

# Quick Start Guide AS240

# **2x2 Dual Band**

802.11ax Access Point



# **Package Contents**



One Indoor access point





Screws for hard ceiling



Screws for suspended ceiling

Mounting Bracket

#### **Installation Requirements**

TERMS OF USE: All Ethernet cabling runs suggest using CAT.6, 24 AWG (or above) Shielded Twisted Pair (STP) cabling. In addition, please cut the cable into a proper length, strip the cables on both ends, and crimp the wires into RJ45 connectors. It is the professional installer's responsibility to follow local country regulations, including operation within legal frequency channels, output power, indoor cabling requirements, and Dynamic Frequency Selection (DFS) requirements.

## **Mounting Below a Suspended Ceiling**

① Identify the location where you intend to mount the access point.

<sup>2</sup> Raise the selected ceiling tile on both sides of the channel to remove the tile.

③ Use the mounting bracket as a template to mark the locations of the mounting holes on the tile.

④ Use a drill to drill a pilot hole at the mounting hole locations you marked.



⑤ Position the mounting bracket holes (with indents up) over the pilot holes.

© Insert a fastener into each mounting hole and use a washer together with wing nut to tighten.

If necessary, drill or cut a cable access hole in the ceiling tile large enough for the Ethernet cables. Pull the cable through the access hole until you have about 1 foot of cable protruding from the hole.

<sup>®</sup> Connect the Ethernet cable to the access point.



<sup>®</sup> Gently slide the access point onto the mounting bracket until it clicks into place.

1 Reinstall the ceiling tile.

## **Mounting On a Hard Ceiling**

This procedure describes the steps required to mount the access point on a hard ceiling using the mounting bracket.

- ① Use the mounting bracket as a template to mark the locations of the mounting holes on the ceiling.
- ② Use a drill to drill a pilot hole at the mounting hole locations you marked and insert the plastic anchors.
- ③ Position the mounting bracket mounting holes (with indents up) over the pilot holes.
- ④ Insert a fastener into each mounting hole and tighten.
- (5) Connect the Ethernet and power cables to the access point.
- <sup>(6)</sup> Align the access point hook over the keyhole mounting slots on the mounting bracket. If you created a hole for the cable, make sure the access point is positioned so that the cable reach their respective port.
- O Gently slide the access point onto the mounting bracket until it clicks into place.



#### **Powering the Access Point**

Connect the PoE cable into the WAN/PoE IN port of the device.





**Note:** Please wait for 5-10 seconds while powering on.

#### **LED Indicator**

Color	Indicator	Behavior	Description	
		On	Power on	
	PWR	Off	Power off	
	WIAN	On	WLAN connection detected	
		Off	No WLAN connection detected	
Green		Blinking	Sending / receiving data	
		On	Ethernet connection detected	
	WAN	Off	No Ethernet connection detected	
		Blinking	Sending / receiving data	

# **Access Point Configuration**

In a default access point configuration, the access point default AP mode is TAP mode, and obtains IP addresses from DHCP Option 43 protocol.



**Note:** In TAP mode, the AP must be able to go with Wireless LAN Controllers (WLCs) for bulk configuration and performing other commands of access points. Please refer to WLC QSG for

settings first, then go back to finish the AP configuration.

https://www.zcom.com.tw/index/downloads?keyword=&meterial\_type=49

Step 1. Power on the access point. As the status of LED indicator from flashing change to steady red, the connection is successful.



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**Note:** Please make sure DHCP server is enabled on the network once accomplished WLC settings. The access point must receive its IP address through DHCP server.

**Note:** Switching from DHCP to assign a static IP address or DNS and L2 discovery mode to the access point, please refer to the user manual for more information.

https://www.zcom.com.tw/index/downloads?keyword=&meterial\_type=25

If the access point cannot connect to the WLC by DHCP broadcast, please refer to the following optional settings.

#### Optional: Set up a static IP address

- **Note:** The following procedure assumes that Windows 10 is the operating system. Procedures for other operating systems are similar.
- Step 1. On your computer, configure your network adapter from the "Local Area Connection "settings as follows:
  - Start→Control Panel→Network & Internet→Change Adapter Options→Ethernet
- Step 2. Edit the TCP/IPv4 address setting as follows:
  - Properties→Internet Protocol Version 4 (TCP/IPv4)
- Step 3. Select "Use the following IP address" and make the following entries:
  - IP address: 192.168.1.168 (or any available address in the 192.168.1.x network, except 192.168.1.1)
  - Subnet mask: 255.255.255.0

Leave the "Default gateway" and "DNS server" fields empty.

Step 4. Click "OK" to save your changes.

#### Login into the access point

- Step 5. Launch a Web browser; type default URL https://192.168.1.1 to connect to the access point. When a security alert dialog box appears, click OK/Yes to proceed.
- Step 6. When login page appears, enter the following: Username: **root**/Password: **password**
- Step 7. Click login.

#### **Customizing the Wireless Settings**

On the Web interface menu, Select Status→General in the menu bar. Check your switchmod item to select "Connect with via IP", and setup your WLC IP address on "Wireless Switch Address 1".

Note: IP address of WLC needs to be assigned (ex. 192.168.1.228) while on operation.

**Note:** If you need a standalone access point, please change to FAP mode.

#### FAP Mode

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The default AP mode is TAP mode, before FAP configurations please change AP mode.

- Step 1. If currently in TAP Mode: On the Web interface menu, click System  $\rightarrow$  AP mode.
- Step 2. Select Fat AP from the drop-down list.
- Step 3. Click save & apply to take effect.



**Note:** For FAP mode, please refer to the user manual for more information. <u>https://www.zcom.com.tw/index/downloads?keyword=&meterial\_type=25</u>

#### Fat and Thin AP Mode Switching

Click **System→APMode**, select the AP mode you want then click **SAVE&APPLY**.

	Wireless Access Point	
AP mode configuration		
APMode	Thin AP Fat AP	
		SAVE & APPLY SAVE RESET

# **Technical Specifications**

AS240						
Dimensions (L x W x H)	Ø175 mm × 39.1 mm					
Weight	310g	310g				
Networking Interface	<ol> <li>WAN/PoE, 10/100/1000Mbps Ethernet Ports</li> <li>LAN10/100/1000Mbps Ethernet Ports</li> </ol>					
Buttons	Reset					
Power Method	PoE 802.3af / 802.3at					
Power Supply	DC 48V, 630mA					
Max. Power Consumption	10W					
Wi-Fi Standards	802.11 a/b/g/n/ac/ax , MIMO 2x2:2					
Wi-Fi Physical Rates	2.4GHz : up to 574Mbps 5GHz : up to 1201Mbps					
Wireless Security	WEP, WPA-PSK, WPA-Enterprise(WPA/WPA2, TKIP/AES)					
	US / Taiwan					
Operating Frequency Band and 20MHz Channels	2,412 – 2,462GHz:11 Channels (Ch1-11) 5,180 – 5,240 GHz:4 Channels (36, 40, 44, 48) 5,745 – 5.825 GHz:5 Channels (149, 153, 157, 161, 165)					
Max. EIRP 2.4 GHz 5 GHz	26 dBm 26 dBm					
Min. Receive Sensitivity 2.4 GHz 5 GHz	-82 dBm -82 dBm					
Antennas	Antennas (2) Dual-Band PCB Antennas					
Mounting						
	Environmental					
	Temperature	Humidity				
Operating	-15°C to 55° (5°F to 131°F)	5% to 95 (Non-condensing)				
Storage	-40°C to 70°C (-40°F to 158°F)	5% to 95 (Non-condensing)				

# Compliance

#### FCC

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This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

**FCC CAUTION** : Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

This radio transmitter(FCC: M4Y-AS240) has been approved by FCC.

**Note:** Operations in the 5.15-5.25GHz band are restricted to indoor usage only.

You are cautioned that changes or modifications not expressly approved by the part responsible for compliance could void the user's authority to operate the equipment.

#### **Radiation Exposure Warning**

 This equipment complies with radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20 cm between the radiator and your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

#### **CE Marking**

CE marking on this product represents the product is in compliance with all directives that are applicable to it.

# CE

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Note: This device meets Max. TX power limit per ETSI regulations.

#### **RoHS/WEEE Compliance**



European Directive 2012/19/EU requires that the equipment bearing this symbol on the product and/ or its packaging must not be disposed of with unsorted municipal waste. The symbol indicates that this product should be disposed of separately from regular household waste streams. It is your responsibility to dispose of this and other electric and electronic equipment via designated collection facilities appointed by the government or local authorities. Correct disposal and recycling will help prevent potential negative consequences to the environment and human health. For more detailed information about the disposal of your old equipment, please contact your local authorities, waste disposal service, or the shop where you purchased the product.

#### **Declaration of Conformity**

Hereby, Z-COM, Inc. declares that the radio devices are in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: <u>https://www.zcom.com.tw</u>

## NCC

根據 NCC 規定: 取得審驗證明之低功率射頻器材,非經核准,公司、商號或使用者均不得擅自變更頻率、加大功率 或變更原設計之特性及功能。

低功率射頻器材之使用不得影響飛航安全及干擾合法通信;經發現有干擾現象時,應立即停用,並 改善至無干擾時方得繼續使用。前項合法通信,指依電信法規定作業之無線電通信。低功率射頻電 機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

- 减少電磁波影響,請妥適使用。
- 本產品使用安裝時,應避免影響附近雷達系統之操作。
- 本產品使用時,建議至少距離人體 20 cm 以上。

## **Optional Accessories**

PN	Item	Picture	AS240
66-400008-00N	Mounting Bracket		yes
61-100049-00N	Screws for hard ceiling		yes
61-100050-00N Screws for suspended ceiling			yes

Note: When ordering power adaptors, you must specify the destination region by indicating -US, -EU instead of -XX.

## **Contact Information**

All information may be changed by Z-COM at any time without prior notice or explanation to the user. For further information please refer to our website: <u>www.zcom.com.tw</u>



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