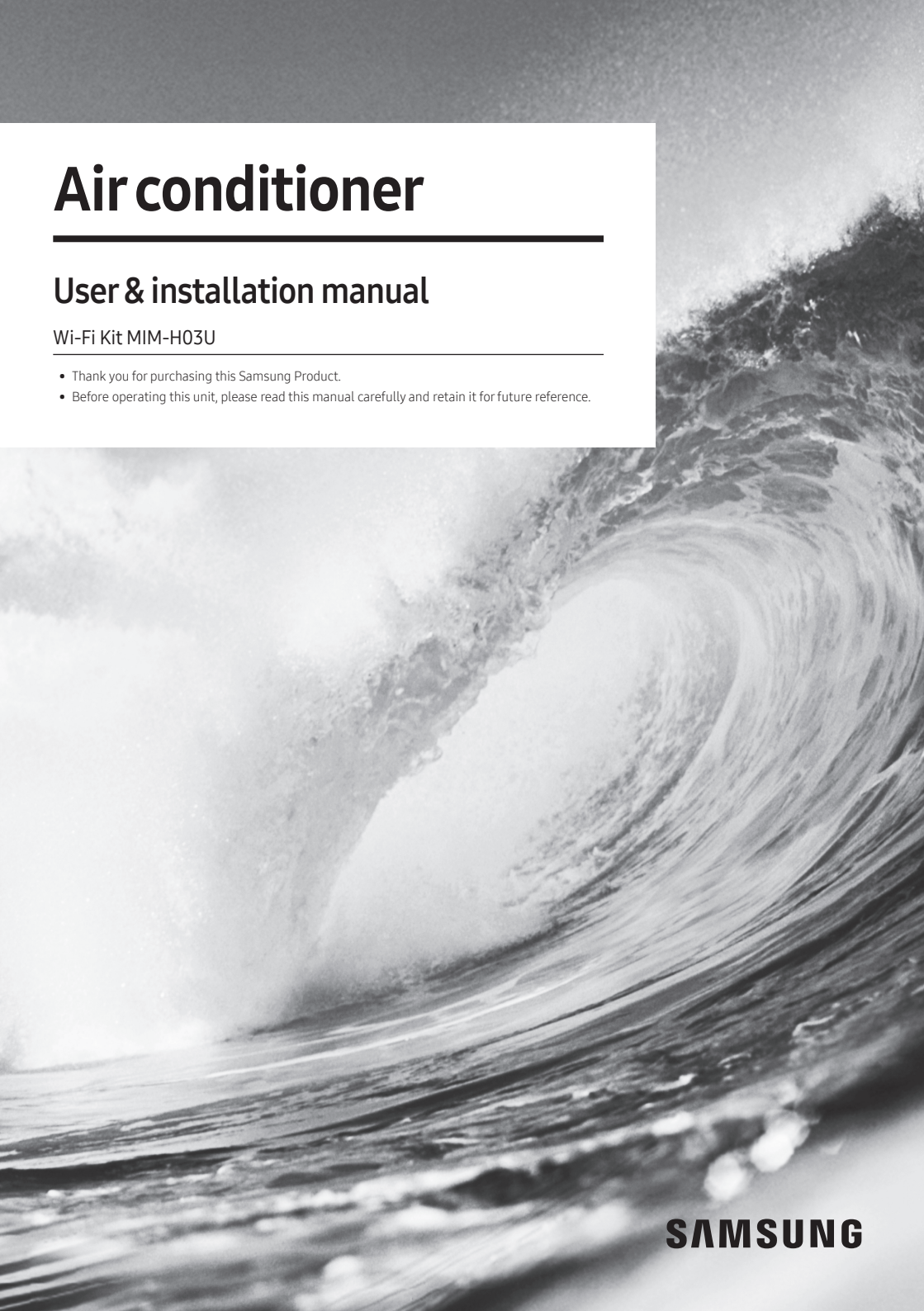


Air conditioner

User & installation manual

Wi-Fi Kit MIM-H03U

- Thank you for purchasing this Samsung Product.
- Before operating this unit, please read this manual carefully and retain it for future reference.



SAMSUNG

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Safety precautions

California Proposition 65 Warning (US)

 **WARNING:** Cancer and Reproductive Harm - www.P65Warnings.ca.gov.

This installation manual explains how to install a Wi-Fi kit to an indoor unit of Samsung system air conditioners. Read the installation manual thoroughly before installing the Wi-Fi kit.
(Refer to the appropriate manual for installing product or other optional parts.)

 WARNING	Hazards or unsafe practices that may result in severe personal injury or death .
 CAUTION	Hazards or unsafe practices that may result in minor personal injury or property damage .

WARNING

- ▶ Contact service center for installation.
 - There is a risk of product malfunction, water leakage, electric shock or fire.
- ▶ Install the Wi-Fi kit securely in a place that can withstand the weight of the product.
 - If the installation location is not strong enough, Wi-Fi Kit may fall and be damaged.
- ▶ Connect the power with rated voltage when installing.
 - If not, there is risk of fire or damage to the Wi-Fi kit.
- ▶ Do not attempt to move or re-install the Wi-Fi kit that is already installed.
 - There is risk of electric shock and fire.
- ▶ Do not attempt to modify or repair the Wi-Fi kit on your own.
 - There is potential risk of product damage, electric shock or fire. When repair is needed, consult service center.
- ▶ Check if the installation was done properly according to the installation manual.
 - If the Wi-Fi kit is installed incorrectly, there is risk of electric shock or fire.
- ▶ Make sure that all wiring work is done by a qualified person complying with regional standards and instructions in this manual.
 - If the installation is done by unqualified person, there is risk of product malfunction, electric shock or fire caused by incorrect installation.
- ▶ Contact the service center if you need to dispose the Wi-Fi kit.

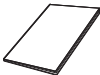
Safety precautions

CAUTION

- ▶ Do not install the product in a place where it is or might be exposed to inflammable gas leakage.
 - There is risk of fire or explosion.
- ▶ Do not install the product in a place where it will be exposed to oil or vapor etc.
 - If the product is used in a place where it is exposed to oil, vapor or sulphur dioxide, parts of the product may get damaged or product may function abnormally.
- ▶ Make sure that water does not get into the Wi-Fi kit.
 - There is risk of electric shock and fire.
- ▶ Make sure there is no tension to the cable during installation.
 - Cable may get cut and cause fire.
- ▶ Install the product in a place with temperature between 0 °C~39 °C (32 °F~102 °F) with no direct sunlight.
 - If not, there is risk of electric shock or abnormal operation.
- ▶ Do not install the product in a place where special spray or acid/alkali solution is used.
 - There is risk of electric shock or abnormal operation.
- ▶ Do not press the button with sharp object.
 - There is risk of electric shock or damaging the parts.
- ▶ Do not connect the power cable to the communication cable terminal.
 - There is risk of fire.
- ▶ When installing the product in hospitals or other places, make sure that the product does not interrupt with other products.
 - Abnormal operation may occur.

Check before installing Wi-Fi kit

Parts

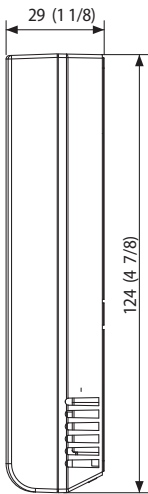
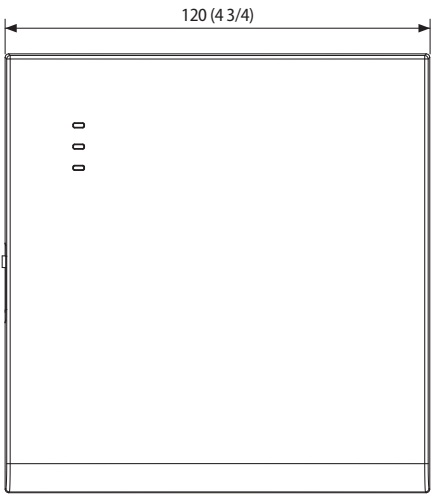
Assy Wi-Fi kit	Cable tie (2)	Cable clamp (3)	M4×16 screw (5)
			
User & Installation manual	U- terminal (6)		
			



- Wi-Fi kit should be installed by a certified installer.
- Before installing a Wi-Fi kit, you should check whether the power of the kit is turned off.
- The wire of Wi-Fi kit should be installed in accordance with electric wiring regulation and should also be installed inside the wall so that it cannot be touched by users.

Exterior dimension

Unit : mm (inches)



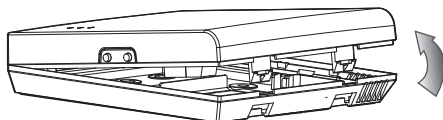
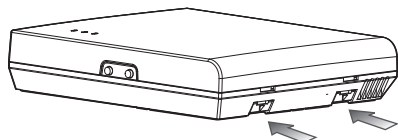
How to install Wi-Fi kit

Wi-Fi kit installation



- For smooth operation, install the Wi-Fi kit and the wireless router in open space with no obstacles between them. Operation may not be possible if the distance between the Wi-Fi kit and the wireless router is too far or if there's any obstacle between them.

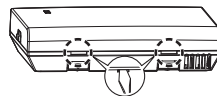
1. After pushing the two hooks on the bottom of the Wi-Fi kit at the same time, lift the front cover up and then detach it from the rear cover.



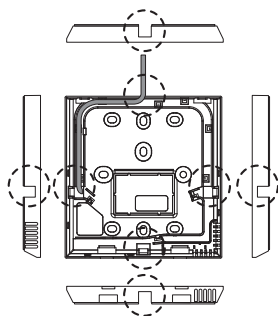
- * Push the two hooks at the same time.



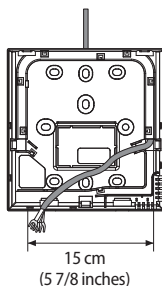
- It might be easier to disassemble the Wi-Fi kit if you put a flat-head screw driver into the square hole above the fixing hook.



2. Place the power wire and communication wire through openings in the rear cover.

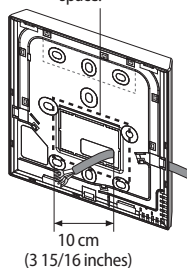


<When the cover is not recessed>



15 cm
(5 7/8 inches)

The opening can be cut and removed if you need more space.



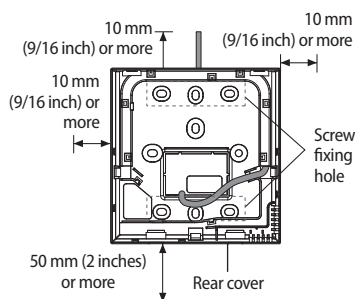
10 cm
(3 15/16 inches)
<When the cover is recessed>

3. Use two or more screws to fix the rear cover of the Wi-Fi kit to a wall. Then, connect the power cable (V1, V2) and the communication cable (F1, F2) to the terminals on the back of the front cover in appropriate length.
4. When connecting the V1 and V2, tighten the screws for the terminal block (CN5) with a tightening torque of 5 ± 2 Kgf-cm. Size of the screw is M3 x 6.

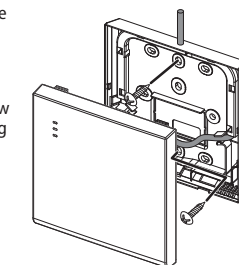


NOTE

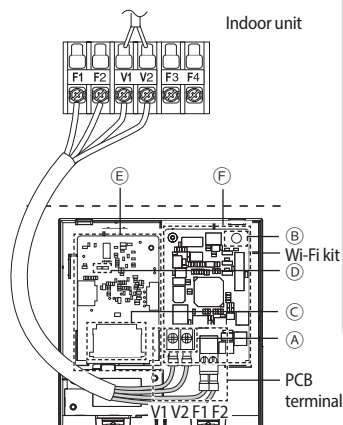
- Maximum number of indoor unit installation that can be connected to Wi-Fi kit is 16.
- One Wi-Fi kit can be registered with maximum 5 users.
 - If you register more than 5 users to single Wi-Fi kit, its operation may become slower.
- Each account (one mobile phone) can be registered with maximum 4 Wi-Fi kits.



* Before fixing the rear cover, allow 10mm or more space for upper, left, and right sides and 50mm space for bottom side.



* Fix the screws in the provided screw holes.



* Do not tighten the PCB terminal with too much force.

Item	Contents
(A)	Power/communication connection terminal
(B)	Tracknig/Initializing button
(C)	SD Card Slot
(D)	LED
(E)	Network PBA
(F)	Interface module PBA

How to install Wi-Fi kit

5. Reassemble the Wi-Fi kit.

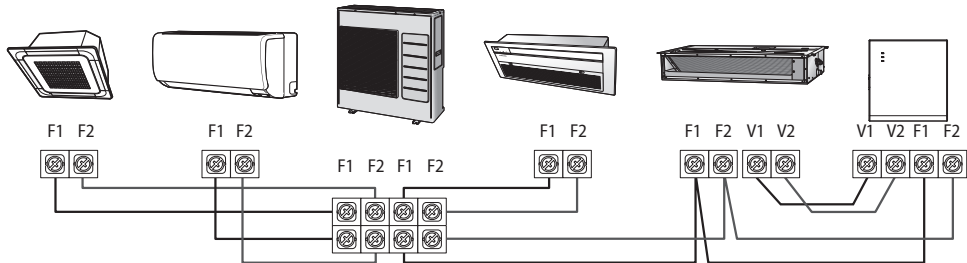


NOTE

- Put the front cover of the kit into the upper grooves first and then fit it as shown in the picture. After assembling the Wi-Fi kit, please check if there is any gap because of the connection cable between front cover and rear cover.

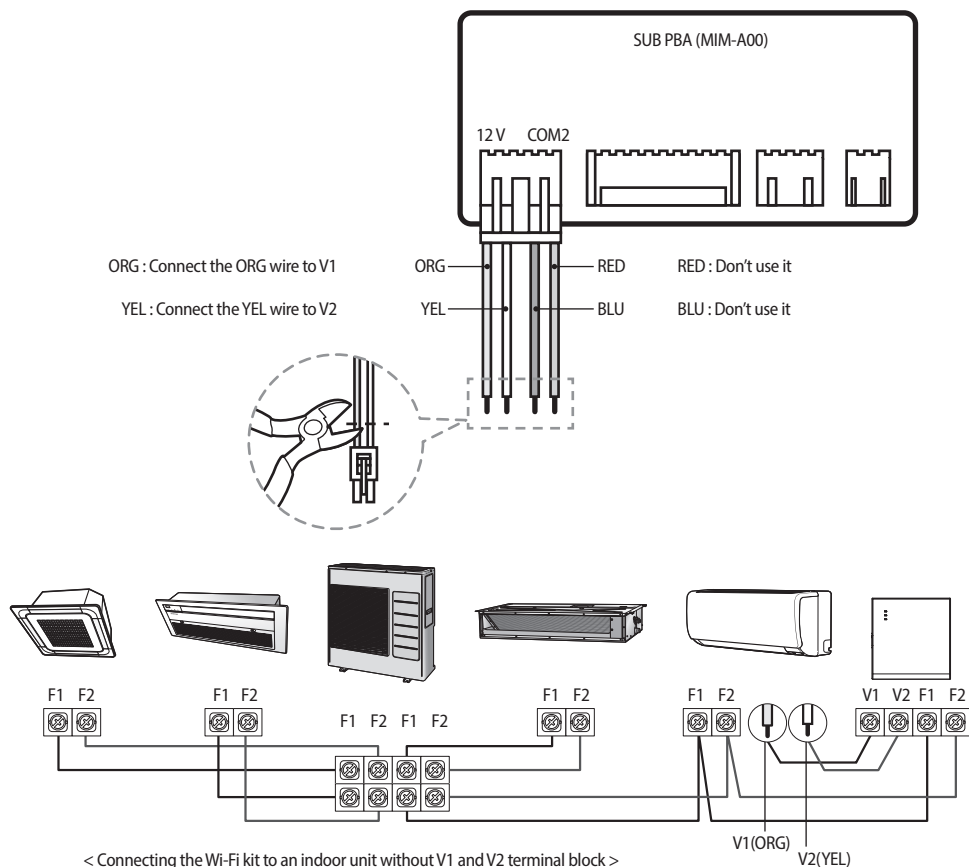


* Connection diagram of Wi-Fi kit



< Connecting the Wi-Fi kit to a multi type product >

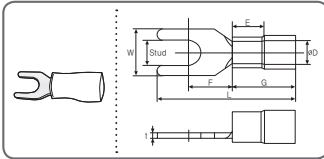
* If an indoor unit does not have V1 and V2 terminal block, use the SUB PBA (sold separately) to supply power to the Wi-Fi kit.



How to install Wi-Fi kit



- When installing a Wi-Fi kit with 10 m (32.8 feet) or more wire, the communication wire and power wire of a Wi-Fi kit should be installed separately. (The Wi-Fi kit will malfunction because of electrical fault.)
- When installing a Wi-Fi kit on the wall, select proper thickness of wires in the consideration of the hole size for wire on the wall.
- Wire for Wi-Fi kit PCB connection
 - When installing a Wi-Fi kit in a buried way, install the kit in accordance with U-terminal wiring Specification.
 - When installing a Wi-Fi kit with 4 core PVC cable, peel off 30 cm (0.98 feet) of the sheath before installing. (Recommendation: AWG22)
- Specification of compressed U-terminal for connecting Wi-Fi kit PCB



Wire range for connection		Rated size	Stud size	Basic size(mm)						
AWG	mm ²	mm ²	mm	t	ΦD	G	E	F	W	L
22~16	0.25~1.65	1.5	3	0.7	3.8	10.0	4.5	6.5	6.0	21.2

The maximum wiring length for communication and power : 50 m (164 feet)

- Tighten the fixing screws to the PCB terminal with less than 6N-cm torque. When the screws are tightened with more than 6N-cm torque, the screw thread will be damaged.
6. Run the Wi-Fi kit.
- ▶ When the Wi-Fi kit is turned on, all the lamps are turned on until system operates.
 - ▶ After the system operates, tracking is performed automatically.
7. Perform the tracking.
- * Tracking : You can search the devices connected to the Wi-Fi kit with the tracking function. The devices connected to Wi-Fi kit recognize that they are connected to the Wi-Fi kit. To monitor or control the system air conditioner with Wi-Fi kit, tracking should be performed.
 - ▶ When the Wi-Fi kit is turned on, the tracking is performed automatically. During the tracking, the lamp of the Wi-Fi kit () blinks.
 - ▶ If the tracking is completed but the lamp () blinks, it means the Wi-Fi kit does not find connected indoor units. In this case, check whether the connection of communication cable between indoor unit and outdoor unit is correct or is affected by noise.
 - ▶ If the configuration of indoor unit or outdoor unit is changed, tracking should be performed again manually by pressing the button (SW3) inside the Wi-Fi kit. ()

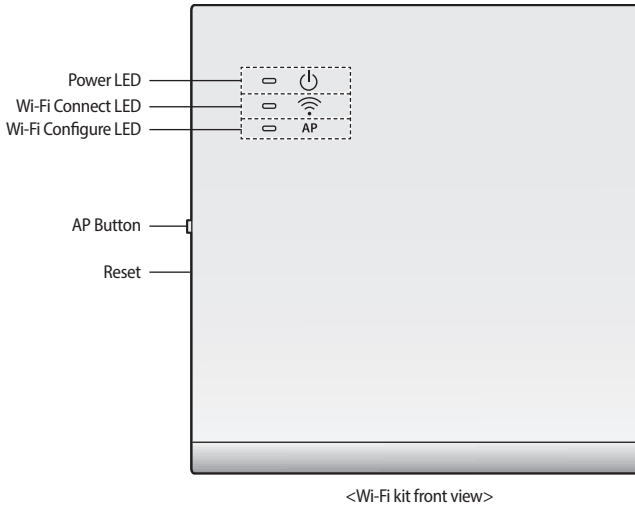


- If you want to control the indoor unit with the Wi-Fi kit, indoor unit's centralized control usage option must be set to "Enable".



- If you want to control the indoor unit with the Wi-Fi kit, tracking must be done properly and connect the Wi-Fi kit to a wired/wireless router.
- When the tracking is completed correctly, the lamp () is turned on until the process which connects the wired/ wireless router to Wi-Fi kit is completed.

Checking the Wi-Fi kit



LED display information

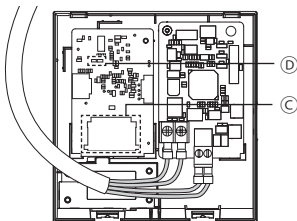
NO	LED information	Power	Wi-Fi Connect	Wi-Fi Configure
1	Initialized	ON	ON	ON
2	Normal	ON	ON	OFF
3	AP Connection OK. But, Internet is not Connected	ON	Blinking	OFF
4	Air conditioner searching OK. but AP connection is not completed.	ON	OFF	OFF
5	Wi-Fi Modem is in Malfunction	Blinking	Blinking	Blinking
6	Searching AP (AP mode)	ON	OFF	ON
7	Searching Air conditioner	Blinking	Blinking	OFF
8	No Air Conditioner Information	Blinking	OFF	OFF
9	Inspecting network PBA	ON	Blinking	Blinking
10	Requesting a token (AP mode)	ON	OFF	Blinking

How to install Wi-Fi kit

Initializing user data

- ▶ If you want to initialize all the user data to set the Wi-Fi kit as factory default status, press and hold the button (SW3) inside the Wi-Fi kit for 5 seconds. After releasing the button, all the lamps on the Wi-Fi kit are turned on and all the user data is deleted.

Updating the Wi-Fi kit by SD card



Type	Capacity
SD	128MB ~ 2GB
SDHC	4GB ~ 32GB
Micro SDHC	4GB ~ 8GB

1. Make update directory in the SD card. Copy the latest S/W image and paste it into the update directory of the SD card.
2. Insert the SD card into the SD card slot which is located inside the Wi-Fi kit. (C)
3. Press the **Reset** button on the side of the Wi-Fi kit.
4. The lamp inside the Wi-Fi kit is turned on during the update. (D)
 - ▶ When the update is completed correctly, the lamp is turned off.
 - ▶ When the update is completed incorrectly, the lamp blinks.
5. When the update fails, the Wi-Fi kit returns to the previous version when it restarts. Retry the update but if it still does not work, take following measures.
 - ▶ Check the file for an error: change the update image (file)
 - ▶ Check the SD file for an error: change the SD card
 - ▶ Check the PBA for an error: change the PBA.

Setting the network



NOTE

- This product supports DHCP (Dynamic Host Configuration Protocol) only. Before connecting the router to the Wi-Fi kit, check whether the DHCP server option function of your wired/wireless router is activated.
- Select a channel for wired/wireless router. The channel should be currently not in use.
- For the authentication/encryption protocols for wireless/wired access points, WPA/TKIP and WPA2/AES are recommended. New Wi-Fi authentication specifications and non-standard Wi-Fi authentication protocols are not supported.
- The quality of wireless network connection can be affected by surrounding wireless circumstance.
- If an internet service provider permanently registered the user's PC or MAC address (Identification number) of the modem, the Wi-Fi kit may not be connected to the internet. Please contact the internet service provider and inquire about the internet connection process to connect a device (e.g. air conditioner) to the internet.
- If the internet service provider requires ID or password to be connected to the internet, the Wi-Fi kit may not be connected to the internet. In this case, you need to enter ID or password every time you connect the internet.
- Internet may not be available due to the firewall. Please contact the internet service provider and request the solution.
- Since some wired/wireless router can send abnormal DNS (Domain Name Server) even though internet is connected, the Wi-Fi kit may not be connected to internet. In this case, contact the suppliers of wired/wireless router or internet service provider.
- If you followed what the internet service provider directed but cannot be still connected to the internet, contact Quietside/Samsung Tech support 888-699-6067.
- If the wired/wireless router is connected to the Wi-Fi kit but the router is not connected to the internet, the lamp of Wi-Fi kit() blinks.

Specification of wired/wireless router for Samsung Smart Air conditioner

- ▶ Please refer to the user manual for installation of your wired/wireless router.
- ▶ Wi-Fi kit supports Wi-Fi 2.4 GHz only.
- ▶ The product supports the IEEE802.11 b/g/n (2.4 GHz), Soft-AP communication protocol.
(Samsung recommends IEEE802.11n.)
- ▶ If the wired/wireless router is not Wi-Fi certified product, it may not be connected to the Wi-Fi kit.
- ▶ The certified wired/wireless router has Wi-Fi CERTIFIED logo on the product package or in the user manual.

Starting Samsung Smart Home App

Downloading Samsung Smart Home App

- ▶ You can download the Samsung Smart Home App by searching "Samsung Smart Home" on Play store, Galaxy Apps and iPhone App Store.

For android phone

- ▶ Korean key word : 삼성 스마트 홈
- ▶ English key word : Samsung Smart Home

For iPhone

- ▶ Korean key word : 스마트 홈
- ▶ English key word : Smart Home



NOTE

- Samsung Smart Home App supports android operating system 4.0 (ICS) or higher and is optimized with Samsung Smart phones (Galaxy S or Note series). If you run the App using a Smart phone manufactured by other companies, some functions may operate differently.
- For iPhone users, the App supports iOS7 or higher.
- The UI of Samsung Smart Home App can be changed for improvement of usability and performance without advanced notice and may differ from images in this manual.

Running the Samsung Smart Home App

Before using the Samsung Smart Home App, register the Samsung account.

- ▶ If you are a Samsung Smart phone user, you can automatically log on to the App with the Samsung account.
- ▶ If you are not a Samsung Smart phone user, the login page appears every time you use the Samsung Smart Home App.
- ▶ Search the country where the product will be used and press the **Save** button. It appears only one time at the first operation.



NOTE

- If you are a Samsung Smart phone user but don't have Samsung account, the Samsung account registration page appears every time you run the Samsung Smart Home App.
- If you don't have Samsung account, press the **Create account** button.

Connecting the air conditioner to Samsung Smart Home app

- ▶ To control the air conditioner remotely, connect the air conditioner to Samsung Smart Home app. Download and install Samsung Smart Home app, then configure settings by following the instructions on the screen.

Starting SmartThings app

To use the SmartThings app, connect the product to the network in the sequence described below.

The images shown may differ depending on your smartphone model, OS version and manufacturer.

You need to set up the Wi-Fi access point only when connecting the product to a Wi-Fi network. Once the product is connected, you can use the SmartThings app via Wi-Fi, 3G, LTE or more wireless networks.

Checking the power connections

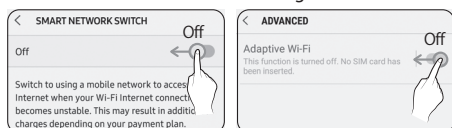
Check if the power is connected to the product and the access point.

Setting up and connecting to a Wi-Fi access point using your smartphone

- To connect the product to a Wi-Fi network, turn on Wi-Fi at "Settings > Wi-Fi", and then select the access point to connect to
 - Only alphanumeric characters are supported for wireless access point names (SSIDs).
If an SSID has a special character, rename it before connecting to it.
 - This product supports only Wi-Fi 2.4 GHz.



- Turning off "SMART NETWORK SWITCH" at "Settings > Wi-Fi" on your Smartphone
 - If "SMART NETWORK SWITCH" or "Adaptive Wi-Fi" is turned on, you cannot connect to the network. Be sure to turn off these functions before connecting to the network.



- The setup may differ depending on your smartphone model, OS version and manufacturer.

NOTE

- Checking the Internet connectivity
 - After connecting to Wi-Fi, check that your smartphone is connected to the Internet.



- A firewall may prevent your smartphone from connecting to the Internet. In this case, contact your Internet service provider for troubleshooting.

NOTE

Starting SmartThings app

Downloading the SmartThings app and registering your Samsung account

1. Downloading the SmartThings app
 - ▶ Search for “SmartThings” on Play Store or App Store, and download the SmartThings app to your smartphone.
 - ▶ If the SmartThings app is already installed on your smartphone, update it to the latest version.



NOTE

- For the tablets that are not supported by the SmartThings app and the smart phones that has an OS version earlier than the recommended versions, the SmartThings app may not be found.
 - Android OS 6.0 or later (with at least 2 GB RAM) is recommended.
 - Supported screen resolutions: 1280 x 720 (HD), 1920 x 1080 (FHD), 2560 x 1440 (WQHD)
- The SmartThings app is not compatible with some Apple devices including iPad and some smartphones.
 - iPhone 6 or later with iOS 10.0 or later is supported.
 - Supported screen resolutions: 1334x750, 1920x1080
- The SmartThings app may change without prior notice to improve product usability and performance.

2. Registering your Samsung account

- ▶ A Samsung account is required to use the SmartThings app. To create your Samsung account and log in to your account, follow the instructions displayed on the SmartThings app. You do not need to install an additional app.



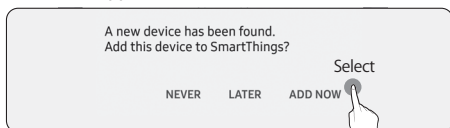
NOTE

- If you already have a Samsung account, log in to the account. When your smartphone is a Samsung device and you have a Samsung account, your smartphone is automatically logged in to your account.

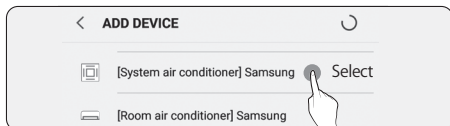
Connecting the SmartThings app to your product

1. Selecting the product to connect to

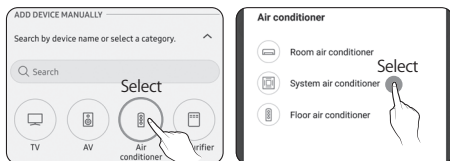
- 1) Start the SmartThings app about one minute after turning on the product to connect to.
- 2) After the SmartThings app is started, select “ADD NOW” when a pop-up window saying that a product to connect to is found appears.



- 3) If the pop-up window does not appear, select “ADD DEVICE”, and then select the product you want to connect to from the list of available devices.



- 4) If the product you want to connect to is not listed in the list of available devices, select “System air conditioner” at “ADD DEVICE MANUALLY”.



2. Connecting the SmartThings app to your product

- ▶ Follow the instructions displayed on the SmartThings app to connect to your product.
- ▶ For information on how to use the SmartThings app, select the How To menu on the app.



NOTE

- If a pop-up window saying that the Internet connection is unsure appears during connecting to your product, do not select it and continue to proceed with the connection.
- If a pop-up window saying that the device is already registered appears during connecting to your product, get permission using "REQUEST PERMISSION" from a user already connected to the product, or create a new account using "REGISTER MY ACCOUNT" to independently connect to the product.
- If a Samsung account-related country error occurs during connecting to your product, log out of your current Samsung account, log in to your previous Samsung account, and then delete all devices that have been connected previously. Then, log in to your current Samsung account again, and then configure the settings.
- If a failure message appears while adding a device, see "Setting up and connecting to a Wi-Fi access point using your smartphone" on page 15. The connection may fail temporarily due to an installation location problem of the access point or other problems.
- If your Internet service provider permanently have registered the MAC address (a unique identification number) of your PC or modem, you may not be able to connect your product to the Internet. Contact your Internet service provider and ask how to connect devices other than your PC (such as an air conditioner and an air purifier) to the Internet.

Starting System Air conditioner App

Controlling the air conditioner with Samsung Smart Home or SmartThings app

► You can skillfully control the air conditioner.

Category	Control items	Description
Control and Monitoring	All On/Off	Turn all devices on or off
	On/Off	Turn an indoor unit & ERV & DHW on or off.
	Desired temperature	Control an indoor unit & DHW desired temperature.
	Fan speed	Control the fan speed.
	Air direction	Control the air direction.
	Wind-Free	Control Wind-Free.
	Mode	Control an indoor unit and ERV operation mode.
Additional function	Energy Monitor	View real-time electricity consumption and the total amount of electricity usage.
	Schedule	Create, add, and delete schedules.
	Group	Create, add, delete, and control zones.
	Settings	Set the temperature unit, the range of temperature adjustment, and the range of heating temperature.



NOTE

- Some functions may not be available depending on the indoor unit specifications.

Troubleshooting

Before you call a service center, please check the items in the table below.

Problem		Solution
After installing Samsung Smart Home or SmartThings App, the air conditioner cannot be connected to the App.		Connect the air conditioner to wireless router.
Samsung account cannot be accessed.		Check your ID and password on Samsung account screen.
A failure message appears when the device is being added.		▶ The failure might be temporary due to the distance between the wired or wireless router and the air conditioner or other problems. Try again later. ▶ Disconnect power to the air conditioner for 30 seconds. Reconnect power and try the setting again.
The control function of Samsung Smart Home or SmartThings App does not work.	Check that all the 3 Wi-Fi kit lamps are turned on.	Reset the Wi-Fi kit and check the kit again.
	Check whether only the  lamp of Wi-Fi kit is turned on.	Check whether you have entered correct password for the wired/ wireless router when adding the device. Check the status of wired/wireless router.
	Check whether the lamp of the  lamp of Wi-Fi kit blinks.	Check that the internet is correctly connected by using the wired/ wireless router.
	Check whether all the lamps of the Wi-Fi kit blinks.	The Wi-Fi kit has a problem. Contact Quietside/Samsung Tech Support 888-699-6067.
	Check whether the lamp  of Wi-Fi kit blinks.	The Wi-Fi kit is not correctly connected to the indoor unit. Contact Quietside/ Samsung Tech Support 888-699-6067.
The indoor unit mode of multi product model that supports heating/cooling is displayed only one between heating and cooling.		▶ Heat pump model is displayed automatically restrictively to be able to select only the operating mode on outdoor unit, in order to prevent the mixed control. (* Mixed control: A situation when both cooling and heating mode is selected in each indoor units connected to same outdoor unit) 1. If you turn off the other indoor unit when you want to select the current working operation mode and the other operation mode, all operable modes are displayed. 2. If the main indoor unit is set up, change the operating mode of main indoor unit.
LED Status is still Initialized. (LED status should be changed within one minute)		1. Check whether the Communication cable is correctly connected between network PBA and interface module PBA. 2. Replace the Wi-Fi Kit if the problem is still same, even though connection is exactly correct.

Open Source Announcement

The software included in this product contains open source software. You may obtain the complete corresponding source code for a period of three years after the last shipment of this product by sending an email to <mailto:oss.request@samsung.com>.

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