airCloud Home Adapter SPX-WFG02
Operation and Installation Guide

General Information

airCloud Home is an cloud-based solution for remotely controlling your Hitachi air conditioning system via smart phone. The airCloud Home Adapter SPX-WFG02 is used to connect your air conditioning system to Cloud through your W-iFi 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 invalidate 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 route the connection cable outdoors.
- Any use or modification of the equipment not foreseen by Johnson Controls-Hitachi Air Conditioning could endanger users.

⚠ WARNING Indicates a hazardous situation that, if not avoided, could result in death or serious injury.

⚠ CAUTION Indicates a hazardous situation that, if not avoided, could result in minor or moderate injury.

NOTICE Indicates information considered important, but not hazard-related (for example, messages relating to property damage).

For Installers

⚠ WARNING

- Make sure there is no dust on connection points such as the power terminals and/or on the cable. Risk of fire or electric shocks.
- Only use the cable supplied. It must not be altered. Risk of cable heating, resulting in 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 in a location where devices using radio frequencies as a transmission medium are prohibited (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 30% and 80%.
−Index protection rating IP30.
−Pollution category: Class 2.
−Dimensions (l × w × h): 80 × 40 × 16.5 mm.
−Wireless LAN standard: IEEE 802.11b/g/n
−Security: WEP/WPA/WPA2/Open.
−Frequency used and maximum power used: 2.4000 GHz - 2.4845 GHz/erp < 100 mW.
−Power supply: 12V 150mA DC.
−Integrated antenna.

Recycling

Do not dispose of the Adapter with the household waste. Please take it to a collection point or an approved centre to ensure it is recycled.

Declaration of Conformity

Hereby, Johnson Controls-Hitachi Air Conditioning declares that the radio equipment type 2 is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: www.airdocumentation.com

Packing List

No.	Name	Qty.	No.	Name	Qty.
①	Adapter with connecting cord (1.0m) 	1	③	SSID&KEY Label 	1
②	Fixing clip 	1	④	Operation and Installation Guide (this manual)	1

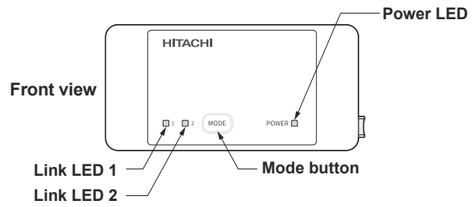
Paste ③SSID&KEY label on the space on the right side as shown in the figure on the right, and please write down the installation location (like living room, bed room, etc.) on the label.

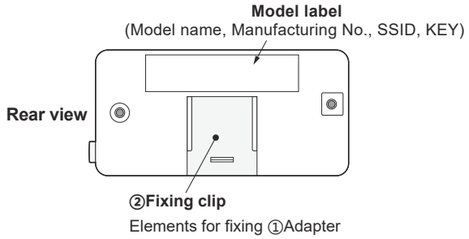
SSID&KEY label paste position

SSID:
KEY:

Installation location:

Product Component Name





Installation Procedure

⚠ WARNING **Please unplug the air conditioner before installing this Adapter.**

(1) Please reserve more than 40mm space in the lower part of the indoor unit as shown on figure (a).
(2) Remove the front cover of the air conditioning unit and the cover of the electric box. Refer to the air conditioner installation manual for instructions on removing the front cover and to open the electric box.
(3) The connecting cord supplied with the Adapter must be connected to the electronic board inside the electric box. Please pull the connecting cord from the connecting cord outlet as shown on figure(b), figure(c) and figure(d).

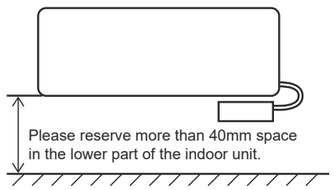


Figure (a)

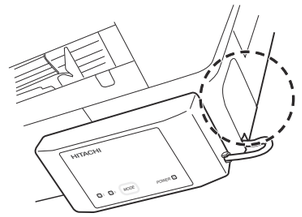
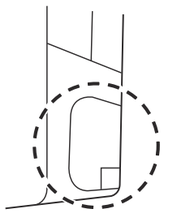


Figure (b)


Figure (c)

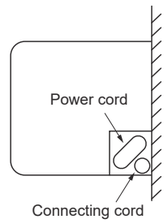
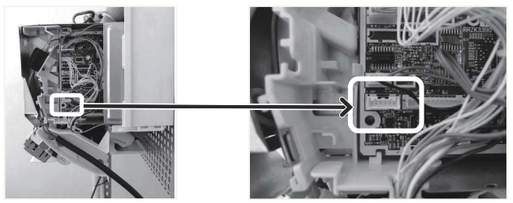
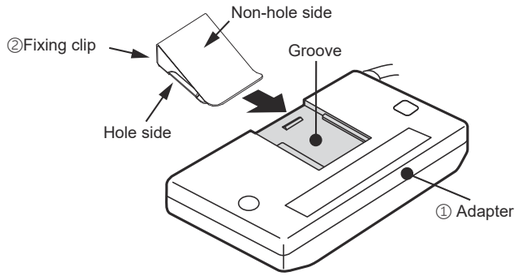


Figure (d)

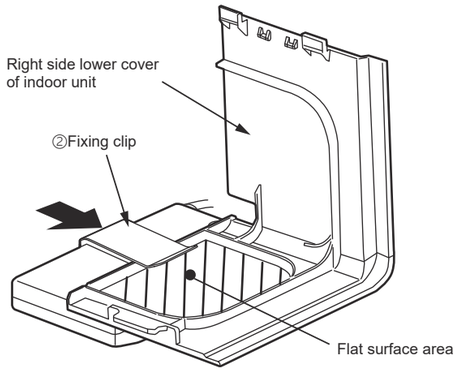
(4) Connect the connecting cord to the electric box as shown on figure (e). The connector on the electric board is usually marked as CN7. The position of CN7 connector may vary depending on the air conditioning model. Refer to the air conditioning system installation manual to confirm the connector number.
(5) Close the cover of the electric box, taking care not to trap the cable. Close the front cover of the air conditioning unit. Refer to the air conditioner installation manual for instructions on closing the electric box and closing the front cover.


Figure (e)

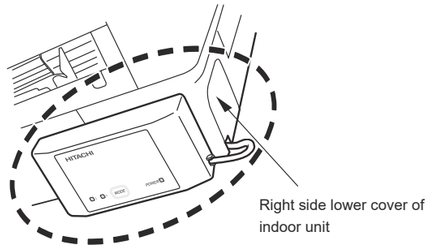
(6) Insert the hole side of the ②fixing clip into the groove of ①Adapter.

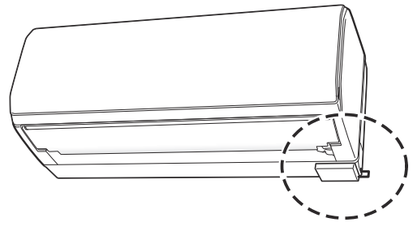


(7) Insert ②fixing clip and clamp to the right side lower cover of indoor unit.



(8) Please confirm the air conditioner installation manual on how to install the lower cover of indoor unit.





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

Indicator	Corresponding Status
All LEDs are off.	• Adapter and the air conditioner is not connected or the air conditioner is not plugged in.
POWER Power LED on	• Power is on. • The connection with the Wi-Fi router has not been established.
Link LED 2 flashes / Power LED on	• Waiting to connect to the Wi-Fi router using AP mode.
Link LED 1 flashes / Power LED on	• Waiting to connect the Wi-Fi router using WPS mode.

Indicator	Corresponding Status
Link LED 1 on / Power LED on	• The connection between the Adapter and the router is completed. • The operation can be conducted through smartphone.
All LEDs flash 4 times repeatedly. / Link LEDs flash / Power LED on	• Restoring factory setting procedure has started.
Power LED flash	• Power LED flashing 5 times: Air Conditioner communication error. • Power LED flashing with 4sec ON/1sec OFF: Router connection error . • Power LED flashing with 4sec ON/3sec OFF: Cloud connection error.

Note:
Please try to power OFF/ON your air conditioner from power cord when an error occurs.

Initial Setting of App

Installation of App

Go to Google Play or the Apple Store (depending on your smartphone) and download the “airCloud Home” Application.

※ Please read and agree to “the Terms of Use” on the App.
※ The App is free. Communication charges will be incurred for download and operation as per the local cell phone provider.
※ Android is a trademark and registered by Google Inc.
※ iPhone is a trademark and registered by Apple Inc.
※ QR code is a trademark and registered by DENSO WAVE Inc.

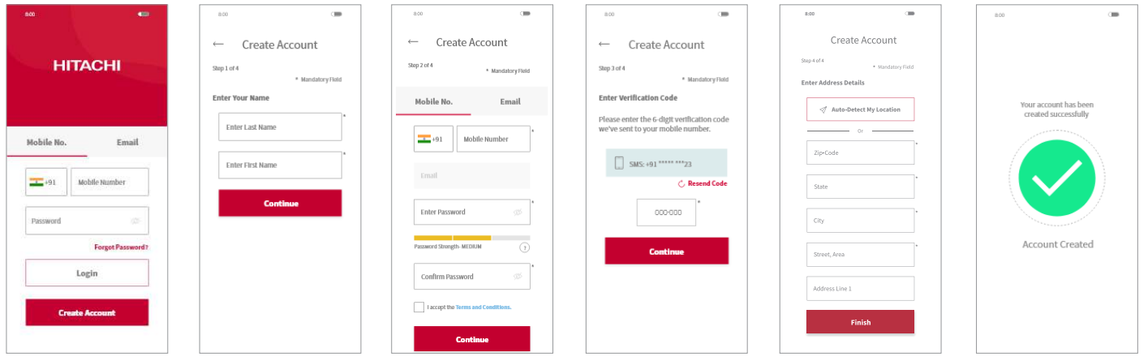
Europe importer: Johnson Controls Hitachi Air Conditioning Europe SAS
Rue de Lombardie, Parc Aktiland II – 69800 Saint Priest, France

Manufacturer: Johnson Controls-Hitachi Air Conditioning Wuhu Co., Ltd.
No.2 Qiluoshan Road, Wuhu City, Anhui Province 241009, China

Registration on App

(1) Click “Create Account”.
(2) Enter your name and click “Continue”.
(3) Enter your phone number and password (or click “E-mail” tab, and enter your E-mail address and password), read the “terms and condition” and check on the box, click “Continue".
(4) Enter received verification code you received and click “Continue”.
(5) Click “Auto-Detect My Location” or Enter address details manually, and click “Finish”.
(6) The account has been created successfully.

(1) (2) (3) (4) (5) (6)



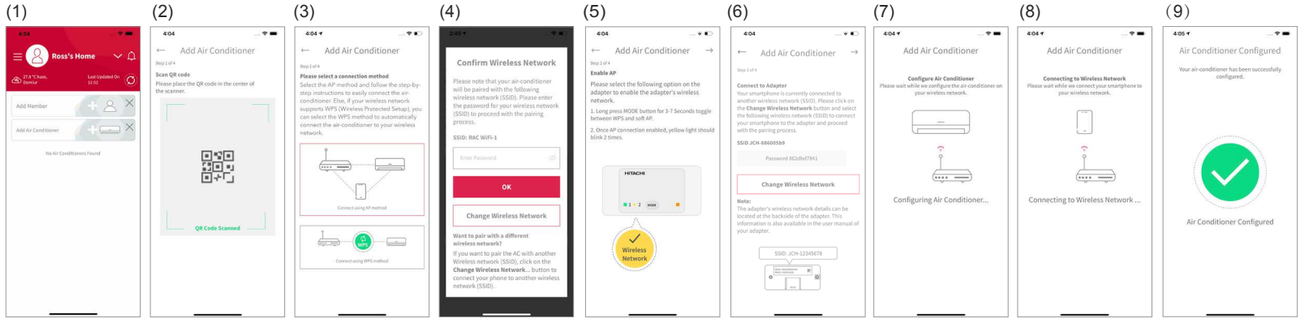
Note:
The first registered user can manage all the users and set access rights as a group owner. Group owner can invite others to register.

Air Conditioner Registration and Router Connection

Make sure that the Adapter is properly installed and the air conditioner is plugged in, then follow the steps below to add your air conditioner device to the App.

(1) Click “Add Air Conditioner” on the top screen after registration and login your App.
(2) Scan QR code on the bundled SSID&KEY label.
(3) Select “Connect using AP method”.
(4) If the SSID shown on the App is your home router, enter your home router password, click “OK”. Otherwise, click “Change Wireless Network”, select your home router enter password and click “OK”.
(5) Press and hold the MODE button for 3 to 7 seconds until Link LED 2 flashes. The Link LED 2 keeps flashing till communication with the Wi-Fi router is succeeded.
(6) Click “Change Wireless Network”, select the Wi-Fi access point of the Adapter with SSID printed on the bundled SSID&KEY Label, input password (the KEY). Click right arrow icon on the screen top to continue for connecting your smart phone with the Adapter.
(7) Waiting for the Adapter to connect to your home router. When communication is established, Link LED 1 turns on, Link LED 2 turns off.
(8) Your air conditioner has been successfully configured. You can reconnect your smart phone to your home router following the instruction of the App.

(1) (2) (3) (4) (5) (6) (7) (8) (9)



Notes:
- If communication cannot succeed within 1 minute, please follow the instructions of the App to complete the pairing process again.
- If a user in the group has already registered some air conditioning units, the other users in the same group can also control the unit.
- The above is the process for using the AP method to add air conditioner. Please follow the guide on the App if you choose to use WPS method on step(3).

Restore Factory Setting

Reset the internal settings (restore the factory settings) by pressing and holding MODE button for 15 seconds. Please note that the configuration will be cleared and new pairing procedure will be required to use the Adapter. Please restore factory setting when discarding this Adapter.

(1) While the power light turns on, keep pressing MODE button until the LED flashes (about 15 seconds).
(2) Make sure all LEDs flash 4 times repeatedly.
(3) Only the power LED turns on after restoring factory setting succeed.

