

Quality People. Building Solutions.

Comfort Systems USA (Arkansas), Inc.
P.O. Box 16620
Little Rock, AR 72231
Phone 501-834-3320
Fax 501-834-5416

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Project: Ritz Theater – Phase 3

Supplier: Harrison Energy

Submittal: Mini Split (Heat Pump)

Submittal Number: 23 62 13-02

Drawing # and Installation: Mechanical Drawings

ARCHITECT

SCM Architects
1400 Kirk Road, Suite 220
Little Rock, AR 72223
501-224-3055

ENGINEER

Pettit & Pettit
201 E. Markham St, #400
Little Rock, AR 72201
501-374-3731

GENERAL CONTRACTOR

Clark Contractors
15825 Cantrell Rd.
Little Rock, AR 72223
501-868-3133

MECHANICAL SUBCONTRACTOR

Comfort Systems USA (Arkansas), Inc.
9924 Landers Rd.
N. Little Rock, AR 72117
501-834-3320

Notes:

*Per RFP #1

CSUSA PROJECT NO.

23-1004

jon@comfortar.com

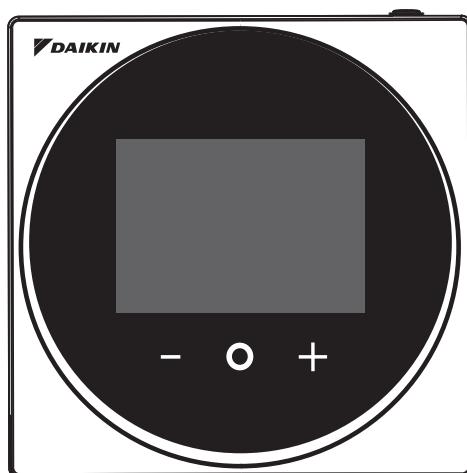
Wired Remote Controller

Installation Handbook

English

Français

Español



MODEL BRC1H71W

- Be sure to read before conducting the installation of this product, and conduct installation according to this manual.
- Refer to this manual together with the installation manual of the indoor unit.
- It is possible to perform settings of some functions from a smart phone app.
- For details, refer to the BRC1H71W manual on our company website.
- Assurez-vous de lire avant de procéder à l'installation de ce produit et procédez à l'installation conformément à ce manuel.
- Reportez-vous à ce manuel ainsi qu'au manuel d'installation de l'unité intérieure.
- Il est possible d'effectuer les réglages de certaines fonctions à partir d'une application pour smartphone.
- Pour plus de détails, reportez-vous au manuel BRC1H71W sur le site Web de notre société.
- Asegúrese de leerlo antes de instalar el producto y realice su instalación de acuerdo con este manual de instalación.
- Consulte este manual junto con el manual de instalación de la unidad interior.
- Algunas funciones se pueden configurar desde una aplicación de teléfono inteligente.
- Para más detalles, consulte el manual BRC1H71W en el sitio web de nuestra empresa.

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Safety Considerations

The original instructions are written in English. All other languages are translations of the original instructions.

All phases of the field-installation, including, but not limited to, electrical, piping, safety, etc. must be in accordance with manufacturer's instructions and must comply with national, state, provincial and local codes.




Read these **SAFETY CONSIDERATIONS** carefully before installing the remote controller.


After completing the installation, ensure that the remote controller operates properly during startup operation.


Train the customer to operate and maintain the remote controller. Inform customers that they should store this Installation Manual with the Operation Manual for future reference.

Always use a licensed installer or contractor to install this product. Improper installation can result in electrical shock, fire, or explosion.

Meanings of **WARNING**, **CAUTION**, and **NOTE** Symbols.

 WARNING	Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
 CAUTION	Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.
 NOTE	Indicates situations that may result in equipment or property-damage accidents only.

 WARNING	
Only qualified personnel must carry out the installation work.	
Consult your Daikin dealer regarding relocation and reinstallation of the remote controller. Improper installation work may result in electric shocks or fire.	
Electrical work must be performed in accordance with relevant local and national regulations and with instructions in this installation manual. Improper installation may cause electrical shocks or fire.	
Use only specified accessories and parts for installation work. Failure to use specified parts may result in electric shocks, fire, or the unit falling.	
Do not disassemble, reconstruct, or repair. Electric shock or fire may occur.	
Make sure that all wiring is secured, that specified wires are used, and that no external forces act on the terminal connections or wires. Improper connections or installation may result in fire.	
Before touching electrical parts, confirm the power is off to the unit.	

 CAUTION	
Keep water out of the remote controller. To avoid electric shock due to entry of water or insects, fill the wiring through-hole with putty. Do not wash the remote controller with water as it may result in electrical shocks or fire.	
Do not touch the remote controller buttons with wet fingers. Touching the buttons with wet fingers can cause an electric shock.	

⚠ CAUTION

Do not install the remote controller in the following locations:

- (a) Where a mineral oil mist or oil spray or vapor is produced, for example, in a kitchen.
Plastic parts may deteriorate.
- (b) Where corrosive gas, such as sulfurous acid gas, is produced.
- (c) Near machinery emitting electromagnetic waves.
Electromagnetic waves may disturb the operation of the control system and cause the unit to malfunction.
- (d) Where flammable gas may leak, where there is carbon fiber or ignitable dust suspension in the air, or where volatile flammables such as thinner or gasoline are handled.
Operating the unit in such conditions can cause a fire.
- (e) High temperature areas or areas with direct flames.
Overheating and/or fire can occur.
- (f) Moist areas where there is exposure to water. If water enters the inside of the remote controller, it may cause electric shock and electrical components may fail.

⚠ NOTE





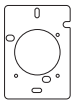
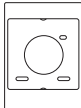


Install the control wires for the indoor unit and the remote controller at least 3.5 feet (1 meter) away from televisions or radios to prevent image interference or noise. Depending on the radio waves, a distance of 3.5 feet (1 meter) may not be sufficient to eliminate the noise.

When the remote controller's temperature sensor is used, select the installation location as per the following:

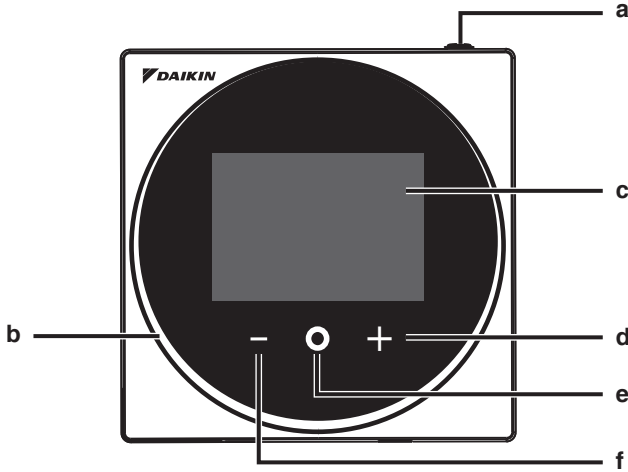
- A place where average temperature in the room can be detected.
- A place where it is not exposed to direct sunlight.
- A place where it is far away from any heat source.
- A place where it is not affected directly by outside air.

Accessories

The following accessories are included.

Drywall screw	Drywall anchor	Operation Handbook	Installation Handbook
 (3 pcs.)	 (3 pcs.)	 (3 pcs.)	 (1 pc.)
Mounting plate (Metal)	Mounting plate (Plastic)	Screw for mounting plate (M3×10)	Screw for mounting plate (M4×40)
 (1 pc.)	 (1 pc.)	 (3 pcs.)	 (2 pcs.)

Button Locations and Descriptions



Functions items (i.e., Operation Mode, Fan Speed, and Setpoint) are set from the menu screen.

! NOTICE

- Do not install the remote controller in places exposed to direct sunlight. The LCD may be damaged.
- Do not pull or twist the remote controller cord. The remote controller may be damaged.
- Do not use objects with sharp ends to press the buttons on the remote controller. Damage may result.

a ON/OFF button

- Press this button to turn on the system.
- Press this button again to turn off the system.

b **Status indicator (LED)**

- During operation, the light ring around the display lights up blue/red/green.
Lights up blue: Operating, Blinks red: Error is occurring, Lights up/blinks green: Bluetooth connecting

c **LCD** (Refer to INFORMATION on page 5.)

- Displays the current setpoint and air conditioner operation status.

d NAVIGATE/ADJUST button

- Navigate right.
- Adjust a setting.

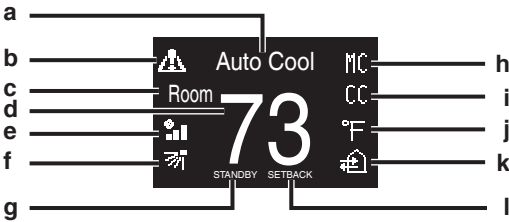
e SELECT/ACTIVATE /SET button

- From the home screen, enter the main menu.
- From the main menu, enter one of the submenus.
- From their respective submenu, activate an operation/ventilation mode.

f NAVIGATE/ADJUST button

- Navigate left.
- Adjust the setting.

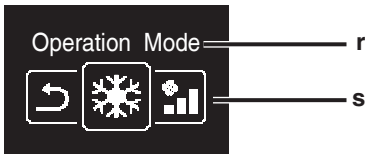
Home screen



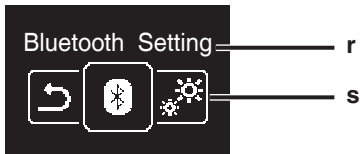
Information screen



User menu/Administrator menu/Installer menu



User menu



Administrator menu/Installer menu

The Bluetooth® word mark and logos are registered trademarks owned by the Bluetooth SIG, Inc. and use of such marks by Daikin industries, LTD. is under license. Other trademarks and trade names are those of their respective owners.

Screen display explanation

- a Operation mode/OFF display**
 - Displays the operation status.
- b Error/Filter/Test icon**
 - Error, filter and test icons are displayed.
- c Room/Set**
 - Indicates whether it's a room temperature display (Room) or setpoint display (Set).
- d Room temperature/Set temperature**
 - Displays the current room or setpoint temperature.
- e Fan speed**
 - Displays the set fan speed.
- f Airflow direction**
 - Displays the set airflow direction.
- g STANDBY**
 - Displays during defrost/hot start.
- h Changeover controlled by the master indoor unit**
 - Displayed when another indoor unit on the system has the authority to change the operation mode between cool and heat.
- i Under centralized control**
 - Displayed if the system is under the management of a multi-zone controller (Optional) and the operation of the system through the remote controller is limited.
- j Fahrenheit/Celsius**
 - Depending on the setting, Fahrenheit/Celsius display can be selected.
- k Ventilation operation/Air Purify**
 - Displayed when a Heat Reclaim Ventilator is connected.
- l Setback**
 - Blinks during setback operation.
 - Displayed during setback setting.
- m Information icon**
- n Clock (24 hours time display)**
- o MAIN/SUB remote controller sign**
- p Status**
 - Notifies the status.
- q Error display**
 - If an error occurs, the icon, an error code and unit number are displayed.
- r Settings menu name**
- s Settings menu icon**

i INFORMATION

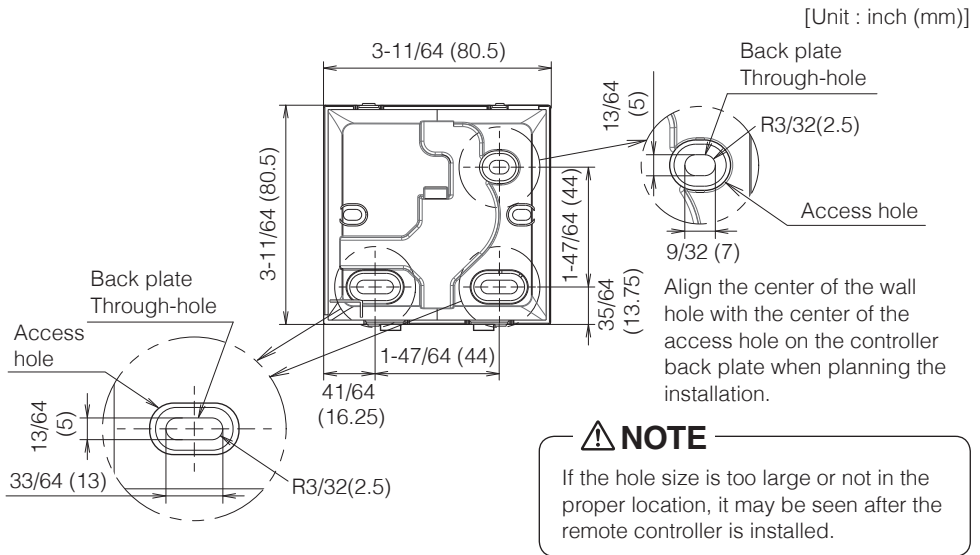
Depending on the connected model, some items may not be displayed. The controller is equipped with a power-saving function that darkens the display if there is no operation for a certain period of time. To make the screen light up again, press one of the buttons. Note that pressing one of the buttons will only make the display bright again, not cause remote controller operation.

Remote controller installation procedure

Deciding where to install the remote controller

Select the installation location based on "Safety Considerations" (see page 2) and obtain consent of the customer.

Creating a wiring through-hole in the wall (when opening a hole in the wall and installing)



CAUTION

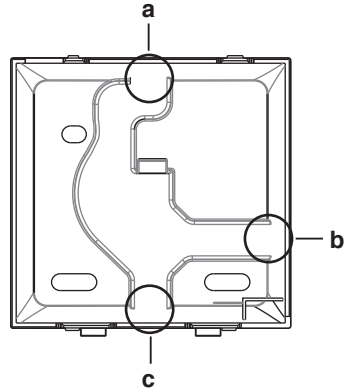
- Note that if the wiring through-hole is large or deviates from the specified position, the hole may be exposed.

Determining the wire routing direction for the back plate

Before mounting the controller, determine the wiring direction and remove a piece of the controller's back plate accordingly (i.e.: a, b, c). The wiring can be routed from the top, the left, or the bottom of the back cover. Remove a piece of the back plate according to the following figure.

After removing a thin piece with a tool such as clippers, remove burrs using a file, etc.

- a** Wiring from top
- b** Wiring from left
- c** Wiring from bottom



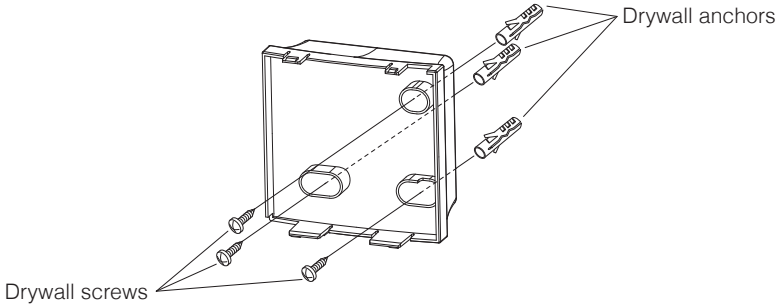
CAUTION

In case you are routing the wiring from the rear, you don't have to remove anything. When routing the wiring from the top, rear, left, or bottom, or when installing on a mounting plate etc., be sure to route the wiring to the upper casing before securing the back plate.

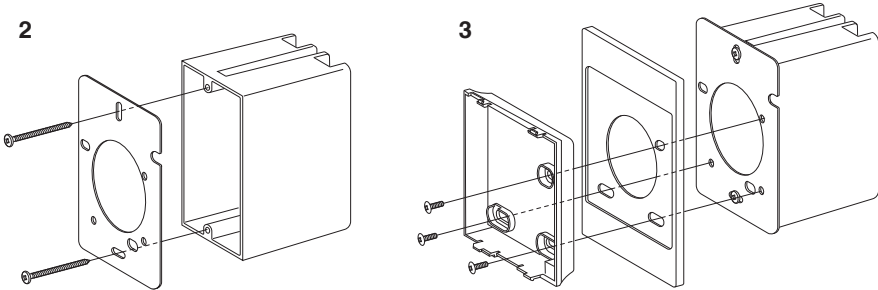
Securing the back plate

Wall installation

- 1: Take the drywall screws and drywall anchors out of the accessory bag.
- 2: Mount the back plate to a flat surface.



In case of installing in the electrical component box



- 1: Take the screws for the mounting plate (M3×10 and M4×40), and the mounting plates (metal and plastic) out of the accessory bag.
- 2: Attach the mounting plate (metal) to the electrical component box with the screws for the mounting plate (M4×40).
- 3: Attach the back plate and mounting plate (plastic) with the screws for mounting plate (M3×10).

CAUTION

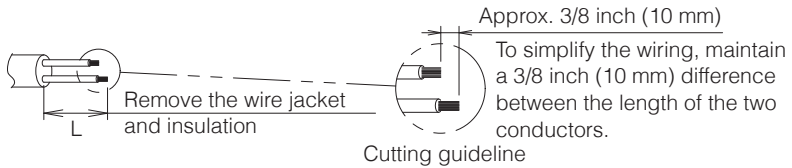
- For the installation surface, select as flat a location as possible.
- Choose a place where there is no gap between the wall and the screw fixing part of the back plate.
- If there is an empty space between the back plate and the screw fixing part (nut part) due to the structure of the wall, install with a torque of 20 N · cm or less.
If it is tightened too much, the back plate will be deformed and the upper casing will come off easily.
- If the upper casing comes off easily, loosen the drywall screws to lessen the deformation.
- If tightened too much, the back plate will be deformed and the upper casing will come off easily.
If the upper casing comes off easily, loosen the screws and correct the deformation.

Connecting the electrical wiring

All wiring must comply with the following requirements:

Wire specification	Value
Wiring type	Non-shielded, 2-conductor, Stranded copper wire
Wiring size	AWG-18
Wiring length	Maximum 1640 feet (500 m)

Prepare the wiring for connection to the remote controller following these instructions:



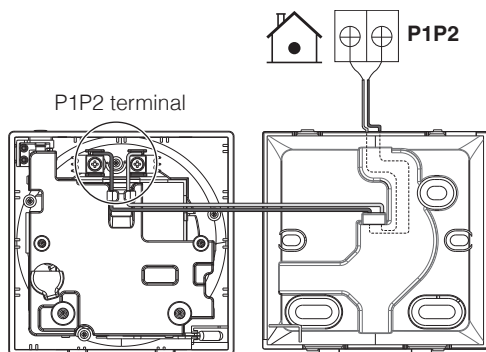
Wiring outlet	L
Top	±5.5 inch (140 mm)
Left	±4.3 inch (110 mm)
Bottom	±3.5 inch (90 mm)
Rear	No requirements

Connect the terminals (P1, P2) of the remote controller to the terminals (P1, P2) of the indoor unit. (P1 and P2 are not polarity sensitive.)

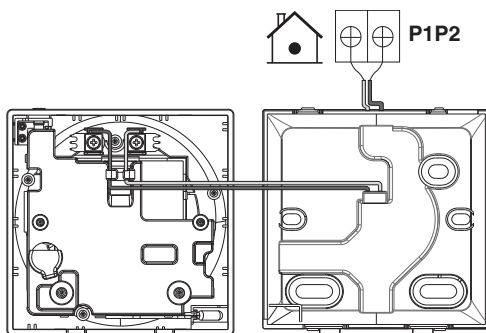
CAUTION

- Before working, shut off all power supplies.
- A mounting plate for installing the remote controller and remote controller wiring are not included.
- Do not touch the remote controller circuit board directly with your hands.

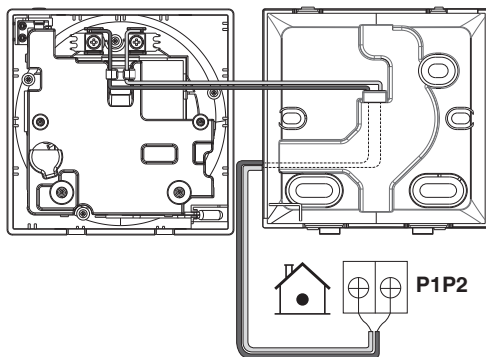
Top outlet



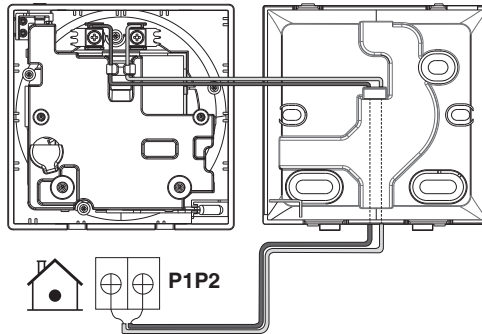
Rear outlet



Left outlet



Bottom outlet

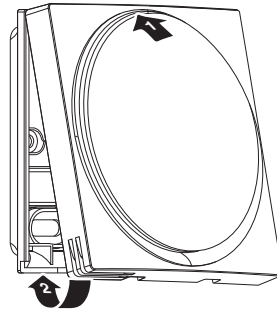


CAUTION

- Keep the wiring away from the power wire so that electrical noise (external noise) is not received.
- In order to prevent the entry of water or insects, use putty (field supply) to securely seal the wiring lead-in hole.

Closing the controller

- 1: Place the top of the controller on the top of the back plate.
- 2: Snap the bottom of the controller into place on the bottom of the back plate.
- 3: Ensure the installation site is dust-free, before peeling the protective seal.

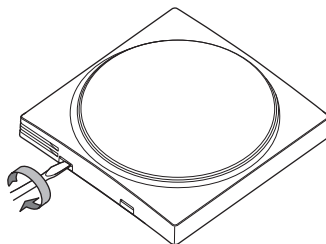


CAUTION

- Never touch the internal parts of the controller.
- When closing the controller, be careful not to pinch the wiring.
- To prevent damage, make sure the front of the controller is clicked into the back plate securely.

When removing the upper casing

Insert a flat head screwdriver into the recess in the back plate and remove the upper casing.
(2 locations)



CAUTION

- The remote controller circuit board is attached to the upper casing. Be careful not to damage the circuit board and casing when removing the upper casing.
 - Do not touch the remote controller circuit board directly with your hands.
 - Be careful not to allow dust or moisture to adhere to the circuit board when the upper casing is removed.
-

Designating a controller as main or sub

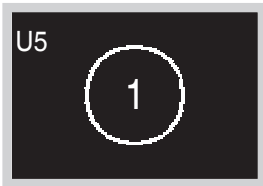
Prerequisite: A remote controller is already connected to the indoor unit.

Connect a second controller.

After turning on the power, perform setting of the second controller.

Result: It will start up automatically.

Home screen



Wait for a U5, U8 error code to appear on the screen.


Screen display explanation


1 main

2 sub

Home screen



When the U5 error code appears, press  and hold until "2" appears on the screen.

When the U8 error code appears, press  and hold until "1" appears on the screen.

Result:

A controller displaying 1 is set as main, and a controller displaying 2 is set as sub.

INFORMATION

If sub remote controller is not set at power-on in the case of one indoor unit controlled by two remote controllers, Error Code: U5 is displayed in the connection checking screen.

If the sub remote controller does not display the home screen two minutes after its designation, turn off the power and check the wiring.

Releasing the changeover master

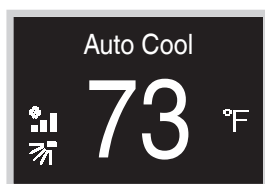
To change the authority to choose cooling/heating, you must first specify the remote controller with the authority, then release the authority.

Depending on the system, setting may not be available.

Prerequisite: You are in the installer menu.

You are operating the controller of the indoor unit that you want to release from being the changeover master.

Home screen





Press and hold  button for 5 seconds or longer.

The information screen is displayed.

Information screen



Press  →  →  (in that order) and hold them down for 10 seconds.

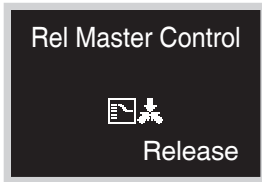
The installer menu screen is displayed.

Installer menu screen



Navigate to the Rel Master Control menu.

Sub-menu screen



Press **+** to release the indoor unit from its authority.

Result:

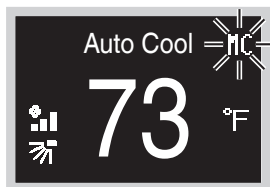
- The indoor unit is released from its authority.
- The controllers of all indoor units display a blinking “**MC**” icon.

Setting up the changeover master

This setting is available only when none of the remote control in the system has master control.

Prerequisite: No indoor unit is yet set as the changeover master (“MC” icon blinking on all controllers).

You are operating the controller of the indoor unit that you want to set as the changeover master.

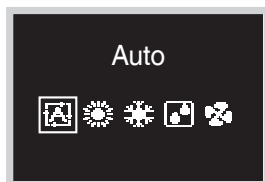


Menu screen



Navigate to the operation mode menu.

Sub-menu screen



Press **←** or **→**.

Result:

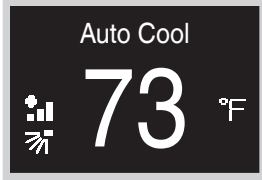
- The indoor unit is now the changeover master (“MC” icon not displayed).
- All sub controllers display the “MC” icon.


Field Setting

Field settings method

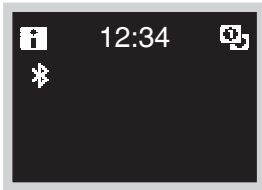
This section describes how to perform field setting.




Home screen



Press and hold  button for 5 seconds or longer to display the information screen.




Information screen



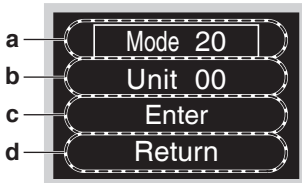
Press  →  →  (in that order) and hold them down for 10 seconds to display the installer menu screen.







Installer menu screen



Press  or  button, for move to "".
If Bluetooth is connected, performing field setting from the remote controller side is impossible.
Disconnect Bluetooth, or perform field setting from the mobile application.

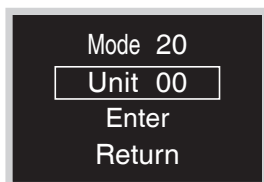
Sub-menu screen



Press  or  button, to select Mode No. and press  to enter the field setting menu.
Press  or  button, to scroll the desired Mode No. and press  button.

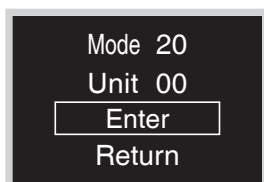
- a** Mode No.
- b** Unit No.
- c** Enter
- d** Return

Sub-menu screen



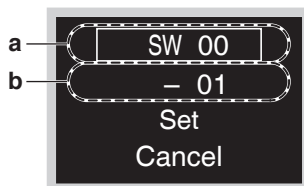
Press **-** or **+** button, to select Unit No. and press **○** button.
Press **-** or **+** button, scroll to the desired Unit No. and then press **○** button to set the selection.

Sub-menu screen



Press **-** or **+** button, to select Enter, and then press **○** button to set the selection.

Sub-menu screen



Press **-** or **+** button, select First Code No., and then press **○** button.
Press **+** or **-** button, scroll to the desired First code No. and then press **○** button to set the selection.

- a** First Code No.
- b** Second Code No.

Sub-menu screen



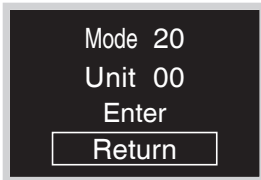
Press **-** or **+** button, to move Second Code No., and then press **○** button.
Press **-** or **+** button, to scroll to the desired Second Code No., and then press **○** button.

Sub-menu screen



Press **-** or **+** button, select Set, and then press **○** button to fix the setting and return to the previous screen.
If the setting is not changed, select Cancel.

Sub-menu screen



Press **-** or **+** button, move to Return, and then press **○** button to return to the installer menu.
* If the setting has been changed, the screen may return to the home screen without returning to the installer menu.

CAUTION

- The connection of optional accessories to the indoor unit might cause changes to some field settings. For more information, see the installation manual of the optional accessory.
 - For details about the specific field settings of each type of indoor unit, see the installation manual of the indoor unit.
 - Field settings that are not available for a connected indoor unit are not displayed.
 - Field setting default values are different depending on the indoor unit model. For more information, see the service manual of the indoor units.
-

Certification

COMPLIANCE WITH FCC RULES AND REGULATIONS

15.21

You are cautioned that changes or modifications not expressly approved by the part responsible for compliance could void the user's authority to operate the equipment.

15.105(b)

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and if not used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase or decrease the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced remote control/ TV technician for help.

This equipment has been verified to comply with the limits for a Class B computing device, pursuant to FCC Rules. The user is cautioned that changes and modifications made to the equipment without the approval of manufacturer could void the user's authority to operate this equipment.

FCC RF Radiation Exposure Statement:

To comply with the FCC RF exposure compliance requirements, this device and its antenna must not be co-located or operating in conjunction with any other antenna or transmitter.

FCC Authorization Label

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada.

To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

RF exposure:

To comply with the FCC RF exposure compliance requirements, this device and its antenna must not be co-located or operating in conjunction with any other antenna or transmitter.

License

The following OSS is included in the remote controller.
[micro-ecc]

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Considérations de Sécurité

La version originale des instructions est rédigée en anglais. Toutes les autres versions dans d'autres langues constituent une traduction de la version originelle des instructions.

Toutes les phases de l'installation sur place, y compris, mais sans s'y limiter, le câblage électrique, la tuyauterie, la sécurité, etc. doivent être conformes aux instructions du fabricant ainsi qu'aux codes nationaux, territoriaux, provinciaux et locaux.




Veillez lire attentivement ces **CONSIDÉRATIONS DE SÉCURITÉ** avant d'utiliser la télécommande.

Une fois l'installation terminée, assurez-vous que la télécommande fonctionne correctement lors du démarrage.

Formez le client à utiliser et à entretenir la télécommande. Informez les clients qu'ils doivent ranger le présent manuel d'installation avec le manuel d'utilisation pour consultation ultérieure.

Faites toujours appel à un installateur ou un entrepreneur agréé pour installer ce produit. Une mauvaise installation peut entraîner des décharges électriques, un incendie, voire une explosion.

Signification des symboles **AVERTISSEMENT**, **ATTENTION** et **REMARQUE**.

 AVERTISSEMENT	Indique une situation potentiellement dangereuse qui, si elle n'est pas évitée, pourrait entraîner la mort ou des blessures graves.
 ATTENTION	Indique une situation potentiellement dangereuse qui, si elle n'est pas évitée, peut entraîner des blessures mineures ou modérées. Ce symbole peut également être utilisé pour mettre en garde contre des pratiques non sécuritaires.
 REMARQUE	Indique des situations pouvant entraîner des dommages au matériel ou aux biens uniquement.

AVERTISSEMENT

Seul le personnel qualifié doit procéder aux travaux d'installation.

Consultez votre revendeur Daikin pour obtenir des directives concernant le déplacement et la réinstallation de la télécommande.

Des travaux d'installation non conformes peuvent entraîner des décharges électriques ou un incendie.

Les travaux électriques doivent être effectués conformément aux réglementations locales et nationales applicables et aux instructions fournies dans le présent manuel d'installation.

Une mauvaise installation peut entraîner des chocs électriques ou un incendie.

Utilisez uniquement les accessoires et pièces spécifiés pour les travaux d'installation.

La non-utilisation des pièces spécifiées peut entraîner des chocs électriques, un incendie ou la chute de l'unité.

Ne procédez pas au démontage, à la reconstruction, ou à la réparation du produit.

Un choc électrique ou un incendie peut se produire.

Assurez-vous que tout le câblage est sécurisé, que les fils spécifiés sont utilisés et qu'aucune force externe n'agit sur les raccordements des bornes ou les fils.

Des raccordements ou une installation incorrects peuvent provoquer un incendie.

Avant de toucher les pièces électriques, vérifiez que l'unité est mise hors tension.

ATTENTION

Gardez la télécommande à l'abri de l'eau.

Pour éviter les chocs électriques dus à la pénétration de l'eau ou d'insectes, bouchez l'orifice de passage du câblage avec du mastic.

Ne lavez pas la télécommande avec de l'eau, car cela peut provoquer des chocs électriques ou un incendie.

Ne touchez pas les boutons de la télécommande avec les doigts mouillés.

Le fait de toucher les boutons avec les doigts mouillés peut entraîner un choc électrique.

ATTENTION

N'installez pas la télécommande dans les endroits suivants:

- (a) Un endroit où un brouillard d'huile minérale ou un jet ou une vapeur d'huile est produit, par exemple, dans une cuisine. Un endroit où des pièces en plastique peuvent se détériorer.
- (b) Un endroit où des gaz corrosifs, tels que le gaz d'acide sulfureux, sont générés.
- (c) À proximité de machines émettant des ondes électromagnétiques. Les ondes électromagnétiques peuvent perturber le fonctionnement du système de commande et provoquer un dysfonctionnement de l'unité.
- (d) Un endroit où une fuite de gaz inflammables peut se produire, où il y a de la fibre de carbone ou une suspension de poussière inflammable dans l'air, ou un endroit où des matières inflammables volatiles, telles que du diluant ou de l'essence, sont manipulées. L'utilisation de l'unité dans de telles conditions peut provoquer un incendie.
- (e) Des endroits à température élevée ou des endroits à flammes directes. Une surchauffe et/ou un incendie peut se produire.
- (f) Des endroits humides où le produit est exposé à l'eau. Si de l'eau pénètre à l'intérieur de la télécommande, cela peut provoquer un choc électrique et des composants électriques peuvent tomber en panne.

REMARQUE






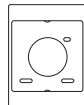

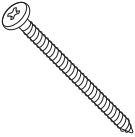
Installez les fils de commande de l'unité intérieure et de la télécommande à au moins 3,5 pieds (1 mètre) des téléviseurs ou des postes de radio pour éviter les brouillages par la fréquence image ou les parasites. En fonction des ondes radio, une distance d'un 3,5 pieds (1 mètre) peut s'avérer insuffisante pour éliminer les parasites.

Lorsque le capteur de température de la télécommande est utilisé, la sélection de l'emplacement d'installation doit répondre aux critères suivants:

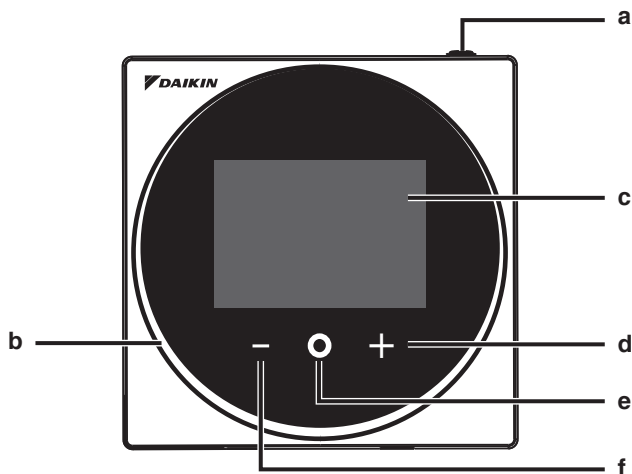
- Un endroit où la température moyenne de la pièce peut être détectée.
- Un endroit où la télécommande ne sera pas exposée à la lumière directe du soleil.
- Un endroit où la télécommande sera loin de toute source de chaleur.
- Un endroit où la télécommande ne sera pas directement affectée par l'air extérieur.

Accessoires

Les accessoires suivants sont inclus avec le produit.

Vis autoforeuse	Cheville pour vis autoforeuse	Manuel d'Utilisation	Manuel d'Installation
 (3 unités)	 (3 unités)	 (3 unités)	 (1 unité)
Plaque de montage (En métal)	Plaque de montage (En plastique)	Vis pour plaque de montage (M3×10)	Vis pour plaque de montage (M4×40)
 (1 unité)	 (1 unité)	 (3 unités)	 (2 unités)

Emplacements et Descriptions des Boutons



Les éléments de fonctions (c.-à-d. Mode de Fonctionnement, Vitesse du Ventilateur et Point de Consigne) sont réglés à partir de l'écran du menu.

! MISE EN GARDE

- N'installez pas la télécommande dans des endroits exposés à la lumière directe du soleil. Sinon, l'écran à cristaux liquides peut être endommagé.
- Ne tirez ou ne tordez pas le cordon d'alimentation de la télécommande. La télécommande peut être endommagée.
- N'utilisez pas d'objets aux extrémités pointues pour appuyer sur les boutons de la télécommande. Sinon, la télécommande risque d'être endommagée.

a **Bouton MARCHE/ARRÊT**

- Appuyez sur ce bouton pour allumer le système.
- Appuyez à nouveau sur ce bouton pour éteindre le système.

b **Témoin de fonctionnement (DEL)**

- Pendant le fonctionnement, l'anneau lumineux autour de l'écran s'allume en bleu/rouge/vert.
S'allume en bleu : en fonctionnement, clignote en rouge : une erreur se produit, s'allume/clignote en vert : connexion Bluetooth en cours

c **Écran à cristaux liquides** (Reportez-vous à INFORMATION à la page 5.)

- Affiche le point de consigne actuel et l'état de fonctionnement du climatiseur.

d **Bouton NAVIGUER/AJUSTEMENT**

- Naviguer à droite.
- Ajuster un réglage.

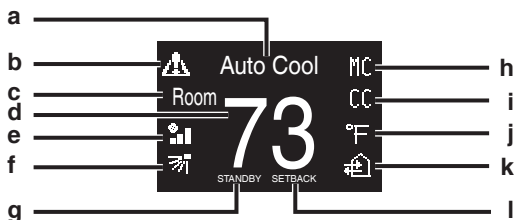
e **Bouton SÉLECTIONNER/ACTIVER/RÉGLER**

- Accéder au menu principal depuis l'écran d'accueil.
- Accéder à l'un des sous-menus depuis le menu principal.
- Activer un mode de fonctionnement/ventilation depuis leur sous-menu respectif.

f **Bouton NAVIGUER/AJUSTEMENT**

- Naviguer à gauche.
- Ajuster le réglage.

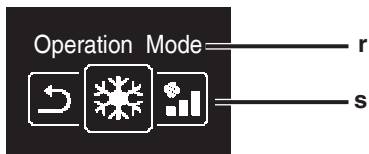
Écran d'accueil



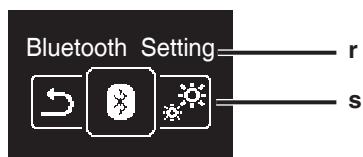
Écran d'information



Menu utilisateur/Menu administrateur/ Menu installateur



Menu utilisateur



Menu administrateur/Menu installateur

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i INFORMATIONS

En fonction du modèle connecté, certains éléments peuvent ne pas s'afficher.

La télécommande est munie d'une fonction d'économie d'énergie qui assombrit l'écran si aucune opération n'est effectuée pendant une certaine période de temps. Pour rallumer l'écran, appuyez sur l'un des boutons. Notez que le fait d'appuyer sur l'un des boutons ne fera qu'éclairer à nouveau l'écran, sans provoquer le fonctionnement de la télécommande.

Explication de l'affichage sur l'écran

a Mode de fonctionnement/affichage OFF

- Affiche l'état de fonctionnement.

b Icône Erreur/Filtre/Test

- Les icônes d'erreur, de filtre et de test s'affichent.

c Pièce/Réglage

- Indique s'il s'agit d'un affichage de la température ambiante (Pièce) ou d'un affichage du point de consigne (Réglage).

d Température ambiante de la pièce/ Température de consigne

- Affiche la température ambiante de la pièce ou de consigne actuelle.

e Vitesse du ventilateur

- Affiche la vitesse du ventilateur.

f Direction du flux d'air

- Affiche le réglage de la direction du flux d'air.

g MISE EN VEILLE

- S'affiche lors du dégivrage/du démarrage à chaud.

h Commutation commandée par l'unité intérieure principale

- S'affiche lorsqu'une autre unité intérieure du système a le pouvoir de changer le mode de fonctionnement entre froid et chaud.

i Lors d'un contrôle centralisé

- Affiché si le système est sous la gestion d'un contrôleur multizone (En Option) et que le fonctionnement du système via la télécommande est limité.

j Fahrenheit/Celsius

- L'affichage de la température en Fahrenheit/Celsius peut être sélectionné en fonction du réglage effectué.

k Fonctionnement de la ventilation/ Purification de l'air

- Affiché lorsqu'un Ventilateur Récupération de Chaleur est connecté.

l Réduction

- Clignote durant l'activation de la fonction de remise au point de consigne.
- S'affiche lors du réglage de la fonction de remise au point de consigne.

m Icône d'information

n Horloge (affichage de l'heure sur 24 heures)

o Signe de télécommande PRINCIPALE/SECONDAIRE

p Statut

- Notifie l'état.

q Affichage Erreur

- En cas d'erreur, l'icône, un code d'erreur et le numéro de l'unité s'affichent.

r Nom du menu des réglages

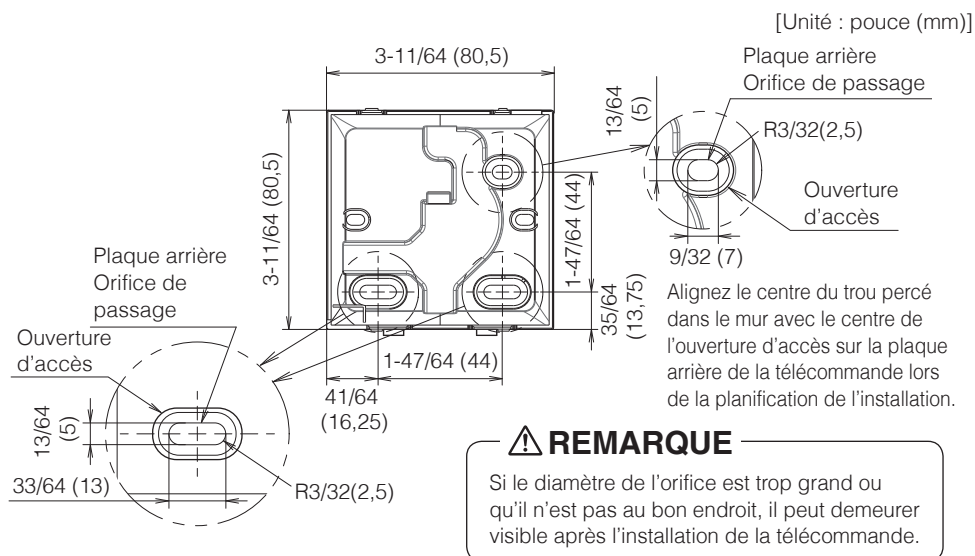
s Icône du menu des réglages

Procédure d'installation de la télécommande

Choix de l'endroit d'installation de la télécommande

Sélectionnez l'emplacement d'installation en fonction des "Considérations de Sécurité" (voir page 2) et obtenez le consentement du client.

Création d'un orifice de passage du câblage dans le mur (lors de l'ouverture d'un trou dans le mur et de l'installation)



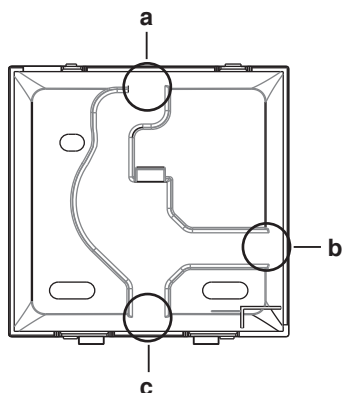
⚠ ATTENTION

- Notez que si l'orifice de passage du câblage est grand ou s'écarte de la position spécifiée, l'orifice peut rester apparent.

Détermination de la direction d'acheminement des fils pour la plaque arrière

Avant de monter la télécommande, déterminez la direction du câblage et retirez un morceau de la plaque arrière de la télécommande en conséquence (par ex.: a, b, c). Vous pouvez acheminer le câblage par le haut, la gauche ou le bas du couvercle arrière. Retirez un morceau de la plaque arrière comme le montre la figure suivante. Après avoir retiré un morceau mince avec un outil tel qu'une tondeuse, supprimez les bavures à l'aide d'une lime, etc.

- a** Câblage par le haut
- b** Câblage par la gauche
- c** Câblage par le bas



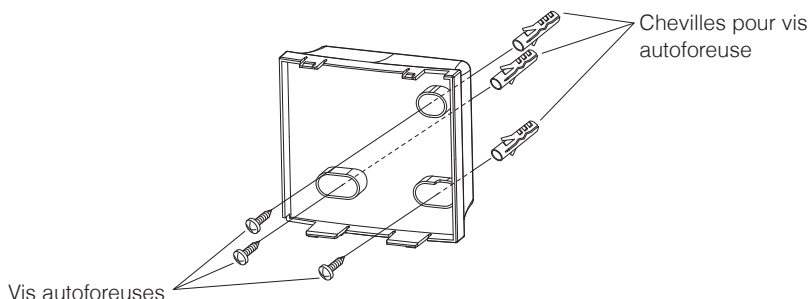
! ATTENTION

Si vous acheminez le câblage par l'arrière, vous n'avez rien à retirer. Lors de l'acheminement du câblage depuis le haut, l'arrière, la gauche ou le bas, ou lors de l'installation sur une plaque de montage etc., assurez-vous d'acheminer le câblage vers le boîtier supérieur avant de fixer la plaque arrière.

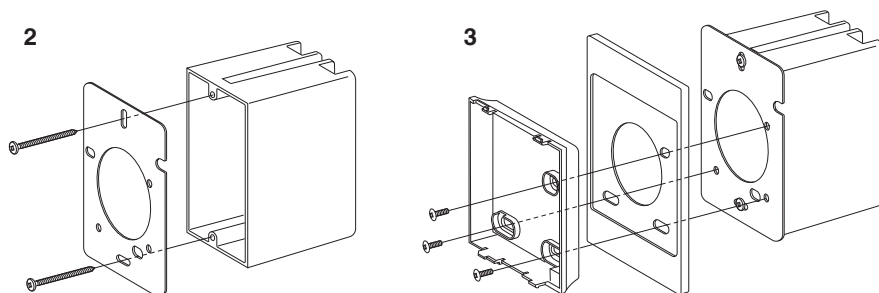
Fixation de la plaque arrière

Installation murale

- 1: Retirez les vis autoforeuses et les chevilles pour vis autoforeuses du sac d'accessoires.
- 2: Montez la plaque arrière sur une surface plane.



Dans le cas d'une installation dans le boîtier des composants électriques



- 1: Retirez les vis de la plaque de montage (M3×10 et M4×40) et les plaques de montage (en métal et en plastique) du sac d'accessoires.
- 2: Fixez la plaque de montage (en métal) au boîtier des éléments électriques à l'aide des vis de la plaque de montage (M4×40).
- 3: Fixez la plaque arrière et la plaque de montage (en plastique) à l'aide des vis de la plaque de montage (M3×10).

⚠ ATTENTION

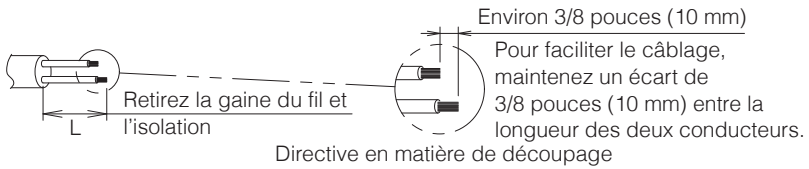
- Pour la surface d'installation, sélectionnez un emplacement aussi plat que possible.
- Choisissez un endroit où il n'y a pas d'espace entre le mur et la partie de fixation par vis de la plaque arrière.
- S'il y a un espace vide entre la plaque arrière et la partie de fixation par vis (partie écrou) en raison de la structure du mur, procédez à l'installation avec un couple de serrage de 20 N/cm ou moins. En cas de serrage excessif, la plaque arrière se déforme et le boîtier supérieur se détache facilement.
- Si le boîtier supérieur se détache facilement, desserrez les vis autoforeuses pour atténuer la déformation.
- En cas de serrage excessif, le boîtier inférieur se déforme et le boîtier supérieur se détache facilement. Si le boîtier supérieur se détache facilement, desserrez les vis et corrigez la déformation.

Raccordement du câblage

Tout le câblage doit être conforme aux exigences suivantes:

Spécification de câblage	Valeur
Type du câble	Câble en cuivre à paires torsadées non blindées, à 2 conducteurs, torsadé
Dimension du câble	AWG-18
Longueur du câble	1640 pieds (500 m) au maximum

Préparez le câblage pour effectuer le raccordement à la télécommande en suivant les directives suivantes:



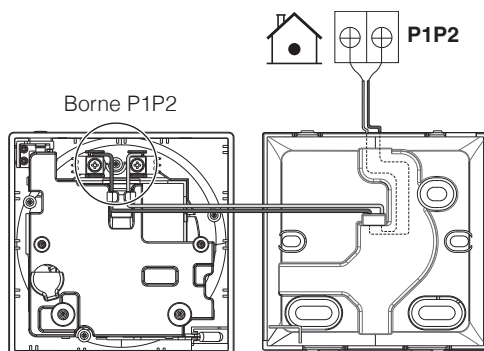
Sortie d'air	L
Haut	±5,5 pouces (140 mm)
Gauche	±4,3 pouces (110 mm)
Bas	±3,5 pouces (90 mm)
Arrière	Pas de conditions exigées

Connectez les bornes (P1, P2) de la télécommande aux bornes (P1, P2) de l'unité intérieure. (P1 et P2 ne sont pas sensibles à la polarité.)

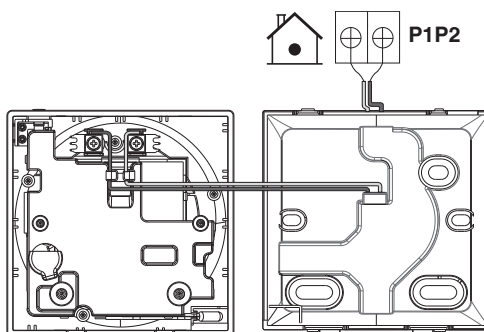
! ATTENTION

- Avant d'entamer les travaux d'installation, coupez l'alimentation.
- Une plaque de montage pour réaliser l'installation de la télécommande et le câblage de celle-ci ne sont pas fournis avec le produit.
- Ne touchez pas le circuit imprimé de la télécommande directement avec les mains.

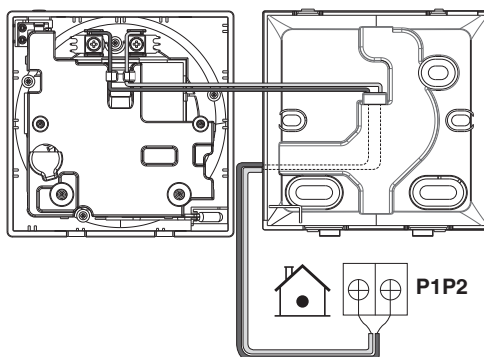
Sortie en haut



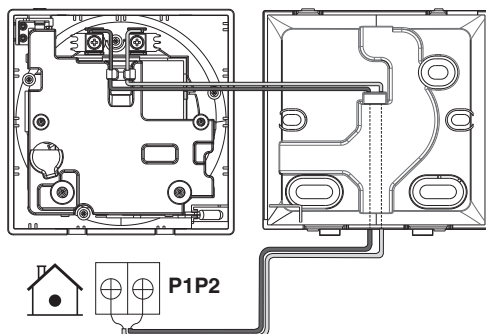
Sortie à l'arrière



Sortie à gauche



Sortie en bas

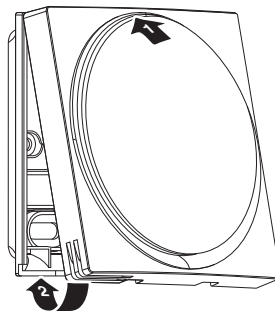


ATTENTION

- Maintenez le câblage loin du fil d'alimentation afin d'éviter tout bruit électrique (bruit externe).
- Afin d'empêcher la pénétration de l'eau ou d'insectes, utilisez du mastic (fourni sur place) pour sceller en toute sécurité l'orifice d'entrée du câblage.

Fermeture de la télécommande

- 1:** Placez le haut de la télécommande contre le haut de la plaque arrière.
- 2:** Enclenchez le bas de la télécommande en place sur le bas de la plaque arrière.
- 3:** Assurez-vous que le site d'installation est exempt de poussière, avant de détacher le joint de protection.

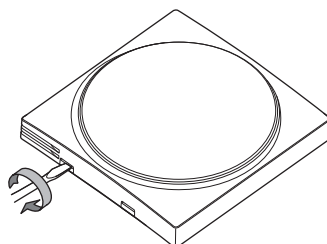


ATTENTION

- Ne touchez jamais les pièces internes de la télécommande.
- Lors de la fermeture de la télécommande, faites attention à ne pas pincer le câblage.
- Pour éviter d'endommager la télécommande, assurez-vous que l'avant de celle-ci est bien enclenché dans le boîtier inférieur.

Lors du retrait du boîtier supérieur

Insérez un tournevis à lame plate dans la gorge de la plaque arrière et retirez le boîtier supérieur.
(2 emplacements)



ATTENTION

- La carte de circuit imprimé de la télécommande est fixée au boîtier supérieur. Veillez à ne pas endommager la carte de circuit imprimé et le boîtier lors du retrait du boîtier supérieur.
 - Ne touchez pas le circuit imprimé de la télécommande directement avec les mains.
 - Veillez à ne pas laisser de la poussière ou de l'humidité adhérer à la carte de circuit imprimé lorsque le boîtier supérieur est retiré.
-

Désigner une télécommande comme principale ou secondaire

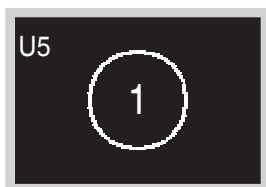
Condition préalable: Une télécommande est déjà connectée à l'unité intérieure.

Connectez une deuxième télécommande.

Après avoir mis sous tension, effectuez le réglage du deuxième contrôleur.

Résultat: Elle démarrera automatiquement.

Écran d'accueil



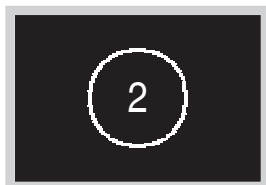
Attendez qu'un code d'erreur U5 ou U8 apparaisse à l'écran.


Explication de l'affichage à l'écran


1 principal

2 secondaire

Écran d'accueil



Lorsque le code d'erreur U5 apparaît, appuyez sur  et maintenez la touche enfoncée jusqu'à ce que "2" apparaisse à l'écran.

Lorsque le code d'erreur U8 apparaît, appuyez sur  et maintenez la touche enfoncée jusqu'à ce que "1" apparaisse à l'écran.

Résultat:

Une télécommande affichant 1 est configurée comme principale et une télécommande affichant 2 est configurée comme secondaire.

INFORMATIONS

Si la télécommande secondaire n'est pas réglée à la mise sous tension dans le cas d'une unité intérieure contrôlée par deux télécommandes, le Code d'Erreur: U5 s'affiche sur l'écran de vérification de la connexion.

Si la télécommande secondaire n'affiche pas l'écran d'accueil deux minutes après sa désignation, coupez l'alimentation et vérifiez le câblage.

Dégager le maître de basculement

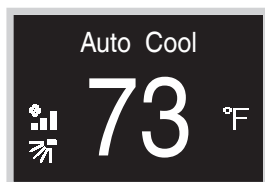
Pour transmettre le pouvoir de sélection du mode de refroidissement/chauffage à une autre télécommande, vous devez d'abord spécifier laquelle des télécommandes détient ce pouvoir, puis désactiver celui-ci.


Selon le système, le réglage peut ne pas être disponible.

Condition préalable: Vous êtes dans le menu installateur.

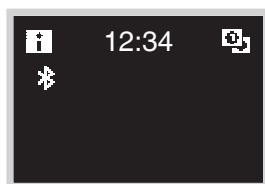
Vous êtes en train d'utiliser la télécommande de l'unité intérieure dont vous voulez désactiver son statut de maître de basculement.




Écran d'accueil



Appuyez sur le bouton  et maintenez-le enfoncé pendant 5 secondes ou plus. L'écran d'information s'affiche.

Écran d'information



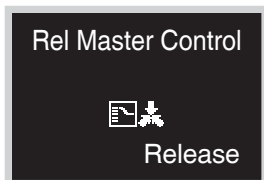
Appuyez sur  →  →  (dans cet ordre-là) et maintenez-les enfoncés pendant 10 secondes. L'écran du menu installateur s'affiche.

Écran du menu installateur



Accédez au menu de la Commande Centrale.

Écran du sous-menu



Appuyer sur **+** pour dépourvoir l'unité intérieure du pouvoir qu'elle détient.

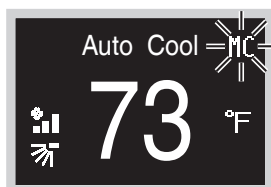
Résultat:

- L'unité intérieure ne détient plus ce pouvoir.
- Une icône clignotante "**MC**" s'affiche sur les télécommandes de toutes les unités intérieures.

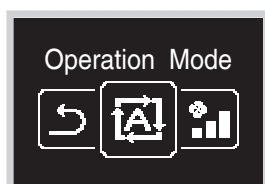
Configuration du maître de basculement

Ce paramètre est disponible uniquement lorsqu'aucune des télécommandes du système n'a de commande centrale.

Condition préalable: Aucune unité intérieure n'est encore définie comme maître de basculement (l'icône "MC" clignote sur toutes les télécommandes). Vous êtes en train d'utiliser la télécommande de l'unité intérieure que vous souhaitez définir comme maître de basculement.

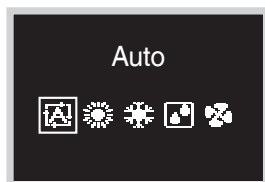


Écran du menu



Accédez au menu du mode de fonctionnement.

Écran du sous-menu



Appuyez sur **-** ou **+**.

Résultat:

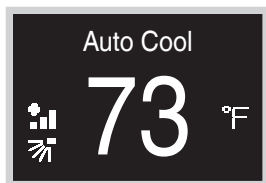
- L'unité intérieure est maintenant définie comme maître de basculement (l'icône "MC" ne s'affiche plus).
- L'icône "MC" s'affiche sur toutes les commandes secondaires.


Réglage sur Place

Méthode des réglages sur place

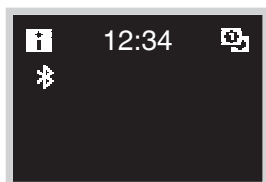
Cette section décrit comment effectuer le réglage sur place.




Écran d'accueil



Appuyez sur le bouton  et maintenez-le enfoncé pendant 5 secondes ou plus pour afficher l'écran d'informations.

Écran d'information



Appuyez sur  →  →  (dans cet ordre) et maintenez ces touches enfoncées pendant 10 secondes pour afficher l'écran du menu Installateur.

Écran du menu installateur

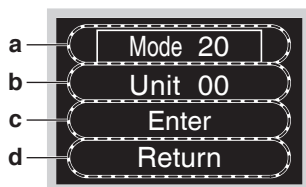








Appuyez sur le bouton  ou  pour passer à "Field Setting".

Si le Bluetooth est connecté, il est impossible d'effectuer le réglage sur place du côté de la télécommande.

Déconnectez le Bluetooth ou effectuez le réglage sur place depuis l'application mobile.

Écran du sous-menu



Appuyez sur le bouton  ou  pour sélectionner le N° de Mode et appuyez sur  pour accéder au menu de réglage sur place. Appuyez sur les boutons  et  pour faire défiler jusqu'au Numéro de Mode souhaité, puis appuyez sur le bouton .

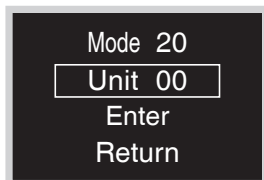
a N ° du mode

b N ° de l'unité

c Entrée

d Retour

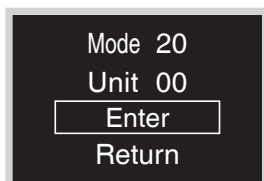
Écran du sous-menu



Appuyez sur le bouton **[-]** ou **[+]**, pour sélectionner le Numéro de l'Unité et appuyez sur le bouton **[O]**.

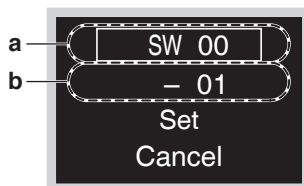
Appuyez sur le bouton **[-]** ou **[+]**, faites défiler jusqu'au Numéro de l'Unité souhaitée et appuyez sur le bouton **[O]** pour confirmer la sélection.

Écran du sous-menu



Appuyez sur le bouton **[-]** ou **[+]**, pour sélectionner Entrée, puis appuyez sur le bouton **[O]** pour définir la sélection.

Écran du sous-menu

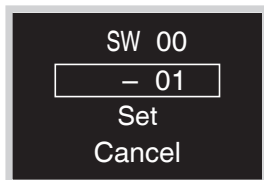


À l'aide du bouton **[-]** ou **[+]**, sélectionnez le Premier Numéro de Code et appuyez sur le bouton **[O]**.

Appuyez sur le bouton **[+]** ou **[-]**, faites défiler jusqu'au Premier Numéro de code souhaité, puis appuyez sur le bouton **[O]** pour définir la sélection.

- a** Premier Numéro de Code
- b** Deuxième Numéro de Code

Écran du sous-menu



Appuyez sur le bouton **[-]** ou **[+]** pour accéder au Deuxième Numéro de Code, puis appuyez sur le bouton **[O]**.

Appuyez sur le bouton **[-]** ou **[+]** pour faire défiler jusqu'au Deuxième Numéro de Code souhaité, puis appuyez sur le bouton **[O]**.

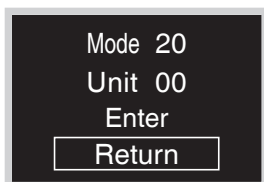
Écran du sous-menu



Appuyez sur le bouton **←** ou **→**, sélectionnez Régler, puis appuyez sur le bouton **○** pour valider le réglage et revenez à l'écran précédent.

Si le réglage n'est pas fixé, sélectionnez Annuler.

Écran du sous-menu



Appuyez sur le bouton **←** ou **→**, allez sur Revenir, puis appuyez sur le bouton **○** pour revenir au menu de l'installateur.

* Si le réglage a été changé, l'écran peut revenir à l'écran d'accueil sans revenir au menu de l'installateur.

ATTENTION

- La connexion d'accessoires optionnels à l'unité intérieure peut entraîner des modifications de certains réglages effectués sur place. Pour plus de renseignements, consultez le manuel d'installation d'accessoires optionnels.
 - Pour plus de détails sur les réglages effectués sur place, spécifiques à chaque type d'unité intérieure, consultez le manuel d'installation de l'unité intérieure.
 - Les réglages effectués sur place qui ne sont pas disponibles pour une unité intérieure connectée ne s'affichent pas.
 - Les valeurs par défaut du réglage effectué sur place varient selon le modèle de l'unité intérieure. Pour plus de renseignements, consultez le manuel d'entretien des unités intérieures.
-

Certification

CONFORMITÉ AVEC LES RÈGLEMENTS DE LA FCC

15.21

Vous êtes informé que les changements ou modifications non expressément approuvés par la partie responsable de la conformité pourraient annuler l'autorité de l'utilisateur à faire fonctionner l'équipement.

15.105(b)

Cet équipement a été testé et prouvé conforme aux limites d'un appareil numérique de classe B conformément à la partie 15 des Règlements de la FCC. Ces limites sont établies pour fournir une protection raisonnable contre les interférences nuisibles dans une installation résidentielle. Cet équipement produit, utilise et peut émettre de l'énergie de fréquence radio et, s'il n'est pas utilisé conformément aux instructions peut causer des interférences nuisibles aux communications radio. Toutefois, il n'existe aucune garantie que des interférences ne se produiront pas dans une installation particulière. Si cet équipement produit des interférences nuisibles à la réception radio ou de la télévision, nous recommandons à l'utilisateur de corriger ces interférences en suivant l'une ou plusieurs des mesures suivantes:

- Changer l'orientation ou l'emplacement de l'antenne.
- Augmenter ou diminuer la distance entre l'équipement et le récepteur.
- Brancher l'équipement sur une prise d'un circuit différent de celui auquel le récepteur est connecté.
- Consulter le revendeur ou un technicien expérimenté en télécommande/télé pour obtenir de l'aide.

Cet équipement a été prouvé conforme aux limites d'un équipement informatique de classe B conformément aux Règlements de la FCC. L'utilisateur est averti que des changements et des modifications apportés à l'équipement sans l'approbation du fabricant pourraient annuler l'autorité de l'utilisateur à faire fonctionner cet équipement.

Déclaration d'exposition aux radiations RF de la FCC:

Afin de respecter les exigences de conformité relatives à l'exposition aux RF de la FCC, cet équipement et son antenne ne doivent pas être placés côté à côté et ne doivent pas fonctionner conjointement avec une autre antenne ou émetteur.

Étiquette d'autorisation de la FCC

Cet appareil est conforme à la partie 15 des Règlements de la FCC. Le fonctionnement est soumis aux deux conditions suivantes:

1. Cet appareil ne doit pas produire d'interférences nuisibles.
2. Cet appareil doit accepter toute interférence reçue, y compris les interférences pouvant entraîner un fonctionnement non souhaité.

En vertu des règlements d'Industrie Canada, cet émetteur radio peut seulement fonctionner avec une antenne d'un type et d'un gain maximum (ou inférieur) approuvé pour l'émetteur par Industrie Canada.

Pour réduire les interférences radio potentielles avec les autres utilisateurs, le type d'antenne et son gain doivent être choisis de sorte que la puissance isotrope rayonnée équivalente (PIRE) n'excède pas la puissance nécessaire pour une communication réussie.

Cet appareil est conforme à la/aux norme(s) RSS exemptes de licence d'Industry Canada. Le fonctionnement est soumis aux deux conditions suivantes: (1) cet appareil ne doit pas causer d'interférences, et (2) cet appareil doit accepter toute interférence, y compris les interférences pouvant entraîner un fonctionnement non souhaité de l'appareil.

Expositions aux RF:

Afin de respecter les exigences de conformité relatives à l'exposition aux RF de la FCC, cet équipement et son antenne ne doivent pas être placés côté à côté et ne doivent pas fonctionner conjointement avec une autre antenne ou émetteur.

Licence

L'OSS suivant est inclus dans la télécommande.
[micro-ecc]

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Consideraciones de Seguridad

Las instrucciones originales están redactadas en Inglés. Todos los demás idiomas son traducciones de las instrucciones originales.




Todas las fases de la instalación de campo, entre otras, la eléctrica, de tuberías, la seguridad, etc., deben hacerse de acuerdo con las instrucciones del fabricante y deben cumplir los códigos locales, provinciales, estatales y nacionales.

Lea estas **CONSIDERACIONES DE SEGURIDAD** atentamente antes de instalar el control remoto. Después de completar la instalación, asegúrese de que el control remoto funcione correctamente durante la operación de puesta en marcha.

Enseñe al cliente cómo operar y dar mantenimiento al control remoto. Informe a los clientes que deben guardar este Manual de Instalación con el Manual de Operación para futuras consultas.

Siempre emplee a un instalador o contratista matriculado para instalar este producto. La instalación incorrecta puede resultar en choque eléctrico, incendio o explosión.

Significado de los símbolos de **ADVERTENCIA**, **PRECAUCIÓN**, y **NOTA**.

 ADVERTENCIA	Indica una situación potencialmente peligrosa que, si no se evita, podría resultar en heridas graves o la muerte.
 PRECAUCIÓN	Indica una situación potencialmente peligrosa que, si no se evita, podría resultar en heridas leves o moderadas. También puede utilizarse para alertar de prácticas poco seguras.
 NOTA	Indica situaciones que podrían resultar solamente en accidentes que produzcan daños materiales o en el equipo.

ADVERTENCIA

La tarea de instalación solo debe realizarla personal calificado.

Consulte a su distribuidor de Daikin en lo que respecta a la reubicación y reinstalación del control remoto. Un trabajo de instalación incorrecto puede resultar en choques eléctricos o incendios.

El trabajo eléctrico debe realizarse de acuerdo con las regulaciones locales y nacionales pertinentes y con las instrucciones de este manual de instalación.

Una instalación incorrecta puede causar choques eléctricos o incendios.

Use solo los accesorios y las piezas especificados para la tarea de instalación.

No utilizar las piezas especificadas puede resultar en choques eléctricos, incendio o fallas en la unidad.

No la desarme, no la reconstruya ni la repare.

Pueden producirse choques eléctricos o incendios.

Asegúrese de que todo el cableado esté seguro, que se utilicen los cables especificados, y que no actúen fuerzas externas en las conexiones ni en los alambres del terminal.

Las conexiones o la instalación incorrectas pueden resultar en incendio.

Antes de tocar partes eléctricas, confirme que la alimentación de la unidad esté apagada.

PRECAUCIÓN

Mantenga el control remoto alejado del agua.

Para evitar choques eléctricos debidos al ingreso de agua o insectos, rellene el orificio pasante del cableado con masilla.

No lave el control remoto con agua, ya que puede resultar en choques eléctricos o incendio.

No toque los botones del control remoto con los dedos mojados.

Si toca los botones con los dedos mojados, puede producirse un choque eléctrico.

⚠ PRECAUCIÓN

No instale el control remoto en las siguientes ubicaciones:

- (a) Donde se produzca niebla de aceite mineral o vapor o rocío de aceite, por ejemplo, en una cocina. Las partes plásticas pueden deteriorarse.
- (b) Donde se produzca gas corrosivo, como gas de ácido sulfuroso.
- (c) Cerca de maquinaria que emita ondas electromagnéticas.
Las ondas electromagnéticas pueden alterar el funcionamiento del sistema de control y hacer que la unidad funcione mal.
- (d) Donde se pueda fugar gas inflamable, donde haya suspensión de polvo inflamable o fibra de carbono en el aire, o donde haya inflamables volátiles como donde se manipulen solvente o gasolina.
Operar la unidad en tales condiciones puede producir un incendio.
- (e) Áreas con altas temperaturas o áreas con llamas abiertas.
Se puede producir sobrecalentamiento y/o incendio.
- (f) Áreas húmedas donde haya exposición al agua. Si ingresa agua al interior del control remoto, puede provocar un choque eléctrico y los componentes eléctricos pueden fallar.

⚠ NOTA





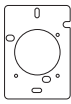
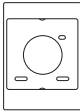


Instale los cables del control para la unidad interior y el control remoto a una distancia de, al menos, 3,5 pies (1 metro) de televisiones o radios para evitar interferencia en la imagen o ruido. Según las ondas de radio, una distancia de 3,5 pies (1 metro) puede ser insuficiente para eliminar el ruido.

Cuando se usa el sensor de temperatura del control remoto, seleccione la ubicación de instalación según las siguientes condiciones:

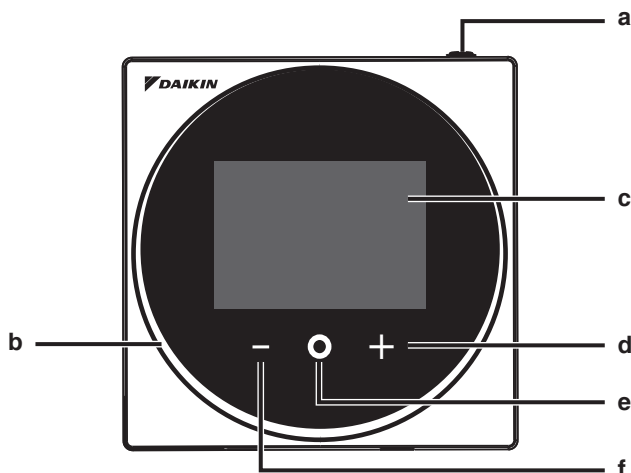
- Un lugar donde la temperatura promedio de la habitación se pueda detectar.
- Un lugar donde no esté expuesto a luz solar directa.
- Un lugar donde esté alejado de cualquier fuente de calor.
- Un lugar donde no esté afectado directamente por el aire del exterior.

Accesorios

Se incluyen los siguientes accesorios.

Tornillo para paneles de yeso	Anclaje para paneles de yeso	Manual de Operación	Manual de Instalación
 (3 pzas.)	 (3 pzas.)	 (3 pzas.)	 (1 pza.)
Placa de montaje (Metal)	Placa de montaje (Plástico)	Tornillo para la placa de montaje (M3×10)	Tornillo para la placa de montaje (M4×40)
 (1 pza.)	 (1 pza.)	 (3 pzas.)	 (2 pzas.)

Ubicación y Descripción de los Botones



Los elementos de las funciones (es decir, Modo de Operación, Velocidad del Ventilador y Punto de Ajuste) se configuran desde la pantalla del menú.

! AVISO

- No instale el control remoto en lugares expuestos a la luz solar directa. El LCD podría dañarse.
- No jale ni retuerza el cable del control remoto. El control remoto se puede dañar.
- No utilice objetos con bordes filosos para presionar los botones del control remoto. Podrían producirse daños.

a Botón de ENCENDIDO/APAGADO

- Presione este botón para activar el sistema.
- Presione este botón nuevamente para apagar el sistema.

b Indicador de estado (LED)

- Durante el funcionamiento, el anillo de luz alrededor de la pantalla se enciende en azul/rojo/verde.
Se enciende en azul: En funcionamiento, Parpadea en rojo: Se está produciendo un error,
Se enciende/parpadea en verde: Conexión Bluetooth

c LCD (Consulte INFORMACIÓN en la página 5.)

- Muestra la temperatura actual del punto de ajuste y el estado de operación del aire acondicionado.

d Botón de NAVEGAR/AJUSTE

- Navega a la derecha.
- Ajusta una configuración.

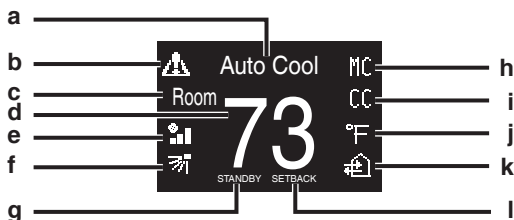
e Botón SELECCIONAR/ACTIVAR/FIJAR

- Desde la pantalla de inicio, ingresa al menú principal.
- Desde el menú principal, ingresa a uno de los submenús.
- Desde el submenú respectivo, activa un modo de operación/ventilación.

f Botón de NAVEGAR/AJUSTE

- Navega a la izquierda.
- Ajusta la configuración.

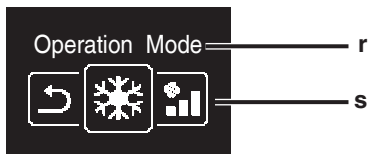
Pantalla de inicio



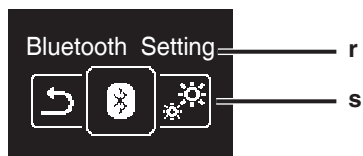
Pantalla de información



Menú del usuario/Menú del administrador/ Menú del instalador



Menú del usuario



Menú del administrador/Menú del instalador

La marca denominativa Bluetooth® y sus logotipos son marcas comerciales registradas propiedad de Bluetooth SIG, Inc. y la utilización de tales marcas por parte de Daikin north américa LLC se realiza bajo licencia. Las demás marcas y nombres comerciales son propiedad de sus respectivos propietarios.

Explicación de la visualización de la pantalla

a Visualización del modo de operación/APAGADO

- Muestra el estado de operación.

b Icono de Error/Filtro/Prueba

- Se muestran los iconos de error, filtro y prueba.

c Habitación/Ajuste

- Muestra si se trata de una indicación de la temperatura de la habitación (Habitación) o del punto de ajuste (Ajuste).

d Temperatura de la habitación/ Temperatura establecida

- Muestra la temperatura actual de la habitación o su valor nominal.

e Velocidad del ventilador

- Muestra la velocidad configurada del ventilador.

f Dirección del flujo de aire

- Muestra la dirección configurada del flujo de aire.

g EN ESPERA

- Se muestra durante el descongelamiento/ arranque en caliente.

h Cambio controlado por la unidad interior maestra

- Se muestra cuando hay otra unidad interior del sistema que tiene autoridad para cambiar el modo de operación entre refrigeración y calefacción.

i Por control centralizado

- Se muestra en caso que el sistema esté bajo la administración de un controlador multizona (Opcional) y que la operación del sistema a través del control remoto sea limitada.

j Fahrenheit/Celsius

- Según la configuración, se puede seleccionar la visualización en Fahrenheit/Celsius.

k Operación de la Ventilación/Purificación del Aire

- Se visualiza cuando el Ventilador de Recuperación de Calor es conectado.

l Reducción

- Parpadea durante la operación de reducción automática.
- Se muestra durante el ajuste de reducción automática.

m Icono de información

n Reloj (visualización en formato de 24 horas)

o Signo de control remoto PRINCIPAL/SECUNDARIO

p Estado

- Notifica el estado.

q Visualización de error

- Si se produce un error, se muestra el icono, un código de error y el número de la unidad.

r Nombre del menú de ajustes

s Icono del menú de ajustes

i INFORMACIÓN

Dependiendo del modelo conectado, es posible que algunos elementos no se muestren.

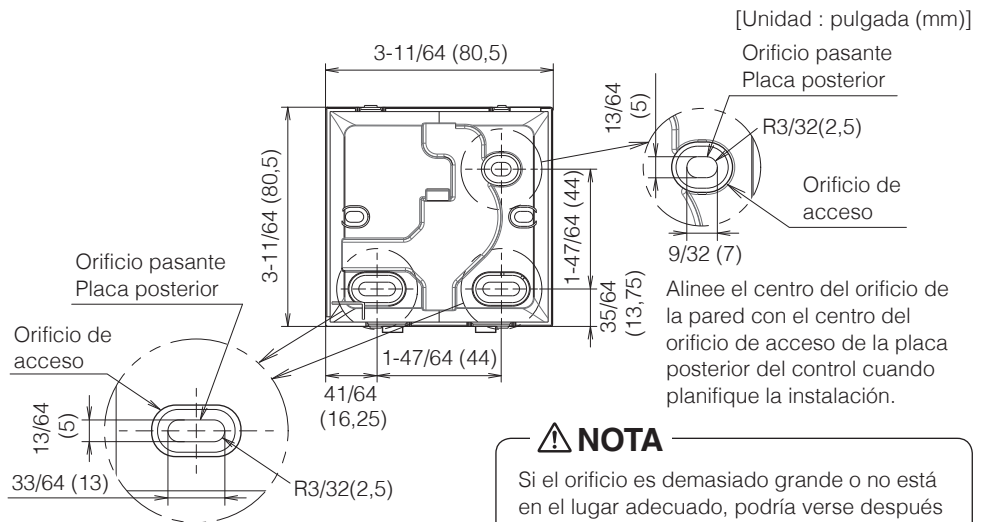
El control está equipado con una función de ahorro de energía que oscurece la pantalla si no hay operaciones durante un determinado tiempo. Para hacer que la pantalla se encienda nuevamente, presione uno de los botones. Tenga en cuenta que al presionar uno de los botones, la pantalla simplemente vuelve a brillar, pero no habilita la operación del control remoto.

Procedimiento de instalación del control remoto

Cómo decidir dónde instalar el control remoto

Seleccione la ubicación de instalación de acuerdo con la sección “Consideraciones de Seguridad” (consulte la página 2) y obtenga el consentimiento del cliente.

Cómo hacer un agujero pasante para el cableado en la pared (al abrir un agujero en la pared e instalar)



⚠ NOTA

Si el orificio es demasiado grande o no está en el lugar adecuado, podría verse después de que se haya instalado el control remoto.

⚠ PRECAUCIÓN

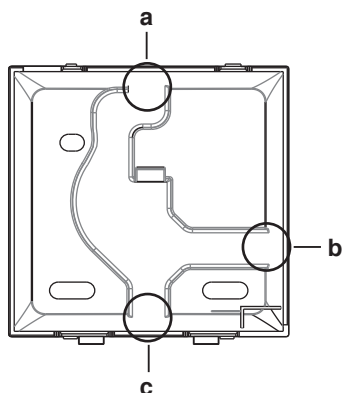
- Tenga en cuenta que, si el orificio pasante para el cableado es grande o se desvía de la posición especificada, el orificio podría quedar expuesto.

Determinando de la dirección de colocación del cableado para la placa posterior

Antes de montar el control, determine la dirección del cableado y retire una pieza de la placa posterior del controlador en éste sentido (ej: a, b, c). El cableado puede colocarse desde la parte superior, izquierda o inferior de la cubierta posterior. Retire una pieza de la placa posterior según la siguiente figura.

Después de quitar una pieza delgada con una herramienta, por ejemplo, un cortador, elimine las rebabas con una lima o similar.

- a** Cableado desde arriba
- b** Cableado desde la izquierda
- c** Cableado desde abajo



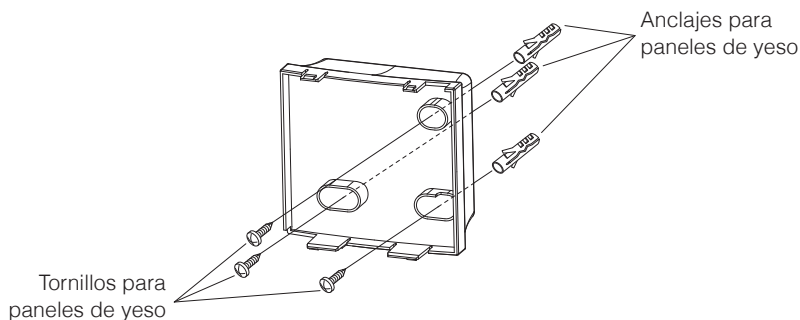
PRECAUCIÓN

En caso de que coloque el cableado desde la parte posterior, no tiene que quitar nada. Al enrutar el cableado desde la parte superior, trasera, izquierda o inferior, o al instalarlo en una placa de montaje, etc., asegúrese de enrutar el cableado a la carcasa superior antes de fijar la placa trasera.

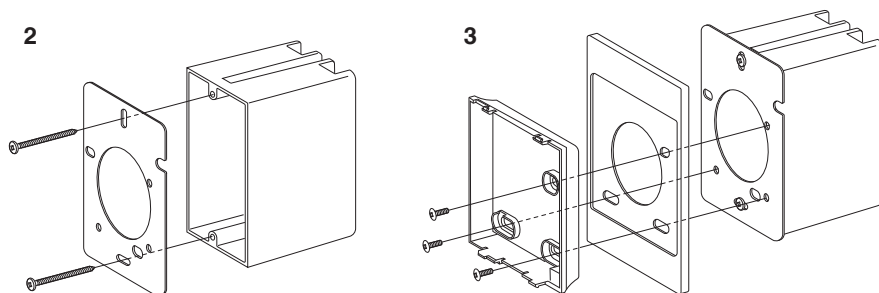
Asegurando la placa posterior

Instalación en la pared

- 1: Tome los tornillos para paneles de yeso y los anclajes para paneles de yeso de la bolsa de accesorios.
- 2: Monte la placa posterior en una superficie plana.



En caso de instalación en la caja de componentes eléctricos



- 1: Saque los tornillos para la placa de montaje (M3×10 y M4×40) y las placas de montaje (de metal y de plástico) de la bolsa de accesorios.
- 2: Acople la placa de montaje (de metal) a la caja de componentes eléctricos con los tornillos para la placa de montaje (M4×40).
- 3: Acople la placa posterior y la placa de montaje (de plástico) con los tornillos para la placa de montaje (M3×10).

PRECAUCIÓN

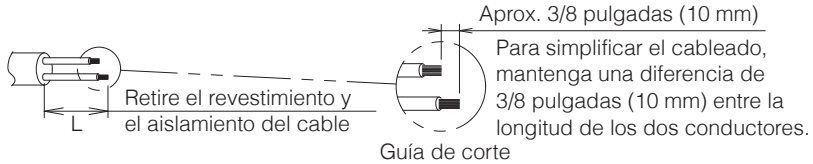
- Para la superficie de instalación, seleccione un lugar tan plano como sea posible.
- escoja un lugar donde no haya un espacio entre la pared y la parte de fijación del tornillo de la placa posterior.
- Si hay un espacio vacío entre la placa posterior y la parte de fijación del tornillo (parte de la tuerca) debido a la estructura de la pared, instálelo con un apriete de 20 N · cm o menos.
Si se aprieta demasiado, la placa posterior se deformará y la carcasa superior se saldrá fácilmente.
- Si la carcasa superior se sale fácilmente, afloje los tornillos para paneles de yeso para disminuir la deformación.
- Si se aprieta demasiado, la carcasa inferior se deformará y la carcasa superior se saldrá fácilmente.
Si la carcasa superior se sale fácilmente, afloje los tornillos y corrija la deformación.

Cómo conectar el cableado eléctrico

Todo el cableado debe cumplir con los siguientes requisitos:

Especificación del cable	Valor
Tipo de cableado	Alambre de cobre Trenzado, de 2 conductores, sin blindaje
Tamaño del cableado	AWG-18
Longitud del cableado	Máximo 1640 pies (500 m)

Prepare el cableado para la conexión del control remoto según estas instrucciones:



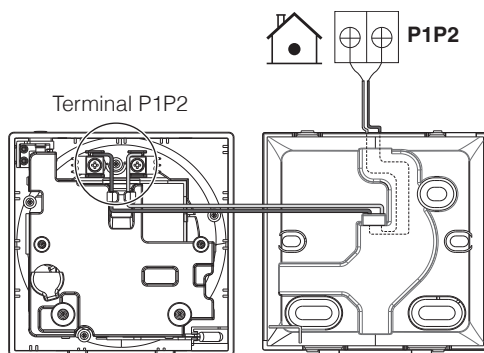
Salida del cableado	L
Parte superior	±5,5 pulgadas (140 mm)
Izquierda	±4,3 pulgadas (110 mm)
Parte inferior	±3,5 pulgadas (90 mm)
Posterior	Sin requisitos

Conecte los terminales (P1, P2) del control remoto a los terminales (P1, P2) de la unidad interior. (P1 y P2 no tienen polaridad específica.)

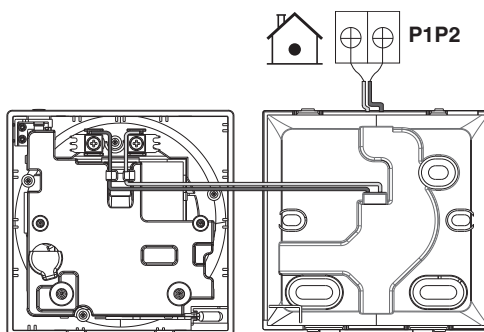
! PRECAUCIÓN

- Antes de trabajar, apague todo el suministro de energía.
- No se incluye una placa de montaje para la instalación del control remoto ni se incluye el cableado para el control remoto.
- No toque la placa de circuitos del control remoto directamente con las manos.

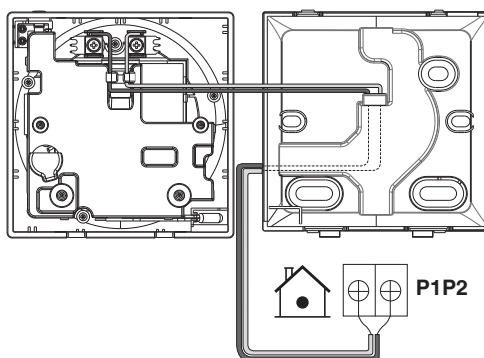
Salida superior



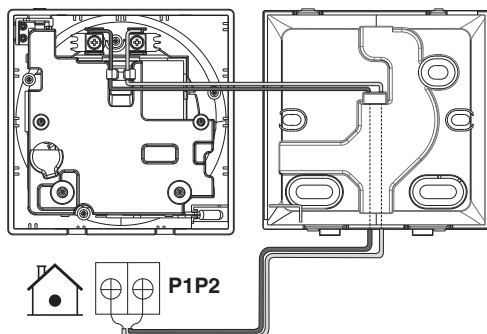
Salida trasera



Salida izquierda



Salida inferior

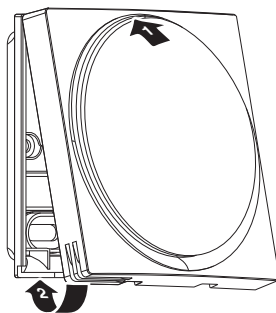


! PRECAUCIÓN

- Mantenga el cableado alejado del cable de alimentación para que no se reciba ruido eléctrico (ruido externo).
- Para prevenir el ingreso de agua o insectos, use masilla (suministro de campo) para sellar correctamente el orificio de entrada del cableado.

Cerrando el controlador

- 1:** Coloque la parte superior del controlador sobre la parte superior de la placa posterior.
- 2:** Coloque a presión la parte inferior del control en la parte inferior de la placa posterior.
- 3:** Asegúrese de que el sitio de instalación esté libre de polvo antes de quitar el sello protector.

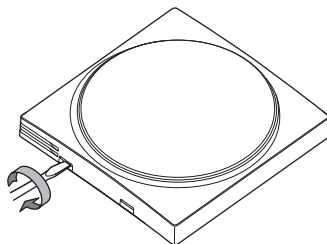


! PRECAUCIÓN

- Nunca toque las partes internas del control.
- Cuando cierre el control, tenga cuidado de no pellizcar el cableado.
- Para evitar daños, asegúrese de que la parte delantera del control haga clic al acoplarse firmemente en la carcasa inferior.

Al retirar la carcasa superior

Inserte un desarmador de punta plana en el hueco de la placa posterior y retire la carcasa superior.
(2 lugares)



PRECAUCIÓN

- La placa de circuitos del control remoto está acoplada a la carcasa superior. Tenga cuidado de no dañar el tablero del circuito y la carcasa cuando retire la carcasa superior.
- No toque la placa de circuitos del control remoto directamente con las manos.
- Tenga cuidado de no permitir que se adhieran polvo o humedad en la placa de circuitos cuando retire la carcasa superior.

Designando un controlador como principal o secundario

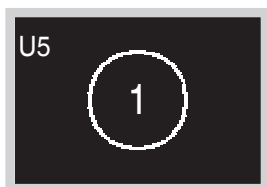
Prerrequisito: Un control remoto ya se encuentra conectado a la unidad interior.

Conecte un segundo control.

Después de conectar la alimentación, realice los ajustes del segundo controlador.

Resultado: Arrancará automáticamente.

Pantalla de inicio

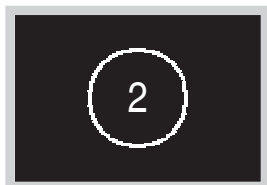




Espere a que aparezca el código de error U5, U8 en la pantalla.

Explicación de la visualización en pantalla

- 1** principal
- 2** secundario

Pantalla de inicio



Cuando aparezca el código de error U5, mantenga presionado  hasta que aparezca "2" en la pantalla. Cuando aparezca el código de error U8, mantenga presionado  hasta que aparezca "1" en la pantalla.

Resultado:

Hay un control establecido como principal que se visualiza como 1 y un control establecido como secundario que se visualiza como 2.

INFORMACIÓN

Si el control remoto secundario no está configurado en el encendido en el caso de una unidad interior controlada por dos controles remotos, el Código de Error: U5 es mostrado en la pantalla de verificación de conexión.

Si el control remoto secundario no muestra la pantalla de inicio luego de dos minutos de su designación, apague la alimentación y verifique el cableado.

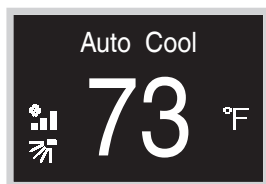
Liberando el conmutador principal


Para cambiar la autorización para escoger refrigeración/calefacción, primero debe especificar el control remoto con la autorización, luego quitar la autorización. Dependiendo del sistema, la configuración podría no estar disponible.

Prerrequisito: Usted está en el menú del instalador.

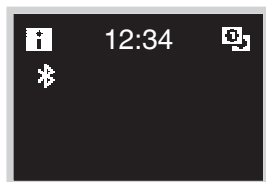
Usted está operando el control de la unidad interior que quiere que deje de ser maestro de selección.




Pantalla de inicio



Mantenga presionado el botón  durante 5 segundos o más.
Se muestra la pantalla de información.

Pantalla de información



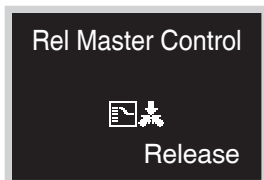
Presione  →  →  (en ese orden) y manténgalos presionados durante 10 segundos.
Se muestra la pantalla del menú del instalador.

Pantalla del menú del instalador



Navegue hacia el menú de Control Maestro Rel.

Pantalla del submenú



Presione **+** para quitarle autorización a la unidad interior.

Resultado:

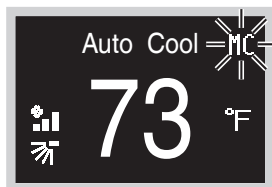
- Se le quita la autorización a la unidad interior.
- Los controles de todas las unidades interiores muestran el icono "MC" parpadeando.

Configurando el conmutador principal

Ésta configuración solo está disponible cuando ninguno de los controles remotos del sistema tiene un control maestro.

Prerrequisito: Ninguna unidad interior está todavía configurada como maestro de selección (el icono "MC" parpadea en todos los controles).

Usted está operando el control de la unidad interior que desea configurar como maestro de selección.

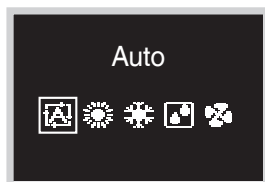


Pantalla del menú



Desplácese hasta el menú de modo de operación.

Pantalla del submenú



Presione **-** o **+**.

Resultado:

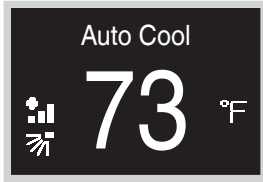
- La unidad interior ahora es el conmutador principal (no se muestra el icono "MC").
- Todos los controles secundarios muestran el icono "MC".

Ajuste de Campo

Método para ajustes de campo

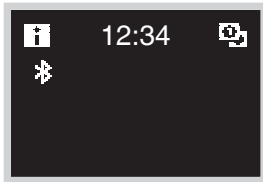
Esta sección describe cómo realizar los ajustes de campo.

Pantalla de inicio



Mantenga presionado el botón durante 5 segundos o más para visualizar la pantalla de información.

Pantalla de información



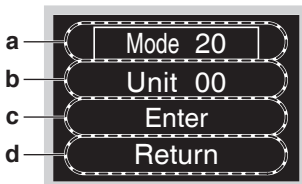
Presione → → (en ese orden) y manténgalos presionados durante 10 segundos para visualizar la pantalla del menú del Instalador.

Pantalla del menú del instalador



Presione el botón o para pasar a . Si el Bluetooth está conectado, realizar ajustes de campo desde el lado del control remoto es imposible. Desconecte el Bluetooth o realice la configuración de campo desde la aplicación del celular.

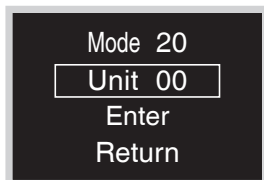
Pantalla del submenú



Presione el botón o para seleccionar No. de Modo y presione para ingresar al menú de ajuste de campo. Presione el botón o , desplácese al No. de Modo deseado y presione el botón .

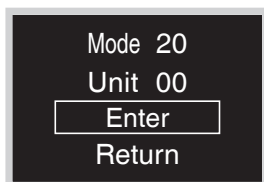
- a No. de Modo
- b No. de Unidad
- c Enter
- d Return

Pantalla del submenú



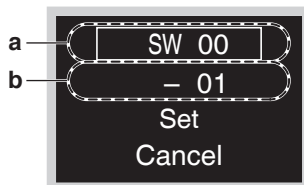
Presione el botón **-** o **+**, para seleccionar el No. de Unidad y presione el botón **○**.
Presione el botón **-** o **+**, desplácese al No. de Unidad deseado y luego presione el botón **○** para establecer la selección.

Pantalla del submenú



Presione el botón **-** o **+**, para seleccionar Enter, y luego presione el botón **○** para establecer la selección.

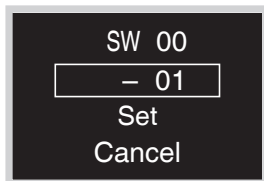
Pantalla del submenú



Presione el botón **-** o **+**, seleccione el Primer No. de Código y luego presione el botón **○**.
Presione el botón **+** o **-**, desplácese hasta el Primer No. de código deseado y luego presione el botón **○** para establecer la selección.

- a** Primer No. de Código
- b** Segundo No. de Código

Pantalla del submenú



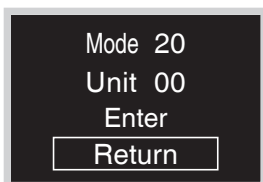
Presione el botón **-** o **+** para pasar al Segundo No. de Código y luego presione el botón **○**.
Presione el botón **-** o **+** para desplazarse hasta el Segundo No. de Código deseado y luego presione el botón **○**.

Pantalla del submenú



Presione el botón **←** o **→**, seleccione Ajustar y luego presione el botón **○** para fijar el ajuste y volver a la pantalla anterior.
Si el ajuste no se fija, seleccione Cancelar.

Pantalla del submenú



Presione el botón **←** o **→**, mueva el botón Volver y, a continuación, presione el botón **○** para regresar al menú del instalador.
* Si la configuración ha sido modificada, la pantalla puede volver a la pantalla de inicio sin regresar al menú del instalador.

PRECAUCIÓN

- La conexión de accesorios opcionales a la unidad interior podría provocar cambios en algunos ajustes de campo. Para obtener más información, consulte el manual de instalación del accesorio opcional.
- Para obtener detalles sobre los ajustes de campo específicos de cada tipo de unidad interior, consulte el manual de instalación de la unidad interior.
- No se muestran los ajustes de campo que no están disponibles para una unidad interior conectada.
- Los valores de los ajustes de campo predeterminados son diferentes según el modelo de la unidad interior. Para obtener más información, consulte el manual de servicio de las unidades interiores.

Certificación

CUMPLIMIENTO DE LAS NORMAS Y REGLAMENTOS DE LA FCC

15.21

Le advertimos que los cambios o modificaciones no expresamente aprobados por la parte responsable de su cumplimiento, pueden dejar sin efecto la facultad del usuario para utilizar el equipo. 15.105(b)

Este equipo ha sido probado y cumple con los límites establecidos para un dispositivo digital de Clase B, de acuerdo con lo dispuesto en la parte 15 de las normas de la FCC. Estos límites están diseñados para proporcionar una protección razonable contra interferencias perjudiciales en una instalación residencial. Este equipo genera, usa y puede emitir energía de radiofrecuencia y, si no se usa en conformidad con las instrucciones, puede ocasionar interferencias perjudiciales a las comunicaciones de radio.

Sin embargo, no hay garantías de que no se produzcan interferencias en una instalación en particular. Si este equipo ocasiona interferencias perjudiciales a la recepción de radio o televisión, el usuario debe intentar corregirlas mediante la implementación de una o más de las siguientes medidas:

- Reoriente o reubique la antena de recepción.
- Aumente o disminuya la separación entre el equipo y el receptor.
- Conecte el equipo a una toma de corriente de un circuito diferente a la del receptor.
- Comuníquese con el distribuidor o un técnico de control remoto/TV experimentado para solicitar ayuda.

Este equipo ha sido verificado en conformidad con los límites establecidos para un dispositivo de computación Clase B, conforme a las normas de la FCC. Se le advierte al usuario que los cambios y modificaciones realizados sin la aprobación del fabricante del equipo podrían invalidar la autoridad del usuario para operar este equipo.

Declaración de exposición a la radiación de RF de la FCC:

Para cumplir con los requerimientos de exposición a RF establecidos por la FCC, este dispositivo, así como su antena, no debe ser colocado u operado en conjunto con cualquier otra antena o transmisor.

Etiqueta de la certificación de la FCC

Este dispositivo cumple con la parte 15 de las normas de la FCC. El funcionamiento está sujeto a las siguientes dos condiciones:

1. Este dispositivo no debe ocasionar interferencias perjudiciales.
2. Este dispositivo debe aceptar cualquier interferencia recibida, incluidas aquellas que puedan causar un funcionamiento no deseado.

Según las regulaciones de la Industria de Canadá, este transmisor de radio solo puede funcionar con una antena de un tipo y con la ganancia máxima (o mínima) aprobada por la Industria de Canadá.

Para reducir la interferencia potencial de radio con otros usuarios, el tipo de antena y su ganancia deben elegirse de tal modo que la potencia radiada isotrópica efectiva (e.i.r.p) no sea superior a la necesaria para que la comunicación sea exitosa.

Este dispositivo cumple con el o los estándar(es) RSS exentos de licencia de la Industria de Canadá. El funcionamiento está sujeto a las siguientes dos condiciones: (1) este dispositivo no debe causar interferencias, y (2) este dispositivo debe aceptar cualquier interferencia, incluso aquella que pueda causar un funcionamiento no deseado del dispositivo.

Exposición a RF:

Para cumplir con los requerimientos de exposición a RF establecidos por la FCC, este dispositivo, así como su antena, no debe ser colocado u operado en conjunto con cualquier otra antena o transmisor.

Licencia

El siguiente software de código abierto (OSS) está incluido en el controlador remoto.
[micro-ecc]

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DAIKIN INDUSTRIES, LTD.

Head office:
Umeda Center Bldg., 2-4-12, Nakazaki-Nishi,
Kita-ku, Osaka, 530-8323 Japan

Tokyo office:
JR Shinagawa East Bldg., 2-18-1, Konan,
Minato-ku, Tokyo, 108-0075 Japan

SPLIT SYSTEM**Air Conditioners**

MODELS

Wall-mounted type

FAQ18TAVJU**FAQ24TAVJU**

Read these instructions carefully before installation.
Keep this manual in a handy place for future reference.
This manual should be left with the equipment owner.

Lire soigneusement ces instructions avant l'installation.
Conserver ce manuel à portée de main pour référence
ultérieure.
Ce manuel doit être donné au propriétaire de l'équipement.

Lea cuidadosamente estas instrucciones antes de instalar.
Guarde este manual en un lugar a mano para leer en caso
de tener alguna duda.
Este manual debe permanecer con el propietario del
equipo.

English

Français

Español

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1. SAFETY CONSIDERATIONS


Read these **SAFETY CONSIDERATIONS for Installation** carefully before installing air conditioning equipment. After completing the installation, make sure that the unit operates properly during the startup operation.


Instruct the customer on how to operate and maintain the unit. Inform customers that they should store this Installation Manual with the Operation Manual for future reference.


Always use a licensed installer or contractor to install this product. Improper installation can result in water or refrigerant leakage, electrical shock, fire, or explosion.

Meanings of **DANGER**, **WARNING**, **CAUTION**, and **NOTE** Symbols:

 **DANGER**Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

 **WARNING**Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

 **CAUTION**Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

 **NOTE**Indicates situations that may result in equipment or property damage accidents only.

DANGER

- Refrigerant gas is heavier than air and replaces oxygen. A massive leak can lead to oxygen depletion, especially in basements, and an asphyxiation hazard could occur leading to serious injury or death.
- Do not ground units to water pipes, gas pipes, telephone wires, or lightning rods as incomplete grounding can cause a severe shock hazard resulting in severe injury or death. Additionally, grounding to gas pipes could cause a gas leak and potential explosion causing severe injury or death.
- If refrigerant gas leaks during installation, ventilate the area immediately. Refrigerant gas may produce toxic gas if it comes in contact with fire. Exposure to this gas could cause severe injury or death.
- After completing the installation work, check that the refrigerant gas does not leak throughout the system.
- Do not install unit in an area where flammable materials are present due to risk of explosions that can cause serious injury or death.
- Safely dispose of all packing and transportation materials in accordance with federal/state/local laws or ordinances. Packing materials such as nails and other metal or wood parts, including plastic packing materials used for transportation, may cause injuries or death by suffocation.

WARNING

- Only qualified personnel must carry out the installation work. Installation must be done in accordance with this installation manual. Improper installation may result in water leakage, electric shock, or fire.
- When installing the unit in a small room, take measures to keep the refrigerant concentration from exceeding allowable safety limits. Excessive refrigerant leaks, in the event of an accident in a closed ambient space, can lead to oxygen deficiency.
- Use only specified accessories and parts for installation work. Failure to use specified parts may result in water leakage, electric shocks, fire, or the unit falling.
- Install the air conditioner on a foundation strong enough that it can withstand the weight of the unit. A foundation of insufficient strength may result in the unit falling and causing injuries.
- Take into account strong winds, typhoons, or earthquakes when installing. Improper installation may result in the unit falling and causing accidents.
- Make sure that a separate power supply circuit is provided for this unit and that all electrical work is carried out by qualified personnel according to local, state and national regulations. An insufficient power supply capacity or improper electrical construction may lead to electric shocks or fire.
- Make sure that all wiring is secured, that specified wires are used, and that no external forces act on the terminal connections or wires. Improper connections or installation may result in fire.

- When wiring, position the wires so that the control box cover can be securely fastened. Improper positioning of the control box cover may result in electric shocks, fire, or the terminals overheating.
- Before touching electrical parts, turn off the unit.
- This equipment can be installed with a Ground-Fault Circuit Interrupter (GFCI). Although this is a recognized measure for additional protection, with the grounding system in North America, a dedicated GFCI is not necessary.
- When installing or relocating the system, keep the refrigerant circuit free from substances other than the specified refrigerant (R410A) such as air. Any presence of air or other foreign substance in the refrigerant circuit can cause an abnormal pressure rise or rupture, resulting in injury.
- Do not change the setting of the protection devices. If the pressure switch, thermal switch, or other protection device is shorted and operated forcibly, or parts other than those specified by Daikin are used, fire or explosion may occur.



CAUTION

- Do not touch the switch with wet fingers. Touching a switch with wet fingers can cause electric shock.
- Do not allow children to play on or around the unit to prevent injury.
- Do not touch the refrigerant pipes during and immediately after operation as the refrigerant pipes may be hot or cold, depending on the condition of the refrigerant flowing through the refrigerant piping, compressor, and other refrigerant cycle parts. Your hands may suffer burns or frostbite if you touch the refrigerant pipes. To avoid injury, give the pipes time to return to normal temperature or, if you must touch them, be sure to wear proper gloves.
- Heat exchanger fins are sharp enough to cut. To avoid injury, wear glove or cover the fins when working around them.
- Install drain piping to proper drainage. Improper drain piping may result in water leakage and property damage.
- Insulate piping to prevent condensation.
- Be careful when transporting the product.
- Do not turn off the power supply immediately after stopping operation. Always wait for at least 5 minutes before turning off the power supply. Otherwise, water leakage may occur.
- Do not use a charging cylinder. Using a charging cylinder may cause the refrigerant to deteriorate.
- Refrigerant R410A in the system must be kept clean, dry, and tight.
 - (a) Clean and Dry -- Foreign materials (including mineral oils such as SUNISO oil or moisture) should be prevented from getting into the system.
 - (b) Tight -- R410A does not contain any chlorine, does not destroy the ozone layer, and does not reduce the earth's protection against harmful ultraviolet radiation. R410A can contribute to the greenhouse effect if it is released. Therefore take proper measures to check for the tightness of the refrigerant piping installation. Read the chapter REFRIGERANT PIPING WORK and follow the procedures.

- Since R410A is a blend, the required additional refrigerant must be charged in its liquid state. If the refrigerant is charged in a gaseous state, its composition can change and the system will not work properly.
- The indoor unit is for R410A. See the catalog for indoor models that can be connected. Normal operation is not possible when connected to other units.
- Handheld remote controller transmitting distance can be shorter than expected in rooms with electronic fluorescent lamps (inverter or rapid start types). Install the indoor unit far away from fluorescent lamps as much as possible.
- Indoor units are for indoor installation only. Outdoor units can be installed either outdoors or indoors.
- Do not install the air conditioner in the following locations:
 - (a) Where a mineral oil mist or oil spray or vapor is produced, for example, in a kitchen. Plastic parts may deteriorate and fall off or result in water leakage.
 - (b) Where corrosive gas, such as sulfurous acid gas, is produced. Corroding copper pipes or soldered parts may result in refrigerant leakage.
 - (c) Near machinery emitting electromagnetic waves. Electromagnetic waves may disturb the operation of the control system and cause the unit to malfunction.
 - (d) Where flammable gas may leak, where there is carbon fiber, or ignitable dust suspension in the air, or where volatile flammables such as thinner or gasoline are handled. Operating the unit in such conditions can cause a fire.



NOTE

- Install the power supply and control wires for the indoor and outdoor units at least 3.5 feet (1.0 m) away from televisions or radios to prevent image interference or noise. Depending on the radio waves, a distance of 3.5 feet (1.0 m) may not be sufficient to eliminate the noise.
 - Dismantling the unit, treatment of the refrigerant, oil and additional parts must be done in accordance with the relevant local, state, and national regulations.
 - Do not use the following tools that are used with conventional refrigerants: gauge manifold, charge hose, gas leak detector, reverse flow check valve, refrigerant charge base, vacuum gauge, or refrigerant recovery equipment.
 - If the conventional refrigerant and refrigerator oil are mixed in R410A, the refrigerant may deteriorate.
 - This air conditioner is an appliance that should not be accessible to the general public.
 - As design pressure is 478 psi (3.3 MPa), the wall thickness of field-installed pipes should be selected in accordance with the relevant local, state, and national regulations.
-

2. BEFORE INSTALLATION

- When unpacking the unit or moving the unit after unpacked, be sure to lift it by the four hanger brackets. Avoid putting any pressure on other parts—horizontal flaps, the refrigerant piping, drain piping, and other resin parts.
- Be sure to remove a cushion (corrugated paper) located between the heat exchanger and the right air filter.
- Be sure to check the type of R410A refrigerant to be used before installing the unit. (Using an incorrect refrigerant will prevent normal operation of the unit.)
- The accessories needed for installation must be retained in your custody until the installation work is completed. Do not discard them!
- Decide upon a line of transport.
- Leave the unit inside its packaging while moving, until reaching the installation site. Where unpacking is unavoidable, use a sling of soft material or protective plates together with a rope when lifting, to avoid damage or scratches to the unit.
- For the installation of an outdoor unit, refer to the installation manual attached to the outdoor unit.
- When using the wireless remote controller, refer to the installation manual attached to the wireless remote controller.
- Do not install or operate the unit in rooms mentioned below.
 - **Laden with mineral oil, or filled with oil vapor or spray like in kitchens. (Plastic parts may deteriorate which could eventually cause the unit to fall out of place, or could lead to leaks.)**
 - **Where corrosive gas like sulfurous gas exists. (Copper tubing and brazed spots may corrode which could eventually lead to refrigerant leaks.)**
 - **Where exposed to combustible gases and where volatile flammable gas like thinner or gasoline is used. (Gas in the vicinity of the unit could ignite.)**
 - **Where machines can generate electromagnetic waves. (Control system may malfunction.)**
 - **Where the air contains high levels of salt such as that near the ocean and where voltage fluctuates greatly such as that in factories, vehicles or vessels.**
- This unit, both indoor and outdoor, is suitable for installation in a commercial and light industrial environment. If installed as a household appliance it could cause electromagnetic interference.



WARNING

- Entrust installation to the place of purchase or an authorized serviceman. Improper installation could lead to leaks and, in worse cases, electric shock or fire.
- Use of unspecified parts could lead to the unit falling, leaks and, in worse cases, electric shock or fire.





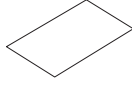
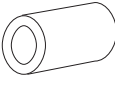

NOTE



- Be sure to read this manual before installing the indoor unit.

2-1 ACCESSORIES

Check if the following accessories are attached to the indoor unit.

Name	(1) Installation panel	(2) Attachment screw for the installation panel
Quantity	1 pc.	9 pcs.
Shape		 M4 × 25L

Name	(3) Paper pattern for installation	(4) Insulating tape	(5) Clamp
Quantity	1 pc.	1 pc.	1 large 4 small
Shape			

Name	(6) Securing screw	(7) Insulating tube	(Other) • Operation manual • Installation manual • Warranty card
Quantity	2 pcs.	1 long 1 short	
Shape	 M4 × 12L		

2-2 OPTIONAL ACCESSORIES

Remote controller	Model
Wired type	BRC1E73
Wireless type	BRC7E818

FOR THE FOLLOWING ITEMS, TAKE SPECIAL CARE DURING CONSTRUCTION AND CHECK AFTER INSTALLATION IS FINISHED.

(1) Items to be checked after completion of work

Items to be checked	If not properly done, what is likely to occur	Check
Are the indoor and outdoor units fixed firmly?	The units may drop, vibrate or make noise.	
Is the gas leak test finished?	It may result in insufficient cooling or heating.	
Is the unit fully insulated?	Condensate water may drip.	
Does drainage flow smoothly?	Condensate water may drip.	
Does the power supply voltage correspond to that shown on the name plate?	The unit may malfunction or the components may burn out.	
Are wiring and piping correct?	The unit may malfunction or the components may burn out.	
Is the unit safely grounded?	It may be dangerous at electric leakage.	
Is wiring size according to specifications?	The unit may malfunction or the components burn out.	
Is something blocking the air outlet or inlet of either the indoor or outdoor unit?	It may result in insufficient cooling.	
Are refrigerant piping length and additional refrigerant charge noted down?	The refrigerant charge in the system is not clear.	
Did you check that no wiring connection screws were loose?	Electric shock or fire.	

Also review the "SAFETY CONSIDERATIONS"

(2) Items to be checked at delivery

Items to be checked	Check
Did you explain how to operate the unit while showing the operation manual to your customer?	
Did you give the operation manual over to your customer?	

2-3 NOTE TO THE INSTALLER

Be sure to instruct customers how to properly operate the unit (especially cleaning filters, operating different functions, and adjusting the temperature) by having them carry out operations themselves while looking at the manual.

3. SELECTING INSTALLATION SITE

(1) Select an installation site where the following conditions are fulfilled and has the customer's approval.

- Where there will be no possible dripping of water from the refrigerant pipe, drain pipe, etc., in the area between the unit and ceiling, and in the attic just above the unit.

- Where the wall is strong enough to bear the indoor unit weight.
- Where sufficient clearance for installation and maintenance can be ensured.
(Refer to Fig. 1 and Fig. 2)
- Where optimum air distribution can be ensured.
- Where nothing blocks the air passage.
- Where condensate can be properly drained.
- Where the wall is not significantly tilted.
- Where piping between indoor and outdoor unit is possible within the allowable limit.
(Refer to the installation manual of the outdoor unit.)
- Install the indoor and outdoor units power supply wiring and connecting wires at least 3.5 ft. (1 m) away from televisions or radios in order to prevent image interference or noise.
(Depending on the radio waves, a distance of 3.5 ft. (1 m) may not be sufficient enough to eliminate the noise.)
- Where the cool (warm) air reaches all across the room.

[Space required for installation [in. (mm)]]

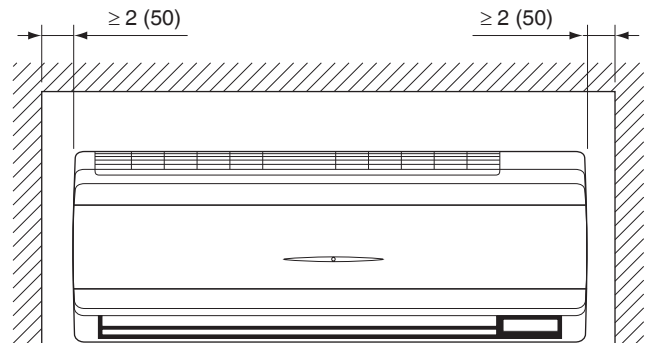


Fig. 1

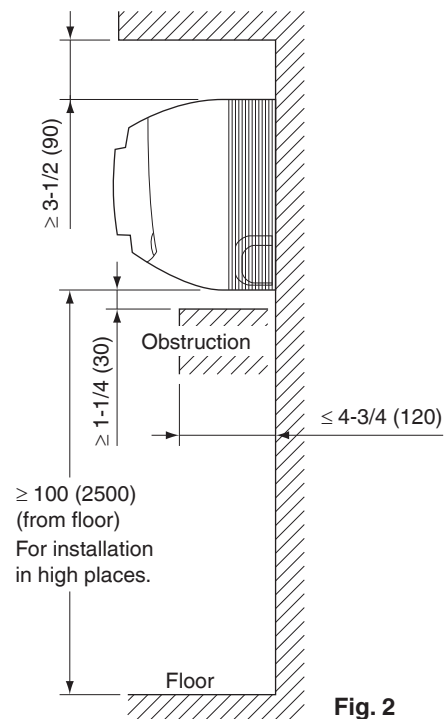


Fig. 2

- (2) Consider whether the place where the unit will be installed can support the full weight of the unit, and reinforce it with boards and beams, etc. if needed before proceeding with the installation. Also, reinforce the area to prevent vibration and noise before installing.
(The installation pitch can be found on the paper pattern for installation (3), so refer to it when considering the necessity for reinforcing the location.)
- (3) The indoor unit may not be directly installed on the wall. Use the attached installation panel (1) before installing the unit.

! DANGER

- Do not install unit in an area where flammable materials are present due to risk of explosion resulting in serious injury or death.

! WARNING

- If the supporting structural members are not strong enough to take the unit's weight, the unit could fall out of place and cause serious injury.

4. INDOOR UNIT INSTALLATION

- Use only accessories and parts which are of the designated specification when installing.

! CAUTION

- Install so that the unit does not tilt to either side or forward.
- Do not hold the unit by the horizontal flaps when lifting it. (This may damage the horizontal flaps.)

(1) Open the piping through-hole.

- The refrigerant pipe and drain pipe can be routed out in one of 5 directions: left, bottom-left, back-left, bottom-right, and back-right. (Refer to Fig. 3)
- Using the paper pattern for installation (3), choose where to route the piping out of the unit, and drill a through-hole ($\phi 3\text{-}1/8"$ ($\phi 80$)) in the wall. Open the hole so that there is a downward slope for the drain piping. (See "6. DRAIN PIPING WORK")

(2) Attach the installation panel (1) to the wall.

- (a) Check the location for the hole using the included paper pattern for installation (3).
- Choose a location so that there is at least a 3-5/8" (90 mm) gap between the ceiling and the main unit.
- (b) Temporarily attach the installation panel (1) at the temporary-securing position on the paper pattern for installation (3) and use a level to make sure the drain hose is either level or tilted slightly downward.

- (c) Secure the installation panel (1) to the wall using either screws or bolts.
- If using the attachment screws for the installation panel (2), attach using at least 4 screws on either side, for a total of 9 screws of the recommended installation cleat position on the included paper pattern for installation (3).
 - If using bolts, attach using a M8 - M10 bolt or equivalent (for a total of 2 bolts) on either side.
 - If dealing with concrete, use commercially available foundation bolts (M8 - M10 or equivalent).

(3) If using the left, bottom-left, or bottom-right positions for the piping, cut out the through-hole for the piping in the front grille. (Refer to Fig. 4)

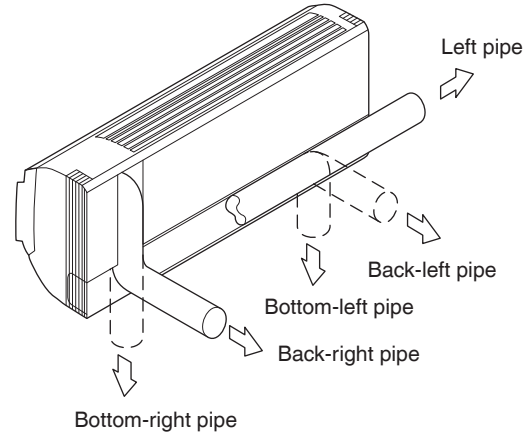


Fig. 3

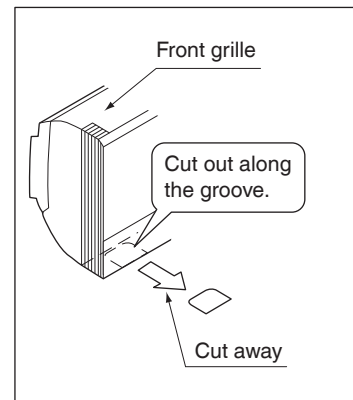


Fig. 4

(4) Remove the front panel and the control box cover. (Refer to Fig. 5)

< How to remove the front panel and control box cover >

- (1) Open the front panel by lifting from the bottom to the point where it stops.
- (2) Push the panel spacers on either side of the front panel towards the center of the main unit and remove.
(You can also remove it by sliding the front panel either to the left or right and pulling it forward.)
- (3) Remove the screw from the control box cover and pull the tab forward.

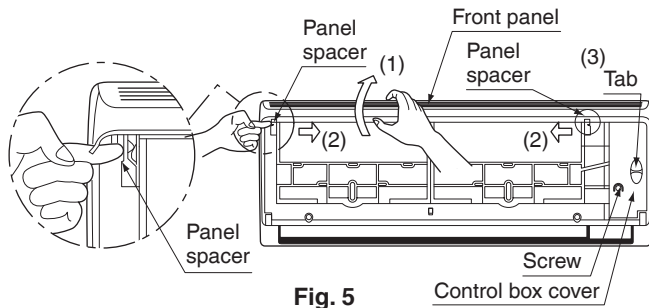


Fig. 5

(5) Point the pipe in the direction it will be routed out of the unit.

For bottom-right and back-right piping (Refer to Fig. 6)

- Wrap the drain hose and the refrigerant piping together with the insulating tape (4) so that the drain hose is below the refrigerant piping.

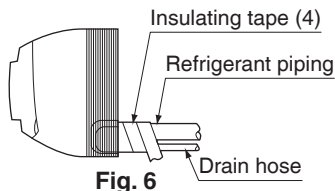


Fig. 6

For left, bottom-left, and back-left piping

- Remove the front grille. (Refer to Fig. 7)

< How to remove the front grille >

Remove the front grille as described below when securing the indoor unit with screws or when attaching Optional Accessories (wireless remote controller, adapter PC board, etc.).

- (1) Remove the front panel.
- (2) Remove the screws (3 places) securing the front grille.
- (3) Remove the tabs (3 places) securing the front grille by pushing them in the direction of the arrows.
- (4) Making sure not to catch the horizontal flaps, remove the front grille by pulling in the direction of the arrow.

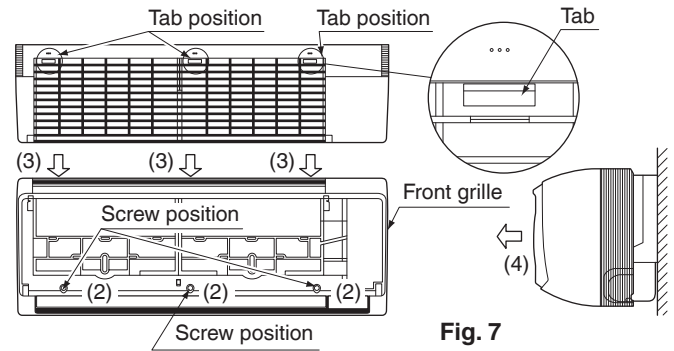


Fig. 7

- Remove the drain plug, the insulating tube, and the drain hose from the drain pan and replace.

(Refer to Fig. 8)

- Connect the field refrigerant piping ahead of time, matching it to the liquid pipe and gas pipe marks engraved on the installation panel (accessory) (1).

< Replacing the drain hose and drain plug >

- (1) Remove the drain plug and insulating tube.
- (2) Remove the drain hose and replace onto the left side.
- (3) Replace the drain plug and the insulating tube onto the right side.

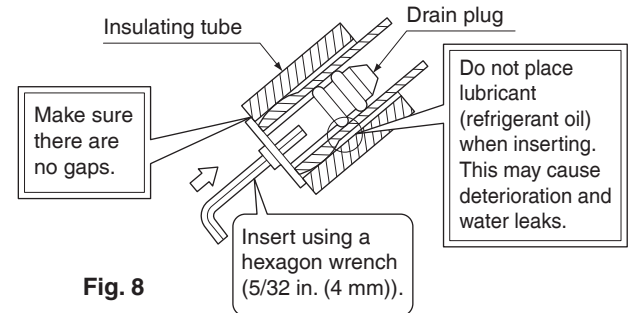


Fig. 8

(6) Hook the indoor unit onto the installation panel.

(Refer to Fig. 9)

- Placing buffering material between the wall and the indoor unit at this time will make work easier.

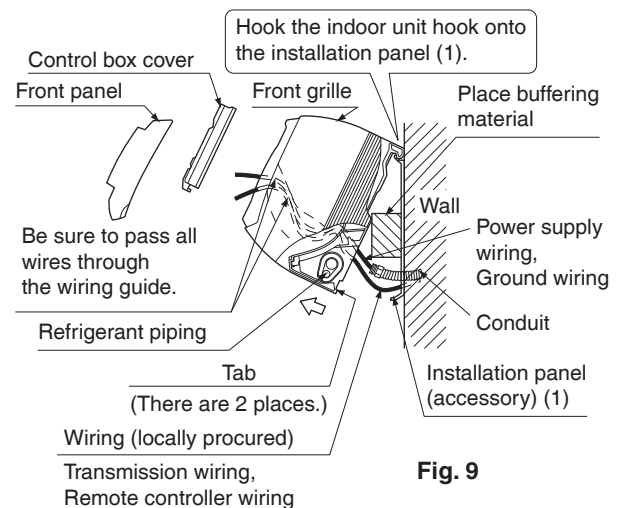
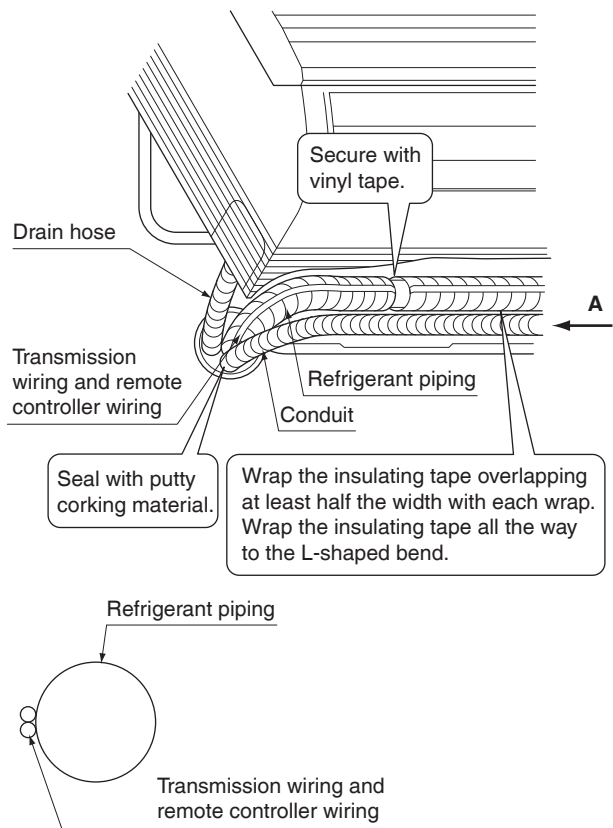


Fig. 9

For bottom-right and back-right piping

- Pass the drain hose and the refrigerant piping to the wall.

- (7) Pass power supply wiring from conduit and control wiring through the wiring guide in the back of the unit, to the front of the unit. (For connecting the power supply wiring to the unit, see “8-1 HOW TO CONNECT WIRINGS”)
- (8) Connect the piping. (See “5. REFRIGERANT PIPING WORK” and Fig. 10)



A arrow view

Fig. 10

- Seal the piping through-hole with putty corking material.

- (9) Push on both bottom edges of the indoor unit using both hands and hook the tab on the back of the indoor unit onto the installation panel (1). (Refer to Fig. 9)
- At this time remove the buffering material placed in step (6).
 - Make sure power supply wiring, transmission wiring, ground wiring and remote controller wiring are not caught inside the indoor unit.

■ When screwing in the indoor unit

- Remove the front grille. (Refer to Fig. 7)
- Secure the indoor unit to the installation panel (1) with the securing screws (6). (Refer to Fig. 11)

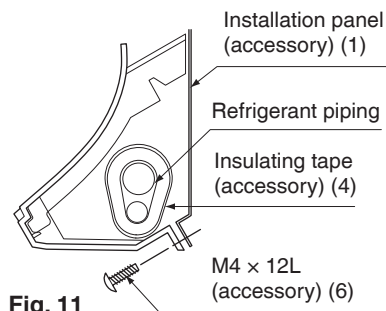


Fig. 11

5. REFRIGERANT PIPING WORK

⟨For refrigerant piping of outdoor unit, see the installation manual attached to the outdoor unit.⟩

⟨Execute thermal insulation work completely on both sides of the gas piping and the liquid piping. Otherwise, a water leak can occur.⟩

⟨Otherwise, a water leak can occur.⟩

(When using a heat pump, the temperature of the gas piping can reach up to approximately 250°F (120°C), so use insulation which is sufficiently resistant.)

⟨Also, in cases where the temperature and humidity of the refrigerant piping sections might exceed 86°F (30°C) or RH80 %, reinforce thermal insulation (13/16 (20 mm) or thicker) for the refrigerant piping. Condensation may form on the surface of the insulating material.⟩

⟨Before refrigerant piping work, check which type of refrigerant is used. Proper operation is not possible if the type of refrigerant is not the same.⟩

⚠ DANGER

- Refrigerant gas may produce toxic gas if it comes in contact with fire such as from a fan, heater, stove or cooking device. Exposure to this gas could result in severe injury or death.

⚠ NOTE

- Use a pipe cutter and a flaring tool suitable for the type of refrigerant.
- To prevent dust, moisture or other foreign matter from infiltrating the tube, either pinch the end or cover it with tape.
- Do not allow anything other than the designated refrigerant to get mixed into the refrigerant circuit, such as air, etc.
- If refrigerant gas leaks while working on the unit, ventilate the room thoroughly right away.

- The refrigerant is pre-charged in the outdoor unit.
- Use copper alloy seamless pipes.
- Be sure to use both a spanner and a torque wrench together, when connecting or disconnecting pipes to/from the unit. (Refer to Fig. 12)
- Refer to "Table 1" for the dimensions of flare.
- When connecting the flare nut, coat the flared inner surface only with ester oil or ether oil, rotate three or four times first, then screw in. (Refer to Fig. 13)

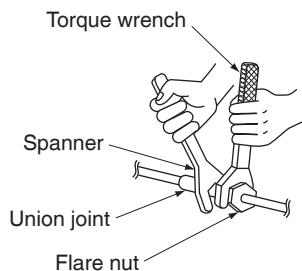


Fig. 12

Coat the flared inner surface only with ester oil or ether oil

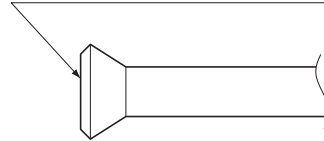


Fig. 13

⚠ CAUTION

- Use the flare nut included with the unit.

- Refer to Table 1 for the corresponding tightening torque.

Table 1

Piping size [in. (mm)]	Tightening torque [lbf-ft. (N-m)]	Dimension for processing flare A [in. (mm)]	Flare shape [in. (mm)]
φ 3/8 (9.5)	24.1 – 29.4 (36.3±3.6)	0.504 – 0.520 (13.0±0.2)	
φ 5/8 (15.9)	45.6 – 55.6 (68.6±6.8)	0.760 – 0.776 (19.5±0.2)	

⚠ CAUTION

- Do not excessively tighten the flare nut.** Doing so will break the flare nut and refrigerant leakage may occur.
- Make sure that all parts around the flare are free of oil.** The drain pan and the resin part may be deteriorated if oil is attached.

⚠ CAUTION

- Do not use flux when brazing refrigerant piping. Therefore, use the phosphor copper brazing filter metal (BCuP) which does not require flux. (Flux has an extremely negative effect on refrigerant piping systems. For instance, if chlorine based flux is used, it will cause pipe corrosion. If the flux contains fluorine, it will damage the refrigerant oil.)

- When brazing the refrigerant piping, carry out nitrogen substitution (inserting nitrogen into the refrigerant piping to substitute air with nitrogen (refer to NOTE below)) and then begin brazing. Once this is done, connect the indoor unit with a flare connection.

! DANGER

- Use of oxygen may cause an explosion resulting in serious injury or death. Only use nitrogen gas.

! NOTE

- Set nitrogen pressure to about 2.9 psi (0.02 Mpa) with a pressure-reducing valve if brazing while inserting nitrogen into the piping. (Refer to Fig. 14)

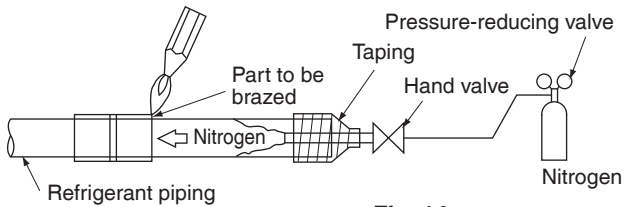


Fig. 14

- After checking for gas leaks, be sure to insulate the pipe connections using the piping insulating tube and insulating tape (4). The insulating tape (4) should be wrapped from the L-shaped bend all the way to the end inside the unit. (Refer to Fig. 15)

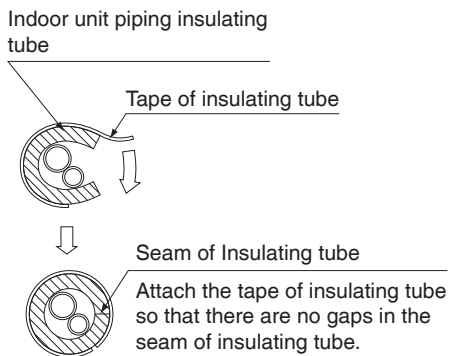
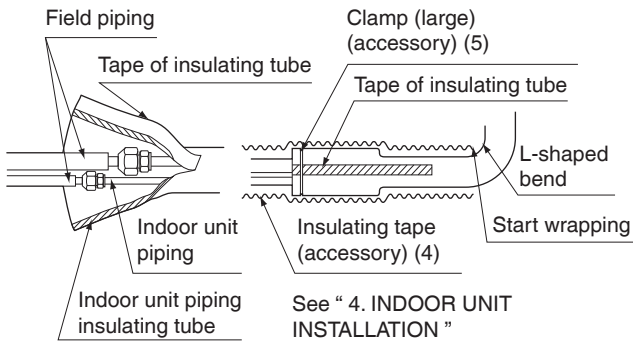


Fig. 15

! CAUTION

- Be sure to insulate the field piping all the way to the piping connection inside the unit. Any exposed piping may cause condensate or burns if touched.

6. DRAIN PIPING WORK

(1) Install the drain piping. (Refer to Fig. 16)

- The drain pipe should be short with a downward slope and should prevent air pockets from forming.
- Watch out for the points in Fig. 16 when performing drain work.

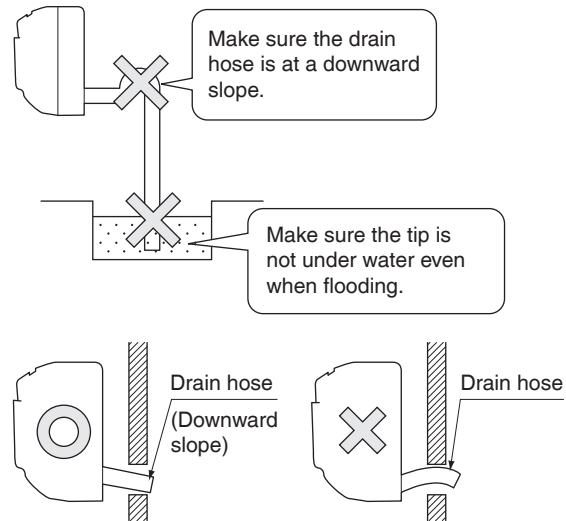


Fig. 16

- When extending the drain hose, use a commercially available drain hose for extension, and be sure to insulate the extended section of the drain hose which is indoors. (Refer to Fig. 17)

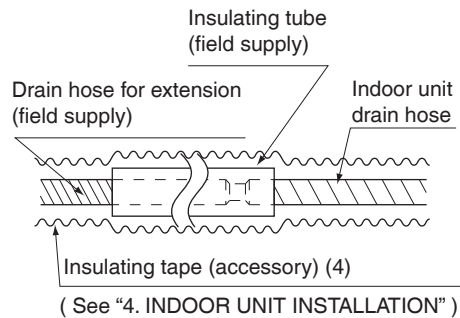


Fig. 17

- Make sure the diameter of the drain hose for extension is the same as the indoor unit drain hose (hard vinyl chloride, I.D. 1/2 in. (13 mm)) or larger.
- In case of converging multiple drain hoses, install them referring to Fig. 18.
- Select diameter of drain hose which adapts to the capacity of the unit connected.

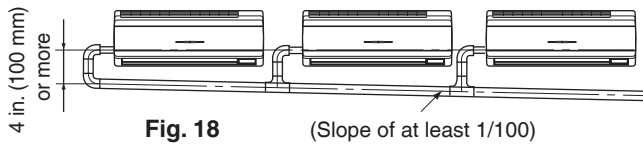


Fig. 18 (Slope of at least 1/100)

(2) Make sure the drain piping works properly.

- After drain piping work is complete, perform a drainage check by opening the front panel, **removing the air filter**, pouring water into the drain pan, and making sure water flows smoothly out of the drain hose. (Refer to Fig. 19)

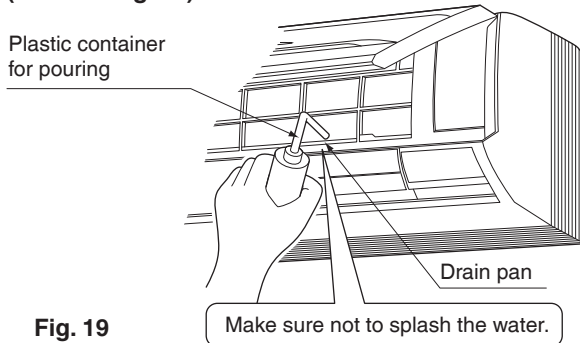


Fig. 19

CAUTION

- Drain piping connections
Do not connect the drain piping directly to sewage pipes that smell of ammonia. The ammonia in the sewage might enter the indoor unit through the drain piping and corrode the heat exchanger.
Keep in mind that it will block the drain pipe and cause water to collect.

7. ELECTRIC WIRING WORK

7-1 GENERAL INSTRUCTIONS

- 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 unit.
- For details of remote controller wiring, refer to the installation manual attached to the remote controller.
- 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.
- Refer to the installation manual attached to the outdoor unit for the size of power supply wiring connected to the outdoor unit, the capacity of the circuit breaker and switch, and wiring instructions.
- Be sure to ground the air conditioner.

DANGER

- Do not ground units to water pipes, telephone wires or lightning rods because incomplete grounding could cause a severe shock hazard resulting in severe injury or death, and to gas pipes because a gas leak could result in an explosion which could lead to severe injury or death.

7-2 ELECTRICAL CHARACTERISTICS

Units				Power supply		Fan motor	
Model	Hz	Volts	Voltage range	MCA	MOP	W	FLA
FAQ18TAVJU	60	208/230	Max. 253	0.5	15	43	0.4
FAQ24TAVJU			Min. 187	0.6	15	43	0.5

MCA: Minimum Circuit Ampacity (A)

MOP: Maximum Overcurrent Protective Device (A)

W: Fan Motor Rated Output (W)

FLA: Full Load Ampere (A)

7-3 SPECIFICATIONS FOR FIELD SUPPLIED FUSES AND WIRE

Model	Power supply wiring		Remote controller wiring Transmission wiring	
	Fuse 	Size	Wire	Size
FAQ18TAVJU	15A	Wiring size and length must comply with local codes.	2-conductor, stranded non-shielded copper cable PVC/vinyl jacket (NOTE)	AWG18-16 (0.75-1.25 mm ²)
FAQ24TAVJU				

Allowable lengths of transmission wiring and remote controller wiring are as follows.

- (1) Outdoor unit – Indoor unit:
Max. 3280 ft (1,000 m)
- (2) Indoor unit – Remote controller:
Max. 1640 ft (500 m)

NOTE

- Vinyl cord with sheath or cable (Insulated thickness : 1/16 in. (1 mm) or more)

8. WIRING EXAMPLE AND HOW TO SET THE REMOTE CONTROLLER

8-1 HOW TO CONNECT WIRINGS

- Conduit for power supply wiring
Unscrew and remove the conduit mounting plate from the control box. **(Refer to Fig. 20)**
Fix a conduit to the plate with a lock nut and reattach them at original position.

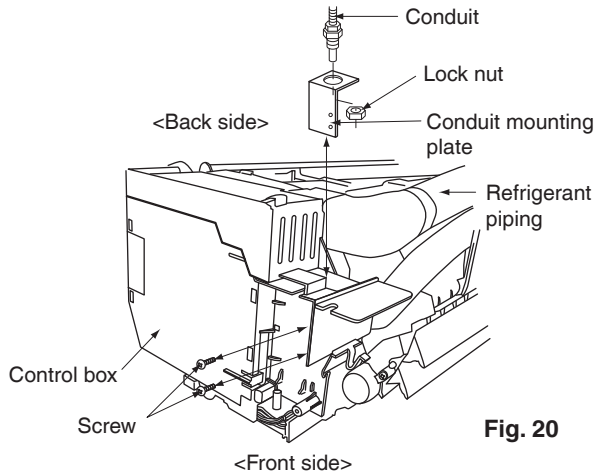


Fig. 20

- Power supply wiring and ground wiring
Unscrew and remove the control box cover. Thread the power supply wiring and ground wiring through the included insulating tube (short) (7) and secure them with the included clamp (small) (5). **(Refer to Fig. 21)**
Connect the power supply wiring and ground wiring to the power supply terminal block (3P). When doing this, firmly secure using the included clamp (small) (5) according to the figure. **(Refer to Fig. 22)**
- Transmission wiring and remote controller wiring
Unscrew and remove the control box cover. Thread the remote controller wiring and transmission wiring through the included insulating tube (long) (7) and secure them with the included clamp (small) (5). **(Refer to Fig. 21)**
Connect the remote controller wiring and the transmission wiring to the terminal block (6P). When doing this, tie the remote controller wiring and the transmission wiring using the included clamp (small) (5) and then firmly secure using the included clamp (small) (5) according to the figure. **(Refer to Fig. 22)**

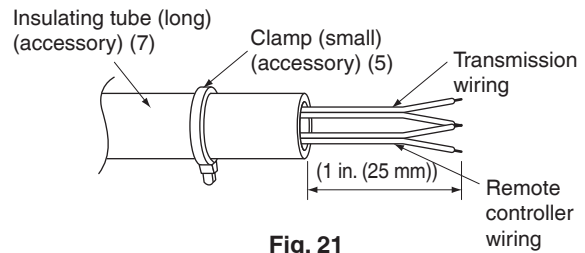
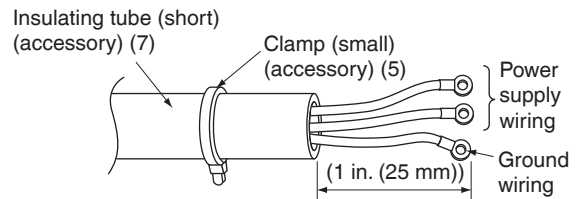


Fig. 21

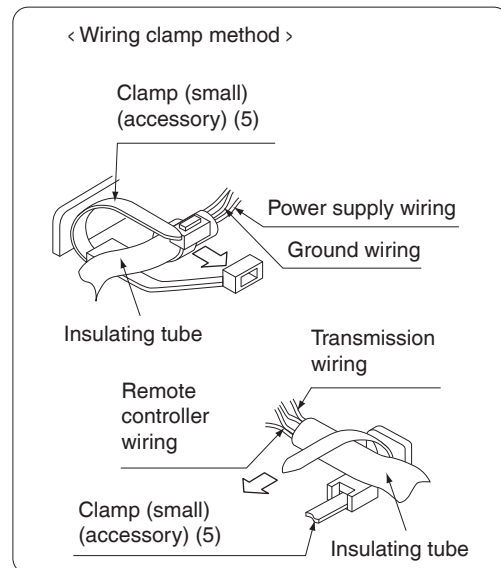
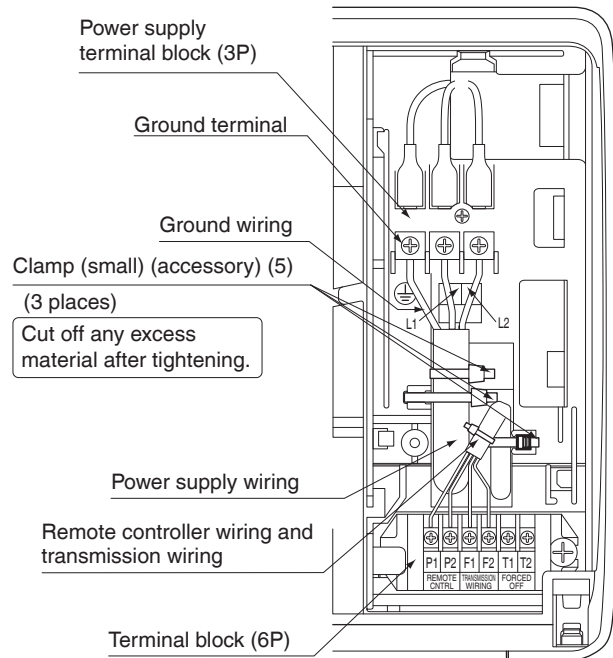


Fig. 22

⚠ WARNING

- Never connect power supply wiring to the terminal block for remote controller wiring as this could damage the entire system.
- Use only specified wire and connect wires to the terminal tightly. Be careful wires do not place external stress on terminals. Keep wires in neat order so as not to obstruct other equipment. Make sure that the control box cover fits tightly. Incomplete connections could result in overheating and, in worse case, result in electric shock or fire.
- To avoid a short circuit in the control box, be sure to apply sealing material or putty (not included) to the wiring hole to prevent the infiltration of water as well as insects or other small creatures. Otherwise a short-circuit may occur inside the control box.

⚠ CAUTION

- When clamping the wirings, be sure no tension is applied to the wire connections by using the included clamp. Also, when wiring, make sure the cover on the control box fits snugly by arranging the wirings neatly and attaching the control box cover firmly. When attaching the control box cover, make sure no wirings get caught in the edges. Pass wiring through holes to prevent damage to them.
- Make sure the remote controller wiring and transmission wiring between the units, and other electrical wiring do not pass through the same locations outside the unit, separating them by at least 2 in. (50 mm), otherwise electrical noise (external static) could cause incorrect operation or breakage.

[PRECAUTIONS]

1. Use round crimp-style terminals for connecting wires to the power supply terminal block.
(Refer to Fig. 23)
If unavailable, observe the following points when wiring.
 - Do not connect wires of different gauge to the same power supply terminal.
(Looseness in the connection may cause overheating.)
 - Use the specified electric wire. Connect the wire securely to the terminal. Lock the wire down without applying excessive force to the terminal.

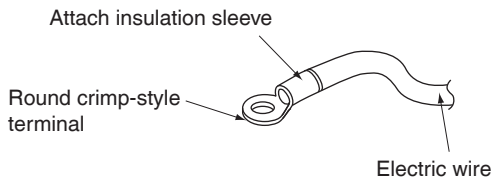


Fig. 23

2. Tightening torque for the terminal screws.

- Use the correct screwdriver for tightening the terminal screws. If the blade of screwdriver is too small, the head of the screw might be damaged, and the screw will not be properly tightened.
- If the terminal screws are tightened too hard, screws might be damaged.
- Refer to the table below for the tightening torque of the terminal screws.

Terminal	Size	Tightening torque [lb-ft. (N-m)]
Remote controller, Transmission wiring and Forced off terminal block (6P)	M3.5	0.59 – 0.71 (0.80 – 0.96)
Power supply and Ground terminal block (3P)	M4	0.89 – 1.03 (1.2 – 1.4)

3. Do not connect wires of different gauge to the same ground terminal. Looseness in the connection may lessen protection.
4. Keep transmission wiring at least 2 in. (50 mm) away from power supply wiring. The equipment may malfunction if subjected to electrical (external) noise.
5. For remote controller wiring, refer to the installation manual attached to the remote controller.

8-2 WIRING EXAMPLE

COMPLETE SYSTEM EXAMPLE

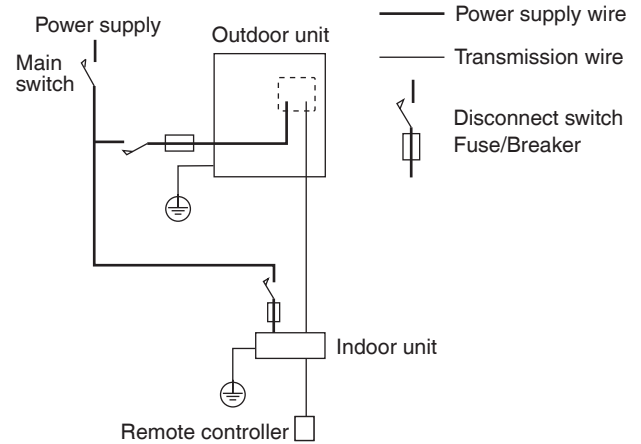


Fig. 24

1. When using 1 remote controller (Normal operation)

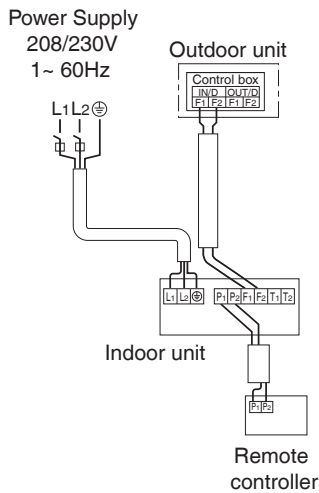


Fig. 25

2. When using 2 remote controllers

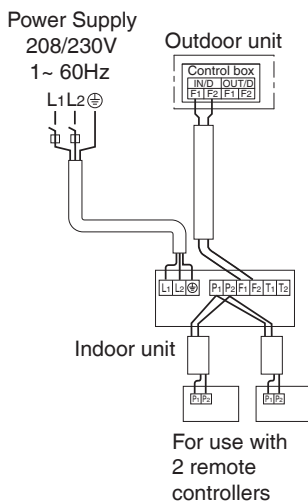


Fig. 26

[PRECAUTIONS]

- Do not ground the equipment on gas pipes, water pipes or lightning rods, or crossground with telephones. Improper grounding could result in electric shock.
- The remote controller wiring (P₁ and P₂) and transmission wiring (F₁ and F₂) have no polarity.

8-3 CONTROL BY 2 REMOTE CONTROLLERS (Controlling 1 indoor unit by 2 remote controllers)

- When using 2 remote controllers, one must be set to "MAIN" and the other to "SUB".

⟨Main/sub changeover⟩

- Refer to the installation manual supplied with the remote controller.

⟨Wiring method⟩

- Remove the control box cover.
- Add the remote controller 2 (SUB) to the terminal block for remote controller (P₁, P₂) in the control box. (There is no polarity.)

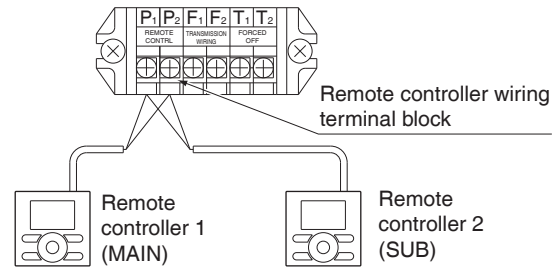


Fig. 27

8-4 REMOTE CONTROL (FORCED OFF AND ON/OFF OPERATION)

- Connect input lines from the outside to the terminals T₁ and T₂ on the terminal block (6P) for remote controller to achieve remote control.
- See "9. FIELD SETTING" for details on operation.

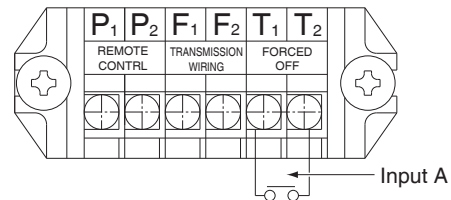


Fig. 28

Wire specification	Sheathed vinyl cord or 2 core cable
Gauge	AWG18 – 16 (0.75-1.25 mm ²)
Length	Max. 328 ft. (100 m)
External terminal	Contact that can ensure the minimum applicable load of 15 V DC, 1 mA.

8-5 CENTRALIZED CONTROL

- For centralized control, it is necessary to designate the group No. For details, refer to the manual of each optional controllers for centralized control.

9. FIELD SETTING

⟨Field settings may have to be performed using the remote controller, depending on the type of installation.⟩

- (1) Make sure the control box covers are closed on the indoor and outdoor units.
- (2) Depending on the type of installation, make the field settings from the remote controller after the power is turned on, following the installation manual attached to the remote controller.
 - The settings can select “Mode No.,” “FIRST CODE NO.” and “SECOND CODE NO.”.
 - The “Field Settings” included with the remote controller lists the order of the settings and method of operation.

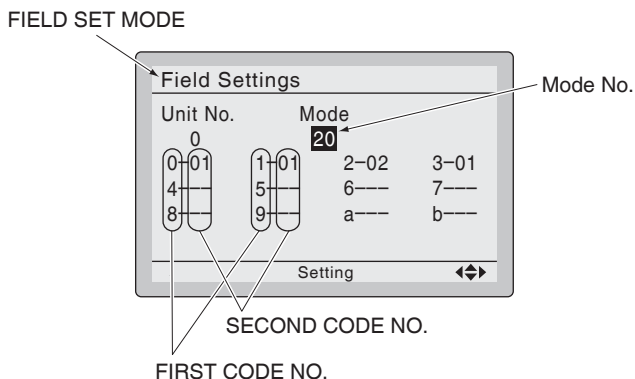


Fig. 29

- Lastly, make sure the customer keeps the installation manual, along with the operating manual, in a safe place.

⟨When using wireless remote controllers⟩

- When using wireless remote controllers, wireless remote controller address setting is necessary. Refer to the installation manual attached to the wireless remote controller for setting instructions.

9-1 SETTING FILTER SIGN

- Remote controllers are equipped with display air filter signs to display the time to clean air filters.
- Change the SECOND CODE NO. according to Table 2 depending on the amount of dirt or dust in the room. (SECOND CODE NO. is factory set to “01” for air filter contamination-light)

Table 2

Setting	Spacing time of display air filter sign	Mode No.	FIRST CODE NO.	SECOND CODE NO.
Air filter contamination-light	Approx. 200 hours	20	0	01
Air filter contamination-heavy	Approx. 100 hours			02

9-2 SETTING AIRFLOW RATE INCREASE MODE

- It is possible to raise set airflow (HIGH and LOW) from the field. Change the SECOND CODE NO. as shown in Table 3 to suit your needs. (SECOND CODE NO. is factory set to “01” for Standard.)

Table 3

Setting	Mode No.	FIRST CODE NO.	SECOND CODE NO.
Standard	23	0	01
A little increase			02
Increase			02

9-3 REMOTE CONTROL SETTING

- Forced off and ON/OFF operation should be selected by selecting the SECOND CODE NO. as shown in Table 4.

Table 4

External ON/OFF input	Mode No.	FIRST CODE NO.	SECOND CODE NO.
Forced off	22	1	01*
ON/OFF operation			02

* Factory set


- Input A of forced off and ON/OFF operation work as shown in Table 5.

Table 5

Forced off	ON/OFF operation
Input A “on” to force a stop (remote controller reception prohibited)	Unit operated by changing input A from “off” to “on”
Input A “off” to allow remote controller	Unit stopped by changing input A from “on” to “off”

10. TEST OPERATION

- The operation lamp of the remote controller will flash when a malfunction occurs. Check the malfunction code on the display to identify the point of trouble. An explanation of malfunction codes and the corresponding trouble is provided in “Service precautions” of the outdoor unit. If the display shows any of the following, there is a possibility that the wiring was done incorrectly or that the power is not on, so check again.

Remote controller display	Contents
“A8”	<ul style="list-style-type: none"> Error in power supply voltage to indoor unit.
“U3”	<ul style="list-style-type: none"> Test operation of outdoor unit has not been finished.
“  ”	<ul style="list-style-type: none"> There is a short circuit at the FORCED OFF terminals (T₁, T₂)
“U4” “UH”	<ul style="list-style-type: none"> The power on the outdoor unit is off. The outdoor unit has not been wired for power supply. Incorrect wiring for the transmission wiring and / or FORCED OFF wiring.
None	<ul style="list-style-type: none"> The power on the indoor unit is off. The indoor unit has not been wired for power supply. Incorrect wiring for the remote controller wiring, the transmission wiring and / or the FORCED OFF wiring.

— CAUTION —

- After the test operation is completed, check the items mentioned in **2. BEFORE INSTALLATION (2) Items to be checked at delivery** on page 4.

If the interior finish work is not completed when the test operation is finished, for protection of the air conditioner, ask the customer not to operate the air conditioner until the interior finish work is completed.

If the air conditioner is operated, the inside of the indoor unit may be polluted by substances generated from the coating and adhesives used for the interior finish work and cause water splash and leakage.

— To the operator carrying out test operation —

- After the test operation is completed, before delivering the air conditioner to the customer, confirm that the control box cover, the air filter and suction grille are attached. In addition, explain the power supply status (power supply ON/OFF) to the customer.

DAIKIN INDUSTRIES, LTD.

Head office:
Umeda Center Bldg., 2-4-12, Nakazaki-Nishi,
Kita-ku, Osaka, 530-8323 Japan

Tokyo office:
JR Shinagawa East Bldg., 2-18-1, Konan,
Minato-ku, Tokyo, 108-0075 Japan

DAIKIN NORTH AMERICA LLC

5151 San Felipe, Suite 500
Houston, TX 77056



INSTALLATION MANUAL

SPLIT SYSTEM

Air Conditioners

MODEL

RZQ18TBVJUA
RZQ24TBVJUA
RZQ30TBVJUA
RZQ36TBVJUA
RZQ42TBVJUA
RZQ48TBVJUA

RZR18TBVJUA
RZR24TBVJUA
RZR30TBVJUA
RZR36TBVJUA
RZR42TBVJUA
RZR48TBVJUA

English

Français

Español

Read these instructions carefully before installation.
Keep this manual in a handy place for future reference.
This manual should be left with the equipment owner.

Lire soigneusement ces instructions avant l'installation.
Conserver ce manuel à portée de main pour référence ultérieure.
Ce manuel doit être donné au propriétaire de l'équipement.

Lea cuidadosamente estas instrucciones antes de instalar.
Guarde este manual en un lugar a mano para leer en caso de tener alguna duda.
Este manual debe permanecer con el propietario del equipo.

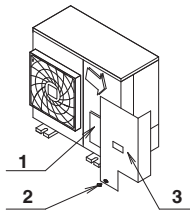


figure 1

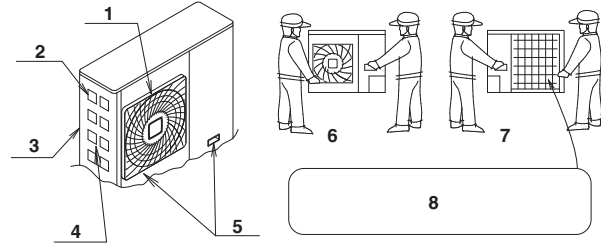


figure 2

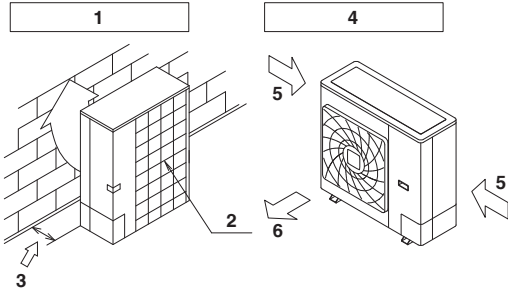


figure 3

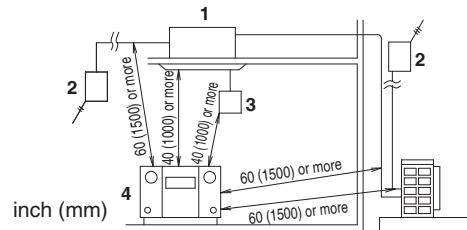


figure 4

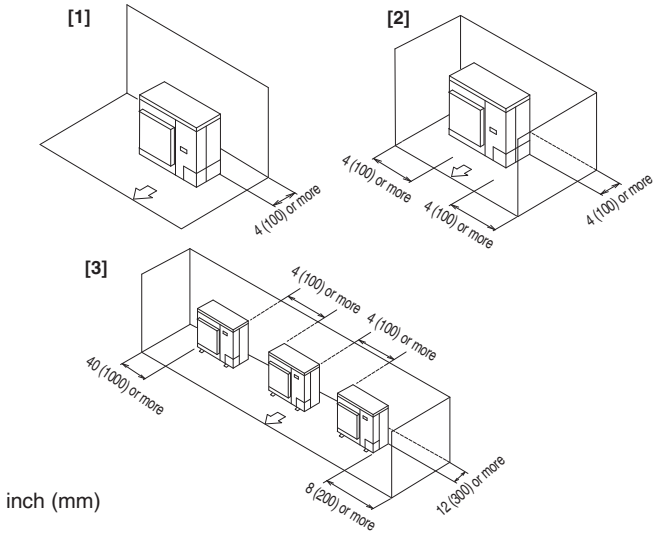


figure 5

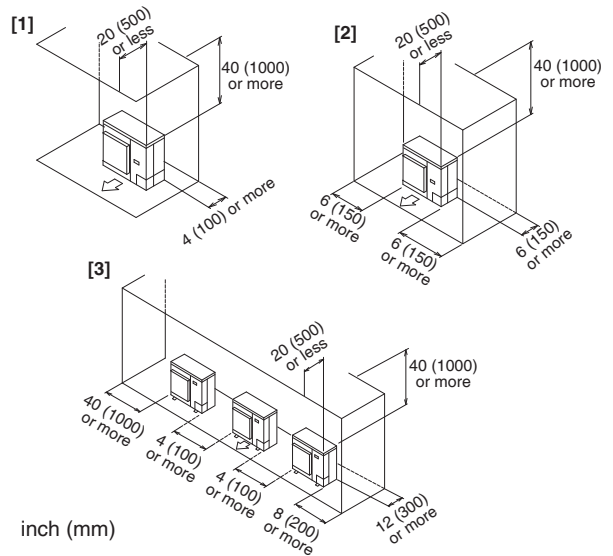


figure 6

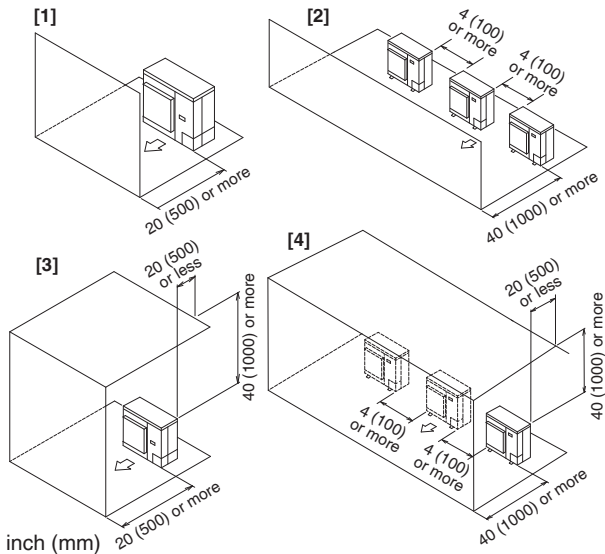


figure 7

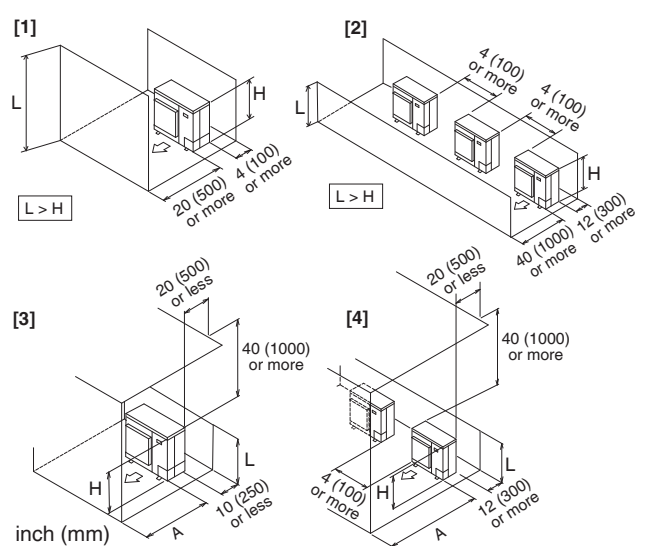


figure 8

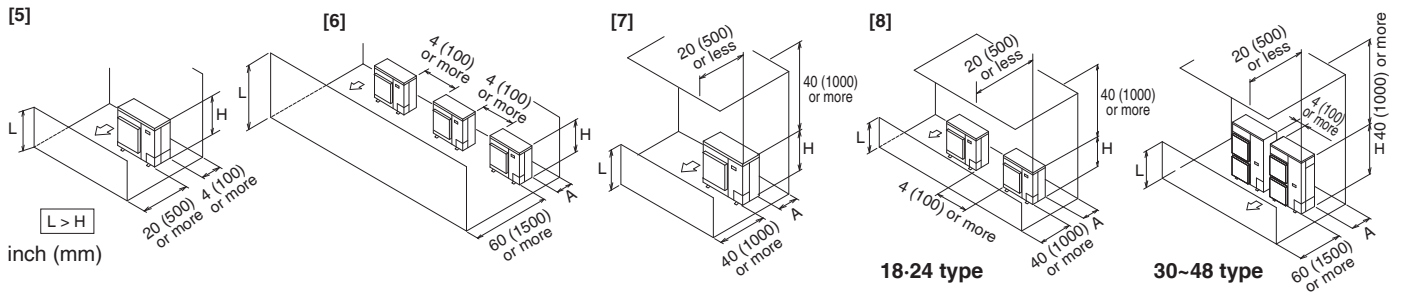


figure 8

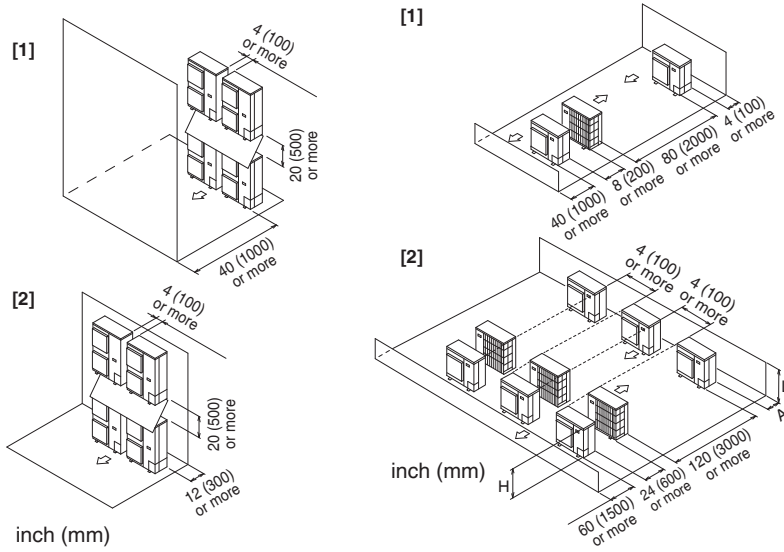


figure 9

figure 10

figure 11

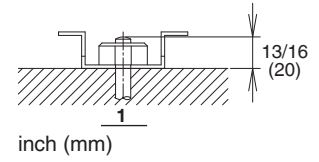


figure 12

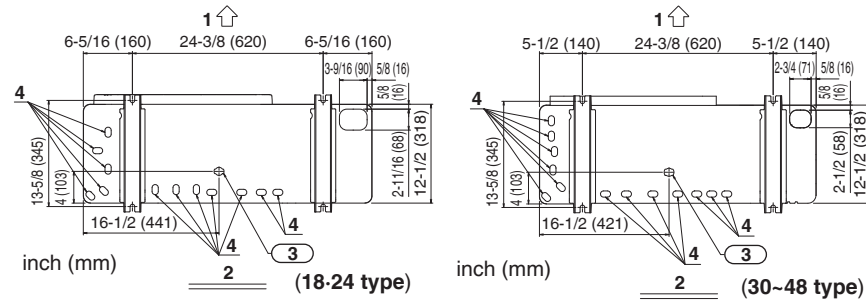
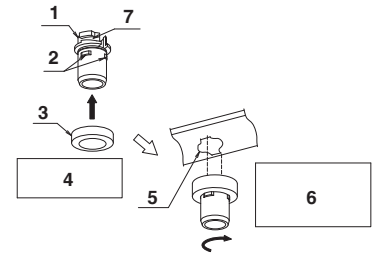


figure 13

figure 14

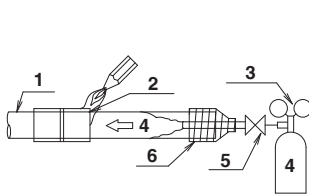
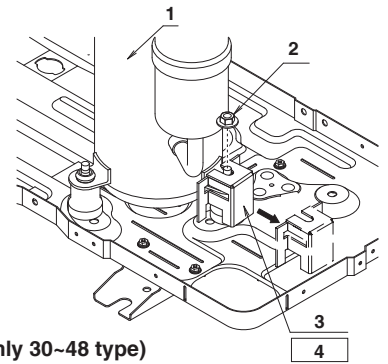


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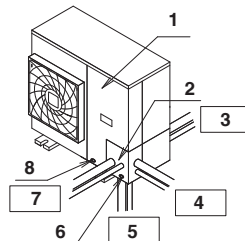


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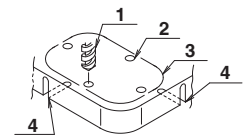


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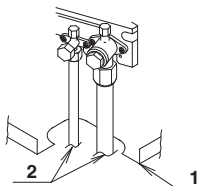


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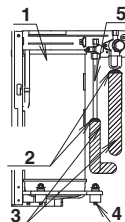


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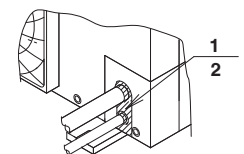


figure 20

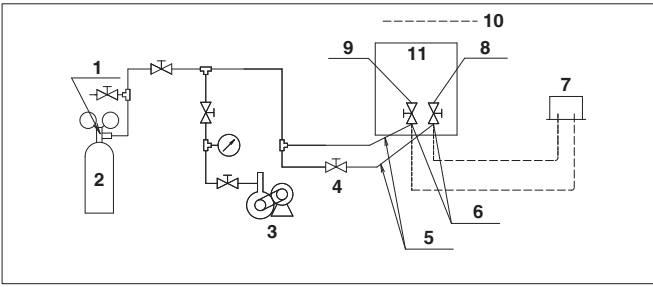


figure 21

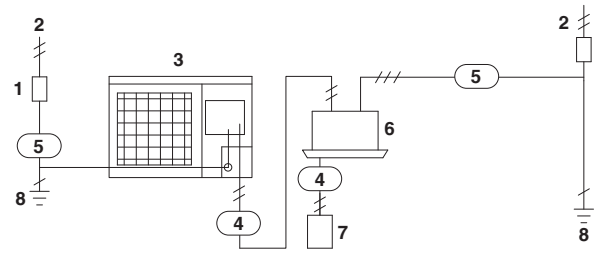


figure 22

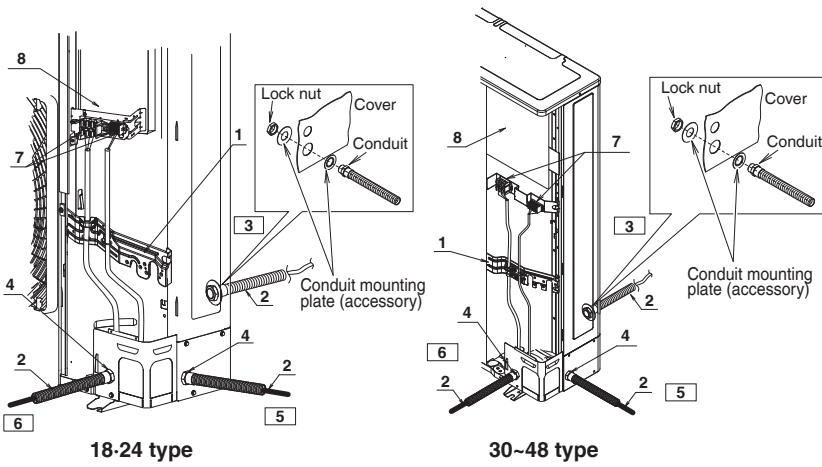


figure 23

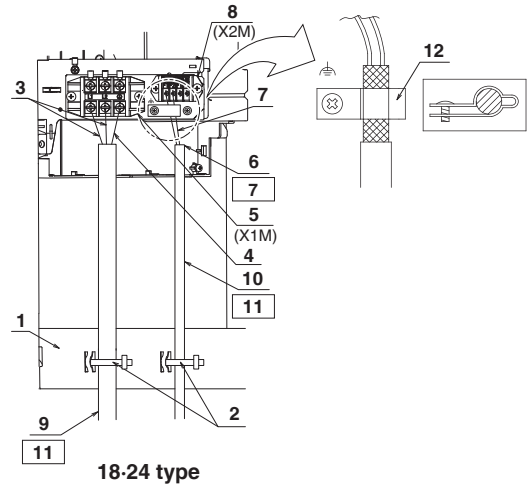


figure 24

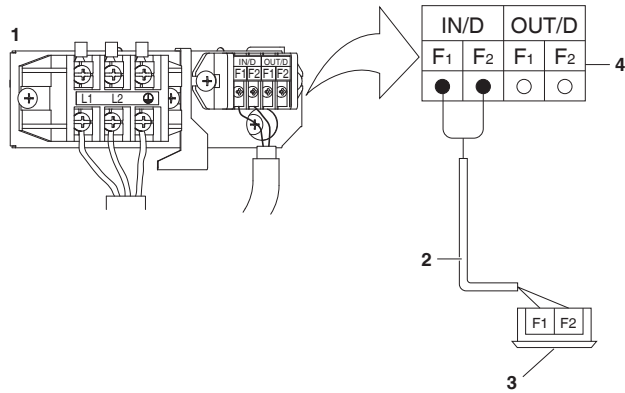


figure 25

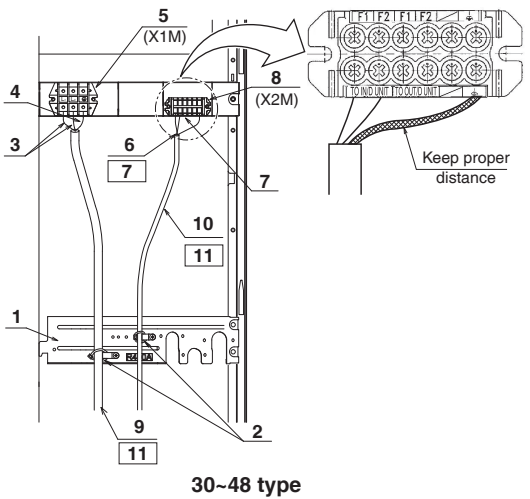
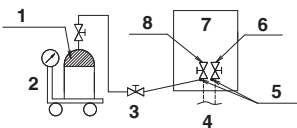


figure 26



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1. SAFETY CONSIDERATIONS


Read these “SAFETY CONSIDERATIONS for Installation” carefully before installing air conditioning equipment. After completing the installation, make sure that the unit operates properly during the startup operation. Instruct the customer on how to operate and maintain the unit. Inform customers that they should store this Installation Manual for future reference.


Always use a licensed installer or contractor to install this product. Improper installation can result in water or refrigerant leakage, electrical shock, fire, or explosion.

Meanings of **DANGER**, **WARNING**, **CAUTION**, and **NOTE** Symbols:

 **DANGER** Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

 **WARNING** Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

 **CAUTION** Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

 **NOTE**..... Indicates situations that may result in equipment or property damage accidents only.

DANGER

- Refrigerant gas is heavier than air and replaces oxygen. A massive leak can lead to oxygen depletion, especially in basements, and an asphyxiation hazard will result in serious injury or death.
- Do not ground units to water pipes, gas pipes, telephone wires, or lightning rods as incomplete grounding will result a severe shock hazard resulting in severe injury or death. Additionally, grounding to gas pipes will result a gas leak and potential explosion causing in severe injury or death.
- If refrigerant gas leaks during installation, ventilate the area immediately. Refrigerant gas will result in producing toxic gas if it comes into contact with fire. Exposure to this gas will result in severe injury or death.
- After completing the installation work, check that the refrigerant gas does not leak throughout the system.
- Do not install unit in an area where flammable materials are present due to risk of explosions that will result in serious injury or death.
- Safely dispose of all packing and transportation materials in accordance with federal/state/local laws or ordinances. Packing materials such as nails and other metal or wood parts, including plastic packing materials used for transportation will result in injuries or death by suffocation.

WARNING

- Only qualified personnel must carry out the installation work. Installation must be done in accordance with this installation manual. Improper installation could result in water leakage, electric shock, or fire.
- When installing the unit in a small room, take measures to keep the refrigerant concentration from exceeding allowable safety limits. Excessive refrigerant leaks, in the event of an accident in a closed ambient space, could result in oxygen deficiency.
- Use only specified accessories and parts for installation work. Failure to use specified parts could result in water leakage, electric shocks, fire, or the unit falling.
- Install the air conditioner or heat pump on a foundation strong enough that it can withstand the weight of the unit. A foundation of insufficient strength could result in the unit falling and causing injuries.
- Take into account strong winds, typhoons, or earthquakes when installing. Improper installation could result in the unit falling and causing accidents.
- Make sure that a separate power supply circuit is provided for this unit and that all electrical work is carried out by qualified personnel according to local, state and national regulations. An insufficient power supply capacity or improper electrical construction could result in electric shocks or fire.
- Make sure that all wiring is secured, that specified wires are used, and that no external forces act on the terminal connections or wires. Improper connections or installation could result in fire.
- Before touching electrical parts, turn off the unit.
- This equipment can be installed with a Ground-Fault Circuit Interrupter (GFCI). Although this is a recognized measure for additional protection, with the grounding system in North America, a dedicated GFCI is not necessary.

- When installing or relocating the system, keep the refrigerant circuit free from substances other than the specified refrigerant (R410A) such as air. Any presence of air or other foreign substance in the refrigerant circuit could result in abnormal pressure rise or rupture, resulting in injury.
- Do not change the setting of the protection devices. If the pressure switch, thermal switch, or other protection device is shorted and operated forcibly, or parts other than those specified by Daikin are used, fire or explosion could result.

⚠ CAUTION

- Do not touch the switch with wet fingers. Touching a switch with wet fingers may result in electric shock.
- Do not allow children to play on or around the unit or it may result in injury.
- Do not touch the refrigerant pipes during and immediately after operation as the refrigerant pipes may be hot or cold, depending on the condition of the refrigerant flowing through the refrigerant piping, compressor, and other refrigerant cycle parts. It may result in your hands getting burns or frostbite if you touch the refrigerant pipes.
To avoid injury, give the pipes time to return to normal temperature or, if you must touch them, be sure to wear proper gloves.
- The heat exchanger fins are sharp enough to cut, and may result in injury if improperly used. To avoid injury, wear gloves or cover the fins when working around them.
- Insulate piping to prevent condensation.
- Be careful when transporting the product.
- Do not turn off the power immediately after stopping operation. Always wait for at least 5 minutes before turning off the power. Otherwise, water leakage may occur.
- Do not use a charging cylinder. Using a charging cylinder may cause the refrigerant to deteriorate.
- Refrigerant R410A in the system must be kept clean, dry, and tight.
 - (a) Clean and Dry - Foreign materials (including mineral oils such as SUNISO oil or moisture) should be prevented from getting into the system.
 - (b) Tight - R410A does not contain any chlorine, does not destroy the ozone layer, and does not reduce the earth's protection against harmful ultraviolet radiation.
R410A can contribute to the greenhouse effect if it is released. Therefore take proper measures to check for the tightness of the refrigerant piping installation.
Read the chapter Refrigerant Piping and follow the procedures.
- Since R410A is a blend, the required additional refrigerant must be charged in its liquid state. If the refrigerant is charged in a gaseous state, its composition can change and the system will not work properly.
- The indoor unit is for R410A. See the catalog for indoor models that can be connected. Normal operation is not possible when connected to other units.
- Remote controller transmitting distance can be shorter than expected in rooms with electronic fluorescent lamps (inverter or rapid start types). Install the indoor unit far away from fluorescent lamps as much as possible.
- Indoor units are for indoor installation only. Outdoor units can be installed either outdoors or indoors. This unit is for outdoor use.

- Do not install the air conditioner or heat pump in the following locations:
 - (a) Where a mineral oil mist or oil spray or vapor is produced, for example, in a kitchen.
Plastic parts may deteriorate and fall off or result in water leakage.
 - (b) Where corrosive gas, such as sulfurous acid gas, is produced.
Corroding copper pipes or soldered parts may result in refrigerant leakage.
 - (c) Near machinery emitting electromagnetic waves.
Electromagnetic waves may disturb the operation of the control system and cause the unit to malfunction.
 - (d) Where flammable gas may leak, where there is carbon fiber, or ignitable dust suspension in the air, or where volatile flammables such as thinner or gasoline are handled. Operating the unit in such conditions may result in a fire.
- Take adequate measures to prevent the outdoor unit from being used as a shelter by small animals. Small animals making contact with electrical parts may result in malfunctions, smoke, or fire. Instruct the customer to keep the area around the unit clean.

⚠ NOTE

- Install the power supply and transmission wires for the indoor and outdoor units at least 3.5 ft. (1 m) away from televisions or radios to prevent image interference or noise.
Depending on the radio waves, a distance of 3.5 ft. (1 m) may not be sufficient to eliminate the noise.
- Dismantling the unit, treatment of the refrigerant, oil and additional parts must be done in accordance with the relevant local, state, and national regulations.
- Do not use the following tools that are used with conventional refrigerants: gauge manifold, charge hose, gas leak detector, reverse flow check valve, refrigerant charge base, vacuum gauge, or refrigerant recovery equipment.
- If the conventional refrigerant and refrigerator oil are mixed in R410A, the refrigerant result in deterioration.
- This air conditioner or heat pump is an appliance that should not be accessible to the general public.
- As design pressure is 478 psi (3.3 MPa), the wall thickness of field-installed pipes should be selected in accordance with the relevant local, state, and national regulations.

Codes and Regulations

This product is designed and manufactured to comply with national codes. Installation in accordance with such codes and/or prevailing local codes/regulations is the responsibility of the installer. The manufacturer assumes no responsibility for equipment installed in violation of any codes or regulations. Rated performance is achieved after 20 hours of operation.

2. INTRODUCTION

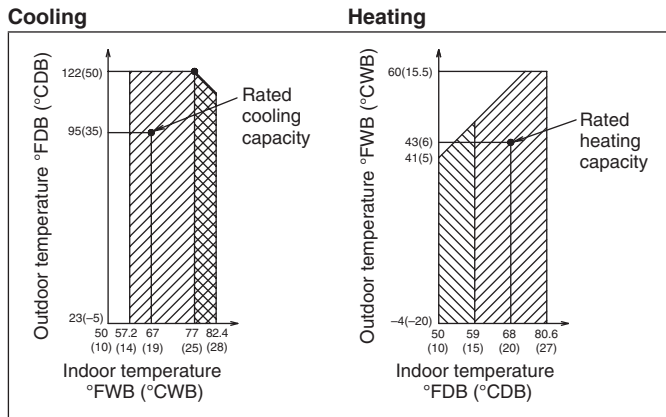
1. This series uses R410A refrigerant. Be absolutely sure to comply with "6. REFRIGERANT PIPING", because even greater caution is needed to prevent impurities from entering R410A (mineral oils and water).
2. The design pressure is 478psi (3.3MPa), which means that piping may be thicker than conventionally, so please refer to "6. REFRIGERANT PIPING".
3. This is a mixed refrigerant, so charge as a liquid when adding refrigerant. (If charged as a gas, the composition of the refrigerant may change, preventing normal operation.)
4. The indoor unit must use R410A. See the catalog for indoor unit models which can be connected. (Normal operation is not possible when connected to other units.)
5. The power supply of this series is single-phase, 208/230V, 60Hz.

2-1 Standard operation limit

Normal operation

The figures below assume following operating conditions for indoor and outdoor units:

Equivalent pipe length..... 25 ft. (7.6 m)
Level difference..... 0 ft. (0 m)



- Range for operation
- Range for pull down operation
- Range for warming up operation

2-2 Standard supplied accessories

Make sure that the accessories shown below are all present.
(The accessories can be found behind the front panel.)

Name	Clamp	Conduit mounting plate		Wire clamp and screw
Quantity	4 pcs.	2 pcs.	2 pcs.	1 (only 18-24 type)
Shape				

Name	Insulation tube		Installation manual	Warranty card
Quantity	1 pc.	1 pc.	1	1
Shape				
	(Large)	(Small)		

(Refer to figure 1)

1. Accessories
2. Screw for front panel
3. Front panel

3. BEFORE INSTALLATION

<Transporting the Unit>

As shown in figure 2, move the unit slowly. (Take care not to let hands or other objects come in contact with rear fins.)

(Refer to figure 2)

1. Air outlet grille
2. Intake hole
3. Corner
4. Outdoor unit
5. Handle
6. Front
7. Rear
8. Always hold the unit by the corners, as holding it by the side intake holes on the casing may cause them to deform.

Use only accessories and parts which are of the designated specification when installing.

4. SELECTING INSTALLATION SITE

(1) Select an installation site where the following conditions are satisfied and that meets with your customer's approval.

- Places which are well-ventilated.
- Places where the unit does not bother next-door neighbors.
- A location where small animals will not make nests in the unit.
- Safe places which can withstand the unit's weight and vibration and where the unit can be installed level.
- A locations where there is enough space to install the unit.
- Places where the indoor and outdoor unit's piping and wiring lengths come within the allowable ranges.
- A location where there is no risk of flammable gas leaking.

(2) If the unit is installed in a location where it might be exposed to strong wind, install as per figure 3.

- 11 mph (5 m/s) or higher winds blown against the outdoor unit's exhaust cause a deterioration in the system performance. High winds force re-circulation of the exhaust air into the inlet, which is known to cause the following effects:
 - Reduction in performance.
 - Increased frost formation in heating mode.
 - System shut down due to increased pressures.
- If very strong wind blows continuously on the air outlet side of the outdoor unit, the fan may turn in reverse at high speed and break, so install as per figure 3.

(Refer to figure 3)

1. Turn the air outlet side toward the building's wall, fence or windbreak screen.
2. Air inlet grille
3. Ensure there is enough space for installing the unit.
4. Set the outlet side at a right angle to the direction of the wind.
5. Strong wind
6. Blown air

(3) When installing the unit in a place frequently exposed to snow, pay special attention to the following:

- Install the outdoor unit on a stand (field supply), so that the bottom frame is more than 20 in. (500 mm) higher than the expected snow fall to prevent it from being covered by snow.
- Attach a snow hood (field supply) and a snow vizor (field supply).
- Avoid installation at the place where a snowdrift is generated.
- Further, perform the following countermeasures, since there is risk that the drain water produced at the defrost operation freezes.
- Install the outdoor unit so that its bottom place level has a sufficient height from foundation level, so that ice does not grow at the lower surface of the bottom place of the outdoor unit. (Recommended clearance: 20 in. (500 mm) or more)

- In areas where the outside air temperature drops below 32°F (0°C) for more than 12 hours continuously, install a drain-pan heater (optional accessory) on the bottom frame to prevent the drain from freezing.
- An optional drain pan heater is available when the unit is installed in a climate where the drain may freeze.
- The installer should use their local knowledge to determine if this accessory is necessary to prevent the drain from freezing.
- Do not use a concentrated drain plug (field supply).
(If a drain plug and/or drain pipe are/is used, there is a risk of freezing.)
- If there is a problem with drain dripping from the bottom frame drain, set up a roof (field supply) below the outdoor unit, or enact other countermeasures.
- Remove the rear inlet grille to prevent snow from accumulating on the rear fins.

(4) When there is possibility of short-circuit depending on the ambient situation, use the wind direction adjusting plate (optional accessory).

(5) The refrigerant gas (R410A) is a safe, non-toxic and non-flammable gas, but if it leaks into the room, the concentration may exceed tolerance levels, especially in small rooms, so steps need to be taken to prevent refrigerant leakage. See the equipment design reference for details.

(6) Inverter-type air conditioners sometimes cause static in other electrical appliances.
When selecting an installation location, make sure the air conditioner and all wiring are sufficiently far away from radios, computers, stereos, and other appliances, as shown in figure 4.
Particularly for locations with weak reception, ensure there is a distance of at least 9.8 ft. (3 m) for indoor remote controllers, place power supply wiring and transmission wiring in conduits, and ground the conduits. Use non-shielded wire for transmission wiring.

(Refer to figure 4)

1. Indoor unit
2. Fuse/Breaker
3. Remote controller
4. Personal computer or radio

(7) Space needed for installation

<Precautions when installing units in series>

- The direction for field piping is either forward or down when installing units in series, as shown in the figure (5~10).
- If the piping is brought out from the back, the outdoor unit will require at least 10 in. (250 mm) from its right side.

(7)-1 IN CASE OBSTACLES EXIST ONLY IN FRONT OF THE AIR INLET

When nothing is obstructing the top

1. Installation of single unit
 - In case obstacles exist only in front of the air inlet **(Refer to figure 5-[1])**
 - In case obstacles exist in front of the air inlet and on both sides of the unit **(Refer to figure 5-[2])**
2. In case of installing multiple units (2 units or more) in lateral connection per row
 - In case obstacles exist in front of the air inlet and on both sides of the unit **(Refer to figure 5-[3])**

When something is obstructing the top

1. Installation of single unit
 - In case obstacles exist only in front of the air inlet **(Refer to figure 6-[1])**
 - In case obstacles exist in front of the air inlet and on both sides of the unit **(Refer to figure 6-[2])**
2. In case of installing multiple units (2 units or more) in lateral connection per row
 - In case obstacles exist in front of the air inlet and on both sides of the unit **(Refer to figure 6-[3])**

(7)-2 IN CASE OBSTACLES EXIST IN FRONT OF THE OUTLET SIDE

When nothing is obstructing the top

1. Installation of single unit **(Refer to figure 7-[1])**
2. In case of installing multiple units (2 units or more) in lateral connection per row **(Refer to figure 7-[2])**

When something is obstructing the top

1. Installation of single unit **(Refer to figure 7-[3])**
2. In case of installing multiple units (2 units or more) in lateral connection per row **(Refer to figure 7-[4])**

(7)-3 IN CASE OBSTACLES EXIST IN FRONT OF BOTH THE AIR INLET AND OUTLET SIDES

Pattern 1: Where obstacle in front of the air outlet is higher than the unit.

(There is no height limit for obstructions on the intake side.)

When nothing is obstructing the top

1. Installation of single unit **(Refer to figure 8-[1])**
2. In case of installing multiple units (2 units or more) in lateral connection per row **(Refer to figure 8-[2])**

When something is obstructing the top

1. Installation of single unit **(Refer to figure 8-[3])**
Relation of dimensions of H, A, and L are shown in the table below.

	L	A
L ≤ H	0 < L ≤ 1/2H	30(750)
	1/2H < L ≤ H	40(1000)
H < L	Set the frame to be L ≤ H	

Note)

Close the area under the frame so the outlet air does not bypass there.

2. Series installation (up to two units) **(Refer to figure 8-[4])**

Relation of dimensions of H, A, and L are shown in the table below.

	L	A
L ≤ H	0 < L ≤ 1/2H	40(1000)
	1/2H < L ≤ H	50(1250)
H < L	Set the frame to be L ≤ H	

Note)

1. Close the area under the frame so the outlet air does not bypass there.

2. No more than two units can be installed in series.

Pattern 2: Where obstacles in front of the air outlet is lower than the unit.

(There is no height limit for obstructions on the intake side.)

When nothing is obstructing the top

1. Installation of single unit **(Refer to figure 8-[5])**
2. In case of installing multiple units (2 units or more) in lateral connection per row **(Refer to figure 8-[6])**

Relation of dimensions of H, A, and L are shown in the table below.

	L	A
	0 < L ≤ 1/2H	10(250)
	1/2H < L ≤ H	12(300)

When something is obstructing the top

1. Installation of single unit (Refer to figure 8-[7])

Relation of dimensions of H, A, and L are shown in the table below.
inch (mm)

	L	A
L ≤ H	0 < L ≤ 1/2H	4(100)
	1/2H < L ≤ H	8(200)
H < L	Set the frame to be L ≤ H	

Note)

Get the lower part of the frame sealed so that air from the outlet does not bypass.

2. Series installation (up to two units) (Refer to figure 8-[8])

Relation of dimensions of H, A, and L are shown in the table below.
inch (mm)

	L	A
L ≤ H	0 < L ≤ 1/2H	10(250)
	1/2H < L ≤ H	12(300)
H < L	Set the frame to be L ≤ H	

Note)

1. Get the lower part of the frame sealed so that air from the outlet does not bypass.
2. Only two units at most can be installed in series.

(7)-4 IN CASE OF STACKED INSTALLATION

(1) In case obstacles exist in front of the outlet side

(Refer to figure 9-[1])

(2) In case obstacles exist in front of the air inlet (Refer to figure 9-[2])

Note)

1. No more than two units should be stacked.
2. If there is a danger of water from the drain falling on the lower outdoor unit and freezing, install a roof (field supply) as shown in the figure 9.
3. To prevent the formation and growth of ice in the bottom frame of the 2nd level outdoor unit, install the outdoor unit so that the bottom frame will be sufficiently higher than the roof. (It is recommended to leave 19.6 in. (500 mm) or more)
4. About 4 in. (100 mm) is required as the dimension for laying the upper outdoor unit's drain pipe.
5. Shut off the Z part (the area between the upper outdoor unit and the lower outdoor unit) so that outlet air does not bypass.

(7)-5 IN CASE OF MULTIPLE-ROW INSTALLATION (FOR ROOF TOP USE, ETC.)

1. In case of installing one unit per row (Refer to figure 10-[1])
2. In case of installing multiple units (2 units or more) in lateral connection per row (Refer to figure 10-[2])

Relation of dimensions of H, A, and L are shown in the table below.
inch (mm)

	L	A
L ≤ H	0 < L ≤ 1/2H	10(250)
	1/2H < L ≤ H	12(300)
H < L	Installation impossible.	

5. PRECAUTIONS ON INSTALLATION

- Before installation, make sure the unit is level and the foundation is sturdy enough to prevent vibration and noise.
- Fasten the unit in place using 4 foundation bolts M12 or equivalent. It is best to screw in the foundation bolt until their length remains 13/16 in. (20 mm) above the foundation surface.

(Refer to figure 11)

1. Diagram of lower surface

<Drain pipe installation>

- Locations where drain water from the outdoor unit might be a problem.

In such locations, for example, where the drain water might drip onto passersby, lay the drain pipe using the separately sold drain plug and seal up the drain holes in the bottom frame. For details, please contact your dealer.

In case of installing the outdoor unit in cold climates, do not take this centralized drainage way. Otherwise, drain pipe freeze-up and ice build-up on the bottom frame may occur.

- When laying the drain pipe, at least 4 in. (100 mm) from the bottom of the outdoor unit is needed.
- Make sure the drainage works properly.
(Watch out for water leaks if piping is brought out the bottom.)

(Refer to figure 12)

1. Drain plug
2. 4 tabs
3. Drain receiver
4. Insert the drain receiver into the drain plug and hook the tabs.
5. Bottom frame drain hole
6. (1) Insert the drain plug through the drain hole in the bottom frame shown in figure 13.
(2) Turn the drain plug along the guides until it stops (approx. 40°).
7. Guide

(Refer to figure 13)

1. Air outlet side
2. Diagram of lower surface
3. Drain hole (For plug)
4. Drain hole

[How to remove the transport bracket] (30-36-42-48 type)

- A yellow transport bracket and washer are attached to the leg of the compressor to protect the unit during transportation, so remove them as shown in figure 14.

(Refer to figure 14)

1. Compressor
2. Securing nut
3. Transport bracket (Yellow)
4. Turn in the direction of the arrow and remove.

- (1) Open the sound-proof cover as shown in figure 14.
Do not pull the sound-proof cover or remove it from the compressor.
- (2) Remove the securing nut.
- (3) Remove the washer.
- (4) Remove the transport bracket as shown in figure 14.
- (5) Retighten the securing nut.
- (6) Return the sound-proof cover as it was.

6. REFRIGERANT PIPING

CAUTION

- Do not allow anything other than the designated refrigerant to get mixed into the refrigerant cycle, such as air, nitrogen, etc. If any refrigerant gas leaks while working on the unit, ventilate the room thoroughly right away.
- Use R410A only when adding refrigerant.

6-1 Installation tools

Make sure to use speciality tools to withstand the pressure and to prevent foreign materials from mixing into the system.

Gauge manifold Charge hose	<ul style="list-style-type: none"> Make sure to use installation tools that are exclusively made for R410A installations to withstand the pressure and to prevent foreign materials (e.g. mineral oils such as SUNISO and moisture) from mixing into the system.
Vacuum pump	<ul style="list-style-type: none"> Use a 2-stage vacuum pump with a non-return valve. Make sure the pump oil does not flow backward into the system while the pump is not working. Use a vacuum pump which can evacuate to 500 microns.

6-2 Selecting piping material

CAUTION

Piping and other pressure containing parts shall comply with the applicable legislation and shall be suitable for refrigerant. Use phosphoric acid deoxidized seamless copper for refrigerant.

CAUTION

- All field piping must be installed by a licensed refrigeration technician and must comply with relevant local and national regulations.
- After piping work is complete, do not under any circumstances open the stop valve until **7. ELECTRIC WIRING** on page 8 and **9. POST-WORK CHECKS** on page 11 are complete.
- Do not use flux when brazing the refrigerant piping. Use the phosphor copper brazing filler metal (B-Cu93P-710/795:ISO 3677) which does not require flux. Flux has extremely negative effect on refrigerant piping systems. For instance, if the chlorine based flux is used, it will cause pipe corrosion or, in particular, if the flux contains fluorine, it will damage the refrigerant oil.

- Use only pipes which are clean inside and outside and which do not accumulate harmful sulfur, oxidants, dirt, cutting oils, moisture, or other contamination. (Foreign materials inside pipes including oils for fabrication must be 0.14 gr/10 ft. (30 mg/10 m) or less.)
- Use the following items for the refrigerant piping.
Material: Jointless phosphor-deoxidized copper pipe.
Thickness: Select a thickness for the refrigerant piping which complies with national and local laws.
- Maximum piping length and height difference between the outdoor and indoor units.

Model	18-24 type	30~48 type
Maximum piping length	164 ft. (50 m)	230 ft. (70 m)
Maximum height difference	98 ft. (30 m) (outdoor unit above indoor unit)	98 ft. (30 m) (outdoor unit below indoor unit)

6-3 Protection against contamination when installing pipes

- Cover the ends of pipe to prevent moisture, dirt, dust, etc. from entering the piping.
- Exercise caution when passing copper piping through the through-holes and when passing them out to the outside.

Place	Installation	Protection method
	More than a month	Pinch the pipe
	Less than a month	Pinch or tape the pipe
	Regardless of the period	

6-4 Pipe connection

- See "Stop valve operation procedure" in "6-7 Air tight test and vacuum drying" regarding handling of the stop valve.
- Only use the flare nuts included with the unit. Using different flare nuts may cause the refrigerant to leak.
- Be sure to perform a nitrogen blow when brazing.** (Brazing without performing nitrogen replacement or releasing nitrogen into the piping will create large quantities of oxidized film on the inside of the pipes, adversely affecting valves and compressors in the refrigerating system and preventing normal operation.)

(Refer to figure 15)

- Refrigerant pipe
- Location to be brazed
- Regulator
- Nitrogen
- Manual valve
- Taping

6-5 Connecting the refrigerant piping

- Connection to larger pipe sizes.
In certain configurations this system is designed to be connected to larger diameter pipe sizes than the standard factory service valves. If the installation requires use of larger pipe diameters, a field setting change is required for the system to operate smoothly.
- The local field piping is connectable in four directions.

(Refer to figure 16)

- Front panel
- Pipe outlet panel
- Backward
- Sideways
- Downward
- Pipe outlet panel screw
- Forward
- Screw for front panel

- When connecting the pipings downward, remove the knockout by making four holes in the middle on the each side of the knockout with a drill.**

(Refer to figure 17)

- Drill
- Center area around knockout hole
- Knockout hole
- Slit

- After knocking out the knockout, it is recommended to apply repair paint to the edge and the surrounding end surfaces to prevent rusting.

(Refer to figure 18)

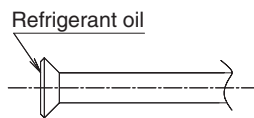
- Bottom frame
- Field piping

<Precautions when connecting pipes>

- Please refer to the Table 1 for the dimensions for processing flares.
- When connecting the flare nut, coat the flare both inside and outside with refrigerating unit oil and initially tighten by hand 3 or 4 turns before tightening firmly.
- Please refer to the Table 1 for the tightening torque. (Too much tightening will end up in splitting of the flare.)

Table 1

Pipe size (in.)	Tightening torque (ft.lbf)	A dimensions for processing flares (in.)	Flare shape (in.)
φ 3/8" (9.5 mm)	24.1~29.4 (32.7~39.9 N·m)	0.504~0.520 (12.8~13.2 mm)	
φ 5/8" (15.9 mm)	45.6~55.6 (61.8~75.4 N·m)	0.760~0.776 (19.3~19.7 mm)	



- After all the piping has been connected, use nitrogen to perform a gas leak check.

Precautions for connecting pipes

- Be careful not to let the field piping come into contact with the compressor terminal cover. Adjust the height of the insulation material on liquid pipe when it has the possibility of getting in contact with the terminal. Also make sure that the field piping does not touch the mounting bolt of the compressor.

(Refer to figure 19)

- Compressor
 - Corking, etc.
 - Insulation material
 - Bolts
 - Field piping
- If installing the outdoor unit higher than the indoor unit, caulk the space around insulation and tubes because condensation on the check valve can seep through to the indoor unit side.

[Preventing foreign objects from entering]

- Plug the pipe through-holes with putty or insulating material (procured locally) to stop up all gaps, as shown in figure 20. (Figure 20 indicates the forward case. Do the same in case of other directions.) Insects or small animals entering the outdoor unit may cause a short in the control box.

(Refer to figure 20)

- Putty or insulating material
- (field supply)

6-6 Thermal insulation of piping

- Insulate the field piping (liquid and gas-side). (Not insulating them may cause leaking.)
- The insulation dimension is recommended as following:

Ambient temperature: 86°F (30°C), humidity : Below 80% RH	Ambient temperature: 86°F (30°C), humidity : 80% RH and above
Minimum thickness : 9/16 inch (15 mm)	Minimum thickness : 3/4 inch (20 mm)

- When using commercial copper pipes and fittings, observe the following:
 - Insulation of pipes should be done after performing air tight test and vacuum drying.
 - Heat transfer rate: 0.024 to 0.030 BTU/fth°F (0.041 to 0.052 W/Mk (0.035 to 0.045 kcal/mh°C))
 - Be sure to use insulation that is designed for use with HVAC Systems.
 - The highest temperature that the gas-side piping can reach is around 248°F (120°C), so be sure to use insulating material which is sufficiently resistant to this temperature.

⚠ CAUTION

For local insulation, be sure to insulate all the way to the pipe connections inside the unit. Exposed piping may cause leaks or burns on contact.

6-7 Air tight test and vacuum drying

After doing the piping, perform the following inspections.

Air tight test

Be sure to use nitrogen gas. (See the figure ("Stop valve operation procedure") for the location of the service port.)

[Procedure]

Pressurize from the liquid pipes and gas pipes to 550 psi (3.8 MPa) (and not above 550 psi (3.8 MPa)). If there is not pressure drop over the next 24 hours, the equipment has passed the test.

If the pressure drops, check for leakage positions. (Confirm that there is no leakage, then release nitrogen.)

If a FTQ indoor unit is used, only pressurize to 450 psi (3.1 MPa).

Vacuum drying

Use a vacuum pump that can create a vacuum down to at least 500 microns.

[Procedure]

Operate the vacuum pump for **at least 2 hours** from **both the liquid and gas pipes** and decrease the pressure to at least 500 microns.

Leave at below 500 microns for at least 1 hour and make sure that the vacuum gauge does not rise. (If it does rise, there is either still moisture in the system or a leak.)

Cases where moisture might enter the piping (i.e., if doing work during the rainy season, if the actual work takes long enough that condensation may form on the inside of the pipes, if rain might enter the pipes during work, etc.)

After performing the vacuum drying for 2 hours, pressurize to 7.2 psi (0.05 MPa) (i.e., vacuum breakdown) with nitrogen gas, then depressurize down to at least 500 microns for an hour using the vacuum pump (vacuum drying). (If the pressure does not reach at least 500 microns even after depressurizing for at least 2 hours, repeat the vacuum breakdown - vacuum drying process.) Leave as a vacuum for 1 hour after that, and make sure the vacuum gauge does not rise.

(Refer to figure 21)

1. Decompression valve
2. Nitrogen
3. Vacuum pump
4. Valve (Open)
5. Charge hose
6. Stop valve service port
7. Indoor unit
8. Gas line stop valve (Close)
9. Liquid line stop valve (Close)
10. Indicates local procurement
11. Outdoor unit

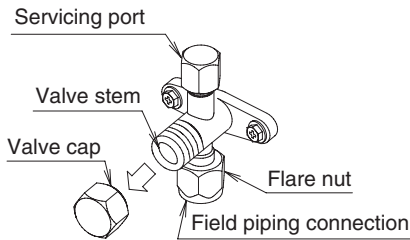
NOTE

The stop valve must always be turned to "closed". Otherwise the refrigerant in the outdoor unit will pour out.

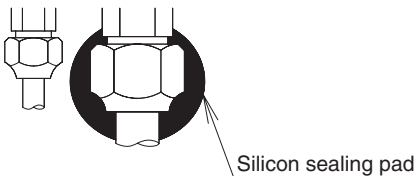
Stop valve operation procedure

Precautions when handling the stop valve

- The names of parts needed to operate the stop valve are shown in the figure below. The unit is shipped from the factory with the stop valve turned to the "closed" position.



- Since the side boards may be deformed if only a torque wrench is used when loosening or tightening flare nuts, always lock the stop valve with a wrench and then use a torque wrench.
- In cases where the unit is run in heating mode when the outside temperature is low or in other situations where the operating pressure might drop, seal the gas-side flare nut on the stop valve with silicon sealant or the like to prevent it from freezing.



(Make sure that there is no gap)

Stop valve operation procedure

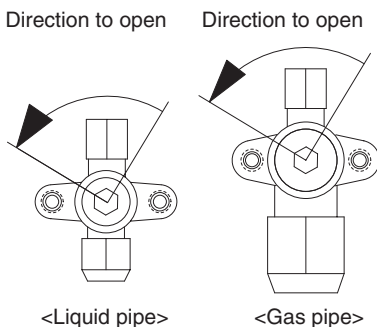
Have a hex wrench ready (size: 0.2 in. (4 mm) and 0.3 in. (6 mm)).

Opening the valve

1. Place the hex wrench on the valve stem and turn counter-clockwise.
2. Stop when the valve stem no longer turns. It is now open.

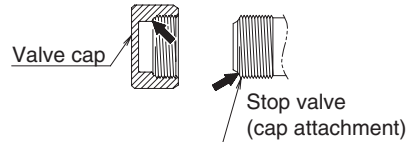
Close the valve

1. Place the hex wrench on the valve stem and turn clockwise.
2. Stop when the valve stem no longer turns. It is now closed.



Precautions for handling valve cap

- A seal is attached to the point indicated by the arrow. Take care not to damage it.



- Be sure to tighten the valve cap securely after operating the valves.

Liquid-side tightening torque	Gas-side tightening torque
10.0 ~ 12.2 ft·lbf (13.5 ~ 16.5 N·m)	16.6 ~ 20.3 ft·lbf (22.5 ~ 27.5 N·m)

Precautions for handling servicing port

- Use a push-rod-provided charging hose for operation.
- Be sure to tighten the valve cap securely after operation.
Tightening torque.....8.5 ~ 10.3 ft·lbf (10.8 ~ 14.7 N·m)

7. ELECTRIC WIRING

CAUTION

To the electrician

- Do not operate until refrigerant piping work is completed. (Failure to adhere by this caution may lead to irreparable compressor damage.)

7-1 Wiring connection example for whole system

- Electrical wiring work should be done by a certified professional.
- Follow the "Wiring diagram" label when carrying out any electrical wiring.
Only proceed with wiring work after turning off all power.
- Always ground wires in accordance with relevant local and national regulations.
- Ground the indoor and outdoor units.
- Do not connect the ground wire to gas pipes, sewage pipes, lightning rods, or telephone ground wires.
 - **Gas pipes:** can explode or catch fire if there is a gas leak.
 - **Sewage pipes:** no grounding effect is possible if hard plastic piping is used.
 - **Telephone ground wires and lightning rods:** dangerous when struck by lightning due to abnormal rise in electrical potential in the grounding.
- Use copper wire.
- When doing the electrical wiring, always shut off the power supply before working, and do not turn on the switch until all work is complete.
- This unit has an inverter, so it must be grounded in order to reduce noise and prevent it affecting other appliances, and also to release any electrical build-up in the unit case due to leaked current.
- Do not install a power-factor improving phase-advancing capacitor under any circumstances.
(Not only will this not improve the power factor, but it might cause a fire.)
- Connect the wire securely using designated wire and fix it with attached clamp without applying external pressure on the terminal parts (terminal for power supply wiring, terminal for transmission wiring and ground terminal). See "7-3 How to connect the power supply wiring".
- Leftover wiring should not be wrapped and stuffed into the unit.
- Secure the wiring with the included clamp so that it does not come in contact with the piping or stop valve.
(See "7-3 How to connect the power supply wiring".)

CAUTION

- Use a conduit for field wiring.
- Outside the unit, make sure the communication wiring (i.e. for the remote controller wire, between units, etc.) and the high voltage wiring do not pass near each other, **keeping them at least 2 in. (50 mm) apart**. Proximity may cause electrical interference, malfunctions, and breakage.
- Be sure to connect the power supply wiring to the power supply wiring terminal block and secure it as described in “7-3 How to connect the power supply wiring”.
- Transmission wiring should be secured as described in “7-4 Transmission wiring connection procedure”.
- Secure wiring with clamp (accessory) to avoid contact with piping.
- Make sure the wiring and the front panel do not stick up above the structure, and close the panel firmly.

(Refer to figure 22)

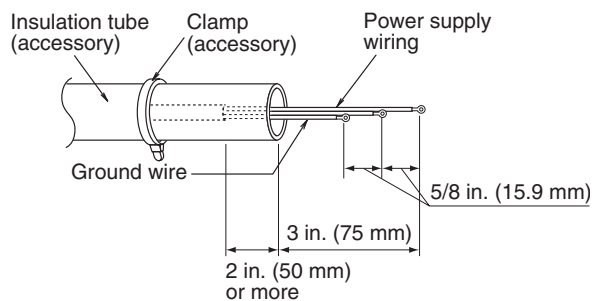
1. Fuse/Breaker
2. Power supply
3. Outdoor unit
4. 16V
5. 208/230V
6. Indoor unit
7. Remote controller
8. Ground wire

7-2 How to lay the power supply wiring and transmission wiring

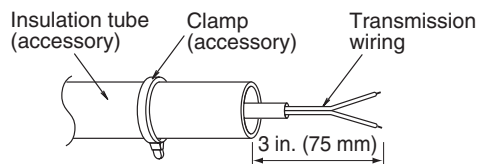
Let the power supply wiring and transmission wiring with a conduit pass through one of the knockout on the front or side cover, and let the transmission wiring with a conduit pass through another knockout.

- For protection from uninsulated live parts, thread the power supply wiring and the transmission wiring through the included insulation tube and secure it with the included clamp.

<Power supply wiring>

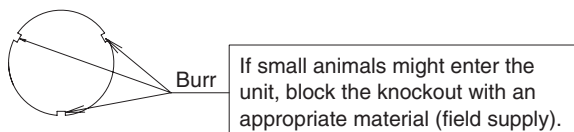


<Transmission wiring>



Precautions knockout

- Open the knockout with a hammer or the like.
- After knocking out the knockout, we recommend you remove burrs in the knockout and paint the edges and areas around the edges using the repair paint to prevent rusting.
- When passing wiring through knockout, make sure there are no burrs, and protect the wiring with protective tape.

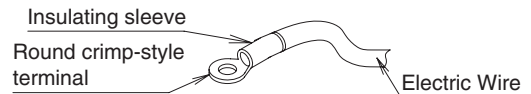


(Refer to figure 23)

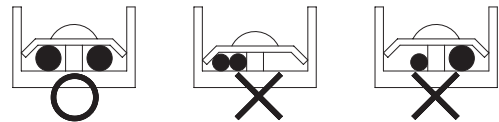
1. Stop valve fixing plate
2. Power supply wiring (including ground wire) or transmission wiring.
3. Back of unit
4. Knockout
5. Side of unit
6. Front of unit
7. Terminal block
8. Control Box

<Precautions when laying power supply wiring>

- Wiring of different thicknesses cannot be connected to the power supply terminal block. (Slack in the power supply wiring may cause abnormal heat.)
- Use sleeve-insulated round pressure terminals for connections to the power supply terminal block. When none are available, connect wire of the same diameter to both sides, as shown in the figure.



- Connect wires of the same gauge to both side.
- Do not connect wires of the same gauge to one side.
- Do not connect wires of different gauges.



Follow the instructions below if the wiring gets very hot due to slack in the power supply wiring.

- For wiring, use the designated power wire and connect firmly, then secure using the included clamping material to prevent outside pressure being exerted on the terminal board.
- Use an appropriate screwdriver for tightening the terminal screws. A screwdriver with a small head will strip the head and make proper tightening impossible.
- Over-tightening the terminal screw may break it.

See the table below the tightening torque of the terminal screws.

Tightening torque (ft-lbf / N-m)		
M5	Power supply terminal	1.76~2.15 / 2.39~2.91
M4	Shield ground	0.87~1.06 / 1.18~1.44
M3	Transmission wiring terminal block	0.58~0.72 / 0.8~0.97

7-3 How to connect the power supply wiring

CAUTION

Attach a circuit breaker or fuse.

Model	Phase and frequency	Voltage	Maximum overcurrent protective device	Minimum circuit ampacity
18-24 type	1~60Hz	208/230V	20A	16.5A
30-36-42-48 type	1~60Hz	208/230V	35A	29.1A

CAUTION

- The wiring should be selected in compliance with local laws and regulations. See the table above.
- Always turn off the power before doing wiring work.
- Grounding should be done in compliance with local laws and regulations.
- As shown in figure 25, when connecting the power supply wiring to the power supply terminal block, be sure to clamp securely.
- Once wiring work is completed, check to make sure there are no loose connections among the electrical parts in the control box.

(Refer to figure 24)

1. Stop valve fixing plate
2. Clamp (accessory)
3. Connecting power supply wiring
4. Ground wire (Yellow/Green)
5. Terminal block (X1M)
6. Transmission wiring
7. (To X2M [TO IN/ D UNIT] (F1, F2))
8. Terminal block (X2M)
9. Insulation tube (Large) (accessory)
10. Insulation tube (Small) (accessory)
11. Cut off the insulation tube sticking out of the outdoor unit.
12. Wire clamp and screw (accessory)

7-4 Transmission wiring connection procedure

- If an excessive force is applied while connecting a wire to the terminal block, the connection may be damaged.

(Refer to figure 25)

1. Terminal block (X2M)
2. Use balance type shield wire (with no polarity).
3. Indoor unit
4. Under no circumstances should 208/230V be connected.

Precautions regarding the length of wiring between units

Exceeding the following limits may cause transmission malfunctions, so observe them.

Max. wiring length Max. 3280 ft. (1000 m)

Precautions regarding wiring between units

- **Do not connect 208/230V power supply wiring to terminals for the transmission wiring. Doing so would destroy the entire system.**
- Wiring to the indoor unit should be wired to F1 and F2 (TO IN/D unit) on the outdoor unit's terminal block (X2M).

NOTE

- The above wiring should be wired using AWG18-16 (0.75-1.25 mm²) stranded, non-shielded wiring. (See figure 25 for how to ground the shielded parts.)
- All transmission wiring is to be procured on site.

8. ADDITIONAL REFRIGERANT CHARGE

WARNING

- When leaving the unit with the power on, be sure to switch with another person doing the installation or close the front panel.



8-1 Before adding refrigerant

- Make sure the following work and inspection is complete, in accordance with the installation manual.
 - Piping
 - Wiring
 - Air tight test, Vacuum drying

8-2 Checking the refrigerant tank

- Charge the refrigerant to the liquid pipe in its liquid state. Since R410A is a mixed refrigerant, its composition changes if charged in a gaseous state and normal system operation would no longer be assured.
- Check whether the tank has a siphon pipe before charging and place the tank so that the refrigerant is charged in liquid form. (See the figure below.)

Tank with siphon pipe



There is a siphon pipe inside, so the cylinder need not be upside-down to fill with liquid. (Stand the cylinder upright when filling.)

Other tanks



Stand the tank upside down and charge.

8-3 Adding refrigerant

WARNING

- To avoid injury always use protective gloves and eye protection when charging refrigerant.
- To avoid injury do not charge with unsuitable substances. Use only the appropriate refrigerant.

NOTE

- Refrigerant cannot be charged until field wiring has been completed. Refrigerant may only be charged after performing the airtight test and the vacuum drying (see above). When charging refrigerant into the system, take care that its maximum allowable charge is never exceeded, in view of the danger of liquid slugging. Refrigerant containers shall be opened slowly. To avoid compressor breakdown, do not charge the refrigerant more than the specified amount to raise the condensing pressure.

Filling after calculating the amount of refrigerant to add

1. Calculate the amount of refrigerant to add as described below.

<Calculation for refrigerant charging amount>

Refrigerant equivalent to 25 ft. (7.6 m) liquid piping is factory-charged in the outdoor unit.

Calculate the refrigerant charging amount based on the following formula.

- If the liquid piping length is 25 ft. (7.6 m) or less (lbs)

		Additional refrigerant charging amount [A]
Indoor unit type	FBQ30, 36, 42, 48	0
	FCQ30, 36, 42, 48	
	FAQ, FBQ18	0.15
	FBQ24	0.20
	FCQ18, 24	0.36
	FTQ18, 24	0.46
	FTQ30, 36	1.07
	FTQ42, 48	1.41

- If the liquid piping length is more than 25 ft. (7.6 m)

$$\begin{array}{|c|} \hline [A] \\ \hline \text{lbs} \\ \hline \end{array}
 +
 \frac{(\text{Liquid piping length}-25) \text{ ft.} \times 0.036}{\text{lbs}}
 =
 \begin{array}{|c|} \hline \text{Additional refrigerant charging amount} \\ \hline \text{lbs} \\ \hline \end{array}$$

Record the additional amount to the label stuck on the back of front panel.

2. After the vacuum drying is finished, open valve A and charge the calculated amount of refrigerant through the service port for the liquid-side stop valve. (See "Stop valve operation procedure" in "6. REFRIGERANT PIPING" for details on how to use the stop valve.)

(Refer to figure 26)

1. R410A Tank (Siphon system)
2. Measuring instrument
3. Valve A
4. Indoor unit
5. Stop valve service port
6. Gas line stop valve
7. Outdoor unit
8. Liquid line stop valve

State of valve A and the stop valve	Valve A	Liquid line stop valve	Gas line stop valve
Before starting to charge the refrigerant	Close	Close	Close
During charging of the refrigerant	Open	Close	Close

3. Close valve A after charging is complete.

Note: If all the refrigerant to be added cannot be charged using the above procedure, re-charge the refrigerant as below.

If all the refrigerant could not be added

Add refrigerant referring to the “Service Precautions” plate attached to the outdoor unit for details on the settings for adding refrigerant.

9. POST-WORK CHECKS

Perform the following checks after work is complete.

- (1) Drain pipe connection, removal of transport bracket → See “5. PRECAUTIONS ON INSTALLATION”.
- (2) Incorrect power supply wiring, loose screws → See “7-3 How to connect the power supply wiring”.
- (3) Incorrect transmission wiring, loose screws → See “7-4 Transmission wiring connection procedure”.
- (4) Incorrect refrigerant piping connections → See “6. REFRIGERANT PIPING”.
- (5) Piping sizes, use of insulation → See : “6-2 Selecting piping material”.
“6-6 Thermal insulation of piping”.
- (6) Stop valve check →
Make sure both the liquid-side and gas-side stop valves are open.
- (7) Record of Amount of Refrigerant Added →
Record it on “Record of Amount of Refrigerant Added” on the “Service Precautions” label.
- (8) Measuring the insulation of the main power circuit →
 - Use a 500V mega-tester.
 - Do not use the mega-tester for low voltage other than 208/230V. (Transmission wiring)

CAUTION

To the piping installer

After completing installation, be sure to open the valves.
(Operating the unit with the valve shut will break the compressor.)

10. TEST OPERATION

This unit is equipped with a crank case heater to ensure smooth startup. Be sure to turn the power on at least 6 hours before operation in order to have power running to the crank case heater.

WARNING

When leaving the unit with the power on, be sure to switch with another person doing the installation or close the front panel.



Precautions before turning the power on

- Using insulating sheets, tape electric parts as described in the “Service Precautions” label on the back of the front panel.
- The indoor unit connected to the outdoor unit operates automatically. Complete work on the indoor unit in order to ensure maximum safety.

10-1 Power On–Check Operation

- Make sure to perform the check operation after installation. (If the air conditioner is operated using the indoor remote controller without performing the check operation, the malfunction code “U3” is displayed in the indoor remote controller, and normal operation is disabled.)
- When making settings on the outdoor unit PC board (A1P or A2P) after turning the power on, do not touch anything other than the push-button switches and dip switches. (See the “Service Precautions” label for the locations of the push-button switches (BS1-5) and dip switches (DS1-1, 2) on the PC board (A1P or A2P).)
- During the operation, monitor the outdoor unit operation status and check for any incorrect wiring.

1. Close the outdoor unit's front panel. Turn the power on for the outdoor unit and the indoor unit.	Caution Be sure to turn the power on at least 6 hours before operation in order to have power running to the crank case heater.																								
2. • Open the outdoor unit's front panel. • Make sure the LED display on the outdoor unit's PC board (A1P or A2P) is as shown in the following table.																									
<18-24 type>	<table border="1"> <thead> <tr> <th>A1P</th> <th colspan="7">A2P</th> </tr> <tr> <th>HAP</th> <th>H1P</th> <th>H2P</th> <th>H3P</th> <th>H4P</th> <th>H5P</th> <th>H6P</th> <th>H7P</th> </tr> </thead> <tbody> <tr> <td>LED display (Default status before delivery)</td> <td>☀</td> <td>●</td> <td>●</td> <td>☀</td> <td>●</td> <td>●</td> <td>●</td> </tr> </tbody> </table>	A1P	A2P							HAP	H1P	H2P	H3P	H4P	H5P	H6P	H7P	LED display (Default status before delivery)	☀	●	●	☀	●	●	●
A1P	A2P																								
HAP	H1P	H2P	H3P	H4P	H5P	H6P	H7P																		
LED display (Default status before delivery)	☀	●	●	☀	●	●	●																		
<30-48 type>	<table border="1"> <thead> <tr> <th colspan="8">A1P</th> </tr> <tr> <th>HAP</th> <th>H1P</th> <th>H2P</th> <th>H3P</th> <th>H4P</th> <th>H5P</th> <th>H6P</th> <th>H7P</th> </tr> </thead> <tbody> <tr> <td>LED display (Default status before delivery)</td> <td>☀</td> <td>●</td> <td>●</td> <td>☀</td> <td>●</td> <td>●</td> <td>●</td> </tr> </tbody> </table>	A1P								HAP	H1P	H2P	H3P	H4P	H5P	H6P	H7P	LED display (Default status before delivery)	☀	●	●	☀	●	●	●
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	LED display: ● OFF ☀ ON ☀ Blinking																								
! To avoid the risk of electric shock, do not touch anything other than the push-button switches on the PC board (A1P or A2P) when making settings.																									
3. • When the customer requests quiet operation or demand operation, make these settings using the push-button switches (BS1-5) on the outdoor unit's PC board (A1P or A2P). • Operate the push-button switches through the opening after protecting it with an insulation cover. (See the “Service Precautions” label for details.)	! Use caution to avoid electric shock while working, since the outdoor unit is on. • Only set the push-button switches (BS1-5) after making sure the operation pilot lamp on PC board is lit up. • See the “Service Precautions” label on the back side of the front panel for details on how to make the settings. (Do not forget to write the settings down on the “Service Precautions” label.) • The dip switch (DS1-1) does not need to be set, so do not touch it. Doing so may cause malfunction.																								
4. • Check that the liquid and gas-side stop valves are open, and if they are closed, open them.	Caution Do not leave any stop valve closed otherwise the compressor will fail.																								
5. Press the test operation button (BS4) for at least five seconds and perform check operation. For details, see “How to perform check operation” on the “Service Precautions” label.	• If you have to leave the outdoor unit during check operation, either switch with another worker or close the front panel. • The system operates for about 30 minutes (60 minutes at maximum) and automatically stops the check operation. • The system can start normal operation about 3 minutes after the check operation if the remote controller does not display any malfunction code. The remote controller will show the test operation display during check operation.																								
6. Close the front panel of the outdoor unit after check operation is complete.																									

<Precautions During Check Operation>

- If operation is performed within 12 minutes of the indoor and outdoor units being turned on, H2P will light up, and the compressor will not run. Only perform operation after checking that the LED display is as shown in “10-1 Power On–Check Operation” 2. table.
- In order to ensure uniform refrigerant distribution, it may take up to around 10 minutes for the compressor to start up after the unit begins running. This is not a malfunction.
- The check operation cannot be performed in other modes.
- If the discharge pipe thermistor (R2T), the suction pipe thermistor (R3T), and the pressure sensors (S1NPH and S1NPL) are removed before operation, the compressor might burn out, so avoid this under all circumstances.

10-2 Temperature control operation checklist

- After check operation is complete, check the temperature control using normal operation.
(Heating is not possible if the outdoor temperature is 75°F (24°C) or higher.)
 - Make sure the indoor and outdoor units are operating normally.
(If liquid compression by the compressor or other abnormal noises can be heard, stop the unit immediately, heat the crank case for a sufficient amount of time, and try again.)
 - Check to see if cold (or hot) air is coming out of the indoor unit.
 - Press the fan direction and fan speed buttons on the indoor unit to see if they operate properly.

<Precautions during temperature control checks>

- For around 5 minutes after the compressor stops, the compressor will not run even if the “On/Off” button on the remote controller is pressed.
- When the system operation is stopped by the remote controller, the outdoor unit may continue operating for up to 1 minute.
- Malfunction code “U3” is displayed if check operation is not performed using the test operation button the first time after installation. Perform the check operation in accordance with “10-1 Power On–Check Operation”.

[Remote controller displays malfunction code] (Check on a remote controller)

Malfunction code	Installation error	Remedial action
E3	The stop valve of outdoor unit is left closed.	Open the gas-side stop valve and the liquid-side stop valve.
	Refrigerant overcharge.	Recalculate the required amount of refrigerant from the piping length and correct the refrigerant charge level by recovering any excessive refrigerant with a refrigerant recovery unit.
F6	Refrigerant overcharge.	Recalculate the required amount of refrigerant from the piping length and correct the refrigerant charge level by recovering any excessive refrigerant with a refrigerant recovery unit.
E4	The stop valve of outdoor unit is left closed.	Open the gas-side stop valve and the liquid-side stop valve.
	Insufficient refrigerant.	Check if the additional refrigerant charge has been finished correctly. Recalculate the required amount of refrigerant from the piping length and add an adequate amount of refrigerant.
F3	Refrigerant overcharge.	Recalculate the required amount of refrigerant from the piping length and correct the refrigerant charge level by recovering any excessive refrigerant with a refrigerant recovery unit.
	The stop valve of outdoor unit is left closed.	Open the gas-side stop valve and the liquid-side stop valve.
	Insufficient refrigerant.	Check if the additional refrigerant charge has been finished correctly. Recalculate the required amount of refrigerant from the piping length and add an adequate amount of refrigerant.
U2	Insufficient power supply voltage	Check to see if the power supply voltage is supplied properly.
U3	If check operation has not been performed.	Perform check operation.
U4	No power is supplied to outdoor unit.	Turn the power on for the outdoor unit.
UA	If no dedicated indoor unit is being used.	Check the indoor unit. If it is not a dedicated unit, replace the indoor unit.

UF	The stop valve of outdoor unit is left closed.	Open the gas-side stop valve and the liquid-side stop valve.
	If the right indoor unit piping and wiring are not properly connected to the outdoor unit.	Make sure that the right indoor unit piping and wiring are properly connected to the outdoor unit.
UH	If the transmission wiring has not been connected or it has shorted.	Make sure the transmission wiring is correctly attached to terminals (X2M) F1/F2 (TO IN/D UNIT) on the outdoor unit circuit board.

- When using a central controller, see the installation manual or service manual which came with the central controller.

[If nothing is displayed on the remote controller]

- There might be a problem with the connections or communication between the indoor unit and the remote controller. Make sure all the wiring is properly connected.



CAUTION

To the piping installer, To the electrician

After the test operation, when handing the unit over to the customer, make sure the front panel on the unit and all screws are attached.

10-3 Final refrigerant charge adjustment

It is not necessary to do this final adjustment normally, but perform the following operation only when the most adequate refrigerant charge for the best performance is required and the piping length between the outdoor and indoor units is less than 50 ft. (15 m).

The outdoor temperature must be between 65°F (18°C) and 105°F (40°C).

The number of revolutions of the compressor must be greater than or equal to the charge mode. (It can be confirmed by LED display on PC board)

The number of revolutions of the compressor LED display.

(○●●●●●○:Chargeable ○●●●●●●:Impossible to charge)

Run the system for 60 minutes in cooling by the forced operation using the field setting mode 2, No.20 LED ○●:ON, mode 2, No.7 LED ○●:ON, (Refer to Service Manual.) to allow pressures to stabilize.

Check subcooling of outdoor unit at LSV. Systems should have the target subcooling in the table below.

- If the subcooling is low, add charge little by little to raise subcooling to the target value. (The maximum additional charge is 2.2 lbs. (1kg))
- If the subcooling is high, remove charge to lower the subcooling to the target value.

Model	Target subcooling
18-24 type	6±1°F (3.33±0.56°C)
30-36 type	7±1°F (3.89±0.56°C)
42 type	8±1°F (4.44±0.56°C)
48 type	9±1°F (5.00±0.56°C)

However, if the connected indoor unit is FCQ or FBQ, refer to the table below.

Model	Target subcooling
18-24-30 type	6±1°F (3.33±0.56°C)
36 type	7±1°F (3.89±0.56°C)
42 type	8±1°F (4.44±0.56°C)
48 type	9±1°F (5.00±0.56°C)

11. ENERGY SAVING AND OPTIMUM OPERATION

The unit is equipped with advanced energy saving functionality. Depending on the priority, emphasis can be put on energy saving or comfort level. Several parameters can be selected, resulting in the optimal balance between energy consumption and comfort for the particular application.

Several patterns are available and explained below. Modify the parameters to the needs of your building and to realize the best balance between energy consumption and comfort.

Refer to Service Manual for changing the field settings.

Setting definition: [A-B]=C; A=mode, B=setting NO., C=setting value.

11-1 Three main operation methods are available:

• Basic

The refrigerant temperature is fixed independent from the situation. It corresponds to the standard operation which is known and can be expected from/under previous systems:

- To activate this operation method under cooling operation: change field setting [2-8]=2.
- To activate this operation method under heating operation: change field setting [2-9]=2.

• Automatic (default)

The refrigerant temperature is set depending on the outdoor ambient conditions. As such adjusting the refrigerant temperature to match the required load (which is also related to the outdoor ambient conditions). E.g., when your system is operating in cooling, you do not need as much cooling under low outdoor ambient temperatures (e.g., 77°F (25°C)) as under high outdoor ambient temperatures (e.g., 95°F (35°C)). Using this idea, the system automatically starts increasing its refrigerant temperature, automatically reducing the delivered capacity and increasing the system's efficiency.

- To activate this operation method under cooling operation: change field setting [2-8]=3 (default).

E.g., when your system is operating in heating, you do not need as much heating under high outdoor ambient temperatures (e.g., 59°F (15°C)) as under low outdoor ambient temperatures (e.g., 23°F (-5°C)).

Using this idea, the system automatically starts decreasing its refrigerant temperature, automatically reducing the delivered capacity and increasing the system's efficiency.

- To activate this operation method under heating operation: change field setting [2-9]=1 (default).

• Hi-sensible (cooling)

The refrigerant temperature is set higher (cooling) compared to basic operation. The focus under high sensible mode is improved comfort for the customer.

The selection method of indoor units is important and has to be considered as the available capacity is not the same as under basic operation. For details concerning to Hi-sensible applications, please contact your dealer.

- To activate this setting under cooling operation: change field setting [2-8] to the appropriate value, matching the requirements of the pre-designed system containing a high sensible solution.

Value	To target
4	46°F (8°C)
5	48°F (9°C)
6	50°F (10°C)
7	52°F (11°C)

11-2 Several comfort settings are available

For each of above modes a comfort level can be selected. The comfort level is related to the timing and the effort (energy consumption) which is put in achieving a certain room temperature by temporarily changing the refrigerant temperature to different values in order to achieve requested conditions more quickly.

• Powerful

Overshoot (during heating operation) or undershoot (during cooling operation) is allowed compared to the requested refrigerant temperature, in order to achieve the required room temperature very fast. The overshoot is allowed from the start up moment.

In case of cooling operation the evaporating temperature is allowed to go down to 37°F (3°C) on temporary base depending on the situation.

In case of heating operation the condense temperature is allowed to go up to 120°F (49°C) on temporary base depending on the situation. When the request from the indoor units becomes more moderate, the system will eventually go to the steady state condition which is defined by the operation method above.

- To activate the powerful comfort setting under cooling operation, change field setting [2-41]=3.

This setting is used in conjunction with setting [2-8].

- To activate the powerful comfort setting under heating operation, change field setting [2-42]=3.

This setting is used in conjunction with setting [2-9].

• Quick

Overshoot (during heating operation) or undershoot (during cooling operation) is allowed compared to the requested refrigerant temperature, in order to achieve the required room temperature very fast. The overshoot is allowed from the start up moment.

In case of cooling operation the evaporating temperature is allowed to go down to 43°F (6°C) on temporary base depending on the situation. In case of heating operation the condense temperature is allowed to go up to 115°F (46°C) on temporary base depending on the situation. When the request from the indoor units becomes more moderate, the system will eventually go to the steady state condition which is defined by the operation method above.

- To activate the quick comfort setting under cooling operation, change field setting [2-41]=2.

This setting is used in conjunction with setting [2-8].

- To activate the quick comfort setting under heating operation, change field setting [2-42]=2.

This setting is used in conjunction with setting [2-9].

• Mild

Overshoot (during heating operation) or undershoot (during cooling operation) is allowed compared to the requested refrigerant temperature, in order to achieve the required room temperature very fast. The overshoot is not allowed from the start up moment. The start up occurs under the condition which is defined by the operation mode above.

In case of cooling operation the evaporating temperature is allowed to go down to 43°F (6°C) on temporary base depending on the situation. In case of heating operation the condense temperature is allowed to go up to 115°F (46°C) on temporary base depending on the situation. When the request from the indoor units becomes more moderate, the system will eventually go to the steady state condition which is defined by the operation method above.

The start up condition is different from the powerful and quick comfort setting.

- To activate the mild comfort setting under cooling operation, change field setting [2-41]=1.

This setting is used in conjunction with setting [2-8].

- To activate the mild comfort setting under heating operation, change field setting [2-42]=1.

This setting is used in conjunction with setting [2-9].

• Eco

The original refrigerant temperature target, which is defined by the operation method (see above) is kept without any correction, unless for protection control.

- To activate the mild comfort setting under cooling operation, change field setting [2-41]=0.

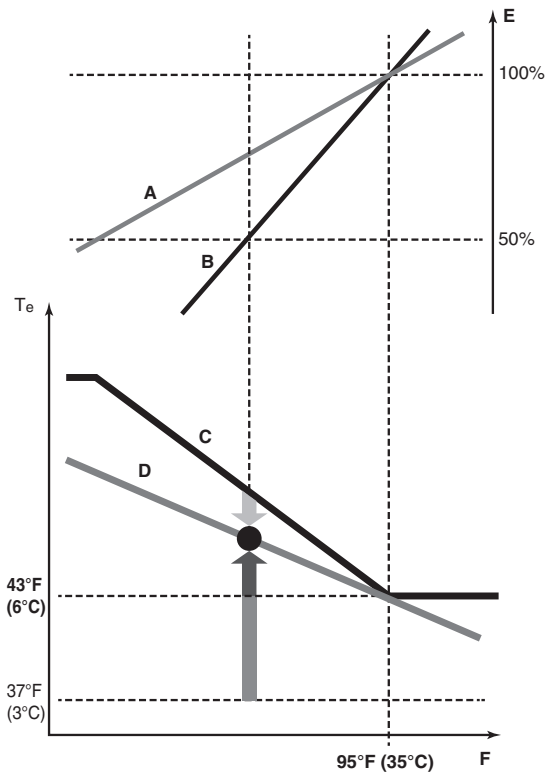
This setting is used in conjunction with setting [2-8].

- To activate the mild comfort setting under heating operation, change field setting [2-42]=0.

This setting is used in conjunction with setting [2-9].

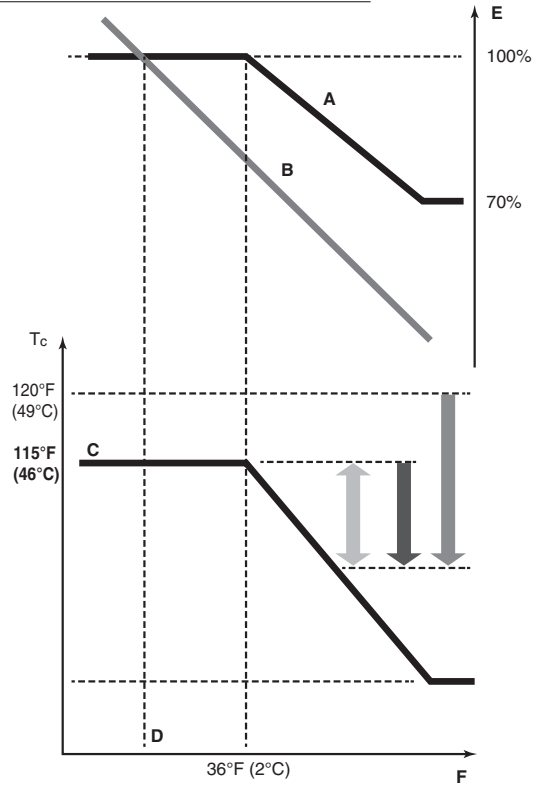
No matter which control is selected, variations on the behavior of the system are still possible due to protection controls to keep the unit operating under reliable conditions. The intentional target, however, is fixed and will be used to obtain the best balance between energy consumption and comfort, depending on the application type.

Example: Automatic mode during cooling



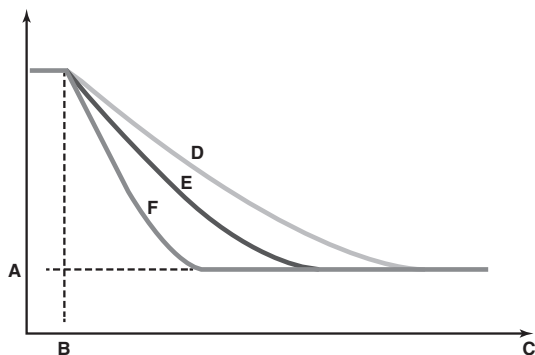
- A** Actual load curve
- B** Virtual load curve (initial capacity automatic mode)
- C** Virtual target value (initial evaporation temperature value automatic mode)
- D** Required evaporation temperature value
- E** Load factor
- F** Outside air temperature
- Te** Evaporating temperature
- Quick
- Powerful
- Mild

Example: Automatic mode during heating



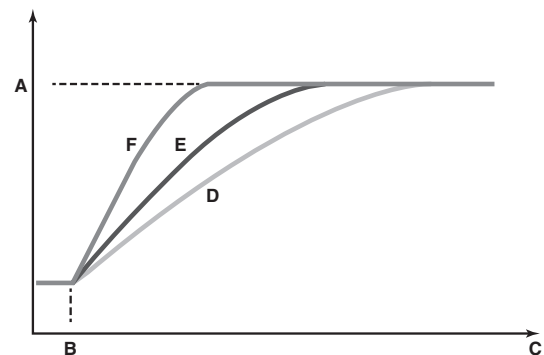
- A** Virtual load curve (default automatic mode peak capacity)
- B** Load curve
- C** Virtual target value (initial condensation temperature value automatic mode)
- D** Design temperature
- E** Load factor
- F** Outside air temperature
- Tc** Condensing temperature
- Quick
- Powerful
- Mild

Room temperature evolution:



- A** Indoor unit set temperature
- B** Operation start
- C** Operating time
- D** Mild
- E** Quick
- F** Powerful

Room temperature evolution:



- A** Indoor unit set temperature
- B** Operation start
- C** Operating time
- D** Mild
- E** Quick
- F** Powerful

11-3 Setting of Heat Pump Lockout and Emergency Heat Mode

Heat pump is locked out when the setting below and/or external input to ABC terminal has been made.

No.	Setting item display								Setting condition display								
	Setting item	MODE H1P	TEST H2P	C/H selection			Low noise H6P	Demand H7P									
				IND H3P	Master H4P	Slave H5P											
16	Setting of heat pump lockout 1	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	OFF	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	*
									ON	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	
37	Setting of heat pump lockout 2	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	OFF	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	*
									Mode 1	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	
									Mode 2	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	
									Mode 3	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	
									Mode 4	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	
									Mode 5	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	
									Mode 6	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	

Type	Description	Actions						
		Field setting	Shorted between	Heating Thermo-on		Heating Thermo-off		
				Heater	Fan	Heater	Fan	
I	–	Heat-pump heating is always locked out	2-16: ON	–	ON	ON (H/L)	OFF	LL
II	Mode 1	Lockout is controlled by ABC terminals	2-37: Mode 1	A-C	ON	ON (H/L)	OFF	LL
	B-C			OFF				
	Mode 2 (for a heater which does not need airflow)		2-37: Mode 2	A-C		LL		LL
				B-C		OFF		OFF
	Mode 3	Lockout is controlled by the outdoor ambient temperature and setpoint which is configured by the field setting 2-57 and 2-47	2-37: Mode 3	Same as 2-37: Mode 1, A-C shorted				
	Mode 4	2-37: Mode 4	Same as 2-37: Mode 1, B-C shorted					
	Mode 5	2-37: Mode 5	Same as 2-37: Mode 2, A-C shorted					
	Mode 6	2-37: Mode 6	Same as 2-37: Mode 2, B-C shorted					

Heat pump lockout temperature

Heat pump would be locked out when the outdoor ambient temperature is smaller than the heat pump lockout temperature. This setting is only effective when heat pump lockout mode has been set. And should make the field setting of indoor unit. Refer to Service Manual for details.

No.	Setting item display								Setting condition display									
	Setting item	MODE H1P	TEST H2P	C/H selection			Low noise H6P	Demand H7P			*Factory setting							
				IND H3P	Master H4P	Slave H5P												
57	Heat pump lockout temperature	○	○	○	○	●	●	○	-26.1°C (-15°F)	○	●	●	●	●	●	●	●	*
									-23.3°C (-10°F)	○	●	●	●	●	●	○		
									-20.5°C (-5°F)	○	●	●	●	●	○	●		
									-17.7°C (0°F)	○	●	●	●	●	○	○		
									-15°C (5°F)	○	●	●	●	○	●	●		
									-12.2°C (10°F)	○	●	●	●	○	●	○		
									-9.4°C (15°F)	○	●	●	●	○	○	●		
									-6.6°C (20°F)	○	●	●	●	○	○	○		
									-3.8°C (25°F)	○	●	●	○	●	●	●		
									-1.1°C (30°F)	○	●	●	○	●	●	○		
									1.6°C (35°F)	○	●	●	○	●	○	●		
									4.4°C (40°F)	○	●	●	○	●	○	○		
									7.2°C (45°F)	○	●	●	○	○	●	●		
									10°C (50°F)	○	●	●	○	○	●	○		
Forced heat pump lockout	○	●	●	○	○	○	●											

Heat pump lockout release differential

Heat pump would be resumed when the outdoor ambient temperature is recovered by differential above the heat pump lockout temperature.

No.	Setting item display								Setting condition display								
	Setting item	MODE H1P	TEST H2P	C/H selection			Low noise H6P	Demand H7P			*Factory setting						
				IND H3P	Master H4P	Slave H5P											
47	Heat pump lockout release differential	○	○	●	○	○	○	○	2.8°C (5°F)	○	●	●	●	●	●	●	
									5.6°C (10°F)	○	●	●	●	●	○	*	
									8.3°C (15°F)	○	●	●	●	○	●		

Automatic lockout

When heat pump lockout mode has been set, the auto backup function will automatically be set. This will allow the auxiliary or secondary heat source to be automatically energized in the event of a system failure related to outdoor units.

12. CAUTION FOR REFRIGERANT LEAKS

(Points to note in connection with refrigerant leaks)

Introduction

The installer and system specialist shall secure safety against leakage according to local regulations or standards. The following standards may be applicable if local regulations are not available.

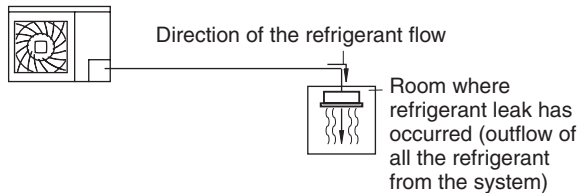
The SPLIT System, like other air conditioning systems, uses R410A as refrigerant. R410A itself is an entirely safe non-toxic, non-combustible refrigerant. Nevertheless care must be taken to ensure that air conditioning facilities are installed in a room which is sufficiently large. This assures that the maximum concentration level of refrigerant gas is not exceeded, in the unlikely event of major leak in the system and this in accordance to the local applicable regulations and standards.

Maximum concentration level

The maximum charge of refrigerant and the calculation of the maximum concentration of refrigerant is directly related to the humanly occupied space in to which it could leak.

The unit of measurement of the concentration is lb./ft³ (the weight in lb. of the refrigerant gas in 1ft³ volume of the occupied space).

Compliance to the local applicable regulations and standards for the maximum allowable concentration level is required.



Pay a special attention to the place, such as a basement, etc. where refrigerant can stay, since refrigerant is heavier than air.

Procedure for checking maximum concentration

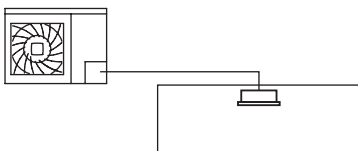
Check the maximum concentration level in accordance with steps 1 to 4 below and take whatever action is necessary to comply.

1. Calculate the amount of refrigerant (lb.) charged to each system separately.

amount of refrigerant in the unit (amount of refrigerant with which the system is charged before leaving the factory)	+	additional charging amount (amount of refrigerant added locally in accordance with the length or diameter of the refrigerant piping and type of indoor unit)	=	total amount of refrigerant (lb.) in the system
---	---	--	---	---

NOTE

- Where a single refrigerant facility is divided into 2 entirely independent refrigerant systems then use the amount of refrigerant with which each separate system is charged.
2. Calculate a room volume (ft³)



3. Calculating the refrigerant concentration by using the results of the calculations in steps 1 and 2 above.

total amount of refrigerant in the refrigerant system	÷	volume (ft ³) of the room in which there is an indoor unit installed	≤	maximum concentration level (lb./ft ³)
---	---	--	---	--

4. Dealing with the situations where the result exceeds the maximum concentration level.
Where the installation of a facility results in a concentration in excess of the maximum concentration level then it will be necessary to revise the system.
Please consult your dealer.

DAIKIN COMFORT TECHNOLOGIES MANUFACTURING, L.P.

Daikin Texas Technology Park,
19001 Kermier Road,
Waller, TX, 77484, U.S.A.





Wired remote controller

BRC1H Series

DAIKIN APP

Ver.1.0.1

Support manual for installer

English

Français

Español



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Cautions for use

- ▶ DAIKIN APP (hereafter referred to as “app”) is an application provided by Daikin Industries, Ltd. which makes it simple to carry out RC settings of remote controllers made for industrial air conditioners.
- ▶ Communication fees which result from the download, update, or use of this app are the responsibility of the user.
(This includes additional communication fees which result from updates of this app, re-setting of this app if not functioning correctly, etc.)



Cautions for use

- ▶ App user should be in close proximity to the remote controller.
Do not use Bluetooth low energy connection around wireless LAN or other wireless equipment, around equipment which produces radio waves, or in environments with poor signal conditions.
There is a possibility that connection will be interrupted frequently, communication speed may be significantly reduced and errors may occur.
- ▶ Do not turn off the Bluetooth function of your smartphone while using this app.
- ▶ If worried about your smartphone being infected by a computer virus, we recommend that you install separate anti-virus software.



App startup

About devices that can be used

Please use this app on a device compatible with Bluetooth low energy communication, as this app uses Bluetooth low energy communication to write setting information to the remote controller.

Also, please use a device with a rear-facing camera, as this app scans QR codes after startup depending on usage.

- Compatible OS versions:
iOS 12.0 or higher
Android 9.0 or higher
- Equipped with rear-facing camera
- Please use a smartphone compatible with BLE 4.2 or higher.



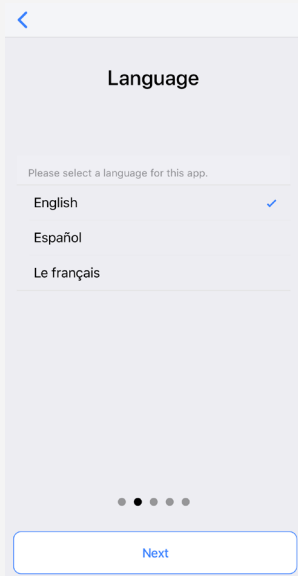
App startup

- This app can only connect with “BRC1H7” series wired remote controllers.
- This app is compatible with iOS Dark Mode.
iOS 13 or higher is required to use Dark Mode.

App startup

Language setting

Select the language to display when using this app.

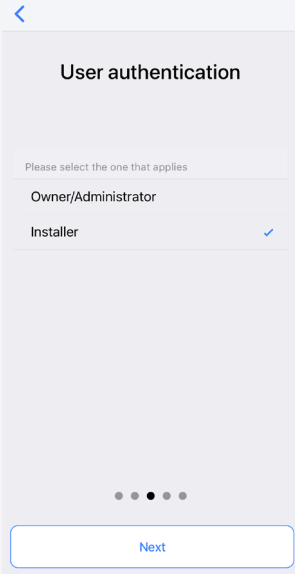




App startup

User selection

Select “Installer”.



The image shows a mobile application screen titled "User authentication". At the top left, there is a blue back arrow. Below the title, a light gray box contains the text "Please select the one that applies". Below this, there are two radio button options: "Owner/Administrator" and "Installer". The "Installer" option is selected, indicated by a blue checkmark to its right. At the bottom of the screen, there are five dots in a row, with the second dot from the left being filled, indicating the current step in a sequence. Below the dots is a white button with a blue border and the text "Next".

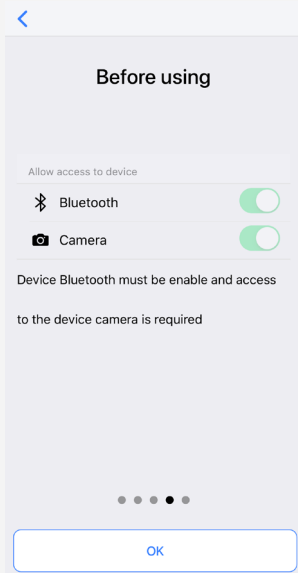


App startup

Bluetooth and camera setting

Set the device Bluetooth and camera function to available.

If not set to available, this app cannot be used.





App startup

QR code scanning

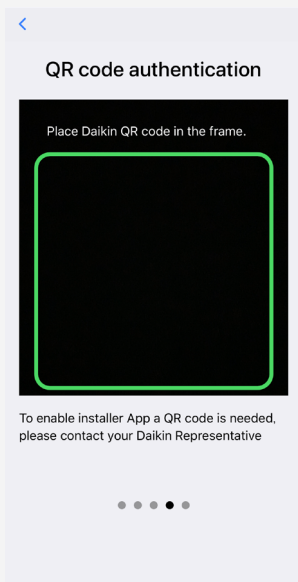
When using this app with installer authority, it is necessary to use the camera to scan the QR code distributed to related parties only by **Daikin's sales office**.

If you do not possess a QR code, it is only possible to use functions allowed with owner/administrator authority.

Also, if the device on which you use this app changes or you update this app, please re-scan the QR code.

The QR code could be update with prior notice.

App startup

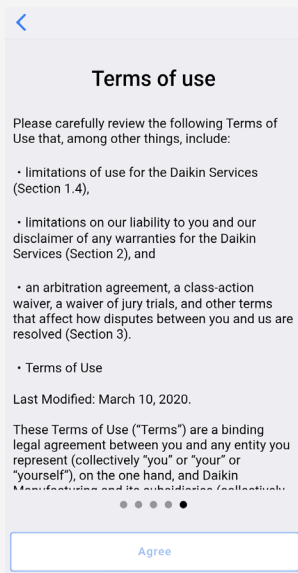




App startup

Terms of service

After initial startup and setting, upon reaching the end of initial setting, the terms of use of this app are displayed. Please read the terms of use to the end. You must agree to the terms of use to proceed with use of this app.





App startup

Usage limitations

Every time this app starts up, it performs a version check, so as a rule, please use it in an environment where internet connection is possible. If there is a newer version of this app, please update this app.

If this app is not updated to the latest version, this app cannot be used.

Also, if the app is being used in an environment where internet connection is not possible and the app has been started more than 31 times since the last version check, the app cannot be used until a version check is performed again.



Basic usage

How to read this operation manual

Main : Represents the Main RC

Sub : Represents the Sub RC

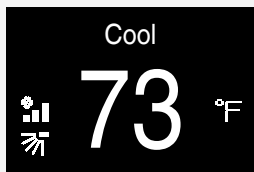
Remote controller preparation

For details on remote controller usage, refer to the installation manual included with the remote controller.

■ Display the installer menu screen

When using this app, it is necessary to display the installer menu screen on the remote controller.

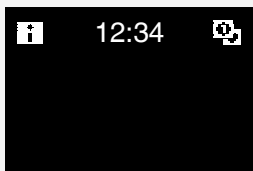
1. Display the basic screen on the remote controller.








Basic usage

2. Press the center button on the remote controller for 5 seconds or more, and display the information screen.



3. While the information screen is displayed, press the center , right  and left  button (in that order), and keep them pressed for 10 seconds or more to display the installer password input screen.

* If a password has been set, the password input screen will be displayed. If a password has not been set, this screen will not be displayed, and continue to step 4.





Basic usage

4. After the installer menu screen is displayed, select the Bluetooth setting icon.

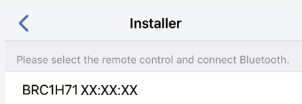


Basic usage

Pairing with the remote controller

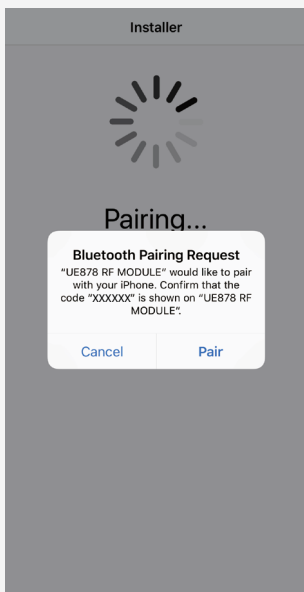
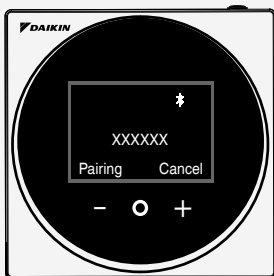
1. After the Bluetooth setting screen is displayed on the remote controller*, use this app to select the remote controller you want to connect to.

* The last 6 digits of the Bluetooth device address are displayed on the remote controller, select the same 6 digits that are also displayed on the app.



Basic usage

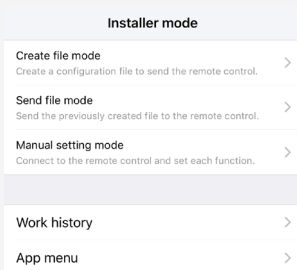
2. A 6 digit number is displayed on the screens of both the remote controller and this app, so confirm that the displayed numbers are the same, then press “Pairing” on the remote controller side and press “Pairing” on the app side.





Basic usage

3. After pairing is complete, the Installer mode menu is displayed on the app.





Basic usage

How to use the app

CAUTION

Once this app writes setting contents to the remote controller, the previous setting contents are overwritten.

From the app Installer Mode Menu, select one of the option below:

1. Create file mode

Create a setting file in advance for the remote controller and indoor unit or outdoor unit to save time on site. Also, re-edit setting files which have been created.

2. Send file mode

Carry out setting from a file saved in this app.



Basic usage

3. Manual setting mode

Send the setting data of each setting item to the remote controller.

This is recommended if carrying out minor setting modifications on-site.

4. Work history

Review settings log for the remote controller.

5. App menu

▶ Application version

You can confirm the software version of the app.

▶ Terms of use

You can confirm the terms of use of the app.

▶ Open source licenses

You can confirm the open-source software license this app uses.



Basic usage

▶ Application language

You can change the language displayed by the app.

▶ Application time

You can change whether the app displays time in 24-hour or 12-hour style.



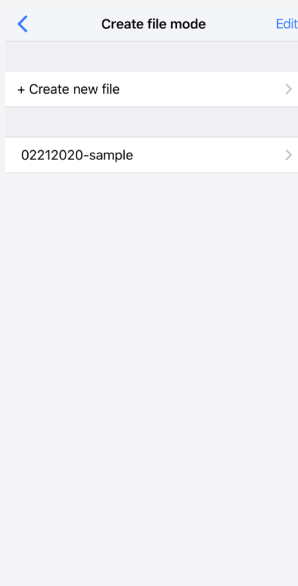
Create file mode

Create a new settings file

Select “+Create new file” to create a new settings file.

Editing created files

By selecting any file, it is possible to edit the created file.





Create file mode

- +Create new file

- Maintenance

Field Setting

Main

Change the internal settings of the outdoor and indoor units, ERV, and remote controller. Specify the setting items with “Mode” and “Switch”, then set the position (setting value).

After all settings are complete, press the “<” button.

- * When changing settings, it is sometimes necessary to restart the remote controller.
- * Set a proper mode number, FIRST CODE NO. (SW), and SECOND CODE NO. after confirming with the installation manual/ technical documentation.
- * As field settings are different on the indoor and outdoor unit, please confirm.



Create file mode

- **+Create new file**

- **Maintenance**

- * The switches that can be set vary depending on the device to which the remote controller is connected.
(An error will occur if setting of a switch which cannot be set is performed, and changes to other switches will not be reflected.)
- * When performing field settings in create file mode, check the installation manual of the connected device.
(When the setting change is reflected, the setting will be overwritten, and it will not be possible to return to the original setting.)



Create file mode

- +Create new file

- Maintenance

<
Field setting
?

Type
Indoor unit ▾

Mode
10 ▾

Switch

0 * ▾	1 * ▾	2 * ▾	3 * ▾
4 * ▾	5 * ▾	6 * ▾	7 * ▾
8 * ▾	9 * ▾	10 * ▾	11 * ▾
12 * ▾	13 * ▾	14 * ▾	15 * ▾

▶ Type

Set the type of device to perform settings on (indoor unit or remote controller).



Create file mode

- +Create new file

- Maintenance

▶ Mode

Set the field setting mode number.



Create file mode

- +Create new file

- Indoor unit settings

Filter auto clean

Main

Set the time when you want to start the filter auto clean function.

After all settings are complete, press the “<” button.

A screenshot of a mobile application interface for setting the filter auto clean function. The screen has a white background with a light blue header bar. The header bar contains a back arrow on the left, the text "Filter auto clean" in the center, and a question mark icon on the right. Below the header, there are two main settings sections. The first section is labeled "Time span" and shows a dropdown menu with the selected time "00:00am-03:00am". The second section is labeled "Forbid filter auto clean" and features a toggle switch that is currently turned off (grey).



Create file mode

- +Create new file

- Indoor unit settings

▶ Time span

Set the time when you want the filter auto clean function to operate.

▶ Forbid filter auto clean

Set the filter auto clean function to enable/disable.



Create file mode

- +Create new file

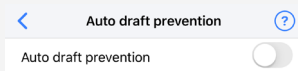
- Indoor unit settings

Auto draft prevention

Main

Set the auto draft prevention function, so that people are not directly hit by airflow.

After all settings are complete, press the “<” button.





Create file mode

- +Create new file

- Indoor unit settings

▶ Auto draft prevention

Set the auto draft prevention function to enable/disable.



Create file mode

- +Create new file

- Indoor unit settings

Sensor settings

Main

Set the sensing sensor low mode function, which controls power consumption by gradually changing the internal set temperature after it detects that no people are present, or set the sensing sensor stop mode function, which stops operation of the air conditioner after it detects that no people are present and a fixed amount of time has elapsed.

After all settings are complete, press the “<” button.



Create file mode

- +Create new file

- Indoor unit settings

Sensing sensor	
Sensing sensor low mode	<input checked="" type="checkbox"/>
Cool	
Setpoint increment	1°F
Increment time	30 minutes
Setpoint high limited	82°F
Heat	
Setpoint increment	1°F
Decrement time	30 minutes
Setpoint low limited	68°F
Sensing sensor stop mode	<input checked="" type="checkbox"/>
Auto off timer	1 hour

► Sensing sensor low mode

Set the sensing sensor low mode function to enable/disable.



Create file mode

- +Create new file

- Indoor unit settings

▶ Cool/Heat

Setpoint increment or decrement

Set the setpoint adjustment value for the cool/heat temperature.

Increment or Decrement time

Set the number of minutes after which the sensing sensor low mode function will begin if no occupancy is detected and the air conditioner is in Cool/Heat mode.

Setpoint high or low limit

Set limits on the correction value (a setpoint high limit for cool and a setpoint low limit for heat).

▶ Sensing sensor stop mode

Set the sensing sensor stop mode function to enable/disable.



Create file mode

- +Create new file

- Indoor unit settings

▶ Auto off timer

Set the number of minutes after which the sensing sensor stop mode function will begin if no occupancy is detected.



Create file mode

- +Create new file

- RC settings

Setpoint configuration

Main

Setpoint mode and differential can be set when changeover is available.

After all settings are complete, press the “<” button.

A screenshot of a mobile application interface for 'Setpoint configuration'. The screen has a white background with a light blue header bar. The header bar contains a back arrow on the left, the text 'Setpoint configuration' in the center, and a question mark icon on the right. Below the header, there are two rows of settings, each with a label on the left and a value on the right followed by a downward arrow. The first row is 'Setpoint mode' with the value 'Dual'. The second row is 'Setpoint minimum differential' with the value '2°F'.

Setpoint configuration	
Setpoint mode	Dual ▼
Setpoint minimum differential	2°F ▼



Create file mode

- +Create new file

- RC settings

► Setpoint mode

Set the setpoint mode.

- Single
The cool setpoint and heat setpoint will be made the same, and the room temperature will be kept close to this one setpoint.
- Dual
The cool setpoint and heat setpoint will be made different, and the room temperature will be kept between these cool and heat setpoints.



Create file mode

- +Create new file

- RC settings

- None

Set the cool temperature and heat temperature so that they do not restrict each other.

When set to None, automatic cooling/heating changeover (Changeover) is unavailable.

▶ **Setpoint minimum differential**

Set the setpoint minimum differential between the cool and heat setpoints.



Create file mode

- +Create new file

- RC settings

Setpoint range limitation

Main

Limit the range of setpoints which can be set from the remote controller.

After all settings are complete, press the “<” button.

The screenshot shows the 'Setpoint range limitation' settings screen. At the top, there is a back arrow on the left and a help icon on the right. The screen is divided into two sections: 'Cool setpoint range' and 'Heat setpoint range'. Each section has a horizontal slider with a range of 60°F to 90°F. The 'Cool setpoint range' section shows a range of 77°F to 86°F, with two blue circular markers on the slider. The 'Heat setpoint range' section shows a range of 68°F to 77°F, with two orange circular markers on the slider.



Create file mode

- +Create new file

- RC settings

▶ Cool setpoint range

Set the cool setpoint range.

* The displayed upper and lower limit values are values from the connected MAIN indoor unit.

▶ Heat setpoint range

Set the heat setpoint range.

* The displayed upper and lower limit values are values from the connected MAIN indoor unit.



Create file mode

- +Create new file

- RC settings

Setback

Main

Used to prevent the room temperature from becoming high or low while the air conditioner operation is stopped. If the room temperature exceeds the setback setpoint or falls below it, operation is set to start automatically.

After all settings are complete, press the “<” button.



Create file mode

- +Create new file

- RC settings

Setback

Setback

Cool setback

Cool setback setpoint

91°F 95°F

Cool recovery differential 4 °F ▼

Heat setback

Heat setback setpoint

41°F 57°F

Heat recovery differential 4 °F ▼

► Setback

Set the setback function to enable/disable.

► Cool setback

Set the cool setback to enable/disable.



Create file mode

- +Create new file

- RC settings

▶ Cool setback setpoint

Set the cool setback setpoint.

▶ Cool recovery differential

Set the cool recovery differential.

▶ Heat setback

Set the heat setback function to enable/disable.

▶ Heat setback setpoint

Set the heat setback setpoint.

▶ Heat recovery differential

Set the heat recovery differential.



Create file mode

- +Create new file

- RC settings

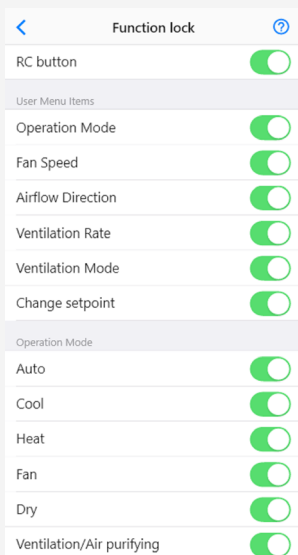
Function lock

Main

Sub

Partially limit the operation from the remote controller.

After all settings are complete, press the “<” button.





Create file mode

- +Create new file

- RC settings

▶ RC button

Set the remote controller button operation to enable/disable.

▶ User menu item

Operation mode

Set the ability to change operation modes to enable/disable.

Fan speed

Set the ability to change Fan speed to enable/disable.

Airflow direction

Set the ability to change airflow direction to enable/disable.

Ventilation rate

Set the ability to change ventilation rate to enable/disable.



Create file mode

- +Create new file

- RC settings

Ventilation mode

Set the ability to change ventilation rate mode to enable/disable.

Change setpoint

Set the ability to change the setpoint to enable/disable.

▶ Operation mode

Auto

Set operation mode Auto to enable/disable.

Cool

Set operation mode Cool to enable/disable.



Create file mode

- +Create new file

- RC settings

Heat

Set operation mode Heat to enable/disable.

Fan

Set operation mode Fan to enable/disable.

Dry

Set operation mode Dry to enable/disable.

Ventilation/Air purifying

Set operation mode Ventilation/Air purifying to enable/disable.



Create file mode

- +Create new file

- RC display settings

Date and time/DST

Main

Sub

Set the remote controller clock and daylight saving time.

After all settings are complete, press the “<” button.

The screenshot shows a mobile application interface for setting the date and time. At the top, there is a back arrow on the left, the title "Date and time/DST" in the center, and a help icon (a question mark in a circle) on the right. Below the title, there are three main settings sections. The first section is "Automatic clock setting" with a green toggle switch turned on. The second section is "Daylight saving time" with a green toggle switch turned on. Below this, there are two rows of settings: "DST start" set to "March 1st Sunday" and "DST end" set to "October 1st Sunday", both with dropdown arrows on the right.

Automatic clock setting	<input checked="" type="checkbox"/>
Daylight saving time	<input checked="" type="checkbox"/>
DST start	March 1st Sunday ▾
DST end	October 1st Sunday ▾



Create file mode

- +Create new file

- RC display settings

▶ Automatic clock setting

Set automatic clock setting to enable/disable.

▶ Daylight saving time

Set the ability to change the daylight saving time setting to enable/disable.

▶ DST start

Set the date and time at which daylight saving time will start.

▶ DST end

Set the date and time at which daylight saving time will finish.



Create file mode

- +Create new file

- RC display settings

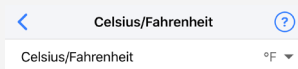
Celsius/Fahrenheit

Main

Sub

Set the unit type with which the temperature is displayed on the app screen.

After all settings are complete, press the “<” button.





Create file mode

- +Create new file

- RC display settings

▶ Celsius/Fahrenheit

Set the Celsius/Fahrenheit display.



Create file mode

- +Create new file

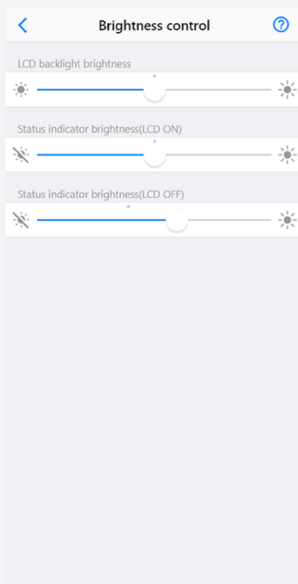
- RC display settings

Brightness control

Main Sub

Set the brightness level of the status indicator and remote controller LCD backlight.

After all settings are complete, press the “<” button.





Create file mode

- +Create new file

- RC display settings

▶ Back light brightness

Set the remote controller LCD brightness level.

▶ Status indicator brightness (Back light on)

Set the status indicator brightness level when the backlight is ON.

▶ Status indicator brightness (Back light off)

Set the status indicator brightness level when the backlight is OFF.



Create file mode

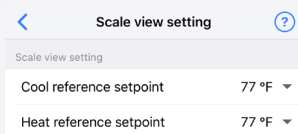
- +Create new file

- RC display settings

Scale view settings

Main

Set the function to enable operation only by how high or low it is from the reference temperature without displaying the setpoint on the remote controller.

A screenshot of a mobile application interface for 'Scale view setting'. The screen has a white background with a light blue header bar. The header bar contains a blue back arrow on the left, the text 'Scale view setting' in the center, and a blue question mark icon on the right. Below the header, there is a section titled 'Scale view setting' with a light blue background. Underneath, there are two rows of settings. The first row is 'Cool reference setpoint' with a value of '77 °F' and a downward arrow. The second row is 'Heat reference setpoint' with a value of '77 °F' and a downward arrow.

Scale view setting	
Cool reference setpoint	77 °F ▼
Heat reference setpoint	77 °F ▼



Create file mode

- +Create new file

- RC display settings

▶ Cool reference setpoint

Set the reference setpoint when the operation mode is Cool.

▶ Heat reference setpoint

Set the reference setpoint when the operation mode is Heat.



Create file mode

- +Create new file

How to save a setting file

After editing any setting item, tap the save icon in the upper right corner of the “Create file mode” screen.

The filename input screen will be displayed, so enter any filename.

- * The maximum number of characters is 50.
- * It is possible to use single-byte alphanumeric characters, hyphens (-) and underscores (_).

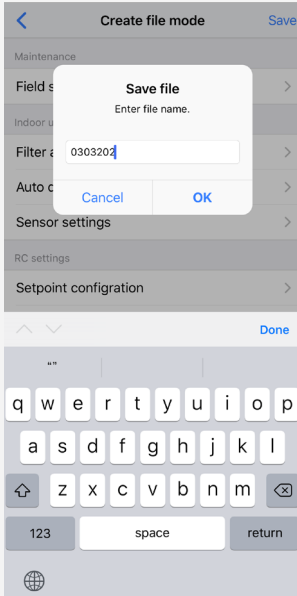
Create file mode

- +Create new file

<	Create file mode	Save
Maintenance		
	Field setting	>
Indoor unit settings		
	Filter auto clean	>
	Auto draft prevention	>
	Sensor settings	>
RC settings		
	Setpoint configuration	>
	Setpoint range limitation	>
	Setback	>
	Function lock	>
RC display settings		
	Date and time/DST	>
	Celsius/Fahrenheit	>
	Brightness control	>
	Scale view setting	>

Create file mode

- +Create new file



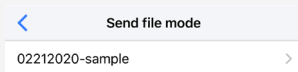


Send file mode

1. Select the file to be read.

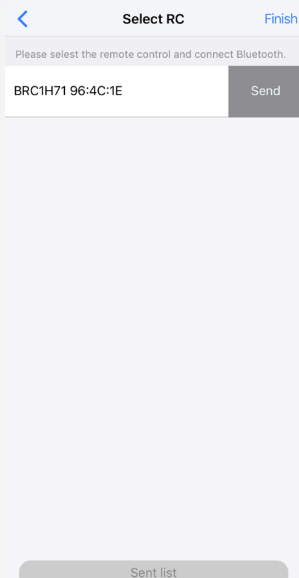
Settings can be sent to a specified remote controller.

- * It is not possible to edit the data after reading a file.
- * For the file creation method, refer to slide 20.



Send file mode

2. Select the remote controller you want to send settings to, then tap the “Send” button.



3. After sending data, a confirmation screen will be displayed asking if you want to continue Group address or Airnet address setting. If address setting is necessary, select “OK”.



Send file mode

4. Perform “Group address setting” and “Airnet address setting”.

After all “Group address setting” and “Airnet address setting” is complete, press the “Send to RC” button.

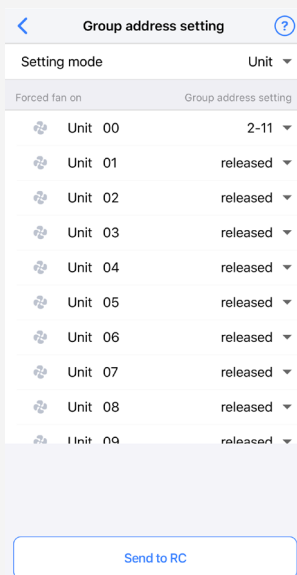
▶ Group address setting

You can switch between setting the indoor unit group address or on a per-unit basis.

▶ Airnet address setting

It is possible to set indoor and outdoor unit airnet addresses.

Send file mode



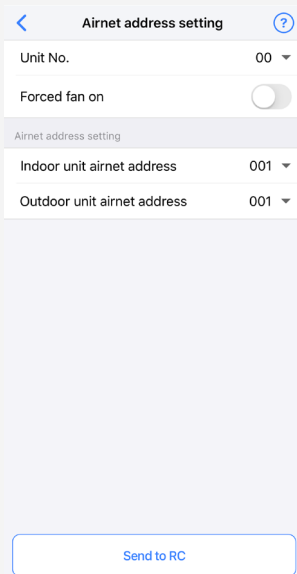
< Group address setting ?

Setting mode	Unit
Forced fan on	Group address setting
Unit 00	2-11
Unit 01	released
Unit 02	released
Unit 03	released
Unit 04	released
Unit 05	released
Unit 06	released
Unit 07	released
Unit 08	released
Unit 09	released

Send to RC

“Group address setting”

Send file mode



The screenshot displays the 'Airnet address setting' interface. At the top, there is a back arrow, the title 'Airnet address setting', and a help icon. Below the title, there are four settings rows: 'Unit No.' with a dropdown menu showing '00', 'Forced fan on' with a toggle switch, 'Indoor unit airnet address' with a dropdown menu showing '001', and 'Outdoor unit airnet address' with a dropdown menu showing '001'. A section header 'Airnet address setting' is positioned above the last two rows. At the bottom of the screen, there is a button labeled 'Send to RC'.

“Airnet address setting”

5. After “Group address setting” and “Airnet address setting” is complete, return to the select RC screen.

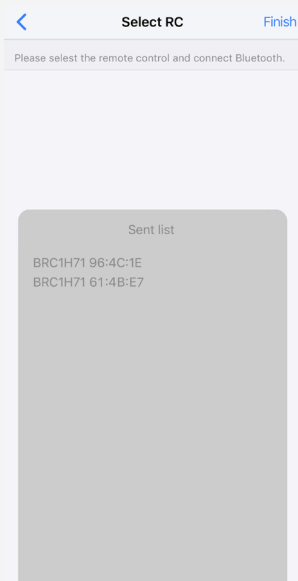


Send file mode

Sent list display

With Sent List, it is possible to display a list of all the remote controllers for which setting is complete.

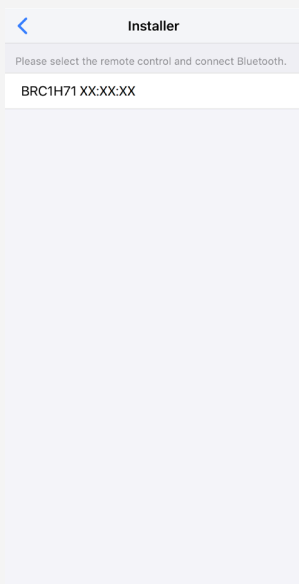
* In the Send list, a maximum of 20 items are displayed.





Manual setting mode

Select the remote controller to perform settings on.





Manual setting mode

- Installer setting

- RC settings

- Maintenance

Field Setting

Main

Change the internal settings of the outdoor and indoor units and the remote controller.

Specify the setting items with “Mode” and “Switch”, then set the position (setting value).

After all settings are complete, press the “Send to RC” button.

- * Set a proper mode number, FIRST CODE NO. (SW), and SECOND CODE NO. after confirming with the installation manual/ technical documentation.
- * Field settings may vary with for each indoor unit model, please confirm the indoor unit field settings changes.



Manual setting mode

- Installer setting

- RC settings

- Maintenance

< Field setting ?

Type Indoor unit ▾

Mode 20 ▾

Unit No. 00 ▾

Forced fan on

Switch

0 02 ▾	1 01 ▾	2 02 ▾	3 01 ▾
4 01 ▾	5 02 ▾	6 01 ▾	7 01 ▾
8 02 ▾	9 01 ▾		
12 02 ▾			

Send to RC

► Type

Set the type of device to perform settings on (indoor unit or remote controller).



Manual setting mode

- Installer setting

- RC settings

- Maintenance

▶ Mode

Set the field setting mode number.

▶ Unit No.

Set the unit number.

▶ Forced fan on

Force operation of the fan of a specified unit number.

You can confirm the location of the device on which you are performing settings.

Manual setting mode

- Installer setting

- RC settings

- Maintenance

Group address setting

Main

Set the indoor unit group address.
After all settings are complete, press
the “Send to RC” button.

< Group address setting ?

Setting mode	Group ▼
Group address setting	
Group	2-05 ▼

Send to RC

Manual setting mode

- Installer setting

- RC settings

- Maintenance

< Group address setting ?

Setting mode	Unit ▼
Forced fan on	Group address setting
Unit 01	2-05 ▼

Send to RC

► Setting mode

You can switch between setting the indoor unit group address for each group, or for each unit.



Manual setting mode

- Installer setting

- RC settings

- Maintenance

▶ Group

Set the group address on a per-group basis.

* Set a group address only for the MAIN unit.

▶ Unit

Set the group address on a per-unit basis.

▶ Forced fan on

Force operation of the fan of the unit number whose icon has been tapped. You can confirm the location of the device on which you are performing settings.



Manual setting mode

- Installer setting

- RC settings

- Maintenance

Airnet address setting

Main

Set the Airnet address of the indoor and outdoor unit.

After all settings are complete, press the “Send to RC” button.

The screenshot shows a mobile application interface for "Airnet address setting". At the top, there is a back arrow, the title "Airnet address setting", and a help icon. Below the title, there are three settings:

- Unit No.**: A dropdown menu currently showing "00".
- Forced fan on**: A toggle switch that is currently turned off.

Below these settings is a section header "Airnet address setting" followed by two more dropdown menus:

- Indoor unit airnet address**: A dropdown menu currently showing "001".
- Outdoor unit airnet address**: A dropdown menu currently showing "001".

At the bottom of the screen, there is a large blue button labeled "Send to RC".



Manual setting mode

- Installer setting

- RC settings

- Maintenance

▶ Unit No.

Set the unit number of the unit whose Airnet address you want to set.

▶ Forced fan on

Force operation of the fan of a specified unit number.

You can confirm the location of the device on which you are performing settings.

▶ Indoor unit airnet address

Set the indoor unit airnet address.

▶ Outdoor unit airnet address

Set the airnet address of the outdoor unit which is in the same system as the specified unit number.



Manual setting mode

- Installer setting

- RC settings

- Indoor unit settings

Airflow range

Main

Change the airflow range of floor-standing type indoor units.

After all settings are complete, press the “Send to RC” button.

The screenshot shows a mobile application interface for setting the airflow range. At the top, there is a back arrow, the title "Airflow range", and a help icon. Below the title, there are two settings: "Unit No." set to "01" with a dropdown arrow, and "Forced fan on" with a toggle switch that is currently turned off. Underneath these settings is a section titled "Airflow range" containing three buttons with fan icons. The rightmost button is highlighted in blue, indicating it is the selected option. At the bottom of the screen, there is a "Send to RC" button.



Manual setting mode

- Installer setting

- RC settings

- Indoor unit settings

▶ Unit No.

Set the unit number.

▶ Forced fan on

Force operation of the fan of a specified unit number.

You can confirm the location of the device on which you are performing settings.

▶ Airflow range



: Left



: Center



: Right



Manual setting mode

- Installer setting

- RC settings

- Indoor unit settings

Individual airflow direction

Main

Set the direction of the flaps of individual indoor units.

After all settings are complete, press the “Send to RC” button.

< Individual airflow direction ?

Unit No. 00 ▾

Forced fan on

Individual airflow direction

Flap □ - >

Flap □□ - >

Flap □□□ - >

Flap □□□□ - >

Airflow direction all reset

Send to RC



Manual setting mode

- Installer setting

- RC settings

- Indoor unit settings

▶ Unit No.

Set the unit number.

▶ Forced fan on

Force operation of the fan of a specified unit number.

You can confirm the location of the device on which you are performing settings.

▶ Individual airflow direction

Confirm the marks from □ to □□□□ engraved on the indoor unit, and set the direction of the flaps.

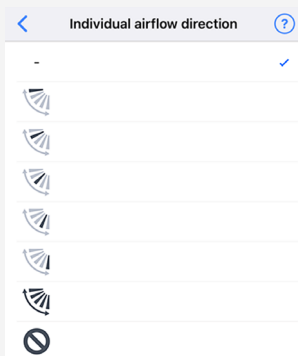


Manual setting mode

- Installer setting

- RC settings

- Indoor unit settings



▶ Airflow direction all reset

Reset the individual airflow direction setting of all indoor units connected to the remote controller.



Manual setting mode

- Installer setting

- RC settings

- Indoor unit settings

Filter auto clean

Main

Set the time when you want to start the filter auto clean function.

After all settings are complete, press the “Send to RC” button.

The screenshot shows a mobile application interface for setting the filter auto clean function. At the top, there is a back arrow on the left, the title "Filter auto clean" in the center, and a help icon (question mark in a circle) on the right. Below the title, there is a "Time span" field with a dropdown menu currently showing "00:00am-03:00am". Underneath this is a "Forbid filter auto clean" toggle switch, which is currently turned off. At the bottom of the screen, there is a large, rounded rectangular button labeled "Send to RC".



Manual setting mode

- Installer setting

- RC settings

- Indoor unit settings

▶ Time span

Set the time when you want the filter auto clean function to operate.

▶ Forbid filter auto clean

Set the filter auto clean function to enable/disable.



Manual setting mode

- Installer setting

- RC settings

- Indoor unit settings

Auto draft prevention

Main

Set the auto draft prevention function, so that people are not directly hit by indoor unit discharge air.

After all settings are complete, press the “Send to RC” button.

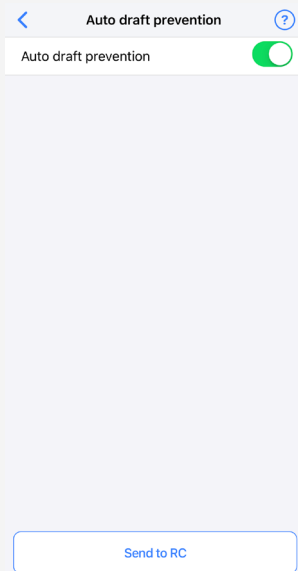


Manual setting mode

- Installer setting

- RC settings

- Indoor unit settings



▶ Auto draft prevention

Set the auto draft prevention function to enable/disable.



Manual setting mode

- Installer setting

- RC settings

- Indoor unit settings

Sensor settings

Main

Set the sensing sensor low mode function, which controls power consumption by gradually changing the internal set temperature after it detects that no people are present, or set the sensing sensor stop mode function, which stops operation of the air conditioner after it detects that no people are present and a fixed amount of time has elapsed.

After all settings are complete, press the “Send to RC” button.



Manual setting mode

- Installer setting

- RC settings

- Indoor unit settings

<
Sensing sensor
?

Sensing sensor low mode

Cool

Setpoint increment 1°F ▾

Increment time 30 minutes ▾

Setpoint high limited 82°F ▾

Heat

Setpoint increment 1°F ▾

Decrement time 30 minutes ▾

Setpoint low limited 68°F ▾

Sensing sensor stop mode

Auto off timer 1 hour ▾

Send to RC

► Sensing sensor low mode

Set the sensing sensor low mode function to enable/disable.



Manual setting mode

- Installer setting

- RC settings

- Indoor unit settings

► Cool/Heat

Setpoint increment or decrement

Set the setpoint increase or decrease of the cool/heat temperature.

Increment or Decrement time

Set the number of minutes after which the sensing sensor low mode function will begin if no people are detected and the air conditioner is in Cool/Heat mode.

Setpoint high or low limit

Set limits on the correction value (a setpoint high limit for cool and a setpoint low limit for heat).

► Sensing sensor stop mode

Set the sensing sensor stop mode function to enable/disable.



Manual setting mode

- Installer setting

- RC settings

- Indoor unit settings

▶ Auto off timer

Set the number of hours after which the sensing sensor stop mode function will turn off the indoor unit if no people are detected.



Manual setting mode

- Installer setting

- RC settings

- RC settings

Setpoint configuration

Main

Setpoint mode and differential can be set when changeover is available. After all settings are complete, press the “Send to RC” button.

The image shows a mobile application screen for 'Setpoint configuration'. At the top, there is a back arrow on the left, the title 'Setpoint configuration' in the center, and a help icon (a question mark in a circle) on the right. Below the title, there are three rows of settings:

Changeover	Available
Setpoint mode	Dual ▼
Setpoint minimum differential	1°F ▼

At the bottom of the screen, there is a rounded rectangular button with the text 'Send to RC'.



Manual setting mode

- Installer setting

- RC settings

- RC settings

► Setpoint mode

Set the setpoint mode.

- Single
The cool setpoint and heat setpoint will be made the same, and the room temperature will be kept close to this setpoint.
- Dual
The cool setpoint and heat setpoint will be made different, and the room temperature will be kept between the cool or heat setpoints.



Manual setting mode

- Installer setting

- RC settings

- RC settings

- None

Set the cool temperature and heat temperature so that they do not restrict each other.

When set to None, automatic cooling/heating changeover (Changeover) is unavailable.

▶ **Setpoint minimum differential**

Set the setpoint minimum differential between the cool and heat setpoints.

Manual setting mode

- Installer setting

- RC settings

- RC settings

Setpoint range limitation

Main

Limit the range of setpoints which can be set from the remote controller.

After all settings are complete, press the “Send to RC” button.

< Setpoint range limitation ?

Cool setpoint range

60°F 68°F - 90°F 90°F

Heat setpoint range

60°F 60°F - 86°F 90°F

Send to RC



Manual setting mode

- Installer setting

- RC settings

- RC settings

▶ Cool setpoint range

Set the cool setpoint range.

* The displayed upper and lower limit values are values from the connected MAIN indoor unit.

▶ Heat setpoint range

Set the heat setpoint range.

* The displayed upper and lower limit values are values from the connected MAIN indoor unit.



Manual setting mode

- Installer setting

- RC settings

- RC settings

Setback

Main

To prevent the room temperature from becoming extremely high or low while the air conditioner operation is turned off, if the room temperature exceeds the setback setpoint or falls below it, operation is set to start automatically. After all settings are complete, press the “Send to RC” button.

Manual setting mode

- Installer setting

- RC settings

- RC settings

< Setback ?

Setback

Cool setback

Cool setback setpoint

95°F 95°F 95°F

Cool recovery differential 4 °F ▾

Heat setback

Heat setback setpoint

41°F 41°F 57°F

Heat recovery differential 4 °F ▾

Send to RC

► Setback

Set the setback function to enable/disable.



Manual setting mode

- Installer setting

- RC settings

- RC settings

▶ Cool setback

Set the cool setback to enable/disable.

▶ Cool setback setpoint

Set the cool setback setpoint.

▶ Cool recovery differential

Set the cool recovery differential.

▶ Heat setback

Set the heat setback function to enable/disable.

▶ Heat setback setpoint

Set the heat setback setpoint.

▶ Heat recovery differential

Set the heat recovery differential.



Manual setting mode

- Installer setting

- RC settings

- RC settings

Function lock

Main Sub

Partially limit the operation from the remote controller.

After all settings are complete, press the “Send to RC” button.

Function lock	
RC button	<input checked="" type="checkbox"/>
User Menu Items	
Operation Mode	<input checked="" type="checkbox"/>
Fan Speed	<input checked="" type="checkbox"/>
Airflow Direction	<input checked="" type="checkbox"/>
Ventilation Rate	<input checked="" type="checkbox"/>
Ventilation Mode	<input checked="" type="checkbox"/>
Change setpoint	<input checked="" type="checkbox"/>
Operation Mode	
Auto	<input checked="" type="checkbox"/>
Cool	<input checked="" type="checkbox"/>
Heat	<input checked="" type="checkbox"/>
Fan	<input checked="" type="checkbox"/>
Dry	<input checked="" type="checkbox"/>
Ventilation/Air purifying	<input checked="" type="checkbox"/>



Manual setting mode

- Installer setting

- RC settings

- RC settings

▶ RC button

Set the remote controller button operation to enable/disable.

▶ User menu item

Operation mode

Set the ability to change operation modes to enable/disable.

Fan speed

Set the ability to change Fan speed to enable/disable.

Airflow direction

Set the ability to change airflow direction to enable/disable.

Ventilation rate

Set the ability to change ventilation rate to enable/disable.



Manual setting mode

- Installer setting

- RC settings

- RC settings

Ventilation mode

Set the ability to change ventilation rate mode to enable/disable.

Change setpoint

Set the ability to change the setpoint to enable/disable.

► Operation mode

Auto

Set operation mode Auto to enable/disable.



Manual setting mode

- Installer setting

- RC settings

- RC settings

Cool

Set operation mode Cool to enable/disable.

Heat

Set operation mode Heat to enable/disable.

Fan

Set operation mode Fan to enable/disable.

Dry

Set operation mode Dry to enable/disable.

Ventilation/Air purifying

Set operation mode Ventilation/Air purifying to enable/disable.



Manual setting mode

- Installer setting

- RC settings

- RC display settings

Date & Time/DST

Main

Sub

Set the remote controller clock and daylight saving time.

After all settings are complete, press the “Send to RC” button.

< Date and time/DST ?

Automatic clock setting

Read the date and time from your smartphone.

Date and time 02/26/2020 11:31 am ▾

Daylight saving time

DST start March 1st Sunday ▾

DST end October 1st Sunday ▾

Send to RC



Manual setting mode

- Installer setting

- RC settings

- RC display settings

▶ Automatic clock setting

Set automatic clock setting to enable/disable.

Not displayed when daylight saving time is displayed, or when connected to a centralized device.

Not displayed and function not available if the daylight saving time setting is able to be changed.

▶ Date and time

Manually set the day and time.

* If Auto clock setting is set to unavailable, this setting is possible.

▶ Daylight saving time

Set the ability to change the daylight saving time setting to enable/disable.



Manual setting mode

- Installer setting

- RC settings

- RC display settings

▶ DST start

Set the date and time at which daylight saving time will start.

▶ DST end

Set the date and time at which daylight saving time will finish.



Manual setting mode

- Installer setting

- RC settings

- RC display settings

Celsius/Fahrenheit

Main

Sub

Set the unit type with which the temperature is displayed on the app screen.

After all settings are complete, press the “Send to RC” button.

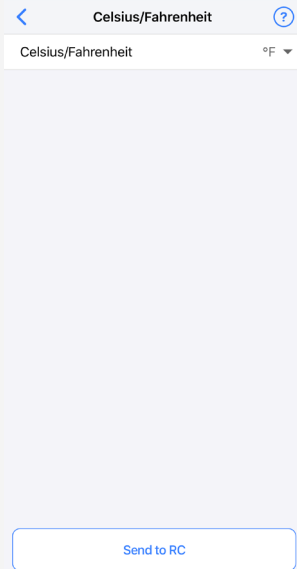


Manual setting mode

- Installer setting

- RC settings

- RC display settings



► Celsius/Fahrenheit

Set the Celsius/Fahrenheit display.



Manual setting mode

- Installer setting

- RC settings

- RC display settings

Brightness control

Main Sub

Set the brightness level of the status indicator and remote controller LCD backlight.

After all settings are complete, press the “Send to RC” button.

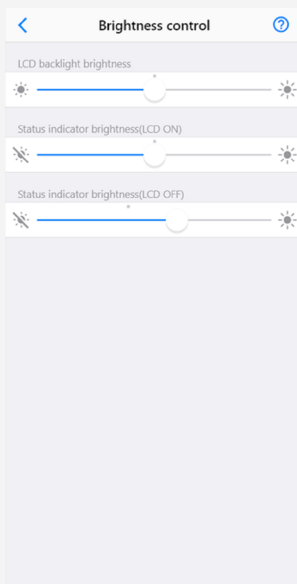


Manual setting mode

- Installer setting

- RC settings

- RC display settings



► Back light brightness

Set the remote controller LCD brightness level.



Manual setting mode

- Installer setting

- RC settings

- RC display settings

▶ **Status indicator brightness (Back light on)**

Set the status indicator brightness level when the backlight is ON.

▶ **Status indicator brightness (Back light off)**

Set the status indicator brightness level when the backlight is OFF.



Manual setting mode

- Installer setting

- RC settings

- RC display settings

Scale view setting

Main

Set the function to enable operation only by how high or low it is from the reference temperature without displaying the setpoint on the remote controller.



Manual setting mode

- Installer setting

- RC settings

- RC display settings

The screenshot shows a mobile application interface for 'Scale view setting'. At the top, there is a back arrow on the left, the title 'Scale view setting' in the center, and a help icon (a question mark in a circle) on the right. Below the title bar, the text 'Scale view setting' is displayed. There are two rows of settings: 'Cool reference setpoint' with a value of '78 °F' and a dropdown arrow, and 'Heat reference setpoint' with a value of '72 °F' and a dropdown arrow. At the bottom of the screen, there is a button labeled 'Send to RC'.

► Cool reference setpoint

Set the reference setpoint when the operation mode is Cool.



Manual setting mode

- Installer setting

- RC settings

- RC display settings

► Heat reference setpoint

Set the reference setpoint when the operation mode is Heat.



Manual setting mode

- Service menu

- Forced fan on

Main

Force operation of the fan by tapping a specific unit number.

- * Only operate the device with the specified unit number.
- * If the unit number does not exist, the fan icon will not be displayed.
- * After turning on the fan of any unit, if 5 minutes passes with no operation, the fan will off automatically by the remote controller.
- * Even if there is a device whose fan is on, when it is displayed on the screen, it will be displayed as off.

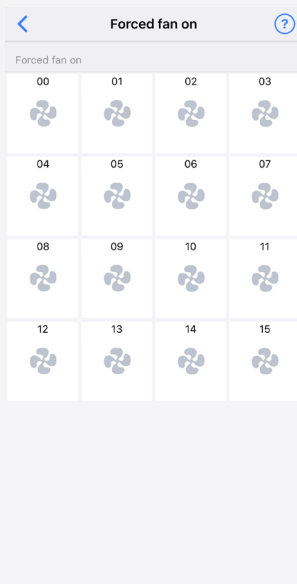


Manual setting mode

- Service menu

- Forced fan on

Main





Manual setting mode

- Service menu

▶ Test operation

Begin test operation of the indoor unit to which the remote controller is connected.

When starting test operation, tap “Start”. When finishing test operation, tap “End”.

▶ Test filter auto clean

Begin filter auto clean test operation of the indoor unit to which the remote controller is connected.

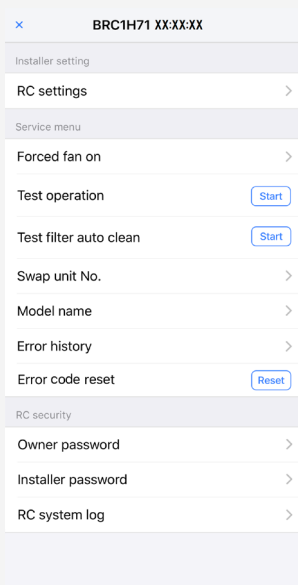
When starting test operation, tap “Start”. When finishing test operation, tap “End”.

▶ Error code reset

After resolving the error, tap “Reset” to clear it from the error history display of the remote controller.

Manual setting mode

- Service menu





Manual setting mode

- Service menu

- Swap unit No.

Main

Perform swapping of the unit numbers. Specify the unit number to be changed, then after fixing the number, press the “Send to RC” button.

- * Unit numbers are basically assigned automatically at the first startup.
- * Indoor units always have a unit number.
- * It is not necessarily required to assign unit numbers sequentially.



Manual setting mode

- Service menu

- Swap unit No.

Main

< Swap unit No. ?

Before change	00 ▾
After change	00 ▾

Send to RC



Manual setting mode

- Service menu

- Model name

Main

Display the indoor and outdoor unit model name of a specified unit number.

- * If the indoor unit does not have a model name, the indoor unit model code/indoor unit horsepower will be displayed.
- * If the outdoor unit does not have a model name, the outdoor unit model code/outdoor unit horsepower will be displayed.
- * If model names cannot be obtained, “-” will be displayed.



Manual setting mode

- Service menu

- Model name

Main

Model name	
Unit No.	00 ▾
Indoor unit	FXYFP80D
Outdoor unit	RXUP335DA



Manual setting mode

- Service menu

- Error history

Main

Display the error history saved in the remote controller and indoor unit.

By selecting from the menu in the upper portion of the screen, you can switch between displaying the error history of the remote controller and indoor unit.

By specifying the unit number of an indoor unit, you can confirm the error history of each indoor unit.

- * For indoor unit error history, a maximum of 5 issues are displayed.
- * For remote controller error history, a maximum of 10 issues are displayed.



Manual setting mode

- Service menu

- Error history

Main

Error history		Clear
Type	Indoor unit	▼
Unit No.	00	▼
06 : Unit 00 12/05/1999 04:10 am		
04 : Unit 00 04/08/2000 10:00 am		

Manual setting mode

- Service menu

- Error history

Main

Error history	
Type	RC ▼
A3 : Unit 01 02/21/2020 04:59 pm	
U4 : Unit 01 02/21/2020 04:57 pm	
C4 : Unit 01 02/21/2020 04:56 pm	



Manual setting mode

- RC security

- Owner password

Main

Sub

Set the password for the owner/
administrator.

It is possible to make password entry
required if the user wants to change
functions that can be changed with
owner/administrator authority.

[When password input is unavailable]

If the toggle switch is available, the
password setting screen will be
displayed, so enter a 4 digit password.

* Be sure to make a memo of your password
and keep it in a safe place.

Please understand that, in case you forget
your password, there is a possibility that we
may not be able to help you.



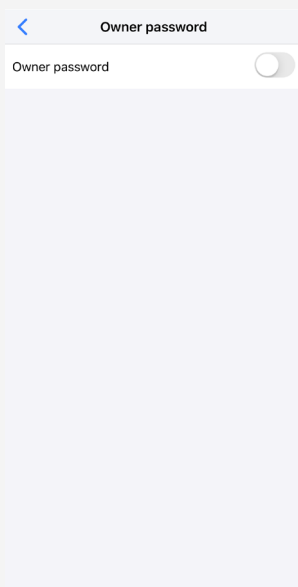
Manual setting mode

- RC security

- Owner password

Main

Sub





Manual setting mode

- RC security

- Owner password

Main

Sub

Cancel Change password

Enter new owner password.

○ ○ ○ ○

^ v Done

1	2 ABC	3 DEF
4 GHI	5 JKL	6 MNO
7 PQRS	8 TUV	9 WXYZ
+ * #	0	⌫

The image shows a mobile application screen for changing a password. At the top, there are two buttons: "Cancel" and "Change password". Below them is a large white rectangular area with the text "Enter new owner password." and four empty circles representing a 4-digit password input field. At the bottom of the screen is a numeric keypad with buttons for digits 1-9, 0, and symbols like "+ * #", a backspace key, and a "Done" button.

[When password input is available]
If “Change Password” is tapped,
the password setting screen will be
displayed, so enter a 4 digit password.



Manual setting mode

- RC security

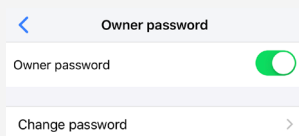
- Owner password

Main

Sub

* After changing your password, be sure to make a memo of your new password and keep it in a safe place.

Please understand that, in case you forget your password, there is a possibility that we may not be able to help you.





Manual setting mode

- RC security

- Owner password

Main

Sub

Cancel Change password

Enter old owner password.

○ ○ ○ ○

^ v Done

1	2 ABC	3 DEF
4 GHI	5 JKL	6 MNO
7 PQRS	8 TUV	9 WXYZ
+ * #	0	⌫



Manual setting mode

- RC security

- Installer password

Main

Sub

Set the installer password.

It is possible to make password entry required if the user wants to change functions that can be changed with installer authority.

[When password input is unavailable]

If the toggle switch is available, the password setting screen will be displayed, so enter a 4 digit password.

* Be sure to make a memo of your password and keep it in a safe place.

Please understand that, in case you forget your password, there is a possibility that we may not be able to help you.



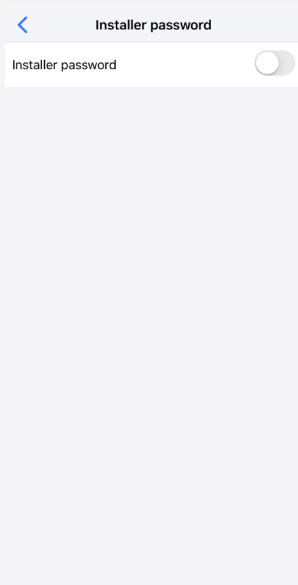
Manual setting mode

- RC security

- Installer password

Main

Sub





Manual setting mode

- RC security

- Installer password

Main

Sub

Cancel Change password

Enter new installer password.

○ ○ ○ ○

Done

1	2 ABC	3 DEF
4 GHI	5 JKL	6 MNO
7 PQRS	8 TUV	9 WXYZ
+ * #	0	⌫

The image shows a mobile application screen for changing a password. At the top, there are two buttons: 'Cancel' on the left and 'Change password' on the right. Below these is a large white rectangular area with the text 'Enter new installer password.' and four empty circles arranged horizontally, indicating where to enter the password. At the bottom of the screen is a numeric keypad with buttons for digits 1-9, 0, and symbols '+ * #', a backspace key (⌫), and a 'Done' button in the top right corner.

[When password input is available]
If “Change Password” is tapped,
the password setting screen will be
displayed, so enter a 4 digit password.



Manual setting mode

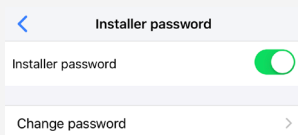
- RC security

- Installer password

Main **Sub**

* After changing your password, be sure to make a memo of your new password and keep it in a safe place.

Please understand that, in case you forget your password, there is a possibility that we may not be able to help you.





Manual setting mode

- RC security

- Installer password

Main

Sub

Cancel Change password

Enter old installer password.

○ ○ ○ ○

^ v Done

1	2 ABC	3 DEF
4 GHI	5 JKL	6 MNO
7 PQRS	8 TUV	9 WXYZ
+ * #	0	⌫



Manual setting mode

- RC security

- RC system log

Main

Sub

Displays the pairing log or setting log.

[Pairing log]

Displays the date and time of up to 5 pairing events.

Also, it displays information about who performed the pairing, either an installer or owner/administrator.

[Setting log]

In relation to the setting items below, up to 5 events will be displayed, featuring information about how the change was made (either from the remote controller or from the app) as well as the date and time of the change.



Manual setting mode

- RC security

- RC system log

Main **Sub**

- * Field setting (remote controller/indoor unit/
outdoor unit)
- * Group address
- * Indoor unit airnet address
- * Outdoor unit airnet address

RC system log	
Paring log ▼	
02/21/2020 08:03 pm	Installer
02/21/2020 04:49 pm	Installer



Work history

Setting log confirmation procedure

You can confirm the setting log of the remote controller on which setting has been done.

Date information is also displayed.

- * A maximum of 50 historical data items are stored.
- * It is not possible to re-edit historical data.
- * Items other than those upon which setting had been carried out cannot be viewed.



Work history

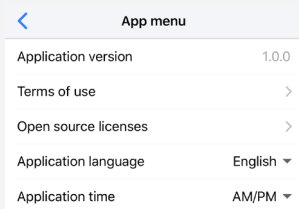
<	Work history	>
	02212020202900_964C1E_J	>
	02212020202303_964C1E_J	>
	02212020200601_964C1E_J	>
	02212020200600_964C1E_J	>
	02212020200558_964C1E_J	>
	02212020200557_964C1E_J	>
	02212020200556_964C1E_J	>
	02212020200555_964C1E_J	>
	02212020200554_964C1E_J	>
	02212020200501_964C1E_J	>



App menu

Application version

You can confirm the software version of this app.

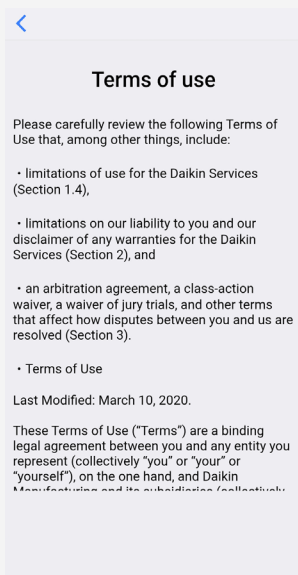
A screenshot of the 'App menu' screen. The title bar shows a back arrow and the text 'App menu'. The menu items are: 'Application version' with '1.0.0' on the right; 'Terms of use' with a right-pointing chevron; 'Open source licenses' with a right-pointing chevron; 'Application language' with 'English' and a downward-pointing chevron; and 'Application time' with 'AM/PM' and a downward-pointing chevron.

App menu	
Application version	1.0.0
Terms of use	>
Open source licenses	>
Application language	English ▾
Application time	AM/PM ▾

App menu

Terms of use

You can confirm the terms of use of this app.



App menu

Open source licenses

You can confirm the open-source software license which this app uses.



Open source licenses

@angular/animations

The MIT License

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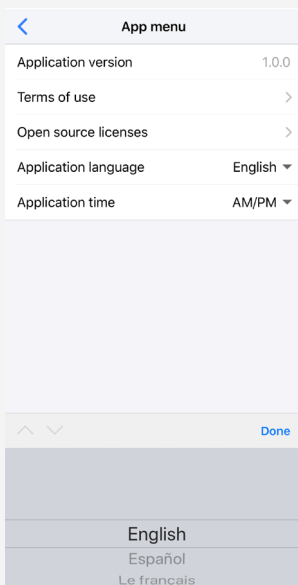
The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

App menu

Application language

You can change the language displayed by this app.

After language selection is complete, press the “<” button.

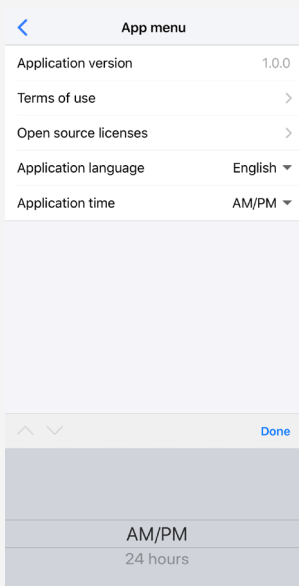


App menu

Application time

You can change whether this app displays time in 24-hour or 12-hour style.

After time display selection is complete, press the “<” button.





Troubleshooting

The app cannot be found

- Is the Android device you are using equipped with Bluetooth and a rear-facing camera?
 - ▶ Unequipped Android devices will not display the app in the Google Play store list of apps.
 - Is the OS version of the Android device you are using correct?
 - ▶ If using an Android device with an OS older than 9.0.0, the app will not be displayed in the Google Play store list of apps.
-



Troubleshooting

The app cannot be used

- Has the app been started more than 31 times since a version check was performed?
 - * A version check is carried out when connecting to the App Store.
 - ▶ Please use in an environment where internet connection is possible.
-



Troubleshooting

Communication with the remote controller is not possible

-
- Are you carrying out settings in a location close to the remote controller?
 - ▶ Though Bluetooth low energy communication is possible even from distant locations, as a basic rule, please carry out work close to the operating remote controller.
-
- Are the Bluetooth function and camera function of the device set to ON?
 - ▶ Set the device Bluetooth function and camera function to ON.
-



Troubleshooting

- Is the Bluetooth setting screen displayed within the installer menu screen?
 - ▶ On the remote controller, display the Bluetooth setting screen within the installer screen.

 - Is the clock on the device correct?
 - ▶ Set the clock on the device correctly to the current time.
-



Troubleshooting

- Is the Bluetooth prohibition setting in the remote controller set to “Allow”?
 - ▶ Set to “Allow” in the Bluetooth prohibition setting area of the remote controller field setting menu.
-



Troubleshooting

- Is the device you are using charged?
 - ▶ Please charge it. If the battery power is insufficient, there is a possibility that communication cannot be carried out well.
 - Connection to the remote controller was possible before, but now connection is not possible.
 - ▶ Unregister the device on your smartphone.
 1. Startup the settings application.
 2. Select Bluetooth.
 3. From the list of your devices, press the “i” button of the “UE878 RF MODULE”.
 4. Select “Unregister this device”.
-



About display messages

App screen (dialog displayed when writing to the remote controller)

Contents	Error code	Message	Correction method
▶ Device error			
The Bluetooth function of the device is OFF	A-0001	The Bluetooth function of the device is unavailable.	From the setting screen of the device, please make the Bluetooth function available.
The app is prohibited from giving its location information (Android only)	A-0002	To use this app, access to location information needs to be granted.	Please grant access to location information from the app information.
Due to insufficient capacity in the device, there was a failure saving the file	A-0003	Saving was not possible.	Please delete unnecessary files.
This device does not support Bluetooth	A-0004	This device does not support Bluetooth.	Please use a recommended device.
This device does not support camera usage.	A-0005	This device does not support camera usage.	Please use a recommended device.
▶ Communication error			
Communication timed out	B-0001	Communication timed out.	Move close to the remote controller and perform settings again.
The length of the frame is not within range	B-0002	Communication failed.	Move close to the remote controller and perform settings again.
A nonexistent command was received	B-0003	Communication failed.	Move close to the remote controller and perform settings again.
Inconsistent frame number	B-0004	Communication failed.	Move close to the remote controller and perform settings again.
Cannot receive due to communication volume exceeding the allotted memory area	B-0005	Communication failed.	Move close to the remote controller and perform settings again.



About display messages

Contents	Error code	Message	Correction method
Pairing was interrupted	B-0006	Communication with the remote controller was interrupted.	Make the advertisement function on the remote controller available, perform pairing again, and then perform settings.
There was a failure at CRC check	B-0007	Communication failed.	Move close to the remote controller and perform settings again.
Received data is missing	B-0008	Reception failed.	Move close to the remote controller and perform settings again.
Connected to a non-supported device	B-0009	It is a non-supported device.	This app can only connect to the Daikin Industries, Ltd. "BRC1H7" wired remote controller series.
The amount of schedule data is excessive	B-0010	The amount of data is in error.	—
An error occurred in part of the header	B-0011	Communication failed.	This app can only connect to the Daikin Industries, Ltd. "BRC1H7" wired remote controller series.
Processing sequence error	B-0012	Communication failed.	—
▶ Setting failure			
There was a setting failure due to an error on the device side	C-0001	Some kind of error occurred between the remote controller and the indoor unit.	<p>Move close to the remote controller and perform settings again.</p> <p>If the same message is displayed, confirm the contents of the setting.</p>



About display messages

Contents	Error code	Message	Correction method
Setting failed because the batch sending function sent a value that cannot be set on the device side.	C-0002	<p>Contains a value that cannot be set. Check the settings for the following functions.</p> <ul style="list-style-type: none"> • Field setting • Setpoint range limitation <p>Enumerates functions that tried to set values which cannot be set, such as above.</p>	Confirm the contents of the setting.
Setting failed because the batch sending function sent a setting to a function which cannot be set on the device side.	C-0003	<p>The following functions cannot be set on the connected device.</p> <ul style="list-style-type: none"> • Filter auto clean setting <p>Enumerates functions which cannot be set, such as above.</p>	Confirm the contents of the setting.

- 1 If this app is not updated to the latest version, this app cannot be used. Also, if the app is being used in an environment where internet connection is not possible and the app has been started more than 31 times since the last version check, the app cannot be used until a version check is performed again.
- 2 Has the app been started more than 31 times since a version check was performed?
- 3 Though Bluetooth low energy communication is possible even from distant locations, as a basic rule, please carry out work close to the operating remote controller.



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SPLIT SYSTEM Air Conditioners

MODELS

Wall-mounted type

FAQ18TAVJU

FAQ24TAVJU

English

Français

Español

Read these instructions carefully before installation.
Keep this manual in a handy place for future reference.
This manual should be left with the equipment owner.

Lire soigneusement ces instructions avant l'installation.
Conserver ce manuel à portée de main pour référence ultérieure.
Ce manuel doit être donné au propriétaire de l'équipement.

Lea cuidadosamente estas instrucciones antes de instalar.
Guarde este manual en un lugar a mano para leer en caso de tener alguna duda.
Este manual debe permanecer con el propietario del equipo.

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1. SAFETY CONSIDERATIONS


Read these *Safety Considerations for Operations* carefully before installing air conditioning equipment. After completing the installation, make sure that the unit operates properly during the startup operation. Instruct the customer on how to operate and maintain the unit.


Inform customers that they should store this Operation Manual with the Installation Manual for future reference.

Meanings of **DANGER**, **WARNING**, **CAUTION**, and **NOTE** Symbols:

 **DANGER** Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

 **WARNING**..... Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

 **CAUTION**..... Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

 **NOTE** Indicates situations that may result in equipment or property damage accidents only.

DANGER

- Do not install the unit in an area where flammable materials are present due to risk of explosion resulting in serious injury or death.
- Any abnormalities in the operation of the air conditioner such as smoke or fire could result in severe injury or death. Turn off the power and contact your dealer immediately.
- Refrigerant gas may produce toxic gas if it comes in contact with fire, such as from a fan, heater, stove, or cooking device. Exposure to this gas could cause severe injury or death.

- For refrigerant leakage, consult your dealer. Refrigerant gas is heavier than air and replaces oxygen. A massive leak could lead to oxygen depletion, especially in basements, and an asphyxiation hazard could occur leading to serious injury or death.
- If equipment utilizing a burner is used in the same room as the air conditioner, there is the danger of oxygen deficiency which could lead to an asphyxiation hazard resulting in serious injury or death. Be sure to ventilate the room sufficiently to avoid this hazard.
- Safely dispose of the packing materials. Packing materials, such as nails and other metal or wooden parts, may cause stabs or other injuries.
- Tear apart and throw away plastic packaging bags so that children will not play with them. Children playing with plastic bags face the danger of death by suffocation.

WARNING

- Contact your dealer for repair and maintenance. Improper repair and maintenance may result in water leakage, electric shock, and fire. Only use accessories made by Daikin that are specifically designed for use with the equipment and have them installed by a professional.
- Contact your dealer to move and reinstall the air conditioner. Incomplete installation may result in water leakage, electric shock, and fire.
- Never let the indoor unit or the remote controller get wet. Water can cause an electric shock or a fire.
- Never use flammable spray such as hair spray, lacquer, or paint near the unit. Flammable spray may cause a fire.
- When a fuse blows out, never replace it with one of incorrect ampere ratings or different wires. Always replace any blown fuse with a fuse of the same specification.
- Never inspect or service the unit by yourself. Contact a qualified service person to perform this work.
- Turn off all electrical power before doing any maintenance to avoid the risk of serious electric shock; never sprinkle or spill water or liquids on the unit.
- Do not touch the switch with wet fingers. Touching a switch with wet fingers can cause electric shock.
- Do not allow children to play on or around the unit to prevent injury.
- The heat exchanger fins are sharp enough to cut. To avoid injury wear gloves or cover the fins while working around them.
- Do not put a finger or other objects into the air inlet or air outlet. The fan is rotating at high speed and may cause injury.
- Check the unit foundation for damage on a regular basis, especially if it has been in use for a long time. If left in a damaged condition the unit may fall and cause injury.
- Placing a flower vase or other containers with water or other liquids on the unit could cause a shock or fire if a spill occurs.
- Do not touch the air outlet or horizontal blades while the swing flap is in operation because fingers could get caught and injured.

- Never touch the internal parts of the controller. Do not remove the control box cover because some parts inside are dangerous to touch. To check and adjust internal parts, contact your dealer.
- Be sure to ground the unit.
Do not ground the unit to a utility pipe, arrester, or telephone ground. Incomplete grounding may cause electric shock, or fire. A high surge current from lightning or other sources may cause damage to the air conditioner.
- This equipment can be installed with a Ground-Fault Circuit Interrupter (GFCI). Although this is a recognized measure for additional protection, with the grounding system in North America, a dedicated GFCI is not necessary.



CAUTION

- Do not use the air conditioner for any other purposes other than comfort cooling or heating. Do not use the unit for cooling precision instruments, food, plants, animals or works of art.
- Do not place items under the indoor unit as they may be damaged by condensates that may form if the humidity is above 80%, or if the drain outlet gets blocked.
- Before cleaning, turn the unit off and disengage power. Otherwise, an electric shock and injury may result.
- Do not wash the air conditioner with excessive water. An electric shock or fire may result.
- Avoid placing the controller in a spot where it can be splashed with water. Water entering the controller may cause an electric shock or damage the internal electronic parts.
- Do not operate the air conditioner when using a room fumigation type of insecticide. Failure to observe this could cause the chemicals to be deposited in the unit and can endanger the health of those who are hypersensitive to chemicals.
- Do not turn off the power immediately after stopping operation. Always wait for at least five minutes before turning off the power. Otherwise, water leakage may occur.
- The appliance is not intended for use by young children or infirm persons without supervision.
- The remote controller should be kept away from children so they cannot play with it.
- Consult with the installation contractor for cleaning.
- Incorrect cleaning of the inside of the air conditioner could make the plastics parts break and cause water leakage or electric shock.
- Do not touch the air inlet or aluminum fin of the air conditioner as they can cut and cause injury.



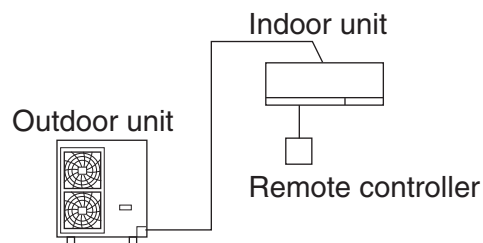
NOTE

- Never press the button of the remote controller with a hard, pointed object. The remote controller may be damaged.
- Never pull or twist the electric wire of the remote controller. It may cause the unit to malfunction.
- Do not place appliances that produce open flames in places that are exposed to the airflow of the unit or under the indoor unit. It may cause incomplete combustion or deformation of the unit due to the heat.

- Do not expose the controller to direct sunlight. The LCD display can become discolored and may fail to display the data.
 - Do not wipe the controller operation panel with benzene, thinner, chemical dust cloth, etc. The panel may get discolored or the coating can peel off. If it is heavily dirty, soak a cloth in water-diluted neutral detergent, squeeze it well and wipe the panel clean. Then wipe it with another dry cloth.
 - Dismantling of the unit, disposal of the refrigerant, oil, and additional parts, should be done in accordance with the relevant local, state, and national regulations.
 - Operate the air conditioner in a sufficiently ventilated area and not surrounded by obstacles. Do not use the air conditioner in the following places.
 - a. Places with a mist of mineral oil, such as cutting oil.
 - b. Locations such as coastal areas where there is a lot of salt in the air.
 - c. Locations such as hot springs where there is a lot of sulfur in the air.
 - d. Locations such as factories where the power voltage varies a lot.
 - e. In cars, boats, and other vehicles.
 - f. Locations such as kitchens where oil may splatter or where there is steam in the air.
 - g. Locations where equipment produces electromagnetic waves.
 - h. Places with an acid or alkaline mist.
 - i. Places where fallen leaves can accumulate or where weeds can grow.
 - Do not attempt to do electrical work or grounding work unless you are licensed to do so. Consult with your dealer for electrical work and grounding work.
 - Make sure that there are no obstacles close to the outdoor unit. Obstacles close to the outdoor unit may drop the performance of the outdoor unit or increase the operating sound of the outdoor unit.
 - Consult your dealer if the air conditioner in operation generates unusual noise.
 - Make sure that the drainpipe is installed properly to drain water. If no water is discharged from the drainpipe while the air conditioner is in the cooling mode, the drainpipe may be clogged with dust or dirt and water leakage from the indoor unit may occur. Stop operating the air conditioner and contact your dealer.
-

2. WHAT TO DO BEFORE OPERATION

This operation manual is for the system with standard control. Before initiating operation, contact your Daikin dealer for the operation that corresponds to your system.



If your installation has a customized control system, ask your Daikin dealer for the operation that corresponds to your system.

- Heat pump type
This system provides cooling, heating, automatic, drying and fan operation modes.
- Cooling only type
This system provides cooling, drying and fan operation modes.

PRECAUTIONS FOR TWO REMOTE CONTROLLERS CONTROL SYSTEM

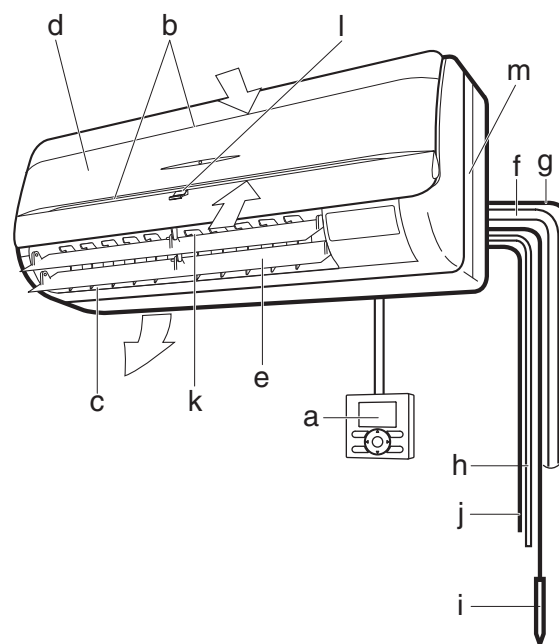
This system provides another control system beside individual control (one remote controller controls one indoor unit) system. Confirm the following if your unit is the following control system type.

- **Two remote controllers control system**
Two remote controllers control one indoor unit. The unit is individually operated.

NOTE

- Contact your Daikin dealer in case of changing setting of two remote controllers control system.

Names and functions of parts



a	Remote controller
b	Air inlet (front and top of main unit)
c	Air outlet
d	Air filter (Inside intake vent)
e	Vertical flaps (vertical air outlet direction adjustment flaps)
f	Refrigerant piping
g	Transmission wiring
h	Drain piping
i	Ground wiring Wire to ground from the indoor unit to prevent electric shock.
j	Power supply wiring
k	Louver (horizontal air outlet direction adjustment flaps)
l	Packaging materials If any packaging materials are included, please remove before operating.
m	Name plate (Indoor unit model name)

3. OPERATION RANGE

If the temperature or the humidity is beyond the following conditions, safety devices may work and the air conditioner may not operate, or sometimes, water may drop from the indoor unit.

OPERATION	TEMPERATURE	
	OUTDOOR	INDOOR
COOLING	23 to 122°F DB (-5 to 50°C DB)	57 to 77°F WB (14 to 25°C WB)
HEATING	-4 to 60°F WB (-20 to 15.6°C WB)	59 to 80.5°F DB (15 to 27°C DB)

DB: Dry bulb temperature (°F (°C))

WB: Wet bulb temperature (°F (°C))

The setting temperature range of the remote controller is 60°F (16°C) to 90°F (32°C).

4. INSTALLATION SITE

Regarding places for installation

- **Is the air conditioner installed at a well-ventilated place where there are no obstacles around?**
- **Do not use the air conditioner in the following places.**
 - a. Filled with much mineral oil such as cutting oil
 - b. Where there is much salt such as a beach area
 - c. Where sulfuric gas exists such as a hot-spring resort
 - d. Where there are considerable voltage fluctuations such as a factory or plant
 - e. Vehicles and vessels
 - f. Where there is oil splatter and vapor such as a kitchen, etc.
 - g. Where there are machines generating electromagnetic waves
 - h. Areas filled with acid and/or alkaline steam or vapor
- **Is a snow protection measure taken?**
For details, consult your dealer.

Regarding wiring

- **All wiring must be performed by an authorized electrician.**
To do wiring, ask your dealer. Never do it by yourself.
- **Make sure that a separate power supply circuit is provided for this air conditioner and that all electrical work is carried out by qualified personnel according to local laws and regulations.**

Pay attention to noise during operation, too

- **Are the following places selected?**
 - a. A place that can sufficiently withstand the weight of the air conditioner with less noise while running and vibrations.
 - b. A place where the airflow and noise generated from the air outlet by the outdoor unit is not a nuisance to the neighborhood.
- **Are you sure that there are no obstacles near the air outlet of the outdoor unit?**
Such obstacles may result in declined performance and increased running noises.
- **If abnormal noise occurs while in use, consult your dealer.**

Regarding drainage of drain piping

- **Is the drain pipe able to perform complete drainage?**
If proper drainage is not carried out from the outdoor drain pipes during cooling operation, chances are that dust and dirt are clogged in the pipe. This may result in water leakage from the indoor unit. Under such circumstances, stop the operation of the air conditioner, and then consult your dealer or our service station.

5. OPERATION PROCEDURE

Read the operation manual that came with the remote controller.

- Operating procedure varies with heat pump type and cooling only type. Contact your Daikin dealer to confirm your system type.
- To protect the unit, turn on the main power switch 6 hours before operation.
- If the main power supply is turned off during operation, operation will restart automatically after the power turns back on again.

6. OPTIMUM OPERATION

Observe the following precautions to ensure the system operates.

- Adjust the room temperature properly for a comfortable environment. Avoid excessive heating or cooling.
- Prevent direct sunlight from entering a room during cooling operation by using curtains or blinds.
- Ventilate the room regularly.
Using the unit for long periods of time requires attentive ventilation of the room.
- Keep doors and windows closed. If the doors and windows remain open, room air will escape and diminish performance of cooling and heating operation.
- Do not place other heaters directly below the indoor unit. They may deform due to the heat.
- Do not block the air inlet or air outlet of the unit as it will cause a decrease in performance or stop operation.
- Turn off the main power supply switch when it is not used for long periods of time. When the main power switch is turned on, some watts of electricity is being used even if the system is not operating. Turn off the main power supply switch for saving energy. When reoperating, turn on the main power supply switch 6 hours before operation for smooth running (Refer to MAINTENANCE).
- When the display shows "Time to clean filter" ask a qualified service person to clean the filter (Refer to MAINTENANCE).
- Fully use the function of airflow direction adjust.
Cold air gathers on the floor, and warm air gathers in the ceiling. Set the airflow direction parallel during cooling or dry operation, and set it downwards during heating operation.
Do not let the air blow directly to a person.
- It takes time for the room temperature to reach the set temperature.
We recommend starting the operation in advance using timer operation.

7. MAINTENANCE

⚠ WARNING

- Only a qualified person is allowed to perform maintenance outside of daily maintenance.
- Before touching any of connection wirings, be sure to turn off all power supply switches.
- Do not use flammable materials (for example, hairspray or insecticide) near the product.
Do not clean the product with organic solvents such as paint thinner.

The use of organic solvents may cause crack damage to the product, electric shocks, or fire.

- Contact your dealer about attachment of accessories and be sure to use only accessories specified by the manufacturer.

If a defect results from your own workmanship, it may result in water leaks, electric shock or fire.

⚠ CAUTION

- Before cleaning, be sure to stop unit operation, turn the breaker off or remove the power cord.
Otherwise, an electric shock and injury may result.
- Do not wash the air conditioner with water, as this may result in electric shocks or fire.
- Consult your dealer regarding cleaning the inside of the air conditioner.

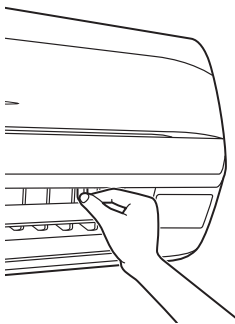
Improper cleaning may cause breakage of plastic parts, water leakage and other damage as well as electric shocks.

- Use appropriate equipment at the time of air filter cleaning or inspection.

Work at higher elevation requires a ladder or scaffolding. If these are unstable you may fall, thus causing injury.

HOW TO ADJUST THE HORIZONTAL FAN DIRECTION ANGLE

Hold the tabs on edge louvers (horizontal air outlet direction adjustment flaps) down slightly and adjust left and right to match the room conditions or your preference.



Stop the vertical flaps at a position where you can hold the tabs and adjust the louver left and right.

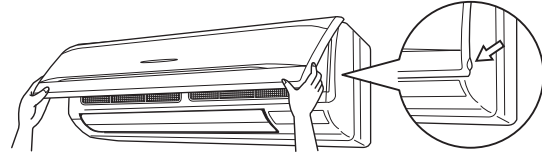
HOW TO CLEAN THE AIR FILTER

Clean the air filter when the display shows “Time to clean filter”.

- It will display that it will operate for a set amount of time.
- Increase the frequency of cleaning if the unit is installed in a room where the air is extremely contaminated.
- If the dirt becomes impossible to clean, change the air filter (Air filter for exchange is optional)

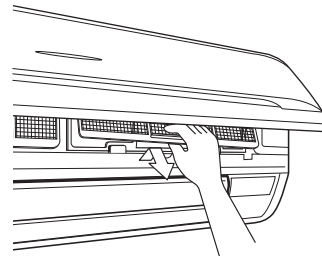
1. Open the front panel.

Place your fingers on the panel protrusions on the left and right sides of the main unit and open until the panel stops. (Follow the same procedure for closing.)



2. Pullout the air filter.

Push up the tab in the center of the air filter slightly then pull out in a downward direction.



3. Clean the air filter.

Use vacuum cleaner **A)** or wash the air filter with water **B)**.

A) Using a vacuum cleaner



B) Washing with water

When the air filter is very dirty, use soft brush and neutral detergent



Remove water and dry in the shade.

⚠ NOTE

- Do not wash the air filter with hot water of more than 122°F (50°C), as doing so may result in discoloration and/or deformation.
- Do not expose it to fire, as doing so may result in burning.

4. Attach the air filter.

Once cleaning is done be sure to replace the air filter as it was.

5. Shut the front panel.

Refer to item No.1.

6. Press the FILTER SIGN RESET button on the remote controller.

The “Time to clean filter” display vanishes.

HOW TO CLEAN THE AIR OUTLET AND EXTERIOR

- Clean with soft cloth.
- When it is difficult to remove stains, use water or neutral detergent.



NOTE

- Do not use gasoline, benzene, thinner, polishing powder, liquid insecticide. It may cause discoloring or warping.
- Do not use water or air of 122°F (50°C) or higher for cleaning air filters.
- When the flap is extremely contaminated, remove it as below and clean or exchange it. (Flap for exchange is optional.)

HOW TO CLEAN THE FRONT PANEL

You can remove the front panel to clean it.

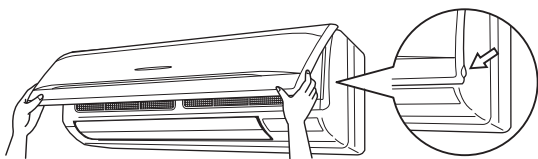


NOTE

- Hold the front panel firmly so that it does not fall.
- Do not use gasoline, benzene, thinner, polishing powder, liquid insecticide. It may cause discoloring or warping.
- Do not let the indoor unit get wet. It may cause an electric shock or a fire.
- Do not scrub firmly when washing the blade with water. The surface sealing may peel off.
- Do not use water or air of 122°F (50°C) or higher for cleaning air filters and outside panels.
- Make sure the front panel is solidly in place.

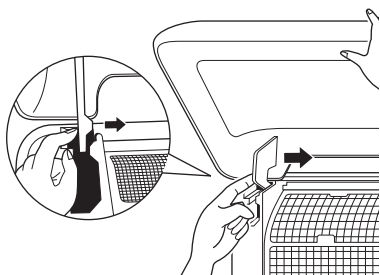
1. Open the front panel.

Place your fingers on the panel protrusions on the left and right sides of the main unit and open until the panel stops. (Follow the same procedure for closing.)



2. Remove the front panel.

Push the panel spacers on either side of the front panel towards the center of the main unit and remove. (You can also remove it by sliding the front panel either to the left or right and pulling it forward.)



3. Clean the front panel.

- Wipe gently with a soft wet cloth.
- Only use neutral cleaning detergent.
- After washing off, wipe off any excess water and dry in a shaded location.

• When very grimy

Directly apply the type of detergent used for cleaning ventilation fans or ovens, wait 10 minutes, and then rinse with water.



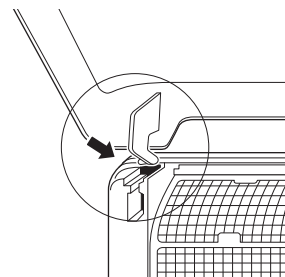
NOTE

- Do not wash the air conditioner with hot water of more than 122°F (50°C). Doing so may result in discoloration or deformation.

4. Attach the front panel.

Set the panel spacers of the front panel into the slots and push them in all the way.

Close the front panel slowly in this state.



8. PROPER OPERATION OF THE AIR CONDITIONER

The following symptoms do not indicate air conditioner malfunction

I. THE SYSTEM DOES NOT OPERATE

- **The system does not restart immediately after the ON/OFF button is pressed.**

If the OPERATION lamp lights, the system is in normal condition.

It does not restart immediately because a safety device operates to prevent overload of the system. After 3 minutes, the system will turn on again automatically.

- **The system does not restart immediately when TEMPERATURE SETTING button is returned to the former position after pushing the button.**

If the OPERATION lamp lights, the system is in normal condition.

It does not restart immediately because a safety device operates to prevent overload of the system. After 3 minutes, the system will turn on again automatically.

- **The system does not start when the display shows "CENTRAL CONTROL" and it flashes for a few seconds after pressing an operation button.**

This is because the system is under centralized control. Flashes on the display indicates that the system cannot be controlled by the remote controller.

- **The system does not start immediately after the power supply is turned on.**

Wait one minute until the micro computer is ready for operation.

II. WHITE MIST COMES OUT OF THE UNIT

- **When humidity is high during cooling operation. (In oily or dusty places)**

If the inside of an indoor unit is extremely contaminated, the temperature distribution inside a room becomes uneven. It is necessary to clean the inside of the indoor unit. Ask your Daikin dealer for details on cleaning the unit. This operation requires a qualified service person.

- **When the system is changed over to HEATING OPERATION after DEFROST OPERATION.**

Moisture generated by DEFROST becomes steam.

III. NOISE OF AIR CONDITIONERS

- **A ringing sound after the unit is started.**

This is the starting sound of the motor which moves the air-flow direction blades.

It will quiet down after about one minute.

- **A continuous “Whoosh” is heard when the system is in COOLING or DEFROST OPERATION.**

This is the sound of refrigerant gas flowing through both indoor and outdoor units.

- **A “Whoosh” sound is heard at the start or immediately after the stop of operation and at the start or immediately after the stop of DEFROST OPERATION.**

This is the noise of refrigerant caused by flow stop and flow change.

- **A continuous flow “Whoosh” sound is heard when the system is in COOLING OPERATION or at a stop.**

The noise is heard when the drain pump is in operation.

IV. DUST FROM THE UNIT

- **Dust may blow out from the unit after starting operation after not being used for a while.**

Dust absorbed by the unit blows out.

V. THE UNIT GIVES OFF ODORS

The unit absorbs odors in the room, furniture, cigarettes, etc., and then emits them.

VI. THE LIQUID CRYSTAL OF THE REMOTE CONTROLLER DISPLAY “Checking the connection. Please stand by”

- **This occurs immediately after the main power supply switch is turned on.**

This indicates that the remote controller is in normal condition and continues temporarily.

9. TROUBLE SHOOTING

I. If one of the following malfunctions occurs, take the measures shown below and contact your Daikin dealer.

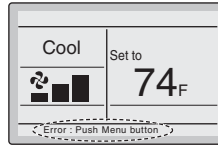
The system must be repaired by a qualified service person.

— ⚠ WARNING —

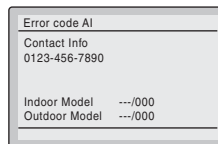
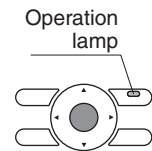
If the air conditioner is operating abnormally, such as a burning smell, unplug the power cord from the outlet, and contact your dealer

Continued operation under such circumstances may result in a failure, electric shock or fire.

- If a safety device such as a fuse, a breaker or a ground fault circuit interrupter frequently actuates;
Procedure: Do not turn on the main power switch, take the following actions.
- If the ON/OFF switch does not properly work;
Procedure: Turn off the main power switch.
- If water leaks from unit.
Procedure: Stop the operation.



- If an error occurs, either one of the following items will flash in the basic screen.
“Error: Push Menu button”
* The operation lamp will flash.
“Warning: Push Menu button”
* The operation lamp will not flash.
Press Menu / OK button.



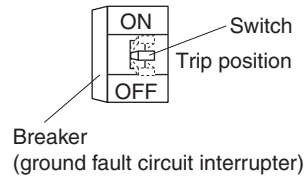
- The error code will flash and the service contact and model name or code may appear.
- Notify your Daikin dealer of the Error code and model name or code.

II. If the system does not properly operate (except for the above mentioned case), and none of the other mentioned malfunctions are evident, investigate the system according to the following procedures.

1. If the system does not operate at all.

- Check if there is a power failure.
Wait until power is restored. If power failure occurs during operation, the system automatically restarts immediately after the power supply recovers.
- Check if no fuse has blown.
Turn off the power supply.

- Check if the breaker is blown.
Turn the power on with the breaker switch in the off position.
Do not turn the power on with the breaker switch in the trip position.
(Contact your dealer.)



2. If the system stops operating after it has been running normally.

- Check if the air inlet or outlet of outdoor or indoor unit is blocked by obstacles.
Remove the obstacle and make it well-ventilated.
- Check if the air filter is clogged.
Ask a qualified service person to clean the air filters (Refer to MAINTENANCE).

3. The system operates but it does not sufficiently cool or heat, check if:

- If the air inlet or outlet of the indoor or the outdoor unit is blocked with obstacles.
Remove the obstacle and make it well-ventilated.
- If the air filter is clogged.
Ask a qualified service person to clean the air filters (Refer to MAINTENANCE).
- If the set temperature is not adequate.
- If the FAN SPEED button is set to LOW SPEED.
- If the airflow angle is not adequate.
- If the doors or the windows are open. Shut doors or windows to prevent outside air from coming in.
- If direct sunlight enters the room (when cooling).
Use curtains or blinds.
- When there are too many inhabitants in the room (when cooling).
Cooling effect decreases if heat gain of the room is too large.
- If the heat source of the room is excessive (when cooling).
Cooling effect decreases if heat gain of the room is too large.

DAIKIN INDUSTRIES, LTD.

Head office:
Umeda Center Bldg., 2-4-12, Nakazaki-Nishi,
Kita-ku, Osaka, 530-8323 Japan

Tokyo office:
JR Shinagawa East Bldg., 2-18-1, Konan,
Minato-ku, Tokyo, 108-0075 Japan

DAIKIN NORTH AMERICA LLC

5151 San Felipe, Suite 500
Houston, TX 77056





REVIEW OF MECHANICAL SUBMITTALS

Project: ASU 3 Rivers Ritz Theater Renovation
Location: Malvern, Arkansas
Date of Receipt: Friday, March 10, 2023
Date of Review: Tuesday, March 28, 2023
Reviewed by: Adam Kelly
Email: akelly@pettitinc.com

P&P Job No. 22-024

Signed: 

Checking is for conformance with the design concept of the Project and compliance with the information given in the Contract Documents. The Contractor is responsible for dimensions to be confirmed and correlated at the job site; for information that pertains solely to the fabrication processes or to techniques of construction; and for coordination of the work of all trades.

Item	Approval Status		Comments
Section 23 23 00 - 02 – Firestopping	Approved as Corrected	○	<ul style="list-style-type: none"> - Contractor to verify all sizes, quantities, and coordinate the use of firestopping materials in all fire rated separations. Coordinate fire barriers with architectural drawings. - Coordinate the use of appropriate fire stopping materials for the applications and ensure that the UL listed materials are installed per manufacturer’s specifications.
Section 23 23 00 - 03 – Gravity Roof Ventilator	Approved as Corrected	○	<ul style="list-style-type: none"> - Coordinate installation with roofing contractor. - Verify unit is provided with backdraft damper and birdscreen.
Section 23 05 29 - 01 – Hangers and Supports	Approved as Corrected	○	<ul style="list-style-type: none"> - Contractor to verify all sizes and quantities.
Section 23 05 53 - 01 – HVAC Identification	Approved as Corrected	○	<ul style="list-style-type: none"> - Contractor to coordinate all tags with most recent construction documents. If changes are made, record deviation on “as built” documents provided to owner.
Section 23 05 93 – 01 – Testing, Adjustment, and Balancing	Approved	✓	<ul style="list-style-type: none"> - Approved as submitted.
Section 23 07 13 – 01 – HVAC Duct Insulation	Approved	✓	<ul style="list-style-type: none"> - Approved as submitted
Section 23 07 19 – 01 – HVAC Duct Insulation	Approved as Corrected	○	<ul style="list-style-type: none"> - Contractor to coordinate minimum thickness of closed cell insulation required for refrigerant piping to meet equipment manufacturer’s requirements. - Provide protection for all exterior piping insulation, see specifications.
Section 23 23 00-	Approved	○	<ul style="list-style-type: none"> - Contractor to verify all sizes and quantities.

01 – Refrigerant Piping	as Corrected		<ul style="list-style-type: none"> - Coordinate refrigerant piping installation with equipment manufacturer’s recommendations and piping diagrams. - Coordinate all natural gas piping and piping accessories with plumbing contractor.
Section 23 31 00-01 – HVAC Ducts & Casings.	Approved as Corrected	○	<ul style="list-style-type: none"> - Contractor to verify all sizes and quantities. - Contractor to coordinate routing of ductwork with all trades in space provided by architects. Ductwork to recessed in pathway to minimize visibility. - Contractor to limit flex duct runout to a total length of 3 ft.
Section 23 33 00-01 – Air Duct Accessories	Approved as Corrected	○	<ul style="list-style-type: none"> - Contractor to verify all sizes and quantities.
Section 23 34 23-01 – Power Ventilators	Approved as Corrected	○	<ul style="list-style-type: none"> - Coordinate location of fan with architect’s RCP and coordinate location of gooseneck terminations with plumbing vents and roof equipment / structure.
Section 23 37 00 – Air Duct Accessories	Approved as Corrected	○	<ul style="list-style-type: none"> - Contractor shall verify all sizes and quantities. - Final finish shall be as per architect. Provide manufacture’s color chip chart to architect for final color selection prior to ordering. - Contractor to provide continuous insulation blanket a top of all supply air and return air devices. - Contractor shall coordinate exact placement with architect’s plans. - Contractor to coordinate with architectural RCP, to verify the correct border and mounting type is provided.
Section 23 54 00-01 – High Efficiency Gas Fired Furnace	Approved as Corrected	○	<ul style="list-style-type: none"> - Refer to refrigerant piping diagrams provided by manufacturer for refrigerant piping size and additional refrigerant required. - Field coordinate clearances required for service with other trades. - Provide all seismic bracing as required. - Coordinate all electrical requirements with electrical contractor. - Field coordinate final smoke detector requirements with other trades. - Provide one set of spare filters and (drive belts; if necessary). - Coordinate placement of condensing unit on equipment pad with additional HVAC equipment and structural.
Section 23 00 00-01 – Electric Unit Heaters	Approved as Corrected	○	<ul style="list-style-type: none"> - Field coordinate clearances required for service with other trades. - Coordinate all electrical requirements with electrical contractor.



Note:

Submittal Review Comment Transmittal



Date: 3/10/2023

Project Name: Phase II Restoration of the Ritz Theater

Project No.: 19114.02

Owner: Arkansas State University Three Rivers

Contractor: Clark Contractors, LLC

Attn: Terry Jacks

Submittal: Div. 23 (various, see below)

- Accepted
- Accepted as Noted
- Revise and Resubmit
- Not Accepted

By: Ryan Biles, AIA

Items Specified:

- A. 23 00 00 Firestopping
- B. 23 00 10 Gravity Roof Ventilator
- C. 23 05 29 Hangers and Supports
- D. 23 05 53 Identification for HVAC
- E. 23 05 93 TAB
- F. 23 07 13 Duct Insulation
- G. 23 07 19 Piping Insulation
- H. 23 23 00 Refrigerant Piping
- I. 23 31 00 Ducts & Casing
- J. 23 33 00 Air Duct Accessories
- K. 23 34 23 Power Ventilators
- L. 23 37 00 Air Inlets & Outlets
- M. 23 54 00 High Efficiency Gas Fired Furnace
- N. 23 62 13 Air Cooled Condensing
- O. 23 00 00 Electric Unit Heater

Acceptance is subject to the provisions of the General Conditions of the Contract for Construction AIA Document A201.

Submittal Comments:

- **Please review for compliance with Div. 23 specifications and Plumbing Drawings and return to SCM via email**

Attachments:

23-0310 Division 23 submittals not yet reviewed by architect

By: **Ryan Biles, AIA**

J:\2019\19114.02 Ritz Theater Phase III\1800 Submittals\DIV 23\TO MEP\23-0310_RitzTheaterPh3_SUBMITTAL_Div23_TO PETTIT.docx



Submittal

Prepared For:
Pettit & Pettit

Date:
March 27, 2023

Sold To:
CSUSA

Job Name:
Ritz Theater Phase III

Harrison Energy Partners is pleased to provide the enclosed submittal for your review and approval.

Qty. Product Summary

1 Mini-Split Heat Pump (MSOU/MS-1)

Bill Simpson, New Systems Sales Team Leader
p. 501.661.0621 • m. 501.539.0578
f. 501.661.9109 • harrisonenergy.com
Harrison Energy Partners • Commercial HVAC Excellence
1501 Westpark Dr., Ste. 9 • Little Rock, AR 72204

The attached information describes the equipment we propose to furnish for this project, and is submitted for your approval.



Submittal Data Sheet

1.5-Ton Wall Mounted Heat Pump SkyAir System - FAQ18TAVJURZQ18TBVJUA

Project: Ritz Theater Phase III - RFP# 1

Submitted by: Tufail Muhammad of HARRISON ENERGY PARTNERS on 3/27/2023

Submitted to: No Engineer Name Specified

FEATURES

- Wide angle louvers distribute comfortable airflow
- Auto-swing function ensures efficient air distribution
- Dependable heat pump operation from -4°F in heating to 122°F in cooling

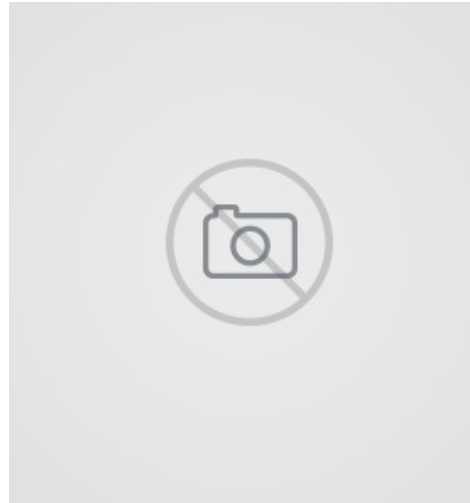
BENEFITS

- For rooms with no false ceiling nor free floor space
- Long piping lengths allow layout flexibility
- 10-year parts limited warranty for residential/commercial applications

INDOOR UNIT



OUTDOOR UNIT





Submittal Data Sheet

1.5-Ton Wall Mounted Heat Pump SkyAir System - FAQ18TAVJURZQ18TBVJUA

Project: Ritz Theater Phase III - RFP# 1

Submitted by: Tufail Muhammad of HARRISON ENERGY PARTNERS on 3/27/2023

Submitted to: No Engineer Name Specified

SYSTEM PERFORMANCE

Indoor Unit Model No.	FAQ18TAVJU	Indoor Unit Name:	Sky-Air Wall Mounted
Outdoor Unit Model No.	RZQ18TBVJUA	Outdoor Unit Name:	1.5-Ton, Heat Pump, SkyAir ODU
Rated Cooling Capacity (Btu/hr):	18,000	Rated Cooling Conditions:	Indoor (°F DB/WB): 80 / 67 Ambient (°F DB/WB): 95 / 75
Sensible Capacity (Btu/hr):		Rated Piping Length(ft):	25
Max/Min Cooling Capacity (Btu/hr):	/	Rated Height Difference (ft):	0.00
Cooling Input Power (kW):		Rated Heating Conditions:	Indoor (°F DB/WB): 70 / 60 Ambient (°F DB/WB): 47 / 43
SEER (Non-Ducted/Ducted):	/		
EER (Non-Ducted/Ducted):	/		
Rated Heating Capacity (Btu/hr):	20,000		

SYSTEM DETAILS

Refrigerant Type:	R-410A	Cooling Operation Range (°F DB):	23 - 122
Holding Refrigerant Charge (lbs):	6.4 Lb	Heating Operation Range (°F WB):	-4 - 60
Additional Charge (lb/ft):	0.04	Max. Pipe Length (Vertical) (ft):	98
Pre-charge Piping (Length) (ft):	15	Cooling Range w/Baffle (°F DB):	0 - 122
Max. Pipe Length (Total) (ft):	164	Heating Range w/Baffle (°F WB):	-
Max Height Separation (Ind to Ind ft):	0		

Submittal Data Sheet

1.5-Ton Wall Mounted Heat Pump SkyAir System - FAQ18TAVJURZQ18TBVJUA

Project: Ritz Theater Phase III - RFP# 1

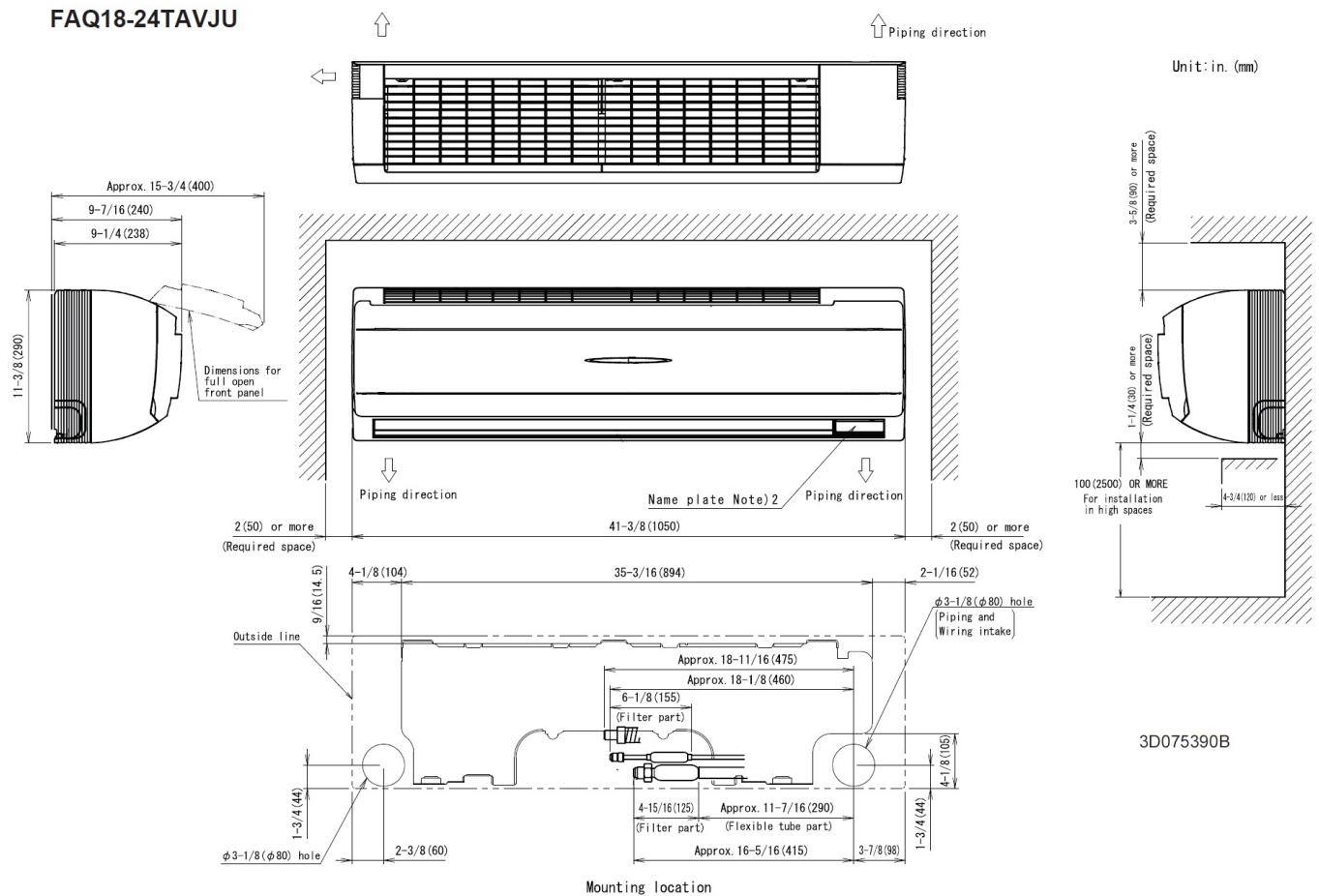
Submitted by: Tufail Muhammad of HARRISON ENERGY PARTNERS on 3/27/2023

Submitted to: No Engineer Name Specified

INDOOR UNIT DETAILS

Power Supply (V/Hz/Ph):	//	Airflow Rate (H/L) (CFM):	500/400
Power Supply Connections:	L1, L2, Ground	Moisture Removal (Gal/hr):	
Min. Circuit Amps MCA (A):	0.5	Gas Pipe Connection (inch):	5/8
Max Overcurrent Protection (MOP) (A):	15	Liquid Pipe Connection (inch):	3/8
Dimensions (HxWxD) (in):	11-3/8 x 41-3/8 x 9-1/4	Condensate Connection (inch):	1/2
Net Weight (lb):	31	Sound Pressure (H/L) (dBA):	43/37
Ext. Static Pressure (Rated/Max) (inWg):	/	Sound Power Level (dBA):	

DIMENSIONAL DRAWING - INDOOR UNIT





Submittal Data Sheet

1.5-Ton Wall Mounted Heat Pump SkyAir System - FAQ18TAVJURZQ18TBVJUA

Project: Ritz Theater Phase III - RFP# 1

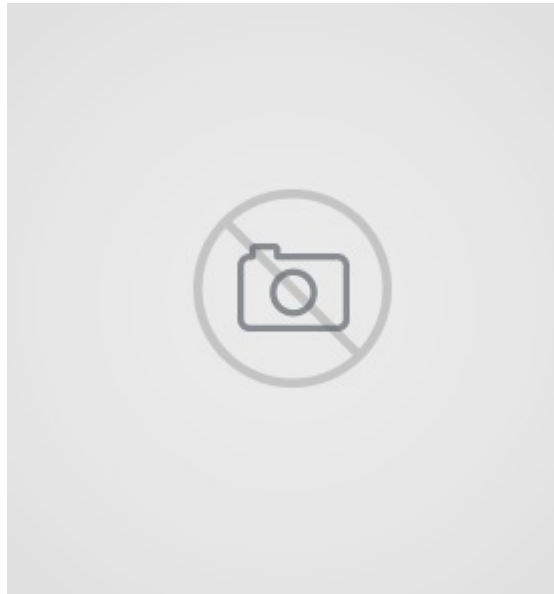
Submitted by: Tufail Muhammad of HARRISON ENERGY PARTNERS on 3/27/2023

Submitted to: No Engineer Name Specified

OUTDOOR UNIT DETAILS

Power Supply (V/Hz/Ph):	208-230 / 60 / 1	Compressor Stage:	Inverter
Power Supply Connections:	L1, L2, Ground	Capacity Control Range (%):	-
Min. Circuit Amps MCA (A):	16.5	Airflow Rate (H) (CFM):	2682
Max Overcurrent Protection (MOP) (A):	20	Gas Pipe Connection (inch):	5/8
Max Starting Current MSC(A):		Liquid Pipe Connection (inch):	3/8
Rated Load Amps RLA(A):		Sound Pressure (H) (dBA):	58
Dimensions (HxWxD) (in):	39 x 37 x 12-5/8	Sound Power Level (dBA):	
Net Weight (lb):	172		

DIMENSIONAL DRAWING - OUTDOOR UNIT



Project Name:	Approval:
Location:	Date:
Engineer:	Construction:
Submitted to:	Unit #:
Submitted by:	Drawing #:
Reference:	

MODEL COMPATIBILITY:

Compatible with VRV and VRV Life™ indoor unit models: FXAQ, FXDQ, FXEQ, FXFQ, FXHQ, FXLQ, FXMQ, FXMQ_MF, FXNQ, FXSQ, FXTQ, FXUQ, FXZQ, VAM, CXTQ
 Compatible with SkyAir indoor unit models: FAQ, FBQ, FCQ, FHQ, FTQ
 Compatible with Single and Multi-zone system indoor unit model: FFQ, FDMQ

SPECIFICATIONS:

Model	BRC1H71W
Description	Madoka Remote Controller
Maximum Connections	16 indoor units
Communication Wire	18AWG-2, No polarity Stranded, Non-shielded
Total Wiring Length	1,640 ft. (500 m)
Communication Protocol	Daikin proprietary P1P2 protocol
Power	16VDC supplied by indoor unit (1.58VA maximum)
Comfort Setpoint Range	60 to 90 °F (16 to 32 °C)
Setback Setpoint Range	40 to 95 °F (5 to 35°C)
Operating Humidity Range	75% or less (RH) (without condensation)
Dimensions	3.35 x 3.35 x 0.98 (inches) 85 x 85 x 25 (mm)
Weight	0.42 lbs. (0.19 kg)

PRODUCT IMAGE:



Text Display Mode



Icon Display Mode



Scale (Text) Display Mode



Scale (Icon) Display Mode

FEATURES:

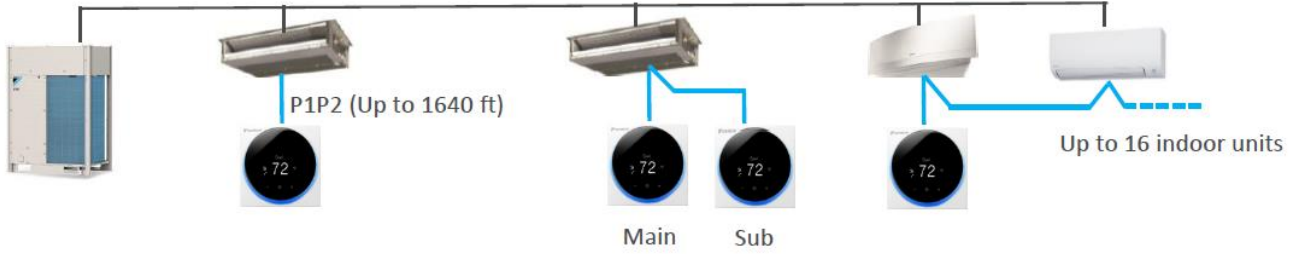
- Compact and stylish design
 - Configurable LED light ring (Dimmable/Off) and LCD brightness
 - Simple and Intuitive touch buttons and a physical On/Off button
 - Selective Display Mode: Text display, Icon display, Scale (Text) display, and Scale (Icon) display
 - Display of Temperature and Setpoint in 1°F / °C increments
 - Customizable display to show selected information only
- Connectivity
 - Up to 16 indoor units can be controlled together within one remote controller group
 - Within one remote controller group, up to 2 Madoka Remote Controllers can be used, one as a main and one as a sub
- Leveled user authority
 - 3 levels at the controller: user, administrator/owner, and installer

Project Name:	
Location:	Approval:
Engineer:	Date:
Submitted to:	Construction:
Submitted by:	Unit #:
Reference:	Drawing #:

- Configurable passwords to access administrator/owner and installer menu in the controller
 - 2 levels at the App: administrator/owner and installer
- Bluetooth quick configuration app available for both Administrator and Installer
 - Can manually set multiple settings at the same time
 - Can create and save pre-configuration files
- Advanced indoor unit control:
 - Temperature sensor built-in with configurable offset
 - Dual setpoints (independent cooling and heating setpoints) with configurable minimum setpoint differential or Single Setpoint (occupied period)
 - Setpoint range limit for cooling and heating modes
 - Independent cooling and heating setback setpoints (unoccupied period)
 - Auto changeover control with configurable primary and secondary changeover dead bands and guard timer
 - Airflow – Individual air flow direction, dual airflow and auto draft prevention (prevents air blowing directly on occupants) *
 - Automatic Setback by occupancy sensor*
 - Automatic Off by occupancy sensor*
 - Configuration for Self-cleaning filter panel**
 - Real-time monitoring of system malfunctions with immediate display of unit in error and error code
 - Remote controller function prohibition: mode (or prohibit specific modes), fan speed, setpoint
- Advanced features
 - Supported language: English, Spanish or French
 - Automatic adjustment for Daylight Savings Time (DST)
 - 48-hour clock/calendar battery backup
- Mounting
 - Can mount to a drywall or an electrical component box
 - Mounting plates and screws are included

* Available for FXFQ_TVJU, FXUQ_PVJU, and FXZQ_TA indoor units
 **Available for FXFQ_TVJU indoor units

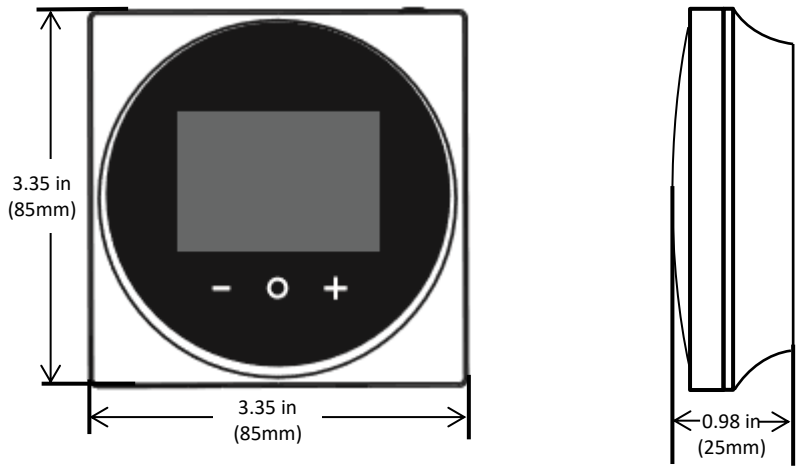
SYSTEM DIAGRAM:



Project Name: _____
Location: _____
Engineer: _____
Submitted to: _____
Submitted by: _____
Reference: _____

Approval: _____
Date: _____
Construction: _____
Unit #: _____
Drawing #: _____

DIMENSIONS:



DOCUMENTATION:

Documentation available on www.daikincity.com and/or www.daikinac.com:

- Installation Manual
- Operation Manual
- App User Manual
- Submittal
- Written Guide Specs
- Quick User Guide
- Field Setting Table



Submittal Data Sheet

Wind Baffle
KPW5G112

DESCRIPTION

Wind Baffle mounts over the standard air grille and allows adjustment in air blow-off direction.



Image for REFERENCE ONLY

SPECIFICATIONS

Model No:	KPW5G112		
Unit Compatibility:	LV 30/36	RKS30LVJU, RKS36LVJU	Qty (1)
	Sky Air	RZR18TAVJU(A), RZR24TAVJU(A), RZQ18TAVJU(A), RZQ24TAVJU(A)	Qty (1)
	VRV IV S	RXTQ36TAVJU(9)(A), RXTQ48TAVJU(A),	Qty (1)
	VRV Life	RXSQ24TAVJU(A), RXSQ36TAVJU(A), RXSQ48TAVJU(A)	Qty (1)
	Fit	DX17VSS, DZ17VSA	Qty (1)
Unit Names:	Wind Baffle		
Dimensions (WxHxD):	23-3/16" x 23-5/16" x 4-5/16"		
Unit Weight:	3.1 (lb.)		
Material:	Flame Retardant Grade UL94V-HB		

DIMENSIONAL DRAWINGS

