



浴室換氣暖風機

使用說明書

HB21417

HB21424



使用前請詳細閱讀本說明書

注意：本浴室換氣暖風機必須由政府認可合資格或授權人員安裝，以免造成危險及意外。

重要的安全資訊

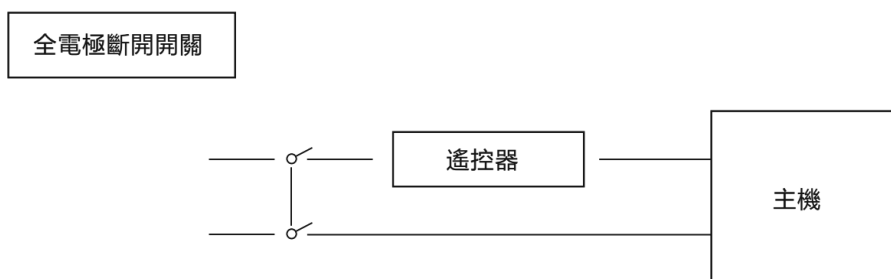
- 必須適應具體的電源 (220-240V ~ /50Hz) 。
- 本加熱器不適用於身體、感官或精神有缺陷，及缺乏必要經驗和知識的人們 (包括兒童) ，除非在能對其安全負責的人的監管下使用。
- 應對兒童應進行監管，以確保他們不玩耍加熱器。
- 為了更方便地使用該產品，並避免錯誤操作造成任何危險，請注意以下事項。
 - 如果電源線損壞，為了避免危險，必須由製造商、其維修部或類似部門的專業人員更換。確保電源線遠離走路通道，並置於不會絆倒人的位置。
 - 警告：為避免過熱，禁止覆蓋加熱器。
 - 加熱器不得直接置於電源插座下面。
 - 在浴缸、噴頭或泳池的四周不得使用本加熱器。
 - 本加熱器不具備室溫控制功能，對於行動不便的人在狹小空間使用本加熱器時，必須有對其安全負責的人進行持續監管。
 - 當兒童對本加熱器進行清潔和維護時，必須有對其安全負責的人進行監管。
 - 3 歲以下的幼兒應遠離本加熱器，除非有對其安全負責的人進行持續監管。
 - 當本加熱器被放置或安裝在正常工作位置時、在有對其安全負責的人的指導或協助、並確保使用者的安全及其明白當中潛在危險的前提下，3 至 8 歲的兒童只可開啟/關閉本加熱器。3 至 8 歲的兒童不可調節、清潔、保養本加熱器，亦不可把本加熱器插頭連接電源。
 - **注意**：本加熱器的某些部位會變得非常熱並可能導致燙傷，當兒童和身體智力有障礙人士在場時要特別注意照顧他們。
 - 此產品必須接地綫。

- 接地線連接不正確可能會給您帶來危險。
- 請檢查接地線連接的可靠性，請不要另外自配電源線，如果您的插座與暖風機的電源線不匹配，請找有資格的電工為您配上合適的插座。
- 按照下面列出的所有安全預防措施，以減少受傷或遭電擊的危險。
 - 為了安全起見，使用此電器產品前，請仔細閱讀所有說明。
 - 保留說明書。如果你把產品交給其他人使用時，請一定要把說明書一併交給對方。
 - 使用前請確保產品裏面無水殘留。
 - **注意：**在沒有適當人員監護下，如果沒有能力自行走動者請不要獨自在房間使用這加熱器。
 - 清潔產品時，請關閉立即切斷電源，直到產品完全停止工作。
 - 請不要拉電源線。它可能會導致電源線損壞或漏電。
 - 使用該產品時如果有異常氣味或噪音，請立即停止使用，並立即切斷電源。
 - 請不要把重物放在電源線上或折疊電源線。它可能導致漏電。
 - 請不要讓孩子長時間被此電器直吹。這可能會影響孩子的健康。
 - 請不要濕手觸摸插頭。
 - 請不要把木棍或金屬插入通風口。它可能導致漏電，短路或產品損壞。
 - 不要在戶外使用。
 - 此產品僅為家庭使用。
 - 切勿將此設備或電線浸在液體中。
 - 使用此產品時，不要超越在說明書中規定的明確操作。
 - 本產品在開啟後必須時刻關注它。
 - 不要將任何物體插入暖風機。
 - 當使用暖風機時，將易燃物或爆炸性的物質遠離暖風機。

- 不要讓兒童或寵物靠近此暖風機。不要讓孩子操作此產品。當小孩在附近，使用暖風機時需要嚴格的監管。
- 使用暖風機時，請不要接觸高溫部分。
- 使用暖風機時不要跟其他家電共用插座。
- 不要使用延長綫和轉插頭。
- 如果它不能正常工作，請切斷電源並告知產品的客服服務中心。
- 請妥善處理包裝。
- 暖風機僅適用於個人室內取暖，請不要用於加熱任何液體或其他物質。
- 缺乏經驗和相關知識的人(包括兒童)或身體智力有障礙的人必須在有專人監督或指導的情況下使用本產品。除非一直被監管，否則上述人士(包括兒童)請遠離本產品。

2.安裝注意事項

- 本產品需安裝於能承受本製品重量之地方。
- 安裝不良可能會造成異音、共鳴、請妥善安裝。
- 為了不使排氣口的結露水流入室內，通往屋外的各排氣口必須保持屋外下斜。
- 安裝本機時，面板距離地面不得低於 1.8 米。
- 不可裝設於熱水爐正上方及攝氏 40 度以上之地方。
- 裝置機體時，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產品水平安裝。
- 請採取適當措施以防止氣體從一般排氣管或其他燃燒燃料的設備排氣管倒流回室內。
- 安裝本產品機體前，必須確保已斷開產品電源。
- 當發生易燃氣體洩漏時，禁止開啟和請關閉本產品的所有功能。
- 切勿把本產品安裝在靠近窗簾和其他可燃材料的附近，以免發生危險。
- 產品的安裝及維修需由廠家指定專業人員進行。
- 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 ~ 16A，且安裝在浴室外側方便操作的地方。如圖所示：

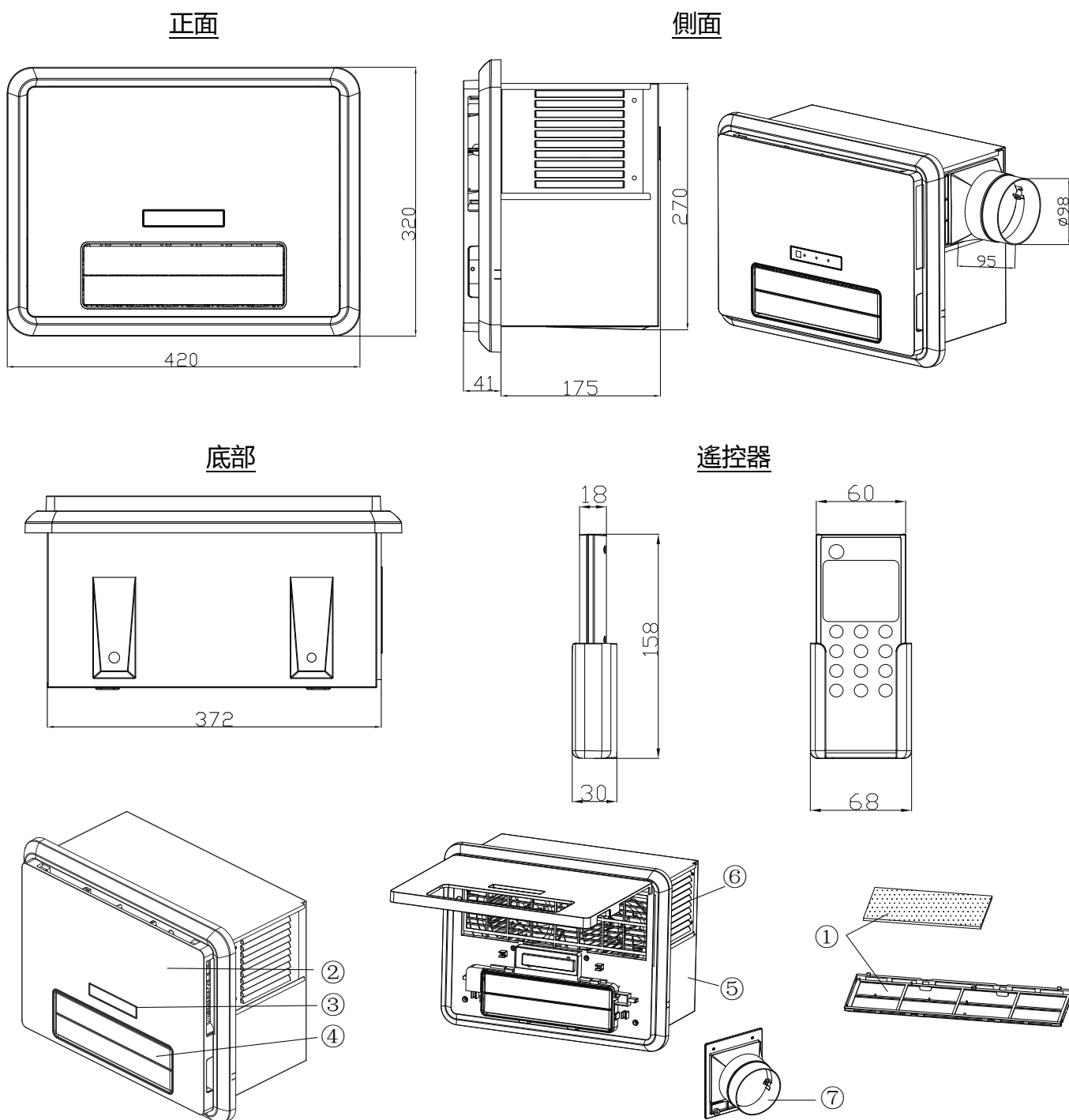


- 請勿安裝在桑拿蒸汽浴室中。
- 請勿安裝在油煙過多的場所。
- 請勿安裝在公共浴室。
- 請勿安裝在衣櫃內。
- 請勿遮蓋加熱器的出風口，否則可能會因加熱器過熱而引起火災。
- 切勿安裝在過於接近的電器插座，防止機體電器損壞時，造成其他電器損壞。
- 嚴禁利用帶有可自動接通電源的程式器、計時器或任何其他裝置來使用本產品。否則會損壞本產品，導致有發生火災的危險。
- 本產品的安裝不能讓在浴缸或淋浴區的人觸及到遙控器。
- 切勿將本產品直接暴露在淋浴器之下。
- 安裝和使用時嚴禁拆卸主電路蓋板，否則會導致觸電或起火。

【部件名稱及尺寸】

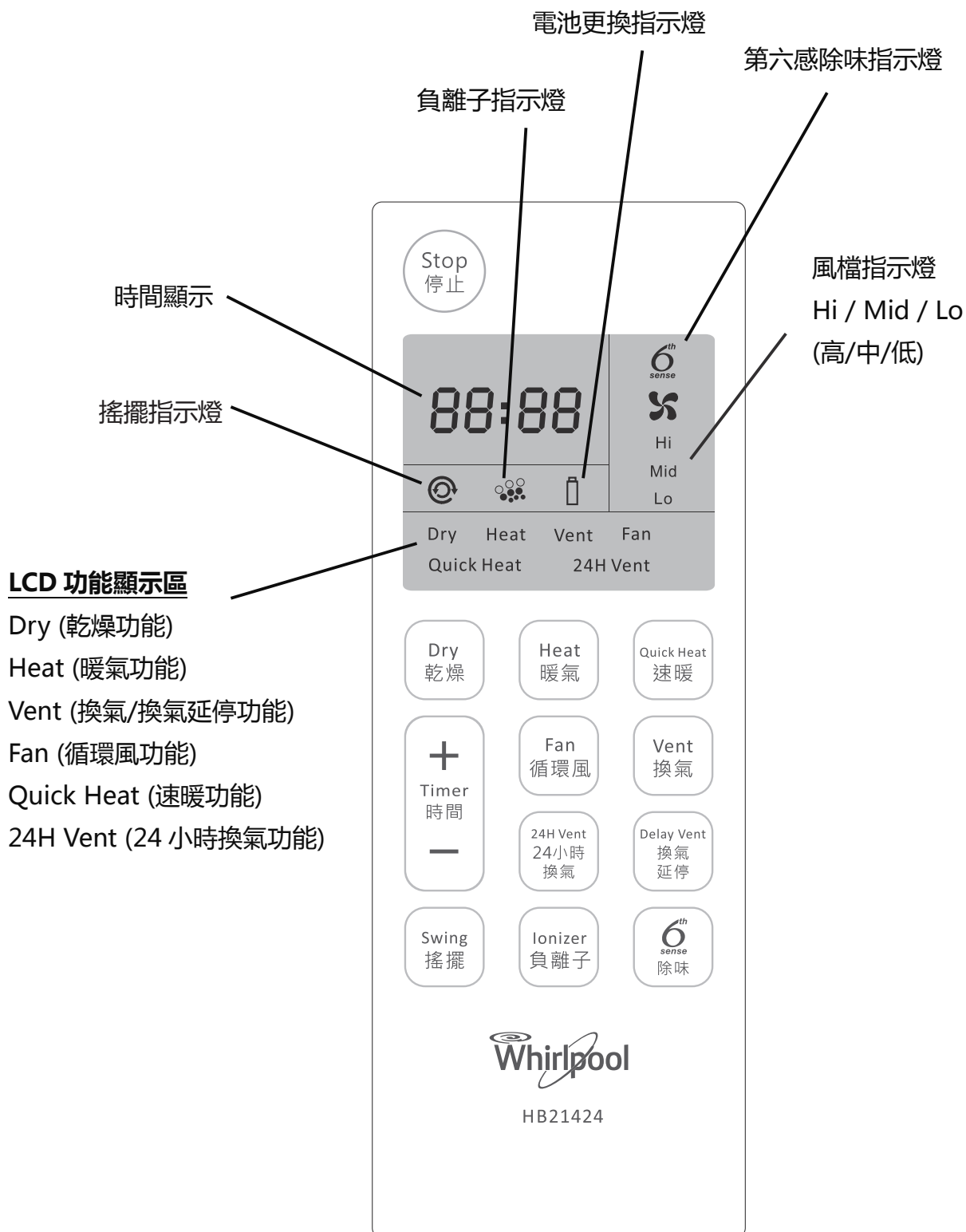
1.機體

單位：毫米



- | | |
|----------------------|-------------------|
| 1. 防塵網、活性炭過濾網 | 2. 面罩 |
| 3. 顯示窗 | 4. 出風口 |
| 5. 不銹鋼外殼 | 6. 百葉窗 (適用於窗口式安裝) |
| 7. 排風筒 (適用於天花/掛牆式安裝) | |

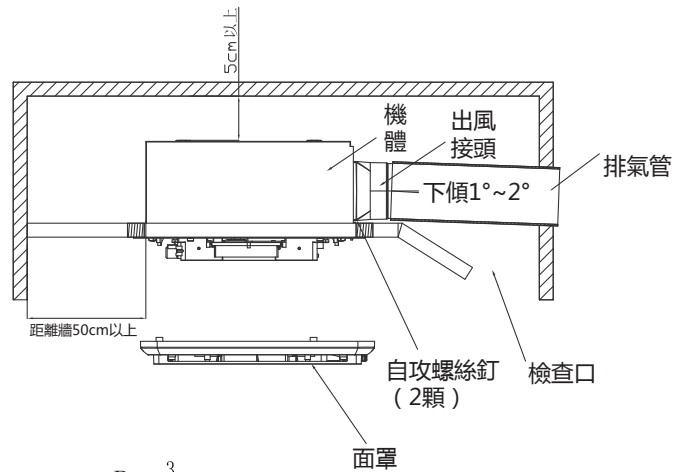
2.遙控器LCD顯示屏



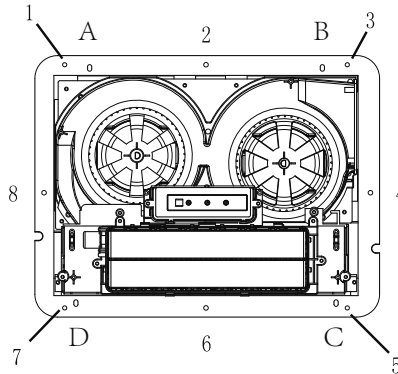
注意：HB21417 與 HB21424 的遙控器除型號不同外，其他顯示均相同。

【安裝方法及說明】

A. 天花固定框安裝



● 安裝參考圖：



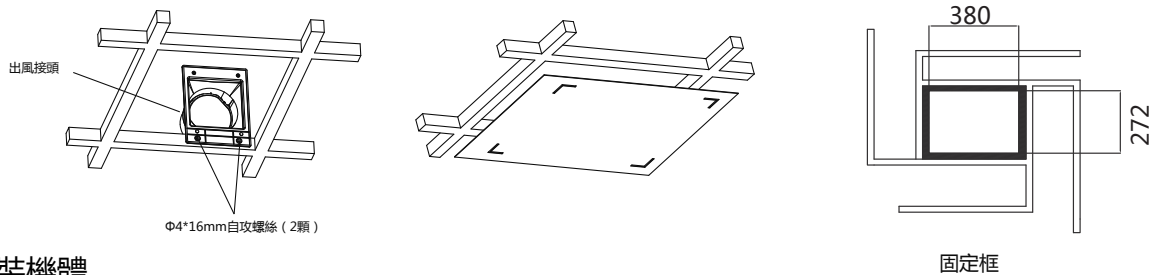
天花固定框安裝使用1,2,3,4,5,6,7,8螺絲孔
 吊頂天花板安裝使用A,B,C,D螺絲孔
 窗口式安裝使用1,2,3,4,5,6,7,8螺絲孔

● 安裝於天花板固定框

- 製作固定框。
- 請使用能承受機體重量(8.5kg)的元件材料來固定周邊。
- 固定框請用 30*25mm之木條釘製。
- 框內尺寸：380*272mm。
- 若無通往室外的排風管，則應先安裝內徑大於100mm的硬質排風管。

● 安裝出風接頭

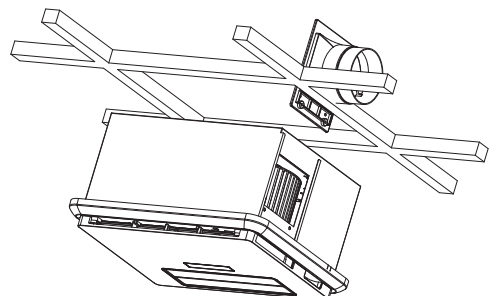
- 用直徑 $\Phi 4 \times 16\text{mm}$ (2顆) 的自攻螺絲將出風接頭固定於天花板上的固定框。



● 安裝機體

- 將機體和出風口之導槽對正出風接頭邊緣，再將機體往上推入。
- 請確認機體和出風接頭接合後，再用附屬之自攻螺絲直徑 $\Phi 4 \times 25\text{mm}$ (8顆)，將機體固定住。

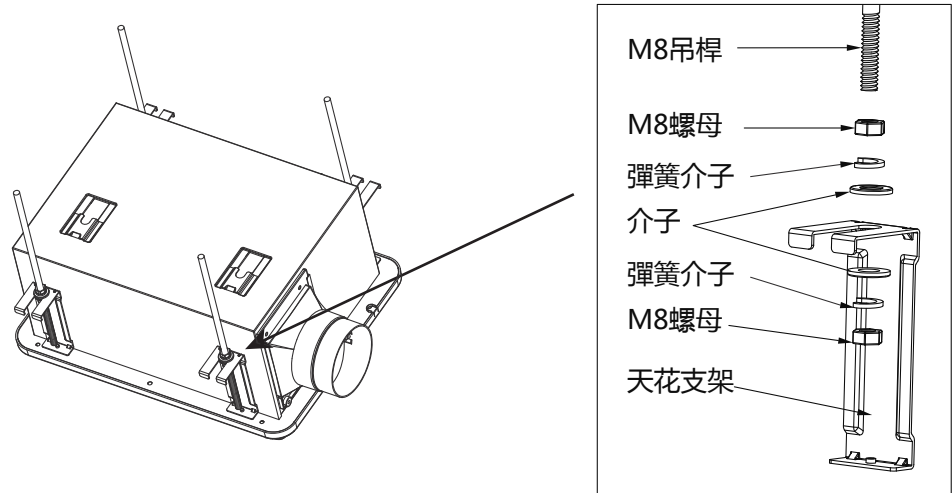
● 於周圍結構之間的最小間距為50cm。



【安裝方法及說明】

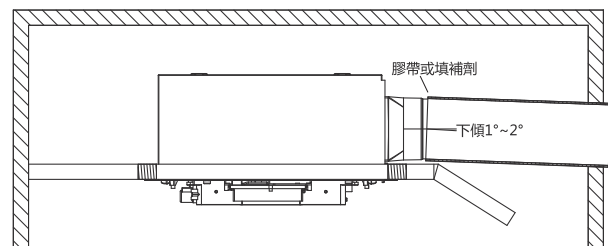
B. 吊頂天花板安裝

- 安裝機體：使用M8螺母，按照下圖指示，將主機固定在吊杆上（建議使用M8吊杆，客人需自行購買）。

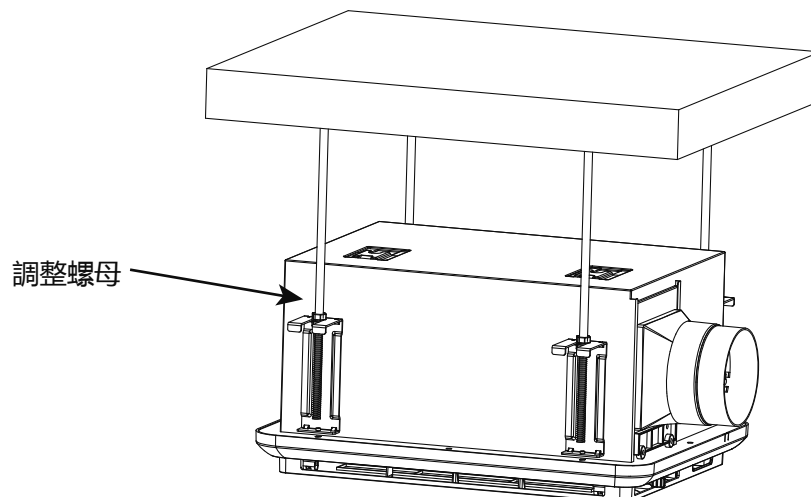


- 安裝排氣管
 - 排氣管出風接頭交接處請用膠帶或填補劑密封。
 - 排氣管傾向屋外傾斜1度~2度。

塑膠	公稱 4" (內徑 > 100mm)
鋁管	

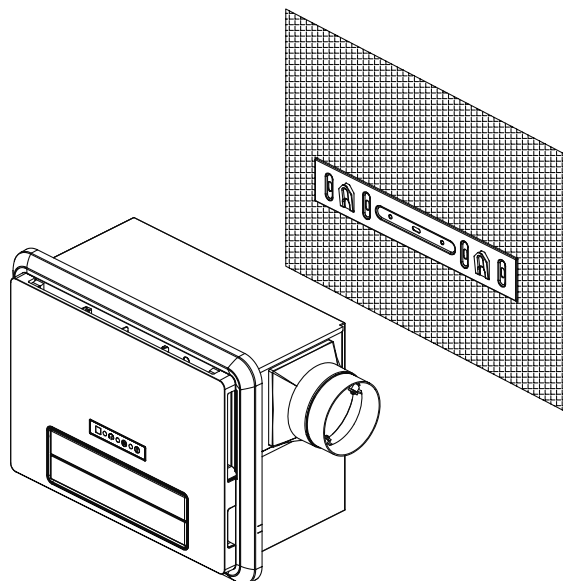


- 於周圍結構之間的最小間距為50cm。

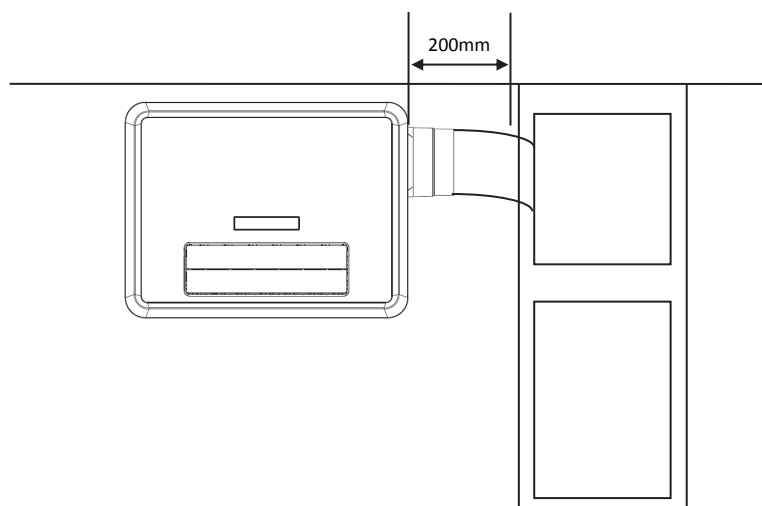


【安裝方法及說明】

C. 掛牆式安裝



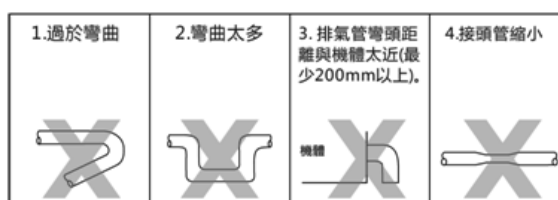
1. 適用於沒有假天花的浴室使用。
2. 先將掛牆支架橫置穩固定在牆上，再嵌入機身在支架上。
3. 再接駁 4 " (100mm)直徑排氣管到玻璃窗。用膠帶或玻璃膠把排風管固定在出風口接頭上 (專業人士安裝)。
4. 可以安裝的機身尺寸420x320mm, 右側要預留最少200 mm 安裝排氣口和管道位置。
機身厚度：216mm 於周圍結構之間的最小間距為50cm。







【安裝排風管】

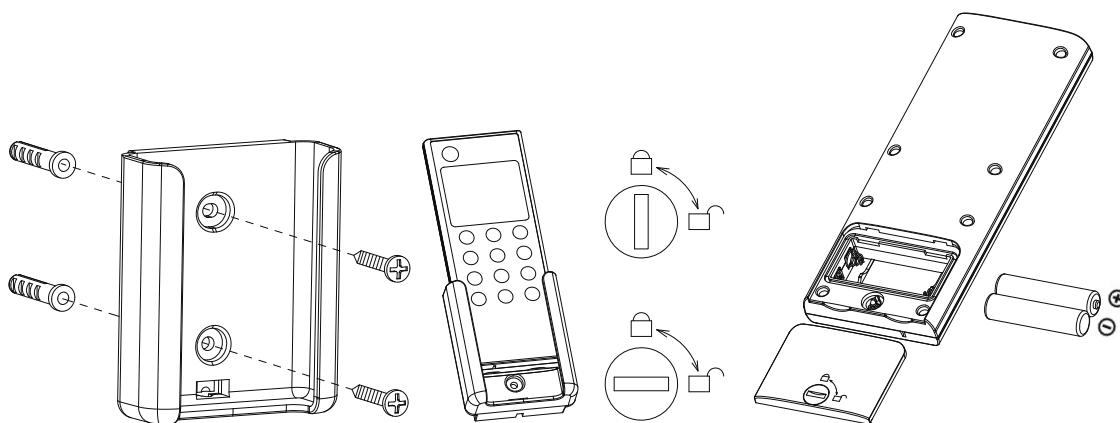
安裝風管應避免以下情況：

1. 過於彎曲。
2. 彎曲太多。
3. 排氣管彎頭距離與機體太近。
4. 接頭管縮小。



【遙控器的安裝】

1. 把遙控器從遙控器底座抽出；
2. 安裝遙控器前，請在預定安裝的位置上檢查接收信號的效果。若該位置無法使機體正常接受，請另選擇合適的位置或使用時從底座中取出遙控器對著機體進行操作。並且安裝位置應避免在花灑直淋處。
3. 遙控器底座放在所要安裝之位置，依箭頭處做上記號。
4. 依記號處鑽孔，埋入 2 個塑膠塞，再用螺絲固定遙控器底座。
5. 將兩粒 R03 (AAA) 乾電池放入遙控器中；
 - A) 將旋鈕  順時針轉至位置  ；
 - B) 打開電池蓋；
 - C) 將兩粒 R03 (AAA) 乾電池放入遙控器中；（注意正負極方向）
 - D) 重新蓋上電池蓋；
 - E) 將旋鈕  逆時針轉至位置  ；
6. 將遙控器放回遙控器底座。



【使用說明】




功能	用途	運作模式			預設時間	最長時間設定
		換氣扇	循環扇	加熱器 *		
1. 速暖	浴室變暖	關閉	高速運轉	開啟	2小時	12小時
暖氣 (高)		關閉	高速運轉	開啟	2小時	12小時
暖氣 (中)		關閉	中速運轉	開啟	2小時	12小時
暖氣 (低)		關閉	低速運轉	開啟	2小時	12小時
2. 換氣 (高)	浴室排氣	高速運轉	關閉	關閉	2小時	24小時
換氣 (中)		中速運轉	關閉	關閉	2小時	24小時
換氣 (低)		低速運轉	關閉	關閉	2小時	24小時
3. 乾燥 (高)	衣物烘乾	高速運轉	高速運轉	開啟	4小時	12小時
乾燥 (中)		中速運轉	中速運轉	開啟	4小時	12小時
乾燥 (低)		低速運轉	低速運轉	開啟	4小時	12小時
4. 循環風 (高)	浴室內涼風	高速運轉	高速運轉	關閉	4小時	24小時
循環風 (中)		中速運轉	中速運轉	關閉	4小時	24小時
循環風 (低)		低速運轉	低速運轉	關閉	4小時	24小時
5. 第六感除味	智能自動排走異味	根據氣味感測器決定風速運轉	關閉	關閉	2小時	24小時
6. 其他 - 24小時換氣	浴室排氣	低速運轉	關閉	關閉	24小時	/
換氣延停		低速運轉	關閉	關閉	15分鐘	/
搖擺	出風風葉擺動 -上下自動 45-120度來回擺動 -左右手動在 120度之間調較	/	/	/	/	/
負離子	負離子輸出	關閉	開啟/關閉	開啟/關閉	/	/

* 注意：加熱器開始操作時，因發熱器會有熱脹冷縮的過程，如聽見滴滴嗒嗒的聲音，這屬正常現象。

【功能說明】

1) 顯示屏介紹



- ：電源指示 - 接通電源後會亮起藍色指示燈
- ：空氣質素指示 - 紅色指示燈表示空氣質素“欠佳”，橙色指示燈表示“一般”，綠色指示燈表示空氣“良好”
- ：故障指示 - 機器發生故障時會亮起紅色指示燈

2) 暖氣功能 - 速暖

- 按“速暖”鍵，LCD “Quick Heat” 功能顯示，風量以“Hi” 模式開始運轉。
- 定時：預設時間為 2小時，可通過按“時間” 上下鍵改變設定時間。可設範圍為 5分鐘 - 12小時。時間會依據剩餘時間顯示在 LCD上。下次啟動會依使用者的習慣，自動記憶前一次的時間設定。
- 停止：當按“停止” 鍵或運轉完所設定的時間後，LCD “Quick Heat” 及剩餘時間會熄滅，本機會自動停止。
- 當加熱器停止運轉之後，風扇仍會運轉約25秒，以對加熱器進行冷卻。

暖氣功能 - 高 / 中 / 低

- 按“暖氣” 鍵，LCD “Heat” 功能顯示，風量以“Hi” 模式開始運轉。重複按“暖氣” 鍵可選擇 (Hi , Mid , Lo) 風量。
- 定時：預設時間為 2小時，可通過按“時間” 上下鍵改變設定時間。可設範圍為 5分鐘 - 12小時。時間會依據剩餘時間顯示在 LCD上，下次啟動會依使用者的習慣，自動記憶前一次的時間設定。
- 在此模式下定時的時間， Hi / Mid / Lo 風量的改變不影響時間的計算。
- 停止：當按“停止” 鍵或運轉完所設定的時間後，LCD “Heat” 及剩餘時間會熄滅，本機會自動停止。
- 當加熱器停止運轉之後，風扇仍會運轉約 25秒，以對加熱器進行冷卻。

3) 換氣功能 - 高 / 中 / 低

- 按“換氣”鍵，LCD“Vent”功能顯示，風量以“Hi”模式開始運轉。重複按“換氣”鍵，可選擇（Hi，Mid，Lo）風量。
- 定時：預設時間為 2小時，可通過按“時間”上下鍵改變設定時間。可設範圍為 5分鐘 - 24小時。時間會依據剩餘時間顯示在 LCD上。下次啟動會依使用者的習慣，自動記憶前一次的時間設定。
- 在此模式下定時的時間，Hi / Mid / Lo 風量的改變不影響時間的計算。
- 停止：當按“停止”鍵或運轉完所設的時間後，LCD“Vent”及剩餘時間會熄滅，本機會自動停止。

4) 乾燥功能 - 高 / 中 / 低

- 按“乾燥”鍵，LCD“Dry”功能顯示，風量以“Hi”模式開始運轉，重複按“乾燥”鍵，可選擇（Hi，Mid，Lo）風量。
- 定時：預設時間為 4小時，可通過按“時間”上下鍵改變設定時間。可設範圍為 5分鐘 - 12小時。時間會依據剩餘時間顯示在 LCD 上。下次啟動會依使用者的習慣，自動記憶前一次的時間設定。
- 在此模式下定時的時間，Hi / Mid / Lo 風量的改變不影響時間的計算。
- 停止：當按“停止”鍵或運轉完所設的時間後，LCD“Dry”及剩餘時間會熄滅，本機會自動停止。
- 當加熱器運轉停止後，風扇仍會運轉約 25秒，以對加熱器進行冷卻。

5) 循環風功能 - 高 / 中 / 低

- 按“循環風”鍵，LCD“Fan”功能顯示，風量以“Hi”模式開始運轉。重複按“循環風”鍵，可選擇（Hi，Mid，Lo）風量。
- 定時：預設時間為 4小時，可通過按“時間”上下鍵改變設定時間。可設範圍為 5分鐘 - 24小時。時間會依據剩餘時間顯示在 LCD上。下次啟動會依使用者的習慣，自動記憶前一次的時間設定。
- 在此模式下定時的時間，Hi / Mid / Lo 風量的改變不影響時間的計算。
- 停止：當按“停止”鍵或運轉完所設的時間後，LCD“Fan”及剩餘時間會熄滅，本機會自動停止。

6) 第六感除味功能

- 按“除味”鍵，LCD “6th_{sense}” 功能顯示。
- 第六感除味模式會自動偵測浴室環境的異味情況而自動進行除味功能，空氣質量指示燈會顯示異味程度，紅燈表示“欠佳”、風量以“Hi”模式運轉，橙燈表示“一般”、以“Mid”模式運轉，綠燈表示空氣“良好”、風量以“Lo”模式運轉。
- 定時：預設時間為 2小時，可通過按“時間”上下鍵改變設定時間，可設定範圍為 5分鐘 - 24小時，時間會依據剩餘時間顯示在LCD上。下次啟動會依使用者的習慣，自動記憶前一次的時間設定。
- 停止：當按“停止”鍵或運轉完所設定的時間後，LCD “6th_{sense}” 及剩餘時間會熄滅，本機會自動停止。
- 當每次重新接通電源，請於5分鐘後才開啟第六感除味功能，以便感應器準備感測工作。

7) 其他

24小時換氣功能

- 按“24小時換氣”鍵，LCD “24H Vent” 功能顯示，風量以“Lo”模式開始運轉，默認運行 24小時後停止運作。
- 停止：當按“停止”鍵或運轉完畢後，LCD “24H Vent” 及剩餘時間會熄滅，本機會自動停止。

換氣延停

- 啟動：按“換氣延停”鍵，LCD “Vent” 功能顯示，風量以“Lo”模式開始運轉，默認運行 15分鐘後停止運轉。
- 停止：當按“停止”鍵或運轉完畢後，LCD “Vent” 及剩餘時間會熄滅，本機會自動停止。

搖擺功能 - 自動（上、下）

- 循環風扇運行時，風葉默認為90度，按下“搖擺”按鍵，可改變風葉角度，遙控器中“⊙”點亮。搖擺功能並不適用於換氣、24小時換氣、換氣延停及第六感除味模式，按此鍵無效。
- 角度擺動：當在循環風扇運行的前提下，按下“搖擺”按鍵，風葉由 90度位置轉到以 45~120度來回擺動，再次按下“搖擺”按鍵停止擺動至理想角度。
- 停機：在選擇功能關閉或功能定時結束關閉時，風葉擺回0度位置（即風葉閉合狀態）。

搖擺功能 - 手動 (左、右)

- 特設手動左右搖擺功能，可作左右 120度廣闊送風調控，或集中送風功能。




擴散送風



集中送風



負離子功能

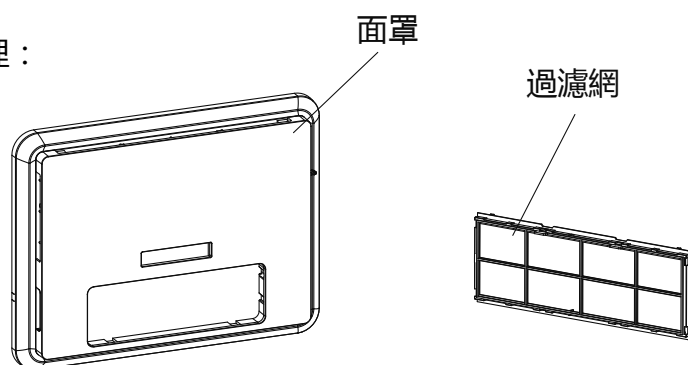
- 循環風扇運行時按“負離子”鍵，負離子功能開啟，遙控器中“”點亮。負離子功能並不適用於換氣、24小時換氣、換氣延停及第六感除味模式時，按此鍵無效。
- 停止：在運行過程中，按下“負離子”按鍵，負離子功能停止，同時LCD圖示“”熄滅；再次按下按鍵，負離子功能開啟，LCD圖示“”亮起。

【保養及安全事項】

■ 保養及清潔：

- 維修前請務必關掉電源。

1. 面罩清理：



- 請先以柔軟的擦拭布，將面罩骯髒的部分清理乾淨。
- 以乾淨的擦拭布在溶有中性清潔劑的溫水中，潤濕擦乾之後擦拭面罩，再用清水潤濕的擦拭布擦拭一遍，表面不可有清潔劑殘留。

2. 過濾網清理：

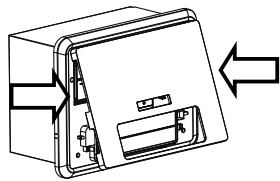
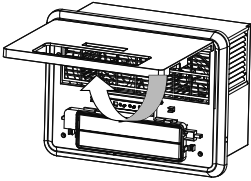
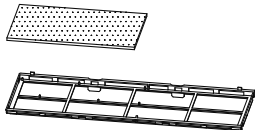
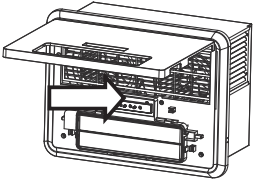
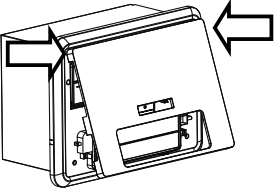
A. 防塵網

- 可用儲電式手提吸塵機把防塵網上的灰塵清除，也可以用清水沖洗，但須確保防塵網在完全乾透下才可裝回產品內。建議定期清潔防塵網，保持濾網有效阻隔灰塵。

B. 活性炭過濾網

- 使用一段時間後，需要更換活性炭過濾網，一般建議 3 個月更換一次，實際情況受使用頻率程度及外在環境所影響。（注意：活性炭過濾網不可放入水中清洗）

活性炭過濾網安裝方法：

 <p>1. 先鬆開兩側手挽位裏的螺絲，然後將面板向上打開。</p>	 <p>2. 向前取出防塵網。</p>	 <p>3. 拆開活性炭過濾網包裝，將防塵網翻轉，沿凸出的柱子將過濾網套在防塵網上。如面向機體正面，過濾網應該是安裝在左手邊。</p>
 <p>4. 放回防塵網。</p>	 <p>5. 將面板合上，要同時按壓上方左右兩角以完全合上面板，然後將螺絲上回兩側手挽裏。</p>	

■ 安全事項：

- 運轉中請勿將手指伸入面罩內以免受傷，或遭加熱器燙傷。
- 請勿向機體噴水，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，請速切斷電源並委託合資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。】
 - 啟動機器，扇葉經常不運轉。
 - 電源時開時關。
 - 運轉中產生異音及不正常振動。
 - 塑膠異味或其他臭味發生。

■ 一般故障處理：

現象	診斷	對策
開啟電源後不運轉	是否停電	待電源接通
	電源指示燈不亮	請合資格電力工程承辦商修理
指示燈不依操作方式顯示	是否接收不到遙控器信號	將遙控器對準機體或在接收範圍內控制機體
運轉聲音變大	過濾網阻塞	請取下過濾網清除污垢或更換新的過濾網
無法遙控	遙控器電池電量過低	更換電池

【安裝配件清單】

安裝	用途	品名	規格	數量
1. 遙控器安裝	固定遙控器	塑膠塞	Φ8X27	2
		不銹鋼螺絲	Φ4*25	2
2. 窗口安裝	外殼固定	不銹鋼螺絲	Φ4*25	8
3. 掛牆安裝	支架固定	塑膠塞	Φ8X27	4
		不銹鋼螺絲	Φ4*25	4
		掛牆支架	-	1
4. 天花安裝	外殼固定 (天花安裝)	不銹鋼螺絲	Φ4*25	4 / 8
	外殼固定 (吊頂天花)	不銹鋼螺絲	Φ4*25	
	固定排風筒	不銹鋼螺絲	Φ4*16	2
	吊頂固定	固定螺母	M8	8
		介子	Φ10	8
		彈簧介子	Φ8	8
		天花支架	-	4
5. 排風筒	適用於天花/ 掛牆式安裝	-	-	1

【產品規格】

型號	HB21417	HB21424
額定電壓 (V)	220-240V~	
額定頻率 (Hz)	50Hz	
額定功率 (W)	1700W	2450W
主機尺寸 (高x闊x深) 毫米	320 x 420 x 216	
機身尺寸 (不包括面板) (高x闊) 毫米	270 x 372	
淨重 (kg)	8.5	

- 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。
- 本產品使用說明書以 www.whirlpool.com.hk 網上版為最新版本為準。



BATHROOM VENTILATOR

OPERATION MANUAL

HB21417

HB21424



Please read this Operation Manual carefully before using this machine.

Warning: In order to prevent damage or accident, this machine must be installed by those qualified technicians recognized by the government.

1. Important Safety Information

- Must use the appropriate power (220V-240V ~/50Hz).
- 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.
- Take care of your children and do not allow them to play with this machine.
- In order to use this machine more properly, and reduce any danger caused by the incorrect operation, please pay attention to the following items.
 - If the power wire is broken, please ask for the supplier and manufacturer's replacement. Make sure the power wire places on suitable location and will not block the road.
 - **WARNING:** In order to avoid overheating, do not cover the heater.
 - The heater must not be located immediately below a socket outlet.
 - Do not use this heater in the surroundings of a bath, a shower or a swimming pool.
 - Product do not control room temperature, when there is no responsible person close by, please do not let those disabled stay alone in the narrow room and use the machine.
 - When children and disabled people do cleaning and maintenance work, please make sure responsible person do take care of them.
 - Do not let the kids under the age of 3 to come close to this machine, unless responsible person do pay strictly

attention to them.

- When the machine was installed and placed at the correct working location, there should be a person responsible for safety guidance and assistance, and to ensure the safety of the users to understand the potential risk of this machine. Children who aged from 3 to 8 only can turn on/off this machine. Please do not let the children aged from 3 to 8 to do regulation, cleaning, maintenance work on this machine, and do not let them to connect the plug to power supply.
- **CAUTION** - some parts of this product can become very hot and may cause burns. Particular attention has to be given where children and vulnerable people are present.
- This product must be connected to the ground wire.
- Incorrect connection to the ground wire may cause danger.
- Please check the reliability of the ground wire connection and do not use your own power wire. If your plug does not match this machine, please ask qualified electrician for the acceptable outlet.
- Follow all the safety precautions listed below for safety and to reduce the risk of injury or electrical shock.
 - Read all the instructions carefully before using this appliance and keep them for future reference.
 - Retain the manual. If you pass the product to a third party, make sure to include this manual.
 - Make sure no water inside the product before using.
 - **WARNING:** Do not use this heater in small rooms when it is occupied by persons not capable of leaving

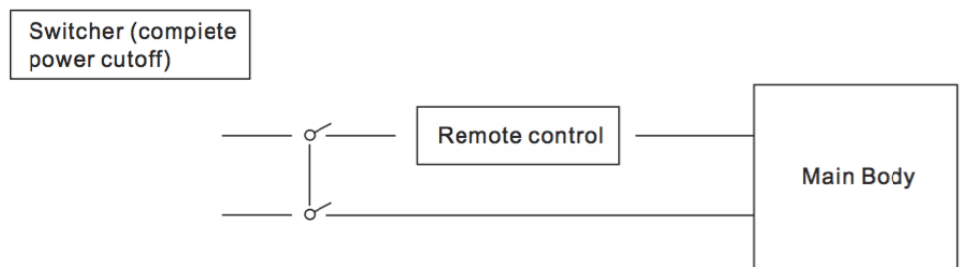
the room on their own, unless constant supervision is provided.

- Turn off the product and remove plug until the product stops working and cool down completely before clean the unit.
- Please do not pull out the power plug by pulling the power cord. It may cause the power cord damage or electric shock.
- If there is abnormal smell or noise when uses the product, please stop using and pull out the power cord immediately.
- Please don't put heavy unit onto the power cord or fold the power cord. It may lead to electric shock.
- Please don't have the wind blow to the children directly for a long time. It may influence the children's health.
- Please don't touch the plug by wet hands.
- Please don't put the wood or metal stick into the air inlet or outlet. It may lead to electric shock, or product damage.
- Do not use it on outdoor areas.
- This appliance is for household use only.
- Do not immerse the appliance or the electrical cord or plug in liquids.
- Do not use the appliance for any purpose not expressly specified in this manual.
- This appliance must be attended at all times when it is switched on.
- Do not insert any objects into the heater.
- When using the heater, keep combustible materials or

- explosive objective, away from the heater.
- Do not place the appliance close to children or pets. Never let children operate this appliance. Close supervision is necessary when this is used near children.
 - Do not touch hot surface when in use.
 - Do not share the same circuit receptacle with others appliances, otherwise may have burn hazard.
 - Do not use extension cord or exchangeable plug.
 - Unplug heater if it fails to operate properly and inform customer service center.
 - Dispose of packaging properly.
 - The heater only for personal use, not for heating any liquids or other danger things.
 - Persons (including children) with reduced physical, sensory or mental capabilities, or any individual lacking experience and knowledge should be supervised or given instruction by a person responsible for their safety when they using this appliance. Unless being supervised, the above persons (included children) can't use this appliance.

2. Installation Precautions

- This product should be installed in the place where can bear the weight of this goods.
- Incorrect installation may cause noise, empathy. Please assembly properly.
- In order not to cause the dew flowing back from exhaust pipe to the bathroom, the exhaust pipe should always be set in downward sloping to the outdoor.
- When installing the machine, the Front Panel shall be not less than 1.8 meters off the ground.
- Not allow being installed in the hot furnace directly above and a place for more than 40 degrees.
- Please set airflow intake to promote convection.
- Do not change the product's rated features.
- Prohibiting using any installation method beyond the specified in the user manual.
- The ceiling openings should face down in order to ensure the product level installation.
- Please take appropriate measures to prevent gas from the exhaust pipe or other fuel burning equipment flowing back to the room.
- Before installing this product, please ensure that the power has been cut off.
- When the flammable gas leaks, stop using it and turn off the machine and all its function.
- Do not install this product near curtains and other flammable materials to prevent any danger.
- Product installation and maintenance should be done by professional designated by the manufacturer.
- Please install a complete power cutoff switcher (refer to below diagram) which the contact separation is more than 3mm and the capacity is more than 250V~16A to control the power of the machine, and install the switcher outside the bathroom where it is easily controlled.



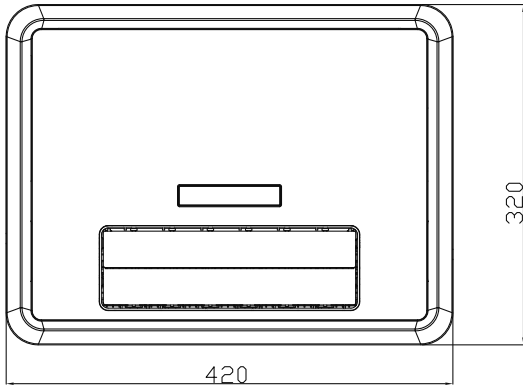
- Do not install the machine in steam sauna bathroom.
- Do not install the machine where it is exposed to oil mist.
- Do not install the machine in public bathroom.
- Do not install the machine in a wardrobe.
- Do not cover heater outlet, otherwise it may cause a fire due to overheating.
- Do not install too close to the electrical outlet in order to prevent damage of the machine, for it may cause damage of other electrical appliances.
- Prohibit using any programmes or timer automatically connected to the power or any other devices to use this product. Otherwise it will cause damage to the product, or fire.
- Do not let people in the bathroom or shower zones touch the remote control.
- Do not expose this product directly under the shower.
- When installing and using, do not remove the main circuit cover plate, otherwise it will cause electric shock or fire.

【Names of the device and functions】

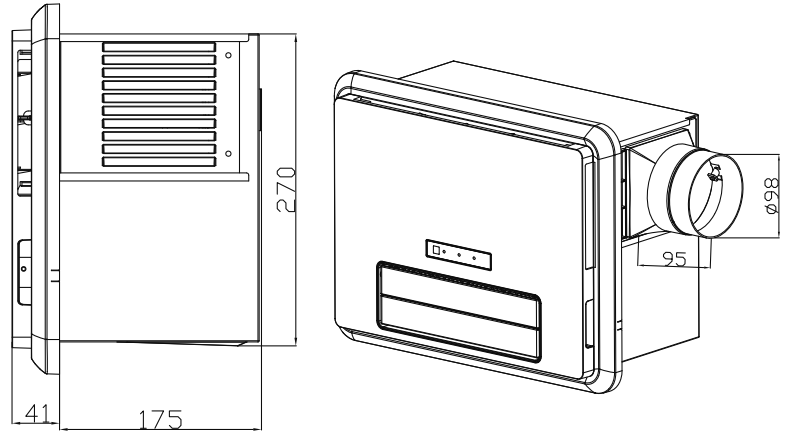
1. Machine

Unit: mm

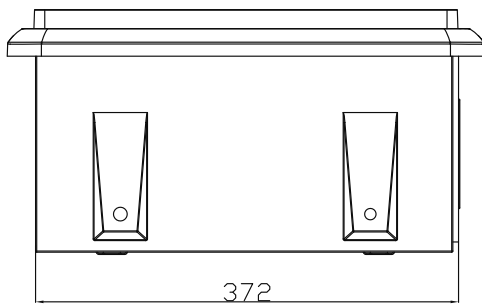
Front



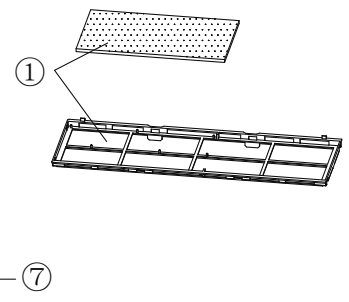
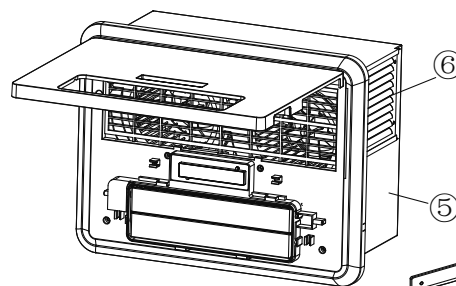
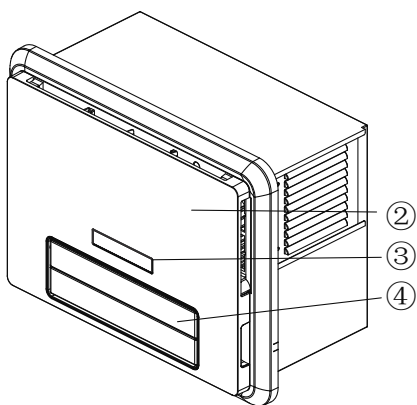
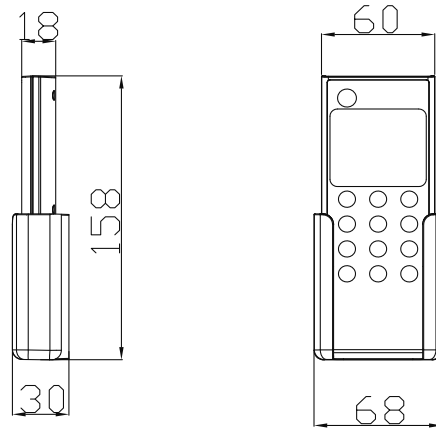
Side



Bottom



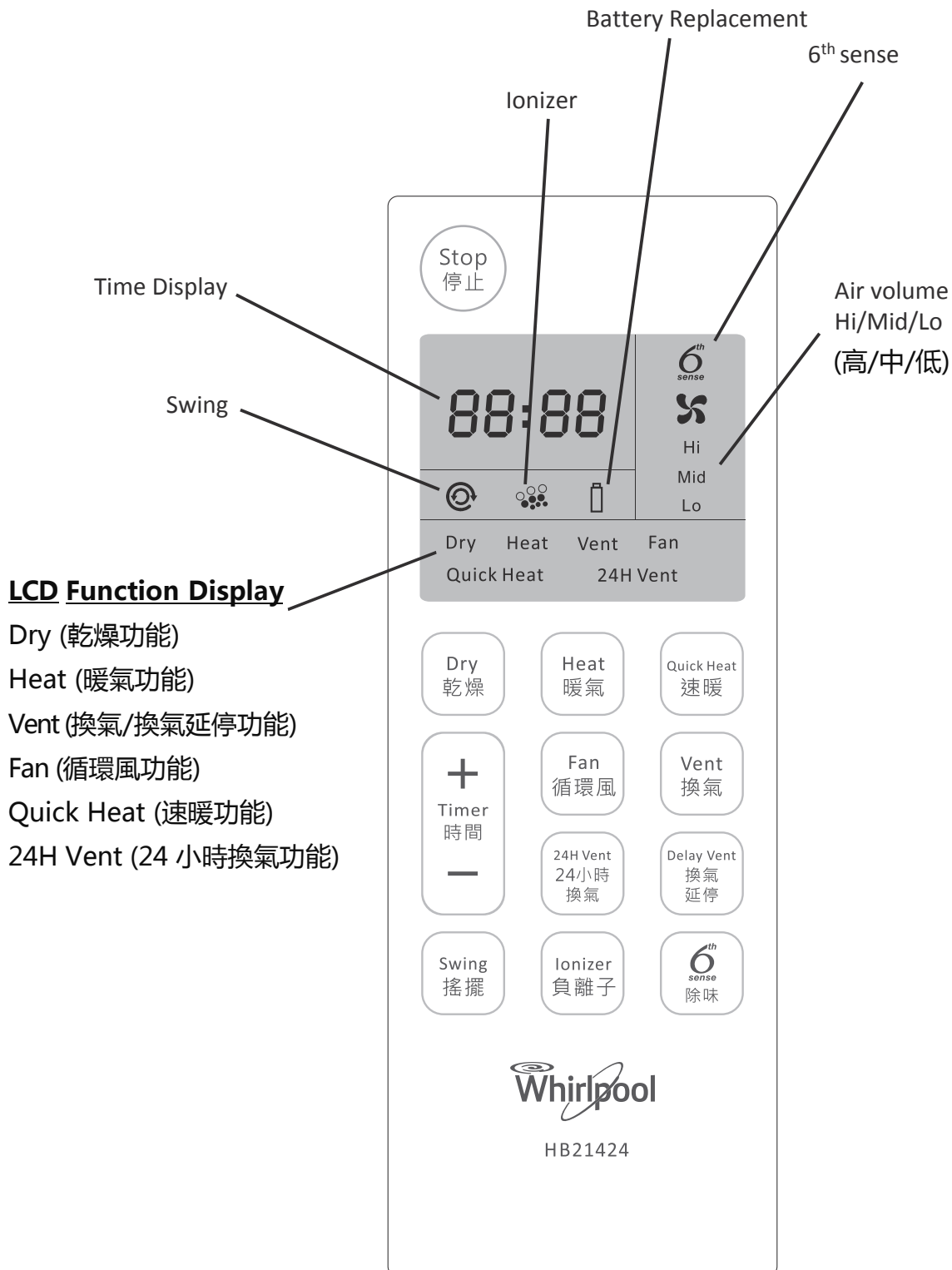
Remote Control



- 1. Pre-Filter, Carbon Filter
 - 3. Display Panel
 - 5. Stainless Steel Housing
 - 7. Air Outlet Joint
- (Applicable to Ceiling/Wall type installation)

- 2. Front Panel
 - 4. Air Outlet
 - 6. Metal Louver
- (Applicable to Window type installation)

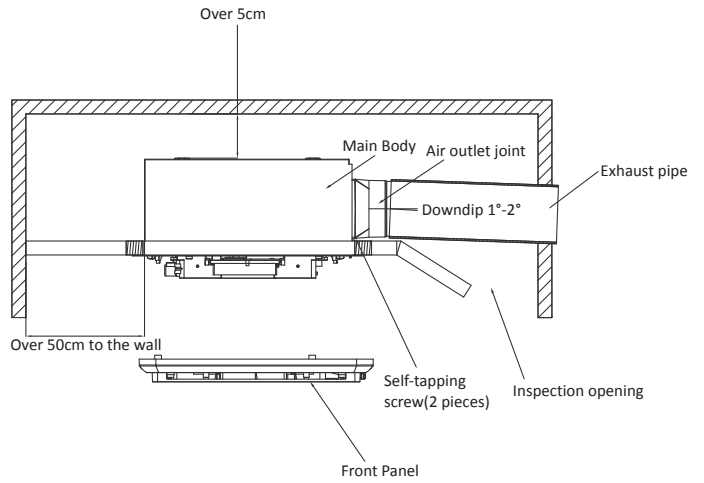
2. Remote LCD Display



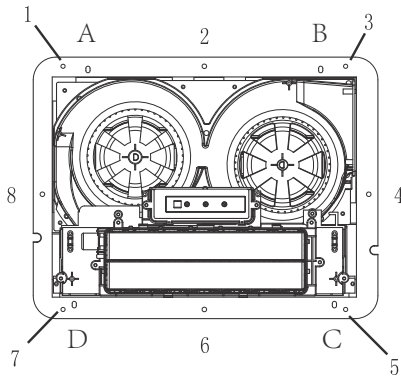
Remark: The remote control of HB21417 and HB21424 is the same except the model number difference.

【Installation Method】

A. Ceiling fixed frame method

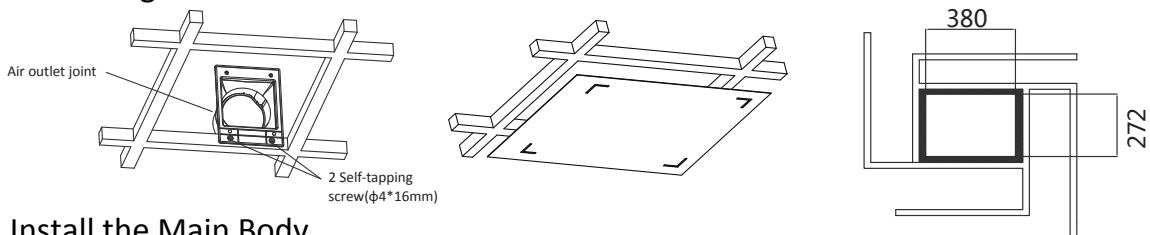


- Installation reference picture:

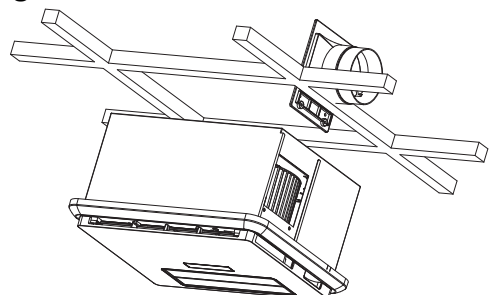


Screw hole 1,2,3,4,5,6,7,8 for ceiling joist installation
 Screw hole A,B,C,D for suspended ceiling installation
 Screw hole 1,2,3,4,5,6,7,8 for window installation

- Install the Fixed Frame to the ceiling
 - Make the fixed frame.
 - Please use materials that can bear 8.5kg to fix the surrounding part.
 - The fixed frame should use sticks of 30*25mm.
 - Size of the inner part of the frame: 380*272mm.
 - If there is no exhaust pipe connects to the outdoors, please firstly install hard exhaust pipe of inner diameter 100mm.
- Install the Air outlet joint
 - Please use 2 self-tapping screws ($\Phi 4 \times 16\text{mm}$) to fix the air outlet joint in the ceiling of the fixed box.



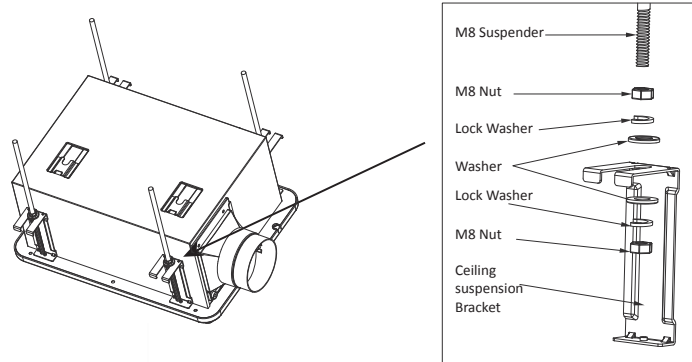
- Install the Main Body
 - Please put the main body directly face the guide slot of the air outlet joint, then push up the main body.
 - Please ensure that the main body joined to the air outlet joint, then use 8 subsidiaries of the tapping screws (diameter 4*25mm) to fix the main body.
- The minimum distance between the surrounding structures should be 50 cm.



【Installation Method】

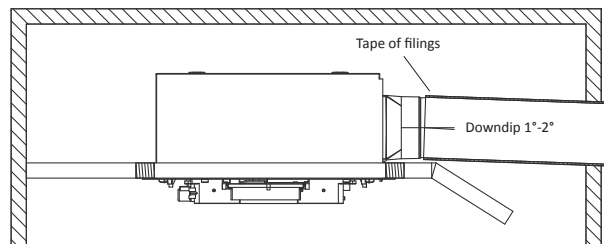
B. Ceiling Type Method

- Follow the below diagram to fix the main body with the M8 nut and the suspenders (suggested to use M8 suspenders and need to be purchased separately).

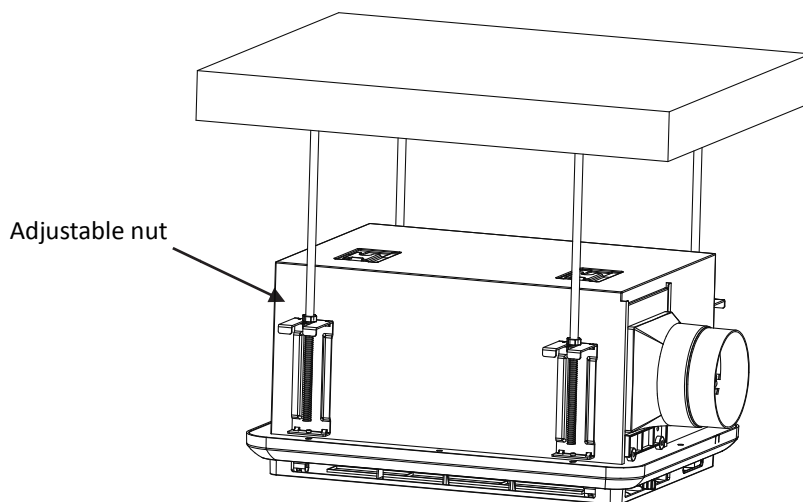


- Install the Exhaust Pipe
 - Use tape or the filling to seat the junction between the exhaust pipe and the air outlet joint.
 - The exhaust pipe should have the tendency (1 degree to 2 degree) down towards outside.

Plastics	Nominal 4" (inner diameter > 100mm)
Aluminum pipe	

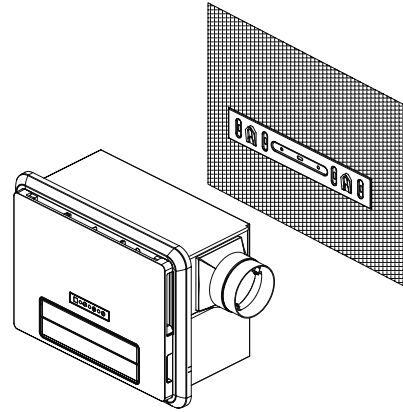


- The minimum distance between the surrounding structures should be 50 cm.

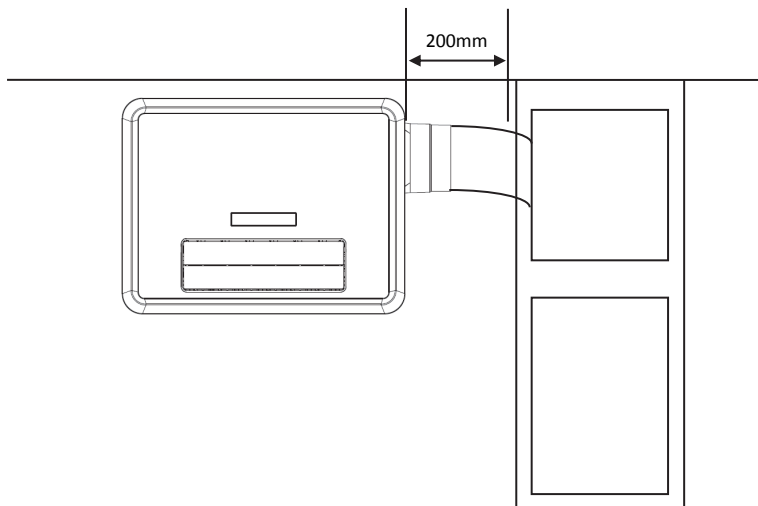


【Installation Method】

C. Wall mount type method



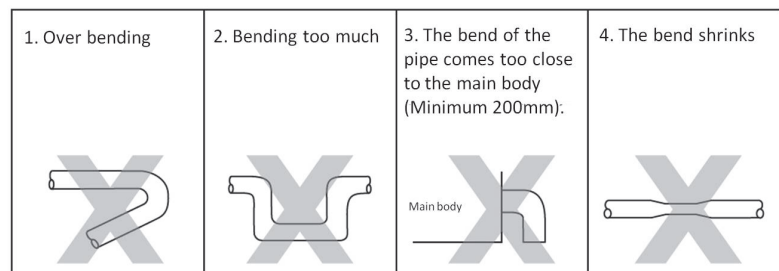
1. Applicable to the bathroom without ceiling.
2. Firstly set the support stick transverse stability to the wall, then embed the main body on the support.
3. Set the exhaust pipe (4" (100mm)) to the glass window. Fix the exhaust pipe to the air outlet joint with tape or metal clamp.
4. Applicable size of the main body: 420x320mm
 *need to reserve 200 mm on the right side to install the exhaust pipe and air outlet joint.
 Thickness of the main body: 216mm
5. The minimum distance between the surrounding structures should be 50cm.



【Air Exhaust】

Please avoid the following situations when installing the exhaust pipe.

1. Over bending.
2. Bending too much.
3. The bend of the pipe comes too close to the main body.
4. The bend shrinks.



【Installation Method】

Window Type

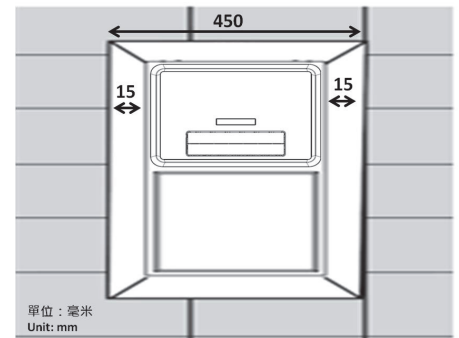
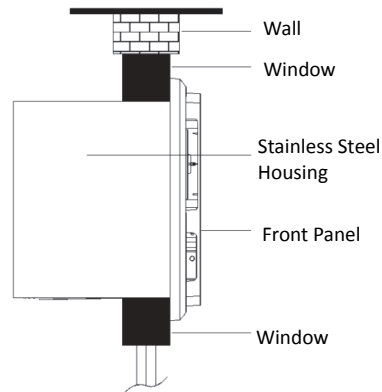
Size

Front Panel (HxW): 320x420 mm

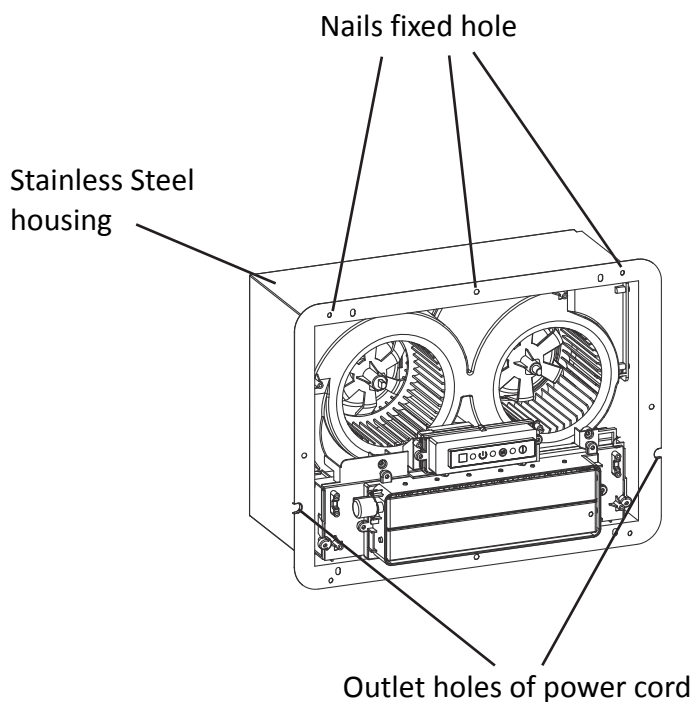
Machine Body* (HxW): 270x372 mm

* Exclude the front panel





Window Cut Out (HxW): 275x377 mm

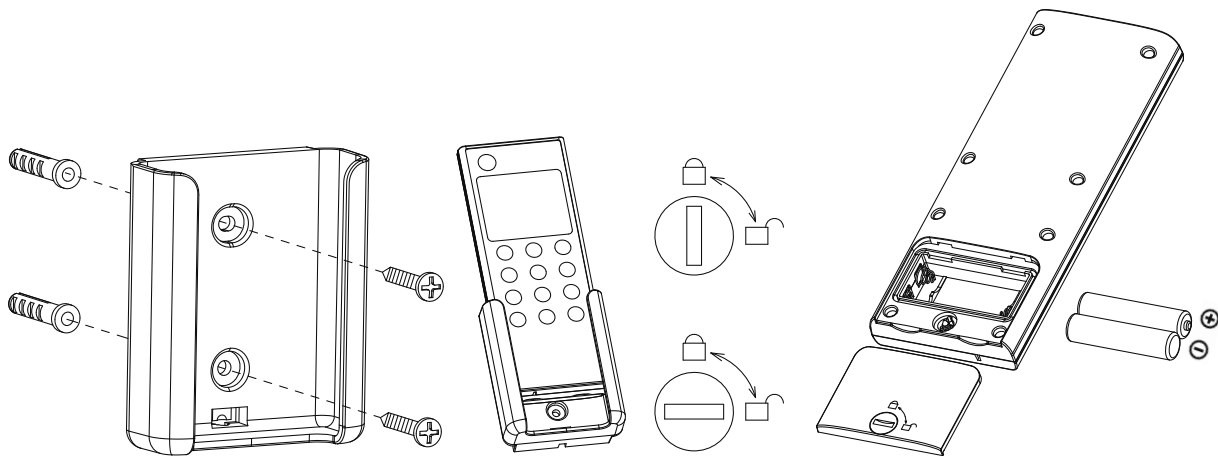


1. Install at the place of the aluminum framed window or replace the exhaust fan in the bathroom.
2. Fix the stainless steel housing to the frame of the aluminum window (must use the waterproof glue for the waterproof).
3. This product can be installed on a window with a frame width of 450 mm or above. In both right side and left side, it is suggested to reserve a distance of minimum 15mm between the product and the wall.



【Installation of the Remote Control】

1. Take out the remote control from the holder.
2. Install the remote control to suitable place. Check the main body can receive signal from the remote control installation location or take out the remote control to check the receiver sensitivity. The installation location cannot be toward the direct spraying area of the shower.
3. Fix the remote control holder to the designed place and make marks according to the arrows.
4. Dig holes according to the mark, fill the holes with 2 plastic plugs, and fix the holder with screws.
5. Install two R03 (AAA) batteries to the remote control:
 - A) Rotate the knob  clockwise to the position ;
 - B) Open the battery cover;
 - C) Install two R03 (AAA) batteries to the remote control;
(pay attention to the directions of positive and negative electrode)
 - D) Replace the battery cover;
 - E) Rotate the knob  anti-clockwise to the position .
6. Place the remote control back to the holder.



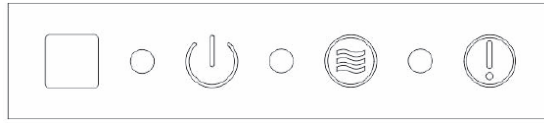
【Instructions】

Function	Application	Operation Mode			Default	Time Setting (Max.)
		Ventilation Fan	Circulation Fan	PTC *		
1. Quick Heat	Warm Air	Off	High Speed	On	2 hrs	12 hrs
Heat (Hi)		Off	High Speed	On	2 hrs	12 hrs
Heat (Mid)		Off	Medium Speed	On	2 hrs	12 hrs
Heat (Lo)		Off	Low Speed	On	2 hrs	12 hrs
2. Vent (Hi)	Air Exhaust	High Speed	Off	Off	2 hrs	24 hrs
Vent (Mid)		Medium Speed	Off	Off	2 hrs	24 hrs
Vent (Lo)		Low Speed	Off	Off	2 hrs	24 hrs
3. Dry (Hi)	Drying	High Speed	High Speed	On	4 hrs	12 hrs
Dry (Mid)		Medium Speed	Medium Speed	On	4 hrs	12 hrs
Dry (Lo)		Low Speed	Low Speed	On	4 hrs	12 hrs
4. Fan (Hi)	Bathroom Cooling	High Speed	High Speed	Off	4 hrs	24 hrs
Fan (Mid)		Medium Speed	Medium Speed	Off	4 hrs	24 hrs
Fan (Lo)		Low Speed	Low Speed	Off	4 hrs	24 hrs
5. 6 th Sense De-odor	Intelligence Auto Deodorization	Determine the fan speed by the odor sensor	Off	Off	2 hrs	24 hrs
6. Others - 24H Vent	Air Exhaust	Low Speed	Off	Off	24 hrs	/
Delay Vent		Low Speed	Off	Off	15 mins	/
Swing	Blade Swing - Up/down auto swing 45°-120° - Left/right manual louver 120°	/	/	/	/	/
Ionizer	Ionizer Output	Off	On/Off	On/Off	/	/

* Remark: The PTC heating elements may make a tapping sound when started due to the expansion and contraction processes. This sound is normal.

【Function Descriptions】

1) Display



: Power Indicator – Blue indicator light on when connected to power supply



: Air Quality Indicator – Red indicator light means “Poor”, Orange indicator light means “Fair”, Green indicator light means “Good”



: Malfunction Indicator – Red indicator light on when the machine is failure

2) HEAT Function – Quick Heat

- Press the “Quick Heat” button, the LCD displays the “Quick Heat” icon, air volume will run at “Hi” mode.
- Timer: the default time is 2 hrs. By pressing “Timer” up or down button to select time duration. The time can be set from 5 mins to 12 hrs. The time counter will be displayed at the LCD. The time selected will be recorded in memory when it is off, and will resume in your next usage.
- Stop: when press the “Stop” button or pre-set time runs over, the LCD “Quick Heat” and time display would disappear, and the machine will stop automatically.
- When the heater stops running, the fan will continue run 25 seconds to cool down the heater.

HEAT Function – Hi / Mid / Lo

- Press the “Heat” button, the LCD displays “Heat” icon, air volume will run at “Hi” mode. Press the button again to select “Hi”, “Mid” or “Lo” mode.
- Timer: the default time is 2 hrs. By pressing “Timer” up or down button to select time duration. The time can be set from 5 mins to 12 hrs. The time counter will be displayed on the LCD. The time selected will be recorded in memory when it is off, and will resume in your next usage.
- Under the mode, the inter-change of the air volume between “Hi”, “Mid” or “Lo” will not affect the time counting.
- Stop: when press the “Stop” button or pre-set time runs over, the LCD “Heat” and time display would disappear, and the machine will stop automatically.
- When the heater stops running, the fan will continue run 25 seconds to cool down the heater.

3) VENT Function - Hi / Mid / Lo

- Press the “Vent” button, the LCD displays “Vent” icon, air volume will run at “Hi” mode. Press the button again to select “Hi”, “Mid” or “Lo” mode.
- Timer: the default time is 2 hrs. By pressing “Timer” up or down button to select time duration. The time can be set from 5 mins to 24 hrs. The time counter will be displayed on the LCD. The time selected will be recorded in memory when it is off, and will resume in your next usage.
- Under the mode, the inter-change of the air volume between “Hi”, “Mid” or “Lo” will not affect the time counting.
- Stop: when press the “Stop” button or the pre-set time runs over, the LCD “Vent” and the time display would disappear, and the machine will stop automatically.

4) DRY Function - Hi / Mid / Lo

- Press the “Dry” button, the LCD displays “Dry” icon, the air volume will run at “Hi” mode. Press the button again to select “Hi”, “Mid” or “Lo” mode.
- Timer: the default time is 4 hrs. By pressing “Timer” up or down button to select time duration. The time can be set from 5 mins to 12 hrs. The time counter will be displayed on the LCD. The time selected will be recorded in memory when it is off, and will resume in your next usage.
- Under the mode, the inter-change of the air volume between “Hi”, “Mid” or “Lo” will not affect the time counting.
- Stop: when press the “Stop” button or the pre-set time runs over, the LCD “Dry” and the time display would disappear, and the machine will stop automatically.
- When the heater stops running, the fan will continue run 25 seconds to cool down the heater.

5) FAN Function - Hi / Mid / Lo

- Press the “Fan” button, the LCD displays “Fan” icon, the air volume will run at “Hi” mode. Press the button again to select “Hi”, “Mid” or “Lo” mode.
- Timer: the default time is 4 hrs. By pressing “Timer” up or down button to select time duration. The time can be set from 5 mins to 24 hrs. The time counter will be displayed on the LCD. The time selected will be recorded in memory when it is off, and will resume in your next usage.
- Under the mode, the inter-change of the air volume between “Hi”, “Mid” or “Lo” will not affect the time counting.
- Stop: when press the “Stop” button or the pre-set time runs over, the LCD “Fan” and the time display would disappear, and the machine will stop automatically.

6) 6th Sense De-odor Function

- Press “6th Sense” button, the LCD displays “6th sense” icon.
- In 6th Sense mode, the machine will automatically detect the odor of the bathroom and run the de-odor function. The air quality light will indicate the odor level, Red indicator light means “Poor”, the machine will run at “Hi” mode; Orange indicator light means “Fair”, and the machine will run at “Mid” mode; Green indicator light means “Good”, and the machine will run at “Lo” mode.
- Timer: the default time is 2 hrs. By pressing “Timer” up or down button to select time duration. The time can be set from 5 mins to 24 hrs. The time counter will be displayed on the LCD. The time selected will be recorded in memory when it is off, and will resume in your next usage.
- Stop: when press the “Stop” button or the pre-set time runs over, the LCD “6th sense” and the time display would disappear, and the machine will stop automatically.
- Every time when connecting to the power, it takes 5 mins for the sensor to get ready before 6th Sense function can be activated.

7) Other

24H Vent Function

- Press the “24H Vent” button, the LCD displays “24H Vent” icon, the air volume will run at “Lo” mode. The default running time is 24 hrs.
- Stop: when press the “Stop” button or the default time runs over, the LCD “24H Vent” and the time display would disappear, and the machine will stop automatically.

Delay Vent Function

- Start: press the “Delay Vent” button, the LCD displays “Vent” icon, the air volume will run at “Lo” mode. The default running time is 15 mins.
- Stop: when press the “Stop” button or the default time runs over, the LCD “Vent” and the time display would disappear, and the machine will stop automatically.

Swing Function – Auto (Up / down)

- When the circulation fan motor is running, the default louver position is 90 degree. Press the “Swing” button to adjust the louver angle. The LCD will display “⊙” icon. Swing function is not valid under the modes of “Vent”, “24H Vent”, “Delay Vent” and “6th Sense”.
- Swing: when the circulation fan motor is running, press the “Swing” button, the louver will turn from 90 degree position to swing ranging from 45 degree to 120 degree. Press the “Swing” button again, auto louver will stop at the desired angle.
- Stop: when press the “Stop” button or the pre-set time runs over, the louver will return to 0 degree position (auto louver will stop operate).

Swing Function – Manual (Left / Right)

- Left and right louver function to provide selection of wide airflow distribution of up to 120 degree, or concentrated airflow.




Diffused Airflow



Concentrated Airflow



Ionizer Function

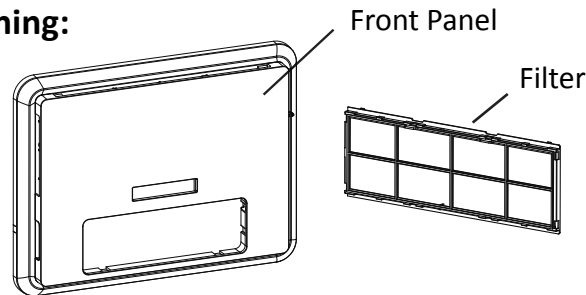
- When the circulation fan motor is running, press the “Ionizer” button, the LCD will display “” icon. Ionizer function is not valid under the modes of “Vent”, “24H Vent”, “Delay Vent” and “6th Sense”.
- Stop: when Ionizer is running, press the “Ionizer” button, Ionizer will stop, and the LCD “” icon would disappear. Press the “Ionizer” button again, Ionizer will turn on again and the LCD will display “” icon as well.

【Maintenance and Safety Items】

■ Maintenance and cleaning:

- Please do turn off the power before maintenance work.

1. Front panel cleaning:



- Please use the soft rag to clean the dirty place of the front panel.
- Put a clean rag in the warm water dissolved with neutral detergent, and then use the rag to wipe the front panel. Use another rag to wipe the cover. The surface shall have no detergent residues.

2. Filter Cleaning:

A. Pre-Filter

- Use a rechargeable handheld vacuum cleaner to remove dust from the filter or wash it in the water. Please make sure the filter is completely dried out before putting back to the machine. It is recommended to clean the filter regularly to ensure its efficiency.

B. Carbon Filter

- Need to replace the carbon filter after usage for some time. In general, it is recommended to replace the filter for every 3 months' usage but the actual replacement is subject to the frequency of usage and air quality of living environment.

(Remark: The carbon filter is not washable.)

Installation of Carbon Filter:

<p>1. Loosen the screws on the two sides of the front panel and then open the front cover.</p>	<p>2. Take out the pre-filter.</p>	<p>3. Unpack the filter packaging. Turn back the pre-filter and place the carbon filter on the pre-filter by attaching it onto the various hooks. The filter should be on the left side when you faced to the machine.</p>
<p>4. Put the pre-filter back to the machine.</p>	<p>5. Close the front panel and also press the upper left & right corners to close it completely. Tighten the screws back to the two sides of the front panel.</p>	

■ **Safety Items:**

- Do not put your hands into the machine when running, to avoid from 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 from any accident or injury, if any of the following symptoms and abnormal situation occur, please switch off the electricity and ask qualified electrical engineering contractor for repair or check. (Self repair by user is strictly prohibited to avoid danger).
 - Turn on the power, the fan does not start.
 - The power on and off.
 - Abnormal sound and vibration during operation.
 - Plastic smell or other abnormal smell occurs.

■ **General Failure Treatment:**

Phenomenon	Check	Solution
No operate when the power turning on	No power supply	Switch on the power
	The light of the Power does not light on	Ask the qualified engineer for repair
The display light does not display conforming to the function	The machine does not receive remote control signal	Align the remote to the machine or control the remote in the receiving range
Abnormal noise	Filter blocking	Clean the filter or replace with a new filter
The remote control does not work	Low battery	Change the battery

【Installation Accessory List】

Installation	Usage	Name	Specification	Amount
1. Remote control	Fix the Remote	Plastic plug	Φ8X27	2
		Screw	Φ4*25	2
2. Window type	Fix the housing	Screw	Φ4*25	8
	Fix the metal louver	Screw	Φ4*16	2
3. Wall type	Fix the wall kit	Plastic plug	Φ8X27	4
		Screw	Φ4*25	4
		Wall Mount Kit	-	1
4. Ceiling type	Fix the housing (Ceiling fixed frame)	Screw	Φ4*25	4 / 8
	Fix the housing (Ceiling suspension)	Screw	Φ4*25	
	Fix the air outlet joint	Screw	Φ4*16	2
	Fix the suspension bracket	Adjustable nut	M8	8
		Washer	Φ10	8
		Lock washer	Φ8	8
		Ceiling suspension bracket	-	4
5. Air Outlet Joint	Applicable to Ceiling/Wall type installation	-	-	1

【Product Specification】

Model No.	HB21417	HB21424
Voltage (V)	220-240V~	
Frequency (Hz)	50Hz	
Power (W)	1700W	2450W
Product Size (H x W x D) mm	320 x 420 x 216	
Product Size (excl. panel) (H x W) mm	270 x 372	
Net Weight (kg)	8.5	

- Be aware that any change of the specification and design will not be informed.
- If any item in the English Version is different from the Chinese Version, please refer to the Chinese Version.
- The latest operation manual will be based on the url: www.whirlpool.com.hk.