VM-3X08-SW(S)

VM-3208-SW(S) / VM-3108-SW(S)

User Guide

v1.0

For single Ethernet models

1. Overview

This phone is a full-feature telephone that provides voice communication. Read this user guide carefully to learn how to operate this product and take advantage of its features.

Package Contents

When unpacking the phone, ensure all the following items are present and undamaged. If anything appears to be missing or broken, contact your dealer for a replacement.

1. **VM-3108-SW(S) or VX-3208-SW(S) Wi-Fi phone**
2. **Handset**
3. **Stand**
4. **AC/DC Adaptor**
5. **User Guide (This document)**

2. Product Description

The following contains important information to help you familiarize with the functions of the VoIP phone.

Front View
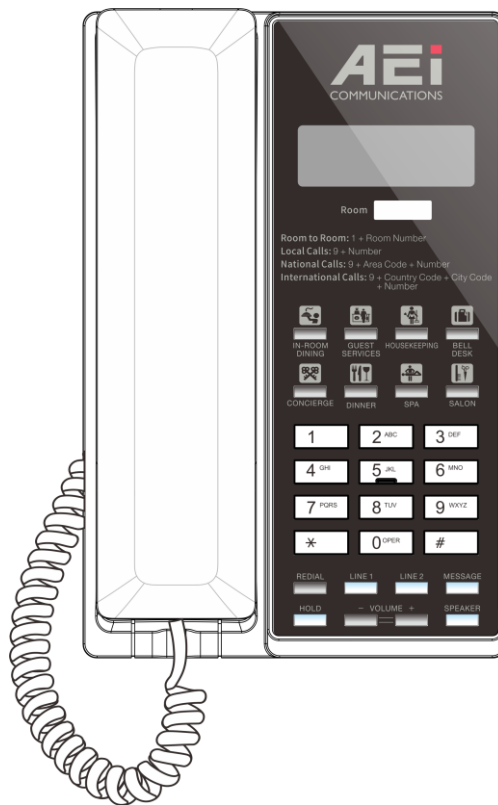
Name	Description
Display screen	To display calls and status information.
Programmable Service keys	Press to call preset service
Alphanumerical keys	Press these keys to enter phone numbers and texts.
Function keys	
LINE 1 / LINE 2 (2 line only)	To indicate a line been used as the following status: - Idle: No LED indication. - Pre-dialing a call: Green LED. - In call: Red LED.
HOLD (2 line only)	Press to put an active call on hold.
MUTE (single line only)	Press to mute MIC.

| Name	Description
Redial	Press to call the last number dialed.
Speaker	Press to activate the speakerphone for hands free conversations.
Volume up/down	Press to increase or decrease the volume of the ringer tone or speakerphone.
Message	Press to retrieve voice messages.
Message LED status	
Fast flash	The phone cannot connect to Wi-Fi network
On (solid)	The phone obtains its IP address, but it cannot be registered to SIP server.
Off	The phone is registered to SIP server successfully
Slow flash	There are one or more voice messages

Back View
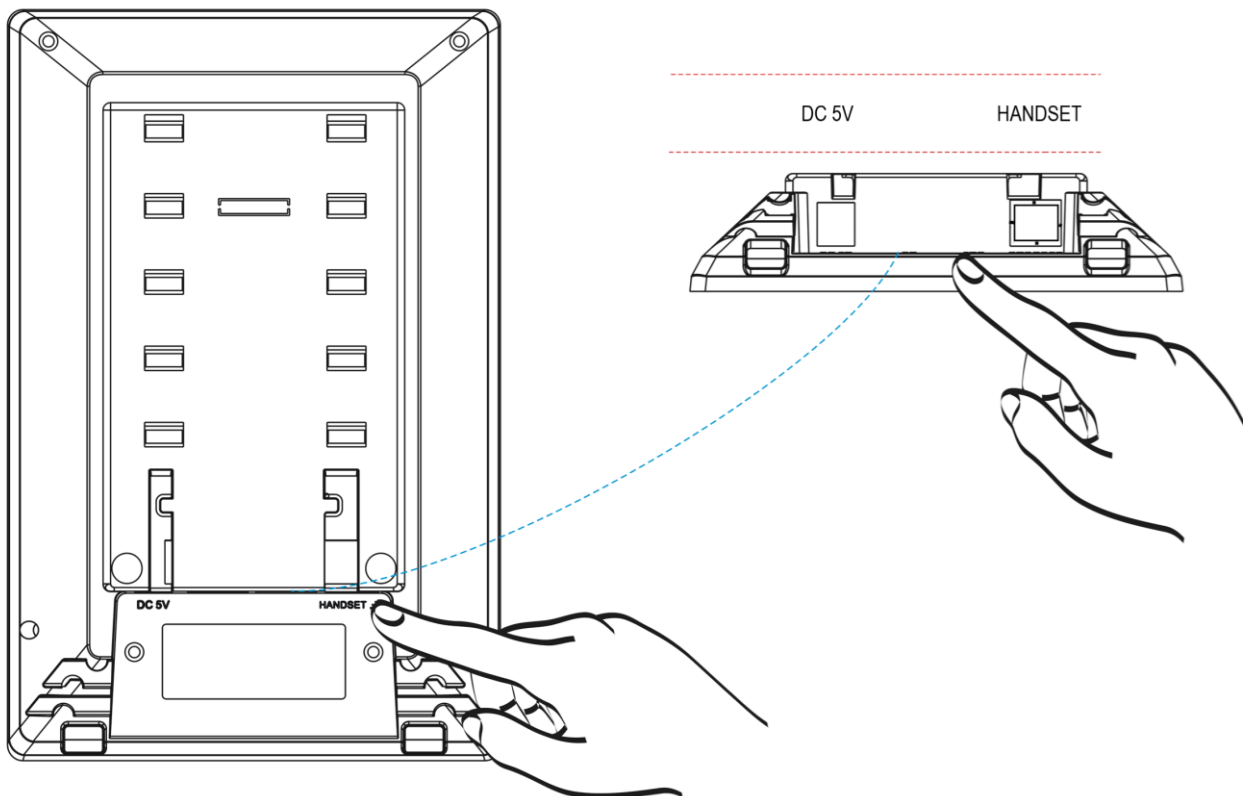
NO.	Name	Description
1	DC 5V Power jack	Connects to AC power adapter.
2	Handset jack	Connects to handset.

Connect the Phone

The following illustration shows how to connect the power and LAN ports of VoIP phone.

The following illustration shows how to install the phone and stand.

Stand
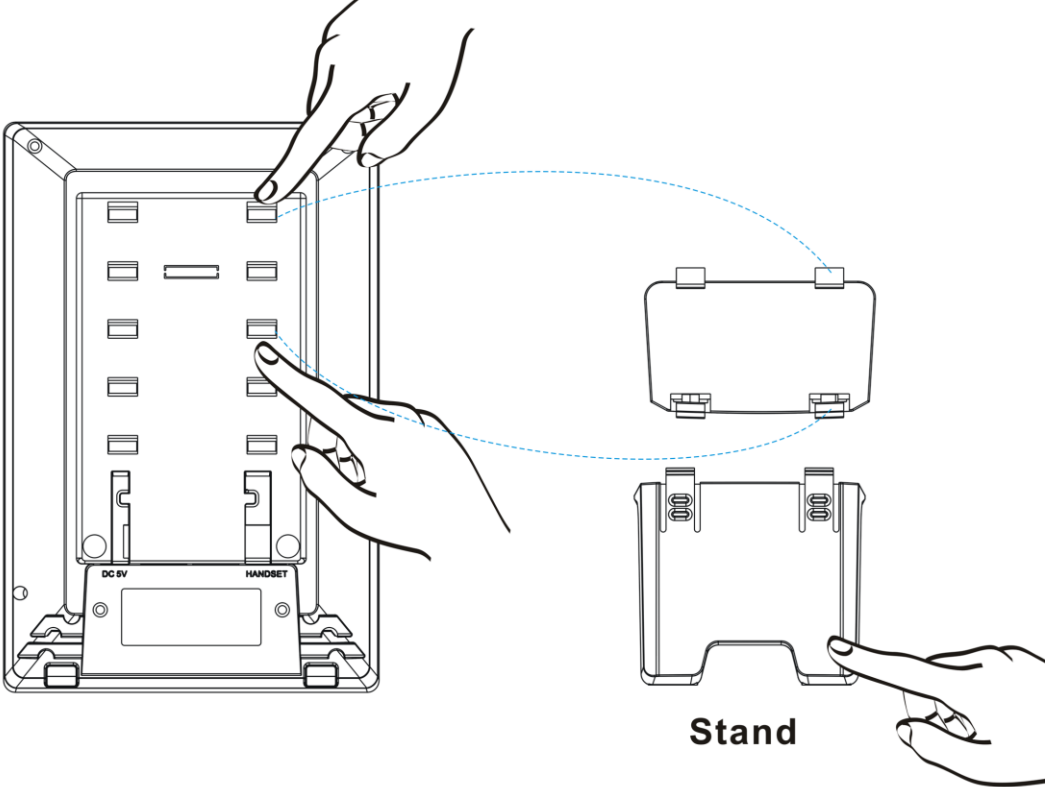
3. Web Configurations

AP Mode and wireless configurations

AP Mode:

The phone can be set as AP mode for wireless configuration.

- Press "Hold/Mute*300*101#" to enable AP mode (phone keyboard is disabled during AP mode).
- AP Mode SSID: AEI_xxxxx. "xxxxx" is part of the phone MAC address.
- AP Password: the AP mode password is 87654321.
- Web configuration address: http://192.168.4.1:8000 , login Username: admin, password: 1234
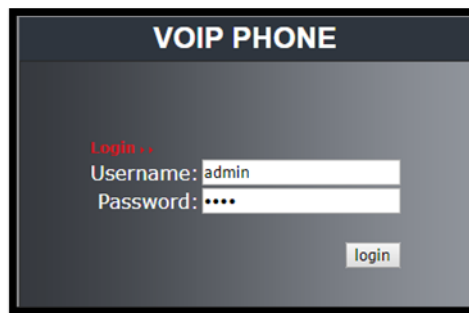
Phone Settings

Speed Dial

Configuring the speed dial keys

Mkey:

The number of the speed dial

Number:

Dialing string after pressing the key; 1, 2, 3, 4 … 9, 10, * and #

Display:

The name of the speed dial

Domain:

The domain of the SIP account; default to the first SIP account

Account:

The SIP account for dialing through; default to the first SIP account

Delete:

Check the speed dial(s) and then click "Submit" to delete.

Dial Plan

The phone sends the dialed string once it matches one of the pre-configured dial plans.

Dialing Timeout: (Default, 6)

The phone sends the dialed string after dialing timeout if no further input. Ranging from 1 ~ 10.

Sharp Dial: (Default, Enable)

Press # at the end of a dialed string will send the call if this is enabled. (the # will not be included in the dialed string) If this is disable, a dialed string will only be sent if it matches a dial plan.
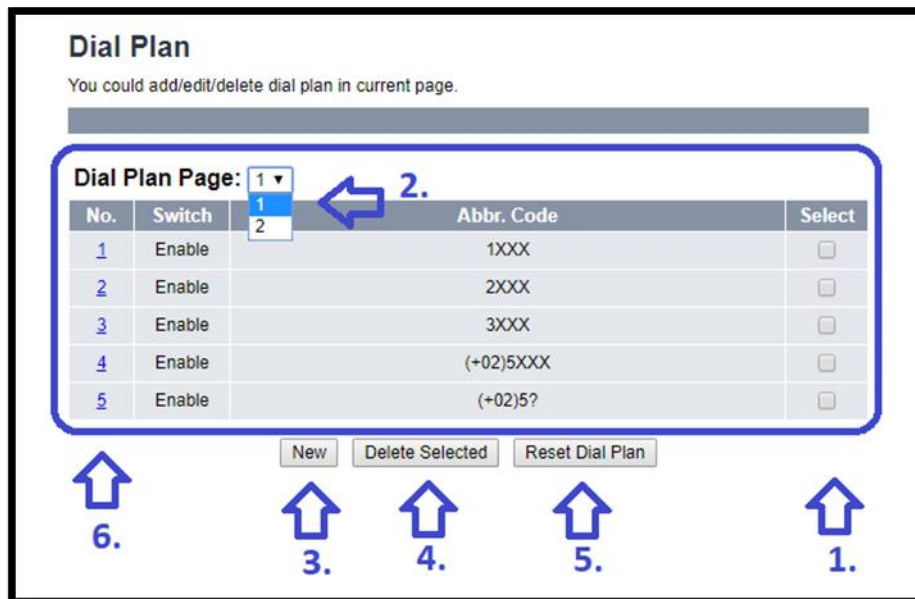
1. By checking the box to select the records for deleting
2. Dial plan page, each page is set to 5 records
3. To New a Dial plan

3.1 To enable or disable the dial plan. (Default, Enable)

3.2 To fill in the dialing syntax. (Please refer to Dial Plan Syntax below)

4. Click "Delete Selected" will delete all selected records.
5. Click "Reset Dial Plan" to delete all dial plan records.
6. By select "No." to edit a dial plan. (Refer to 3.1 and 3.2)

Syntax	Description
X	**Defines a digit length.** **Ex., (+02)5xxx, add 02 as a prefix if the dialing string starts with 5 and is followed by 3 digits.**
?	**Matches any number of digits.** **Ex., (+02)5?, add 02 as prefix if dialed string starts with 5 and is followed by any number of digits.**
(-)	**Removes a prefix or postfix.** **Ex., 1234(-34), removes two digits of the postfix if the dialing string is 1234.**
(+)	**Adds a prefix or postfix. Ex., (+02)1234, adds 02 as a prefix if the dialing string is 1234.**
Y	**Define the dialed digit matches 0 or 1** **Ex., 1Yxx, if the second digit is 1 or 0 and total 4 digits. An example match is 1034 or 1145**
N	**Define the dialed digit matches between of 2 and 9.** **Ex., 9Nxxxxxx, if the first digit starts between 2 and 9 then followed by 6 digits.** **An example match is 92123456, 93123456, 94123456….or 99123456.**
,	**The phone play second dial tone if "," is used after a digit. For, example, "9, "**

PS: Abbr. Code can't be only syntax; it must be with at least 1 digit. For example, Yxx, NYYx or Nxxx is applicable.

System Settings

Auto Config

Auto Configuration: (Default, Enable)

Enable or disable auto provisioning.

DHCP OPTION 66: (Default, Enable)

After enable this feature, the phone acquires the tftp server IP address from DHCP OPTION 66. If it is disable and "Auto Configuration" is enabled, the phone will try to download its configuration file from the server in the "Server" field.

Server:

The IP address information of the server, for example, tftp://192.168.1.54. The phone only looks for its cfg file if "DHCP OPTION 66" is disable. The server can be tftp, ftp or http server. For example, tftp://IP.address.of.tftp, ftp://IP.address.of.ftp or http://IP.address.of.http

UserName:

Username for logining into the ftp or the http server

Password:

Password for logining into the ftp or the http server

Interval:

Auto provisioning period (seconds); "0" is disable auto provisioning periodically.

** By default, a phone looks for MAC.cfg from the server, for example, 000e43d01234.cfg. It only downloads ext#.cfg once it was manually programmed by pressing *357*room-number# feature code.

Firmware Upgrade

Force Upgrade: (Default, Disable)

Enable to force the phone to upgrade via the Server IP address manually.

Auto Upgrade: (Default, Enable)

Enable to auto upgrade after booting up once if "Interval" is 0. If "Interval" isn't 0, then it checks periodically and auto upgrade if a new firmware is found.

Server IP:

The IP address information of the server for downloading the firmware. It can be tftp://IP.address.of.tftp, ftp://IP.address.of.ftp or http://IP.address.of.http

Server File Path:

The file name of the firmware in the root folder of the server

Server Username:

Username for logining into the ftp or the http server

Server Password:

Password for logining into the ftp or the http server

Interval:

Auto upgrade period (seconds); It means how long the phone goes check the firmware on the server. If the firmware is different from the current one, the phone will then reboot for updating.

Backup & Recover

Backup & Recover

You could Backup and Restore system Configuration here.

Backup System Configuration

Configuration File: Please click Backup icon to create backup configuration file

Backup

Recover System Configuration

File Location: Choose File | No file chosen
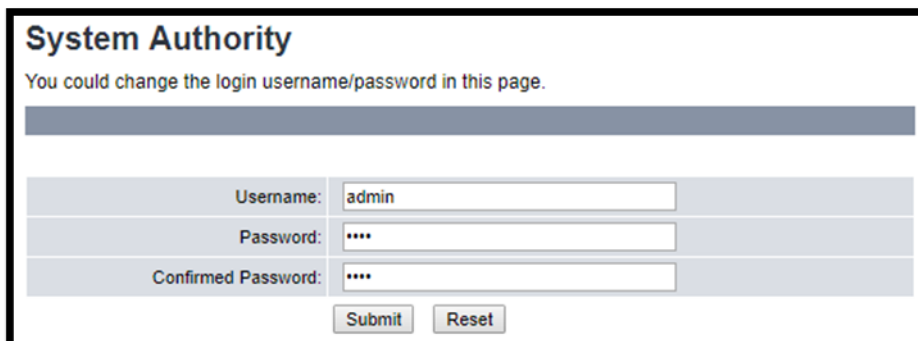
Submit | Reset

Backup System Configuration:

Click the "Backup" button to back up the settings of the phone, the file is created with prefix "Back" followed by the creating date. The extension is sbak, for example, Back_2018_1_11.sbak. It can be edited by a text editor, such as wordpad.

Recover System Configuration:

Click the "Choose File" to select a preconfigured back up file and then submit to load the configuration file.

System Auth.

System Authority

You could change the login username/password in this page.

Username: admin

Password: ••••

Confirmed Password: ••••

Submit | Reset

Username:

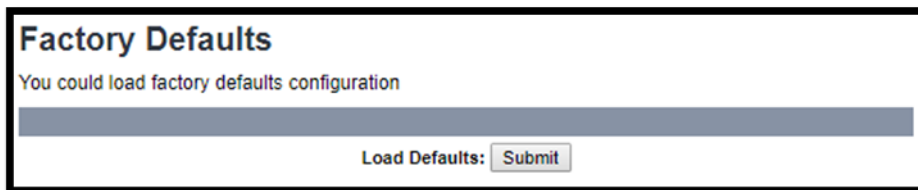Change the Username of the web configuration login.

Password:

Change the Password of the web configuration login.

Confirmed Password:

Confirm the Password of the web configuration login.

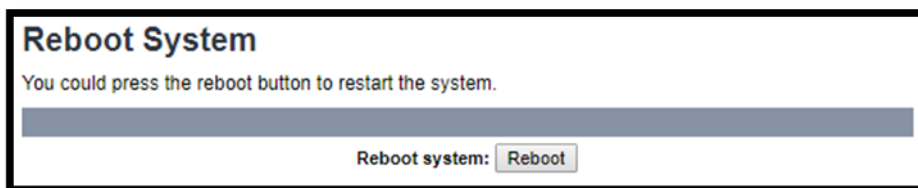Once it is done, press Submit to change or reset to start over.

Factory Defaults

Factory Defaults
You could load factory defaults configuration

Load Defaults: Submit

Click "Submit" to reset all settings back to factory default.

Reboot
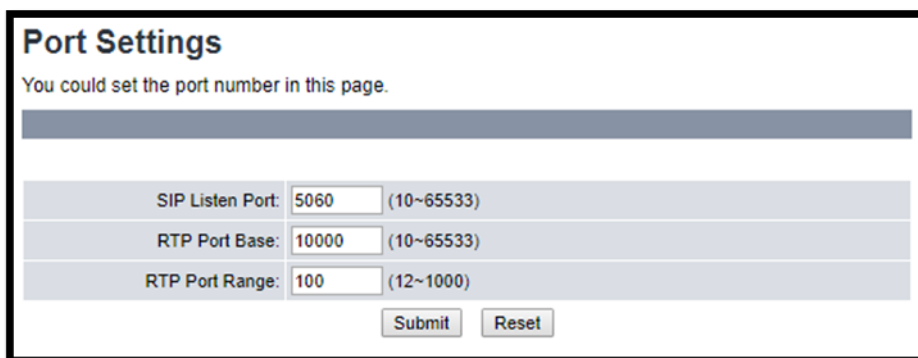
Reboot System
You could press the reboot button to restart the system.

Reboot system: Reboot

Click "Reboot" to restart the phone.

Global SIP Settings

Port Settings

Port Settings
You could set the port number in this page.

SIP Listen Port: 5060 (10~65533)
RTP Port Base: 10000 (10~65533)
RTP Port Range: 100 (12~1000)

Submit   Reset

SIP Listen Port: (Default, 5060)

SIP Local port, ranging from 10 ~ 65533

RTP Port Base: (Default, 10000)

The port of RTP starts, ranging from 10 ~ 65533

RTP Port Range: (Default, 100)

RTP port range, ranging from 12 ~ 1000

Codec Settings

Codec Priority:

There are 4 codecs in the drop box, please select one for each priority.

RTP Packet Length:

Frame size for each code.

G711 ranges from 20ms, 30ms, 40ms and 50ms

G723 ranges from 30ms, 60ms, 90ms, 120ms, 150ms and 180ms

G729 ranges from 20ms, 30ms, 40ms, 50ms, 60ms, 70ms and 80ms

Other Settings

Signaling Precedence (Tos): (Default, 0 Routing)

Selection from 0 (Routing), 1 (Priority), 2 (Immediate), 3 (Flash), 4 (Flash Override) and 5 (CRITIC/ECP)

Voice Precedence (Tos): Default, 0 Routing)

Selection from 0 (Routing), 1 (Priority), 2 (Immediate), 3 (Flash), 4 (Flash Override) and 5 (CRITIC/ECP)

RFC2833 Payload Type: (Default, 101)

DTMF RFC2833 Payload Type, ranging from 96 ~ 127

Hotel Name:

The name shows on the first line of the display if input, if not it shows Date and Time.

DECT Number:

This number will be showed on the DECT handset.

Room Number:

The key of Room Keeper feature that the phones will look for each other by using the same room number.

SIP Mode: (Default, Master)

This is for Room Keeper feature with three selections. Master is the room keeper; Slave and Suite are the IP end points that will register to the room keeper. For standard alone IP SIP phone, select "Master" **[VX-8x08-SMBU(S)/VM-9x08-SM(S)/VM-8x08-SMK(S)]**; for Roomkeeper/Suitekeeper client, select "Suite" **[VX-8x08-SMBU(S)/VM-9x08-SM(S)/VM-8x08-SMK(S)]**; for Roomkeeper, select "Master" [**VM-9x08-SMG(S)**].

Log Server: (Default, blank is disable)

Please fill in the IP address of the **AEi IMM** Server. The phone then reports status back to IMM, such as firmware version, IP address of the phone, cordless handset status and etc. Also it accepts commands from it, such as firmware updating, restart, reset to factory default and etc.

Replace Sharp: (Default, Enable)

The "#" in the sending string will be sent as %23% if this is Enable.

The "#" in the sending string will be send as # if this is Disable

MWI To Tag: (Default, Disable)

This is for Broadworks compatibility. Set to Enable while interoperating with Broadworks.

Caller ID: (Default, Disable)

To display caller ID on the display, select Enable; otherwise select Disable.

Register P-Asserted-Identity: (Default, Disable)

Enable to support P-Asserted-Identity in SIP registration.

Session Timer: (Default, 0 is disable)

To enable session timer, input the value in seconds ranging from 1 ~ 9999. The minimum session is 120 seconds; any number less than 120 will be set to 120.

Hot Line: (Default, blank is disable)

Input an extension number to enable hot line feature. This feature is also known as Ring Down.

Debug Mode: (Default, blank is disable)

Input the IP address of a log server (UDP; port: 514) to send the log of the phone system.

SIP Accounts

The maximum SIP accounts of the phone are up to 2.

To add a new SIP account, click "Add".

To delete a SIP account, check the "Select" box and then click "Delete"

Check the server IP or account credential if the "Status" shows "registering" or "register fail"

SIP Accounts

You could set information of service domians in this page.

SIP Accounts

Display Name	Registration Server	Status	Registration	Select
71001	gtek.com.tw	registering	Enable	☐
				☐
				☐

Add   Delete

SIP Accounts

You could set information of service domians in this page.

SIP Accounts

Display Name	Registration Server	Status	Registration	Select
71001	gtek.com.tw	register fail	Enable	☐
				☐
				☐

Add   Delete

SIP Account Settings

You could set information of service domians in this

SIP Account 1

Active:	◉ Enable ◯ Disable
Registration ID:	71001
Display Name:	71001
Authentication Name:	71001
Password:	••••••
Registration Server:	gtek.com.tw
Proxy Server:	172.8.12.11
Proxy Address:	172.8.12.11
Voice Mail:	1299
Expire Time:	300 ▼
DTMF Type:	RFC2833 ▼
Send KeepAlive:	Disable ▼
Send KeepAlive Type:	Dummy ▼
Send KeepAlive Interval:	60 ▼
MWI:	Enable ▼
Mode:	Multi ▼
DNSSRV:	Disable ▼
Status:	registered

Submit   Cancel

Active:

Check "Enable" to enable sending SIP registration or "Disable" to disable the SIP account temporarily.

Registration ID:

Registration ID is also known as user ID or extension number.

Display Name:

Display Name is for showing the name of the phone or the location of the phone on the remote party.

Authentication Name:

Authentication Name is for SIP authentication.

Password:

Password of the SIP account

Registration Server:

FQDN, SIP domain name or IP address of the SIP server

If the listening port of the SIP Server is different from 5060, please add the port to at end, for example, aeicommunications.com:5070 or 172.8.12.11:5061

Proxy Server:

Domain name or IP address of the SIP Proxy Server

If the listening port of the SIP Server is different from 5060, please add the port to at end, for example, aeicommunications.com:5070 or 172.8.12.11:5061

Proxy Address:

Outbound proxy address

Voice Mail:

Voice mail number of the hard key

Expire Time: (Default, 60)

SIP registration expire time (seconds); select from 60, 120, 300, 600, 1200, 1800, 3600 and 7200

DTMF Type: (Default, RFC 2833)

DTMF for transmitting digits, * and #; select from RFC2833, SIP Info and In Band

Send KeepAlive: (Default, Disable)

Send keep alive package to keep the SIP registration from being blocked

Send KeepAlive Type: (Default, Dummy)

Dummy; to send a dummy UDP package through port 5060

Options; to send SIP options

Send KeepAlive Interval: (Default, 60)

How long the phone sends the keep alive message (seconds); select from 10, 20, 30, 40, 50, 60, 90, 120, 240 and 480.

MWI: (Default, Disable)

Enable to subscribe message waiting information.

Mode: (Default, Multi)

Multi; allow send/receive multiple calls through the SIP account

Single; allow only one send/receive call through the SIP account

DNSSRV: (Default, Disable)

Enable DNSSRV query

Status:

The status of the SIP registration; registered, registering or register fail

**AEi SIP resilience feature, also known as SIP registration failed over feature. With the setting shown in the follow picture, it supports up to three SIP servers. Add ";" in-between two servers and also at the end.

Network

Status

Show the network status of the phone

Type: Current IP type; **DHCP Client** or **Static IP**

IP Address: Current IP address of the phone

Netmask: Current Netmask of the phone

Gateway: Current Gateway of the phone

Primary DNS: Current Primary DNS IP address

Secondary DNS: Current Secondary DNS IP address

LAN Port Settings

LAN Port Setting

IP Type: (Default, DHCP Client)

Select "Static IP" and configure the following fields from IP address to Secondary DNS.

IP address: The IP address of the phone

Netmask: The Netmask of the phone

Gateway: The gateway of the phone

Primary DNS: The primary DNS IP address

Secondary DNS: The secondary DNS IP address

Mac Address: The MAC address of the phone

LAN Port Setting	
IP Type:	○ Static IP ● DHCP Client
IP Address:	192.168.1.188
Netmask:	255.255.255.0
Gateway:	192.168.1.4
Primary DNS:	192.168.1.100
Secondary DNS:	
Mac Address:	00:0e:43:d1:6d:2a

802.1X Setting

EAP Method: (Default, Disable) The EAP method; PEAP or TLS

Username: The username of the method

Password: The password of the method

Confirm Password: Confirm the password of the method

802.1X Setting	
EAP Method:	Disable ▼
Username:	
Password:	
Confirm Password:	

VLAN Setting

Switch: (Default, Disable) Enable switch to apply a VLAN to the phone.

Identifier: (Default, 1) Ranging from 1 ~ 4094

Priority: (Default, 0) Ranging from 0 ~ 7

VLAN Setting	
Switch:	Disable ▼
Identifier:	1 (1~4094)
Priority:	0 (0~7)

NTP & Time Settings

NTP & Time Settings
You could set the NTP servers in this page.

Switch :	● Enable ○ Disable
Primary Server:	ntp.ucsd.edu Select: ntp.ucsd.edu ▼
Secondary Server:	clock.nc.fukuoka-u.ac.jp Select: clock.nc.fukuoka-u.ac.jp ▼
Location:	GMT +8:00 Taipei ▼
Day Light:	○ Off ● Auto
Start:	Apr ▼ MM 1st ▼ W Sun ▼ DD 02 ▼ hh
End:	Oct ▼ MM 5th ▼ W Sun ▼ DD 02 ▼ hh
Sync. Time:	00 : 01 (dd:hh)

Submit

Switch: (Default, Enable) Enable to synchronize the date & time

Primary Server:

Select from the listed servers in the drop box. If there is an intranet NTP server, select "User defined" and then input the IP address of the NTP server.

Secondary Server:

The phone will synchronize date & time with the secondary server if the primary server is down. Select from the listed servers in the drop box. If there is an intranet NTP server, select "User defined" and then input the IP address of the NTP server.

Location: Select the time zone from the drop-down box.

Day Light: (Default, Off)

Daylight saving switch; enable to configure daylight saving date and time

Start:

Select what month (MM) of the year, what week (W) of the month, what day (DD) of the week and what time (hh) of the day to start daylight saving.

End:

Select what month (MM) of the year, what week (W) of the month, what day (DD) of the week and what time (hh) of the day to start daylight saving.

Sync Time:

Configure the period of time to synchronize the date and time with the NTP server.

WIFI Station Settings

WIFI interface: (Default, Enable) **Enable** or **Disable** WIFI interface

WIFI SSID: The SSID of target AP

WIFI Password: The password of target AP

If **WPA Enterprise** is required, please also specify ID and password

IP Type: (Default, DHCP Client) **DHCP Client** or **Static IP**

Press **Submit** and settings will be applied after reboot.

After connecting to WIFI network, press "HOLD/MUTE*112*113#" to check IP address for further configurations.

Example:
Phone IP address: 192.168.168.108
Web interface will be "http://192.168.168.108:8000"

4. Operations

Answering a Call

An incoming call is indicated by a ringing tone and a flashing indicator at the top of both handset and base units. You can answer the call by doing one of the followings:

- Pick up the **handset** to answer the call.
- Press the **Line (Line1/Line2)** key on the base or handset to answer the call.

Making a Call

Dialing with the Keypad

- Enter the telephone number with the alphanumerical keypad.
- After entering the number, press the **#** key to force dialing or wait for 4 seconds before the number is dialed automatically.

Using the pre-assigned speed dial hotkeys on base

Use the pre-assigned speed dial service keys to configure the most commonly dialed numbers. Press the speed dial service key that has been pre-assigned to the phone number and the call will start automatically.

Call Options

While a call is in progress, following additional options are available.

Using the Speaker Phone

For hands free operation, you can use the built-in speaker to talk on the phone. To use the speakerphone, follow the steps below:

- While talking on the phone, press the **SPEAKER** key on the phone to enable the Speakerphone function.
- Press **SPEAKER** key again to terminate the call.

Putting a Call on Hold (two-lines model only)

You may want to put a call on hold temporarily while doing some work or attending to a second incoming or outgoing call. To put a call on hold, do one of the following:

- Press the **HOLD** key on the phone to put the call on hold.
- When you receive a second call, press the next available LINE key to attend to the new call, and the first call will be put on hold automatically.

Checking Voice Messages

When the **message waiting indicator** would (slow) flash in red, it indicates that there are one or more new messages in voicemail box.

- Press the **MESSAGE** key on the phone to retrieve voice messages.

(An external ITSP or PBX must support voice message feature. And you need to set a voice message code before using the voice mail feature.)

5. Support

To configure through the web browser, do the following:

- Ensure the phone is powered up and connected to a DCHP network.
- Press HOLD/MUTE *112*113# (HOLD for 2-Line / MUTE for 1-Line), the IP address is displayed on the LCD screen.
- Open your browser (such as Internet Explorer, Firefox, etc.) and type in the web address of the phone. For example, if the IP address you obtain in step 4 above is 192.168.1.2, enter the web address: http:// 192.168.1.2:8000.
- When the Web login front page is displayed. Enter the user name and the password and click **Login**. The administrator's user name and password are "**admin**" and "**1234**" respectively.

For technological support, please email to <u>support@aeicommunication.com</u>.

Record of Revision

Date	ver.	Description
2023/11/15	1.0	First issue