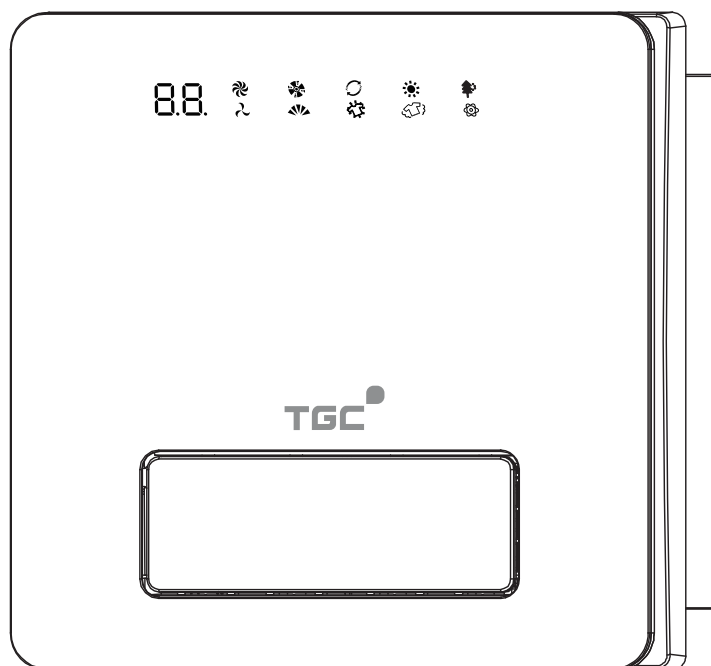# TGC

全新
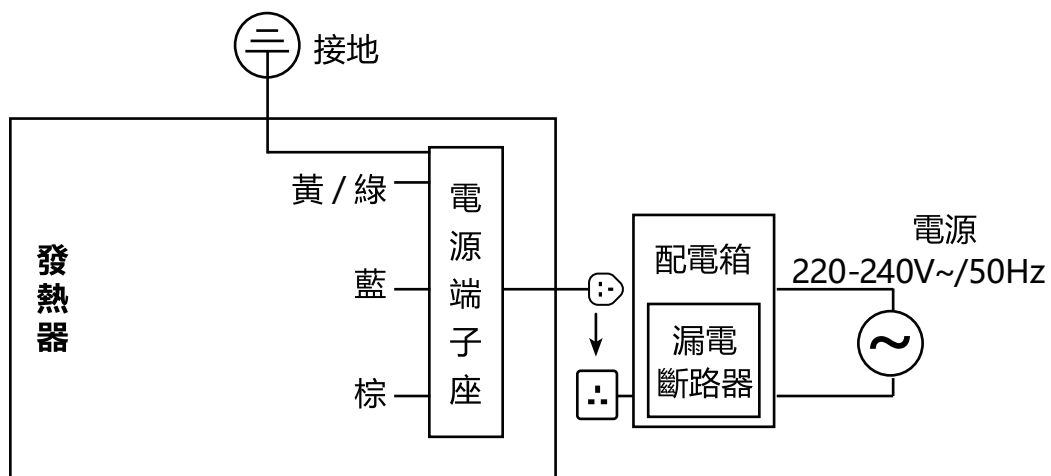## 浴室多功能 浴暖寶

TTH2150 | 使用及安裝說明書

浴暖寶

使用前,請詳細閱讀本說明書

注意:本產品必須由政府認可合資格技工或香港機電工程處註冊之「電業承辦商」授
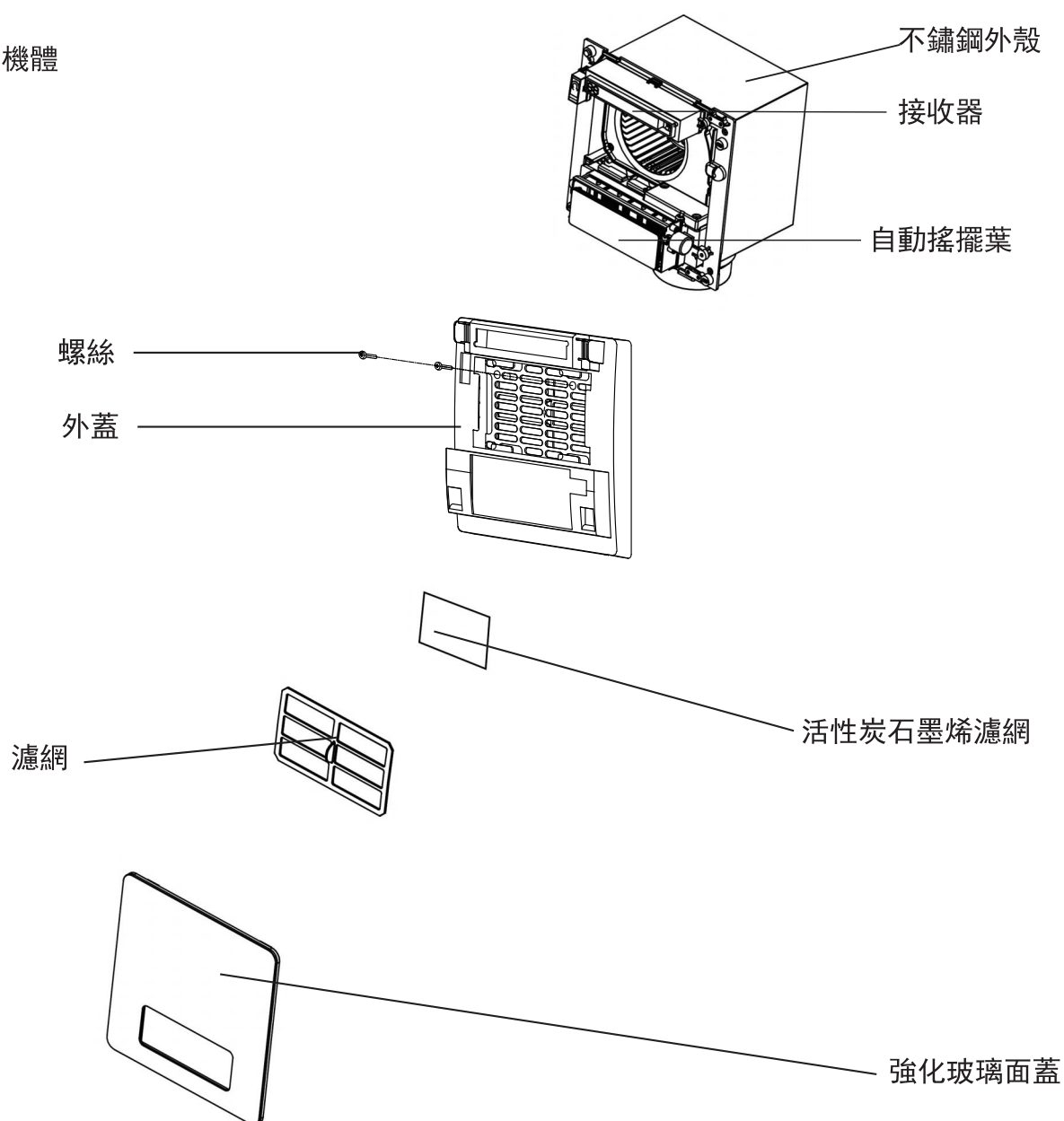權的電力工程人員(電力工程級別A或以上)進行安裝,以免造成危險或發生意外。

感謝您選用TGC產品

⚠ 安裝使用注意事項

◎ 如有任何有關使用及維修的查詢，請致電客戶服務熱線2232 1000。

◎ 本產品需安裝於能承受本製品重量之地方。

◎ 安裝不良會造成噪音、共鳴，請妥善裝配。

◎ 為了不使排氣的結露水流入浴室，通往屋外的各排氣管必須保持屋外下斜。

◎ 通風口蓋之通風抵抗，是造成風量減少及噪音之主因，請適當的選擇使用。

◎ 安裝本機時，外蓋距地面不得低於2.3米。(只適用於吊頂天花板安裝)

◎ 不可裝設於熱水爐正上方或溫度在攝氏40度以上之場所。

◎ 建議浴室大小不超過6平方米。

◎ 裝置本機時，請設置入風口以促進對流。

◎ 切勿變更產品的額定使用特性。

◎ 禁止使用本說明書指定以外的方法安裝本產品。

◎ 天花板安裝開口需向下且保證機身水平安裝。

◎ 請採取適當措施以防止氣體從一般排氣管或其它燃燒燃料的設備排氣管倒流回室內。

◎ 安裝本產品主體前，必須確保已斷開產品電源。

◎ 當發生易燃氣體洩露時，禁止開啟或關閉本產品的任何功能。

◎ 本產品面板為加熱空氣的進、出口，為避免產品過熱產生危險，請不要在本產品上覆蓋衣物等任何物品。

◎ 本產品不得直接置於電源插座下面，切勿安裝過於接近插座，防止主機電器損壞時，造成其他電器損壞。

◎ 嚴禁利用帶有自動接通電源的程式器、計時器或任何其他裝置來使用本產品，否則會導致損壞本產品，會有發生火災的可能。

◎ 切勿把本產品安裝在靠近窗簾和其它可燃材料的附近，以免發生危險。

◎ 安裝和使用時嚴禁拆卸主電路板，否則會導致觸電或起火。

◎ 本產品不適合有殘障、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。在維護保養期間,兒童應該有人進行看護，以防將產品當做玩具。

◎ 3歲以下兒童在無成人監管下需遠離。3歲以上8歲以下的兒童可以在成人的監管或者安全指導，并了解相關危害的情況下，僅可以對正確安裝和安放的機器進行相關操作。這個年齡段的兒童不可以插插頭，調節及清洗機器、維修機器。

◎ 注意——這款產品的某些部件可能會變得非常熱並且可能會引起燃燒。有兒童及弱勢群體在場時，需特別注意。

◎ 如果電源線損壞，為了避免危險，必須由製造商、其維修部或相關部門的專業人員更換。

◎ **安裝的時候要確保有一個全極斷開的漏電斷路器，如圖所示：**

◎ 根據《電力(線路)規例工作守則》26A(3)(j)，在設有固定浴缸或花灑的房間內，插座應符合 IEC 60364-7-701的規定及安裝在距離浴盆或浴缸 0.6 米以外的地方，並由餘差啟動電流不超過 30 毫安的電流式漏電斷路器加以保護。
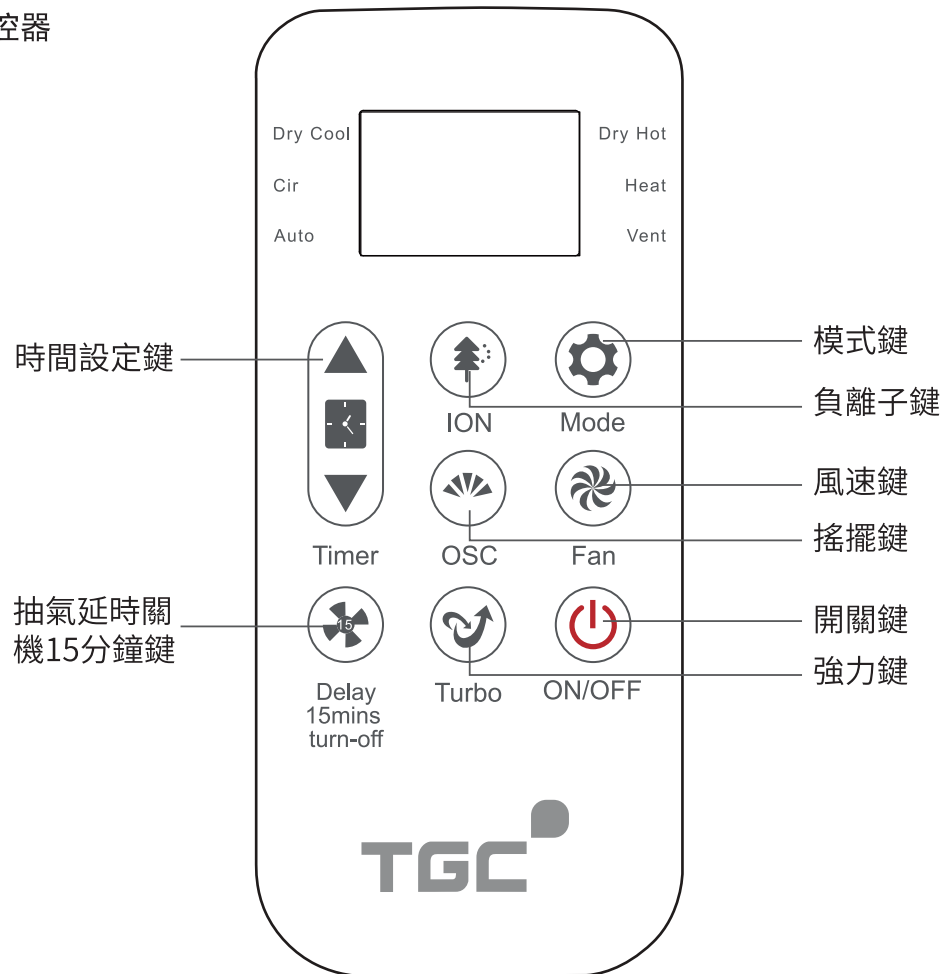
接地

黃／綠

藍

棕

發熱器

電源端子座

配電箱

漏電斷路器

電源
220-240V~/50Hz

★ 部件名稱

1. 機體

不鏽鋼外殼

接收器

自動搖擺葉

螺絲

外蓋

活性炭石墨烯濾網

濾網

強化玻璃面蓋

2. 紅外綫遙控器

時間設定鍵 — ▲ ▼ Timer

抽氣延時關機15分鐘鍵 — Delay 15mins turn-off

ION

Mode — **模式鍵**

負離子鍵

OSC   Fan — **風速鍵** / **搖擺鍵**

Turbo   ON/OFF — **開關鍵** / **強力鍵**

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涼風：調節空氣功能, 室內空氣進行循環, 同時少部分室內空氣被抽往室外進行新鮮空氣交換。適用於室內空氣輕微污濁, 溫度適中而不需要加熱的場合使用（沒有加熱用途）;

循環：調節空氣功能, 僅室內空氣進行循環, 不與外部進行空氣交換, 適用於室內空 氣質量較好, 室溫適宜, 僅需要增加空氣流通的場合（沒有加熱用途）;

自動：根據房間溫度, 自動選擇循環、暖氣或乾燥模式進行運行, 適用於自動判定運行的場合;

乾燥：室內升溫功能開啟, 同時會將室內部分潮濕空氣抽往室外進行交換, 適用於室內溫度稍低, 濕度稍高的狀況, 希望進行部分升溫和降濕的場合;

暖氣：室內升溫功能, 空氣僅在室內進行加熱循環, 適用於室內空氣溫度較低, 希望快速升溫的場合;

抽氣：調節空氣功能（沒有加熱用途）將室內空氣抽出室外進行交換。適用於室內空氣較污濁, 需要快速引進新鮮空氣的場合。

時間設定：按 ▲ ▼ 鍵調節當前功能的運行時間（在1~24小時範圍內）。

抽氣延時關機15分鐘鍵：按此功能, 機器運行抽氣功能。15分鐘後自行停止。

模式鍵：按此鍵切換機器運行模式, 在"自動—循環—涼風—乾燥—暖氣—抽氣"之間循環。

負離子鍵：打開/關閉負離子功能。

風速鍵：切換風扇運行高/低速。

搖擺鍵：打開/定格擺風功能, 抽氣以及抽氣延時關機此功能無效。

開關鍵：打開/關閉機器。

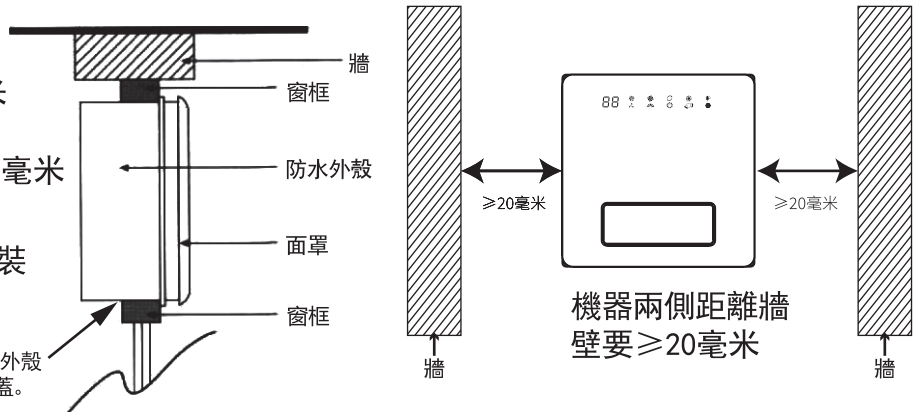強力鍵：使當前運行功能進入/退出強力模式。

★ 安裝方法
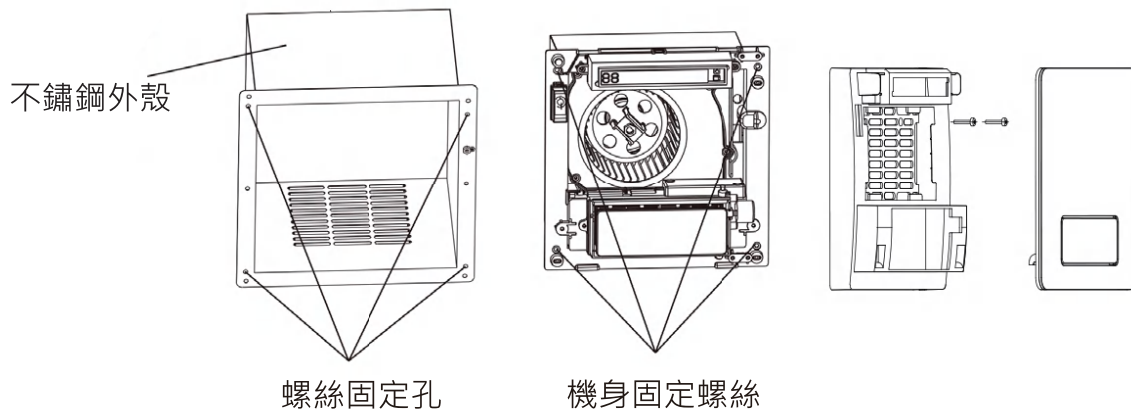
A.【窗口式安裝】

面罩尺寸:

254毫米 X 254毫米

開孔尺寸:

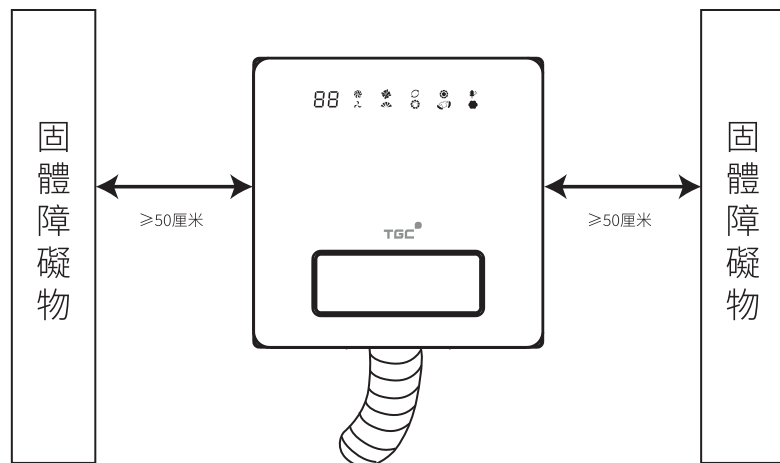高219毫米 X 闊210毫米

機身厚度:160毫米

*注意窗口式必須橫置安裝
機身排氣位向下

排風口在不鏽鋼外殼
下方,不能被遮蓋。

牆
窗框
防水外殼
面罩
窗框

機器兩側距離牆
壁要≥20毫米

≥20毫米   ≥20毫米

牆   牆

1. 安裝在浴室鋁窗抽氣扇窗口位置,可以取代抽氣扇。
2. 將窗口框用拉釘固定在鋁窗窗框。(需用玻璃膠造好周邊防水)
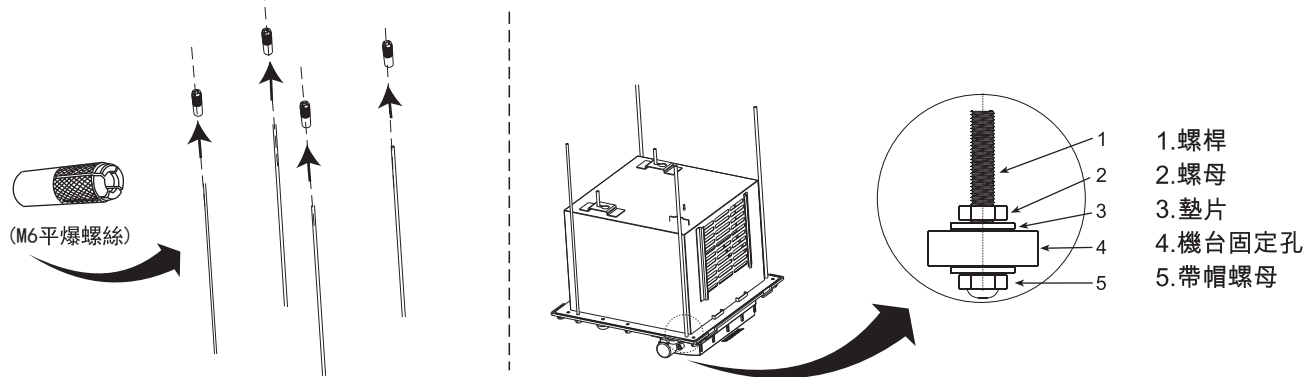3. 接駁電源線後,嵌入機身加上螺絲固定。

不鏽鋼外殼

螺絲固定孔   機身固定螺絲

B【掛壁式安裝】

1. 適用於沒有假天花的浴室使用。
2. 先將掛壁支架橫置穩固定在牆上,再嵌入機身的支架上。
3. 再接駁4"(100毫米)直徑排氣管到玻璃窗。
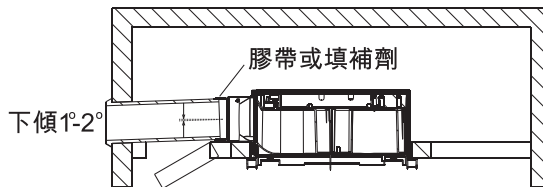4. 可安裝的牆身尺寸: 254 X 254毫米
   機身厚度:160毫米
5. 與固體結構的最小
   距離為50厘米。

固體障礙物   固體障礙物

≥50厘米   ≥50厘米

TGC

C.【吊頂天花板安裝】

1. 安裝主機

- 在頂部牆體打孔後, 裝入左圖的M6平爆螺絲*, 再將吊桿*擰入平爆螺絲。
- 將主機固定在吊桿上 * · (*M6平爆螺絲及吊桿需用戶另購)

(M6平爆螺絲)

1. 螺桿
2. 螺母
3. 墊片
4. 機台固定孔
5. 帶帽螺母

2. 安裝排氣管

- 排氣管出風接頭交接處請用膠帶或填補劑密封。
- 排氣管傾向屋外傾斜1度~2度。

塑膠喉管	公稱 4"
鋁錫喉管	(內徑 > 100毫米)

膠帶或填補劑

下傾1°-2°
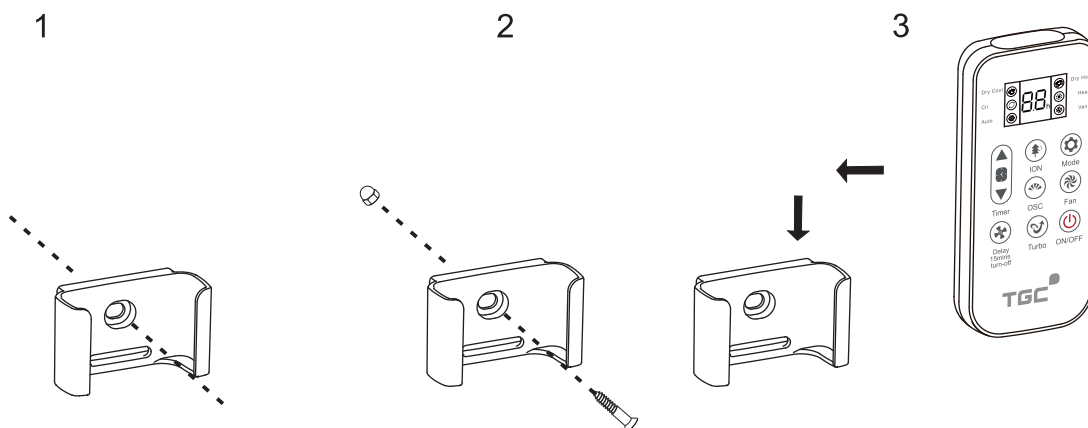
3. 外蓋的裝配

向外推開4個螺絲蓋, 用4支螺絲固定外蓋和機體。
依上述方法裝配後, 請確認下列檢查要點。

- 外蓋的安裝是否牢固。
- 運轉時是否有異常噪音或震動產生。

4. 本產品安裝於天花式時, 固定螺桿(φ6, 另購)的長度要合適, 以保持機身的水平。但是如果螺桿裁切長度不足或天花板高度誤差等因素, 而無法保持水平時, 可以採用本項安裝方式, 使用4個調節螺母作長度調節。

調節螺母
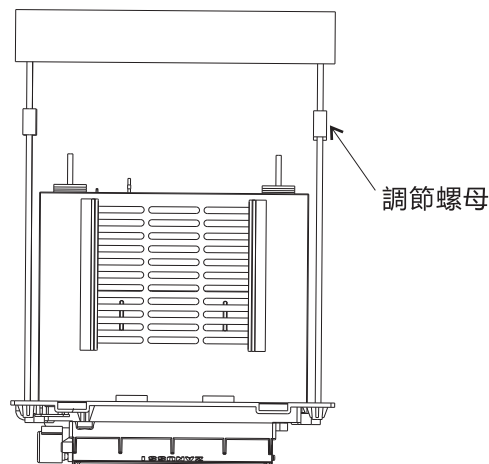
★ 遙控器的安裝

● 此款為無線遙控型, 請安裝在適當的位置。

1. 遙控器固定架放在所要安裝之位置, 依箭頭處做上記號。

2. 依記號處鑽孔1/4 (6毫米), 埋入2個塑膠塞。

3. 將遙控器對位嵌入遙控器固定架。

1   2   3

★ 安裝排風管

● 安裝排風管應避免以下情況

1. 太過於彎曲(大於90°)。

2. 一米距離內, 彎曲太多(不超過兩個彎)。

3. 排氣管彎頭距離主機體太近(大於20厘米)。

4. 接頭管縮小。

1.太過於彎曲 (大於90°)。	2.一米距離內, 彎曲太多(不超過兩個彎)。	3.排氣管彎頭距離主機體太近(大於20厘米)。	4.接頭管縮小。
		機體	

★ 電器工程-電器配線

◎ 安裝及佈線必須由合資格電力工程承辦商完成。

◎ 請依據產品銘牌指示, 在額定電壓及額定頻率下使用本產品。

◎ 用戶的固定佈線中, 應單獨為本產品配備獨立的空氣開關, 並且空氣開關應符合
觸電斷開距離大於3毫米的全極斷開要求。以便在出現意外時能及時切斷產品的電源。

◎ 請確保電源插座具有符合電氣規範要求的良好接地。

◎ 安裝時, 固定電源線需符合當地安全法規。

◎ 金屬網底、鋼絲網底墙壁或金屬表面木造房屋等貫穿後要安裝金屬風管時, 注意
不可有電器的接觸。

◎ 如果與電力公司的契約用電量不足時, 請增加工程。

◎ 於開啟面板前, 請確保機體電源斷開。

不鏽鋼外殼

紅外綫遙控器

>1.8米
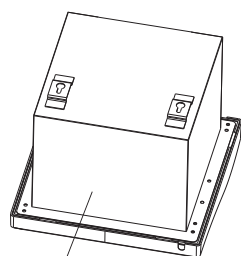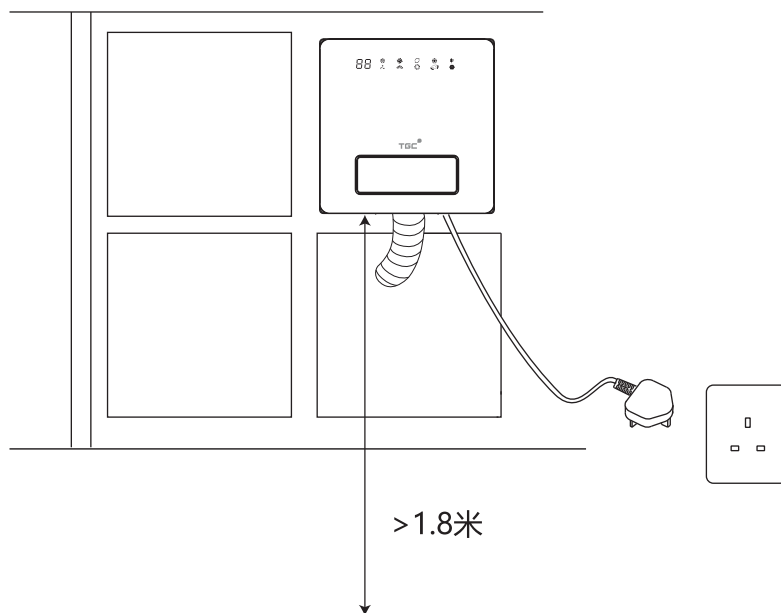
◎ 本產品不得直接置於電源插座下面，切勿安裝過於接近插座，防止主機電器損壞時，
造成其他電器損壞。

★ 使用功能

功能	用途	運轉狀態			預設 （可設範圍）
		風扇	室內風門	加熱器	
自動	自動偵測運行模式	/	/	/	1小時
抽氣 （風速鍵切換高/低）	浴室換氣（排氣）	可調節 （低/高/強力） 速度運轉	關閉	關閉	2小時 (1-24小時)
抽氣延時關機	浴室換氣（排氣）	低速運轉	關閉	關閉	15 分鐘
涼風 （風速鍵切換高/低）	增加浴室內 空氣流動 及少部分排氣	可調節 （低/高/強力） 速度運轉	全開 （可調節 上下角度）	關閉	4小時 (1-24小時)
暖氣 （風速鍵切換高/低）	入浴暖房 （不排氣）	可調節 （低/高/強力） 速度運轉	全開 （可調節 上下角度）	啟動	2小時 (1-24小時)
乾燥 （風速鍵切換高/低）	浴室快速烘乾， 衣物乾燥(排氣)	可調節 （低/高/強力） 速度運轉	全開 （可調節 上下角度）	啟動	4小時 (1-24小時)
循環 （風速鍵切換高/低）	浴室內循環 （不排氣）	可調節 （低/高/強力） 速度運轉	全開 （可調節 上下角度）	關閉	2小時 (1-24小時)
搖擺 （上下自動）	出風擺片擺動方向	45～80度上下 來回擺動	/	/	80度
負離子 （釋放負離子 清新空氣）	負離子輸出	啟動	/	/	/

★ 功能說明

1. 自動功能 Auto ⚛:

A) 按"模式 ⚙"鍵切換到自動功能,顯示板"AUTO ⚛"指示燈顯示,自動模式開始運轉,換氣風機以"LO ∿"運轉20秒檢測房間溫度後,根據當前房間溫度選擇運行模式(風機自動設定為HI ❋):

1. 房間溫度>24度,以"循環"功能運行,顯示板仍顯示"AUTO ⚛"圖標。
2. 房間溫度<20度,以"暖氣"功能運行,顯示板仍顯示"AUTO ⚛"圖標。
3. 房間溫度在20～24度間,以"乾燥"功能運行,顯示板仍顯示"AUTO ⚛"圖標。
4. 定時:預設時間為1小時,不可更改時間。

B) 停止:當按"開/關 ⏻"鍵或運轉完所設的時間後,"AUTO ⚛"及剩餘時間會熄滅,本機會自動停止。

2. 抽氣功能 Vent ❋:

A) 按"模式 ⚙"鍵切換到抽氣功能,"Vent ❋"指示燈顯示,抽氣模式開始運轉,預設風速為LO ∿"。按"風速 Speed ❋"按鍵,可選擇(HI ❋、LO ∿)風量,此時可按"強力 ❥"鍵,進入強力工作狀態(整機運行噪音也會相應升高),進入後圖標HI ❋,LO ∿ 同時點亮,再次按"強力 ❥"鍵退出強力工作狀態,下次啟動會依使用者的習慣,自動記憶前次的工作狀態。

B) 定時:預設時間為2小時,可通過按"時間設定"上下鍵改變設定時間。可設範圍為1小時−24小時。時間會依據剩餘啟動時間顯示在機身上方的LED顯示。下次的啟動會依使用者的習慣,自動記憶前一次的時間設定。

C) 在此模式下設定的時間,HI ❋、LO ∿ 風量的改變,不影響時間的計算。

D) 停止:當按"開/關 ⏻"鍵或運轉完所設的時間後,LED指示燈"Vent ❋"及剩餘時間會熄滅,本機會自動停止。

3. 抽氣延時關機 Delay 15mins turn off ❋:

A) 啟動:按"抽氣延時關機 Delay 15mins turn off ❋"鍵,"Vent ❋"指示燈顯示。抽氣延時關機開始運轉。預設15分鐘後停止運轉。時間不可調節,也不顯示。

B) 停止:當按"開/關 ⏻"鍵或運轉完畢,本機會自動停止。

4. 涼風功能 Dry Cool ❄:

A) 按"模式 ⚙"鍵切換到涼風功能,"COOL ❄"指示燈顯示,涼風以"HI ❋"模式開始運轉,按"風速Speed"按鍵,可選擇(HI ❋、LO ∿)風量,此時可按"強力 ❥"鍵,進入強力工作狀態(整機運行噪音也會相應升高),進入後圖標HI ❋,LO ∿同時點亮,再次按"強力 ❥"鍵退出強力工作狀態,下次啟動會依使用者的習慣,自動記憶前次的工作狀態。

B) 定時:預設時間為4小時,可通過按"時間設定"上下鍵改變設定時間。可設範圍為1小時～24小時。時間會依據剩餘時顯示在機身上方的LED顯示。下次的啟動會依據使用者的習慣,自動記憶前一次的時間設定。

C) 在此模式下定時的時間,HI ❋、LO ∿ 風量的改變,不影響時間的計算。

D) 停止:當按"開/關 ⏻"鍵或運轉完所設定的時間後,LED指示燈"Cool ❄"及剩餘時間會熄滅,本機會自動停止。

5. 暖氣功能 Heat ☀ :

A) 按"模式 ✿"鍵切換到暖氣功能，"HEAT ☀"指示燈顯示，以"LO ⟳"模式開始運轉，按"風速Speed ❁"按鍵，可選擇（HI ❁、LO ⟳）風量，此時可按"強力 ❣"鍵，進入強力工作狀態（整機運行噪音也會相應升高），進入後圖標HI ❁ ,LO ⟳ 同時點亮，再次按"強力 ❣"鍵退出強力工作狀態，下次啟動會依使用者的習慣，自動記憶前次的工作狀態。

B) 定時：預設時間為2小時，可通過按"時間設定"上下鍵改變設定時間。可設範圍為1小時～24小時。時間會依據剩餘時顯示在機身上方的LED顯示。下次的啟動會依據使用者的習慣，自動記憶前一次的時間設定。

**C)** 在此模式下定時的時間，HI ❁、LO ⟳ 風量的改變，不影響時間的計算。

D) 停止：當按"開/關 ⏻"鍵或運轉完所設定的時間後，LED指示燈"Heat ☀"及剩餘時間會熄滅。

E) 當加熱功能停止運轉之後，扇葉仍會運轉約35秒，以對加熱器進行冷卻。

6. 乾燥 Dry Hot 💨 :

A) 按"模式 ✿"鍵切換到乾燥功能，"DRY 💨"指示燈顯示，乾燥以"HI ❁"模式開始運轉。按"風速Speed ❁"按鍵，可選擇（HI ❁、LO ⟳）風量，此時可按"強力 ❣"鍵，進入強力工作狀態（整機運行噪音也會相應升高），進入後圖標HI ❁ ,LO ⟳同時點亮，再次按"強力 ❣"鍵退出強力工作狀態，下次啟動會依使用者的習慣，自動記憶前次的工作狀態。

B) 定時：預設時間為4小時，可通過按"時間設定"上下鍵改變設定時間。可設範圍為1小時～24小時。時間會依據剩餘時間顯示在機身上方的LED顯示。下次的啟動會依使用者的習慣，自動記憶前一次的時間設定。

C) 在此模式下定時的時間，HI ❁、LO ⟳ 風量的改變，不影響時間的計算。

D) 停止：當按"開/關 ⏻"鍵或運轉完所設的時間後，LED指示燈"DRY 💨"及剩餘時間會熄滅。

7. 循環功能 Cir ↻ :

A) 按"模式 ✿"鍵切換到循環功能，"CIR ↻"指示燈顯示，循環風以"HI ❁"模式開始運轉。按"風速Speed ❁"按鍵，可選擇（HI ❁、LO ⟳）風量，此時可按"強力 ❣"鍵，進入強力工作狀態（整機運行噪音也會相應升高），進入後圖標HI ❁ ,LO ⟳ 同時點亮，再次按"強力 ❣"鍵退出強力工作狀態，下次啟動會依使用者的習慣，自動記憶前次的工作狀態。。

B) 定時：預設時間為2小時，可通過按"時間設定"上下鍵改變設定時間。可設範圍為1小時～24小時。時間會依據剩餘時間顯示在機身上方的LED顯示。下次的啟動會依使用者，的習慣，自動記憶前一次的時間設定。

C) 在此模式下定時的時間，HI ❁、LO ⟳ 風量的改變，不影響時間的計算。

D) 停止：當按"開/關 ⏻"鍵或運轉完所設的時間後，LED指示燈"CIR ↻"及剩餘時間會熄滅，本機會自動停止。

8. 擺風功能 OSC ⚞:

A) 啟動：預設同循環風扇同時做ON/OFF運行動作，ON狀態時，機身LED液晶屏幕 ⚞ 標示亮；OFF狀態時，機身LED液晶屏幕 ⚞ 標示滅。在循環風機OFF狀態時，擺風按鍵為無效操作，此時擺片歸於0度位置。

B) 啟動2：當在循環風扇運行時，擺片預設80度上下。

**C)** 角度擺動：當在循環風扇運行的前提下，按下"擺風按鍵 ⚞ "，擺片由80度上下位置轉到以45~80度左右來回擺動狀態；再次按下"擺風按鍵 ⚞ "，擺片馬上停止；再次按下"擺風按鍵 ⚞ "，擺片轉到以45~80度左右來回擺動狀態。

第一次開機	→	80度上下	→	45~80度上下度自由擺	→	任意角度自由停	→	45~80度上下自由擺

自動記憶前一次的角度設定	←	重新開機	←	0度	←	STOP關機	←	任意角度自由停
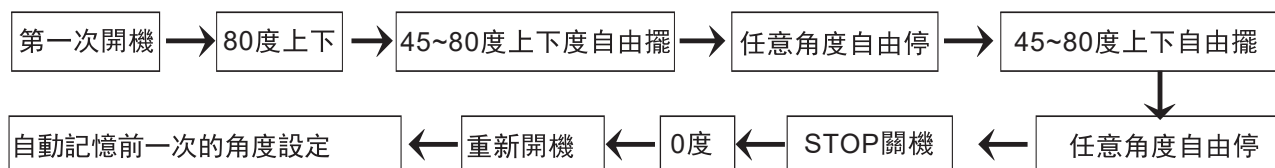
D) 停機：在選擇功能關閉或功能定時結束關閉時，擺片擺回0度位置（即擺片閉合狀態）下次的啟動會依使用者的習慣，自動記憶前一次的角度設定。

9. 負離子 ION 🌲:

A) 啟動：ON狀態時，主機機身接收器顯示窗口 🌲 標示亮；OFF狀態時，主機機身接收器顯示窗口 🌲 標示滅。在循環風機OFF狀態時，負離子按鍵為無效操作。

B) 停止：在運行過程中，按下負離子按鍵，負離子做OFF動作，同時主機機身接收器顯示窗口 🌲 標示滅；再次按下按鍵，負離子做ON動作，同時同時主機機身接收器顯示窗口 🌲 標示亮。如此重復。

10. 應急按鈕：

觸按啟動應急按鈕以自動模式運行，再次觸按應急按鈕切換到抽氣模式運行，再次觸按應急按鈕切換到待機模式。

應急按鈕 ←
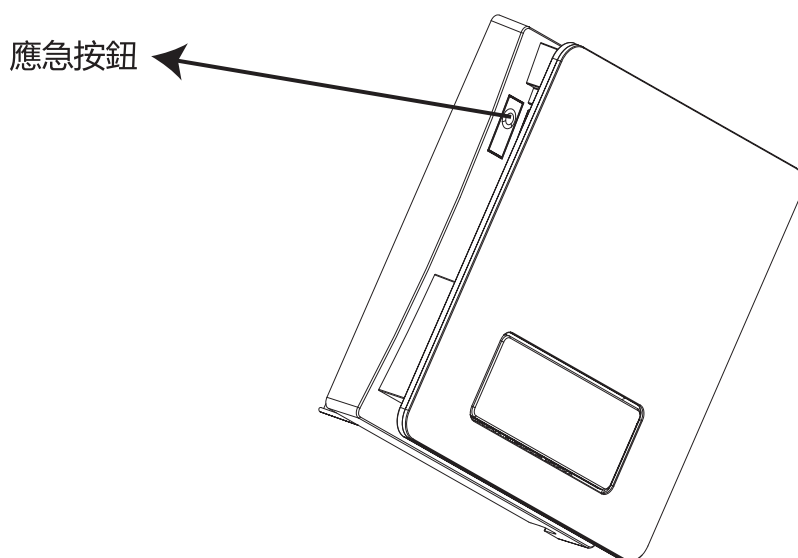
★ 保養及安全事項

▪ 保養：
  ● 維護前請務必關掉電源。
  ● 外蓋清理擦拭：

外蓋
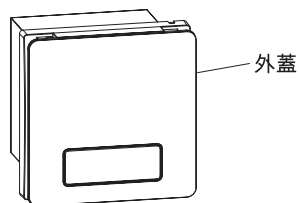
  ● 請先以柔軟之擦拭布或軟毛刷, 將外蓋髒物之部分清理乾淨。
  ● 以乾淨之擦拭布在溶有中性清潔劑之溫水中, 潤濕擦乾之後擦拭外蓋, 再用清水潤濕之擦拭布擦拭一遍, 表面不可有清潔劑殘留。

▪ PVC過濾網清理：
  使用一段時間(約1~3周左右)應將過濾網取出, 放入清水中, 將污垢、毛屑洗清後, 晾乾再放回外蓋中。

▪ 拆卸過濾網步驟：

鎖扣
按住鎖扣
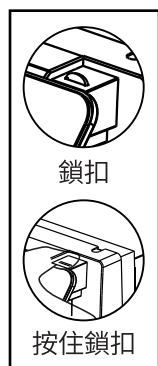
(1) 拆卸玻璃面板：按住玻璃上蓋兩側鎖扣, 向外取下玻璃上蓋。
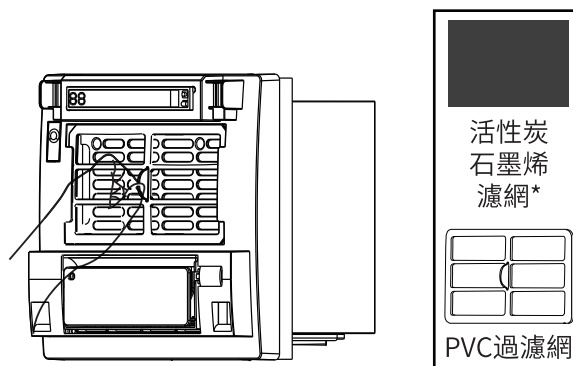
活性炭石墨烯濾網*
PVC過濾網

(2) 從PVC濾網拉手處向外拉出PVC濾網, 進行過濾網清洗, 取出PVC濾網後也可根據使用情況對活性炭石墨烯濾網*進行更換。
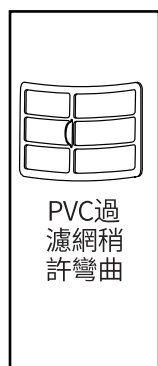
PVC過濾網稍許彎曲

(3) 安裝新的活性炭石墨烯濾網*, 將PVC過濾網一端裝入外蓋卡槽, 使PVC過濾網稍許彎曲後, 將另一端卡入卡槽。
  *注意: 活性炭石墨烯濾網*不可水洗

卡槽
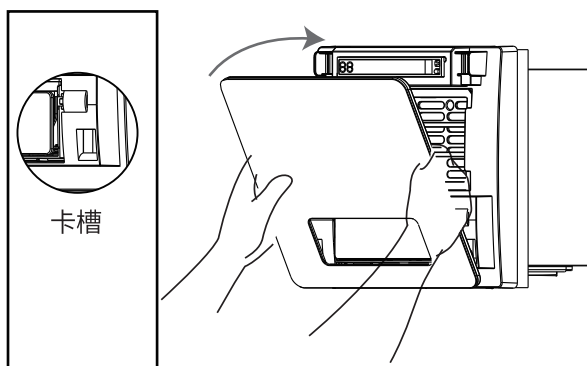
(4) 將玻璃上蓋底部卡入槽內, 按壓上部自動卡入鎖扣內, 再稍用力往外拉玻璃上蓋, 確保玻璃上蓋安裝可靠。

■ 安全選項:
  ● 運轉中請勿將手指伸入外蓋內以免受傷,或遭加熱器燙傷。
  ● 機體請勿噴到水,會造成馬達故障,或加熱器漏電造成觸電傷害。
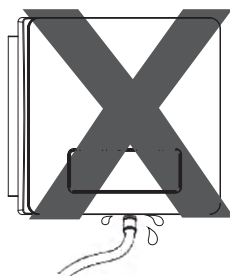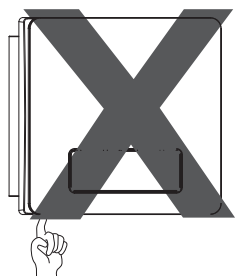
  ● 為了使用上的安全,若有以下症狀及其他異常時,為了防止事故發生,請速切斷
    電源並致電客戶服務熱線2232 1000或委託合格電力工程承辦商修理或檢查。
    [絕對不要自行修理,以免發生危險。]
      ○ 打開電源,扇葉經常不運轉。
      ○ 電源忽開忽關。
      ○ 運轉中產生異音及不正常振動。
      ○ 塑膠異味或其它嗅味發生。

■ 故障處理:

現象	診斷	對策
打開電源後不運轉	是否停電	待電源接通
	遙控器指示燈不亮	請致電客戶服務熱線2232 1000或委託合格電力工程承辦商修理
運轉聲音變大	過濾網阻塞	請取下外蓋及過濾網清除污垢
無法遙控	電池電量過低	請更換電池

故障代碼	原因	處理方法
E1	室內溫度傳感器異常	聯絡客戶服務進行維修。
E2	PTC溫度傳感器異常	
E3	高溫保護裝置啟動	檢查進出風口是否順暢。清洗PVC過濾網上的髒污。
E4		

★ 規 格

功能名稱	換氣最大風量 (m³/h)	循環最大風量 (m³/h)	馬達消耗 (w)	電熱消耗 (w)
暖氣（強力）	/	110	50.8	1350
暖氣（高速）	/	90	40	1300
暖氣（低速）	/	80	26	1250
乾燥（強力）	67	60	50.8	1280
乾燥（高速）	55	50	40	1200
乾燥（低速）	55	50	40	1120
抽氣（強力）	100	/	50.8	/
抽氣（高速）	85	/	40	/
抽氣（低速）	65	/	26	/
涼風（強力）	67	60	50.2	/
涼風（高速）	55	50	40	/
涼風（低速）	40	45	26	/
抽氣延時關機	85	/	40	/
出風口尺寸	98毫米			
電源	220-240V~ 50Hz			
重量	4.7kg			
機身尺寸(高x闊x深)	254x254x218毫米			
機身連背面掛馬 (高x闊x深)	254x254x229毫米			

遙控器

整體尺寸(高x闊x深)	121x56x17毫米
電池	1.5V（兩枚）

★ 螺絲明細表

五金包	用途	品名	規格	數量	圖示
1.標準配備	固定遙控器	螺絲	ST4*25圓頭	2	
		塑膠塞	Φ8*27	2	
2.天花式配備	出風接頭*3,風道固定*4	螺絲	ST4*25圓頭	7	
	機體固定	固定螺母	M6	4	
	機體固定	固定螺帽	M6	4	
	螺桿調整	調整螺母	M6	4	
3.壁掛式配備	安裝壁掛支架	塑膠塞	Φ8*27	2	
		螺絲	ST4*25圓頭	2	
4.窗戶式配備	窗台安裝防水箱	螺絲	ST4*25圓頭	4	

＊ 本產品規格及設計如有變更, 恕不另行通知。

＊ 中、英文版本如有出入, 一概以中文版為準。

Towngas
Enterprise

202503

Thermo ventilator

TGC

New

Multi-function bathroom thermo ventilator

TTH2150   **User manual and installation instruction**

Please Read this manual carefully before use.

Caution: This product must be installed by government approved qualified technician, or electrical worker (Grade A Electrical Work or above) authorized by an electrical contractor registered with Hong Kong Electrical and Mechanical Services Department to prevent danger or accident.

Thank you for purchasing TGC product.

⚠ *Installation and Usage Precaution:*

1. If you have any inquiries regarding usage and maintenance, please call the customer service hotline，2232 1000。
2. This product should be installed in the place which can bear the weight of this product.
3. Incorrect installation may cause noise, resonance. Please assembly properly.
4. In order not to cause the dew flowing back from exhaust pipe to the bathroom, the exhaust pipe should be set in downward sloping to the outdoor.
5. The ventilation resistance of the ventilation flap is the main reason which causes the decrease of air volume and high noise. Please use this appropriately.
6. Make sure that the Front Cover shall not be less than 2.3 meters off the ground during installation. (only applicable to ceiling method)
7. Recommend bathroom size within 6 square meters.
8. Do not install the product directly above the hot water heater or a place with temperature over 40 ℃.
9. Please set airflow intake to promote convection.
10. Do not change the product's rated features.
11. Any other installation method beyond the specified in the manual is prohibited.
12. The ceiling openings should face down in order to ensure the product installed at horizontal level.
13. Please take proper measures to prevent gas from the exhaust pipe or other fuel burning equipment flowing back to the room.
14. Before installation, please ensure that the power has been cut off.
15. When the flammable gas leaks, stop using the product, turn it off.
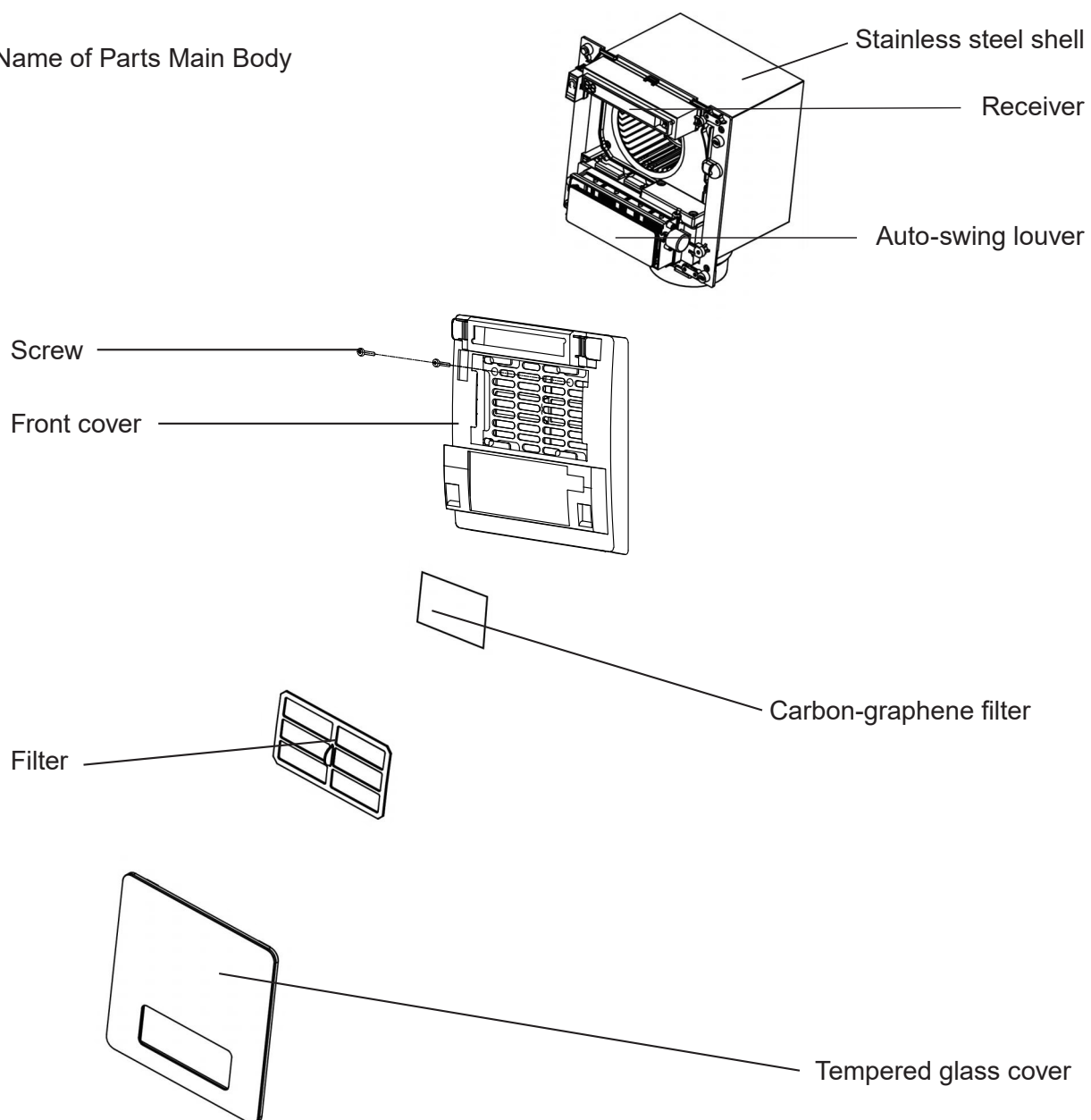16. Do not cover the heater, especially the front panel where the air inlet and heating air outlet, to avoid overheat and danger.
17. This heater must not be located below a socket outlet, and do not install it too close to the socket outlet, to prevent damage of other electrical appliances, if the heater gets damaged.
18. Prohibit using any programs or timer automatically connected to the power or any other devices to start this product, otherwise it may cause damage to the product or fire.
19. Do not install this product near curtains and other flammable material to prevent any danger.
20. During installation and normal usage, do not remove the main circuit board, otherwise it may cause electric shock or fire.
21. This product is not suitable for the disabled, mental retarded or mental disorder, or those who are lack of experience and common sense(including children) unless they are under guidance. During the period of maintenance, children should be taken special care of and do not let them play the product as toys.
22. The children aged less than 3 year-old must stay away from the product, unless continuous supervision and guidance by any adult. The children aged between 3 and 8 years old, they can only switch on or off the product, with knowledge of relevant risk during usage and under guidance of adult , if the product is properly installed and in good condition. But they cannot plug or unplug the product, do complicate operation or repair it.
23. Warning— Some components or parts may become quite hot or cause burning. Particular attention must be given to children or vulnerable people if they are at present.
24. If the power wire or plug is damaged, do not use this product. The replacement or maintenance on the appliance must be done by the manufacturer, after-sales service department or other qualified persons.
25. To make sure that a switcher is available for completely cutting off the power, diagram below as reference:
26. According to 26A(3)(j) of Code of Practice for the Electricity (Wiring) Regulations, In a room containing a fixed bath or shower, the provision of socket outlets should comply with IEC 60364-7-701 and be installed 0.6m away from shower basin or bath tub, and the socket outlets should be protected by an RCD with a residual operating current not exceeding 30mA.

Earthing

The heater

Yellow/Green

Blue

Brown

Power terminal block

Distribution box

Earth leakage breaker

Power 220-240V~/50Hz
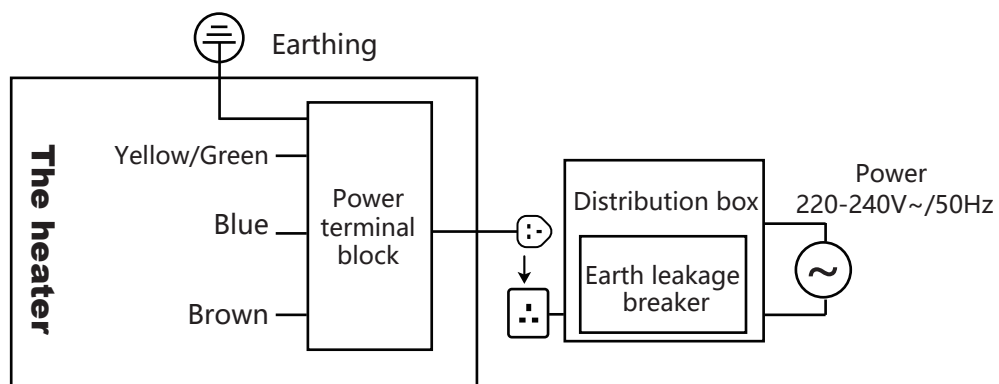
★ *Name of Parts*

1.Name of Parts Main Body

Stainless steel shell

Receiver

Auto-swing louver

Screw

Front cover

Carbon-graphene filter

Filter

Tempered glass cover

2. Infrared remote control

Dry Cool

Cir

Auto

Dry Hot

Heat

Vent

Time setting button

ION

Mode

Mode button

ION button

Timer

OSC

Fan

Fan speed button

Swing button

Air circulation
delay 15 minutes button

Delay
15mins
turn-off

Turbo

ON/OFF

On/off button

Turbo button

TGC
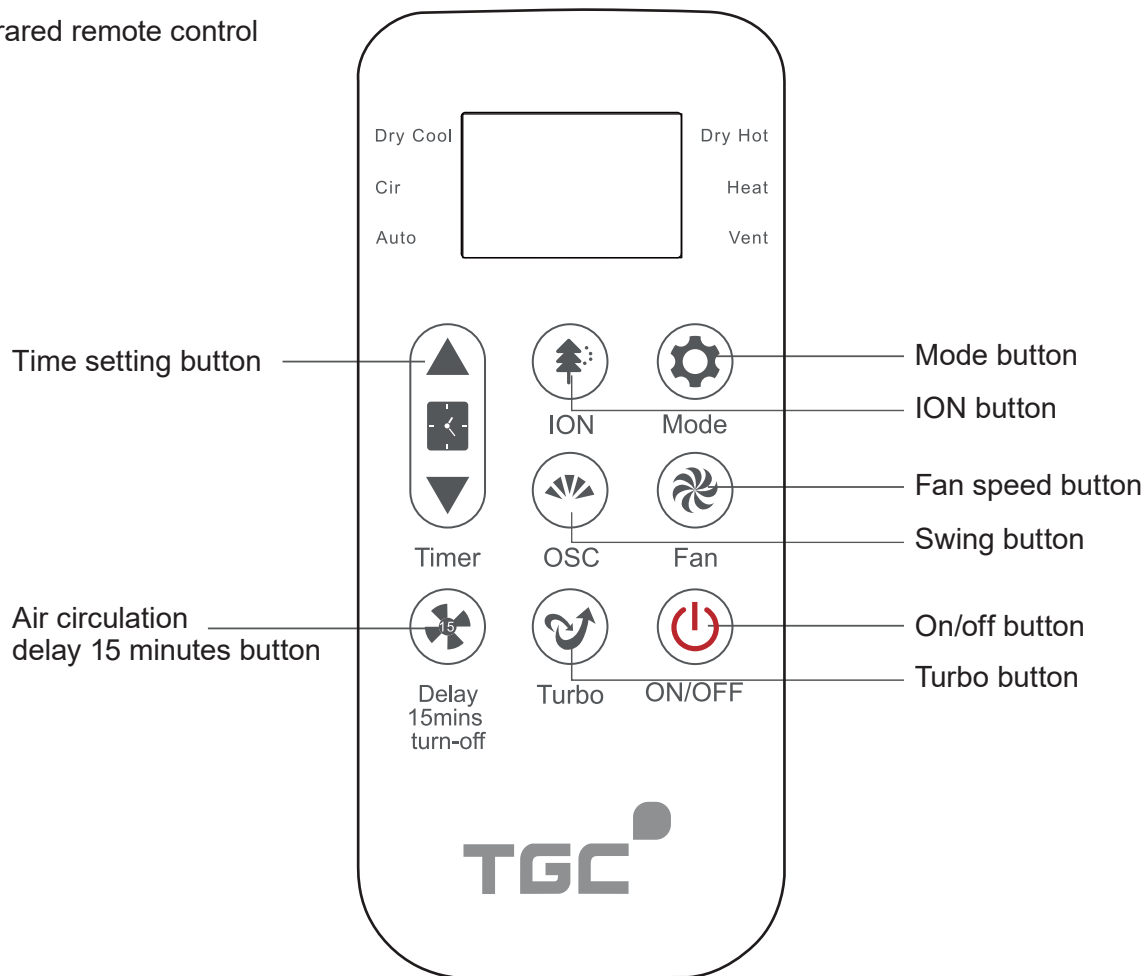
Dry Cool : adjust the air , to circle the indoor air , and a few air will be exhausted to the outdoor and exchanged with fresh air. It is suitable for those situation such like a bit thirsty, temperature is ok, no need heating.(no heating function)

Circulation : Adjust the air , only circle the indoor air, not exchange with outdoor , it is suitable for the good indoor air quality, comfortable indoor temperature , only need to increase the indoor air circulation.(no heating function)

Auto : Will choose circulation / heating / dry mode to work as per the room temperature , is available for situation that determined automatically.

Dry Hot : The indoor heating function is on, and will exhausted some indoor moisture air to outdoor and exchange, it is suitable for low indoor temperature ,higher humidity ,and is willing to increase the temperature and decrease the humidity.

Heating : Indoor heating function, the air is only being heated and circled indoor, it is suitable for the low indoor temperature, is willing to increase the temperature quickly.

Ventilation : Adjust the air function (no heating function),exhaust the indoor air to the outdoor and exchange it. It is suitable for the poor indoor air quality, need to refresh the air quality quickly.

Timer setting : press ▲ ▼ to adjust the running time of current mode (1-24H).

Delay 15 mins Turn - off : press this function, the ventilation function is on ,and will stop after 15 minutes.

Mode : press this button to switch the mode, auto-circulation-cool air—dry –heating -ventilation

ION : turn on / off ION function.

Fan : adjust the fan high / low speed.

OSC : turn on / fix the swing function, is not available if in ventilation mode / Delay 15 mins Turn - off mode.

On / off button : power on / off the device.

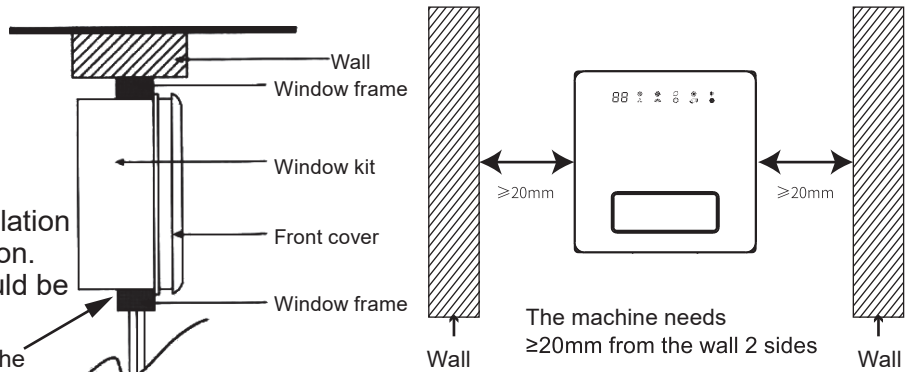**Turbo :** enter / quit the turbo mode.

★ Installation Method

A. Window type method

Front cover size:
254mm X 254mm
Cut-out Dimensions:
H 219mm X W 210mm
Main body thickness:
160mm.

*Remark: Window type installation
must be transverse installation.
the air exhaust position should be
downward

The vent is under the
stainless steel cover
and cannot be covered

Wall
Window frame

Window kit

Front cover

Window frame

≥20mm   ≥20mm

The machine needs
≥20mm from the wall 2 sides

Wall   Wall

1. Install at the place of the aluminum framed window or replace the exhaust fan in the bathroom
2. Fix the window kit to the frame of the aluminum window (waterproof glue must be used for waterproof)
3. After connecting the power cord, embed the main body into the hole with screws.

Stainless steel shell

Nails fixed hole   Main body fixed screw
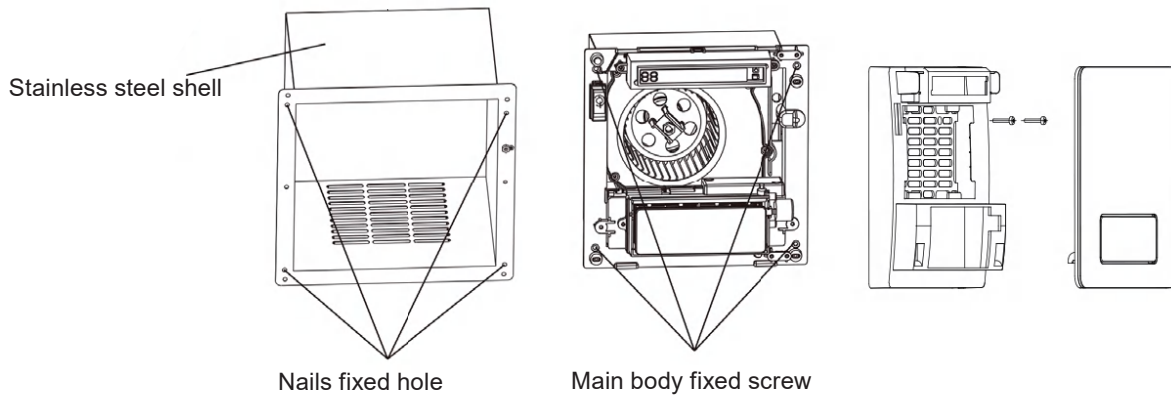
B. Wall mounted type method

1. Applicable for the bathroom without ceiling.
2. Fix the wall kit to the wall, then embed the main body on the wall kit.
3. Set the exhaust pipe (4" inner diameter 100mm) to the glass of window, and fix it to the adaptor with tape or metal clamp.
4. Applicable size of the main body: 254mmX254mm,
   Thickness of the main body: 160mm.
5. The minimum distance between the surrounding structures should be 50 cm.

Surrounding
structures

≥50cm   ≥50cm

Surrounding
structures

TGC
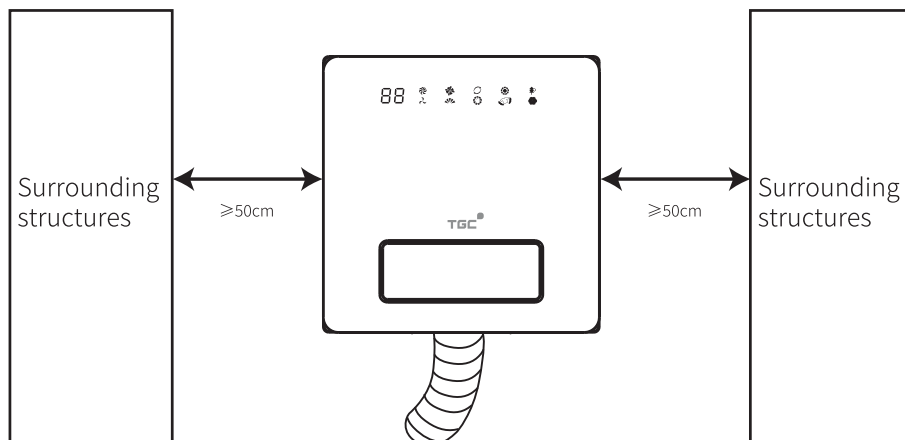
## c. Integrated suspended ceiling method

1. Install the main body

- After punching a hole on the ceiling, install the M6 flat detonating screw* same as the left image, then screw suspender* into the M6.
- Fix the main body to the suspender*. (*M6 flat detonating screw and suspender need to be purchased separately)

(the M6 flat detonating screw)

1.screw
2.nut
3.washer
4.fixed hole for the machine
5.hooded nut
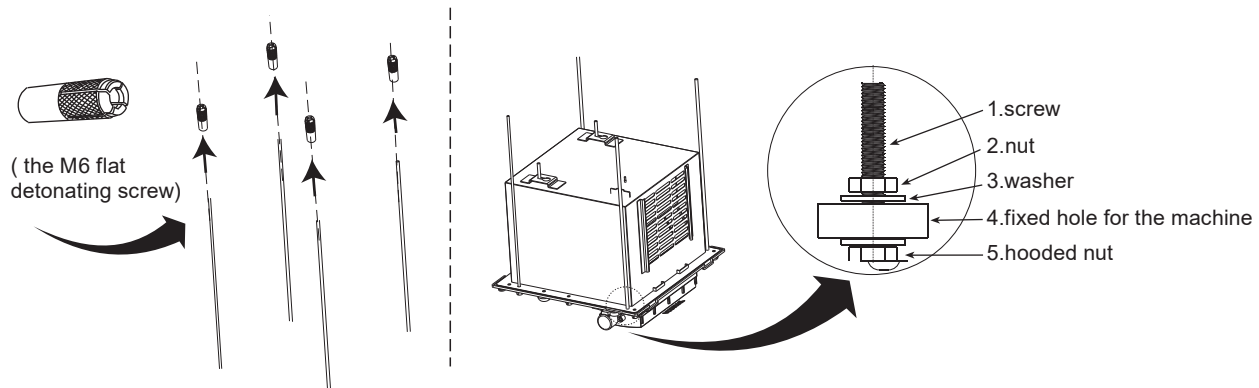
2. Install the exhaust pipe

- Use tape or the filling to seal the junction between the exhaust pipe and adaptor.
- The exhaust pipe should have the tendency (1 degree to 2 degrees) down towards outside.

plastic choke	Nominal 4" inner diameter>100mm
Al-Sn-Zn choke	

Downdip 1°-2°

Tape or fillings
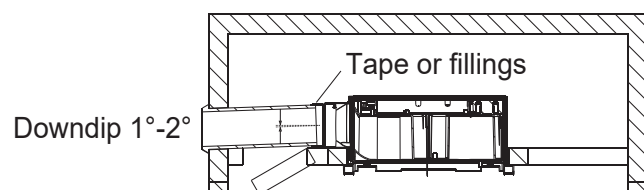
3. Install the front cover

a. Open the 4 screw covers, and use 4 screws to fix the front cover and main body.
   Please check the following inspection points once above finished:
b. Whether the installation of the front cover is well fixed.
c. Whether any noise or shaken happen during operation.

4. When installing this product on the ceiling, the length of the fixed screw (diameter 6, purchased separately) should be appropriate to maintain the level of the body. However, if the cutting length of the screw is insufficient or the ceiling height error cannot be maintained horizontally, this installation method can be used to adjust the length using four adjustment nuts.



Adjustable nut
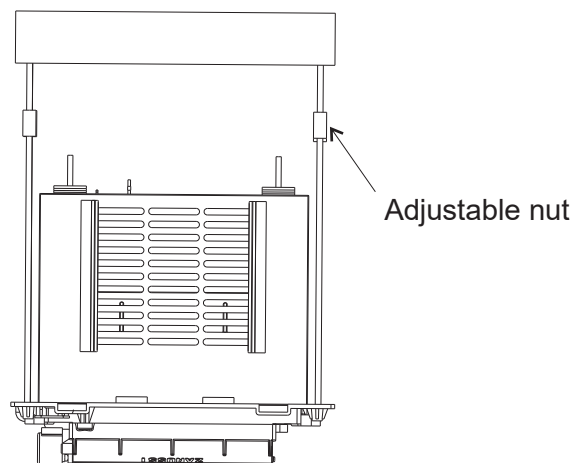
★ *Installation of Remote Controller*

● This is the wireless remote control, please install it to the suitable place with the accessory holder if necessary

1.Fix the R/C holder to the designated place and make marks according to the arrows
2.Dig holes 1/4 (6mm) according to the marks, and fill in the holes with 4 plastic plugs.
3.Put the remote controller into the holder.

1   2   3
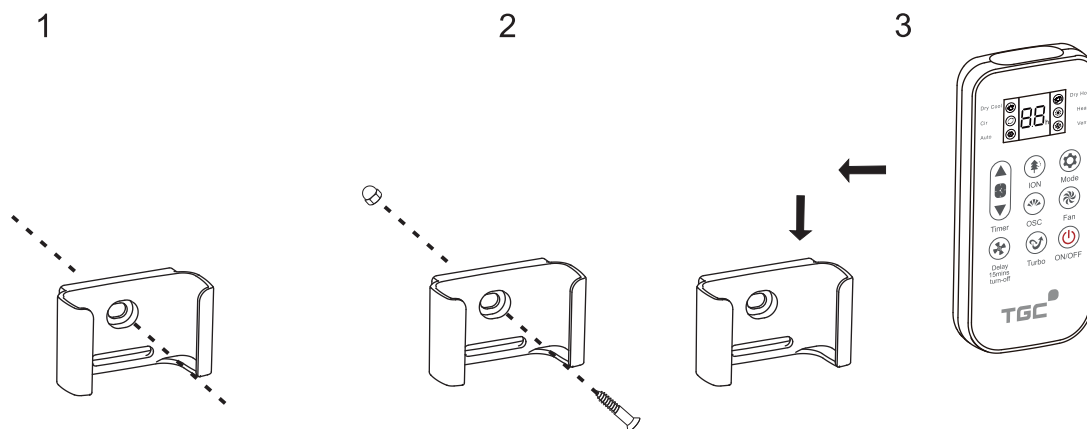
★ *Installation of Exhaust Pipe*

● Please avoid the following situations when installing the exhaust pipe.

1. Over bending exceeds 90°.
2. Bending is excessive. No more than two bends are allowed within a distance of 1meter.
3. The bend of the pipe is too close to the main body. The distance needs to exceed 20cm.
4. The pipe shrinks.

Over bending exceeds 90°	Bending is excessive.No more than two bends are allowed within a distance of 1meter	The bend of the pipe is too close to the main body.The distance needs to exceed 20cm	The pipe shrunks
		Main boby	
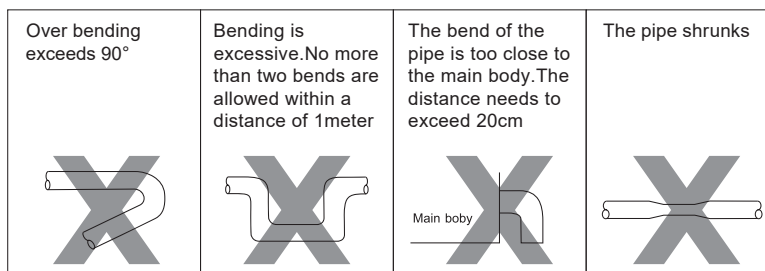
★ *Electrical engineering-wiring*

1. Installation and wiring must be done by qualified electrical engineering contractor.
2. Please use the product under rated voltage and rated frequency in accordance with its rating label.
3. Please prepare the unique air switch for this product in the user's house, and let the air switch should be consistent with air switch off contact all extremely disconnected requirements of distance is greater than 3mm, in order to cut off the power of the product immediately in case of accident.
4. Must be connected to the ground wire.
5. During installation, the fixed power wiring must be in accordance with local safety regulations.
6. For metal net bottom, steel wire net bottom of walls or wooden houses with the metal surface, etc. when install metal exhaust pipe through, do paying attention that there shall be no electrical contact.
7. When the power supply is insufficient, contact with electric power supply company.
8. Prior to the opening front cover, please make sure that the machine is powered off.
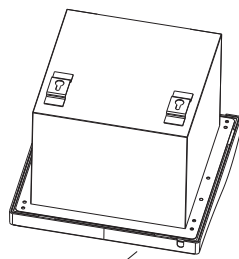
Stainless steel shell

Infrared Wireless
Remote Control

>1.8m
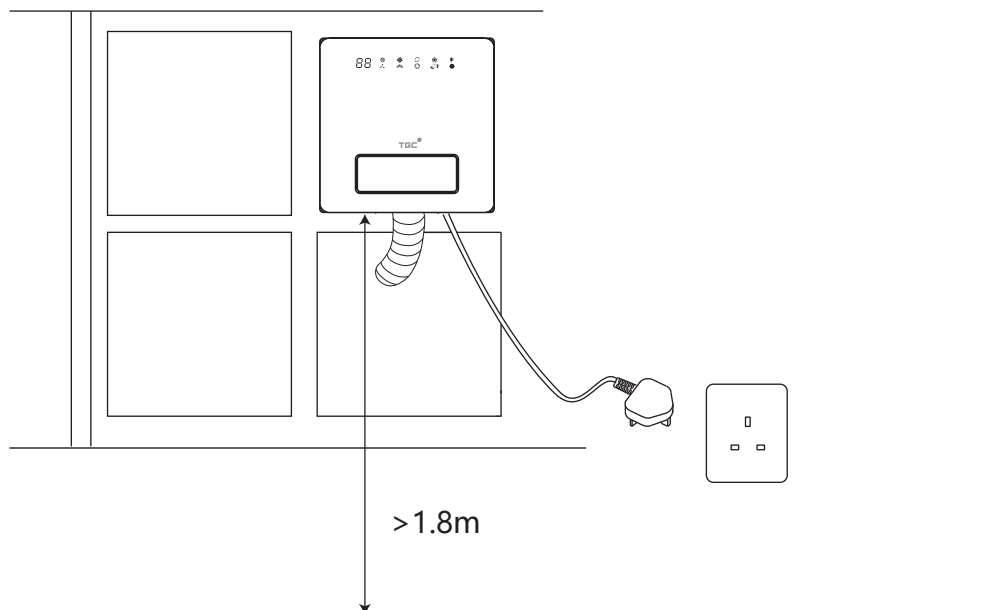
9. This product shall not be placed directly below the power outlet, do not install too close to the socket to prevent the host electrical equipment from being damaged and damage other electrical appliances.

★ *Instructions*

FUNCTION	APPLICATION	OPERATION STATUS			Pre-set（Default setting）
		Circulation	Indoor ventilation door	Heater	
AUTO	Automatic detection operation mode	/	/	/	1h
VENT (Wind speed switch key high/low)	Air exhaust (air exhaust)	Working speed is adjustable (low/high / Turbo)	OFF	OFF	2h (1-24h)
Delay power off 15 minutes	Air exhaust (air exhaust)	Low speed	OFF	OFF	15 Min
Dry Cool (Wind speed switch key high/low)	Increase the bathroom air flow and a few ventilation	Working speed is adjustable (low/high / Turbo)	All on (up and down angle is adjustable)	OFF	4h (1-24h)
Heat (Wind speed switch key high/low)	Warm air (not air exhaust)	Working speed is adjustable (low/high / Turbo)	All on (up and down angle is adjustable)	ON	2h (1-24h)
Dry Hot (Wind speed switch key high/low)	Rapid drying of the bathroom, laundry drying (air exhaust)	Working speed is adjustable (low/high / Turbo)	All on (up and down angle is adjustable)	ON	4h (1-24h)
CIR (High/low fan speed key switch)	Cycle in bathroom (no air exhaust)	Working speed is adjustable (low/high / Turbo)	All on (up and down angle is adjustable)	OFF	2h (1-24h)
OSC (up and down automatic)	Swing direction of the wind swing	Swing Up and down from 40-80 degree	/	/	Defaulted 80 degree
ION (release the ION to air purification)	ION generation	ON	/	/	/

★ *Function Descriptions*

1. AUTO Function ⚛ :

- Start: press "AUTO ⚛ " button, the "AUTO ⚛ " indication light gets on, and the machine starts to run in automatic mode, and the air volume runs at the mode of "Lo 🗘" for 20 seconds to detect the room temperature, the machine will run at different modes according to the room temperature(air volume automaticallyat "Hi 🗘 " mode).

  a. Room temperature>24 ℃ degrees, the"CIR 🗘 " function is on, will display AUTO ⚛ icon

  b. Room temperature<20 ℃ degrees, the"Heat ☀ " function is on, will display AUTO ⚛ icon

  c. 20 ℃ degrees<room temperature<24 ℃ degrees, the "Dry Hot 🗘 " function is on, will display AUTO ⚛ icon

  d. Timer : default setting is 1 hour, it is not changeable.

  Stop: press the "ON/OFF ⏻ " button or pre-set time runs over, "AUTO ⚛ " indication light gets off,

- and the time display will disappear, and the machine stops automatically.

2. Ventilation Function 🌀 :

- Start: press the "Vent ❄ " button , the "Vent ❄ " indication light gets on, air volume will run the "Lo 🗘 " mode. Press the "Speed" button to inter-change the "Hi 🗘 " or "Lo 🗘 " mode, Press "Turbo 🗘 " button, enter the strong working state (running noise of the whole will be a corresponding increase), after entering the HI 🗘 icon, LO 🗘 lit up at the same time, again according to the "Turbo 🗘 " key to exit a strong state, the next will start according to the user's habits, automatic memory the previous working condition.
- Timer: the default setting is 2 hours, By pressing the button "Time-up-down" to select time duration. The time could be set from 1 hour to 24 hours. The time counter will be showed on the "88" LED display. The time selection will be recorded in memory when it is off, and will resume in next usage.
- Under the mode, the inter-change of air volume between "Hi 🗘 " and "Lo 🗘 " will not affect the time counting.
- Stop: press the "ON/OFF ⏻ " button or pre-set time runs over, "Vent ❄ " indication light gets off, and the time display will disappear, and the machine stops automatically.

3. Delay 15 mins Turn Off 🌀 :

- Start: press "Delay Vent ❄ " button, and the "Delay Vent ❄ " indication light gets on, it runs delay vent mode. It will stop after 15 minutes as default setting. The settime could not be selected, and no display.
- Stop: press "ON/OFF ⏻ " button, and the default time run over, the machine will stop automatically.

4. Dry Cool Function ❄ :

- Start: press "Dry Cool ❄ " button to start with a "Hi 🗘 " mode for operation and indication light gets on. You can choose "Hi 🗘 " or "Lo 🗘 " air volume by continuously press "SPEED 🗘 " button, Press "Turbo 🗘 " button, enter the strong working state (running noise of the whole will be a corresponding increase), after entering the HI 🗘 icon, LO 🗘 lit up at the same time, again according to the "Turbo 🗘 " key to exit a strong state, the next will start according to the user's habits, automatic memory the previous working condition.
- Timer: the default time is 4 hours. By pressing "TIME-UP-DOWN" button to select time duration. The time can be set form 1 hour to 24 hours. The remaining time will be showed on the LED display. The time selection will be recorded in memory when it is off, and will resume in your next usage.
- Under the mode, the inter-change of air volume between "Hi 🗘" and "Lo 🗘' will not affect the time counting.
- Stop: press the "ON/OFF ⏻ " button or pre-set time runs over, "Dry Cool ❄ " indication light gets off, and the time display will disappear, and the machine stops automatically.

5. Heat Function ☀ :

- Start: press "Heat ☀ " button to start with a "Lo ⚡ " mode for operation and indication light gets on. You can choose "Hi ❀ " or "Lo ⚡" air volume by continuously press "SPEED" button, Press "Turbo ❤ " button, enter the strong working state (running noise of the whole will be a corresponding increase), after entering the HI ❀ icon, LO ⚡ lit up at the same time, again according to the "Turbo ❤ " key to exit a strong state, the next will start according to the user's habits, automatic memory the previous working condition.
- Timer: the default time is 2 hours. By pressing "Time-up-down" button to select time duration. The time can be set form 1 hour to 24 hours. The remaining time will be showed on the LED display. The time selection will be recorded in memory when it is off, and will resume in your next usage.
- Under the mode, the inter-change of air volume between "Hi ❀" and "Lo ⚡ " will not affect the time counting.
- Stop: press the "ON/OFF ⏻ " button or pre-set time runs over, "Heat ☀ " indication light gets off, and the time display will disappear, and the machine stops automatically.
- When the heater stops running, the fan will continuously run for around 35 seconds to cool down the heater.

6. Dry Hot Function ⟨⟩ :

- Start: press "Dry ⟨⟩ " button to start with a "Lo ⚡ " mode for operation and indication light gets on. You can choose "Hi ❀ " or "Lo ⚡ " air volume by continuously press "SPEED" button, Press "Turbo ❤ " button, enter the strong working state (running noise of the whole will be a corresponding increase), after entering the HI ❀ icon, LO ⚡ lit up at the same time, again according to the "Turbo ❤ " key to exit a strong state, the next will start according to the user's habits, automatic memory the previous working condition.
- Timer: the default time is 4 hours. By pressing "Time-up-down" button to select time duration. The time can be set form 1 hour to 24 hours. The remaining time will be showed on the LED display. The time selection will be recorded in memory when it is off, and will resume in your next usage.
- Under the mode, the inter-change of air volume between "Hi ❀" and "Lo ⚡ " will not affect the time counting.
- Stop: press the "ON/OFF ⏻ " button or pre-set time runs over, "Dry ⟨⟩ " indication light gets off, and the time display will disappear, and the machine stops automatically.
- When the heater stops running, the fan will continuously run for around 35 seconds to cool down the heater.
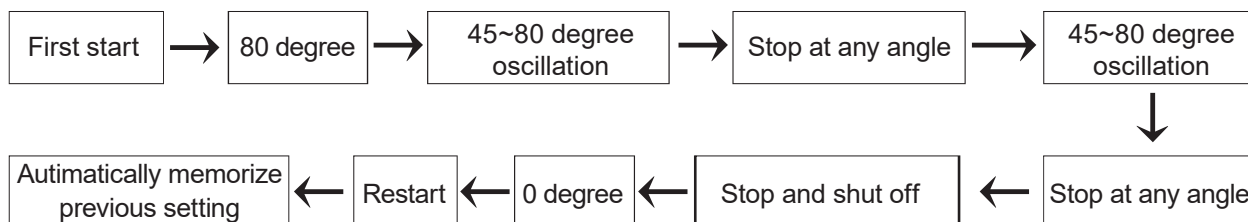
7. Cir Function ○ :

- Start: press "CIR ○ " button to start with a "Hi ❀ "mode for operation and indication light gets on. You can choose "Hi ❀ " or "Lo ⚡ " air volume by continuously press "SPEED" button, Press "Turbo ❤ " button, enter the strong working state (running noise of the whole will be a corresponding increase), after entering the HI ❀ icon, LO ⚡ lit up at the same time, again according to the "Turbo ❤ " key to exit a strong state, the next will start according to the user's habits, automatic memory the previous working condition.
- Timer: the default time is 2 hours. By pressing "Time-up-down" button to select time duration. The time can be set form 1 hour to 24 hours. The remaining time will be showed on the LED display. The time selection will be recorded in memory when it is off, and will resume in your next usage.
- Under the mode, the inter-change of air volume between "Hi ❀ " and "Lo ⚡ " will not affect the time counting.
- Stop: press the "ON/OFF ⏻ " button or pre-set time runs over "CIR ○ " indication light gets off, and the time display will disappear, and the machine stops automatically.

8. OSC ⚜ :

- Start: default running the on and off operation, same with fan. If it is ON, LCD " ⚜ " icon will display, and " ⚜ " icon will disappear when it is off. When it is off, the swing function is invalid, and the louver will resume to 0 degree position.
- Start2 : When it is fan mode, the default is 80 degree louver position
- Auto-swing When the fan is running, press the "OSC ⚜ " button, the louver will turn from 80 degree position to swing from 45 degree to 80 degree. Press "OSC ⚜ " button again, auto-swing function will stop, and if you press it again, it will run auto-swing again.

| First start | → | 80 degree | → | 45~80 degree oscillation | → | Stop at any angle | → | 45~80 degree oscillation |

↓

| Autimatically memorize previous setting | ← | Restart | ← | 0 degree | ← | Stop and shut off | ← | Stop at any angle |

- Stop: When press "ON/OFF ⏻ " button or pre-set time runs over, the louver will return to 0 degree position. But then it will resume in next usage, as recorded in memory.

9. Ionizer Function 🌲 :

- In the ON state, the display window of the host machines' receiver is illuminated.
  In the OFF state, the display window is turned off. In the OFF state of the circulating fan, the negative ion key is disabled.

- To stop mid way in running.Dress the 🌲 button. To resume ionizer function.Press again 🌲 button.

10. Emergency Button:

- Press the start emergency button to automatic mode operation, once again touch the emergency button to switch to the ventilation mode operation, and touch again the emergency button to switch to standby mode.

Emergency Button ←
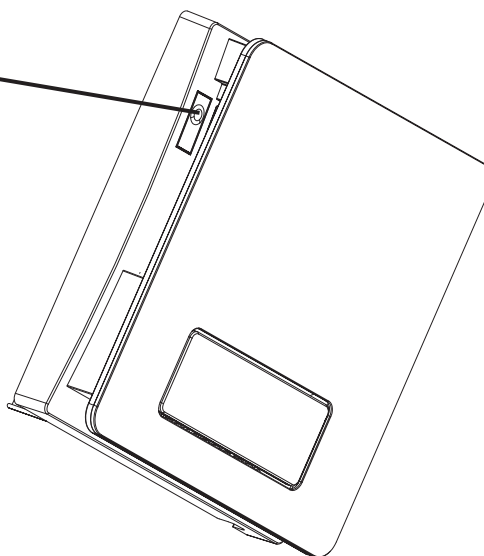
★ *Maintenance and Safety Items*

■ Maintenance:

- Please make sure that the machine is power off before maintenance.
- Please clean the front cover
  a] please use the soft rag or soft brush to clean the dirty place of the cover.
  b] Put a clean rag in the warm water dissolved with neutral detergent, then use the rag to wipe the front cover. Use another rag to wipe the panel then. The surface shall have no detergent residues.
- PVC filter cleaning:
  a] Please take out the filter and put it in water to clean the dust and dirty after around 1-3 weeks usually, then put it back to the cover after the filter is dry.
  b] Subject to the frequency of use and environment.

Front Cover
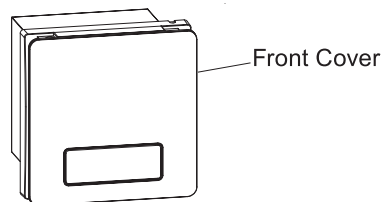
Steps of removing filters

Lock catch

Press the lock catch

Carbon-graphene filter*
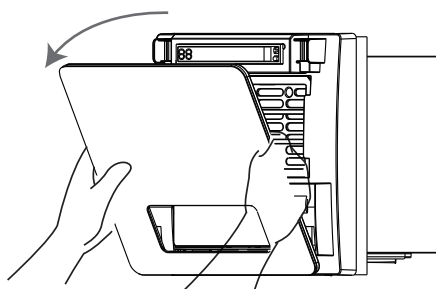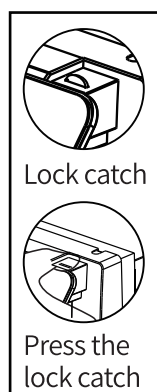
PVC filter

(1) Uninstall the glass panel, press the lock catch on the two sides of glass roof cover, take down the roof cover outward.
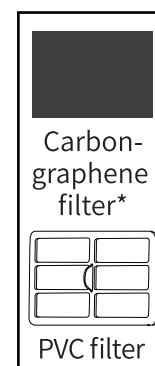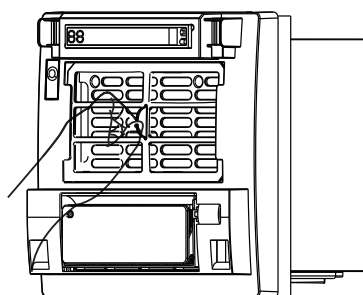
(2) Take down the PVC filter outward from filter handle, then clean the PVC filter, you can replace the Carbon-graphene filter* if necessary.

The PVC filter is bent a bit

Slot
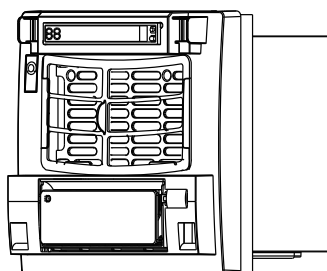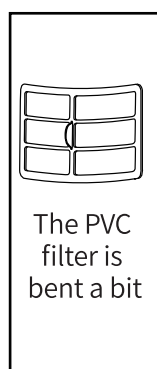
(3) Install new carbon-graphene filter* put one end of the PVC filter into the neck of shell , bend the PVC filter abit, then lock the other end into the neck.

Attention: Carbon-graphene filter is not washable.
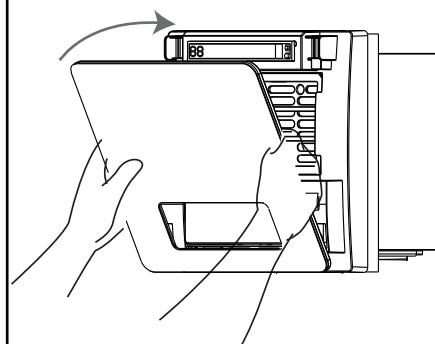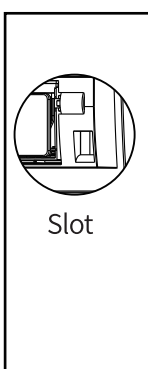
(4) Lock the bottom part of glass roof cover into the neck, press the top part and it will be locked automatically, then pull the glass roof cover outward with little strength.

■ **Safety Items:**
- Do not put your hands into the machine when running, to avoid injury or burn by the heater.
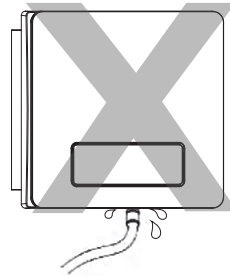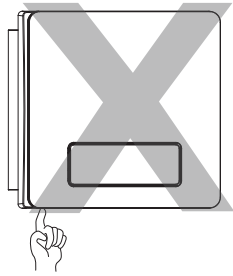- Do not spray water into the main body, which may damage the motor, or cause electric shock by the electricity leakage.

- In order to avoid any accident or injury, if any of the following symptoms and abnormal situation occur, please switch off the electricity and call the customer service hotline, 2232 1000. ask qualified electrical engineering contractor for repairing or checking (self repair by user is strictly prohibited, to avoid danger).
  a] Turn on the power, the fan does not work
  b] The power suddenly on, then gets off suddenly, and in turn.
  c] Abnormal sound and vibration during operation
  d] Plastic smell or other abnormal smell occurs.

■ **Trouble-shooting guide:**

Phenomenon	Check	Solution
Does operate when the power is turn on	No power supply	Switch the power
	The light of the remote control does not light on	Call the customer service hotline, 2232 1000 Ask the qualified technician for repair
The sound becomes much louder	Filter blocking	Remove the panel and clean the filter
The remote control does not work	Low battery	Change the battery

Error Codes	Cause	Remedy
E1	Environment temperature sensor abnormal	Contact customer service for services.
E2	PTC temperature sensor abnormal	
E3	Overheat protection device activated	Check whether the air inlet or outlet are blocked.
E4		Clean the dirt on PVC filter.

★ *Specifications*

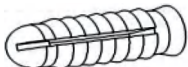| Function	Max air volume Ventilation (m³/h)	Max of circulation (m³/h)	Motor power consumption (W)	Heater (W)
HEAT (Turbo)	/	110	50.8	1350
HEAT (Hi)	/	90	40	1300
HEAT (Lo)	/	80	26	1250
DRY HOT (Turbo)	67	60	50.8	1280
DRY HOT (Hi)	55	50	40	1200
DRY HOT (Lo)	55	50	40	1120
VENT (Turbo)	100	/	50.8	/
VENT (Hi)	85	/	40	/
VENT (Lo)	65	/	26	/
DRY COOL (Turbo)	67	60	50.2	/
DRY COOL (Hi)	55	50	40	/
DRY COOL (Lo)	40	45	26	/
Delay power off	85	/	40	/
Adaptor size	98mm			
Power	220-240V~ 50Hz			
Weight	4.7kg			
Product size (H×W×D)	254x254x218mm			
Product with wall mount (H×W×D)	254x254x229mm			

Remote control

Size (H×W×D)	121x56x17mm
Power	1.5V（2Pcs）

★ *Screw list*

Hardware packs	Usage	Name	Specification	Amount	Picture
1.Standard setting	Fixed remote control	Screw	ST 4*25,Round head	2	
		Plastic plug	Φ8*27	2	
2.Ceiling type setting	Air outlet joint*3, Air channel fixation*4	Screw	ST 4*25,Round head	7	
	Main body fixation	Fixed Nut	M6	4	
	Main body fixation	Fixed Screw	M6	4	
	Screw Adjusting	Adjusting nut	M6	4	
3.Hung-to-wall type setting	Hung-to-wall support installation	Plastic plug	Φ8*27	2	
		Screw	ST 4*25,Round head	2	
4.Window type setting	Watertight casing on the window	Screw	ST 4*25,Round head	4	

* Please note that any changes to the specifications and design will not be communicated without prior notice.
* If there are any discrepancies between the English and Chinese versions, please refer to the Chinese version.

Towngas
Enterprise