WEA412h (Indoor type) Quick Installation Manual

This manual describes the Wireless Enterprise WEA412h configuration and installation instructions.

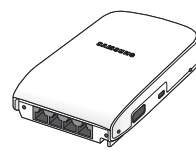SAMSUNG

Introduction

What is WEA412h?

WEA412h is an Access Point (AP) which supports IEEE 802.11ac wave1 standards and it connects wireless devices such as smartphone, laptop, tablet and etc. to a wired network in a hospitality environment such as hotel, dormitory, and condominium.

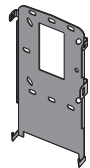The WEA412h supports the following features.
- IEEE 802.11a/b/g/n/ac standards
- 2.4 GHz and 5 GHz concurrent radios.
- 2 × 2 Multiple Input Multiple Output (MIMO)
- Gigabit Ethernet 1 port (PoE In) for a WAN connection
- Gigabit Ethernet 4 ports (PoE Out 1 port) for an uplink connection for wired network
- Power over Ethernet (PoE) IEEE 802.3af/802.3at
- External 48 V/0.75 A power adaptor (Optional).
- PoE Output of 10 watts max with 802.3at mode or using 48 V/0.75 A power adaptor.
- A tricolored LED displaying the operational status of WEA412h.
- One USB port (Host 2.0)

Components

After unpacking the WEA412h, confirm that all of the following items have been included:

WEA412h

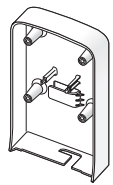| Bracket for the standard junction box (standard gang junction box)	Four Phillips screws (UNC #6-32, L8)	Two Security Torx (T10) screws	Installation Manual

Ordered separately

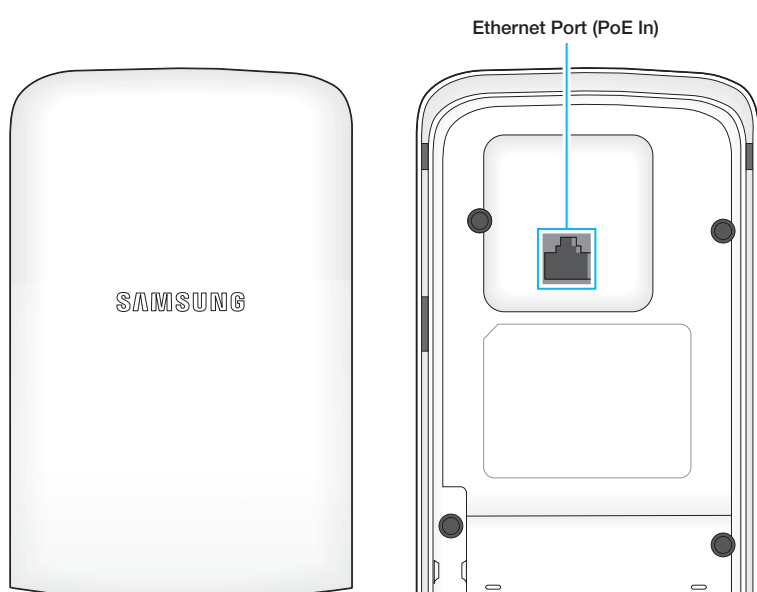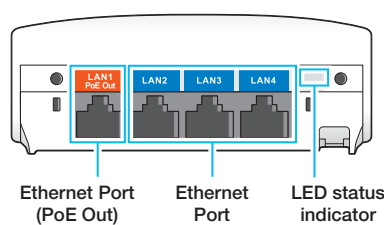| Wall Mount Bracket	Four plastic anchors	Four Phillips screws (M4, L50)

> **NOTE**
> - It is recommended to keep all packaging materials and the box.
> - The power adaptor is sold separately. If necessary, contact the retailer.
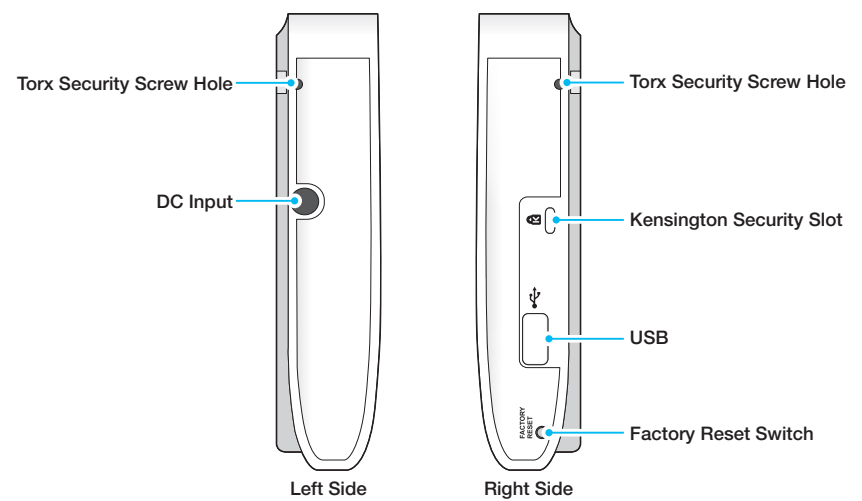
Names and Functions

Front and Rear View

Ethernet Port (PoE In)

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Bottom View

Ethernet Port (PoE Out)   Ethernet Port   LED status indicator

LAN1 PoE Out   LAN2   LAN3   LAN4

Side View

Torx Security Screw Hole

DC Input

Torx Security Screw Hole

Kensington Security Slot

USB

Factory Reset Switch

Left Side   Right Side

Interface

Port Name	Description
Tricolored LED	Displays the operational status of WEA412h using a tricolored LED.
DC Input	This is for connecting the power adapter.
Ethernet Port (PoE In)	Supports 1000 BASE-T Gigabit Ethernet and IEEE 802.3af/802.3at PoE mode.
Ethernet Port (LAN1~LAN4)	Supports 1000 BASE-T Gigabit Ethernet and a PoE Output for the LAN1 port.
USB Port	Supports BLE and ZigBee dongle and provides the 2.5 W output power.
Factory reset switch	Used to reset the WEA412h to the initial factory settings.

LED status indicator

LED	Status	Description
System start status	White On	Initial LED status
	Blue On	Device reset and test in progress
	Red On	Booting failure (Device reset failure)
Provisioning status	Red, Green, and Off repeatedly	APC connection in progress (Network link normal)
	Green blinking	CAPWAP connection in progress (APC server connection normal)
Normal operation status	Green On	When there is no connected wireless device
	Blue On	When there is a connected wireless device
Upgrade	Blue blinking	Software upgrade in progress
Error status	Red blinking	Physical connection error of network
	Yellow blinking	IP address conflict
	Purple blinking	Dynamic IP address allocation failure
	Bluish-green blinking	Logical connection error of network
	Off	Wireless interface error

Installation

WEA412h can be installed on a general wall or on the standard junction box.
Please confirm that all of the components have been included before installation.

Before Installation

Safety Requirements

Carefully observe the following safety warnings in order to avoid the risk of damage or injury. For safe use, make sure to be well-informed.

> ⚠ **WARNING**
> - There is a risk of electrical shock. Make sure that the power is turned off during installation. Do not proceed with the installation if there is any electrical current leaking. It may cause a serious electric shock.
> - Wear anti-static gloves or take an appropriate action to prevent ESD when handling the product.
> - Do not connect a phone line to an Ethernet port. This may damage the product.
> - This product must be connected to a power supply in compliance with IEEE 802.3af/at or connected to a limited power supply in compliance with IEC60950.
> - This product must be installed in a vertical direction. To prevent damage of a product and burns of a user due to heat caused when the product is installed in a horizontal direction, an operation of wireless LAN is compulsorily restricted when the surface temperature of the product exceeds IEC60950 standards (95°C).

> ⚠ **CAUTION**
> - This product must be installed or removed by only appropriately trained service personnel.
> - This product operates in the Safety Extra Low Voltage (SELV) state in compliance with IEC60950.
> - All the connected equipment including this product must be installed inside of the same building. For more details, refer to the Environment A of IEEE 802.3af/at standards.
> - During installation, this product must be installed at least 3 m or more apart from WiBro/3G/4G repeater or antenna.
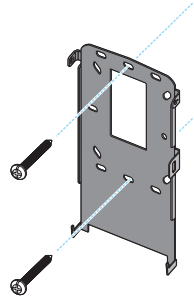
Installation Instructions

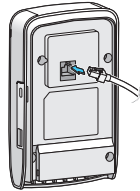The following instructions must be carefully observed during installation.
- The system must be installed in a place that is easily accessible for product installation, cable connections, and maintenance.
- The PoE cable must be always installed away from any electrical interference source such as power lines, fluorescent lights or transmitters.
- The PoE cable must be Cat 5e or higher.
- When PoE is unavailable, a power adapter (sold separately) can be used. The 3-pin (including ground) power socket that supplies 100~240 V AC, 50~60 Hz must be located within 2 m from each equipment and the power must be supplied through an independent circuit breaker. It is recommended to use the equipment that uses a filter or a surge.
- Whether a USB port and a PoE output port (LAN1/PoE Out) operate or not according to a power pull-in source is as follows.
  1) Power adapter: an USB port (2.5 W) and a PoE output port (15.4 W) available
  2) 802.3at: an USB port (2.5 W) and a PoE output port (10 W) available
  3) 802.3af: both an USB port and a PoE output port are disabled
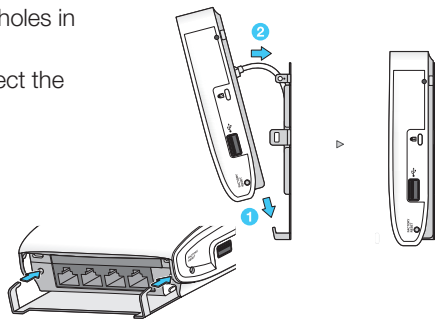
Wall-mount installation on a junction box

1. Couple and assemble screws fitting to the type of the standard junction box.
 ※ Location and number of screws to be coupled vary depending on the standard junction box.
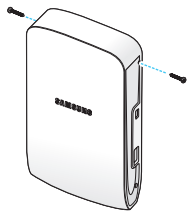

> **NOTE**
> □: Standard gang junction box (Box for 1-Korea/USA)
> ⋮: Standard gang junction box (Box for 2-Korea/USA)
> ⋮: Standard gang junction box (Box for 1-EU)

2. Connect an Ethernet cable to the Ethernet (PoE In) port by passing through the standard junction box.

3. 1) Mount the AP on the bracket using two holes in the lower end of the AP.
 2) Push the AP backward and tightly connect the AP to the bracket.
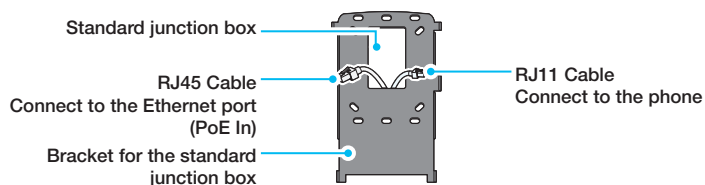
4. Fasten the AP to the bracket using Torx security screws (each one on the left/right sides).
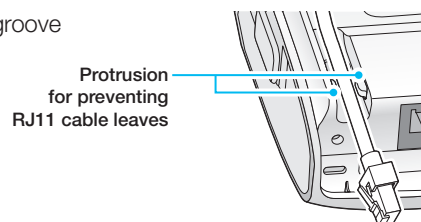
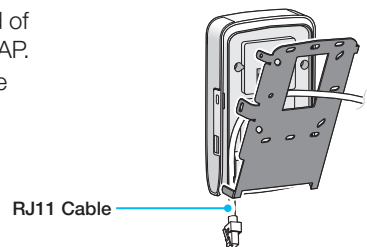## Connecting RJ11 phone cable coming from the standard junction box

1. Pull forward the RJ11 cable by passing through the rectangular hole on the bracket as shown in the picture.

Standard junction box
RJ45 Cable
Connect to the Ethernet port
(PoE In)
Bracket for the standard
junction box
RJ11 Cable
Connect to the phone

2. Pass through the RJ11 cable into the cable groove located in the lower end of the product.
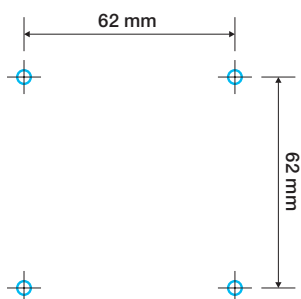
Protrusion
for preventing
RJ11 cable leaves

3. 1) Fitting the left/right protrusion of the lower end of the bracket into the hole of the bottom of the AP.
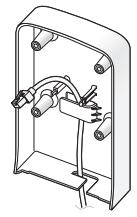 2) Push the AP backward and tightly connect the AP with the bracket.

RJ11 Cable

Wall-mount installation directly on wall
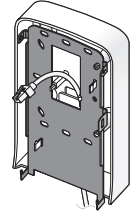## (Wall mounting bracket, Anchors and Screws can be ordered separately)

1. Mark 4 screw holes along the following dimensions on a wall and drill them. (You can easily mark the screw holes by using a 1:1 sized drawing in the WEA412h Quick Installation Manual.)
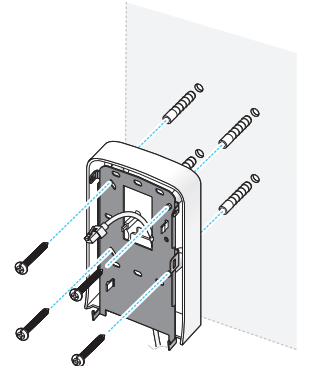
62 mm
62 mm

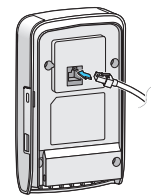**2.** Hang the Ethernet cable on the wall mounting bracket as shown in the picture.

3. Mount the standard junction box bracket on the wall mounting bracket. (There is hook type fasteners to help mounting)
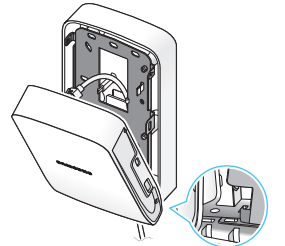
4. 1) Use a hammer to insert 4 plastic anchors into the drilled holes on the wall.
 2) Align the inserted plastic anchors with the screw holes of the bracket.
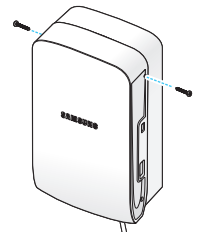 3) Tighten the wall mounting bracket and the standard junction box bracket to a wall using four M4 × L50 screws.

5. Connect the Ethernet cable to the Ethernet port (PoE In).

6. 1) Mount the AP on a bracket using a hole in the lower of the AP.
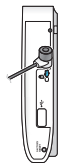 2) Push the AP backward and tightly connect the AP to the bracket.

7. Fasten the AP to the bracket using Torx security screws (each one on the left/right sides).

> **NOTE**
> **Installing Anti-theft lock cable**
> When installing the WEA412h AP in a public place, it is recommended to use anti-theft lock cables to prevent any loss. (An anti-theft lock cable can be purchased separately and a variety of products are available in the market.)
>
> Connect the anti-theft lock cable to the WEA412h AP.

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 or more 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.

> ⚠ **CAUTION**
> Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

The 5150-5250 MHz band is restricted to indoor use only.
This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this devicemust accept any interference, including interference that may cause undesired operation of thedevice.
Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence.
L'exploitation est autorisée aux deux conditions suivantes: (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

FCC RF Radiation Exposure Statement:
This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment.
This equipment should be installed and operated with a minimum distance of 50 cm between the radiator and your body.
This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

RSS-102 RF Exposure
L'antenne (ou les antennes) doit être installée de façon à maintenir à tout instant une distance minimum de au moins 50 cm entre la source de radiation (l'antenne) et toute personne physique. Cet appareil ne doit pas être installé ou utilisé en conjonction avec une autre antenne ou émetteur.

Electromagnetic Wave Suitability Notice

Class B Equipment (For Home Use Broadcasting & Communication Equipment)
This equipment is home use (Class B) electromagnetic wave suitability equipment and to be used mainly at home and it can be used in all areas.

Regulatory Information
'Hereby, Samsung Electronics, declares that this WEA412h is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.'
The original Declaration of Conformity may be found at http://www.samsungdocs.com, go to Search Product and enter the model name.

AEEE Yönetmeliğine Uygundur (Compliant with WEEE)

产品中有害物质的名称及含量

部件名称	有害物质					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬（Cr⁶⁺）	多溴联苯（PBB)	多溴二苯醚 (PBDE)
金属 料件	×	○	○	○	○	○
印刷电路板部件	×	○	○	○	○	○
线材	×	○	○	○	○	○
塑部件	○	○	○	○	○	○

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