

# INSTALLATION & OPERATION MANUAL

# Packaged Thru-the-Wall Heat Pump



# ALWAYS MAKE SURE THAT THIS MANUAL REMAINS WITH THE ODESSEY PACKAGED THRU-THE-WALL HEAT PUMP OR OWNER OF THE PRODUCT.

# READ THIS MANUAL BEFORE INSTALLING, OPERATING, OR PERFORMING MAINTENANCE ON THE ODESSEY PACKAGED ROOM AIR HEATPUMP UNIT.

The figures in this manual may be different with the material objects, please refer to the material objects for reference.



Do not dispose this product as unsorted municipal waste. Collection of such waste separately for special treatment is necessary.

#### **INDEX**

#### ODESSEY PACKAGED THRU-THE-WALL HEAT PUMP UNIT

		PAGE
1.1	INTRODUCTION	1
1.2	SAFETY INSTRUCTIONS	1
1.3	RECEIVING THE GOODS	2
1.4	HANDLING	2
1.5	LIST OF ACCESSORIES	2
1.6	TECHNICAL FEATURES	3
2.1	POSITIONING THE UNIT	4
2.2	INSTALLATION TEMPLATE	4
2.3	DRILLING THE WALL	5
2.4	FASTENING THE BRACKET	6
2.5	INSTALLATION OF THE PIPES	6
2.6	FITTING THE GRATINGS	7
2.7	FITTING THE UNIT ON THE BRACKET	8
3.1	INTRODUCTION OF LCD ICONS	9
3.2	REMOTE CONTROL FUNCTIONS	9
3.3	STANDARD HEATING MODE	10
3.4	SUPER HEATING MODE	11
3.5	COOLING MODE	12
3.6	DRY MODE	13
3.7	FAN MODE	13
3.8	SLEEP MODE	14
3.9	AUTO MODE	15
3.10	TIMER OFF FUNCTION	16
3.11	TIMER ON FUNCTION	16
3.12	ON BOARD CONTROL FUNCTION	17
3.13	HEATING MODE AND SUPER HEATING MODE REFERENCE	18
3.14	FRESH AIR SYSTEM	19
3.15	INSTALLING AND CHANGING THE BATTERIES	19
3.16	MAINTENANCE	20
3.17	TROUBLE SHOOTING	21
3 18	INSTALLATION TEMPLATE FOR WALL DRILLING	22

#### 1. GENERAL INFORMATION

#### 1.1 INTRODUCTION

- Do not dispose of any packaging until installation of the unit is completed.
- After having removed the packing, check that all the contents are intact and complete.
   See list of accessories. In the event of missing parts, contact your retailer.
- This unit has been designed to heat or cool the air of a room and should only be used for this purpose.
- The manufacturer cannot be held liable for damage caused to property or injury to persons or animals due to incorrect installation, regulation and maintenance or improper use.
- This unit contains R410A refrigerant. At the end of its life, the disposal of this unit must be in accordance with the regulation governing the recycling of this product.
   Please contact your local authority for regulatory advice.
- Do not switch on before having totally assembled the unit and before installing in its correct operating position.
- Before starting the appliance, check that it is correctly earthed, according to the legislation in force in the country concerned.

### 1.2 IMPORTANT SAFETY INSTRUCTIONS

When using electrical appliances, basic safety precautions should always be followed:

- Do not place objects on the product or allow objects to obstruct the inlet or outlet openings.
- Extreme care should be taken when any product is used by, or near children and pets, and whenever the product is left operating and unattended.
- Before operating the product remove the unit from its packaging and check it is in good condition.
- Do not operate any product with a damaged cord or plug, or after the unit malfunctions, has been dropped, or damaged in any

- Do not pull, remove or twist the power cord, even if disconnected from the main electrical supply.
- Never place the power cord under a carpet or rug or other location where it creates a tripping hazard.
- Do not attempt to repair or adjust any electrical or mechanical functions on this unit as this may void warranty.
- Always operate the product from a power source of the same voltage, frequency and rating as indicated on the product identification plate.
- This unit is not intended for use in wet or damp locations.
- Do not place the unit near an open flame, cooking or heating appliance, or hot surface.
- Do not operate the unit in areas where gasoline or other flammables are used or stored.
- Do not carry out any cleaning or maintenance or access internal parts until the unit has been disconnected from the main electrical supply.
- Do not alter the safety or regulating devices without the permission and instructions of the manufacturer.
- Repair or maintenance work must be carried out by an authorized servicer in compliance with the instructions given in this booklet.
- Do not alter the appliance. Since hazardous situations could be created, the manufacturer of the appliance will not be liable for any damage or injury caused.
- This instruction booklet is an integral part of the appliance and should therefore be carefully preserved and always accompany the appliance in the event of transfer to another owner or another installation.

.....

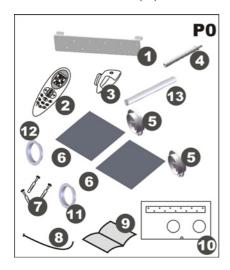
#### 1.3 RECEIVING THE GOODS

The unit is delivered in a protective packaging and is accompanied by an instruction manual. This manual is an integral part of the unit and should therefore be carefully read and preserved. When the unit is unpacked, please check that the unit and accessory pack are complete and undamaged.

#### 1.4 HANDLING

- Be fully aware of the weight of the unit before attempting to lift it. Take all necessary precautions to avoid damaging the product or causing personal injury.
- It is advisable to remove the packaging only when the unit has been located in the installation position.
- Carefully remove the adhesive strips positioned on the unit.
- Packaging components must be disposed correctly and not left within reach of children, since they are a potential source of danger.

#### 1.5 LIST OF ACCESSORIES (P0)



- 1 FASTENING BRACKET
- 2. REMOTE CONTROL
- 3 REMOTE CONTROL HOLDER
- 4. DRAINAGE PIPE
- 5. EXTERNAL GRATING x2
- 6. PLASTIC SHEET AIR PIPE x 2
- 7. SCREWS KIT
- 8. GRATING FIXING CORD x2
- 9 INSTRUCTION MANUAL
- 10. INSTALLATION TEMPLATE FOR WALL DRILLING (See page 19)
- 11. 160mm RING
- 12. 150mm RING
- 13. FRESH AIR PIPE

This product has been manufactured to comply with ETL.

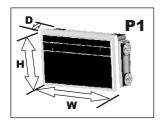


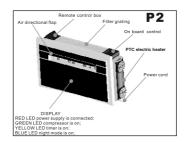
Waste electrical products should not be disposed of with household waste. Please recycle where facilities exist. Check with your Local Authority or retailer for recycling advice.



Any batteries used in the remote control contain materials, which are hazardous to the environment. They must be removed from the remote control when they reach the end of their life and disposed of responsibly.

#### 1.6 TECHNICAL FEATURES (P1,P2)





Model	MITSWZ28EC	
Cooling capacity (Btu/h)	9300	
Heating capacity (Btu/h)	9300	
Electric heater capacity (Btu/h)	6800	
Power input in cooling (W)	922	
Power input in heating (W)	864	
Power input for electric heater (W)	2000	
EER (Btu/w)	9.99	
COP (Btu/w)	3.16	
Air flow	265 CFM / 450 m³/h	
Fan speed setting	3+Auto	
Dehumidification capacity (L/24h)	19.7	
Noise level indoor dB(A)	48.2	
Noise level outdoor dB(A)	58.1	
Power supply (V/Ph/Hz)	208/230/1/60	
Refrigerant type	R410A	
Refrigerant charged	22.9 oz / 650 g	
Dimension HxWxD	22.8x43.1x9.6 inch / 580x1095x245 mm	
Weight	114.6 lb / 52 kg	
Inlet/Outlet hole diameter	6.4 inch / 162 mm	
Fresh air pipe diameter	2 inch / 50 mm	

# ALL PERFORMANCE DATA AND SPECIGICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE STANDRD TEST OPERATING CONDITIONS IN COOLING AND DEHUMIDIFICATION MODE

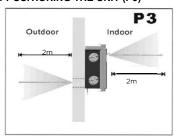
- Inside 26.7°C DB; 19.4°C WB
- Outside 35°C DB; 23.9°C WB

#### STANDRD TEST OPERATING CONDITIONS IN HEATING MODE

- Outside 8.3°C DB; 6.1°C WB
- •Inside 21.1°C DB; 15.6°C WB

#### 2. INSTALLATION

#### 2.1 POSITIONING THE UNIT (P3)



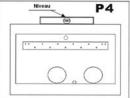
To maintain the best performance from your unit and to prevent breakdowns or hazards, you must position it correctly. Please follow the guidelines and instruction below in full, as failure to do so could cause potential installation problems.

- The unit must be installed on an exterior wall that has access to outside air with a minimum of 2m feet outside clearance.
- The unit must be fitted leaving space around the unit as illustrated in the installation template.
- The wall on which the unit is installed must be sturdy and able to withstand the weight of the unit.

After determining the best place for installation as described above, please check to ensure that the wall can be drilled in the chosen area without interfering with other structures or installations (beams, studs, pipes, wires, etc.).

Please also ensure that there are no obstacles on the outside of the wall, which may obstruct air circulation through the drilled holes, for example: plants and their leaves, fences, drain pipes, overflows and gratings, etc.). Any obstruction could interfere with the correct performances of the unit.

#### 2.2 PAPER TEMPI ATE (P4)



Fasten the template to the wall once the following guidelines have been checked.

- Do not drill any holes until you are completely confident that there are no obstacles in the area you wish to drill and there are no obstructions, which could be hidden by the construction of the wall, for example: electrical wiring water, gas pipes or supporting lintels or beams.
- Ensure that a level is used, as the unit must be level.

#### 2. INSTALLATION

#### 2.3 DRILLING THE WALL (P5)



Please note: If you are drilling the hole above ground floor level, please ensure while the holes are drilled the outside area is supervised, until drilling has been completed.

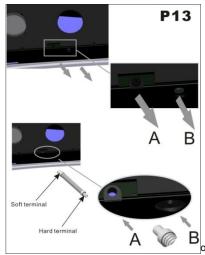
## INTAKE AND OUTLET AIR HOLES, FRESH AIR HOLE AND CONDENSATE DRAIN HOLE

This operation should be carried out using the proper tools (diamond tip or core borer's drills with high twisting torque and adjustable rotation speed).

- Fasten the template to the wall taking care to check the distance from the floor or ceiling.
   Keep it horizontal by using a level.
- Use a pilot drill to mark the centre of each core hole to be drilled, and then use a 162mm core boring head to drill the two holes for intake and outlet the air.
- Use a pilot drill to mark the centre of the core hole to be drilled, and then use a 50mm core boring head to drill the hole for fresh air.
- Use a pilot drill to mark the centre of the core hole to be drilled, and then use a 30mm core boring head to drill the hole for condensate drain
- All holes should be drilled in one operation.
- For detail holes sizing and dimension for the holes, please refer to the template on page
   22

It is recommended that the holes must have a slightly downward slope of 3-5 degree to prevent any backflow of water in the pipes.

#### **DRAINAGE HOLE (P13)**



manage condensate. Before installing the unit, choose the most suitable method for your application. There are 2 drain connections on the unit, one is vertical to the floor which is named "A" and the other one is horizontal to the floor which is named "B" as shown in P13.

Method "A": Employing this method allows the condensate to drain to the outdoors. Begin by drilling a hole through the wall measuring 30mm in the position shown on the paper template. Drainage occurs by gravity, thus it is essential to have a minimum downward slope of at least 3 degrees throughout the drain line's length. Connect the drain pipe (from soft terminal) to the unit (hole "A") after unplugging the black rubber cap (see picture P13). Note: If method "A" is used, do not unplug the black rubber cap for drainage hole "B".

**Method** "B": Drainage occurs indoors to an external floor drain, water tank, or sump pump. Unplug the black rubber cap of system "B" (see picture P13), then connect the drain pipe (from soft terminal) to the unit hole "B" after unplugging the black rubber cap. Place the hard terminal into a water tank, floor drain, or sump pump. **Note:** If system "B" is used, do not unplug the black rubber cap for drainage hole "A"

#### 2.4 FASTENING THE BRACKET (P6)



- Drill holes for anchoring the bracket to the wall using the (6) holes shown in black on the paper template.
- The anchor bolts provided require (6) Ø8mm holes.

**NOTICE:** If the wall is not sturdy enough, it is advisable to use extra anchor bolts using the holes shown in grey on the paper template.

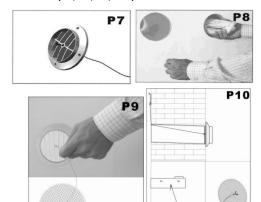
NOTICE: The wall should be inspected to determine if the manufacturer provided bolts are adequate for the installation depending on the application. Due to building construction variations, it may be necessary for the installing contractor to use a different type of anchorage to maintain the intended installation of the unit to the wall. The manufacture is not liable in case of underestimation of the structural consistency of the anchorage made at the time of installation.

#### 2.5 INSTALLATION OF THE PIPES (P20)

- After drilling the holes, the plastic sheet supplied with the air conditioner need to be fitted through them.
- Measure the depth if the wall and cut supplied plastic sheet.
- Roll the sheet and insert it into the hole, paying attention to the joint line, which Must be always upper position.
   Remember that the sheet must have the
  - Remember that the sheet must have the same inclination of the holes(min3°).
- Insert the rings into the holes.
- Please centre the pipes into the holes In the wall and insulate and seal their perimeters to prevent air and humidity infiltration using polyurethane foam and using plaster as finishing on the inside wall.
- Insert the fresh air pipe (Ø 50mm into The little hole, keep the net side with outdoor.(This function is optional for customer).



# 2.6 FITTING THE GRATINGS AND THE METAL GRILLE (P7, P8, P9, P10)



To fit the external two gratings and the metal grille, please proceed as follows:

- Familiarize yourself with the fitting of the flexible grating and the metal grille to the tube before installation.
- Insert the cords through the centre of the grating. Note: The flexible grating fits on the outside of the tube and the metal grille fits inside.
- Insert the supplied cord into the hole in the center of the metal grille (see P9). Then insert the supplied cord into the hole in the center of the grating (see P9). Fold the outer grating in half grasping the cord with your free hand. Insert your arm inside the pipe with the grating and push all the way to the outside. Let the grating unfold and pull the cord toward you.
- With a little patience and manipulation, the 2 gratings will fit the end of the tubes.
- Grasping the cord, insert your fingers between the fins and pull the grating toward you until it is properly fitted to the pipe, keeping the fins in vertical position. Then tighten the cord and fasten it to the dent on the internal flanges (see P10).

# 2.6 FITTING THE GRATINGS AND THE METAL GRILLE (P7, P8, P9, P10) - CONT'D

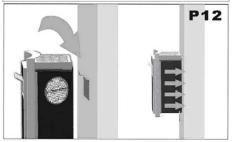
- If the external grating is accessible, to prevent its removal, it is recommended to fasten it to the wall with wall plugs and Ø6mm screws.
- Once the grating is secure, slide the metal grille inside the air discharge and the air intake hose (1 per each hose) along the cord.
- Once the metal grille is adjacent to the grating, use one of the special butterfly nut screws provided to secure the metal grille to the cord.

7

#### 2. INSTALLATION

# 2.7 FITTING THE UNIT ON THE BRACKET (P11, P12)





After checking again that the fastening bracket is securely fastened to the wall, and that any necessary preparations for electric connection and condensate drainage have been made, fasten the unit to its supporting bracket.

- Lift up by holding the sides at the bottom.
- Tilt the unit slightly toward you to engage the unit with the bracket flange.
- The unit can now be pushed firmly against the wall.

Carefully inspect the installation to make sure that the insulated back panel fits firmly against the wall, there are no gaps at the back of the unit and wall, and that the two plastic semicircles on the back side of the unit are placed inside of the two plastic pipes fixed inside the wall.



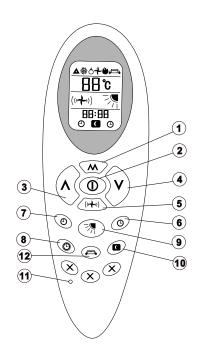
The unit shall not be installed inside a laundry

The unit must be positioned so that the plug is accessible.

The unit shall be installed in accordance with the National Electrical Code N.E.C. (C.E.C. in Canada) and any other local ordinances.

#### 3.1 INTRODUCTION OF LCD ICONS

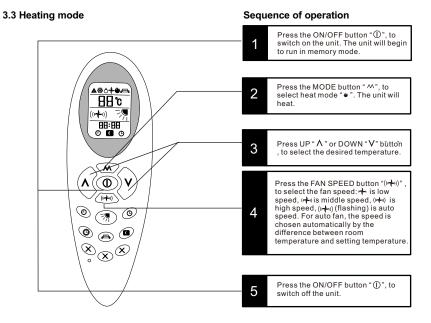
Icons	Meaning	Icons	Meaning
	Auto	((+1))	Fan speed
*	Cooling	<b> </b>	Airflow direction
$\Diamond$	Dry	$\bigoplus$	Time off
+	Fan	$\oplus$	Time on
•	Heating		Sleep
88:88	Clock	X	Not Used
•	Super Heating Mode	88°	TEMP



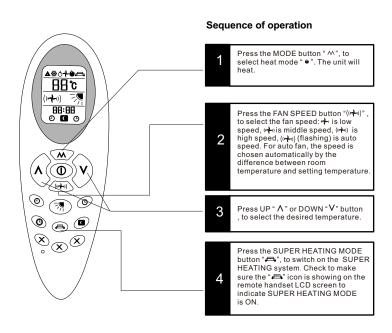
#### 3.2 REMOTE CONTROL FUNCTIONS

- **1. MODE** BUTTON: Selects and sets the operating mode between cooling, heating, dry, and auto.
- 2. ON/OFF BUTTON: Turns on or off the unit
- 3. UP BUTTON: Increases the temperature or time
- 4. DOWN BUTTON: Decreases the temperature or time
- 5. FAN SPEED BUTTON: Selects the fan speed
- 6. TIMER ON BUTTON: Selects the time the unit starts
- 7. TIMER OFF BUTTON: Selects the time the unit stops
- 8. CLOCK BUTTON: Adjusts the clock
- 9. LOUVER SWING BUTTON: Adjusts the airflow direction
- **10. SLEEP** BUTTON: Change the set temperature of the unit over time while you sleep to provide optimal comfort in an effort to match the body's natural temperature changes during sleep.
- **11. SUPPER HEATING MODE** BUTTON: Turns on the integrated electric heat to boost heating performances when outdoor temperatures are below 5°C and additional heat is required.

NOTE: Memory Mode is an automatic function of the unit that allows the unit to run in the last mode it operated in when it is turned back on after being off.

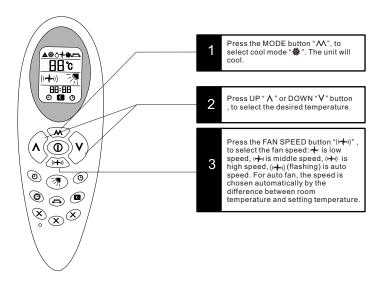


**3.4 Super heating mode:** Allows the electric heater to run in addition to the heat pump when additional heat is needed, particularly when outdoor temperatures are below 5 °C.

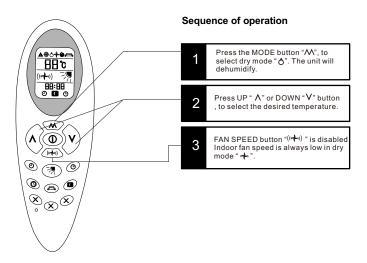


#### 3.5 Cooling mode

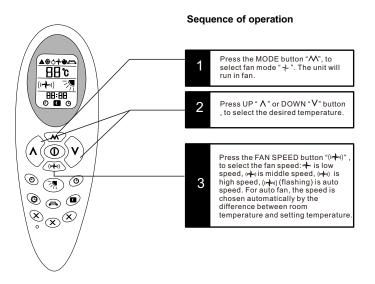
#### Sequence of operation



**3.6 Dry mode:** Allows the unit to dehumidify and remove moisture in the air within the area the unit is installed.

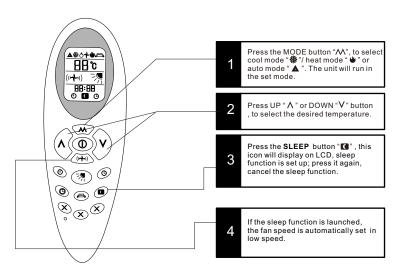


**3.7 Fan mode:** Allows the fan to run without cooling or heating the space.

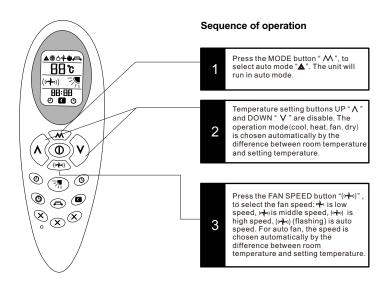


**3.8 Sleep mode:** The sleep mode changes the set temperature of the unit over time while you sleep to provide optimal comfort in an effort to match the body's natural temperature changes during sleep. To activate sleep mode, simply press the sleep button. In the sleep mode, the set temperature of the unit will either increase in cooling mode or decrease in heating mode by 1 degree after an hour, then by another degree an hour later. The sleep mode function can be cancelled by pressing the sleep button at any time.

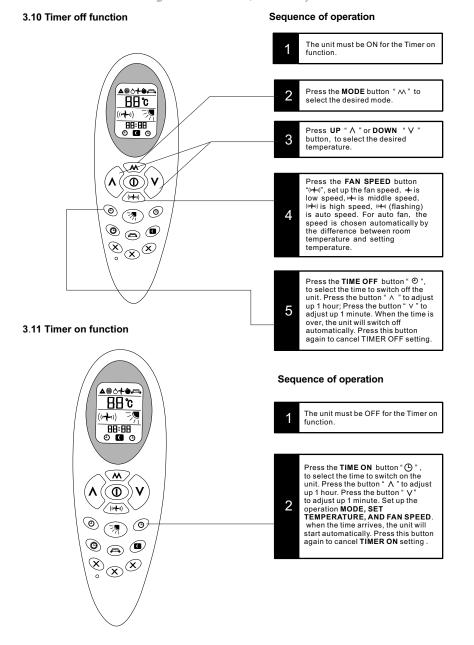
#### Sequence of operation



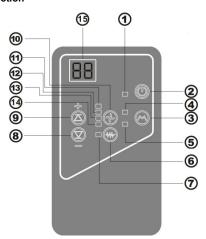
**3.9 Auto mode:** The unit will automatically adjust its operation according to the room temperature.



Timers can be used to turn the unit off or on when not needed, such as when you are not at home.



#### 3.12 On board control function



- 1) Running LED: When lit indicates that the compressor is running
- 2) On/Off button: Turns the unit on/off
- 3) Mode button: Allows you to select the desired mode heating/cooling/dry/auto
- 4) Cooling LED: When lit indicates the unit is running cooling mode
- 5) Heating LED: When lit indicates the unit is running heating mode
- 6) Super Heating Mode button: Switches ON/OFF Super Heating Mode
- 7) Super Heating Mode LED: When lit indicates the Super Heating Mode is ON or OFF.
- 8) Down button: Reduces the set temperature.
- 9) Up button: Increases the set temperature.
- 10) Fan speed button: Selects the desired fan speed low/medium/high/auto.
- 11) Auto fan speed LED: When lit indicates the auto fan speed mode is active.
- 12) Low fan speed LED: When lit indicates the low fan speed mode is active.
- 13) Medium fan speed LED: Indicates the medium fan speed mode is active.
- 14) High fan speed LED: Indicates the high fan speed mode is active.
- 15) Temperature display window: The window will show both the set temperature and room temperature. Whenever a temperature is set, it will flash on the display 15 times while flashing. Following that, room temperature will be shown on the display for 70 seconds and finally, the display will turn off.

.....

#### 3.13 Heating Mode and Super Heating Mode

This unit has an integrated heater with the ability to produce heat even at very low outdoor temperatures.

There are two heating modes which should be used according to different outdoor temperatures:

- STANDARD HEATING MODE (outdoor temperature above 5°C)
- SUPER HEATING MODE (outdoor temperature below 5°C)

The amount of energy used by the machine depends on which mode is used. Therefore users are advised to read the following guide carefully and select the correct operating mode for the correct outdoor temperature condition.

- STANDARD HEATING MODE is recommended mainly in Late Spring / Summer / Early
  Autumn when heating is required and outdoor temperatures tend to stay above 5°C.
   This mode does not incorporate the on-board supplemental electric heater, but runs the
  heat pump only. This mode is more energy efficient.
- SUPER HEATING MODE is recommended in Late Autumn / Winter / Early Spring when
  the standard heating mode is not suffice and temperatures tend to stay below 5°C. This
  mode incorporates the standard heat mode as well as the additional on-board
  supplemental electric heat. This mode requires more energy than the Standard heating
  mode, as more energy is needed to power the electric heater.

.....

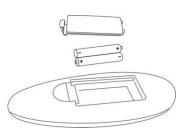
#### 3.14 Fresh air system



There is fresh air system in the back of the unit. The air conditioner will change the room air automatically with air from outdoors entering the room. The filter should be clean regularly to maintain the fresh air flow. Take out the filter as shown in the picture on the above, wash it (do not use hot water) and only when it is dried replace it in same way.

#### ATTENTION:

- Do not use the unit without the filter. 1.
- Do not use the fresh air system in heating mode below 5°C



#### 3.15 Installation and changing batteries

- Open the battery cover, hold the hook and lightly pull up.
- Insert 2 x AAA batteries with the positive (+) the same direction as marked on the plastic surface.
- Reinstall the cover of battery.
- Test the remote for proper operation by pressing the **ON/OFF** button "  $\bigcirc$  ".  $_{\odot}$  If no icons are displayed, please install the batteries again in the correct position.

#### 3.16 MAINTENANCE (P15, P16, P17, P18)



#### Filter cleaning:

The filters should be regularly cleaned to keep the unit running efficiently. Clean the filters every two weeks.

#### How to proceed:

- Disconnect the unit from the electrical supply.
- Extract the filter (P15) in the same direction as the arrows.
- Remove the filter along the slot as shown in P17.
- Proceed to wash them (do not use hot water) and only when are dried completely, replace them in the same way.

**ATTENTION:** Do not use the unit without filters as it could seriously damage the unit.

#### **ACTIVATED CARBON FILTER (P19)**



The unit includes an activated carbon filter, which not only has the function of eliminating suspended particles the standard filter has, but also eliminates smaller particles such as free chlorine, odors, colors and toxic particles that are too small to filter out by using standard filter. The activated carbon filter should be changed every three months depends on the indoor air quality. NOTICE: Do no attempt to wash or vacuum the dust from the active carbon filter in an effort to clean it; this filter must be replaced with a new active carbon filter only.

#### Cleaning the unit:

- Disconnect the unit from the electrical supply.
- Wipe external surfaces clean with a damp cleth
- Do not use an abrasive cloth and/or harsh detergents or solvents, as this may damage the surfaces.
- Do not use excessively wet washcloths or sponges, as excess water could damage the unit and compromise safety if it gets inside electrical components.

# 3.17 TROUBLESHOOTING POSSIBLE PROBLEMS

- The unit does not work.
- The unit does not heat or cool the room
- Strange smell in the room.
- Water drips from the unit.
- The remote control does not work.
- The unit does not work for 3 minutes when switched on.

#### **POSSILE SOLUTIONS**

- 1. Check the Timer settings to ensure the unit is not programmed to be off/on.
- 2. Ensure that there is power to the unit and the power cord is not damaged.
- 3. The filter could be dirty. Clean the filter.
- 4. The room temperature is too high, wait until the temperature goes down.
- 5. The temperature may not be properly set. Check it to ensure the desired setting is selected.
- 6. The outdoor grilles could be obstructed, remove any obstacles.
- 7. Excessive humidity/moisture in the air may require more time to heat or cool the room.
- 8. Ensure that the unit and condensate drain pipe has been installed properly per the installation instructions.
- 9. If the remote controller does not work, the batteries may be exhausted or they are inserted incorrectly.
- 10. The compressor will not work for the frist three minutes that the unit is powered on in order to protect the compressor. Wait for 3 minutes and the compressor will start to work.



If the supply cord damaged, it must be replaced by manufacturer or an authorized servicer with a manufacturer supplied replacement power cord in order to avoid a hazard.

The max operation temperature for the unit:

- · Max cooling:
  - o Outdoor DB 43°C/ WB26°C
  - o Indoor DB 32°C / WB 23°C
- Min heating:
  - o Outdoor DB -5°C / WB -6°C
  - o Indoor DB 21.1°C

Heating or cooling may not work outside of these temperature ranges.

All electrical and electronic products should be disposed of separately from the municipal waste stream via specific collection facilities designated by the government or the local authorities to recycle or dispose of refrigerant bearing products to prevent unintended discharging of refrigerant into the air. For more detailed information about disposal of your old unit, please contact your municipality, the waste disposal service or the store where you purchased the product.



