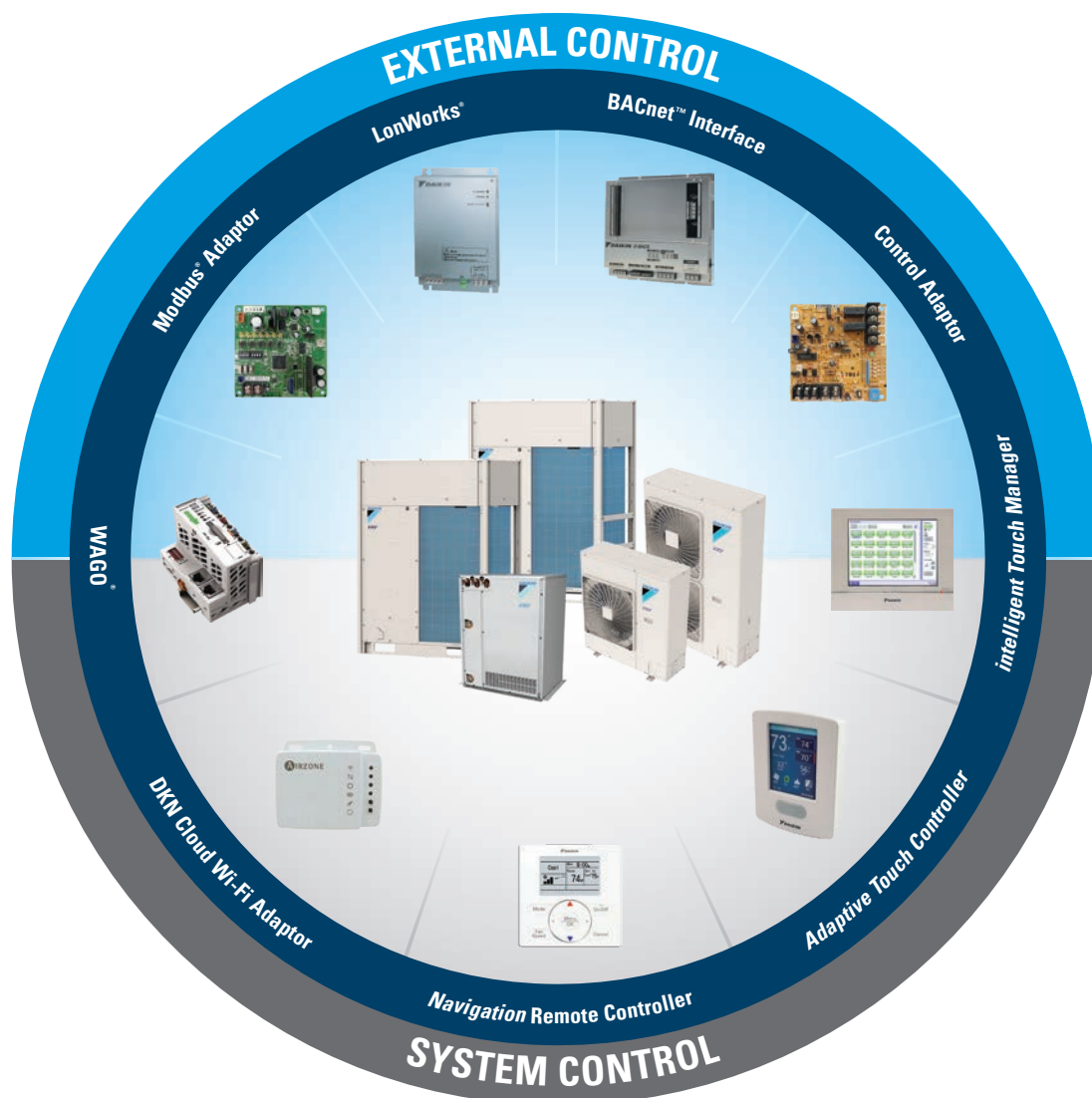


Engineering Data



Controls

R-410A

VRV

Controls

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1. Control Systems

1.1 Optional Accessories of Operation Control System

No.	Item	FXFQ-TVJU	FXZQ-TAVJU	FXUQ-PVJU	FXEQ-PVJU	FXDQ-MVJU	FXSQ-TAVJU
1	Navigation Remote Controller	BRC1E73	BRC1E73	BRC1E73	BRC1E73	BRC1E73	BRC1E73
2	DKN Cloud Wi-Fi Adaptor	AZAI6WSCDKA	AZAI6WSCDKA	AZAI6WSCDKA	AZAI6WSCDKA	AZAI6WSCDKA	AZAI6WSCDKA
3	Wireless Remote Controller	—	BRC082A42W BRC082A42S BRC082A41W	—	—	BRC4C82	BRC4C82
4	Remote sensor Kit	KRCS01-4B	KRCS01-4B	KRCS01-4B (Note 4)	KRCS01-4B	KRCS01-1B	KRCS01-4B
5	Installation Box for Adaptor PCB	KRP1J98A KRP1H98A (Note 2, 3)	KRP1BB101	KRP1BA97	KRP1BB101	KRP1BB101	KRP4A98
6	Central remote controller	DCS302C71					
7	Electrical box	KJB311AA (Note 5)					
8	External control adaptor for outdoor unit	DTA104A62*	—	—	—	DTA104A53*	—
9	DIII-NET expander adaptor	DTA109A51					
10	Adaptor for wiring	KRP1C75*	KRC1C75*	—	KRP1C75*	KRP1C75*	KRP1C74*
11	Wiring adaptor for electrical appendices (2)	KRP4A74*	KRP4A74*	KRP4A74*	KRP4A74*	KRP4A74*	KRP4A71*
12	PCB adaptor for humidifier	—	—	—	—	—	—
13	Sensor unit (Sensor kit)	—	—	BRE49B1F (Note 4)	—	—	—
14	Adaptor for multi tenant	DTA114A61*	—	—	—	—	—
15	Madoka Wired Remote Controller	BRC1H71	BRC1H71	BRC1H71	BRC1H71	BRC1H71	BRC1H71
16	Daikin One+ Smart Thermostat	DTST-ONE-ADA-A	DTST-ONE-ADA-A	DTST-ONE-ADA-A	DTST-ONE-ADA-A	DTST-ONE-ADA-A	DTST-ONE-ADA-A
17	Adaptive Touch Controller	BACRC-T-P01 BACRC-TH-P01 BACRC-THO-P01 BACRC-THOC-P01	BACRC-T-P01 BACRC-TH-P01 BACRC-THO-P01 BACRC-THOC-P01	BACRC-T-P01 BACRC-TH-P01 BACRC-THO-P01 BACRC-THOC-P01	BACRC-T-P01 BACRC-TH-P01 BACRC-THO-P01 BACRC-THOC-P01	BACRC-T-P01 BACRC-TH-P01 BACRC-THO-P01 BACRC-THOC-P01	BACRC-T-P01 BACRC-TH-P01 BACRC-THO-P01 BACRC-THOC-P01
18	DKN Plus Interface	AZAI6WSPDKC	AZAI6WSPDKC	AZAI6WSPDKC	AZAI6WSPDKC	AZAI6WSPDKC	AZAI6WSPDKC
19	Button Sensor Kit	KRCSH2018-01	KRCSH2018-01	KRCSH2018-01	KRCSH2018-01	KRCSH2018-01	KRCSH2018-01
Drawing No.		C: 3D086933C	C: 4D110595	C: 3D090253A	C: 3D098723	C: 3D043022H	C: 3D112077

No.	Item	FXMQ-PBVJU	FXMQ-MVJU	FXHQ-MVJU	FXAQ-PVJU	FXLQ-MVJU9	FXNQ-MVJU9
1	Navigation Remote Controller	BRC1E73	BRC1E73	BRC1E73	BRC1E73	BRC1E73	BRC1E73
2	DKN Cloud Wi-Fi Adaptor	AZAI6WSCDKA	AZAI6WSCDKA	AZAI6WSCDKA	AZAI6WSCDKA	AZAI6WSCDKA	AZAI6WSCDKA
3	Wireless Remote Controller	BRC4C82	BRC4C82	BRC7E83	BRC7E818	BRC4C82	BRC4C82
4	Remote sensor Kit	KRCS01-4B	KRCS01-1B	KRCS01-1B	KRCS01-1B	KRCS01-1B	KRCS01-1B
5	Installation Box for Adaptor PCB	KRP4A96 (Note 2, 3)	—	KRP1C93	—	—	—
6	Central remote controller	DCS302C71					
7	Electrical box	KJB311AA (Note 5)					
8	External control adaptor for outdoor unit	DTA104A61*	DTA104A61	DTA104A62*	DTA104A61	DTA104A61	DTA104A61
9	DIII-NET expander adaptor	DTA109A51					
10	Adaptor for wiring	KRP1C74*	KRP1C74	KRP1C74*	—	KRP1C74	KRP1C74
11	Wiring adaptor for electrical appendices (2)	KRP4A71*	KRP4A71	KRP4A72*	KRP4A71	KRP4A71	KRP4A71
12	PCB adaptor for humidifier	—	—	—	—	—	—
13	Sensor unit (Sensor kit)	—	—	—	—	—	—
14	Adaptor for multi tenant	DTA114A61	—	—	DTA114A61	—	—
15	Madoka Wired Remote Controller	BRC1H71	BRC1H71	BRC1H71	BRC1H71	BRC1H71	BRC1H71
16	Daikin One+ Smart Thermostat	DTST-ONE-ADA-A	DTST-ONE-ADA-A	DTST-ONE-ADA-A	DTST-ONE-ADA-A	DTST-ONE-ADA-A	DTST-ONE-ADA-A
17	Adaptive Touch Controller	BACRC-T-P01 BACRC-TH-P01 BACRC-THO-P01 BACRC-THOC-P01	BACRC-T-P01 BACRC-TH-P01 BACRC-THO-P01 BACRC-THOC-P01	BACRC-T-P01 BACRC-TH-P01 BACRC-THO-P01 BACRC-THOC-P01	BACRC-T-P01 BACRC-TH-P01 BACRC-THO-P01 BACRC-THOC-P01	BACRC-T-P01 BACRC-TH-P01 BACRC-THO-P01 BACRC-THOC-P01	BACRC-T-P01 BACRC-TH-P01 BACRC-THO-P01 BACRC-THOC-P01
18	DKN Plus Interface	AZAI6WSPDKC	AZAI6WSPDKC	AZAI6WSPDKC	AZAI6WSPDKC	AZAI6WSPDKC	AZAI6WSPDKC
19	Button Sensor Kit	KRCSH2018-01	KRCSH2018-01	KRCSH2018-01	KRCSH2018-01	KRCSH2018-01	KRCSH2018-01
Drawing No.		C: 3D068551B	C: 3D043022H	C: 3D043022H	C: 3D043022H	C: 3D094932	C: 3D094932

Note:

- Adaptors with * required installation box (No.5).
- Up to two adaptors can be fixed for each installation box.
- Only one installation box can be installed to each indoor unit.
- The remote sensor cannot be installed when applying the Sensor unit (Sensor kit).
- Electrical box (No. 6-1/7-1) is required for controller (No. 6/7).

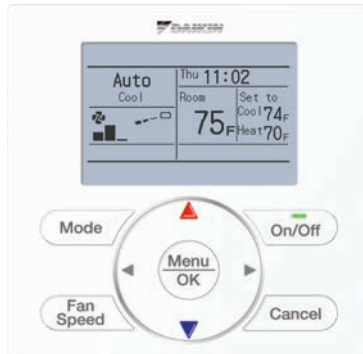
No.	Item	FXTQ-TAVJUA FXTQ-TAVJUD	CXTQ	VAM-GVJU		FXMQ-MFVJU
				300/470/600	1200	
1	Navigation Remote Controller	BRC1E73	BRC1E73	BRC1E73	BRC1E73	BRC1E73
2	DKN Cloud Wi-Fi Adaptor	AZAI6WSCDKA	AZAI6WSCDKA	—	—	—
3	Wireless Remote Controller	—	BRC4C82 (Note 6)	—	—	BRC4C82
4	Remote sensor Kit	KRCS01-2UA	KRCS01-2UA	—	—	KRCS01-1B
5	Installation Box for Adaptor PCB	KRP1BB101	KRP1BB101	KRP50-2A90	—	—
6	Central remote controller	DCS302C71	DCS302C71 (Note 6)	DCS302C71		DCS302C71
7	Electrical box	KJB311AA (Note 5)		—	—	KJB311AA (Note 5)
8	External control adaptor for outdoor unit	DTA104A53*	DTA104A53*	—	—	DTA104A61
9	DIII-NET expander adaptor	DTA109A51		—	—	DTA109A51
10	Adaptor for wiring	KRP1C75*	KRP1C75*	—	—	KRP1C74
11	Wiring adaptor for electrical appendices (2)	KRP4A74*	KRP4A74*	KRP4A72		KRP4A71
12	PCB adaptor for humidifier	—	—	KRP50-2		—
13	Sensor unit (Sensor kit)	—	—	—	—	—
14	Adaptor for multi tenant	DTA114A61*	—	—	—	—
15	Madoka Wired Remote Controller	BRC1H71	BRC1H71	BRC1H71	BRC1H71	BRC1H71
16	Daikin One+ Smart Thermostat	DTST-ONE-ADA-A	DTST-ONE-ADA-A	—	—	DTST-ONE-ADA-A
17	Adaptive Touch Controller	BACRC-T-P01 BACRC-TH-P01 BACRC-THO-P01 BACRC-THOC-P01	BACRC-T-P01 BACRC-TH-P01 BACRC-THO-P01 BACRC-THOC-P01	—	—	BACRC-T-P01 BACRC-TH-P01 BACRC-THO-P01 BACRC-THOC-P01
18	DKN Plus Interface	AZAI6WSPDKC	AZAI6WSPDKC	—	—	AZAI6WSPDKC
19	Button Sensor Kit	KRCSH2018-01	KRCSH2018-01	—	—	KRCSH2018-01
Drawing No.		—	—	C: 3D073395A	C: 3D073395A	C: 3D043022H

Note:

- Adaptors with * required installation box (No.5).
- Up to two adaptors can be fixed for each installation box.
- Only one installation box can be installed to each indoor unit.
- The remote sensor cannot be installed when applying the Sensor unit (Sensor kit).
- Electrical box (No. 6-1/7-1) is required for controller (No. 6/7).

1.2 Individual Control Systems

Navigation Remote Controller (wired) (Optional) BRC1E73

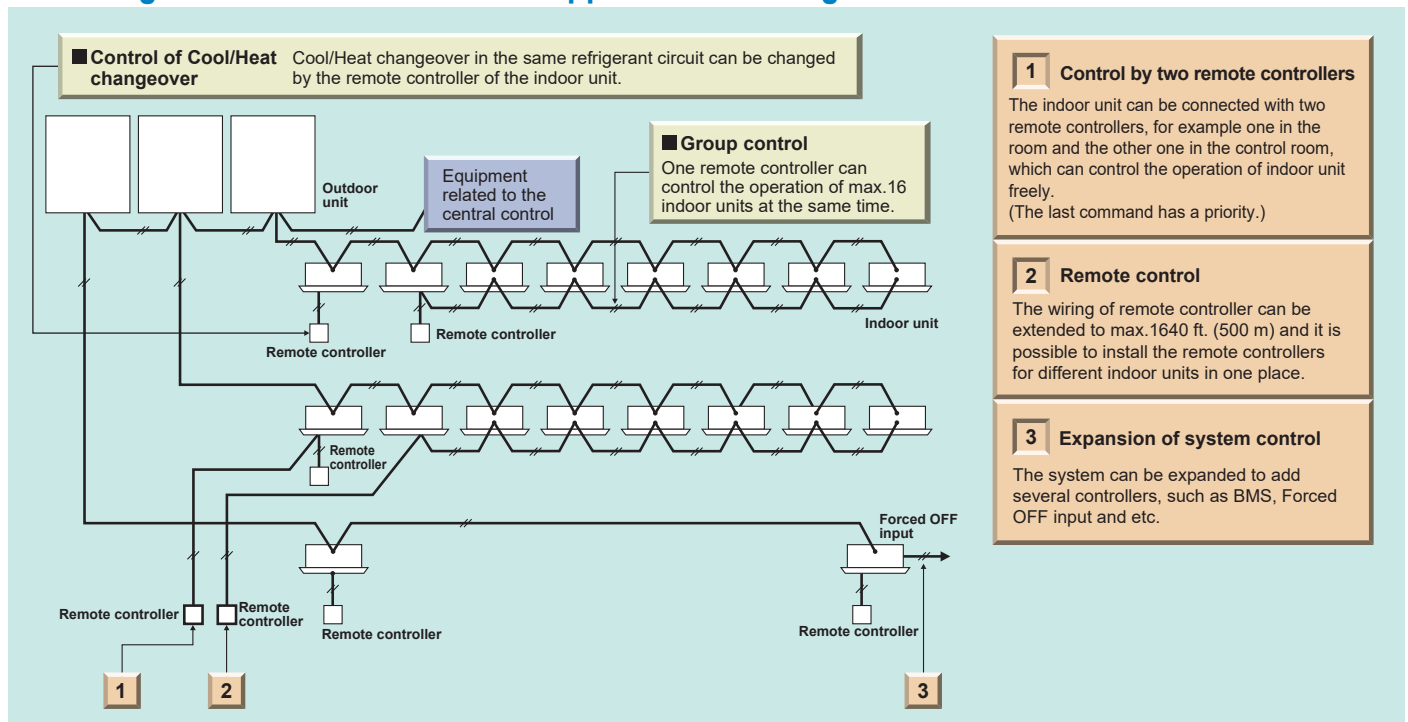


Navigation Remote Controller

- Selectable Screen Display
3 types of displays are available; Standard, Detailed and Simple.
- Clear Display
Equipped with backlight and large sized character display and buttons.
- Stylish
Basic tone is white and arrow keys are located at the center.
- Simple Operation
Simple operation used with arrow keys and menu-driven method.
- Multilingual Display
3 languages available to select: English, French and Spanish.
- Convenient Features
Schedule function and Daylight Saving Time function.
- Face Decal Options
Hides unnecessary (locked/prohibited) buttons.

Used with	Single Setpoint mode			Dual Setpoint mode		
	BRC1E72RMF	BRC1E72RF	BRC1E72RM	BRC1E72RMF2	BRC1E72RF2	BRC1E72RM2
Model						

The Navigation Remote Controllers supports a wide range of control functions



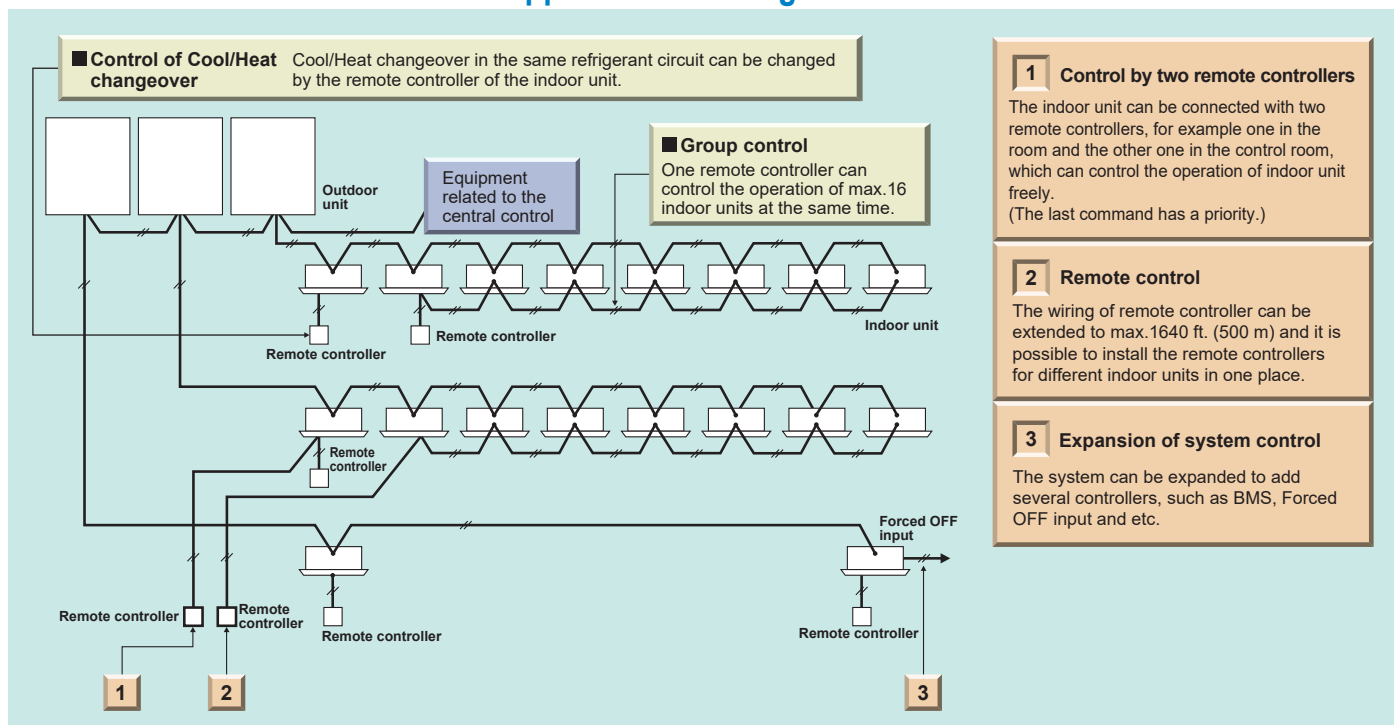
Madoka Wired Remote Controller (wired) (optional) BRC1H71



Madoka Remote Controller

- **Sleek Stylish Design**
Much like the perfection of its circular shape, the remote controller gives you perfect control over your individual climate.
- **Simple Interface**
The remote controller combines functionality and simplicity. The minimalistic touch button control enlarges the display and makes the remote controller easy to use.
- **The Madoka Quick Set APP for Installer**
Simplifies the advanced settings such as field settings and the controller configuration via Daikin's Bluetooth® furnace connectivity.
- **Shorter and Easier Installation**
The application connected to this controller provides 2 modes, Owner / Administrator mode and Installer mode (no end-user mode).
- **Display**
Provides 3 selectable options for the display view: Text, Icon and Scale.

The Madoka Remote Controllers supports a wide range of control functions



Daikin One+ Smart Thermostat DTST-ONE-ADA-A

Smart thermostat offers full two-way communications with Daikin **VRV** systems

- 1 **The high-resolution color touch screen display** is protected by the same toughened glass used in smart phones.



A number of screen savers are available, including this analog clock.

- 2 **The anodized aluminum bezel and dial** are precision manufactured. The surfaces have a fine bead blast with a warm hued anodized finish. The dial rotation is extraordinarily smooth because it rests on a bearing assembly typically found in precision instruments. A switch behind the dial enables users to return to the home screen from any menu with a single tap.



Turning the dial changes the temperature set-point.

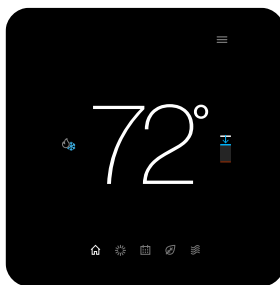
- 3 **An integrated WiFi radio** connects to the internet (via a home router) to the cloud and on to the homeowner's mobile application. The Daikin cloud will also seamlessly integrate with open smart home architectures, including *Amazon Alexa* and *Google Assistant*, enabling consumers to effortlessly use features such as voice control.



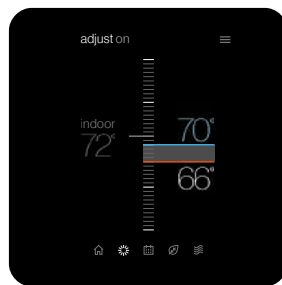
- 4 **A thin LED light bar** sits flush within the bottom surface and runs from edge to edge, delicately illuminating the wall beneath. Emitting a soft emotive glow, the light bar indicates the current system mode: red-orange for heating, blue for cooling.



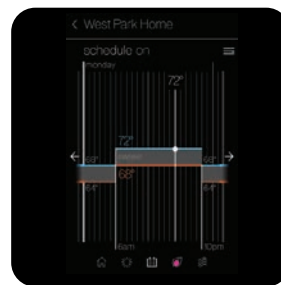
- 5 **Built-in bubble level** aids professional installation.



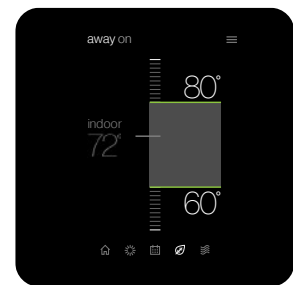
The **home screen** displays the current temperature, the current system mode, and icons leading to each of the top level screens.



The **adjust screen** displays the current temperature on the left and set-points on the right. Change the set-points by dragging them or by turning the dial.



The **schedule screen** displays upcoming set-point changes and scheduled times. It also offers access to edit mode, where you can adjust the schedule.



The **away screen** displays energy saving set-points. Energy saving can be invoked manually or automatically when the mobile app recognizes everyone is away.

Adaptive Touch Controller BACRC-T-P01/ BACRC-TH-P01/ BACRC-THO-P01/ BACRC-THOC-P01

Advanced and Configurable Control Logic

The Daikin *Adaptive Touch Controller (ATC)* is used to control VRV, SkyAir, Single and Multi-Zone systems (P1P2) with advanced and configurable control logic. The *ATC* comes in 4 different models with a built-in temperature sensor, humidity sensor, CO₂ sensor, and occupancy sensor. The *ATC* will also provide analog input, analog output, digital input, and digital output terminals to monitor auxiliary sensors and control auxiliary equipment. The built-in sensors can be combined with advanced logic to create actionable tasks based upon the sensor values. The *ATC* controller can be integrated with a compatible building management system (BMS) using BACnet MS/TP.



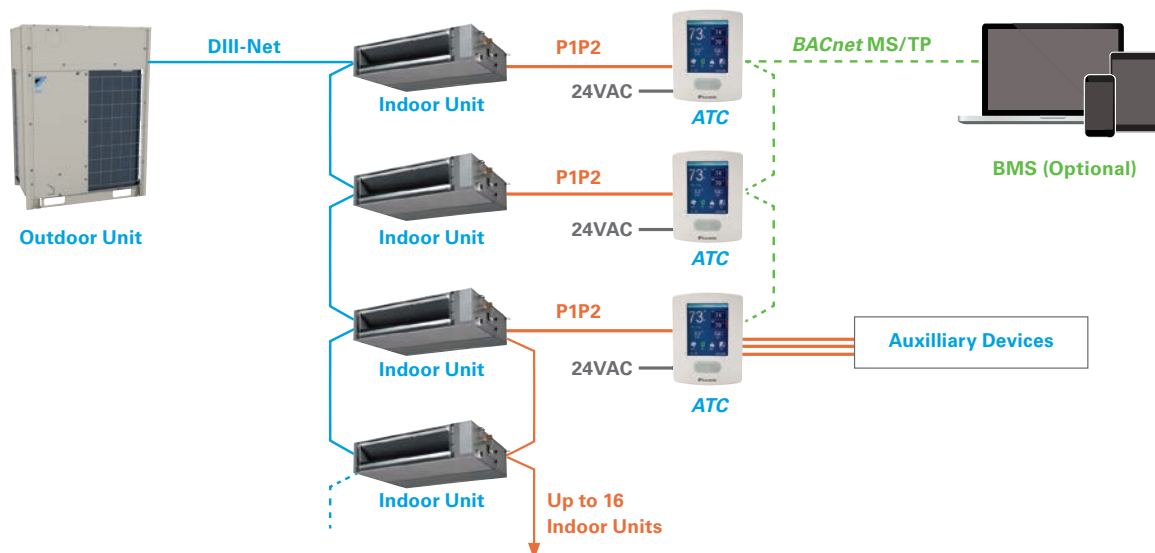
BACRC-T-P01
BACRC-TH-P01



BACRC-THO-P01
BACRC-THOC-P01

Indoor Unit	Models
BACRC-T-P01	<i>ATC</i> with Temperature Sensor
BACRC-TH-P01	<i>ATC</i> with Temperature/Humidity Sensor
BACRC-THO-P01	<i>ATC</i> with Temperature/Humidity/Occupancy Sensor
BACRC-THOC-P01	<i>ATC</i> with Temperature/Humidity/Occupancy/CO ₂ Sensor

System Overview



DKN Plus Interface AZAI6WSPDKC

Energy-Efficient Control

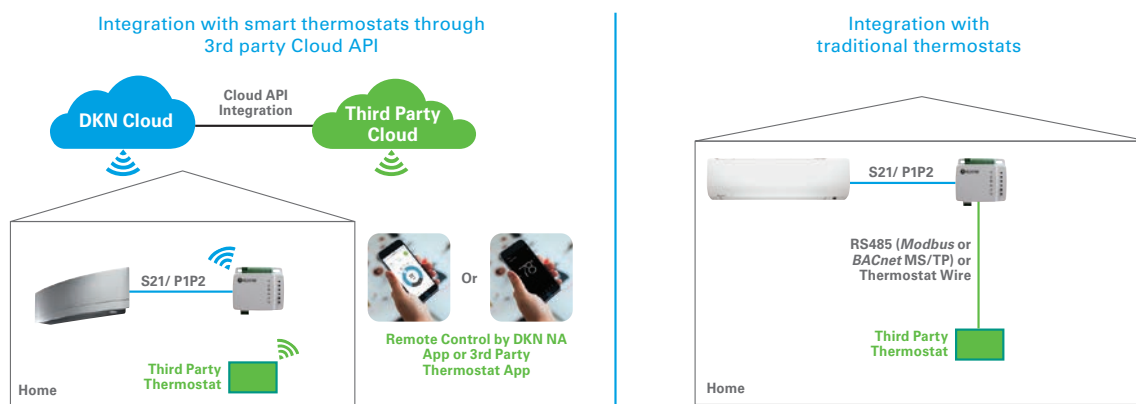
The DKN Plus Interface (AZAI6WSPDKC) enables the energy-efficient control of Daikin air conditioners by a third-party thermostat or an automation system. With this interface third-party devices or systems can control the **VRV**, SkyAir, Single-Zone and Multi-Zone indoor unit through Cloud API, Modbus, BACnet MS/TP, or thermostat relay contacts. This interface can be commissioned easily through the DKN Cloud NA app via Daikin's Bluetooth furnace Low Energy (BLE).



System Diagram

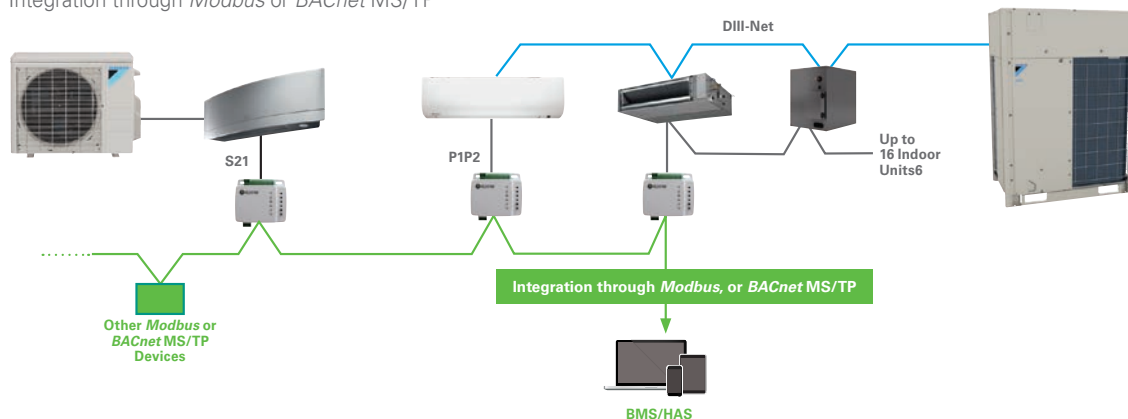
Integration with 3rd party thermostat

» The adaptor provides 4 different approaches for a 3rd party thermostat to control the Daikin indoor units

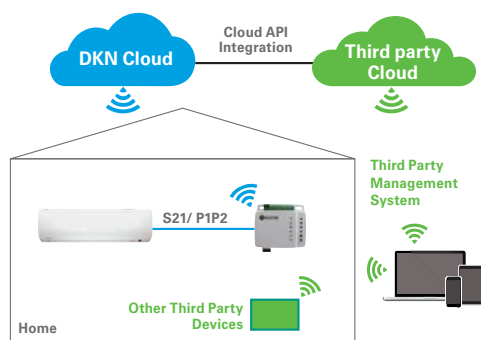


Integration with Building Management System (BMS) or Home Automation System (HAS)

» Integration through Modbus or BACnet MS/TP



» Integration through Cloud API



DKN Cloud Wi-Fi Adaptor AZA16WSCDKA

Connect your Daikin system with the DKN Cloud Wi-Fi adaptor

The DKN Cloud Wi-Fi Adaptor for **VRV** (P1P2) enables the remote control of your Daikin indoor units through an iOS/Android App. With the app, the DKN Cloud Wi-Fi Adaptor provides remote control and monitoring of P1P2 indoor units' ON/OFF, mode, set-point, fan speed, louver position, room temperature, and error alert status from an iOS/Android smartphone. Voice control is also possible through Google Assistant and Amazon Alexa.

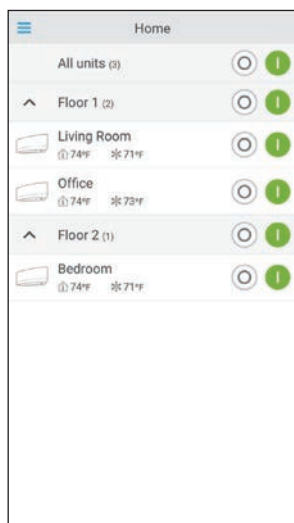
System Overview

The adaptor can be connected to the indoor unit as a standalone controller. It can also be connected to the indoor units as a main or sub remote controller if used with a wired remote controller. When connected to a Daikin indoor unit, the adaptor can monitor and control up to 16 indoor units together on the same P1P2 communication bus.

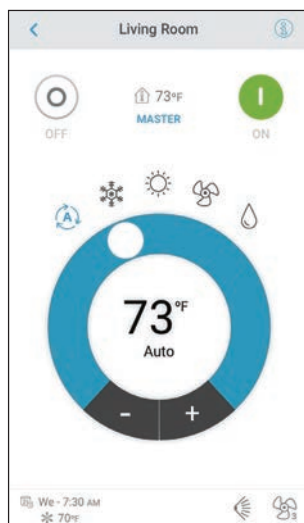
The DKN Cloud Wi-Fi Adaptor has the capabilities to connect to a building management system (BMS) or home automation system via the wired Modbus connection. The adaptor also has the ability to connect to a 3rd party controls system via the an Cloud API Integration.



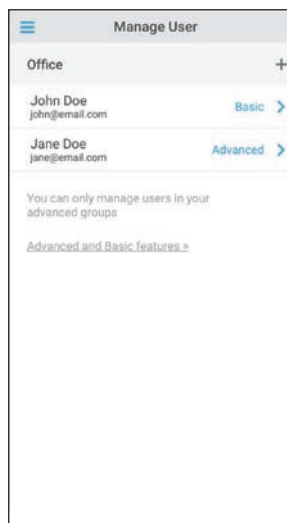
App Features



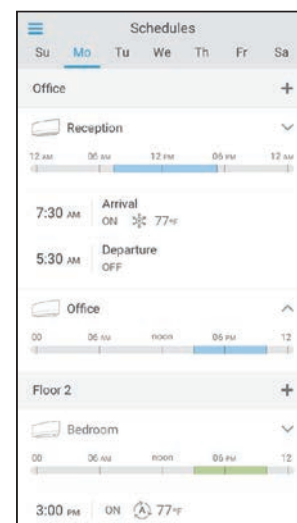
Indoor unit control and monitoring. Unlimited indoor units can be added to one account. Control indoor units as a group.



Control and monitor indoor unit's ON/OFF, mode, set-point, fan speed, louver position, room temperature, and error status.



Leveled user authority options: Basic/Advanced



7 Days Schedule

Wireless Remote Controller (Optional) BRC4C/BRC7E Type



Wireless Remote
Controller



Signal receiver unit
(Separate type)

- ON/OFF operation
- Temperature setting
- Change of operation mode
- Airflow setting
- A compact light receiving unit to be mounted into a wall or ceiling is included.
 - A light receiving unit for ceiling-suspended type and wall-mounted type is mounted into the indoor unit.

1.3 Centralized Control System

intelligent Touch Manager

The intelligent Touch Manager (iTM) is an advanced multi-zone controller that controls and monitors the Daikin **VRV** system. The iTM can also provide a cost-effective mini Building Management System (BMS) solution to integrate and control third-party devices through optional software and hardware. If a BMS already exists, the iTM can be used as a BACnet gateway interface for BMS integration with iTM BACnet Server Gateway Option.

Easy Operation and Configuration

- Intuitive user interface with 10.4" LCD touch screen
- Flexible screen views includes the icon view, list view and layout view for system configurations
- Easy engineering with use of the Preset Tool and USB port

Advanced Control Logic

- Independent Cool and Heat setpoints or Single setpoint in the occupied period
- Independent Setback setpoints in the unoccupied period
- Weekly Schedule with Optimum Start and Timed Override
- Auto Changeover with configurable methods

Facility Management and Billing

- Remote Web access
- Automatic Error and Alert emails
- Tenant Billing with the iTM PPD option

Mini BMS Solution with Software and Hardware Options

- Interlock and Emergency Stop for facility management
- DI, DO, AI, AO points integrated via the WAGO I/O System
- BACnet points (AI, AO, AV, BI, BO, BV, MSI, MSO, MSV) integrated with the iTM BACnet Client Option
- DI and DO points integration via DIII-Net connected DI and DIO units

Built-in Service Tool with Remote Access

- Operation data are stored in the iTM for the last 5 days:
 - Indoor unit and outdoor unit operation data
 - BACnet Client objects
 - WAGO I/O system data
- Operation data can be exported through a USB drive or through the iTM web browser remotely
- BMS can monitor the BACnet objects of indoor unit and outdoor unit operation data with the BACnet Server Gateway Option activated

BACnet Server Gateway Option

- Direct connection to the **VRV** system using the iTM as a gateway
- Individual device ID assigned to each indoor unit group and outdoor unit
- Seamless control logic integration between the iTM and BMS
- Greatly reduces the need for BMS integrator programming

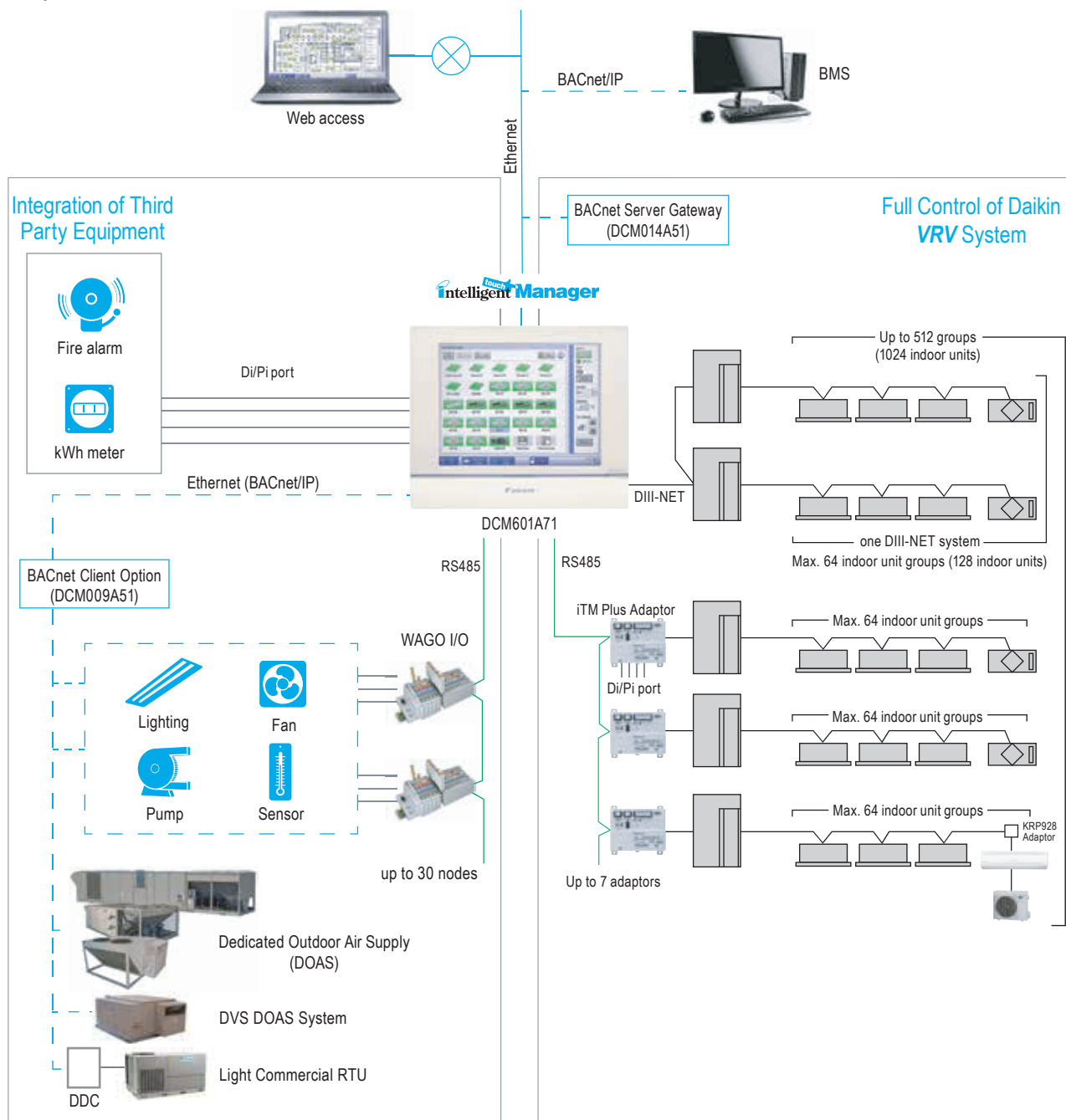
BACnet Client Option

- Monitor and control equipment and sensors connected to a BACnet server via BACnet IP
- Up to 50 BACnet IP servers can be connected

PPD Option

- Apportions total outdoor unit power consumption back into the respective indoor units served by those outdoor units

iTM system overview



1.4 Group, Management Point and Area

1.4.1 Definition

Remote controller group

- The group means the indoor units connected by the same control wiring for remote controller (connected to terminal P1 and P2) and all the units in the group have “the same setting” and “the same operation”.
- The indoor units in the group are controlled by the local remote controller connected to the indoor unit(s).
- Up to 16 indoor units can be placed in one group.

Management point

A management point is the target equipment monitored and operated using the iTM.

A remote controller group is a management point in the iTM.

The types of management points that can be controlled by iTM are as follows:

Indoor*1, Ventilator, Dio*2, Analog*3, Pulse*4, Outdoor, MultiState*5

*1 The management points indoor unit and AHU are treated as the indoor management point type.

*2 The management points Di, D3Di, D3Dio, External Di, External Dio, BACnet Di, and BACnet Dio are treated as the Dio management point type.

*3 The management points External Ai, External Ao, Internal Ai, BACnet Ai, and BACnet Ao are treated as the Analog management point type.

*4 The management points Pi, External Pi, and Internal Pi are treated as the Pi management point type.

*5 The management points BACnet Mi and BACnet Mo are treated as the MultiState management point type.

Area

Area is used in the iTM instead of Zone.

An area is a hierarchical group into which management points, monitored and operated by the iTM, are classified. You can populate an area with member areas and management points. An All area, to which you cannot manually register or delete members from, is provided by default.

- The indoor units connected by the same control wiring for centralized control equipment (connected to terminal F1 and F2) and all the units in the same Area can have “the same setting” or “independent settings”.
- The Area control of the indoor unit is operated by the centralized control equipment.
- From 1 up to 64 Areas can be controlled by the centralized control equipment.
- The number of groups you can set in one Area is from 1 up to 64 indoor unit groups.
- Up to 16 indoor units can be set in one group, and up to 64 indoor unit groups (up to 128 indoor units) can be connected.

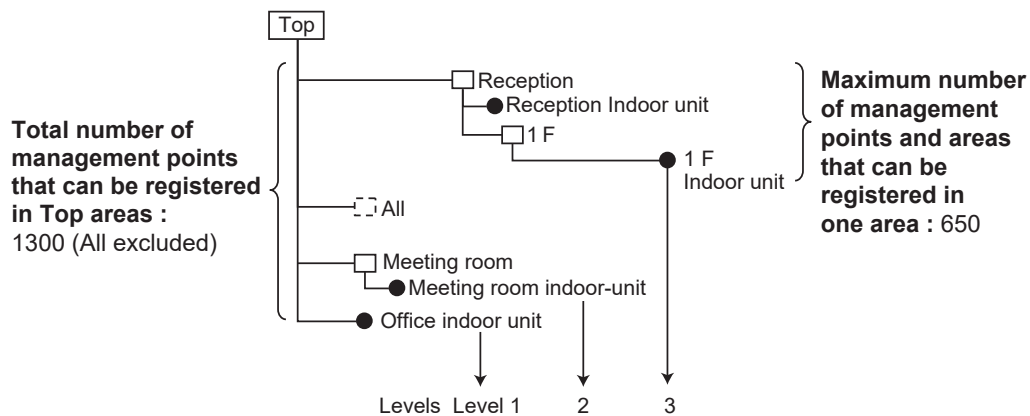
Centralized control equipment is capable of controlling/monitoring up to 512 groups of indoor units (hereafter “groups”) with use of up to 7 iTM Plus Adaptors.

The main functions of the centralized control equipment include :

1. Collective starting/stopping of operation of the indoor units connected to the centralized control equipment.
2. Starting/stopping of operation, temperature setting, switching between temperature control modes and enabling/disabling of operation with the local remote control by Area or group.
3. Scheduling by Area or group.
4. Monitoring of the operation status by Area or group.
5. Display of the air-conditioner operation history.
6. Forced stop input from BMS (non-voltage, normally-open contact).

Maximum number of areas that can be created: 650 (All excluded)

Example:  All Area  Area ● Management point



Maximum number of hierarchal levels that can be created: 10 levels

Note:

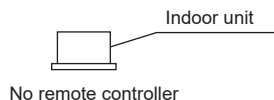
Registered management points are automatically registered in the folder for the corresponding management point type set up under the all area (default).

1.4.2 Patterns of Group and Area

Group

■ A group of indoor units include:

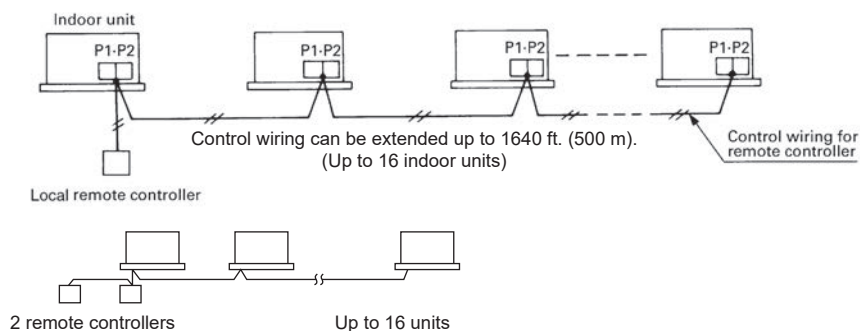
1. One indoor unit without a remote controller.



2. One indoor unit controlled with one or two remote controllers.

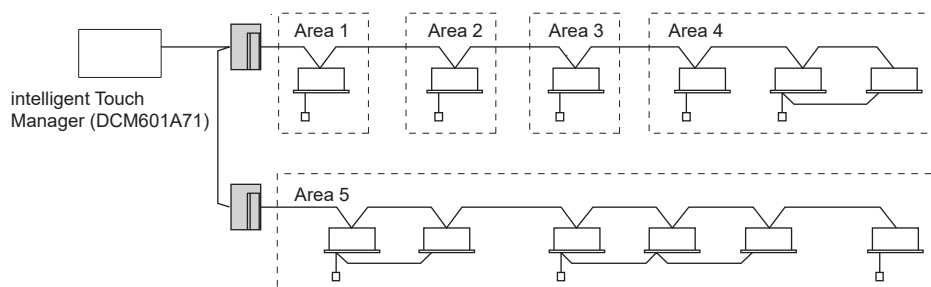


3. Up to 16 indoor units controlled with one or two remote controllers.



Area

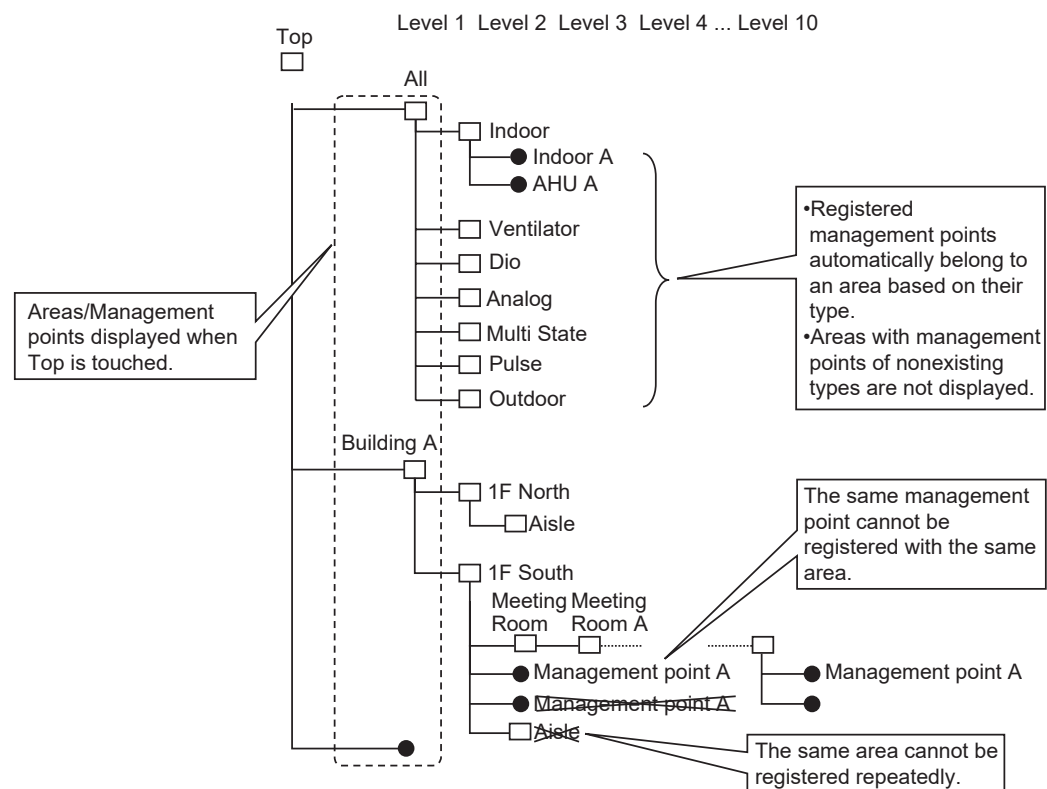
- Area control with the centralized control equipment
- Area control, which allows collective settings for more than one group, is available with the centralized control equipment, which facilitates the setting operations.



- One setting can make the same setting for all of the units in one area.
- Up to 512 Areas can be set with one centralized control equipment. (The maximum number of groups in one area is 512.)
- Groups can be placed in areas at will with the centralized control equipment.
- Indoor units in one group can be divided into more than one area. (not recommended)
- 1 Area is not limited to 1 Group and vice versa.

You can register a management point in two or more areas. However, you cannot register the same management point two or more times in one area. You cannot register the same area in two or more areas either.

Example: ☐ Area ● Management point

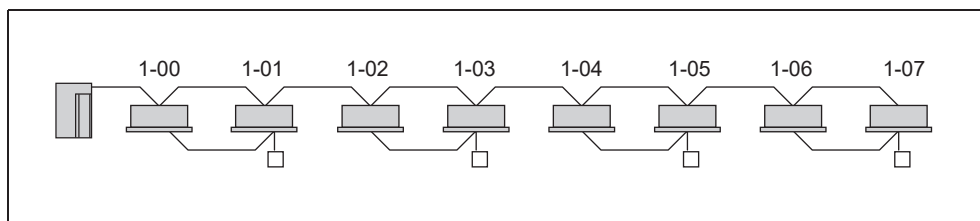
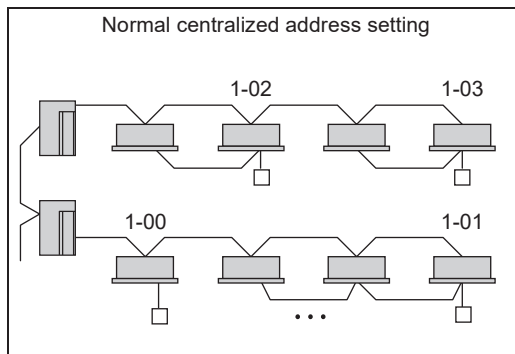


1.4.3 Group Address

- Set a group address to a device to be connected to the DIII-NET.
- The range of addresses to be set is 64 types as shown below.

1-00~1-15	16 types	Total 64 types
2-00~2-15	16 types	
3-00~3-15	16 types	
4-00~4-15	16 types	

- You cannot set a same group address on a same DIII-NET.
- You do not need to set a group address to a sub unit in a remote control group.
 - In case of power proportional distribution is used, you need to set a group address to a sub unit in a remote control group as well.



1.5 Building Management System

	Part name			Model No.	Function
Building Management System	Basic	Hardware	intelligent Touch Manager	DCM601A71	■ Air-conditioning management system that can be controlled by touch screen.
	Option	Hardware	iTM plus adaptor	DCM601A72	■ Additional 64 groups (10 outdoor units) are possible. Max. 7 iTM plus adaptors can be connected to intelligent Touch Manager.
		Software	iTM power proportional distribution	DCM002A71	■ Power consumption of indoor units are calculated based on operation status of the indoor unit and outdoor unit power consumption measured by kWh metre.
Communication Line	External Equipment Control		iTM BACnet Client Option	DCM009A51	■ With this option, the iTM is able to manage DOAS systems and other third party equipment through the BACnet/IP protocol. By registering equipment connected to a BACnet server as management points in the iTM, you can now monitor and control the equipment via the iTM.
	Interface Solutions		iTM BACnet Server	DCM014A51	■ With the iTM BACnet Server Gateway Option (DCM014A51), the iTM provides BMS integrators with the ability to monitor and/or control the VRV indoor and outdoor units, eliminating the need for an additional hardware interface. Moreover, with the latest software update to the iTM 2+ (v2.06), the iTM is able to serve as a service tool to access indoor and outdoor unit operation data. With the iTM BACnet Server Gateway Option, the operation data points for both the IDU (indoor unit) and ODU (outdoor unit) are also available to the BMS through BACnet.
	Interface for use in BACnet (Note 1)			DMS502B71	■ Interface unit to allow communications between VRV and BMS. Operation and monitoring of air-conditioning systems through BACnet communications.
	Optional DIII board			DAM411A1	■ Expansion kit, installed on DMS502B71, to provide 3 more DIII-NET communication ports. Not usable independently.
	Interface for use in LONWORKS (Note 2)			DMS504C71	■ Interface unit to allow communications between VRV and BMS. Operation and monitoring of air-conditioning systems through LONWORKS communication.
	Home automation interface adaptor for use in Modbus			DTA116A51	■ Use of the Modbus protocol enables the connection of the VRV system with a variety of home automation systems from other manufacturers.
	Mounting plate			BKS26A	■ When installing DTA116A51, DTA109A51 into outdoor units.
Remote Controller Integration	DKN Plus Interface			AZAI6WSPDKC	■ Enables the energy-efficient control of VRV indoor unit by a third-party thermostat or an automation system. With this interface, third-party devices or systems can control VRV indoor unit through Cloud API, Modbus, BACnet MS/TP, or thermostat relay contacts.
	DKN Cloud Wi-Fi Adaptor			AZAI6WSCDKA	■ Enables the energy-efficient control of VRV indoor unit by DKN NA smartphone app and/or voice control command. With this adaptor, third-party devices or systems can control VRV indoor unit through Cloud API, or Modbus.
	Adaptive Touch Controller			BACRC-T-P01 BACRC-TH-P01 BACRC-THO-P01 BACRC-THOC-P01	■ Built-in sensors and logic for VRV indoor unit control. It also enables the monitoring and control of the VRV indoor unit through BACnet MS/TP.
Contact/Analog signal	Unification adaptor for computerized control			DCS302A72	■ Interface between the central monitoring board and central control units (not compatible with the iTM).
	Wiring adaptor for electrical appendices			KRP4A71, 72, 73, 74	■ To control the group of indoor units collectively, which are connected by the transmission wiring of remote controller.
	External control adaptor for outdoor unit (Must be installed on indoor units.)			DTA104A53, 61, 62	■ Cooling/Heating mode change over. Demand control and Low noise control are available between the plural outdoor units.
	DIII-NET expander adaptor			DTA109A51	■ Apply to increase the number of connected outdoor units with a multi-zone controller. ■ Overcome communication errors in electrically noisy environments.

1.6 Open Protocol Interface

Integrated control systems that recognize the trend of open protocol control systems

- Compatibility with BMS open protocols by utilizing the international communication standards, BACnet , LONWORKS, or Modbus.



DMS502B71
(Interface for use in BACnet)

DMS502B71 Interface for use in BACnet

- Conformance class 3 (ASHRAE 135)
- Standard BACnet Device B-ASC (ASHRAE 135)
- BACnet/IP over Ethernet
- Up to 40 outdoor units and 256 indoor unit groups on one gateway. (optional expansion adaptor)
- BTL listed



DTA116A51
(Modbus communication adaptor)

DTA116A51 Modbus Communication Adaptor

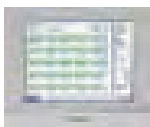
- BMS interface based on Modbus (RS485, which communicates via Modbus RTU)
- Gateway between Daikin DIII-Net and BMS Modbus workstation
 - Manages up to 16 indoor units and 2 outdoor units
- Preferred low cost alternative to typical BMS gateways and protocols



DMS504C71
(Interface for use in LONWORKS)

DMS504C71 Interface for use in LONWORKS

- XIF file for confirming of specifications of the units.
- Connectable up to 10 outdoor units and 64 indoor unit groups.



DCM014A51
(intelligent Touch Manager
+ BACnet Server Gateway Option)

DCM014A51 intelligent Touch Manager + BACnet Server Gateway Option

- Direct connection to the **VRV** System using the intelligent Touch Manager as a Gateway
- Individual device ID assigned to each indoor unit and outdoor unit management point
- Seamless control logic integration between the intelligent Touch Manager and BMS
- Greatly reduces the need for BMS integrator programming
- Up to 128 indoor unit and outdoor unit management points can be controlled and monitored by the BMS



AZAI6WSPDKC
(DKN Plus Interface)

AZAI6WSPDKC DKN Plus Interface

- Versatile interface adaptor that can integrate with a third-party thermostat/BMS through multiple approaches:
 - Cloud API
 - Modbus
 - BACnet MS/TP
 - Thermostat Relay Control: Y/W/G (Cool/Heat/Fan)



AZAI6WSPDKA
(DKN Cloud Wi-Fi Adaptor)

AZAI6WSPDKA DKN Cloud Wi-Fi Adaptor

- The adaptor that can integrate with a third-party thermostat/BMS through multiple approaches:
 - Cloud API
 - Modbus

1.7 Localized Control

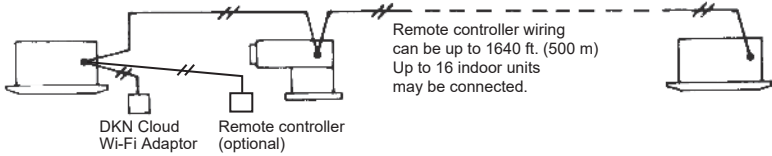
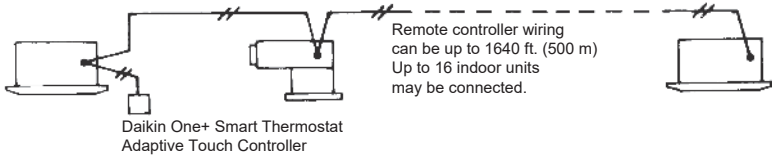
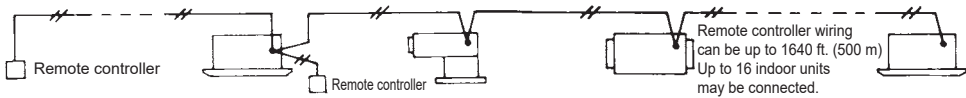
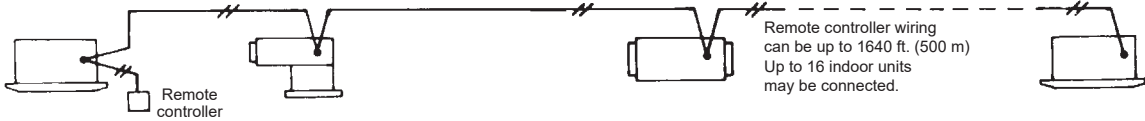
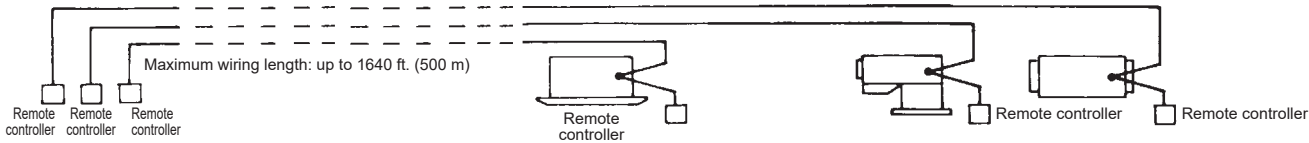
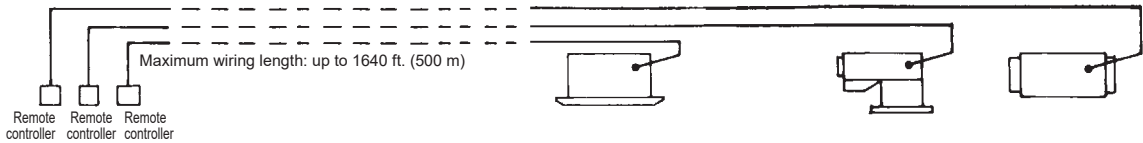
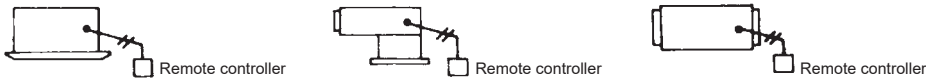
For more effective localized environmental control Daikin offers variety of control options such as single or double remote control or centralized control. This enables the construction of a variety of operational control systems which can be adapted for a wide range of uses from remote control to building automation.

Control Method		Objective / Use	Unit Name and Model	Function	Standard Number of Units			
Remote Controller	Local operation of remote controller	Example of typical use	Navigation Remote Controller BRC1E73  Madoka Remote Controller BRC1H71 	Main Menu ■ Airflow Direction ■ Ventilation ■ Schedule ■ Celsius / Fahrenheit ■ Maintenance Information ■ Configuration ■ Current Settings ■ Clock & Calendar ■ Daylight Saving Time ■ Language Service Settings ■ Test Operation ■ Maintenance Contact ■ Field Settings ■ Energy Saving Options ■ Prohibit Buttons ■ Min Setpoints Differential ■ Group Address ■ Indoor unit AirNet Address ■ Outdoor unit AirNet Address ■ Error History ■ Indoor Unit Status ■ Outdoor Unit Status ■ Forced Fan ON ■ Switch Main Sub Controller ■ Filter Indicator	1 remote controller controls 1 indoor unit			
	Remote operation of remote controller	For control from multiple locations						
	2 remote control *1, *3	For control from 2 places (distant or local)					2 remote controllers control 1 indoor unit (Main and sub remote controllers)	
	Group control *1, *2	For the control of multiple indoor units at the same time					1 remote controller controls up to 16 indoor units simultaneously	
	Group control with 2 remote controllers *1 *2, *3	For control from multiple locations					2 remote controllers control up to 16 indoor units from 2 different places simultaneously	
Other devices	Group control *1, *2, *4	For the control of multiple indoor units at the same time	Daikin One+ Smart Thermostat DTST-ONE-ADA-A  Adaptive Touch Controller BACRC-T* 		1 remote controller controls up to 16 indoor units simultaneously			
	Group control *1, *2, *5		DKN Cloud Wi-Fi Adaptor AZAI6WSCDKA 					

Note:

- *1. Connection to indoor unit: For group control it is connected to 1 unit out of the group, and in the case of control with 2 remote controllers both controllers are connected to the indoor unit.
- *2. In the case of group control, the controller used as the main controller must be selected with the Navigation/Madoka Remote Controller connected with the indoor unit having auto-swing function.
- *3. In the case of using two remote controllers, the power supply connector (X35A, etc.) on the indoor printed circuit board and the adaptor for wiring (KRP1C74/75) cannot be used at the same time.
- *4. Cannot use together with other wired or wireless controllers.
- *5. The adaptor can be used together with the Navigation/Madoka remote controller (optional).

Outline of System



Centralized control using multi-zone controllers

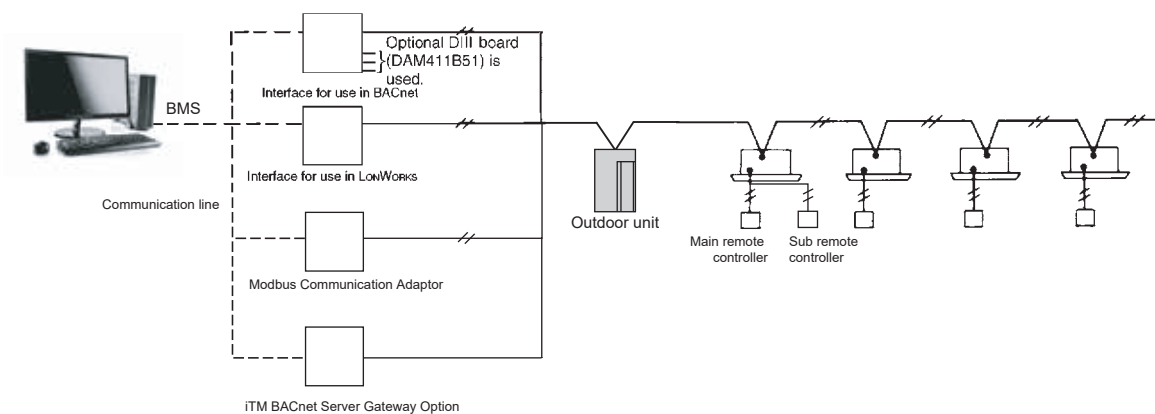
Control Method		Objective / Use	Unit Name and Model	Function	Standard Number of Units	
Control by Multi-zone Controllers	intelligent Touch Manager	For providing centralized control of a Daikin VRV system and other building equipment	DCM601A71 	■ Independent Cool, Heat, and Setback Setpoints ■ Automatic Changeover in Heat Pump and Heat Recovery Systems ■ Setpoint range limitation ■ Simple Interlock ■ Alarm email ■ Errors and Operation History ■ Power Proportion Distribution Option ■ Various automatic control functions ■ Remote access function ■ VRV Power Proportional Distribution function ■ DIII-NET connection ■ BACnet Client option monitors and controls ancillary equipment via BACnet/IP ■ BACnet Server option used to integrate VRV indoor units and outdoor units to a BMS ■ Operation data available for last 5 days	Controls up to 64 groups (Max. 512 indoor units groups) with one intelligent Touch Manager. (Up to 7 iTM Plus Adaptor can be use to maximize indoor unit group count)	
	Central Remote Controller	For central control of indoor units	DCS302C71 	■ Max. 64 groups (128 indoor units controllable) ■ Max. 128 groups (128 indoor units) are controllable by using 2 central remote controllers, which can control from 2 different places. ■ Zone control ■ Malfunction code display ■ Max. wiring length 3,280-27/32 ft. (Total : 6,561-11/16 ft.) ■ Combination with schedule timer and BMS system ■ Airflow rate and direction can be controlled individually for indoor units in each group operation. ■ Ventilation rate and mode can be controlled for Heat Reclaim Ventilator. ■ Up to 4 Start/Stop pairs can be set per day by connecting a schedule timer.	One central remote controller may control a maximum of 64 groups of indoor units (Max. 128 indoor units)	

	Outline of System
■ When using one intelligent Touch Manager	Maximum length of transmission wiring for centralized control equipment: 3280 ft. (1000 m) Power supply Single phase 24 V intelligent Touch Manager Outdoor unit Remote controller Up to 64 groups for individual control Remote controller Up to 64 groups for group control (however, up to 128 indoor units can be controlled)
■ When using one central remote controller	Maximum length of transmission wiring for centralized control equipment: 3280 ft. (1000 m) Power supply Single phase 208/230 V Central remote controller Outdoor unit Remote controller Up to 64 groups for individual control Remote controller Up to 64 groups for group control (however, up to 128 indoor units can be controlled)

Control method using open protocol interface

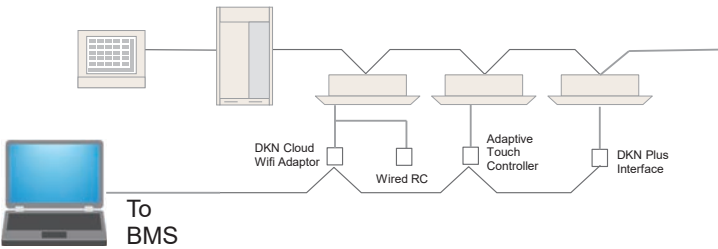
Control Method	Objective / Use	Unit Name and Model	Function	Standard Number of Units	
Building Control System	Building Management System (BMS) control for air-conditioning are carried out by communication and contact signal.	Interface for use in BACnet DMS502B71 	Interface for use in BACnet Interface unit to allow communications between VRV and BMS	Interface for use in BACnet: Up to 256 indoor unit groups (512 indoor units) When the option DIII board is used	
		Interface for use in LONWORKS DMS504C71 	Interface for use in LONWORKS Interface unit to allow communications between VRV and BMS	Interface for use in LONWORKS: Up to 64 indoor unit groups (128 indoor units)	
		Modbus Communication Adaptor DTA116A51 	Modbus Communication Adaptor allows communication between VRV and BMS	Modbus Communication Adaptor: Up to 16 indoor units and 2 outdoor units	
		iTM BACnet Server Gateway Option 	- Direct connection to the VRV system using the iTM as a gateway - Individual device ID assigned to each indoor unit management point - Seamless control logic integration between the iTM and BMS - Greatly reduces the need for BMS integrator programming	Up to 128 indoor unit groups and 20 outdoor units	

Outline of System



Control Method	Objective / Use	Unit Name and Model	Function	Standard Number of Units	
Local Control BMS Interface	Building Management System (BMS) control for air-conditioning are carried out by communication and contact signal.	■ DKN Plus Interface AZAI6WSPDKC 	■ Versatile interface that can integrate with a third-party thermostat through multiple approaches: Cloud API, Modbus, BACnet MS/TP, Thermostat G/Y/W Relay Control: Fan, Cool, Heat ■ Easy commissioning with Daikin's Bluetooth furnace configuration app ■ Modbus and BACnet MS/TP Integration	Up to 16 indoor units	
		■ DKN Cloud Wi-Fi Adaptor AZAI6WSCDKA 	■ A wired remote controller is optional to connect to the indoor unit together with the Wi-Fi adaptor ■ Compatible with Amazon Alexa and Google Home voice control ■ The Wi-Fi adaptor wiring consists of a non-polar two-wire connection to the indoor unit at terminals P1/P2 and a connection to the indoor unit power supply connector X18A or X35A (16VDC) ■ Open API document is available for cloud to cloud integration ■ Modbus Integration	Up to 16 indoor units	
		■ Adaptive Touch Controllerr BACRC-T* 	■ Communication between indoor unit and BMS using BACnet MS/TP.	Up to 16 indoor units	

Outline of System



1.8 BMS Integration Solutions

1.8.1 Compatibility with Multi-zone control

The table below shows which combinations of centralized control equipment are possible and which are not.

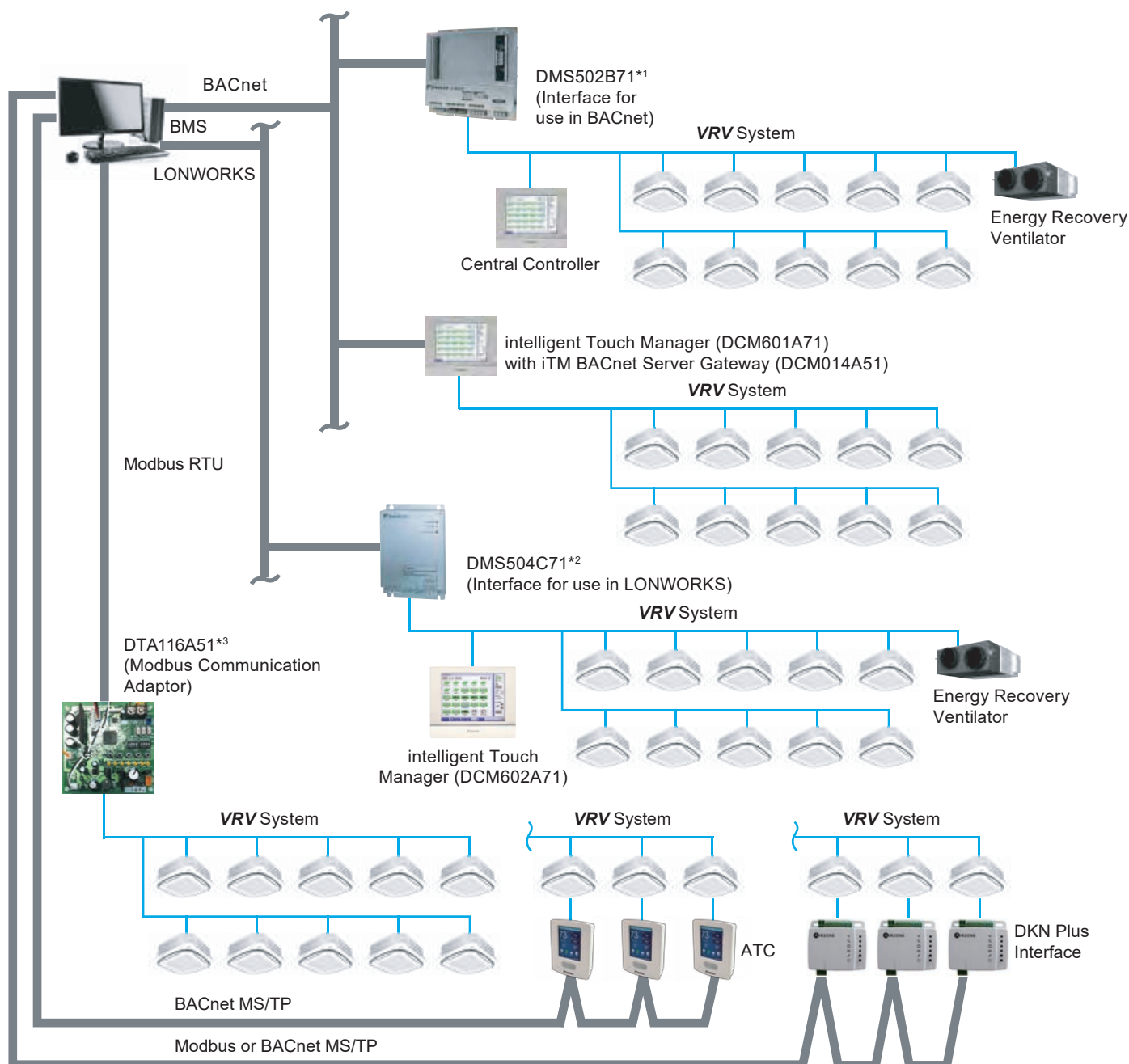
	 intelligent Touch Manager	 Interface for use in LonWorks	 Interface for use in BACnet	 Modbus Communication Adaptor	 Adaptive Touch Controller	 DKN Plus Interface
	DCM601A71	DMS504C71	DMS502B71	DTA116A51	BACRC-T*	AZAI6WSPDKC
intelligent Touch Manager	OK	OK	OK	OK	OK*	OK
Interface for use in LonWorks	OK	NG	NG	NG	NG	OK
Interface for use in BACnet	OK	NG	NG	NG	OK	OK
Modbus Communication Adaptor	OK	OK	OK	NG	NG	OK
DKN Plus Interface	OK	OK	OK	OK	NG	NG

Note:

*Humidity, CO₂ and external equipment input/output and interlocks on the Adaptive Touch Controller will not be displayed on the intelligent Touch Manager.

1.8.2 BMS Integration Overview

■ BMS Introduction and Daikin Interface



Name	Functions
Interface for use in BACnet (DMS502B71)	Interface unit to allow communications between VRV and BMS. Operation and monitoring of air-conditioning systems through BACnet communications.
Interface for use in LONWORKS (DMS504C71)	Interface unit to allow communications between VRV and BMS
Optional DIII board (DAM411B51)	Expansion kit, installed on the DMS502B71, to provide 2 more DIII-NET communication ports. Not for use independently.
intelligent Touch Manager (DCM601A71)	Main VRV control system or backup system if BMS fails.
Modbus communication adaptor (DTA116A51)	Allows integration between VRV and BMS. Operation and monitoring of the air-conditioning system through Modbus.
Adaptive Touch Controller (BACRC-T*)	Allows connected indoor unit integration directly to a BMS via BACnet MS/TP.
DKN Plus Interface (AZAI6WSPDKC)	Allows connected indoor unit integration directly to a BMS via BACnet MS/TP or Modbus communication.

1.8.3 Available Control Points through different BMS gateways

1. iTM BACnet Server Gateway Points List

■ System configuration points linked to iTM control logic

Point Name	Point Description
Enable iTM Schedule Operation	Enable or disable iTM schedule operation
Enable iTM Auto Changeover Operation	Enable or disable iTM auto changeover logic.
Timed Override Minutes	Set override time in minutes
System Forced Off	The forced system stop command will force the indoor unit to stop running. Remote controllers will be locked out from restarting indoor units during the forced system stop event.

■ Indoor unit points

	Point Name	Point Description
Monitoring Points	Unit On_Off Status	Monitors if the indoor unit fan is On or Off
	Alarm Status	Monitors whether or not the indoor unit is operating normally, and issues an alarm if the indoor unit has a malfunction. Error code is shown in the description.
	Room Temperature	Monitors and displays the room temperature.
	Unit On Details	Indoor unit details operation Off - Normal (ON) - Override - Setback
	Filter Sign Status	Monitors filter run time and provides service alert.
	Indoor Fan Status	Monitors if the indoor unit fan is On or Off
	Communication Status	Monitor if the communication is normal or in alarm
	Thermo-on Status	Monitors whether or not the indoor unit is actively cooling or heating.
	Compressor Status	Monitors if the compressor of the outdoor unit is On/Off/Defrost
	Aux Heater Status	Monitors if the external heater controlled by the indoor unit is operating.
	Changeover Option	Monitor if iTM changeover logic is active.

	Point Name	Point Description
Operation, Configuration and Monitoring Points	Occupancy Mode	Set the occupancy of the indoor unit occupied, Unoccupied or Standby
	Operation mode	Set Cool-Heat-Fan-Dry operation mode. For the indoor unit and monitors the latest mode
	Occ Cooling Setpoint	Sets the occupied cooling setpoint of the indoor unit and monitors the latest setpoint value.
	Occ Heating Setpoint	Sets the occupied heating setpoint of the indoor unit and monitors the latest setpoint value.
	Unocc Cooling Setpoint	Sets the unoccupied cooling setpoint of the indoor unit and monitors the latest setpoint value.
	Unocc Heating Setpoint	Sets the occupied heating setpoint of the indoor unit and monitors the latest setpoint value.
	Max Cooling Setpoint	Sets the maximum cooling setpoint of the indoor unit and monitors the latest setpoint value.
	Min Cooling Setpoint	Sets the minimum cooling setpoint of the indoor unit and monitors the latest setpoint value.
	Max Heating Setpoint	Sets the maximum heating setpoint of the indoor unit and monitors the latest setpoint value.
	Min Heating Setpoint	Sets the minimum heating setpoint of the indoor unit and monitors the latest setpoint value.
	Min Setpoint Differential (Cooling & Heating)	Set the minimum differential value between cooling and heating setpoint and monitor the latest differential value.
	Cooling & Heating Setpoint Tracking Mode	Enable or disable iTM setpoint tracking mode.
	Fan speed	Sets the indoor unit fan speed and monitors the latest setting
	Timed Override Operation	Enable or disable iTM override timer
	Remote Controller Prohibit (On_Off)	Permits or prohibits the remote controller to control the indoor unit's On/Off.
	Remote Controller Prohibit (Operation Mode)	Permits or prohibits the remote controller to control the indoor unit's operation mode.
	Remote Controller Prohibit (Setpoint)	Permits or prohibits the remote controller to control the indoor unit's setpoint.
	Filter Sign Reset	Clears the filter sign status.
	Forced Thermo-off	Force the indoor unit to stop actively cooling or heating.

2. Interface for use in BACnet

Daikin indoor unit monitoring and control points accessible through the DMS502B71

Check the appropriate box indicating the required integrated points for this project.

Function		Description
Operation, Configuration, and Monitoring	On/Off (Note 2)	Start/stops the indoor unit and monitors the latest status
	Operation Mode (Note 2)	Sets the Cool/Heat/Fan/Dry mode for the indoor unit and monitors the latest mode
	Setpoint setting	Sets the setpoint of the indoor unit and monitors the latest setpoint.
	Filter sign and reset	Monitors filter run time, provides service alert, and allows a manual reset of the status as required.
	Remote controller permit/prohibit	Permits or prohibits the remote controller so that it can or cannot be used to control the indoor unit's On/Off/Operation mode/Setpoint
	Lower Centralized Controller operation enable/disable	Enables or disables operation of a Centralized Controller connected to the DIII network .
	Fan Speed setting (Note 2)	Sets the fan speed and monitors the latest setting.
	Airflow direction setting (Note 2)	Sets the airflow direction and monitors the latest setting.
	Forced system stop	The forced system stop command will force the indoor units to stop running based upon a received emergency alarm input. Remote controllers will be locked out from restarting indoor units during a forced system stop event.
	Forced Thermo-off	In response to the forced thermo-off command, the indoor unit stops actively cooling or heating.
	Energy saving	Offsets the internal setpoint +3.6°F (2°C) in cooling, and -3.6°F (-2°C) in heating in an indoor unit. The actual setpoint is not changed.
	Ventilation mode setting (Note 2)	Sets the ventilation mode and monitors the latest mode.
	Ventilation amount setting (Note 2)	Sets the ventilation amount and monitors the latest amount.
	On/Off status	Monitors the On/Off status of the indoor unit.
Monitor	Alarm	Monitors whether or not the indoor unit is operating normally, and issues an alarm if the indoor unit has a malfunction.
	Malfunction code	Displays a malfunction code specified by Daikin if an indoor unit in the system has a malfunction.
	Operation mode	Monitors if the indoor unit is in Cool, Heat, Fan, or Dry mode.
	Room temperature (Note 1)	Monitors the room temperature.
	Filter sign	Monitors filter run time and provides service alert.
	Thermo-on status	Monitors whether or not the indoor unit is in actively cooling or heating.
	Compressor status	Monitors if the compressor of the outdoor unit connected to the indoor unit is properly operating.
	Indoor fan status	Monitors if the indoor unit's fan is properly operating.
	Heater status	Monitors if the indoor unit's heater is properly operating.
	Ventilation mode status	Monitors the ventilation mode status of the Energy Recover Ventilator
	Ventilation amount status	Monitors the ventilation amount status of the Energy Recovery Ventilator
Application Note		

- Room temperature data (BACnet object name RoomTemp_XXX) by default is reported from the Daikin indoor units return air thermistor. This applies to all **VRV** indoor unit styles and capacities. During periods when the indoor unit is turned off or during certain operating modes that cycle the fan off including defrost operation, hot-start and system pressure equalization, the reported temperature may not accurately reflect the actual space temperature. For applications where this temperature value will be primary to system control including mode and temperature setpoint management, it is recommended that the Daikin remote temperature sensor (Part No. KRCS01-1B or 4B depending on model) is specified for each indoor unit and installed within the occupied space or unit be configured to be controlled from temperature sensor in BRC1E72/73 Navigation Controller if the unit is capable.
- The indoor unit saves the settings for the Setpoint, On/Off, Operation mode, Airflow direction, and Fan Speed in the nonvolatile memory of the indoor unit each time they are changed, so that the settings will not be lost when a power loss occurs. This nonvolatile memory has a write count limit and may cause a failure if the "write to" count limit is exceeded. Therefore when the Setpoint, On/Off, Operation mode, Airflow direction, and Fan Speed of each indoor unit are automatically controlled from the building management system via the Interface for use in BACnet, be sure that the number of changes for each setting **should not exceed 7,000 times per year**.
If the same value is repeatedly sent, it will not be added to the total "write to" count.
- BACnet is a registered trademark of ASHRAE.

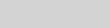
3. Interface for use in Lonworks

Daikin air conditioner monitoring and control points accessible through the DMS504C71

Check the appropriate box indicating the required integrated points for this project.

Function		Description
Monitoring points	ON/OFF Status	Monitors the start/stop status of the indoor unit.
	Operation Mode Status	Monitors whether the indoor unit is in the cooling, heating or fan mode.
	Temperature Setpoint	Reports the current temperature setpoint of the indoor unit.
	Room Temperature (Note 1)	Reports the current return air or room temperature of the indoor unit. (Note 1)
	Airflow rate	Reports the current fan speed setting of the indoor unit.
	Filter Indication Status	Reports the status of the filter maintenance icon on the indoor unit remote controller.
	Error Status	Monitors the indoor unit malfunction status.
	Error Code	Reports a specific malfunction code for an indoor unit in alarm state.
	Thermo Status	Reports whether the indoor unit is demanding heating or cooling capacity or if it is in a satisfied state.
	Forced Thermostat Off Status	Reports whether the indoor unit is forced to a satisfied state.
	Remote Controller ON/OFF Restriction Status	Indicates the restriction status of the indoor units remote controller ON/OFF button.
	Remote Controller Operating Mode Restriction Status	Indicates the restriction status of the indoor units remote controller operation mode button.
	Remote Controller Temperature Setpoint Restriction Status	Indicates the restriction status of the indoor units remote controller temperature setpoint buttons.
	System Forced OFF Setting Status	Monitors the system forced off status for all indoor units connected to the Lon gateway.
Operation, configuration, and control points	Sub-group Control Operation Restriction Setting Status	Monitors the network variable input status for permission/prohibition of centralized control devices on the DIII-Net bus.
	A/C Communication Status	Monitors the communication status of the indoor unit to the DIII-Net.
	ON/OFF Command	Starts and stops the indoor unit. (Note 2)
	Operating Mode	Sets the cooling/heating/ventilating/auto mode for the indoor unit. (Note 2)
	Temperature Setpoint	Commands the temperature setpoint for the indoor unit. (Note 2)
	Airflow Rate (Fan Speed)	Sets the fan speed (high, low) for the indoor unit. (Note 2)
	Filter Indicator Reset	Resets the filter maintenance indicator on the indoor unit.
	Forced Thermo OFF Setting	Forcibly stops all cooling or heating capacity for the indoor unit.
	Remote Controller ON/OFF Restriction Setting	Disables the operation of the indoor unit remote controller ON/OFF button.
	Remote Controller Operating Mode Restriction Setting	Disables the operation of the indoor unit remote controller MODE button.
	Remote Controller Temperature Setpoint Restriction Setting	Disables the operation of the indoor unit remote controller temperature setpoint buttons.
	System Forced OFF Setting	Forcibly stops/resets all indoor units that are under control of the Lon interface. Units cannot be started by a remote controller or centralized controller while in this state.
	Sub-group Control Restriction Setting	Network variable input to permit or prohibit the operation of Daikin centralized control devices on the DIII-Net bus.

Application Note

 = Control Items pertaining to the entire system

1. Room temperature data (**SNVT_temp_p nvoSpaceTemp_nn**) by default is reported from the Daikin indoor units embedded return air thermistor. Depending upon the remote controller model and the manufacturing date of the indoor unit, this may be reconfigured to retrieve the room temperature value from the remote controller thermistor. During periods when the indoor unit is turned off or during certain operating modes that cycle off the fan including defrost operation, hot-start and system pressure equalization, the reported temperature may not accurately reflect the actual space temperature. For applications where this temperature value will be primary to system control including mode and temperature setpoint management, it is recommended that the Daikin remote temperature sensor (Part No. KRCS01-1B) is specified for each indoor unit or the remote controller is programmed to report room temperature through the gateway. Please consult Daikin AC for guidance with specific applications.
2. The Daikin indoor unit maintains the settings for temperature, start/stop status, operating mode, air direction and fan speed in the non-volatile memory each time they are changed. These settings will not be lost upon a power loss event.

4. Modbus Communication Adaptor

■ Monitor

On/Off	On/Off status of indoor units
Operation mode	Cooling, Heating, Fan, Dry, Auto (depend on indoor unit capability)
Setpoint	Setpoint of indoor units
Room temperature	Suction temperature of indoor units
Fan direction	Swing, Flap direction (depend on indoor unit capability)
Fan volume	L, M, H (depend on indoor unit capability)
Forced off status	Forced off status of indoor units
Error	Malfunction, Warning with Error code
Filter sign	Filter sign of indoor units
Communication status	Communication normal/error of indoor units

■ Control

On/Off	On/Off control of indoor units
Operation mode	Cooling, Heating, Fan, Dry, Auto (depend on indoor unit capability)
Setpoint	Cooling/Heating setpoint
Fan direction	Swing, Stop, Flap direction (depend on indoor unit capability)
Fan volume	L, M, H (depend on indoor unit capability)
Filter sign reset	Reset filter sign of indoor units

5. DKN Plus Interface

■ Monitoring

Unit on/off	On/Off control of indoor units
Setpoint	Setpoint of indoor units
Room temperature	Suction temperature of indoor units
Mode (Auto/Cool/Heat/Fan/Dry)	Cooling, Heating, Fan, Dry, Auto (depend on indoor unit capability)
Fan speed	L, M, H (depend on indoor unit capability)
Louver position	Swing, Flap direction (depend on indoor unit capability)
Error code	Malfunction, Warning with Error code

■ Control

Unit on/off	On/Off control of indoor units
Setpoint	Setpoint of indoor units
Mode (Auto/Cool/Heat/Fan/Dry)	Cooling, Heating, Fan, Dry, Auto (depend on indoor unit capability)
Fan speed	L, M, H (depend on indoor unit capability)
Louver position	Swing, Flap direction (depend on indoor unit capability)

6. DKN Cloud Wi-Fi Adaptor

■ Monitoring

Unit on/off	On/Off control of indoor units
Setpoint	Setpoint of indoor units
Room temperature	Suction temperature of indoor units
Mode (Auto/Cool/Heat/Fan/Dry)	Cooling, Heating, Fan, Dry, Auto (depend on indoor unit capability)
Fan speed	L, M, H (depend on indoor unit capability)
Louver position	Swing, Flap direction (depend on indoor unit capability)
Error code	Malfunction, Warning with Error code

■ Control

Unit on/off	On/Off control of indoor units
Setpoint	Setpoint of indoor units
Mode (Auto/Cool/Heat/Fan/Dry)	Cooling, Heating, Fan, Dry, Auto (depend on indoor unit capability)
Fan speed	L, M, H (depend on indoor unit capability)
Louver position	Swing, Flap direction (depend on indoor unit capability)

7. Adaptive Touch Controller

The following points are available through BACnet MS/TP:

■ Monitoring Points

#	Value	Description	Type
1	SPACE_SENSOR	Space Temperature Value Measured By Controller	R
2	REMOTE_CO2_SENSOR	Remote CO ₂ Sensor Value	R
3	REMOTE_HUMIDITY	Remote Humidity Sensor Value	R
4	REM_SPACE/DAT_SENSOR	Remote Space Temperature Or Discharge Air Temperature Value	R
5	OUTDOOR_AIR	Outside Air Temperature	R
6	SENSOR_FAILURE	Sensor Failure Value	R
7	IU_SUCTION_AIR_TEMP	Indoor Unit Return Air Temperature	R
8	COOLING_HOURS	Cooling Hours	R
9	HEATING_HOURS	Heating Hours	R
10	NUMBER_IDU_CONNECTED	Number Of Indoor Unit Connected To The Controller	R
11	IDU_GAS_PIPE_TEMP	Indoor Unit Gas Pipe Temperature	R
12	IDU_LIQUID_PIPE_TEMP	Indoor Unit Liquid Pipe Temperature	R
13	IU_FAN_HOURS	Indoor Unit Fan Operation Time	R
14	ODU_FAN_STEP	Outdoor Unit Fan Step	R
15	IU_OPERATING_HOURS	Indoor Unit Operation Hours	R
16	IU_ENERGIZED_HOURS	Indoor Unit Energized Hours	R
17	IU_FAN_SPEED_RPM	Indoor Unit Fan Speed RPM	R
18	IU_EV_OPEN_PULSE	Indoor Unit EEV Pulses	R
19	OU_TH1_OAT	Outdoor Unit TH1 Value	R
20	OU_TH2_HEAT_EXCHANGER	Outdoor Unit TH2 Heat Exchanger	R
21	OU_TH3_DAT	Outdoor Unit TH3	R
22	OU_TH4	Outdoor Unit TH4	R
23	OU_TH5	Outdoor Unit TH5	R
24	OU_TH6	Outdoor Unit TH6	R
25	OU_EV1	Outdoor Unit EEV Pulses	R
26	OU_COMP_SPEED_RPM	Outdoor Unit Compressor Speed	R
27	OU_OPERATION_HOURS	Outdoor Unit Operation Hours	R
28	IU_TH4_DISCHARGE_AIR_TEMP	Indoor Unit Discharge Air Temperature	R
29	OU_FAN1_HOURS	Outdoor Unit Fan 1 Hours	R
30	OU_FAN2_HOURS	Outdoor Unit Fan 2 Hours	R
31	OU_COMP1_HOURS	Outdoor Unit Compressor 1 Hours	R
32	OU_COMP2_HOURS	Outdoor Unit Compressor 2 Hours	R
33	AUX_TOTAL_HOURS	Auxiliary Heat Total Hours	R
34	HEAT_TOTAL_HOURS	Heating Total Hours	R
35	COOL_TOTAL_HOURS	Cooling Total Hours	R
36	ALARM_ON-OFF_ECON	Configurable Point (Alarm Or Motion Sensor Or Econ)	R
37	SYSTEM_FORCED_OFF	System Forced Off (T1-T2)	R
38	ALARM_STATUS	Alarm Status	R
39	FILTER_SIGN_STATUS	Filter Sign Status	R
40	IU_COOLING_THERMO_ON	Indoor Unit Cooling Thermo On	R
41	IU_HEATING_THERMO_ON	Indoor Unit Heating Thermo On	R
42	COMMUNICATION_STATUS	Indoor Unit Communication Status	R
43	TIMED_OVERRIDE_STATUS	Override Status	R
44	IU_FAN_STATUS	Indoor Unit Fan Status	R
45	AUX_HEATER_STATUS	Aux Heater Status	R
46	EMERGENCY_HEATER_STATUS	Emergency Heater Status	R
47	IU_VRV_CENTRAL_CONTROLLER	Central Controller Connection Status	R
48	IU_THERMO-ON_STATUS	Indoor Unit Thermo-On	R
49	DEHUM_MODE	Dehumidification Mode	R
50	HUMIDIFICATION_MODE	Humidification Mode	R

#	Value	Description	Type
51	AUX_HEAT_STG_1	Aux Heat Stg 1	R
52	AUX_HEAT_STG_2	Aux Heat Stg 2	R
53	ADPTR AUX Heat Status	Indoor Unit Aux Heat Status	R
54	CALL_FOR_DEHUM	Dehumidification Call	R
55	AUXH_EMERGENCY_OPERATION	Aux Heater Emergency Heater Operation	R
56	DEFROST_OIL_RETURN_MODE	Defrost Oil Return Mode Value	R
57	ECONOMIZER_MODE	Economizer Mode	R
58	TIMED_OVERRIDE_OPERATION	Time Override Operation	R
59	MOTION	Motion Sensor Value	R
60	MOTION_SENSOR_OUT	Motion Sensor Output	R
61	DIGITAL_OUTPUT_1_STATUS	Digital Output 1 Status Value	R
62	DIGITAL_OUTPUT_2_STATUS	Digital Output 2 Status Value	R
63	DIGITAL_OUTPUT_3_STATUS	Digital Output 3 Status Value	R
64	DIGITAL_OUTPUT_4_STATUS	Digital Output 4 Status Value	R
65	IU_CAUTION_1	Indoor Unit Caution	R
66	IU_WARNING	Indoor Unit Warning	R
67	IU_ERROR	Indoor Unit Error	R
68	ALARM_CONTACT	Alarm Contact Status	R
69	IU_DRAIN_PUMP_MP	Indoor Unit Drain Pump Status	R
70	IU_HUMIDIFIER	Indoor Unit Humidifier Status	R
71	IU_ANTIFREEZING_TBF	Indoor Unit Antifreeze Operation Status	R
72	IU_FLOAT	Indoor Unit Float Status	R
73	IU_RC Fan Prohibit	Indoor Unit Fan Speed Change Prohibit	R
74	On Prohibit	Indoor Unit On Prohibit	R
75	IU_TEST_RUN	Indoor Unit Test Run Operation	R
76	TEST_OPERATION	Test Operation Status	R
77	OU_TEST_RUN	Outdoor Unit Test Run Operation	R
78	Backup Operation	Outdoor Unit Backup Operation	R
79	IU_RC_LouverProhibit	Indoor Unit Louver Prohibit	R
80	IU_CHANGEOVER_OPTION	Indoor Unit Master Status	R
81	OU_SV1	Outdoor Unit SV1 Value	R
82	FORCED_THERMO_OFF_STATUS	Forced Thermo Off Status Value	R
83	FORCED_STPT_SHIFT	Indoor Unit Setpoint Shift	R
84	OU_OP_MODE_ACTUAL_DISP	Outdoor Unit Actual Mode	R

■ Control Points

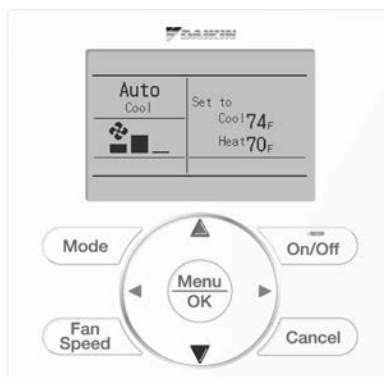
#	Value	Description	Type
1	AUX_HEAT	Auxiliary Heat Output (Modulating)	W
2	CO2_DAMPER	CO ₂ Damper Output (Modulating)	W
3	HUMIDIFIER_DEHUMIDIFIER	Humidifier Or Dehumidifier Output (Modulating)	W
4	IU_W_CONTROL_TEMP	Control Temperature Used By The Controller	W
5	UI_COOL_STPT	Active Cooling Setpoint	W
6	UI_HEAT_STPT	Active Heating Setpoint	W
7	OCC_COOLING_STPT	Occupied Cooling Setpoint	W
8	OCC_HEATING_STPT	Occupied Heating Setpoint	W
9	UNOCC_COOLING_STPT	Unoccupied Cooling Setpoint	W
10	UNOCC_HEATING_STPT	Unoccupied Heating Setpoint	W
11	MIN_COOLING_STPT	Minimum Cooling Setpoint	W
12	MAX_COOLING_STPT	Maximum Cooling Setpoint	W
13	MIN_HEATING_STPT	Minimum Heating Setpoint	W
14	MAX_HEATING_STPT	Maximum Heating Setpoint	W
15	AUX_H_CONFIG_OAT_STPT	Outside Air Temperature Setpoint For Aux Heat Logic	W
16	AUXH_PROP	Aux Heat Control Proportional	W
17	AUXH_INTG	Aux Heat Control Integral	W
18	DEHUM_STPT	Dehumidification Setpoint	W
19	HUM_HYSTERESIS	Hysteresis Used For Humidity Control	W
20	DEHUM_PROP	Dehumidification Control Proportional	W
21	DEHUM_INTG	Dehumidification Control Integral	W
22	HUM_PROP	Humidification Control Proportional	W
23	HUM_INTG	Humidification Control Integral	W
24	SPACE_HUM	Space Humidity Value	W
25	HUMIDITY_STPT	Humidification Setpoint	W
26	CO2_STPT	CO ₂ Control Setpoint	W
27	CO2_DIFFERENTIAL	CO ₂ Control Differential	W
28	CO2_MINIMUM_POSITION	CO ₂ Damper Minimum Position For Occupied Mode	W
29	CO2_MAXIMUM_POSITION	CO ₂ Damper Maximum Position For Occupied Mode	W
30	CO2_UNOCCUPIED_POSITION	CO ₂ Damper Unoccupied Position	W
31	CO2_TIME_DELAY	Time Delay For CO ₂ Control (Minutes)	W
32	CO2_PROP	CO ₂ Control Proportional	W
33	CO2_INTG	CO ₂ Control Integral	W
34	SPACE_CO2	Space CO ₂ Value	W
35	MOTION_UNOCC_DELAY	Time To Set To Unit To Unoccupied When No Motion Is Detected	W
36	OCCUPANCY_RELAX_MAXIMUM	Maximum Setpoint Relax When No Motion Is Detected	W
37	DEMAND_SETPOINT_RELAX_CLG	Cooling Setpoint Relaxation Value During Demand Limit	W
38	DEMAND_SETPOINT_RELAX_HTG	Heating Setpoint Relaxation Value During Demand Limit	W
39	DEMAND_RECOVERY_STEP_TIME	Demand Recovery Step Time Minutes	W
40	ECONOMIZER_TIMER	Economizer Timer	W
41	COOL_MODE_TEMP_OFFSET	Cool Mode Temp Offset Value	W
42	HEAT_MODE_TEMP_OFFSET	Heat Mode Temp Offset Value	W
43	OUTDOOR_TEMP	Outdoor Temp	W
44	DISCHARGE_AIR_TEMP	Discharge Air Temp	W
45	STAGE_DELAY	Stage Delay For Aux Heat	W
46	FILTER_SIGN_RESET	Filter Sign Reset	W
47	HUMIDITY_CONTROL_ALWAYS	Enable Humidity Control During Unoccupied Mode	W
48	HUM_OVRIDE	Turn On Humidity Control During Override	W
49	REMOTE_HUMIDITY_SENSOR	Enable Remote Humidity Sensor	W
50	HUMIDIFY_DURING_HEAT	Allow Humidity Control During Heat	W
51	OCCUPIED_MODE	Occupied Mode	W

#	Value	Description	Type
52	ENABLE_LOCAL_SCHED	Enabled Local Schedule	W
53	STPT_HOLD	Hold Enable	W
54	STPT_TRACKING	Setpoint Tracking Mode	W
55	DAT_SENSOR	Enables Remote Discharge Air Temperature	W
56	DEHUM_WOUT_FAN	Dehumidification Without Fan	W
57	OAT_SENSOR	Enable Outside Air Sensor	W
58	HUMIDIFY_WOUT_FAN	Humidify Without Fan	W
59	ENABLE_REMOTE_CO2_SENSOR	Enable Remote CO ₂ Sensor Monitoring	W
60	DEHUM_OVERCOOL_STATUS	Overcooling To Dehumidify	W
61	SPEED_UP	Speed Up Timers	W
62	RC_PROHIBIT_MODE_OPERATION	Remote Controller Prohibit Mode Operation	W
63	REMOTE_CONTROLLER_PROHIBIT_STPT	Remote Controller Prohibit Setpoint	W
64	ENABLE_DEMAND_CONTROL	Enables Demand Control	W
65	CO2_VENT_ENABLE	Enable CO ₂ Control	W
66	CONTINUOUS_AUX_FAN	Enable Fan Operation During Aux Heat	W
67	FORCE_FAN	External Forced Fan Input	W
68	CALL_FOR_HUMIDIFICATION	Humidification Call	W
69	HUMIDIFIER_OUT	Humidifier Output Status	W
70	ECONOMIZER	Economizer Status	W
71	CO2_ALARM_OUT	CO ₂ Alarm Status	W
72	DEHUMIDIFIER_OUT	Dehumidification Output Status	W
73	ENERGY_SAVINGS_ICON	Energy Saving Icon Status	W
74	AUX_HEAT_FAN	Check For Fan Before Running Aux Heat	W
75	Humidity_Display_Enable	Enable Humidity Display	W
76	CO2_Display_Enable	Enable CO ₂ Display	W
77	OAT_Display_Enable	Enable Outside Air Sensor Display	W
78	OPERATION_MODE	Controller Operation Mode	W
79	AUX_HEAT_CONFIGURATION	Aux Heat Configuration Setting	W
80	OVER_COOL_FAN_SPEED	Overcool Mode Fan Speed	W
81	FAN_MODE	Fan Speed	W
82	SCHEDULE_OCC_MODE	Occupancy Mode To Be During Start Of Schedule	W
83	ROOM_TEMP_CALCULATION	Room Temperature Calculation Logic	W
84	PRI_CHANGEOVER_DEADBAND	Primary Changeover Deadband	W
85	SEC_CHANGEOVER_DEADBAND	Second Changeover Deadband	W
86	GUARD_TIME	Autochangeover Gaurdtimer Value	W
87	MIN_STPT_DIFFERENTIAL	Minimum Setpoint Differential Value	W
88	TIMED_OVERRIDE_MINUTES	Timed Override Minutes	W
89	COOLING_UNOCC_RECOVERY	Cooling Unoccupied Recovery Setpoint	W
90	HEATING_UNOCC_RECOVERY	Heating Unoccupied Recovery Setpoint	W
91	DEMAND_CONTROL	Demand Control	W
92	OCCUPANCY_SENSOR_LOGIC	Occupancy Sensor Logic	W
93	OCCUPANCY_RELAX_TIME_DELAY	Occupancy Sensor Setpoint Relax Time Delay	W
94	IU_LOUVER_2_POSITION	Indoor Unit Louver 2 Position	W
95	INPUT_6_CONFIGURATION	Binary Input 6 Configuration	W
96	CO2_DAMPER_SELECTION	CO ₂ Damper Type Selection	W
97	IU_W_AIRFLOW_DIRECTION	Indoor Unit Louver Direction	W
98	DO-1_SETTING	Do 1 Setting Value	W
99	DO-2_SETTING	Do 2 Setting Value	W
100	DO-3_SETTING	Do 3 Setting Value	W
101	DO-4_SETTING	Do 4 Setting Value	W
102	DEHUMIDIFICATION	Dehumidification Control Type	W
103	HUMIDIFICATION	Humidification Control Type	W
104	EXTERNAL_DEHUM_CONTROL	External Dehumidification Control Type	W
105	OVERCOOL_OPTION	Overcool Degree	W

2. Control Devices

2.1 BRC1E73 Navigation Remote Controller (Wired Remote Controller)

2.1.1 Features



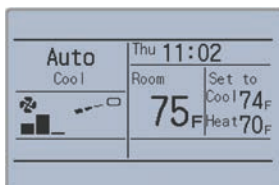
BRC1E73

- Selectable Screen Display3 types of displays are available; Standard, Detailed and Simple.
- Clear Display.....Equipped with backlight and large sized character display and buttons.
- StylishBasic tone is white and arrow keys are located at the center.
- Simple OperationSimple operation used with arrow keys and menu-driven method.
- Multilingual DisplayAvailable for selection of 3 languages to display arbitrarily.
- Convenient Features.....Schedule function and Daylight Saving Time function are improved.

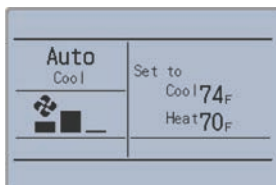
Selectable Screen Display

- Thanks to dot LCD, 3 different displays can be selected to meet various customers.
- New Simple display helps the customers to use easily.
- In Auto mode, the actual operation mode (Cool or Heat) is newly displayed.

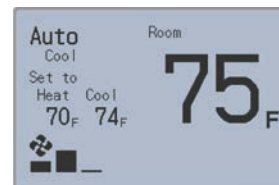
Detailed display



Standard display



Simple display



- Larger room temperature display
- Layout to fill the entire screen

Note:

CENTRAL CONTROL, MASTER CONTROL, and

This function is not available
are not displayed.

2.1.2 Functions

Functions

Category	Function	BRC1E73
Basic Functions	Drawing display	Full dot LCD
	Operation method	Menu selection
	Backlight function	✓
Convenient Functions	Clock function (time display)	✓
	Display selection	✓ *1
	Keylock function	✓
	Daylight saving time function	✓
	Schedule (weekly) timer	✓
Maintenance/Services	Model name display	✓ *2 *3 *5
	Contact dealer display	✓ *3 *4
	Operation time display	✓ *2
	Operational data display	✓ *2

✓: Possible

Note:

*1 Used for setting Standard Display mode, Detailed Display mode or Simple Display mode.

*2 Can display for some model only.

*3 When an error occurs, the error code blinks and the contact address and model names appear.

*4 The contact address must be registered when the controller is installed.

*5 For some models, model codes are displayed instead of model names.

Restrictions

1. In the case of 2 remote control system.

		Main			
		BRC1E73	Wireless BRC4*** BRC7***	DKN Cloud Wi-Fi Adaptor AZA***	DKN Plus Interface AZA***
Sub	BRC1E73	✓	—	✓	✓
	Wireless BRC4*** BRC7***	—	—	✓	✓
	DKN Cloud Wi-Fi Adaptor AZA***	✓	—	—	—
	DKN Plus Interface AZA***	✓	—	—	—

✓: Connectable —: Not connectable

- Due to the limited power supply capacity, there are some restrictions when controlling 2 remote controllers.
 - Common restriction for SkyAir and **VRV**
When controlling one indoor unit with 2 remote controllers, the remote controller operated first turns the backlight on.
 - Restriction for **VRV** only
When configuring two remote controllers system, Adaptor for wiring (KRP1*) or Power supply of Adaptor for indoor unit (X18A, X35A) is unable to use due to capacity.
- When controlling 2 remote controllers, the following functions cannot be set with the sub remote controller.
 - Schedule
 - Auto Changeover
 - Setback
 - Dual Setpoint
(For the details, refer to operation manual.)

2. In the case of centralized controller connection.

- When connecting centralized control equipment (*1), the following functions can be re-enabled with a field setting.
 - Schedule
 - Auto Changeover
 - Setback

Note:

*1. This means all centralized controller.

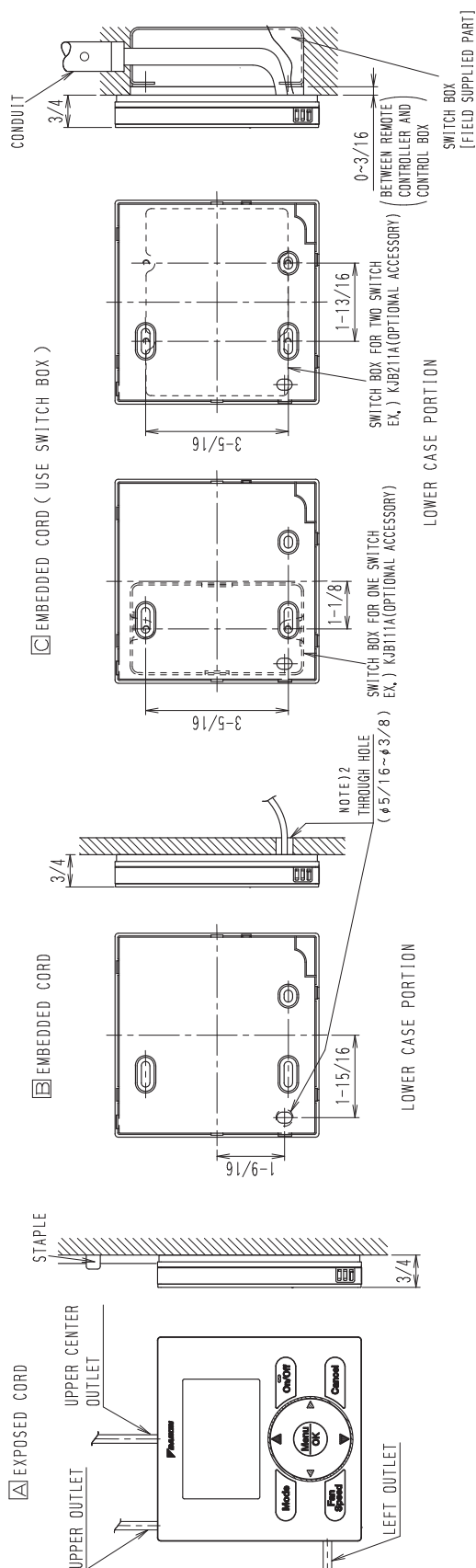
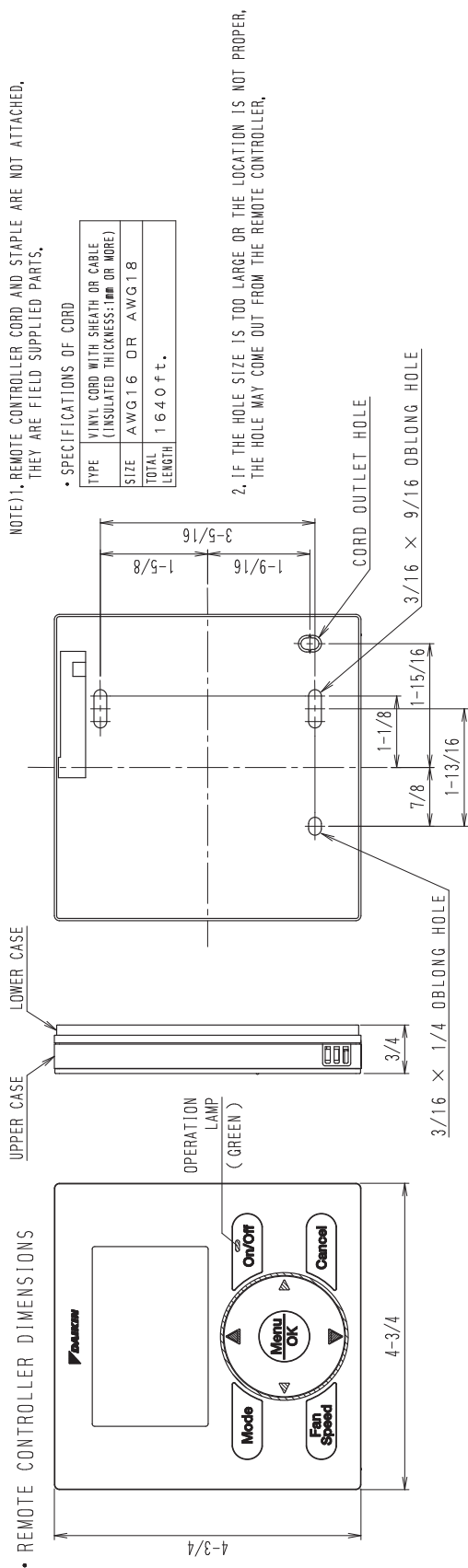
- intelligent Touch Manager [DCM601A71]
- Interface for use in BACnet [DMS502B71]
- Central remote controller [DCS302C71]
- Wiring adaptor for electrical appendices [KRP1C74/75]
- Interface for use in LONWORKS [DMS504C71]

2.1.3 Specifications

			New Remote Controller BRC1E73
Dimension (H × W × D)		in.	4'3/4" × 4'3/4" × 3/4"
LCD	Display size (H × W)	in.	1'25/32" × 2'13/16"
	Display method		Full dot method (dot 160 × 255)
	Backlight		Yes (Background color: white)
Color			Fresh white

2.1.4 Dimensions

Unit : in.



C: 3D091305A

2.1.5 Applicable Models

Applicable Models

	Applicable Indoor Unit
VRV	All models with P1P2 termination
SkyAir	All models with P1P2 termination
RA	All models with P1P2 termination

2.2 BRC1H71 Madoka Wired Remote Controller

2.2.1 Features



■ Sleek Stylish Design

Much like the perfection of its circular shape, the remote controller gives you perfect control over your individual climate.

■ Simple Interface

The remote controller combines functionality and simplicity.

The minimalistic touch button control enlarges the display and makes the remote controller easy to use.

■ The Madoka Quick Set APP for Installer

Simplifies the advanced settings such as field settings and set point range.

- Visual interface simplifies advanced settings such as energy saving activation, setting restrictions, etc.
- Easy and quick commissioning, saves time and cost for installers.
- Featuring Daikin's Bluetooth furnace low energy technology.

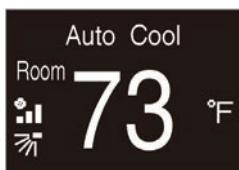
■ Shorter and Easier Installation

The application connected to this controller provides 2 modes, Owner / Administrator mode and Installer mode (no end-user mode). While traditional setting at the controller unit is still available, Installer mode makes installation faster and easier with

- On-site setting through smartphone application
- Set up multiple settings at once
- Save and reuse settings

■ Display

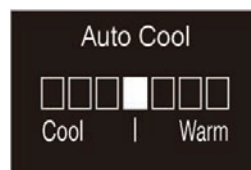
Provides 3 selectable options for the display view: Text, Icon and Scale.



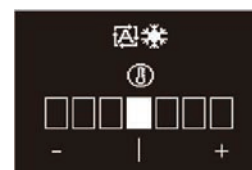
Text mode



Icon mode



Scale (text mode / icon mode)



2.2.2 Functions

Functions

Category	Functions	Remote controller			Application (Smartphone)		Remarks
		Basic operation	Administrator menu	Installer menu	Owner / Administrator mode	Installer mode	
Basic Function	Operation Start / Stop	✓					
	Operation mode	✓					
	Airflow rate (Fan speed)	✓					The number of airflow steps depends on indoor unit model.
	Airflow direction	✓					
	Setpoint	✓					
	Ventilation rate	✓					Available for only when Energy Recovery Ventilator is connected.
	Ventilation mode	✓					
	Celsius / Fahrenheit	✓			✓	✓	
Energy Saving	Setpoint range set				✓	✓	
	Sensing sensor low mode				✓	✓	
	Sensing sensor stop mode				✓	✓	Applicable for the indoor unit with infrared sensors.
Comfort	Airflow direction range (for Floor standing type)					✓	
	Individual airflow direction control				✓	✓	Applicable for the indoor unit with this function.
	Setback				✓	✓	
	Draft prevention				✓	✓	Applicable for the indoor unit with this function.
	Auto cooling / heating changeover (for Heat pump type)				✓	✓	This note does not apply to the US market. WLAN not used with SkyAir models.
	Setpoint minimum differential				✓	✓	Allowed to disable the settings.
Filter Indicator	Filter sign (Reset)	✓					Filter sign notifies the time to clean the filter of indoor unit.
	Element sign (Reset)	✓					Element sign notifies the time to clean the element of air purifier unit when the indoor unit connected with air purifier unit.
Option	Prohibit function (user menu items)				✓	✓	Set whether user can change basic functions in each menu.
	Prohibit function (center button prohibit)				✓	✓	
	Prohibit function (operation Mode)				✓	✓	Limit available operation mode from remote controller in each mode.
Display	Contrast adjustment		✓				
	LCD backlight adjustment		✓		✓	✓	
	LED brightness adjustment (screen Backlight ON)	✓			✓	✓	The brightness of LED (Status indicator) when backlight is On or Off can be changed respectively. Also, LED can be turned off.
	LED brightness adjustment (screen Backlight OFF)	✓			✓	✓	
	Auto display OFF			✓		✓	
Remote Controller Setting	Date and time setting		✓		✓	✓	
	Daylight Saving Time (DST)				✓	✓	
	R/C field settings			✓		✓	
	Display icon customization			✓		✓	
	Remote controller thermostat temperature offset			✓		✓	
	BLE settings (Pairing screen)		✓		✓	✓	
	Set / release Cooling / Heating master (for VRV)			✓			Decision procedure for the Master Control is same as BRC1E73.
	Administrator Password Settings		✓		✓		Default is no password.
	Installer Password Settings			✓		✓	

✓: Possible

Note:

1. Installer mode includes functions in the Owner / Administrator mode.
2. Installer mode requires dedicated QR code for startup.
It can be obtained by either accessing the Daikin Business Portal or by contacting your local Daikin sales office.

Restrictions

Limitation of two control connection

There is a limitation when connecting two controllers to one indoor unit because of lack of electricity supply.

■ All Indoor Unit restriction

- BRC1H71 cannot connect with E type and C type controller to one indoor unit, refer to the correspondence table below.

		Main				
		New BRC1H71	Current BRC1E73	Wireless BRC4*** BRC7***	DKN Cloud Wi-Fi Adaptor AZA***	DKN Plus Interface AZA***
Sub	New BRC1H71	✓	—	—	✓	✓
	Current BRC1E73	—	✓	—	✓	✓
	Wireless BRC4*** BRC7***	—	—	✓	✓	✓
	DKN Cloud Wi-Fi Adaptor AZA***	✓	✓	—	—	—
	DKN Plus Interface AZA***	✓	✓	—	—	—

✓: Connectable —: Not connectable

- In the case of two control connection, the backlight of the remote control that you operated the button first turns on.
- In the case of two control connection Heat pump changeover and Setback are not able to be set on sub controller.

■ Restriction for **VRV** only

- When configuring two remote controllers system, Adaptor for wiring (KRP1*) or Power supply of Adapter for indoor unit (X18A, X35A) is unable to use due to capacity.

2.2.3 Specifications

Remote Controller

Dimension (H × W × D)		3"11/32 × 3"11/32 × 63/64 (in) 85 × 85 × 25 (mm)
LCD	Size (H × W)	1 × 1"1/2 (in) 25.48 × 38.23 (mm)
	Display area	Full dot 100 × 150 dot (H × W)
	Backlight	Available
	Color	White on black background
Plastic case color		White
Buttons		Physical SW × 1 + Touch SW × 3
Operation LED		Blue / Red / Green Dimmable

BLE Specification

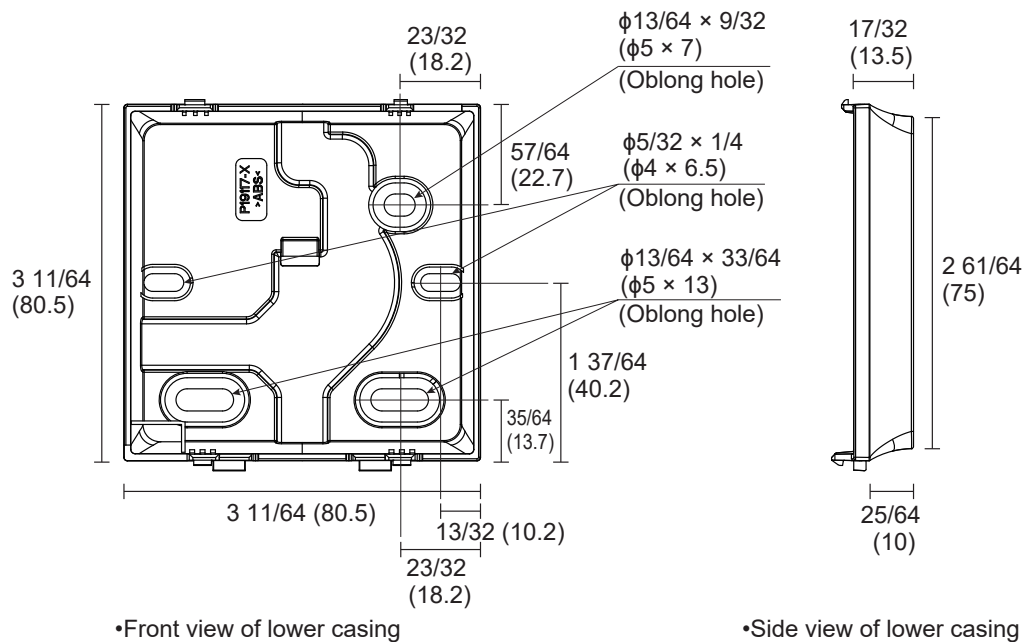
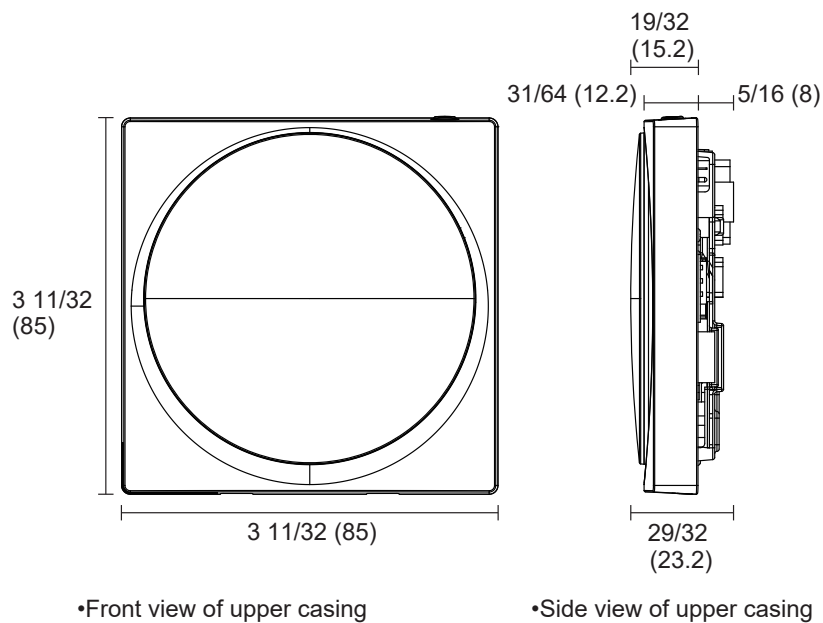
Daikin's Bluetooth furnace	Daikin's Bluetooth furnace 4.2 (BLE)
Paring algorithm	Numeric comparison

Apps Specification

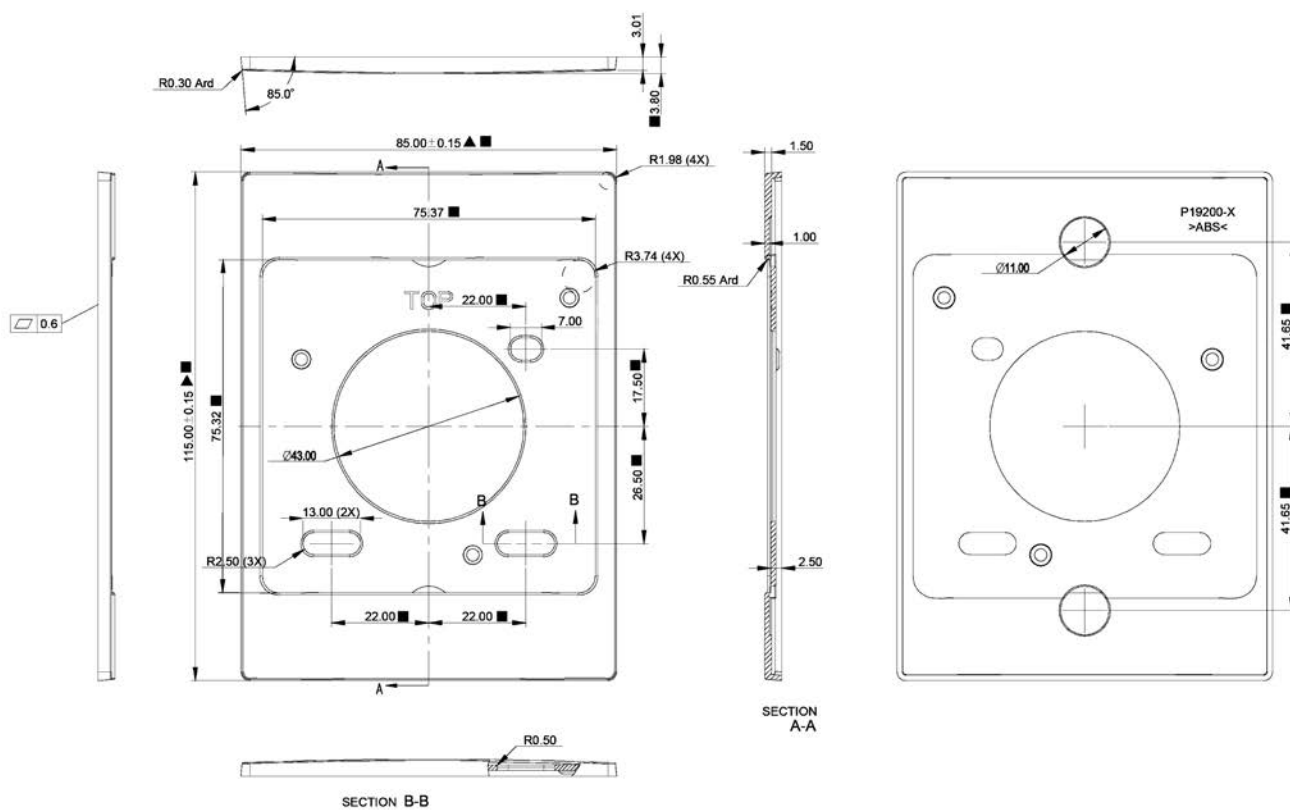
	Android OS	iOS
Recommended OS version	Android OS 9	iOS 12
Recommended smartphone model	Galaxys 10	iPhone XS

2.2.4 Dimensions

Unit : in. (mm)

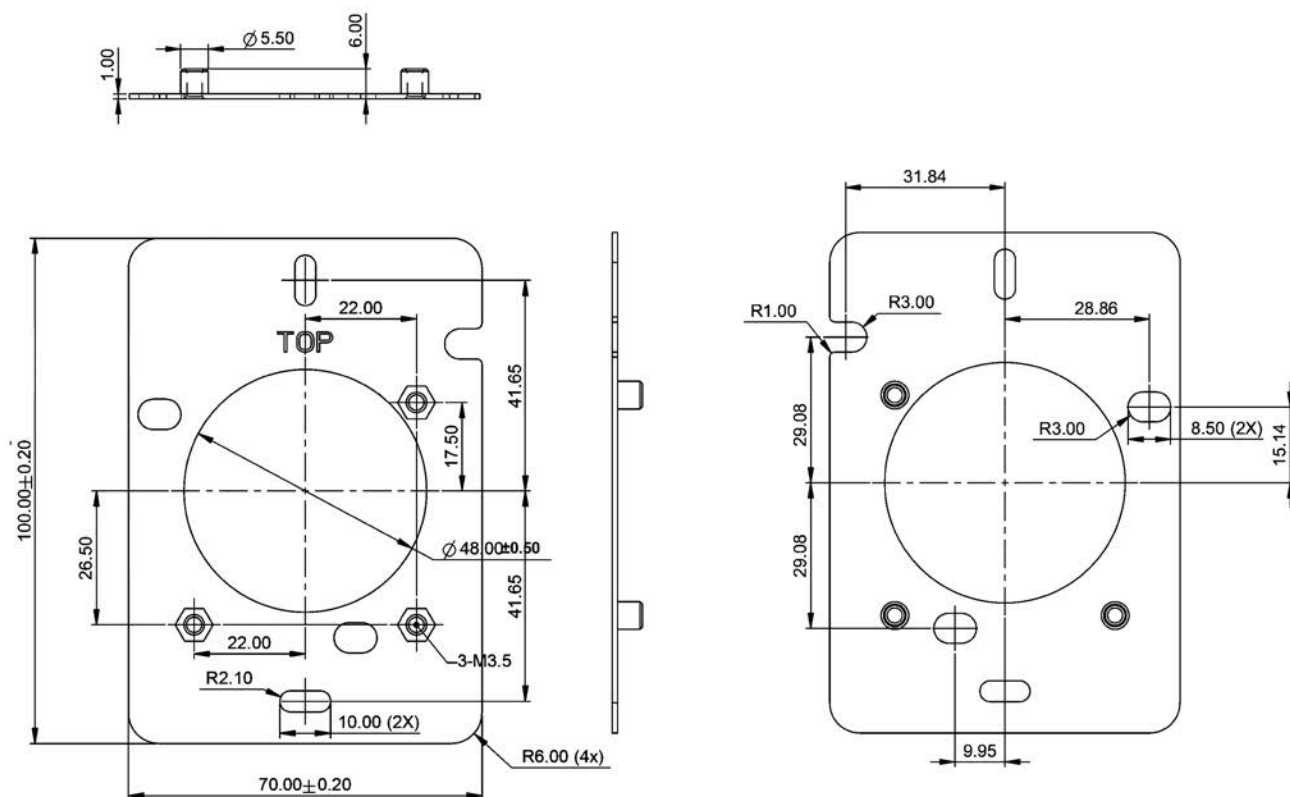


Plastic Cover



2P614991C

Installation Metal Fitting



2P614995B

2.2.5 Applicable Models

VRV Indoor Unit

		Model name
Cassette	Sensing flow	FXFQ-TVJU
	2 x 2	FXZQ-TAVJU
	Single flow	FXEQ-PVJU
Wall mount		FXAQ-PVJU
Duct	HSP duct	FXMQ-PBVJU
		FXMQ-MVJU
	MSP duct	FXSQ-TAVJU
	Slim duct	FXDQ-MVJU
Ceiling suspended		FHQ-MVJU
Wonderful		FXUQ-PVJU
Floor standing	FXLQ-MVJU9	
	FXNQ-MVJU9	
Vertical AHU		FXTQ-TAVJU
Cased coil unit		CXTQ-TASBLU
VAM		VAM-GVJU
Outside air processing unit		FXMQ-MFVJU

SkyAir Indoor Unit

	Model name
Wall mount	FAQ-TAVJU
Duct	FBQ-PVJU
Sensing flow	FCQ-TAVJU
Ceiling suspended	FHQ-P(M)VJU
Vertical AHU	FTQ-TAVJU

Mini-Split Indoor Unit

	Model name
2 x 2	FFQ-Q2VJU
Duct	FDMQ-RVJU

2.3 DTST-ONE-ADA-A Daikin One+ Smart Thermostat

MODEL COMPATIBILITY:

Compatible with **VRV** and **VRV** Life indoor unit models: CXTQ, FXAQ, FXDQ, FXEQ, FXFQ, FXHQ, FXLQ, FXMQ, FXNQ, FXSQ, FXTQ, FXUQ, FXZQ

SPECIFICATIONS:

Model		DTST-ONE-ADA-A
Description		Daikin One+ Smart Thermostat for Ductless Products
Maximum Connections		1 for S21 indoor units (cannot use together with another wireless remote controller or wired remote controller)
Max Wiring Length	Power Wire	5.5 ft (included)
	Thermostat Wire	125 ft (Field-supplied, 18AWG, 4-conductor non-shielded wire)
	P1P2 Communication Wire	6 ft* for the wire between the Translation Adaptor and the indoor unit terminal block (Field-supplied, 18AWG, 2-core non-shielded stranded wire)
Power Supply	Thermostat	Obtained from the Translation Adaptor
	Translation Adaptor	110-240 VAC
Dimensions	Thermostat	6.8" x 3.4" x 0.8"
	Translation Adaptor	2.7" x 7.3" x 1.3"
Weight	Thermostat	10.5 oz
	Translation Adaptor	18.4 oz
Storage Temperature		32°F to 120°F
Operation Temperature	Thermostat	32°F to 120°F
	Translation Adaptor	-40°F to 150°F
Humidity		20 to 95%RH (non-condensing)
Thermostat Screen		640 pixels × 480 pixels × 24 bits RGB
Compliance (Thermostat only)		Compliant to California Title 24 (OCST listed), FCC Certified (FCC Part 15 subpart B), UL Listed

* P1P2 wire has a maximum wiring length of 1640 feet

PRODUCT IMAGE:

Thermostat:



Translation Adaptor (Included):

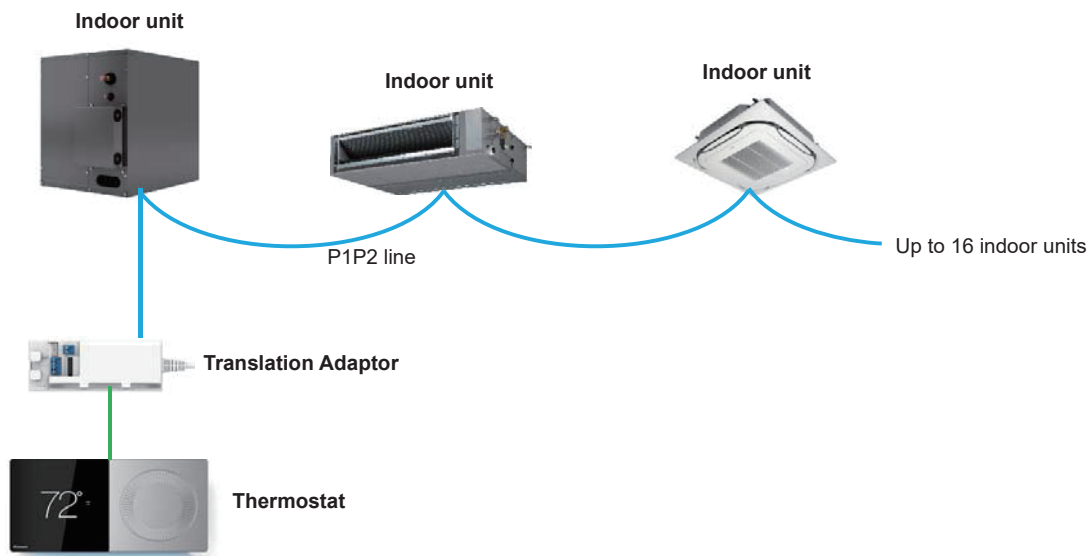


FEATURES:

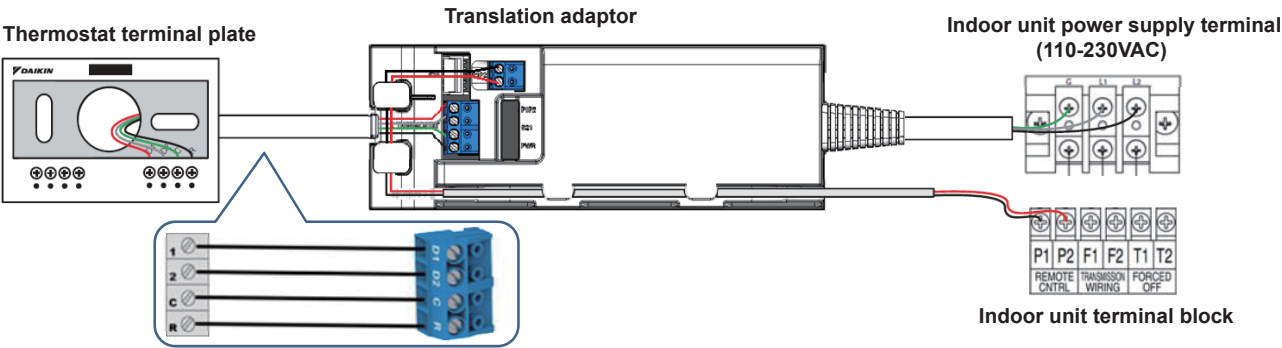
- Stylish design
 - Capacitive multi-touch display
 - Easy rotational dial for precise setpoint adjustment
 - Light pipe indication for heating/cooling operation
- Remote control and software update
 - Wifi-enabled smart thermostat with iOS and Android app control
 - Voice control by Amazon Alexa and Google Assistant
 - Over-the-air software updates
 - Outdoor environment report: outdoor temperature, outdoor humidity, and weather forecast
- Intelligent energy management
 - Energy and comfort functions: Schedule/Adjustment Hold/Away mode with geo-fencing
 - Programmable schedule with up to 6 scheduled events per day
- Versatile indoor comfort control
 - Indoor unit control: Mode (Auto/Heat/Cool/Off), Setpoint, Fan Speed (Heat/Cool), Louver position
 - Built-in temperature and humidity sensors
 - Dehumidification with overcooling function
 - Error Code and maintenance notification
- External device support
 - Built-in Daikin's Bluetooth furnace and Sub GHz communication
 - Two dry contacts for auxiliary devices
- Complete support
 - Multi-language support: English, Spanish, French
- Compliant to California Title 24 (OCST listed)

SYSTEM DIAGRAM:

- Connect to one indoor unit control group (up to 16 indoor units)
- Cannot use together with another wireless remote controller or wired remote controller

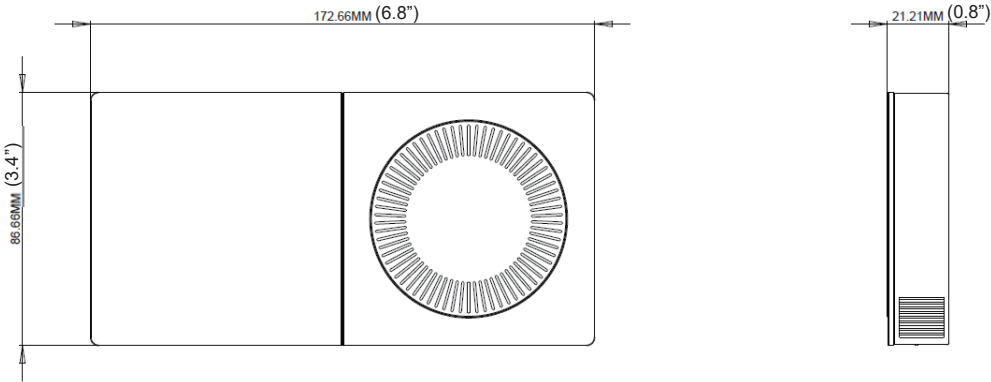


WIRING DIAGRAM:

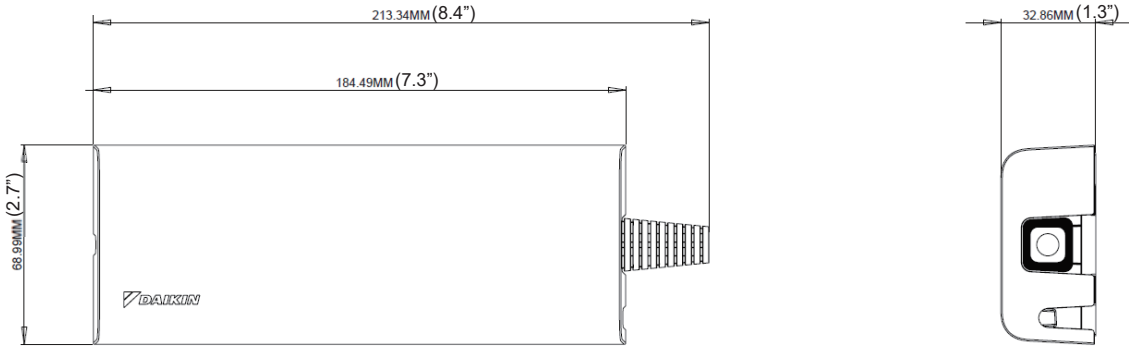


DIMENSIONS:

- Thermostat:



- Translation Adaptor:



2.4 BACRC-T-P01/ BACRC-TH-P01/ BACRC-THO-P01/ BACRC-THOC-P01 Adaptive Touch Controller

MODEL COMPATIBILITY:

Compatible with **VRV** indoor unit models: FXAQ, FXDQ, FXEQ, FXFQ, FXHQ, FXLQ, FXMQ, FXMQ_MF, FXNQ, FXSQ, FXTQ, FXUQ, FXZQ, CXTQ

Compatible with SkyAir indoor unit models: FAQ, FBQ, FCQ, FHQ, FTQ

Compatible with Single Zone/Multi Zone/SkyAir system indoor unit models: FDMQ, FFQ

SPECIFICATIONS:

Model		BACRC-T-P01/ BACRC-TH-P01/ BACRC-THO-P01/ BACRC-THOC-P01
Description		Adaptive Touch Controller
Maximum Indoor Units		16 indoor units in one remote controller group
Max Wiring Length (P1P2)		1640 ft
Dimensions		3.50 in x 5.12 in x 1.12 in
Weight		0.6202 lbs. in box
Communication Protocol		P1P2
Storage Temperature		-40°F to 140°F
Operation Temperature		32°F to 120°F
Operation Humidity		0% to 90% (non-condensing)
Power Supply		24VAC (requires separate Class 2 power)
BMS Communication		BACnet MS/TP
Auxiliary I/O	Analog Output	1, 0-10VDC
	Digital Output	4
	Analog Input	1, 0-10VDC or 4-20mA (configurable)
	Digital Input	1

PRODUCT IMAGE:



BACRC-T-P01
BACRC-TH-P01



BACRC-THO-P01
BACRC-THOC-P01

FEATURES:

- The Adaptive Touch Controllers (ATC) are available with four different built-in sensor combinations including temperature, humidity, carbon dioxide and occupancy sensor. The ATC sensor configurations are listed:

Part Number	Model
BACRC-T-P01	ATC with Temperature Sensor
BACRC-TH-P01	ATC with Temperature/Humidity Sensor
BACRC-THO-P01	ATC with Temperature/Humidity/Occupancy Sensor
BACRC-THOC-P01	ATC with Temperature/Humidity/Occupancy/CO ₂ Sensor

- Color LCD touchscreen
- Basic indoor unit control and monitoring*:
 - On/Off
 - Mode (Cool, Heat, Fan, Dry, Auto)
 - Setpoint
 - Room temperature
 - Fan speed
 - Louver position
 - Alarm status and error code
 - Dirty filter indicator
 - Changeover master identification
- Indoor unit control logic:
 - Auto changeover logic with guard timer
 - Dual/Single temperature setpoint (°C/ °F)
 - Setpoint range limitation
 - Setback setpoints control
 - Humidity control with setpoint (%)**
 - CO₂ control with setpoint (ppm)**
 - Schedule
 - Configurable occupancy sensor logic**
- Advanced and configurable inputs and outputs:
 - Aux heater control: primary/secondary/emergency heat
 - Interlock through digital and analog outputs: heating stage 1, heating stage 2, cooling thermo-on, heating thermo-on, fan on/off, unit on/off, alarm status, CO₂ alarm, occupancy sensor, humidifier/dehumidifier control
- Optional integration to a compatible building management system (BMS) using the BACnet MS/TP.
 - Control and monitor the ATC operation using the various BACnet objects.
 - Indoor unit operation data BACnet points

* The ATC can only be set as P1P2 main controller. No sub controller can be connected to the P1P2 network with ATC.

**Depends on model used

BACNET POINT LIST:■ **Monitoring Points**

#	Value	Description	Type
1	SPACE_SENSOR	Space Temperature Value Measured By Controller	R
2	REMOTE_CO2_SENSOR	Remote CO ₂ Sensor Value	R
3	REMOTE_HUMIDITY	Remote Humidity Sensor Value	R
4	REM_SPACE/DAT_SENSOR	Remote Space Temperature Or Discharge Air Temperature Value	R
5	OUTDOOR_AIR	Outside Air Temperature	R
6	SENSOR_FAILURE	Sensor Failure Value	R
7	IU_SUCTION_AIR_TEMP	Indoor Unit Return Air Temperature	R
8	COOLING_HOURS	Cooling Hours	R
9	HEATING_HOURS	Heating Hours	R
10	NUMBER_IDU_CONNECTED	Number Of Indoor Unit Connected To The Controller	R
11	IDU_GAS_PIPE_TEMP	Indoor Unit Gas Pipe Temperature	R
12	IDU_LIQUID_PIPE_TEMP	Indoor Unit Liquid Pipe Temperature	R
13	IU_FAN_HOURS	Indoor Unit Fan Operation Time	R
14	ODU_FAN_STEP	Outdoor Unit Fan Step	R
15	IU_OPERATING_HOURS	Indoor Unit Operation Hours	R
16	IU_ENERGIZED_HOURS	Indoor Unit Energized Hours	R
17	IU_FAN_SPEED_RPM	Indoor Unit Fan Speed RPM	R
18	IU_EV_OPEN_PULSE	Indoor Unit EEV Pulses	R
19	OU_TH1_OAT	Outdoor Unit TH1 Value	R
20	OU_TH2_HEAT_EXCHANGER	Outdoor Unit TH2 Heat Exchanger	R
21	OU_TH3_DAT	Outdoor Unit TH3	R
22	OU_TH4	Outdoor Unit TH4	R
23	OU_TH5	Outdoor Unit TH5	R
24	OU_TH6	Outdoor Unit TH6	R
25	OU_EV1	Outdoor Unit EEV Pulses	R
26	OU_COMP_SPEED_RPM	Outdoor Unit Compressor Speed	R
27	OU_OPERATION_HOURS	Outdoor Unit Operation Hours	R
28	IU_TH4_DISCHARGE_AIR_TEMP	Indoor Unit Discharge Air Temperature	R
29	OU_FAN1_HOURS	Outdoor Unit Fan 1 Hours	R
30	OU_FAN2_HOURS	Outdoor Unit Fan 2 Hours	R
31	OU_COMP1_HOURS	Outdoor Unit Compressor 1 Hours	R
32	OU_COMP2_HOURS	Outdoor Unit Compressor 2 Hours	R
33	AUX_TOTAL_HOURS	Auxiliary Heat Total Hours	R
34	HEAT_TOTAL_HOURS	Heating Total Hours	R
35	COOL_TOTAL_HOURS	Cooling Total Hours	R
36	ALARM_ON-OFF_ECON	Configurable Point (Alarm Or Motion Sensor Or Econ)	R
37	SYSTEM_FORCED_OFF	System Forced Off (T1-T2)	R
38	ALARM_STATUS	Alarm Status	R
39	FILTER_SIGN_STATUS	Filter Sign Status	R
40	IU_COOLING_THERMO_ON	Indoor Unit Cooling Thermo On	R
41	IU_HEATING_THERMO_ON	Indoor Unit Heating Thermo On	R
42	COMMUNICATION_STATUS	Indoor Unit Communication Status	R
43	TIMED_OVERRIDE_STATUS	Override Status	R
44	IU_FAN_STATUS	Indoor Unit Fan Status	R
45	AUX_HEATER_STATUS	Aux Heater Status	R
46	EMERGENCY_HEATER_STATUS	Emergency Heater Status	R
47	IU_VRV_CENTRAL_CONTROLLER	Central Controller Connection Status	R
48	IU_THERMO-ON_STATUS	Indoor Unit Thermo-On	R
49	DEHUM_MODE	Dehumidification Mode	R
50	HUMIDIFICATION_MODE	Humidification Mode	R

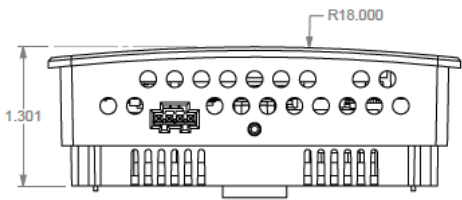
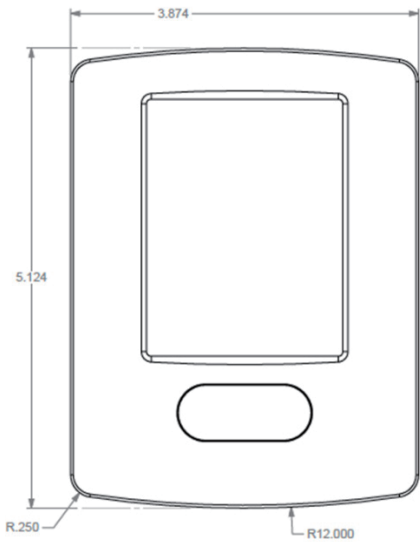
#	Value	Description	Type
51	AUX_HEAT_STG_1	Aux Heat Stg 1	R
52	AUX_HEAT_STG_2	Aux Heat Stg 2	R
53	ADPTR AUX Heat Status	Indoor Unit Aux Heat Status	R
54	CALL_FOR_DEHUM	Dehumidification Call	R
55	AUXH_EMERGENCY_OPERATION	Aux Heater Emergency Heater Operation	R
56	DEFROST_OIL_RETURN_MODE	Defrost Oil Return Mode Value	R
57	ECONOMIZER_MODE	Economizer Mode	R
58	TIMED_OVERRIDE_OPERATION	Time Override Operation	R
59	MOTION	Motion Sensor Value	R
60	MOTION_SENSOR_OUT	Motion Sensor Output	R
61	DIGITAL_OUTPUT_1_STATUS	Digital Output 1 Status Value	R
62	DIGITAL_OUTPUT_2_STATUS	Digital Output 2 Status Value	R
63	DIGITAL_OUTPUT_3_STATUS	Digital Output 3 Status Value	R
64	DIGITAL_OUTPUT_4_STATUS	Digital Output 4 Status Value	R
65	IU_CAUTION_1	Indoor Unit Caution	R
66	IU_WARNING	Indoor Unit Warning	R
67	IU_ERROR	Indoor Unit Error	R
68	ALARM_CONTACT	Alarm Contact Status	R
69	IU_DRAIN_PUMP_MP	Indoor Unit Drain Pump Status	R
70	IU_HUMIDIFIER	Indoor Unit Humidifier Status	R
71	IU_ANTIFREEZING_TBF	Indoor Unit Antifreeze Operation Status	R
72	IU_FLOAT	Indoor Unit Float Status	R
73	IU_RC Fan Prohibit	Indoor Unit Fan Speed Change Prohibit	R
74	On Prohibit	Indoor Unit On Prohibit	R
75	IU_TEST_RUN	Indoor Unit Test Run Operation	R
76	TEST_OPERATION	Test Operation Status	R
77	OU_TEST_RUN	Outdoor Unit Test Run Operation	R
78	Backup Operation	Outdoor Unit Backup Operation	R
79	IU_RC LouverProhibit	Indoor Unit Louver Prohibit	R
80	IU_CHANGEOVER_OPTION	Indoor Unit Master Status	R
81	OU_SV1	Outdoor Unit SV1 Value	R
82	FORCED_THERMO_OFF_STATUS	Forced Thermo Off Status Value	R
83	FORCED_STPT_SHIFT	Indoor Unit Setpoint Shift	R
84	OU_OP_MODE_ACTUAL_DISP	Outdoor Unit Actual Mode	R

Control Points

#	Value	Description	Type
1	AUX_HEAT	Auxiliary Heat Output (Modulating)	W
2	CO2_DAMPER	CO ₂ Damper Outoput (Modulating)	W
3	HUMIDIFIER_DEHUMIDIFIER	Humidifier Or Dehumidifier Output (Modulating)	W
4	IU_W_CONTROL_TEMP	Control Temperature Used By The Controller	W
5	UI_COOL_STPT	Active Cooling Setpoint	W
6	UI_HEAT_STPT	Active Heating Setpoint	W
7	OCC_COOLING_STPT	Occupied Cooling Setpoint	W
8	OCC_HEATING_STPT	Occupied Heating Setpoint	W
9	UNOCC_COOLING_STPT	Unoccupied Cooling Setpoint	W
10	UNOCC_HEATING_STPT	Unoccupied Heating Setpoint	W
11	MIN_COOLING_STPT	Minimum Cooling Setpoint	W
12	MAX_COOLING_STPT	Maximum Cooling Setpoint	W
13	MIN_HEATING_STPT	Minimum Heating Setpoint	W
14	MAX_HEATING_STPT	Maximum Heating Setpoint	W
15	AUX_H_CONFIG_OAT_STPT	Outside Air Temperature Setpoint For Aux Heat Logic	W
16	AUXH_PROP	Aux Heat Control Proportional	W
17	AUXH_INTG	Aux Heat Control Integral	W
18	DEHUM_STPT	Dehumidification Setpoint	W
19	HUM_HYSTERESIS	Hysteresis Used For Humidity Control	W
20	DEHUM_PROP	Dehumidification Control Proportional	W
21	DEHUM_INTG	Dehumidification Control Integral	W
22	HUM_PROP	Humidification Control Proportional	W
23	HUM_INTG	Humidification Control Integral	W
24	SPACE_HUM	Space Humidity Value	W
25	HUMIDITY_STPT	Humidification Setpoint	W
26	CO2_STPT	CO ₂ Control Setpoint	W
27	CO2_DIFFERENTIAL	CO ₂ Control Differential	W
28	CO2_MINIMUM_POSITION	CO ₂ Damper Minimum Position For Occupied Mode	W
29	CO2_MAXIMUM_POSITION	CO ₂ Damper Maximum Position For Occupied Mode	W
30	CO2_UNOCCUPIED_POSITION	CO ₂ Damper Unoccupied Position	W
31	CO2_TIME_DELAY	Time Delay For CO ₂ Control (Minutes)	W
32	CO2_PROP	CO ₂ Control Proportional	W
33	CO2_INTG	CO ₂ Control Integral	W
34	SPACE_CO2	Space CO ₂ Value	W
35	MOTION_UNOCC_DELAY	Time To Set To Unit To Unoccupied When No Motion Is Detected	W
36	OCCUPANCY_RELAX_MAXIMUM	Maximum Setpoint Relax When No Motion Is Detected	W
37	DEMAND_SETPOINT_RELAX_CLG	Cooling Setpoint Relaxation Value During Demand Limit	W
38	DEMAND_SETPOINT_RELAX_HTG	Heating Setpoint Relaxation Value During Demand Limit	W
39	DEMAND_RECOVERY_STEP_TIME	Demand Recovery Step Time Minutes	W
40	ECONOMIZER_TIMER	Economizer Timer	W
41	COOL_MODE_TEMP_OFFSET	Cool Mode Temp Offset Value	W
42	HEAT_MODE_TEMP_OFFSET	Heat Mode Temp Offset Value	W
43	OUTDOOR_TEMP	Outdoor Temp	W
44	DISCHARGE_AIR_TEMP	Discharge Air Temp	W
45	STAGE_DELAY	Stage Delay For Aux Heat	W
46	FILTER_SIGN_RESET	Filter Sign Reset	W
47	HUMIDITY_CONTROL_ALWAYS	Enable Humidity Control During Unoccupied Mode	W
48	HUM_OVRRIIDE	Turn On Humidity Control During Override	W
49	REMOTE_HUMIDITY_SENSOR	Enable Remote Humidity Sensor	W
50	HUMIDIFY_DURING_HEAT	Allow Humidity Control During Heat	W
51	OCCUPIED_MODE	Occupied Mode	W

#	Value	Description	Type
52	ENABLE_LOCAL_SCHED	Enabled Local Schedule	W
53	STPT_HOLD	Hold Enable	W
54	STPT_TRACKING	Setpoint Tracking Mode	W
55	DAT_SENSOR	Enables Remote Discharge Air Temperature	W
56	DEHUM_WOUT_FAN	Dehumidification Without Fan	W
57	OAT_SENSOR	Enable Outside Air Sensor	W
58	HUMIDIFY_WOUT_FAN	Humidify Without Fan	W
59	ENABLE_REMOTE_CO2_SENSOR	Enable Remote CO ₂ Sensor Monitoring	W
60	DEHUM_OVERCOOL_STATUS	Overcooling To Dehumidify	W
61	SPEED_UP	Speed Up Timers	W
62	RC_PROHIBIT_MODE_OPERATION	Remote Controller Prohibit Mode Operation	W
63	REMOTE_CONTROLLER_PROHIBIT_STPT	Remote Controller Prohibit Setpoint	W
64	ENABLE_DEMAND_CONTROL	Enables Demand Control	W
65	CO2_VENT_ENABLE	Enable CO ₂ Control	W
66	CONTINUOUS_AUX_FAN	Enable Fan Operation During Aux Heat	W
67	FORCE_FAN	External Forced Fan Input	W
68	CALL_FOR_HUMIDIFICATION	Humidification Call	W
69	HUMIDIFIER_OUT	Humidifier Output Status	W
70	ECONOMIZER	Economizer Status	W
71	CO2_ALARM_OUT	CO ₂ Alarm Status	W
72	DEHUMIDIFIER_OUT	Dehumidification Output Status	W
73	ENERGY_SAVINGS_ICON	Energy Saving Icon Status	W
74	AUX_HEAT_FAN	Check For Fan Before Running Aux Heat	W
75	Humidity_Display_Enable	Enable Humidity Display	W
76	CO2_Display_Enable	Enable CO ₂ Display	W
77	OAT_Display_Enable	Enable Outside Air Sensor Display	W
78	OPERATION_MODE	Controller Operation Mode	W
79	AUX_HEAT_CONFIGURATION	Aux Heat Configuration Setting	W
80	OVER_COOL_FAN_SPEED	Overcool Mode Fan Speed	W
81	FAN_MODE	Fan Speed	W
82	SCHEDULE_OCC_MODE	Occupancy Mode To Be During Start Of Schedule	W
83	ROOM_TEMP_CALCULATION	Room Temperature Calculation Logic	W
84	PRI_CHANGEOVER_DEADBAND	Primary Changeover Deadband	W
85	SEC_CHANGEOVER_DEADBAND	Second Changeover Deadband	W
86	GUARD_TIME	Autochangeover Gaurdtimer Value	W
87	MIN_STPT_DIFFERENTIAL	Minimum Setpoint Differential Value	W
88	TIMED_OVERRIDE_MINUTES	Timed Override Minutes	W
89	COOLING_UNOCC_RECOVERY	Cooling Unoccupied Recovery Setpoint	W
90	HEATING_UNOCC_RECOVERY	Heating Unoccupied Recovery Setpoint	W
91	DEMAND_CONTROL	Demand Control	W
92	OCCUPANCY_SENSOR_LOGIC	Occupancy Sensor Logic	W
93	OCCUPANCY_RELAX_TIME_DELAY	Occupancy Sensor Setpoint Relax Time Delay	W
94	IU_LOUVER_2_POSITION	Indoor Unit Louver 2 Position	W
95	INPUT_6_CONFIGURATION	Binary Input 6 Configuration	W
96	CO2_DAMPER_SELECTION	CO ₂ Damper Type Selection	W
97	IU_W_AIRFLOW_DIRECTION	Indoor Unit Louver Direction	W
98	DO-1_SETTING	Do 1 Setting Value	W
99	DO-2_SETTING	Do 2 Setting Value	W
100	DO-3_SETTING	Do 3 Setting Value	W
101	DO-4_SETTING	Do 4 Setting Value	W
102	DEHUMIDIFICATION	Dehumidification Control Type	W
103	HUMIDIFICATION	Humidification Control Type	W
104	EXTERNAL_DEHUM_CONTROL	External Dehumidification Control Type	W
105	OVERCOOL_OPTION	Overcool Degree	W

DIMENSIONS:



2.5 AZAI6WSCDKA DKN Cloud Wi-Fi Adaptor

MODEL COMPATIBILITY:

Compatible with **VRV** indoor unit models: FXAQ, FXDQ, FXEQ, FXFQ, FXHQ, FXLQ, FXMQ, FXMQ_MF, FXNQ, FXSQ, FXTQ, FXUQ, FXZQ, CXTQ

Compatible with SkyAir indoor unit models: FAQ, FBQ, FCQ, FHQ, FTQ

Compatible with Single Zone/Multi Zone/SkyAir system indoor unit models: FDMQ, FFQ

Backwards compatible with indoor unit models that communicate via the P1P2 protocol

SPECIFICATIONS:

Model		AZAI6WSCDKA
Description		DKN Cloud Wi-Fi Adaptor for VRV (P1P2)
Maximum Indoor Units		16 indoor units in one remote controller group
Total Wiring Length		6ft (2m)
Dimensions		3.6 in x 3.15 in x 1.15 in (92mm x 80mm x 29 mm)
Weight		0.28lbs (130 g)
Communication Protocol		P1P2
Storage Temperature		-4°F to 158°F (-20 °C to 70 °C)
Operation Temperature		32°F to 122°F (0 °C to 50 °C)
Operation Humidity		5% to 90% (non-condensing)
Communication	Connection	WiFi-Certificated network 802.11b/g/n (802.11n up to 150 Mbps) Daikin's Bluetooth furnace: v4.2 BR/EDR and BLE specification
	Communication Frequency	2.4GHz
	Max Antenna power	20 dBm
	Sensitivity	-97 dBm
	IP Addressing	Static DHCP
Modbus RS485 communication baud rate		19200 bps
Power Supply (obtained from indoor unit PCB)	Type	Vdc
	Voltage	12 – 16V
	max current	85 mA
	max Power	1360 mW

PRODUCT IMAGE:

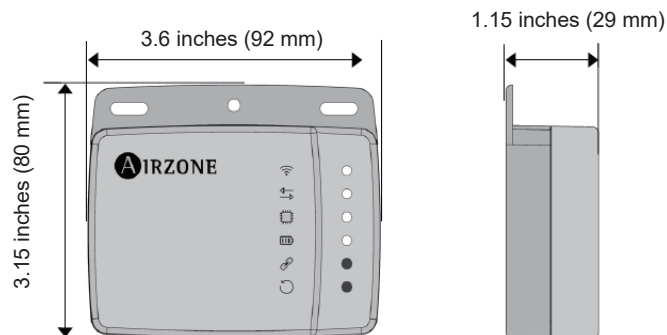


FEATURES:

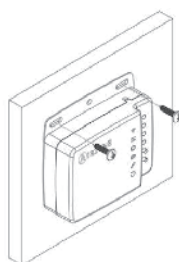
- A wired remote controller is optional to connect to the indoor unit together with the Wi-Fi adaptor.
- The DKN Cloud Wi-Fi adaptor is capable of controlling a group of up to 16 indoor units
- The Wi-Fi adaptor wiring consists of a non-polar two-wire connection to the indoor unit at terminals P1/P2 and a connection to the indoor unit power supply connector X18A or X35A (16VDC).
 - Wiring harness provided with Wi-Fi adapter
- The DKN Cloud Wi-Fi adaptor enables the control of P1P2 indoor units through an iOS or Android smartphone app:
 - Monitor and/or control the indoor units:
 - On/Off
 - Mode – Cool, Heat, Auto*, Dry and Fan
 - Room temperature
 - Sensed by the remote controller or indoor unit return air sensor (depends on indoor unit model)
 - Setpoint
 - Fan speed
 - Error code
 - Next scheduled event
 - Capable of setting a 7 day schedule for each indoor unit group
 - Capable of editing unit name and icon, and grouping units
 - Capable of managing users with Basic and Advanced authority
 - Capable of displaying different languages: English, Spanish and French
 - Capable of selecting temperature units °F/°C
- Open API document is available for cloud to cloud integration
- Modbus Integration
 - The following points are available through Modbus:

No.	Point Name	Read Only/Writable
1	Unit on/off	Writable
2	Setpoint	Writable
3	Room temperature	Writable
4	Mode Auto/Cool/Heat/Fan/Dry	Writable
5	Fan speed	Writable
6	Louver position	Writable
7	Error code	Read only

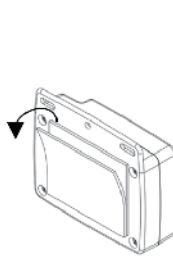
*Applicable to indoor units that connect to **VRV** Heat Recovery outdoor units only.

DIMENSIONS:**MOUNTING:**

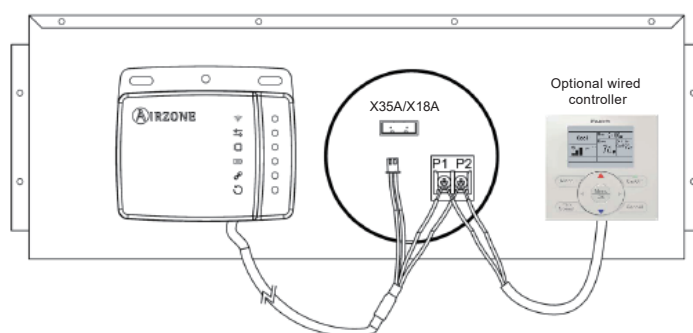
The Wi-Fi adaptor shall be mounted onto a flat surface either through screws or double-sided adhesive tape provided with the Wi-Fi adaptor



Screw attachment



Double-sided adhesive attachment

CONNECTION:

*For FTQ_P and FXTQ_P, use the X9A connector on the A2P PCB

ADAPTOR COMPATIBILITY:

This adaptor is not compatible with the following adaptors:

- KRP4A71, KRP4A72, KRP4A73, KRP4A74
- DTA104A53, DTA104A61, DTA104A62
- DTA116A51 if powered by the indoor unit PCB

2.6 AZAI6WSPDKC DKN Plus Interface

MODEL COMPATIBILITY:

Compatible with the following indoor units:

Indoor Unit Family	Model Number	Type
VRV and VRV Life	CXTQ, FXAQ, FXDQ, FXEQ, FXFQ, FXHQ, FXLQ, FXMQ, FXNQ, FXSQ, FXTQ, FXUQ, FXZQ	P1P2
SkyAir	FAQ, FBQ, FTQ, FCQ, FHQ	P1P2
Single-Zone and Multi-Zone	FDMQ, FFQ	P1P2
	CDXS, CTXS, FDXS, FTK, FTX, FTXG, FTXR, FTXS, FVXS	S21

The following indoor units do not have the S21 connection and require an additional interface adaptor (ordered separately) to provide the S21 connect for the adaptor:

Indoor Unit Models	Required Interface Adaptor
FTX09NMVJU, FTX12NMVJU, FTK09NMVJU, FTK12NMVJU	KRP067A41E
FTX15NMVJU, FTX18NMVJU, FTX24NMVJU, FTK18NMVJU, FTK24NMVJU	KRP980B2E

SPECIFICATIONS:

Model		AZAI6WSPDKC
Description		DKN Plus Interface
Maximum connections		1 S21 indoor units / 16 P1P2 indoor units
Wiring	P1P2/S21 communication and power wire	7.7ft / 2.35m (included)
	S21 wire adaptor	0.5ft / 0.15m (included)
	P1P2 wire adaptor	0.5ft / 0.15m (included)
Modbus RS485 communication baud rate		19200 bps
BACnet MS/TP communication baud rate		9600/19200/38400 bps (Default: 38400)
Power supply	For DKN Plus Interface	12-16VDC from indoor unit PCB
	For 3rd party thermostat	24VAC from external power supply
Dimensions		3.62 in x 3.15 in x 1.14 in / 92mm x 80 mm x 29 mm
Weight		3.24 oz / 92g
Storage temperature		-4°F to 158°F
Operation temperature		32°F to 113°F
Compliance		EMC with the standard 47 CFR Part 15B (US) EMC with ICES-003 Issue6 standard (Canada)

PRODUCT IMAGE:



FEATURES:

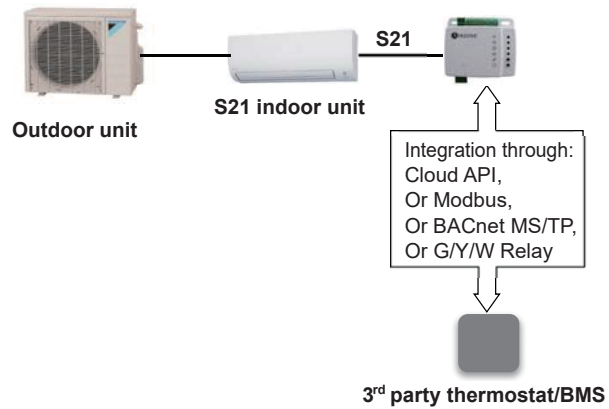
- Versatile interface that can integrate with a third-party thermostat through multiple approaches:
 - Cloud API
 - Modbus
 - BACnet MS/TP
 - Thermostat G/Y/W Relay Control: Fan, Cool, Heat
 - Advanced control logic to maximize indoor unit efficiency
 - Automatically disables thermostat relay logic when cloud API connection detected
- Easy commissioning with Daikin's Bluetooth furnace configuration app
- Indoor unit control and monitoring points*
 - On/Off
 - Setpoint
 - Room temperature
 - Mode (Auto, Cool, Heat, Fan, Dry)
 - Fan speed
 - Louver position
 - Error code
 - Interlock control with indoor unit On/Off – Dry Contact
- Aux Heater Control
- Modbus and BACnet MS/TP Integration
 - The following points are available through Modbus or BACnet MS/TP:

No.	Point Name	Read Only/Writable
1	Unit on/off	Writable
2	Setpoint	Writable
3	Room temperature	Writable
4	Mode Auto/Cool/Heat/Fan/Dry	Writable
5	Fan speed	Writable
6	Louver position	Writable
7	Error code	Read only

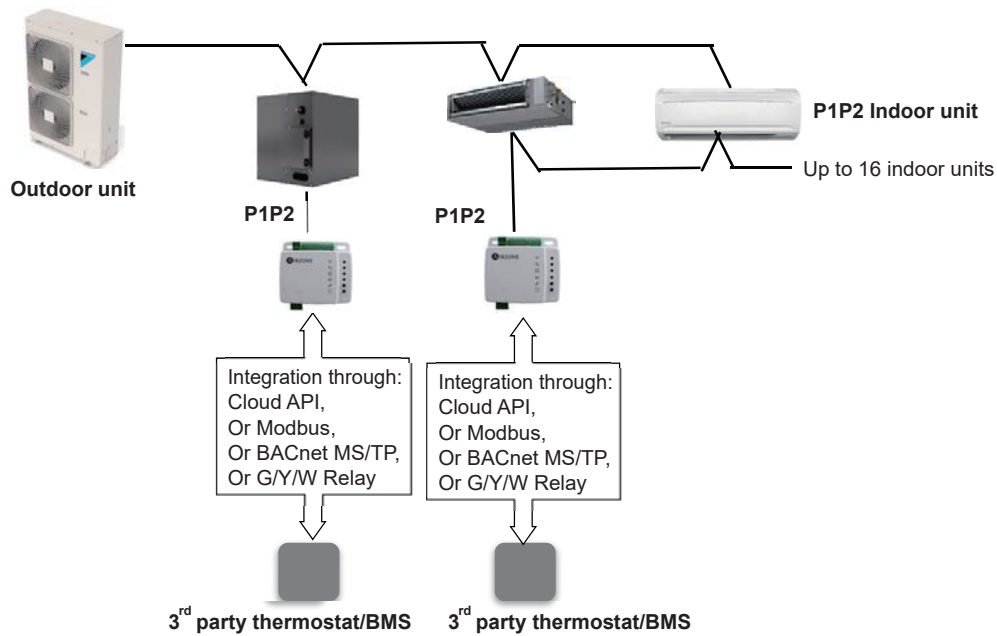
* For integration through cloud, Modbus, and BACnet MS/TP only

SYSTEM DIAGRAM:

- For S21 indoor units:

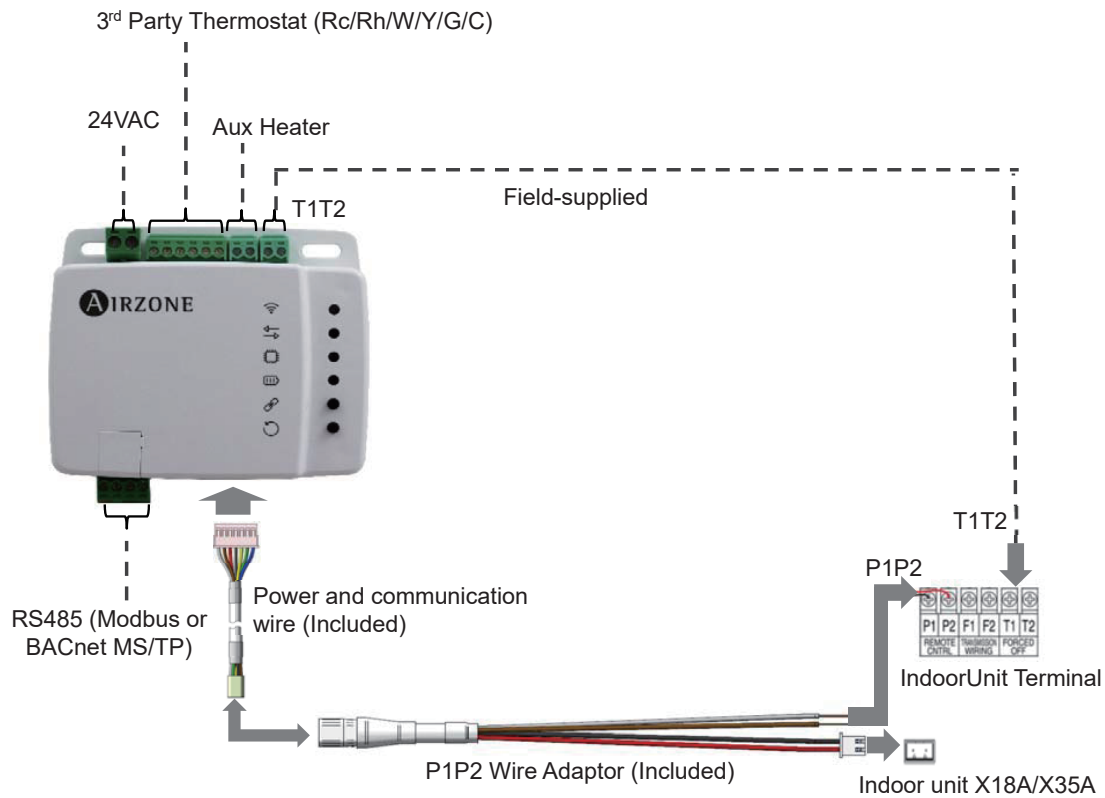


- For P1P2 indoor units:

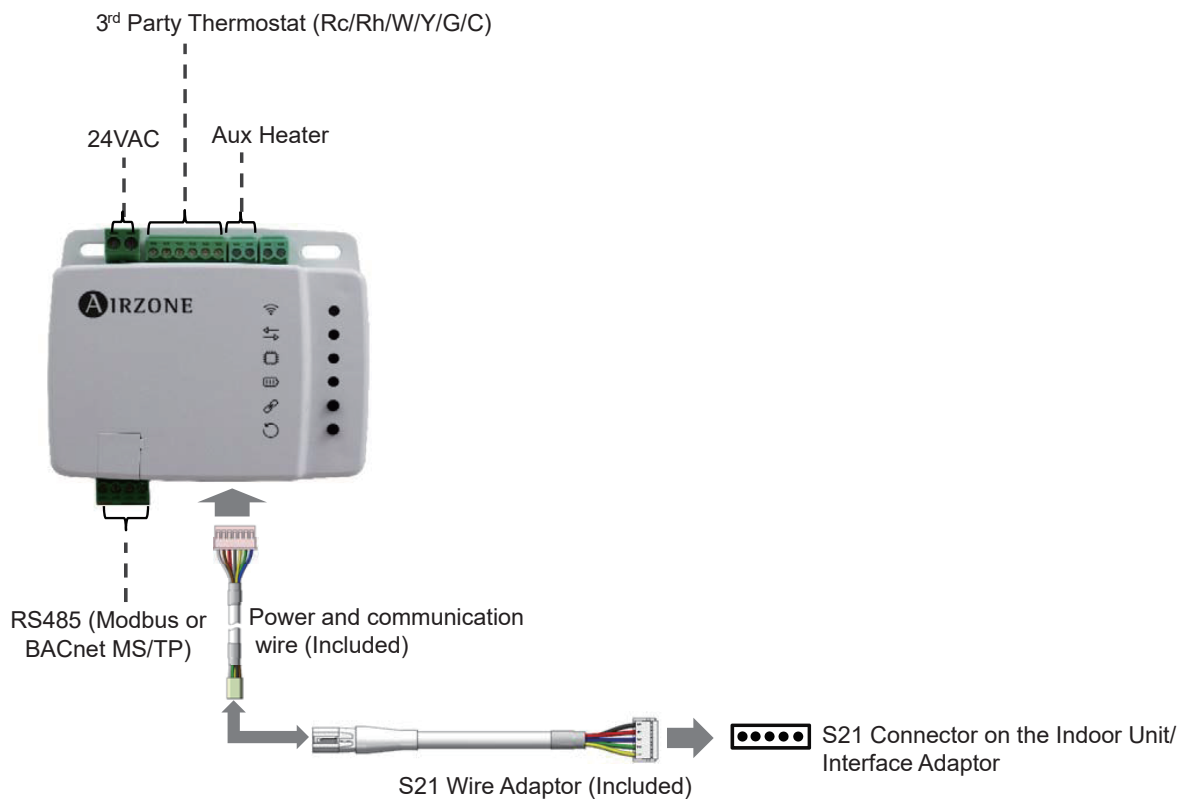


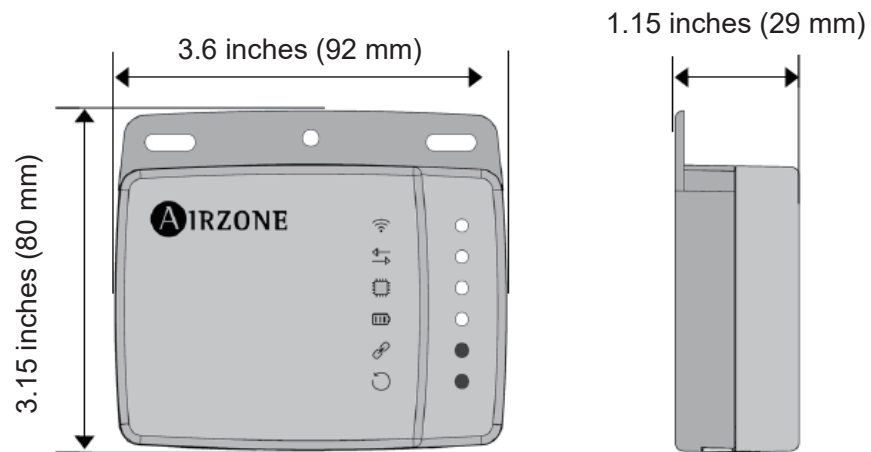
WIRING DIAGRAM:

- Connects to P1P2 indoor unit



- Connects to S21 indoor unit

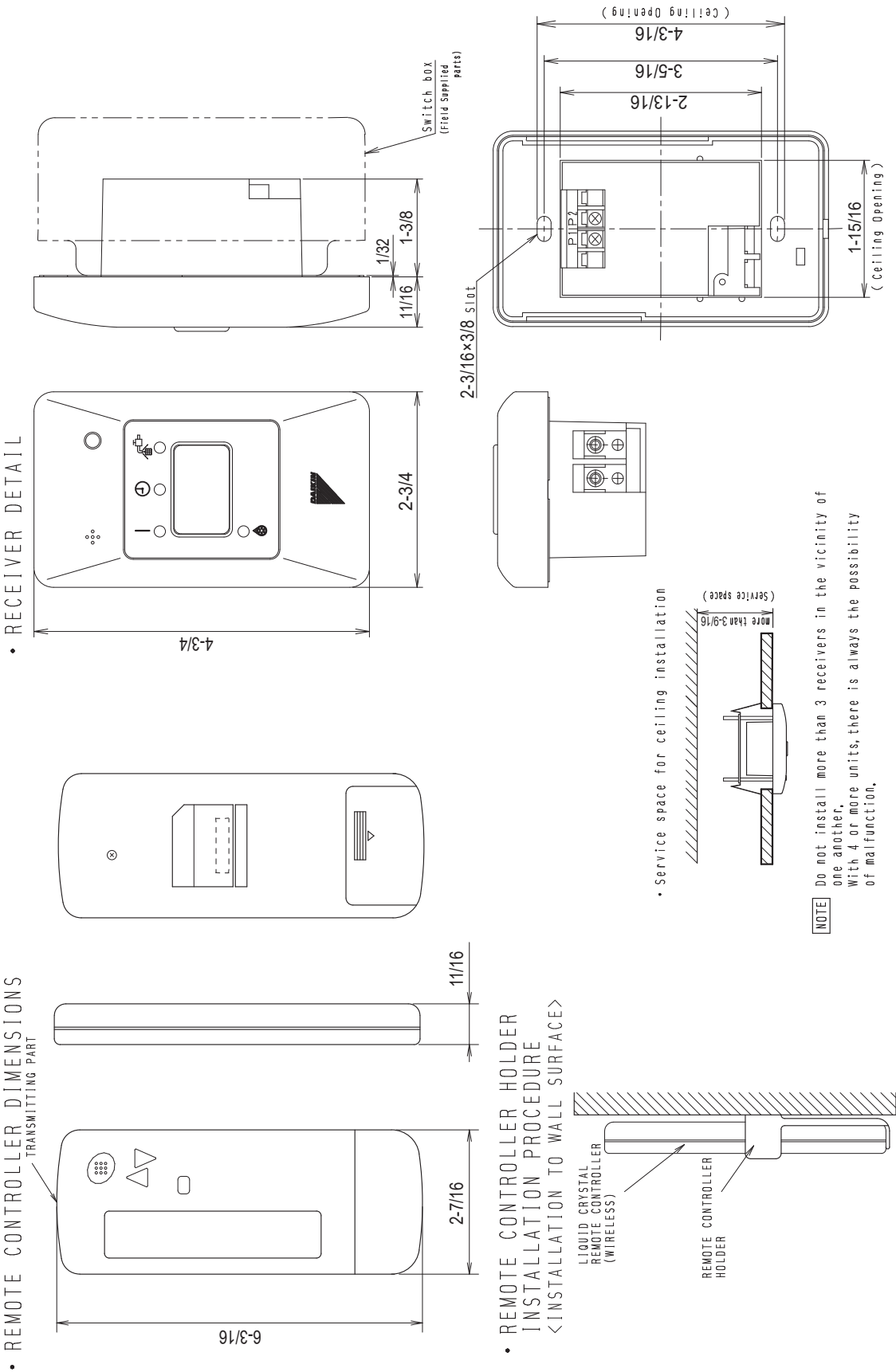


DIMENSIONS:

2.7 BRC4C / 7E / 082A Wireless Remote Controller / Receiver

BRC4C82

Unit : in.

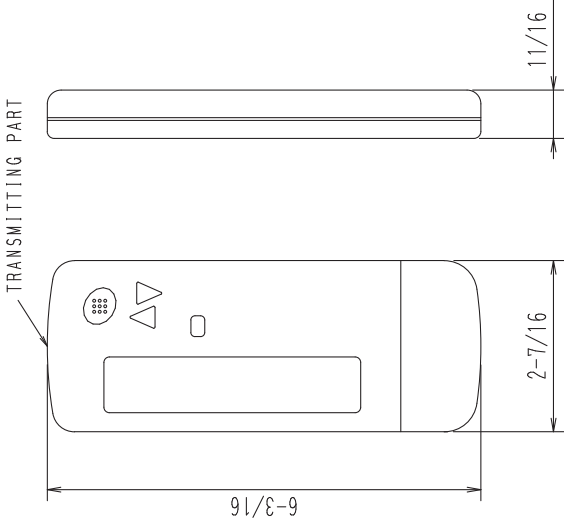


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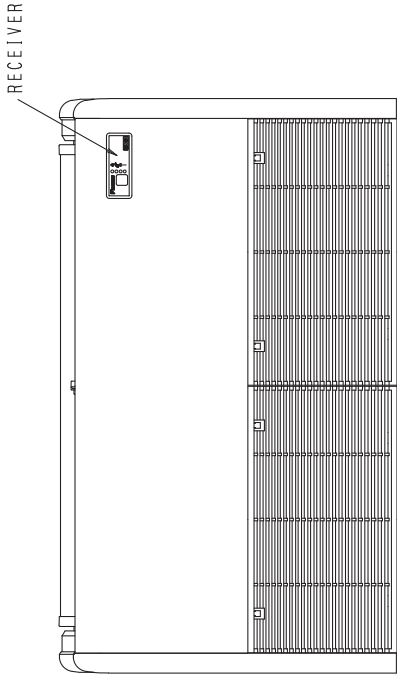
BRC7E83

Unit : in.

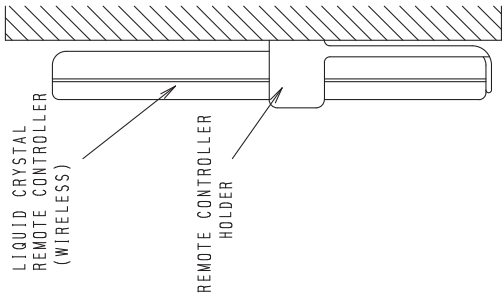
• REMOTE CONTROLLER DIMENSIONS



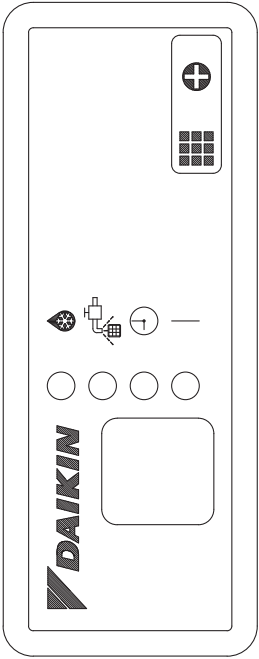
• RECEIVER INSTALLATION PROCEDURE



• REMOTE CONTROLLER HOLDER
INSTALLATION PROCEDURE
<INSTALLATION TO WALL SURFACE>



• RECEIVER DETAIL

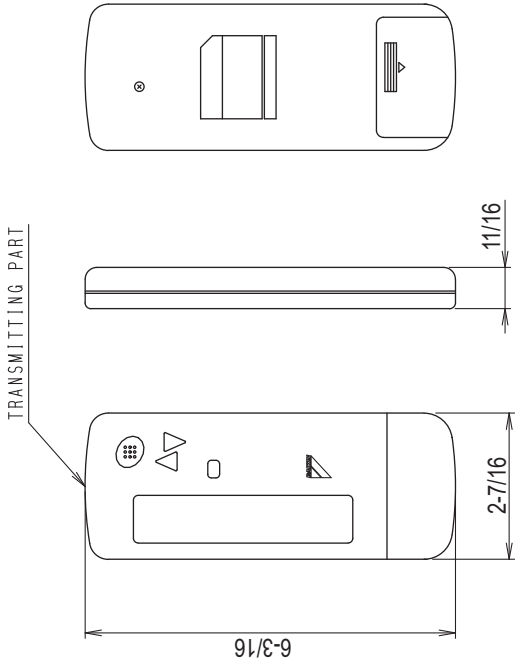


3D049336

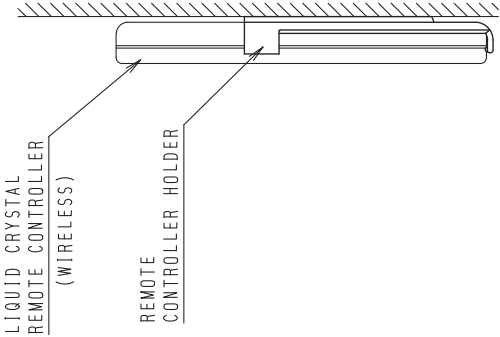
BRC7E818

Unit : in.

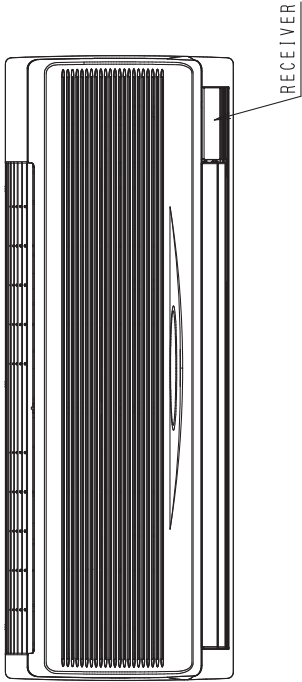
• REMOTE CONTROLLER DIMENSIONS



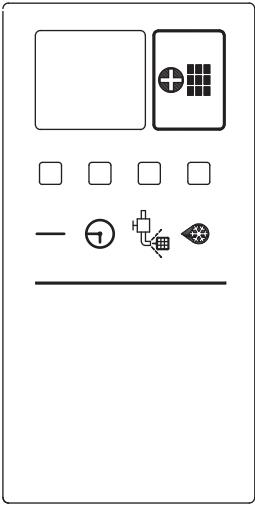
• REMOTE CONTROLLER HOLDER
INSTALLATION PROCEDURE
< INSTALLATION TO WALL SURFACE >



• RECEIVER INSTALLATION PROCEDURE



• RECEIVER DETAIL



• WIRELESS REMOTE CONTROLLER KIT

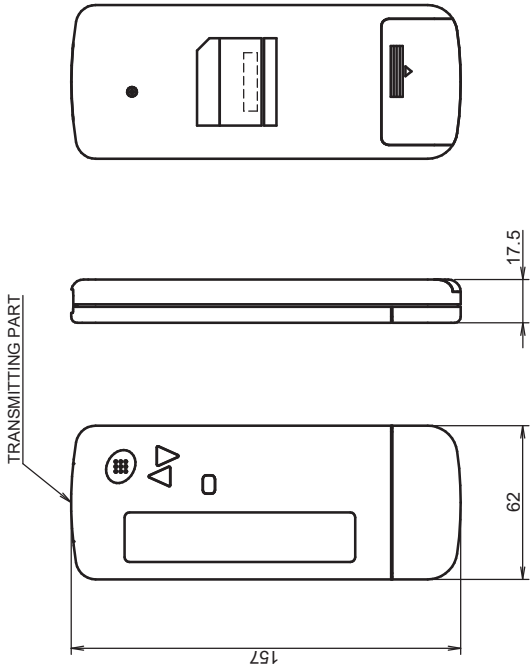
WIRELESS REMOTE CONTROLLER KIT	INDOOR UNIT
BRC7E818	FXAQ ~ MVJU

C: 3D034905B

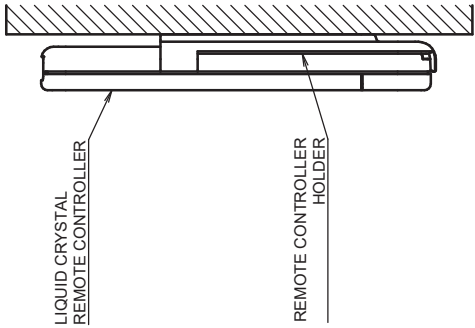
BRC082A42W / BRC082A42S

Unit : in.

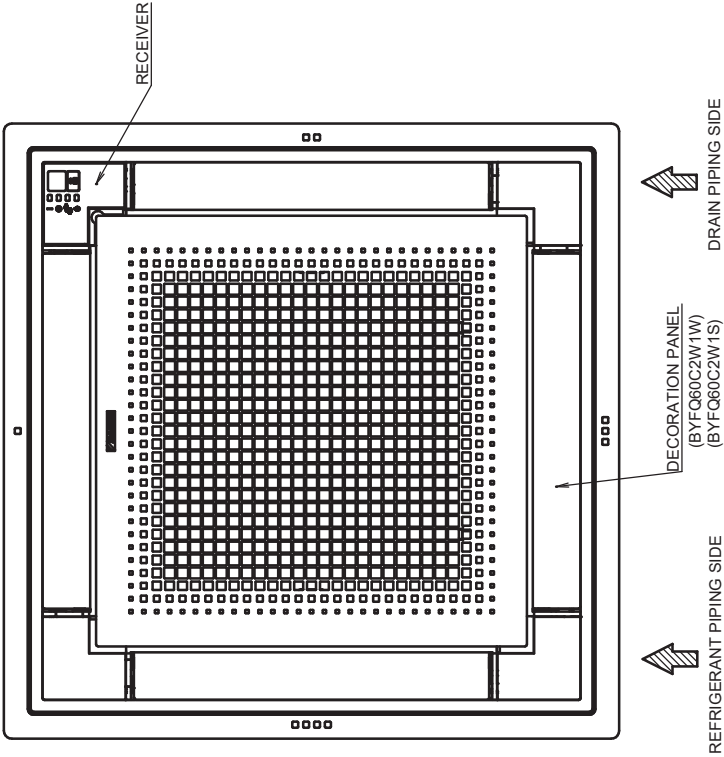
• REMOTE CONTROLLER DIMENSIONS



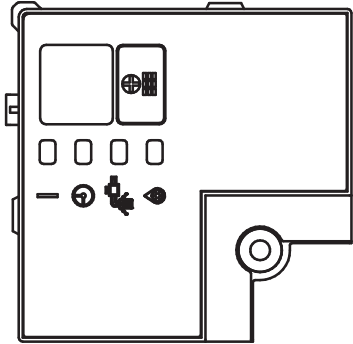
• REMOTE CONTROLLER HOLDER
INSTALLATION PROCEDURE
<INSTALLATION TO WALL SURFACE>



• RECEIVER INSTALLATION PROCEDURE



• RECEIVER DETAIL

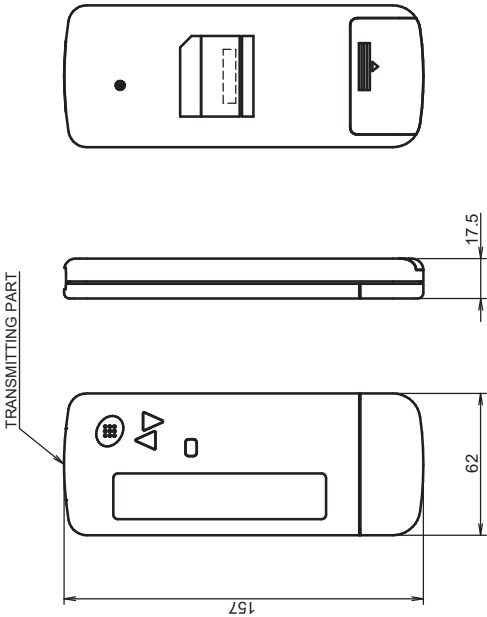


3D082024

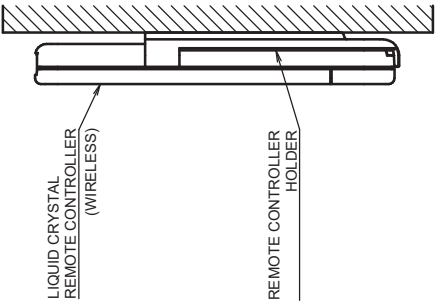
BRC082A41W

Unit : in.

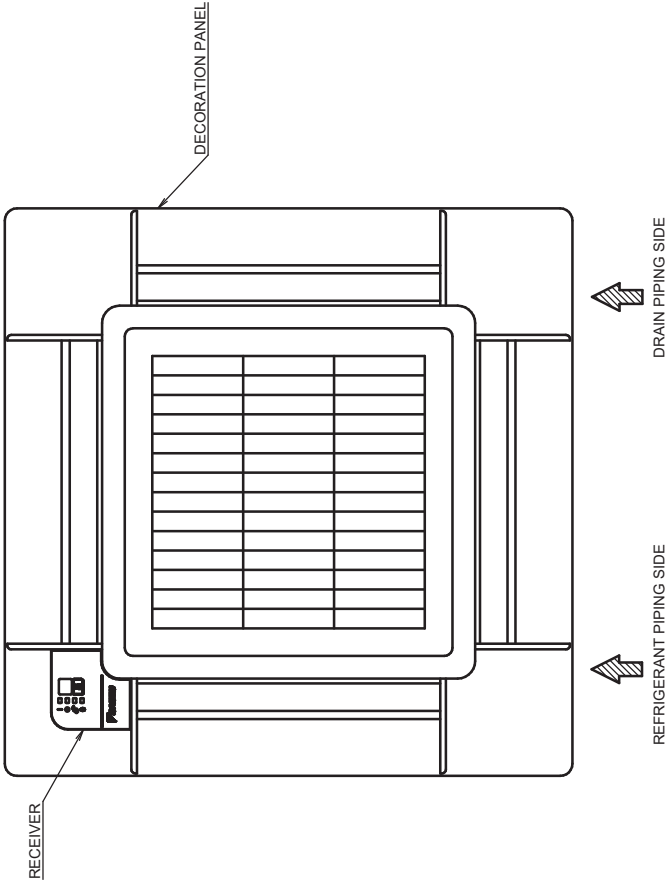
• REMOTE CONTROLLER DIMENSIONS



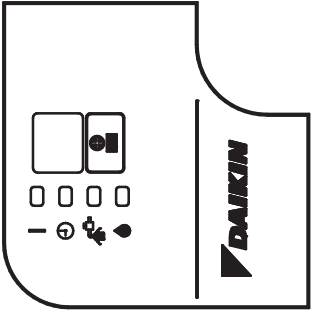
• REMOTE CONTROLLER HOLDER
INSTALLATION PROCEDURE
<INSTALLATION TO WALL SURFACE>



• RECEIVER INSTALLATION PROCEDURE

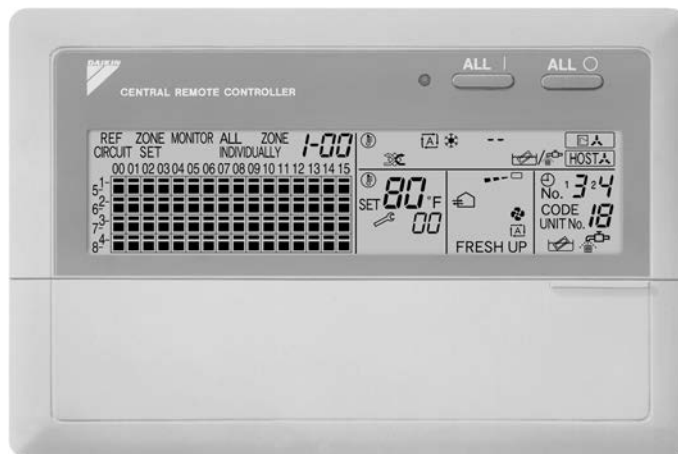


• RECEIVER DETAIL



3D082556A

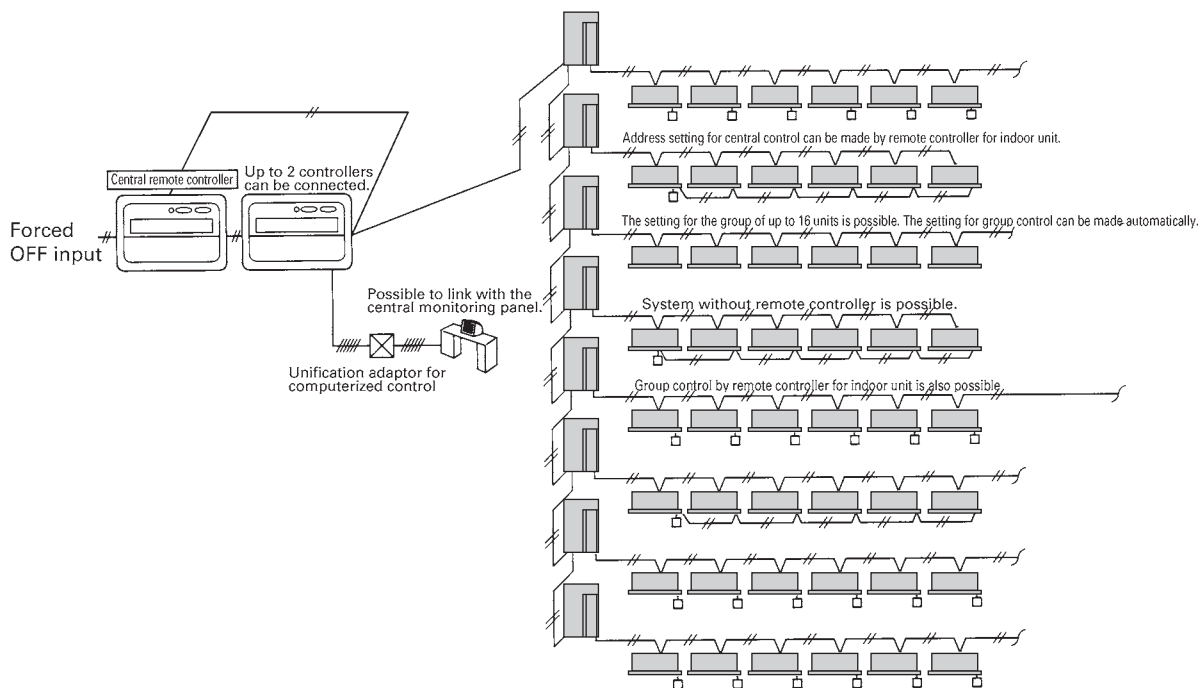
2.8 DCS302C71 Central Remote Controller



- You can connect up to 64 groups of indoor units (max. 128 units); lets you operate or monitor ON/OFF, temperature setting, etc., by zone individually or together.
- Up to 2 units are connectable within 1 system (Up to 4 units in case of the double central control mode)
- Executes zone control for up to 64 zones and is designed for operation efficiency.
- Error contents are displayed in code; maintenance and inspections can be quickly carried out.
- Applicable wiring methods include bus and star in addition to series wiring

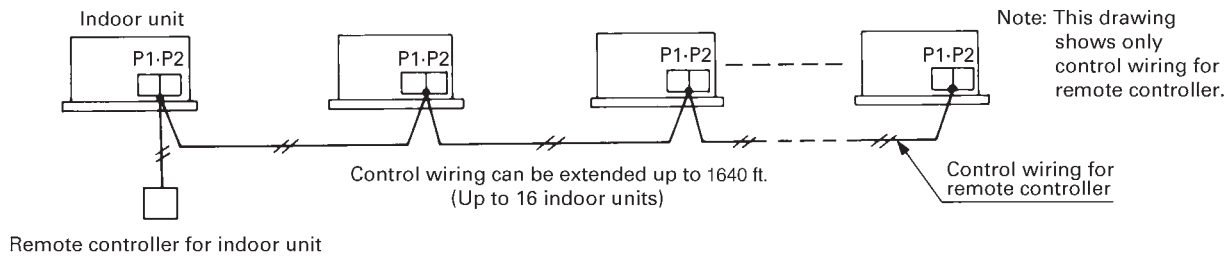
2.8.1 System Configuration

System Outline



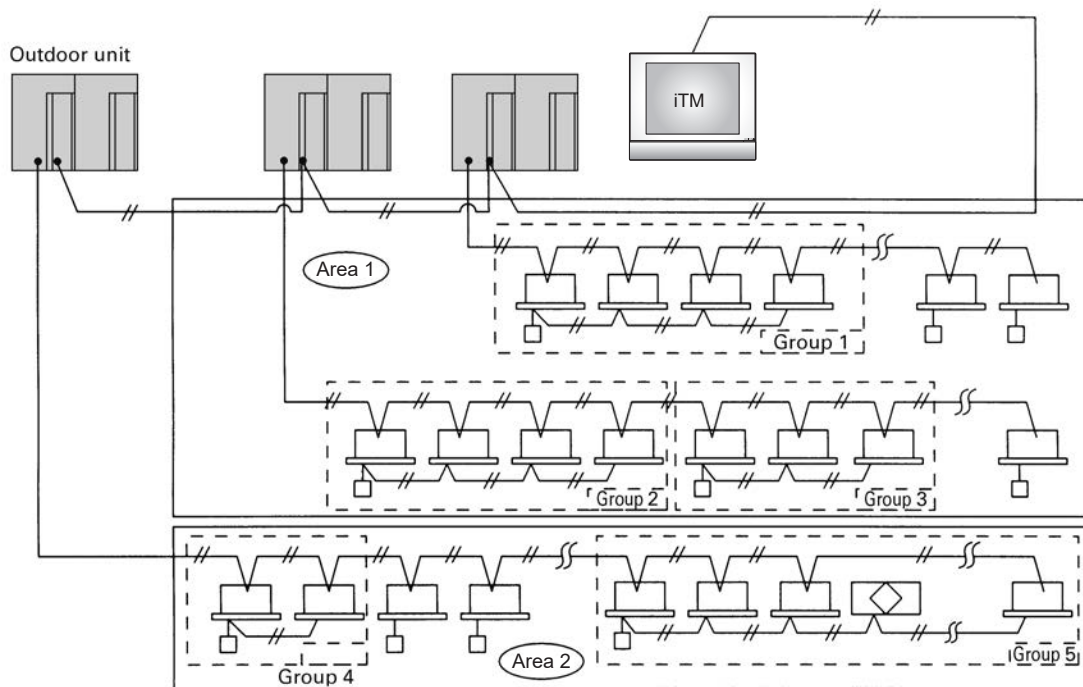
System Configuration (Group / Area Control)

Group control



- The group means the indoor units connected by the same control wiring for remote controller (connected to terminal P1 and P2) and all the unit in group have "the same setting" and "the same operation".
- The indoor units in the group are controlled by the remote controller for indoor unit.
- The number of indoor units in one group is up to 16 units.

Area control



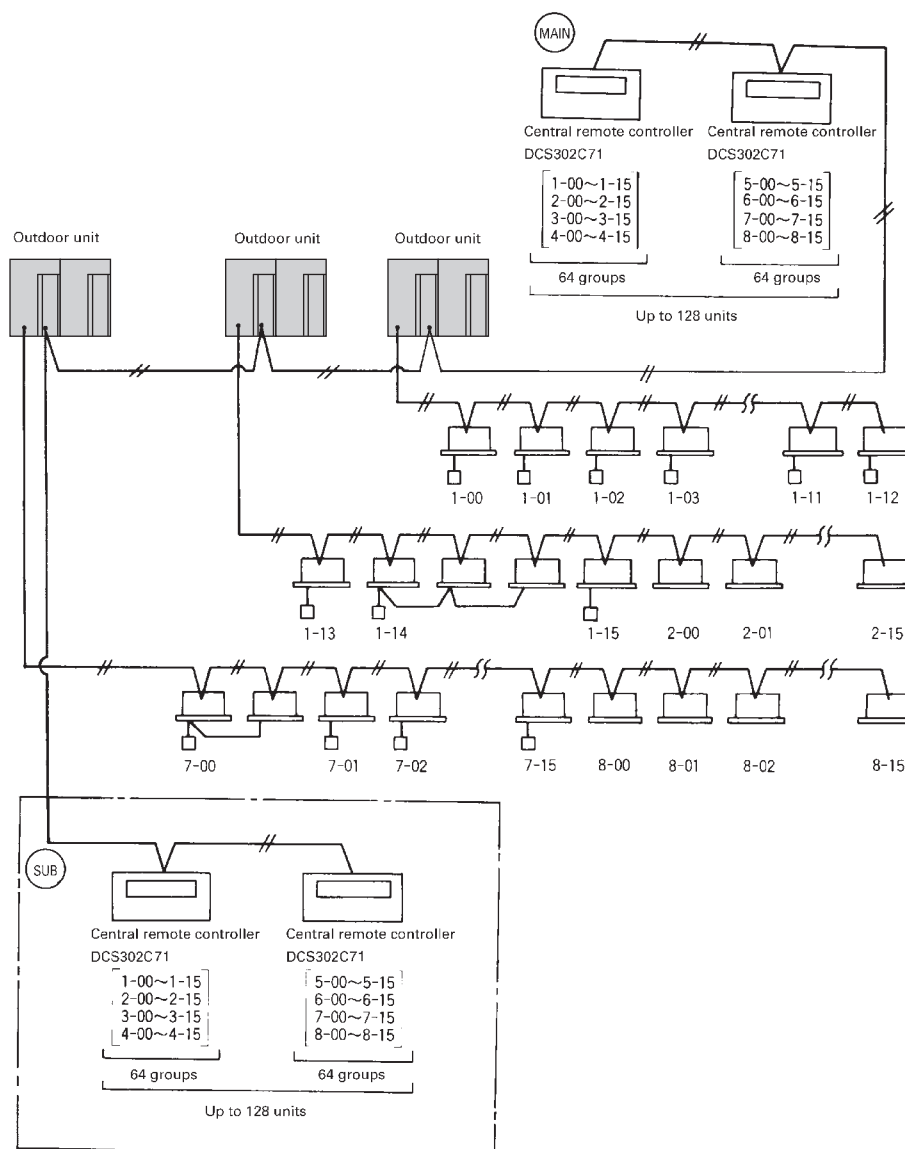
- The Area means the indoor units connected by the same control wiring for central remote controller (connected to terminal F1 and F2) and all the unit in area have "the same setting".
- The Area control of the indoor unit is operated by the central remote controller.
- From 1 up to 64 areas can be controlled by the central remote controller.
- The number of groups you can set in one area is from 1 up to 64 groups.
- Up to 16 units can be set in one group, and up to 64 groups (up to 128 units) can be connected.

System Configuration (Control by 2 central remote controllers)

- Up to 128 indoor units can be connected in one system.
- 2 or 4 central remote controllers are required. It is possible to control the same unit from 2 locations.

Note:

1. Electrical power should be supplied to each central remote controller. (Single phase 100~240 V)
2. When you control by 2 central remote controllers, be sure to set SS3 by the initial setting.



- When you control by 2 central remote controllers. (Last command priority)

Note:

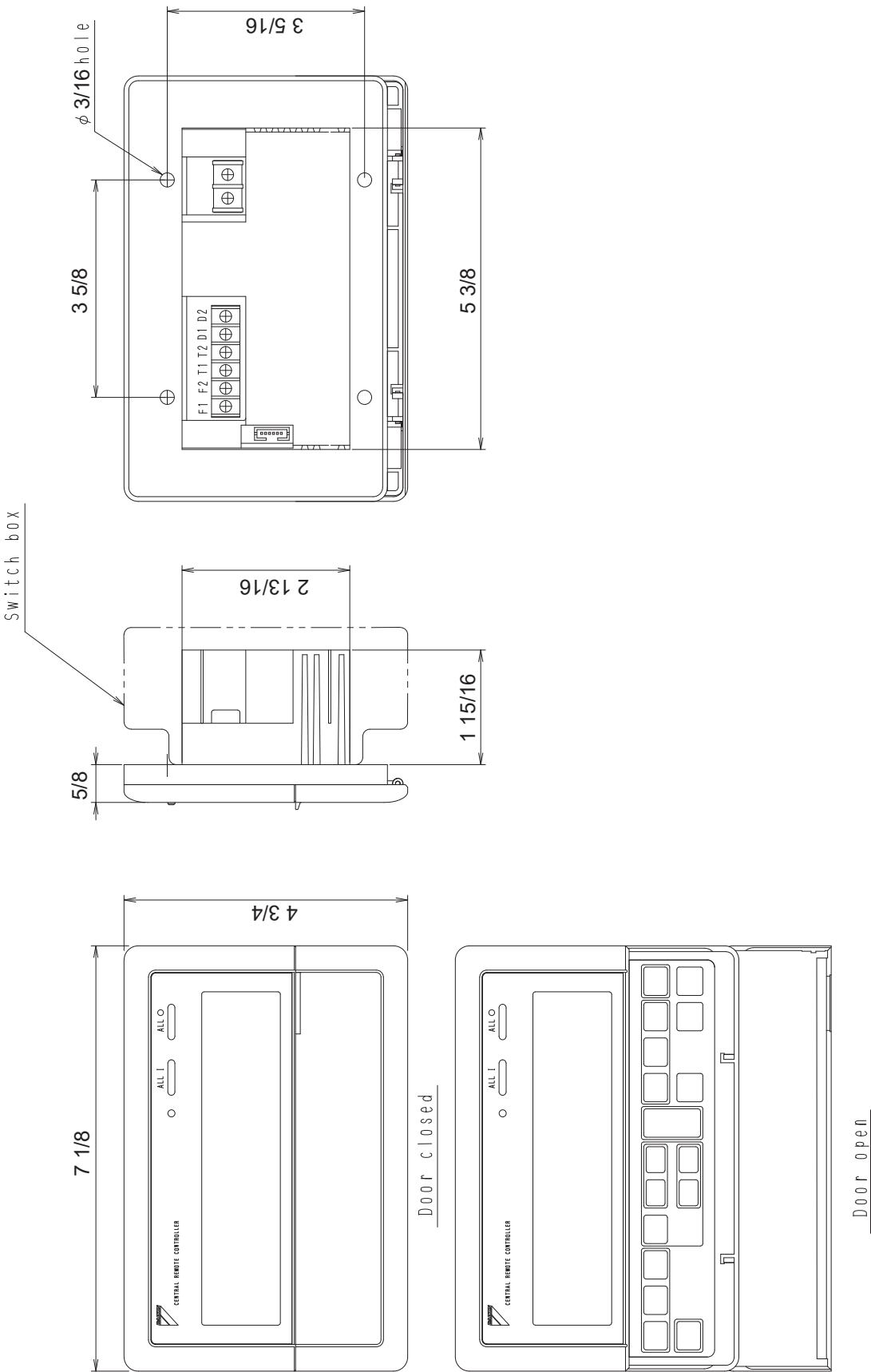
The operation code setting cannot be made by the sub side. Be sure to set by the main side.

2.8.2 Specifications

	DCS302C71
Power supply voltage / frequency	AC100~240 V $\pm$ 10% 50/60 Hz
Power consumption	Max. 8 W
Setting data backup	Non-volatile memory (Data preserved semi-permanently)
Effects of instantaneous power failure	No effect for 20 mili-sec. or less
Forced OFF input Operation on the local side cannot be carried out during forced OFF input.	■ No-voltage normal open contact ■ Micro-current contact capable of handling 16VDC and approx. 10 mA. ■ Max. 492 ft cable length
Operating ambient temperature /humidity condition	-5~40°C, 95% RH or less (no condensation)
Size (width × height × depth)	7 1/8×4 3/4×2 9/16 exposed portion of front panel: 5/8 (Unit: Inch)
Machine Weight (Mass)	Approx. 0.95 lbs

2.8.3 Dimensions

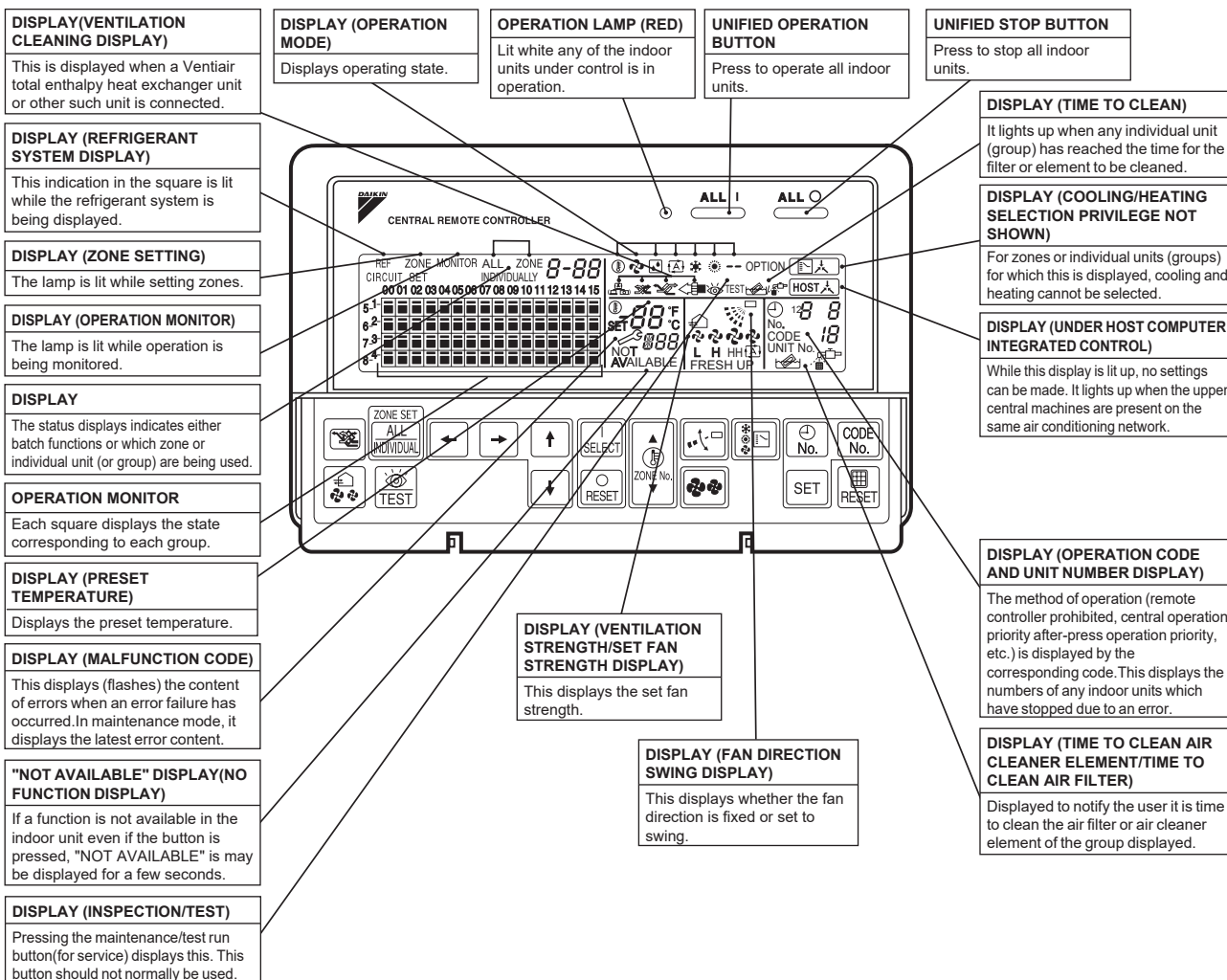
Unit : in.



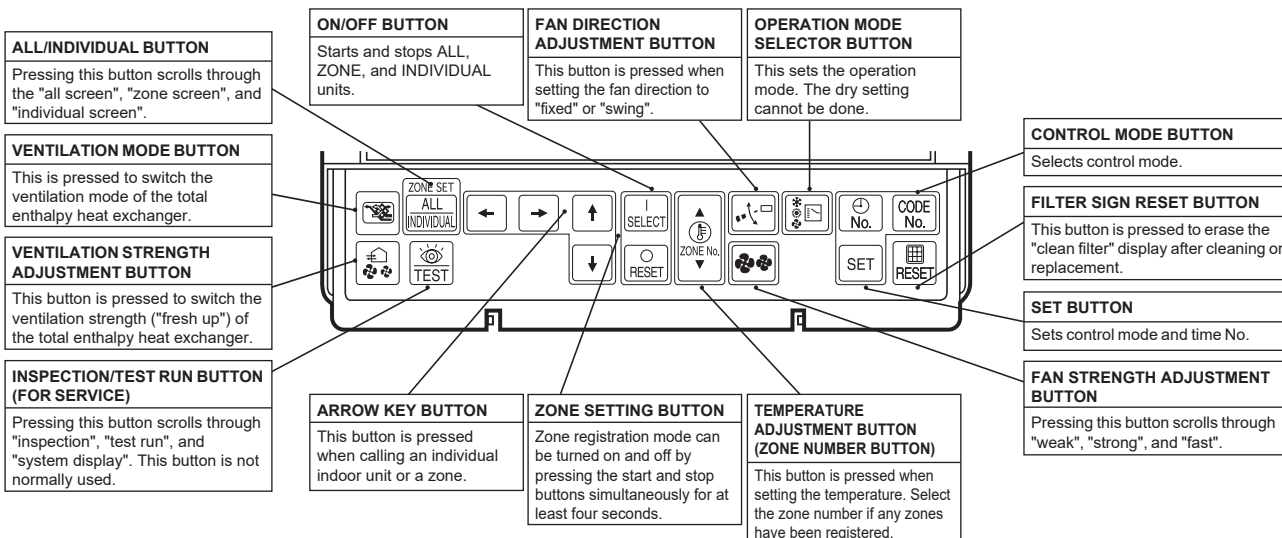
C: 3D043353

2.8.4 Names and Functions of Operating Part

Display part DISPLAY (OPERATION MODE) Displays operating state.



Control Section



2.8.5 Description of Functions

Individual Screen, all Screen, Zone Screen

This controller can perform operations in the individual screen, all screen, or zone screen.

- Individual screen
The individual screen is used when performing group operations.
- All screen
The all screen is used when performing operations for all units at once.
- Zone screen
The zone screen is used when performing zone operations.

Basic Functions

	Descriptions of outline
Individual/Zone control	Up to 64 groups (Max. 128 units and max. 16 units per group) of indoor units and HRV units can be controlled by individually or by zone.
Unified ON/OFF	ON/OFF can be set for each zone, and can be controlled simultaneously for entire system by push button or by contact signal from outside.
Malfunction code display	The status of each group is always displayed, such as ON/OFF, error, etc. If the error occurs, it displays the contents of error by malfunction code through the self-diagnosis function.
Connection of unification adaptor for computerized control	By connecting the unification adaptor for computerized control (option), it can be linked with the central monitoring panel and etc. by contact signal, which enables you to operate ON/OFF simultaneously or monitor the operating status.
Remote control acceptance/rejection	It is possible to restrict the function of local remote controller. (Only ON operation rejection, or ON/OFF operation rejection)
2 central controllers	By connecting two central remote controllers, the same air-conditioner can be controlled from 2 locations (By tenant or administration office.)

Zone Control Functions

	Descriptions of outline
Zone control	The zone function is a function to control one or more group of air-conditioner, and the operation setting such as ON/OFF etc. can be made by zone.
Up to 64 zones	Up to 64 zones (64 groups for each zone) can be set. However, the group setting spreading over the plural zone cannot be set.
Zone register	When the power is supplied first time, each group is registered in each respective zone. If you can simply register the several groups in the same zone by switch, so that you can have simultaneous operation of the units in that zone immediately. (The operation of temperature setting and etc. is also controlled by zone simultaneously.)
Zone setting	By adding the zone setting function (Zone "0") from the central remote controller, you can set the same setting for all the zone registered by single operation.
ON/OFF control of zone	For example, if there are three groups in one room and if you register these three groups as one zone, you can operate these three groups simultaneously by single operation (ON/OFF, temperature setting etc.). You still can operate each group individually by local remote controller.
Maintaining zone setting	Even if the power is turned off, the zone configurations set are maintained semi-permanently. (saved in non-volatile memory)
Cool/Heat changeover by zone	The cool/heat changeover can be made by zone. However, it is required to have a master group for Cool/Heat changeover in that zone.
Batch operation	The same setup is possible at one operation to all the groups registered on the "All" screen.
No local remote controller	Even if there is no local remote controller, you can still perform the same operation. There is no problem even if no remote controller is connected. (However, in this case, each one air-conditioner consists of one group.)
Connection to central monitoring panel	You can also combine with an Interface for use in BACnet and a data station in order to connect to the central monitoring panel. A parallel interface can also be connected.

Cool/Heat Changeover and Eligibility Setting

	Descriptions of outline
Possible control	The operation mode of the outdoor unit can be changed by the local remote controller or by the central remote controller. (For test operation, change setting of cool/heat selector switch of the outdoor unit.)
Remote controller acceptance/rejection	You can set the remote controller acceptance/rejection on the central remote controller by the local remote controller.
"NOT AVAILABLE" DISPLAY (NO FUNCTION DISPLAY)	If a function is not available in the indoor unit even if the button is pressed, "NOT AVAILABLE" is may be displayed for a few seconds.

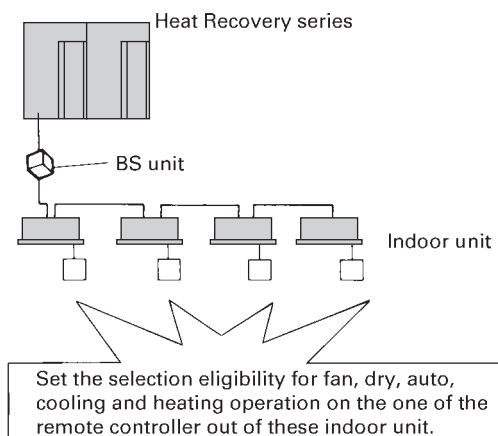
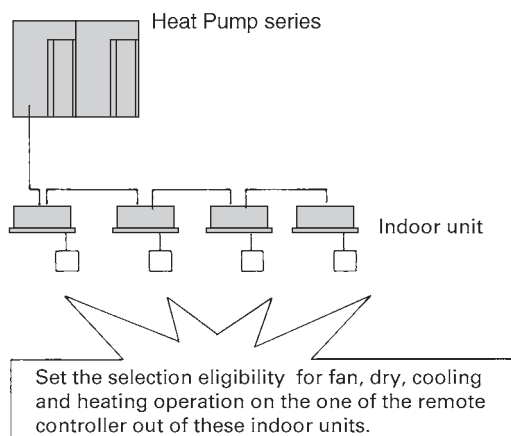
Note:

Refer to the next page for the selection of cool/heat mode (eligibility for cool/heat changeover).

Cool/heat Selection Eligibility Setting by Remote Controller for Indoor Unit

The outdoor unit of can freely be selected the operation mode (fan, dry, auto [Heat Recovery only], cooling or heating) by the remote controller for indoor unit. However, you have to set the selection eligibility for fan, dry, cooling and heating operation on the one of the remote controller out of the indoor units connected to the outdoor unit. For Heat Recovery series and the function unit (for heat recovery), if 2 or more indoor units are connected to one Branch Selector unit, you have to set the selection eligibility for fan, dry, auto, cooling and heating operation on the one of the remote controller out of the indoor units connected to the Branch Selector unit.

(Only remote controller having the selection eligibility can change the operation mode.)



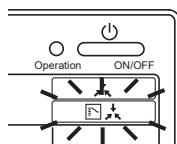
Setting method of the selection eligibility for cool/heat

1. Preparation

- When turning on the power first time, "CHANGEOVER UNDER CONTROL" sign blinks.

When you set;

Continue to push **[Operation switch]** for about 4 seconds.  sign blinks on all the indoor units connected to the outdoor unit or Branch Selector unit.



2. Selection Eligibility Setting

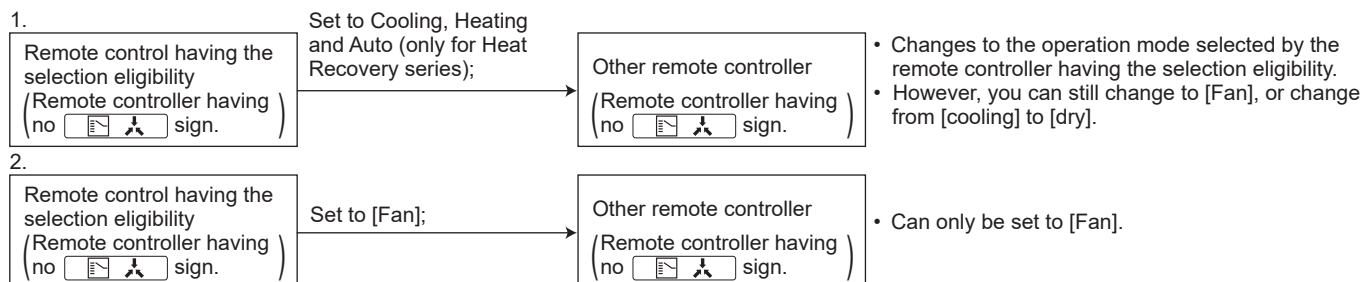
Push **[Operation switch]** of the remote controller, which you want to set the selection eligibility. This completes the setting procedure. Cool/heat selection eligibility is set for that remote controller, and  sign goes off.

 still blinks on all other remote controllers.

3. Operation mode changeover

Push **[Operation switch]** of remote controller having the selection eligibility (The remote controller not displaying  sign) several times to select the desired operation mode. [Fan], [Dry], [Auto](only for Heat Recovery series), [Cooling] and [Heating] mode are selected each time you push the **[Operation switch]**. Operation mode of other remote controllers, which has no selection eligibility, is also switched automatically.

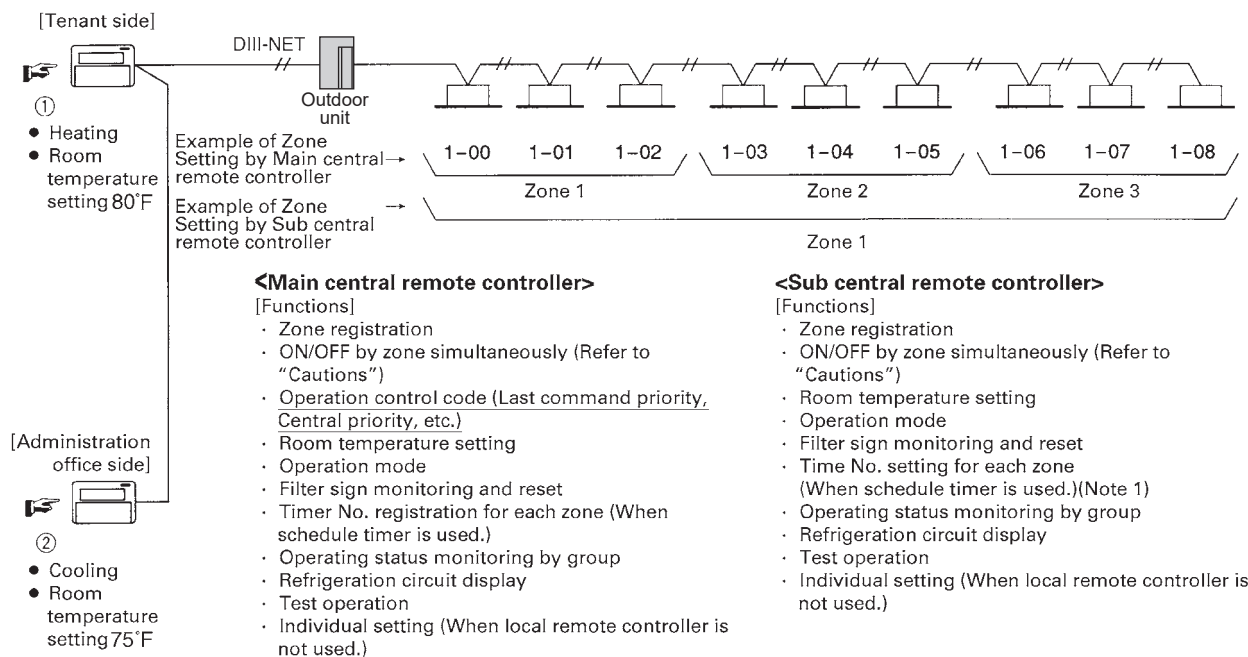
Description of operation and its function



* It is also possible to set the selection eligibility on the wireless remote controller.
It does not possible to set the "Dry" by the Central Remote Controller.

Control with Two Central Remote Controllers

The central remote control equipment is newly designed to "B" type, which has been added with a new control function for 2 central remote controllers. However, be sure that the relation between Main/Sub of the central remote controller is different from those of local remote controllers.



Note:

Be sure that if timer No. is registered by the sub central remote controller, [Timer mode acceptance for local remote controller (mode no. 8,9,18, and 19)] for the same units set by the Main remote controller becomes meaningless (operates when time comes.).

Explanation of the above figure

If you operate the central remote controller in the sequence of ① and ②, the indoor unit is set for cooling / temperature setting 75°F. However, the display of zone setting of the master remote controller remains at heating / temperature setting at 80°F.

Cautions

- Operation code cannot be set by the sub central remote controller.
- Combined zone operation can only be set by zone registration of the main central remote controller.
- Both main and sub central remote controller are operated by a Last priority command for the functions other than the above.
- However, the display on the central remote controller cannot be changed by each other. (On the display for the group, you can monitor the present operation status.)

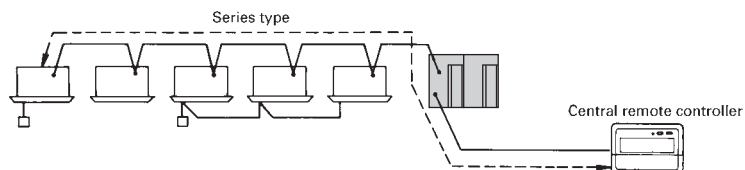
2.8.6 Wiring Instructions

Wiring instructions

For control wiring of DIII-NET, you can select from the following 3 types of wiring methods.

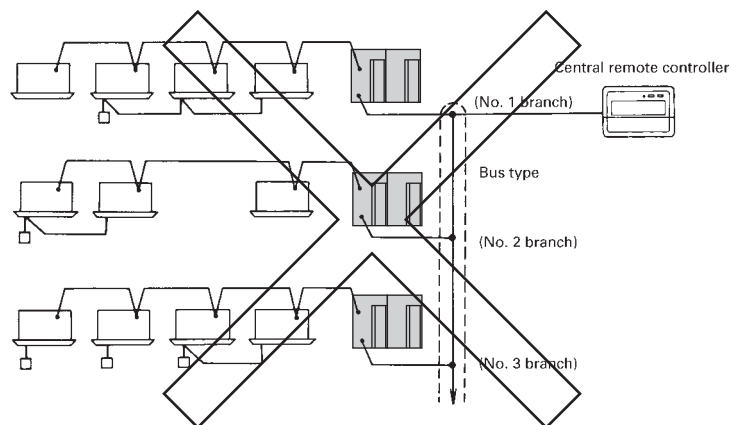
1. Series method

Wiring is connected by a single line from the central controller.



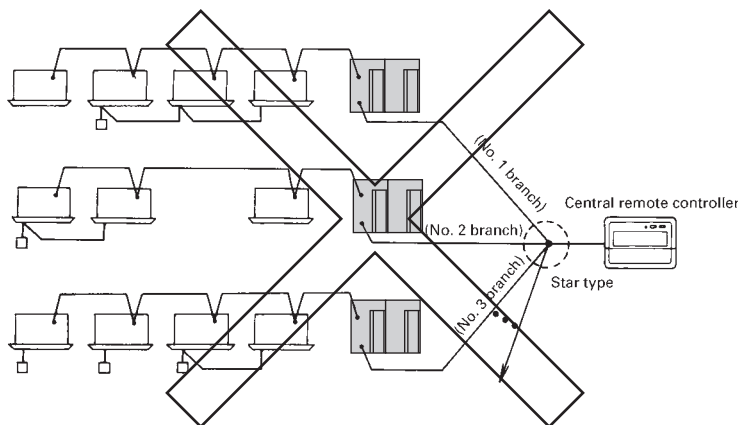
2. Bus method

Up to 16 branches is possible. Never diverge the sub-branches from the branch line.



3. Star method

Up to 16 branches is possible. Never diverge the sub-branches from the branch line.



Specifications of Transmission Wiring

Be sure to use either 2-core sheathed vinyl cord or cable as mentioned below. The size of wire should be selected in the range of AWG 18 or AWG 16.

Length of control wiring

Between central remote controller and air-conditioner

Maximum extension : 3280 ft, Total length : 6560 ft (*1)

Note:

*1. When you have branches, be sure to make a total length of all the branch.

2.8.7 Instructions for Initial Setting

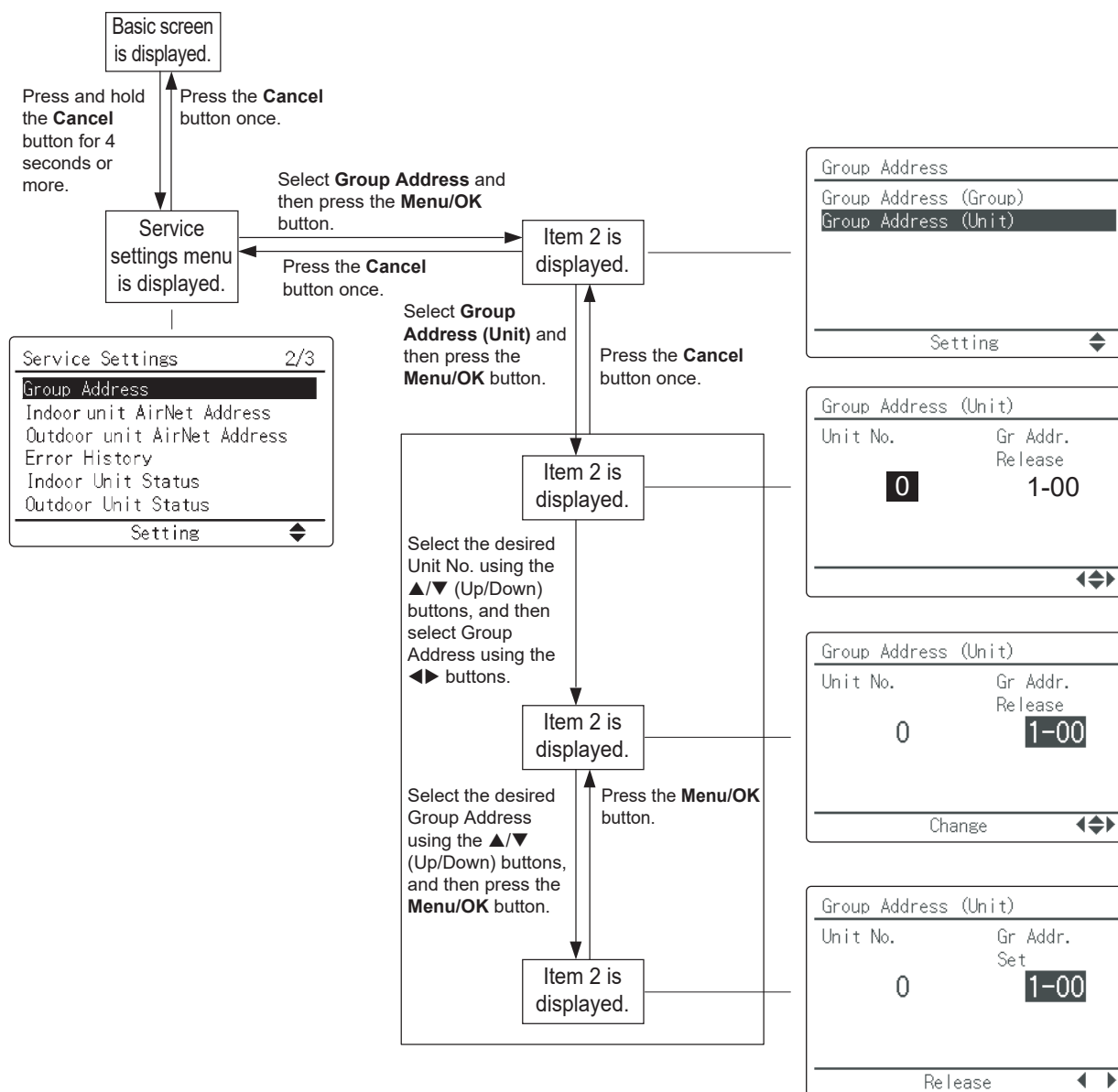
Group No. Setting for Central Control Equipment

Group No. should be set for each group by the remote controller for indoor unit, when you operate the system with central remote controller. (For the same control group, set only one of the unit.)

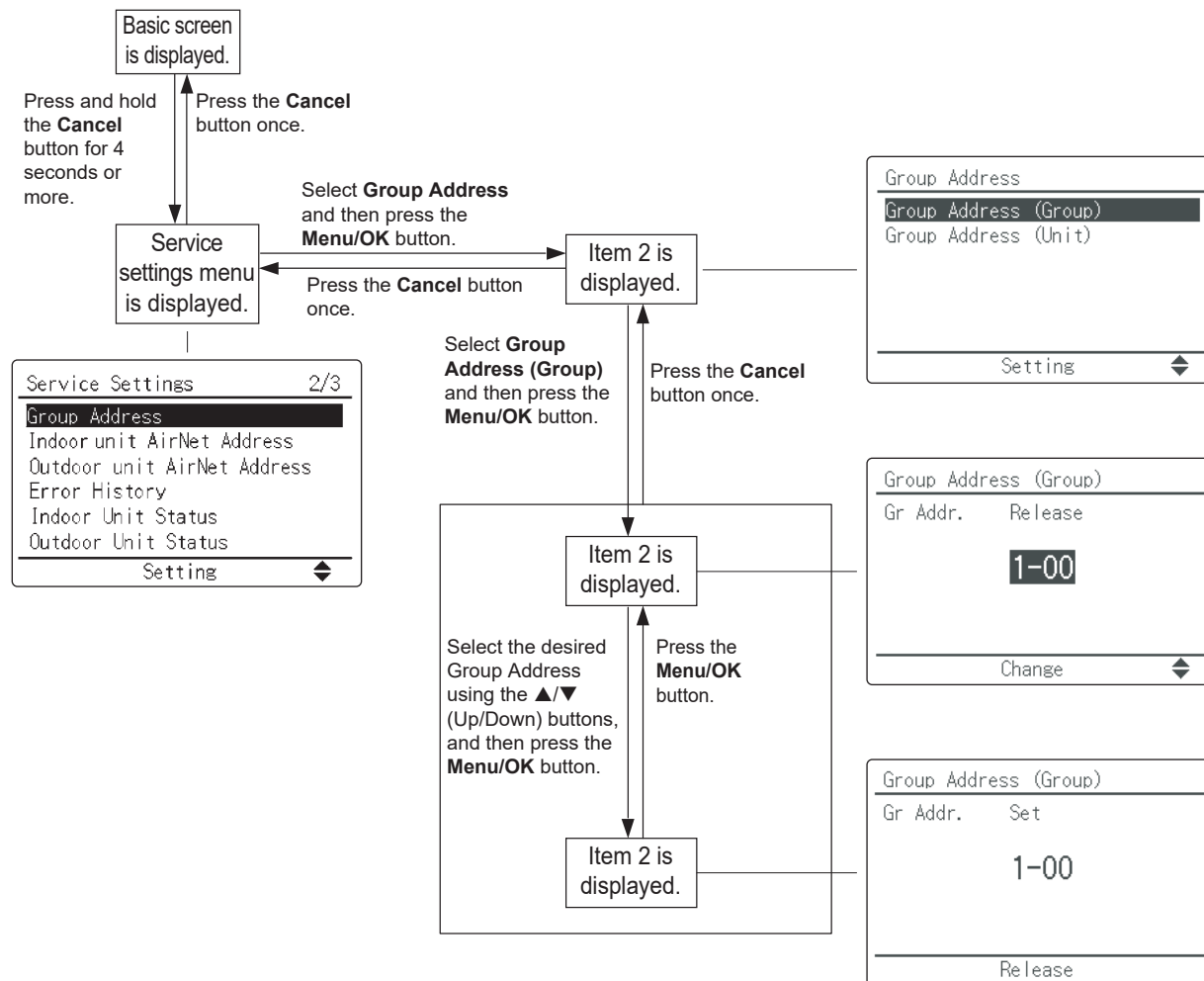
For setting group No. of Energy recovery ventilator and wiring adaptor for other air conditioners, etc., refer to the instruction manual.

Remote controller for indoor unit

■ Group Address (Unit)



■ Group Address (Group)



2.9 DCM601A71 intelligent Touch Manager

2.9.1 Feature

The intelligent Touch Manager (iTM) is an advanced multi-zone controller that controls and monitors the Daikin **VRV** system. The iTM can also provide a cost-effective mini Building Management System (BMS) solution to integrate and control third-party devices through optional software and hardware. If a BMS already exists, the iTM can be used as a BACnet gateway interface for BMS integration with iTM BACnet Server Gateway Option.



■ Easy Operation and Configuration

- Intuitive user interface with 10.4" LCD touch screen
- Flexible screen views includes the icon view, list view and layout view for system configurations
- Easy engineering with use of the Preset Tool and USB port

■ Advanced Control Logic

- Independent Cool and Heat setpoints or Single setpoint in the occupied period
- Independent Setback setpoints in the unoccupied period
- Weekly Schedule with Optimum Start and Timed Override
- Auto Changeover with configurable methods

■ Facility Management and Billing

- Remote Web access
- Automatic Error and Alert emails
- Tenant Billing with the iTM PPD option

■ Mini BMS Solution with Software and Hardware Options

- Interlock and Emergency Stop for facility management
- DI, DO, AI, AO points integrated via the WAGO I/O System
- BACnet points (AI, AO, AV, BI, BO, BV, MSI, MSO, MSV) integrated with the iTM BACnet Client Option

■ BACnet Server Gateway Option

- Direct connection to the **VRV** system using the iTM as a gateway
- Individual device ID assigned to each indoor unit group and outdoor unit
- Seamless control logic integration between the iTM and BMS
- Greatly reduces the need for BMS integrator programming

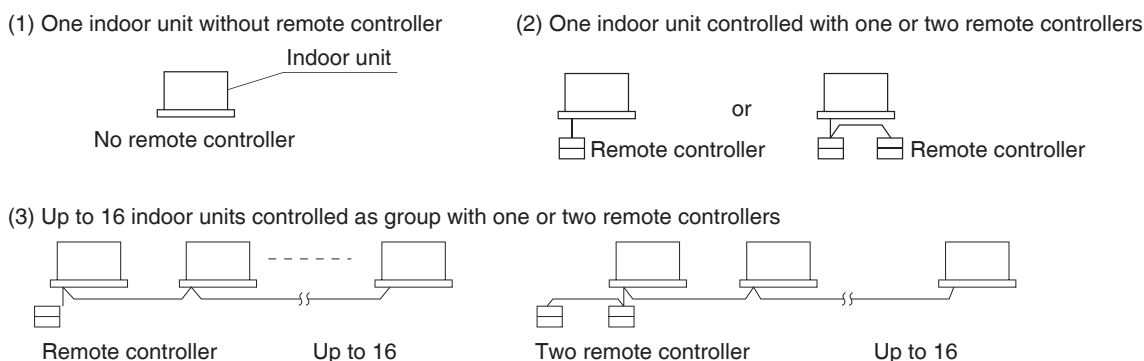
■ Built-in Service Tool with Remote Access

- Operation data are stored in the iTM for the last 5 days:
 - Indoor unit and outdoor unit operation data
 - BACnet Client objects
 - WAGO I/O system data
- Operation data can be exported through a USB drive or through the iTM web browser remotely
- BMS can monitor the BACnet objects of indoor unit and outdoor unit operation data with the BACnet Server Gateway Option activated

2.9.2 System Overview

- iTM is an advanced central controller operated by using a 10.4" touch panel. It allows you to easily monitor as well as operate air conditioners and generic equipment connected to the iTM from the touch panel.
- One iTM can monitor and control a maximum of 64 groups of indoor units (128 units), including Ventilator. The iTM can be expanded with up to a maximum of 7 iTM plus adaptors, which similarly to the iTM, can connect a maximum of 64 groups of indoor units (128 units); that is, with one iTM you can control and monitor a maximum of 512 groups of indoor units (1024 units).

A group of indoor units refers to the following:

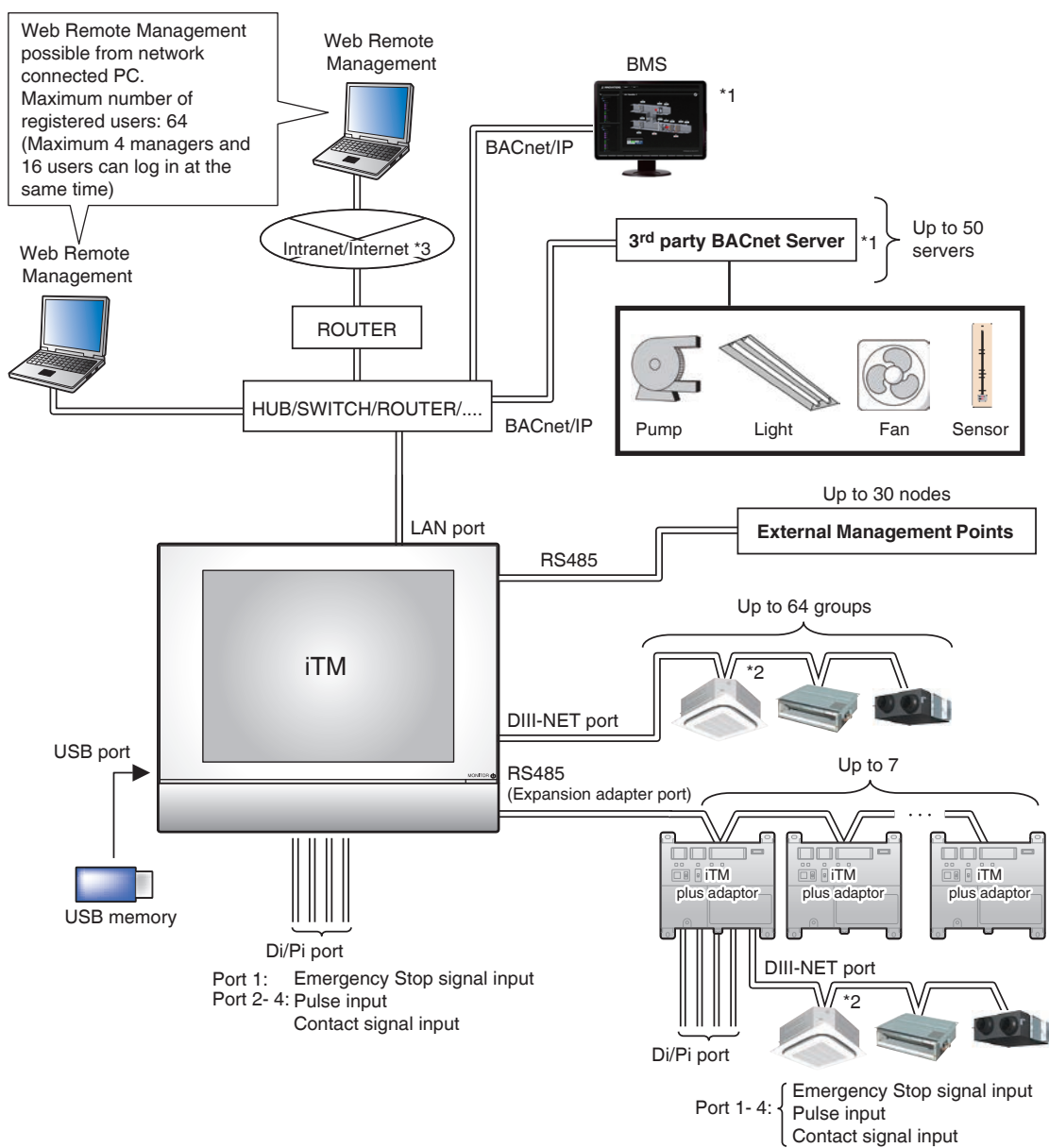


- The iTM allows you to define privileges for Users and Managers, so that you can set up and manage them according to their respective privileges. Furthermore, by connecting the iTM with computers in a LAN, you can set up Web Remote Management and allow a maximum of 4 managers and 16 users to simultaneously access the iTM, and if a connection to the Internet is available, then, you can monitor and operate the iTM remotely, via the Internet.
- The iTM allows you to schedule the operation of each air conditioner in detail.
You can set up an annual schedule by setting up a schedule by the day of the week and defining Special Days such as extra holidays.
Changes by the season are achieved by setting up a validity period to programs.
- By using optional functions, you can display the floor plan of individual buildings and the like as background on the iTM monitoring screen, and monitor and operate by viewing the actual layout of the air conditioners.
- You can use Interlocking Control to start/stop air conditioners in conjunction with other equipment or Setback function to save energy.
- You can use Power Proportional Distribution function (option software) to distribute the electric bill among tenants.
- By connecting a USB memory to the iTM, you can output billing data, budget/actual energy consumption data, function settings, history data, etc. to a CSV file.

NOTE

- Periodical data saving is recommended in order to prevent loss of your important data due to an accidental problem.

2.9.3 System Configuration



EM11A017F

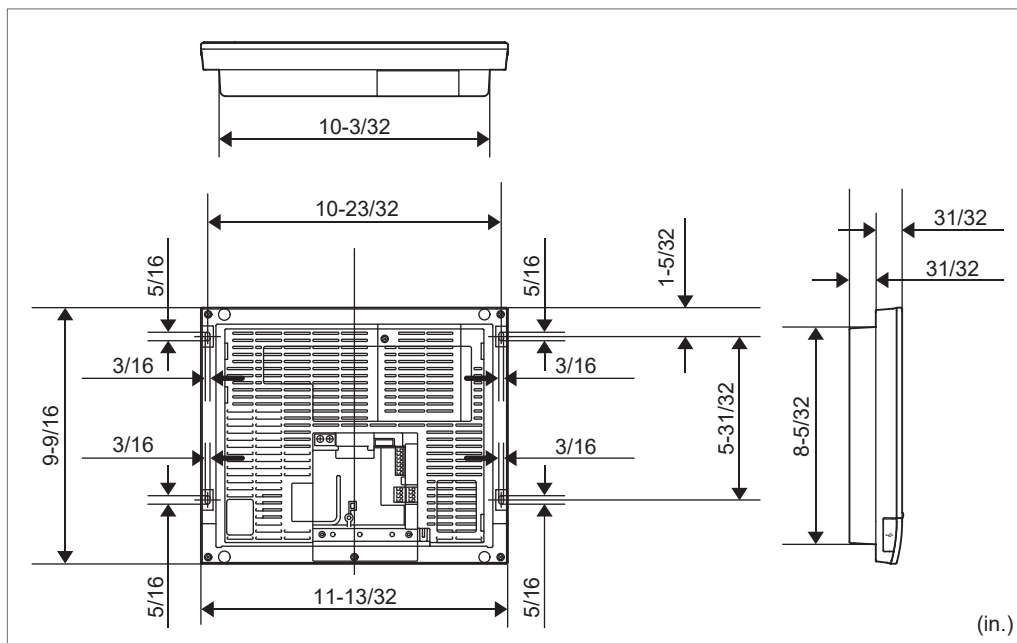
2.9.4 Specification

Model	DCM601A71	
Power supply	AC 24 V, 60 Hz	
Power consumption	23 W maximum	
Operating conditions	Surrounding temperature	32 °F to 104 °F
	Humidity	15% to 85% RH (non condensing)
Dimensions	H x W x D (inch)	9.57 x 11.42 x 1.97
Capacity	Max. number of indoor unit	64 addressed indoor unit groups (maximum 128 indoor units)
	Max. number of outdoor unit	10
Interface	F1F2 (Daikin DIII-NET communication)	1
	100Base-TX (Ethernet communication)	1 (RJ-45)
	USB port (for flash memory drive)	1 (2 to 32 GB)
	RS-485 (for iTM Plus Adaptor connection)	1 (2-wire polarity sensitive)
Input terminals	Di (Digital input for forced shutdown)	1
	Di/Pi (Digital/Pulse input)*	3
EMC certification	FCC Part 15 Class B	

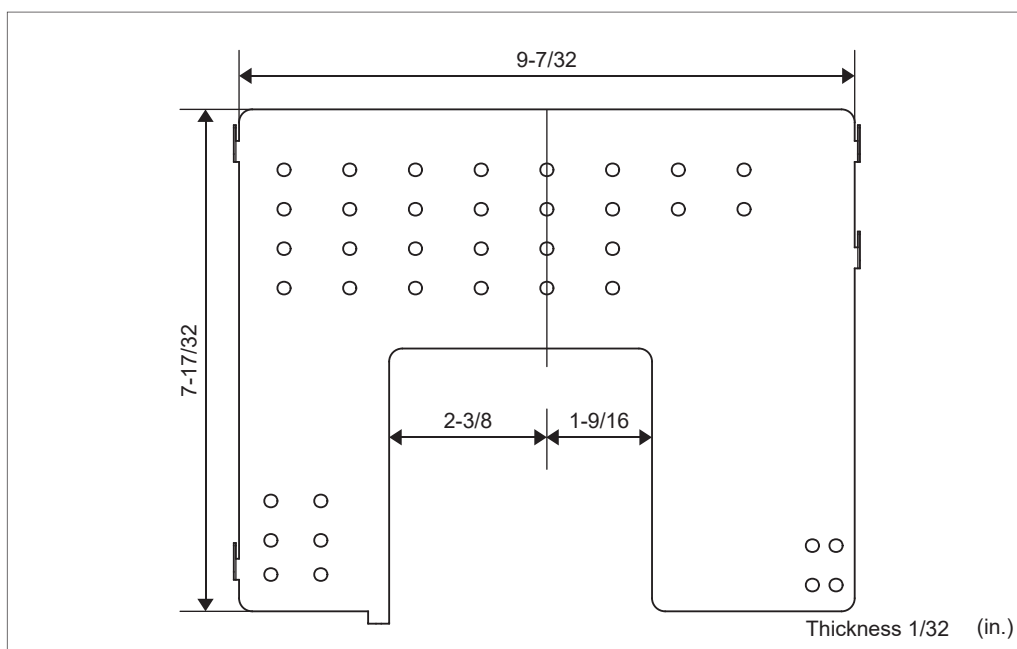
* Pulse input from kWh meter requirements: 1 pulse to 1kWh or 10kWh. Pulse width must be between 40-400 msec.
Non voltage, normally open semi-conductor type.

2.9.5 Dimension

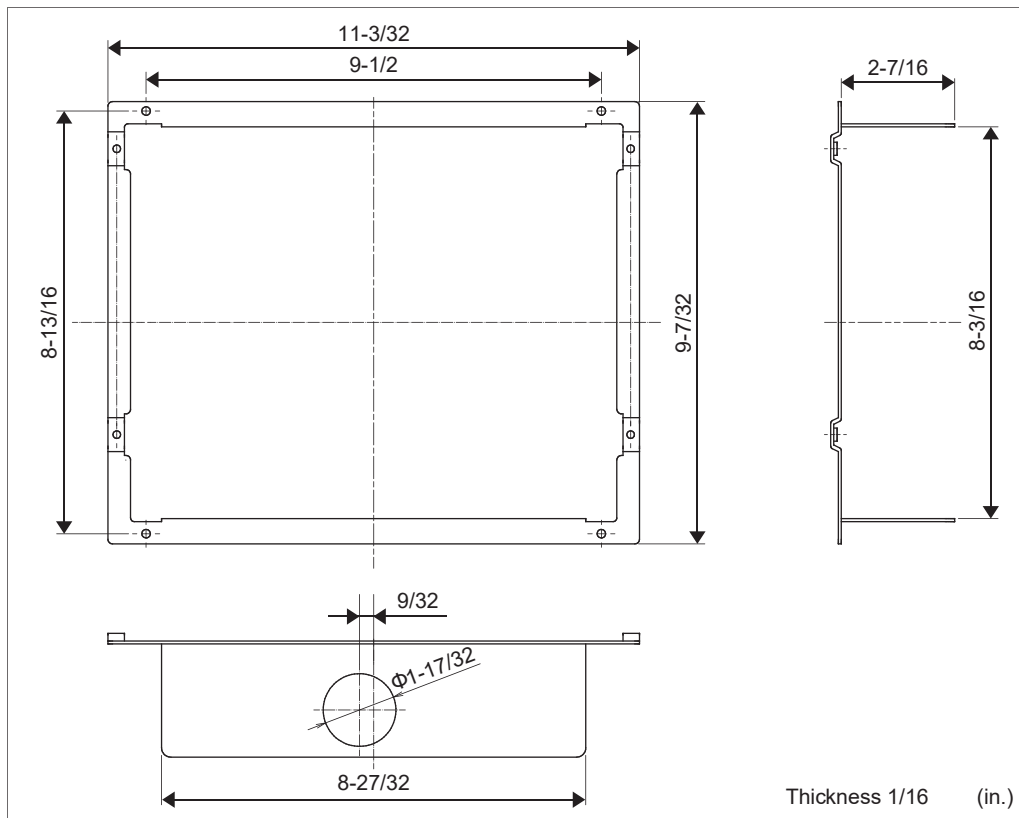
- intelligent Touch Manager body



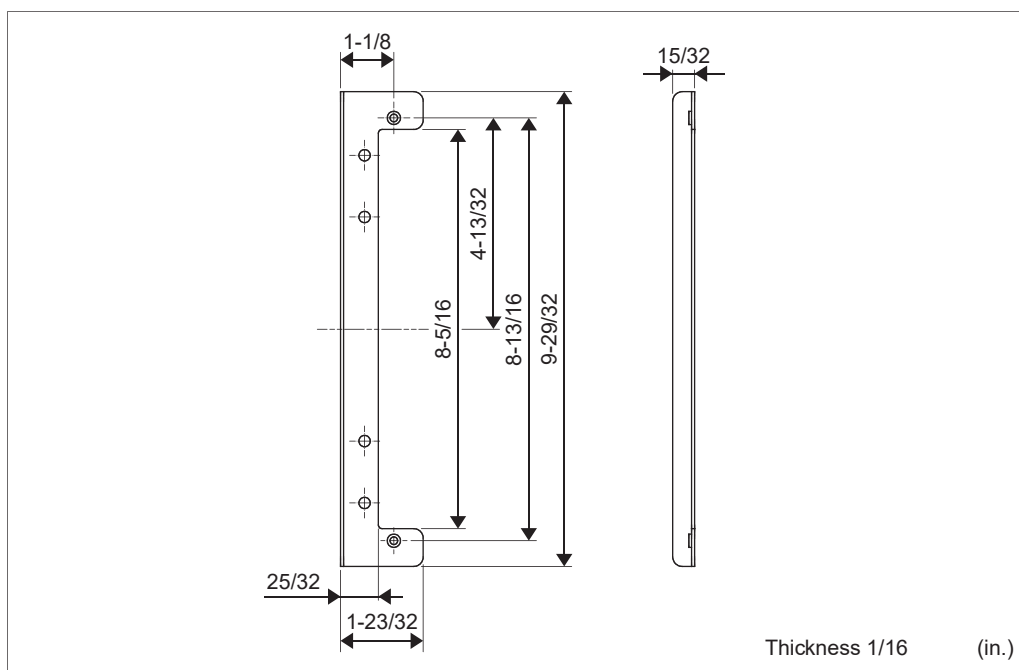
- Wall mounting metal plate



• Frame bracket

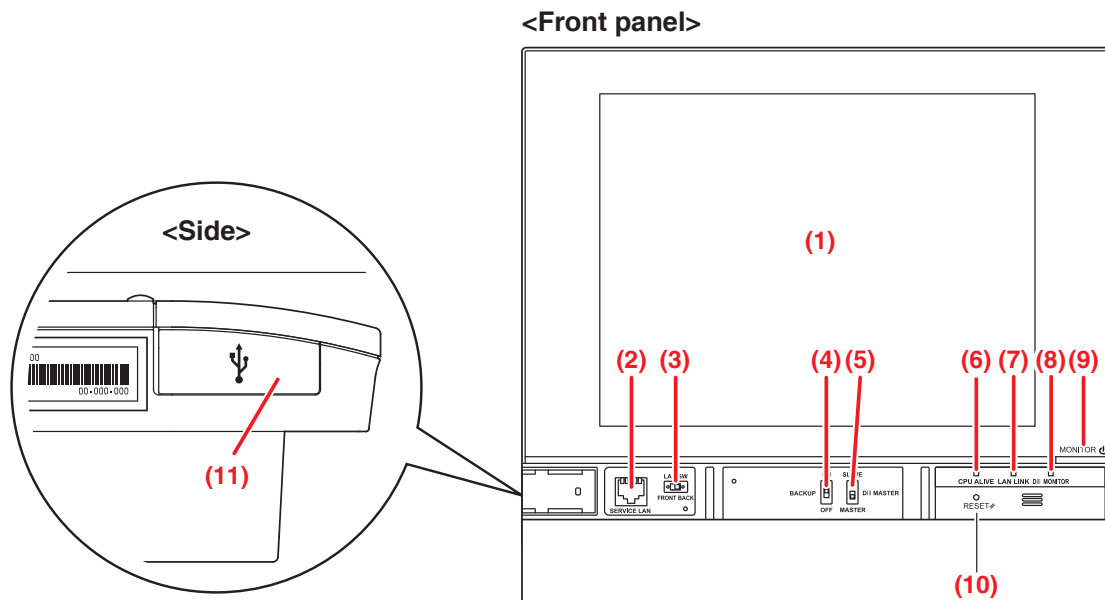


• Angle bracket



2.9.6 Part Names and Functions

Front Panel and Side View



(1) MONITOR

LCD touch panel for monitoring and performing operations.

(2) SERVICE LAN

Service LAN connection port. Unused.

(3) LAN SW

Switch for toggling between the LAN port on the rear and the SERVICE LAN port on the front.

When set to FRONT, you cannot close the cover.

To close the cover, set it to Back. (Be careful not to touch the switch inadvertently.)

(4) BACKUP

Power ON/OFF switch for settings backup battery. (Be careful not to touch the switch inadvertently.)

(5) DIII MASTER

Switch for setting up the MASTER and SLAVE when there are two or more DIII-NET central control devices such as the intelligent Touch Manager.

(6) CPU ALIVE (Green)

This LED flashes when the CPU is operating normally.

If it is not flashing, an operational error occurred in the CPU. (It takes about 10 seconds to determine the cause of an error.)

On: Software error

Off: Hardware error, power-off

(7) LAN LINK (Green)

This LED indicates whether the LAN connection between the intelligent Touch Manager and the connected hardware is correct. The LED is On when the connection is correct.

(8) DIII MONITOR (Yellow)

This LED flashes when data transmission occurs on the DIII-NET communication line.

(9) MONITOR key/LED (Orange/Green)

Press this switch to turn on/off the monitor. Doing so also causes the LED color to change as follows.

Off: Indicates that the power is off.

On (Orange): Indicates that the monitor is on.

On (Green): Indicates that the monitor is on.

(10) RESET//

Restart switch for restarting the intelligent Touch Manager.

(11) USB socket cover (side)

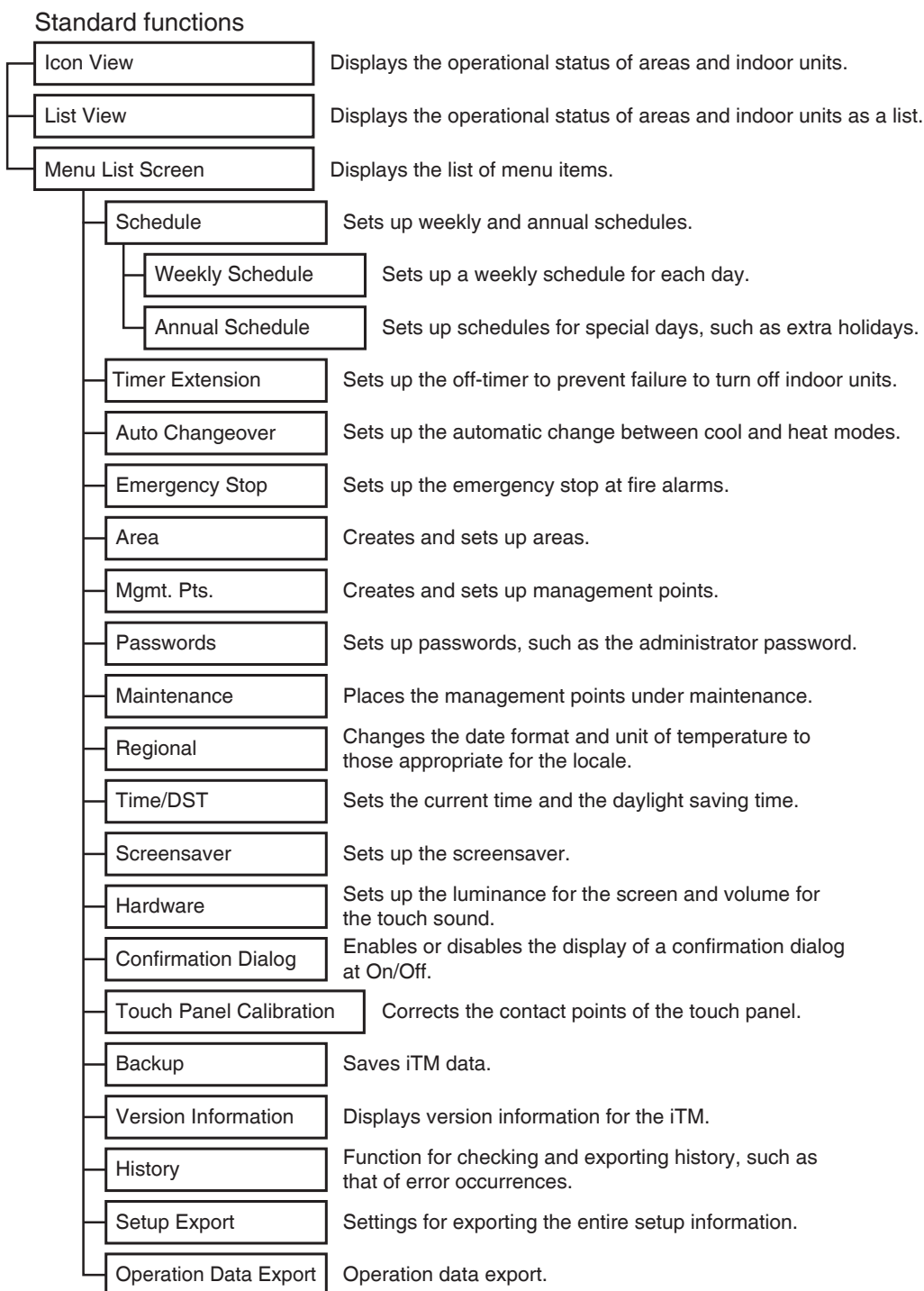
USB memory port.

NOTE

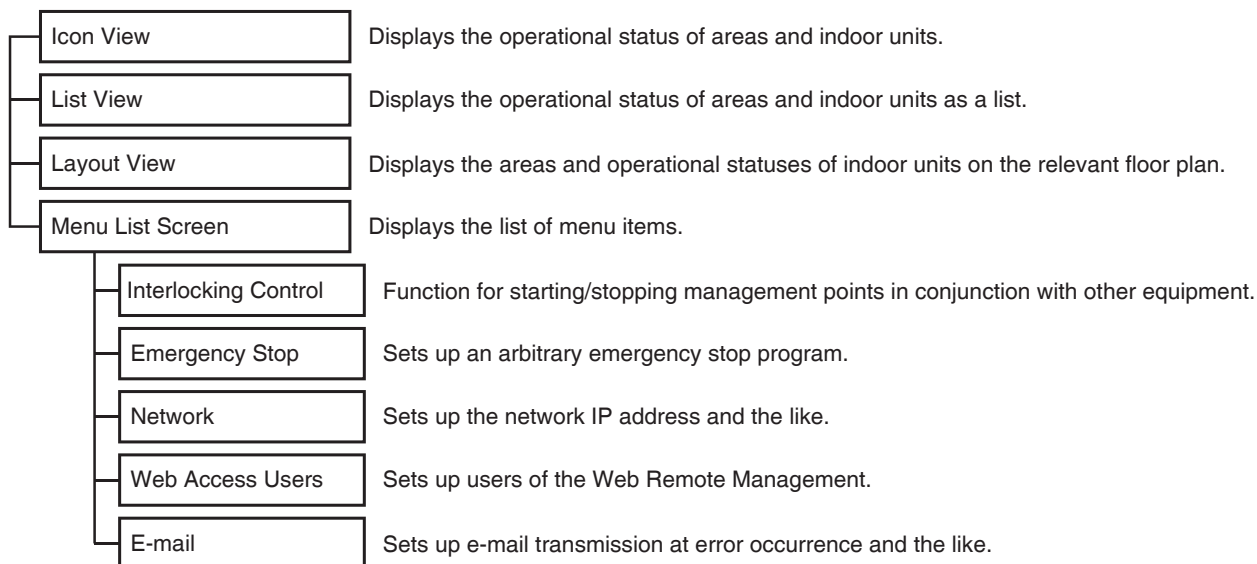
Do not use the socket for any purpose other than connecting a USB memory.

2.9.7 Detailed Screen Description

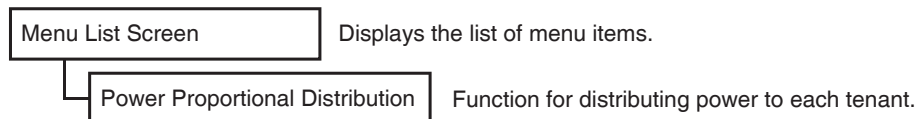
Setup Screen Structure



Optional functions



Maker option



Standard View (Icon) Screen



(1) Area/Management Point view area

Displays area and management point icons.

(2) Menu List switch button

Switches to the Menu List screen, which consists of Automatic Ctrl., System Settings, Operation Mgmt. and Energy Navigator (optional) tabs.

The button changes to Close while the Menu List screen is being displayed.

(3) Standard View switch button

Switches from the Layout View screen (optional) to the Standard View screen.

(4) Layout View switch button

Switches the screen to the Layout View, which displays icons on a floor plan.

NOTE

Displayed only when the Layout View option (see “4-4 Layout View (Optional) Screen”) is enabled.

(5) Lock/Unlock button

Locks/Unlocks switching to the Menu List screen.

The button is not displayed when the screen lock is disabled.

(6) Group monitoring icon

A Error detection Reports error when any of the following faults is detected.

**Flashing indicator: System error**

Text: System error occurred. Touch this icon to check and restore.

**Flashing indicator: Unit/Limit Error**

Text: Error occurred. Touch this icon to check.

**Lit indicator: Communication error**

B Emergency Stop Reports emergency stop.

**Emergency Stop**

Text: Emergency stop occurred. Touch this icon to release.

**Waiting for Release**

Text: Emergency stop occurred. Touch this icon to release.

*A balloon is displayed when the target unit entered into waiting for release status automatically, without the icon being touched even once. The balloon is not displayed if the target unit was put into waiting for release status manually, by touching the icon.

**OFF**

C Energy Save Displays the Energy Save status.

**Enabled**

Energy Saving control is enabled and being active.

**Suspended**

Energy Saving control is suspended.

**Under Control**

Energy Saving control is disabled.

(7) Time

Displays the current time.

(8) Area hierarchy indicator

Displays the hierarchical level of the currently displayed area.

(9) Top, Down, and Up buttons

Top button: Displays the area and management points at the Top.

Down button: Moves into the selected area and displays the areas and management points there.

Up button: Moves up one hierarchical level from that of the currently displayed area and displays the areas and management points there.

(10) List switch button

Toggles the Standard View screen between Icon View and List View.

(11) Information button

Displays the legend for an icon or contact information for inquiries regarding the system.

(12) Selected area/management point information indicator

Displays the name, icon, and filter sign of the selected area or management point.

(13) Room Temp/Operation Mode/Changeover Option indicator

Displays the room temperature and settings of the selected management point. Not displayed for areas.

NOTE

When the selected management point is in error, it displays the error code.

(14) Details button

Displays the Detailed Setup screen for the selected area or indoor unit.

(15) On/Off button

Starts/Stops the selected area or management point.

(16) Cool Setpoint spin box

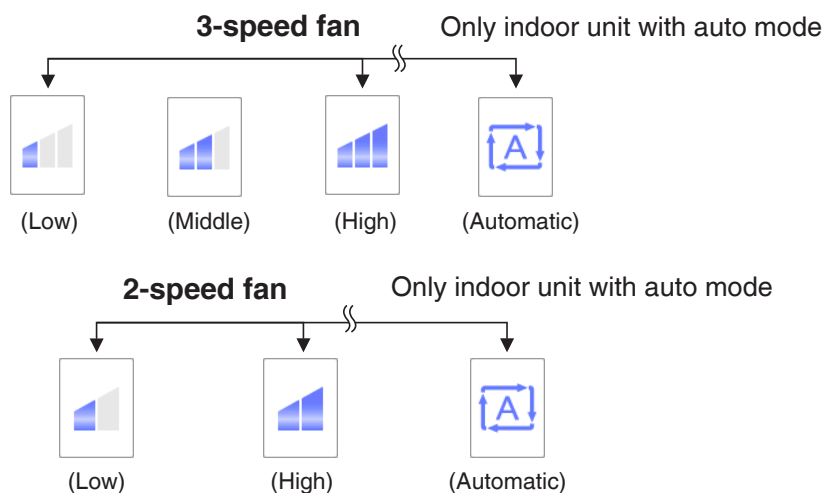
Sets up the cooling temperature for indoor units in the selected area, or the selected indoor unit.

(17) Heat Setpoint spin box

Sets up the heating temperature for indoor units in the selected area, or the selected indoor unit.

(18) Fan Speed button

Sets up the fan speed for the indoor unit of the selected area, or the selected indoor unit.

**(19) Setting button**

Displays the Detailed Setup screen for the selected area or management point.

2.9.8 Electric Wiring

This chapter describes the procedure for connecting the intelligent Touch Manager with DAIKIN air conditioning devices and other equipment.

In addition to air conditioners, the intelligent Touch Manager can monitor and control a wide range of equipment. However, the required connection procedures vary depending on the equipment to be connected.

Do not connect more than two wires to the same terminal.

Required procedures

(2) Connecting DIII-NET-compatible air conditioning equipment

(7) Connecting power supply

Equipment-specific procedures

(3) Connecting a LAN cable

(4) Connecting I/O module

(5) Connecting an emergency stop input device or power meter

(6) Connecting iTM plus adaptors



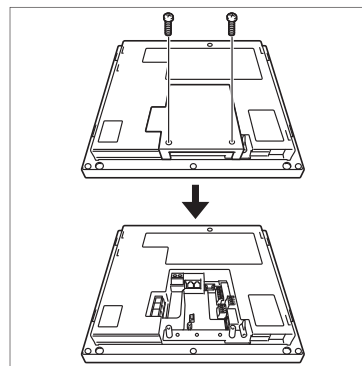
WARNING

- Do not turn on the power supply before all wire connections are completed. When there is an earth leakage breaker or a local switch installed on the circuit, make sure that the circuit is securely interrupted. Otherwise, an electric shock may result.
- After the wiring is completed, double-check that all wires are connected correctly before turning on the power supply.
- All field supplied parts and materials, electric works must conform to local codes.
- All wiring must be performed by an authorized electrician.

(1) Removing wiring cover from rear face

Remove the wiring cover from the rear face. Take out two screws using a Phillips screwdriver to remove the wiring cover.

<Removing wiring cover>



(2) Connecting DIII-NET-compatible air conditioning equipment

DIII-NET is the DAIKIN's original communication method used between air conditioners. Using DIII-NET, you can centrally control multiple DAIKIN DIII-NET-compatible air conditioning devices by connecting them to your intelligent Touch Manager.



WARNING

- Be sure to perform the operation during power-off conditions. Not doing so may cause an electric shock.
- The maximum length of adhered wiring of high current electrical line of power wires and weak current line of communication wires must be kept to 65 ft. or less.

(2)-1

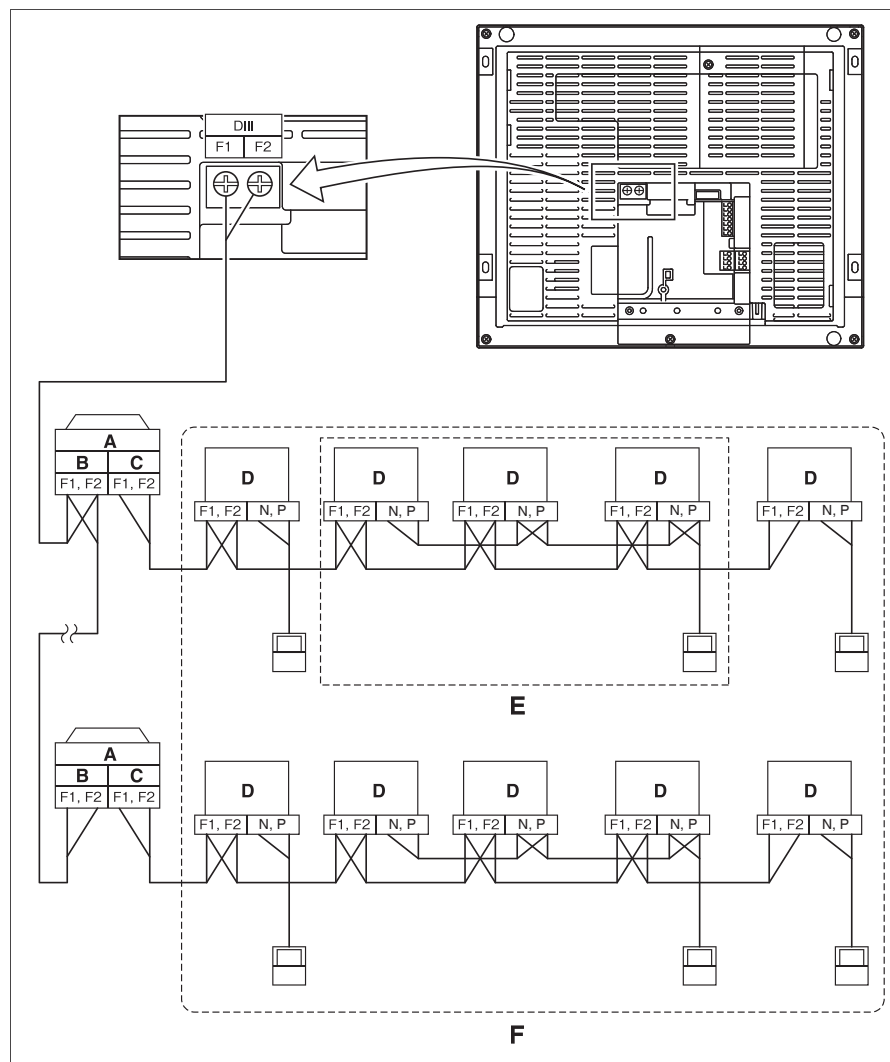
Terminal location and schematic connection diagram

To connect the DIII-NET communication line, use F1 and F2 terminals that are located on the rear face and indicated with "DIII" mark. These 2 terminals have no polarity. An example of connecting more than two air conditioning devices is shown in the following conceptual connection diagram.

**CAUTION**

Make sure that the wires you are connecting to the F1 and F2 terminals are not power wires. Inadvertently connecting power wires to these terminals results in a failure of the air conditioner or intelligent Touch Manager.

<Conceptual connection diagram with air conditioning equipment>



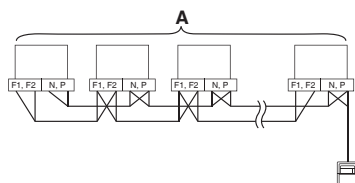
- A** Outdoor unit
- B** OUT - OUT communication (terminal)
- C** IN - OUT communication (terminal)
- D** Indoor unit
- E** A maximum of 16 indoor units can be connected per remote controller group.
- F** A maximum of 64 remote controller groups (128 indoor units) can be connected. When the power proportional distributions is applied, the maximum number of indoor units is 64.

NOTE

- What's a remote controller group?

A single remote controller can simultaneously control a maximum of 16 indoor units. This capability is referred to as group control. A remote controller group is a group of indoor units controlled under the same remote controller.

[Schematic diagram of remote controller group]



A Max.16 Indoor units

(2)-2**Wiring specifications**

- Cable type: 2-core vinyl-insulated vinyl-sheathed cable/vinyl cabtyre cable or 2-core non-shielded cable
- Core thickness: AWG 18-16
- Terminal treatment: Use a round crimp-type terminal (M3.5) with insulating sleeve

**CAUTION**

- Do not use multicore cables with three or more cores.
- The maximum wiring length is 3280 ft. and total wiring length is 6561 ft. or less.

(2)-3**Precautions for using multiple centralized controllers**

The “centralized controller” refers to the equipment (e.g. the intelligent Touch Manager) that controls multiple air conditioners. Besides the intelligent Touch Manager, the DAIKIN's product portfolio includes a wide range of centralized controllers suitable for different applications or building sizes, which can be used in combination to construct an optimal air conditioning control system.

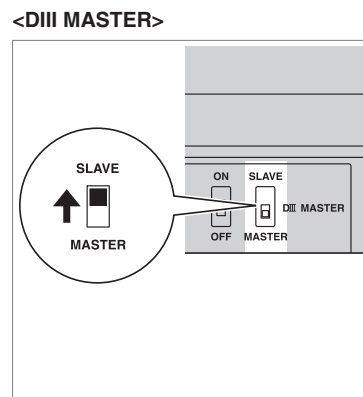
If multiple centralized controllers are connected on the DIII-NET network, you must set MASTER and SLAVE relationship for those controllers.

Assign only one of those controllers to MASTER, and other controllers to SLAVE.

The intelligent Touch Manager is set to MASTER by default. Change the setting to SLAVE in any of the following cases:

- Where Interface for use in BACnet is installed in parallel.
- Where Interface for use in LONWORKS is installed in parallel.
- If there is another intelligent Touch Manager or iTM plus adaptor which is assigned to MASTER.

To change the setting of the intelligent Touch Manager to SLAVE, turn the DIII MASTER switch located under the front slide cover. Placing the DIII MASTER switch in the upper position (labeled as "SLAVE") changes it to a SLAVE.



When installing multiple centralized controllers, set only the highest-priority controller to MASTER and all other controllers to SLAVE according to the following order of priority.

High	↑	(1) Interface for use in BACnet
		(2) Interface for use in LONWORKS
		(3) intelligent Touch Manager (Main) , iTM plus adaptor (Main)
Priority		(4) Central Remote Controller (Main)
		(5) intelligent Touch Manager (Sub) , iTM plus adaptor (Sub)
		(6) Central Remote Controller (Sub)
Low	↓	(7) ON/OFF Controller (Main)
		(8) ON/OFF Controller (Sub)

Centralized controllers that cannot be connected to the same network as the intelligent Touch Manager.

- Calculate Unit
- intelligent Processing Unit
- Parallel Interface
- intelligent Touch Controller
- DIII-NET Plus Adaptor
- Residential Central Remote Controller
- Wiring Adaptor for Electrical Appendices (1) (KRP2)

(3) Connecting a LAN cable

By connecting the intelligent Touch Manager with a PC via Ethernet, you can remotely perform operations such as operation setup and maintenance of air conditioning system.



WARNING

Do not clamp the LAN cable with high current cables.

NOTE

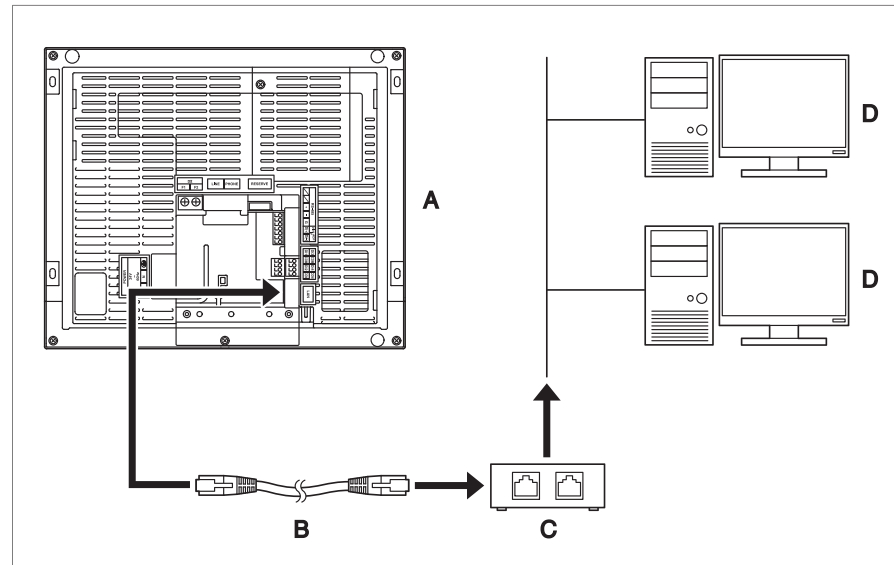
For how to connect the intelligent Touch Manager to a PC network, contact your network administrator.

(3)-1

Terminal location and schematic connection diagram

Using a LAN cable, connect the LAN port to the network hub.

<LAN connection schematic diagram>



- A Rear face of intelligent Touch Manager
- B LAN cable
- C Hub
- D PC

(3)-2

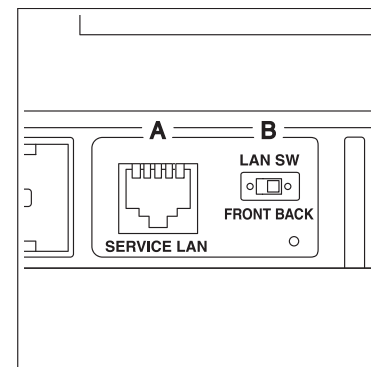
Wiring specifications

- Applicable cable standard: 100Base-TX or 10Base-T
- Connector standard: RJ-45

NOTE

- When you connect the intelligent Touch Manager to the LAN temporarily during installation or maintenance, use the SERVICE LAN port located on the front face. The SERVICE LAN port is enabled by changing the position of the LAN SW switch beside the SERVICE LAN to the FRONT position.
- You cannot close the cover when the switch is set to "FRONT". To close the cover, select "BACK".

<SERVICE LAN socket and LAN SW switch>



- A SERVICE LAN
- B LAN SW

(4) Connecting I/O module

In combination with the I/O module, the intelligent Touch Manager can monitor and control a maximum of 960 contacts of non-DAIKIN peripheral devices such as lighting equipment and security systems. Connect the intelligent Touch Manager to the termination of the RS-485 wiring.



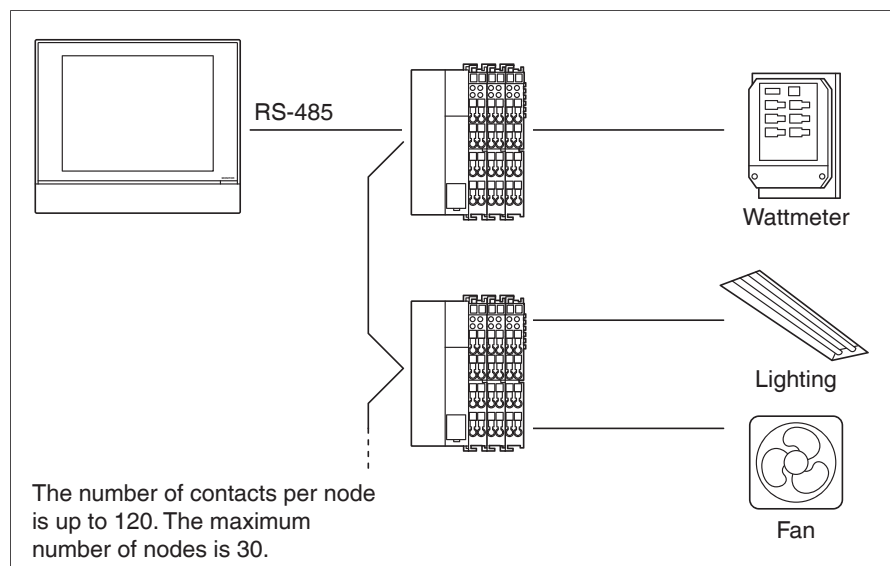
WARNING

- Be sure to perform the operation during power-off conditions. Not doing so may cause an electric shock.
- Do not clamp the cables with high-current lines such as a power cable.

(4)-1

Terminal location and schematic connection diagram

<Schematic drawing of I/O module connection>



Connect to the RS-485 terminals located on the rear face. As the terminals have polarity, be sure to connect the positive core wire to the + (positive) terminal and the negative core wire to the – (negative) terminal, respectively.

(4)-2

Wiring specifications

- Cable type: CPEV or FCPEV cable (shielded type also acceptable)
- Cable length: 1640 ft. or less
- Core thickness: AWG 22-19



CAUTION

When using a shielded cable, be sure to connect the cable to the G (ground) terminal.

(4)-3

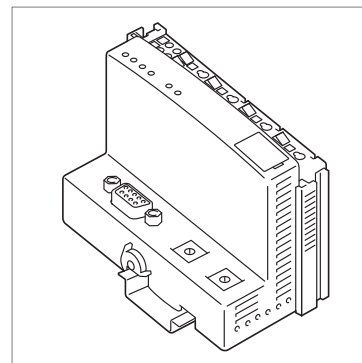
Address setup

The bus coupler located at the left end of nodes has rotary switches for setting the addresses.

Set a unique address for each node.

For details, refer to the "Commissioning Manual Supplementary Volume (External Management Points (EM11A026))".

<Bus coupler>

**(5) Connecting an emergency stop input device or power meter**

The intelligent Touch Manager can perform operations such as an emergency stop of air conditioners according to the external signal input device, and an electricity usage calculation for each air conditioner (for power proportional distribution) according to the pulse inputs from a power meter.

**WARNING**

- Be sure to perform the operation during power-off conditions. Not doing so may cause an electric shock.
- Do not clamp high-current cables together with low-current cables.

(5)-1

Terminal location and schematic connection diagram

Connect the contact input signal wire or pulse signal wire to Di1, Di2, Di3, Di4, or COM terminal on the orange connector on the rear face. Each of these terminals has different function.

[Di1] Emergency stop input

[Di2] [Di3] [Di4] Pulse input, contact signal input

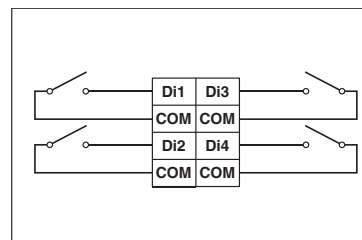
[COM] Common

However, the function settings for these terminals can be changed later. For how to change the function settings, refer to the "Commissioning Manual (EM11A022)".

NOTE

The COM terminals are all connected internally. So, you can use either of them. However, you can connect up to two wires simultaneously to each COM terminal. When using an open collector type output, connect the COM terminal to the negative side.

<Schematic drawing of Di connection>

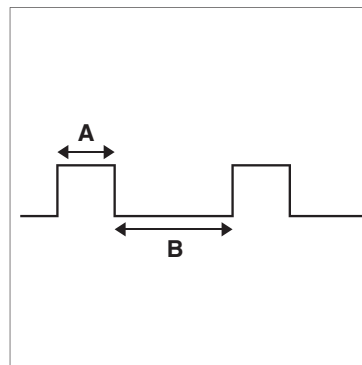


(5)-2

Wiring specifications

- Cable type: CPEV cable
- Core thickness: AWG 22-19
- Cable length: 656 ft. or less

<Pulse width>

**A** Pulse width: 20 to 400 ms**B** Pulse interval: 100 ms or more**CAUTION**

- The contact connected to the contact input terminal must be capable of handling 10 mA at 16 VDC.
- If an instantaneous contact is used for triggering an emergency stop, use one that has an energization time of 200 ms or more.

NOTE

Once the emergency stop input signal is turned on, all air conditioners stop and do not restart until the emergency stop input is cleared. When the manual reset is specified for the resetting method, you need to clear the emergency stop using the intelligent Touch Manager.

(6) Connecting iTM plus adaptors

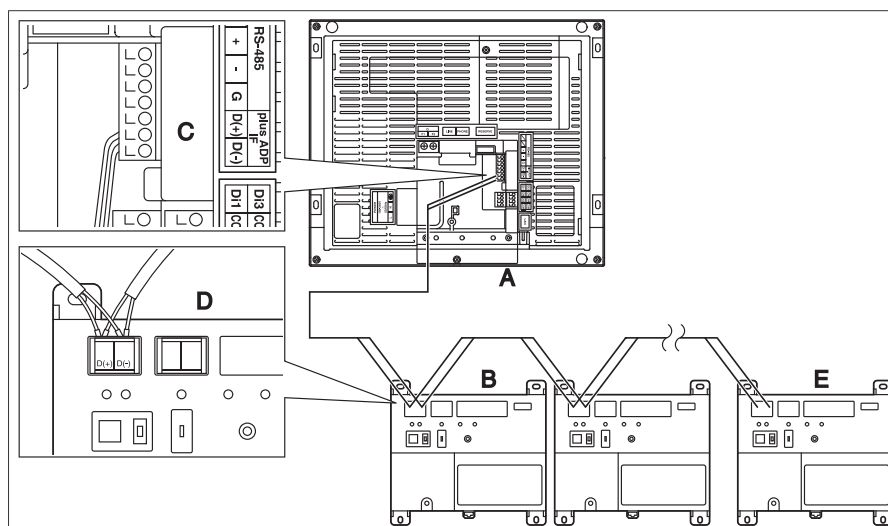
If you have many air conditioners, use iTM plus adaptors to connect them. It is a fact that the number of indoor groups you can control using a single intelligent Touch Manager is limited to 64. By using iTM plus adaptors, you can add 64 indoor unit groups per iTM plus adaptor. Moreover, considering that the intelligent Touch Manager can be connected with a maximum of seven iTM plus adaptors, you can control a total of 512 groups of indoor units at a maximum using a single intelligent Touch Manager.

**WARNING**

- Be sure to perform the operation during power-off conditions. Not doing so may cause an electric shock.
- Do not clamp high-current cables together with low-current cables.

(6)-1**Terminal location and schematic connection diagram**

Connect the iTM plus adaptor to the plus ADP IF terminal located on the rear face. Connect the intelligent Touch Manager to the plus ADP IF terminal. As the terminals have polarity, be sure to connect the positive wire to the “+” terminal and the negative wire to the “-” terminal without fail. Connect the intelligent Touch Manager to the termination of the RS-485 wiring.

<Terminal location and schematic connection diagram>

- A** intelligent Touch Manager
- B** iTM plus adaptor
- C** plus ADP IF (intelligent Touch Manager)
- D** plus ADP IF (iTM plus adaptor)
- E** iTM plus adaptor on which termination resistor must be enabled
(For details, refer to the “iTM plus adaptor installation manual” (EM11A030).)

(6)-2**Wiring specifications**

- Cable type: CPEV or FCPEV cable
- Core thickness: AWG 22-18
- Cable length: The overall cable length between the intelligent Touch Manager and the terminal iTM plus adaptor is 164 ft. or less.
- Wiring connection type: Sequential connections

NOTE

Each air conditioner controlled via an iTM plus adaptor is also assigned a DIII address between “1-00” to “4-15”. From the intelligent Touch Manager, it is recognized as “2:1-00”, “3:1-02”, or the like, with the DIII-NET port number prefixed.

3. Adaptor

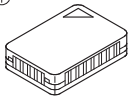
3.1 KRCS01-1B / KRCS01-4B / KRCS01-2UA Remote Sensor

Notes

- Please check applicable kit model name by catalog etc.,
- When installed on Skyair Round-flow type models, the dehumidification by detection of humidity does not operate.

Accessories

Check the following accessories.

Name	Remote sensor (sensor box)	Extension cable (2-core, 12m)	Clamp	Installation manual (this drawing)	Mounting screw (M4X16)
Shape	① 	② 	③ 	④ 	⑤ 
Quantity	X 1	X 1	X 2	X 1	X 2

1 Mounting

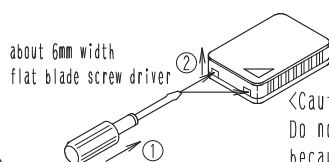
1) Selection of mounting location.

The thermistor for temperature detection is incorporated into the remote sensor. Select the mounting location taking the following cautions into account.

- ① Where the average temperature of an air conditioned room can be detected.
- ② Where it is not exposed to the direct sunlight.
- ③ Where it is not influenced by other heat sources.
- ④ Where it is not exposed to the direct discharge air from the air conditioner.
- ⑤ Where it is not exposed to the outdoor air infiltrated into the room by opening the door.

2) Mounting

- Remove the cover of the sensor box.

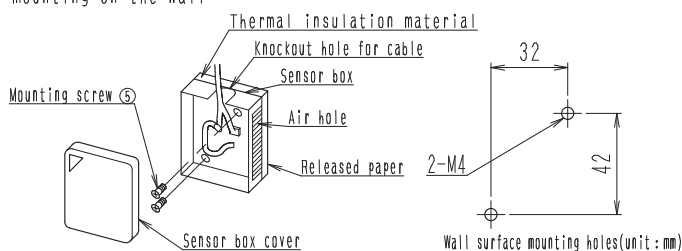


- ① Insert a flat blade screw driver into the sensor box concave part (2 locations).
- ② Remove the cover pushing up the nail to the cover of the sensor box.

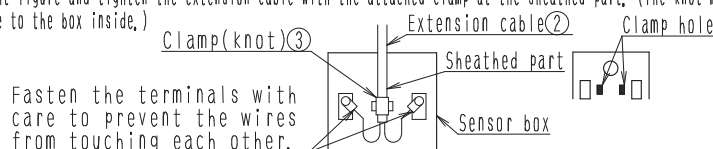
<Cautions>

Do not push the nail powerfully with a narrow flat blade screw driver, because you may break off the nail.

(a) When mounting on the wall

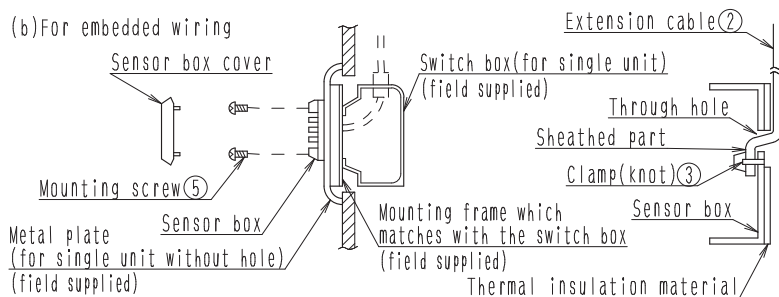


- Break open the knockout hole in the sensor box with a nipper or a similar tool. Pass the extension wires through the hole and fasten the wires to the terminals with screws.
- To avoid tensile force on the terminals, pass the attached clamp through the holes shown in the below right figure and tighten the extension cable with the attached clamp at the sheathed part. (The knot must come to the box inside.)

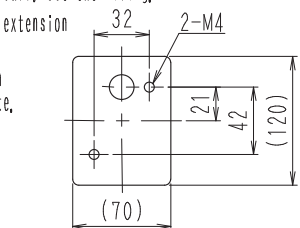


- Screw the sensor box securely to the wall surface with screws M4X16(2 places).
If the sensor box cannot be screwed to wall surface, tear off the released paper and mount it on the wall surface.

(b) For embedded wiring



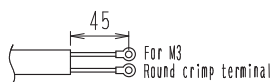
- Pass the extension cable through the switch box cable hole and carry out the wiring.
- Pass the attached clamp through the clamp holes and tighten the extension cable at the sheathed part as shown in the upper right figure.
- Tap M4 screw holes in the metal plate (field supplied) as shown in the right drawing and mount the switch box on the metal plate.



Holes to be tapped in the metal plate on site (unit: mm)

<Cautions>

- When wiring the extension cable, the air holes will not be blocked.
- When the extension cable is longer than necessary, cut it to the appropriate length, peel the insulation, attach the round crimp terminal for M3 (field supplied) and carry out the wiring. The length of insulation to be peeled off is as shown.
(Work carefully so that the connector side may not be cut.)



2 Wiring method

Connect the extension cable connector side to the indoor unit PCB (printed circuit board)
For connection to the indoor unit, follow the procedure shown below.

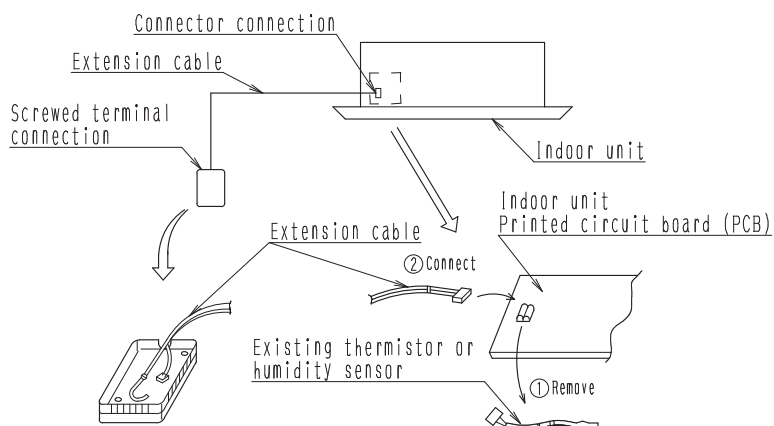
Caution

- 1) Make sure to turn off the power supply before starting the wiring work and do not turn on until all the work is completed.
Read also the installation manual and the wiring diagram of the indoor unit when carrying out the work.
- 2) When wiring the extension cable, do not pass where the extension cable may be affected by the power line or noise.
- 3) Make sure to securely connect the connectors.
Defective connection may result in incorrect detection of room temperature or malfunction.
- 4) Do not splice wires.
- 5) Since the connector marking of the thermistor for detection of inlet air temperature differ depending on the indoor unit type, make sure to check the indoor unit wiring diagram and follow it correctly.
- 6) Lay and clamp the extension cable inside the indoor unit switch box just like the low voltage line(cord for remote controller).
And do not pass where the extension cable inside the indoor unit switch box may be affected by the power line(cord for the indoor unit and the other electric line).

<Procedure>

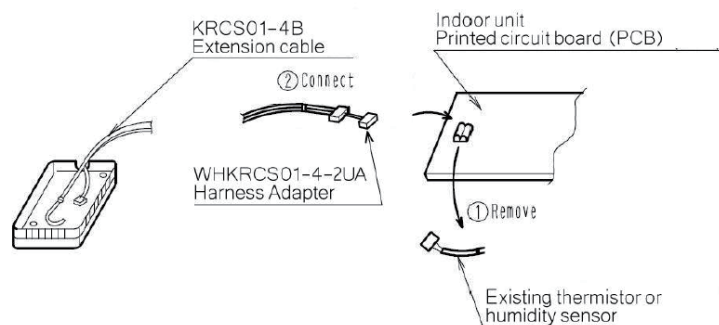
- 1) When wiring to the indoor unit PCB, remove the existing thermistor (for detection of inlet air temperature) and then connect the extension cable. When doing this work, make sure to check the symbol of connecting address on the PCB whether it is correct or not referring to the wiring diagram,

<For KRCS01-1B/4B>



<For KRCS01-2UA>

KRCS01-2UA includes Wiring Harness Adaptor WHKRCS01-4-2A that connects Extension Cable KRCS01-4B to the X4A connector on the FXTQ_TA PCB:



Part #	Description
KRCS01-2UA	New Remote Sensor Kit
KRCS01-4B	Existing Remote Sensor
WHKRCS01-4-2UA	New Wiring Harness Adaptor

- 2) Lay and clamp the extension cable inside the indoor unit switch box just like the existing thermistor. When doing this work, keep a certain distance between the high voltage wiring and the low voltage wiring to avoid error of sensor, Provide protection of the existing cable for thermistor without affecting other components,
- 3) Fit the sensor box cover into the sensor box,

③ Operation test after mounting the sensor

Conduct cooling and heating operation test after the sensor is mounted and the wiring is completed,

3.2 KRCSH2018-01 Button Sensor Kit

MODEL COMPATIBILITY:

Compatible with the following indoor unit models:

VRV and VRV Life	CXTQ, FXAQ, FXDQ, FXHQ, FXLQ, FXNQ, FXEQ, FXFQ, FXMQ, FXTQ, FXSQ, FXUQ, FXZQ
SkyAir	FAQ, FBQ, FCQ, FHQ, FTQ
Multi-zone and Single-Zone	FDMQ, FFQ

SPECIFICATIONS:

Model	KRCSH2018-01
Description	Button Sensor
Weight	0.31 oz (sensor only)
Wiring Length	40 ft
Thermistor	Rt = 20k ohms +/-1% @ 77° or 25°C B 25/50 = 3900 K +/-1% Dissipation Constant ~ 2.5 mW/°C
Self-Heat Compensator	Internal Series Resistor = 140 ohms +/- 1%
Housing	Gray ABS/PC UL94 V-0
Cover	Aluminum (Paintable) Tumble Finish
Spring Fingers	Stainless Steel
Operating Temperature	34 to 125°F (1.1 to 51.6°C)
Storage Temperature	-40 to 140°F (-40 to 60°C)
Humidity	0 to 95% RH non-condensing
Mounting Hole	3/4" Diameter
Compliance	RoHS & REACH Compliant

PRODUCT IMAGE:



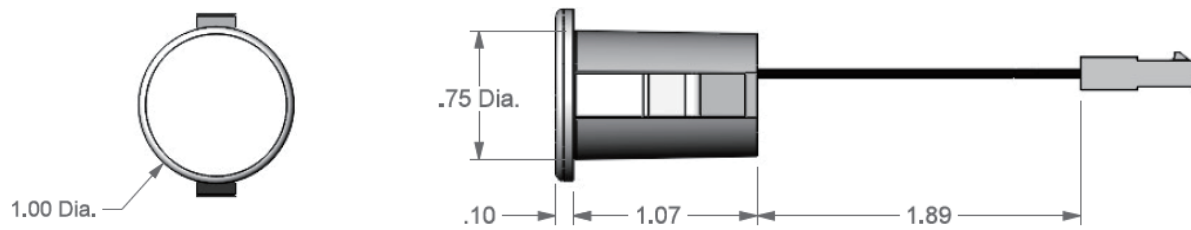
FEATURES:

- Extend the sensing location by replacing the return air thermistor in the indoor unit
- Compact and concealable design
- Paintable surface to match wall color (Note: when painting the surface of the sensor, be sure to avoid thick/multiples coats to maintain the accuracy of the sensor)
- Sensor, plenum rated cable and wiring harness adaptors are included in the kit

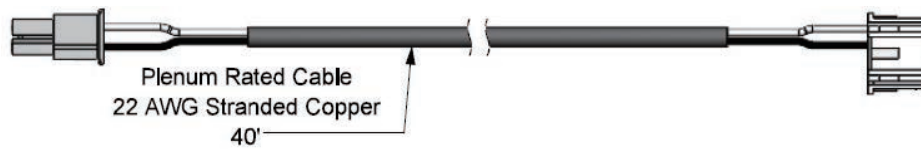
Items	Button sensor	4-pin plenum rated wiring cable	2-pin harness adaptor	3-pin harness adaptor
Quantity	1	1	1	1
Image				

DIMENSIONS:

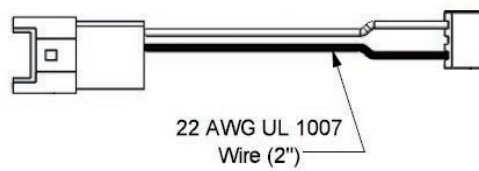
- Button Sensor



- 4-pin Plenum Rated Cable



- 3-pin harness adaptor (included)

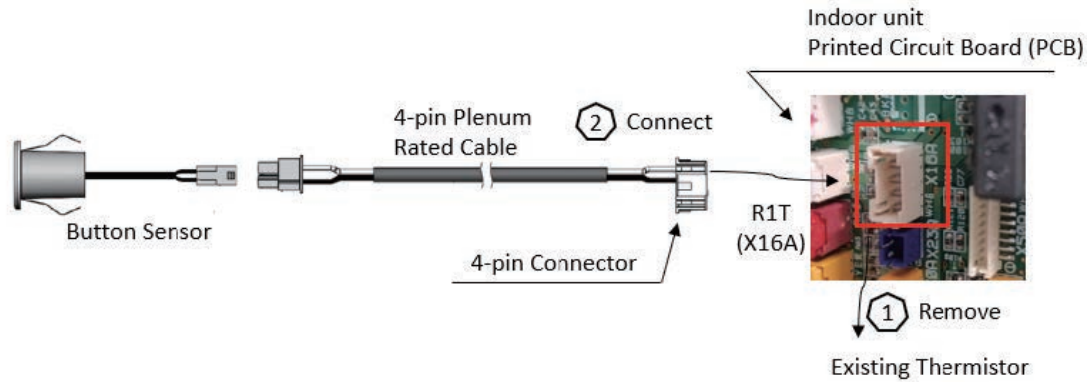


- 2-pin harness adaptor (included)

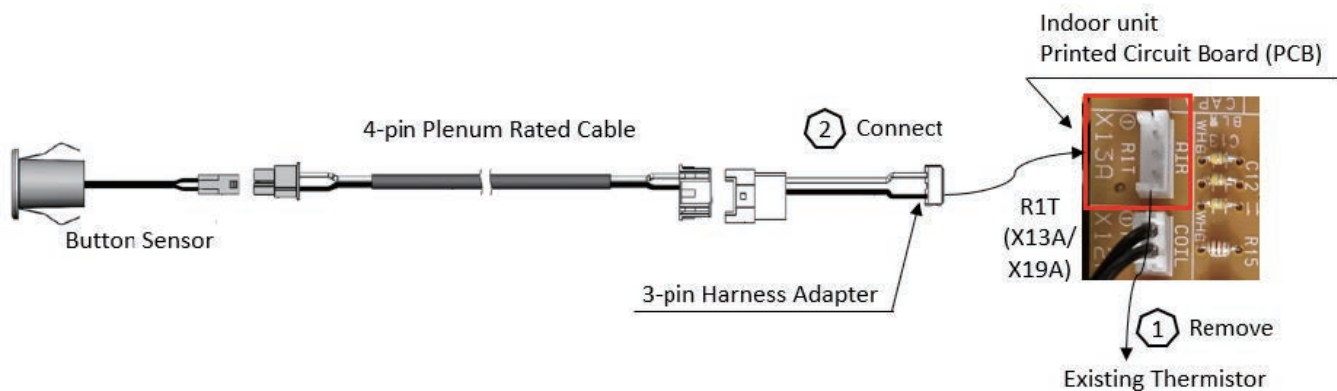


WIRING DIAGRAM:

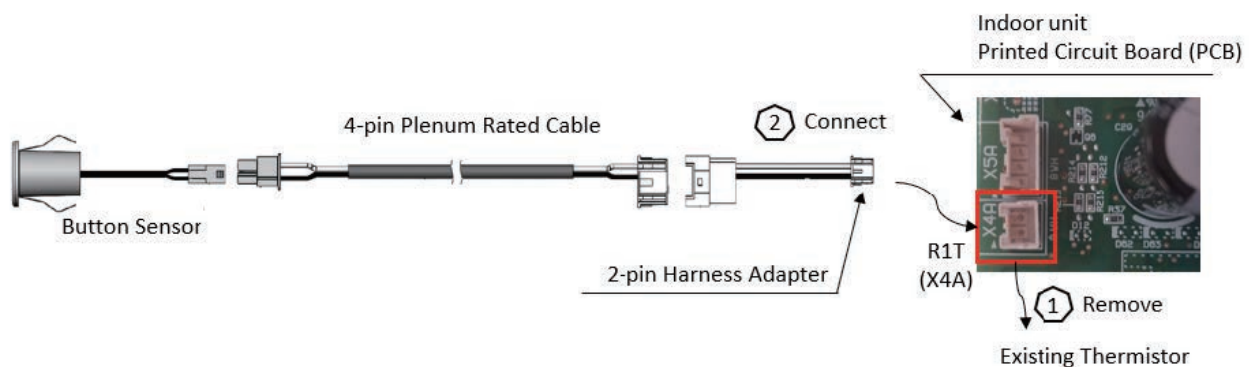
- For indoor units that use the 4-pin connector (FXEQ_PVJU, FXFQ_TVJU, FXMQ_PB, FXSQ_TAVJU, FXUQ_PVJU, FXZQ_TAVJU, FCQ_TAVJU, FBQ_PVJU, FFQ, FDMQ), use only the 4-pin Plenum rated cable to connect between the button sensor and the indoor unit PCB. The 2-pin harness adaptor and the 3-pin harness adaptor are not needed for these indoor units.



- For indoor units that use the 3-pin connector (FXAQ_PVJU, FAQ_TAVJU, FXDQ_MVJU, FXHQ_MVJU, FXLQ_MVJU9, FXNQ_MVJU9, FXMQ_M, FHQ_PVJU), use the 4-pin Plenum rated cable and the 3-pin harness adaptor to connect between the button sensor and the indoor unit PCB. The 2-pin harness adaptor is not needed for these indoor units.



- For indoor units that use the 2-pin connector (FXTQ_TAVJU, CXTQ, FTQ_TAVJUD), use the 4-pin Plenum rated cable and the 2-pin harness adaptor to connect between the button sensor and the indoor unit PCB. The 3-pin harness adaptor is not needed for these indoor units.



3.3 KRP1H98A Installation Box for Adaptor PCB



AIR CONDITIONER

KRP1H98A

Installation box for adapter PCB. Installation manual

READ THESE INSTRUCTIONS CAREFULLY BEFORE INSTALLATION.
KEEP THIS MANUAL IN A HANDY PLACE FOR FUTURE REFERENCE.

2P447067-1

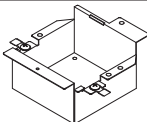
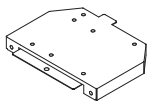
Caution

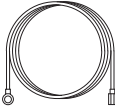
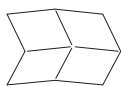
- This box is mountable on the ceiling mounted cassette type (round-flow type) unit. After confirming the indoor unit model name, mount this box on the unit listed in the table shown bottom.
- When mounting the box, see also the indoor unit installation manual and the adapter PCB (Printed Circuit Board) mounting instruction.

Kit name	Indoor unit model that party crowded is possible	
KRP1H98A	SPLIT	FCQ-TAVJU (When using standard deco panel)
	VRV	FXFQ-TVJU (When using standard deco panel)

Accessories

Check if the following accessories are included with your kit.

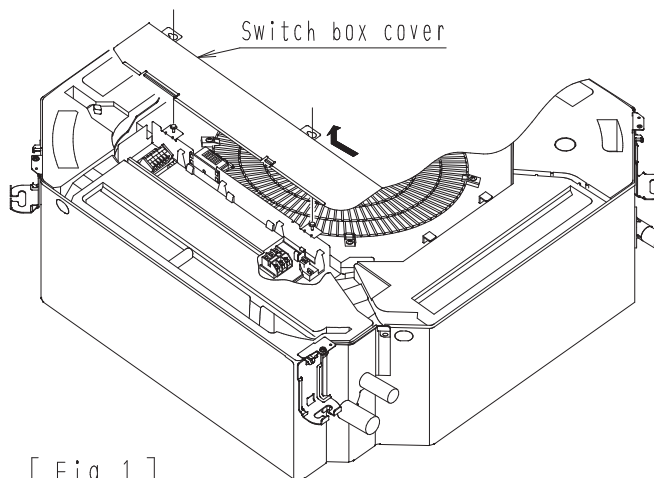
Name	Adapter box	Adapter box cover	Screw(1)	Screw(2)
Quantity	1 PC.	1 PC.	2 PCS.	1 PC.
Shape			 M4 × 12	 M4 × 8

Name	Clamp	Earth wire	Screw for earth wire	Installation manual
Quantity	8 PCS.	1 PC.	1 PC.	1 PC.
Shape				

1 Mounting the adapter box

《Preparation before wiring》

Remove the switch box cover. (Fig.1)

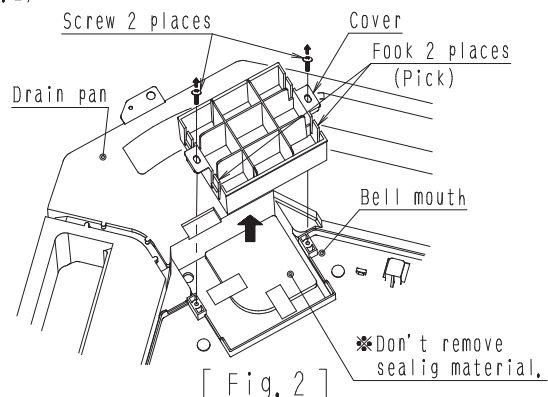


[Fig. 1]

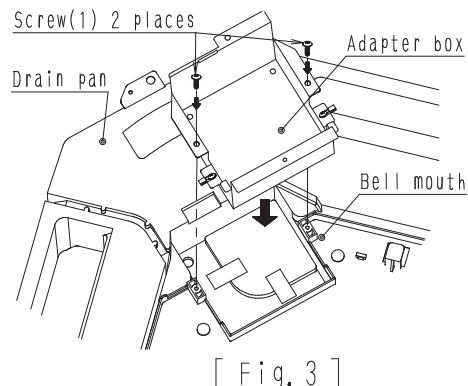
✱ The figure mentions FCQ~TAVJU as a representative.

《Mounting the adapter box》

- ① Remove the cover, when the cover is attached, (Fig. 2)



- ② Fix the box with the attached fixing screws (1) at two places, (Fig. 3)



* The figure mentions FCQ~TAVJU as a representative.

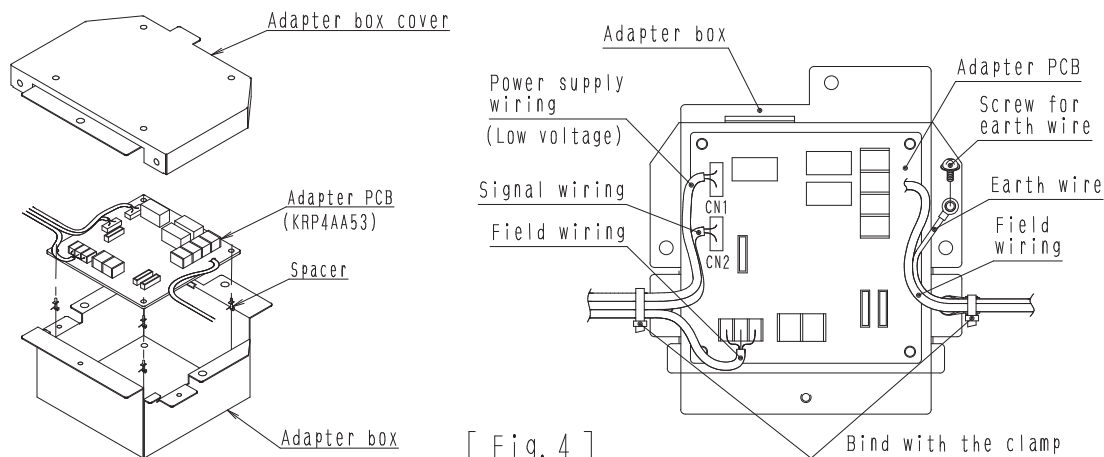
2 Mounting the adapter PCB

《How to mount the adapter PCB》

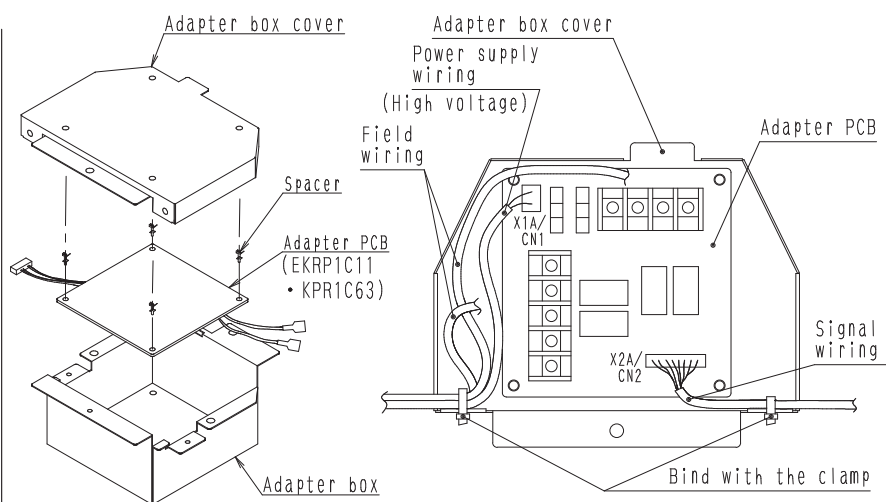
- ① Connect the wiring to the adapter PCB.
(The work is easier if the wiring is connected to the PCB first.)
● See the instruction attached to the adapter PCB for where to connect the wiring.
- ② Mount the adapter PCB on the adapter box and the adapter box cover.

Adapter PCB	Place where to mount
KRP4A(A)53 KRP2A52 • KRP2A62	The PCB to be mounted on the adapter box, (Fig. 4)
EKRP1C11 • KRP1C63	The PCB to be mounted on the adapter box cover, (Fig. 5)
KRP1BA57	The PCB to be mounted on the adapter box cover, (Fig. 6)

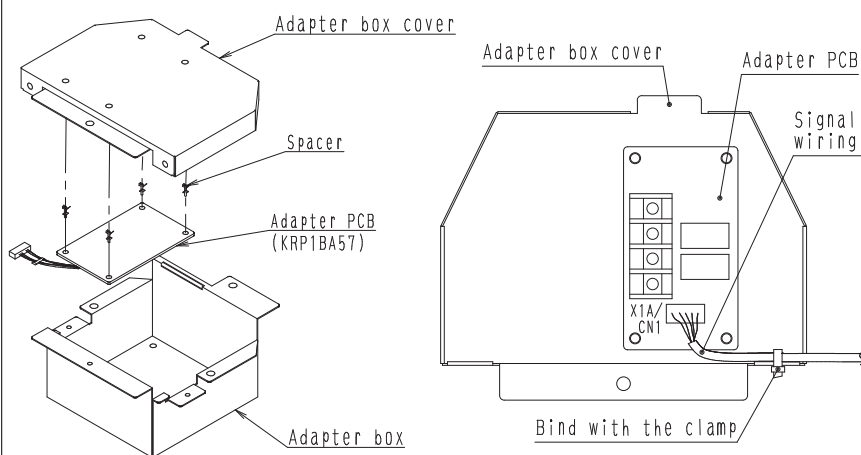
- For the mounting position of the adapter PCB, see the instruction attached to the adapter PCB.
- ③ Fix the earth wire with the attached fixing screw for earth wire, (Fig. 4)
- ④ Bind the wiring from the adapter PCB with the attached clamp, (Fig. 4~6)



Continues on back side

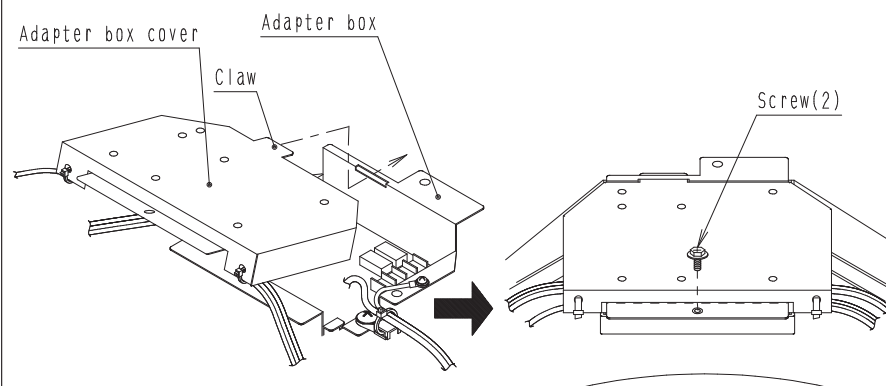


[Fig. 5]



[Fig. 6]

- ⑤ After putting the claw of the cover into the hole of the box, fix them with the attached screw (2). (Fig.7)
- Take precautions to prevent the wires from getting caught.



[Fig. 7]

③ How to handle the wiring

《Wiring to the indoor unit》

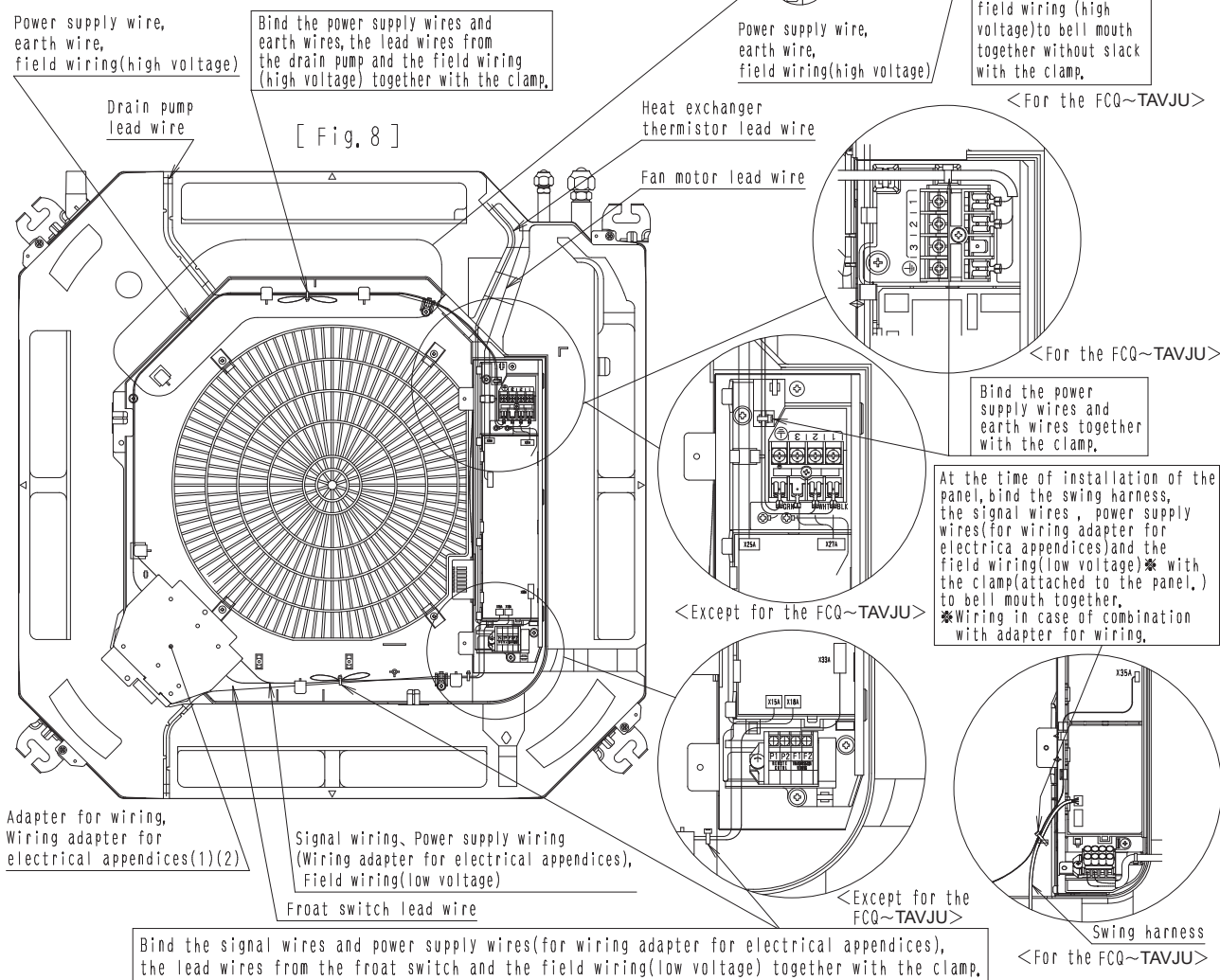
- Connect the wiring from the adapter PCB to the indoor unit, (signal wires, power supply wires, earth wires)
(See the installation manual of indoor unit and wiring diagram label for where to connect the wiring.)
- See the instruction attached to the adapter PCB for the place where to connect the wires on the indoor unit.

① Fix the internal wirings,

- Bind the wiring from the adapter box to the indoor unit switch box according to the drawing shown on the right with the attached clamp.
- Bind the the surplus wires and the other wiring together with the clamp.

② Secure firmly the switch box cover in place in opposite order of removing,

- Take precautions to prevent the wires from getting caught.



3.4 BKS26A Installation Box for Adaptor Print Circuit Board



OPTIONAL ADAPTOR FOR OUTDOOR UNIT MOUNTING PLATE KIT FOR VRV
 READ THE INSTRUCTIONS PROVIDED HEREIN CAREFULLY IN ADVANCE AND INSTALL THIS KIT CORRECTLY.
BKS26A **1P508774-1A**

PLEASE READ THESE "SAFETY PRECAUTIONS" CAREFULLY BEFORE INSTALLING

- The following two conventions are used to indicate and classify precautions in this manual.
Always heed the important safety information provided with them.

	WARNING	Failure to follow these instructions properly may result in personal injury or loss of life.
	CAUTION	Failure to observe these instructions properly may result in property damage or personal injury, which may be serious depending on the circumstances.

- Make sure that the unit operates properly after completing the installation, and explain to the customer how to operate the unit and keep it maintained.
Also, advise the customer that they should keep this installation manual along with other manual for future reference.
- At the time of the installation, read the installation manual of the unit along with the electric diagram.

WARNING

Ask your dealer or qualified personnel to carry out installation work.
Do not attempt to install the air conditioner yourself. Improper installation may result in water leakage, electric shocks or fire.

Install the kit in accordance with the instructions in this installation manual.
Improper installation may result in electric shocks or fire.

Be sure to use only the specified accessories and parts for the installation work.
Failure to use the specified parts may cause the kit to fail or result in electric shocks or fire.

Make certain that all electrical work is carried out by qualified personnel according to the local laws and regulations and this installation manual, using a separate circuit.
Insufficient capacity of the power supply circuit or improper electrical construction may lead to electric shocks or fire.

Turn off the unit before touching electrical parts.
An electric shock may be received if charged parts come in contact with humans.

Be sure to use the specified wires and fix them securely so that no external force resulting from the wires will be imposed on any terminal connections.
Improper connections or securing of wires may result in abnormal heat build-up or fire.

Position the wires so that the cover will not rise when wiring the power supply.
Make sure that the cover is attached securely. If the cover is attached improperly, electric shocks or fire may result.

CAUTION

Do not install this kit in the following locations:

1. Where there is a high concentration of mineral oil spray or vapour for example a kitchen.
2. Where corrosive gas, such as sulfurous acid gas, is produced, acid or alkaline steam gathers, or the air contains a high salt content, such as places by the sea. Parts may be corroded and fall off.
3. Near machinery emitting electromagnetic waves or in places with great voltage fluctuations, such as factories.
4. Where flammable gas may leak, in places with carbon fiber or ignitable dust suspensions in the air or with volatile flammables such as paint thinner or gasoline, or in vehicles or vessels.
Fire may result if gas leakage occurs and stays around the kit.
5. Where small animals intrude, fallen leaves gather, or weeds grow.
Small animals making contact with electrical parts can cause malfunctions, smoke or fire.

Caution

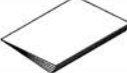
- This product is mountable on VRV outdoor unit.
Confirm the model name of the outdoor unit in the table on the right (List of combination) before mounting this product.
- When mounting, see also the installation manuals of a main unit of an outdoor unit and Optional adaptor for outdoor unit.

Accessories

- Check if the following accessories are included in the unit.

<Attention>

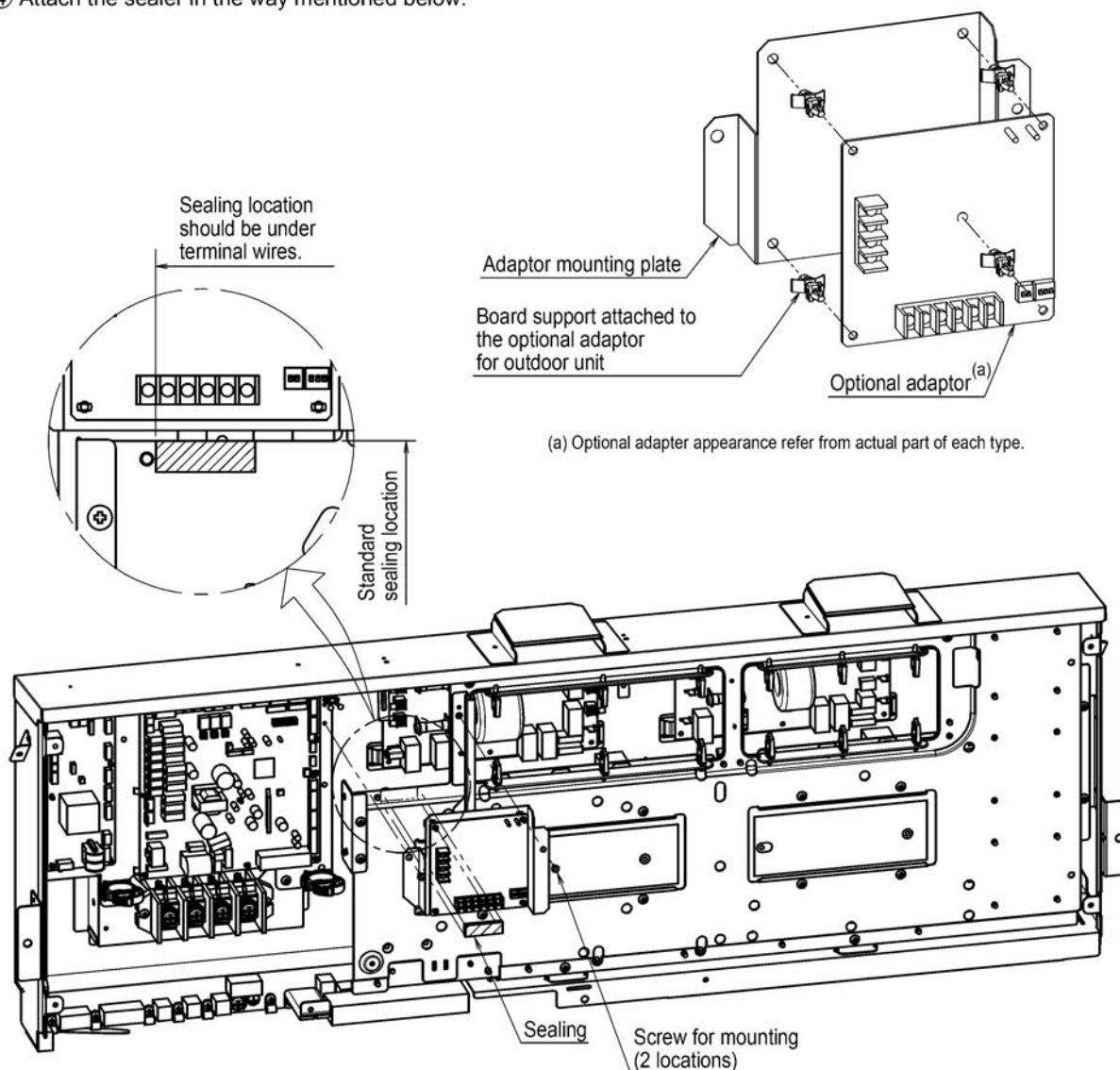
Do not throw away the accessories until the installation work is completed.

Name	Adaptor mounting plate	Screw for mounting	Installation manual	Sealing
No. of pcs	1	2	1	1
Shape		 M4×8		

Kit name	Model name of the outdoor unit
BKS26A	RXQ14 ~ 20A
	RXYQ14 ~ 20A
	RXUQ10 ~ 20A

1 Installation

- ① Remove the front panels (Middle), (Upper) of unit and a cover of the control box.
- ② Mount the optional adaptor for outdoor unit to the adaptor mounting plate in the way mentioned in the fig. below.
 - Use the PCB support attached to the adaptor.
 - Pay attention to the mounting direction of the adaptor.
 (Refer to the arrow in the fig.)
- ③ Mount the adaptor mounting plate to the control box in the way mentioned in the fig. below.
- ④ Attach the sealer in the way mentioned below.



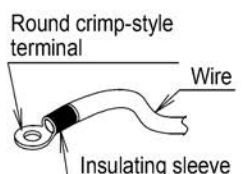
<Attention>
Mount with care in order not to take the wire in.

2 Electric wiring

<Attention>

- Be sure to use a round crimp-style terminal to connect to a terminal block. Attach insulating sleeve and the like to insulate the crimping part.
- Wiring must be carried out with predetermined wire and connect and fix securely so that the external force does not apply to the terminal.
- Use an appropriate screwdriver to tighten terminal screws.
The screw head may be damaged or the terminal screws may not be tightened properly if a screwdriver is too small.
- Do not tighten the terminal screws excessively or the screws may be damaged.
Refer to the table below for the required tightening torque values of the terminal screws.

Optional adaptor	Tightening torque(N•m)
The external control adaptor (DTA104A~)	0.6 ~ 1.0
DIII-NET expander adaptor (DTA109A~)	
DIII-NET/Modbus Communication adaptor (DTA116A~)	

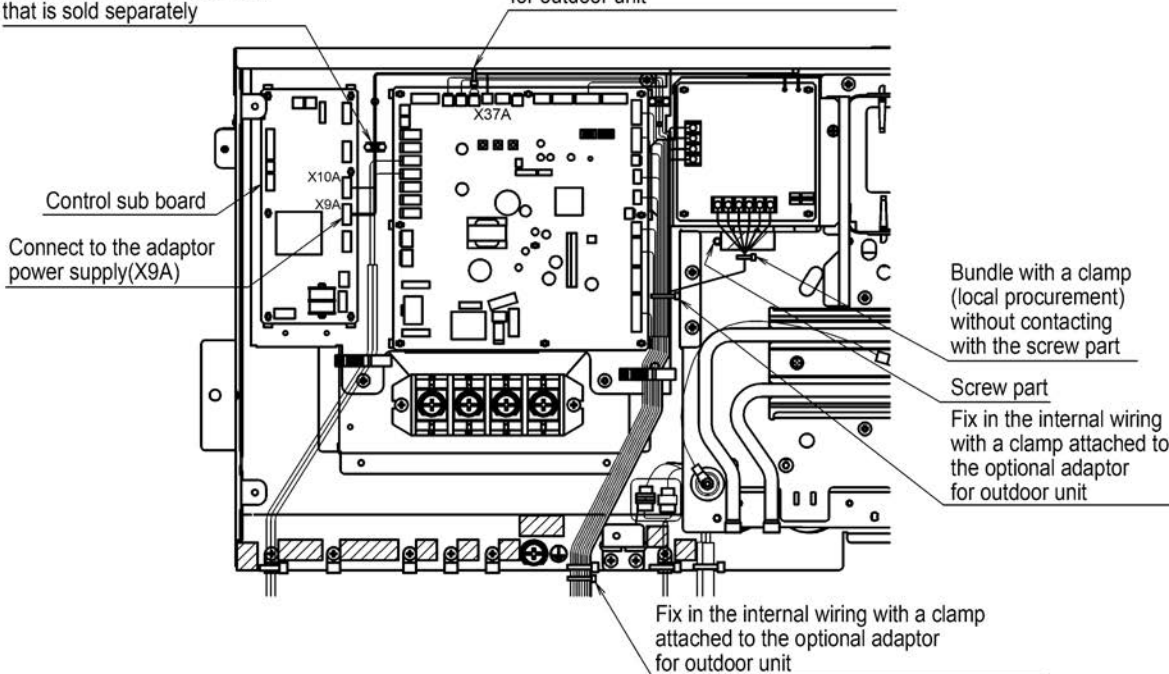


- ① Connect the wire to the connector and the terminal block.
For selecting and connecting wire, see the installation manuals attached to the adaptor and the wiring diagram attached in the back of the Control box cover.
- ② Fix the wire with clamps attached to the adaptor in the way mentioned below.
• Fix the wire without contacting with the electric components other than the connecting part.
- ③ Put back the cover of the control box, panels (middle and upper).

[With the control sub board]

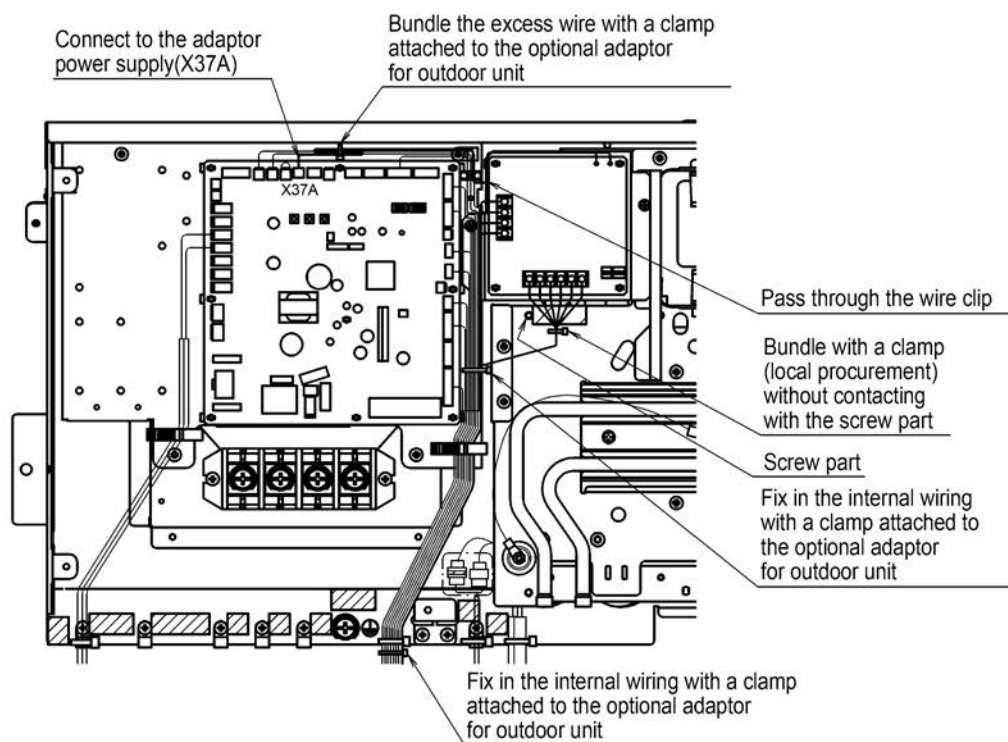
Bundle with a clamp attached to the drain pan heater and such that is sold separately

Fix in the internal wiring with a clamp attached to the optional adaptor for outdoor unit



※ Only DIII-NET/Modbus Communication adaptor (DTA116A~) is not apply.

[Without the control sub board]



1P508774-1A

3.5 KRP1BA101 Installation Box for Adaptor PCB

Daikin Air Conditioner

Installation Box for Adaptor PCB

Installation Manual

KRP1B101
KRP1BA101

Read this installation manual carefully before installing this kit and be sure to install it correctly.

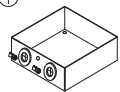
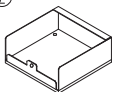
Notes

- One kit is required for each adaptor.
- Refer to the installation manuals attached to the indoor unit and adaptor.

Kit name	Indoor unit
KRP1B101 KRP1BA101	FXZQ-TAVJU FXEQ-PVJU FXDQ-MVJU FXTQ-TAVJUA FXTQ-TAVJUD

Accessories

Check the following accessories are included in this kit.

Name	Installation box	Lid of installation box	Clamp	Screw	Cord sticker	Installation manual	Screw
Quantity	x 1	x 1	x 3	x 3	x 3	KRP1B101 English x 1 KRP1BA101 English x 1, Japanese x 1	x 2
Shape	① 	② 	③ 	④ 	⑤ 	⑥  (This manual)	⑦ 

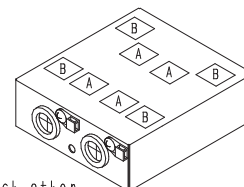
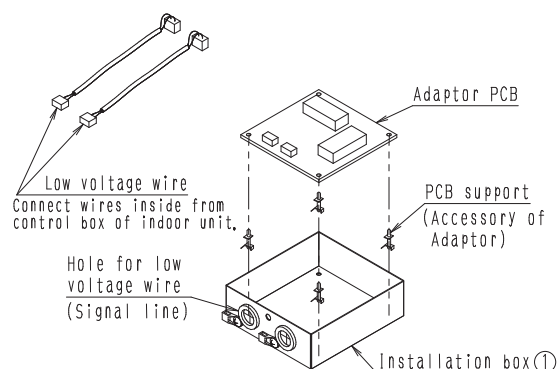
Applicable adaptor

Adaptor	Kit name	
	In case of FXZQ-TAVJU, FXEQ-PVJU type	In case of FXDQ-MVJU, FXTQ-TAVJUA, FXTQ-TAVJUD type
Adaptor for wiring	KRP1C75	KRP1C75
Wiring adaptor for electrical appendices(1)	_____	_____
Wiring adaptor for electrical appendices(2)	KRP4A74	KRP4A74
External control adaptor for outdoor units	_____	DTA104A53

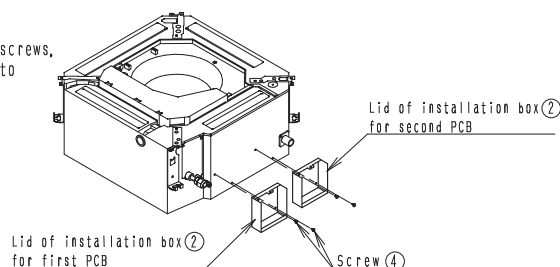
<In case of FXZQ-TAVJU, FXEQ-PVJU type>

1 Method of attaching the adaptor**Attach the adaptor**

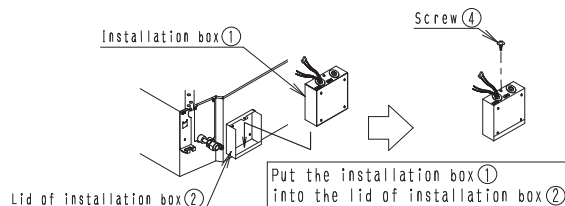
- Detach the aluminum tape of the installation box ① to insert the PCB supports.
Adaptor : KRP1C75, KRP4A74, DTA104A53 --- Detach the aluminum tapes B.
Attach the adaptor in the installation box ① by the PCB supports.
(PCB supports are accessories of adaptor.)
- Connect wires with the adaptor before attaching to the installation box ①.
- Low voltage wires and high voltage wires should be kept space at least 50mm from each other.

**In case of KRP1C75, KRP4A74, DTA104A53 type****Attach the lid of installation box**

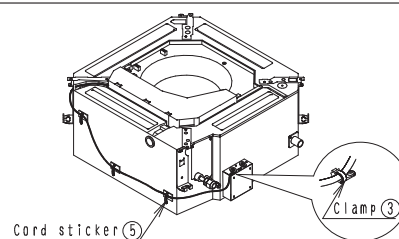
Attach the lid of installation box ② to indoor unit with two screws.
If two adaptors are installed, the second adaptor is attached to side of first one.

**Attach the installation box**

Attach the installation box ① into the lid of installation box ② with the screw.

**2** Method of wiring processing

- Connect wires with the control box.
(Refer to the installation manual attached to the adaptor.)
- After connecting wires with the control box, clamp wires by using the cord stickers ⑤ and the clamp ③ as shown in the below drawing.

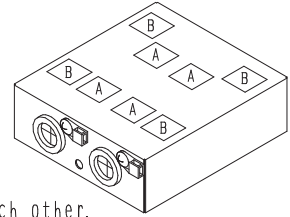


<In case of FXDQ-MVJU, FXTQ-TAVJUA, FXTQ-TAVJUD type>

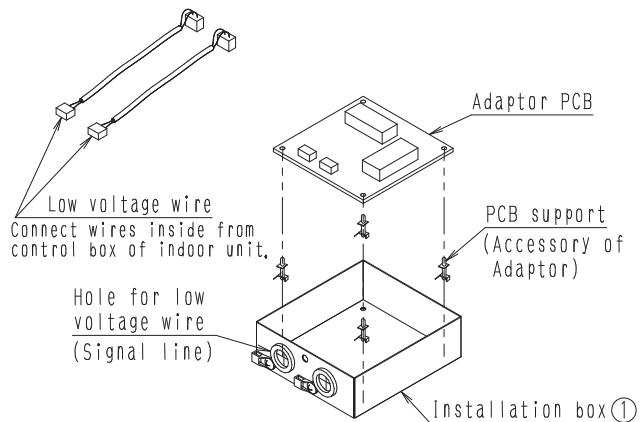
1 Method of attaching the adaptor

Attach the adaptor

- Detach the aluminum tape of the installation box ① to insert the PCB supports.
Adaptor : KRP1C75, KRP4A74, DTA104A53 --- Detach the aluminum tapes B.
Attach the adaptor in the installation box ① by the PCB supports.
(PCB supports are accessories of adaptor.)
- Connect wires with the adaptor before attaching to the installation box ①.
- Low voltage wires and high voltage wires should be kept space at least 50mm from each other.

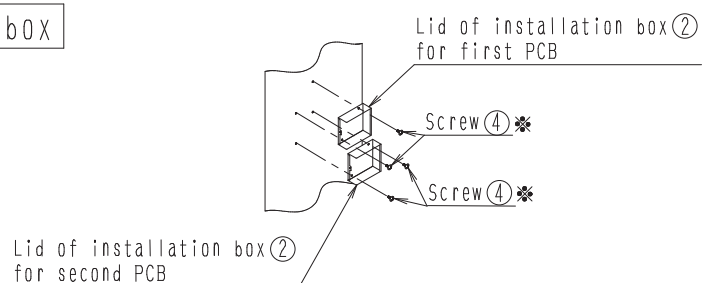


In case of KRP1C75, KRP4A74, DTA104A53 type



Attach the lid of installation box

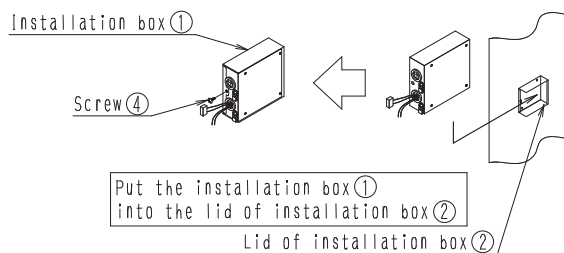
- Do not mount the installation box directly on the unit.
Mount the box near the local wiring outlet.
- Attach the lid of installation box ② on the vertical rigid surface near the unit with two screws ④.
- If two adaptors are installed, the second adaptor is attached to side of first one.



*If the attached screws ④ cannot be used due to the local conditions, procure the screws locally.

Attach the installation box

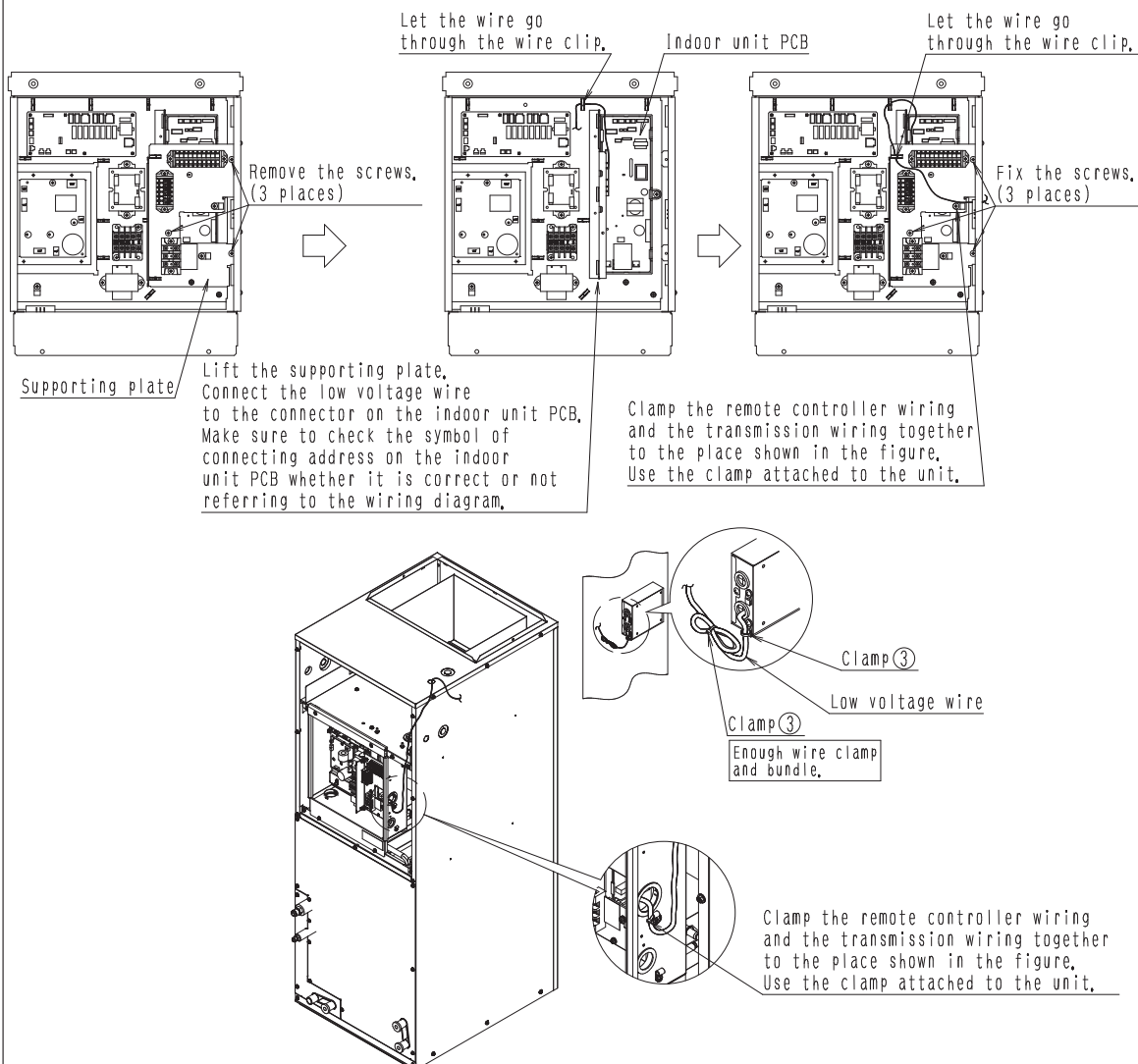
Attach the installation box ① into the lid of installation box ② with the screw ④.



2 Method of wiring processing

- Connect wires with control box. (Refer to the installation manual attached to the adaptor.)
- After connecting wires with the control box, clamp wires by using the clamps ③ as shown in the below drawing.

Detail view of control box



3.6 KRP1BA97 Installation Box for Adaptor PCB

Daikin Air Conditioners

Adapter Mounting Box
Installation manual

KRP1B97 • KRP1BA97

Carefully read these instructions
before installation.

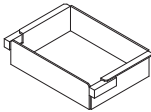
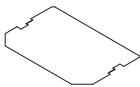
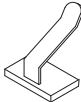
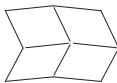
2P389469-1

Caution

- This kit is installable to the ceiling flexible type (4-way blow ceiling suspended type)
- See also the installation manual attached to the indoor unit

Accessories

Check if the following accessories are included in the unit.

Name	Mounting Box body	Mounting Box cover	Mounting screw	Code sticker	Installation manual
Shape			 M4×12		
Quantity	1	1	2	2	1

1 Preparation for installation

(1)Remove a suction grille and open a cover of the electric component box (2 screws). Fig. 1-1

(2)disconnect the swing motor lead wire from the bell mouth, Fig. 1-1

(3)Remove the bell mouth from the indoor unit (4 screws), Fig. 1-2

(4)Cut a bell mouth wiring bracket (1 location) with a nipper or cutter, etc. Fig. 1-3

(5)Make 2 holes for mounting on the concave part of the bell mouth with a drill. Fig. 1-3

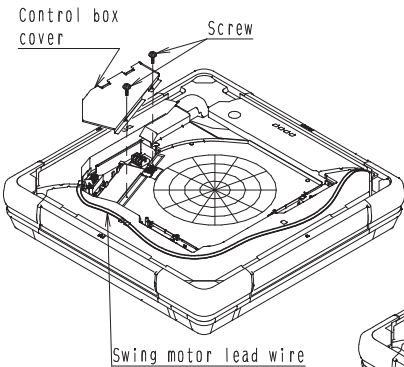


Fig. 1-1

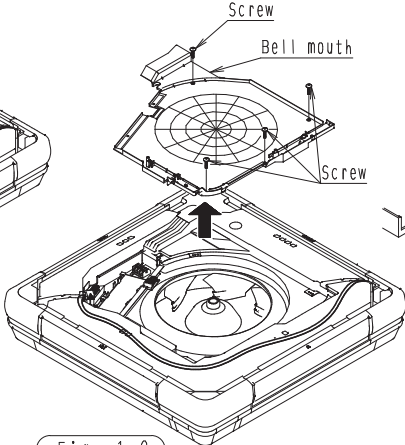


Fig. 1-2

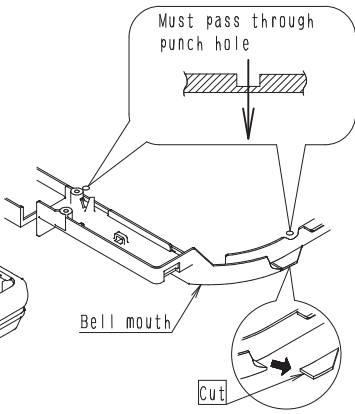
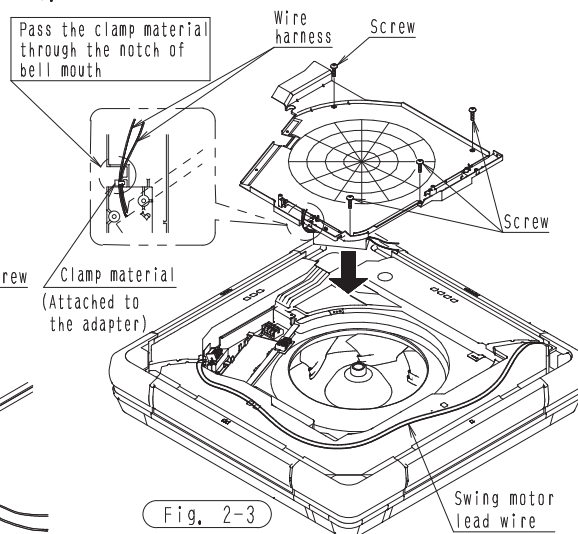
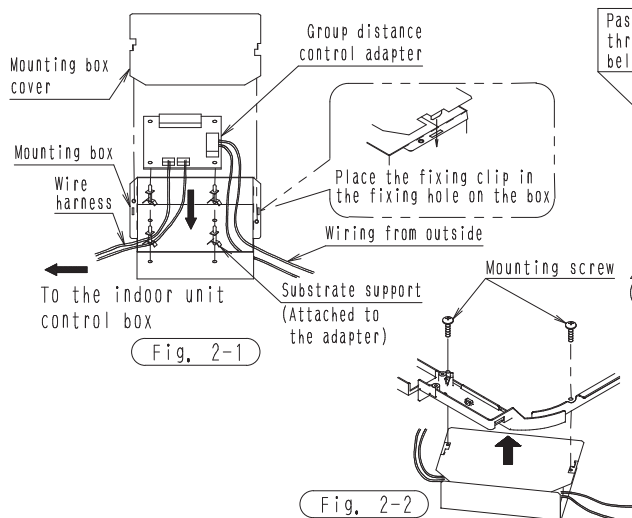


Fig. 1-3

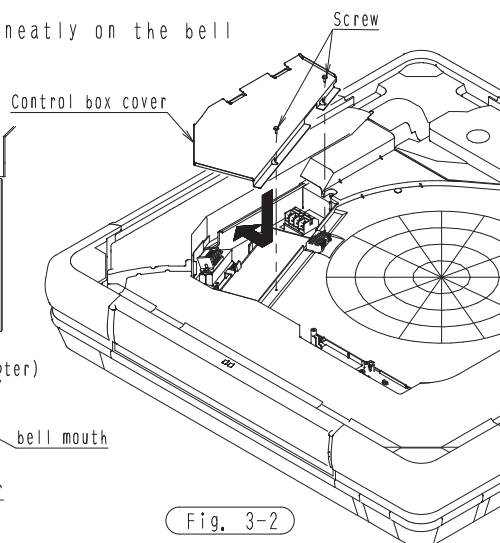
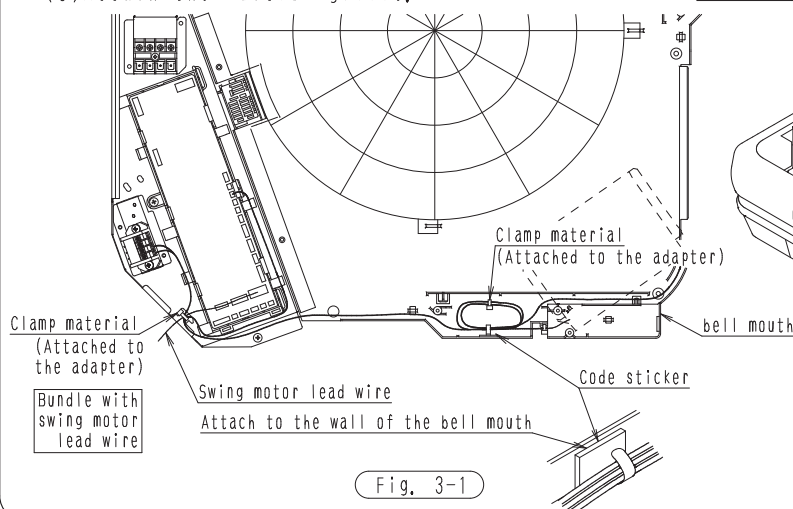
2 Adapter installation <See also the installation manual attached to the adapter.>

- (1) Attach 4 substrate supports in the holes on the mounting box before mounting an adapter. Substrate supports are attached to the adapter. (Fig. 2-1)
- (2) Install the adapter in accordance with the location of the substrate support. Connect the external wiring to the adapter.
- (3) Install the mounting box to the bell mouth with 2 mounting screws attached to the box. (Fig. 2-2)
- (4) Bundle the wire harness and fix to the bell mouth with the clamp material attached to the adapter. Cut the extra clamp material. (Fig. 2-3)
- (5) Attach the bell mouth to the indoor unit. (Fig. 2-3)
- (6) Reconnect the swing motor lead wire as before.



3 How to arrange the wiring

- Carry out electric wiring after reading the installation manual attached to the adapter
- (1) Fix the wiring with the code sticker and clamp material attached to the adapter as shown in the Figure below after wiring work is finished. (Fig. 3-1)
 - Make sure the wiring is pulled tight and follows the path shown in the diagram below.
 - Cut the extra clamp material.
 - Roll up the extra lead wire and arrange them neatly on the bell mouth as shown in the Fig.
 - (2) Attach the control box cover. (Fig. 3-2)
 - (3) Attach the suction grille.



3.7 KRP4A98 Installation Box for Adaptor PCB

DAIKIN AIR CONDITIONERS Adaptor Plate

Installation Manual

KRP4A98

READ THESE INSTRUCTIONS
CAREFULLY BEFORE INSTALLATION

Precaution

- This is installable to the ceiling mounted duct type air conditioners and to the ceiling mounted cassette built-in type air conditioners.
- When mounting the adaptor plate, see also the indoor unit installation manual and the adaptor printed circuit board mounting instruction.
- Fixing method is not in the installation manual attached to the adapter printed circuit board. Please follow directions on this sheet.

Accessories

- Check if the following accessories are included with your kit.

<Precaution>

The accessories are required for the installation of the air conditioner.
Be sure to keep them until the installation work is completed.

Name	adaptor plate(1)	adaptor plate(2)	Screws(1)	Screws(2)	Sealing material	Clamp	(Others)
Quantity	1PC.	1PC.	4PCS.	1PC.	2PCS.	10PCS.	Installation Manual
Shape			M4×8	M4×10			(This copy)

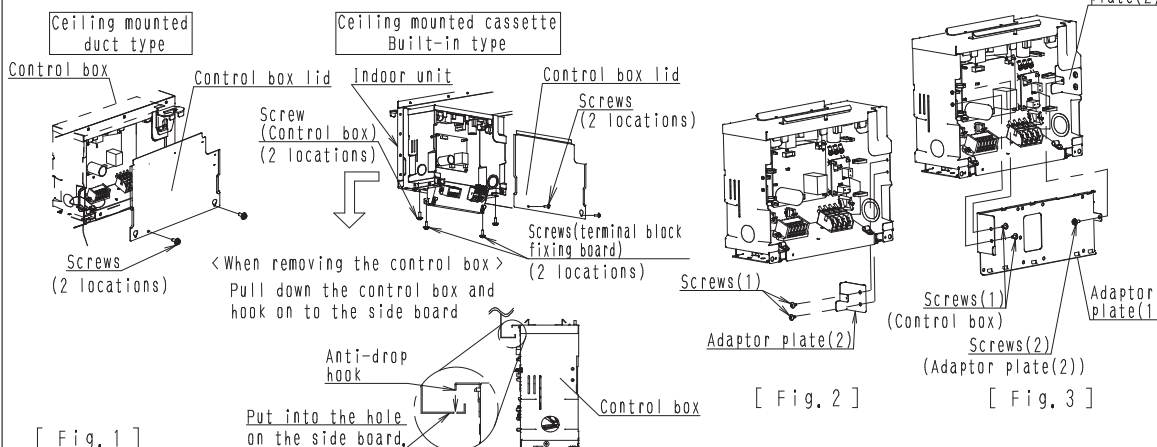
1 Mounting the adaptor plate

<Wiring to the indoor unit>

- (1) Remove the control box lid. For built-in type, open the terminal block fixing plate.
(The control box can be removed if it is hard to work.) [Fig.1]
- (2) Connect the wiring attached to the adaptor printed board to the indoor unit.
(The work is easier if the wiring is connected first.)
 - Refer to the instruction attached to the adaptor PCB for where to connect the wires.
 - Refer to Fig.5 of **2 How to mount the adaptor printed circuit board and handle the wiring** for the connector location.

<Mounting the adaptor plate>

- (3) Fix the adaptor plate (2) to the control box with the attached screws (1) at 2 locations. [Fig.2]
- (4) Attach the adaptor plate (1) to the control box with the attached screw (1) and attach adaptor plate (1) and (2) to the control box with the attached screw (2). [Fig.3]

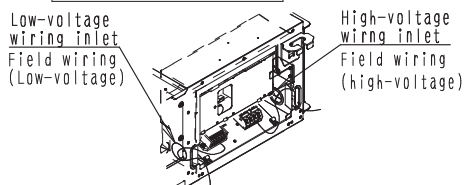


2 How to mount the adaptor printed circuit board and handle the wiring

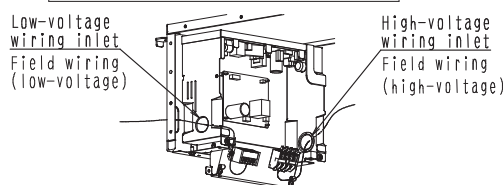
<How to lead-in external wires>

Lay the high-voltage and low-voltage wires in the control box separately through the wire inlet on the side of the control box. [Fig.4]

Ceiling mounted duct type



Ceiling mounted cassette Built-in type



[Fig. 4]

<Adaptor for wiring, Wiring adaptor for electrical appendices for group, Wiring adaptor for electrical appendices>

<How to mount the adaptor printed circuit board>

- Connect the wiring to the adaptor printed circuit board.
(The work is easier if the wiring is connected to the printed circuit board first.)
 - See the instruction attached to the adaptor PCB for the connecting locations of wiring.
- Mount adaptor printed circuit board onto the adaptor plate in the direction as shown on Fig.5 and 6.
 - Use printed circuit board supports attached to the adaptor PCB.

Adaptor plate
Adaptor
Printed circuit board support

Low-voltage wiring
Field wiring (low-voltage)

Wiring	Access point on adaptor
Wiring on-site (low-voltage)	A1 ~ A4 • B1 ~ B2
	BC • W1 ~ d

Fix the wires with clamp

PCB for Wiring adaptor for electrical appendices for group
Wiring adaptor for electrical appendices
Adaptor plate
PCB of adaptor plate for wiring

High-voltage wiring
Field wiring (high-voltage)

Wiring	Access point on adaptor
Wiring on-site (high-voltage)	X1 ~ X4
	YC • Y1 ~ Y4

Fix the wires with clamp

<Caution> If adaptor PCB is mounted in a wrong direction, electric noise may cause malfunction of the system or may influence upon other devices.

Adaptor PCB	Location to mount
Adaptor plate for wiring	KRP1C64 [Fig. 5]
Wiring adaptor for electrical appendices for group, Wiring adaptor for electrical appendices(※1)	KRP4AA51 KRP2AA61 [Fig. 5]
External control adaptor (※1)	DTA104A61 [Fig. 6]

Adaptor(※1) Only one adaptor can be mounted.

<How to handle the wiring>

<Caution> Do not make high-voltage and low-voltage wires run in parallel. Electric noise may cause malfunction of the system or may influence upon other devices.

- Fix the internal wiring.
Fix the wiring to the adaptor plate with the attached clamps as shown on Fig.5 and 6.
(Put clamps through the corner holes to fix wires.)
- Attach the control box terminal block fixing board and control box lid and wrap the wire sealing material around the wires so as to block the wire through hole. [Fig.7]
 - Take precautions to prevent the wires from getting caught.
 - Fill in any gaps in the through holes with putty or insulation (Procured locally) to prevent small animals and insects from entering the unit from outside, which may cause short circuits in the control box.)

Low-voltage wiring
Field wiring (low-voltage)

Wiring	Access point on adaptor
Wiring on-site (low-voltage)	F1 • F2 • P3 • P4
	DEMAND CONTROL-3
	C • L • N • O

Fix the wires with clamp

External control adaptor PCB
Adaptor plate

Fix the wires with clamp

[Fig. 6]

Wire through holes
Low-voltage wire
High-voltage wire
Earth wire
Clamp
Wiring fixture
Wire fixing screw

[Fig. 7]

<Caution>

- Be sure to use round crimp-style terminal to connect to the terminal block. Provide insulation to the crimping part by attaching the insulation sleeve and such.
- Connect proper wires securely and fix the wires so that external force will not be imposed on the terminals.
- Use appropriate screwdriver to tighten the terminal screws. The screw heads may be damaged if the screwdriver is too small and terminal screws will not be tightened properly.
- Refer to the instruction attached to the indoor unit for the required tightening torque values of the terminal screws.

Round crimp-style terminal
Electric wire
Insulation sleeve

3.8 KRP4A96 Installation Box for Adaptor PCB

Caution

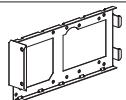
- This plate is mountable on the ceiling mounted duct type unit. After confirming the indoor unit model name, mount this plate on the unit listed in the table shown bottom.
- When mounting the plate, see also the indoor unit installation manual and the adaptor **printed circuit board** (Printed Circuit Board) mounting instruction.
- Fixing method is not on the installation manual attached to the adaptor **printed circuit board**. Please follow directions on this sheet.

Accessories

- Check if the following accessories are included with your kit.

<Precaution>

The accessories are required for the installation of the air conditioner. Be sure to keep them until the installation work is completed.

Name	Adaptor plate	Screw	Sealing material	Clamp	Installation manual
Quantity	1PC.	2PCS.	2PC.	8PCS.	1PC.
Shape		 M4×8			

Kit name	Indoor unit model that party crowded is possible		
KRP4A96	Ceiling mounted duct type unit	SkyAir	FBQ-PVJU
		VRV	FXMQ-PBVJU

*See the DAIKIN catalog for the details

<Caution>

- All field supplied parts and materials and electric works must conform to local codes.
- Use copper wire only.
- For electric wiring work, refer to also "Wiring diagram" attached to the control box lid.
- All wiring must be performed by an authorized electrician.
- A circuit breaker capable of shutting down power supply to the entire system must be installed.

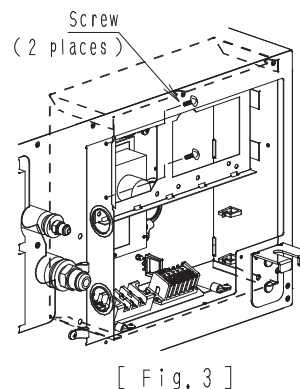
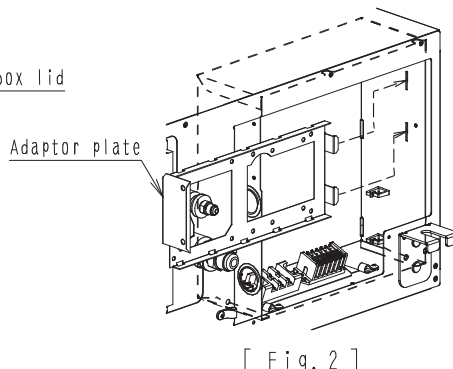
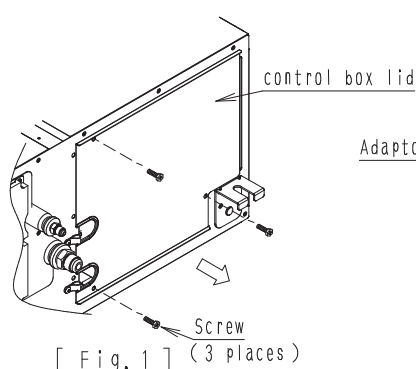
1 Mounting the adaptor plate

<Wiring to the indoor unit>

- ① Remove the control box lid. [Fig.1]
- ② Connect the wiring to the indoor unit. (The work is easier if the wiring is connected first.)
 - See the instruction attached to the adaptor PCB for the place where to connect the wires on the indoor unit.
 - Please see the connector location on (figure 1) on the **2 How to mount the adaptor printed circuit board and handle the wiring**.

<Mounting the adaptor plate>

- ① Putting the claw of the adaptor plate into the hole of the box. [Fig.2]
- ② Fix the box with the attached fixing screws at two places. [Fig.3]



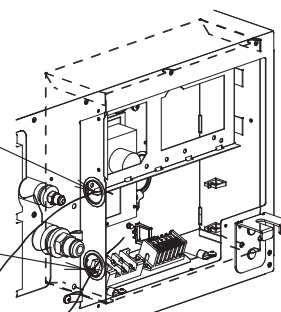
2 How to mount the adaptor printed circuit board and handle the wiring

<How To Lead-in External Wires >

Lay the wires in the control box through the wire inlet on the side of the control box.

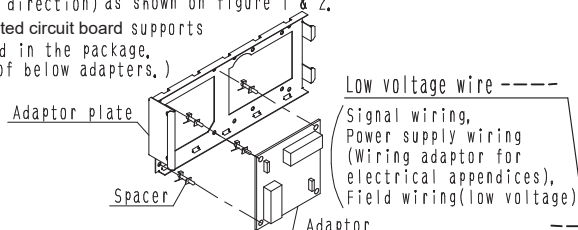
Low-voltage wiring inlet
Signal wiring,
Field wiring(low voltage)

High-voltage wiring inlet
Power supply wire,
Field wiring(high voltage)



<How to mount the adaptor printed circuit board>

- ① Connect the wiring to the adaptor printed circuit board.
(The work is easier if the wiring is connected to the printed circuit board first.)
 - See the instruction attached to the adaptor PCB for where to connect the wiring.
- ② Mount adaptor printed circuit board onto the mounting plate
(in the direction) as shown on figure 1 & 2.
 - Use printed circuit board supports included in the package, (for any of below adapters.)



<Caution> If (adaptor printed circuit board is) mounted in a wrong direction, electric noise may cause malfunction of the system, or may influence upon other devices.

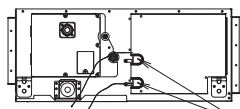
Adaptor PCB	Place where to mount
Adaptor for wiring KRP1C64	(Fig. 1)
Wiring adaptor for electrical appendices (*1) KRP4AA51 KRP2A61	(Fig. 1)
External control adaptor for outdoor unit (*1) DTA104A61	(Fig. 2)

(*1) adaptor cannot be mounted 2 or more together.

<How to handle the wiring>

<Caution> Do not make high-voltage and low-voltage wires run in parallel.
Electric noise may cause malfunction of the system, or may influence upon other devices.

- ① Fix the internal wirings.
Bind the wiring from the adaptor plate to the indoor unit control box according to the drawing shown on the right with the attached clamp. (Put the clamping materials through the corner holes to fix wires.)
 - Bind the surplus wires and the other wiring together with the clamp.
- ② Put the control box lid, and wrap the wire sealing material around the wires so as to block the wire through holes.
 - Take precautions to prevent the wires from getting caught.
 - After all the wiring connections are done, fill in any gaps in the through holes with putty or insulation (procured locally) to prevent small animals and insects from entering the unit from outside. (If any do get in, they could cause short circuits in the control box.)

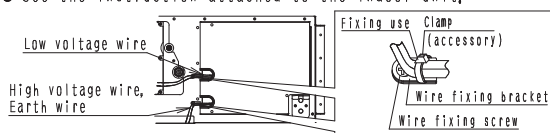


Wire through holes

Warning

Trim and lay the wiring neatly and attach the control box lid securely.
An electric shock or fire may result if the control box lid catches any wiring or the wires push up the lid.

- ③ Connect round crimp-style terminals provided with insulation sleeves to the terminal block for power supply.
 - See the instruction attached to the indoor unit.

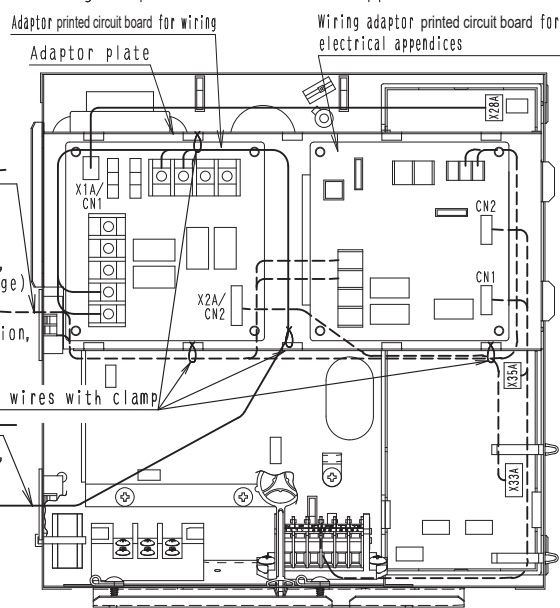


<Caution>

- Connect proper wires securely and fix the wires so that external force will not be imposed on the terminals.
- Use an appropriate screwdriver to tighten the terminal screws. The screw heads may be damaged if the screwdriver is too small and the terminal screws will not be tightened properly.
- Do not tighten the terminal screws excessively, or otherwise the screw heads may be damaged.
- Refer to the table below for the required tightening torque values of the terminal screws.

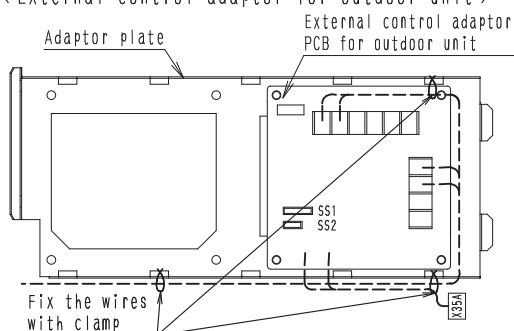
	Tightening torque (N·m)
Terminal block for remote controller and transmission wires	1.18 - 1.44
Terminal block for power supply, and wiring the units	1.18 - 1.44

<Adaptor for wiring, Wiring adaptor for electrical appendices>

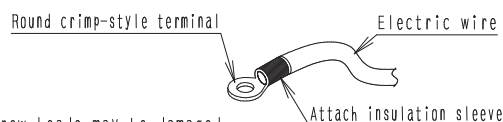


(Fig. 1)

<External control adaptor for outdoor unit>



(Fig. 2)

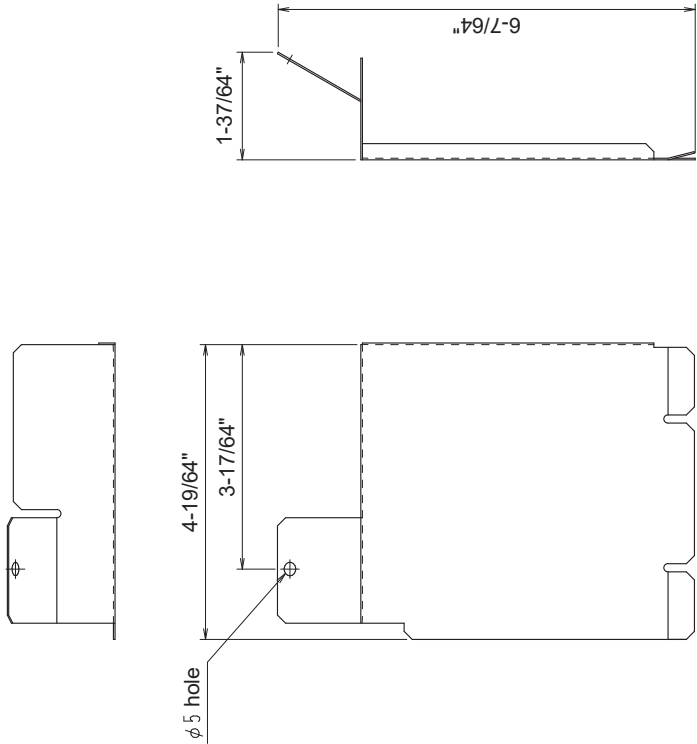


3.9 KRP1C93 Installation Box for Adaptor PCB

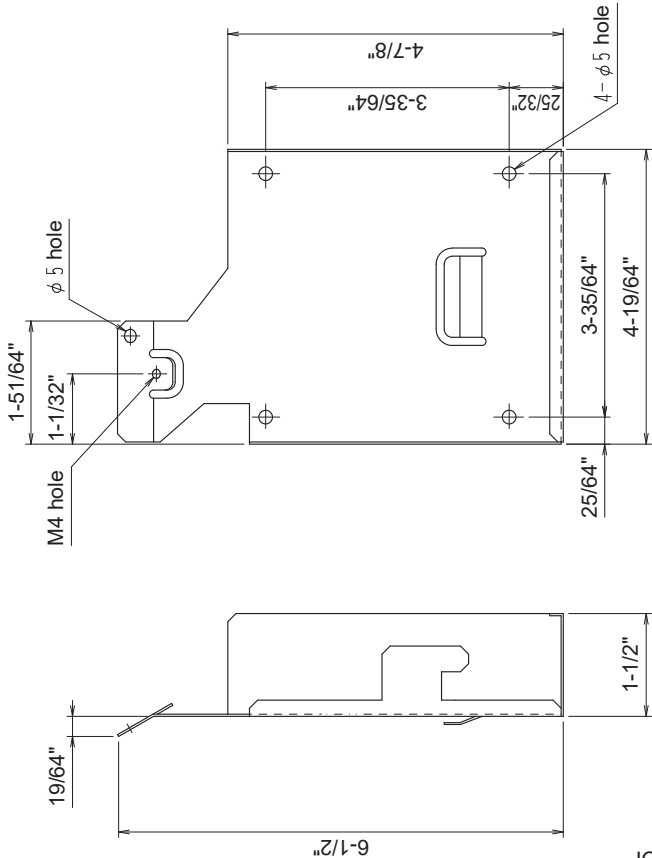
unit: in.

- Specification
Materials: Galvanized steel plate
Accessories
Fixture : 2
Mounting screw : 4
Installation manual

Installation box lid



Installation box for adaptor PCB



DAIKIN AIR CONDITIONERS Adapter Installation Box Installation Manual

KRP1C93 • KRP1CA93

READ THESE INSTRUCTIONS CAREFULLY BEFORE INSTALLATION.
KEEP THIS MANUAL IN A HANDY PLACE FOR FUTURE REFERENCE.

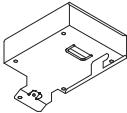
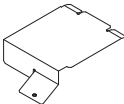
NOTE:

● This box can be installed to the ceiling-hang type unit.

● Each adapter plate requires one kit.

Parts included:

Check the following parts are include with your unit.

Part name	Installation box main body	Installation box lid	Installation screw	Fixing screw for lid	Fixture	Installation manual	Clamp
Shape			 M4×8	 M4×12			
Quantity	1	1	2	2	2	1	4

Applicable adapter plate

Adapter plate name	Kit name
(Group) Remote control adapter	KRP2A62, KRP4A52

1 Installation preparation

① Remove the electric parts box lid, (2 screws)

② Take out the electric parts box, (2 screws)

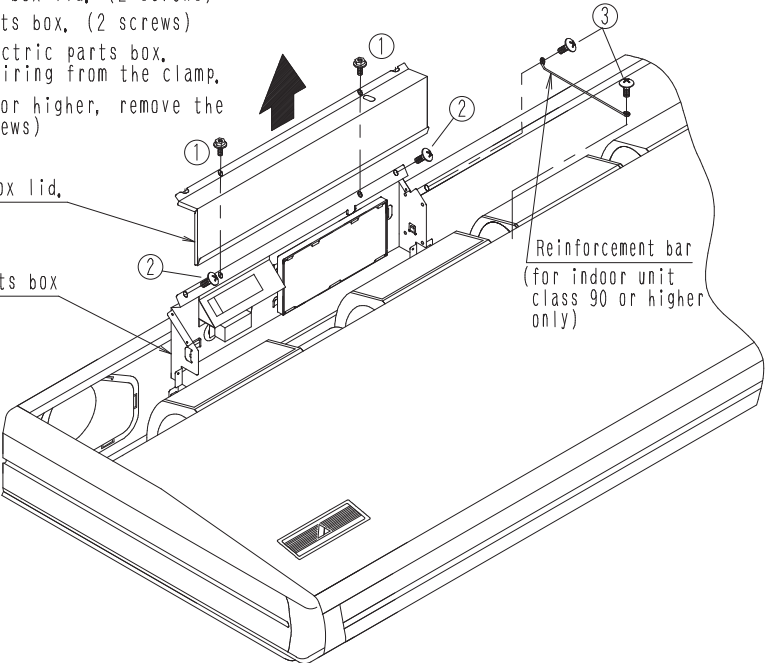
● Before taking out the electric parts box, disconnect the internal wiring from the clamp.

③ For indoor unit class 90 or higher, remove the reinforcement bar, (2 screws)

Electric parts box lid.

Indoor unit electric parts box

Reinforcement bar
(for indoor unit
class 90 or higher
only)



2 Installation of Adapter Plate

① Install the fixture included with the kit to the electric parts box. (2 locations)

② Install the adapter plate to the adapter installation box.

- For installation direction of the adapter plate, refer to the installation manual included with the adapter plate.

③ Temporarily hang the adapter installation box on the electric parts box of the indoor unit.

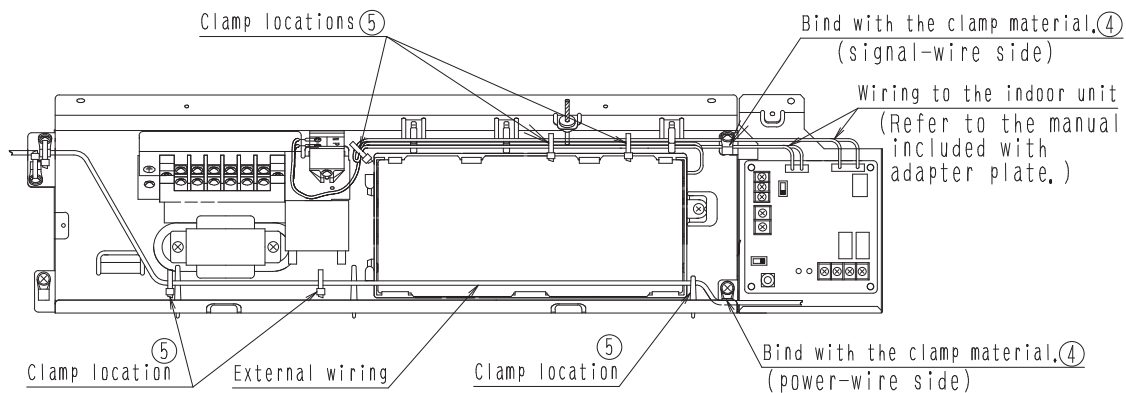
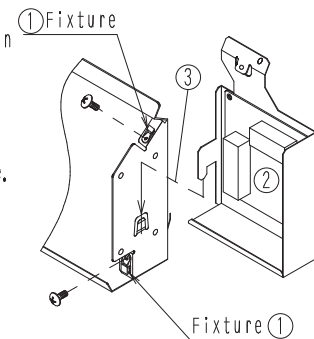
④ Connect wires to the adapter plate and the indoor unit.

- For wiring locations, refer to the manual included with the adapter plate.
- Separate power wires and signal wires. Refer to the figure below on how to wire inside the electric parts box.
- Bind the wires taken out of the adapter plate together with the fixture installed in ① using the included clamp material.

⑤ Fix the internal wiring.

- Refer to the figure below on how to fix the wires inside the electric parts box to the clamp material.

- Bind the remaining wires with the clamp material, and house them inside the electric parts box.



3 Installation to the Indoor Unit

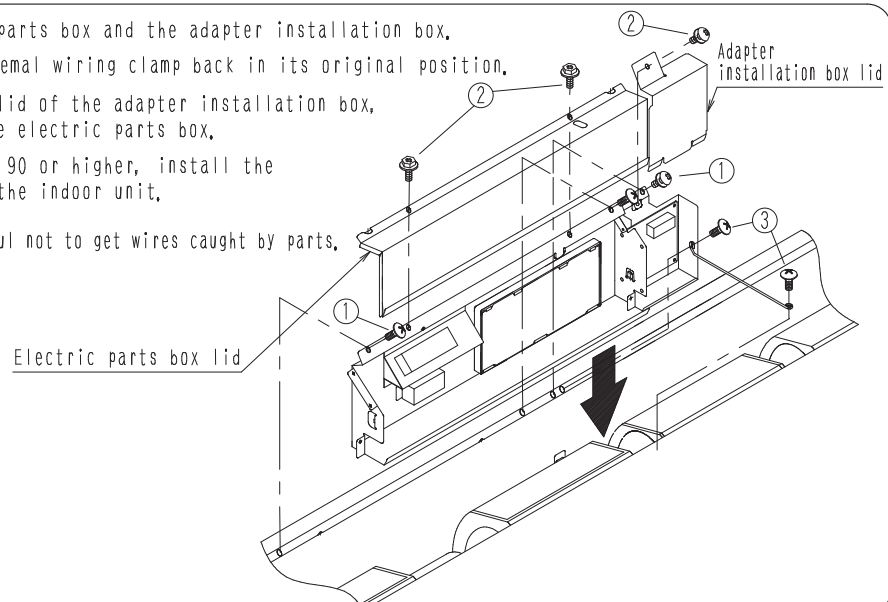
① Install the electric parts box and the adapter installation box.

- Place the removed internal wiring clamp back in its original position.

② After installing the lid of the adapter installation box, install the lid of the electric parts box.

③ For indoor unit class 90 or higher, install the reinforcement bar to the indoor unit.

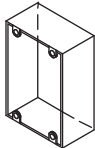
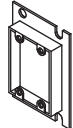
*When installing, be careful not to get wires caught by parts.



3.10 KJB311AA Electrical Box

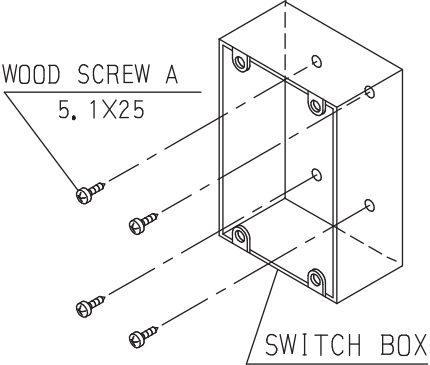
INSTALLATION POINT OF SWITCH BOX

PARTS • Check the parts according to the list shown below.

	NAME	SWITCH BOX	COVER	WOOD SCREW A (5.1×25)	CLAMP SCREW B (M4×16)	EARTH SCREW (M4×12)	C-CUP WASHER	LABEL FOR EARTH
Q	KJB212A(A)	1	1	4	4	3	2	1
T	KJB311A(A)	1	1	4	4	3	3	1
Y	KJB411A	1	1	4	4	—	—	—
	SHAPE							

INSTALLATION

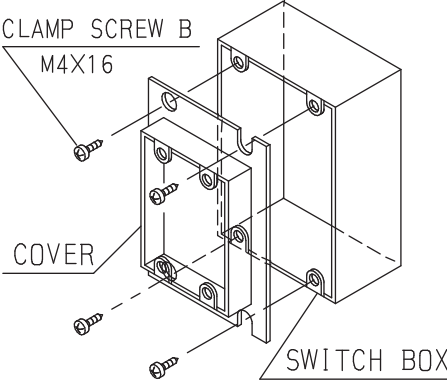
① Attach the switch box.



WOOD SCREW A
5.1X25

SWITCH BOX

② Attach the cover.

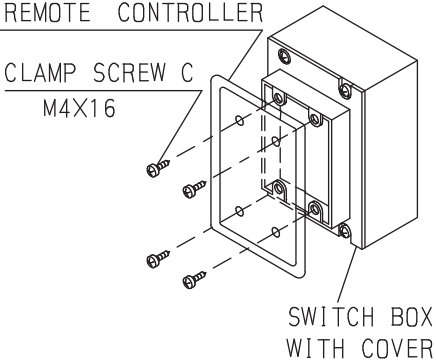


CLAMP SCREW B
M4X16

COVER

SWITCH BOX

③ Attach the remote controller.

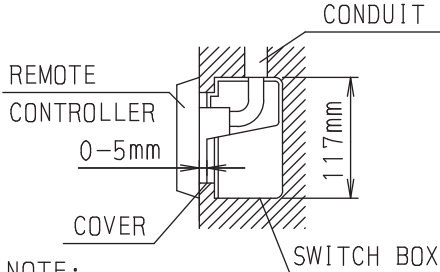


REMOTE CONTROLLER

CLAMP SCREW C
M4X16

SWITCH BOX WITH COVER

④ Example of installation.



CONDUIT

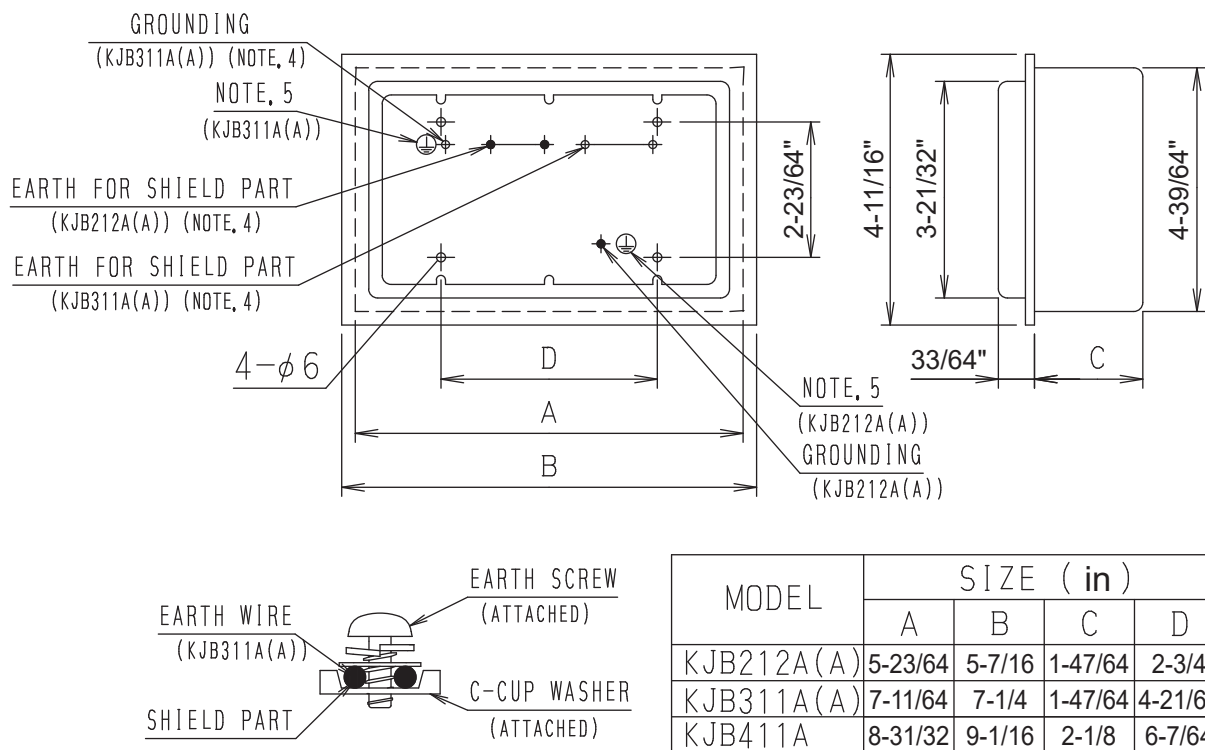
REMOTE CONTROLLER

0-5mm

COVER

SWITCH BOX

NOTE:
Push the switch box in the wall.
Indent its surface a little
from the wall surface.



- Fig. 1
- NOTES: 1. Refer to the installation of each remote controller.
2. Do not bind the lead wires for switch box with the power cord and the link wiring.
This may cause erratic operation.
3. The remote controller and the clamp screw C are one kit.
They are sold separately and attach to the switch box.
4. Ground the shield part of shielded wire or earth wire (only KJB311A(A)) as shown in the Fig. 1.
5. Stick the label for earth attached to the equipment.

3.11 DTA104A53 / 61 / 62 External Control Adaptor for Outdoor Unit (Must be Installed on Indoor Units)

(Note) The drawing is released common for worldwide models. Please ask your DAIKIN dealer for more specific information such as applicable models.

DAIKIN VRV AIR CONDITIONER

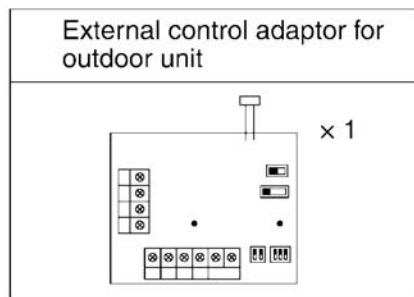
External Control Adaptor for Outdoor Unit

Installation Manual

DTA104A61·62·62-9·51·52·53·53-9

Accessories

Check the following accessories are included in the kit before the installation.



PCB support	× 4
Clamp	× 3
Installation manual	× 1

NOTES

- The kit type (DTA104A61·51 type, DTA104A62·62-9·52 type, DTA104A53·53-9 type) varies according to air conditioner model.
- The installation box for adaptor PCB are required with the following air conditioner models.

FXHQ		KRP1D93A
FXYH · FXH(Q)~L · M		KRP1C93
FXCQ		KRP1C96
FXYC · FXC(Q)~L · M		KRP1B96
FXZQ · FXD(Q)		KRP1B101
FXFQ~PVE(D)		KRP1H98

1 General description of system

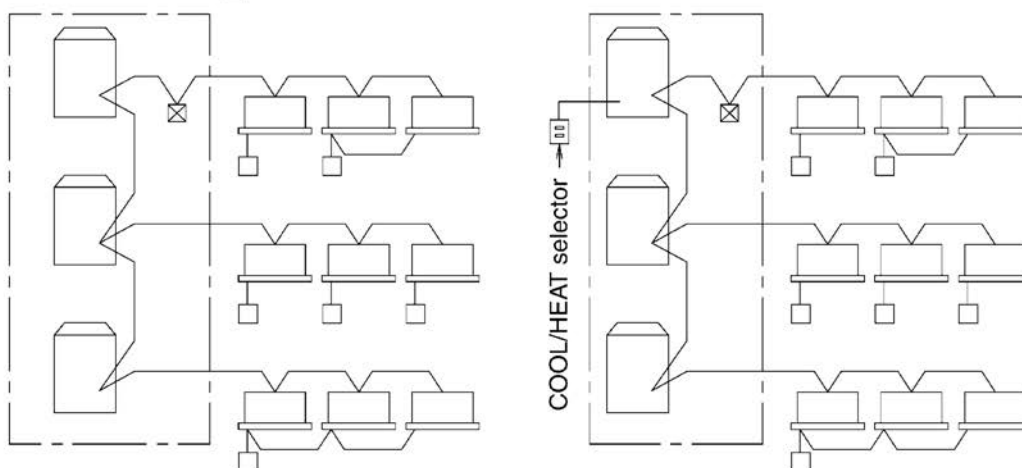
With the external control adaptor, outdoor units are controlled as follows.

1. Operation mode (COOL/HEAT/FAN) is switched simultaneously for more than one outdoor unit.

- If switching operation mode by indoor unit remote controller or COOL/HEAT selector.
- Except RSEY-K

☒ External control adaptor for outdoor unit

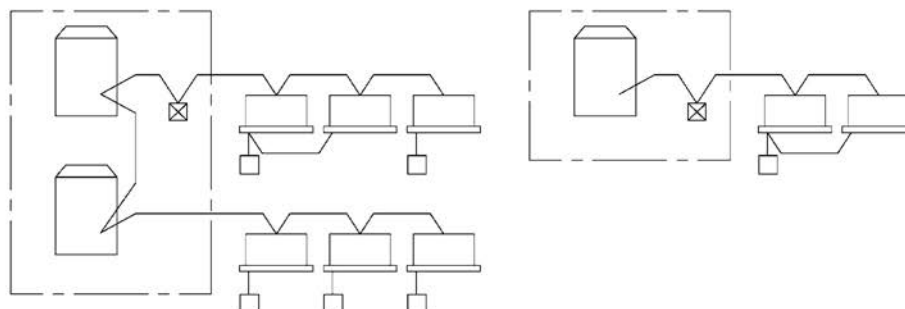
☐ Indoor unit remote controller



You can simultaneously switch operation mode for outdoor units in [].

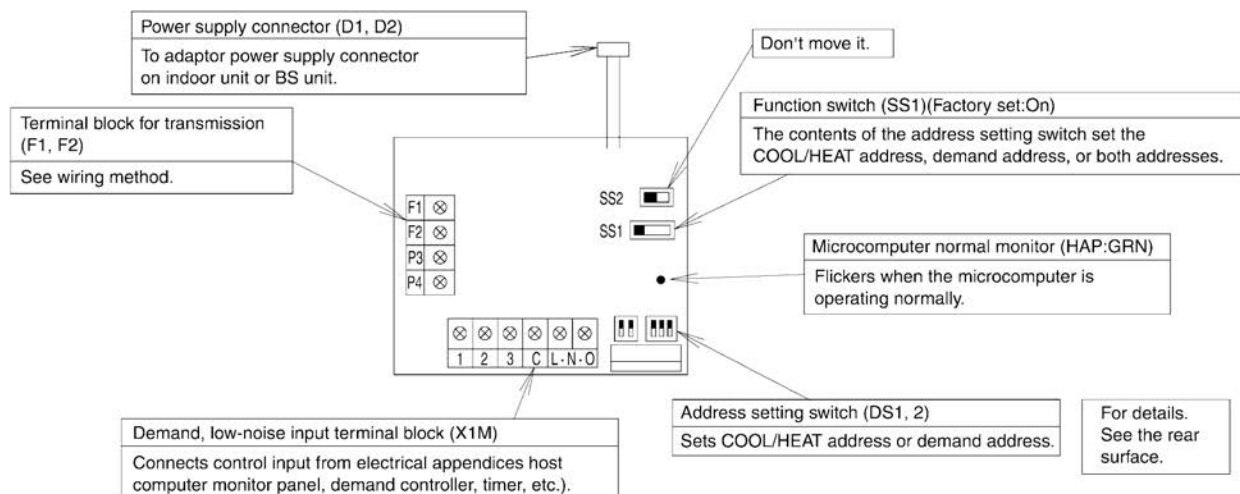
2. Demand control and low-noise control are executed simultaneously for more than one outdoor unit.

- Except RSEY-K



Demand control and low-noise control are executed simultaneously for outdoor units in [].

2 Names of parts and functions

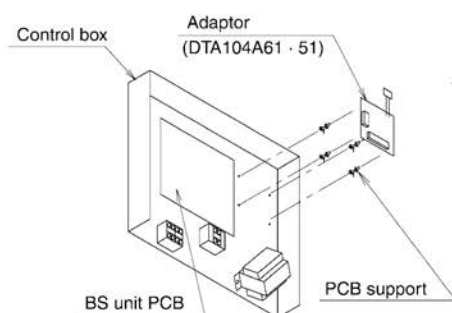


3 Installation

- Install the adaptor inside the control box of indoor unit of same refrigerant circuit.
- If installing on a BS unit, install the adaptor inside the control box of the BS unit.

« BS Unit »

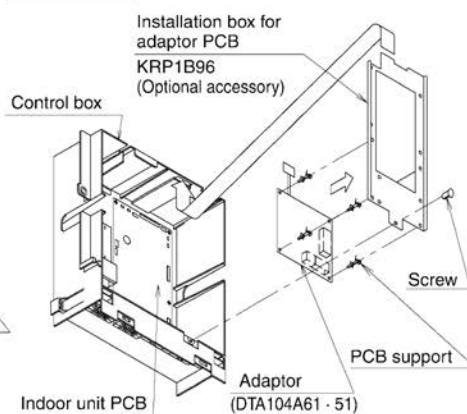
BSV



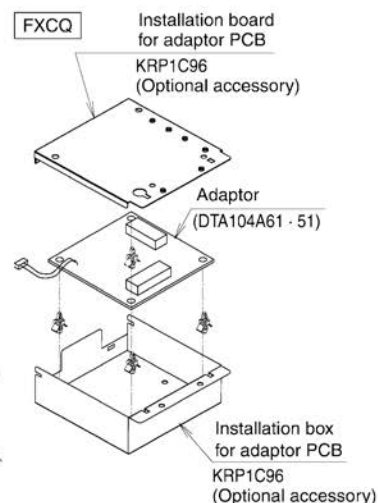
« Ceiling-mounted cassette type »

FXYC (Double-flow model)

FXC(Q)~L · M

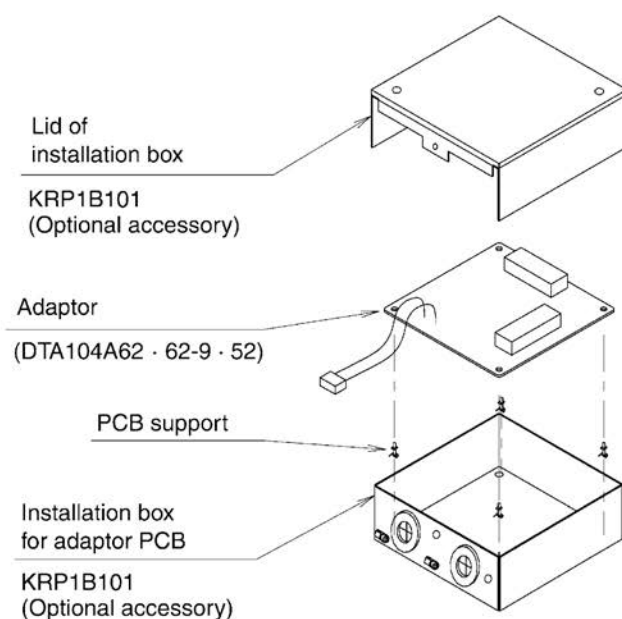


NOTE : Installation box for adaptor PCB is required to install the adaptor.



<< Ceiling-mounted cassette type >>

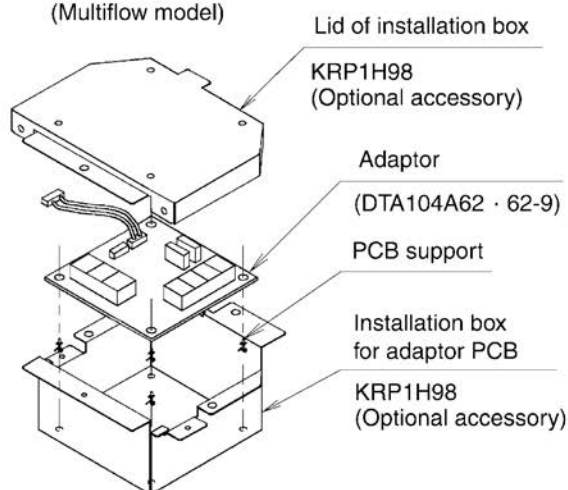
FXZQ (600×600 Multiflow model)



NOTE : Installation box for adaptor PCB is required to install the adaptor.

<< Ceiling-mounted cassette type >>

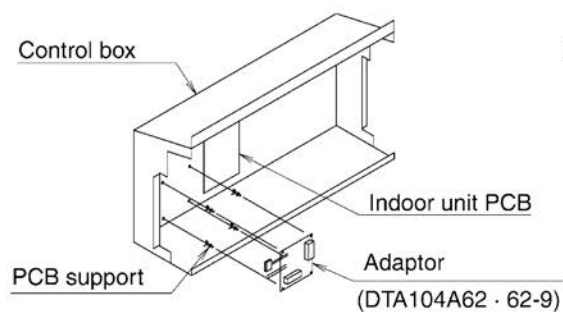
FXFQ
(Multiflow model)



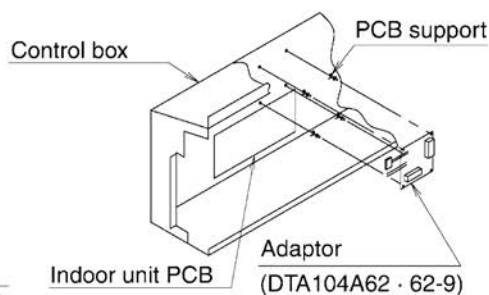
NOTE) Installation box for adaptor PCB is required to install the adaptor.

<< Floor duct type >>

FXVQ125~250



FXVQ400 · 500



« Ceiling-mounted Duct type »

FXMQ20~140P

FBQ-D(A)

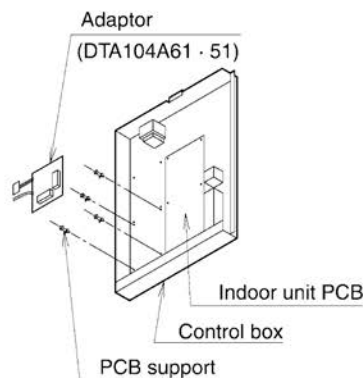
See installation
manual of KRP4A96
(Optional accessory).

FXSQ20~140P

FBQ-E

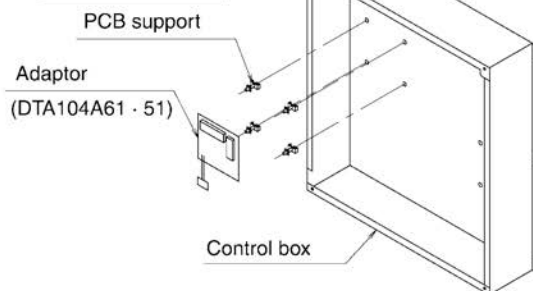
See installation
manual of KRP4A98
(Optional accessory).

FXM-40~125



FXYM200 · 250KJ

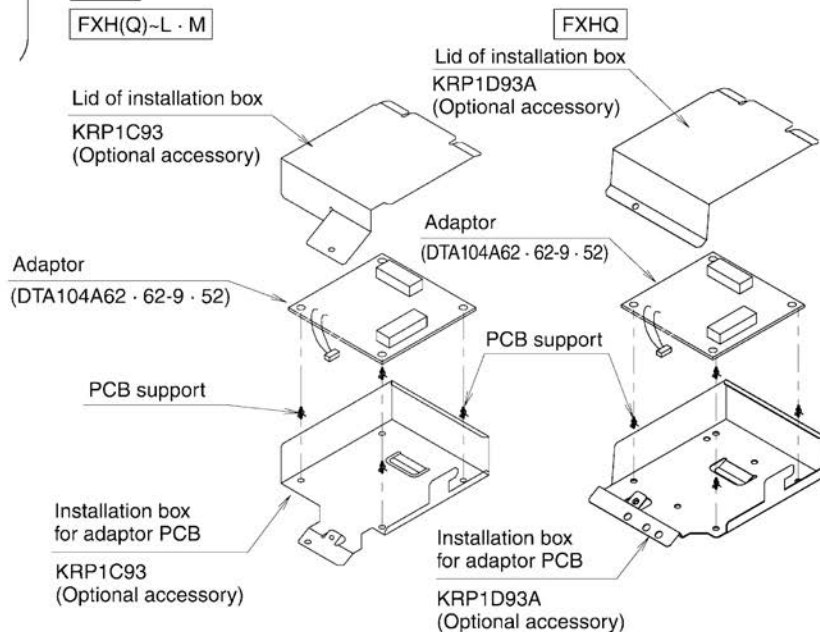
FXM(Q)200 · 250



« Ceiling Suspended type »

FXYH

FXH(Q)~L · M

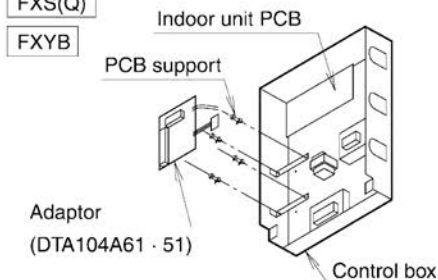


NOTE : Installation box for adaptor PCB is required
to install the adaptor.

« Ceiling-mounted Built-in type »

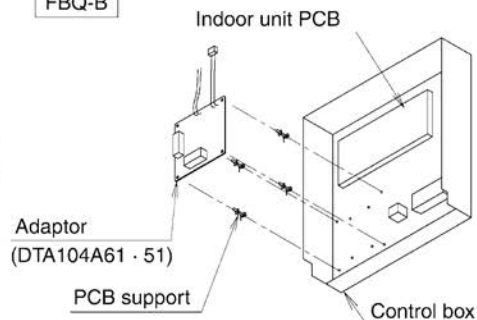
FXS(Q)

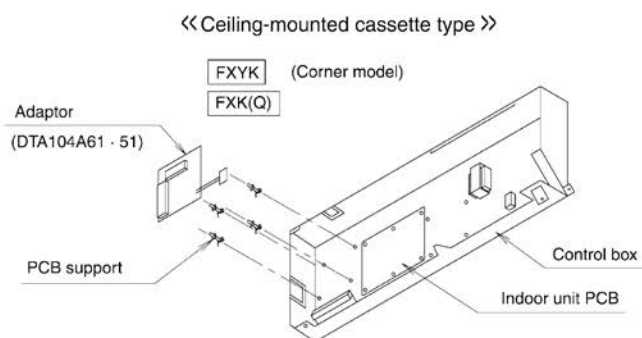
FXYB



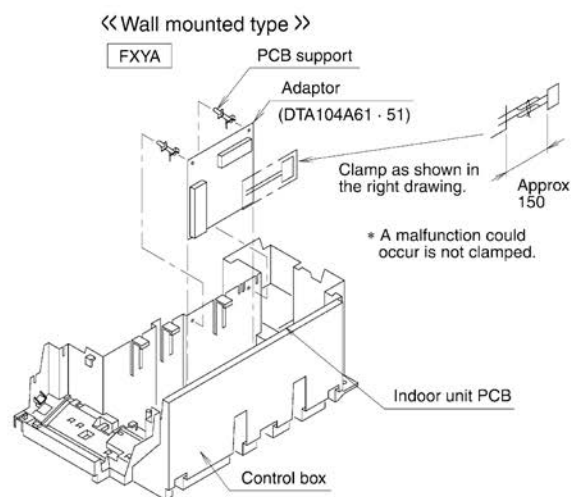
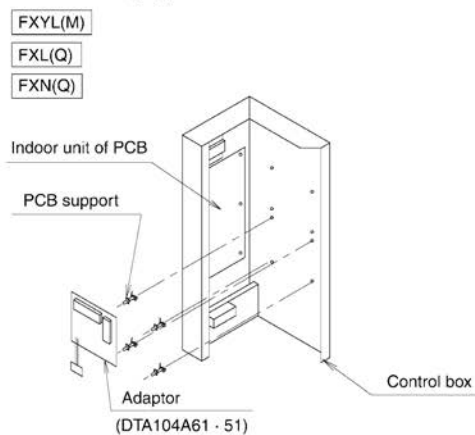
NOTE: Installation box is necessary for
second adaptor (FXS).

FBQ-B

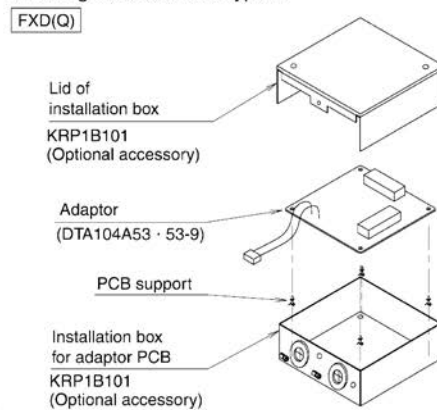




«Floor-standing type»



«Ceiling-mounted Duct type»



NOTE : Installation box for adaptor PCB is required to install the adaptor.

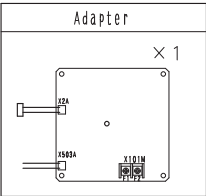
1PA63164-1J

3.12 DTA109A51 DIII-NET Expander Adaptor

Accessories

Check the following accessories are included in the kit before the installation

Adapter



× 1

PCB support	× 4
Clamp	× 3
Installation Manual	× 1

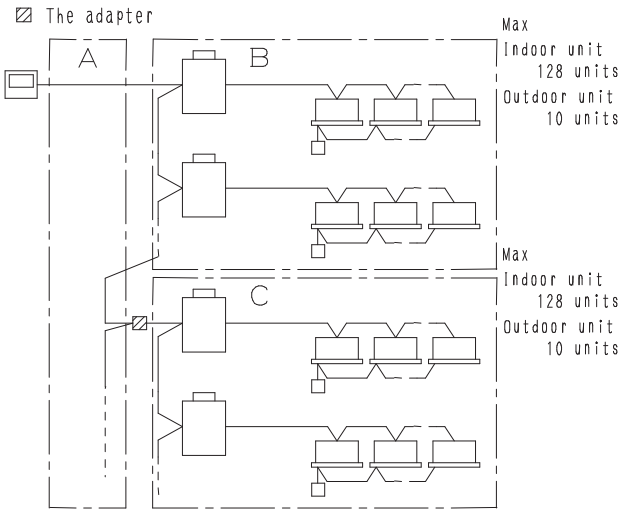
NOTE

This adapter does not apply to salt damage resistance.

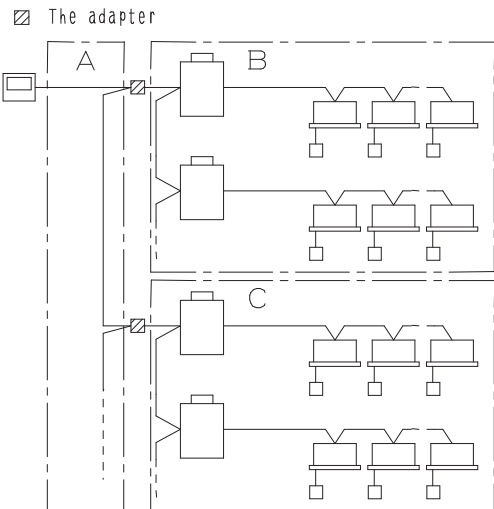
1 General description of system

The adapter allows easy system expansion as long as restrictions are observed.
1. The below systems can be controlled on the Super Wiring System when using the adapter.

- (1) Up to 1024 units can be centrally controlled in 64 different groups.
(With 2 central remote controllers, up to 1024 units can be controlled in 128 groups.
Restrictions on the number of units that can be connected to the Super Wiring System apply to each adapter.
- (2) Wiring restrictions (max. length: 1000m, total wiring length: 2000m, max. number of branches: 16) apply to each adapter.



A maximum of 128 indoor units and 10 outdoor units can be connected in each group B and C.

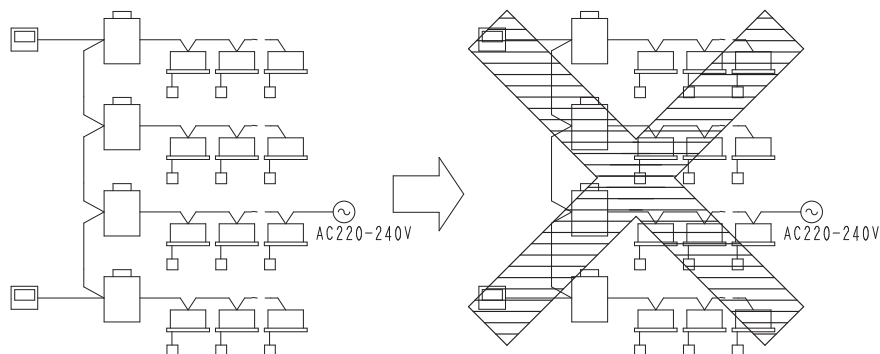


Each group A, B and C can have a maximum wiring length of 1000m, total wiring length of 2000m and a maximum 16 branches.

(3) Setups risky for centralized control systems are possible.

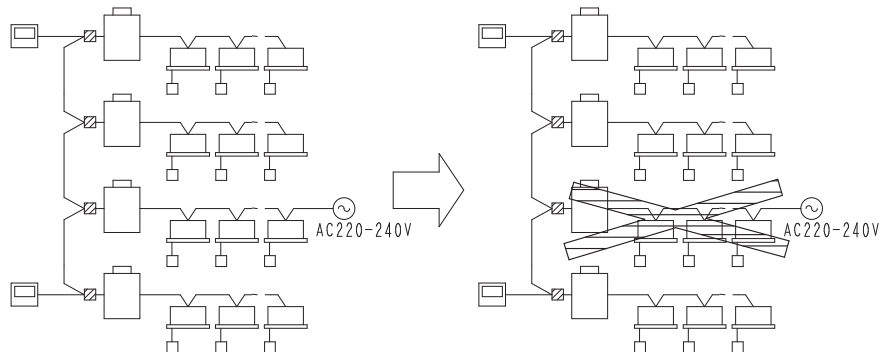
Conventional System

Misswiring such as apply 220-240V to circuits could possibly shut down the entire system.

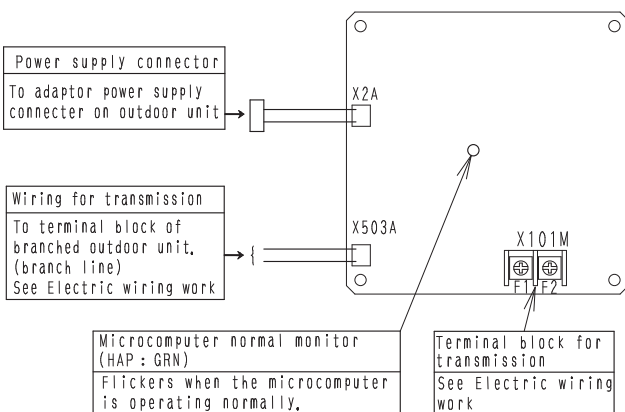


With the adapter

Should trouble occur, only units below the adapter are shut down. Thus, it is possible to avoid a total system shutdown.

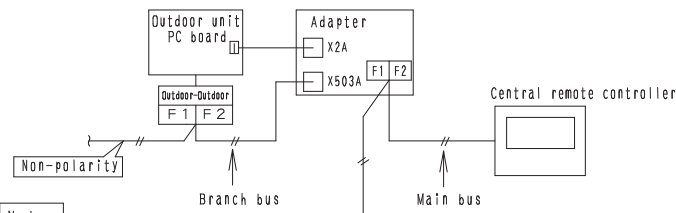


2 Names of parts and functions



3 Electric wiring work

- (1) Connect the wire from the adapter to the adapter power connector on the outdoor unit's PC board.
(For connector Nos., see the electric wiring diagrams for the indoor and function units.)
- (2) Connect transmission wires between outdoor units (Outdoor-Outdoor terminal board).
- (3) Wire transmission wires to terminal boards as shown below.



Notes

(Transmission wiring specifications)

- 0.75~1.25mm² sheathed wire (2 wire).

(Transmission wiring length)

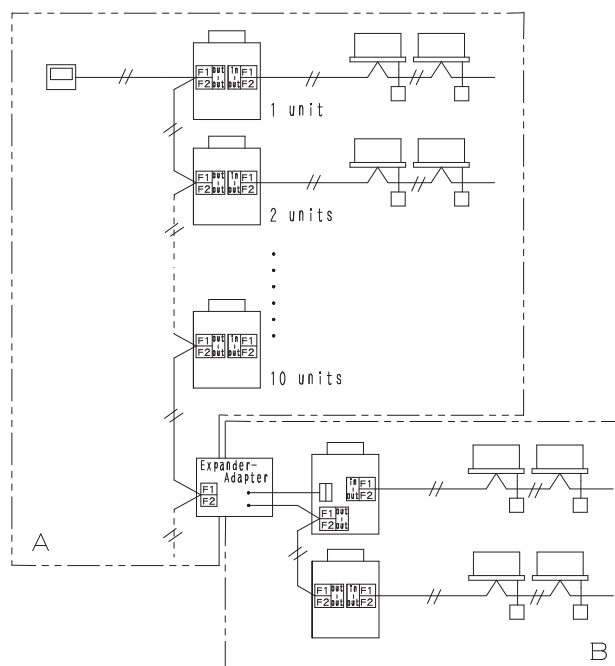
- Observe the following limits on transmission wires. The limits apply to each adapter. If you exceed the limits, it may cause malfunction.

(Total length: 2000m
Max. length...1000m
Max. number of branches: 16)

- At least one outdoor unit and one optional controller for centralized control are required for every main bus and branch bus.
- Up to 8 adapters can be connected in one system.
- Do not locate adapters downstream of other adapters (i.e., on a branch bus).
- If not used with a central control device, the expander adapter cannot be used with the wiring adapter for electrical appendices (KRP2A) or the schedule timer (DST301B51).
- The external control adapter for outdoor units controls group cooling and demand for each adapter. (Anything beyond the expansion control falls outside the control domain.)
- Do not turn the system ON/OFF rapidly from the optional controller for centralized control. This can cause temporary erroneous displays.
- Sequential starts is controlled by each expander adapter.

4 Wiring example

System with more than 10 outdoor units.



Note Wiring restrictions (see "Electric wiring work") apply to each group A and B.

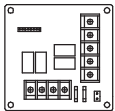
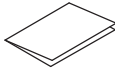
3.13 KRP1C74 / 75 Adaptor for Wiring

Wiring Adaptor Installation Manual

KRP1C74 • 75

Accessories

Check if the following accessories are included in the kit.

Name	Adaptor for wiring	Harness	PCB support	Clamp	Installation manual
Shape					
Quantity	× 1	× 1	× 4	× 3	× 1

Notes

- Kits vary according to applicable models.
- A special adaptor fixing plate and box are required for the following models.

FXHQ-MVJU

FXMQ-PBVJU

FXSQ-TAVJU

FXFQ-TVJU

FXEQ-PVJU, FXDQ-MVJU

FXZQ-TAVJU, FXEQ-PVJU, FXTQ-TAVJUA, FXTQ-TAVJUD

KRP1C93

KRP4A96

KRP4A98

KRP1J98A, KRP1H98A

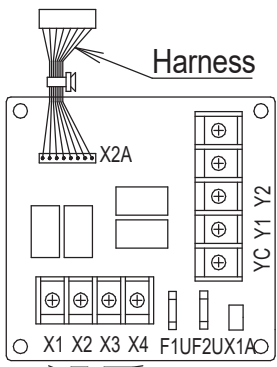
KRP1B101

KRP1BA101

<Caution>

- All wiring must be performed by an authorized electrician.
- For electric wiring work, refer to also "Wiring diagram" attached to the control box lid and this manual.
- All wiring must be worked after shutting down power supply.
- All field supplied parts and materials and electric works must conform to local codes.
- A circuit breaker capable of shutting down power supply to the entire system must be installed.

1 Names of parts



This function can not be used.
Terminals for controlling
auxiliary heater, humidifier,
and other equipment.

Terminals for operation status

2 Electric wiring

- Refer to the wiring diagram attached to the indoor unit before attempting to wire.

[Make sure wires to units do not pass over the PCB when wiring.]

- Wire the adaptor to the indoor unit as shown below.



Note)1 Connector No.

X16A: FXLQ-MVJU, FXNQ-MVJU,
FXDQ-MVJU, FXHQ-MVJU

X33A: FXFQ-TVJU, FXZQ-TAVJU, FXEQ-PVJU,
FXSQ-TAVJU, FXMQ-PBVJU,
FXTQ-TAVJUA, FXTQ-TAVJUD

① Thermo-ON and Fan ON status

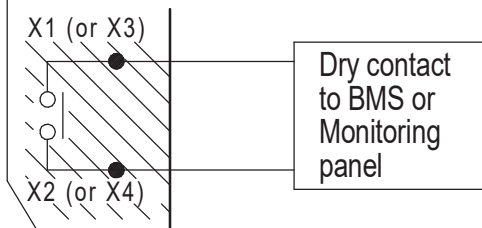
- Thermo-ON status

Contact terminals X1 and X2 close while the indoor unit is Thermo-ON (call for cooling or heating)

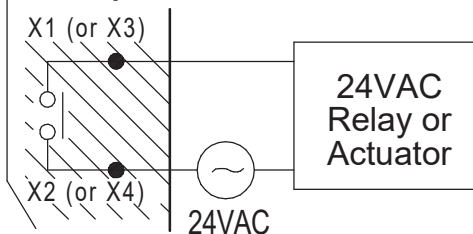
- Fan ON status

Contact terminals X3 and X4 close when indoor unit fan is ON

Example : Obtaining status

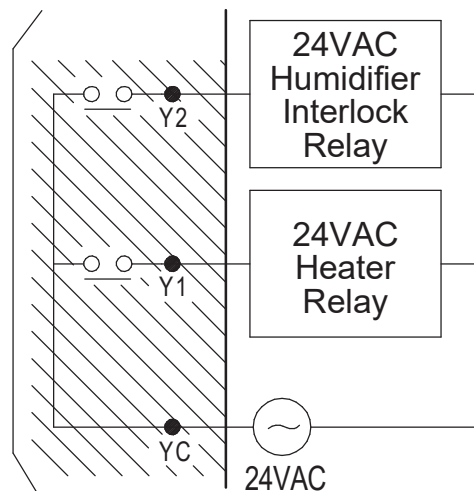


Example : Interlock



② Interlocking Humidifier and Heater

- Humidifier output(Y2-YC)
 - Energized while heating Thermo-ON (call for heating)
- Heater output(Y1-YC)
 - Auxiliary heater output with heat pump heating
 - Primary heater output when heat pump lockout enabled

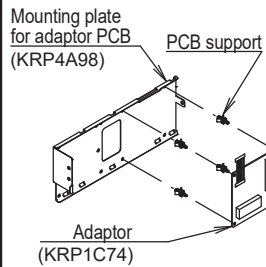


3 Installation

- Installation differs according to models as shown below.
- Do not bundle low and high voltage wires together.
- Bundle any excess wires with the attached clamps so as to keep loose wires off the indoor unit PCB.

«Ceiling mounted duct type»

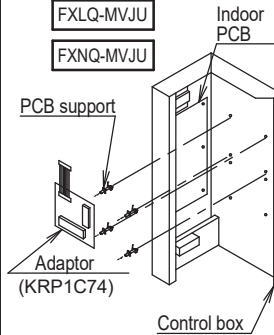
FXSQ-TAVJU



«Floor-standing type»

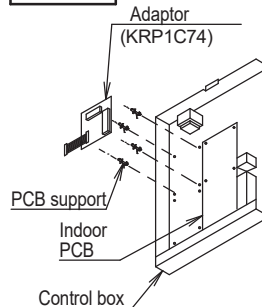
FXLQ-MVJU

FXNQ-MVJU



«Ceiling mounted duct type»

FXMQ-MVJU



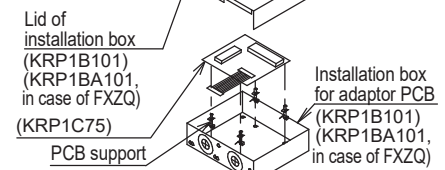
«Ceiling mounted duct type» «Ceiling mounted cassette type (2'X2')» «Air handling unit type» «One way blow cassette type»

FXDQ-MVJU

FXZQ-TAVJU

FXTQ-TAVJUA

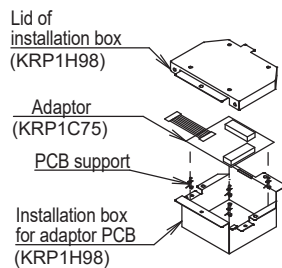
FXTQ-TAVJUD



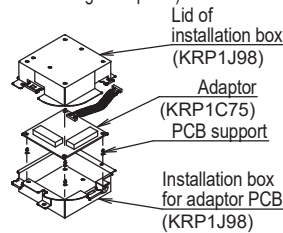
«Ceiling mounted cassette type»

FXFQ-TVJU

Insert the edge of the adaptor into the groove in the adaptor box.



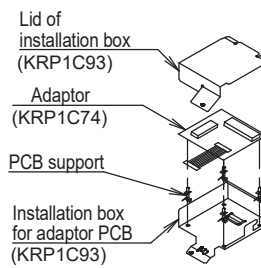
(In case of installing Self cleaning deco panel)



NOTE) Installation box for adaptor PCB is necessary for installing wiring adaptor. Install the adaptor at Installation box side by using PCB support.

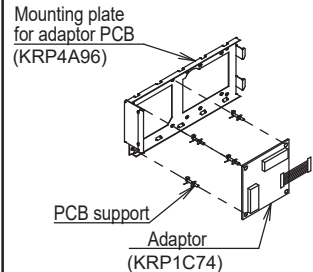
«Ceiling suspended type»

FXHQ-MVJU



«Ceiling mounted duct type»

FXMQ-PBVJU

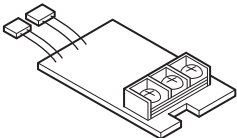
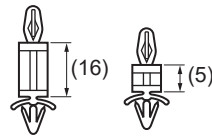


3.14 KRP50-2 Wiring Adaptor for Remote Contact / Humidifier



Model		KRP50-2
Item		
Applicable Model		VAM-GVJU
Dimensions (in.)	W	3-11/32"
	H	1-59/64"
	D	1-1/16"
Applicable load		AC250V 0.01~1A
Component parts		PCB, PCB stand offs, Installation manual

Components

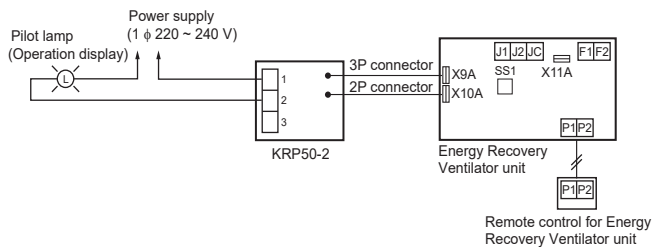
1. KRP50-2 PCB (×1)	2. PCB stand offs (4 large, 4 small)
	
Tie wrap(×1)	Manual(×1)

Installation guide

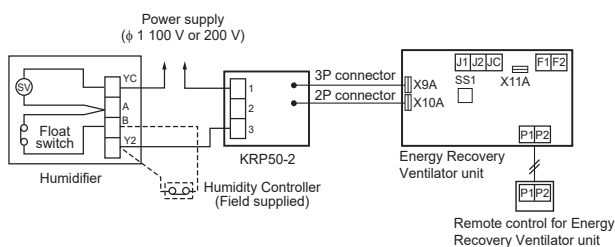
- The KRP50-2 can be connected to Energy Recovery Ventilator units as follows to send the operation signal (pilot lamp etc.) to remote locations.

Electric wiring is as follows.

- For Remote contact



- For Humidifier



- KRP50-2 can also be connected to SkyAir indoor unit for the interlocked operation with Energy Recovery Ventilator units.

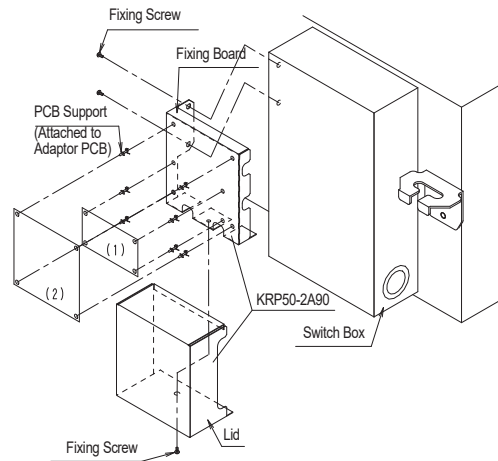
Components

See the right for components.

Fixing Screw	3 PCS.
Clamp	2 PCS.

Installation

Install the Adaptor PCB to the outside of switch box for Energy Recovery Ventilator unit as show below.



Applicable adaptor

	Adapter name	Kit name
(1)	Adaptor PCB for Humidifier	KRP50-2
(2)	Adaptor PCB for Remote control	KRP2A21

C: 4P055444

3.15 KRP4A71 / 72 / 73 / 74 Wiring Adaptor for Electrical Appendices (2)

DAIKIN VRV HEAT PUMP

Wiring Adaptor for Electrical Appendices (Group Control Adaptor)

Installation Manual

KRP4A71 • 72 • 73 • 74

Accessories Check if the following accessories are included in the kit.

Adaptor	Relay harness
 × 1	(1)  × 1 each
	(2)  × 1 each

PCB support	× 4
Clamp	× 3
Installation manual	× 1

Notes

- Kits vary according to applicable models.
- A special adaptor fixing plate and box are required for the following models.

FXUQ-PVJU.....	KRP1BA97
FXZQ-TAVJU, FXTQ-TAVJUA, FXTQ-TAVJUD.....	KRP1BA101
FXHQ-MVJU.....	KRP1C93
FXMQ-PBVJU.....	KRP4A96
FXFQ-TVJU.....	KRP1J98A, KRP1H98A
FXEQ-PVJU, FXDQ-MVJU.....	KRP1B101

1 System outline

This kit enables remote control (ON/OFF control, temperature setting, operation display, error display) and can be used with the following systems though it cannot be used in conjunction with other optional controllers for centralized control.

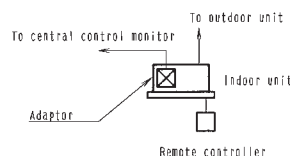
1. Individual control (Each indoor unit is controlled individually.)

This system requires the following parts.

- Adaptor.....KRP4A71 • 72 • 73 • 74 Any one kit
- Remote controller.....BRC1E71 (For operation control)

(Ex.) When individually controlling 8 FXS012MVJU units

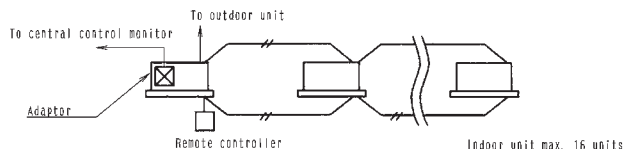
KRP4A71 × 8 kits
BRC1E71 × 8 kits



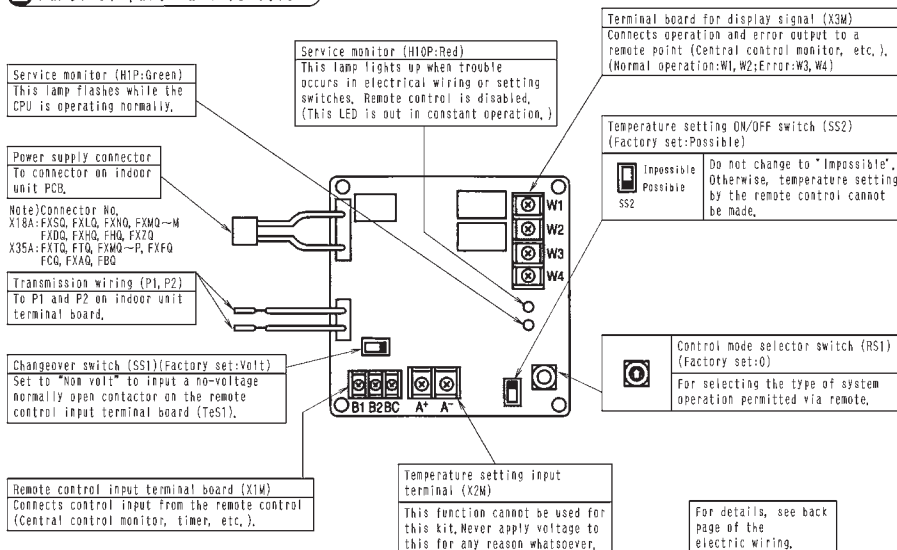
2. Group control (Multiple indoor units are controlled as a group.)

This system requires the following parts.

- Adaptor.....KRP4A71 • 72 • 73 • 74 Any one kit
- Remote controller (For operation control).....BRC1E71



2 Names of parts and function



③ Installation

<Ceiling-mounted duct type>

FXDQ-MVJU
FXZQ-TAVJU

Lid of installation box
KRP1B101, KRP1BA101 (Optional accessory)

<Air handling unit>

FXTQ-TAVJUA, FXTQ-TAVJUD

Adaptor
(KRP4A74)

PCB support

Installation box for adaptor PCB

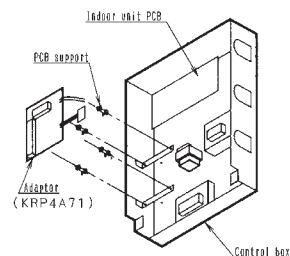
KRP1B101, KRP1BA101

(Optional accessory)

Note: Installation box for adaptor PCB is required to install the adaptor.

<4-way blow ceiling-suspended type>

FXUQ-PVJU



<Ceiling-mounted cassette type>

FXFQ-TVJU (Fit the edge of the adaptor PCB into the grooves on the adaptor box.)

Lid of installation box
KRP1H98

Adaptor
(KRP4A74)

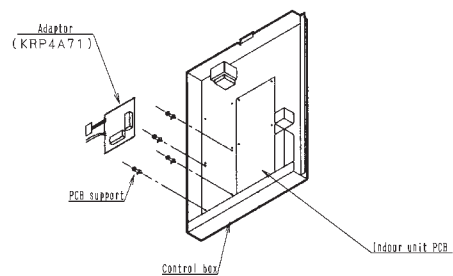
PCB support

Installation box for adaptor PCB

KRP1H98

<Ceiling-mounted duct type>

FXMQ-MVJU



<Ceiling-suspended type>

FXHQ-MVJU

Lid of installation box
KRP1C93 (Optional accessory)

Adaptor
(KRP4A72)

PCB support

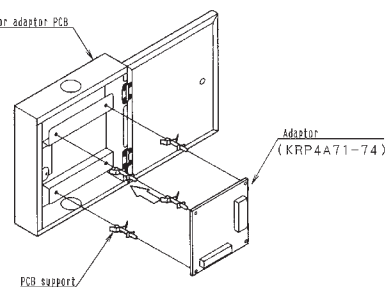
Installation box for adaptor PCB
KRP1C93 (Optional accessory)

Note: Installation box for adaptor PCB is required to install the adaptor.

<Wall-mounted type>

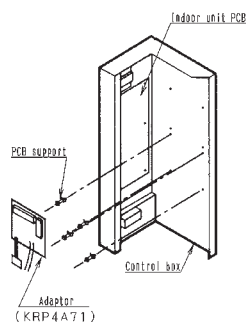
FXAQ-PVJU

Installation box for adaptor PCB
(KRP4A93)



<Floor-standing type>

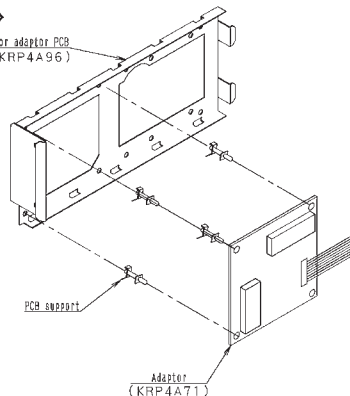
FXLQ-MVJU
FXNQ-MVJU



<Ceiling-mounted duct type>

FXMQ-PBVJU

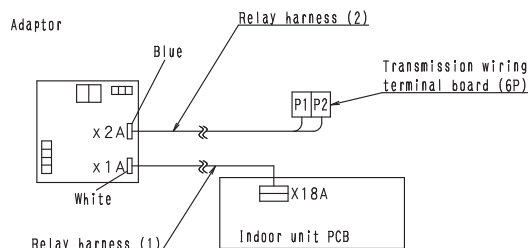
Mounting plate for adaptor PCB
(KRP4A96)



4 Electric wiring

- ① First, wire between the indoor and outdoor units, and then to the separate power sources, and finally between the indoor units and the remote controllers. Then, check if they operate properly.
(If wiring for group control by remote controller, check crosswires.)
For details, see the installation manual of the indoor and outdoor units.
- ② Next, wire between outside units such as the central control monitor, etc, and make the necessary settings.
For details, see [Wiring to outside units\(Central control monitor\)](#).

Wiring to indoor units



Make connections as shown above, using the attached relay harnesses (1) and (2).

- Connect relay harness (1) to the connector (X18A) on the indoor unit PCB.
- Relay harness (2) has no polarity. Connect it to terminals P1 and P2 on the transmission wiring terminal board inside the indoor unit electric parts box.

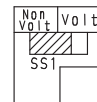
Wiring to outside units (Central control monitor)

1. Remote control input (Operation control)

Wire as described below. Wiring differs depending on whether using a voltage or no-voltage input.

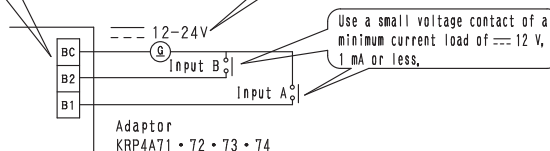
For voltage input

Set the changeover switch (SS1) to "Volt", (Factory set : Volt)



Connect the control input to the common contact (No polarity).

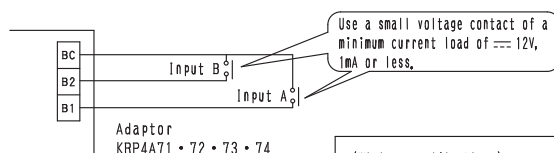
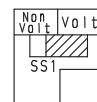
Use an external $\approx 12 \sim 24V$ power supply. Each contact requires approximately 10 mA, therefore carefully select power supply capacity.



Adaptor
KRP4A71 • 72 • 73 • 74

For Non volt input

Set the changeover switch (SS1) to "Non volt".



Adaptor
KRP4A71 • 72 • 73 • 74

(Wiring specifications)
Wiring • • • Sheathed vinyl cord or cable
Gauge • • • AWG24-16
Length • • • Max, 490ft

<Note>

Keep transmission wiring away from power supply wiring to avoid malfunctions.

2. Setting the control mode selector switch (RS1)

Using the control mode selector switch (RS1), select the control mode as described below.



(Factory set)
"0" position

① For specifying individual display

Position	Function
0	Individual display (Input ignored)

② When operating the unit with constant input at input A

Position	Function	When input A is ON	When input A is OFF
1	ON/OFF control impossible by remote controller	Operation (Normally ON/OFF control impossible by remote controller)	OFF + ON/OFF control impossible by remote controller
2	Centralized	Operation + ON/OFF control possible by remote controller	
3	OFF control possible by remote controller	Operation + OFF control possible by remote controller (ON control impossible by remote controller)	
4	ON/OFF control possible by remote controller	ON/OFF control possible by remote controller (Operation impossible by optional controller)	

<Note>

- Input B is for forced ON/OFF input. When input B is ON, OFF control is possible but ON/OFF control by the remote controller is impossible, and input A is ignored. When it is OFF, input A is ignored even if selected, it is necessary to reselect input A.

③ When operating the unit using instantaneous input at input A
(Use an instantaneous input of 200 msec or longer ON time).

Position	Function	Input A	Input B capacity
5	ON/OFF control impossible by remote controller	Turns OFF system with ON input Turns ON system with ON input	Input B is for forced OFF input (when ON, OFF control is possible but ON/OFF control by remote controller is impossible, and input A is ignored)
6	Individual	Turns OFF system with ON input Turns ON system with ON input (Normally ON/OFF control possible by remote controller)	

★ For thermostat control using input B

Position	When input A is ON	When input B is ON
C	ON/OFF control impossible by remote controller (Same as position 5)	Forced thermostat OFF command
D		Energy saving command (✱)
E	Individual (Same as position 6)	Forced thermostat OFF command
F		Energy saving command (✱)

- Forced thermostat OFF command
indoor unit fan only operates.
- Energy saving command (✱)
The indoor unit operates at 4° F higher (cooling)/lower (heating) the set temperature.

<Note>

- In such case, even if input A is ON, thermostat control is turned OFF, and all units in the same group will stop.

④ When operating the unit using instantaneous input at input A and B
(Use an instantaneous input of 200 msec or longer ON time).

Position	Function	When input A is ON	When input A is OFF
7	ON/OFF control impossible by remote controller	Operation (Normally ON/OFF control impossible by remote controller)	OFF + ON/OFF control impossible by remote controller
8	Centralized	Operation + ON/OFF control possible by remote controller	
9	OFF control possible by remote controller	Operation + OFF control possible by remote controller (ON control impossible by remote controller)	
A	ON/OFF control possible by remote controller	ON/OFF control possible by remote controller (Operation impossible by optional controller)	
B	Individual	Operation (Normally ON/OFF control possible by remote controller)	OFF (Normally ON/OFF control possible by remote controller)

<Note>

- When set to position 7-A, and using the constant mode for input B, forced stop capacity is enabled (Input A is ignored).
- At position B, the constant mode for input B is not used.

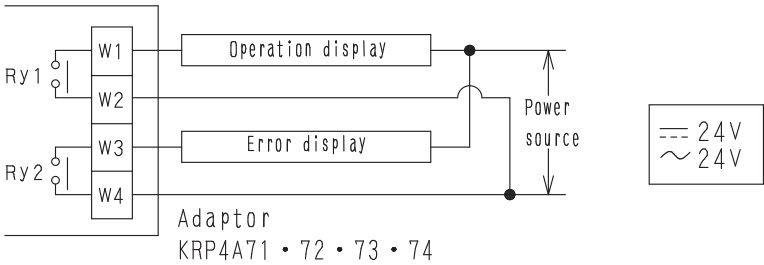
3. Cancelling display signals

Operation output terminals (W1 and W2) and error output terminals (W3 and W4) are no-voltage normally constant contacts.

(Allowed electric current per contact is between 10 mA and 3 A,)

Normal operation output (Ry1)
ON when the indoor unit is
operating normally.

Error output (Ry2)
ON when the indoor unit stops
because of malfunction or when
a transmission error occurs
between the adaptor and the
indoor unit.

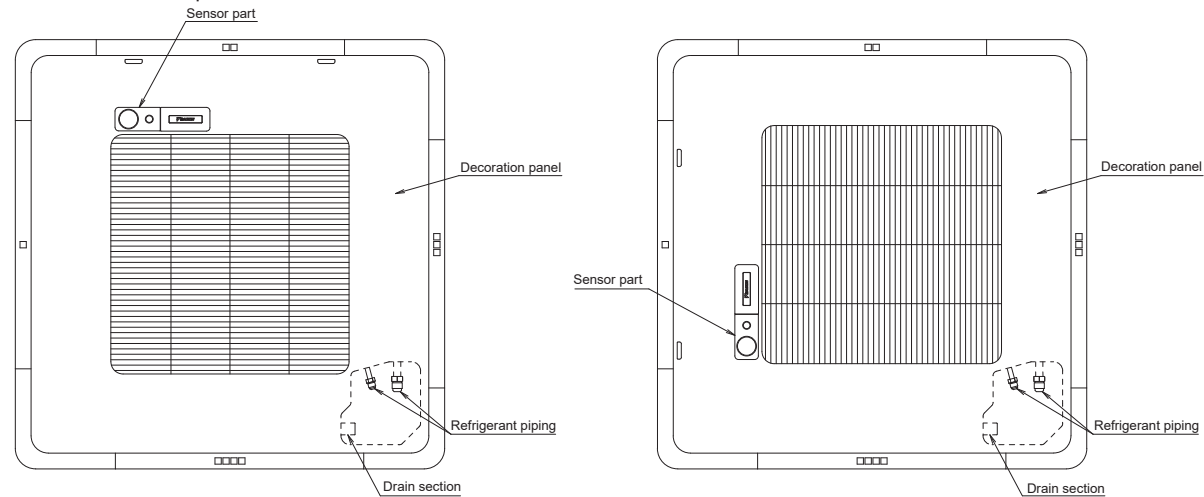


Display output is as described below.

Output	Both Ry1 and Ry2 OFF	Only Ry1 ON	Only Ry2 ON
Display	OFF	Normal operation	System stopped due to malfunction or transmission error generated between adaptor and indoor unit

3.16 BRE49B1F Sensor Unit (Sensor Kit)

• Installation of sensor part



C: 3D075714K

Daikin Air Conditioners

Sensor kit installation manual

Read this manual before
installation and follow the instruction

BRE49B1(F)(K), BRE49B2(F)(K)

1P383776-1B

Note to the installer

• After installation, make sure the sensor can activate the swing flap operation.

Note

• Refer also to the installation manual attached to the indoor unit.

Accessories

Check if the following accessories are included with your unit.

Name	Shape	Quantity	Name	Shape	Quantity	Name	Shape	Quantity	Name	Shape	Quantity
Sensor assembly		1 set	Sensor cover		1	Brand name plate		1	Fixing screw		1
						Wire harness (Long)		1	Wire harness (Short)		1
Clamp material (Large)		5	Clamp material (Small)		1	Others	Installation manual (This manual)	1			

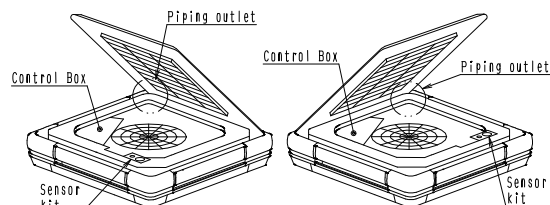
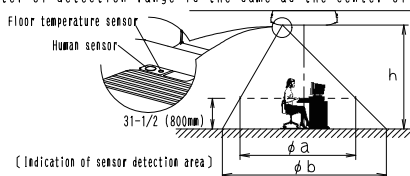
1P383776-1B

1 Before installation

- (1) It is easier to assemble the sensor kit before suspending an indoor unit.
- (2) Sensor kit is installable to 2 locations in accordance with the direction of suction grille shown in the figure on the right. Install the kit after checking the customers request.

<Note>

- When the local temperature sensed by the floor sensor and the room air temperature are extremely different, it may affect judgment of the floor temperature sensor, (e.g. Location where floor heater or high-heat generating machine is installed.)
- When the height of ceiling is 8.9ft (2.7m), Human sensor detects the temperature of the area of 31-1/2inch (800mm) from the floor. Floor temperature sensor detects the temperature of floor surface. The center of detection range is the same as the center of the product.



Example ①

Example ②

Height of the indoor unit installed h [ft (m)]	8.9 (2.7)	11.5 (3.5)	13.2 (4.0)
Human sensor ϕa [ft (m)]	approx. 28 (8.5)	approx. 38 (11.5)	approx. 44 (13.5)
Floor temperature sensor ϕb [ft (m)]	approx. 36 (11)	approx. 46 (14)	approx. 52 (16)

*Value shows maximum.

2 Sensor unit assembling

- (1) Connect wire harness to sensor assembly.
In accordance with the location determined on ① Before installation, use a following wire harness.
If the installation location of sensor kit is Example 1., use short wire harness.
If the installation location of sensor kit is Example 2., use long wire harness.

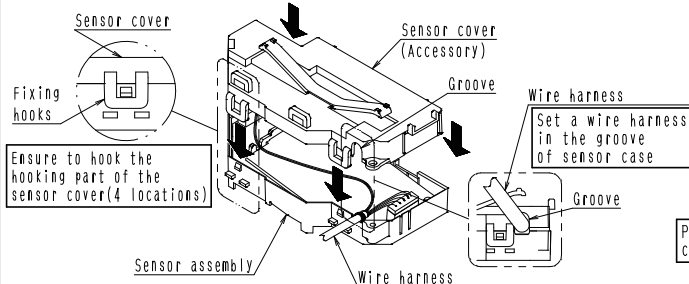
- ① Be sure to connect the connector of the wire harness to the connectors (2 locations) of the sensor assembly.
(Be careful not to drop PCB from the sensor assembly.)
- ② Straighten the wire harness as shown in the figure.

- (2) Attach the sensor cover to the sensor assembly.

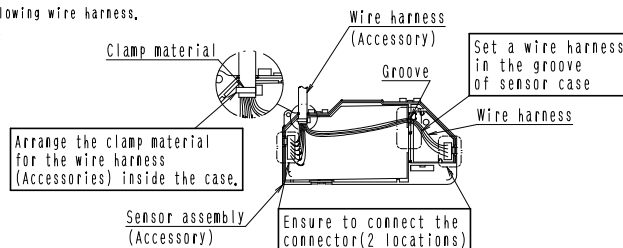
- ① Attach the sensor cover in accordance with the shape of the sensor assembly.
Ensure that the clamp material for the wire harness is inside the case and wire harness is not located between the sensor cover and sensor assembly.
Ensure that 4 fixing hooks are secured.

- (3) Arrange the wire harness.

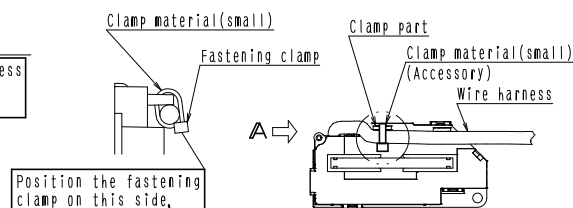
- ① Pass the wire harness inside the clamp part of the sensor cover and band to the clamp material of sensor cover using the clamp material (small).
The fastening part should come to Arrow view A location.
After bundled, cut off the extra clamp material.
(Ensure that there is no clearance between the sensor assembly and sensor cover.)



(2) Sensor cover attaching method



(1) Wire harness connecting method

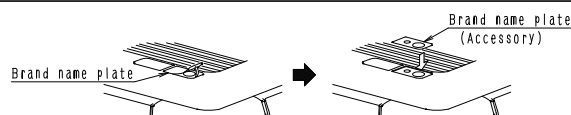


Arrow view A (3) Wire harness clamping method

3 Applying Brand name plate

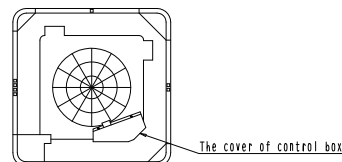
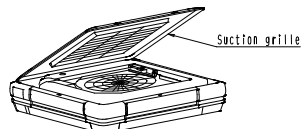
<Applying Brand name plate>

- Remove the brand name plate stuck with adhesive material.
- Apply the attached brand name plate.
(Align with the hole and indent on the suction grille.)



4 Mounting a sensor unit

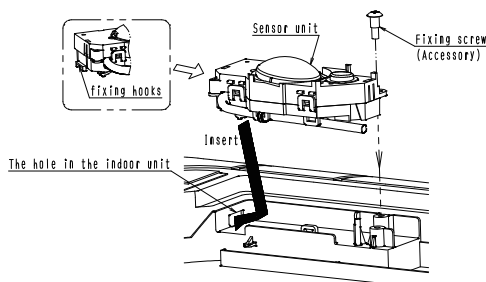
- (1) Remove the suction grille and a cover of the control box in accordance with the installation manual attached to the indoor unit.



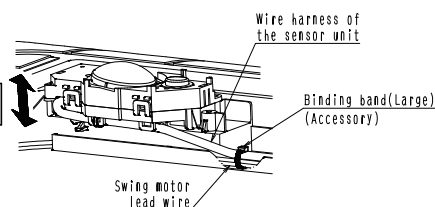
- (2) Attach the sensor unit to the indoor unit.

For the mounting location, see ① Before installation.

- ① Insert the fixing hooks on the sensor unit to the holes on the indoor unit.
- ② Mount the sensor unit with fixing screws attached with this kit.
- ③ Bundle the wire harness of the sensor unit to the swing motor lead wire harness of the indoor unit with the binding band(Large) attached with this kit. Ensure that the sensor unit can move up and down.



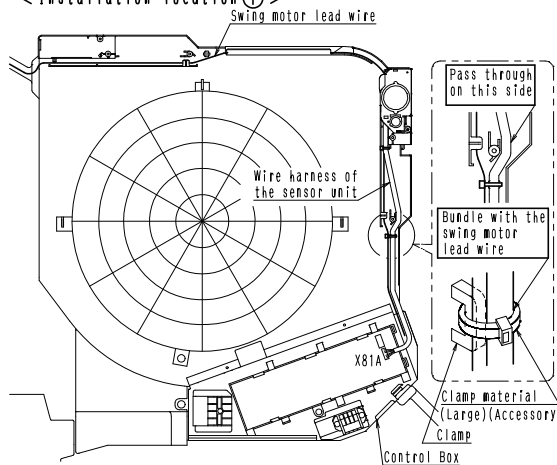
Check if the sensor unit moves up and down



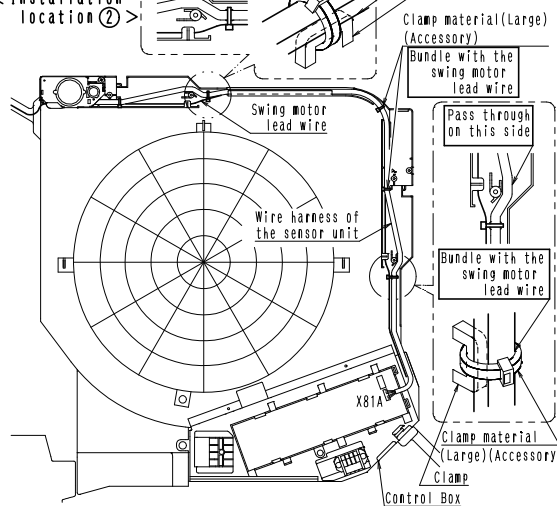
- (3) Bundle the wire harness of sensor unit evenly and connect to the connector of indoor unit control box.

- ① Arrange the wire harness of the unit sensor as shown in the figure below.
- ② Connect the wire harness of sensor unit to the connector (X81A) on the PCB in the control box of indoor unit.
- ③ Bundle the clamp and swing motor lead wire harness of the indoor unit with clamp material (Large) (Accessory) and arrange evenly. Then cut the extra clamp material. (Clamp locations for installation location ①: 1 location for installation locations ②: 4 locations)

< Installation location ① >



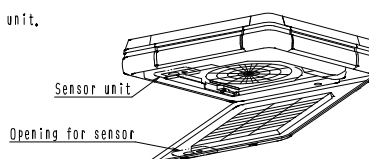
< Installation location ② >



- (4) Attach the cover of the control box

5 Mounting suction grills

- Mount the suction grille in accordance with the installation manual attached to the indoor unit. Make sure that the opening for the sensor on the suction grille and the location of the sensor unit are matched.



6 Test operation

<Refer to the installation manual attached to the indoor unit as well as the operation and installation manuals attached to the remote controller.>

- Make sure that all installation work for the indoor unit has been completed.

Sensor kit connection check

- Perform the following steps to confirm that the sensor kit is correctly connected.
 1. After turning on the power, confirm that no infrared presence or infrared floor sensor errors (error codes: CE-01 through CE-04) are present upon pressing the ON/OFF button on the remote controller.
 2. Operate the remote controller to confirm that the functions only supported on models equipped with an infrared presence sensor listed in the "Main Menu List" or "Full Menu" in the remote controller operation manual are indicated on the remote controller menu. (Example: "Auto airflow", "Draft prevention", etc.)
 3. Confirm that the functions as confirmed in step 2 above operate correctly.

(Note) Swing control using the infrared presence sensor is not available when using the air conditioner for frontal air discharge only by means of flexible ducts or other accessories.

1P383776-1B

1P383776-1B

3.17 DTA114A61 Adaptor for Multi Tenant

Daikin Air Conditioner

Adaptor for Multi tenant Installation Manual

DTA114A61 • 61-9

Accessories

Check that the following accessories are provided with the adaptor before installation.

Adaptor for Multi tenant

1 pc.

PCB support	4 pcs.
Tiewrap	4 pcs.
Relay harness	4 pcs. (see the table on the right-hand side for applicable models)
Installation Manual	1 pc.

Applicable models	Relay harness
FXFQ-P	700 White UL electric wire White, 4 pins
FXMQ-P	350 White UL electric wire White, 4 pins
BSVQ-P	260 White UL electric wire Blue, 3 pins
FXAQ-M	1900 White VCTF electric wire White, 3 pins

Note

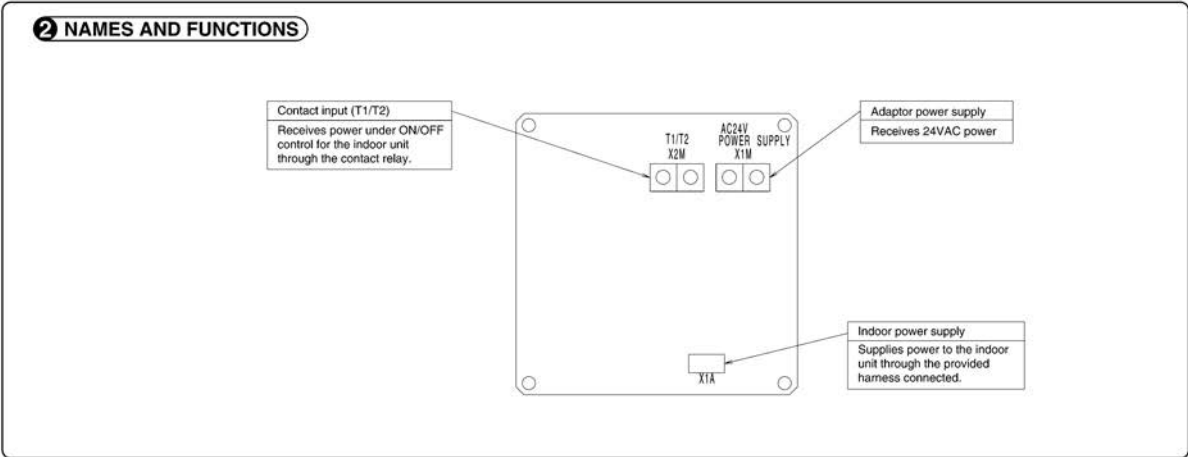
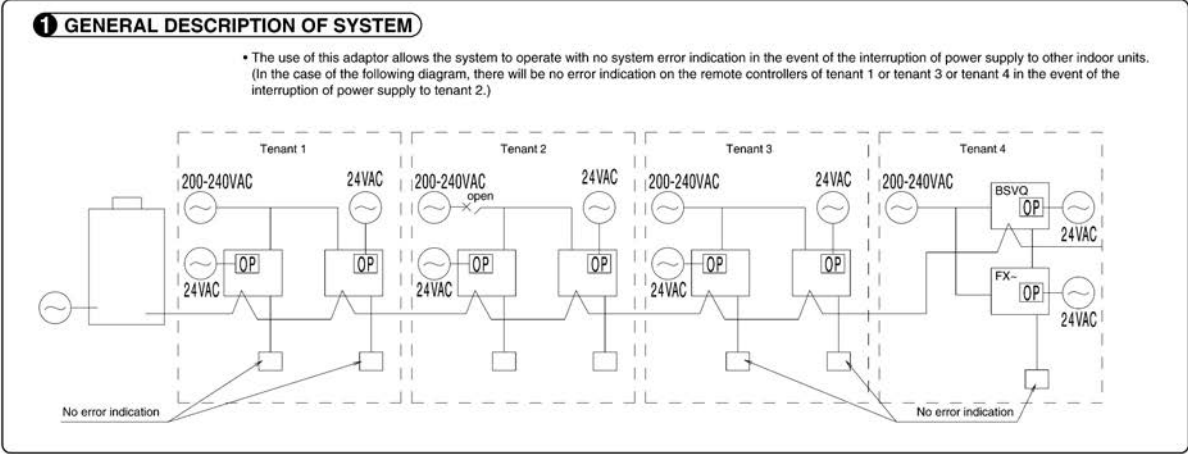
- An adaptor mounting plate and mounting box are required in addition to the provided component parts in the case of mounting the adaptor to the following models.

FXFQ-P: KRP1H98

FXMQ-P: KRP4A96

FXAQ-M: KRP4A93

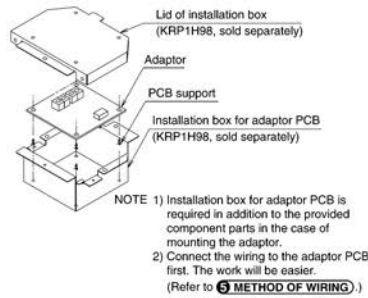
- Both ends of harness are for connection of PCB of indoor unit (or BS unit) and for connection of adaptor for multi tenant. Be careful when connecting them.



3 INSTALLATION

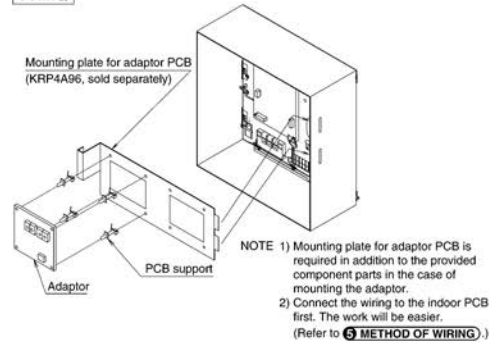
«Ceiling-mounted Cassette Round-flow Type»

FXFQ



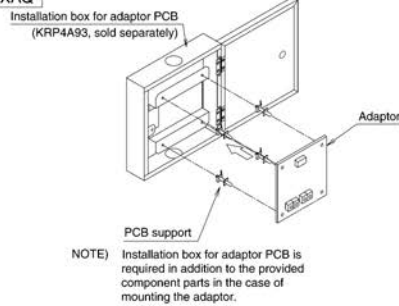
«Ceiling-mounted Duct Type»

FXMQ



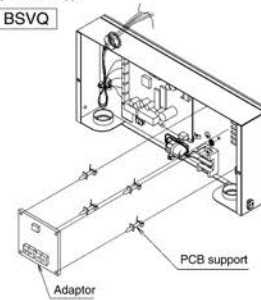
«Wall-mounted type»

FXAQ

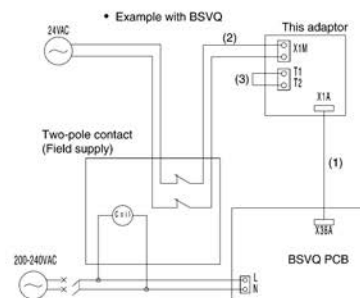
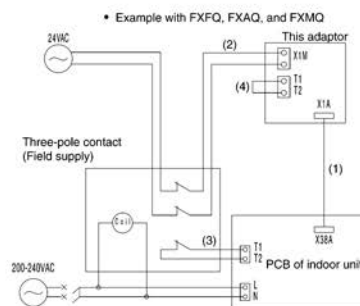


«BS unit»

BSVQ



4 ELECTRIC WIRING



- (1) Connect this adaptor and the PCB of the indoor unit with the provided relay harness (varying with each indoor unit model).
- (2) Connect the 24VAC ($\pm 20\%$) power supply to the X1M terminals of the adaptor through the normally closed contacts of the relay. Be sure to contact the relay contacts to both poles of the power supply so that the positive and negative lines of the power supply will be turned off simultaneously. A transformer may be used for the 24VAC power supply provided for each adaptor on the condition that the transformer has a capacity of 24VA or over.
- (3) Provide a relay (with a normally closed contact) between the T1 and T2 terminals of the PCB.

Minimum contact load: 1mA normally closed contact at 15VDC
Rated current: 3 A min.
Wire specifications: Vinyl cord with sheath or cable (2 wire)
Wiring thickness: 0.75 to 1.25 mm²
Wiring length: 100 m max.

- (4) Short-circuit the T1 and T2 terminals of the adaptor.

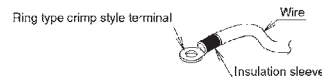
- (1) Connect the adaptor and BSVQ PCB through the relay harness.
- (2) Connect the 24VAC ($\pm 20\%$) power supply to the X1M terminals of the adaptor through the normally closed contacts of the relay. Be sure to contact the relay contacts to both poles of the power supply so that the positive and negative lines of the power supply will be turned off simultaneously. A transformer may be used for the 24VAC power supply provided for each adaptor on the condition that the transformer has a capacity of 24VA or over.
- (3) Short-circuit the T1 and T2 terminals of the adaptor.

Minimum contact load: 1mA normally closed contact at 15VDC
Rated current: 3 A min.
Wire specifications: Vinyl cord with sheath or cable (2 wire)
Wiring thickness: 0.75 to 1.25 mm²
Wiring length: 100 m max.

5 METHOD OF WIRING

⚠ CAUTION ⚠

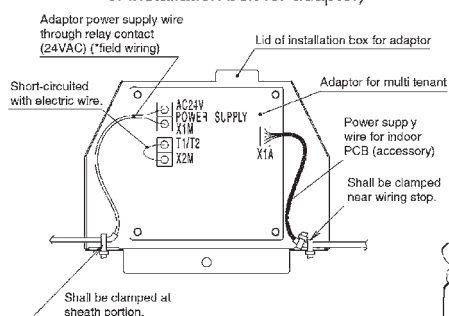
- For connection to the terminal block, be sure to use a ring type crimp style terminal. Also insulate the crimping portion, for example, by mounting an insulation sleeve.
 - For wiring, use the specified wire to connect it securely and fix it so that external force is not applied to the terminal.
 - For tightening the terminal screw, use a proper screwdriver. A smaller size screwdriver may damage the screw head, resulting in improper tightening.
 - If the terminal screw is secured too tightly, the screw may be damaged.
- For tightening torque for terminal screw, see the table on the right-hand side.



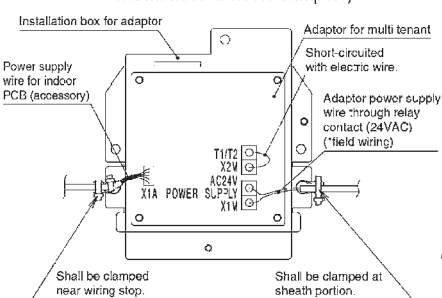
	Tightening torque (N · m)
Terminal block of adaptor for multi tenant (X1M, X2M)	1.18~1.44

● FXFQ-TVJU (Ceiling-mounted Cassette Round-flow Type)

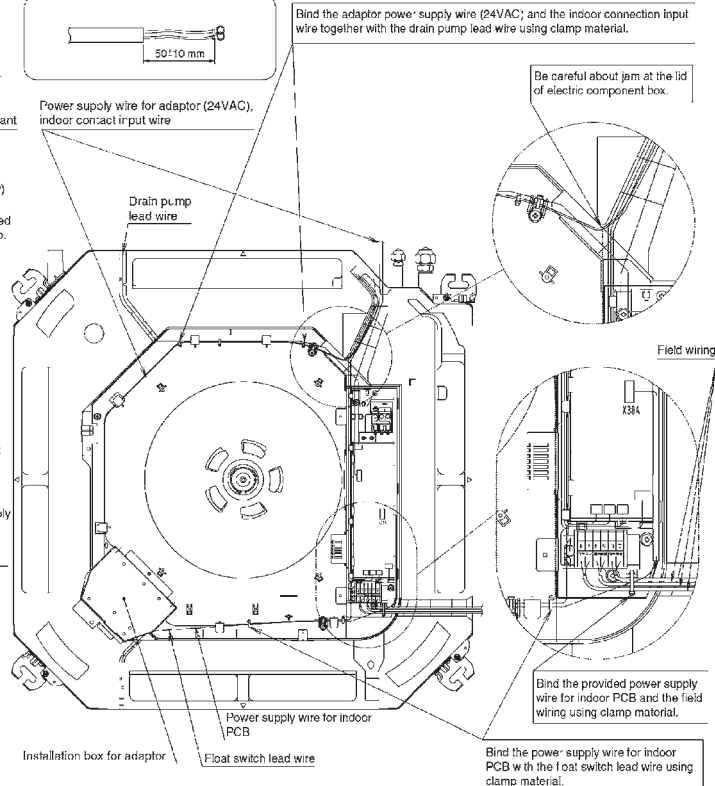
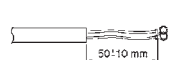
(In the case of mounting to lid of installation box for adaptor)



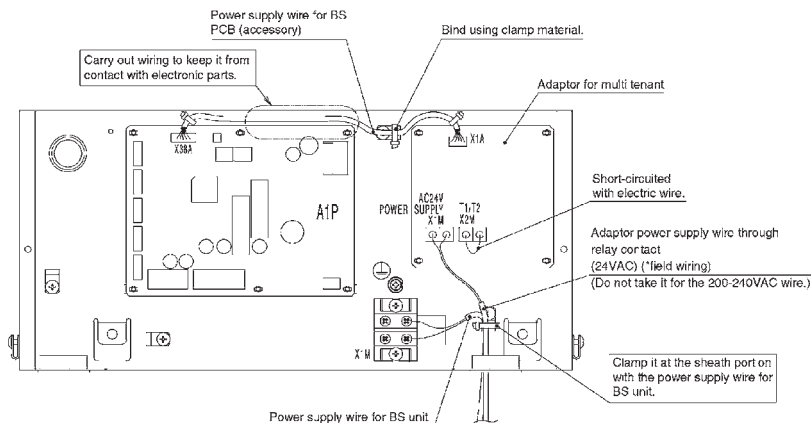
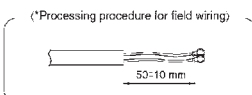
(In the case of mounting to installation box for adaptor)



(*Processing procedure for field wiring)

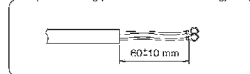


● BSQ-TVJ, BS-Q54TVJ (BS unit)

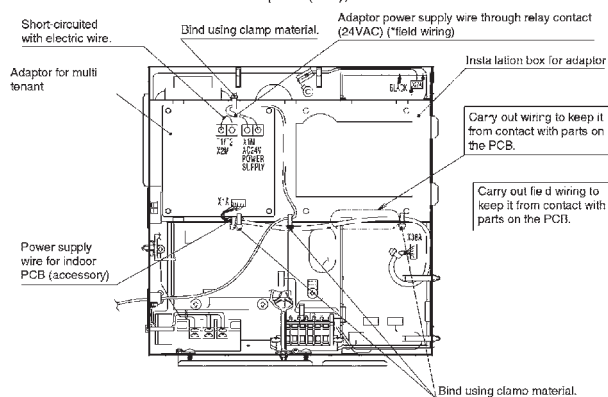


●FXMQ-PBVJU (Ceiling-mounted Duct Type)

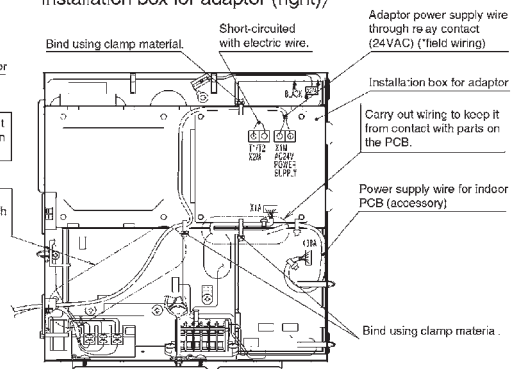
(*Processing procedure for field wiring)



(In the case of mounting to installation box for adaptor (left))

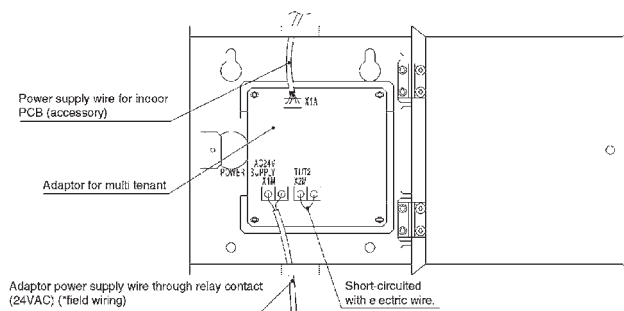
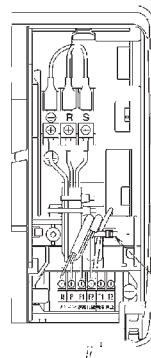
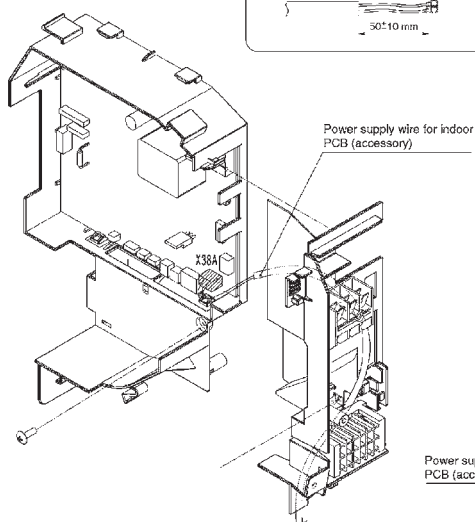
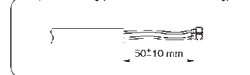


(In the case of mounting to installation box for adaptor (right))



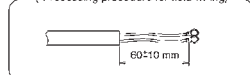
●FXAQ-PVJU (Wall-mounted type)

(*Processing procedure for field wiring)

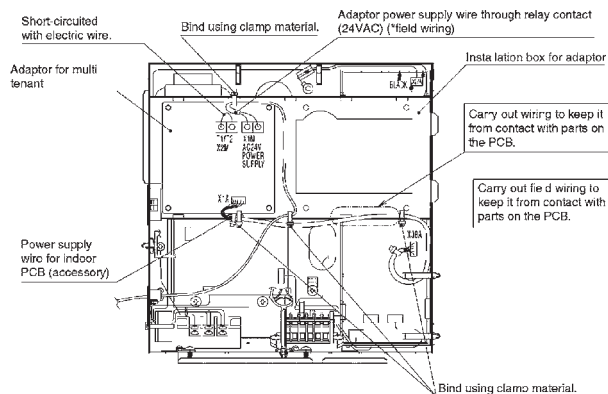


● FXTQ-TAVJUA, FXTQ-TAVJUD (Air handling unit)

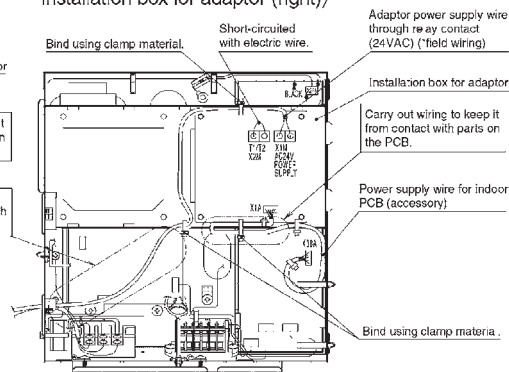
(*Processing procedure for field wiring)



(In the case of mounting to
installation box for adaptor (left))



(In the case of mounting to
installation box for adaptor (right))



6 FIELD SETTING

Follow the "FIELD SETTING" in the installation manual of the remote controller for the indoor unit and make a necessary field setting in the remote controller after turning the air conditioner ON.

- Set the remote controller to field set mode, select Mode No. "12", and set the FIRST CODE NO. to "1" and the SECOND CODE NO. to "04".
(The SECOND CODE NO. is factory set to "01".)

Note: The remote control terminals (T1 and T2) of the indoor unit is for multi-tenant use. Therefore, the COMPUTERIZED CONTROL of the indoor unit is not available.

4. Trademark Disclaimer

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Warning

- Ask a qualified installer or contractor to install this product. Do not try to install the product yourself. Improper installation can result in water or refrigerant leakage, electrical shock, fire or explosion.
- Use only those parts and accessories supplied or specified by Daikin. Ask a qualified installer or contractor to install those parts and accessories. Use of unauthorised parts and accessories or improper installation of parts and accessories can result in water or refrigerant leakage, electrical shock, fire or explosion.
- Read the user's manual carefully before using this product. The user's manual provides important safety instructions and warnings. Be sure to follow these instructions and warnings.

If you have any inquiries, please contact your local importer, distributor and/or retailer.

Cautions on product corrosion

1. Air conditioners should not be installed in areas where corrosive gases, such as acid gas or alkaline gas, are produced.
2. If the outdoor unit is to be installed close to the sea shore, direct exposure to the sea breeze should be avoided. If you need to install the outdoor unit close to the sea shore, contact your local distributor.