airCloud Adapter GA-WFG
Operation and Installation Guide

General Information

airCloud Go is a cloud-based solution for remotely controlling your Hitachi air conditioning system via smart phones. The airCloud adapter GA-WFG is used to connect your air conditioning system to the cloud through your Wi-Fi home router. Please read the guide and safety precautions before installing the adapter. The installation is required to be performed by a professional. Please follow all of the instructions below carefully and keep the guide for the entire life of the adapter. Any installation or use not foreseen by Johnson Controls-Hitachi Air Conditioning will be deemed non-compliant. This would void the warranty and discharges Johnson Controls-Hitachi Air Conditioning of all liability, as does any failure to comply with the instructions given herein.

General Safety Advice

- Do not try to open the housing of the adapter. Avoid dropping or impact and never immerse the adapter in liquid.
- Do not use abrasive products or solvents to clean the housing of the adapter. Its surface can be cleaned using a soft dry cloth.
- Do not use the adapter outdoors. Do not run the connection cable outdoors.
- Any use or modification of the equipment not foreseen by Johnson Controls-Hitachi Air Conditioning could endanger users.

| ⚠ WARNING | : | **WARNING** indicates a hazardous situation that, if not avoided, could result in death or serious injury. |
| ⚠ CAUTION | : | **CAUTION** indicates a hazardous situation that, if not avoided, could result in minor or moderate injury. |

| *NOTICE* | : | **NOTICE** is used to address practices not related to physical injury. |
| NOTE | : | NOTE is useful information for operation and/or maintenance. |

For Installers

⚠ WARNING

- Make sure there is no dust on connection points such as the power terminals and/or on the cable to mitigate the risk of fire or electric shocks.
- Only use the cable supplied. Do not modify the cable. Doing so may result in the cable overheating which could cause a fire.
- Do not install the adapter near devices that could be affected by radio waves.
- Do not allow children to touch the adapter. Risk of injury.

⚠ CAUTION

- Do not install the adapter near devices using radio frequencies as radio transmissions will affect stable operation (refer to the applicable local standards).
- Do not install the adapter in a location where there may be people with heart pacemakers.

NOTICE

- Avoid installing the adapter in an environment with high humidity (e.g. bathroom).

For Users

⚠ WARNING

- Do not operate the air conditioner with ambient humidity above 80%. Water droplets may collect on the moving flaps and drip onto and damage equipment placed under the indoor unit. The damage may be worse if the problem is not detected during remote operations from App.
- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
- Children should be supervised to ensure that they do not play with the appliance.

⚠ CAUTION

- Make sure that the Air Conditioning unit is active during Wi-Fi communication operations.
- Abnormal operation may result in fire or electric shocks. Have the adapter installed by a qualified installer.

Technical Specifications

- ABS plastic housing.
- Configuration: AP and WPS.
- Operating temperature: 5°C to 35°C.
- Operating humidity: between 35% and 90%.
- Index protection rating IP30.
- Pollution category: Class 2.
- Dimensions (l × w × h): 105 × 46 × 20 mm.
- Wireless LAN standard: IEEE 802.11b/g/n.
- Security: WPA/WPA2.
- Frequency used and maximum power used: 2.4000 GHz - 2.4835 GHz/erp < 100 mW.
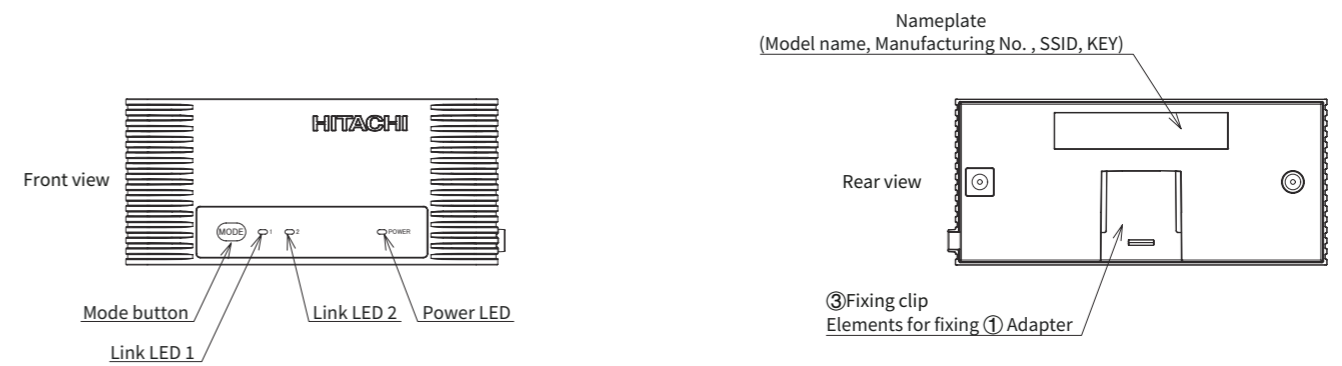- Power supply: 15V 110mA DC.
- Integrated antenna.

Packing List

No.	Name	Qty.	No.	Name	Qty.
①	Adapter with connecting cord (2m) and a cable tie	1	②	SSID&KEY Label	1
③	Fixing clip	1	④	Wall mounting screw M4X30	2
⑤	Operation and Installation Guide English (this manual)	1	⑥	Software Licenses Information	1

The ② SSID&KEY label is used to register the device on the mobile application.
To prevent the label from getting lost, please paste it on the right side.
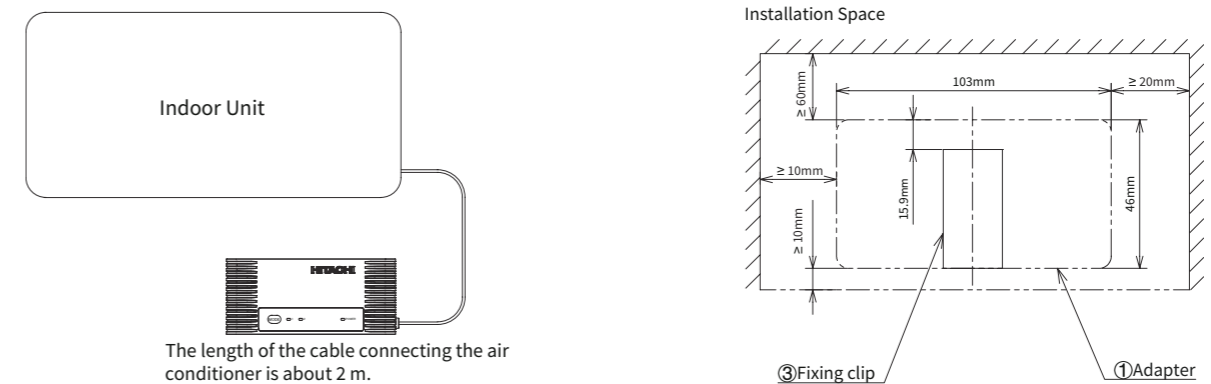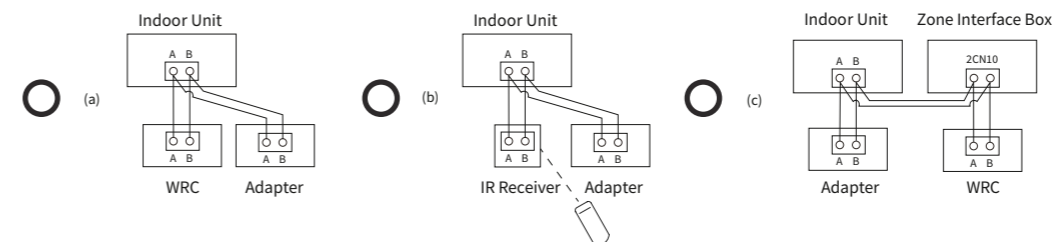
SSID:XXXXXXXXXXXX
KEY: XXXXXXXXXX
TYPE: XX

Product Component Name

Nameplate
(Model name, Manufacturing No. , SSID, KEY)

Front view

Mode button — Link LED 2 — Power LED
Link LED 1

Rear view

③Fixing clip
Elements for fixing ① Adapter

Installation Drawing

Please reserve enough space for installation as shown in the following figures.

Indoor Unit

The length of the cable connecting the air conditioner is about 2 m.

Installation Space

103mm   ≥ 20mm
≥ 60mm
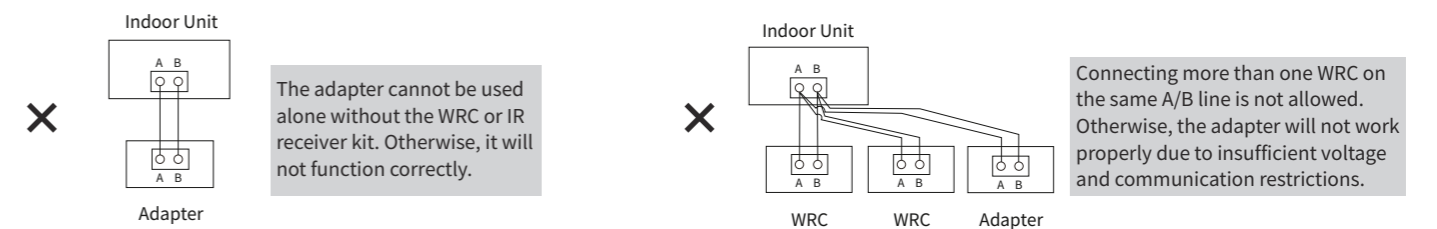≥ 10mm
≥ 10mm
15.9mm
46mm

③Fixing clip   ①Adapter

Installation Restrictions

- This adapter must be used in conjunction with a Wired Remote Controller (WRC) following (a), or with an IR receiver kit following (b).
- For Zone systems, this adapter needs to be installed following (c).

(a) Indoor Unit A B — WRC / Adapter
(b) Indoor Unit A B — IR Receiver / Adapter
(c) Indoor Unit A B / Zone Interface Box 2CN10 — Adapter / WRC

- The following system configurations are NOT supported.

The adapter cannot be used alone without the WRC or IR receiver kit. Otherwise, it will not function correctly.

Indoor Unit A B — Adapter

Connecting more than one WRC on the same A/B line is not allowed. Otherwise, the adapter will not work properly due to insufficient voltage and communication restrictions.

Indoor Unit A B — WRC WRC Adapter

- The max cable length between indoor unit and adapter is 15 meters, and the max cable length between indoor unit and WRC (or IR receiver) is 100 meters.
- For safety reasons, please use the included adapter cable as it is. If an extension is necessary, please consult a professional installation service for assistance.
- When connecting wiring, branch from the terminal block of the indoor unit and connect.
- When adding or replacing an adapter/WRC to an existing system, please reset before using it.
- Please confirm with your supplier which indoor unit can be used with this adapter.

A163820MPD

Installation Procedure

> ⚠️ **WARNING**   Please isolate power to the air conditioner before installing this adapter. ❗

1. Determine the location according to the above "installation space", and mount the fixing clip ③ to the wall with wall mounting screws ④ (2pcs) as shown in Figure (a).

2. Insert the groove of adapter ① into the fixing clip ③ as shown in Figure (b).

3. Following the installation manual of the air conditioner to locate the electrical box and proceed to detach the front cover.

4. Insert the adapter cable through the communication line outlet of the electrical box. Different types of indoor units have different communication line outlet.
   ※Figure (c) shows the electrical box of PPIH-UFA1NQ indoor unit as an example.
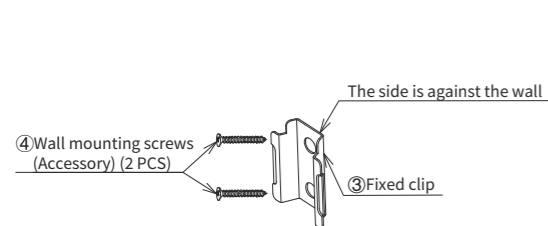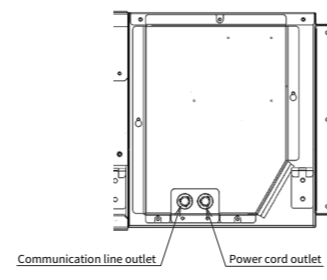

Figure (a)   Figure (b)   Figure (c)
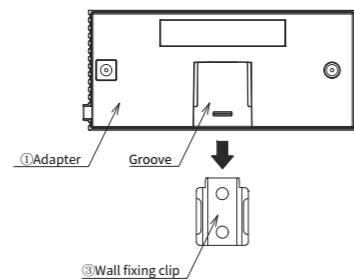
5. Connect the adapter cable to the A/B terminals on the board of the electrical box. The A/B terminals are the same one to connect with wired remote controller or IR receiver kit. There are two types of terminal blocks of indoor units with A/B terminals:
   (1)The terminal blocks of PPIM-UFA1NQ, PPIH-UFA1NQ, and PCIM-UFA1NQ indoor unit are installed on the PCBA board, as shown in Figure (d).
   (2)The terminal blocks of PCI-UFA1NQ and PPFC-UFA1NQ indoor unit are installed on the sheet metal parts of the electrical box, as shown in Figure (e).

   ※To avoid the cable being pulled out, the cable must be secured in the snap buckle.
   If there is a snap buckle in the electrical box of the indoor unit, secure the cable in it, as shown in Figure (d).
   If there is no snap buckle in the electrical box of the indoor unit, secure the cable in the snap buckle on the outside of the side panel of the indoor unit, as shown in Figure (f).
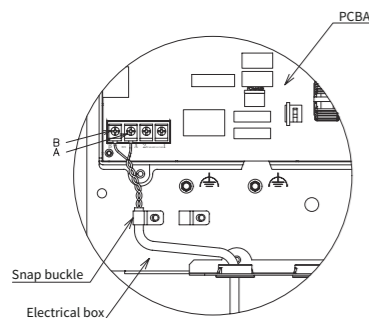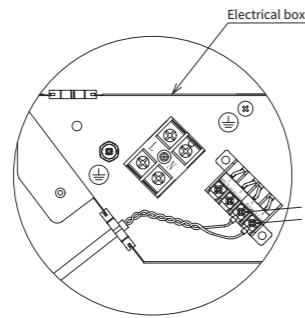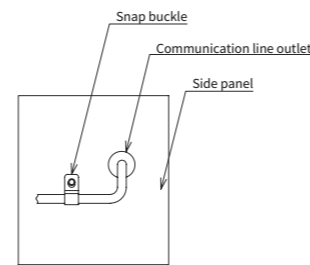

Figure (d)   Figure (e)   Figure (f)

6. There are two recommended methods for managing excess cable of the adapter:
   (1) For installation on the PPFC-UFA1NQ indoor unit, the excess cable should be secured inside the unit as depicted in Figure (g).
      a. Gather the excess cable through the indoor unit outlet and secure it with a cable tie.
      b. Tape the secured cable to the inside of the side panel of the indoor unit.
   (2) For installation on the PCI-UFA1NQ, PPIM-UFA1NQ, PPIH-UFA1NQ, and PCIM-UFA1NQ indoor units, the excess cable should be fixed outside the unit as shown in Figure (h).
      a. Gather the excess cable on the exterior of the indoor unit outlet and secure it with a cable tie.
      b. Tape the secured cable to a concealed area on the ceiling where it is not visible.
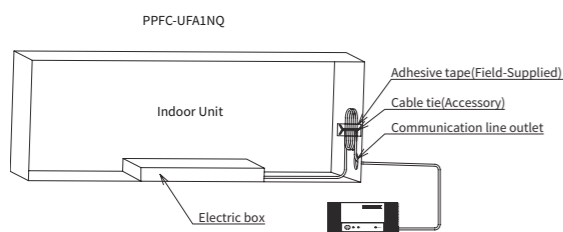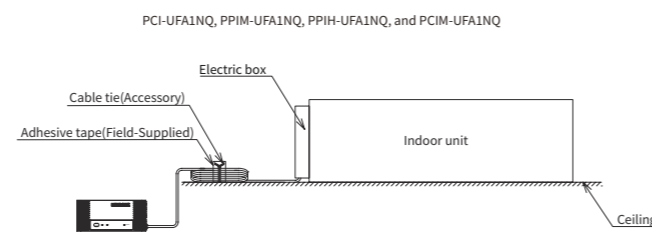

Figure (g)   Figure (h)

7. Close the cover of the electrical box, taking care not to trap the cable. Restore the air conditioner unit to its original state. For detailed operation, please refer to the Installation Manual of the air conditioner.

8. After completing all the above settings and checking the correct wiring connection, turn on the indoor unit power supply.

Status Indicator (LED Indicator may light up while the air conditioner is turned off)

Indicator	Corresponding Status	Indicator	Corresponding Status
All LEDs are off.	• Adapter OFF	Link LED 2 flashes 2 times / Power LED on	• AP connection requesting
Power LED flashes 1 time	• Adapter ON (Initialization to IDU connection checking)	Power LED flashes with 4s on and 1s off	• Router connection error
Power LED on	• Adapter ON (Not connected to Wi-Fi)	Power LED flashes with 4s on and 3s off	• Cloud connectivity error
Link LED 1 on / Power LED on	• Adapter ON (Wi-Fi connected)	Power LED flashes	• Unit alarm
Power LED flashes 5 times	• Adapter communication error	Power LED and Link LED 2 flash 4 times repeatedly. Link LED 2 flashes 4 times / Power LED flashes 4 times	• Initializing (under factory settings)
Link LED 1 flashes 2 times / Power LED on	• WPS connection requesting	Link LED flash with 1s on and 4s off / Power LED flashes with 1s on and 4s off	• Japan law forced stop (Future functions)

NOTE:
• Please try to power OFF/ON your air conditioner from the circuit breaker when an error occurs.

Initial Setting of App

Installation of App

a. Download App

   To download the "airCloud Go" application, search for it on the "App Store®"*1 or "Google Play"*2. Alternatively, you can scan the code provided below with your smartphone to directly access the application.

   *1: App Store® is a service mark of Apple Inc.

   *2. Google Play and the Google Play logo are trademarks of Google LLC.

   NOTE:

   • An internet connection is required to download, update, or use airCloud Go (user registration, etc.). Customers are responsible for internet communication costs.

b. User registration and onboarding the air-conditioner

   To get started, please complete the user registration process and closely follow the instructions on your app to onboard the air conditioner for use with the app. For more comprehensive step-by-step instructions, you can visit the product website by scanning the provided code below.

Restore Factory Setting

Restore the factory settings will erase the adapter configuration, and pairing procedure will be required to use the adapter. Please restore factory settings when discarding this adapter. To perform the factory reset, please follow these steps:

(1) Confirm the power LED turns on. Press and hold the MODE button for more than 15 seconds until the LED starts flashing.

(2) The Power LED and "Link LED 2" will flash four times. Afterward, only the Power LED will turn on, indicating that the factory reset has been successfully executed.

Link LED 1 on / Power LED on → Link LED 2 flashes 4 times / Power LED flashes 4 times → Power LED on
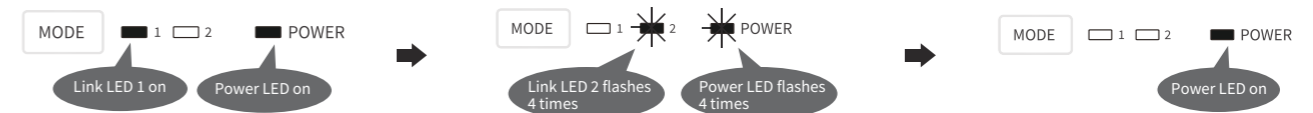
Scan the code to get the electronic manual.