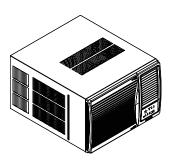
Panasonic[®]

Operating Instructions Air Conditioner



Model No. Window Unit

CW-LC181AG series CW-LC181AM series CW-LC181AR series

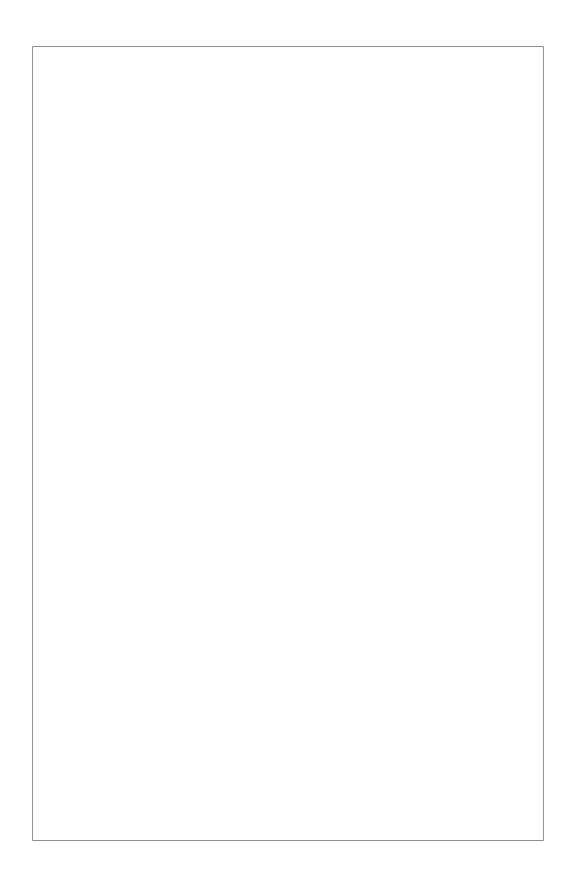
CW-XC181AG series CW-XC181AM series CW-XC181AR series



Operating Instructions Air Conditioner

Thank you for purchasing Panasonic Air Conditioner. Installation instructions attached.

Before operating the unit, read these operating instructions thoroughly and keep them for future reference.



SAFETY PRECAUTIONS

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Please observe these following safety precautions when using your air conditioner.

Failure or negligence in observing these safety precautions could cause fire, electrical shock or personal injury.

NARNING This sign warns of risk of death or serious injury.

CAUTION This sign warns of risk of injury or damage to property.

INSTALLATION PRECAUTIONS

MARNING Do not install, remove and reinstall the unit yourself.

Improper installation may cause leakage, electric shock or fire. Please engage an authorized dealer or specialist for the installation work.

Do not add or replace refrigerant other than the specified type. It may cause product damage, burst and injury. If the supply cord is

damage, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid any hazard.

(CAUTION

The room air conditioner must be earthed. Improper grounding could cause electric shock.

Do not install the unit in place where there are explosive gas leaks.

O Gas leaks near unit could cause fire.

Ensure that the drain pipe is connected properly.

Otherwise, water will leak out.

OPERATION PRECAUTIONS

!\ WARNING

This sign warns of risk of death or serious injury.



- Do not modify the length of the power cord or use an extension cord. Do not touch or operate with wet hands.
- Do not modify or damage the cord
- Do not turn on the unit by inserting the power plug. Do not switch off the unit by pulling out the
- power plug. Avoid an extended period of direct airflow.
- Do not insert your fingers or other objects into the unit, rotating parts may cause injury.
- Do not try to repair unit yourself.
- Plug in properly before operating and use a specified power cord. If abnormal conditions (burnt smell, etc) occur switch off and remove the power plug.
 - Confirm from authorized dealer or specialist on usage of specified refrigerant type. Using of refrigerant other than the specified may cause product damage, burst and injury etc.
 - This appliance is not intended for use by persons (including children) with reduced physical sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance

CAUTION

This sign warns of risk of injury or damage to property.



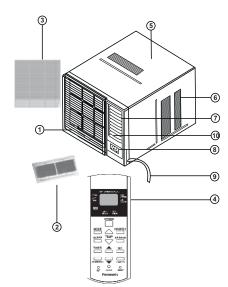
- Do not use the unit for other purposes than its intended use
- Do not remove the power plug by pulling the cord. Do not block the air intake and outlet vanes.
- Do not splash or direct water at the unit.
 Do not expose the unit to direct sunlight during operation.
- Do not operate the unit without the air filter installed or when the front intake grille has been
- Do not place any object on the unit.
- Do not operate any combustion equipment near the unit's airflow area. Do not sit or step on the unit, you may fall down accidentally.
- Do not touch the sharp aluminium fin, sharp parts may cause injury.



- Switch off the breaker and unplug the unit from the socket if the unit will not be operated for a long period.
- Pay attention to any damage on the unit caused by extensive usage. Ventilate the room occasionally where the unit is installed.
- Unplug the power cord when cleaning the unit.

PARTS IDENTIFICATION

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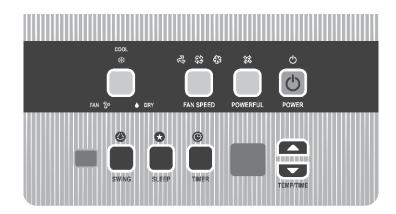


- 1. Front Grille
- 2. PM 2.5 Filter
- 3. Air Filter
- 4. Remote Control
- 5. Cabinet
- 6. Air Inlet Grille (Outdoor Side)
- 7. Air Outlet Grille
- 8. Electronic Control Keypad
- 9. Power Supply Cord
- 10. Vertical Vane
- 1. Power supply cord conductors are distinguished according to color.
- For your safety and protection, this unit is earthed through the power supply cord.Please contact the manufacturer or its service dealer or a similarly qualified person if you want to replace it.
- This unit is earthed through the power cord.The wall outlet should be provided with reliable earth wire.
- 4. The unit should be provided with an individual circuit and the circuit breaker/fuse rating should be the same as that of the power supply cord and wall outlet.

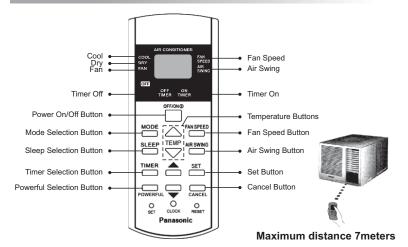
FEATURES

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DISPLAY PANEL



REMOTE CONTROL



Note:

- 1. The operating range for the remote handset is 7 meters.
- 2. The unit will beep once it receives signal from the remote control.
- 3 User has to refer the photo and feature of same remote, shown above, which they receive with AC.

OPERATIONAL INSTRUCTIONS

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This document describes the functional details of the Remote Controller for Window Air Conditioner. The receiver unit receives command from the user (By Remote Transmitter or Keys on the Receiver Board) and takes action accordingly by processing the received command in order to control the various sub units of the air conditioner.

GENERAL FEATURES

The controller receiver has following general features Preset temperature setting from 16°C to 30°C

- Visual indication of the system configuration using LEDs and seven segment display. Various modes of operation (Explained below under the heading 'Modes Of Operations') NOTE: Power box cabinet: FR material.

There are 11 LEDs on the Receiver board (Front display panel) to indicate the following

- : To indicate Supply in System
- To indicate the Cool mode selection & Compressor Status. To indicate the Dry mode selection Cool
- Dry Fan To indicate the Fan mode selection
- To indicate Swing motor condition.
 To indicate Fan Speed. Fan Low/ Medium/High Timer
- To indicate Timer setting.
 To indicate Powerful selection condition. Powerful
- : To indicate Sleep condition Sleep

DUAL DIGIT 7 SEGMENT DISPLAY

- The Seven Segment shows:

 Set Temperature (ST) in Cool Mode and Dry Mode.

 'Fn' in Fan Mode.

- 'Fn' in Fan Mode.

 'E1' when Room Sensor Short or Open.

 'E2' when Coil Sensor Short or Open.

 'SL' for Sleep in Cool Mode only for 5 second in every one minute if Sleep is active.

 'CL' visible only when operated from Display Panel button.

 'dr' visible only when operated from Display Panel button.

 'Po' visible only when operated from Display Panel button.

MODES OF OPERATIONS

Various modes of operation of the unit are as follows: Cool

- •

Cool:

- In this mode of operation, compressor will be switched on after a delay of three minute depending on the differential of Room Temp & Set Temperature.

 Cool LED blinks during the ON delay time of the compressor.
- Preset temperature and fan speed can be changed by the user. Fan Speed can be selected (Fan auto, High, Medium or Low).
- Compressor will work as per the following conditions

Compressor will cut off,

If Room temperature = Preset temperature - 1°C or Below

Compressor will cut in,

If Room temperature = Preset temperature + 1° C or Above
NOTE: Compressor should take 3 min times delay if it required as per the timing protection and 3mins required for thermostatic cutoff from Comp Switch On (minimum Run Time).

Dry:

Initial startup

Fan motor run at only low speed and cannot be changed. The comp On/Off duration is controlled by difference between room temp and set temp, as follows:

Room Temp = Set Temp + 2°C or above
Room Temp = Set Temp + 1°C
Room Temp = Set Temp
Comp On for 10 min Off for 10min
Room Temp = Set Temp
Comp On for 10 min Off for 10min Room Temp = Set Temp-1°C Room Temp = Set Temp -2°C or Below Comp On for 5 min Off for 15min

OPERATIONAL INSTRUCTIONS

Panasonic

FEATURES:

a) Fan Speed Low. b) Swing ON/OFF c) Temp can be set from 16 ° C to 30 ° C.

FAN:

In this mode, Compressor will be switched off. High, Medium or Low Fan speed can be selected with the transmitter or Fan key.

AUTO FAN SPEED (in Cool Mode):

While increasing room temps

- Low fan change to medium when room temp≥ set temp. + 2°C. Medium fan change to high when room temp.≥ set temp+ 4°C.

While decreasing room temp:

- High fan change to medium when room temp≤ set +2°C Medium fan change to low when room temp≤ set temp.

KEYS ON THE RECEIVER UNIT:

There are Nine (9 nos.) keys on the Receiver Unit. Abeep sound is heard when any key is pressed.

: Switch the system on or off. Power : To Increases the set temp.

UP : To Increases the set temp.

Down : To Decreases the set temp.

Mode : Changes the mode to Cool, Dry, Fan, Corresponding LED glows to indicate the selected mode.

Swing : This is a toggle key to switch On/Off the Swing Motor.

Fan : This key changes the Fan speed to High, Medium or Low.

Powerful Mode : By pressing this key, Compressor will turn ON instantly by-passing delay time (if room temp>Preset temp). Fan will run at high speed. Powerful Mode can be turn off by changing Mode.

Used to set timer ON when unit is OFF and vice versa.
Sleep function can be selected in cool mode only. Total 3 degree preset temperature will increment in 6 hour (1 degree in 2 hours.) Timer Sleep

NON VOLATILE MEMORY:

Controller starts with a default memory if the non volatile memory fails.

Mode : Cool rivoue : Cool Timer : Off Set Temp : 25°C Fan Speed : High Swing Motor : ON d.

ROOM SENSOR FAILURE:

When the room sensor is short or open, Display shows "E1" & compressor gets on for 20 minutes & off for 07 minutes & repeats this cycle irrespective of the set temperature.

COIL SENSOR FAILURE:

When the coil sensor is short or open, Display shows "E2" & compressor gets on for 20 minutes & off for 07 minutes & repeats this cycle irrespective of the set temperature

EVAPORATOR UNIT FROST PREVENTION (COOL MODE / DRY MODE)

When ECT* Reached 2 deg. C or below for 1 min Compressor cut off immediately and Fan runs with low Speed.

 $\frac{When \ ECT\ Reached\ on\ 12\ deg.\ C\ or\ above.}{Compressor\ will\ turn\ on\ according\ to\ Room\ Temperature\ (With\ 3\ minutes\ delay)}$

(ECT: Evaporator Coil Temperature.)

	Fan	Set Temp	Timer	Sleep	Swing	Comp.	Display
	Speed	Control					
Cool	Yes	Yes	Yes	Yes	Yes	Yes	CL, ST, SL, Po
Dry	No	Yes	Yes	NA	Yes	Yes	dr , S T
Fan	Yes	No	Yes	NA	Yes	No	Fn
OFF	No	No	Yes	NA	No	No	OFF/Timer
							value

NOTE: "ST" stands for Set Temperature.
Display PCB : VL-DISP-01
Relay PCB : VL-POWER 11

PREPARATION BEFORE OPERATION

Panasonic





Ensure that the power plug is securely inserted.
A loose plug may cause fire or an electric shock.

- **NOTES:** If the unit is not going to be used for an extended period of time, remove the power plug. Otherwise, approximately 2.5W of electricity will be used even if the unit has been turned off using the remove control.
- If operation is stopped, and to be restarted immediately, the unit will resume operation only after 3 minutes.

• HOW TO INSERT BATTERIES







Open the cover.

Insert the two batteries.

Close the cover.



CAUTION Do not use rechargeable (Ni-Cd) batteries because such batteries differ from the standard dry cell batteries in shape, dimension and performance.

ABOUT THE BATTERIES

- The batteries can be used for approximately one year.
- Be sure to replace the batteries with two new identical batteries.
- Remove the batteries if the air conditioner will not be used for an extended period of time

OPERATION CONDITIONS

Use the air conditioner under the following conditions: • Operating temperature range.

Continuous operation at over 90% high humidity may create condensation and result in waterdrops on the intake and outlet vanes.

(unit in °C)

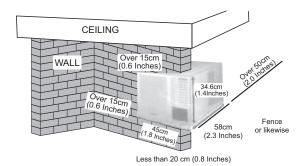
	Indoo	r side	Outdoor side		
	D.B.T	W.B.T	D.B.T	W.B.T	
Max. Temperature	35	24	46	27	
Min. Temperature	16	11	16	11	

NOTE: Humidity may exceed 90%

D.B.T. : Dry Bulb Temperature W.B.T.: Wet Bulb Temperature

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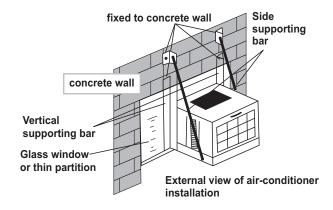
Do not install the unit near a heat source, steam source and flammable gas. Select a location where the power supply is within 1.5 metres (59 Inches). Prepare the installation hole slightly bigger than the actual cabinet size. Ensure that the minimum distances around the unit are maintained as shown below.



INSTALLING THE UNIT

For testing purpose and enhanced performance use the Installation guidelines given below

- The unit should be inclined 15-20mm (0.6-0.8 Inches) towards the back for optimum performance.
- For optimum performance Drain should be plugged.



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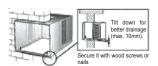
INSTALLATION PROCEDURES

- Remove the cabinet screws.LC Series from left (1 nos) and
 - right (1 nos) side.

 XC Series from back side (2 nos).
- 2 Slide the chassis out from the cabinet.



3 Place cabinet into the installation hole.



- 4 Slide the chassis into the cabinet.
- 5 Lock the chassis to the cabinet with screws.

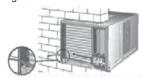
 • LC Series from left (1 nos) and

 - right (1 nos) side.

 XC Series from back side (2 nos).



6 Depending upon the location of the AC outlet, route the AC cord to either left or right side while installing the front grille.



This figure shows the AC cord routed to the left side.

• Attach the front grille to the cabinet and fasten it with screws.



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REMOVAL OF FRONT GRILLE

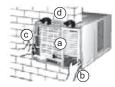
Please hold the Ribs(Shown in Photo) with your thumbs from top and bottom and push in left direction to open the Grille and to take out filter for cleaning.



Remove the air filter. Tilt up and pull out the air filter by the holder



- 3 Remove the front grille.
 - (a) Remove air filter then remove the screw on the front.
 - (b) At bottom right side of the front grille, press inward on cabinet near the power cord, and pull the grille outward to the right until right tab releases.
 - (c) At the bottom left side, push inward on cabinet and pull the grille outward to the left to release the left tab. Do not pull the bottom edge toward you more than 3 inches to prevent the two top tabs from damage.
 - (d) Slide the front grille upwards to loosen the two top tabs from slots at the top of the cabinet.



ELECTRIC WORK

- Always use at the rated voltage and with a specific air conditioning circuit.
- This equipment must be earthed and strongly recommended to be installed with Earth Leakage Circuit Breaker (ELCB) or Residential Current Device (RCD). Otherwise, it may cause electric shock or fire in case of malfunction.
- A 16 ampere time delay fuse or circuit breaker is required.
- Nominal cross sectional area of power supply wire must be 3 core x 1.5mm².
- The power supply must be from an independent circuit.
- All electrical installation must be made in accordance with local wiring and safety regulation wherever applicable.
- There must be a double pole switch with a minimum of 3.5mm contact gap in the fixed installation circuit.
- Please engage an authorized dealer or specialist for the installation work.

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CONDENSED WATER DRAINAGE

DRAIN WATER

To achieve maximum cooling efficiency, the airconditioner is designed to splash the condensation water on the condenser

In order to avoid the splashing sound, an external drain can be provided by using the following procedure. This may however cause a small loss of performance.

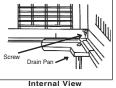
- 1. Slide out the chassis from the cabinet.
- 2. Remove the rubber plug from the body base plate.
- Install the Drain Pan at corner of the Cabinet with single screw
- 4. Connect the drain hose to the outlet on the bottom of the drain pan.
- 5. Slide the chassis into its original place in the cabinet.
 - 1 Slide out the chassis from the cabinet. Remove the rubber plug from the body base plate.

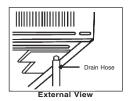


2 Install the drain pan.



Install the drain pan at the right corner of the cabinet using 1 screw.





3 Connect a drain hose. Fit the drain hose to the drain pan. EXTERNAL VIEW

> Underside view with drain pan and hose in place.



NOTE: Drain hose or tubing can be purchased locally to satisfy your particular needs.

4 Slide the chassis back into the cabinet. Lock the chassis to the cabinet. Then reinstall the cabinet to the chassis.



NOISE CONSIDERATION

- Select an installation location that can support the weight of the air conditioner and one that will not cause increased operating noise and vibration.
- Ensure that airflow and noise from the rear side of the unit (outdoor) when installed do not disturb neighbouring residents.
- Obstacles placed in front of the air outlet on the rear side of the unit (outdoor), or covers placed over it will cause excessive noise and deterioration in performance.



TRANSFERRING

Repositioning or transfer of the air conditioner due to renovation or moving requires an additional service charge, Please consult your dealer before moving.

A/C OPERATION

Panasonic

OPERATING THE UNIT



Start operation by pressing OFF/ON Button.

The operation will turn on and the display panel will light up. To stop the operation, press the OFF/ON Button again.

The unit will stop operating and the display panel light will turn off. Please note that the OFF indication is as follows:

To Start: To Stop:

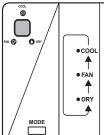
SETTING DISPLAY TEMPERATURE



Press TEMP ▲ or ▼ to set the display temperature. The temperature can be set between 16°C and 30°C Recommended temperature: 26°C ~ 28°C NOTES:

- The latest temperature setting will be memorized and will appear on the display the next time it's turned on.
- The Display temperature selection is for display purpose only and shows the temperature set by you.

SELECTING OPERATION MODE



Press MODE to select the desired operation.

The indicator will light up and a "beep" sound will indicate changing setting.

COOL mode

To set room temperature to your preference of cooling comfort. **FAN** mode

To provide air circulation without cooling the room.

During Fan operation, temperature setting cannot be selected. DRY mode

Fan motor Run at only low speed, and cannot be changed. The comp On/Off duration is controlled by difference between room temp and set temp.

SELECTING FAN SPEED



Press FAN SPEED to choose the speed level of the fan. The indicator will light up and the "beep" sound will indicate changing setting.

NOTE:

• The latest fan speed setting will be memorized and the indicator will light up the next time the unit is turned on.

ADJUSTING HORIZONTAL AIRFLOW DIRECTION



Press to select AIR SWING.

The air circulation will automatically move the horizontal louvers left and right for better air distribution around the room.

NOTE:



Using your hands to adjust the direction may cause the louvers to malfunction. If this happens, stop operation immediately and restart.



of the airflow done manually.

A/C OPERATION

<u>Panasonic</u>

POWERFUL OPERATION



To obtain set temperature quickly:

- Press POWERFUL.
- To cancel this operation, press the mode.
- After POWERFUL is selected, Compressor will turn ON instantly by-passing delay time (if room temp>Preset temp).
 Fan will run at high speed.

SETTING THE OFF/ON TIMER

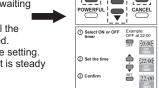


When the air conditioner is in operation: Press the TIMER button.

The TIMER indicator light will blink awaiting for setting.

Press the TIMER ▲ or ▼ button until the preferred hour of operation is reached. Press the SET button to complete the setting. At this time, the TIMER indicator light is steady instead of blinking.





When ON Timer is set, the unit may start earlier (up to 15 minutes) before the actual set time in order to achieve the desired temperature on time.
Timer operation is based on the clock set in the remote control and repeats

daily once set. For clock setting, please refer to Clock Setting Column.

If timer is cancelled manually or due to power failure, you can restore the previous setting (once power is resumed) by pressing Set

CANCEL TIMER SETTING DURING OFF TIMER



TIMER

Press the CANCEL button to cancel the time setting. The TIMER indicator light will turn off.

However the temperature remains displayed.

SETTING THE SLEEP MODE



To Maximize comfort while sleeping

- This operation provides you with a comfortable environment while sleeping by gradually increasing the set temperature 1°C after 2 hours operation.
- Can be cancelled by pressing the respective button again.

Remote Settings:

SET : Not used in normal operation.

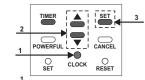
RESET : Press to restore the Remote control to default setting.

CLOCK SETTING : Clock Setting

(1) Press CLOCK

(2) Set the time

(3) Confirm



ENERGY SAVING HINTS

Panasonic

• HELPFUL INFORMATION

Auto Restart Control

- Operation will automatically resume under the previous operation mode.
- $\bullet\,$ If the unit was set to TIMER mode, operation will not resume automatically.

Timer Setting

 When power failure occurs, the timer setting is cancelled, Once power returns, reset the timer.

• ENERGY SAVING HINTS

- Setting the temperature 1°C higher save 10% electricity costs.
- Clean the air filter every 2 weeks. Regular cleaning of the air filter preserves efficiency.
- Keeping openings closed keeps cool air in and hot air out.
- Avoid direct sunlight and heat.
- For health reasons do not overcool your room.
- Your air conditioner's cooling capacity should match your room size.

CARE AND MAINTENANCE

Panasonic⁶



Always turn off the air conditioner and the main power supply before cleaning the unit.

Switch off the power supply if the unit is not going to be used for a long period of time.



- Clean the cabinet, front grille with a mild soap or detergent and lukewarm water.
- The front intake grille can be easily removed for cleaning purpose (refer to Remove the front intake grille procedure). Gently wash with water and a sponge.
- The filter can be easily cleaned using a vacuum cleaner. Vacuum the front of the filter and then wash the rear with water. If it is badly soiled, wash with a mild household detergent.
- Do not clean with benzene, thinner, scouring powder or cloth soaked in caustic chemical.
- If the unit is extremely dirty, heat transfer is less efficient and the unit may not cool effectively.
- If the air filter becomes clogged with dust, the cooling capacity will drop and 6% of the electricity used to operate the air conditioner will be wasted.

NOTE: Do not dry the front panel or the air filter in direct sunlight. (Exposure to direct sunlight may discolour or deform the panel.)

• PRE-SEASON INSPECTION

- Is the discharged air cold?
 - *After* 15 minutes of operation, it is normal for the temperature difference between intake and outlet air to be more than 8°C for cooling.
- Are the air intake and outlet vanes of the indoor and outdoor side obstructed ?
- Are the remote control batteries weak?

• RECOMMENDED INSPECTION

Usage over several seasons will reduce performance as the unit becomes dirty.
 A dirty unit may produce foul odours and dust may clog the dehumidifying drainage.
 Seasonal inspection is recommended in addition to regular cleaning.
 Consult Panasonic Authorized Service Centre.

TROUBLESHOOTING

Panasonic

BEFORE

Check the following points before calling for repairs or service if the malfunction persists, Please contact Panasonic Authorized Service Centre.

Condition

If the unit is too noisy during operation.

The following sounds are normal during operation:

- A low humming sound indicating that the unit is operating.
- A soft clicking sound when the compressor turns on and off.
- A flowing sound due to circulation of the refrigerant when the compressor is turned on.
- A splashing sound indicating condensation in the condenser coil.

If you hear other noises please consult Panasonic Authorized Service Centre.

Condition 2 operate.

If the unit does not

- The main power cord is not plugged in.
- The main circuit breaker has tripped.
- Remote control batteries are weak.

Condition 3 If the unit does not cool properly.

- The room is too big for the unit's cooling capacity.
- The ventilation lever is set to OPEN.
- The air circulation is impede by curtains or furniture.
- After 15 minutes of operation, it is normal for the temperature difference between intake and outlet air to be more than 8°C for cooling.

Condition 4 If water drips off the rear of the unit.

- Humidity is high.
- Condensed water is overflowing.
- To rectify the problem, mount an optional drain pan to the unit.

Condition 5 If water drips inside the room.

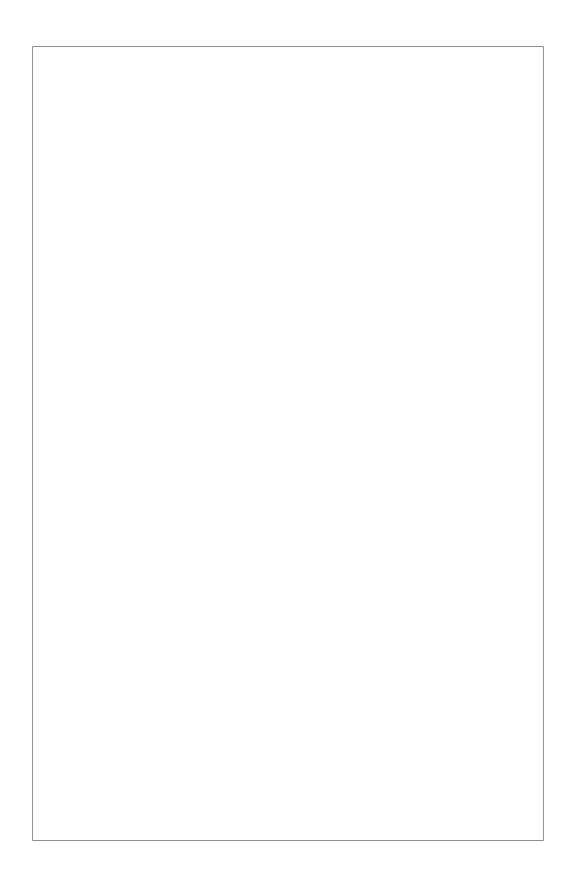
- The unit is tilted inward. To rectify this, tilt the unit slightly outward.
- Mount the optional drain pan if you prefer.
- The drain pan may be blocked.

To call Panasonic Authorized Service Centre, IMMEDIATELY turn off the power and contact Panasonic Authorized Service Centre Ltd. as soon as any of following events occur.

- The Circuit breaker frequently trips or the fuse blows regularly.
- If water or foreign objects have accidentally entered the air conditioner.
- If there is abnormal sound during operation.

NOTE:

- 1. The enclosure opposing the room side is splash proof (IPX4).
- 2. Do not install this appliance in laundry room or other locations where water may drip from the ceiling, etc.
- 3. If the supply cord is damaged or need to be replaced, it must be replaced by the manufacturer or its service agent or a similarly qualified person in order to avoid any hazard.



Information

English

Declaration of Conformity with the requirements of the E - Waste (Management) Rules-2016 The Product is in conformity with the requirements of reduction of hazardous substances of the E-Waste Rules-2016

The content of hazardous substance with the exemption of the applications listed in SCHEDULE II of the E-Waste Rules-2016

- 1. Lead (Pb) not over 0.1% by weight;
- 2. Cadmium (Cd) not over 0.01% by weight;
- 3. Mercury (Hg) not over 0.1% by weight;
- 4. Hexavalent chromium (Cr⁶⁺) not over 0.1% by weight;
- 5. Polybrominated biphenyls (PBBs) not over 0.1% by weight;
- 6. Polybrominated diphenyl ethers (PBDEs) not over 0.1% by weight.



For the purpose of recycling to facilitate effective utilization of resources, please return this product to a nearby authorized collection center, registered dismantler of recycler, or Panasonic service center when disposing of this product.

Customer care number (Toll free): 1800 103 1333

1800 108 1333

Please see the Panasonic website for further information on collection centers, etc. or call the customer care toll-free number http://www.panasonic.com/in/corporate/sustainability/panasonic-india-i-recycle-program.html

Panasonic Corporation

Website: http://www.panasonic.com

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