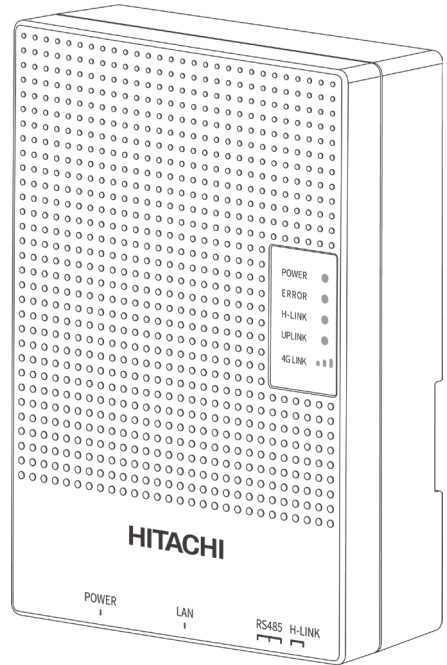


INSTALLATION & MAINTENANCE MANUAL

airCloud Gateway

AIR CONDITIONER
MANAGEMENT SYSTEM

MODEL
HC-IOTGW



air

Cooling & Heating

A10013740A

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1. Safety Summary




Important Notice

- Hitachi - Johnson Controls Air Conditioning Inc. pursues a policy of continuing improvement in design and performance in its products. As such, Hitachi - Johnson Controls Air Conditioning Inc. reserves the right to make changes at any time without prior notice.
- Hitachi - Johnson Controls Air Conditioning Inc. cannot anticipate every possible circumstance that might involve a potential hazard.
- This airCloud Gateway is designed for standard air conditioning applications only. Do not use this unit for anything other than the purposes for which it was intended for.
- The installer and system specialist shall safeguard against leakage in accordance with local pipefitter and electrical codes. The following standards may be applicable, if local regulations are not available. International Organization for Standardization: (ISO 5149 or European Standard, EN 378). No part of this manual may be reproduced in any way without the expressed written consent of Hitachi - Johnson Controls Air Conditioning Inc.
- If you have questions, please contact your distributor or dealer.
- This manual provides common descriptions, basic and advanced information to maintain and service this airCloud Gateway which you operate as well for other models.
- This manual should be considered as a permanent part of the airCloud Gateway equipment and should remain with the airCloud Gateway equipment.


Product Inspection upon Arrival

1. Upon receiving this product, inspect it for any damages incurred in transit. Claims for damage, either apparent or concealed, should be filed immediately with the shipping company.
2. Check the model number, electrical characteristics (power supply, voltage, and frequency rating), and any accessories to determine if they agree with the purchase order.
3. The standard utilization for this unit is explained in these instructions. Use of this equipment for purposes other than what it designed for is not recommended.
4. Please contact your local agent or contractor as any issues involving installation, performance, or maintenance arise. Liability does not cover defects originating from unauthorized modifications performed by a customer without the written consent of Hitachi - Johnson Controls Air Conditioning Inc. Performing any mechanical alterations on this product without the consent of the manufacturer will render your warranty null and void.

Signal Words

 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).
	The location with this signal in circuit board means there is high voltage, if not avoided, could result in death or serious injury.

General Precautions

 WARNING	To reduce the risk of serious injury or death, read these instructions thoroughly and follow all warnings or cautions included in all manuals that accompanied the product and are attached to the unit. Refer back to these safety instructions as needed.
--	---

- This system should be installed by personnel certified by Hitachi - Johnson Controls Air Conditioning Inc. Personnel must be qualified according to local, state and national building and safety codes and regulations. Incorrect installation could cause leaks, electric shock, fire or explosion. In areas where 'Seismic Performance' requirements are specified, the appropriate measures should be taken during installation to guard against possible damage or injury that might occur in an earthquake if the unit is not installed correctly, injuries may occur due to a falling unit.
- Use appropriate Personal Protective Equipment (PPE), such as gloves and protective goggles and, where appropriate, have a gas mask nearby. Also use electrical protection equipment and tools suited for electrical operation purposes. Keep a quenching cloth and a fire extinguisher nearby during brazing. Use care in handling, rigging, and setting of bulky equipment.
- When transporting, be careful when picking up, moving and mounting these units. Although the unit may be packed using plastic straps, do not use them for transporting the unit from one location to another. Do not stand on or put any material on the unit. Get a partner to help, and bend with your knees when lifting to reduce strain on your back. Sharp edges or thin aluminum fins on the air conditioner can cut fingers, so wear protective gloves.
- Do not touch or adjust any safety devices inside the indoor or outdoor units. All safety features, disengagement, and interlocks must be in place and functioning correctly before the equipment is put into operation. If these devices are improperly adjusted or tampered with in any way, a serious accident can occur. Never bypass or jump-out any safety device or switch.
- Hitachi - Johnson Controls Air Conditioning will not assume any liability for injuries or damage caused by not following steps outlined or described in this manual. Unauthorized modifications to Hitachi - Johnson Controls Air Conditioning products are prohibited as they:
 - * May create hazards which could result in death, serious injury or equipment damage;
 - * Will void product warranties;
 - * May invalidate product regulatory certifications;
 - * May violate OSHA standards.
- 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.
- Keep the appliance and its cord out of reach of children less than 8 years old.
- Children should be supervised to ensure that they do not play with the appliance.
- If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.

NOTICE

Take the following precautions to reduce the risk of property damage.

- Be careful that moisture, dust, or variant refrigerant compounds not enter the refrigerant cycle during installation work. Foreign matter could damage internal components or cause blockages.
- Do not install this unit in any place where silicon gases can coalesce. Any amount of drainage moisture condensate could settle inside of the electrical box, possibly causing electrical failures.
- When installing the unit in a hospital or other facility where electromagnetic waves are generated from nearby medical and/or electronic devices, be prepared for noise and electronic interference Electromagnetic Interference (EMI). Do not install where the waves can directly radiate into the electrical box and controller cable. Inverters, appliances, high-frequency medical equipment, and radio communications equipment may cause the unit to malfunction. The operation of the unit may also adversely affect these same devices. Install the unit at least 3m (approximately 10ft.) away from such devices.
- Do not install the unit in any location where animals and plants can come into directly. Exposure could adversely affect the animals and plants.
- Do not install the unit with any downward slope to the side of the drain boss. If you do, you may have drain water flowing back which may cause leaks.
- Do not install the unit in any place where oil can seep onto the units, such as table or seating areas in restaurants, and so forth. For these locations or social venues, use specialized units with oil-resistant features built into them. In addition, use a specialized ceiling fan designed for restaurant use. These specialized oil-resistant units can be ordered for such applications. However, in places where large quantities of oil can splash onto the unit, such as a factory, even the specialized units cannot be used. These products should not be installed in such locations.

Installation Precautions

WARNING

Take the following precautions to reduce the risk of electric shock, fire or explosion resulting in serious injury or death.

- When installing the unit into...
 - * A wall: Make sure the wall is strong enough to hold the unit's weight. It may be necessary to construct a strong wood or metal frame to provide added support.
 - * Damp or uneven areas: Use a raised concrete pad or concrete blocks to provide a solid, level foundation for the unit to prevent water damage and abnormal vibration.
 - * An area with high winds: Securely anchor the device down with bolts and a metal frame. Provide a suitable air baffle.
- Do not install the unit in the following places. Doing this can result in an explosion, fire, deformation, corrosion, or product failure.
 - * Explosive or flammable atmosphere
 - * Where a fire, oil, steam or powder can directly enter the unit, such as nearby or above a kitchen stove.
 - * Where oil (including machinery oil) may be present.
 - * Where corrosive gases such as chlorine, bromine, or sulfide can accumulate, such as near a hot tub or hot spring.
 - * Where dense, salt-laden airflow is heavy, such as in coastal regions.
 - * Where the air quality is of high acidity.

* Where harmful gases can be generated from decomposition.

- Before performing any brazing work, be sure that there are no flammable materials or open flames nearby.
- Perform a test run to ensure normal operation. During the test run, keep fingers and clothing away from the device.
- Clean up the site when finished, remembering to check that no metal scraps or bits of wiring have been left behind inside the unit being installed. After installation work for the system has been completed, explain the “Safety Precautions”, the proper use and maintenance of the unit to the customer according to the information in all manuals that came with the system. All manuals and warranty information must be given to the user.

Electrical Precautions



Take the following precautions to reduce the risk of electric shock, fire or explosion resulting in serious injury or death.

- Highly dangerous electrical voltages are used in this system. Carefully refer to the wiring diagram and these instructions when wiring. Improper connections and inadequate grounding can cause serious injury or death.
- Before servicing, open and tag all disconnect switches. Never assume that electrical power is disconnected. Check with meter and equipment.
- Only use electrical protection equipment and tools suited for this installation.
- Use specified cables between units. Use wiring and cables insulated with PVC, TFE, PTFE, FEP, polychloroprene or polyimide.
- Communication cabling shall be a minimum of 18-Gauge, two-Conductor, Stranded Copper. Shielded cable must be considered for applications and routing in areas of high EMI and other sources of potentially excessive electrical noise to reduce the potential for communication errors. When shielded cabling is applied, proper bonding and termination of the cable shield is required. Plenum and riser ratings for communication cables must be considered per application and local code requirements.
- Be sure to install circuit breakers (ground fault interrupter, isolating switch, molded case circuit breaker and so on), with the specified capacity. Ensure that the wiring terminals are tightened securely to recommended torque specifications.
- Clamp electrical wires securely with a cable clamp after all wiring is connected to the terminal block. In addition, run wires securely through the wiring access channel.
- When installing the power lines, do not apply tension to the cables. Secure the suspended cables at regular intervals, but not too tightly.
- Make sure that the terminals do not come into contact with the surface of the electrical box. If the terminals are too close to the surface, it may lead to failures at the terminal connection.
- Turn OFF and disconnect the unit from the power source when handling the service connector. Do not open the cover without turning OFF the main power supply.
- Disconnect the power source completely before attempting any maintenance for electrical parts. Check to ensure that no residual voltage is present after disconnecting the power source.
- Do not clean with, or pour water into the unit as it could cause electric shock and/or damage the unit. Do not use strong detergent such as a solvent. Clean with a soft cloth.
- Check that the ground cable is securely connected. Do not connect ground wiring to gas piping, water piping, lighting conductor, or telephone ground cables.
- If there are frequent occurrences with blown fuses or flipped circuit breakers, shut down the system immediately and contact your service contractor.

2. System Configuration

2.1 System Configuration

This installation and operation manual is exclusively for the airCloud Gateway. Sample of system configuration is illustrated in Figure 2.1. Refer to the installation and maintenance manual for each of the air conditioners and devices connecting to the system.

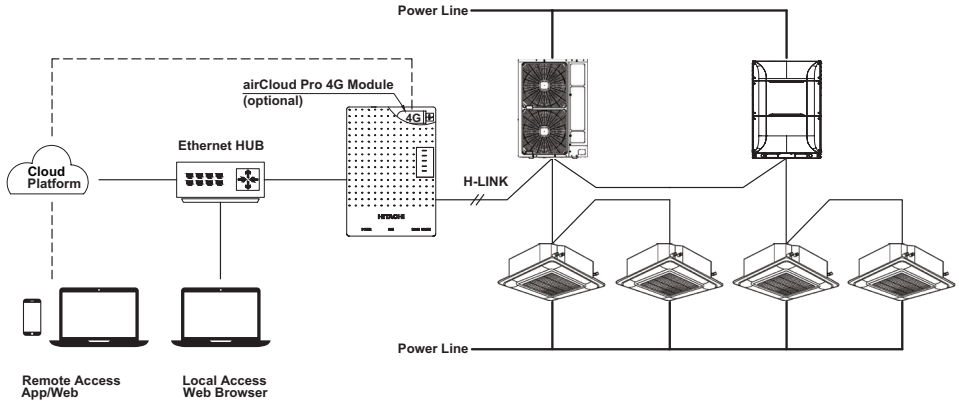


Figure 2.1 Sample of System Configuration

1. Hitachi-Johnson Controls Air Conditioning provides the airCloud Gateway, 4G Module (optional) and Cloud Platform; others are prepared by user.
2. Please refer to “4. App Operation” to get more information for remote access.
3. Up to 16 outdoor units and 80 indoor units / 32 outdoor units and 64 indoor units (excluding H-LINK II, up to 16 outdoor units and 64 indoor units).

2.2 Names and Functions

Names are as described in the following figure 2.2.

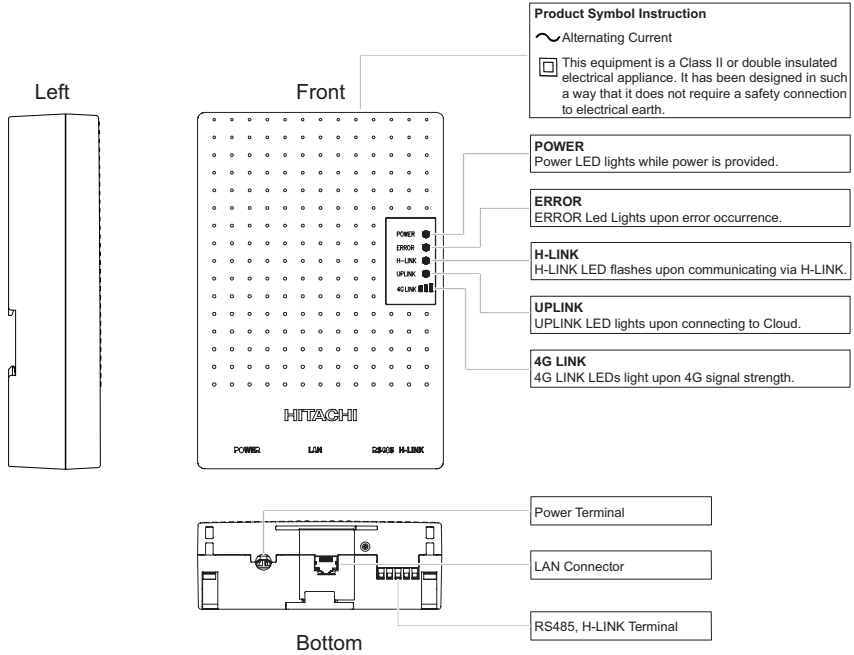


Figure 2.2 Parts Names

2.3 Key Components

The following figure shows the airCloud Gateway without the cover. Each name and function are as follows.

Regarding how to connect each terminal, refer to “3.2.1 Wiring Procedures”. Regarding how to set each switch, refer to “3.2.3 Switch Setting Procedures”.

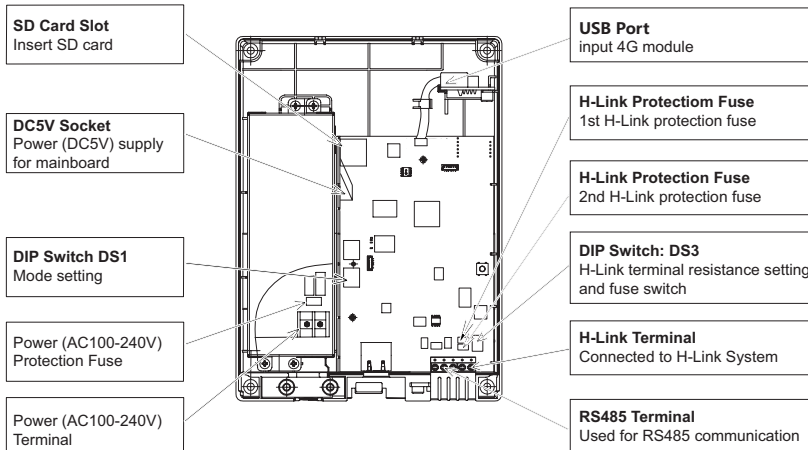


Figure 2.3 Names of Inner Parts

2.4 Specifications

Table 2.1 Hardware Specification

Item	Specification
Dimensions	W: 201mm, H:146mm, D:52mm
Net Weight	Approx. 540g
Rated Power Supply	AC 100V~240V 50/60Hz
Power Consumption	Max.8W
Ambient Temperature	0°C~+40°C
	30%~90%RH
Storage Condition	-10°C~50°C
Installation Place	For indoor installation only
	For wall mount or DIN rail mount
Class of Pollution	2

Table 2.2 Communication Specification for H-LINK

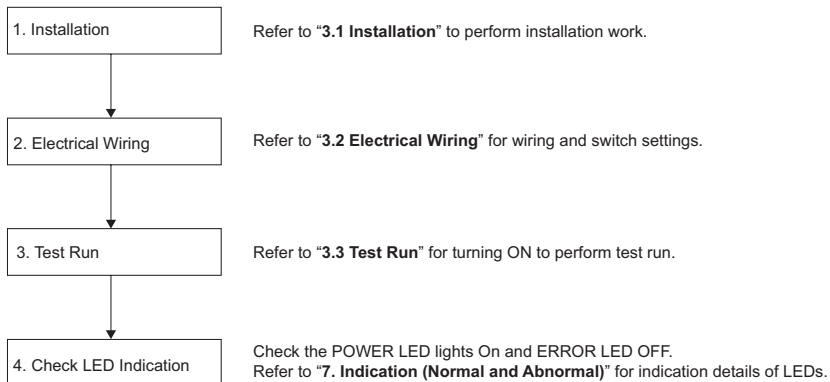
Item	Specification
Communication Peer	Indoor unit / Outdoor unit
Communication Line	2 wires, non-polar
Communication Method	Half duplex communication
Synchronization Method	Asynchronous
Communication Speed	9600 bps
Wire Length of Connecting Cable	Less than 1,000m (3,281 ft.)
Units Connected (Qty.)	Up to 16 outdoor units and 80 indoor units / 32 outdoor units and 64 indoor units (excluding H-LINK II, up to 16 outdoor units and 64 indoor units).
For Combined Use	<p>PSC-A64GT, PSC-A32MN</p> <p>NOTE 1: RC-less indoor units can not be connected to the system where 2 or more central controllers are connected.</p> <p>NOTE 2: One H-LINK system can only have 1 airCloud Gateway; One H-LINK system can include up to 8 central controllers.</p>



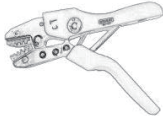


Table 2.3 LAN (Ethernet) Specification

Item	Specification
Communication Peer	Ethernet HUB
Communication Line	LAN (Ethernet)
Communication Method	IEEE 802.3 complied (10BASE-T/100BASE-TX)
Total Length of Connecting Cable	Less than 100m (328ft.)

3. Installation Overview

Follow instructions 1-4 to install and power on it.



Installation Tool List			
No.	Name	Picture	Remarks
1	Drill		Diameter: 6mm
2	Wire stripper		/
3	Crimping plier		/
4	Screwdriver		Cross screwdriver; Diameter: 6mm; Length: less than 240mm
5	Ruler		/

3.1 Installation

3.1.1 Installation Location









Select a place that meets the following:

- 1) Refer to “1. Safety Summary” of this installation manual.
- 2) Place where the airCloud Gateway can be firmly fixed with screw for wall mount or DIN rail.
- 3) Place where cannot be easily accessed (e.g., inside of control console).
- 4) If 4G module is selected to connect with cloud, place where 4G signal can be covered and not inside metal box.

3.1.2 Packing List

Check for the following components before installation:

Table 3.1 Components List

Description	Appearance	Quantity	Remarks (mm)
airCloud Gateway		1	/
Expansion Pipe		4	Φ6×30
Self-tapping Screw (for Expansion Tube)		4	M3.5×35
Line Pressing Board		1	/
Self-tapping Screw (for Line Pressing Board)		2	M4×14
Installation & Maintenance Manual		1	/
Installation & Maintenance Manual (for EU)		1	/
Wiring Terminal		2	RVN 1.25-3

3.1.3 Installation Procedure

(1) Secure enough space as illustrated in Figure 3.1.

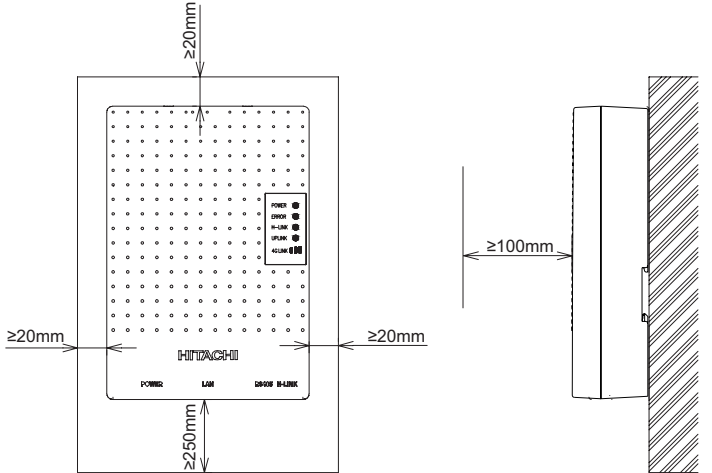


Figure 3.1 Installation Location

(2) There are two mount methods: Wall mount and DIN rail mount.

For any installation method, ensure that the wire outlet faces the floor and keep the airCloud Gateway mounted vertical not horizontal. See the example below.

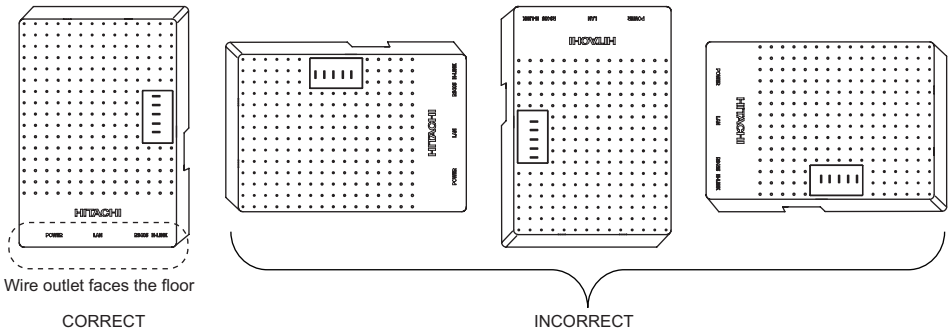


Figure 3.2 Direction for Installing

(2-1) Wall Mount

(a) The wall is wooden.

(a-1) Remove the cover of the airCloud Gateway.

Firmly fix airCloud Gateway on wall through foot hole with self-tapping screws.

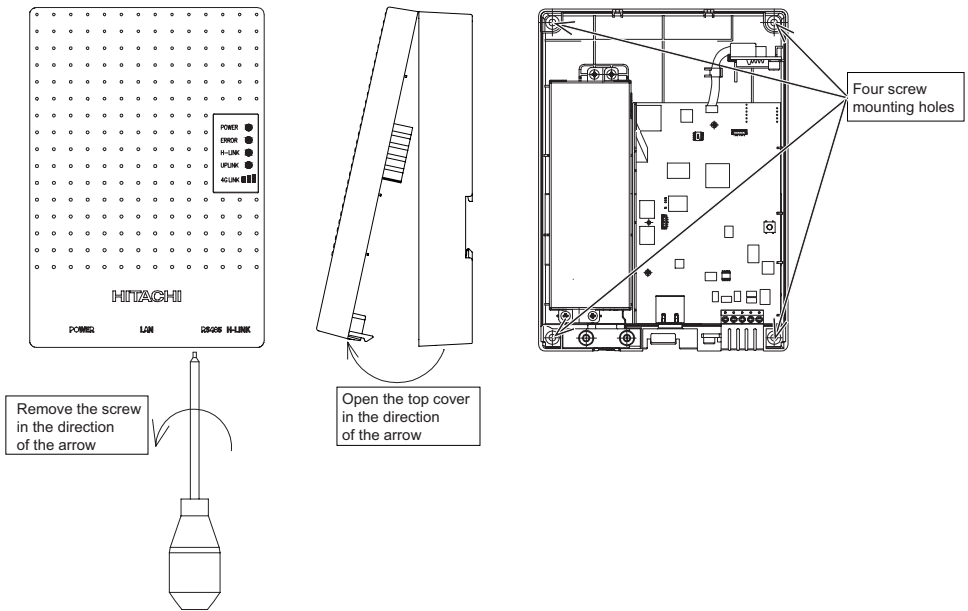


Figure 3.3 Install on Wooden Wall

(b) The wall is non-wood (such as cement, marble structure etc.).

(b-1) Drill holes in the wall (please refer to the figure below for the hole position and size), insert the wall plugs into the holes.

(b-2) Remove the cover of the airCloud Gateway. Firmly fix the gateway on wall through foot hole with self-tapping screws.

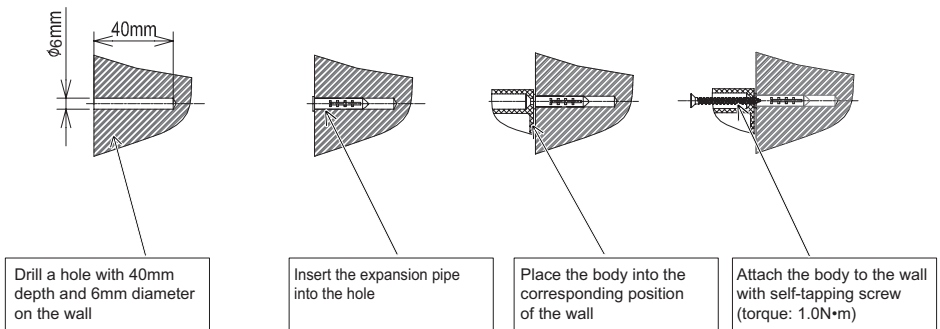


Figure 3.4 Install on Non-wood Wall

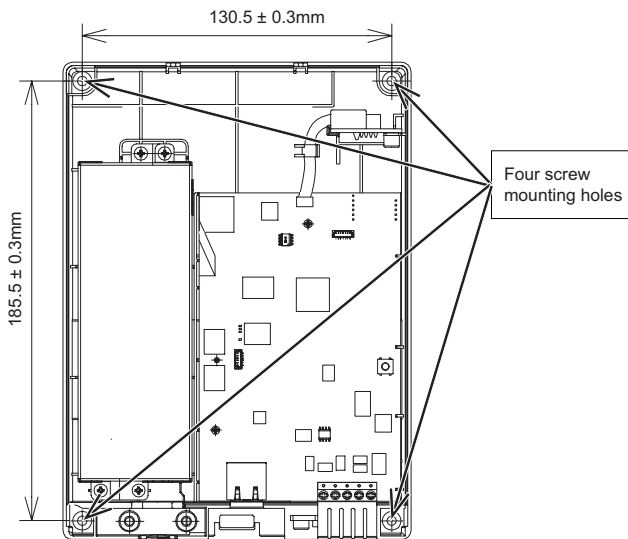


Figure 3.5 Install on Non-wood Wall

(2-2) DIN rail installation

(a) Firmly fix the rail on the wall.

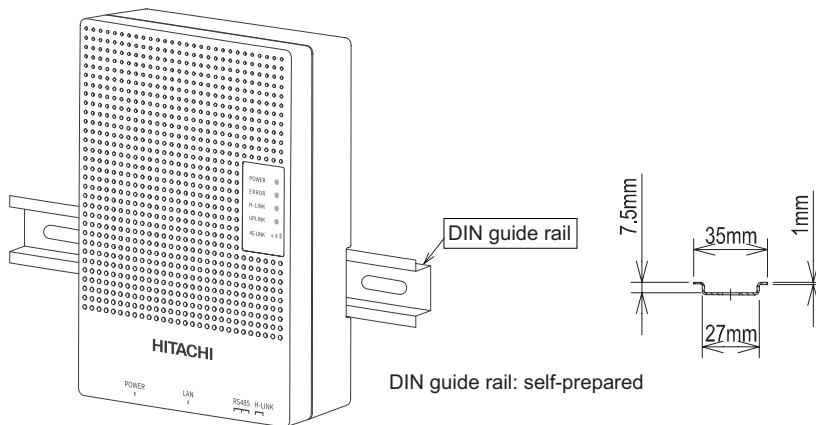


Figure 3.6 DIN Rail Installation

(b) Install the airCloud Gateway on the guide rail by the clip.

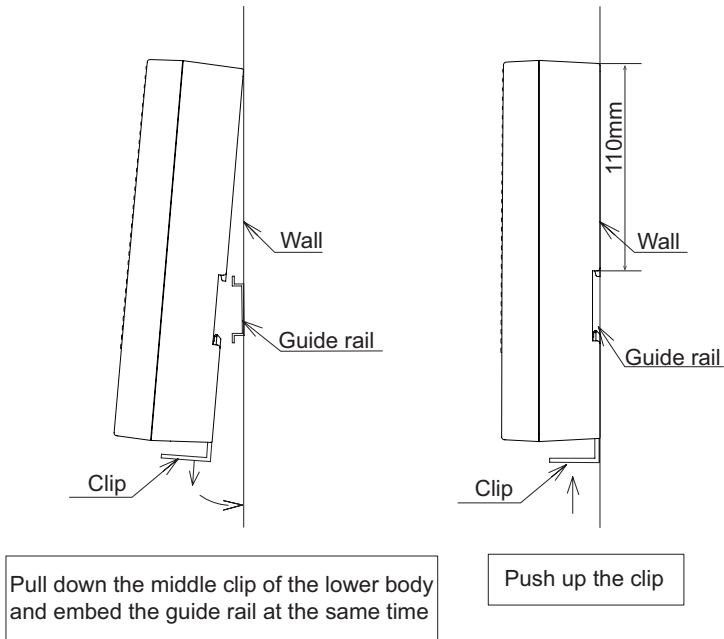


Figure 3.7 Install on the DIN Rail

3.2 Electrical Wiring

Read and understand “1. Safety Summary” in this manual well before performing wiring work. Wiring work for power line, communication with air conditioners (H-LINK) and Ethernet cable (LAN) with cloud are required.

Note that wiring work for communication with external devices is also required for any external device connected to the system. Ensure that the power line is turned off before performing any wiring work.

3.2.1 Wiring Procedures

- (1) Ensure that the power line and the power on devices connected are all turned off before performing any wiring work.
- (2) Unscrew the bottom screws.
- (3) Press two snap-joints at the lower end of the upper cover, remove the cover.

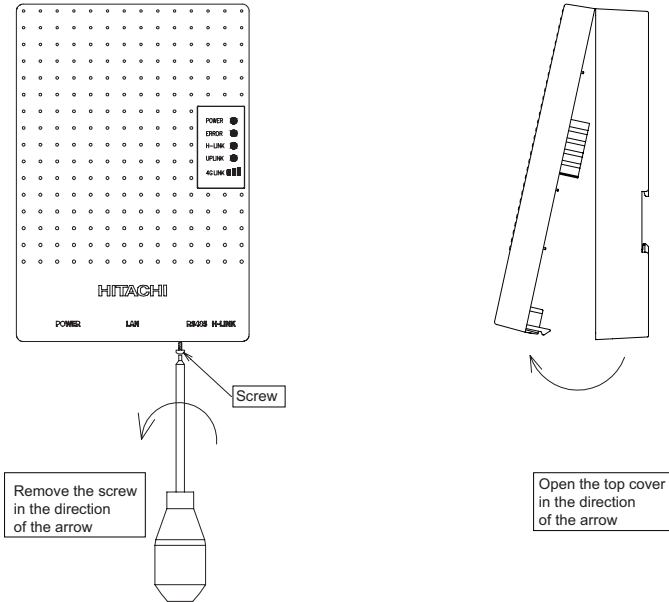


Figure 3.8 Remove the Upper Cover

- (4) Remove the screws on the power board cover with a screwdriver, then remove the power board cover.

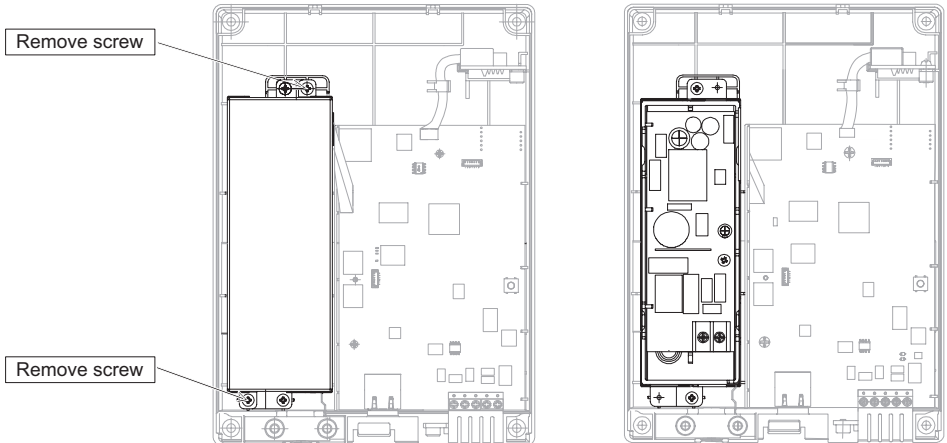
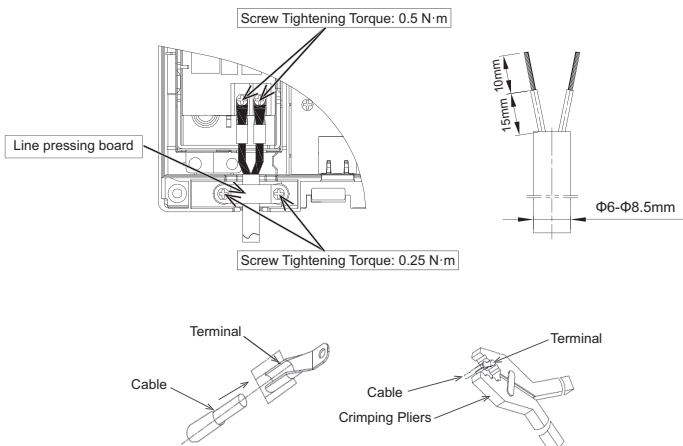

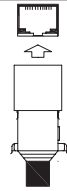


Figure 3.9 Remove the Cover of Power Board

(5) Follow the instruction below to perform power wiring work.

Table 3.2 Connecting Wires

Type of Wiring	Power Line
Power Input	AC 100~240V 50/60Hz
Wiring Length	-
Cable Specification	AWG15(1.5mm ²) to AWG12(2mm ²) Outer diameter finish is up to 10mm
Terminals/Connector	M3 Screw Terminal
Connection Procedure	 <ol style="list-style-type: none"> 1. Let wire out of the power line outlet. 2. Insert wire into round terminal. 3. Crimp the round terminal to fix wire. 4. Fix each round terminal to terminals with screw. 5. Fix cable with line pressing board.

Type of Wiring	H-LINK (Communication Line)	LAN Cable
Specification	5VDC	IEEE802.3 Compliant 100BASE-TX/10BASE-T
Wiring Length	Less than 1,000m (3,281ft.)	Less than 100m (328.1ft.)
Cable Specification	AWG21 (0.75mm ²) to AWG16 (1.25mm ²)	LAN Cable (CAT 5 or more)
Terminals/Connector	M2.5 Screw Terminal	RJ45 Connector
Connection Procedure	 <ul style="list-style-type: none"> • Crimp the round terminal to connect wire. • Let wire out of H-LINK line outlet. • Fix each round terminal to terminals with screw. 	 <ul style="list-style-type: none"> • Let wire out of LAN wire outlet. • Insert connector until lock sound is heard.

NOTE:

- The distance between the power line and communication line is more than 150mm.

(6) Fix the power board cover with screws.

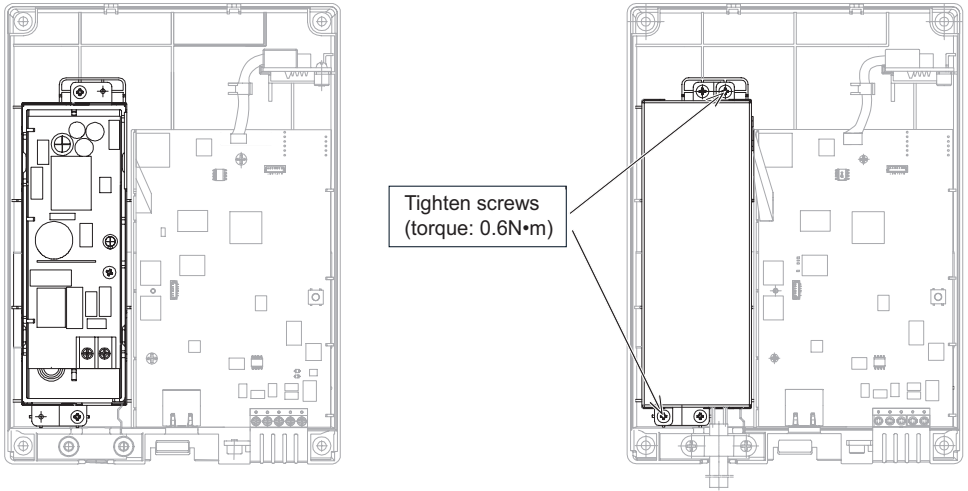


Figure 3.10 Fix the Cover of Power Board

3.2.2 4G Module Installation

4G Module is optional for airCloud Gateway.

If use 4G module, insert the 4G module on USB port as below:

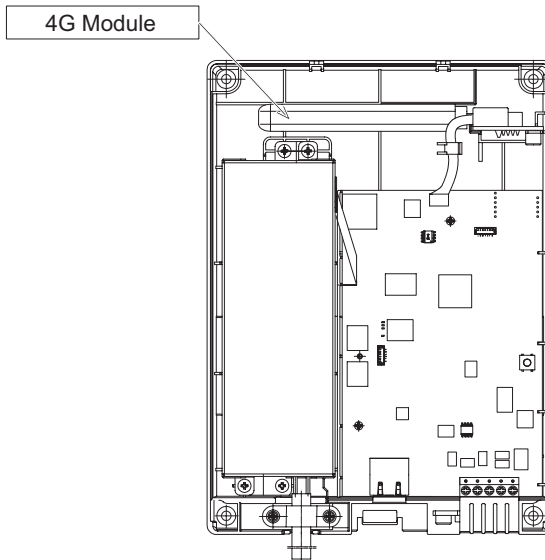


Figure 3.11 Insert 4G Module

NOTE:

- If having 4G and LAN simultaneously, 4G is preference when connecting to cloud.

3.2.3 Switch Setting Procedures

Change switch setting before turning on.

Switch setting is as follows. Factory default setting may need to be changed depending on use in the field.

Table 3.3 Switch Settings

Switch		Mode Setting			Factory Setting	Remarks
Pin No.		DHCP Mode	Static Mode	Restore Factory Setting		
DS1 (4-position DSW)	1	ON	ON	OFF	ON	Do NOT set other patterns.
	2	OFF	ON	OFF	OFF	
	3	ON	ON	OFF	ON	
	4	OFF	OFF	ON	OFF	
DS3 (2-position DSW)	1	ON: The second protection fuse for H-LINK is active OFF: The second protection fuse for H-LINK is inactive			OFF	When the first protection fuse for H-LINK is blown, set 2 pin on DS3 to ON to make short-circuit between fuse terminals.
	2	ON: H-LINK Terminal Resistance is active OFF: H-LINK Terminal Resistance is inactive			OFF	Ensure that no other terminal resistance exists on the same H-LINK when activating terminal resistance from the airCloud Gateway.

NOTE:

- DHCP mode is the factory default setting.

At last, align the top cover to the guide plate (dent) on the bottom cover to reattach the top cover upon completing wiring work.

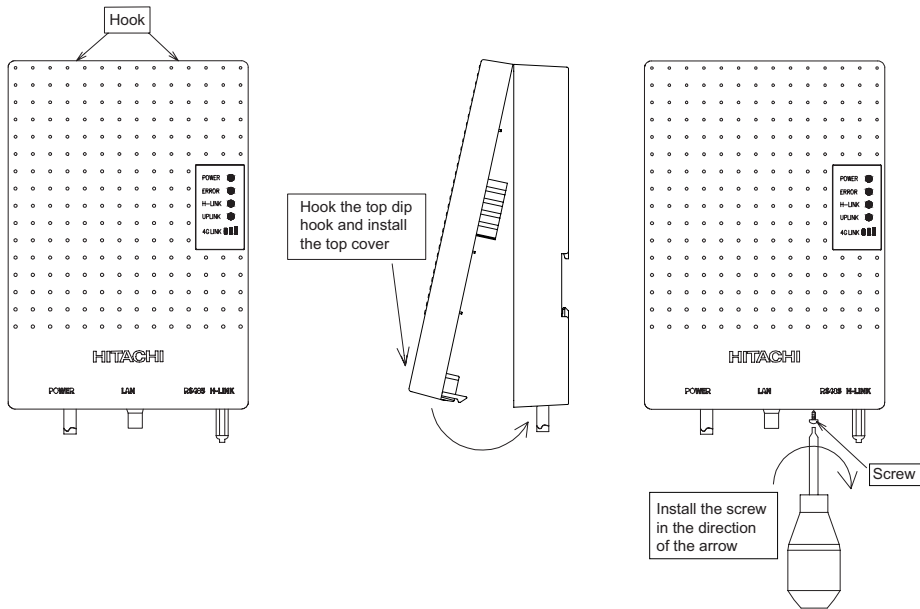


Figure 3.12 Attaching Top Cover

3.2.4 DHCP Mode

In DHCP mode, there is no need of manual IP configuration. Refer to “3.3 Test Run” for the following operation.

IT Consideration

- (1) Please confirm that there is a DHCP server in the current LAN network environment. As a client, the airCloud Gateway will automatically obtain the IP/subnet mask/default gateway/DNS information from the DHCP server.
- (2) If the current LAN network needs to be connected to the Internet through a proxy server, please refer to “5.4 Ethernet Information” for proxy configuration.

3.2.5 Static Mode

In static mode, the airCloud Gateway accesses the Internet through the LAN static configuration. Users can change the LAN static configuration through the local web. The steps are as follows:

Step 1 Connect your PC and airCloud Gateway directly with Ethernet cable as below:

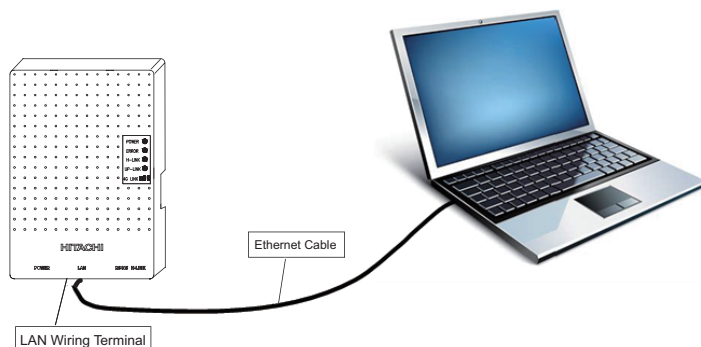


Figure 3.13 Connect PC to airCloud Gateway

Step 2 Make sure your PC are in the same Sub network with airCloud Gateway, follow the procedures below:

- (1) Go to Start - Control Panel - Network and Sharing Center - Local Area Connection - Properties - Internet protocol version 4 (TCP/IP4)* to set the IP address of PC. Ensure that the last digit of PC IP address is different from airCloud Gateway. (Example: If IP address for airCloud Gateway is 192.168.0.23, then IP address for PC can be 192.168.0.30, and so on.)
- (2) Turn the airCloud Gateway ON, the UPLINK LED lights on.
- (3) Wait until the UPLINK LED lights off.
- (4) Visit the airCloud Gateway local web to modify the LAN static configuration and proxy, please refer to “5.4 Ethernet Information”.

* These steps apply to Windows 7 OS.

* The default network setting see “6. Reset to Factory Default”

3.3 Test Run

After completing installation, wiring operation, switch setting and configuration, use the following procedure to turn ON the power for airCloud Gateway.

- (1) Turn ON the power for all air conditioners on the system.
 - Complete test run on all air conditioners first to confirm their health.
- (2) Ensure the pins of DS1 on airCloud Gateway are correct.
- (3) Turn ON the power for airCloud Gateway to execute startup. The UPLINK LED off means that the startup completes in one minute.

* In the condition that this device is used to be combined with other central controllers, please remove the other central controllers before powering on airCloud Gateway.

3.3.1 AC System Connection Check

The connection check starts after startup completed. While airCloud Gateway is checking connection, the ERROR LED flashes every 5 seconds. Connection check completes in approximately several minutes. Upon completion, the ERROR LED goes off.

3.3.2 Cloud Connection Check

The cloud connection check starts after start up completed. It completes in one minute, The UPLINK LED lights on when completion.

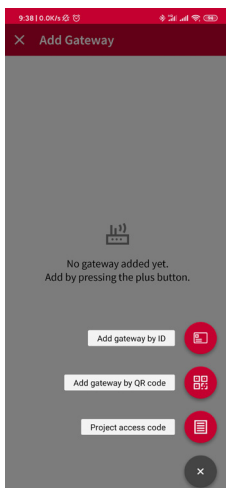
4. App Operation

Entry of Mobile App and Web Application

- Web Application Address: <https://www.aircloud.hitachiaircon.com/>
- Scan the QR code below from mobile phone to download the App.



Scan the QR code on Appendix I following App instructions to connect to airCloud Gateway.



5. Local Web for Firmware Update

airCloud Gateway firmware update and basic monitoring can be conducted through local web browser.

- Before you login airCloud Gateway, please make sure you know the LAN IP Address of airCloud Gateway. (airCloud Gateway supports dynamic IP address which could be got from the App.)
- Ensure that the PC can access the airCloud Gateway through the LAN.
- Before performing the steps below, please confirm your web browser is one of the following version or later: Google Chrome 49, Microsoft IE 11.0, Firefox 52.9, and Opera 36.
- Unsafe warning would appear on the first login through local Web. Please go head.

5.1 Login

Open the web browser in PC, enter the airCloud Gateway's IP address in address bar, input the user name and password in the login screen.

Please get the default user name and password from the "Appendix I" of this manual.

HITACHI

Username

Password

→ Login

Figure 5.1 Login

5.2 Device List

The initial screen is as below:

Name	Description	Unit Number	Model
System-000			
IDU-001	Undefined	1	-----
IDU-002	Undefined	2	-----
ODU-001	Undefined	1	-----

Figure 5.2 Device List

Login airCloud Gateway from web browser, check the system connection information, all of the outdoor units and indoor units in all refrigerant system are listed here. (In this example, we have 1 refrigerant system which has one outdoor unit and two indoor units).

Select the language from the language list on the top-right.

By clicking the "Edit Device Details", the content of description becomes editable. You can specify a meaningful name for each indoor and outdoor.

5.3 Rediscover Devices

In condition there are any changes in the refrigerant system, such as removing or adding units from/to the system, including remote controller changes, make sure to update the connection information for airCloud Gateway by "Rediscover Devices". Otherwise, the changing will not express until you perform this action.

NOTE:

- This operation will lead the airCloud Gateway restart, please wait the airCloud Gateway restart completing firstly, and then refresh the web browser and re-login to check the changes of "Device List".

5.4 Ethernet Information

In DHCP mode, only ethernet information can be checked.

In Static mode, LAN static configuration can be modified.

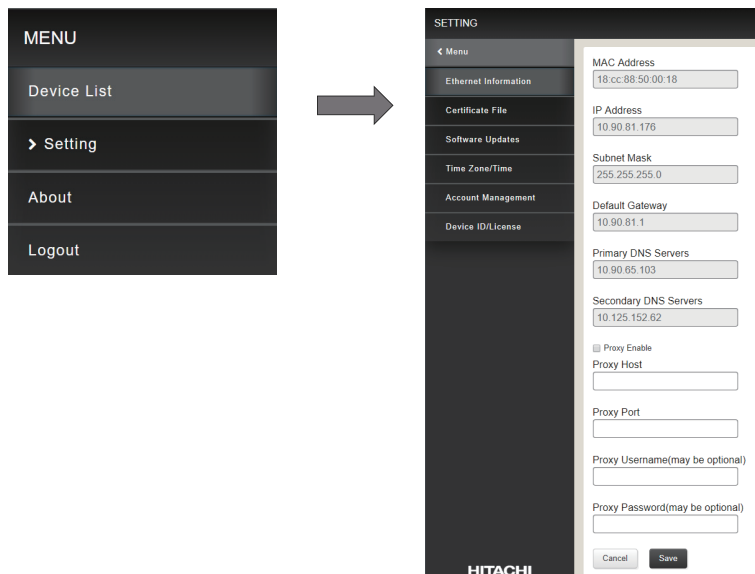


Figure 5.3 Ethernet Information

LAN Static Configuration

To change the IP address of airCloud Gateway to meet target network, follow the steps below:

- (1) Click “Setting” in main menu, then go into “Ethernet Information”, set the IP Address and related parameters.

The screenshot shows the 'SETTING' menu with 'Ethernet Information' selected. The configuration fields are as follows:

MAC Address	00:11:49:32:11:62
IP Address	10.90.81.201
Subnet Mask	255.255.255.0
Default Gateway	10.90.81.1
Primary DNS Servers	10.90.65.103
Secondary DNS Servers	
<input type="checkbox"/> Proxy Enable	
Proxy Host	
Proxy Port	
Proxy Username	
Proxy Password	

Buttons: Cancel, Save

Figure 5.4 LAN Static Configuration

- (2) Click “Save” to save the setting.
- (3) Click “OK” in the displayed confirmation screen. This will restart the airCloud Gateway.

10.90.81.176 says
Device will be restarted, do you want to continue?

Buttons: OK, Cancel

Figure 5.5 Confirmation Screen

Proxy Information Settings

1. Tick Proxy Enable.
2. Set proxy information. For proxy configuration problems, please contact local IT personnel.

Proxy Enable

Proxy Host
192.168.0.111

Proxy Port
19312

Proxy Username(may be optional)
123

Proxy Password(may be optional)
123456

Buttons: Cancel, Save

Figure 5.6 Proxy Information Settings

IT Consideration:

1. Proxy server needs to support HTTP/1.1 protocol "CONNECT" method.
2. The proxy server must support to forward data to destination port 80, port 443 and port 8883.
3. Proxy user name password authentication must be basic (BASE64) encrypted.
4. Max length of Proxy Host is 60 character. Max length of Proxy Username and Password is 30 characters.
5. If you need to upload the root certificate of the proxy server to the aircloud gateway, please refer to "5.5 Certificate".

NOTE:

- Regarding network security, please contact network administrator.
- DHCP mode and static mode are applicable after proxy configuration.

5.5 Certificate

User can import the root Certificate into the trusted certificates of airCloud Gateway.

- (1) Click "Certificate File" under "Menu".
- (2) Click "Select File" and choose the certificate file in PC.
- (3) Click "Upload".

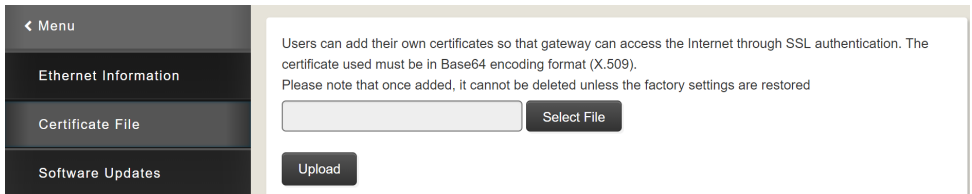


Figure 5.7 Certificate Upload

5.6 Time Zone/Time Setting

Please set the correct time and time zone from this menu.

- (1) Click "Time Zone/Time" to go into the time setting screen.

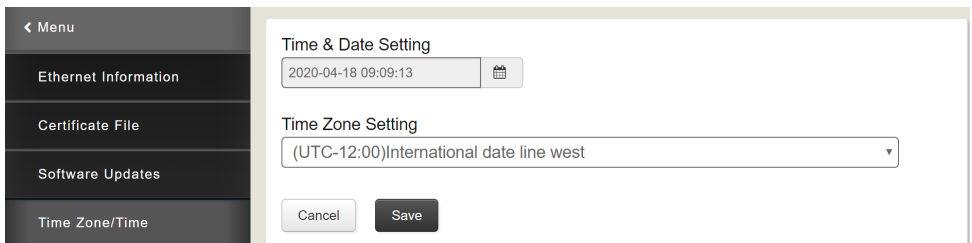


Figure 5.8 Time Zone/Time

- (2) Set the airCloud Gateway time by clicking the icon 📅 .
- (3) Select the proper time zone where the airCloud Gateway is installed from dropdown list.
- (4) Click "Save" to make the new setting effective.

5.7 Account Management

The user account and password which are used to login airCloud Gateway from PC can be maintained from here:

- (1) Select “Account Management” from the left menu list.

Figure 5.9 Account Management

- (2) Input the new Username and Password, click “Change” to save them.

5.8 Software Update

This is not a must step. When software upgrades are needed, please follow procedures below:

- (1) Select “Software Updates” from “Setting” menu.

Figure 5.10 Software Update

- (2) Select the software package file(name: W-XXXX.YYYY.zip, please confirm the package file is provided from official channel*) from your PC, clicking the “Upload” button.

* Please contact your local contractor if you have any problems. For software package access, please contact via the service mailbox.

✉ E-mail: JCH-IoT-Service@jci-hitachi.com

- (3) Click “OK” in the displayed confirmation screen. This will make the airCloud Gateway restart immediately and execute the upgrade operation.

Figure 5.11 Execute Update

5.9 Indoor Unit Status

Click the indoor unit name to check the detailed information.

DEVICE LIST
°C ▾
English ▾

< Device List

> Setting

About

Logout

Status

Item	Value	Item	Value	Item	Value
System No.	0	Air Volume		Room Therm	
Address	0	iE	2	Warning Up	
Model Code	RPL-	Ti	127.0	HA Control	
Capacity	140	Tg	106.0	Far Pulse	
Run/Stop	OFF	Hi	0	Warm Circulator	
Thermo on	OFF	Ti	26.0	Cold Heater	
Commissioning/Normal	Normal	To	23.0	3Min Guard	
Mode	Fan	dT	3.0	Power supply start / stop	
Oil Return	----	Tr	-62.0		
ALM	0	fd	0		
Remote Control	Without remote controller	d1	6		
Ts correction	0	Tset/Ts	28.0		

Figure 5.12 Indoor Unit Status

5.10 Indoor Control

The “Control” area is below the “Status” area. From the control area, change the operation mode as below.

Control

On/Off

Fan Speed

Mode

Setpoint

Figure 5.13 Indoor Control

Press “Set” to send command to indoor, confirm the indoor status changed from the status area.

5.11 RC Operation Prohibit

The “RC operation prohibit” area is below the “Control” area. From the “RC operation prohibit” area, set the function of remote controller.

RC operation prohibit

All

- On/Off Disable
- Mode Disable
- Fan Speed Disable
- Louver Disable
- Setpoint Disable

Figure 5.14 Remote Controller Disable

Click “Set” will make new setting effective immediately.

- If other central controller and the following is connected to the system, “RC operation prohibit” function cannot be used.
- In this case, none of the central controller shall set “RC operation prohibit” function. Setting “RC operation prohibit” in such scenario may cause malfunction.
- On wall type (if RC is connected, RC operation prohibit function will be available.)

5.12 Outdoor Unit Status

Click outdoor name item in the device list page, check the status of outdoor unit.

DEVICE LIST
°C
English

< Device List

> Setting

About

Logout

Item	Value	Item	Value	Item	Value
Cycle Status	C/H simultaneous	H1(Hz)	0.0	C11	OFF
Run/Stop	OFF	Fo	0	C13	OFF
Heat exchange state	C/H simultaneous	oE1	100	C14	OFF
Preparation for defrosting	Normal	EVB(%)	0	C15	OFF
Emergency driving	Normal	Pd(MPa)	5.07	C16	OFF
Commissioning/Normal	Normal	Ps(MPa)	1.98	C17	OFF
Protection code	--	Td1	84	Y212	OFF

Figure 5.15 Outdoor Unit Status

5.13 Temperature Unit Selection

In the page of indoor status and outdoor status, change the temperature unit between Celsius (°C) and Fahrenheit (°F)

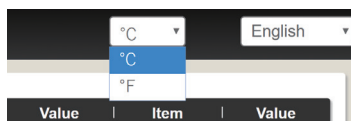


Figure 5.16 Temperature Unit

6. Reset to Factory Default

Turn ON the power for airCloud Gateway on the condition that the pins of DS1 are set as "Reset to Factory Default" mode (refer to 3.2.3 Switch Setting Procedures), the setting of airCloud Gateway will restore reset to default factory setting. After entering the factory reset program, all LEDs except the power supply flash until the factory reset is completed, and all LEDs are turned OFF.

The factory default settings are as below:

Table 6.1 Factory Settings

Name	Factory Default Setting
IP Address	192.168.0.23
Subnet Mask	255.255.255.0
Default Gateway	192.168.0.1
Primary DNS Servers	192.168.0.1
Second DNS Servers	Blank
Proxy	Blank
Web Server Username	Get the default user name and password from the Appendix of this manual.
Web Server Password	

After restoring factory settings, user needs to set the DS1 Pin1~Pin4 to the normal startup mode and power on again. Restoring factory settings will clear previously added certificates.

Since the connection information is also removed when resetting to factory default, it will check connection again at next power on.

7. Indication (Normal and Abnormal)

The indication of LEDs are as follows.

Table 7.1 Indication of LEDs

Name	Color	Lights/indicates when	Goes OFF/clears when	Flash when
POWER (5V)	Green	The power supply is normal.	No power supply.	-
ERROR	Red	Please refer to "Table 7.2 Indications and Condition for ERROR LED and Error Code of airCloud Gateway".		
H-LINK	Green	-	-	Flash once every 2 seconds: no data delivery. Flash twice every 2 seconds: in data delivery. Flash rapidly and continuously: in searching.
UPLINK	Green	Connect with cloud successfully.	Cannot connect with cloud.	-
4G LINK	Green	Indicates the signal strength of 4G.		

Table 7.2 Indications and Condition for ERROR LED and Error Code of airCloud Gateway

State	Lights/indicates when	Goes OFF/clears when	ERROR LED state	Error Code	Indication priority
Software start up failure	Detected abnormality on the software.	The software has no error/abnormality.	ON	N/A	1
Memory check failure (FlashROM)	Detected abnormality while checking FlashROM.	Checking FlashROM successfully completed.	ON	N/A	2
Memory check failure (SDRAM)	Detected abnormality on checking SDRAM.	Checking SDRAM successfully completed.	ON	N/A	3
File system failure	Detected abnormality while checking file system.	Checking file system successfully completed.	ON	N/A	4
Application start up	Immediately after power ON and application starts up on normal mode.	1 second elapsed.	ON for 1 second	N/A	5
H-LINK initialization failure	After turning ON the power on normal mode, application starts up and detected abnormality on initializing H-LINK communication port.	Initialization of H-LINK communication port successfully completed.	ON	N/A	6
Checking connection with air conditioners	After turning ON the power on normal mode, application starts up and then checking connection with air conditioners.	Connection checking completed.	Flashes once in 5 sec. (Repeated)	N/A	7
Communication failure with air conditioners	After turning on the power on normal mode, completed connection checking with air conditioners and detected communication failure with 1 or more air conditioners.	Communication on all the detected air conditioners is successfully established.	Flashes once in 3 sec. (Repeated)	60/61/64/65*	8
Combined with other central controller error	airCloud Gateway detects that there is central controller which cannot connect together with it.	Remove the central controller which cannot connect together with airCloud Gateway. Please refer to "2.4 Specifications" for the central controllers which can be combined use with airCloud Gateway.	OFF	63*	9
Normal state	One or more above criteria are met.	After turning ON the power on normal mode, none of the above situations is observed.	OFF	N/A	10

*Error code 60/61/64/65 can be checked on the local web browser, while error code 60/61/63/64/65 can be checked on the App.

60: Communication failure between airCloud Gateway and outdoor unit (While 1 or more indoor unit(s) is ON.)

61: Communication failure between indoor unit and airCloud Gateway (While the indoor unit is ON).

64: Communication failure between airCloud Gateway and outdoor unit while none of the indoor units are ON.

65: Communication failure between indoor unit and airCloud Gateway (While the indoor unit is OFF).

8. Maintenance and Service

8.1 Troubleshooting Solutions

The following table identifies possible troubleshooting solutions for abnormal conditions. Ensure the power line is turned off before performing any checking described in the table.

If the answer of checking is yes, please check the next item in the list. If not, please carry out action.

Table 8.1 Troubleshooting Solutions

Item	Phenomenon	Check	Action
1	airCloud Gateway does not seem to be working even after power is applied	Is power line correctly connected to airCloud Gateway?	Ensure the power line is correctly connected to airCloud Gateway. Ensure the power line is turned off to perform wiring work.
		Is the power source turned ON?	Turn ON the power source.
		Is power voltage within the applicable range?	Check the voltage on the power supply. Check and reconnect the wire if the voltage is out of "normal range" (AC 100V – 240V).
		Does the POWER LED light up?	If none of the above applies to the circumstances and POWER LED still does not light up, airCloud Gateway may have an internal defect. Contact your dealer or distributor.
		Is the ERROR LED indication is ON, or in the state ON for 1 second and OFF for 1 second (repeated)?	airCloud Gateway may have an internal defect. Contact your dealer or distributor.
2	Checking connection never completes.	Is H-LINK line correctly connected to airCloud Gateway?	Correctly connect H-LINK to airCloud Gateway.
		Is the terminal resistance on H-LINK wiring correctly set?	Set only 1 terminal resistance on one H-LINK circuit.
		Are all addresses for the equipment configured correctly?	Set the addresses for all equipment as outlined in the manuals.
		Is the H-LINK wiring disconnected?	Check the wiring connection.
		Is all the equipment powered ON?	Power ON all equipment.
		Does H-LINK wiring meet specification requirement?	Use 0.75 - 1.25mm ² standard and shielded cable with a length of 1,000m (3,281ft.) or shorter.
		Doesn't ERROR LED flashes once 5 seconds (repeated)?	airCloud Gateway is checking connection. Please wait. If the situation keeps more than sixty minutes, please checking wiring and address setting on air conditioners and perform connection again.
		Does the H-LINK LED flashes once every 2 seconds?	- Ensure that the H-LINK line is correctly wired. - If the first protecting fuse for H-LINK circuit is blown, remove the cause and then set 2 pin on DS3 ON. - If none of the above applies, airCloud Gateway may have an internal defect. Contact your distributor or dealer.
3	The connection between PC and airCloud Gateway cannot be established.	Is LAN cable correctly connected to airCloud Gateway?	Correctly connect LAN cable to airCloud Gateway. Also check the fitting for connectors.
		Is the PC and airCloud Gateway in the same subnet?	Refer to "5. Local Web for Firmware Update" to check IP address.
		Is DS setting on airCloud Gateway correct?	When changing DS setting, refer to "3.2.3 Switch Setting Procedures" to check the procedure.
		Is the power on HUB turned ON?	Turn the power on HUB ON.
		Does LAN cable meet specification requirement?	Use LAN cable of category 5 or higher with length of 100m (328ft.) or shorter.
		Is LAN cable (and HUB) free from loose connections shorted wires or other issues?	Replace with new ones.
		Is the H-LINK within 5-7/8 inches of any high voltage?	Provide spacing of 150mm (5-7/8 inches) or more between H-LINK and high voltage.
		Is the web browser version is correct in PC?	Refer to "5. Local Web for Firmware Update" to confirm the web browser version is correct.
Does the LAN LED stay OFF?	If none of the above applies to the circumstances and phenomenon described on the left remains, airCloud Gateway may have an internal defect. Contact your dealer or distributor.		

Item	Phenomenon	Check	Action
4	The connection with Cloud cannot be established. (4G module is inserted)	Is the airCloud Gateway installed in the area covered by 4G?	Make sure the airCloud Gateway is installed in the area covered by 4G signal.
		Do the 4G signal strength LEDs stay OFF?	If none of the above applies to the circumstances and phenomenon described on the left remains, airCloud Gateway may have an internal defect.
5	The connection with Cloud cannot be established. (4G module is not inserted)	Is LAN cable correctly connected to airCloud Gateway?	Correctly connect LAN cable to airCloud Gateway. Also check the fitting for connectors.
		Is PC and airCloud Gateway in the same subnet?	Refer to "5. Local Web for Firmware Update" to check IP address.
		Is DS setting on airCloud Gateway correct?	When changing DS setting, refer to "3.2.3 Switch Setting Procedures" to check the procedure.
		Is the power on HUB turned ON?	Turn the power on HUB ON.
		Does LAN cable meet specification requirement?	Use LAN cable of CAT 5 or higher with length of 100m (328ft.) or shorter.
		Is LAN cable (and HUB) free from loose connections shorted wires or other issues?	Replace with new ones.
	Does the LAN LED stay OFF?	If none of the above applies to the circumstances and phenomenon described on the left remains, airCloud Gateway may have an internal defect. Contact your dealer or distributor.	

8.2 Regular Inspection

In order to maintain the normal operation of air conditioning system including airCloud Gateway, please check the following regularly.

(1) Surrounding Environment

- Is the temperature of airCloud Gateway unusually high?
- Is there any dust, powder, wire etc. entering the airCloud Gateway?

(2) LED Indication

- Is POWER LED light?
- Is ERROR LED light or flash?
- Is H-LINK, UPLINK LED light or flash?
- Is 4G LINK LEDs has enough strength?

(3) Installation and Connection

- Whether the installation of airCloud Gateway is loose or not?
- Whether the connection lines is normal?

9. Memory Cards

airCloud Gateway provides slots for microSD/microSDHC memory cards that applies to SD standard. This function is reserved for service maintenance.

Memory cards are used to store communication logs.

<Regarding trademarks>

microSD, microSDHC, and microSDXC logos are trademark of SD-3C, LLC.



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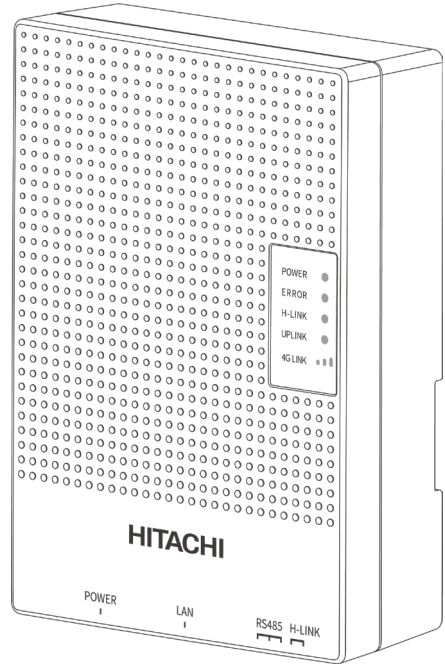
安裝 & 維護手冊

airCloud Gateway

空調機管理系統

型號

HC-IOTGW



air

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日立空調系統

製品安裝前，請詳細閱讀此說明書，並正確地安裝本製品。

安裝維護說明書 airCloud 閘道器 HC-IOTGW

本手冊為 airCloud 閘道器專用。請配合所組合之空調機附屬的手冊一起使用。

■本手冊請務必移交給下一階段之工事施工者，最後交由顧客保管。

(搬運安裝工事) → (配線工事) → (試運轉) → (顧客)

前言

- 本製品為 airCloud 閘道器。
- 請勿安裝於下列之場所。如果有瓦斯、油的飛沫存在其周圍時，將會造成起火、火災及機器變形、腐蝕、破損之現象。
 - 油 含機械油 之飛沫、蒸氣多的場所。 ○溫泉地等之硫磺氣多的地方。
- 請勿安裝於下列之場所，將會造成腐蝕的現象。
 - 海岸地帶、含鹽分較多的場所。 ○酸性或鹼性環境下的場所。 ○濕度高的場所。
- 使用於會產生電磁波之醫療儀器場所時，請注意要防止空調機之誤動作。
 - 安裝時，請勿將電磁波之發信面直接面向室內機之電氣箱、遙控器及遙控器之電線。
 - 為避免受電磁波之空中傳播的影響，會產生電磁波的機器，如收音機等，至少要遠離製品 3m 以上。
- 請勿安裝於下列之場所，以防止製品誤動作或故障。
 - 日光直射到的場所。 ○高溫的場所。 ○不通風的場所。 ○會被水濺到的場所。

為了安全起見，請務必遵守事項

- 使用前，本篇「為了安全起見，請務必遵守事項」之內容，請確實閱讀之後，作正確的安裝。
- 本說明書中所表示的注意事項有「⚠警告」、「⚠注意」之區分。當安裝錯誤時，很可能會導致傷害等危險者，特別標示於「⚠警告」欄中。但是在「⚠注意」欄中的表示之項目，依狀況之不同，也可能導致傷害等危險。不管是那一種，都標示著關於安全方面的重要內容，請務必確實遵守。
- 安裝工事完成後試運轉，確認是否有異常現象的同時，依照使用說明書的指示，請將使用方法、保養方法向顧客作說明。且將本安裝說明書及使用說明書確實交由顧客保管。

【記號的意義】

- ⚠ 警告：表示警告，想像當操作錯誤時，可能會導致使用者傷害等危險的標示。
- ⚠ 注意：表示警告，想像當操作錯誤時，可能會導致使用者受傷或製品故障的標示。
- ⓘ：表示強制事項，指示一般使用者的行為之表示。
- ⊘：表示禁止事項。

關於安裝

⚠ 警告	安裝工事，請依照本安裝說明書確實執行。安裝不確實時，可能造成觸電、火災。	ⓘ
	安裝時，請於可充份承受製品重量的地方進行施工，強度不足和安裝不完全的場合，可能會因製品的掉落而受傷。	ⓘ
	請勿在可燃性氣體可能發生或流入疑慮的場所，進行安裝作業，否則可能會造成火災。	⊘

關於電氣工事

⚠ 警告	電氣工事部份，請委託合格的代理店進行施工。請注意自行施工不完全時，會有觸電的現象。	ⓘ
	電氣工事請依據相關的國家法規及安裝說明書進行施工，務必使用專用回路，以避免電源回路容量不足或施工不完全時，發生觸電、火災的現象。	ⓘ
	製品間的配線，請使用規定之電線。電線的選定錯誤，也會造成火災或觸電的現象。	ⓘ
	因電氣配線作業、點檢等而打開上蓋時，請將電源完全切斷後實施，以避免發生觸電的現象。	ⓘ
	配線的端子請確實鎖付。端子鎖付不完全的場合，會有端子接續部發熱、火災或觸電的現象。	ⓘ
	端子接續部，以電線不會受外力影響下，確實固定電線。當電線固定不完全的場合，會發生電線發熱或火災的現象。	ⓘ
	漏電斷路器的安裝是必要的，不安裝漏電斷路器時，可能會造成觸電的現象。	ⓘ
	接地請按照接地工事作業。室內、外機未實施接地工事時，會造成觸電等事故發生。地線不可和瓦斯管、水管、避雷針及電話的地線等連接。接地不完全時，會造成感電現象。	ⓘ
帶有聚氯乙烯 (PVC)、四氟乙烯 (TFE)、聚四氟乙烯 (PTFE)、氟化乙丙烯 (FEP) 和氯丁橡膠或聚醯亞胺絕緣的導線和電纜。	ⓘ	

HO2019261F

2. 系統配置

2.1 系統配置

本安裝和操作手冊專用於 airCloud 閘道器，示例系統配置如圖 2.1 所示。請參閱每個空調機和連接到系統的設備的安裝和維護手冊。

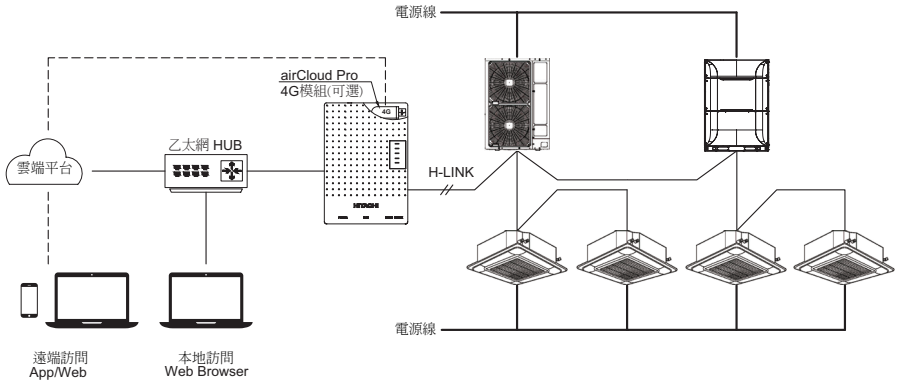


圖 2.1 系統配置示例

1. 日立江森空調機公司提供 airCloud 閘道器和 4G 模組（選配），其它由用戶自備。
2. 若需獲取更多遠端訪問資訊，請參閱 < 4. App 操作 >。
3. 最大可連接室外機 16 台、室內機 80 台，或連接室外機 32 台、室內機 64 台（非 H-LINK II，最大可達外機 16 台，室內機 64 台）。

2.2 名稱和功能

本機的各部品名稱如圖 2.2 所示。

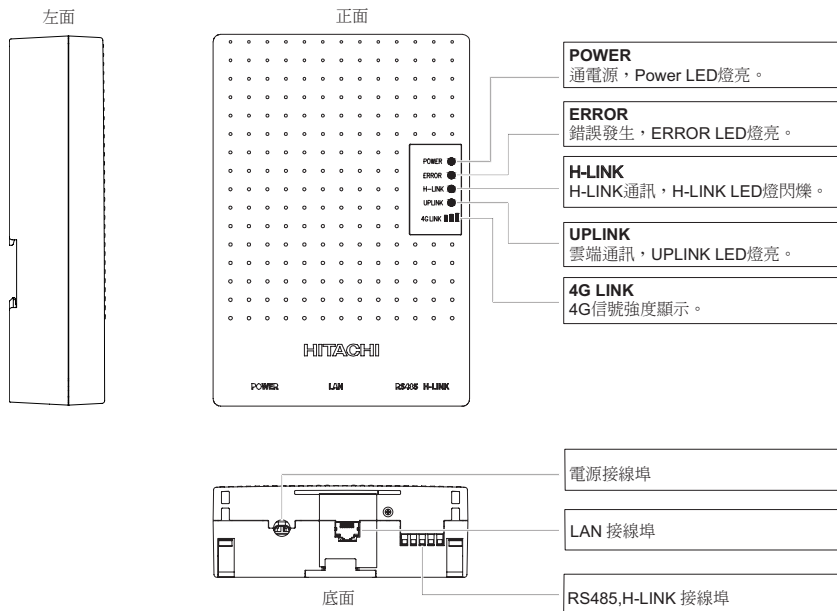


圖 2.2 各部品名稱

2.3 關鍵部品

圖 2.3 表示已卸下頂蓋的設備，名稱和功能如下。電源端子的接續方法參照 <3.2.1 接線程式>，各開關的設置參照 <3.2.3 開關設置方法>。

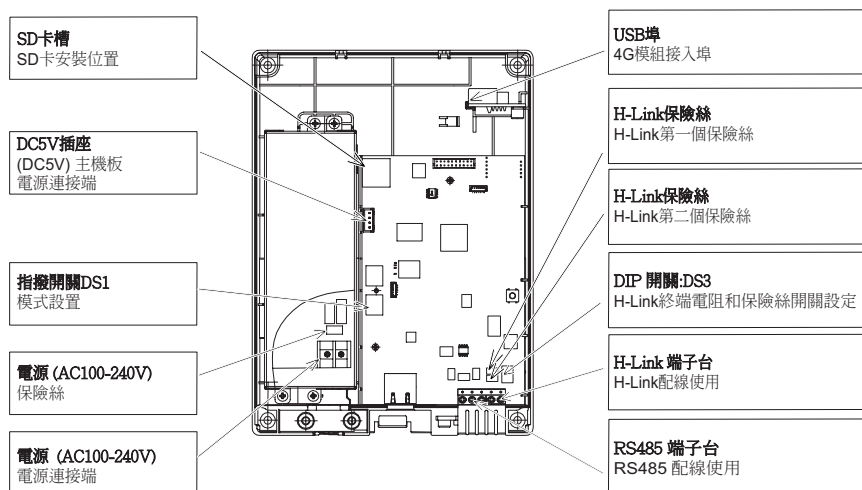


圖 2.3 內部元件名稱

2.4 規格

表 2.1 硬體規格

項目	規格
尺寸	W: 201mm, H:146mm, D:52mm
淨重	約 540g
額定電源	AC 100V~240V 50/60Hz
功耗	最大 8W
運轉環境	0°C-40°C
	30%-90%RH
儲存條件	-10°C-50°C
安裝方式	僅室內安裝
	壁裝或導軌安裝
污染等級	2

表 2.2 H-LINK 通訊規格

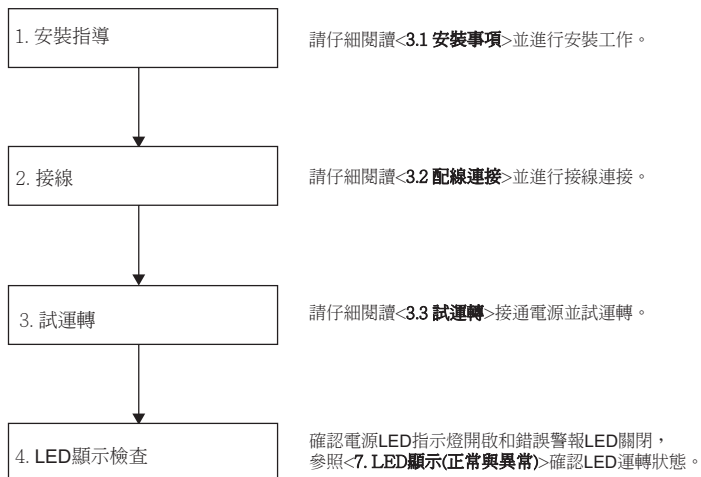
項目	規格
通訊物件	室外機、室內機
通訊線	無極性 2 線式
通訊方式	半雙工
同步方式	非同步
通訊速率	9600 bps
配線長度	1000m (3281ft) 以下
空調機連接台數 (Qty.)	最大可連接室外機 16 台、室內機 80 台，或連接室外機 32 台、室內機 64 台（非 H-LINK II，最大可達外機 16 台，室內機 64 台）。
並聯使用	PSC-A64GT, PSC-A32MN 注 1：同一 H-LINK 下，併用兩台以上集中控制器的場合，室內機必須接續遙控器。 注 2：一個 H-LINK 系統只能有 1 個 airCloud 關道器；一個 H-LINK 系統最多可包含 8 個集中控制器。 注 3：併用時，不能使用遙控器操作禁止機能。

表 2.3 LAN(乙太網) 通訊規格





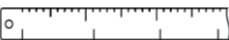
項目	規格
通訊物件	乙太網 HUB
通訊線	LAN(乙太網)
通訊方式	IEEE 802.3 標準 (10BASE-T/100BASE-TX)
配線總長	100m (328ft) 以下

3. 安裝概述

執行以下步驟 1-4 完成安裝和上電運轉。



安裝工具清單

No.	名稱	圖片	備註
1	電錘		半徑：6mm
2	電線剝線器		/
3	壓線鉗		/
4	螺絲刀		十字螺絲刀； 半徑：6mm； 長度：少於 240mm
5	尺子		/

3.1 安裝事項

3.1.1 安裝場所








選擇適用於以下內容的地點：

- (1) 參見本安裝手冊 <1. 安全須知>。
- (2) 可使用螺絲將 airCloud 開道器牢固地固定在牆壁或 DIN 導軌上。
- (3) 不能隨意進出的場所（例如，在控制台內）。
- (4) 如選擇 4G 模組與雲端連接，則該場所需涵蓋 4G 訊號。

3.1.2 裝箱單

安裝前檢查以下元件：

表 3.1 元件清單

描述	外觀	數量	備註 (mm)
airCloud 開道器		1	/
膨脹管		4	Φ6×30
自攻螺絲（膨脹管用）		4	M3.5×35
壓線板		1	/
自攻螺絲（壓線板用）		2	M4×14
安裝 & 維護手冊		1	/
安裝 & 維護手冊（歐洲版）		1	/
接線端子		2	RVN 1.25-3

3.1.3 安裝程式

(1) 確保安裝空間，如圖 3.1 所示。

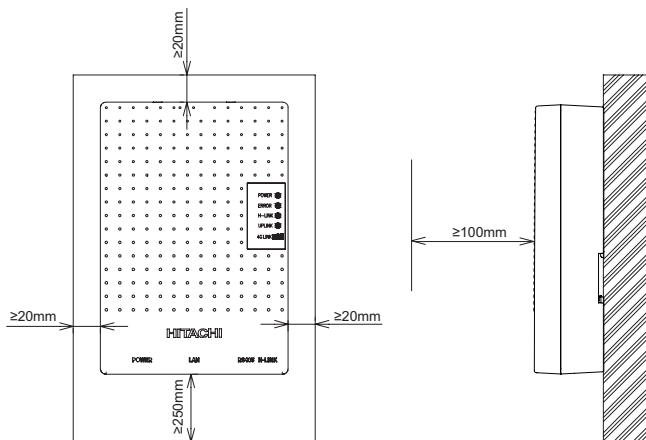


圖 3.1 安裝位置

(2) 安裝有以下兩種類型：牆壁安裝和 DIN 導軌安裝。

對於任何安裝方法，請確保電線出口朝向地面並使 airCloud 開道器垂直安裝而非水平安裝，見以下示例。

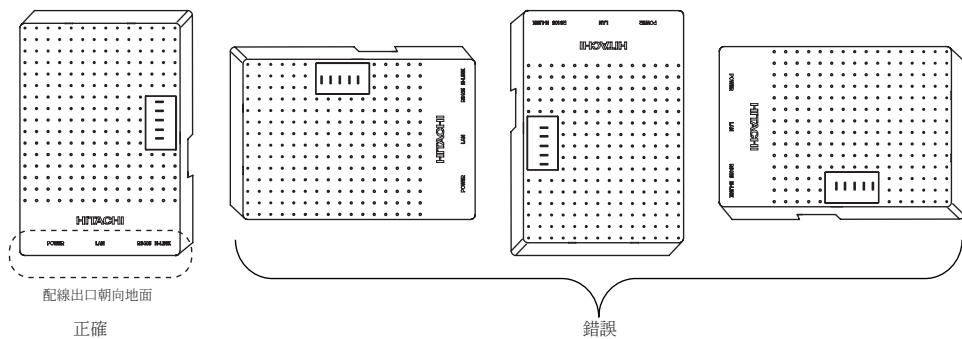


圖 3.2 安裝方向

(2-1) 牆壁安裝：

(a) 木板牆

(a-1) 取下 airCloud 閘道器的蓋子。

使用自攻螺絲通過腳孔牢固地將 airCloud 閘道器固定在牆上。

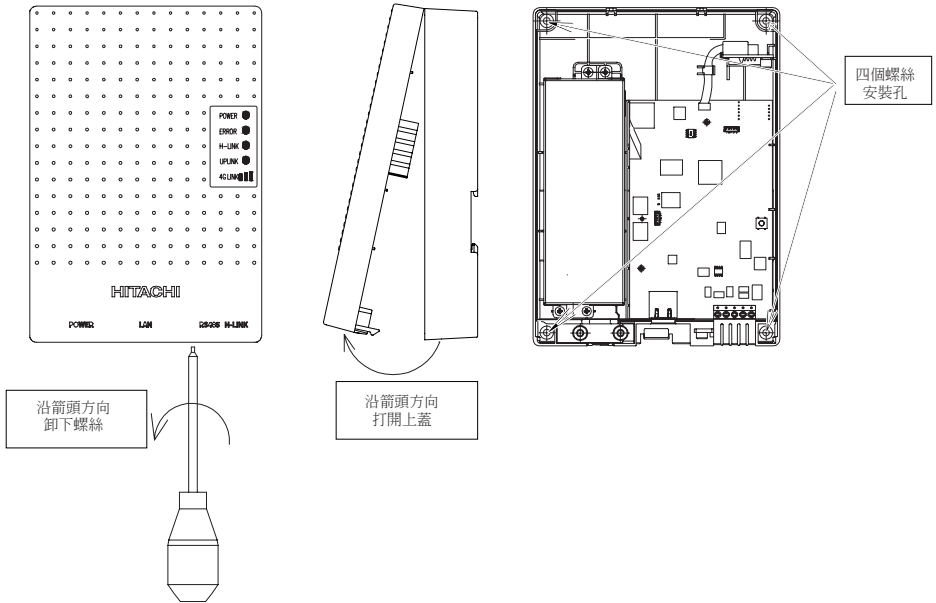


圖 3.3 木牆上安裝方法示意圖

(b) 非木板牆（如水泥，大理石結構等）

(b-1) 在牆上鑽孔（孔位置和尺寸請參考下圖），將牆上插頭插入孔中。

(b-2) 取下 airCloud 閘道器的蓋子，使用自攻螺絲通過腳孔牢固地將 airCloud 閘道器固定在牆上。

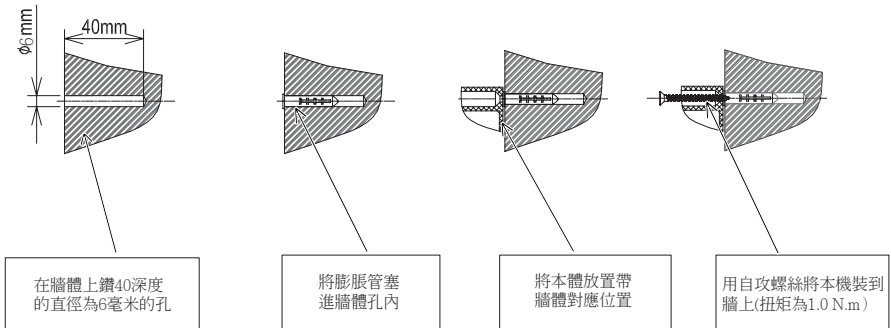


圖 3.4 安裝在非木板牆上

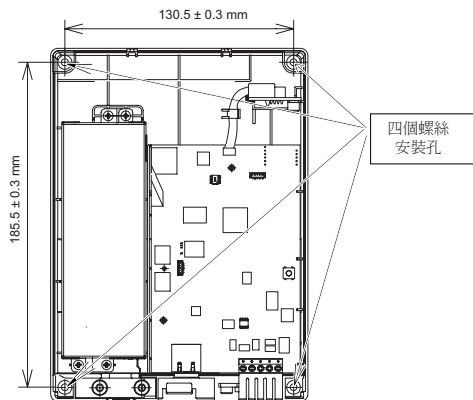


圖 3.5 非木牆上安裝方法示意圖

(2-2) DIN 導軌安裝

(a) 將 DIN 導軌固定在牆上。

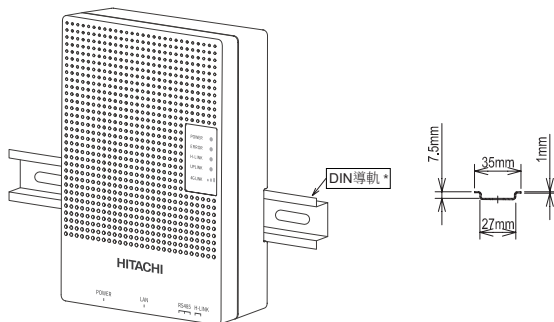


圖 3.6 DIN 導軌安裝

注：*自備

(b) 使用插銷將 airCloud 開道器安裝到導軌上。

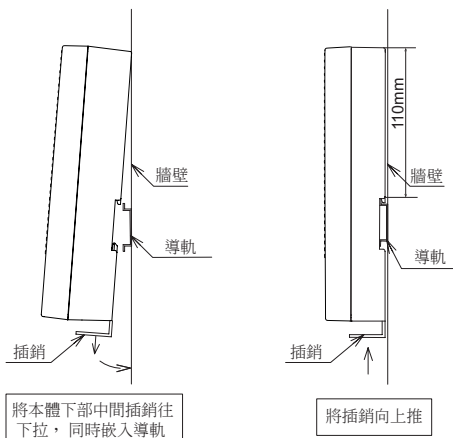


圖 3.7 安裝至導軌

3.2 配線連接

閱讀並理解 <1. 安全須知>，以便順利進行接線工作，包括電源線、與空調機（H-LINK）連接通信的線和與雲端連接的乙太網絡線（LAN）等接線工作。請注意，連接到系統的任何外部設備也需要與外部設備進行通信的接線工作。在執行任何接線工作前，請確保電源線已關閉。

3.2.1 接線程式

- (1) 進行任何接線工作前，確保電源線和連接設備的電源都已關閉。
- (2) 擰下底部螺絲。
- (3) 按住上蓋下端的兩個卡扣，取下蓋子。

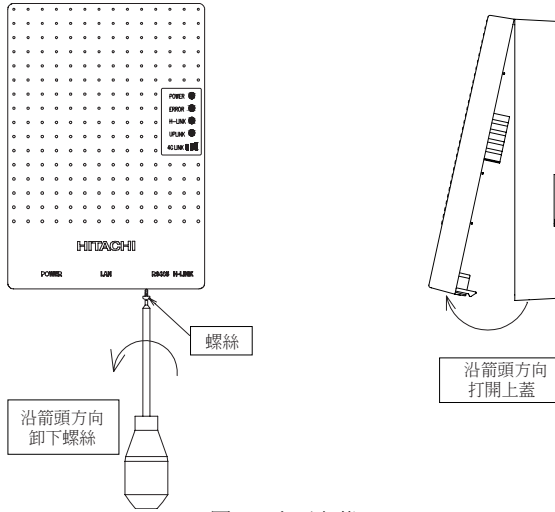


圖 3.8 取下上蓋

- (4) 用螺絲起子卸下電源板蓋上的螺絲，拆下電源板蓋。

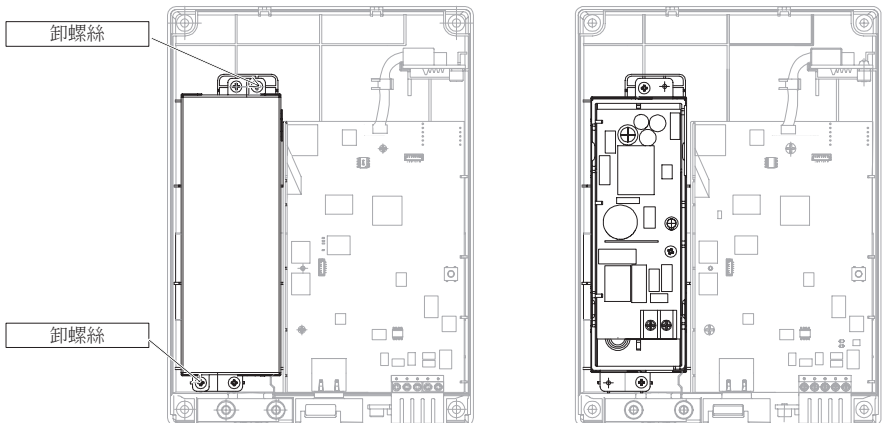


圖 3.9 拆下電源板蓋

(5) 按照以下說明進行電源接線工作。

表 3.2 連接線

接線類型	電源線	
電源	AC 100-240V 50/60Hz	
接線長度	-	
電纜規格	AWG15 (1.5mm ²) 至 AWG12 (2mm ²) 外徑精加工可達 10mm	
端子 / 連接器	M3 螺絲端子	
連接程式	<ol style="list-style-type: none"> 1. 將電線從電源線出口中取出。 2. 將電線插入圓形端子 3. 壓接圓形端子以固定電線。 4. 用螺絲將每個圓形端子固定到端子上。 5. 用壓線板固定電纜。 	

接線類型	H-LINK (通信線路)	LAN 電纜
規格	5VDC	符合 IEEE802.3 標準 100BASE-TX/10BASE-T
接線長度	1000m (3281ft) 以下	100m (328ft) 以下
電纜規格	AWG21 (0.75mm ²) 至 AWG16 (1.25mm ²)	LAN 電纜 (CAT5 或更高)
端子 / 連接器	M2.5 螺絲端子	RJ45 連接器
連接程式	<ul style="list-style-type: none"> · 壓接圓形端子以連接電線。 · 電線從 H-LINK 線路中接出。 · 用螺絲將每個圓形端子固定到端子上。 	<ul style="list-style-type: none"> · 將電線從 LAN 線路中接出。 · 插入連接器，直到聽到鎖定聲音。

注：

- 電源線與通訊線之間距離大於 150mm。

(6) 用螺絲固定電源板蓋。

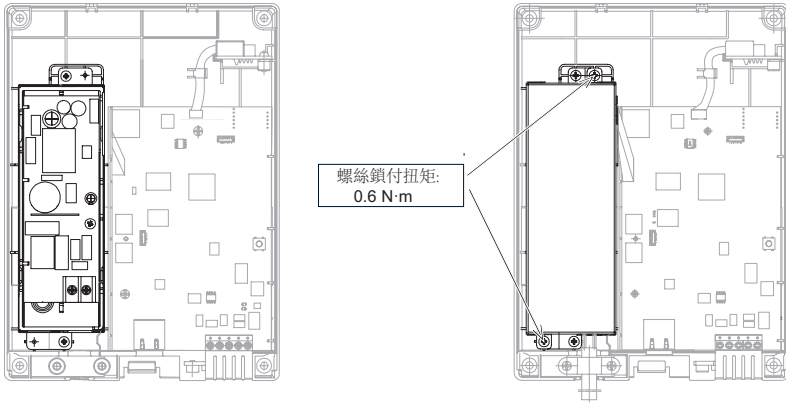


圖 3.10 固定電源板蓋

3.2.2 4G 模組安裝

4G 模組是 airCloud 閘道器的選配部分。

如果使用 4G 模組，請在 USB 埠上插入 4G 模組，如下所示：

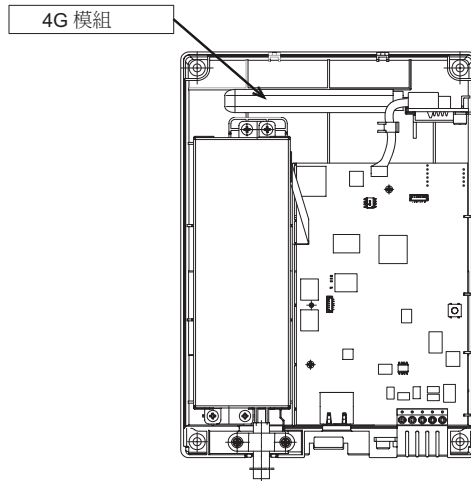


圖 3.11 插入 4G 模組

注：

- LAN 和 4G 同時連接，雲端連接時首選 4G。

3.2.3 開關設置方法

接通電源前更改開關設置。

開關設置如下。出廠預設值可能需要根據現場使用情況進行更改。

表 3.3 開關設定

開關	使用 (ON / OFF)				出廠設置	備註
	Pin No.	DHCP 模式	靜音模式	恢復出廠設置		
DS1 (4-位 DSW)	1	ON	ON	OFF	ON	不要設置其他模式。
	2	OFF	ON	OFF	OFF	
	3	ON	ON	OFF	ON	
	4	OFF	OFF	ON	OFF	
DS3 (2-位 DSW)	1	ON : H-LINK 的第 2 個保護保險絲有效 OFF : H-LINK 的第 2 個保護保險絲無效			OFF	當 H-LINK 的第 1 個保護熔絲熔斷時，將 DS3 的 Pin No.2 碼設為 ON，使熔絲端子之間短路。
	2	ON : H-LINK 終端電阻有效 OFF : H-LINK 終端電阻無效			OFF	當從 airCloud 閘道器設定終端電阻時，確保同一 H-LINK 上不存在其他終端電阻。

注：

- DHCP 模式是發貨時預設設置。

最後，將頂蓋與底蓋上的導板（凹槽）對齊，以便在接線工作完成時重新安裝頂蓋。

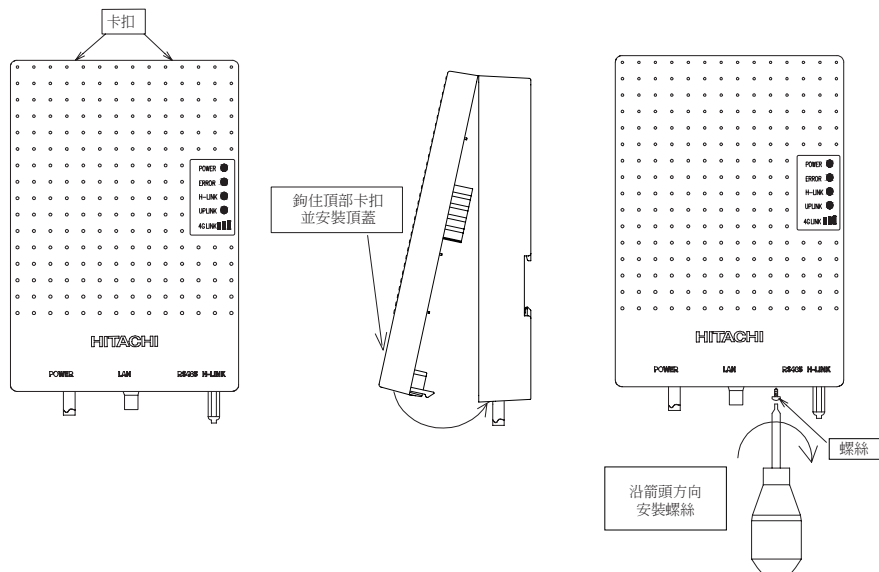


圖 3.12 頂蓋安裝

3.2.4 DHCP 模式

運行在 DHCP 模式時，無需手動進行 IP 配置，參考〈3.3 試運行〉繼續操作。

IT 提示：

- (1) 請確認當前 LAN 網絡環境中存在 DHCP 伺服器，airCloud 閘道器作為用戶端會從該 DHCP 伺服器自動獲取 IP/subnet mask/default gateway/DNS 信息。
- (2) 如果當前 LAN 網絡需要經過代理伺服器連接互聯網，請參考〈5.4 網絡資訊〉進行代理配置。

3.2.5 靜音模式

運行在靜音模式時，airCloud 閘道器通過 LAN 靜態配置訪問互聯網。用戶可通過本地 Web 修改 LAN 靜態配置，步驟如下：

步驟 1：如下所示，通過乙太網絡線直接連接 PC 和 airCloud 閘道器：



圖 3.13 連接 PC 和 airCloud 閘道器

步驟 2：請確保您的 PC 與 airCloud 閘道器位於同一個子網絡中，請按照以下步驟操作：

- (1) 開始 --> 控制台 --> 網絡和網際網絡 --> 區域連線 --> 內容 --> 互聯網協定版本 4 (TCP/IP4)*，設置 PC 的 IP 地址，確保最後一位數字與 airCloud 閘道器不同。（例如：如 airCloud 閘道器的 IP 地址是 192.168.0.23，則 PC 的 IP 地址可以是 192.168.0.30，依此類推。）
- (2) 打開 airCloud 閘道器電源，UPLINK LED 亮起。
- (3) 等到 UPLINK LED 熄滅。
- (4) 訪問 airCloud 閘道器本地 WEB 修改 LAN 靜態配置及代理 (proxy)，請參考〈5.4 網絡資訊〉。

* 這些步驟適用於 Windows 7 作業系統。

* 預設網絡設置請參見〈6. 恢復出廠設置〉。

3.3 試運轉

完成安裝、配線、指撥開關設置後，請使用以下步驟打開 airCloud 閘道器的電源。

(1) 打開系統上所有空調機的電源。

* 首先對所有空調機進行全面測試，以確認其正常狀態。

(2) 確保 airCloud 閘道器上 DS1 的設定處於 DHCP 模式。

(3) 打開 airCloud 閘道器的電源執行啟動。UPLINK LED 亮起後在一分鐘內熄滅，表示啟動已完成。

* 在本設備與其他集中控制器並聯使用的情況下，請在啟動 airCloud 閘道器之前卸下其他集中控制器。

3.3.1 AC 系統接續確認

啟動完成後，接續確認開始。當 airCloud 閘道器檢查連接時，ERROR LED 每 5 秒閃爍一次。接續確認大約在幾分鐘內完成。完成後，ERROR LED 熄滅。

3.3.2 雲端接續確認

啟動完成後，雲端接續確認將啟動。它在一分鐘內完成，完成後 UPLINK LED 亮起。

4. App 操作

使用行動 App 和 Web 瀏覽器登錄。

瀏覽器網頁登錄位址：

 <https://www.aircloud.hitachiaircon.com/>

使用手機掃描右邊二維碼，下載 App。



按 App 說明書，使用行動 App 掃描附錄 I 二維碼，連接 airCloud 閘道器。



5. 用於固件更新的本地網絡

閘道器固件更新和基本監控可以通過本地 Web 瀏覽器進行。

- 在您登錄 airCloud 閘道器 之前，請確保您知道 airCloud 閘道器 的 LAN IP 地址。（airCloud 閘道器支持動態 IP，從行動 App 端可以獲得 IP 地址。）
- 請確保 PC 可以通過 LAN 訪問 airCloud 閘道器。
- 請在執行以下步驟之前，確認您的網絡瀏覽器是以下或其後續新版之一：Google Chrome 49，Microsoft IE 11.0，Firefox 52.9 和 Opera 36。
- 首次登錄本地 Web，會有頁面不安全提示，請繼續前往。

5.1 登錄

在 PC 中打開 Web 瀏覽器，在網址列中輸入 airCloud 閘道器 的 IP 地址，在登錄螢幕中輸入用戶名和密碼。請從本手冊的 < 附錄 I > 中獲取預設用戶名和密碼。

HITACHI

用戶名

密碼

圖 5.1 登錄

5.2 設備清單

初始介面如下：

名稱	描述	機號	型號
System-000			
IDU-001	未定義	1	-----
IDU-002	未定義	2	-----
ODU-001	未定義	1	-----

圖 5.2 設備清單

從 Web 瀏覽器登錄 airCloud 閘道器，檢查系統連接資訊，冷媒系統中的所有室外機和室內機都在此處列出（本例中，1 個冷媒系統，一台室外機和兩台室內機）。

從右上角的語言列表中選擇語言。

通過點選“編輯設備詳細資訊”，描述內容變為可編輯。您可以為每台室內機和室外機指定有意義的名稱。

5.3 重新搜索設備

冷媒系統如有任何變化，例如從系統中移除或增加內外機，包括線控器更改，請確保通過“重新搜索設備”更新 airCloud 閘道器的連接資訊。否則，更改不會自動更新連接系統。

注：

- 此操作將使 airCloud 閘道器重啟，請等待重啟完成，重新整理 Web 瀏覽器並重新登錄以檢查“設備清單”的更改。

5.4 網絡資訊

DHCP 模式，只能查詢網絡資訊。

靜音模式，可以修改 LAN 靜態配置。



圖 5.3 網絡資訊

LAN 靜態設置

如需更改 airCloud 閘道器的 IP 地址匹配目標網絡，請執行以下步驟：

(1) 在主選單中按“設置”，然後進入“網絡資訊”，設置 IP 地址和相關參數。

圖 5.4 LAN 靜態設置

(2) 點擊“保存”保存設置。

(3) 在顯示的確認螢幕中按“確定”將重新啟動 airCloud 閘道器。

圖 5.5 確認顯示

代理資訊設置

- (1) 勾選 代理伺服器使用。
- (2) 設置代理資訊，代理配置問題，請諮詢本地 IT。



代理伺服器使用

代理伺服器
192.168.0.111

代理伺服器埠號
19312

代理伺服器用戶名(可選的)
123

代理伺服器密碼(可選的)
123456

取消 保存

圖 5.6 代理資訊設置

IT 提示：

1. 代理伺服器需要支援 HTTP / 1.1 協定的“CONNECT”方法。
2. 代理伺服器必須支援將資料發送至目標 80 埠，443 埠和 8883 埠。
3. 代理用戶名密碼驗證必須採用 BASE64 加密方式。
4. 代理主機的最大長度為 60 個字元。代理用戶名和密碼的最大長度為 30 個字元。
5. 如果需要將代理伺服器的根證書上傳到 airCloud 閘道器，請參考 < 5.5 證書 >。

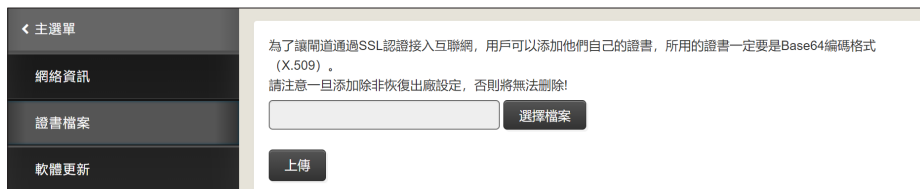
注：

- 關於網絡安全，請聯繫網絡系統管理員。
- 代理配置後 DHCP 模式和靜音模式都適用。

5.5 證書

用戶可以將根證書導入到 airCloud 閘道器的受信任證書中。

- (1) 從功能表中點選“證書檔案”。
- (2) 點選“選擇檔案”從 PC 中選擇證書檔案。
- (3) 點選“上傳”。



< 主選單

網絡資訊

證書檔案

軟體更新

為了讓閘道通過SSL認證接入互聯網，用戶可以添加他們自己的證書，所用的證書一定要是Base64編碼格式(X.509)。
請注意一旦添加除非恢復出廠設定，否則將無法刪除！

選擇檔案

上傳

圖 5.7 證書上傳

5.6 時區 / 時間設定

請從此主選單中設定正確的時間和時區。

- (1) 點選“時區 / 時間”進入時間設定螢幕。

圖 5.8 時區 / 時間

- (2) 點選圖示設置 iCloud 閘道器時間。
- (3) 根據安裝 iCloud 閘道器的位置，從下拉清單中選擇適當的時區。
- (4) 點選“保存”使新設置生效。

5.7 帳戶管理

從 PC 登錄 iCloud 閘道器的用戶帳戶和密碼可以通過以下方式進行維護：

- (1) 從左側主選單列表中選擇“帳戶管理”。

圖 5.9 帳戶管理

- (2) 輸入新的用戶名和密碼，點選“修改”保存。

5.8 軟體更新

此步驟為非必須步驟。但當軟體需要升級時，請按照以下步驟操作：

- (1) 從 "設定" 主選單中選擇 "軟體更新"。



圖 5.10 軟體更新

- (2) 從 PC 中選擇軟體套件文件(名稱 W-XXXX.YYYY.zip, 請確認升級包來自官方), 點選 "上傳" 按鈕。如有任何問題, 請聯繫當地經銷商。有關軟體包獲取權限, 請聯繫我公司服務郵箱。

✉ 電子郵件: JCH-IoT-Service@jci-hitachi.com.

- (3) 在顯示的確認螢幕中點選 "確定", airCloud 開道器立即重啟並執行升級操作。



圖 5.11 執行更新

5.9 室內機狀態

點選室內機名稱以檢查詳細信息。



圖 5.12 室內機狀態

5.10 室內機控制

“控制”區域位於“狀態”區域下方。從“控制區域”，如下所示更改運轉模式。

控制

開/關 模式

風速 設定溫度

圖 5.13 室內機控制

點選“設定”將指令發送到室內機，確認室內機線控器面板的狀態變化。

5.11 線控器禁止

“線控器禁止”區域位於“控制”區域下方。從“線控器禁止”區域，設定線控器功能。

線控器禁止

全選

開/關禁止

模式禁止

風速禁止

風向禁止

設定溫度禁止

圖 5.14 線控器禁止

點選“設定”將立即生效新設定。

- 如果 airCloud 閘道器和以下設備連接到系統，則“線控器禁止”功能不能使用。在這種情況下，集中控制器都不應設置“線控器禁止”功能，因“線控器禁止”可能會導致故障。
 - * 非對應遙控器操作禁止（個別項目）的遙控器
 - * 適溫適所 EZ 集中控制器以外的集中控制器
- 壁掛式空調機中，如果連接了線控器，則可以使用線控器禁止功能。

5.12 室外機狀態

點選設備清單清單頁面中的室外機名稱，檢查室外機的狀態。

項目	數值	項目	數值	項目	數值
循環狀態	冷暖同時	H1(Hz)	0.0	C11	OFF
運轉/停止	OFF	Fo	0	C13	OFF
熱交 1 狀態	冷暖同時	oE1	100	C14	OFF
除霜準備/通常	正常	EVB(%)	0	C15	OFF
應急運轉/通常	正常	Pd(Mpa)	5.08	C16	OFF
試運轉/正常	正常	Ps(Mpa)	1.97	C17	OFF
保護代碼	--	Td1	84	Y212	OFF

圖 5.15 室外機狀態

5.13 溫度單位選擇

在室內機狀態和室外機狀態頁面中，可將溫度單位從攝氏度（°C）和華氏度（°F）之間切換。



圖 5.16 溫度單位

6. 恢復出廠設置

在 DS1 設置為“恢復出廠預設值”模式時（參見 3.2.3 開關設置方法），打開 airCloud 閘道器的電源，airCloud 閘道器的設置將重置為預設出廠設置。進入出廠重置程式後，除電源外的所有 LED 都閃爍，直到出廠復位完成，所有 LED 燈熄滅。

所有預設出廠設置如下：

表 6.1 出廠設置

名稱	出廠設置
IP 地址	192.168.0.23
子網絡遮罩	255.255.255.0
預設閘道器	192.168.0.1
主 DNS 伺服器	192.168.0.1
次 DNS 伺服器	空白
代理	空白
Web 伺服器用戶名	從本手冊附錄獲取預設用戶名和密碼。
Web 伺服器密碼	

恢復出廠設置後，用戶需要將 DS1 Pin1~Pin4 設置為 DHCP 模式 / 靜音模式並重新送電。恢復出廠設置將會清除先前添加的證書。

由於恢復出廠設置時也會刪除接續確認資訊，因此下次開機時會再次執行接續確認。

7. LED 顯示 (正常與異常)

設備面板上 LED 顯示模組運轉狀態如下。

表 7.1 LED 顯示

名稱	顏色	亮燈條件	滅燈條件	燈閃爍條件
POWER(5V)	綠色	供電正常	無供電	-
ERROR	紅色	參考 < 表 7.2 ERROR LED 的指示和條件以及 airCloud 閘道器的故障代碼 >		
H-LINK	綠色	-	-	每兩秒閃一次：無資料傳輸 每兩秒閃兩次：資料傳輸中 持續快速閃爍：正在搜索中
UPLINK	綠色	雲端連接成功	雲端未連接	-
4G LINK	綠色	指示 4G 信號強度		

表 7.2 ERROR LED 的顯示和條件以及 airCloud 閘道器的故障代碼

狀態	亮燈條件	滅燈條件	ERROR LED 狀態	故障代碼	顯示順序
軟體啟動失敗	檢測到軟體異常。	軟體沒有錯誤 / 異常。	ON	N/A	1
內存檢查失敗 (FlashROM)	檢查 FlashROM 時檢測到異常。	檢查 FlashROM 成功完成。	ON	N/A	2
內存檢查失敗 (SDRAM)	檢查 SDRAM 時檢測到異常。	檢查 SDRAM 成功完成。	ON	N/A	3
文件系統故障	檢查文件系統時檢測到異常。	檢查文件系統成功完成。	ON	N/A	4
應用程式啟動	電源打開後立即啟動並在正常模式下啟動應用程式。	1 分鐘完成。	1 秒啟動	N/A	5
H-LINK 初始化失敗	打開正常模式的電源後，應用程式啟動並在初始化 H-LINK 通訊連接埠時檢測到異常。	H-LINK 通訊連接埠的初始化成功完成。	ON	N/A	6
檢查與空調機的連接	打開正常模式的電源後，應用程式啟動，然後檢查與空調機的連接。	通訊檢查完成。	每 5 秒閃爍 1 次 (重複)	N/A	7
與空調機的通訊連接失敗	打開正常模式下的電源後，與空調機完成接續確認，並檢測到與 1 個或多個空調機的通信故障。	已成功建立所有檢測到的空調機的通訊。	每 3 秒閃爍 1 次 (重複)	60/61/64/65*	8
與其他集中控制器並聯	airCloud 閘道器檢測到存在無法與之連接的集中控制器。	卸下無法與 airCloud 閘道器連接的集中控制器。有關可與 airCloud 閘道器配合使用的集中控制器，請參閱 <2.4 規格 >。	OFF	63*	9
正常狀態	態符合一個或多個上述標準。	打開正常模式的電源後，沒有觀察到上述情況。	OFF	N/A	10

* 故障代碼 60/61/64/65 可以在本地 Web 瀏覽器上查看，故障代碼 60/61/63/64/65 可以在 App 查看。

60 airCloud 閘道器和室外機之間的通信故障 (1 個或多個室內機打開時)。

61 室內機與 airCloud 閘道器之間的通信故障 (室內機運轉時)。

64 airCloud 閘道器和室外機之間的通信故障 (無室內機運轉時)。

65 室內機與 airCloud 閘道器之間的通信故障 (室內機停止時)。

8. 維護和服務

8.1 異常時的處理方法

下表列出了可能的異常時的處理方法。在執行表中所述的任何檢查之前，請確保電源線已關閉。如果檢查列的回答為“是”，則檢查下一個問題，如果檢查列的回答為“否”，則執行措施列。

表 8.1 異常時的處理方法

項目	現象	檢查	措施
1	即使在接通電源後，airCloud 閘道器似乎也無法工作。	電源線是否正確連接到 airCloud 閘道器？	確保電源線正確連接到 airCloud 閘道器。確保電源線已關閉以執行接線工作。
		電源是否打開？	打開電源。
		電源電壓是否在適用範圍內？	檢查電源上的電壓。如果電壓不在“正常範圍”內(AC 100V - 240V)，請檢查並重新連接電線。
		POWER LED 是否亮起？	如果以上都不適用於這種情況且 POWER LED 仍然不亮，則 airCloud 閘道器可能存在內部缺陷。請聯繫您的經銷商或分銷商。
		ERROR LED 指示燈是 ON，還是處於 ON 狀態 1 秒鐘，OFF 1 秒鐘（重複）？	airCloud 閘道器可能存在內部缺陷。請聯繫您的經銷商或分銷商。
2	接續確認無法完成。	H-LINK 是否正確連接到 airCloud 閘道器？	正確連接 H-LINK 到 airCloud 閘道器。
		H-LINK 接線上的終端電阻是否正確設置？	在一個 H-LINK 系統上僅設置 1 個終端電阻。
		是否正確配置了設備的所有地址？	按照手冊中的說明設置所有設備的地址。
		H-LINK 接線是否斷開？	檢查接線連接。
		所有設備都已開機嗎？	打開所有設備的電源。
		H-LINK 接線是否符合規格要求？	使用 0.75 - 1.25mm ² 標準和屏蔽電纜，長度為 1,000m (3,281ft) 或更短。
		ERROR LED 是否會閃爍 5 秒（重複）？	airCloud 閘道器正在檢查連接，請耐心等待。如果該情況持續超過六十分鐘，請檢查空調機的接線和地址設置，然後重新進行連接。
		H-LINK LED 是否保持每兩秒閃一次？	- 確保 H-LINK 線路已正確接線。 - 如果 H-LINK 電路的第一個保護熔斷器熔斷，請排除原因，然後在 DS3 上設置 Pin No.2 碼設為 ON。 - 如果以上都不適用於，airCloud 閘道器可能有內部缺陷。請聯繫您的經銷商或分銷商。
3	無法建立 PC 與 airCloud 閘道器之間的連接。	乙太網絡線是否正確連接到 airCloud 閘道器？	將乙太網絡線正確連接到 airCloud 閘道器，檢查接頭的連接。
		PC 與 airCloud 閘道器 是否位於同一個子網絡中？	請參閱 <5. 用於固件更新的本地網絡 > 檢查 IP 地址。
		airCloud 閘道器上的 DS 設置是否正確？	更改 DS 設置時，請參閱 <3.2.3 開關設置方法 > 以檢查步驟。
		HUB 上的電源是否打開？	打開 HUB 的電源。
		乙太網絡線是否符合規格要求？	使用長度為 100m (328ft) 或更短的 CAT5 或更高類別的乙太網絡線。
		乙太網絡線（和 HUB）是否有鬆動的連接線短路或其他問題？	替換為新的。
		H-LINK 是否在任何高壓的 5-7 / 8in 範圍內？	在 H-LINK 和高壓之間提供 150mm (5-7/8in) 或更大的間距。
		PC 中的 Web 瀏覽器版本是否正確？	請參閱 <5. 用於固件更新的本地網絡 > 確認 Web 瀏覽器版本是否正確。
		LAN LED 是否保持熄滅狀態？	如果上述情況均不適用於左側所述的情況和現象，airCloud 閘道器可能存在內部缺陷。請聯繫您的經銷商或分銷商。
4	無法建立與雲端的連接（4G 模組已插入）。	airCloud 閘道器是否安裝在 4G 涵蓋的區域？	確保 airCloud 閘道器安裝在涵蓋 4G 訊號的區域。
		4G 信號強度顯示 LED 燈是否保持熄滅狀態？	如果上述情況均不適用於左側描述的環境和現象，則 airCloud 閘道器可能存在內部缺陷。請聯繫您的經銷商或分銷商。
5	無法建立與雲端的連接（未插入 4G 模組）。	乙太網絡線是否正確連接到 airCloud 閘道器？	將乙太網絡線正確連接到 airCloud 閘道器，檢查接頭。
		PC 與 airCloud 閘道器 是否位於同一個子網絡中？	請參閱 <5. 用於固件更新的本地網絡 > 檢查 IP 地址。
		airCloud 閘道器上的 DS 設置是否正確？	更改 DS 設置時，請參閱 <3.2.3 開關設置方法 > 以檢查步驟。
		HUB 上的電源是否打開？	打開 HUB 的電源。
		乙太網絡線是否符合規格要求？	使用長度為 100m (328ft) 或更短的 CAT5 或更高類別的乙太網絡線。
		乙太網絡線（和 HUB）接頭是否鬆動 / 短路或其他問題？	替換為新的。
		LAN LED 是否保持熄滅狀態？	如果上述情況均不適用於左側所述的情況和現象，airCloud 閘道器可能存在內部缺陷。請聯繫您的經銷商或分銷商。

8.2 定期檢查

為了維持包括 airCloud 閘道器在內的空調機系統的正常運轉，請定期檢查以下內容。

(1) 周圍環境

- airCloud 閘道器的溫度是否異常高？
- 是否有灰塵、粉末、不必要之電線等進入 airCloud 閘道器？

(2) LED 指示

- POWER LED 是否亮起？
- ERROR LED 是否亮起或閃爍？
- H-LINK，UPLINK LED 是否亮起或閃爍？
- 4G LINK 信號強度指示燈 LED 是否亮起？

(3) 安裝和連接

- airCloud 閘道器的安裝是否鬆動？
- 連接線是否正常？

9. 記憶卡

airCloud 閘道器提供適用於 SD 標準的 microSD /microSDHC 記憶卡插槽。此功能用於維修服務。
記憶卡用於存儲通信日誌。

< 關於商標 >

microSD，microSDHC 和 microSDXC 標誌是 SD-3C，LLC 的商標



MEMO

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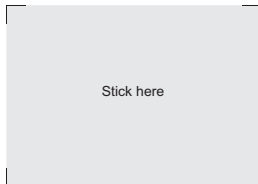
Appendix I

附錄 I

Web Browser Username and Password:

ウェブブラウザユーザー名とパスワード:

Web 瀏覽器用戶名和密碼:



Device ID and License (Scan the QR code below through App to bind the device):

プロダクト ID とライセンス (アプリと本機とを紐付けする際に使用します):

設備 ID 和許可證 (通過 App 掃描以下二維碼, 綁定設備):

