

# OPERATION AND INSTALLATION MANUAL

Please read this owner's manual carefully before operating, and keep it for reference.

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St-Mathieu-de-Beloeil (Québec) Canada **1-866-680-GREE** 

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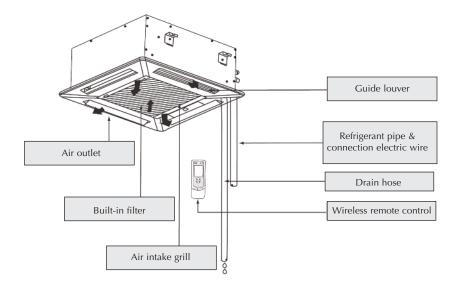
#### **OPERATION INSTRUCTIONS**

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Thank you for purchasing this air conditioner. Please read this MANUAL carefully before using this unit and keep it for future reference.

# **PARTS AND THEIR FUNCTIONS**

## INDOOR UNIT



# **Safety precautions**

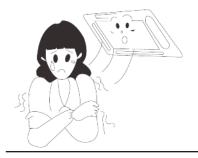
• Read the following instructions carefully before use.

# Warning

Do not aim the air flow directly at people and avoid excessive heating or cooling, which may cause discomfort or illness.

Regularly verify the support on which the unit is installed to ensure it is still stable.

If the support is damaged and remains unrepaired, the unit may fall and cause injury.





Do not remove protection grill nets from the outdoor unit.

service center.

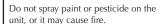
Do not put hands or insert anything into the unit's air outlet vent.



Do not stand on the outdoor unit or put anything on it, as falls and/or injury may result.

If you notice something wrong (eg. burning smell), turn off the power immediately and contact the









If the air in the room is stuffy, open a door and window for a short period of time to air it out. Otherwise, keep the curtains closed to prevent the loss of cooled air.

The use of iron or copper wire may cause the unit to break down or cause fire.





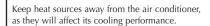
Iron wire

# **Safety precautions**

• Read the following instructions carefully before use.

# Warning

Do not check or repair while the unit is running, as this may result in serious injury.





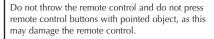


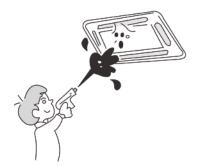
Never place objects near the unit's air intake and outlet, as it may affect performance or cause the unit to turn off.





Keep all liquids away from the indoor unit, as they may cause damage or electric shock.







#### How to use the wireless remote control

#### Parts and Functions of the Wireless remote control

Note: Be sure that there are no obstructions between the receiver and the remote control. Do not drop or throw the remote control. Do not allow the remote control to come into contact with liquids, direct sunlight or intense heat.

# Signal transmitter

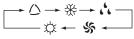


# ON/OFF button

Press this button to turn the unit on, then press again to turn the unit off. The Sleep function is canceled, while the unit is off.

# MODE MODE button

Press this button to select Auto, Cool, Dry, Fan or Heat modes. Auto mode is the default when power is on. In Auto mode, the temperature is not be displayed. In Heat mode, the initial value is 28°C (82°F). In other modes, the initial value is 25°C (77°F).



🛆 AUTO

∰ COOL

M DRY

HEAT\*

\*Note: Only for cooling and heating unit.

# SLEEP SLEEP button

Press this button, to activate or deactive the Sleep function. When turned on, Sleep Off is defaulted. When the unit is turned off, the Sleep function is canceled. After the Sleep function is set, the Sleep signal will be displayed. In this mode, the timer can be adjusted. This function is not available.

# FAN FAN button

Press this button to select Auto, Low, Middle or High speed. When turned on the Auto fan speed is the default. Only the Low fan speed can be used in Blow mode.



# CLOCK CLOCK button

Press this button to set the clock. The signal icon ⊕ will appear and blink on and off. Within 5 seconds, the value can be adjusted by pressing + or - button. If the button is held for 2 seconds or more, the minute value will increase by 10 every .5 seconds. When blinking, press the Clock button again. The signal icon ⊕ will be displayed, which means that the setting has been entered successfully. The first time it is turned on, 12:00 is the default display time and the signal icon will be displayed. When the signal icon is displayed, it denotes the clock time. When the symbol is not displayed, it is the timer.

# TEMP button

Press this button to display the indoor setting temperature or indoor ambient temperature. When the indoor unit is first turned on, it will display the setting temperature. If the temperature's display status is changed from another status to " ",", the ambient temperature is displayed. Within 5s, it receives the other remote control signal that will return the display to the setting temperature. If the user hasn't yet set the temperature display status, it will display the setting temperature.

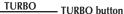
#### Parts and functions of the wireless remote control

This is a universal wireless remote control, and can be used for several units. The buttons on this control which are not available to this unit will not be described below.



**Blow** Blow button

> Press this button, the Blow on and Blow off can be set up. Under the Cool and Dry mode, press this button once, the Icon Blow will be displayed, and Blow is turned on; When repressing this button once more, Icon Blow will be concealed, at this time, the BLOW is turn off. After powered on, Blow Off is defaulted. If operating ON/OFF button and changing mode to Cool, Dry, the status of BLOW will stay in the original position. If unit is off, only Blow off can be set up and send the signal. this function is not available under the Auto, Fan and Heat mode and there is no Blow signal displayed.



In the Cool or Heat mode, press this button to turn the Turbo function on or off. After the Turbo function is turned on, the Turbo symbol will be displayed. The symbol will be automatically cancelled if the mode or fan spéed is changed.

- + button

Press this button to increase the temperature setting. Hold the button down for two seconds to change the numbers quickly. When the button is released, the °C (°F) symbol will be displayed. Temperature adjustment is unavailable in the Auto mode, but the order can be sent by pressing this button. Temperatures for Celsius degree setting: 16-30; for Fahrenheit degree setting: 61-86.

button

Press this button to decrease the temperature setting. Hold the button down for two seconds to change the numbers quickly. When the button is released, the °C(°F) symbol will be displayed. Temperature adjustment is unavailable in the Auto mode, but the order can be sent by pressing this button.

LIGHT - LIGHT button 💳

> Press this button to turn the light on or off when the unit is either on or off. After activation, Light On is the default.

#### Parts and functions of the wireless remote control

This is a universal wireless remote control, and can be used for several units. The buttons on this control which are not available to this unit will not be described below.



#### **≩**∎ SWING UP AND DOWN button

Press this button to set swing angle, which changes in the order shown below:

This remote control is universal.If it receives three of the following settings, the swing angle will remain in its original position.

If the guide louver is stopped when it is swinging up and down, it will remain its present position.



indicates that the guide louver can be placed in the five directions, as shown in the figure.



#### AIR button

Press this button to select Air On or Air Off.

# TIMER ON button

Timer On setting: The "ON" signal will blink and the signal icon @ will no longer be displayed. The numerical section will now be the timer setting status. During the 5 seconds that the "ON" is blinking, press the + or button to adjust the time value in the numerical section. Each time the button is pressed. the value increases or decreases by 1 minute. Hold the + or - buttons for 2 seconds and the numbers will change more quickly. During the initial 2.5 seconds, the individual minutes change by ten and then stop. During the next 2.5 seconds, the minutes (in the tens place) change by ten. During the 5s of blinking press the Timer On button and the Timer On setting will show. The Timer On has been set up. Press the Timer On button again, and the Timer On will be canceled. Before setting the Timer, adjust the Clock to the current actual time.

#### **TIMER OFF** - TIMER OFF button

Press this key once to begin setting the TIMER OFF times. The setting method is the same as for TIMFR ON.



#### - **HEALT button** (optionnal)

Press this button to select Health On or Health Off. Health On is the default when the unit is on.

#### I FEEL - I FEEL button 🖥

Press this button once to turn on the I FEEL function, "I FEEL" will be displayed. After this function is activated, the remote control will send the temperature to the main unit every 10minutes. When the button is pressed again, this function will turn off.

#### User Guide- General use

- After turned on, press the **b** button, to run the unit. (Note: When it is powered on, the guide louver of main unit will close automatically.)
- 2. Press the MODE button to select the desired running mode.
- 3. Press the + or button to set the desired temperature. (It is not necessary to set the temp. at AUTO mode.)
- 4. Press the FAN button to set the fan speed: select AUTO FAN, LOW, MID or HIGH.
- 5. Press the substant button to select the direction of the air flow.

#### **User Guide- Optional Use**

- 1. Press the SLEEP button to set the Sleep mode.
- Press the TIMER ON and TIMER OFF button to set the scheduled timer settings
- 3. Press the LIGHT button to turn the display light on or off. (This function may be not available for some unit).
- Press the TURBO button to turn the TURBO function ON and OFF.



#### • About the BLOW function

This function indicates that moisture on the indoor unit's evaporator will be blown out after the unit is stopped to keep mould away.

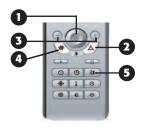
- 1. Having set BLOW function on: After turning off the unit by pressing the **b** button, the indoor fan will continue running for about 10 min. at low speed. While it is running, press the BLOW button to stop indoor fan directly.
- 2. Having set BLOW function off: After turning off the unit by pressing  $\ensuremath{\boldsymbol{\vartheta}}$  button, the entire unit will be off.

#### About AUTO RUN

When the AUTO RUN mode is selected, the setting temperature will not be displayed on the LCD. The unit will automatically accord with the room temp. to select the suitable running method and to reach a comfortable temperature.

#### · About turbo function

This function makes the unit run at super-high fan speed to cool or heat quickly, so that the ambient temp. approachs the preset temp. as soon as possible.





#### **OPERATION INSTRUCTIONS**

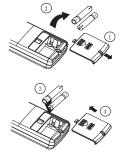
#### How to insert batteries

- 1. Remove the cover from the back of the remote control.
- 2. Insert the two batteries ( two AAA dry-cell batteries ) and press the ACL button.
- 3. Replace the cover.

#### NOTE:

- Do not mix new batteries with old.

  Do not use different types of batteries.
- Remove batteries when the remote control will not be used for an extended period of time.
- The lifetime of batteries is about one year.
- The remote control should be placed about 1m or more away from the TV or any other electric appliances.
- Bad batteries must never be used.



Sketch map for changing batteries

# **Guidelines for best results**

#### Adjust the room temperature properly.

Adjust the room temperature properly for a comfortable environment.



#### Never place anything under the indoor unit that is to be kept dry.

The indoor unit may drip water when the humidity is over 80% or when the drainage outlet is clogged.



#### Turn off the main power supply when is the unit will not to be used for an extended period of time.

When the main power switch is on, some electricity is still being used even if the system is not running. Turn off the main power supply to save energy.



## Do not open the doors and windows for a long time when the air conditioner is running

Cooling and heating performance will be affected if the doors and windows are open for a long time.



Place TV, radio, stereo, etc. at least 1m away from the indoor unit and the remote control.

It may cause interference in the picture or sound.



#### Avoid directing the air flow onto pets and plants

It may harm them.



#### Warning

- \* In case of malfunction (such as bad smell), turn off the power immediately and contact the service center.
- \* Do not repair the air conditioner by yourself. Incorrect repairs may cause fire. Please contact the service center.
- \* The appliance should not be used by children without supervision.

# Check the items shown below before contacting the service center.

| Problem                                    | Cause  | Correctives measures             |
|--|--|----------------------------------|
| The system does not                        | Fuse off or broken   | Change fuse or replace fuse      |
| operate at all                             | Power off  | It will restart when power is on |
|  | Loose plug   | Put the plug into place          |
|  | Dead batteries in remote control                                     | Replace batteries                |
|  | Out of the remote control's range                                    | Keep distance of 8m or less      |
| The system stops right after it is started | of the air conditioner   |                                  |
| Cooling and/or heating are malfunctioning  | Object near the air intake or air outlet of indoor and outdoor units | Remove the object                |
|  | Wrong temperature setting  | Refer to p. 6                    |
|  | Low fan speed  | Refer to p. 6                    |
|  | Air direction is not correct   | Refer to p. 6                    |
|  | Doors or windows are open  | Close them                       |
|  | Direct sun   | Close the curtain or blinds      |
|  | Too many people in the room  |                                  |
|  | Too many heating sources   |                                  |
|  | Dirty air filter   | Clean it                         |
|  |  |                                  |
|  |  |                                  |

#### Note:

If the problem persists after checking the above items, please contact the service center.

# The following are not problems:

|                                | Problem  | Cause  |  |
|--------------------------------|--|--|--|
| The unit does not operate when | started right after stopping. the SET TEMP. is pressed and then immediately released.  | Once the unit is stopped, it will not operate for about 3 minutes to protect it.       |  |
|                                | the power is switched on.  | Wait for 1 minute  |  |
| Mist is emitted                | when cooling   | When the air in the room is rapidly cooled, it creates mist.                           |  |
| The outdoor unit is warm       | after the unit is stopped.   | The compressor is emitting heat while preparing to restart.                            |  |
| Noise                          | Buzz is heard when started.  | This is the sound of the thermostat starting and will decrease after 1minute.          |  |
|                                | Sound of running water can be heard when running.  | This is caused by the refrigerant flowing inside the unit.                             |  |
|                                | A "shuh" sound is heard when the unit starts or immediately after it stops running. Or it is heard when the defrosting mode starts or stops. | This is caused when the refrige-<br>rant flow stops or changes.                        |  |
|                                | A continuous low "shah" sound is heard when the system is in cooling mode or is stopped.   | This noise is heard when the drainage pump is running.                                 |  |
|                                | Cracking noise can be heard during or after operation.   | This is caused by the panel expanding or contracting due to the change in temperature. |  |
| Dust coming from the units     | when starting the unit after it has been out of use for a long time.   | Dust that has settled in the unit is blown out when it is turned on again.             |  |
| Air from the outlet smells     | while running.   | This is caused by the odors in the room that have gotten onto the air conditioner.     |  |

## FAULT INDICATORS

| Serial<br>number | Meaning   | LED (red)        | LED (yellow)   | LED (green) |
|------------------|---|------------------|----------------|-------------|
| 1                | Compressor in high pressure protection. Unit stops. | Flashes once     |                | _           |
| 2                | Indoor unit in anti-freezing protection             | Twice            |                |             |
| 3                | Low-pressure protection.<br>Unit stops.             | Three<br>times   |                |             |
| 4                | Air-exhaust protection.<br>Unit stops.              | Four<br>times    |                |             |
| 5                | Over-current protection.<br>Unit stops.             | Five<br>times    |                |             |
| 6                | Communication malfunction. Units stops.             | Six<br>times     |                |             |
| 7                | Unit mode conflict.                                 | Seven<br>times   |                |             |
| 8                | Jumper malfunction.                                 | Fifteen<br>times |                |             |
| 9                | Defrosting/Heating oil return.                      |                  | Flashes once   |             |
| 10               | Compressor overload protection. Unit stops.         |                  | Three<br>times |             |
| 11               | Unit system malfunction                             |                  | Four<br>times  |             |
| 12               | IPM modular protection.<br>Unit stops.              |                  | Five<br>times  |             |
| 13               | PFC modular protection.<br>Unit stops.              |                  | Six<br>times   |             |
| 14               | Compressor malfunction                              |                  | Seven<br>times |             |
| •                | •   | 14               | -              | •           |

# **12 FAULT INDICATORS**

## **OPERATION INSTRUCTIONS**

| serial<br>number | Meaning  | LED (red) | LED(yellow)    | LED(green)      |
|------------------|--|-----------|----------------|-----------------|
| 15               | Water spill protection.                        |           | Eight<br>times |                 |
| 16               | Indoor ambient temp. sensor malfunction.       |           |                | Flashes once    |
| 17               | Indoor pipe temp.<br>sensor malfunction.       |           |                | Twice           |
| 18               | Outdoor ambient temp. sensor malfunction.      |           |                | Three<br>times  |
| 19               | Outdoor pipe temp. sensor malfunction.         |           |                | Four<br>times   |
| 20               | Outdoor air exhaust temp. sensor malfunction.  |           |                | Five<br>times   |
| 21               | E2 PROM error                                  |           |                | Eleven<br>times |
| 22               | Wire control ambient temp. sensor malfunction. |           |                | Flashes once    |

## FAULT INDICATORS

| Fault<br>code | Meaning   | Wire controller |  |
|---------------|---|-----------------|--|
| 1             | Compressor in high pressure protection. Unit stops. | E1              |  |
| 2             | Indoor unit in anti-freezing protection             | E2              |  |
| 3             | Low-pressure protection. Unit stops.                | E3              |  |
| 4             | Air-exhaust protection. Unit stops.                 | E4              |  |
| 5             | Over-current protection. Unit stops.                | E5              |  |
| 6             | Communication malfunction. Units stops.             | E6              |  |
| 7             | Unit mode conflict.                                 | E3              |  |
| 8             | Jumper malfunction.                                 | E3              |  |
| 9             | Defrosting/Heating oil return.                      | DEFROST         |  |
| 10            | Compressor overload protection. Unit stops.         | E5              |  |
| 11            | Unit system malfunction                             | F2              |  |
| 12            | IPM modular protection. Unit stops.                 | E5              |  |
| 13            | PFC protection. Unit stops.                         | E5              |  |
| 14            | Compressor malfunction                              | E9              |  |

# **12 FAULT INDICATORS**

## **OPERATION INSTRUCTIONS**

| fault<br>code | Meaning  | Wire controller |
|---------------|--|-----------------|
| 15            | Water spill protection.                        | E9              |
| 16            | Indoor ambient temp. sensor malfunction.       | FO              |
| 17            | 17 Indoor pipe temp. sensor malfunction.       |                 |
| 18            | Outdoor ambient temp. sensor malfunction.      | F3              |
| 19            | Outdoor pipe temp. sensor malfunction.         | F2              |
| 20            | Outdoor air exhaust temp. sensor malfunction.  | F4              |
| 21            | E2 PROM error                                  | E3              |
| 22            | Wire control ambient temp. sensor malfunction. | F5              |

#### Care and maintenance

Please remove the power plug when the air conditioner is not in use.

## **Warning**

- Remove the power plug before cleaning.
- Do not get water in the unit.

# How to clean the air filter

#### 1. Open the suction grill

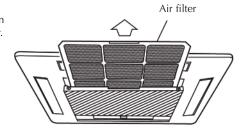
Use a screwdriver to remove the two screws.

Slide both knobs simultaneously as shown and then pull them downward slowly.



#### 2. Remove the air filters.

Slide knobs on the back of the suction grill outward and remove the air filter. Then remove the air filters on it.



#### 3. Clean the air filter

Use a vacuum or wash the air filter with water if it is very dirty. Use a gentle detergent and water. Let the filter dry naturally in the shade.

#### Note:

Do not clean with hot water.

Do not dry over fire.

Do not run the air conditioner without the air filter.

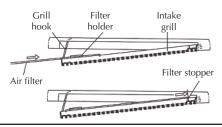
The suction grill must be opened by a professional.





#### Care and maintenance

Replace the air filters
 Place the air filter into its holder.
 Make sure that the air filter makes contact
 with the filter stopper when it is placed
 into its holder.



5. Shut the suction grill.

Refer to step 1.

# How to clean the suction grill

1. Open the suction grill. See step 1 of "How to clean the air filter."

2. Remove the air filters. See step 2 of "How to clean the air filter."

3. Remove the suction grill Lower the suction grill to 45 and then lift.

4. Wash with water If the suction grill is very dirty, use a soft brush and gentle detergent. Shake off water and dry in the shade.

Note:

Do not wash with hot water.



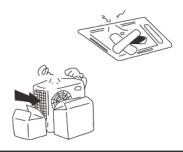


5. Attach the suction grill.
6. Attach the air filter.
7. Close the suction grill.
Refer to step 3.
Refer to step 4 of "How to clean the air filter."
Refer to step 1.

#### Care and maintenance

#### Before starting the air conditioner for the first time of the season

- Check to make sure there aren't any objects obstructing the air intakes and outlets on both the indoor and outdoor units.
- 2. Check to make sure the ground wire is connected and that it is not damaged.
- 3. Check to make sure the air filter has been cleaned.
- 4. Turn on the power 6 hours before starting the air conditioner.



#### End of season cleaning

- 1. Clean the filter and the body of the unit.
- 2. Turn off the power.
- 3. Clean the outdoor unit of any dust.
- 4. If there is any rust on the outdoor unit, paint over it to prevent the rust from spreading.



#### Power supply and wiring requirements

- Power frequency of air-conditioner should be 60Hz, and the voltage AC 208/230V.
   If the voltage is too high, electrical components may be damaged. If the voltage is too low, the compressor may vibrate and damage the unit, or it may fail to function. The voltage must be stable and must not fluctuate excessively.
- The power supply must be provided via a sound ground connection. (See grounding requirements)

#### **Electrical connection requirements**

- 1. Should have a sound ground connection (See grounding requirements).
- 2. Wire screw must be tight, and any damaged screws should be replaced. Self-tapping screws must not be used in electric connections.)
- 3. Only the provided wire should be used. Please do not modify the wire, its length or its end. If you need to make adjustments, please contact the local service center.
- 4. Please do not connect the plug and the wire by yourself.
- 5. Indoor and outdoor electrical connecting wires should not be pulled or twisted.

#### **Installation notes**

#### Location

- The air conditioner must be solidly installed and 3-4 liability checks must be done every year.
- Avoid placing within easy reach of young children.
- · Avoid other heat sources or direct sun.
- Install indoor unit away from TV set or radio.
- · Avoid where inflammable gas may leak.
- In coastal areas or other special areas such as near a sulfur hot spring, please contact dealer before installation to make sure it is safe to use the unit.
- · Not to be installed in laundries.
- The air conditioner must be positioned so that the plug is accessible.

#### Noise

- Select a location with good ventilation or it may affect performance or increase noise.
- Install the air conditioner on a support that can withstand its weight. A weak support may cause the unit to fall, leading to damage or injury.
- Select a location where the air exhaust or noise will not be a nuisance to neighbors.
- Never place objects near the air outlet or the unit, as it may affect performance or increase noise.
- If there is abnormal noise while operating, contact the dealer immediately.

## Installation and transportation

- Installation and transportation of the unit must be done by professionals.
- Be sure to use only the specified accessories and parts for installation Failure to do so may lead to electric shock, leakage or fire.
- When installing, keep natural hazards in mind, such as strong winds, hurricanes or earthquakes. Improper installation may result in accidents.
- If the unit is to be moved to another place, please consult the dealer first.

## Wiring

- Make sure wiring is carried out by a qualified technician according to laws, regulations and this manual, using a separate circuit and suitable fuse.
- Be sure to install a ground-leakage circuit breaker.
- The power cord must have a sufficient diameter. (Refer to p. 24 for sizes)
- If the power cord is damaged, it must be replaced by the manufacturer or its service agent or a similarly qualified person in order to avoid electrical hazards.
- The appliance must be installed in accordance with the applicable wiring regulations.

#### **Grounding requirement**

- 1. An air conditioner is a class I appliance, and it must use the proper grounding connection.
- Please do not cut or modify the use of the yellow/green grounding wire. This may cause electrical leakage.
- 3. Ground resistance should be approved by Country Standard GB17790.
- 4. Power should be provided by a sound ground terminal. Please do not connect the ground wire to any of the following:
- 1. Water supply
- 2. Gas supply
- 3. Sewage pipe
- 4. Other inappropriate locations

#### Water pipe

Some parts of the water pipe are made of plastic materials and are not suitable for grounding.





Gas pipe

Accidental electrical leakage from the air conditioner may cause fire or explosion.

# Installation accessories and diagrams

# • Accessories

| No | Name                            | Shape          | Quantity | Specification | Notes                                |
|----|---------------------------------|----------------|----------|---------------|--------------------------------------|
| 1  | Drainage hose                   | <b>©</b>       | 1        |               | For indoor side pipe joint           |
| 2  | Clamp                           | Q              | 1        |               | For hole                             |
| 3  | Nylon fastener                  | P              | 4        | L = 200       |                                      |
| 4  | Washer                          | 0              | 10       | 10            |                                      |
| 5  | Paper pattern for installation  | $\Diamond$     | 1        |               |                                      |
| 6  | Screws                          | Onn            | 4        | ST4,8 X 13-F  | Use paper pattern for installation   |
| 7  | Heat insulation sponge for pipe |                | 2        |               | Encase the tie-in                    |
| 8  | Large sealing pad               |                | 1        | 5 X 160 X 300 |                                      |
| 9  | Sealing pad                     |                | 1        | 5 X 45 X 300  |                                      |
| 10 | Small sealing pad               | 0              | 2        | 3 X 30 X 150  |                                      |
| 11 | Sealing bar                     |                | 1        | 120 X 65 X 25 |                                      |
| 12 | PVC tape                        | <u>(</u>       | 2        | 120 X 65 X 25 |                                      |
| 13 | Screws                          |                | 8        | ST4,2 X 9,5PA |                                      |
| 14 | Remote control                  |                | 1        |               | For mounting the remote control unit |
| 15 | Battery                         | <del>-</del> ) | 2        | AAA (1,5 V)   | For remote control                   |
| 16 | Power control wire              |                | 1        |               |                                      |

# **Installation diagrams**

# • Installation diagrams

Indoor unit

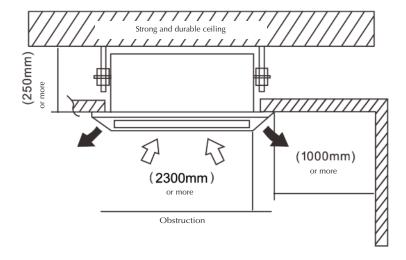


Fig.1

#### Note:

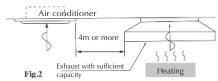
Air conditioner must be installed by a skilled professional according to this manual.

#### Location

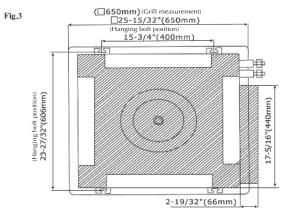
- 1. Do not place objects near the air outlet so that the cooled air can reach the whole room.
- 2. Be sure that the indoor unit is solidly installed in a horizontal position.
- 3. Select a location that can support 4 times the indoor unit's weight and that will not increase noise and vibration.
- 4. Select a location where it will be easy to drain water from and to connect with the out door unit.
- 5. Make sure there is easy access for maintenance and that the distance between the unit and the ground is 1.8m or more.
- 6. Make sure the suspension bolt pitch can hold 4 times the indoor unit's weight. If not, strengthen the suspension bolt pitch.

#### Note

- 1. Place at a reasonable distance from the kitchen.
- 2. The appliance should not be installed in the laundry room.

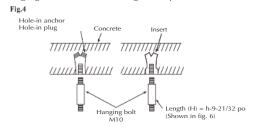


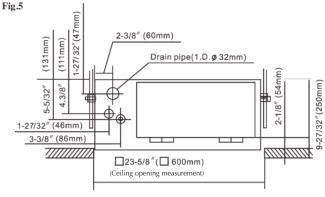
#### Ceiling opening and suspension bolt (M10) pitch dimension



# • Hanging preparations

Firmly fasten the hanging bolts as shown in Fig.4 or by another method.





# Hanging preparations

Fig.6

- (1) Install special nut A, then special nut B onto the hanging bolt. (Fig.6)
- (2) Raise the body and mount its hooks onto the hanging bolt between the special nuts. (Fig.6)
- (3) Turn special nut B to adjust the height of the body. (Fig.6)
- (4) Using a level, or a vinyl hose filled with water, adjust so that the body is level.

# Warning Perform final tightening by tightening the double nut firmly.

Special nut A Hook

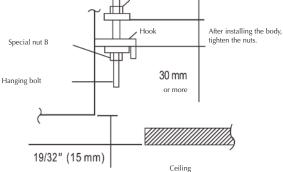
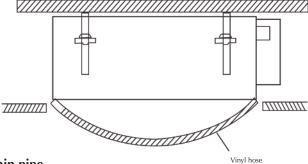


Fig.7

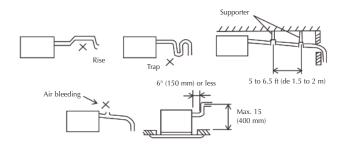


# Installing drain pipe

## NOTE: Install the drain pipe.

- Install the drain pipe at a downward angle (1/50 to 1/100) and check to be sure there is no bending or blockage in the pipe.
- Use general hard polyvinyl chloride pipe (VP25) [outside diameter 1-1/4" (32mm)] and connect it with adhesive (polyvinyl chloride) to prevent leakage.
- When the pipe is long, install supports.
- Always insulate the indoor side of the drain pipe.
- When a high drain pipe height is required, raise it up to 15" (400 mm) or less from the ceiling within a range of 6" (150mm) from the body. Anything beyond this range will cause leakage.

Fig.8



## **Connecting the pipes**

- Use both a spanner and wrench together as shown in the drawing to connect or disconnect pipes to/from the unit.
- The water-in/out pipes have a G3/4 thread. The surface of thread should be enlaced by the two or three-circle trap.
- After the water-in pipe and water-out pipe are firmly connected, start the water pump and check that it is airtight.
- Insulate as shown in the drawing below.
- Use the sealing pad (10) to wrap the water-in/out pipes and the insulation (8).

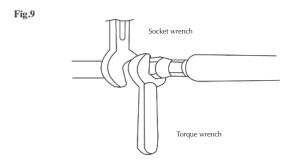
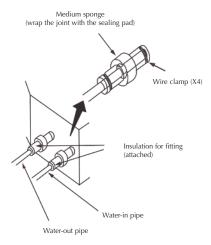


Fig.10



## **Electrical wiring**

#### A. For solid core wiring (or F-cable)

- (1) Cut the wire end with a wire cutter or wire-cutting pliers, then strip the insulation to about 15/16" (25mm) to expose the solid wire.
- (2) Using a screwdriver, remove the terminal screw(s) on the terminal board.
- (3) Using pliers, bend the solid wire to form a loop that would fit around the terminal screw.
- (4) Shape the loop wire properly, place it on the terminal board and tighten securely with the terminal screw using a screw driver.

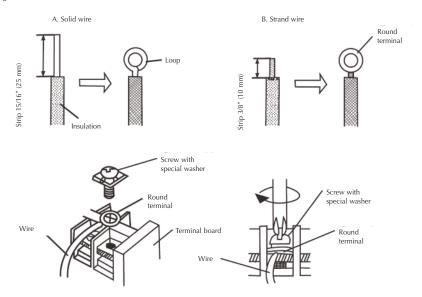
#### B. For strand wiring

- (1) Cut the wire end with a wire cutter or wire-cutting pliers, then strip the insulation to about 3/8" (10mm) to expose the solid wire.
- (2) Using a screwdriver, remove the terminal screw (s) on the terminal board.
- (3) Using a round terminal fastener or pliers, securely clamp a round terminal to each stripped wire end.
- (4) Position the round terminal wire, and replace and tighten the terminal screw using a screwdriver.

#### C. Attention:

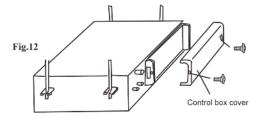
The fixed wiring should be connected by an all-pole disconnection switch with a contact separation of at least 3mm in all poles.

Fig. 11



#### Indoor unit side

Remove the control box cover and install the connection cord. (Fig. 12 and 13)



#### Note

- \* The refrigerant circuit will be hot. Please keep the connection cable away from the copper tube.
- \* An all-pole disconnection device which has at least 3mm separation distance in all poles and a residual current device (RCD) with the rating of above 10mA should be incorporated in the fixed wiring according to regulations.

Fig.13

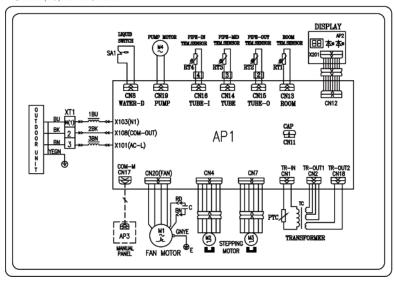
N(1) 2 3

Blue Black Brown

Yellow/Green

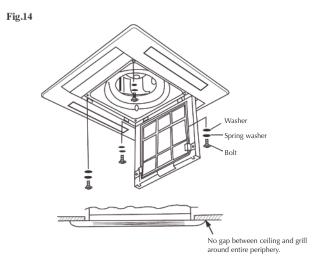
Circuit Diagram GKHD(12)ABND3A2AI GKHD(18)ABND3A2AI

4-core rubber cable (to outdoor unit)



# Bolting the grill assembly to the body

Install the grill assembly to the body with the four bolts, spring washers, and washers.



#### Wireless unit connection wiring

- (1) Connect the connector as shown in the part A detail view.
- (2) Then clamp the lead wire so that it does not touch the rotating parts.

Fig.15

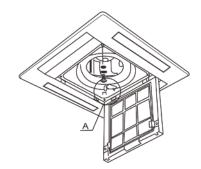
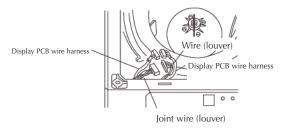


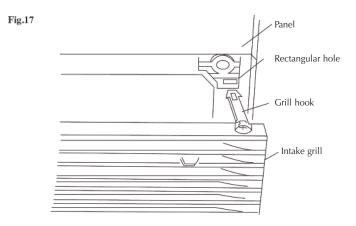
Fig.16 Part A detail view



# Installing/Removing the intake grill

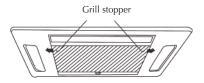
## 1. Installing the intake grill

(1) Fully insert the intake grill hooks into the rectangular holes in the panel.



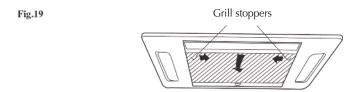
(2) Close the intake grill, then slide the two grill stoppers outward.

Fig.18

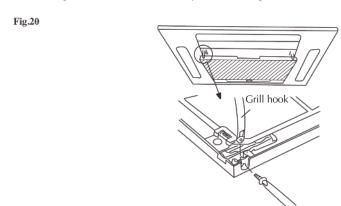


#### 2. Removing the intake grill

(1) Slide the two grill stoppers inward, and then open the intake grill.

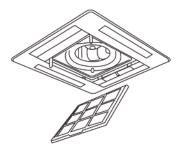


(2) Remove the grill hook screws, and then open the intake grill.



(3) Open the intake grill so that it is at an angle of 20° to 40°, and then remove the grill.

Fig.21



#### Caution:

- The louver angle cannot be changed if the power is off. It may be damaged if moved by hand.
- (2) The grill assembly is directional in relation to the air conditioner body.
- (3) Install so that there is no gap between the grill assembly and the air conditioner body.

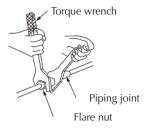
#### Connection of refrigerant pipe

- Be sure to use both a spanner and torque wrench together as shown in the drawing, to connect or disconnect pipes to/from the unit.
- Refer to table 1 to determine the proper tightening torque (over-tightening may damage the flare and cause leaks.)
- When connecting the flare nut, coat the flare both inside and outside with refrigerating machine oil and initially tighten by hand 3 or 4 turns.
- Check the pipe connection for gas leaks, then insulate it as shown in the drawing below.
- Use the sealing pad (11) to wrap the joint between the gas pipe and the insulation (8).
- The enclosure of the appliance should be marked (with words or symbols) to show the direction the fluid flows.

# Coat here with refrigerating machine oil

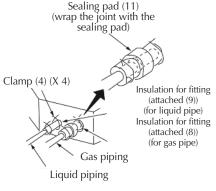


Fig.22



Torque tightening table:

| Pipe gauge | Tightening torque (N·m) |
|------------|-------------------------|
| Ф6         | 15~20                   |
| Φ 9. 52    | 30~40                   |
| Ф 12       | 50~55                   |



## Post-installation test and verification

#### • Test operation

#### 1. Prepare for test

- (1) Do not turn on the power switch before the installation is complete.
- (2) Connect wires correctly and firmly.
- (3) Open the check valve.
- (4) Remove all dust.

#### 2. Test

- (1) Turn on the power switch and press the ON/OFF button.
- (2) Press MODE to select COOL, HEAT, FAN, etc. to test whether it works correctly.

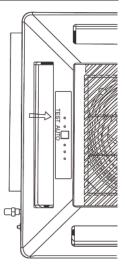
#### 3. Emergency operation

When the batteries fail or when the remote control is missing, operate as shown below.

\*When the unit is off, you can press the AUTO button on cover NO. II to activate the AUTO mode.

The air conditioner will automatically select from the COOL, HEAT. DRY or FAN modes.

\* When the unit is running, press the AUTO button to stop.



#### Note

The TEST button on the cover No. is specially designed to test the air conditioner. When pressing it, the air conditioner will either run or stop. Do not press it when the air conditioner is in normal operation.

# Pay special attention to the items below during installation and check when the installation is complete.

| Items to check   | If not properly done, what is likely<br>to happen        | Check |
|--|--|-------|
| Is the indoor unit solidly attached?   | The unit may fall, vibrate or make noise.                |       |
| The unit may fall, vibrate or make noise.  | It may result in insufficient cooling.                   |       |
| Is the unit fully insulated?   | Condensate water may drip.                               |       |
| Does the power supply voltage correspond to that shown on the nameplate?               | The unit may malfunction or the components burn out.     |       |
| Are the wiring and piping correct?   | The unit may malfunction or the components burn out.     |       |
| Is the unit safely grounded?   | Risk of electrical leakage.                              |       |
| Is wiring size according to specifications?  | The unit may malfunction or the components burn out.     |       |
| Is something blocking the air outlet or intake of either the indoor or outdoor units?  | It may result insufficient cooling.                      |       |
| Have records of refrigerant piping length and additional refrigerant charge been made? | Volume of refrigerant charge in the system is not clear. |       |

# **WARRANTY**

#### LIMITED WARRANTY

This air conditioner is covered by a warranty against defects in materials and workmanship including the compressor, if used for the applications specified in this owner's manual, for a period of FIVE (5) YEARS from the date of original purchase in Canada.

Note: The internal compressor is covered by a 5-YEAR limited warranty.

During the warranty period, if this air conditioner fails under normal use, **GREE** will, at its option, either repair the unit or replace it, free of charge, within a reasonable period of time after the air conditioner is returned.

As a condition to any warranty service obligation, the customer must present this warranty certificate along with the proof of purchase.

#### THIS WARRANTY DOES NOT COVER:

- Damage, accidental or otherwise, to the air conditioner that are not caused by materials or workmanship defect.
- Damage caused by misuse, tampering or failure to follow the operating and maintenance instructions provided in this owner's manual.
- 3. Damage to the finish of the unit enclosure or to other outer features caused by wear.
- 4. Filter
- Damage caused by repairs or modifications to the air conditioner made by any person not duly authorized by GREE
- 6. Insurance and freight costs for the warranty service.

ALL IMPLIED WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY, ARE LIMITED TO A FIVE YEAR (5) PERIOD COVERED BY THIS EXPRESS LIMITED WARRANTY. **GREE** DISCLAIMS ANY LIABILITY FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES AND, IN NO EVENT, SHALL **GREE**. LIABILITY EXCEED THE RETAIL VALUE OF THIS AIR CONDITIONER FOR BREACH OF ANY WRITTEN OR IMPLIED WARRANTY WITH RESPECT TO THIS AIR CONDITIONER.

Keep this owner's manual along with your proof of purchase in a safe place for future reference. You must provide proof of purchase for warranty service.

Enter the following information on your air conditioner; it will help you upon getting assistance or service if you ever need it. You will have then to provide the model and serial numbers of the air conditioner – these data are detailed on the rating plate of the unit.

| Dealer name : |  |
|---------------|--|
|               |  |
|               |  |
|               |  |
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