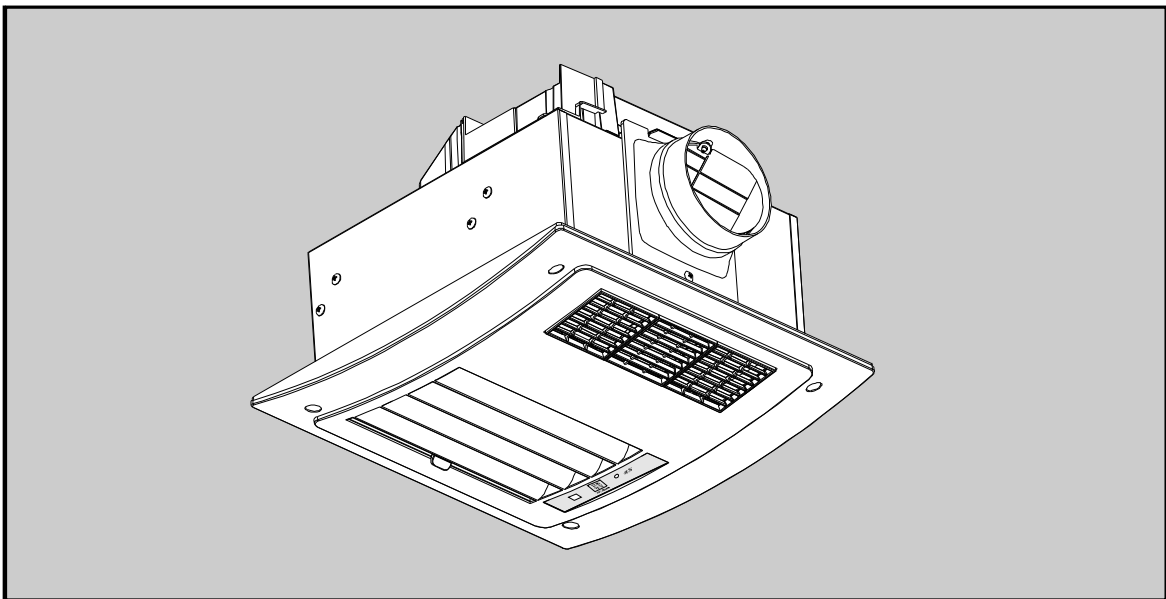


Operating and Installation Instructions

使用安裝說明書

Thermo Ventilator 浴室換氣暖風機

Model No. 30BGAH
型號



Thank you very much for having purchased our "Thermo ventilator".
Please read these instructions carefully before installation , operation or
maintenance of this product.

Read and retain these instructions for future reference.

Please give these instructions to the customer.


在此誠摯地感謝您購買本公司浴室換氣暖風機。

請在安裝、使用、維修本產品前詳細閱讀此說明書。

請保留此說明書以備將來查閱。

請把此說明書交給最終用戶。

SUPPLIED ACCESSORIES 包裝附件包清單



No. 代號	Drawing 圖樣	Name and Use 名稱及用途	Quantity 數量
①		MECHANICAL SCREW (M4x10 Used by louver's installation) 機械螺絲(M4x10用於面板安裝)	4
②		TAPPING SCREW (ϕ 4x20 Used by product's installation) 自攻螺絲(ϕ 4x20用於產品安裝)	6
③		TAPPING SCREW (ϕ 4x20 Used by adapter's installation and avoiding body falling off for ordinary ceiling) 自攻螺絲 (ϕ 4x20用於普通天花板的出風口接頭安裝及本體防跌落)	2
④		TAPPING SCREW (ϕ 4x10 Used by adapter's installation for integrated suspended ceiling) 自攻螺絲 (ϕ 4x10用於集成吊頂的出風口接頭安裝)	1
⑤		TAPPING SCREW (ϕ 4x16 Used by controller base's installation) 自攻螺絲(ϕ 4x16用於遙控器底座安裝)	2
⑥		GUARANTEE 保證書	2
⑦		OPERATING AND INSTALLATION INSTRUCTIONS 安裝使用說明書	1
⑧		ADAPTER 出風口接頭	1
⑨		LOUVER 面板組合	1
⑩		REMOTE CONTROL 遙控器組合	1
⑪		REMOTE CONTROL BATTERIES (Ordinary carbon battery R03) R03乾電池(普通碳性電池)	2
⑫		Installation suspension bracket for integrated suspended ceiling 集成吊頂用懸吊支架	3

SYMBOL INSTRUCTIONS 圖例說明




The following instructions should be strictly observed in order to prevent injury to the users and other persons, or damage to property.

為避免給您及其他人造成傷害，這裏我們列出了以下安全注意事項，請務必遵守，各種標誌的含義請參見以下內容。


- The degrees of injury of damage that can occur when the instructions are ignored and if the product is not used properly have been classified and described by the following indications.
對無視表示內容，錯誤地使用時，會引起的危害或損傷的程度，用下列符號進行分類、說明。

 <p>Warning 警告</p>	<p>Those things shown in this column indicate that there is possibility of causing death or severe injury. 本標誌所表示的內容為“可能造成人員重傷或傷亡”。</p>
 <p>Caution 注意</p>	<p>Those things shown in this column indicate that there is possibility of causing injury to the users or damage. 本標誌所表示的內容為“可能造成人身傷害和其它物品損害”。</p>







- Types of instructions that should be observed have been classified and described by the following pictorial symbols. (An example of a pictorial symbol is given below)
對希望遵守的內容和種類，用下列符號進行分類、說明。

	<p>This symbol indicates the item is “PROHIBITED” to do. 此標誌表示為禁止事項</p>
	<p>This symbol indicates the “COMPULSORY” item that must be followed without failure. 此標誌表示為強制事項</p>
	<p>This symbol indicates the item is “CAUTION”. 此標誌表示為提示注意事項</p>

INSTALLATION SAFETY INSTRUCTIONS 安裝時注意事項



Warning
警告

<p> The product must be grounded. 必須有接地裝置</p> <p> Grounding mark 接地標誌</p> <p>It may cause electric shock when there is any trouble or electric leakage. 當出現故障或漏電時，可能會觸電。</p>	<p> Suggest using a power cord which with specification not below 60227 IEC 53 model's power cord and with cross section of 3x1.5mm². 電源纜推薦選用已認證的規格不低於60227 IEC 53型絞合軟纜，導纜的截面積為3x1.5mm²。</p>
<p> Please install the all-pole switch which the contact separation is not less than 3mm and the current not less than 250V~ 13A to control the power of the product. Please install the all-pole switch out of the bathroom where it is easily controlled. 安裝時，須在供電線路中安裝其觸點開距不小於3mm的“電源全極開關”，以用於接通或斷開主機電源，其額定負載能力不小於250V~ 13A，且安裝在浴室外側方便操作的地方。</p>	<p> Make sure the power cord installed firmly, otherwise it may catch fire. 確保電源纜安裝到位，否則可能會引起火災。</p> <p> Do avoid the back-flow of gas into the room from the open flue of gas or other open-fire appliances. 必須避免氣體從敞開的氣道或其他燃燒燃料的設備回流進室內。</p>

INSTALLATION SAFETY INSTRUCTIONS 安裝時注意事項

Warning 警告



The product is installed so that switches and other controls cannot be touched by a person in the bath or shower.

產品的安裝，應使得浴缸內或淋浴區的人不能夠觸及到開關和其他控制器。



Installation and wiring should be done by dealers or authorized person (Fix wiring is required by the local wiring rules.)

安裝及電源布線必須由專業人員完成(產品安裝必須符合當地的安全法規)。



Prohibited 禁止

The product must not be located immediately below a socket outlet.

不能把本產品安放在電源插座下使用。



Prohibited 禁止

It may be dangerous, when the product is installed close to curtains and other combustible materials.

靠近窗簾和其他可燃材料安裝時可能存在危險。



Disconnect power source before working on the unit to avoid receiving an electric shock.

安裝、維修保養時必須斷開電源，以防觸電。



Prohibited 禁止

Don't operate the product beside of the rated voltage (220V~, 50Hz), otherwise it may damage the product or catch fire.

禁止使用額定電壓(220V~, 50Hz)以外的電源，否則會導致損壞本產品，可能會導致火災。



Prohibited 禁止

Don't install the product as the method which is not approved in the instruction.

禁止使用本說明書指定以外的方法進行安裝。



Prohibited 禁止

To avoid electric shock or fire, do not remove the PCB cover.

安裝、使用和連接電源線時，嚴禁拆卸電路板蓋板，否則會導致觸電或起火。



Prohibited 禁止

Don't make transformation to this product.

禁止對本產品進行改造。

Caution 注意

Don't install the product in sauna bathroom.

請不要安裝在桑拿蒸汽浴室中。



蒸汽

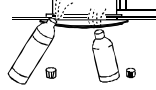


Prohibited 禁止

Maybe it can cause breakdown.
可能會引起故障

Don't install the product in the places where the organic solvent is used.

請不要安裝在使用有機溶劑的場所。



Prohibited 禁止

Maybe it can cause breakdown.
可能會引起故障

Don't install the product in the places where the sprayer is used.

請不要安裝在使用噴霧器的場所。

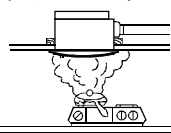


Prohibited 禁止

Maybe it can cause breakdown.
可能會引起故障

Don't install the product in places with much lampblack.

請勿安裝在油煙過多的場所。



Prohibited 禁止

Do not allow to install this product in wardrobes and public bath.

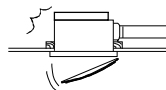
請不要安裝在衣櫃以及公共浴室。



Prohibited 禁止

Components must be installed tightly.

部品安裝必須牢固。

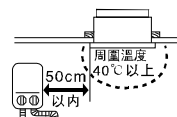


It may injure person caused by product's falling off.

可能會脫落，導致受傷

Don't install the product in places with high temperature.

請不要安裝在高溫場所。



Prohibited 禁止

周圍溫度 40°C 以上

50cm 以內

INSTALLATION SAFETY INSTRUCTIONS 安裝時注意事項

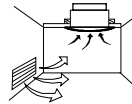
Caution 注意

- Do fix this product tightly.
本體安裝必須牢固。



It may injure person caused by product's falling off.
可能會脫落，導致受傷

- Please set vent.
請設置通風口。



- Do not install onto slanting ceiling.
請勿安裝在傾斜的天花板上。

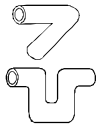


Prohibited
禁止

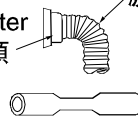


Prevent the water to flow backwards.
防止水倒流

- Do not form the duct as shown below.
安裝導風管應該避免以下情況。



Adapter
接頭



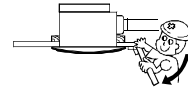
Wave pipe
波形導管



- When the ceiling is unable to dismantle, please set a square inspection hole of at least 45 cm.

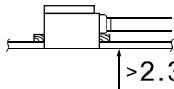


吊裝且天花板無法拆下時，請設置一個邊長45cm以上的方形點檢口。



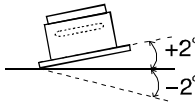
Convenience for installation and mending.
方便安裝、維修

- Install this product over 2.3 m above the floor.
安裝高度必須距地面大於2.3m。



Avoiding any accident
防止意外

- Please make sure the product installed horizontally and the deviation angle in $\pm 2^\circ$.
請確保整機水平安裝偏差角度在 $\pm 2^\circ$ 之間。



Install this product over 200mm apart from curtains and other combustible materials.
離窗簾和其他易燃材料距離200mm以上。



Install this product, the distance between roof and ceiling should be more than 200mm.
用於安裝本產品的天花板離房屋頂部的距離在200mm以上。



This product's weight is 4.1kg, so the wood frame to support and install this product can bear over 21kg.
本產品的重量為4.1kg，用於支撐及安裝本產品的木框能承受的重量為21kg以上。



Install this product over 200mm apart from walls.
安裝孔至牆壁的距離在200mm以上。



Connect the power source, press on the remote controller's each function button to inspect the following items:

- Does the fan revolve normally?
- Does it have abnormal vibration or noise?
- Does it have hot wind output?
- On remote controller, each button's function is normal?

接通電源，按動遙控器上各個功能按鈕，檢查以下項目：

- 扇葉是否正常旋轉？
- 是否有不正常的震動或者噪音？
- 是否有熱風輸出？
- 遙控器上的各個功能按鈕的功能是否正常？



The minimum diameter of the hole: $\varnothing 110\text{mm}$.
通風孔最小直徑： $\varnothing 110\text{mm}$ 。



The product is not provided with power cord, all-pole switch and leakage protection switch. Please purchase them in market.
本產品沒有提供電源綫、電源全極開關和漏電保護開關，需用戶另購。

INSTALLATION OUTLINE 安裝方法

1. Preparations Before Installation 安裝前準備

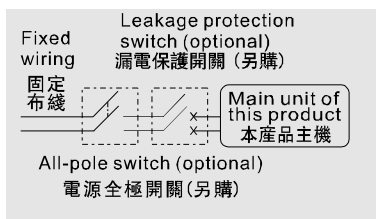
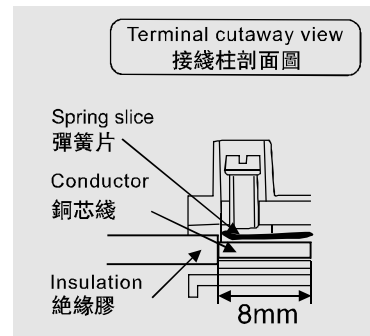
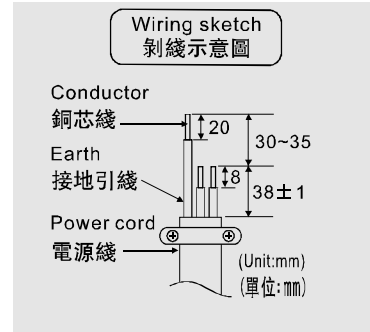

**Warning
警告**

 **Prohibited
禁止** When connecting the power cord, do not remove the PCB cover.
連接電源綫時，嚴禁拆卸電路板蓋板。

 Suggest using a power cord which with specification not below 60227 IEC 53 model's power cord and with cross section of 3x1.5mm².
電源綫推薦選用已認證的規格不低於60227 IEC 53型絞合軟綫，導綫的截面積為3x1.5mm²。

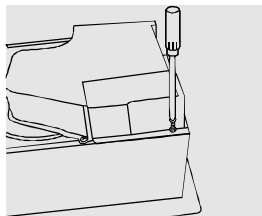
 There's no risk of damage to the insulation of power cord.
電源綫的絕緣膠不能破損。

 Lay-up the dispersion copper core cord in the same place, then insert it into the pillar terminal hole(Cross section 2.5 mm²) and make sure all the cord under the spring slice are inserted into the pillar terminal completely, and make sure to present the copper core cord from appearing externally. Make sure the conductor fixed tightly by screws (Suggest that the screw's locking torque is 0.49 N·m).
先將分散的銅芯綫絞合在一起，然後伸入到端子台的深處，並確保其在彈簧片的下方位置被全部插入接綫孔(橫截面積2.5 mm²)，切勿出現銅綫外露現象。螺絲擰緊後，請確保銅綫不易鬆脫(建議螺絲鎖緊扭矩為0.49N·m)。

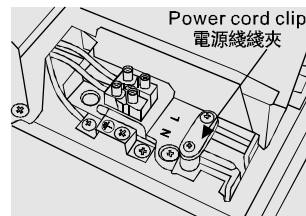


- ① Install an optional all-pole switch with the contact separation not smaller than 3mm and specifications not lower than 250V~ 13A between the fixed wiring and the main unit of this product. This power switch is used to control input of the external power supply. The user needs to separately purchase a leakage protection switch (with the leakage current lower than 30 mA).

請於固定布綫與本產品主機間安裝客戶另購的觸點開距不小於3mm的“電源全極開關”(規格必須不低於250V~ 13A)用於控制外部電源的接入。請用戶自行購買漏電保護開關(洩漏電流在30mA以下)。



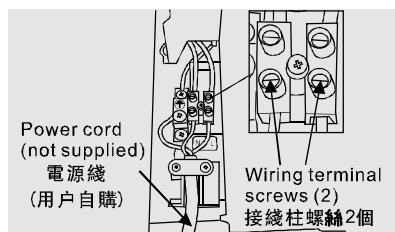
- ② Remove the one screw on the cover plate of power cord.
取下電源綫蓋板上的1顆螺絲。



- ③ Lift the cover plate of power cord, and loosen the screw fixing the power cord clip.
掀起電源綫蓋板，並將固定電源綫綫夾的螺絲鬆脫。

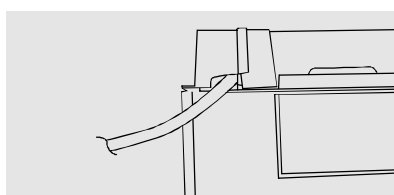
INSTALLATION OUTLINE 安裝方法

1.Preparations Before Installation 安裝前準備



- ④ Insert the power cord (not supplied) connected to the indoor fixed line into the wiring terminal, tighten the wiring terminal screw with a small straight screwdriver, and then fix the power cord with power cord clips. (The power cord clip must pin the insulation sheath of power cord.)

將接入室內固定綫路的電源綫(用戶自購)插入接綫柱，擰緊接綫柱螺絲(請使用小一字螺絲刀)，然後用電源綫綫夾將電源綫固定。(電源綫綫夾必須壓住電源綫絕緣護套)



- ⑤ Fix the cover plate of power cord again with the screw.
用螺絲將電源綫蓋板重新固定。

- ⑥ Adjust direction of the air outlet grille.
This product can heat zones 1 - 2 through adjustment of air outlet direction (as shown in Figure 1) of the air outlet grille according to the bathroom type. The specific adjustment method and direction are described below:

調整出風柵格方向

本產品可根據浴室房型通過調整出風柵格的出風方向(圖1)實現1~2區域的取暖，具體調整方法及方向說明如下：

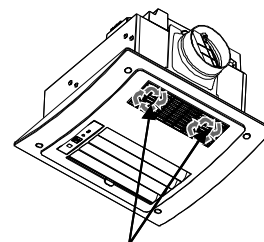
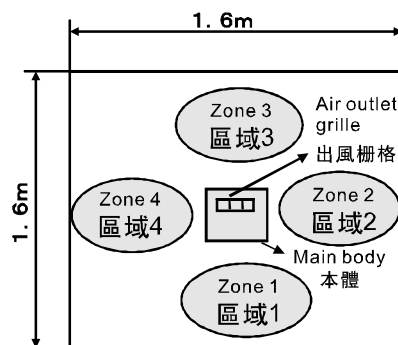
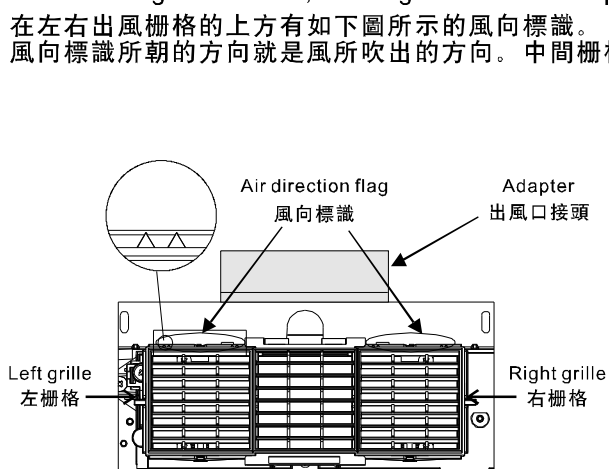


Figure 1 Both the left and right air outlet grilles are adjustable in four directions
圖1 左右出風柵格均可調四個方向

- ⑥-1 The air direction flag as shown below is provided above the left/right air outlet grille. The direction the air direction flag faces is the direction where air is blown out. The middle grille is fixed, blowing air to the lower part the product.




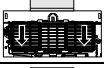
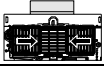
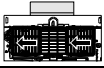
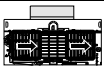
Schematic diagram of bathroom layout
浴室布局示意圖

INSTALLATION OUTLINE 安裝方法

1. Preparations Before Installation

安裝前準備

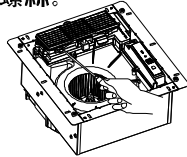
※ Recommended assemblies 推薦使用組合

Schematic diagram of orientation 朝向示意圖	Orientation of air direction flag 風向標識朝向		Applicable scope 舒適範圍
	Left grille 左柵格	Right grille 右柵格	
※ 	Upward Factory default state 朝上出廠狀態		Below the product to zone 3 產品下方至區域3
	Downward (Two grilles rotate down 180°) 朝下(兩柵格向下轉180°)		Below the product to zone 1 產品下方至區域1
※ 	Rightward (rotating right 90°) 朝右(向右轉90°)	Leftward (rotating left 90°) 朝左(向左轉90°)	Below the product 產品下方
※ 	Leftward Two grilles rotate left 90° 朝左兩柵格向左轉90°		Below the product to zone 2 產品下方至區域2
※ 	Rightward Two grilles rotate right 90° 朝右兩柵格向右轉90°		Below the product to zone 4 產品下方至區域4

※ After installation for the first time, if you want to adjust direction of the air outlet grille again, do not replace it by yourself. Please contact the customer service center or the dealer instead.
首次安裝後，如需再調整出風柵格方向，請不要自行更換，請與客戶諮詢中心或經銷商聯繫。

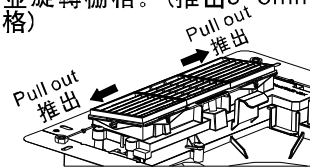
⑥-2 Remove the two M4X10 screws fixing the air outlet grille to be altered.

拆下需改變的固定出風柵格的2顆M4X10螺絲。



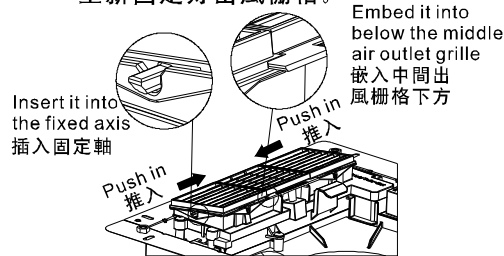
⑥-3 Pull out the air outlet grille to be altered as shown in the figure below, and rotate the grille. (You can remove the grille after pulling it out for 5-8 mm.)

把需要改變的出風柵格按下圖所示推出，並旋轉柵格。(推出5~8mm後即可取出柵格)



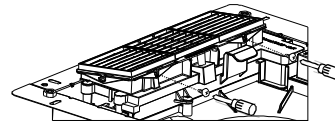
⑥-4 Fix the air outlet grille again.

重新固定好出風柵格。



⑥-5 Fix the two screws on the air outlet grille.

固定兩出風柵格螺絲。



2. Installing the Main Body Method 1 Ordinary Ceiling

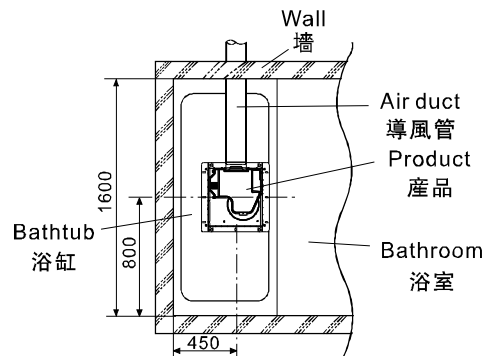
機體安裝 方法一 普通天花板

① Top view of the recommended installation (Unit: mm)

推薦安裝俯視示意圖

(單位: mm)

※ The bathroom size may affect the room heating result of this product.
浴室大小的不同會影響本產品的暖房效能。



INSTALLATION OUTLINE 安裝方法

2. Installing the Main Body Method 1 Ordinary Ceiling 機體安裝 方法一 普通天花板

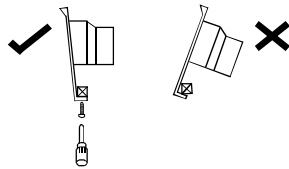
- ② Make a wooden frame and install it onto the ceiling joist. Ensure that the total thickness of the wooden frame and ceiling should be 25 mm - 30 mm. Meanwhile, open a mounting hole in the ceiling with dimensions (unit: mm) as shown in the table below:

制作木框以及將木框(注意:木框與天花板的總厚度應在25mm-30mm之間)安裝到天花板攔柵上,同時在天花板上開安裝孔,具體尺寸如下表:(單位: mm)

A	B	C	D
300	300	300	300

- ③ Install the adapter (in the middle). Use one $\varnothing 4 \times 20$ self-tapping screw provided in the accessory package to fix the adapter to the ceiling. (If the total thickness of the wooden frame and ceiling is 30 mm, we recommend that you attach the adapter to the air outlet with adhesive tape before fixing the adapter.)
(See Page 11 for details.)

出風口接頭安裝(請居中安裝)
用附件包所提供的1顆 $\varnothing 4 \times 20$ 自攻螺絲將出風口接頭固定於天花板上。(當木框與天花板的厚度為30 mm時,建議在固定出風口接頭前,先將出風口接頭與導風管用膠帶連接好。)
(參考第11頁)

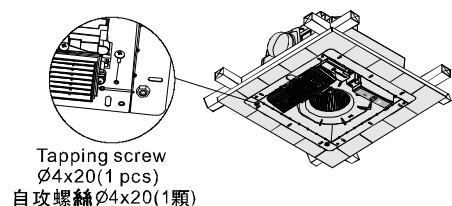
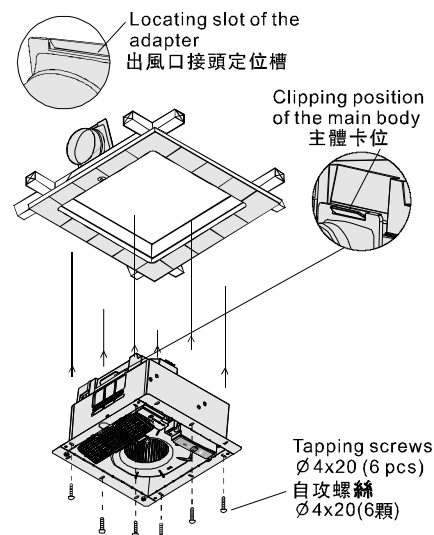
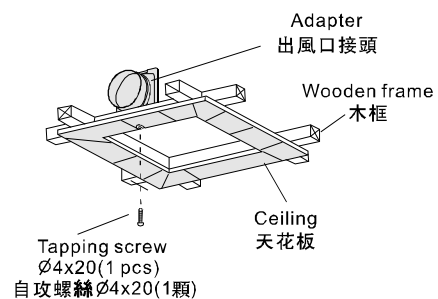
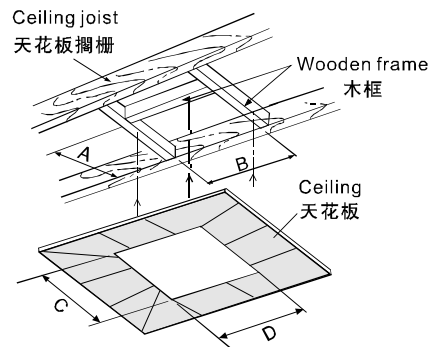


- ④ Install the main body. Push the main body upward into the ceiling and wooden frame by closely leaning against the adapter, clip the clipping position of the main body into the locating slot of the adapter (otherwise air will leak), and securely fix the main body with six $\varnothing 4 \times 20$ tapping screws.

機體安裝
將機體緊靠出風口接頭往上推入天花板與木框,並使機體卡位卡入出風口接頭定位槽中(否則漏風),用6顆 $\varnothing 4 \times 20$ 自攻螺絲將主體牢固地固定。

- ⑤ Tightly lock the main body with the wooden frame of ceiling through the inner side of the unit body by using one $\varnothing 4 \times 20$ tapping screw. Be sure to fix this screw because it can prevent the unit body from falling off the ceiling.

用1顆 $\varnothing 4 \times 20$ 自攻螺絲從機體內側面將機體與天花板木框緊鎖在一起,該螺絲能起到防止機體脫落的作用,請務必安裝。



INSTALLATION OUTLINE 安裝方法

2. Installing the Main Body Method 2 Integrated Suspended Ceiling

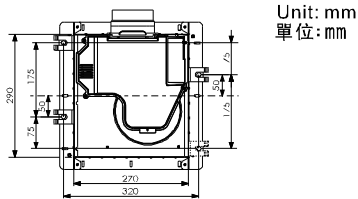
機體安裝 方法二 集成吊頂天花板

This product can also be installed on the currently mainstream integrated suspended ceilings (300 mm x 300 mm). (The user needs to purchase 3 sets of suspenders separately; the recommended suspender is M8 or M10.)

本產品同時適用於當前主流的集成吊頂類(300mmX300mm)天花板上的安裝使用(需另購3套吊杆, 吊杆推薦使用M8或M10):

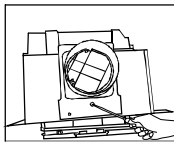
- ① Remove several adjacent ceiling boards. The size should match the space required for installing the product.

拆下鄰近的幾塊天花板, 大小應滿足產品安裝操作的所需空間。

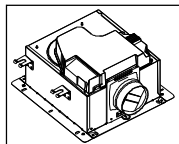


- ③ Fix the adapter. Use one $\phi 4 \times 20$ tapping screw provided in the accessory package to fix the air adapter with the main body.

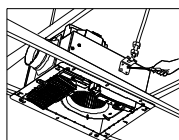
出風口接頭固定
使用附件包提供的1顆 $\phi 4 \times 10$ 的自攻螺絲將出風口接頭與機體緊固安裝。



- ④-2 Remove the installation suspension bracket from the packaging foam, and fix the installation suspension bracket on one side (two positions) with the screws removed in the previous step. 從包裝泡沫中取出懸吊支架, 並用上一步拆下的螺絲將其中一側(兩個位置)的懸吊支架固定。

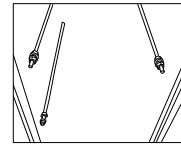


- ④-3 Push the main body into the ceiling, and fix the installation suspension bracket on the other side (with the screws removed in Step ④-1). 把機體推入天花板, 固定另一側懸吊支架(用步驟④-1拆下的螺絲)。



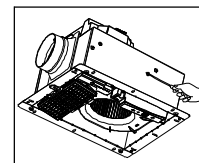
- ② Position and install the hanger. Referring to the installation dimensions of four suspension bracket in the figure of Step ①, select any three angle pieces to install the unit body, and fix the suspenders purchased separately at the corresponding positions on the ceiling.

吊具定位安裝。
參考步驟①圖中4個支架的安裝尺寸, 任意選擇其中3個來安裝機體, 並在天花板的相應位置固定好另購的吊杆。



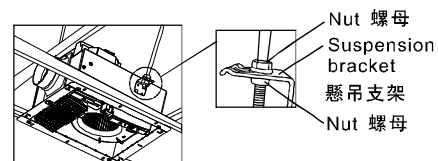
- ④ Fix the installation suspension bracket. ④-1 Remove the six screws at the corresponding three positions on the unit body according to the fixing positions selected in Step ②. (This product provides four positions, but screw on the fourth position need not be removed, lest air would leak).

懸吊支架的固定
按照步驟②所選定的固定位置將機體相應的3個位置的6顆螺絲取下。(本產品提供4個位置, 剩餘位置的螺絲無需取下以防漏風)



- ⑤ Install the main body. Finally, fix the main body to the suspenders.

機體安裝
最後將機體固定在吊杆上。



INSTALLATION OUTLINE 安裝方法

2. Installing the Main Body Method 2 Integrated Suspended Ceiling

機體安裝 方法二 集成吊頂天花板

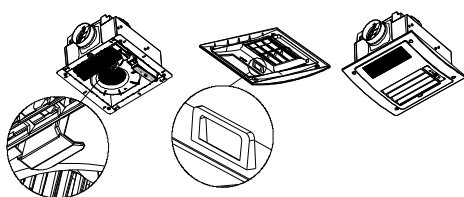
- ⑥ Connect the pipeline by referring to Page 11.
參考第11頁進行管道連接。

- ⑦ Replace the removed ceiling boards, and adjust positions of the nuts on the suspenders to make the flange edge of the unit body cling to the ceiling.
裝回拆下的天花板，並調整吊杆上螺母的位置，使機體法蘭邊緊貼天花板。

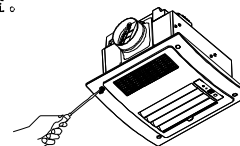
3. Installing the louver

面板安裝

- ① Hang the louver into the hook on the main body.
將面板組合掛入機體上的掛鉤。

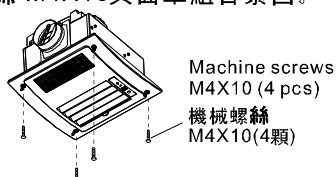


- ② Insert a straight screwdriver into the gap of the screw cap, and unclench the screw cover outward.
用一字螺絲刀插入螺絲蓋的縫隙，往外撬開螺絲蓋。



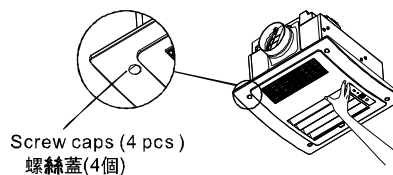
- ③ Use a Phillips screwdriver to fasten the four mechanical screw M4X10 provided in the accessory package with the louver.
用十字螺絲刀將附件包所提供的4顆機械螺絲 M4X10與面罩組合緊固。

用十字螺絲刀將附件包所提供的4顆機械螺絲 M4X10與面罩組合緊固。



Machine screws M4X10 (4 pcs)
機械螺絲 M4X10(4顆)

- ④ Attach the unclenched screw cap again.
把撬開的螺絲蓋重新蓋好。



Screw caps (4 pcs)
螺絲蓋(4個)

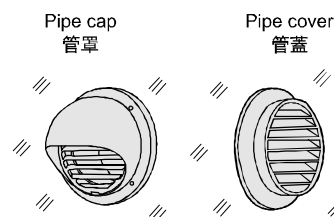
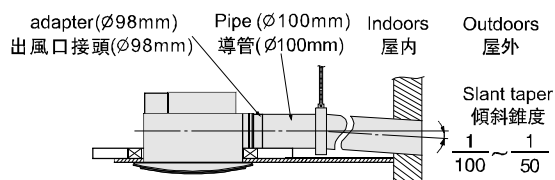
4. Connecting Pipelines

管道連接

- ① Install the pipeline onto the adapter, and then bind them together tightly with adhesive tape. Suspend the pipeline from the ceiling to prevent external force exerted on the unit body. The pipeline connected to outside of the room must be slanted to prevent rain or condensed water from flowing backwards. (This pipeline should be as short as possible. To prolong the pipeline by connecting a pipe, please use a straight pipe with the length smaller than 30 m.)
將管道裝入出風口接頭上，然後用膠帶扎緊。將管道從天花板上懸掛下來，以防止外力施加於機體。通往屋外的管道必須保持傾斜，防止雨水或結露水倒流。(此管道要盡可能短，若需接長管，則最長不要使用超30m的直管。)

- ② Install the pipe cap or pipe cover on the external wall. (We recommend you purchase products of the following models provided by Panasonic.)
將管罩或管蓋安裝到牆外。(建議購買本公司如下圖所示型號的產品)

Name 名稱	Pipe cap 管罩	Pipe cover 管蓋
Model 型號	FV-MCX100PC	FV-VCX100PC



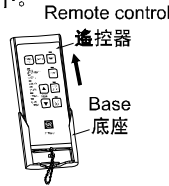
INSTALLATION OUTLINE 安裝方法

5. Install the remote control

遙控器的安裝

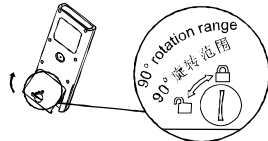
- ① Draw the remote control out of the remote control base. Do not damage the ball chain between them since it can prevent the remote control from falling or dropping into water.

把遙控器從遙控器底座抽出。請勿破壞其間的珠鏈，該珠鏈能防止遙控器跌落或掉入到水中。



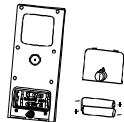
- ③ Rotate the linear-shaped knob on the back of the remote control to the “☰” position, and then open the battery cover upward from the bottom.

將遙控器背部的“—”字旋鈕，旋至“☰”位置，然後從底部向上翻開電池蓋。



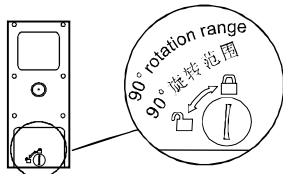
- ④ Install two R03 dry batteries correctly according to the direction shown in the figure.

裝入兩粒R03乾電池並確保電池按如圖方向正確安裝。



- ⑤ Close the battery cover, and rotate the linear-shaped knob to the “☰” position.

重新蓋上電池蓋並將“—”字旋鈕旋至“☰”的位置。



- ⑥ Insert the remote control back into the base properly along with the guide groove of the remote control base.

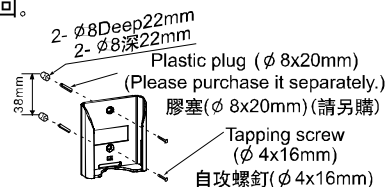
順着遙控器底座導槽，把遙控器插回底座放好。

- ② Open two $\phi 8$ mounting holes in the bathroom wall, as shown below. Before installing the remote control, check at the preset installation location whether the unit can receive signals properly. If the unit cannot receive signals normally at this location, select a proper location or take the remote control out of the base and operate by pointing the remote control towards the unit. Do not select an installation location in places where the shower head can spray directly. Replace the remote control after the base is installed.

在浴室的牆壁上開2個 $\phi 8$ 的安裝孔，如下圖所示。遙控器安裝前，請在預定安裝的位置上檢測機體接收信號的效果。

若該位置無法使機體正常接收，請另選擇合適的位置或使用時把遙控器從底座中取出對着機體進行操作。

且安裝位置應避免在花灑直淋處，底座安裝後，請把遙控器放回。



Caution 注意



Prohibited 禁止

Do not install the positive pole and negative pole of the battery reversely.

請勿將電池正負極反裝。



Prohibited 禁止

Do not use new and old batteries or batteries of different types together.

請勿將新舊、異種電池混合使用。



Please remove the batteries if the product will not be in use for a long time.

長期不使用時，請取出電池。



Before replacing the batteries, please wipe to dry the remote control surface first.

更換電池時，請擦乾遙控器機體後進行更換。



When you rotate the linear-shaped knob on the back of the remote control, do not exert too much force. Otherwise, the knob would be damaged.

旋動遙控器背部“—”字旋鈕時，請勿用力過大，否則可能會損壞該旋鈕。



We recommend you use common carbon batteries (R03).

建議使用普通碳性電池(R03)。

USAGE 功能一覽表

Panel of the remote control 遙控器面板

Stand-by button 待機按鈕

- In the heating or hot drying mode, press the Standby button to stop the heater. The fan will stop running after a delay of 20 seconds.
- In the standby status, this product still requires power consumption of 0.5W. If the product will not be in use for a long time, the double-pole power switch should be turned off to disconnect the power supply for the purpose of energy saving.
- 當運轉模式為取暖、熱乾燥功能時，按待機按鈕，加熱器將停止工作，風扇延時20秒後停止工作。
- 本產品處於待機狀態時，仍有0.5W的功耗。如長時間不使用時，應使用電源雙極開關斷開電源，以節省能源。

Timer buttons 定時按鈕

The longest running time of heating and hot drying can be set to 3 hours, and continuous running can be set for air change and cool drying. The initial value for each mode is 15 minutes.

- Time will increase by one each time you press ▲ .
- Time will decrease by one each time you press ▼ .

取暖熱乾燥的運轉時間最長可設定3小時。換氣及涼乾燥可設連續運轉。各模式初始設定值為15分鐘。

- 每按一次▲ 時間會逐步遞增。
- 每按一次▼ 時間會逐步遞減。

(Initial settings)
(初始設定)

5 min 5分	15 min 15分	30 min 30分	1 h 1小時	3 h 3小時	CONT. 連續
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Heating and hot drying modes
取暖及熱乾燥運轉模式

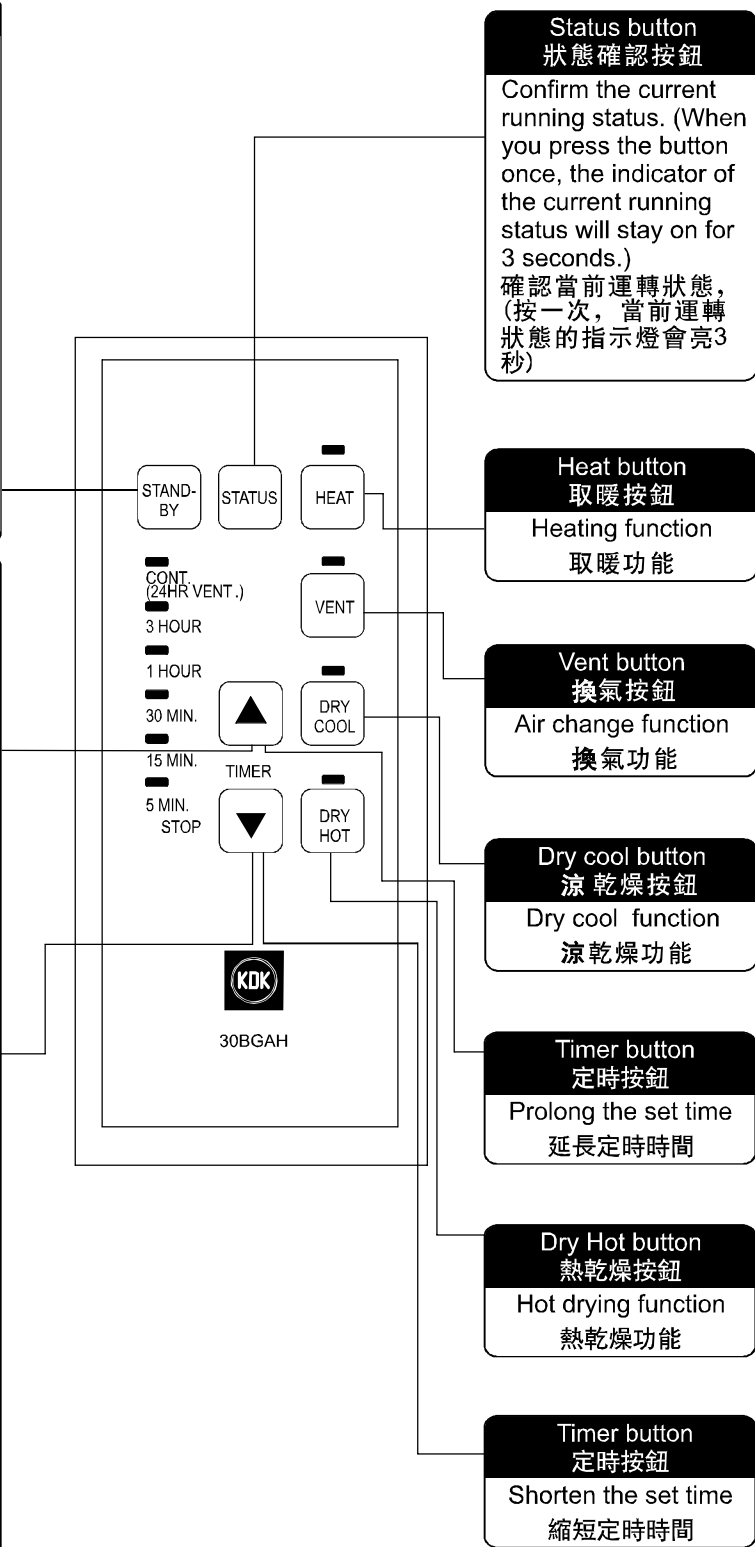
Air change and cool drying modes
換氣及涼乾燥運轉模式

During running, you can press the ▲ or ▼ button to change the set time.

- Memory function
- ※ The product will automatically record the remaining running time of each mode last time when it wakes up from the standby mode.
- ※ Pressing and holding the Standby button for 3 seconds cancels the memory function.

運轉途中也可通過▲▼ 按鈕改變定時時間。

- 記憶功能
- ※ 待機再運轉時，自動記錄各模式上一次所運轉的剩餘時間。
- ※ 持續按待機3秒鐘可解除記憶功能。



USAGE 功能一覽表

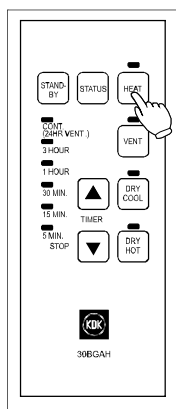
Below are four running modes of this product: 以下為本產品的4種運轉模式

Running mode 運轉模式	Usage 用途	Running status 運轉狀態	
		Fan blade 扇葉	Heater 加熱器
Heat 取暖	<ul style="list-style-type: none"> ● People will feel warm as taking a bath or a shower ● 入浴及淋浴時使人感到暖和 	Run fast 快轉	Operate 工作
Vent 換氣	<ul style="list-style-type: none"> ● Change air for the bathroom ● 浴室換氣 	Run slowly 慢轉	Stop 停止
Dry Cool 涼乾燥	<ul style="list-style-type: none"> ● People will feel cool (This function is used for non-air-conditioned rooms in summer) ● Dry the bathroom ● 使人感到涼快(夏季非冷房內使用) ● 浴室乾燥 	Run fast 快轉	Stop 停止
Dry Hot 熱乾燥	<ul style="list-style-type: none"> ● Dry the bathroom or clothes ● 浴室乾燥, 衣類乾燥 	Run fast 快轉	Operate 工作

1. When the heating mode or hot drying mode is switched to the standby mode, the electric engine still runs to cool the heater down. The electric engine will stop running in 20 seconds.
2. When the heating mode or hot drying mode is switched to the air change mode, the fan blade will run at a low speed to cool the heater down. The air change mode will start in 20 seconds.
3. When you connect the power supply or switch a mode, you may hear the sound sent when the wind path switches the wind shield inside the unit body.

1. 從“取暖”或“熱乾燥”模式切換到待機時，為使加熱器冷卻，電機仍將繼續運轉，待20秒後電機停止運轉。
2. 從“取暖”或“熱乾燥”模式切換到換氣時，為使加熱器冷卻，電機將低速運轉，待20秒後切換到換氣。
3. 接通電源或切換模式時，可能會聽到機體內部的風路切換擋風板動作的聲音。

Heat (This function is used in cold seasons to make people feel warm)
取 暖 (在寒冷的季節使用, 可使人感到暖和.)



※Before taking a bath, start the heating function to warm the bathroom beforehand.

①Press the **HEAT** button to start the heating mode.

※The indicators for the Heat button and initial set time (15 min.) button are lit and then go out automatically after 3 seconds.

②During running, you can press **▲** or **▼** to change the set time.

※You can set time for the heating mode in the range of 5 min - 3 h.

③To confirm the current running mode and remaining time, press the **STATUS** Status button.

④This product will stop automatically when the set time is up.

⑤To stop midway in running, press the **STANDBY** button.

※After you press the Standby button, the electric engine still runs to cool the heater down. The electric engine will stop running in 20 seconds.

※在入浴前開取暖功能，可提前把浴室加溫。

①按 **HEAT** 按鈕，取暖模式開始運轉。

※取暖及初設時間(15分)按鈕的指示燈亮，3秒後自動滅。

②運轉過程中，可通過 **▲** 或 **▼** 改變設定時間。

※取暖模式的設範圍為5分~3小時。

③如想確認當前運轉模式及剩餘時間請按 **STATUS** 按鈕。

④運轉完所設時間後，本機會自動停止。

⑤如需在運轉途中停止，請按 **STANDBY** 按鈕。

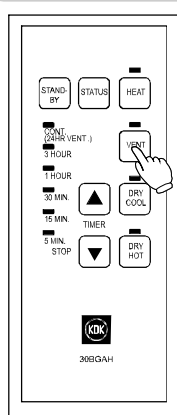
※按待機按鈕後，為使加熱器冷卻，電機仍將繼續運轉，待20秒後停止運轉。

USAGE 功能一覽表

Heat (This function is used in cold seasons to make people feel warm)
取 暖 (在寒冷的季節使用, 可使人感到暖和。)

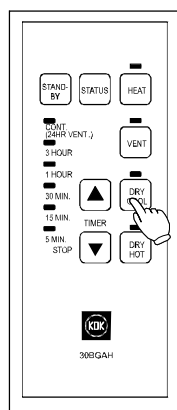
- Hot startup function: After the product starts up in the heating mode when the temperature in the bathroom is lower than 20° C, it enters the hot startup status to avoid blowing of cold air, and the electric engine runs at a low speed. When the temperature in the bathroom reaches 20° C or above or after running for 60 seconds, the hot startup status stops and the electric engine runs at a high speed.
- 熱啟動功能: 當浴室溫度低於20° C時, 以取暖模式啟動後, 為避免冷風吹出, 產品進入熱啟動狀態, 電機以低速運轉, 待浴室溫度達至20° C以上或經過60秒後, 熱啟動狀態停止, 電機以高速運轉。

Vent (Change air in the bathroom)
換 氣 (浴室換氣)



- ① Press the **VENT** button to start the air change mode.
※ The indicators for the Change Air button and initial set time (15 min.) button are lit and then go out automatically after 3 seconds.
 - ② During running, you can press **▲** or **▼** to change the set time.
※ You can set time for the air change mode in the range of 5 min - Continuous.
 - ③ To confirm the current running mode and remaining time, press the **STATUS** button.
 - ④ This product will stop automatically when the set time is up.
 - ⑤ To stop midway in running, press the **STANDBY** button.
- ① 按 **VENT** 按鈕, 換氣模式開始運轉。
※ 換氣及初設時間(15分)按鈕的指示燈亮, 3秒後自動滅。
② 運轉過程中, 可通過 **▲** 或 **▼** 改變設定時間。
※ 換氣模式的可設範圍為5分~連續。
③ 如想確認當前運轉模式及剩餘時間請按 **STATUS** 按鈕。
④ 運轉完所設時間後, 本機會自動停止。
⑤ 如需在運轉途中停止, 請按 **STANDBY** 按鈕。

Dry cool (This function is used in summer to make people feel cool and can also be used for drying the bathroom.)
涼 乾 燥 (夏季使用使人感到涼爽, 還可用於浴室的乾燥。)

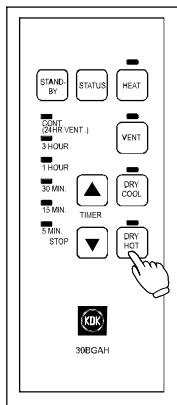


- ① Press the **DRY COOL** button to start the cool drying mode.
※ The indicators for the Cool Dry button and initial set time (15 min.) button are lit and then go out automatically after 3 seconds.
 - ② During running, you can press **▲** or **▼** to change the set time.
※ You can set time for the cool drying mode in the range of 5 min - Continuous.
 - ③ To confirm the current running mode and remaining time, press the **STATUS** button.
 - ④ This product will stop automatically when the set time is up.
 - ⑤ To stop midway in running, press the **STANDBY** button.
- ① 按 **DRY COOL** 按鈕, 涼乾燥模式開始運轉。
※ 涼乾燥及初設時間(15分)按鈕的指示燈亮, 3秒後自動滅。
② 運轉過程中, 可通過 **▲** 或 **▼** 改變設定時間。
※ 涼乾燥模式的可設範圍為5分~連續。
③ 如想確認當前運轉模式及剩餘時間請按 **STATUS** 按鈕。
④ 運轉完所設時間後, 本機會自動停止。
⑤ 如需在運轉途中停止, 請按 **STANDBY** 按鈕。

USAGE 功能一覽表

Dry Hot (This function is used to dry the bathroom and clothes in winter)

熱乾燥 (冬季用於衣類及浴室的乾燥。)



- ① Press the **DRY HOT** button to start the hot drying mode.
※ The indicators for the Hot Dry button and initial set time (15 min.) button are lit and then go out automatically after 3 seconds.
- ② During running, you can press **▲** or **▼** to change the set time.
※ You can set time for the hot drying mode in the range of 5 min - 3 h.
- ③ To confirm the current running mode and remaining time, press the **STATUS** button.
- ④ This product will stop automatically when the set time is up.
- ⑤ To stop midway in running, press the **STAND-BY** button.
※ After you press the Standby button, the electric engine still runs to cool the heater down. The electric engine will stop running in 20 seconds.

- ① 按 **DRY HOT** 按鈕，熱乾燥模式開始運轉。
※ 熱乾燥及初設時間(15分)按鈕的指示燈亮，3秒後自動滅。
- ② 運轉過程中，可通過 **▲** 或 **▼** 改變設定時間。
※ 熱乾燥模式的可設範圍為5分~3小時。
- ③ 如想確認當前運轉模式及剩餘時間請按 **STATUS** 按鈕。
- ④ 運轉完所設時間後，本機會自動停止。
- ⑤ 如需在運轉途中停止，請按 **STAND-BY** 按鈕。
※ 按待機按鈕後，為使加熱器冷卻，電機仍將繼續運轉，待20秒後停止運轉。

※ To use the drying function to dry clothes, we recommend you install the accessories as shown in the right figure:

※ 使用乾燥功能進行衣物烘乾時，建議按照右圖示進行安裝：

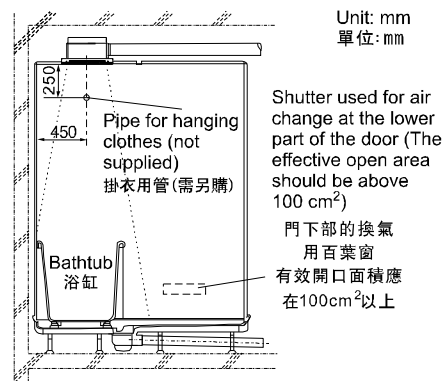
4. We recommend you use the following running modes:

推薦使用以下運轉方式：

※ You will feel more comfortable if you use the suitable running mode in each season.

※ 按照各季節採用不同的運轉方式，會更加舒適。

	Before bathing 入浴前	During bathing 入浴中	After bathing 入浴後
Winter 冬	Heat 取暖	Heat/Dry Hot 取暖熱乾燥	Heat/Dry Hot 取暖熱乾燥
Summer 夏	Dry Cool 涼乾燥	Vent/Dry Cool 換氣/涼乾燥	Vent/Dry Cool 換氣/涼乾燥
Spring and autumn 春、秋	—	Vent 換氣	Vent/Dry Cool 換氣/涼乾燥



Mode switch mask on the main body.

※ When the remote control is lost or fails to function well, you can temporarily use the mode switch on the front panel of the product and switch among the “Stand-by”, “Heat” and “Vent” modes in turn.

本體模式按鈕面板

※ 當遙控器丟失或者無法正常使用時，可臨時通過產品面板正面的模式按鈕，依次切換“待機”、“取暖”、“換氣”三種模式。



Run indicator 運轉指示燈

※ Changes of the Run indicator 運轉指示燈的變化

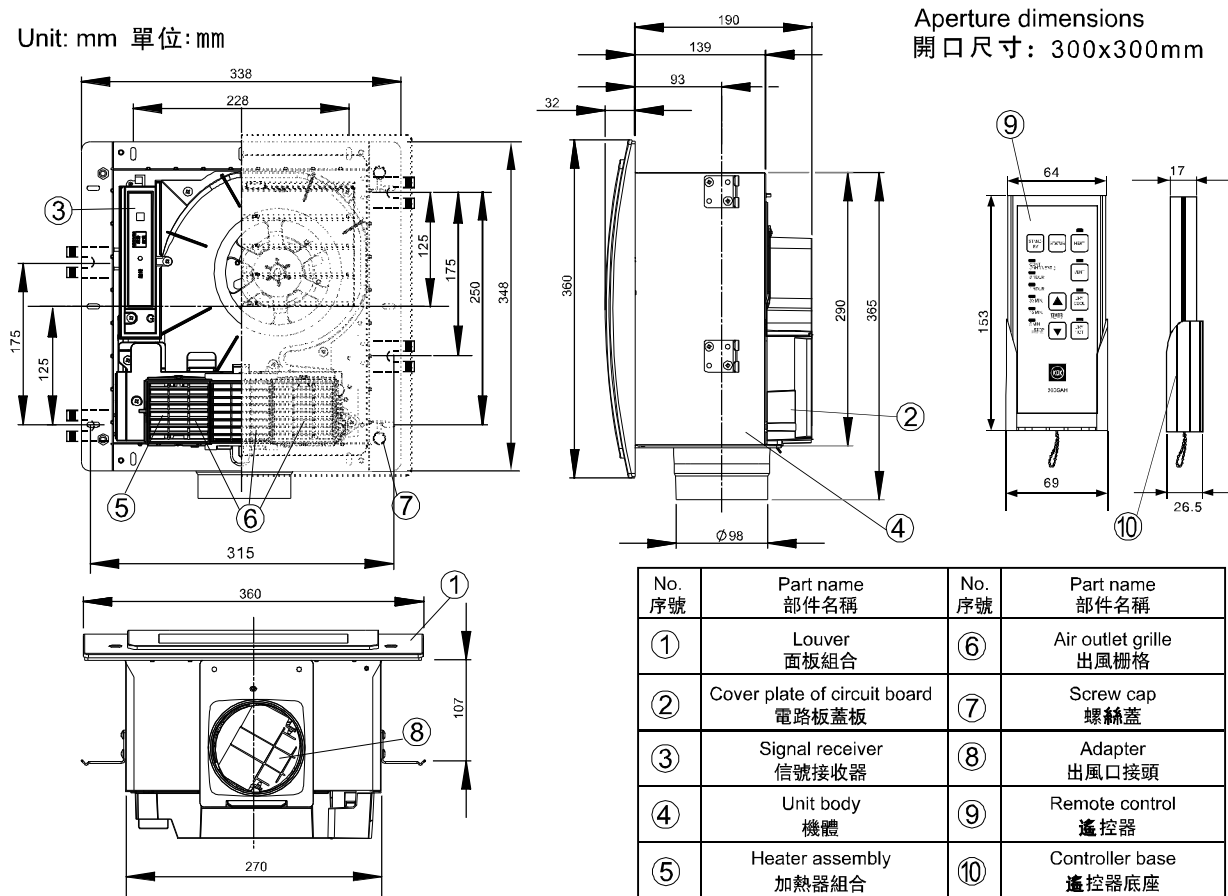
Running status	運轉狀態	Run indicator	運轉指示燈
Stop	停止	Off	滅
Delay power off	延時關機	Off	滅
Hot startup	熱啟動	On	亮
Normal running	正常運轉	On	亮
Abnormal running	運轉異常	Blinking	閃爍

※ Product abnormality means that the Run indicator blinks when a fault occurs or the main unit fails to function well. In this case, please disconnect the power supply and contact the customer service center or the dealer.

※ 產品異常主要指出現故障或主機失常時，運轉指示燈閃爍，請斷開電源，且與客戶諮詢服務中心或經銷商聯繫。

NAME AND DIMENSIONS OF MAIN PARTS 部品名稱和尺寸

Unit: mm 單位: mm



No. 序號	Part name 部件名稱	No. 序號	Part name 部件名稱
①	Louver 面板組合	⑥	Air outlet grille 出風柵格
②	Cover plate of circuit board 電路板蓋板	⑦	Screw cap 螺絲蓋
③	Signal receiver 信號接收器	⑧	Adapter 出風口接頭
④	Unit body 機體	⑨	Remote control 遙控器
⑤	Heater assembly 加熱器組合	⑩	Controller base 遙控器底座

PRECAUTIONS IN USE 使用時注意事項



Warning 警告

■ Do not disassemble this product for repair or alteration.
禁止拆解本產品進行修理或改造。



Do not disassemble 禁止拆解

Doing this may lead to fire and electric shock.
容易導致火災、觸電

When necessary, represent the warranty certificate and repair the product at the specified repair store.
修理時必須持保修證，到指定維修店進行修理。



Prohibited 禁止

When you are bathing in the bathroom, do not operate the mode switch.
當在浴室沐浴時，請不要操作模式按鈕。

■ Once gas leaks, do not start any function of this product.
當發生煤氣泄漏時，禁止開啓本產品的任何功能。



Prohibited 禁止

Doing this may generate spark and thus lead to explosion.
可能會產生火花而引起爆炸



Prohibited 禁止

To avoid low-temperature scalding, do not directly blow the same part of the body with hot wind for a long time (2 hours or above).
為避免低溫燙傷請勿長時間(2小時或以上)讓熱風直接吹在身體同一位置。



Prohibited 禁止

A statement to the effect that when the product is to no longer be used, it must not be left in place but removed, to prevent it from possibly falling.
如以後不打算再使用本產品，為了防止在萬一的情況下掉落，不得放置不管，而應予以拆除。

PRECAUTIONS IN USE 使用時注意事項



Caution
注意



If the product will not be in use for a long time, please use the “double-pole power switch” to disconnect the power supply.

不使用本產品時，請斷開“電源雙極開關”。



The applicable ambient temperature of this product is in the range of $-10^{\circ}\text{C} \sim 40^{\circ}\text{C}$.

本產品適用環境溫度為 $-10^{\circ}\text{C} \sim 40^{\circ}\text{C}$ 。



This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

Children should be supervised to ensure that they do not play with the appliance.

本產品不適合有殘疾、智障或精神障礙的人士或缺乏經驗、常識者(包括兒童)維護使用，除非在負責他們安全的人士的看護或指導下使用。

兒童應該有人進行看護，以防將產品當作玩具。



When the remote control is lost or fails to function properly, please contact the customer service center or the dealer.

當遙控器丟失或者無法正常使用時，請與客戶諮詢服務中心或經銷商聯繫。

ROUTINE USE AND MAINTENANCE 日常使用及維護



Warning
警告

- Before you contact the main body of this product or clean this product, make sure that the “all-pole switch” connected to this product is disconnected.

在接觸本產品主體前和清潔本產品時，必須確保連接本產品的“電源雙極開關”處於斷開狀態。



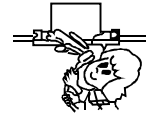
Failure to following this may lead to electric shock.
可能會觸電

- Do not directly spray this product with water and other liquids.

禁止用水及其它液體直接噴射本產品。



Prohibited
禁止



Doing this may lead to short circuit or electric shock.
可能導致短路或觸電



Caution
注意



When you clean this product, please wear gloves to prevent unexpected injury.

清潔時請戴上手套以防意外受傷。



Clean the filter mesh assembly once every 3 months.

每3個月應對其過濾網組合進行清潔。



Prohibited
禁止

Do not use gasoline, benzene, dilution agent or other similar chemicals to wipe the air exchange fan and louver.

切勿使用汽油、苯、稀釋劑或者其它類似的化學品擦拭換氣扇及面板組合。



Prohibited
禁止

Do not clean the heating part or let water flow into the electric motor or electrical parts.

加熱部件不需要進行清潔，且切勿讓水進入電動機及電器部件內。



Prohibited
禁止

Do not clean the louver with an iron wire brush or other hard objects.

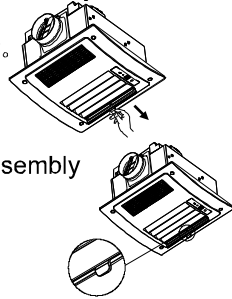
切勿用鋼絲刷或其它硬物清洗面板組合。

ROUTINE USE AND MAINTENANCE 日常使用及維護

Cleaning the filter mesh 過濾網清潔

- ① Pull out the filter mesh assembly as shown in the figure.
按圖所示拉出過濾網組合。

- ③ Install the filter mesh assembly again.
重新安裝過濾網組合。



- ② Use a cleaner to clean dust and dirt on the filter mesh. Do not rinse the filter mesh with water, because water will damage its performance; do not clean the filter mesh with an iron wire brush or other hard tools, lest the filter mesh would be damaged.

用吸塵器吸取過濾網上的灰塵和污垢，不可用水清洗，因為水會破壞過濾網的性能；不可用鋼絲刷或其它硬質的工具來清潔以免損壞過濾網。



ANTIBACTERIAL FUNCTION 抗菌功能

- ※ The filter mesh in the filter mesh assembly provides the antibacterial function, with the antibacterial ratio against staphylococcus aureus and the antibacterial ratio against colibacillus up to 99.9% respectively (test basis: JIS Z2801:2000).
- ※ After use for a period of time, the color of the filter mesh will change from yellow to brown, but the change to material color will not affect performance.
- ※ As the use time increases, the antibacterial performance of the filter mesh will decrease accordingly.
- ※ 過濾網組合中的過濾網具有抗菌功能，其對金黃色葡萄球菌抗菌率達到99.9%，大腸杆菌抗菌率達到99.9% (檢測依據：JIS Z2801:2000)。
- ※ 使用一段時間後，過濾網的顏色會從黃色變成茶色，這種材質顏色的變化並不影響性能。
- ※ 隨着使用時間的增加，過濾網的抗菌性能會相應減弱。

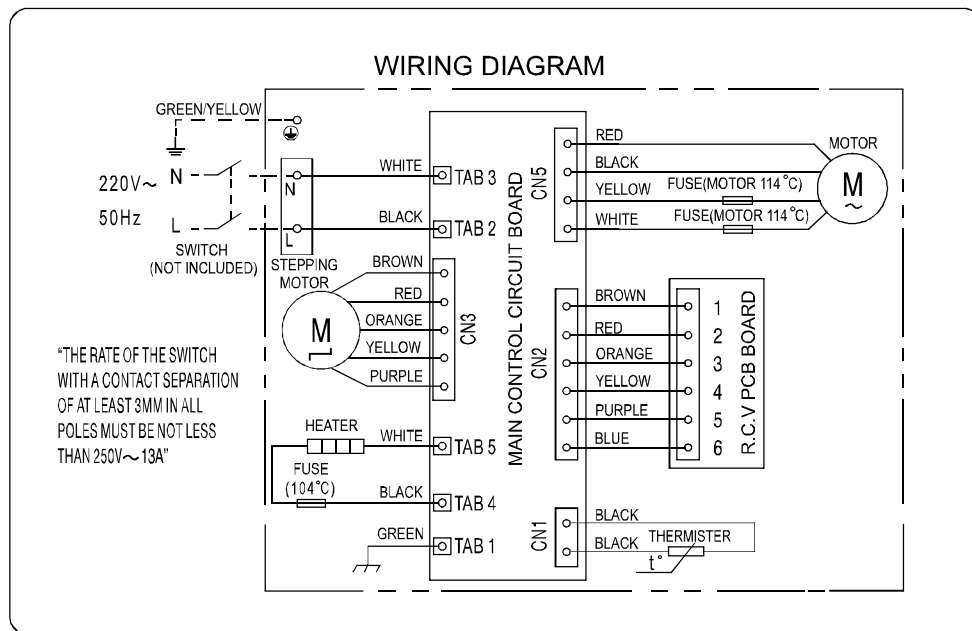
TROUBLESHOOTING 常見故障的識別與處理

When a fault occurs, check the product against the table below. If the problem cannot be solved yet, make sure that the “all-pole switch” connected to this product is disconnected, and contact the customer service center or the dealer.

發生故障時請按下表進行檢查，如果問題仍然未能解決，請確保連接本產品的“電源全極開關”處於斷開狀態，且與客戶諮詢中心或經銷商聯繫。

	Symptom 症狀	Reason 原因	Solution 處置
Wind 風	The blast volume of circulation/air change decreases. 循環/換氣風量變小	The filter mesh may be blocked. 有可能是過濾網堵塞	Please clean the filter mesh. 請清潔過濾網
		The air change duct may be blocked. 有可能是換氣風道阻塞	Please contact the customer service center or the dealer. 請與客戶諮詢中心或經銷商聯繫
		The wind shield may be in an improper location. 有可能是擋風板位置不當	Please disconnect the power supply and restart the product after 1 minute. The wind shield will be reset. 請斷開電源1分鐘後重新開啓，擋風板將重新復位
	No hot wind is blown out. 無熱風吹出	The heater may fail. 有可能是加熱器不良	Please contact the customer service center or the dealer. 請與客戶諮詢中心或經銷商聯繫
Remote control 遙控器	The remote control cannot control the unit body. 遙控器不能控制機體	The battery power may be insufficient. 有可能是電池電量不足	Please replace the batteries. 請更換電池
		The receiver may be obstructed by a barrier. 有可能是接收器受障礙物遮擋	Please clean the receiving window of the receiver. 請清潔接收器接收窗
		The transmitting signal window of the remote control may be obstructed. 有可能是遙控器發射信號窗口被遮擋	Please clean the transmitting window of the remote control. 請清潔遙控器發射窗口
Sound 聲音	Abnormal sound 有異常聲音	The unit body may not be installed securely. 有可能是機體安裝不牢固	Please contact the customer service center or the dealer. 請與客戶諮詢中心或經銷商聯繫
		The fan blade may be distorted. 有可能是扇葉變形	Please contact the customer service center or the dealer. 請與客戶諮詢中心或經銷商聯繫
	The buzzer sounds and the Run indicator blinks. 蜂鳴器響運轉指示燈閃爍	May be disconnected or short-circuited. 可能是發生斷綫或短路	The air change and cool drying functions are still available when the fault occurs. Please contact the customer service center or the dealer. 異常中換氣及涼乾燥功能可用，請與客戶諮詢中心或經銷商聯繫

SPECIFICATIONS 規格及電氣原理圖



Model No. 型號	額定電壓 [V]	額定頻率 [Hz]	Power Consumption 額定輸入總功率 [W]	Rated Current 額定電流 [A]	Air Volume 換氣風量 [m ³ /h]	Power 功率 [W]				Noise(dB) 噪音 [dB]				Weight 淨重 [kg]
						HEAT 取暖	VENT 換氣	DRY COOL 涼乾燥	DRY HOT 熱乾燥	HEAT 取暖	VENT 換氣	DRY COOL 涼乾燥	DRY HOT 熱乾燥	
30BGAH	220	50	1650	7.5	150	1600	30	35	1570	47	39	47	47	4.1

- Rated input power and rated current are obtained when the product is output.
- Wind volume, electric characteristic and noise value are measured when Hydrostatic Pressure is 0Pa.
- Noise value is the weighted sound pressure grade A, which is the central value measured by this company, its tolerance range is from +3 to -7. The method to measure is as follows: in an anechoic chamber, measure noise value first 1m away from the left, right and beneath of the sample, then get the averaged value.
- Wind volume is the central value measured by this company with ±10% of tolerance range.
- The product is against water drop experiment, complying with the IPX2 requirement, and the controller is against the shower test, complying with the IPX4 requirement.
- * If any of the above parameter is changed, no further notice.
- * Insulation grade E
- 額定輸入總功率、額定電流值在出廠狀態下測得。
- 換氣風量、電氣特性、噪音值等數據是在靜壓為0Pa狀態下的數值。
- 噪音值為A計權平均聲壓級，是本公司測試結果的中心值，有+3，-7的公差範圍。測試方法為在噪音測試室內，距樣品左側、右側、下方各1米處測定其噪音值，然後取其平均值。
- 換氣風量是本公司測試結果的中心值，有±10%的公差範圍。
- 本產品機體通過防滴水試驗，符合IPX2要求，遙控器通過防濺水試驗，符合IPX4要求。
- * 上述參數如有變動，恕不另行通知。
- * E級絕緣

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