SIP BYOD Master

BY-3000-X(S)

User Guide

V 1.2

1. Overview

The SIP BYOD master is an SIP telephone to Wi-Fi connection adaptor that provides voice communication. Read this QIG carefully to learn how to operate this product and take advantage of its features.

Package Contents

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

1. **BYOD master Unit**
2. **Power Adaptor(optional)**
3. **Ethernet Cable**
4. **User Guide (This document)**

2. Product Description

The following contains important information to help you familiarize with the functions of the device.
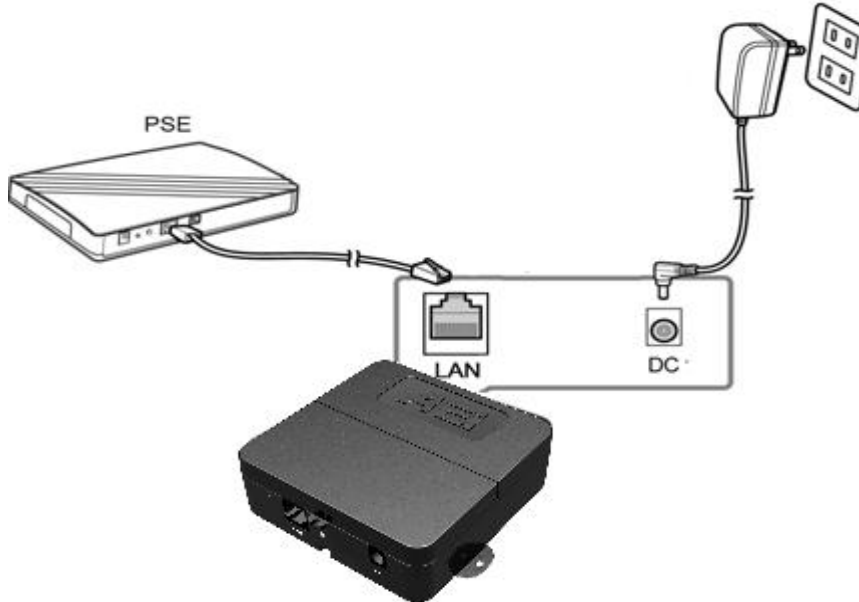
Back View
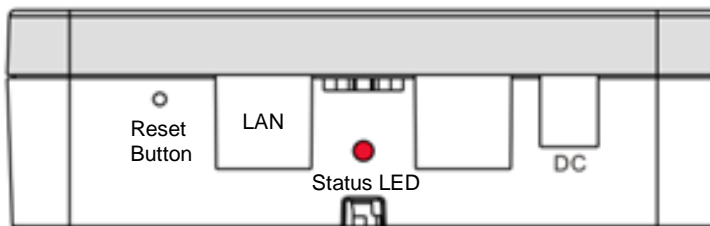
	Name	Description	
1	Reset Button	Rest device to factory default.	
2	LAN	Connects to PSE(IP-PBX)	
3	DC Power jack	Connects to power adapter.	
4.	Status LED	Blinking Red	The device does not register to IP-PBX

3. Installation and web configurations

The following illustration shows how to install the device.

Web Configuration Login

AEI BYOD master is a DHCP client that it acquires an IP address from a DCHP network. BY-3000 support mDNS to find the device or you can find the BYOD master IP address from your DHCP server.

Open your web browser (such as Internet Explorer, Chrome, Firefox etc.) and type in the web address of the BYOD master. For mDNS, input http://MAC-aei.local:8000, or http://<<IP.address>>:8000. The Web login page is displayed. Enter the user name and the password and click **Login**. The default user name and password are "admin" and "1234" respectively.

System Settings

Auto configuration

Auto Configuration: (Default, Enable)

Enable or disable auto provisioning.

DHCP OPTION 66: (Default, Enable)

After enabling DHCP option 66, the BYOD master acquires the tftp server IP address from DHCP option 66. If it is disabled but "Auto Configuration" is enabled, the device will try to download its configuration file from the server specified in the "Server" field.

Server:

The IP address information of the cfg file server, for example, tftp://192.168.1.54. The device will look for its cfg file at such server address if "DHCP OPTION 66" is disabled. 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 to login to the ftp or the http server

Password:

 Password to login to the ftp or the http server

 Interval:

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

Firmware Upgrade

Force Upgrade: (Default, Disable)

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

Auto Upgrade: (Default, Enable)

 Enable to auto upgrade. if "Interval" is 0 the device will check the firmware on the server after booting up

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 to login to the ftp or the http server

Server Password:

 Password to login to the ftp or the http server

Interval:

 Auto upgrade interval (seconds); It means the interval that the device will check the firmware on the server. If the firmware is different from the current one, the device will then reboot and update.

Backup & Recover

Backup System Configuration:

Click the "Backup" button to back up the settings of the device, the file is created with prefix "Back" followed by the creating date. And the extension will be 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 Authority

Username:

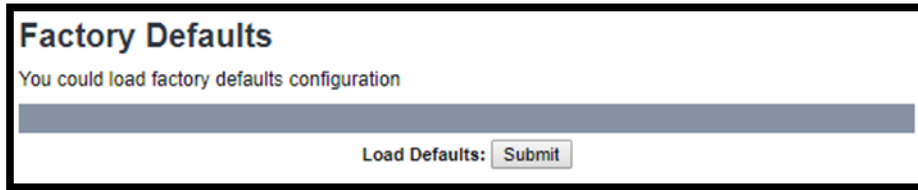Change the Username of the web configuration login.

Password:

Change the Password of the web configuration login.

Confirmed Password:

Confirm the Password of the web configuration login.

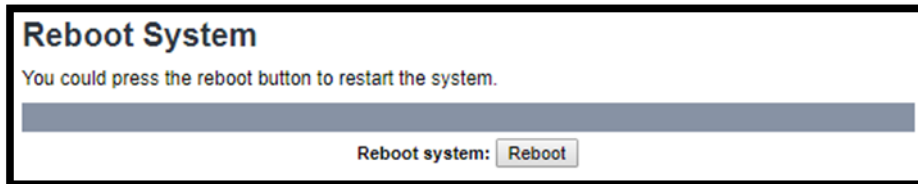Once it is done, press Submit to confirm change or Reset to start over

Factory Defaults

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

Reboot
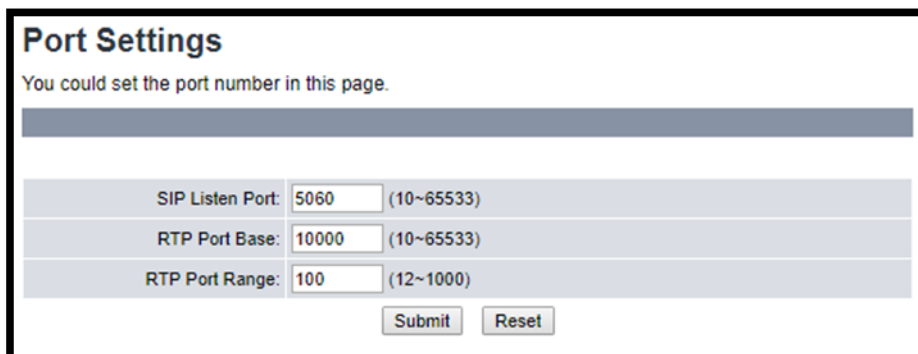
Click "Reboot" to restart the device.

Global SIP Settings

Port Settings

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 Settings

You could set the codec settings in this page.

Codec Priority

First Priority:	G.711 u-law ▼
Second Priority:	Disable ▼
	Disable
Third Priority:	G.711 a-law
	G.729
Fourth Priority:	G.723

RTP Packet Length

G.711 Frame Size:	20 ms ▼
G.723 Frame Size:	60 ms ▼
G.729 Frame Size:	20 ms ▼

Submit

Codec Priority:

There are 4 types of codec 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

Other Settings

You could set the other settings in this page.

Signaling Precedence(ToS)	0(Routing) ▼
Voice Precedence(ToS)	0(Routing) ▼
RFC2833 Payload Type:	101 (96~127)
Hotel Name	
DECT Number	
Room Number	
SIP Mode	Master ▼
Log Server	
Replace Sharp	Disable ▼
MWI To Tag	Disable ▼
Caller ID	Disable ▼
Register P-Asserted-Identity	Disable ▼
Session Timer	0
Debug Mode	

Submit   Reset

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

Room Number:

The key of Room Keeper feature that the master and client devices will look for each other by using the same room number.

SIP Mode: (Default, Master)

BYOD Master will always act as master SIP mode.

Log Server: (Default, blank is disable)

Please fill in the IP address of the **AEi IMM** Server. The device then reports status to IMM server, such as firmware version, IP address of the device, 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 it is enabled.

The "#" in the sending string will be send as # if it is disabled

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 device are two.

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 the name or the location of the device 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 the 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:

No 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 device sends the keep alive message (seconds); select from 10, 20, 30, 40, 50, 60, 90, 120, 240 and 480.

MWI: (Default, Disable)

No MWI in BYOD master.

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.

BYOD Settings

ROOM ID:

Input correct room ID that for BYOD.link app scan the QR code then sync to this device.

WIFI SSID:

Setup the remote WIFI SSID that the mobile device can access the device at same networking.

WIFI Password:
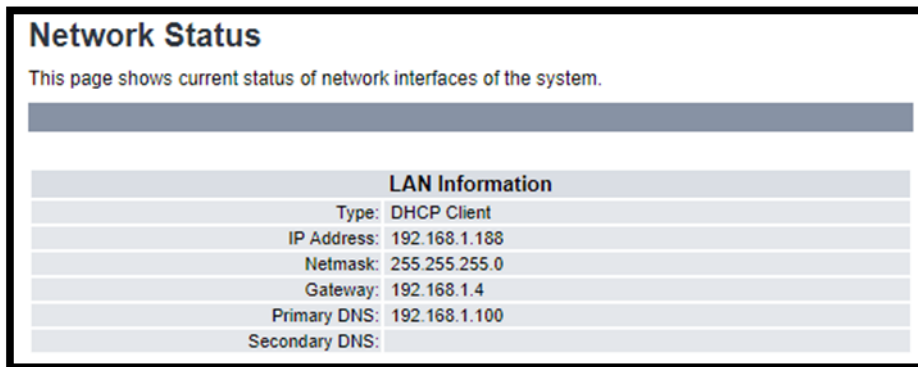
Setup the remote WIFI Password.

Json URL:

Setup the Json file path for BYOD.link app to download user interface settings after scan the QR code to login the room.

Marriott sample JSON file path:

http://crm.aeicommunications.com.tw:8080/Marriott01/uiconfigMarriott01.json

Network Status

Show the network status of the device

Type: Current IP type; **DHCP Client** or **Static IP**
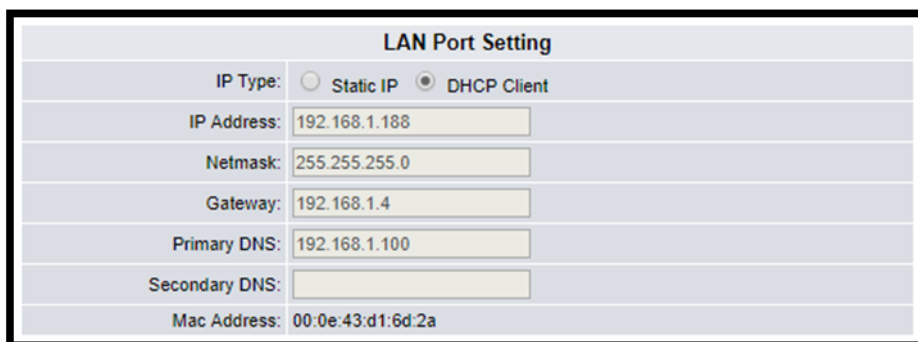
IP Address: Current IP address of the device

Netmask: Current Netmask of the device

Gateway: Current Gateway of the device

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 device

Netmask: The Netmask of the device

Gateway: The gateway of the device

Primary DNS: The primary DNS IP address

Secondary DNS: The secondary DNS IP address

Mac Address: The MAC address of the device

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

VLAN Setting

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

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

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

NTP & Time Settings

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 device 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.
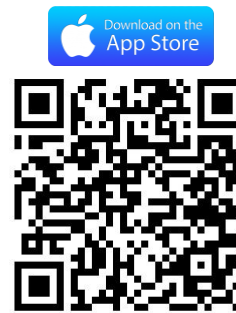
End:

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.

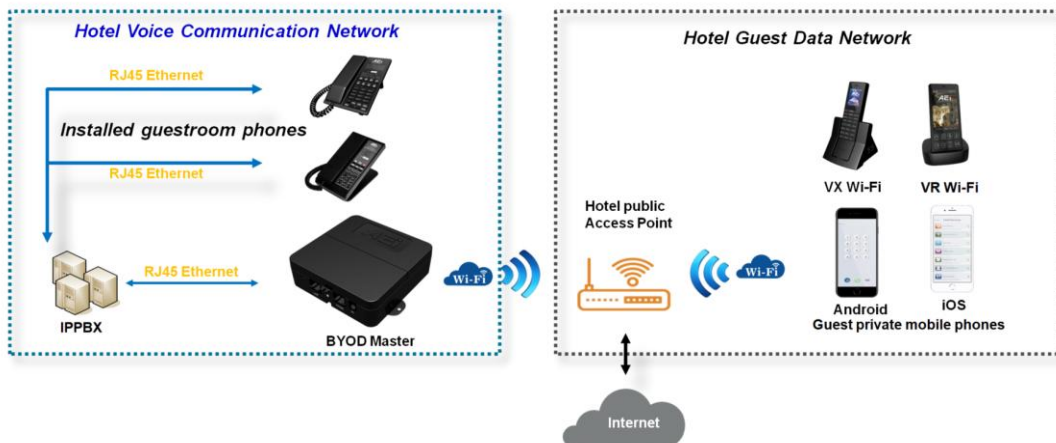## 4. Download the BYOD.link App to the smart phone

5. Scan the in-room QR code

Turn on Bluetooth on the smart phone.

Stay close to the BYOD master and scan the following QR code to download and activate soft phone configurations

QR code link: http://crm.aeicommunications.com.tw:8080/qrcode.htm? "Room number"

http://crm.aeicommunications.com.tw:8080/qrcode.htm?1233

6. Connectivity - BYOD Master, VM, GR, and Wi-Fi handsets

7. Support

For further technological support, please email to support@aeicommunication.com.

Record of Revision

Date	ver.	Description
2022/4/22	1.0	First issue
2021/11/10	1.1	Configuration update
2023/2/21	1.2	Connectivity Update