



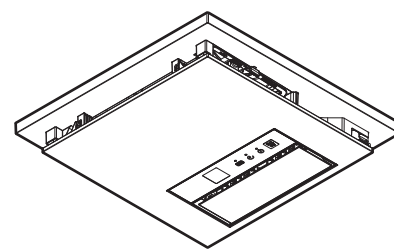
Bathroom Thermo Ventilator / 浴室換氣暖風機

MODEL / 型號

V-251BZ-HK [220 V single-phase / 220 V 單相]

Installation Manual / 安裝手冊

For Dealers and Contractor / 經銷商和承包商專用



Contents / 目錄

Page / 頁次

1. Safety Precautions / 安全須知	2
2. Names and Dimensions of Parts (Dimensional Drawings) / 部件名稱和尺寸(尺寸圖)	4
3. Selecting Installation Position / 選擇安裝位置	5
4. Method of Installation / 安裝方法	7
5. Checks after Installation / 安裝後檢查	12
6. Trial Operation / 運轉試驗	12
7. Checking and Changing Initial Values / 檢查和變更初始值	14
8. Explanations to the Customer / 向客戶介紹	14
9. Troubleshooting / 故障排除	15

■ Correct installation is essential to achieve full performance and functionality of this product and to ensure safety. Carefully read this Installation Manual before installation.

■ This product is for domestic use. Do not use it for commercial applications.

■ In the event of any conflict between the English and Traditional Chinese, the English version shall prevail.

■ 正確安裝對於實現本產品的完整效能與功能以及確保安全性至關重要。安裝前請仔細閱讀本安裝手冊。

■ 本產品僅供家用。請勿將其用於商業用途。

■ 若英文版與繁體中文版之間有任何衝突，以英文版為準。

1. Safety Precautions / 安全須知






The table below classifies the degree of danger from incorrectly handling or using the product.

下表對產品不當處理或使用的危險程度進行了分類。





 Warning 警告	Incorrect handling or use may result in death or serious injury. 不當處理或使用產品可能會導致死亡或嚴重傷害。
 Caution 注意	Incorrect handling or use may result in minor injury or physical damage to the house or household goods. 不當處理或使用產品可能會造成輕微傷害或對房屋或家庭用品造成物理損壞。

The symbols used in this manual and on the main unit indicate the following meanings.


本手冊和主機上使用的符號表示以下含義。

	Prohibited 禁止		The product must be grounded 產品必須接地
	Do not wet 禁止潮濕		Follow instructions 遵照說明
	Do not disassemble 請勿拆解		

Warning / 警告

 Prohibited 禁止	Do not use in a bathroom containing a bathtub with built-in gas water heater. Exhaust gases flowing back into the bathroom may cause carbon monoxide poisoning. Do not connect the product to the power supply via a wall switch. The shortage of the switch capacity could cause fire.	請勿在設有帶內建燃氣熱水器的浴缸之浴室中使用。 廢氣流回浴室可能會導致一氧化碳中毒。 請勿通過牆壁開關連接本產品的電源。 開關容量不足可能引起火災。
 Do not wet 禁止潮濕	Do not immerse or spray the product with water. Water entering live parts may cause an electric shock or short-circuit.	請勿將產品浸入水中或用水噴灑。 通電部件進水可能造成觸電或短路。
 Do not disassemble 請勿拆解	Do not modify or disassemble using tools. Contacting internal parts could cause fire, electric shock or other injuries.	請勿使用工具進行改裝或拆解。 觸摸內部部件可能造成火災、觸電或其他傷害。
 The product must be grounded 產品必須接地	Securely connect the earth and install an earth leakage circuit breaker. Failure to do so could cause a malfunction or an electric shock due to an electrical fault.	請牢固接地並安裝接地漏電斷路器。 否則可能會因電氣故障而造成故障或觸電。

⚠ Warning / 警告

 <p>Follow instructions 遵照說明</p>	Use a 220 V AC single-phase power supply. Using a power supply other than 220 V AC single-phase may cause fire or electric shock.	使用220 V AC單相電源。 使用220 V AC單相電源以外的電源可能造成火災或觸電。
	Electrical work and main unit installation must be performed safely and reliably by qualified personnel certified by the Electrical and Mechanical Services Department (EMSD). Incorrect electrical work or installation work may cause electric shock, fire, or the unit falling down.	電氣作業及主機安裝必須由符合資質的機電工程署(EMSD)認證人員以安全可靠的方式執行。 不當電氣作業或安裝作業可能造成觸電、火災或裝置墜落。
	When passing metal ducts through wooden buildings clad with metal laths, wire laths or metal sheets, these ducts must be installed in such a way that they will not make electrical contact with the metal laths, wire laths or metal sheets. If the metal ducts make contact with these materials electrically, a fire might result due to an electric leakage.	在安裝時不要讓金屬管道與金屬板條、金屬絲、不銹鋼板等有電氣上的接觸。 若連接到這類金屬部分則可能會因漏電而引起火災事故。
	Securely connect the power cable. An insecure connection may result in overheating of the connectors and cause fire.	牢固連接電源線。 連接不牢可能導致連接器過熱並引起火災。
	Install the product at least 2.3 m above the floor. Failure to do so could cause an injury.	將產品安裝在離地面至少2.3 m高度的位置。 否則可能造成傷害。
	Do not block the inlet or outlet of the product. Doing so could cause a fire.	請勿堵塞產品的進風口或出風口。 否則可能造成火災。
	Firmly secure the main unit and panel with screws. They could fall and cause an injury.	用螺絲牢牢固定主機和面板。 可能會墜落並造成傷害。

⚠ Caution / 注意

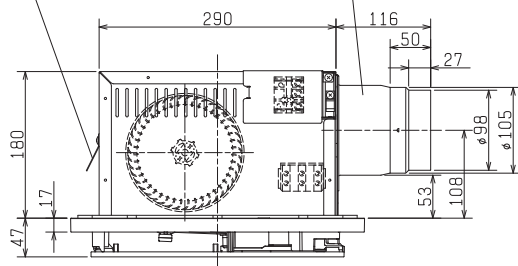
 <p>Follow instructions 遵照說明</p>	Install securely in a place with sufficient strength. It could fall and cause an injury.	牢固安裝到有足夠強度的位置。 可能會墜落並造成傷害。
	Securely attach parts. They could fall and cause an injury.	牢固連接部件。 可能會墜落並造成傷害。
	Use parts supplied and designated parts for installation. Failure to use parts designated by MITSUBISHI ELECTRIC could lead to an accident.	使用隨附的部件和指定的部件進行安裝。 不使用三菱電機指定的部件可能導致事故。
	Wear gloves during installation. Failure to do so could result in injury.	安裝時請佩戴手套。 否則可能導致傷害。
	Earth leakage circuit breaker (leakage current not exceeding 30 mA) and circuit breaker shall be directly connected to the supply terminals and shall have a contact separation in all poles, providing full disconnection under overvoltage category III conditions (Secure at least 3 mm between contact points). Use a circuit breaker for 16 A or greater.	接地漏電斷路器（漏電流不超過30 mA）和斷路器應直接連接至電源終端，並在所有電極上都設有接觸隔離，確保在III類過電壓下完全斷開連接（接觸點之間至少留出3mm距離才能保證安全）。使用16 A或以上斷路器。

2. Names and Dimensions of Parts (Dimensional Drawings)

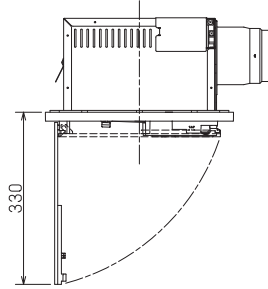
2. 部件名稱和尺寸(尺寸圖)

Fall-prevention fixture
防掉落鐵片

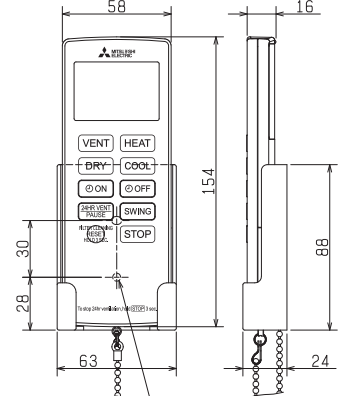
Duct connection port
管道連接口



■ Panel open
面板打開



■ Wireless remote controller
遙控器



Remote controller case
mounting screws
遙控底座安裝螺絲

Panel base
面板底座

Inlet
進風口

Fixing clip
固定夾

Baffle plate
導風板

Inlet
進風口

Filter
濾網

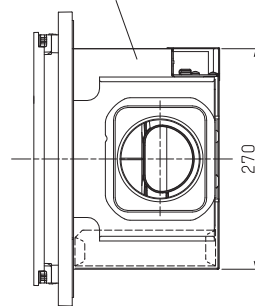
Panel
面板

Inlet / 進風口

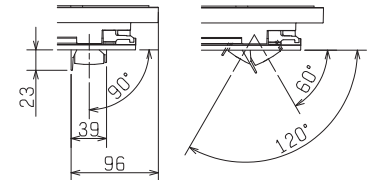
Mounting holes (11 positions)
安裝孔(11個)

Main unit display
主機顯示器

Main unit
主機

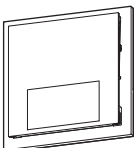
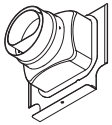










■ Baffle plate (60° to 120° movement
range during operation)
導風板 (運轉期間60° 至120° 移動
範圍)



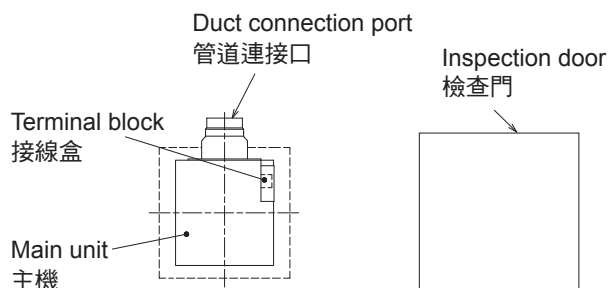
Unit (mm)
單位 (mm)

■ Parts supplied / 隨附的部件

Panel / 面板: 1 	Duct connection port / 管道連接口: 1 	Remote controller / 遙控器: 1 	Remote controller case / 遙控底座: 1 
AAA alkaline batteries / AAA鹼性電池: 2 	Display sticker (traditional Chinese) / 顯示貼紙(繁體中文): 1 	Display sticker (English) / 顯示貼紙(英文): 1 	Main unit mounting screws (4 x 40): 8 Duct connection port mounting screw (4 x 40): 1 主機安裝螺絲 (4 x 40): 8 管道連接口安裝螺絲 (4 x 40): 1 
Panel mounting screws / 面板安裝螺絲 (4 x 10): 4 	Remote controller case mounting screws / 遙控底座安裝螺絲 (4 x 16): 2 	Instruction Manual / 使用說明書: 1 Installation Manual (this manual) / 安裝手冊(本手冊): 1 Warranty Card / 保養卡: 1	

3. Selecting Installation Position / 選擇安裝位置

- The product is for bathroom ceiling installation only.
■ 本產品僅適用於浴室天花板安裝。
- Standard supported size is a bathroom with a floor area of 2.9 m².
■ 標準支援尺寸為建築面積2.9 m²的浴室。
- The heating and drying effect may deteriorate if the bathroom is large or has a large window, if the bathroom is tiled, or if the walls and floor have poor thermal insulation such as a natural stone construction.
■ 如果浴室面積很大或有大窗戶，如果浴室貼了瓷磚，或者如果浴室牆壁和地面的隔熱效果較差(如天然石材結構)，暖房和乾燥效果可能會受影響。
- Take note of the following points during installation to ensure inspection and maintenance of the main unit is possible.
■ 安裝時請注意以下事項，以確保可以對主機進行檢查和維護。
 - When the ceiling is unable to dismantle, please set a square inspection hole of at least 45 cm (The inspection hole should not be directly under the duct pipe).
- 吊裝且天花板無法拆下時，請設置一個邊長45 cm 以上的方形點檢口(點檢口不能在管道正下方)。



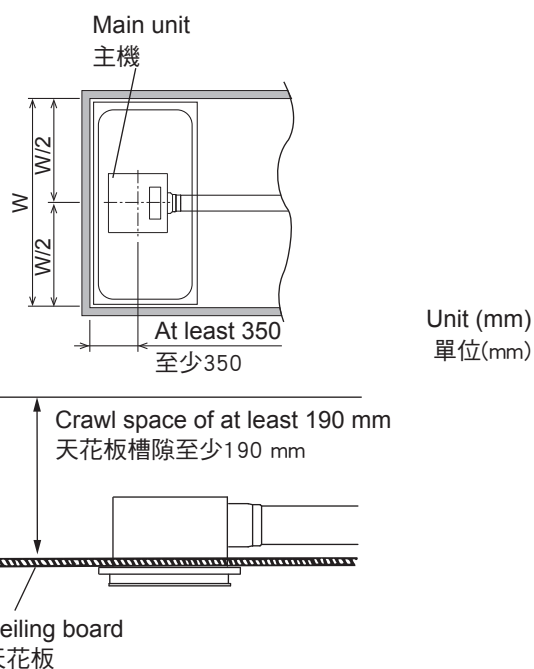
- Do not install in a place where the product cannot be seen from the inspection door, such as when it is blocked by a cover, or where inspection and repair of the product is not possible.
- 請勿將產品安裝在無法從檢查門看到產品的地方(如被蓋子擋住等)，或無法檢查和修理產品的地方。
 - Do not use materials that make removal of the product difficult, such as applying glue or double-sided tape to the mounting parts of the product.
- 請勿使用導致產品拆卸困難的材料，如在產品的安裝部位使用膠水或雙面膠帶。
- The system must not be installed in the following locations.
■ 禁止將本系統安裝在以下位置。
 - Locations always above 40°C (thermostat prevents heater operation at high temperatures)
- 溫度始終高於40°C的位置(在高溫環境下，恆溫器會阻止加熱器運轉)
 - Bathroom at a hot spring or swimming pool (could cause a malfunction)
- 溫泉或游泳池的浴室(可能造成故障)

- Bathroom fitted with a steam sauna (could cause a malfunction)
- 配備蒸汽桑拿裝置的浴室(可能造成故障)
- Slanted ceiling (could cause a malfunction. Condensed water drips from the panel.)
- 傾斜的天花板(可能導致故障。冷凝水從面板滴落。)
- Place where organic solvents or sprays are used (could cause a malfunction)
- 使用有機溶劑或噴霧劑的位置(可能造成故障)
- Place where oil mist occurs (could cause a malfunction)
- 起油霧的位置(可能造成故障)
- Under a wall socket
- 牆裝插座下

■ Dimensions for installation

■ 安裝尺寸

- Install the main unit at a position in the following dimensions.
- 將主機按照以下尺寸位置安裝。



■ Requirements during installation

■ 安裝期間要求

[Main unit / 主機]

- Do not cover the main unit with heat-insulating materials, etc. (Could cause a malfunction)
- 請勿用隔熱材料等覆蓋主機(可能導致故障)
- Install the main unit on the ceiling board from inside the bathroom. (Otherwise lowering the main unit for maintenance becomes impossible)
- 從浴室內部將主機安裝在天花板上。(否則無法降低主機以進行維護)

3. Selecting Installation Position / 選擇安裝位置 (continued / 續)

[Electrical work / 電氣作業]

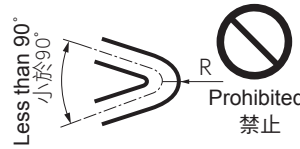
- Ensure the power cable and control switch connection cable have a spare length of around 2 m to allow the main unit to be lowered. (If the cables are short, maintenance becomes impossible)
- 確保電源線和控制開關連接電纜的備用長度約為2 m，以便降低主機。(如果電纜太短，則無法進行維護)

[Duct piping / 管道配置]

- Use incombustible materials.
- 使用不可燃材料。
- Ensure the piping is for exclusive use with this product.
- 確保配管為本產品專用。
- Tilt the piping downwards towards the outside with a slant of at least 1/100 to prevent entry of rainwater into the exhaust ducts and backflow of condensed water.
- 將管道朝戶外向下傾斜至少1/100，以防止雨水進入排氣管和冷凝水回流。
- To the end of the exhaust duct, attach a vent cap (system component) to prevent entry of rainwater or birds, or attach a hood (system component) to prevent entry of rainwater.
- 在排氣管末端安裝通風蓋(系統組件)以防止雨水或鳥類進入，或安裝罩蓋(系統組件)以防止雨水進入。
- Do not use a commercial outdoor hood with a large pressure loss. (Could reduce the air volume or increase noise)
- 請勿使用壓力損失大的市售戶外罩蓋。(可能導致風量減小或噪音增大)

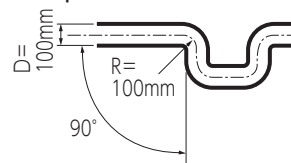
- Take note of the following. (Could reduce the air volume or increase noise)
- 請注意以下事項。(可能導致風量減小或噪音增大)

- Bend angle (R) / 彎曲角度(R)



Bend angle: At least 90°
Bend radius (R): At least the diameter of the duct (For a $\phi 100$ spiral duct, have a radius of at least 100 mm)
彎曲角度：至少90°
彎曲半徑(R)：至少為管道直徑
(對於 $\phi 100$ 的螺旋管道，半徑至少為100 mm)

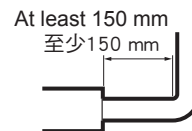
- Multiple bends / 多次彎曲



The distance that air flows through straight pipes will become shorter as the number of bends increase.
彎曲次數增加使空氣流過直管的距離變短。

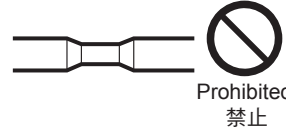
- Bend just next to the discharge opening

/ 靠近排放口彎曲



Ensure the bend is at least 150 mm away from the discharge opening.
確保彎曲離開排放口至少150 mm。

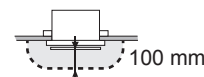
- Pipe narrowing / 管道變窄



Do not conduct pipe narrowing.
請勿將管道收窄。

[Others / 其他]

- To use this product for general ventilation of the house requires ventilation measures (such as an undercut) in the door of the room.
- 若要將本產品用於房屋的一般換氣，需要針對房門採取換氣措施(例如底切)。
- Provide an air vent.
- 提供排氣口。
- Do not install anything (including wet clothes and laundry pipes) within 100 mm below the panel.
- 請勿在面板下方100 mm範圍內放置任何物品(包括濕衣服和晾衣桿)。



- Do not use an impact driver to tighten the screws in the panel. Tighten by hand.
- 請勿使用衝擊起子緊固面板中的螺絲。請用手緊固。

4. Method of Installation / 安裝方法

Installation procedure / 安裝步驟

1	Preparations for installation / 安裝準備
	1. Make a mounting hole in the bathroom ceiling board.
	1. 在浴室天花板上打一個安裝孔。
	2. Install the suspension support frame.
	2. 安裝懸掛支撐框架。
	3. Carry out wiring.
	3. 進行布線。

2	Installing the main unit / 安裝主機
	1. Install the duct connection port.
	1. 安裝管道連接口。
	2. Carry out ducting.
	2. 進行配管。
	3. Install the main unit.
	3. 安裝主機。
	4. Install the panel.
	4. 安裝面板。

3	Electrical work / 電氣作業
	Connect to the main unit.
	連接主機。

4	Installing the remote controller / 安裝遙控器
---	---

5	Adjusting the air direction / 調整風向
---	---

Checks after installation / 安裝後檢查	
--	--

Trial operation / 運轉試驗	
-------------------------------	--

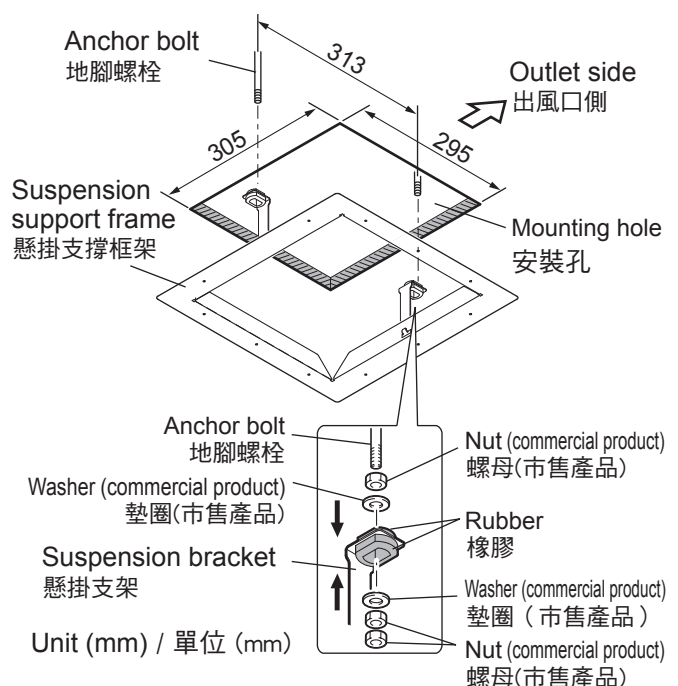
1	Preparations for installation / 安裝準備
---	---

Caution / 注意	
	Install securely in a place with sufficient strength.
	It could fall and cause an injury.
	牢固安裝到有足夠強度的位置。 可能會墜落並造成傷害。

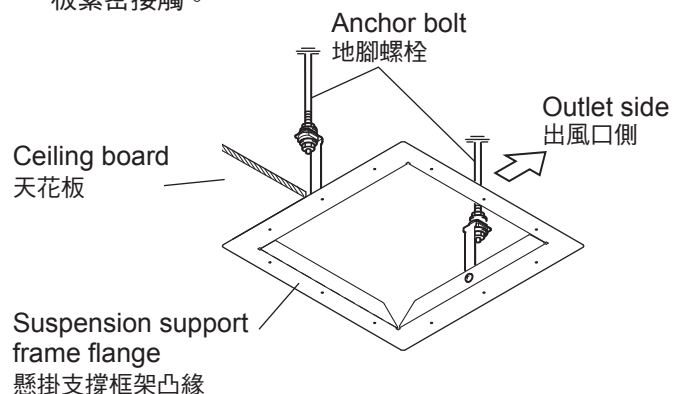
1. Make a mounting hole in the bathroom ceiling board.	
1. 在浴室天花板上打一個安裝孔。	
Refer to "3. Selecting Installation Position" and make a 295 mm x 305 mm mounting hole in the ceiling board.	
參照「3. 選擇安裝位置」在天花板上打295 mm x 305 mm的安裝孔。	

2. Install the suspension support frame.	
2. 安裝懸掛支撐框架。	
Be sure to use the dedicated suspension support frame (P-251TW-HK).	

- 務必使用專用的懸掛支撐框架 (P-251TW-HK)。
- (1) Fix commercial anchor bolts (M8 or M10) to the installation position beforehand.
 - (1) 事先將市售的地腳螺栓(M8或M10)固定在安裝位置。
 - (2) Assemble the suspension support frame and insert it in the mounting hole from inside the bathroom.
 - (2) 組裝懸掛支撐框架並將其從浴室內插入安裝孔。使用市售的墊圈和螺母將懸掛支撐框架懸掛在地腳螺栓上。(有關組裝, 請參閱懸掛支撐框架(P-251TW-HK)的安裝說明書)



- (3) Secure the suspension support frame to the anchor bolts so that its flanges are in close contact with the ceiling board.
- (3) 將懸掛支撐框架固定到地腳螺栓上, 使其凸緣與天花板緊密接觸。



- Note / 備註**
- Tighten the nuts securing the suspension brackets and check that the flanges of the suspension support frame are in close contact with the ceiling board. If the flanges are not in close contact with the ceiling board (the frame rattles), it will cause a gap between the main unit and the ceiling board.

4. Method of Installation / 安裝方法 (continued / 續)

- 擰緊固定懸掛支架的螺母，並檢查懸掛支撐框架的凸緣是否與天花板緊密接觸。如果凸緣未與天花板緊密接觸（框架搖晃），將會在主機和天花板之間產生間隙。
- **Be sure to fix the nuts securely.**
- 務必牢牢固定螺母。

3. Carry out wiring.

3. 進行布線。

Wire the power cable (VVF cable: $\phi 2\text{ mm} \times 3\text{ cores}$).
連接電源線(VVF電纜：2 mm x 3芯)。

Note / 備註

- If electrical work is difficult, carry out electrical work before installing the product on the ceiling.
- 如果電氣作業困難，請在將產品安裝到天花板上之前進行電氣作業。
- Ensure cables have a spare length of around 2 m when wiring. Otherwise maintenance of the main unit becomes impossible.
- 接線時確保電纜的備用長度約為2 m。否則無法對主機進行維護。
- Pass electrical wiring on top of heat-insulating materials.
- 將電線從隔熱材料的上側通過。
- Do not touch the power cable when using styrene as a heat-insulating material.
- 使用苯乙烯作為隔熱材料時，請勿觸摸電源線。
- Wire the power cable from a branch circuit breaker (for 16 A or greater) designated for its use.
- 從專用的分路斷路器(16 A或更大)連接電源線。
- Install the earth leakage circuit breaker in a place where it can be reset such as on a distribution board, etc.
- 將接地漏電斷路器安裝在配電板等可以重置的地方。

2 Installing the main unit / 安裝主機

Warning / 警告



Firmly secure the main unit and panel with screws.

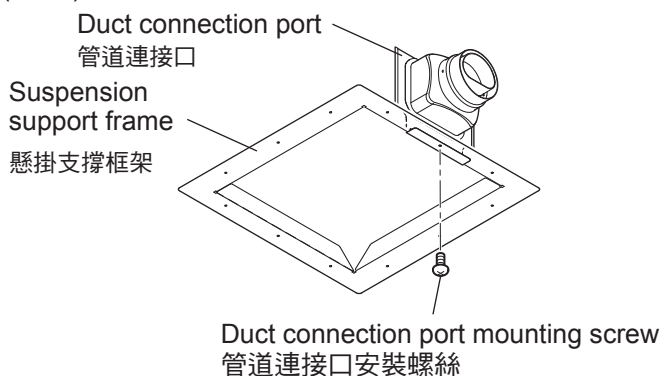
They could fall and cause an injury.
用螺絲牢牢固定主機和面板。
可能會墜落而造成傷害。

1. Install the duct connection port.

1. 安裝管道連接口。

Place the duct connection port in the position of the suspension support frame as shown below. Fix it to the suspension support frame securely using one duct connection port mounting screw(4X40) supplied.

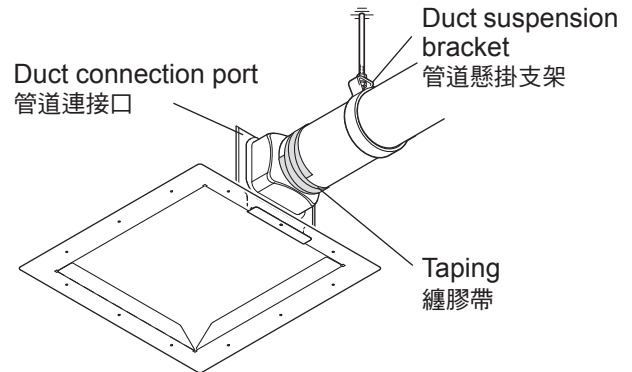
的下圖所示位置。使用附隨的一個管道連接口安裝螺絲(4X40) 將其牢牢地固定到懸掛支撐框架上。



2. Carry out ducting.

2. 進行配管。

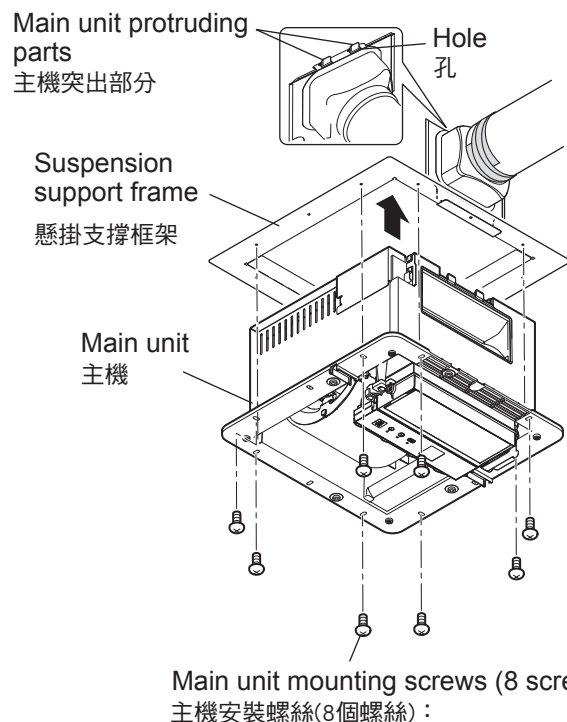
- (1) Insert the duct firmly into the duct connection port and tape around it to ensure air cannot leak.
- (1) 將管道牢牢插入管道連接口，並用膠帶纏繞確保空氣不會洩漏。
- (2) Suspend the duct from the ceiling so that it does not apply force to the main unit.
- (2) 將管道懸掛在天花板上，使其不對主機施力。



3. Install the main unit

3. 安裝主機

- (1) Insert the main unit horizontally into the opening in the suspension support frame. Insert the main unit all the way in so that the protruding parts of the main unit fit in the holes of the duct connection port catch.
- (1) 將主機水平插入懸掛支撐框架的開口中。將主機完全插到底，使主機的突出部分插入管道連接口卡口的孔中。
- (2) Use the eight mounting screws(4X40) supplied to firmly secure the main unit in the suspension support frame.
- (2) 使用隨附的八個安裝螺絲(4X40) 將主機牢牢固定在懸掛支撐框架上。



Note / 備註

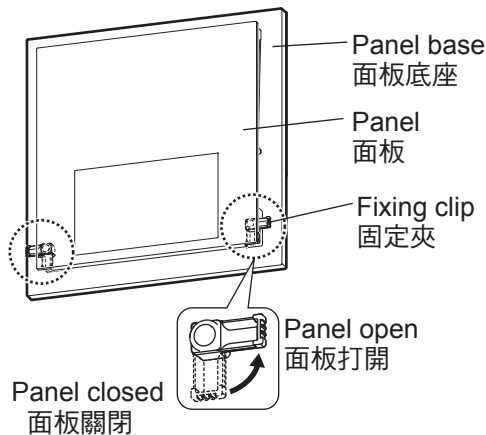
- Check that the protruding parts of the main unit are fit into the holes of the duct connection port catch. (If the protruding parts are not fit into the holes, the connection could be insufficient and could cause air leakage)
- 檢查主機的突出部分是否插入管道連接口卡口的孔中。(如果突出部分未插入孔中，則可能會因連接不良而導致漏氣)
- Install the main unit on the ceiling from inside the bathroom. Otherwise maintenance of the main unit becomes impossible.
- 將主機從浴室內部安裝到天花板上。否則無法對主機進行維護。
- Do not cover the surface of the main unit with heat-insulating materials. Also, ensure that heat-insulating materials are at least 100 mm away from the main unit.
- 請勿使用隔熱材料覆蓋主機表面。另外，確保隔熱材料離開主機至少100 mm。
- Check that all mounting screws are tightened in the suspension support frame.
- 檢查懸掛支撐框架上的所有安裝螺釘是否擰緊。

4. Install the panel.

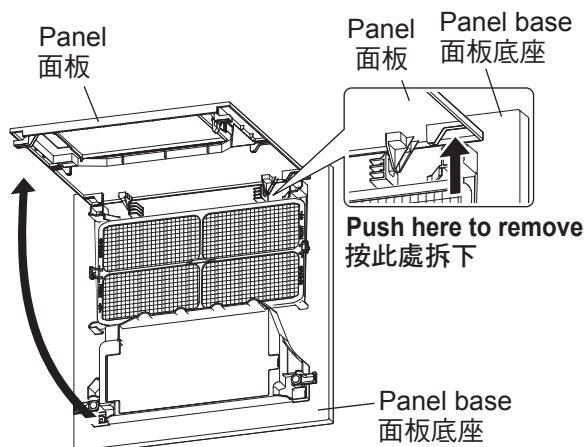
4. 安裝面板。

- (1) Turn the fixing clips between the panel and panel base at the left and right sides.

- (1) 轉動左右兩側面板與面板底座之間的固定夾。

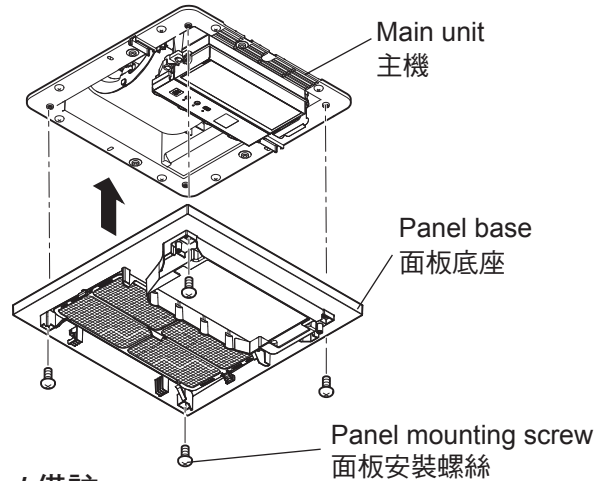


- (2) Open the panel and remove it from the panel base.
- (2) 打開面板，將其從面板底座上拆下。



- (3) Attach the panel base to the main unit using the four panel mounting screws (4 x 10) supplied.

- (3) 使用隨附的四個面板安裝螺絲(4 x 10)將面板底座安裝到主機上。



Note / 備註

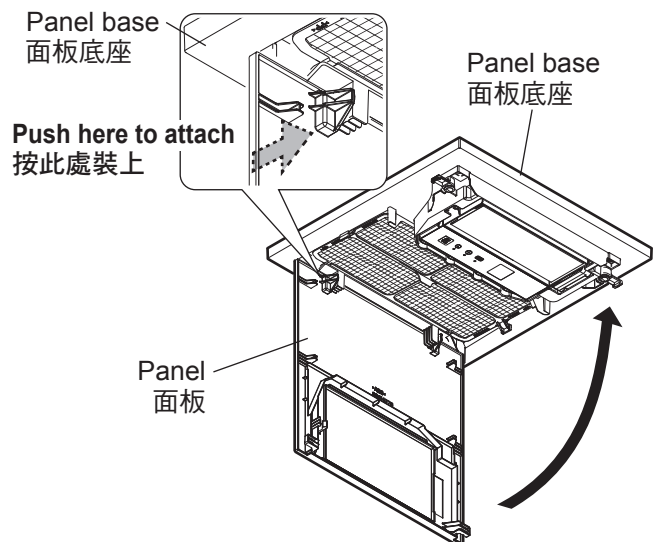
- Do not use an impact driver to tighten the screws in the panel base. Tighten by hand.
- 請勿使用衝擊起子緊固面板上的螺絲。請用手緊固。

- (4) After installing the panel, close the panel.

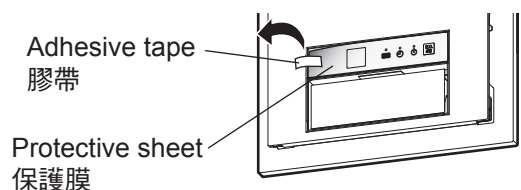
Attach the panel to the panel base. After closing the panel, turn the fixing clips to secure the panel.

- (4) 安裝面板後，關閉面板。

將面板安裝到面板底座上。關閉面板後，轉動固定夾以固定面板。



A protective sheet is attached to the front surface of the controller on the main unit. Peel off the protective sheet. 主機控制器正面上貼有保護膜。請撕掉保護膜。



Stick commercial adhesive tape to a corner of the protective sheet, as shown above, and peel off the protective sheet. 如上圖所示，將市售的膠布貼到保護膜的一角上，然後撕掉保護膜。

4. Method of Installation / 安裝方法 (continued / 續)

3 Electrical work / 電氣作業

Warning / 警告



Do not connect the product to the power supply via a wall switch.

The shortage of the switch capacity could cause fire.

請勿通過牆壁開關連接電源。
開關容量不足可能引起火災。



Securely connect the earth and install an earth leakage circuit breaker.

Failure to do so could cause a malfunction or an electric shock due to an electrical fault.

請牢固接地並安裝接地漏電斷路器。
否則可能會因電氣故障而造成故障或觸電。



Use a 220 V AC single-phase power supply.
Using a power supply other than 220 V AC single-phase may cause fire or electric shock.

使用220 V AC單相電源。
使用220 V AC單相電源以外的電源可能造成火災或觸電。

Electrical work and main unit installation must be performed safely and reliably by qualified personnel certified by the Electrical and Mechanical Services Department (EMSD).

Incorrect electrical work or installation work may cause electric shock, fire, or the unit falling down.

電氣作業及主機安裝必須由符合資質的機電工程署(EMSD)認證人員以安全可靠的方式執行。不當電氣作業或安裝作業可能造成觸電、火災或裝置墜落。

Securely connect the power cable.

An insecure connection may result in overheating of the connectors and cause fire.

牢固連接電源線。
連接不牢可能導致連接器過熱並引起火災。

Caution / 注意



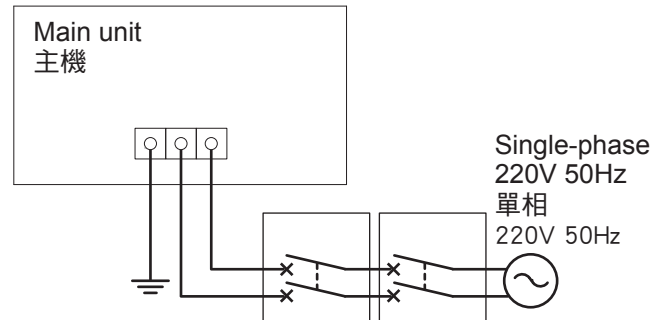
Earth leakage circuit breaker (leakage current not exceeding 30 mA) and circuit breaker shall be directly connected to the supply terminals and shall have a contact separation in all poles, providing full disconnection under overvoltage category III conditions (Secure at least 3 mm between contact points). Use a circuit breaker for 16 A or greater.

接地漏電斷路器(漏電流不超過30 mA)和斷路器應直接連接至電源終端,並在所有電極上都設有接觸隔離,確保在III類過電壓下完全斷開連接(接觸點之間至少留出3mm距離才能保證安全)。使用16 A或以上斷路器。

Wiring diagram / 配線圖

Parts shown in thick lines must be installed by a qualified person certified by EMSD.

以粗線條顯示的部件必須由符合資質的機電工程署(EMSD)認證人員進行安裝。



Circuit breaker (Use an independent circuit breaker (16 A or greater))

斷路器(使用獨立的斷路器(16 A或更大))

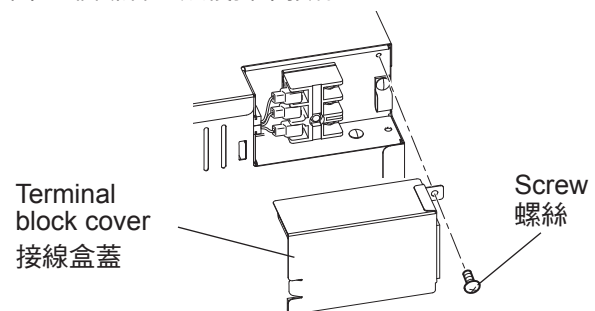
Earth leakage circuit breaker

接地漏電斷路器

1. Remove the terminal block cover.

1. 拆下接線盒蓋。

Remove one screw, and remove the terminal block cover.
拆下一個螺絲,然後拆下接線盒蓋。

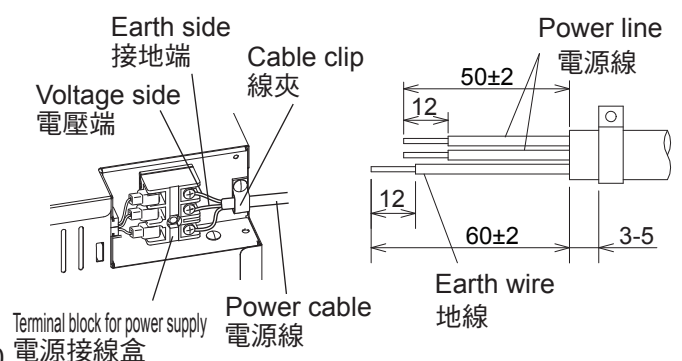


2. Connect the power cable to the "terminal block for power supply".

2. 將電源線連接到「電源接線盒」。

- (1) Peel off around 60 mm of the outer sheath of the power cable.
- (2) Make the power line 50 mm.
- (3) Peel off 12 mm of the sheath at the end of the cable.
- (4) Secure the power cable firmly (VVF cable: $\phi 2$ mm) to the "terminal block for power supply" of the main unit with screws.
- (5) Secure the power cable with a cable clip.

- (1) 將電源線外皮剝去約60 mm。
- (2) 將電源線長度做成50 mm。
- (3) 將電纜末端皮剝去12 mm。
- (4) 用螺絲將電源線(VVF電纜: $\phi 2$ mm)牢牢固定在主機的「電源接線盒」上。
- (5) 用電纜夾固定電源線。



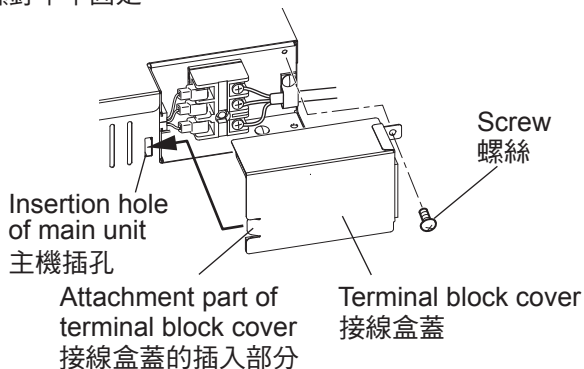
Note / 備註

- Secure the power cable to the voltage side and earth side with screws as shown in the diagram.
- 用螺絲將電源線的電壓側和接地側如圖所示固定。

3. Install the terminal block cover.

3. 安裝接線盒蓋。

Insert the attachment part of the terminal block cover into the insertion hole of the main unit, and secure it firmly with one screw. 將接線盒蓋的插入部分插入到主機的插入孔中，並用一個螺釘牢牢固定。



Note / 備註

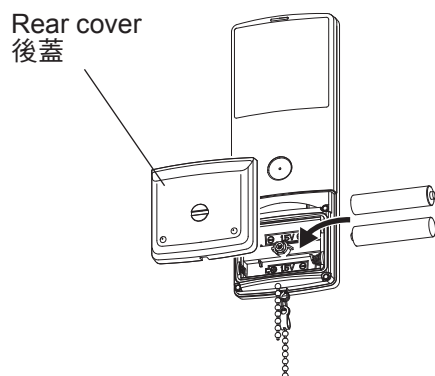
- Pass the cable through the cable outlet hole in the terminal block cover so that the cable does not get crushed by the terminal block cover. (Arrange the shape of the cable beforehand to make it easier to secure the terminal block cover)
- 將電纜穿過接線盒蓋的電纜通過孔，使電纜不會被接線盒蓋夾住。(預先整理電纜的形狀，以便使接線盒蓋更容易固定)
- Check that the terminal block cover is firmly secured.
- 檢查接線盒蓋是否牢牢固定。

4 Installing the remote controller / 安裝遙控器

1. Insert batteries in the remote controller.

1. 將電池裝入遙控器。

- (1) Remove the rear cover with a coin.
 - (2) Insert the batteries correctly.
 - (3) Firmly attach the rear cover.
- (1) 用硬幣拆下後蓋。
(2) 正確裝入電池。
(3) 牢牢裝好後蓋。

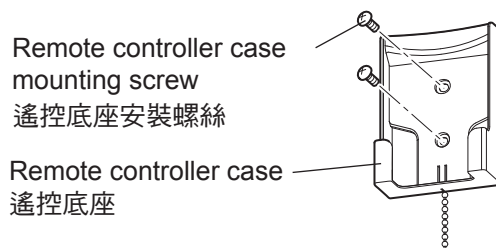


2. Install the remote controller case using the two remote controller case mounting screws (4 x 16) supplied.

2. 使用隨附的兩個遙控底座安裝螺絲 (4 x 16) 安裝遙控底座。

Before installing the remote controller case, check the product operating position.

在安裝遙控底座之前，請檢查產品的工作位置。



5 Adjusting the air direction / 調整風向

Set the direction of the louvres.

The air direction can be adjusted using the remote controller.

設定百葉方向。

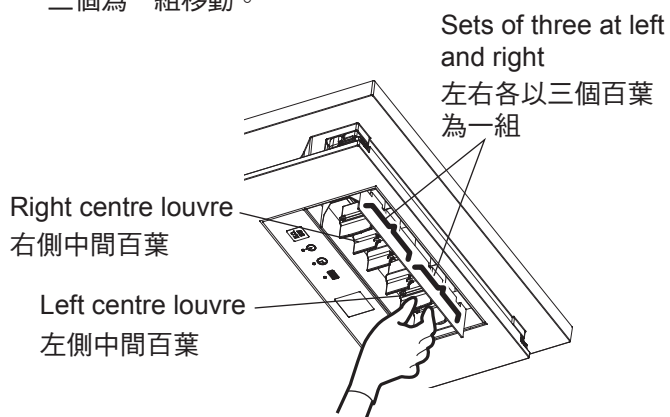
可以使用遙控器調整風向。

- (1) Hold down **[SWING]** on the remote controller (for 3 seconds) to open the baffle plate.

- (2) Hold and move the centre louvres at the left and right. The louvres move in sets of three at the left and right.

- (1) 按住遙控器上的 **[SWING]** (3秒) 打開導風板。

- (2) 捏住並移動左右方向的中間百葉。左右兩個的百葉以三個為一組移動。



- (3) Press the **[STOP]** button to close the baffle plate.

- (3) 按 **[STOP]** 按鈕關閉導風板。

5. Checks after Installation / 安裝後檢查

Check the following items before trial operation.

Be sure to put a tick mark in the corresponding tick box ☒.

Perform trial operation after making these checks.

運轉試驗前請檢查以下項目。

務必在相應的勾選框中打上勾號☒.

請先進行這些檢查，然後再執行運轉試驗。

(1) Product installation check / 產品安裝檢查

Reference page / 參考頁次

- | | |
|--|--------|
| <input type="checkbox"/> Is the main unit installed securely, without looseness? | Page 8 |
| <input type="checkbox"/> 主機是否安裝牢固，沒有鬆動？ | 第8頁 |
| <input type="checkbox"/> Are the product inlet and outlet kept unblocked? | Page 6 |
| <input type="checkbox"/> 產品進風口和出風口是否暢通無阻？ | 第6頁 |

(2) Electrical work check / 電氣作業檢查

- | | |
|---|---------|
| <input type="checkbox"/> Is an earth leakage circuit breaker installed in the power supply? | Page 10 |
| <input type="checkbox"/> 電源是否安裝了接地漏電斷路器？ | 第10頁 |
| <input type="checkbox"/> Is a 220 V AC single-phase used for the power supply? | Page 10 |
| <input type="checkbox"/> 是否使用了220 V AC單相電源？ | 第10頁 |
| <input type="checkbox"/> Is the wiring connected according to the wiring diagram? | Page 10 |
| <input type="checkbox"/> 配線是否按照配線圖進行連接？ | 第10頁 |
| <input type="checkbox"/> Are the power cable connected to the terminal block without looseness? | Page 10 |
| <input type="checkbox"/> 連接到接線盒的電源線是否鬆動？ | 第10頁 |
| <input type="checkbox"/> Is the connected wiring secured with cable clips? | Page 10 |
| <input type="checkbox"/> 連接的配線是否用線夾固定？ | 第10頁 |
| <input type="checkbox"/> Is the earth connected? | Page 10 |
| <input type="checkbox"/> 是否接地？ | 第10頁 |
| <input type="checkbox"/> Is the product connected to the power supply via a wall switch? | Page 10 |
| <input type="checkbox"/> 是否通過牆壁開關連接了本產品的電源？ | 第10頁 |

(3) Others / 其他

- | | |
|---|---------|
| <input type="checkbox"/> Are the louvre directions correct? | Page 11 |
| <input type="checkbox"/> 百葉方向是否正確？ | 第11頁 |

*To prevent initial problems, be sure to perform the post-installation checks before hand-over to the customer.

*為防止出現早期問題，請務必在交付給客戶之前執行安裝後檢查。

6. Trial Operation / 運轉試驗

The customer should witness the trial operation.

If the customer is unavailable, the person who placed the order (the owner, etc.) can be the witness.

運轉試驗時客戶應在場見證。

若客戶無法在場，應由下訂單的人員(物主等)在場見證。

1 Checks before trial operation / 運轉試驗前檢查

When electrical work is complete, make sure that all wiring is correct.

電氣作業完成後，確保所有配線正確。

2 Turn on the power (turn on the circuit breaker) / 打開電源 (打開斷路器)







When the power is turned on, the main unit starts.

電源打開後，主機啟動。

3 Operation checks / 運轉檢查

Check the operation according to the table below. After checking the operation, hold down the **STOP** button for at least 3 seconds to fully stop the product, and then turn off the circuit breaker.

根據下表檢查運轉。檢查運轉後，按住 **STOP** 按鈕至少3秒以完全停止產品，然後關閉斷路器。

Operating mode 運轉模式	Operation 操作	Display 顯示器	<input checked="" type="checkbox"/>	Description 描述
24-hour ventilation 24小時換氣	Press the 24HR VENT PAUSE button. 按 24HR VENT PAUSE 按鈕。		<input type="checkbox"/>	Check that ventilation occurs at the inlet on the main unit panel. 檢查主機面板上的進風口是否換氣。
Ventilation 換氣	Press the VENT button. The function toggles each time the button is pressed. 按 VENT 按鈕。 每次按下該按鈕時，功能都會切換。		<input type="checkbox"/>	Check that ventilation occurs at the inlet on the main unit panel. (The air volume for 24-hour ventilation is the same as for low ventilation) 檢查主機面板上的進風口是否換氣。(24小時換氣的空氣流量與弱換氣時相同)
Heating 暖房	Press the HEAT button. The function toggles each time the button is pressed. 按 HEAT 按鈕。 每次按下該按鈕時，功能都會切換。		<input type="checkbox"/>	Check that the baffle plate opens. Check that warm air is discharged from the main unit outlet. 檢查導風板是否打開。 檢查主機出風口是否排出暖風。
Drying 暖房	Press the DRY button. The function toggles each time the button is pressed. 按 DRY 按鈕。 每次按下該按鈕時，功能都會切換。		<input type="checkbox"/>	Check that the baffle plate opens. Check that High (warm air)/Low (warm air)/Wind (cool air) is discharged from the main unit outlet. (The air volume for high drying is the same as for low drying) 檢查導風板是否打開。 檢查主機出風口是否排出強(暖風)/弱(暖風)/風乾燥氣流。(強乾燥的空氣流量與弱乾燥時相同)
Cooling 涼風	Press the COOL button. The function toggles each time the button is pressed. 按 COOL 按鈕。 每次按下該按鈕時，功能都會切換。		<input type="checkbox"/>	Check that the baffle plate opens. Check that air is discharged from the main unit outlet. 檢查導風板是否打開。 檢查主機出風口是否排風。
Heating Drying Cooling 暖房 乾燥 涼風	Press the SWING button. 按 SWING 按鈕。		<input type="checkbox"/>	Check that the baffle plate swings between 60° and 120°. Press the button again and check that the baffle plate stops at that position. 檢查導風板擺動幅度是否在60° 和 120° 之間。 再次按下按鈕，檢查導風板是否在該位置停止。

7. Checking and Changing Initial Values / 檢查和變更初始值

Refer to the Instruction Manual.

請參閱使用說明書。

8. Explanations to the Customer / 向客戶介紹

- If the customer is unavailable, the explanations can be made to the person who placed the order (the owner, etc.) or manager.
- Explain the correct method of use according to the separate Instruction Manual.
Emphasize the importance of following the "Safety Precautions" section, which describes important safety-related information.
- After installation, hand this Installation Manual to the customer. Also hand the supplied Instruction Manual and display stickers to the customer.
- 若客戶無法在場，應向下訂單的人員(物主等)或經理進行介紹。
- 根據單獨的使用說明書介紹正確的使用方法。
強調遵循「安全須知」部分的重要性，該部分說明重要的安全相關資訊。
- 安裝完成後，將本安裝手冊交給客戶。此外，請將隨附的使用說明書和顯示貼紙交給客戶。

9. Troubleshooting / 故障排除

Perform an inspection if any of the following symptoms occurs. Turn off the circuit breaker in the distribution board before starting the inspections.

若出現以下任何現象，請執行檢查。在開始檢查之前，請關閉配電板中的斷路器。

Symptom / 現象	Cause and Remedy / 原因和改進措施	
No operation 不運轉	Is power supplied to the main unit? 主機是否通電？	Inspect the circuit breaker. An independent circuit breaker with 16 A or greater capacity is required. 檢查斷路器。 需要一個容量為16 A或以上的獨立斷路器。
	Starting operation and switching operation functions can take about 40 seconds. 開始運轉和切換運轉功能大約需要40秒。	This is not a malfunction. 這不是故障。
Operation does not stop 無法停止運轉	Cooling operation continues for about 15 seconds after heater operation stops. 加熱器運轉停止後，涼風運轉持續約15秒。	This is not a malfunction. 這不是故障。
It takes too long to start operation or switch operation functions 等很長時間才會開始運轉或切換運轉功能	Switching the air flow path or cooling the main unit can take about 40 seconds. 切換氣流路徑或主機冷卻大約需要40秒。	This is not a malfunction. 這不是故障。
Vibrations occur 發生震動	Is the panel securely installed? 面板安裝是否牢固？	Securely install the panel. 牢固安裝面板。
	Are the mounting screws loose? 安裝螺絲是否鬆脫？	Fully tighten the screws. 完全緊固螺絲。
Burning smell 燃燒氣味	A burning smell may be detected when a purchased system is first operated or when the heater operates after a long period of time. 購買系統後首次運轉時或加熱器很長一段時間不運轉後恢復運轉時，可能會聞到燃燒氣味。	This is not a malfunction. (The smell will disappear after a few days) 這不是故障。 (氣味會在幾天後消失)
No warm air output Heater cuts out during operation (Cold air is output) 沒有暖風排出 加熱器在運轉時電源切斷 (排出冷風)	Power is not supplied to the heater when the temperature in the bathroom exceeds about 40°C. 當浴室溫度超過約40°C時，會停止向加熱器供電。	This is not a malfunction. 這不是故障。
	The heater power has been cut off by the temperature overheat prevention device and the main unit is cooling. 加熱器電源被過熱保護裝置切斷，並對主機進行冷卻。	There is no malfunction if it restarts after several minutes. 若幾分鐘後重新啟動，則沒有故障。
A gap exists between the main unit and window frame 主機與窗框之間有空隙	Is the main unit separated from the installation surface? Is the installation surface distorted? 主機是否與安裝面分離？ 安裝面是否扭曲？	Check the mounting of the main unit and for distortion of the installation surface. 檢查主機是否妥善安裝以及安裝面是否出現扭曲。
Clicking sound when switching operation functions 切換運轉功能時發出咔嗒聲	This is the sound of the relay contacts switching. 這是繼電器觸點切換的聲音。	This is not a malfunction. 這不是故障。
Squeaking sound when switching operation functions 切換運轉功能時發出吱吱聲	This is the sound of the operation function switching. 這是運轉功能切換的聲音。	This is not a malfunction. 這不是故障。
The panel is displaced 面板移位	Is there a problem with the panel mounting screws? 面板安裝螺絲是否有問題？	Check that no mounting screws are missing and firmly tighten all screws. 檢查安裝螺絲是否缺失並牢牢緊固所有螺絲。

MITSUBISHI ELECTRIC CORPORATION

MITSUBISHI ELECTRIC CORPORATION NAKATSUGAWA WORKS

1-3 Komaba-cho, Nakatsugawa-city Gifu-pref. 508-8666, Japan

三菱電機株式会社 中津川製作所

〒508-8666 岐阜県中津川市駒場町1番3号

原産國: 日本

製造商: 三菱電機株式會社