



# **i503W Indoor Station**

## **User Manual**

V1.0

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# Foreword

## Introduction

This manual introduces the installation, functions and operations of the indoor station (hereinafter referred to as "the Device"). Please read carefully before using the Device, and keep the manual for future reference.

## Symbol Conventions

The symbols that might be found in this guide are defined as follows.

| Symbol   | Description  |
|--|--|
|  <b>DANGER</b>    | Indicates a hazardous situation that, if not avoided, will result in death or serious injury.  |
|  <b>WARNING</b> | Indicates a medium or low potential hazard which, if not avoided, could result in slight or moderate injury.   |
|  <b>CAUTION</b> | Indicates a potentially hazardous situation which, if not avoided, could result in property damage, data loss, performance degradation, or unexpected results. |
|  <b>TIP</b>     | Provides methods to help you solve a problem or save time.   |
|  <b>NOTE</b>    | Provides additional information as a supplement to the text.   |

## Revision History

| Version | Changes        | Release Date |
|---------|----------------|--------------|
| V1.0    | First release. | January 2026 |

## About the Manual

- The Manual is for reference only. Slight differences might be found between the manual and the Device.
- We are not liable for losses incurred due to operating the Device in ways that are not in compliance with the manual.
- If there is any uncertainty or controversy, we reserve the right of final explanation.

# Safety Instructions

Read all safety instructions carefully before installing or using the Device. Failure to follow these instructions may result in personal injury, equipment damage, or property loss.

- Use only the power adapter specified for this product. If a power adapter from another manufacturer must be used due to special circumstances, ensure that its rated voltage and current meet the product specifications, and that it is certified by recognized safety authorities. Using an incompatible or uncertified power adapter may result in fire or electric shock.
- Do not bend, twist, stretch, pull, bundle, place heavy objects on, or pinch the power cord. A damaged power cord may cause fire or electric shock.
- Before using the product, ensure that the ambient temperature and humidity meet the operating requirements specified for the Device. If the product is moved from an air-conditioned environment to a warmer or more humid environment, condensation may form on the surface or inside the device. In this case, allow the Device to dry naturally before powering it on.
- Do not disassemble or repair the product unless you are authorized technical service personnel. Improper disassembly or repair may result in electric shock, fire, or other hazards, and will void the product warranty.
- Do not insert metal objects, such as pins or wires, into the ventilation openings or slots of the Device. Contact between metal objects and internal electrical components may cause electric shock or injury. If any foreign object enters the Device, stop using it immediately and contact technical support.
- Keep plastic packaging bags out of the reach of children. Plastic bags may cause suffocation if placed over the head and block the nose and mouth.
- Do not continue to charge or use a battery that is swollen or leaking. Dispose of the battery properly, as it poses a fire risk.
- Use the product strictly in accordance with the instructions provided in this manual. Prolonged improper operation may result in device damage or safety hazards.

# Chapter 1 Product Introduction

## 1.1 Overview

The i503W is a compact indoor station with a 2.8-inch display. It supports battery-powered operation, remote door unlocking, and home broadcasting for simple, secure, and efficient communication in homes and offices.

### NOTE

- The manual serves as a reference guide for the better comprehension and operation of the Device.
- The manual may not reflect the latest software version. For assistance, you can refer to the Device's built-in help interface or download the latest user manual from the Fanvil official website.

## 1.2 Specification

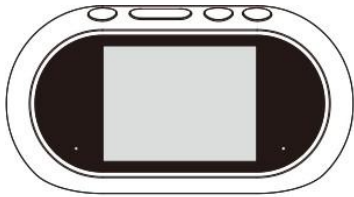
Table 1-1 Product specification

| Model                 | i503W   |
|-----------------------|---|
| Applications          | Residential communities, offices, villas                  |
| Display               | 2.8-inch IPS color display, resolution 320 × 240 pixels   |
| Casing Material       | ABS + PC  |
| Button                | 5 programmable physical buttons                           |
| Speaker               | 5 W multimedia speaker                                    |
| Battery Capacity      | 2600 mAh (typical capacity);<br>2470 mAh (rated capacity) |
| Wi-Fi                 | 2.4 GHz / 5 GHz, Wi-Fi 6                                  |
| Power Supply          | 5 VDC, 2 A  |
| Operating Temperature | -20 °C to +60 °C (-4 °F to +140 °F)                       |
| Storage Temperature   | -30 °C to +70 °C (-22 °F to +158 °F)                      |

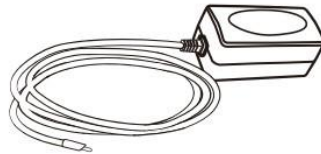
|                    |  |
|--------------------|--|
| Operating Humidity | 10% to 90% (RH)  |
| Product Dimension  | 129.5 mm × 59.6 mm × 67.5 mm (5.10" × 2.35" × 2.66") (L × W × H) |

### 1.3 Packing List

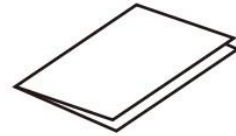
Figure 1-1 Packing list




Indoor Station



Power Adapter



Quick Installation Guide

 **NOTE**

The removable battery is pre-installed inside the Device.

# Chapter 2 Getting Started

## 2.1 Button Introduction

The Device is equipped with five physical buttons on the top.

Figure 2-1 Top view

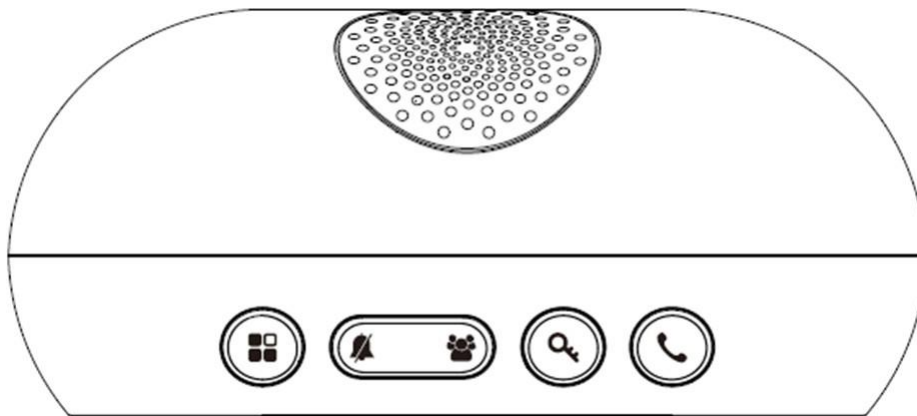


Table 2-1 Button description

| Icon | Description  |
|------|--|
|      | <ul style="list-style-type: none"> <li>• Press on the home screen to go to the menu screen.</li> <li>• On the home screen, press and hold for 3 seconds to power off the Device; press and hold for 10 seconds to restart the Device.</li> <li>• Press and hold for 3 seconds to power on the Device.</li> </ul> |
|      | Press to enable or disable the DND mode. In this mode, the Device rejects all incoming calls.  |
|      | Press to call indoor stations on the same network.   |
|      | Press to unlock the door.  |
|      | Press to answer an incoming call or hang up the current call.  |

## 2.2 Setup Wizard

When powering on the Device for the first time or after a factory reset, you follow the setup wizard to configure language, time zone, Wi-Fi, auto-discovery, and app registration.

*Procedure*

1. Press and hold  to power on the Device.

After powered on, the screen displays illustrations for the five physical buttons. Press any button to continue through the introduction.

Table 2-2 Button illustration



2. Select the language and time zone.

3. Configure Wi-Fi.

After configuration, the Device can communicate with door phone or the App. For details, see [2.2.1 Configuring Wi-Fi](#).

4. Configure auto-discovery.

The Device automatically discovers other kit devices on the same network. For details, see [2.2.2 Auto Discovery](#).

5. Download and register the App for communication.

For details, see [2.2.3 Downloading and Registering Fanvil Link App](#).

## 2.2.1 Configuring Wi-Fi

Network configuration is required for the Device before communicating with the App or other devices. A QR code for Wi-Fi connection will display on the screen when you have selected language and time zone.

### Procedure

1. Open the camera or the QR code scanner on your mobile phone, and then point it to the QR code on the Device.

When the QR code is recognized, the phone will prompt **Join WLAN Network "i503W\_XXXXXX"?**

2. Tap **Join**.

After a few seconds, the phone will go to the Wi-Fi configuration interface.

### NOTE

You can also go to **Settings > WLAN** on your mobile phone, and then select **i503W\_XXXXXX** to go to the Wi-Fi configuration interface.

3. Configure Wi-Fi.

- Select a Wi-Fi from the list

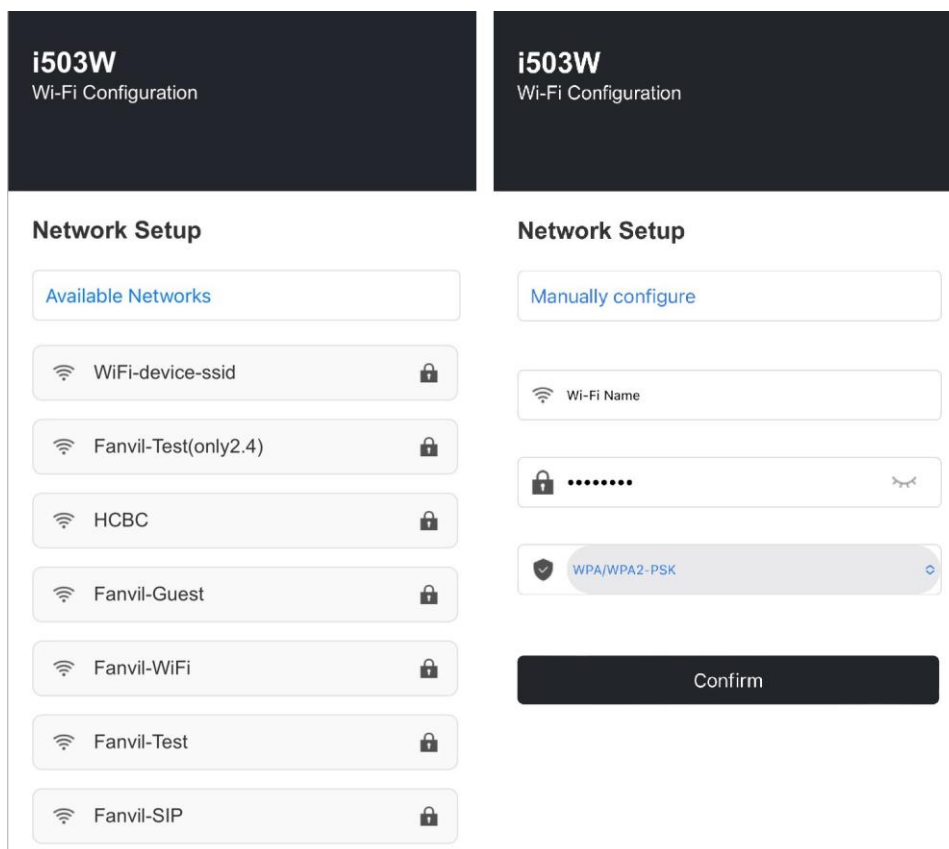
Select a Wi-Fi from the **Available Networks** list, enter the password, and then tap **Confirm**. The Device displays **Connecting**. After a few seconds, the Device displays **Connect Success**.

- Add a Wi-Fi manually

1. Tap **Available Networks**, and then select **Manually configure**.
2. Enter the Wi-Fi name and password, and then tap **Confirm**.

The Device displays **Connecting**. After a few seconds, the Device displays **Connect Success**.

Table 2-3 Wi-Fi configuration interfaces



### 2.2.2 Auto Discovery

The Device can automatically discover other devices in the kit, which can be bound to the Fanvil Link App.

**NOTE**

Ensure that these devices are powered on and on the same network segment as the Device.


## 2.2.3 Downloading and Registering Fanvil Link App

### Procedure

1. Open the camera or the QR code scanner on your mobile phone, and then scan the QR code on the Device to download the Fanvil Link app.

#### NOTE

You can also download the app from App Store, Google Play, or the Fanvil official website.

2. Open the app, and then tap  on the login screen to scan the QR code on the Device. The app will display the account registration screen.
3. Register with your phone number or email address, and then set and confirm the login password.

After setting the password, you will see the home screen of the app.

## 2.3 Selecting Language


The default language is English. You can select the desired language in the setup wizard, on the Device or via the web interface.

### Procedure

- In the setup wizard

After a factory reset, select the desired language in the setup wizard, and then press the **OK** or **Next** button.

- On the Device


1. On the Device's home screen, press the  button, select **Language**, and then press the **OK** button.
2. Select the desired language, and then press the **OK** button.

The screen displays **Config OK!** in the set language.

- Via the web interface

You can log in to the Device's web interface using a mobile phone or computer. Ensure that your mobile phone and computer are on the same network segment as the Device.

- Log in on a mobile phone

1. On the Device's home screen, press the  button, select **Settings**, and then press the **OK** button.

- Open the camera or the QR code scanner on your mobile phone, and then point it to the QR code on the Device.

The phone will go to the Device's login screen.

- Enter the username and password, and then tap **Login**.

 **NOTE**

The username and password are both **admin**.

- Tap **System** on the Device's webpage, and then select the language.

The Device's screen displays **Config OK!** in the set language.

- Log in on a computer

- Log in to the Device's webpage. For details, see [2.7 Web Login](#).
- Select the language from the drop-down list in the top-right corner.

The Device's screen displays **Config OK!** in the set language.

## 2.4 Home Screen

The home screen is set as the start screen of the Device.

Figure 2-4 Home screen



Figure 2-2 Description of home screen

| NO. | Description   |
|-----|---|
| 1   | Displays battery level, network connection status, and other system statuses. |
| 2   | Displays date and time.   |

## 2.5 Menu Screen



On the menu screen, you can configure function key, network, language, SIP account, and more. Press the  button to go to the menu screen.

Table 2-3 Description of menu screen

| Menu              | Description   |
|-------------------|---|
| Function Key      | Press the function key to trigger an action that you have assigned to it on the Device's webpage.   |
| Network           | View network information, including the network type, IP address, Wi-Fi SSID, and more.   |
| Device            | View device information, including the model, MAC address, software version, and hardware version.  |
| Account           | Check the registration status of the SIP line.  |
| Settings          | Set the network, language, and time zone on the mobile phone.   |
| Wi-Fi QR Code     | Configure Wi-Fi network on the mobile phone.  |
| Language          | Set the language for the Device.  |
| Reboot System     | Restart the Device.   |
| Advanced Settings | Includes auto discovery, factory reset, and USB drive debugging.<br><div style="background-color: #f0f0f0; padding: 5px; margin-top: 10px;"> <p> <b>CAUTION</b><br/>A factory reset will erase all configurations and saved data.</p> </div> |

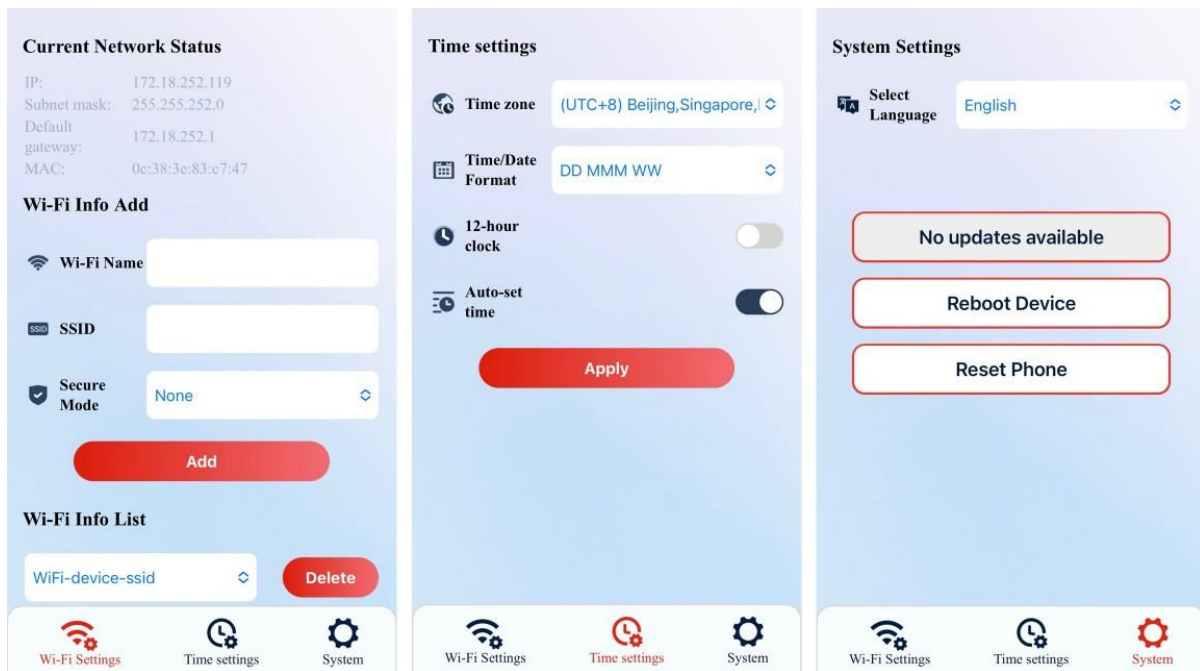
### 2.5.1 Function Keys

The Device's function keys can be configured for various actions via the web interface, such as speed dial and door unlock. After configuration, press the function key on the Device to trigger a configured action. For details, see [Chapter 13 Function Keys](#).

## 2.5.2 Settings

There is a QR code on the **Settings** screen. Scan the QR code with your mobile phone to log in to the webpage and configure Wi-Fi, language, time zone, and more. For detailed information on login with a mobile phone, see [2.3 Selecting Language](#).

Figure 2-5 Webpage interface on the mobile phone




## 2.5.3 Advanced Settings

- Auto discovery

The Device is able to discover other devices on the same network. You can select the discovered devices and scan the QR code to bind them to the Fanvil Link App.

- Factory reset

1. On the Device's home screen, press the  button, select **Advanced**, and then press the **OK** button.

The screen displays **Reset to Default?**

2. Press the **OK** button to restore the Device to factory settings or press the **Cancel** button to cancel the operation.

- USB drive debugging

### *Prerequisites*

Please ensure that you have inserted the USB.

- **U-Disk Log Export:** Export the debugging logs.

- **U-Disk Config Update:** Update the configuration file.
- **U-Disk Wi-Fi Config Update:** Update Wi-Fi configuration.

## 2.6 Device Status

You can view device status on the Device or via the web interface.


- On the Device  
On the Device's home screen, press the  button to go to the menu screen.
- Via the web interface  
On the Device's home page, select **System > Information**.

Table 2-4 Parameter description of device status

| Access Method         | Parameter          | Description  |
|-----------------------|--------------------|--|
| On the Device         | Network            | Displays network type, IP address, Wi-Fi SSID, and more                  |
|                       | Device             | Displays the model, MAC address, software version, and hardware version. |
|                       | Account            | Displays the registration status of each SIP line.                       |
| Via the web interface | System Information | Displays device model, hardware and software versions, uptime, and more. |
|                       | Network            | Displays MAC address, IP address, subnet mask, gateway, and more.        |
|                       | SIP Accounts       | Displays the name, number, and registration status of SIP line.          |

## 2.7 Web Login

### 2.7.1 Obtaining IP Address


You can find the Device's IP address on the Device or by using an IP scanner tool (**Device Manager**) on the computer.

*Procedure*

- On the Device

On the Device's home screen, press the  button, select **Network**, and then press **OK** to view its IP address (e.g., 192.168.1.100).

- IP scanner

1. Go to our official website <https://fanvil.com>, and then select **Support > Download Center > Tools > IP Scanner**.
2. Click  to download the latest version of the tool.
3. Open the tool, and then click **Rescan** to view the Device's IP address.

## 2.7.2 Logging in to the Webpage

Log in to the Device's webpage to view or configure parameters.

### *Prerequisites*

You have obtained the IP address of the Device.

### *Procedure*

1. Open a web browser on your computer (such as Chrome, Edge, Safari).
2. Enter the Device's IP address in the browser's address bar, and then press the Enter key.
3. Enter username and password, select the language, and then click **Login**.

### **NOTE**

- Ensure that the computer and the Device are on the same network segment.
- The default username and password are both **admin**.
- Click the checkbox on the right to synchronize the set language to the Device.

# Chapter 3 Basic Calling Features


## 3.1 Making Calls

The Device supports configuring speed dial numbers on the function keys, allowing you to quickly make a call to the configured number on the Device.

### *Prerequisites*

You have configured the number via the Device's web interface. For details, see [Chapter 13 Function Keys](#).

### *Procedure*

1. On the Device home screen, press the  button, select **Function Key**, and then press the **OK** button.
2. Select the desired number.
3. Press the **OK** button.

The Device calls the selected number.

## 3.2 Answering Calls

When the Device receive an incoming call, press the **Answer** button to answer the incoming call. Press the **End** button to hang up the current call.

## 3.3 Rejecting Calls

You can reject a call manually or by enabling DND.


### 3.3.1 Rejecting a call manually

Press the **Reject** button to reject an incoming call.

### 3.3.2 DND

You can enable the do not disturb (DND) mode on the Device or via the web interface. After enabled, the Device automatically rejects an incoming call.

### *Procedure*

- On the Device
  1. On the Device's home screen, Press the  button.

The screen displays **Do you want to enable DND?**

2. Press the **OK** button to enable DND.

The screen displays **DND enabled**.

3. Press the  button again to exit the DND mode.

The screen displays **DND disabled**.

- Via the web interface
  1. On the Device's home page, select **Device Settings > Features > DND Settings**.
  2. Select **Device** or **Line** from the DND option, select  to enable DND timer, and then set the time interval.
  3. Click **Apply**.


## 3.4 Ending Calls

If you want to end the current call, press the **End** button to hang up.

## 3.5 Adjusting Volume

- During a call, press the **Vol.+** button to turn up the volume.
- During a call, press the **Vol.-** button to turn down the volume.

## 3.6 One-Touch Family Call

In a home environment, family members in different rooms may need to communicate with one another. The one-touch family call feature allows the user to call all supported devices at once by pressing the  button. When a one-touch family call is initiated, devices in different rooms automatically answer the call, enabling real-time voice communication throughout the home.

# Chapter 4 Advanced Calling Features

## 4.1 Holding and Resuming Calls

During a call, you can put the call on hold to temporarily mute audio in both directions.

- On the call screen, press the **Hold** button to put the call on hold.
- On the call screen, press the **Hold** button to resume the call.

## 4.2 Call Forwarding

Call forwarding is a feature that redirects incoming calls to another number. You can configure call forwarding individually for each line via the web interface.

There are three types of call forwarding:

- **Unconditional forwarding:** All incoming calls are forwarded to the configured number.
- **Busy forwarding:** When the user is busy (on another call), incoming calls are forwarded to the configured number.
- **No-Answer forwarding:** If the user does not answer within a set timeout period, incoming calls are forwarded to the configured number.

### *Procedure*

1. On the Device's home page, select **Line > SIP > Basic Settings**.
2. Select the line from the **Line** drop-down list.
3. Select  to enable the desired forwarding type, and then enter the target number for forwarding.
4. Click **Apply**.

## 4.3 Intercom

The Intercom function allows for instant and hands-free audio communication between devices. When Intercom mode is enabled, the device can automatically answer incoming intercom calls.

### 4.3.1 Making Intercom Calls

To quickly make an intercom call, you need to configure the function key via the web interface. After configuration, you can make an intercom call on the **Function Key** screen of the Device.

### *Procedure*

1. On the Device's home page, select **Function Key > Function Key**.
2. Select **Memory Key** from the **Type** drop-down list, and then select **Intercom** from the **Subtype** drop-down list.
3. Configure the line, name, and number.
4. Click **Apply**.

### 4.3.2 Answering Intercom Calls

You can enable the intercom function and configure parameters via the web interface. After enabled, the Device automatically answers incoming intercom calls.

#### *Procedure*

1. On the Device's home page, select **Device Settings > Features > Intercom Settings**.
2. Configure the parameters.
3. Click **Apply**.

Table 4-1 Parameter description of intercom

| Parameter             | Description   |
|-----------------------|---|
| Enable Intercom       | When enabled, the Device will automatically answer incoming calls that contain the specific SIP <code>Call-Info</code> header indicating an intercom request.   |
| Enable Intercom Mute  | Enables or disables the mute function during an intercom call.  |
| Enable Intercom Tone  | Plays an alert tone when an intercom call is received.  |
| Enable Intercom Barge | When enabled, if the current call is not an intercom call, the Device automatically answers the new intercom call; if the current call is an intercom call, the Device rejects the new intercom call. |

## 4.4 Multicast

The Multicast function enables efficient one-to-many audio broadcasting. A source server sends an RTP stream once to a specific multicast group address, and all devices configured to listen to that address will receive and play the stream simultaneously. You can configure multicast parameters via the web interface.

*Procedure*

1. On the Device's home page, select **Device Settings > MCAST**.
2. Configure the parameters.
3. Click **Apply**.

Table 4-2 Parameter description of multicast

| Parameter                        | Description  |
|----------------------------------|--|
| SIP Priority / Intercom Priority | Defines the call priority when a multicast call is received during an existing call.   |
| Mcast Listening Renew Time       | The waiting time before the Device attempts to re-listen to the multicast stream after an interruption.  |
| Multicast Tone                   | When enabled, a short beep tone plays before the multicast audio starts.   |
| Enable Page Priority             | When enabled, if two multicast streams arrive simultaneously, the device will answer the one with the higher priority.   |
| Enable Prio Chan                 | When enabled, a connection is established only if both the port and channel match. Channel 24 is the highest priority, and channel 0 indicates not matching the channel. |
| Enable Emer Chan                 | When enabled, Channel 25 is given the highest priority.  |
| Name                             | Set a name for the multicast.  |
| Host:port                        | Enter the server address and port of the multicast.  |
| Channel                          | 0–25. <ul style="list-style-type: none"> <li>• 24: priority channel</li> <li>• 25: emergency channel</li> </ul>  |

|                  |   |
|------------------|---|
| MCAST<br>Dynamic | Multicast configuration can be delivered dynamically via SIP NOTIFY messages. After receiving such a message, the Device automatically adds the configuration to its system to start listening to the specified multicast stream, or removes the configuration to stop listening. |
|------------------|---|

## 4.5 SIP Hotspot

The SIP hotspot function creates a simple virtual SIP extension group. One device serves as the hotspot server (Device A), registering a main SIP account with the service provider. Other devices serve as hotspot clients (Device B and Device C), sharing this SIP account.

- **Incoming calls:** When the Device A receives an incoming call, all devices (Devices A, B, and C) in the hotspot group ring simultaneously. Once any one device answers, the ringing on all devices stops, and the remaining devices hang up.
- **Outgoing calls:** When any client device (Device B or Device C) makes an outgoing call, it uses the SIP account of the hotspot server (Device A).

### NOTE

Extension numbers:

- The hotspot server is automatically assigned extension 0.
- Hotspot clients are automatically assigned extensions starting from 1 (incrementally).
- Devices within the same hotspot can call each other using these extensions (e.g., extension 1 dials extension 0).

You can configure SIP hotspot for the SIP server and SIP client via the web interface.

### Procedure

- SIP server
  1. On the Device's home page, select **Line > SIP Hotspot**.
  2. Configure the parameters.
  3. Click **Apply**.
- SIP client
 

Select the **Mode** as **Client**, and then the Device will be automatically configured as a SIP client.

Table 4-3 Parameter description of SIP hotspot

| Parameter       | Description   |
|-----------------|---|
| Enable Hotspot  | Select <b>Enabled</b> from the drop-down list to enable the hotspot function.   |
| Mode            | <ul style="list-style-type: none"> <li>• <b>Hotspot:</b> The Device serves as the SIP server.</li> <li>• <b>Client:</b> The Device serves as the SIP client.</li> </ul>   |
| Monitor Type    | Includes <b>Broadcast</b> and <b>Multicast</b> . Defines how server and clients discover and communicate. Server and clients must be set to the same monitor type. Select <b>Multicast</b> allows reducing broadcast traffic. |
| Monitor Address | The IP address used for the communication between server and clients. Required only if <b>Monitoring Type</b> is <b>Multicast</b> . The system uses the WAN port's broadcast address when <b>Broadcast</b> is selected.       |
| Local Port      | The port for hotspot communication, which must be identical between server and clients.   |
| Name            | Set a unique name for the hotspot server to prevent conflicts in networks with multiple hotspots.   |
| Line Settings   | Select desired SIP line to enable SIP hotspot.  |

## 4.6 Text Message

If the SIP server supports short message service (SMS), the Device will receive notifications for incoming text messages. A new message alert will display on the Device's home screen.

### *Procedure*

1. When the Device notifies a new message, press any button to open the inbox.
2. Select the unread message, and then press the **View** button to view the message.

# Chapter 5 Door Unlock

The device can be bound to door phones via auto-discovery. You can then:

- Unlock a single door.
- Unlock multiple doors (if multiple devices are bound).
- Unlock the door for a device during a call.

## 5.1 Door Unlock on the Home Screen

### 5.1.1 Unlocking the Door

- For one door phone: Press the **Q** button to directly unlock the door.
- For multiple door phones: Press the **Q** button to go to the **Door Access List**, select the desired device, and then press the **OK** button to unlock the door.

### 5.1.2 Configuring Door Unlock

You can add door phones via the web interface, including third-party devices or those on a different network.

#### *Procedure*

1. On the Device's home page, select **Application > Open the Door > Door Unlock Settings**.
2. Configure the name, IP address (or URL), username, and password of the door phone.
3. Click **Apply**.
4. On the Device's home screen, press the **Q** button to go the access control list.

#### **NOTE**

- For Fanvil door phones, enter the door phone's IP address or URL.
- For the third-party door phones, enter the door phone's URL.

## 5.2 Door Unlock on the Call Screen

### 5.2.1 Unlocking the Door

You can press the **Open** button to unlock the door for the door phone that is on a call with the Device.

## 5.2.2 Configuring Door Unlock

### Procedure

1. On the Device's home page, select **Application > Doorphone Settings**.
2. Click **Add**, configure the parameters, and then click **OK**.
3. Click **Apply**.

Table 5-1 Parameter description of door unlock

| Parameter              | Description  |
|------------------------|--|
| Title                  | Set a custom name for the door phone.  |
| Number                 | The IP address or SIP number of the door phone. Use IP address only for direct IP calls.                           |
| Line                   | Select the SIP line. <b>Auto</b> by default.   |
| Password & Access Code | The password to remotely unlock the door, which must match the door release password configured on the door phone. |

# Chapter 6 Preview and Monitoring

## 6.1 Video Preview for Incoming Calls

Video preview allows you to see video from a door phone or a bound IP camera before answering the call. You can enable this function by configuring **SIP Video Preview** via the web interface.

### *Procedure*

- SIP Line
  1. On the Device's home page, select **Line >SIP > Advanced Settings**.
  2. Click **Enable Preview**, and then select the **Preview Mode**.
    - **Preview18x**: Standard SIP video preview.
    - **Preview2XX**: Use only with Fanvil door phones.
  3. Click **Apply**.
- Direct IP dialing
  1. On the Device's home page, select **Line > Basic Settings > SIP P2P Settings**
  2. Click **Enable Preview**, and then select the **Preview Mode**.
    - **Preview18x**: Standard SIP video preview.
    - **Preview2XX**: Use only with Fanvil door phones.
  3. Click **Apply**.

# Chapter 7 Phonebook

## 7.1 Adding Blocklist

The blocklist is used to reject calls from specific numbers. When numbers added to the blocklist call the Device, the system automatically rejects the call, and a missed call record will be displayed on the Device.

You can configure the blocklist via the web interface.

### *Procedure*

1. On the Device's home page, select **Phonebook > Call List > Restricted Incoming Calls**.
2. Click **Add**, and then configure **Number**, **Line**, and **Number/Prefix**.
3. Click **OK**.

## 7.2 Adding Allowlist

The Device supports an incoming call allowlist. When a number is added to the allowlist, calls from this number can still be received even when DND or call forwarding is enabled. Calls from numbers not on the allowlist will be automatically rejected or forwarded.

The configuration of allowlist is similar to that of blocklist. For details, see [7.2 Adding Blocklist](#).

## 7.3 Configuring Restricted Outgoing Calls

The Device allows outgoing call restrictions. Calls to restricted numbers are blocked, and the Device plays a call restriction tone and displays a pop-up notification. You can configure the function via the web interface.

### *Procedure*

1. On the Device's home page, Select **Phonebook > Call List > Restricted Outgoing Calls**.
2. Click **Add**, and then configure **Number**, **Line**, and **Number/Prefix**.
3. Click **OK**.

## Chapter 8 Call Logs

Call logs allow you to view and delete all incoming, outgoing, forwarded, and missed calls on the Device or via the web interface.

### *Procedure*

- View call logs

The Device can store up to 1,000 call records.

- On the Device

1. When the Device displays a missed call, press any button to go to the **Miss** screen.
2. Press the **Up** or **Down** button to view all missed calls.

- Via the web interface

On the Device's home page, select **Call Logs** to view all calls.



Select a call type from the drop-down list to view corresponding call records.

- Delete call logs

1. On the Device's home page, select **Call Logs**.
2. Select one or more records, and then click **Delete**. Click **Delete All** to delete all records.

# Chapter 9 Device Functions

## 9.1 Time Plan

Time plan enables scheduling of automated device actions at a precise time or across a defined time range, allowing tasks like reboots or upgrades to be performed automatically.

### NOTE

If the Device is on a call within the scheduled time period, restarting and upgrading will be skipped.

### Procedure

1. On the Device's home page, select **Device Settings > Time Plan**.
2. Configure the parameters.
3. Click **Apply**.

Table 9-1 Parameter description of time plan

| Parameter         | Description   |
|-------------------|---|
| Name              | Set a custom name for the action rule.  |
| Type              | The action to perform, including <b>Timed reboot</b> , <b>Timed upgrade</b> , <b>Timed forward</b> , and <b>Timed config</b> .  |
| Repetition Period | Sets the recurrence pattern. <ul style="list-style-type: none"> <li>• <b>No Repetition</b>: Executes once within the set time range.</li> <li>• <b>Daily</b>: Executes at the same time every day.</li> <li>• <b>Weekly</b>: Executes on the same weekday(s) every week.</li> <li>• <b>Monthly</b>: Executes on the same date every month.</li> </ul> |
| Start Date        | The date when the rule becomes active.  |
| End Date          | The date when the rule expires.   |
| Effective Time    | The effective time period for action execution.   |

## 9.2 Action Plan

Action plan is a Fanvil-defined technology that enables event-triggered control and linkage between Fanvil terminals and other devices. It allows the terminal to automatically execute predefined actions when specified events occur.

### Procedure

1. On the Device's home page, select **Line > Action Plan**.
2. Configure the parameters.
3. Click **Apply**.

Table 9-2 Parameter description of action plan

| Parameter  | Description  |
|------------|--|
| Action     | The action to perform when the rule is triggered. <ul style="list-style-type: none"> <li>• <b>Video</b>: Displays video feed from a bound third-party camera during an incoming or active call.</li> <li>• <b>Mcast-Xfer</b>: Transfers the multicast.</li> <li>• <b>Mute</b>: Automatically mutes the Device.</li> <li>• <b>Answer</b>: Automatically answers the incoming call.</li> </ul> |
| Number     | The calling number that triggers this rule. Supports the same expression format as <b>Dial Plan</b> .  |
| Type       | <ul style="list-style-type: none"> <li>• <b>Early</b>: Displays the video before the call is answered.</li> <li>• <b>Connected</b>: Displays the video after the call is answered.</li> </ul>  |
| Direction  | <ul style="list-style-type: none"> <li>• <b>Both</b>: For both incoming and outgoing calls.</li> <li>• <b>Incoming Call</b>: For the incoming calls only.</li> <li>• <b>Outgoing Call</b>: For the outgoing calls only.</li> </ul>   |
| Line       | The SIP line to which this rule applies.   |
| Username   | The username for the RTSP authentication.  |
| Password   | The password for the RTSP authentication.  |
| URL        | (For <b>Video</b> action) The RTSP URL of the camera.  |
| User Agent | User agent information.  |

## 9.3 System Maintenance

### 9.3.1 Managing System Configurations

Administrators can import, export, and clear device configurations, and restore the Device to factory settings in **System > Configurations**.

Table 9-3 Parameter description of system configurations

| Operation             | Description   |
|-----------------------|---|
| Export configurations | Click to export the configuration file in .txt format.  |
| Import configurations | Upload a previously saved configuration file to apply its settings to the Device.                                     |
| Clear configurations  | Clears SIP settings, auto-provisioning configurations, and shortcut keys.   |
| Clear user data       | Clears the local phonebook, call records, and blocklist and allowlist.  |
| Reset Device          | Erases all device data, including all configurations and database tables, restoring the device to its original state. |

### 9.3.2 Upgrade

#### 9.3.2.1 Upgrading Software Version

##### *Procedure*

1. On the Device's home page, select **System > Upgrade**.
2. Click **Select**, and then select a software version file.
3. Click **Upgrade**.

#### 9.3.2.2 Upgrading Server

Places the upgrade .txt file and software on the corresponding server. When the device detects that the software on the server differs from its own version, it will prompt for an upgrade.

##### *Procedure*

1. On the Device's home page, select **System > Upgrade**.
2. Configure the parameters.

3. Click **Apply**.

Table 9-4 Parameter description of server upgrade

| Parameter                   | Description   |
|-----------------------------|---|
| <b>Upgrade Server</b>       |   |
| Enable Auto Upgrade         | When selected, the Device will periodically check the configured HTTP server for a new version. |
| Upgrade Server Address1     | The URL of the main HTTP upgrade server.  |
| Upgrade Server Address2     | (Optional) The URL of a backup upgrade server.  |
| Update Interval             | The frequency at which the Device checks for new versions.                                      |
| <b>Firmware Information</b> |   |
| Current Software Version    | The currently installed software version.   |
| Server Firmware Version     | The currently installed firmware version available on the server.                               |
| Upgrade                     | Becomes active when a newer version is detected. Click to upgrade to the new version.           |
| New Firmware Information    | Displays update information from the server's version file when available.                      |

4. Place the firmware file (.z file) and a corresponding version information file on your HTTP server.

- The version file must be named in this format: vendor\_model\_hww1\_0.txt
- The .txt file must be UTF-8 encoded and contain the following information.

```
Version=2.12.0
Firmware=http://ip:port/xxx.z
BuildTime=2023.09.11 20:00
Info=TXT

Release Note:
XXXXX
XXXXX
XXXXX
```

- When the update interval arrives, if new files are on the server, the device prompts the user who can then upgrade. The web UI also enables its upgrade button with release notes.

### 9.3.3 Auto-Provisioning

The Device supports four methods to obtain auto-provisioning parameters:

- **SIP plug-and-play (PnP)**
- **DHCP**
- **Static provisioning**
- **TR-069**

If all four methods are configured simultaneously, the Device will acquire the auto-provisioning parameters at startup according to the following procedure or priority: **SIP PnP > DHCP > TR-069 > Static provisioning**

Supported protocols: FTP, TFTP, HTTP, and HTTPS

#### *Procedure*

1. On the Device's home page, select **System > Auto Provision**.
2. Configure the Parameters.
3. Click **Apply**.

Table 9-5 Parameter description of auto-provisioning

| Parameter             | Description                               |
|-----------------------|---|
| <b>Basic Settings</b> |   |
| CPE Serial Number     | Displays the serial number of the Device. |

|   |   |
|---|---|
| Authentication Name                       | The username for the FTP server. Not required for TFTP protocol. If using FTP and this field is left blank, the default is set to <b>anonymous</b> .  |
| Authentication Password                   | Password for the FTP user.  |
| Configuration File Encryption Key         | If the configuration file to be upgraded is encrypted, enter its decryption key here.   |
| General Configuration File Encryption Key | If the common configuration file to be upgraded is encrypted, enter its decryption key here.  |
| Download Fail Check Times                 | The number of times the Device retries after a failed download.<br>Default: 1.  |
| Update Contact Interval                   | The preset interval at which the Device automatically downloads and updates the phonebook.  |
| Save Auto Provision Information           | Select <input type="checkbox"/> to save the auto-provisioning information.  |
| Download CommonConfig enabled             | Select <input type="checkbox"/> to download the common configuration file during automatic upgrading.   |
| Enable Server Digest                      | If the Device uses Digest authentication to match configuration content, enabling this will trigger an update download whenever the configuration on the server is modified, or if the local configuration differs from the server's. |
| Display Provision Prompt                  | Settings for displaying upgrade prompt dialogs.   |

|                                |   |
|--------------------------------|---|
| Provision Config Priority      | Sets the priority between auto-provisioning and manual configuration.   |
| <b>DHCP Option</b>             |   |
| Option Value                   | DHCP option used to obtain auto-provisioning parameters, supporting <b>Custom Option</b> , <b>Option 66</b> , and <b>Option 43</b> . <b>Disabled</b> is set by default.   |
| Custom Option Value            | The valid range for a custom option is 128 to 254. The custom option type must match the definition on the DHCP server.   |
| Enable DHCP Option 120         | Enables setting the SIP server address via DHCP Option 120.   |
| <b>DHCPv6 Option</b>           |   |
| Option Value                   | DHCP option used to obtain auto-provisioning parameters, supporting <b>Custom Option</b> , <b>Option 66</b> , and <b>Option 43</b> . <b>Option 66</b> is set by default.  |
| Custom Option Value            | The valid range for a custom option is 128 to 254. The custom option type must match the definition on the DHCP server.   |
| <b>SIP Plug and Play (PnP)</b> |   |
| Enable SIP PnP                 | When enabled, the terminal will periodically send SIP SUBSCRIBE messages via multicast upon startup. Any compatible SIP server will respond with a SIP NOTIFY message containing the path to the auto-configuration or auto-provisioning server, from which the terminal can obtain the configuration file to download. |
| Server Address                 | The IP address of the PnP server.   |
| Server Port                    | The port of the PnP server.   |
| Transport Protocol             | The transport protocol for PnP.   |
| Update Interval                | The interval (in hours) for checking updates.   |
| <b>Plug and Play</b>           |   |

|                         |  |
|-------------------------|--|
| Auto Discover           | When enabled, the Device scans the LAN for door phones and indoor stations that have auto-discovery enabled and automatically configures them.   |
| Device Name             | The name of the Device.  |
| Device Location         | Devices in the same location can be discovered.  |
| <b>Static Server</b>    |  |
| Server Address          | The address of the FTP/TFTP/HTTP server. It can be an IP address (e.g., 192.168.1.1) or a domain name (e.g., ftp.domain.com). The system also supports specifying a subdirectory path (e.g., 192.168.1.1/ftp/Config/ or ftp.domain.com/ftp/config), meaning it will access the server at the given address or domain, with the file storage path under the specified subdirectory. A trailing slash is optional. |
| Configuration File Name | The name of the configuration file to download. For typical auto-provisioning, leave this field empty. The Device will then use its own MAC address as the filename to retrieve the file from the server.  |
| Protocol Type           | The server type: <b>FTP, TFTP, HTTP, and HTTPS.</b>  |
| Update Interval         | The interval (in hours) for checking updates.  |
| Update Mode             | The auto-update type. <ul style="list-style-type: none"> <li>• <b>Disabled:</b> No update.</li> <li>• <b>Update After Reboot:</b> Update after the Device reboots.</li> <li>• <b>Update at Time Interval:</b> Updates at the specified interval.</li> </ul>  |
| Autoprovisioning Now    | Click to start auto-provisioning.  |
| <b>TR069</b>            |  |
| Enable TR069            | Select <input type="checkbox"/> to enable TR069.   |
| ACS Server Type         | Select the ACS server type. Supports <b>China Telecom, Common, China Unicom, eSight, and Reliance Jio.</b>   |
| ACS Server URL          | The URL of the ACS server.   |
| ACS User                | The username for ACS server authentication.  |

|                           |   |
|---------------------------|---|
| ACS Password              | The password for ACS server authentication.   |
| Enable TR069 Warning Tone | Select <input type="checkbox"/> to enable TR069 prompt tone.  |
| TLS Version               | If "Auto Login" is selected, the Device will use the previously entered credentials to connect to the ACS server upon reboot without prompting for username and password. |
| INFORM Sending Period     | The interval at which the Device periodically sends an INFORM message to the ACS server.  |
| STUN Server Address       | The address of the STUN server.   |
| STUN Enable               | Select <input type="checkbox"/> to enable STUN.   |

# Chapter 10 Preferences

You can configure date & time, screen and display, wallpaper, and other features on the Device or via the web interface.

## 10.1 Configuring Date & Time

### Procedure


- On the Device
  1. On the Device home screen, press the  button, select **Settings**, and then press the **OK** button.
  2. Scan the QR code on the screen to set date and time. For details, see [2.52 Settings](#).
- Via the web interface
  1. On the Device's home page, select **Device Settings > Time/Date**.
  2. Configure the parameters.
  3. Click **Apply**.

Table 10-1 Parameter description of date & time

| Parameter                           | Description  |
|-------------------------------------|--|
| <b>Network Time Server Settings</b> |  |
| Time Synchronized via SNTP          | Enable time synchronization using the SNTP protocol.           |
| Time Synchronized via DHCP          | Enable time synchronization using the DHCP protocol.           |
| Time Synchronized via DHCPv6        | Enable time synchronization using the DHCPv6 protocol.         |
| Primary Time Server                 | The address of the primary network time protocol (NTP) server. |

|                                      |   |
|--------------------------------------|---|
| Secondary Time Server                | The address of the backup NTP server. The Device will attempt to synchronize with this server if the primary is unavailable.  |
| Time zone                            | Select your local time zone.  |
| Resync Period                        | The interval at which the Device re-synchronizes with the time server.  |
| <b>Time/Date Format</b>              |   |
| 12-hour clock                        | When enabled, displays time in a 12-hour format (AM/PM).  |
| Time/Date Format                     | Set the display format for the date.  |
| <b>Daylight Saving Time Settings</b> |   |
| Location                             | Select your geographic location for automatic daylight saving time (DST) rules.   |
| DST Set Type                         | <ul style="list-style-type: none"> <li>• <b>Disabled:</b> DST adjustments are not applied.</li> <li>• <b>Manual:</b> Configure DST start and end times manually.</li> <li>• <b>Automatic:</b> DST rules are automatically applied based on the selected Location. When set to <b>Automatic</b>, the start and end parameters become read-only.</li> </ul> |
| Fixed Type                           | <p>Defines how the DST start/end dates are specified.</p> <ul style="list-style-type: none"> <li>• <b>By Date:</b> Set an exact calendar date (e.g., March 31).</li> <li>• <b>By Week:</b> Set a relative day (e.g., Second Sunday of March).</li> </ul>  |
| Offset                               | The amount of time to adjust the clock at the start and end of DST (e.g., +1 hour at the start, -1 hour at the end).  |
| Start and End                        | <ul style="list-style-type: none"> <li>• <b>By Date:</b> Configure <b>Month</b>, <b>Month day</b>, and <b>Hour</b>.</li> <li>• <b>By Week:</b> Configure <b>Month</b>, <b>Week</b>, <b>Weekday</b>, and <b>Hour</b>.</li> </ul>   |
| <b>Manual Time Settings</b>          | Manually set the current date and time.   |

## 10.2 Screen and Display Settings

You can configure the brightness, wall paper, and other parameters on the Device.

## 10.2.1 Configuring Brightness and Backlight

The device enters backlight mode after a period of no operation. You can configure brightness and backlight via the web interface.

*Procedure.*

1. On the Device's home page, select **Device Settings > Advanced > Screen Configuration**.
2. Configure the parameters.
3. Click **Apply**.

Table 10-2 Parameter description of brightness and backlight

| Parameter                | Description  |
|--------------------------|--|
| Backlight Active Level   | The screen brightness level when the Device is active.   |
| Backlight Inactive Level | The screen brightness level when the Device is idle.     |
| Backlight Time           | Screen backlight turns off after a period of inactivity. |

## 10.2.2 Configuring Wallpaper

*Procedure*

1. Log in to the Device's web page, and then select **System > Upgrade > Background Upgrade**.
2. Click **Select** to select an image, and then click **Upload**.

The image format is as follows:

- Image Format: .bmp, .png, .jpg
- Resolution: 320 × 240
- Bit Depth: 24-bit

## 10.2.3 Configuring Boot Logo

*Procedure*

1. Log in to the Device's web page, and then select **System > Upgrade > Boot Logo Upgrade**.
2. Click **Select** to select an image, and then click **Upload**.

The image format is as follows:

- Image Format: .bmp
- Resolution: 320 × 240
- Bit Depth: 24-bit

## 10.3 Audio Settings

### 10.3.1 Selecting Ringtone

You can configure ringtone volume via the web interface.

#### *Procedure*

1. On the Device's home page, select **Device Settings > Media Settings > Media Settings**.
2. Select a ringtone type from the **Default Ring Type** drop-down list.
3. Click **Apply**.

### 10.3.2 Adjusting Volume

You can adjust the device volume via the web interface.

1. On the Device's home page, select **Device Settings > Media Settings > Media Settings**.
2. Configure the volume parameters.
3. Click **Apply**.

Table 10-3 Parameter description of volume adjustment

| Parameter                | Description   |
|--------------------------|---|
| Speakerphone Ring Volume | Volume for the incoming call ringtone and door open tone. |
| Speakerphone Volume      | Volume for hands-free calls.                              |

### 10.3.3 Configuring Alert Info

You can assign specific ringtones for calls containing Alert Info headers via the web interface.

#### *Procedure*

1. On the Device's home page, select **Device Settings > Media Settings > Alert Info Ring Settings**.
2. Configure the parameters.

3. Click **Apply**.

Table 10-4 Parameter description of alert information

| Parameter     | Description   |
|---------------|---|
| Value         | Defines a value for a specific ringtone type. When an incoming INVITE message contains an Alert Info header matching this value, the assigned ringtone plays. |
| Line          | Enable the Alert Info rule on the selected SIP line.  |
| Ringtone Type | Select a ringtone type for the Alert Info value.  |

### 10.3.4 Configuring Tones

You can configure various call tones via the web interface, such as call hold tone, call waiting tone, auto-answer tone.

#### *Procedure*

1. On the Device's home page, select **Device Settings > Features > Tone Settings**.
2. Configure the parameters.
3. Click **Apply**.

Table 10-5 Parameter description of tones configuration

| Parameter                | Description  |
|--------------------------|--|
| Enable Holding Tone      | Plays a tone when a call is placed on hold. It is enabled by default.                    |
| Enable Call Waiting Tone | Plays a tone when a second call arrives during an active call. It is enabled by default. |
| Play Dialing DTMF Tone   | Plays a DTMF tone when pressing keys to dial.  |

|                        |   |
|------------------------|---|
| Play Talking DTMF Tone | Plays a DTMF tone when pressing keys during a call. It is enabled by default.   |
| Auto Answer Tone       | Plays a prompt tone when a call is auto-answered.   |
| Ring Back Tone         | Set the ringback tone heard by the caller. You can configure custom ringback tone in <b>System &gt; Upgrade &gt; Ring Upgrade</b> .                       |
| Busy Tone              | Set the fast busy tone indicating network congestion or failure. You can configure custom ringback tone in <b>System &gt; Upgrade &gt; Ring Upgrade</b> . |

### 10.3.5 Uploading Ringtone

#### *Procedure*

1. On the Device's home page, select **Device Settings > Upgrade > Ring Upgrade**.
2. Click **Select** to select a ringtone file, and then click **Upload**.

Ringtone file specifications:

- Supported formats: .wav
- Maximum file size: 1 MB

# Chapter 11 Network Settings

## 11.1 Wireless Network

The Device can be connected to Wi-Fi on the Device or via the web interface.

### Procedure

- On the Device

You can use the mobile phone to scan the QR code on the Device for Wi-Fi connection. For details, see [2.2.1 Configuring Wi-Fi](#).

- Via the web interface

1. On the Device's home page, select **Network > Wi-Fi Settings**.
2. Select  to enable the Wi-Fi function, and then click **Apply**.
3. Configure **SSID**, **Secure Mode**, and **Password**.
4. Click **Add**.

The Connected Wi-Fi information displays in **Wi-Fi Info List**.

## 11.2 Network Mode

The network mode can be set to IPv4, IPv6, or both. You can configure it via the web interface.

### Procedure

1. On the Device's home page, select **Network > Basic > Network Mode**.
2. Select the desired network mode from the drop-down list.
3. Click **Apply**.

Table 11-1 Parameter description of network mode

| Parameter   | Description                            |
|-------------|--|
| IPv4        | Uses Internet Protocol version 4 only. |
| IPv6        | Uses Internet Protocol version 6 only. |
| IPv4 & IPv6 | Uses both protocols simultaneously.    |

## 11.3 Web Server

Configure the protocol and security for the Device's web management interface.

### Procedure

1. On the Device's home page, select **Network > Service Port**.
2. Configure the parameters.
3. Click **Apply**.

Table 11-2 Parameter description of web server

| Parameter         | Description   |
|-------------------|---|
| Web Server Type   | Select <b>HTTP</b> or <b>HTTPS</b> . A restart is required for changes to take effect.  |
| Web Login Timeout | The period of inactivity before the web interface is logged out. The default value is 15 minutes.   |
| Web auto login    | If enabled, the browser automatically logs in to the web interface after a timeout. You do not need to enter username and password again.         |
| HTTP Port         | The TCP port for HTTP access. The default value is 80. Format: <code>http://device-ip:port</code> . For security, the port value can be custom.   |
| HTTPS Port        | The TCP port for HTTPS access. The default value is 443. Format: <code>http://device-ip:port</code> . For security, the port value can be custom. |

## 11.4 VPN

- Virtual private network (VPN) creates a secure tunnel to a private network over the public Internet.
- The Device supports connecting to a VPN via L2TP and OpenVPN, and you can configure them via the web interface.

### NOTE

Both L2TP and OpenVPN connections automatically reconnect after the Device restarts, unless manually disabled.

### Procedure

- Configuring L2TP

1. On the Device's home page, select **Network > VPN**.
2. Select  to enable VPN function, and then select  to enable **L2TP**.
3. In Configure **L2TP Server Address**, **Authentication Name**, and **Authentication Password**.
4. Click **Apply**.

The Device attempts to connect. Once connected, the assigned VPN IP address will display in **Virtual Private Network (VPN) Status**.

#### **NOTE**

L2TP on the Device only supports basic unencrypted authentication and data transmission. If data encryption is required, use the OpenVPN.

- Configuring OpenVPN
  1. Obtain the following files from your OpenVPN service provider:
    - OpenVPN configuration File: client.ovpn
    - CA Root Certification: ca.crt
    - Client Certification: client.crt
    - Client Key: client.key
  2. On the Device's home page, select **Network > VPN**.
  3. Select  to enable VPN function, and then select  to enable **OpenVPN**.
  4. Click **Select** to select a VPN file, and then click **Upload**.

## 11.5 VLAN

Virtual local area network (VLAN) allows a single physical LAN to be divided into multiple logical LANs—VLANs. Each VLAN forms a separate broadcast domain, with broadcast packets confined within the VLAN. The Device supports obtaining VLAN IDs via DHCP VLAN.

### *Procedure*

1. On the Device's home page, select **Network > Advanced > DHCP VLAN Settings**.
2. Select **Custom** from the **Option Value** drop-down list, and then set the value for **DHCP Option Vlan**.
3. Click **Apply**.

# Chapter 12 System Security

## 12.1 Changing Web Login Password

Change the password for logging into the Device's web interface. You can change it on the Device.

### *Procedure*

1. On the Device's home page, select **System > Account > Add New User**.
2. Enter the current password, new password, and then confirm the new password.
3. Click **Apply**.

### **NOTE**

After changing the password, the user will be automatically logged out of the web interface. Please log in again with the new password.

## 12.2 Filtering Web Access

You can create an allowlist of IP address ranges permitted to access the web interface.

### *Procedure*

1. On the Device's home page, select **Security > Web Filter**.
2. Enter the starting IP address and the ending IP address in **Start IP Address** and **End IP Address** fields.
3. Select  to enable the function.
4. Click **Apply**.

### *Related Operations*

Click **Delete** to delete the IP current address range.

### **NOTE**

If your computer is on the same network as the Device, ensure its IP address falls within an allowed range. Otherwise, you cannot log in to the web interface after saving the configuration.


## 12.3 Mutual Authentication

Enable and manage certificates for secure, encrypted HTTPS and SIP TLS connections with mutual authentication.

### Procedure

- Manage device certificates
  1. On the Device's home page, select **Security > Device Certificates**.
  2. Configure the parameters.
  3. Click **Apply**.

Table 12-1 Parameter description of device certificates

| Parameter           | Description   |
|---------------------|---|
| Device Certificates | The identity certificate that the Device presents to servers, include <b>Default Certificates</b> or <b>Custom Certificates</b> .   |
| Import Certificates | Upload the custom device certificate.<br><div style="background-color: #f0f0f0; padding: 5px; margin-top: 10px;">  <b>NOTE</b><br/>           You can upload only one device certificate.         </div> |
| Certification File  | Displays the uploaded custom certificate. The list is empty if no custom certificate is uploaded.   |

- Manage trusted certificates
  1. On the Device's home page, select **Security > Trust Certificates**.
  2. Configure the parameters.
  3. Click **Apply**.

Table 12-2 Parameter description of trusted certificates

| Parameter              | Description  |
|------------------------|--|
| Permission Certificate | Used to verify whether server certificate authentication is enabled.   |
| Common Name Validation | Specifies whether to enable common name verification.  |
| Certificate Mode       | <ul style="list-style-type: none"> <li>• <b>All Certificates:</b> Trust both custom and built-in certificates.</li> <li>• <b>Default Certificates:</b> Trust only the Device's built-in certificates</li> <li>• <b>Custom Certificates:</b> Trust only the uploaded certificates.</li> </ul> |
| Import Certificates    | Upload the server certificate to the trusted list.   |
| Certificates List      | Displays uploaded trusted certificates.  |

#### NOTE

- Upload the device certificate to the server's trusted certificate list, and ensure that the server's trusted certificate list contains the device's certificate. Please confirm this with the server administrator.
- On the Device's home page, select **Security > Trusted Certificates > Import Certificates**, upload the server's certificate to the Device's trusted certificate list, and then select the trusted certificate module to be used.

## 12.4 Network Firewall

Configure inbound and outbound firewall rules to control network access, prevent malicious traffic, and enhance system security. Each rule is assigned a unique sequence number, with up to 10 rules allowed for each rule type.

### *Procedure*

1. On the Device's home page, select **Security > Firewall**.
2. Configure the parameters.
3. Click **Add**.

Table 12-3 Parameter description of network firewall

| Parameter           | Description   |
|---------------------|---|
| Enable Input Rules  | Select <input type="checkbox"/> to enable <b>Input Rules</b> .  |
| Enable Output Rules | Select <input type="checkbox"/> to enable <b>Output Rules</b> .   |
| Input/Output        | <ul style="list-style-type: none"> <li>• <b>Input:</b> The traffic to the Device.</li> <li>• <b>Output:</b> The traffic from the Device.</li> </ul>   |
| Deny/Permit         | Select <b>Permit</b> to enable the rule.  |
| Src Port Range      | The source port range.  |
| Dst Port Range      | The destination port range.   |
| Src Address         | The source IP address. It can be a host address, network address, or <b>0.0.0.0</b> (all addresses).  |
| Dst Address         | The destination IP address. It can be a host address, network address, or <b>0.0.0.0</b> (all addresses).   |
| Src Mask            | The source subnet mask. When it is set to <b>255.255.255.255</b> , it indicates a specific host. When it is set to a subnet mask such as <b>255.255.255.0</b> , it indicates that a network segment is being filtered.      |
| Dst Mask            | The destination subnet mask. When it is set to <b>255.255.255.255</b> , it indicates a specific host. When it is set to a subnet mask such as <b>255.255.255.0</b> , it indicates that a network segment is being filtered. |

# Chapter 13 Function Keys

## 13.1 Setting Function Keys

The Device supports configuring multiple function keys to perform specific functions. You can configure function keys via the web interface.

### Procedure

1. On the Device's home page, select **Function Key > Function Key**.
2. Select a type of function key, and then configure the parameters.
3. Click **Apply**.

Table 13-1 Parameter description of function keys setting

| Type       | Subtype      | Description   |
|------------|--------------|---|
| Memory Key |              |   |
|            | Speed Dial   | In standby mode, press the button to immediately dial a configured number.  |
|            | Intercom     | Calls the configured number in intercom mode. If the called party is configured to receive intercom calls, the call will be answered automatically. |
| Key Event  |              |   |
|            | Voice Mail   | Displays detailed voicemail information for all SIP lines.  |
|            | DND          | Enters the DND settings screen to enable or disable the DND function.   |
|            | Phonebook    | Holds or resumes the current call.  |
|            | Redial       | Redials the last outgoing number.   |
|            | Call Forward | Enters the call forwarding screen.  |
|            | Logs         | Enters the call logs screen to view the history of incoming, outgoing, and missed calls.  |

|                 |                |  |
|-----------------|----------------|--|
|                 | SMS            | Enters the text message screen.  |
|                 | Call Back      | Dials the number of the last received incoming call.   |
|                 | Intercom       | Opens the dial pad to manually enter a number for an intercom call.  |
|                 | Prefix         | Tap to automatically add a configured number prefix to the dialed number.                                    |
|                 | Disposition    | A method of recording call information in a call center, relied on Broadsoft server.                         |
|                 | Escalate       | During a call, sends a specific SIP message to the server to request escalation, relied on Broadsoft server. |
|                 | Trace          | During a call, sends a specific SIP message to the server to request escalation, relied on Broadsoft server. |
|                 | Handfree       | Enters hands-free dialing or switch to hands-free mode.  |
|                 | Local Contacts | Enters the local contact list screen.  |
|                 | XML Group      | Enters the cloud contact list screen.  |
| DTMF            | /              | During a call, press the button to send the configured DTMF tone sequence to the remote party.               |
| URL             | /              | Accesses the configured remote URL, such as an XML phonebook address.  |
| MCAST Paging    | /              | After configuring the multicast address and audio codec, press the button to send multicast paging.          |
| Action URL      | /              | Performs basic call operations on the Device using a specific URL.   |
| MCAST Listening | /              | The Device listens to and plays the audio stream from a configured multicast IP address and port.            |

## 13.2 Setting Softkeys

You can configure softkeys via the web interface.

*Procedure*

1. On the Device's home page, select **Function Key > Softkey**.
2. Configure the parameters.
3. Click **Apply**.

Table 13-2 Parameter description of Softkeys setting

| Parameters         | Description   |
|--------------------|---|
| Softkey Mode       | Includes <b>Disabled</b> and <b>More</b> . The default mode is <b>More</b> .  |
| Softkey Exit Style | The position of the softkey, including left and right.  |
| <b>Screen</b>      |   |
| Call Dialer        | Redial/2aB/Delete/Exit/Call Back/Dial/Join/MWI/Local Contacts/Pickup/Call Log/Missed/Clear/In/Dialed/Pause/ Next line/Prevline/Headset/Audio/Video/Remote XML/DSS Key               |
| Conference         | Hold/Split/End/Release/Mute/DSS Key/Headset   |
| Desktop            | Call Log/Menu/Local Contacts/DND/Prev Account/Next Account/Blocked List/Call Back/Call Forward/Locked/Memo/Missed/MWI/Dialed/Reboot/Redial/Remote XML/SMS/Headset/Status/DSS Key/In |
| Divert Dialer      | Redial/2aB/Delete/Exit/Forward/Local Contacts/Call Log/Clear/Missed/Dialed/Headset/Video/Audio/Remote XML/DSS Key   |
| Ending             | Redial/End/Headset/Release/DSS Key  |
| Predictive Dialer  | Dial/2aB/Delete/Exit/Call Back/Local Contacts/Redial/Pickup/MWI/Join/Call Log/Release/Missed/Pause/Dialed/Headset/Video/Audio/Remote XML/DSS Key/In/Next line/Prev line             |
| Ringing            | Answer/Forward/Reject/Mute/Release/Headset/Video/Audio/DSS key  |
| Talking            | Hold/Transfer/Conference/End/Mute/Release/New Call/Local Contacts/Listen/Call Log/Next call/Prev call/Private/Headset/Video/Audio/DSS Key   |
| Transfer Alerting  | End/Transfer/Headset/Release/DSS Key  |
| Transfer Dialer    | Redial/Delete/Exit/2aB/Dial/Local Contacts/Transfer/Call Log/Clear/Missed/Dialed/Pause/Headset/Video/Audio/Remote XML/DSS Key   |
| Trying             | End/Release/Headset/DSS Key   |

|         |  |
|---------|--|
| Waiting | Hold/Transfer/Conference/End/Answer/Forward/Mute/Next call/New call/Prev. call/Reject/Release/Headset/Listen/Video/Audio/DSS Key |
|---------|--|

# Chapter 14 Troubleshooting

When the Device malfunctions or operates abnormally, you can try the following methods to restore normal operation or collect relevant information and send a problem report directly to the technical support email.


## 14.1 Viewing System Status

You can view the Device's current state, network, and account information via the web interface.


On the Device's home page, select **System > Information**.

## 14.2 Restarting the Device

### *Procedure*

- On the Device
  1. On the Device home screen, press the  button, select **Reboot System**, and then press the **OK** button.


The Device displays **Reboot Now?**.
  2. Click **OK**.

You can also press and hold the  button for 10 seconds to restart the Device.
- Via the web interface
  1. On the Device's home page, select **System > Reboot Device**.
  2. Click **Reboot**.
  3. Click **OK**.

## 14.3 Restoring Factory Settings

You can restore the Device to the factory settings on the Device or via the web interface.

- On the Device

On the Device home screen, press the  button, select **Reset to Default**, and then press the **OK** button.
- Via the web interface
  1. On the Device's home page, select **System > Configurations > Reset Device**.
  2. Click **Reset**.
  3. Click **OK**.

## 14.4 Capturing Screenshots

If the Device encounters a problem, capturing a screenshot can help technical personnel locate the relevant function and clearly identify the issue.

### Procedure

1. On the Device's home page, select **System > Tools > Screenshot**.
2. Tap **Save BMP** to save the current screenshot of the Device.

## 14.5 Capturing Network Packets

Packet capture allows you to record network traffic to analyze call setup, registration failures, or other network-related issues.

### Procedure

1. On the Device's home page, select **System > Tools**.
2. Click **Start** under **WLAN Packet Capture**.

The web browser will open a download dialog, prompting you to save the packet capture file locally.

3. Click **Save** to save the offered capture file.
4. Reproduce the issue.

For example: Make a call or register SIP account.

5. Return to the web page and click **Stop**.

The saved file contains all network packets during that period.

## 14.6 Exporting Logs

The Device supports exporting system logs and Wi-Fi logs.

### Procedure

- Export system logs
  1. On the Device's home page, select **System > Tools > Syslog**.
  2. Select  to enable **Syslog**, and then select **Debug** from the **App Log Level** drop-down list.
  3. Select  to enable **Export Log**, and then click **Apply**.
  4. Reproduce the issue, and then click **Export Log**.
- Export Wi-Fi logs
  1. On the Device's home page, select **System > Tools > WLAN Log**.

2. Select  to enable **WLAN Log**, and then click **Apply**.
3. Reproduce the issue, and then click **Export Log**.

## 14.7 Common Issues
















Table 14-1 Parameter description of common issues

| Issue  | Solution   |
|--|--|
| The Device fails to power on                       | <ol style="list-style-type: none"> <li>1. <b>Power Source:</b> Ensure you are using a Fanvil-approved power adapter or a standard-compliant PoE switch. Check all physical connections.</li> <li>2. <b>POST Mode:</b> If the Device boots into POST mode, the system may be corrupted. Contact Fanvil support for recovery.</li> </ol>   |
| The Device fails to register with service provider | <ol style="list-style-type: none"> <li>1. <b>Network Connection:</b> Verify the network cable is properly connected.</li> <li>2. <b>IP Address:</b> Check the Device's system information. If the IP address displays <b>Negotiating...</b>, the Device has no IP. Please review your network settings.</li> <li>3. <b>SIP Configuration:</b> Double-check all SIP account settings, including username, password, and server address.</li> <li>4. <b>Service Provider:</b> If all else seems correct, contact your service provider or see <a href="#">14.5 Capturing Network Packets</a> to collect data for Fanvil support analysis.</li> </ol> |

# Chapter 15 Appendix

## 15.1 Appendix I—Status and Notification Icons

Table 15-1 Icon description of status and notification

| Icon  | Description            |
|---|------------------------|
|    | Auto Answer            |
|    | Call Forwarding        |
|    | DND                    |
|    | Enable Hotspot         |
|    | Missed Call            |
|   | Mute                   |
|  | Enable VLAN            |
|  | Enable VPN             |
|  | IP Conflict            |
|  | Unread SMS             |
|  | Unread Voice Message   |
|  | Wi-Fi Connection Error |
|  | Wi-Fi Connected        |
|  | Network Storm          |
|  | USB Drive              |