



Mini-ESBC User Guide

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Chapter 1 Getting Started

Before using the Mini-ESBC, it is recommended that you familiarize yourself with the device's functions and user interface. Unless otherwise specified in this guide, all adapters operate similarly.

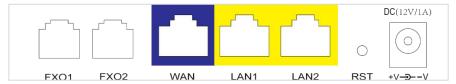
For more information and assistance, please contact your system administrator.

This chapter provides an overview of Mini-ESBC, including the following:

- ♦ Hardware Introduction
- ♦ Indicator Lights
- ♦ Installation

1.1 Hardware Introduction

The main hardware components and interfaces of the Mini-ESBC are shown in the figure below.



The main hardware components of the Mini-ESBC are described below:

No	Туре	Description
01	DC (12V/1A)	Power adapter interface
02	LAN1/LAN2	LAN Port
03	WAN	WAN Port
04	FXO1	PSTN external line port 1
05	FXO2	PSTN external line port 1

1.2 Indicator Lights

The indicator lights on the Mini-ESBC device are explained below:

LED	LED Status	Description
	ON(GREEN)	Powered on
Power	OFF	Powered off
	ON(GREEN)	Connected (Data), running as active WAN
	On Blinking (GREEN)	Connected (Registered)
WAN	OFF	Disconnected/Power off
	ON(GREEN)	Connected (Data)
	On Blinking (GREEN)	Connected (Registered)
LAN	OFF	Disconnected/Power off
	ON(GREEN)	Connected (Registered)
	On Blinking (GREEN)	Connected (Data)
	OFF	Disconnected/Register fail
EVO.	ON(GREEN)	Connected (Registered)
FXO	On Blinking (GREEN)	Connected (Data)
	OFF	Disconnected/Register fail
	ON(GREEN)	Powered on

1.3 Installation Steps

Before configuring your device, you must connect it correctly.

1.3.1 Powering On the Device

- a) Connect the 12V1A power adapter to the device's DC port and wait 2 minutes for the Mini-ESBC device to boot up.
- b) Connect the phone to an Ethernet cable and power it on, ensuring it joins the same local area network as the Mini-ESBC.

TIPS: Whenever possible, power on the Mini-ESBC first to allow it to boot up before connecting and powering on the phone. Logging into the Mini-ESBC web interface at this point will enable it to gradually detect and scan the phone devices.

1.3.2 Device Deploymen Diagram Example



1.3.3 Logging in to the Device Web Interface

- Connect your computer to the LAN port of the device using an RJ45 Ethernet cable.
 Once connected, your computer will obtain an IP address in the range of 192.168.1.X
- Open a web browser and enter the device IP address 192.168.1.1 to access the login page. Enter the username/password (admin/admin) to log in to the device's web interface.

TIPS: If 192.168.1.1 is not accessible, try 192.168.2.1 instead.

3. You can go to the Simple Mode-> Basic to view and record the device's IPv4 address.

1.3.4 Connecting Device to PSTN

- Connect the carrier's PSTN cable to the device's FXO1 or FXO2 port. Two PSTN lines
 can be connected simultaneously.
- After connection is complete, the device's FXO1/FXO2 indicator light will display a steady green light.

Chapter 2 Feature usage

2.1 Web Login

The device provides a web-based interface for configuration and management.

When the device's WAN port is connected via an RJ45 Ethernet cable, it will obtain a WAN IP address automatically.

For the first login, you may need to connect your computer to the LAN port of the device. For more details, please refer to LAN Port Login.

2.1.1 LAN Port Login

- 1. Connect the LAN port of the Mini-ESBC to the Ethernet port of your computer.
- 2. Open a web browser and enter 192.168.1.1 (Static IP login mode) in the address bar to access the web interface. The default username and password are admin/admin.



2.1.2 WAN Port Login

- 1. Connect the LAN port of the Mini-ESBC to the Ethernet port of your computer.
- 2. Open a web browser and enter 192.168.1.1 (Static IP login mode) in the address bar to access the web interface.

The default username and password are admin/admin.

2.2 Device Access Management

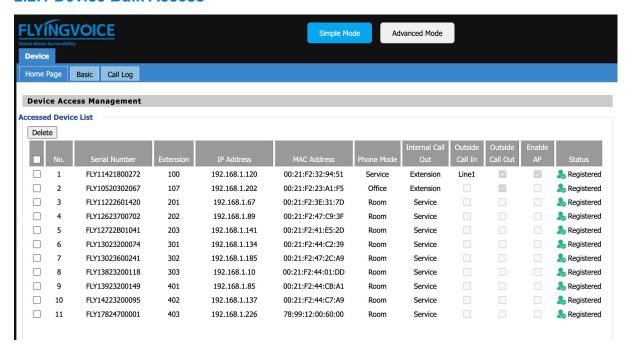
Mini-ESBC supports detection of IP phones within the local network.

IP phones detected for the first time will appear in the Unregistered Device Management list. The user needs to complete the following:

- Assign an extension number
- Set the phone mode (Room / Office / Service Desk)
- Select internal call permissions
- Select external call permissions

After completing the access authorization, the device will appear in the Registered Device Management list.

2.2.1 Device Bulk Access



Туре	Description
Extension	Custom extension number. Up to 5 digits.
Number	Example: 100, 201, 301, 8601, etc.
Phone Mode	Supports Room / Office / Service modes. Each mode corresponds to
	different internal and external call permissions. Default is Room mode.
	Room Mode: Can only call the Service Desk; external calls are disabled.
	Office Mode: Can call all extensions; external calls are disabled by default
	but can enable outbound external calls.
	Service Mode: Can call all extensions; must bind to Line 1 or Line 2;
	outbound external calls can be enabled. Only 2 phones supported in this
	mode.

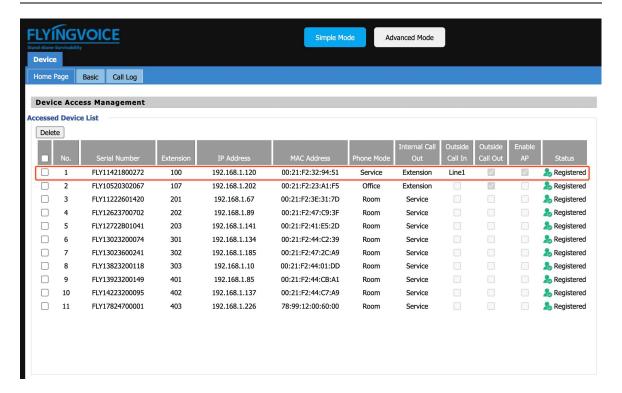
IP Address	Displays the phone's IP address; can be used to access the phone's web interface.
MAC Address	The physical address of the device.
Internal Call Permission	Internal call permissions: Service Only or All Extensions. Service: Can only call phones in Service Desk mode. All: Can call all internal extensions.
External Call In	External call-in permission. Disabled: External calls cannot reach the PSTN line. Enabled: External calls can reach the PSTN line.
External Call Out	External call-out permission. Disabled: PSTN line cannot be used for outbound calls. Enabled: PSTN line can be used for outbound calls.

2.2.2 Auto-Configure SpeedDial Key

Extension Menu Display After Device Access AuthorizationAfter successfully deploying guest room mode extensions, the LCD soft keys on guest room phones will change to Menu, Call Log, Do Not Disturb, and Front Desk.TIPS: Pressing the [Service] key will directly dial the service desk extension 1. When the extension is deleted, the default menu key settings will be restored.

2.2.3 Accessed Device List

After the device completes authorized access, it will appear in the Accessed Devices list. In addition to viewing device information, phone mode, and internal/external call authority, you can also check the current extension's registration status. You may also access the device by entering the IP address.



Deleting Connected Extensions via Web Interface

- 1. Navigate to Devices -> Home -> Accessed Device List.
- 2. Select (or select all) the extension you want to delete. After deletion, the registration information on the extensions will be cleared.

Category	Description	Remarks
Registration	Current extension's registration status: registered or registration	
Status	failed.	
AP Mode	Indicates whether the current Wi-Fi phone has AP mode	
Ar wode	(wireless hotspot) enabled.	

2.3 Voice Prompt on No-Answer

Mini-ESBC supports a simplified template for unanswered external lines. When an incoming call on the FXO line goes unanswered, a voice response template (custom number) will be triggered after exceeding the preset time.



2.4 Enable the AP Mode on Phone

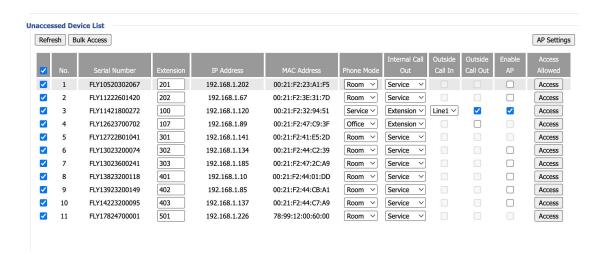
Mini-ESBC supports batch activation of AP mode (wireless hotspot) for Feiyin Wi-Fi handsets, enabling them to function as routers. Customizable Wi-Fi names and passwords can be configured, suitable for office environments, hotel rooms, and similar scenarios.

Enable hotspot via Web Interface

- 1. Access the web interface and select the Wi-Fi phone requiring hotspot (AP) activation
- 2. Choose the extension for which you wish to enable the hotspot and click to check the "Enable AP Mode" option
- 3. Enter the wireless name and wireless password (min 8 characters), then click Save. If no password is required, uncheck the box.

Example: Flyingvoice-Extension Number (The wireless name is determined by the entered extension number, e.g., Flyingvoice-8101)

3. Click "Access" or "Bulk Access." The small switch will batch-distribute the extension information and hotspot activation configuration. Wait for the phone to restart to complete hotspot activation.



TIPS: If a WiFi phone with hotspot (AP mode) enabled needs to be turned off, you must either remove the device from the Mini-ESBC access management page or restore the phone to factory settings.

2.5 Call Log

Supports viewing call logs for internal and external extensions, and supports viewing the external lines used for incoming and outgoing calls on the telephone.

View call logs via the web

- 1. Access the web Simple Mode Call Log
- 2. View device incoming/outgoing calls, call start/end times, and status.

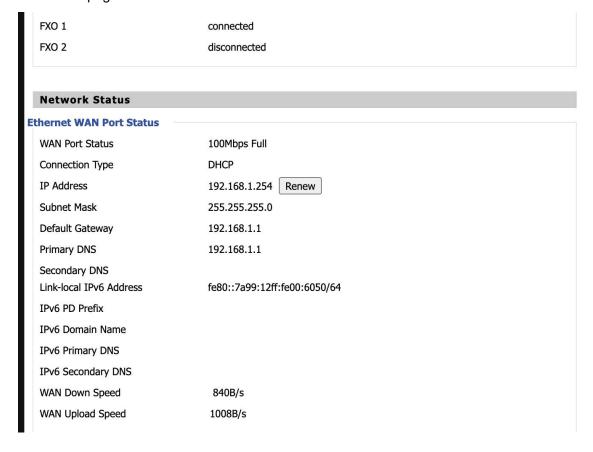
2.6 System Information

This page displays device, network, and system status information, including product details, SIP account status, FXS port status, and network status.

Viewing System Information via the Web Interface

- 1. Access the web interface, click Simple Mode -> Status -> System Information
- 2. Review current device details, external FXO line status, and network information.

The status page is shown as follows:



Chapter 3 Advanced Setting

3.1 Basic Network Setting

3.1.1 WAN

This page allows you to set WAN configuration with different modes. Use the Connection Type drop down list to choose one WAN mode and then the corresponding page will be displayed. **Static IP**

This configuration may be utilized when a user receives a fixed public IP address or a public subnet, namely multiple public IP addresses from the Internet providers. In most cases, a Cable service. provider will offer a fixed public IP, while a DSL service provider will offer a public subnet. If you have a public subnet, you can assign an IP address to the WAN interface.



Configuring a Static IP Address via the Web Interface

- 1. Access the web interface, then navigate to **Advanced Mode -> Network -> WAN**.
- 2. Select Static as the INTERNET access method.
- 3. Enter the static IP address you wish to configure, along with the subnet mask, default gateway, and other relevant information.

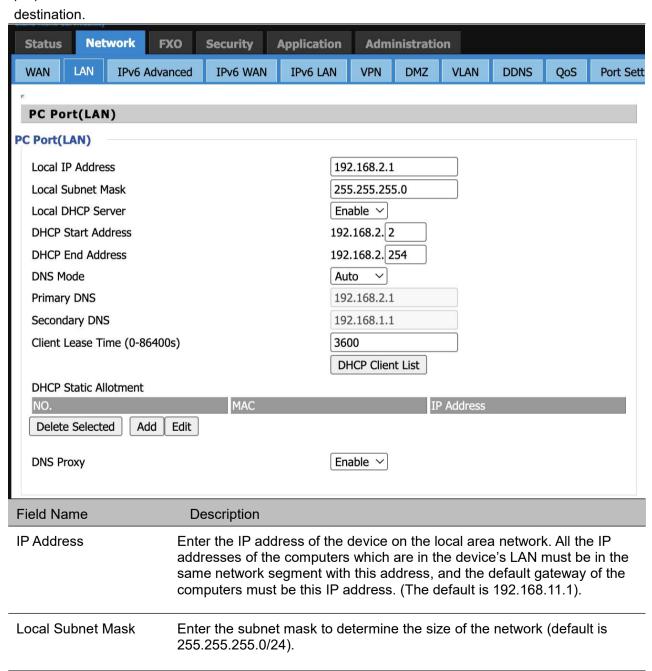
Field Name	Description
WAN IP Mode	DHCP/Static/PPPoE
MAC Address Clone	Enable MAC address cloning to use another device's MAC address
LAN Connection Mode	NAT/Bridge
IPAddress	The IP address of Internet port
Subnet Mask	The subnet mask of Internet port

Default Gateway	The default gateway of Internet port
DNS Mode	Select DNS mode, options are Auto and Manual: 1. When DNS mode is Auto, the device under LAN port will automatically obtain the preferred DNS and alternate DNS 2. When DNS mode is Manual, the user manually configures the preferred DNS and alternate DNS information
Primary DNS Address	The primary DNS of Internet port
Secondary DNS Address	The secondary DNS of Internet port

3.1.2 LAN

LAN Port

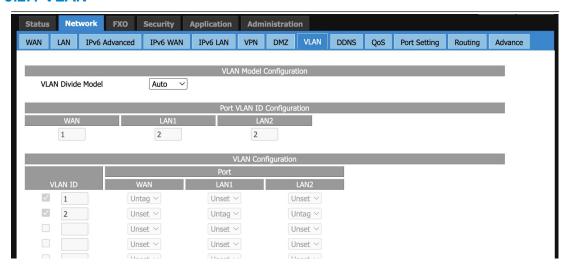
NAT translates the packets from public IP address to local IP address to forward packets to the proper



Local DHCP Server	Enable/Disable Local DHCP Server.
DHCP Start Address	Enter a valid IP address as a starting IP address of the DHCP server, and if the device's LAN IP address is 192.168.11.1, starting IP address can be 192.168.11.2 or greater, but should be less than the ending IP address.
DHCP End Address	Enter a valid IP address as an end IP address of the DHCP server.
DNS Mode	Select DNS mode, options are Auto and Manual:
	When DNS mode is Auto, the device under LAN port will automatically obtains the preferred DNS and alternate DNS.
	When DNS mode is Manual, the user should manually configure the preferred DNS and alternate DNS.
Primary DNS	Enter the preferred DNS address.
Secondary DNS	Enter the secondary DNS address.
Client Lease Time	This option defines how long the address will be assigned to the computer within the network. In that period, the server does not assign the IP address to the other computer.
DNS Proxy	Enable or disable; If enabled, the device will forward the DNS request of LAN-side network to the WAN-side network.

3.2 Advanced Network Setting

3.2.1 VLAN



Field Name	Description
VLAN Divide Model	Select the desired mode from the dropdown list: Auto/Custom
VLAN Configuration	Select the desired configuration from the dropdown list:

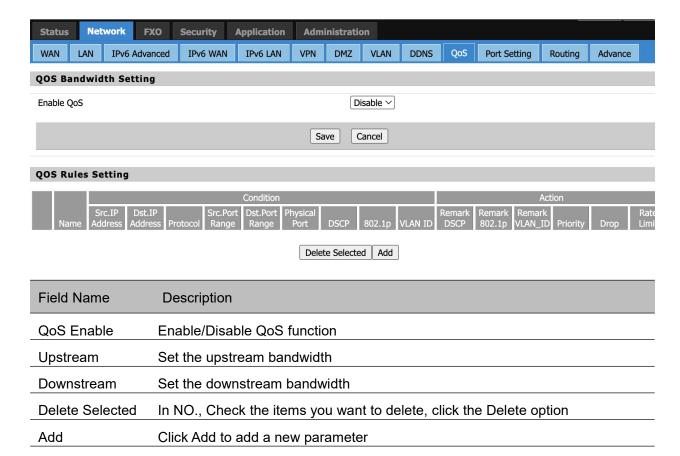
3.2.2 DDNS



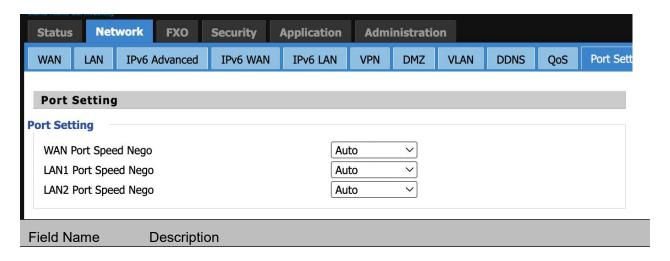
Field Name	Description
Dynamic DNS	Enable DDNS and select the DDNS service provider
Account	Fill in the DDNS service account
Password	Fill in the DDNS service account password

DDNS URL	Fill in the DDNS domain name or IP address
Status	Check if DDNS is successfully upgraded

3.2.3 QoS



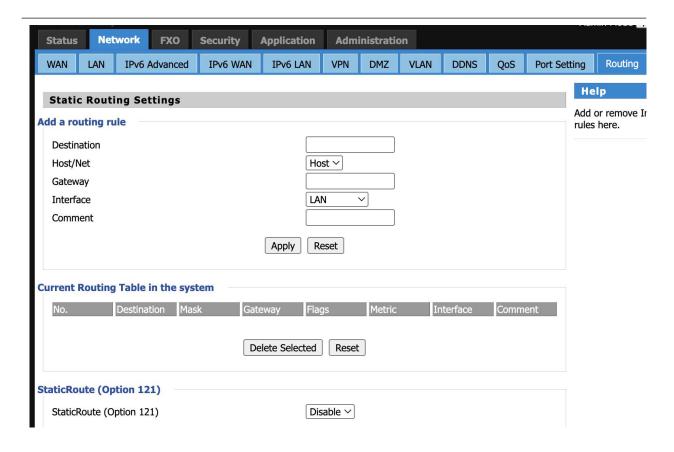
3.2.4 Port Setting



WAN Port speed Auto-negotiation, options are Auto, 100M full, 100M half-duplex, 10M half and full. Nego

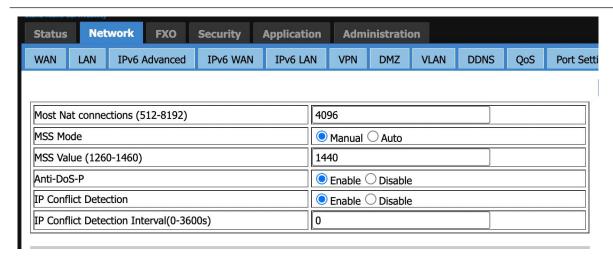
LAN1~LAN2 Port Auto-negotiation, options are Auto, 100M full, 100M half, 10M half and 10M full. Speed Nego

3.2.5 Routing



Field Name	Description
Destination	Destination address
Host/Net	Both Host and Net selection
Gateway	Gateway IP address
Interface	LAN/WAN/Custom three options, and add the corresponding address
Comment	Comment

3.2.6 Advanced



Field Name	Description
Most Nat connections	The largest value
MSS Mode	Choose MSS Mode from Manual and Auto
MSS Value	Set the value of TCP
Anti-Dos-P	You can choose to enable or prohibit
IP conflict detection	Select enable if enabled, phone IP conflict will have tips or prohibit
IP conflict Detecting Interval	Detect IP address conflicts of the time interval

Chapter 4 Management

4.1 Upgrade firmware

You can upgrade your device to a newer firmware version.

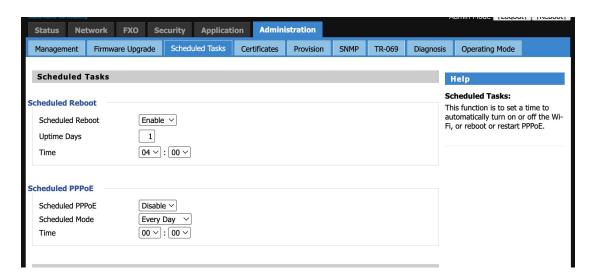


Upgrade firmware via the Web Interface

- 1. Access the web interface and select Advanced Mode.
- 2. Navigate to Management -> Firmware Upgrade. Select the firmware file and click Upgrade.

4.2 Scheduled Task

You can set the device's scheduled reboot time or PPPoE.



Field Name	Description	
Scheduled Reboot		
Scheduled Reboot	Enable / disable scheduled reboot	
Scheduled Mode	Choose work mode every day / week	
Time	Set the time for scheduled reboot	

Scheduled PPPoE			
Scheduled PPPoE	Enable / disable restart PPPoE		
Scheduled Mode	Choose work mode every day / week		
Time	Set the time for scheduled PPPoE		

4.3 Factory Default

You can factory reset the device via the web interface or by pressing the Reset button on the device for 5 seconds.

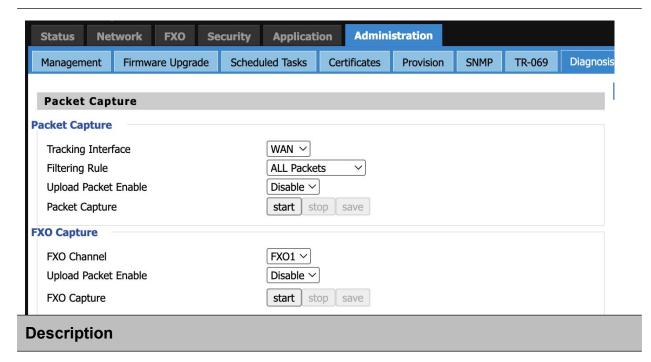


Factory Reset via Web Interface

- 1. Access the web interface -> Advanced Mode -> Management -> Factory Default
- 2. Select Factory Reset and wait for the device to reboot after the reset completes.

4.4 Diagnose

In this page, user can do packet trace, ping test and traceroute test to diagnose the device's connection status.

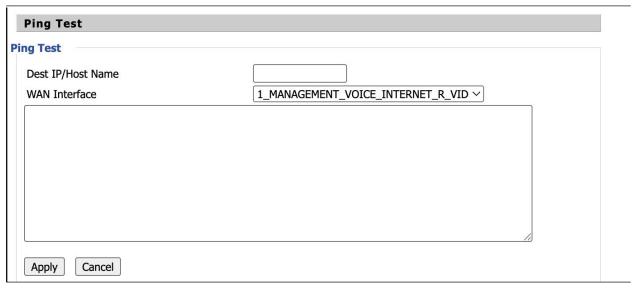


1. Packet Trace

Users can use the packet trace feature to intercept packets which traverse the device. Click the Start button to start home gateway tracking and keep refreshing the page until the message trace shows to stop, click the Save button to save captured packets.

2. Ping Test

Enter the destination IP or host name, and then click Apply, device will perform ping test.



3. Traceroute Test

Enter the destination IP or host name, and then click Apply, device will perform traceroute test.

