

MITSUBISHI ELECTRIC Package Air-Conditioner Decorative Panel (Optional Part)

Automatic Filter Elevation Panel Installation Manual

PLP-6BAJ Series
*Wired/Wireless Remote Controller Enabled

Safety precautions that must be followed

- Before installing the unit, make sure you read all the "Safety precautions that must be followed".
- The precautions herein provide very important points regarding safety. Make sure you follow them.
- Symbols used in this manual are categorized as follows according to the degree of risk when used improperly:

Warning	Describes precautions that should be observed to prevent danger of serious injury or death of the user.
Caution	Describes precautions that should be observed to prevent the danger of injury or damage to the premises and/or contents thereof.

- After installation, describe the user "Safety Precautions", how to use, and how to care for and clean the unit following the operation manual, and test run the unit to confirm whether there are any problems.
- In addition, direct the user to keep this installation manual together with the operation manual, and, should the users change, to give the manuals to the new user.

Warning

<p>The unit must not be installed by the user. Ask the dealer or an authorized company to install the unit.</p> <ul style="list-style-type: none"> • If the unit is installed improperly, water leakage, electric shock or fire may result. 	<p>Wiring must be done properly using specific cables and fixed so that external pressure from the cable will not transmit to the terminal area.</p> <ul style="list-style-type: none"> • If the connection and/or fixation are not done properly, heat or fire may result.
<p>Installation must be properly done following this installation manual.</p> <ul style="list-style-type: none"> • If the unit is installed improperly, water leakage, electric shock or fire may result. 	<p>Terminal board cover (panel) of the indoor/outdoor unit must be installed properly.</p> <ul style="list-style-type: none"> • If the terminal board cover (panel) is installed improperly, fire or electric shock may result due to dust or water.
<p>Installation must be done in proper order in case of strong wind such as storms and earthquakes.</p> <ul style="list-style-type: none"> • If the unit is installed improperly, there is a risk that a fall may result. 	<p>Do not mix substances other than the designated refrigerant in the refrigerant cycle when installing and/or moving the unit.</p> <ul style="list-style-type: none"> • If air or other substances mix in, abnormal high-pressure will occur in the refrigerant cycle, which may cause explosion.
<p>The unit must be installed on a surface that is able to support the weight of the unit.</p> <ul style="list-style-type: none"> • If the surface does not have sufficient strength, accidents may result due to falling of the unit. 	<p>Use genuine Mitsubishi parts such as humidifier and high-performance filters (sold separately).</p> <ul style="list-style-type: none"> • Ask an authorized company to install. If the unit is installed improperly, water leakage, electric shock, or fire may result.
<p>If the unit is to be installed in a small room, take measures to prevent exceeding the concentration limit of refrigerant in the case of refrigerant leakage.</p> <ul style="list-style-type: none"> • Ask a dealer about measures to prevent the exceeding the concentration limit. If there is any chance of refrigerant leakage and its concentration exceeds the limit, it may result in lack of oxygen. 	<p>Never make alterations to the unit.</p> <ul style="list-style-type: none"> • Consult with a dealer for repairs. If alterations are done on the unit or the unit is repaired improperly, water leakage, electric shock, or fire may result.
<p>Ventilate the room if refrigerant leaks out during installation.</p> <ul style="list-style-type: none"> • When refrigerant comes in contact with fire, noxious fumes may be produced. 	<p>The unit must not be moved or reinstalled by the user.</p> <ul style="list-style-type: none"> • If the unit is installed improperly, water leakage, electric shock, or fire may result. Ask the dealer or an authorized company to do so.
<p>Electrical work must be done by an authorized engineer following "Technical standards for electrical equipment", "Extension Code" and this installation manual and using dedicated communication circuit and rated power voltage/circuit breakers.</p> <ul style="list-style-type: none"> • If the electrical circuit does not have sufficient capacity or if the unit is installed improperly, electric shock or fire may result. 	<p>Make sure the refrigerant has not leaked after installation.</p> <ul style="list-style-type: none"> • In case the refrigerant leaks into the room and comes in contact with a fan heater, heater, or stove burner, noxious fumes may be produced.

Before installation: Environment

Caution

<p>This product must not be used in certain environments.</p> <ul style="list-style-type: none"> • If used in an environment with a large amount of grease (including mechanical oil), steam, or sulfidizing gas or where it is high in salt content such as a seashore where the outdoor unit may become blocked by snow, performance may drop significantly or parts may become damaged. 	<p>The unit must not be used for special purposes such as the storage of precision apparatuses, food, animals and plants, and art objects.</p> <ul style="list-style-type: none"> • It may cause deterioration in quality of the objects.
<p>Do not install the unit in an area where flammable gas may be generated, flow in, be retained or leaked.</p> <ul style="list-style-type: none"> • In case gas leaks around the unit, fire or explosion may result. 	<p>Do not install the unit above objects that should not get wet.</p> <ul style="list-style-type: none"> • In case humidity exceeds 80% or the drain outlet is blocked, dew may fall from the indoor unit. When the heating function is on, water leaks from the outdoor unit; intensive drain work may be done to the outdoor unit as needed.
<p>If the unit is installed in a hospital or telecommunications office, preparation for noise must be adequately completed.</p> <ul style="list-style-type: none"> • The effect of inverter equipment, private power generators, high-frequency medical devices and radio communication devices may result in malfunctions and/or damage of the air-conditioner. Air-conditioners may affect medical devices or telecommunications devices to interfere with medical treatment or cause adverse effects such as disturbance of broadcasting and/or noise bursts. 	

Before installation (relocation)

Caution

<p>Transport of the product must be done carefully.</p> <ul style="list-style-type: none"> • In principle, products over 20 kg must be carried by two or more people. Make sure you move the product holding the designated handles such as a PP band. Use protectors to prevent injury; do not touch the fins with your bare hands. 	<p>Drain piping must be done properly according to the installation manual to drain water and must be kept warm to prevent bedewing.</p> <ul style="list-style-type: none"> • If piping is not properly installed, water leakage may result, which will make the ceilings, floors or other household items wet.
<p>Appropriately dispose of packages.</p> <ul style="list-style-type: none"> • Packaging may contain metal objects such as "nails" and wood chips. So injury may result if disposal is neglected. 	<p>Do not neglect damaged platforms.</p> <ul style="list-style-type: none"> • If left damaged, the unit may fall and result in injury.
<p>Make sure heat insulation for refrigerant piping is properly installed to prevent bedewing.</p> <ul style="list-style-type: none"> • If heat insulation is not done properly, bedewing of the surfaces such as piping may result, which will make the ceilings, floors or other valuable items wet. 	<p>Do not wash the air-conditioner.</p> <ul style="list-style-type: none"> • Doing so may cause electric shock.

Before electrical work

Caution

<p>Install short circuit breakers depending on the installation area (area with high moisture content).</p> <ul style="list-style-type: none"> • If a short circuit breaker is not installed, electric shock may result. 	<p>Unit must be grounded.</p> <ul style="list-style-type: none"> • Do not connect the ground wires with ground wires for gas pipes, water pipes, conductor rods or telephones. If the unit is not properly grounded, electric shock may result.
<p>Use proper electrical cables to meet the standard for current capacity.</p> <ul style="list-style-type: none"> • If proper electrical cables are not used, short circuit, electric shock or fire may result. 	<p>Use fuses with appropriate capacity.</p> <ul style="list-style-type: none"> • If fuses, wires and copper wires with larger capacities are used, damage or fire may result.
<p>Electrical wiring must be done without tension.</p> <ul style="list-style-type: none"> • If there is tension on the cables, wire disconnection, electric shock or fire may result. 	

Before test runs

Caution

<p>Turn it on more than 12 hours before operation.</p> <ul style="list-style-type: none"> • If operation starts as soon as the unit is turned on, damage may result. Do not turn it off during the season. 	<p>Do not operate the unit with wet hands.</p> <ul style="list-style-type: none"> • Electric shock may result.
<p>Do not operate the unit without the panel or guard.</p> <ul style="list-style-type: none"> • If you touch rotating, hot or high-voltage parts of the equipment, injury may result from being snagged or burnt, or from electric shock. 	<p>Do not touch refrigerant piping when operating with bare hands.</p> <ul style="list-style-type: none"> • Refrigerant piping when operating becomes cold and hot, depending on the condition of the flowing refrigerant. If touched with bare hands, frostbite or burns may result.
<p>Do not operate the unit without air filters.</p> <ul style="list-style-type: none"> • Dirt may get clogged inside and may result in damage. 	<p>Do not turn the unit off soon after operation stops.</p> <ul style="list-style-type: none"> • Make sure you wait for more than five minutes. If it is turned off too soon, water leakage or damage may result.

1. Included parts (This manual and following parts are included.)

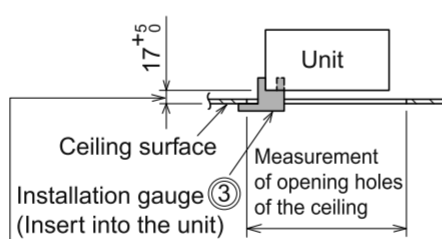
Part Number/Name	① Decorative panel	② Screw with washer	③ Installation gauge	④ Plastic fastener	⑤ Tag
Quantity	1	4 M5 x 0.8 x 25	1	3	1
Shapes/Sizes	Vane				
Part Number/Name	⑥ Screw	⑦ Screw	⑧ Screw	⑨ i-see sensor corner panel	⑩ Wireless remote controller
Quantity	4 4 x 8	1 4 x 12	1 M5 x 10	1	1
Shapes/Sizes	Only 3 are used			Optional part PAC-SA1ME-E	
					⑪ Battery
					1 Lithium battery (CR2025, 3V)
					⑫ Hook and loop fastener
					1 Hook tape (white)
					1 Loop tape (black)

* Never force pressure on the vane, it may result in damage.

2. Preparation before installing the decorative panel

Confirming the location of the unit

- Check whether the opening holes of the ceiling are within the following range. 860 x 860 - 910 x 910
- Using included installation gauge ③, locate the ceiling surface and the unit. If location of the ceiling surface and the unit does not match, wind leakage, dew fall or damage of the vane may result.
- Turn off the main power (short circuit breaker).



* The gap must be in the range of 17 to 22. If it exceeds or falls below the range, damage may result.

Warning

- Turn off the main power.
- If the main power is not turned off, injury or electric shock may result.

Location for installing the wired remote controller

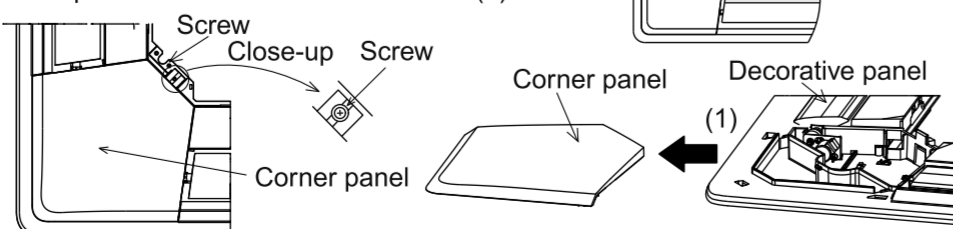
- There are two methods for controlling the air intake grille up/down function: use the up/down function for all the units which are controlled by the remote controller at one time, and use the up/down function for each unit individually. (Please refer to the operation manual for the operation method.) When using the up/down function for all units at the same time, a lowering grille may come in contact with a person or object and may cause damage if the unit cannot be seen from where the remote controller is. Install the remote controller where all the units can be seen.
- * The air intake grille up/down function can also be controlled with the wired remote controller. (Depending on the connected outdoor unit, operation may not be possible.)

Removing the air intake grille

- Remove the tape that secures the air intake grille and remove the air intake grille from the decorative panel.
- * You will find the limit switch for storing and detecting air intake grille shown in the right figure. Make sure you do not damage the limit switch when operating.

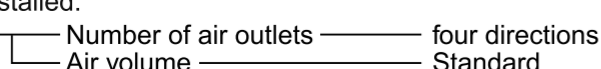
Removing the corner panel

- Remove all corner panels except for the one with sensor.
- * If the corner panel with sensor is removed, a problem may occur when installing the decorative panel.
- Remove the screw on the corner, slide the panel in the direction of the arrow (1) in the figure and remove the corner panel.



3. Selection of air outlet location

- You can select 11 different patterns of air outlet directions on this decorative panel. Select them depending on the location the panel is installed.
- * Factory default



- Select a pattern of air outlet directions. **More than two directions must be selected.**
- * When changing the number of directions, you need an air outlet shutter plate, which is sold separately. An air outlet shutter plate will be attached to the indoor unit; configuration must be done before attaching the decorative panel on the unit.
- * Do not select two directions in a hot and humid environment. (Dew formation or dewfall may result.)

3. Selection of air outlet location (continued from the previous page)

	4 directions	3 directions	2 directions
Patterns of air outlet directions	1 pattern Initial setting	4 patterns Block one of the air outlets on the unit with shutter plate.	6 patterns Block 2 of the air outlets on the unit with shutter plate.

- Change the settings depending on the number of air outlets and the ceiling height where the unit is installed.
- * If not changed, failure may result or users may feel discomfort.

1) BA Type Indoor Unit

Configuration will be done on the remote controller. Refer to the section "Function Selection" in the installation manual of the remote controller or the section "Function Selection by Remote Controller" in the installation manual of the unit.

2) BM Type Indoor Unit

Set up the slide switches on address board of the indoor unit as shown in the following table.

<Ceiling height and number of air outlets>

Unit Type	SWA	32 - 80 Type			100 - 140 Type		
		Low ceiling	Standard	High ceiling	Low ceiling	Standard	High ceiling
4 directions	2.5 m	2.7 m	3.5 m	2.7 m	3.2 m	4.5 m	
3 directions	2.7 m	3.0 m	3.5 m	3.0 m	3.6 m	4.5 m	
2 directions	3.0 m	3.3 m	3.5 m	3.3 m	4.0 m	4.5 m	

* Slide switch setting is necessary except for the column highlighted in gray. (Column highlighted in gray is the factory default.)

- SWA - Compatible with ceiling height
- SWB - Compatible with number of air outlets

* Do not set up for low ceilings in a hot and humid environment. (Dew formation or dewfall may result.)

4. Installing decorative panel

1) Preparation for pre-installation

- Put two of the included screws ② with a washer on the unit as shown in the right figure (across from the corner of drain pipe).

2) Pre-installation of decorative panel

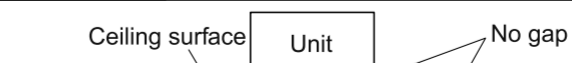
- Join the corner of drain pipe on the unit with the corner with socket on the decorative panel and put them together temporarily with slots on the decorative panel.
- * Make sure the lead wires of the decorative panel do not get caught between the unit and the decorative panel (Refer to the figure on the next page).

3) Fixing the decorative panel

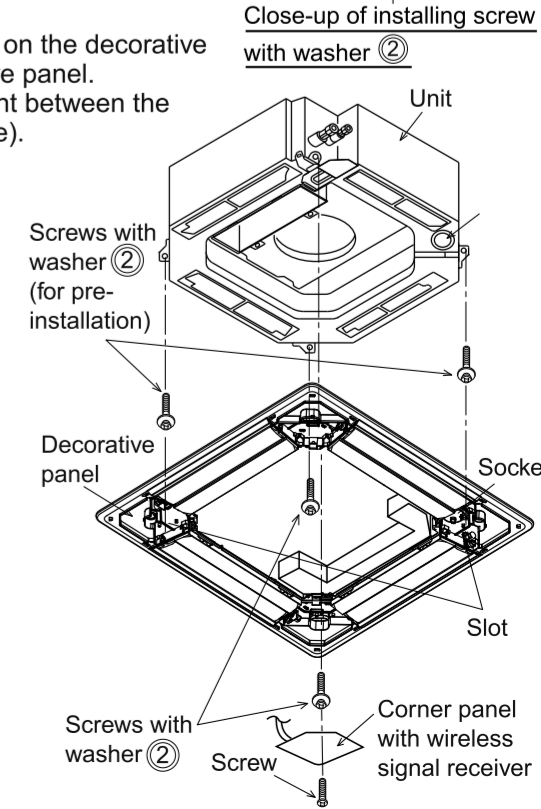
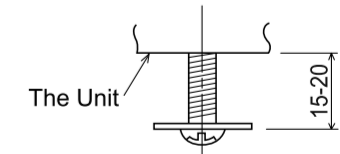
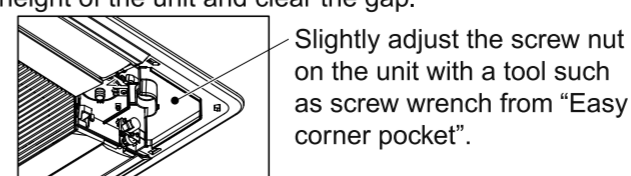
- Remove the corner panel with the wireless signal receiver.
- By tightening the pre-installed screws with a washer ② and the remaining two screws with a washer ②, fix the decorative panel onto the unit.
- * Make sure there is no gap between the unit and the decorative panel or between the decorative panel and the ceiling surface.

Caution

- When tightening the screw with captive washer ②, tighten it at a torque of 4.8 N·m or less. Never use an impact screwdriver.
- It may result in parts damage.



- If there is a gap between the decorative panel and the ceiling: With the decorative panel attached, slightly adjust the installation height of the unit and clear the gap.



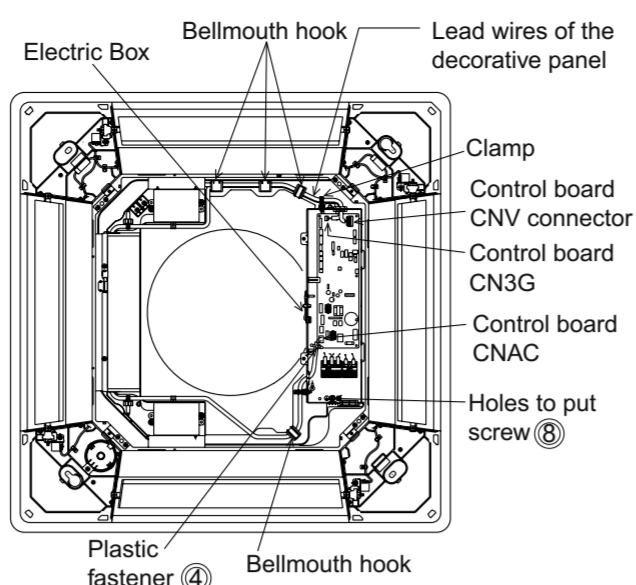
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4. Installing decorative panel (continued from the previous page)

4) Wiring connections

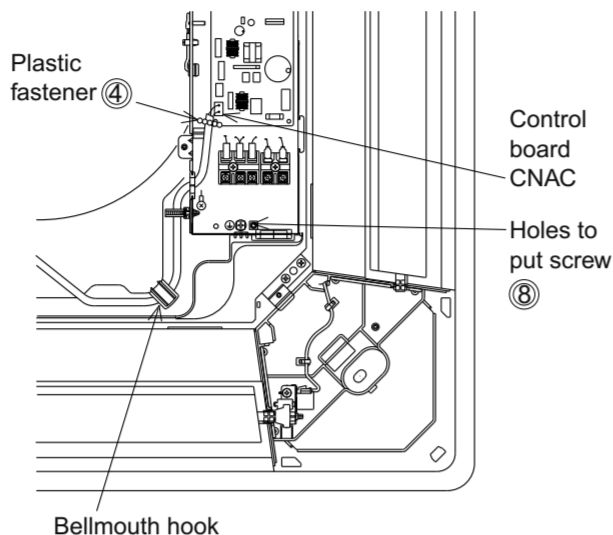
Wiring connections for vane motor

- Remove the plastic fastener banding four wires together.
- Open the electric box of the unit by unscrewing the three screws that fix the cover of the electric box of the unit.
- Make sure to connect a connector for vane motor (white, 20 poles) with CNV connector on the control board of the unit.
- Lead wires that lead off the decorative panel should be put through the bellmouth hooks of the unit so that there is no slack. Extra lead wires should be held together by a clamp on the unit.
- Lead wires of the decorative panel should be held together by a clamp on the unit so that they do not contact the wires.
- Do not place the extra lead wires in the electric box of the unit.
- With the i-see sensor panel, the cover of electric box of the unit should be put on after installing i-see sensor corner panel.



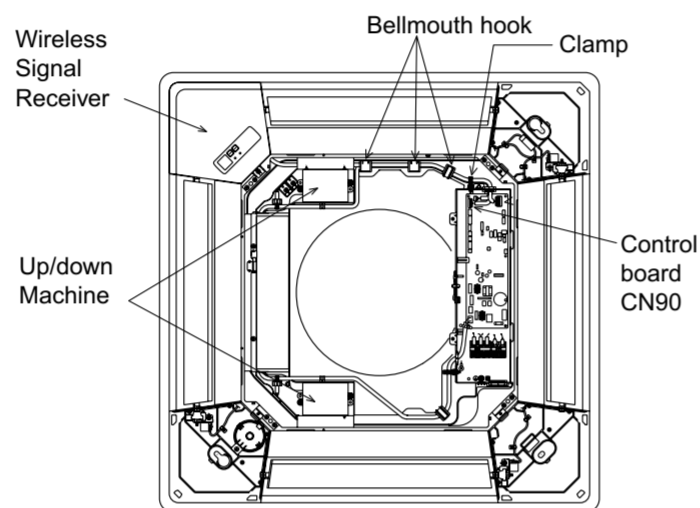
Wiring connections for up/down machine

- Take CNAC (white) and CN3G (black), lead wires of the up/down machine of the decorative panel from the side of the electric box on the unit.
- Make sure to connect them to CNAC (white) and CN3G (black) on the control board of the unit.
- CNAC, lead wires of the decorative panel should be held together with the included plastic fastener ④ in the electric box of the unit.
- Ground wire of CNAC, lead wires of the decorative panel should be fixed with the included screws ⑧ in the electric box of the unit.
- CN3G, lead wires of the decorative panel should be put through the bellmouth hooks of the unit so that there is no slack and extra lead wires should be held together by the clamp on the unit.



Wiring connections for the signal receiver board of the wireless remote controller

- Make sure to connect lead wires for the signal receiver board for the wireless remote controller of the unit (white, nine poles) to CN90, control board of the unit.
- Lead wires on the dressing panel should be put through the bellmouth hooks of the unit so that there is no slack and extra lead wires should be held together by the clamp on the unit.
- With the i-see sensor panel, the cover of electric box of the unit should be put on after installing i-see sensor corner panel.
- Make sure wires are not caught in the cover of electric box of the unit. If they get caught, they will be cut off.



5. Setting up the lowering distance of air intake grille

- You can set up 8 different stages of lowering distance for the air intake grille according to the set up location if desired.

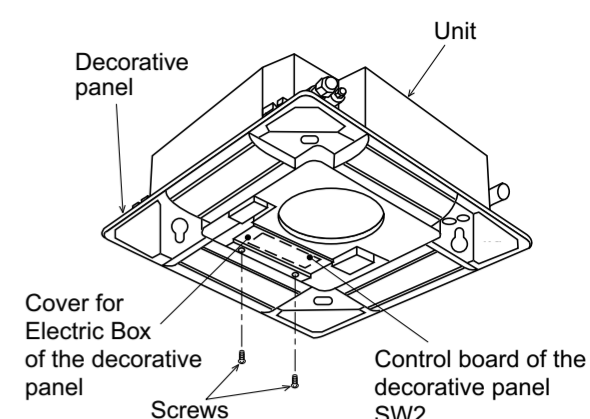
* As a factory default, the decorative panel will automatically stop at 1.6 m from the ceiling surface. The distance is a rough indication, check by actually lowering it.

1) Take the cover off the electric box of the decorative panel. (2 screws)

2) Set up the dip switches of SW2 on the control board of the decorative panel as followed.

■ is the switch position

Lowering distance (Rough indication of the ceiling height)	SW2 (Lowering distance set up)	Lowering distance (Rough indication of the ceiling height)	SW2 (Lowering distance set up)
1.2m (~2.4m)	ON OFF 1 2 3 4 5 6	1.6m (2.4m~2.8m)	Initial setting ON OFF 1 2 3 4 5 6
2.0m (2.8m~3.2m)	ON OFF 1 2 3 4 5 6	2.4m (3.2m~3.6m)	ON OFF 1 2 3 4 5 6
2.8m (3.6m~4.0m)	ON OFF 1 2 3 4 5 6	3.2m (4.0m~4.4m)	ON OFF 1 2 3 4 5 6
3.6m (4.4m~4.8m)	ON OFF 1 2 3 4 5 6	4.0m (4.8m~5.2m)	ON OFF 1 2 3 4 5 6



* Airflow outreach distance is different depending on indoor units, number of air outlets and air volume (ceiling height), airflow may not reach the indicated ceiling height as shown in the left table.

3) Put the cover back on the electric box of the decorative panel.

6. Wireless remote controller compatible (for operating the unit)

- The pair number configuration is a configuration to assign the unit to be operated by a wireless remote controller. **If a specific assignment is not necessary, you do not need this configuration.** (Initial setting, pair numbers on the indoor unit (signal receiver side) and the wireless remote controller are set "0".)
- If an assignment is necessary, set up pair numbers on the indoor unit (signal receiver side) and the wireless remote controller as shown in the right table.

Pair number set up for wireless remote controller	Set Up on Indoor Unit Which jumper wires (J41 and J42) on the indoor control board will be cut.
0	None
1	J41 only
2	J42 only
3 - 9	J41 and J42

Setting up the pair numbers of wireless remote controller

1) Press "Set" button. (Press it with a fine tip.) Operate when the display is turned off.

[MODEL SELECT] will blink and the model number (3 digit numbers) will light up.

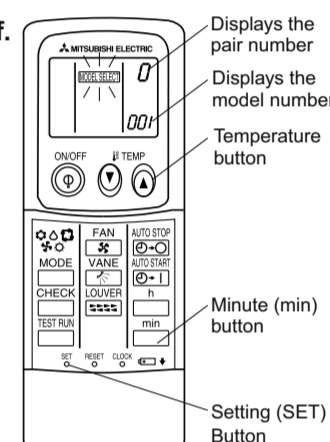
2) Press \square button twice. Pair number will blink.

3) Use temperature buttons (1) and (2) to adjust the pair number you need.

* If you make a mistake, press ON/OFF button and start over from 2).

4) Press "Set" button. (Press it with a fine tip.) The pair number you set up will blink for 3 seconds and turn off.

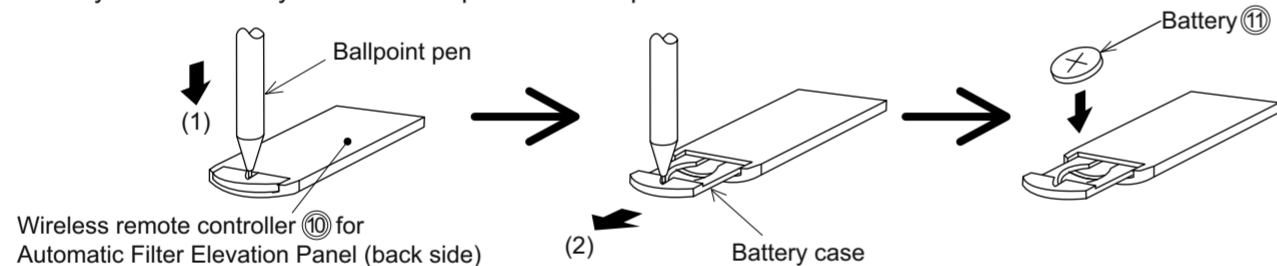
* Depending on the connected outdoor unit, operation may not be possible.



6. Wireless remote controller compatible (for operating the unit) (continued from the previous page)

How to set battery

- Press and hold the remote controller with a sharp object such as a ballpoint pen (in the direction of the arrow (1)) and slide toward the direction of the arrow (2) to remove the battery case.
- Use the lithium battery ⑩ (CR2025, 3V).
- Insert the battery into the battery case with the positive side up and install the case back onto the remote controller.



Installation of wireless remote controller

- When installing the wireless remote controller to a wall or the like, affix the included hook tape (white) of the hook and loop fastener to the back of the remote controller, and affix the included loop tape (black) of the fastener to the installation surface.

7. Installation of corner panels and air intake grille

- You can set the direction of the air intake grille such as grids when installing multiple units as desired. If forced to be set at other than the position shown in the figure, failure may result.

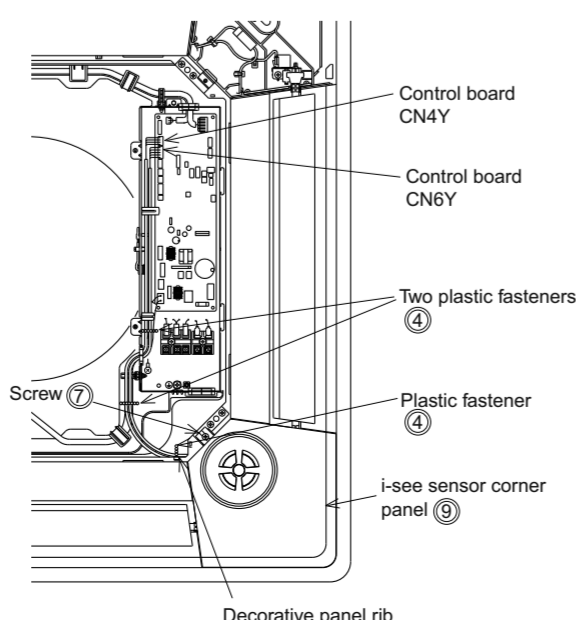
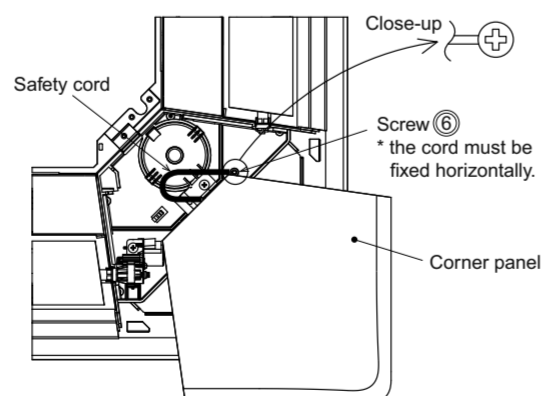
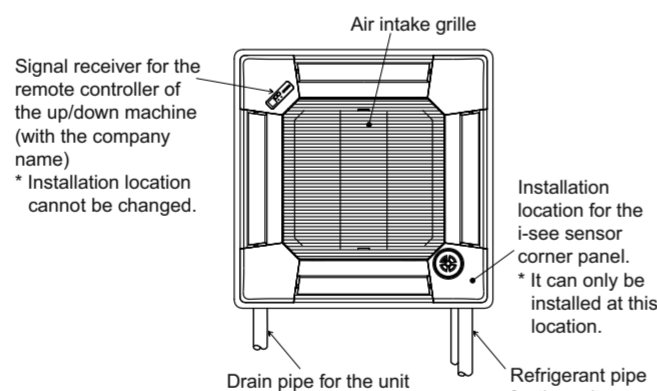
Installation of corner panels

- Adverse procedure of "Preparation before installing the decorative panel" in the Section 2 will be taken for installing the corner panels. For the corner panels with a safety cord, the cord should be fixed at the position shown in the right figure with the included screw ⑥ onto the decorative panel.

* If not fixed, corner panels may fall during operation.

Installation of i-see sensor corner panel

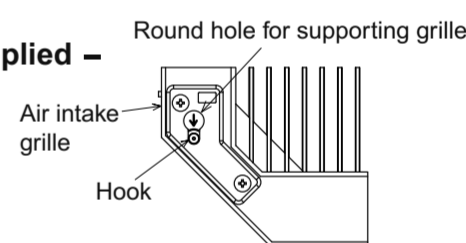
- Optional part: PAC-SA1ME-E
- Take CN4Y (white) and CN6Y (red), lead wires of the i-see sensor corner panel ⑨ from the side of the electric box on the unit and make sure to connect them to the connector of the control board.
- Lead wires of the i-see sensor corner panel ⑨ should be fixed at the rib of the decorative panel with the plastic fastener ④ so that there is no slack.
- Lead wires should be held together with the lead wires of the unit and fixed with two of the plastic fastener ④ so that there is no slack.
- Put the cover back on the electric box with three screws.
- Make sure wires are not caught in the cover of electric box. If they get caught, they will be cut off.
- Adverse procedure of "Preparation before installing the decorative panel" in the Section 2 will be taken for installing the i-see sensor corner panels.
- The i-see sensor corner panel should be fixed onto the decorative panel with screw ⑦.



7. Installation of corner panels and air intake grille (continued from the previous page)

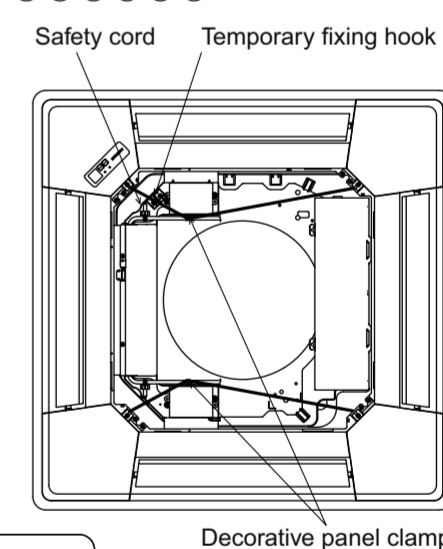
Installation of Air Intake Grille – After electronic power is supplied –

- Slide the hook tip of the wire in the direction of the arrow and attach all four parts to the round hole on the corner of the air intake grille.
- Never pull the wire as it may cause damages.**



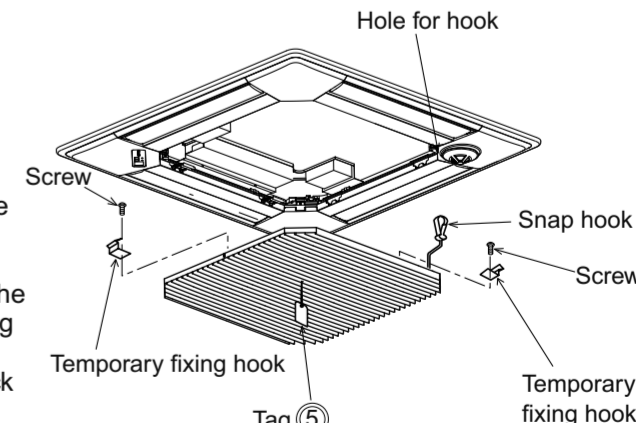
Storage of air intake grille * This operation must be done after turning off the unit.

- The air intake grille will be stored when you press "UP" button on the remote controller or the signal receiver for the remote controller.
- Temporary Fixation of the Air Intake Grille before electronic power is supplied (The same procedure should be taken in the maintenance.) –**
- Hold the four wires together so that they do not get tangled and fix them by the clamp for fixing lead wires on the decorative panel.
- Fix the wires so that there is no slack, as the unit may be operated with wires fixed temporarily during the maintenance.
- Remove the temporary fixing hooks and the safety cords, which are screwed onto the decorative panel shown in the right figure.
- Using the screws which have fixed the temporary fixing hooks, attach the temporary fixing hooks onto two parts of the air intake grille.
- Hook the snap hook of one end of the safety cord in the hole on the air intake grille and hook that of the other end in the hole on the decorative panel.



Warning Take measures to prevent falling of the air intake grille. * If the air intake grille falls, accident may result.

- Set the air intake grille in the decorative panel.
- Make sure the safety cord does not get caught.
- If you are temporarily fixing the air intake grille during installing the decorative panel, attach included tag ⑤ to one of the grids on the air intake grille and let everyone know the air intake grille is fixed temporarily.
- There will be no tag ⑤ during the maintenance, in case the service technician changes make sure the new service technician knows that it is fixed temporarily.
- Take the tag ⑤ off after electronic power is supplied or the maintenance is finished, take the air intake grille following the adverse procedure of the previous procedure, and attach the temporary fixing hook and the safety cord back to their original position. (They will be reused.)



8. Verification

- Verify that there is no gap between the unit and the decorative panel or between the decorative panel and the ceiling surface.
- If there is a gap, dew formation or dewfall may result.
- Verify that wires are properly connected.
- If any are improperly connected, problems may result; vane does not move, dew formation or dewfall may occur or the air intake grille does not rise/lower.
- If the model has a wireless remote controller compatible (for operating the unit), check whether the pair numbers of the remote controller and the unit match.
- Make sure if the lowering distance of air intake grille is given as requested by the user and if the up/down movement is smooth.
- For optional part PAC-SA1ME-E, check the rotating movement of the i-see sensor. If the i-see sensor does not rotate, review the procedure in "installation of i-see sensor corner panel" in section 7.

After verifying all the items above, hand all the documents including this manual and the manuals for the unit and separately sold parts to the user. Be sure to explain the descriptions of cleaning the filters and how to use the air intake grille up/down function (remote controller operation) in the operation manual of the decorative panel to the user.