggle the switch next to **Audio** to turn on/off the audio.

## 5.4 Configure Events

Step 1 Click the **Central Control Configuration** tab to enter the corresponding page.

Step 2 Select the desired device from the device list on the left.

Step 3 Click the **Events** tab to enter the event configuration page.

Figure 5-10 Configure events

No.	事件名称	Event Type	Data Content	Description	Action
1	COM-CTRL-(ASCII)	Serial Port	COM-CTRL-COM1		<a href="#">↶</a> <a href="#">↷</a> <a href="#">🗑️</a>
2	COM-1-1(HEX)	Serial Port	aa 55 bb 11 c1		<a href="#">↶</a> <a href="#">↷</a> <a href="#">🗑️</a>
3	COM-1-2(HEX)	Serial Port	aa 55 bb 11 c2		<a href="#">↶</a> <a href="#">↷</a> <a href="#">🗑️</a>
4	COM-1-3(HEX)	Serial Port	aa 55 bb 11 c3		<a href="#">↶</a> <a href="#">↷</a> <a href="#">🗑️</a>
5	COM-1-4(HEX)	Serial Port	aa 55 bb 11 c4		<a href="#">↶</a> <a href="#">↷</a> <a href="#">🗑️</a>
6	COM-1-5(HEX)	Serial Port	aa 55 bb 11 c5		<a href="#">↶</a> <a href="#">↷</a> <a href="#">🗑️</a>
7	COM-1-6(HEX)	Serial Port	aa 55 bb 11 c6		<a href="#">↶</a> <a href="#">↷</a> <a href="#">🗑️</a>
8	COM-1-7(HEX)	Serial Port	aa 55 bb 11 c7		<a href="#">↶</a> <a href="#">↷</a> <a href="#">🗑️</a>
9	COM-CTRL-1(HEX)	Serial Port	aa 55 bb cc c1		<a href="#">↶</a> <a href="#">↷</a> <a href="#">🗑️</a>
10	COM-1-1(ASCII)	Serial Port	COM-1-COM1		<a href="#">↶</a> <a href="#">↷</a> <a href="#">🗑️</a>
11	COM-1-2(ASCII)	Serial Port	COM-1-COM2		<a href="#">↶</a> <a href="#">↷</a> <a href="#">🗑️</a>
12	COM-1-3(ASCII)	Serial Port	COM-1-COM3		<a href="#">↶</a> <a href="#">↷</a> <a href="#">🗑️</a>
13	COM-1-4(ASCII)	Serial Port	COM-1-COM4		<a href="#">↶</a> <a href="#">↷</a> <a href="#">🗑️</a>
14	COM-1-5(ASCII)	Serial Port	COM-1-COM5		<a href="#">↶</a> <a href="#">↷</a> <a href="#">🗑️</a>

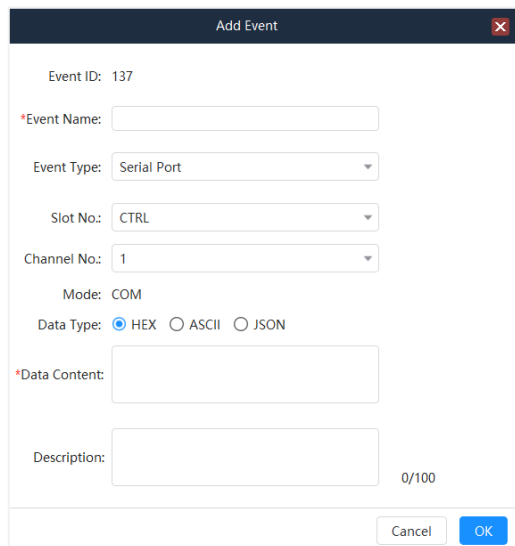
## 5.4.1 Configure Serial Port Events

### Configure COM Events

When the backend device is controlled via COM protocol, you need to set the serial port mode to **COM** as described in 5.2.1 Configure Serial Port Parameters. Additionally, set the baud rate, data bits, stop bits and parity check according to the communication parameters of the backend device.

- Step 1 On the event configuration page, click **Add** at the top right to open the new event adding window.

Figure 5-11 Add COM events



The screenshot shows a dialog box titled "Add Event" with a close button (X) in the top right corner. The dialog contains the following fields and options:

- Event ID: 137
- \*Event Name: [Text input field]
- Event Type: [Dropdown menu showing "Serial Port"]
- Slot No.: [Dropdown menu showing "CTRL"]
- Channel No.: [Dropdown menu showing "1"]
- Mode: COM
- Data Type:  HEX  ASCII  JSON
- \*Data Content: [Text input field]
- Description: [Text input field] 0/100

At the bottom of the dialog, there are "Cancel" and "OK" buttons.

The event ID is generated automatically and cannot be edited. The ID cannot repeat and should increase in ascending order. After an event is deleted, the new event ID continues to increase based on the original order. When all the events are cleared, the event ID restarts from 1.

- Step 2 Enter a name for the new event.
- Step 3 Select **Serial Port** from the drop-down list next to **Event Type**.
- Step 4 Select the slot number of the corresponding card matched with the added event.
- CTRL: Main control card
- Step 5 Select the channel number of the corresponding card matched with the added event.
- Step 6 Select the data format of the control command next to **Data Type**.

- HEX: The control command is in hexadecimal format.
- ASCII: The control command is in text format.
- JSON: The control command is in .json format.

Step 7 Enter the control command in the text box next to **Data Content**.

Step 8 Enter the event description to provide clearer event details.

Step 9 Click **OK** to complete the adding.

## Configure DMX Events

When the backend device is controlled via DMX protocol, you need to set the serial port mode to **DMX** as described in [5.2.1 Configure Serial Port Parameters](#).

Step 1 On the event configuration page, click **Add** at the top right to open the new event adding window.

Figure 5-12 Add DMX events

The screenshot shows the 'Add Event' dialog box. The 'Event ID' is 137. The 'Event Name' field is empty. The 'Event Type' is 'Serial Port'. The 'Slot No.' is 'CTRL'. The 'Channel No.' is '1'. The 'Mode' is 'DMX'. Below this, there is a section for 'Lamp Central Control(1)' with a 'Lamp Name' field containing 'Enter...'. The 'Start Channel' is '1' and the 'Channel' is '1'. The 'Target Value' is '10' and the 'Function' toggle is off. At the bottom, there is a 'Description' field and 'Cancel' and 'OK' buttons.

The event ID is generated automatically and cannot be edited. The ID cannot be repeated and should be increased in ascending order. After an event is deleted, the new event ID continues to increase based on the original order. When all the events are cleared, the event ID restarts from 1.

Step 2 Enter a name for the new event.

Step 3 Select **Serial Port** from the drop-down list next to **Event Type**.

Step 4 Select the slot number of the corresponding card matched with the added event.

Step 5 Select the channel number of the corresponding card matched with the added event.

Step 6 Below the **Light** area, configure the light according to the actual application.

- Light Name: The name of the controlled light
- Start Channel and Channels: Fill in the relevant values according to the specification of the controlled light.
- Target Value: Enter the command value for each channel. If you toggle the switch to on next to **Function Name**, you can also name each channel.

---

**Note:**

For different lights, please refer to the documentation that comes with the light to fill in the control parameters.

---

Step 7 If you want to control multiple lights which are under the control of the same light controller, click **New Light** and fill in the control command parameters.

Step 8 Enter the event description to provide clearer event details.

Step 9 Click **OK** to complete the adding.

## Configure Modbus Events

When the backend device is controlled via Modbus protocol, you need to set the serial port mode to **Modbus** as described in [5.2.1 Configure Serial Port Parameters](#). Additionally, set the baud rate, data bits, stop bits and parity check according to the communication parameters of the backend device.

Step 1 On the event configuration page, click **Add** at the top right to open the new event adding window.

Figure 5-13 Add Modbus events

The event ID is generated automatically and cannot be edited. The ID cannot repeat and should increase in ascending order. After an event is deleted, the new event ID continues to increase based on the original order. When all the events are cleared, the event ID restarts from 1.

Step 2 Enter a name for the new event.

Step 3 Select **Serial Port** from the drop-down list next to **Event Type**.

Step 4 Select the slot number of the corresponding card matched with the added event.

Step 5 Select the channel number of the corresponding card matched with the added event.

Step 6 Select the control command mode supported by the backend device next to **Mode**.

The supported options include **RTU**, **ASCII** and **TCP**.

Step 7 Enter the control command in the text box next to **Command**.

Step 8 Enter the control command in the text box next to **Data Content**.

The command and data content supports data in hexadecimal format.

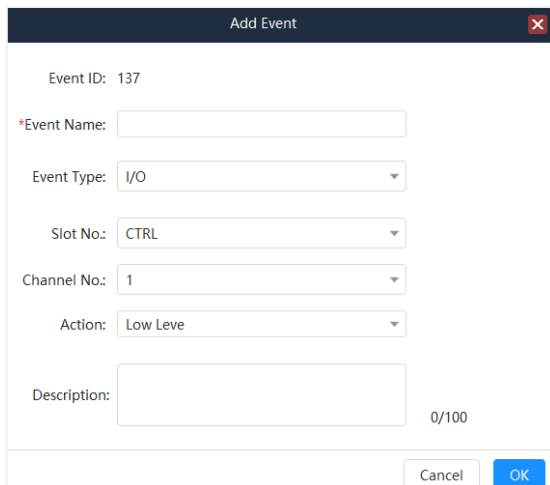
Step 9 Enter the event description to provide clearer event details.

Step 10 Click **OK** to complete the adding.

## 5.4.2 Configure I/O Events

Step 1 On the event configuration page, click **Add** at the top right to open the new event adding window.

Figure 5-14 Add new events



The screenshot shows a dialog box titled "Add Event" with a close button (X) in the top right corner. The dialog contains the following fields and controls:

- Event ID: 137
- \*Event Name:
- Event Type:
- Slot No.:
- Channel No.:
- Action:
- Description:  0/100
- Buttons: Cancel, OK

Step 2 Enter a name for the new event.

Step 3 Select **I/O** from the drop-down list next to **Event Type**.

Step 4 Select the slot number of the corresponding card matched with the added event.

Step 5 Select the channel number of the corresponding card matched with the added event.

Step 6 Select the response action that the controlled device supports.

The options include **High Level** and **Low Level**.

Step 7 Enter the event description to provide clearer event details.

Step 8 Click **OK** to complete the adding.

### 5.4.3 Configure IR Events

#### Prerequisites

You have added the infrared commands as described in [5.7 Configure IR Command Library](#).

#### Operating Procedure

Step 1 On the event configuration page, click **Add** at the top right to open the new event adding window.

Figure 5-15 Add new events

Step 2 Enter a name for the new event.

Step 3 Select **IR** from the drop-down list next to **Event Type**.

Step 4 Select the slot number where the corresponding card matched with the added event is installed.

Step 5 Select the slot number of the corresponding card matched with the added event.

Step 6 Select the command sending information of the IR control button next to **Button Action**.

The supported options include **Send once**, **Send continuously** and **Stop sending**.

- Send once: For each operation, the system will send the command once.
- Send continuously: The system sends the command automatically and continuously.
- Stop sending: Working with **Send continuously**, you can stop sending the command continuously.

Step 7 Select the added infrared command from the drop-down list next to **Command**.

Step 8 Enter the event description to provide clearer event details.

Step 9 Click **OK** to complete the adding.

#### 5.4.4 Configure Relay Events

Step 1 On the event configuration page, click **Add** at the top right to open the new event adding window.



Figure 5-16 Add new events

The screenshot shows a dialog box titled "Add Event" with a close button (X) in the top right corner. The dialog contains the following fields and controls:

- Event ID: 137
- \*Event Name: [Text Input Field]
- Event Type: [Dropdown Menu] (Selected: Relay)
- Slot No.: [Dropdown Menu] (Selected: CTRL)
- Channel No.: [Dropdown Menu] (Selected: 1)
- Action: [Dropdown Menu] (Selected: Open)
- Description: [Text Area] (Character count: 0/100)
- Buttons: Cancel, OK

Step 2 Enter a name for the new event.

Step 3 Select **Relay** from the drop-down list next to **Event Type**.

Step 4 Select the slot number of the corresponding card matched with the added event.

Step 5 Select the channel number of the corresponding card matched with the added event.

Step 6 Select the Relay status from drop-down list next to **Response Action**.

The supported options include **Close**, **Open** and **Delay Open**.

When **Delay Open** is selected, you need to set the delay duration. After the set duration, the delay will be closed.

Step 7 Enter the event description to provide clearer event details.

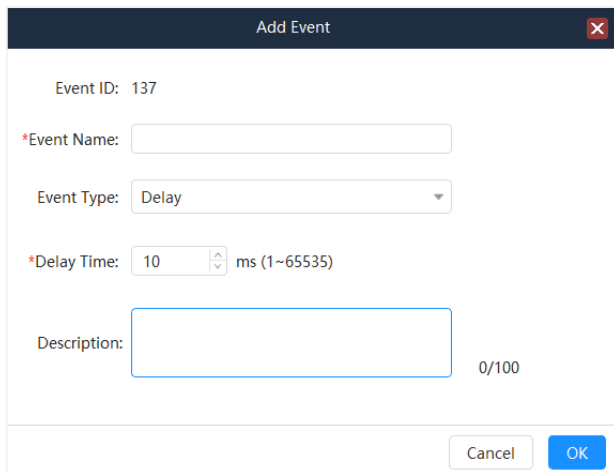
Step 8 Click **OK** to complete the adding.

### 5.4.5 Configure Delay Events

When there are multiple commands in the trigger, you can add a delay interval.

Step 1 On the event configuration page, click **Add** at the top right to open the new event adding window.

Figure 5-17 Add new events



Event ID: 137

\*Event Name:

Event Type: Delay

\*Delay Time: 10 ms (1-65535)

Description:  0/100

Cancel OK

Step 2 Enter a name for the new event.

Step 3 Select **Delay** from the drop-down list next to **Event Type**.

Step 4 Enter the delay time ranging from 1 to 65535. The unit is ms.

Step 5 Enter the event description to provide clearer event details.

Step 6 Click **OK** to complete the adding.

#### 5.4.6 Configure Ethernet Port Events

Step 1 On the event configuration page, click **Add** at the top right to open the new event adding window.

Figure 5-18 Add new events

The screenshot shows a dialog box titled "Add Event" with a close button (X) in the top right corner. The dialog contains the following fields and options:

- Event ID: 1
- \*Event Name: [Text input field]
- Event Type: Ethernet Port (dropdown menu)
- Protocol:  TCP  UDP
- Slot No.: CTRL (dropdown menu)
- \*IP Address: [Text input field]
- \*Port: [Text input field] (1024-65535)
- Data Type:  HEX  ASCII  JSON
- \*Data Content: [Text input field]
- Description: [Text input field] 0/100

At the bottom right of the dialog, there are two buttons: "Cancel" and "OK".

Step 2 Enter a name for the new event.

Step 3 Select **Ethernet Port** from the drop-down list next to **Event Type**.

Step 4 Select the transmission protocol.

The supported options include **TCP** and **UDP**.

Step 5 Select the slot number of the corresponding card matched with the added event.

Step 6 Enter the IP address of the controlled device.

Step 7 Enter the port number used for transmission with the controlled end. The value ranges from 1024 to 65535, but 8080 is unavailable.

Step 8 Select the data format of the control command next to **Data Type**.

- HEX: The control command is in hexadecimal format.
- ASCII: The control command is in text format.
- JSON: The control command is in .json format.

Step 9 Enter the control command in the text box next to **Data Content**.

Step 10 Enter the event description to provide clearer event details.

Step 11 Click **OK** to complete the adding.

## 5.4.7 Configure CAN Events

Step 1 On the event configuration page, click **Add** at the top right to open the new event adding window.

Figure 5-19 Add new events

Step 2 Enter a name for the new event.

Step 3 Select **CAN** from the drop-down list next to **Event Type**.

Step 4 Select the frame format of the Ethernet port transmission protocol.

The supported options include **Standard Frame** and **Extended Frame**.

Step 5 Enter the standard frame ID or extended frame ID.

The hexadecimal format is supported.

Step 6 Select the frame type of CAN protocol.

The supported options include **Data Frame** and **Remote Frame**.


- **Data Frame**: The frame used for data transmission from the sending unit to the receiving unit
- **Remote Frame**: The frame used for data requests from the receiving unit to the sending unit with the same ID as the receiving unit

Step 7 Enter the control command in the text box next to **Data Content**.


Step 8 Click **OK** to complete the adding.

## 5.4.8 Other Operations

- Change the event.


In the event list, select the desired event and click  in the column of **Action** to open the event editing window where you can edit the event. Click **OK** to complete the editing.

- Delete the event.

In the event list, select the desired event and click  in the column of **Action** to delete the selected event.

The event used in triggers cannot be deleted.

- Copy the event.

In the event list, select the desired event and click  in the column of **Action**. The system will copy the event and open the event editing window where you can edit the event. Click **OK** to complete the copy.

- Search and filter the event.

- On the event configuration page, enter the event name to search the desired event. The fuzzy search is supported.
- Select the desired event type from the drop-down list next to **Event Type**. You can view the added events according to the selected event type.

## 5.5 Configure Timeline

The Vunit 3000 supports the automatic execution of tasks within a predetermined timeline.

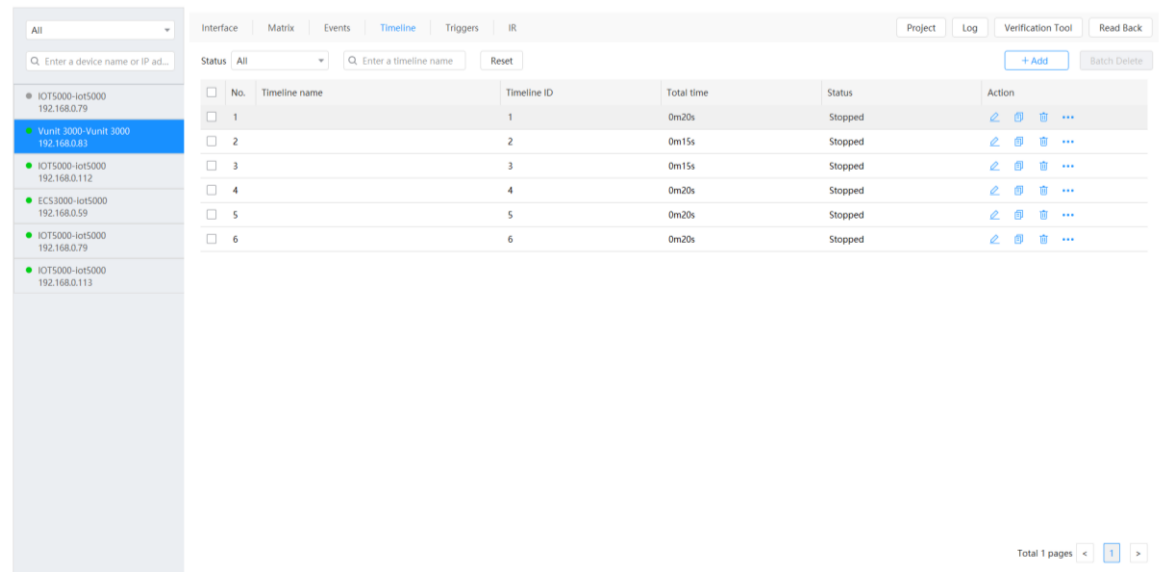
### Prerequisites

You have configured the event as described in [5.4 Configure Events](#).

### Operating Procedure

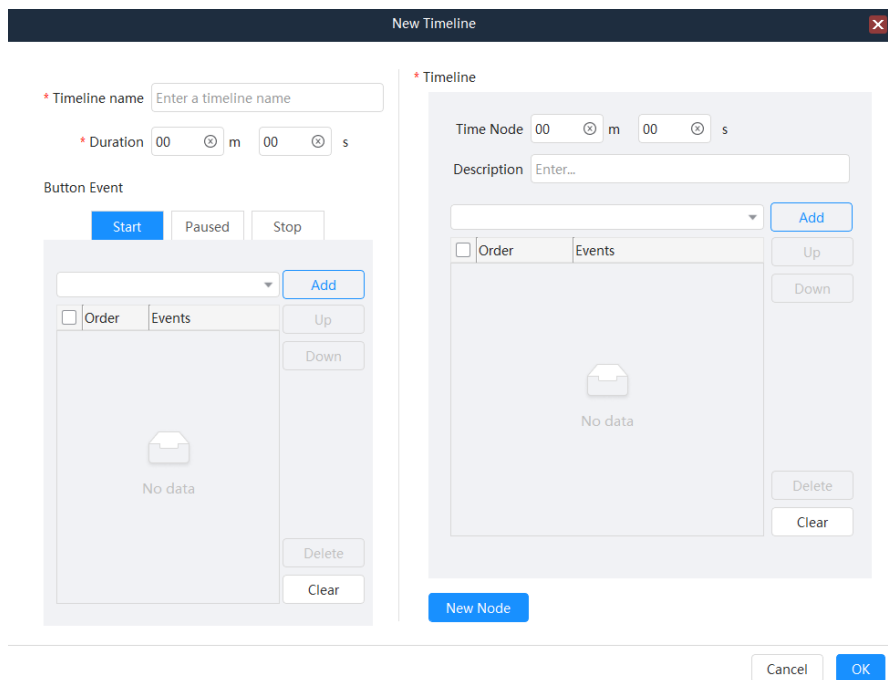
- Step 1 On the **Central Control Configuration** page, click the **Timeline** tab to enter the timeline configuration page.

Figure 5-20 Configure timeline



Step 2 Click **Add** at the top right to open the new timeline adding window.

Figure 5-21 Add timeline and task



Step 3 Enter a timeline name for easy task triggering in the future.

Step 4 Set the duration for the timeline task.

Step 5 Configure the tasks for the button events individually. The button events include **Start**, **Pause** and **Stop**.

- **Start**: When a start task is triggered, the task configured to **Start** will be automatically executed and the timer will be automatically started.

- **Pause:** When a pause task is triggered, the task configured to **Paused** will be automatically executed and the timer will be paused.
- **Stop:** When a stop task is triggered, the task configured to **Stop** will be automatically executed and the timer will be stopped.

The following operations take the start task as an example to illustrate.

1. Click the **Start** tab to enter the event configuration page.
2. Select the desired event from the drop-down list next to **Add**.
3. Click **Add** to complete the adding.
4. Select other events and click **Add** to add them.

After the events are added successfully, select **Start** from the drop-down list next to **Status** on the timeline page. The system will automatically execute the events according to the selected task sequence.

- **Up:** Move the selected event up.
- **Down:** Move the selected event down.
- **Delete:** Delete the selected event. The deleted event will not be executed.
- **Clear:** Clear all the added events.

#### Step 6 Set the time node.

Configure the key time nodes within the timeline duration and automatically execute the task in the key time node.

1. Set the time node after the task is executed.

For example, if the time node is set to 5 minutes and 30 seconds, it means that the time node task will be executed after the timeline is executed for 5 minutes and 30 seconds.

2. Enter the task description in the text box, which helps to know the task.
3. Select the desired event from the drop-down list next to **Add**.
4. Click **Add** to complete the adding.
5. Select other events and click **Add** to add them.

Select the added event and adjust the execution sequence by selecting **Up**, **Down** or **Delete**.

#### Step 7 Click **New Node** to add more time nodes.

After a new time node is added successfully, configure the task for the time node following the operations in [Step 6](#).




#### Step 8 Click **OK** to complete the adding.

Figure 5-22 Timeline tasks

No.	Timeline name	Timeline ID	Total time	Status	Action
1	Vunit 3000-Vunit 3000 192.168.0.89	1	0m20s	Stopped	[Edit] [Copy] [Delete] [Start]
2	IOTS5000-iot5000 192.168.0.112	2	0m15s	Stopped	[Edit] [Copy] [Delete] [Start]
3	ECS3000-iot5000 192.168.0.59	3	0m15s	Stopped	[Edit] [Copy] [Delete] [Paused]
4	IOTS5000-iot5000 192.168.0.79	4	0m20s	Stopped	[Edit] [Copy] [Delete] [Stop]
5	IOTS5000-iot5000 192.168.0.79	5	0m20s	Stopped	[Edit] [Copy] [Delete] [Start]
6	IOTS5000-iot5000 192.168.0.113	6	0m20s	Stopped	[Edit] [Copy] [Delete] [Start]

Step 9 Click **...** in the column of **Action** and to expand the menu pane. The options include **Start**, **Pause** and **Stop**.

Other operations:

-  : Edit the selected timeline task.
-  : Copy the selected timeline task as a new task.
-  : Delete the selected timeline task.

## 5.6 Configure Triggers

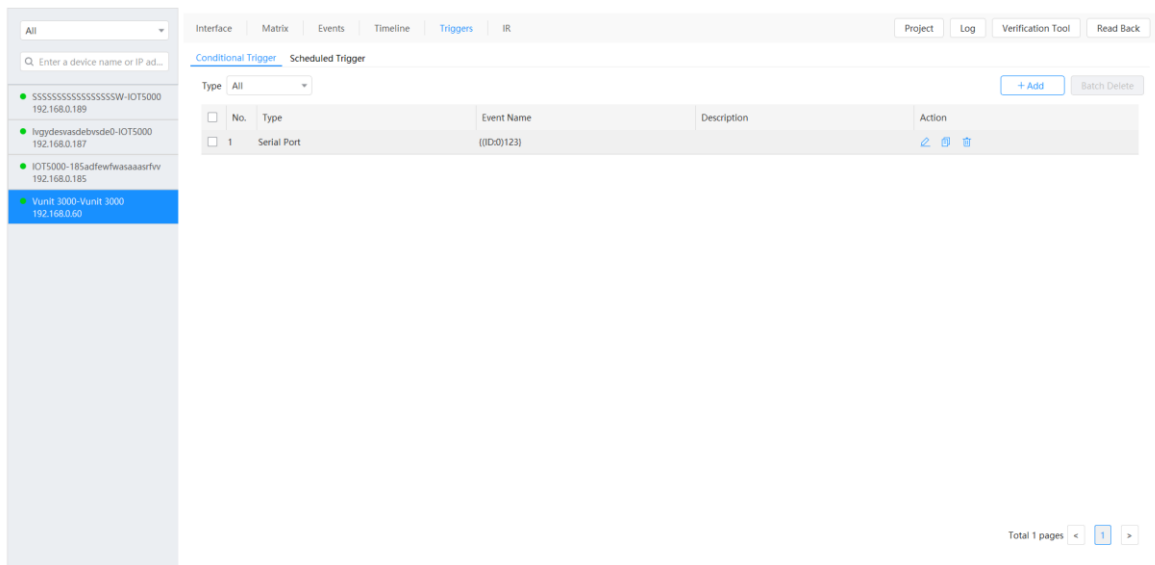
The Vunit 3000 supports the conditional and scheduled triggers.

- Conditional trigger: Configure the trigger condition. When the trigger condition is met, the system will automatically execute the added events in order.
- Scheduled trigger: Configure the execution time. When the set time is reached, the system will automatically execute the added events in order.

On the **Central Control Configuration** page, click **Triggers** to enter the trigger configuration page.



Figure 5-23 Triggers



### 5.6.1 Configure Conditional Triggers

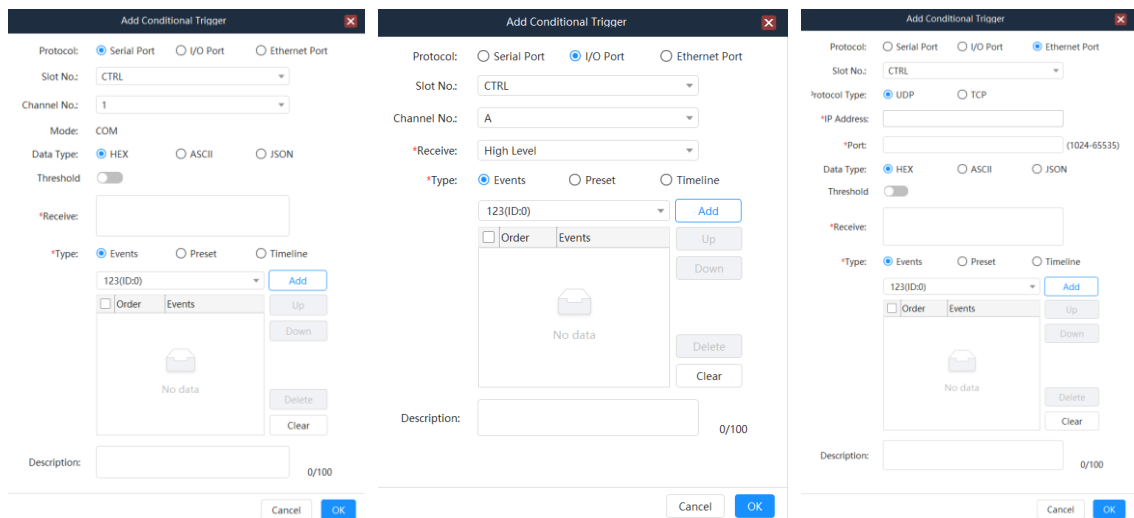
#### Prerequisites

You have added the event or matrix preset.

#### Operating Procedure

- Step 1 Click the **Conditional Trigger** tab to enter the conditional trigger configuration page.
- Step 2 Click **Add** at the top right to open the conditional trigger adding window.

Figure 5-24 Conditional triggers



Step 3 Select the desired protocol. The supported options include **Serial Port**, **I/O Port** and **Ethernet Port**.

- **Serial Port:** Receive the serial command sent by the trigger end. You need to configure the slot number of the serial port, channel number of the corresponding card where the serial port is located, protocol type of the trigger command and received command information.
- **I/O Port:** Receive the high and low level signals sent by the trigger end. You need to configure the slot number of the I/O port, channel number of the corresponding card where the I/O port is located and received command information.
- **Ethernet Port:** Receive the network command sent by the trigger end. You need to configure the slot number of the Ethernet port, transmission protocol, IP address of the trigger end, communication port number, protocol type of the trigger command and received command information.

Step 4 (Optional) Set whether the command is triggered by a threshold.

1. If the command is trigger by a threshold, toggle the switch to on next to **Threshold**.
2. Enter the received command in the text box next to **Receive**. The variables in the command must be replaced with #.

Step 5 Configure the command processing information.

1. Select the command processing type. The supported options include **Events**, **Preset** and **Timeline**.
2. Select the desired event or preset from the event list or preset list.
3. Click **Add** to add the selected event or preset to the command list.
4. In the command list, select an event or preset and click **Up** or **Down** to adjust the sequence of the selected event or preset.
  - Click **Delete** to delete the selected event or preset.
  - Click **Clear** to clear all the selected events or presets.
5. If the command processing type is set to **Timeline**, you need to set the control mode of the timeline for the third party. The supported options include **Start**, **Pause** and **Stop**.

Step 6 Enter the detailed descriptions for the added trigger.

Step 7 Click **OK** to complete the adding.

## 5.6.2 Configure Scheduled Triggers

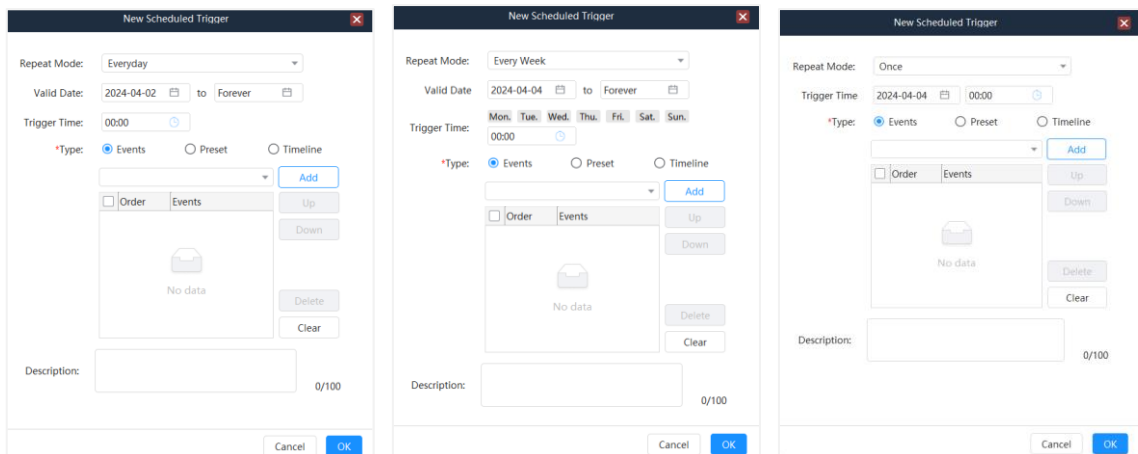
### Prerequisites

You have added the event or matrix preset.

### Operating Procedure

- Step 1 Click the **Schedule Trigger** tab to enter the schedule trigger configuration page.
- Step 2 Click **Add** at the top right to open the scheduled trigger adding window.

Figure 5-25 Scheduled triggers



- Step 3 Select the desired repeat mode. The supported options include **Everyday**, **Every Week** and **Once**.

- **Everyday**: Execute the added event or preset everyday. You need to set the start and end dates.
- **Every Week**: Execute the added event or preset every week. You need to set the start and end dates.
- **Once**: You need to set the execution date and time to execute the added event or preset.

- Step 4 Set the trigger event.

- When **Everyday** is selected, you need to set the execution start time.
- When **Every Week** is selected, you need to set the execution day of the week and start time.

- When **Once** is selected, you need to set the date and start time.

Step 5 Configure the command processing information.


1. Select the command processing type. The supported options include **Event**, **Preset** and **Timeline**.
2. Select the desired event or preset from the event list or preset list.
3. Click **Add** to add the selected event or preset to the command list.
4. In the command list, select an event or preset and click **Up** or **Down** on the right to adjust the sequence of the selected event or preset.
  - Click **Delete** to delete the selected event or preset.
  - Click **Clear** to clear all the selected events or presets.

Step 6 Enter the detailed descriptions for the added trigger.


Step 7 Click **OK** to complete the adding.

### 5.6.3 Other Operations


- Change the trigger.

In the trigger list, select the desired trigger and click  in the column of **Action** to open the trigger editing window where you can edit the trigger. Click **OK** to complete the editing.

- Delete the trigger.

- Delete single trigger: In the trigger list, select the desired trigger and click  in the column of **Action** to delete the selected trigger.
- Batch delete: In the trigger list, check the boxes in front of the desired triggers and click **Batch Delete** at the top right to delete all the selected triggers.

- Copy the trigger.

In the trigger list, select the desired trigger and click  in the column of **Action**. The system will copy the trigger and open the trigger editing window where you can edit the trigger. Click **OK** to complete the copy.

- Filter the trigger.

- Filter the conditional trigger: Select the desired event type from the drop-down list next to **Type** to filter the trigger.

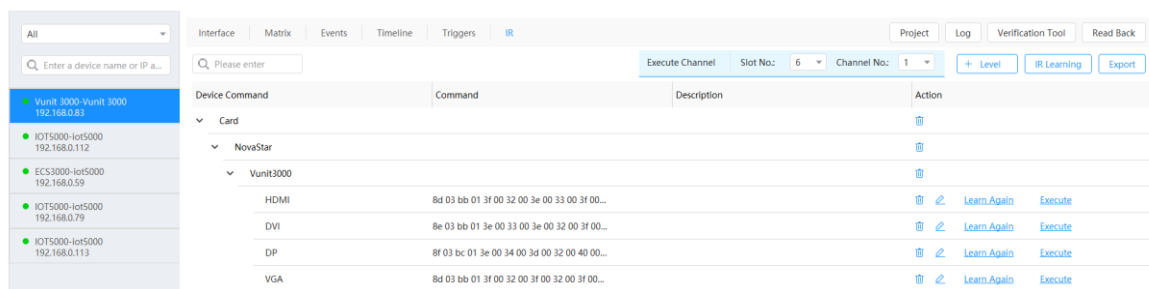
- Filter the scheduled trigger: Set the desired repeat mode or valid date to filter the trigger.

## 5.7 Configure IR Command Library

Add the desired controlled devices to the Vunit 3000 so that you can select the corresponding execution command when adding the IR event.

On the **Central Control Configuration** page, click **IR** to enter the corresponding page.

Figure 5-26 IR command library



### 5.7.1 Configure IR Device Levels

Configure the device information controlled by IR.

- Step 1 On the **IR** page, click **Level** at the top right to open the level adding window.

Figure 5-27 Add levels

- Step 2 Enter the desired product type, such as the air conditioning or television.
- Step 3 Enter the product manufacturer for easy categorizing.
- Step 4 Enter the product model.

Step 5 Click **OK** to complete the level adding.

**Note:**

Once the product type and manufacturer are added, you can simply select the added one from the drop-down list for future use.

## 5.7.2 Configure IR Learning

### Prerequisites

- You have added the level.
- You have obtained the remote control.

### Operating Procedure

Step 1 On the **IR** page, click **IR Learning** at the top right to open the IR learning window.

Figure 5-28 IR learning

*Command Name	Command	Description:
Enter...	Auto filled after le...	Enter...

Step 2 Select the product type, manufacturer and product model.

Step 3 Click **+** to add the desired command.

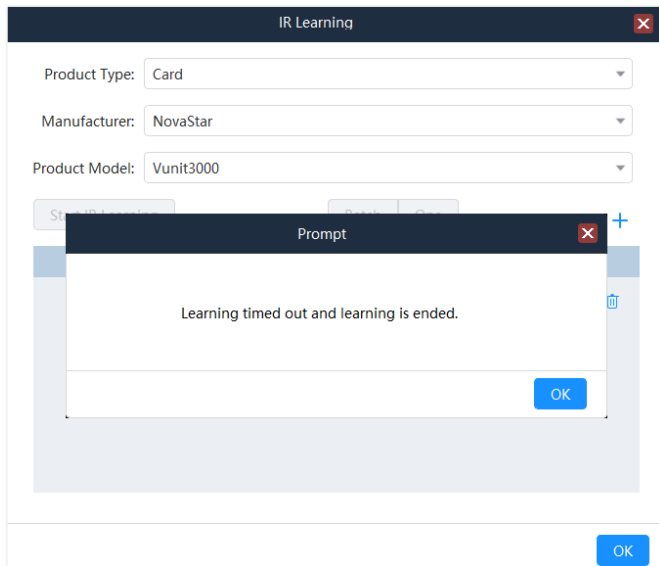
Step 4 Enter a name for the added command.

Enter the command descriptions to better obtain the command information.

Step 5 Click **Start IR Learning** and the device will enter the learning mode.

Step 6 Aim the remote control matched with the selected product model at the Vunit 3000 and press the buttons matched with the commands. The system will automatically learn the IR commands one by one and display them in the text boxes below **Command**.

Figure 5-29 Command learning




Step 7 Click **Complete** to complete the learning.


### 5.7.3 Other Operations

- Change the IR command name.

Only IR command name can be changed via the following two ways.

- After the command learning is completed, enter a new name in the text box below **Command Name** in the IR learning window.
- On the **IR** page, select the desired IR command and click  in the column of **Action** to open the command editing window where you can change the command name.

- Delete the IR command.

On the **IR** page, select the desired IR command and click  in the column of **Action** to delete the selected IR command.

You cannot delete the IR command used in the event.

- Learn the IR command again.

On the **IR** page, click **Learn Again** in the column of **Action** open the IR learning window. Press the buttons on the remote control to learn the IR commands again.

- Test the IR command.

After the IR learning is completed and the controlled device is connected, click **Execute** in the column of **Action** to test whether the current command is correct.

- Export the IR command.

After the IR command is added, click **Export** at the top right to export the command information to your local device.

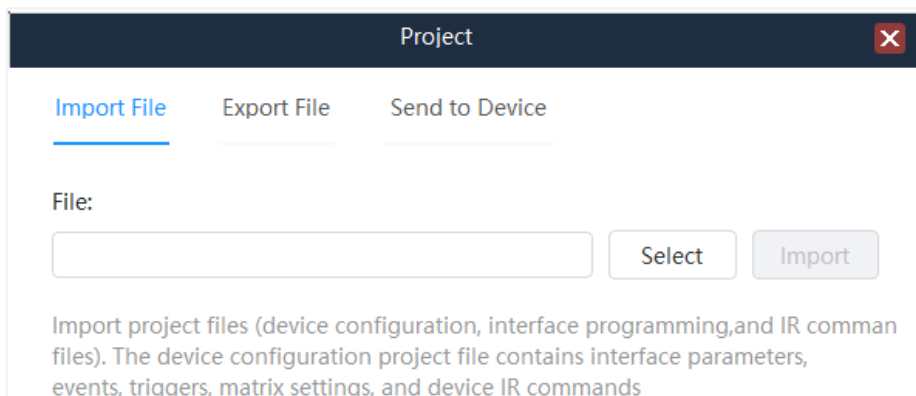
## 5.8 Project Files

### 5.8.1 Import Project Files

After the device is connected, you can manually add the event, trigger and perform IR learning. You can also quickly add the configuration information by importing the project file.

- Step 1 On the **Central Control Configuration** page, click **Project** at the top right to open the corresponding window.

Figure 5-30 Import project files



- Step 2 Click **Select** to select the desired project file and click **Open**.

- Step 3 Click **Import** to import the selected file to the device.

After the project file is imported successfully, the device will automatically restart.

### 5.8.2 Export Project Files

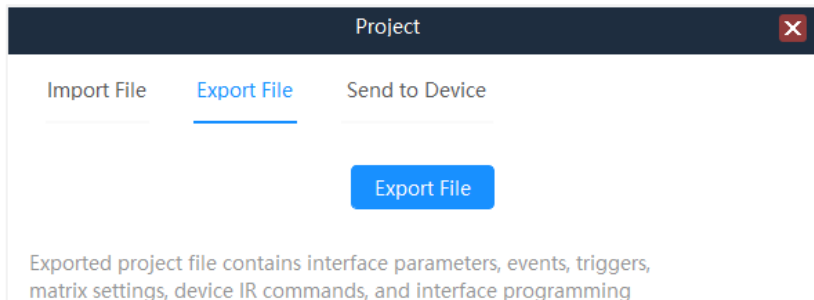
When the device configuration is complete, you can export the configuration information as a project file and save it to your computer for quick configuration in the future.



Step 1 On the **Central Control Configuration** page, click **Project** at the top right to open the corresponding window.

Step 2 Click **Export File** to open the project file exporting window.

Figure 5-31 Export project files



Step 3 Click **Export** and select the save location.

Step 4 Click **OK** to complete the exporting.

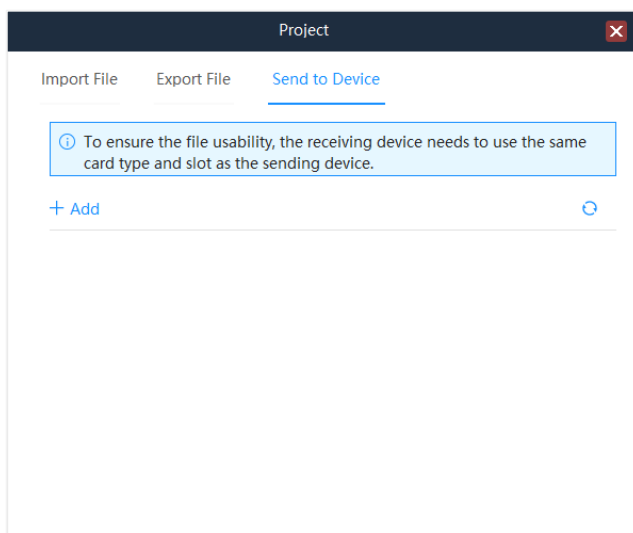
### 5.8.3 Send to Device

After the device configuration is complete, you can save the configuration information as a project file and also send the configuration information to other Vunit 3000 devices via this function.


Step 1 On the **Central Control Configuration** page, click **Project** at the top right to open the corresponding window.

Step 2 Click **Send to Device** to open the corresponding window.

Figure 5-32 Send to device



Step 3 Click **Add** and enter the IP information of the desired control processor. Click **OK** to add it to the control processor list.

Step 4 Click  to send the configuration information to the selected control processor.

## 5.9 Manage Logs

In the log management window, you can export the device configuration logs, which can be used by our technical support staff or developers to analyze device problems.

## 6 Language

Change the UI language. BCTools supports **English** and **Simplified Chinese**.

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