



## **Model ACDC12**

### **Solar Heating & Cooling Heat Pump Mini-Split System**

#### **User and Remote Control Manual**

**Please read this manual carefully and keep it for future reference.**

Inside you will find many helpful hints on how to use and maintain your unit properly. Just a little preventative care on your part can save you a great deal of time and money over the life of your system. You'll find many answers to common problems in the chart of troubleshooting tips. If you review the chart of troubleshooting tips first, you may not need to call for service.

The design and specifications are subject to change without prior notice for product improvement. Consult with the sales agency or manufacturer for details.

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# SAFETY PRECAUTIONS

## **Warning**

- Contact an authorized service technician for repair or maintenance of this unit.
- Contact the authorized installer for installation of this unit.
- 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.
- Young children should be supervised to ensure that they do not play with the air conditioner.
- If the power cord is to be replaced, replacement work shall be performed by authorized personnel only.
- Installation work must be performed in accordance with the national wiring standards by authorized personnel only.

When using this air conditioner in the European countries, the following information must be followed:



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

It is prohibited to dispose of this appliance in domestic household waste. For disposal, there are several possibilities:

- The municipality has established collection systems, where electronic waste can be disposed of without charge to the user.
- When buying a new product, the retailer may take back the old product free of charge.
- The manufacture may take back the old appliance for disposal free of charge to the user.
- As old products contain valuable resources, they can be sold to scrap metal dealers.

Disposal of waste in forests and landscapes endangers everyone's health when hazardous substances leak into the groundwater and find their way into the food chain. Don't be evil.

To prevent injury to the user or other people and property damage, the following instructions must be followed. Incorrect operation due to ignoring these instructions may cause harm or damage. The seriousness is classified by the following indications.

 <b>WARNING</b>	This symbol indicates the possibility of death or serious injury.
 <b>CAUTION</b>	This symbol indicates the possibility of injury or damage to property.

 **WARNING**

- Connect to the proper power source, 240 VAC, otherwise it may cause electric shock or fire due to excess heat generation.
- Do not operate or stop the unit by turning off the power. It may cause electric shock or fire due to heat generation.
- Do not damage or use an unspecified power cord. It may cause electric shock or fire.
- Do not modify the power cord or share the power source with other devices. It may cause electric shock or fire due to heat generation.
- Do not operate with wet hands or in a damp environment as it may cause electric shock.
- Do not direct the airflow at room occupants as this may cause health problems.
- Ensure proper grounding as improper grounding may cause electric shock.
- Do not allow water to drain into the indoor unit as it may cause electrical shock or equipment failure.
- Always install with a disconnect on a dedicated circuit as failure to do so may cause fire or electric shock.
- Disconnect the power source if abnormal sounds or odors are noticed.
- Do not drink the water drained from the unit as it may be contaminated and cause illness.
- Do not open the unit during operation as it could cause electrical shock.
- Always use the correctly rated fuse or circuit breaker as failure to do so may cause a fire.
- Do not install the power cord close to heating appliances as it may cause a fire or electrical shock.

- Do not disassemble or modify unit as it may cause a fire or electrical shock.
- Ventilate room before operating unit if there is a gas leak from another appliance. It may cause an explosion or fire.
- Do not expose the power cord to flammable gas or combustibles such as gasoline, benzene, paint thinner, etc. It may cause an explosion or fire.

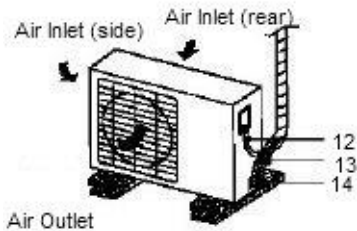
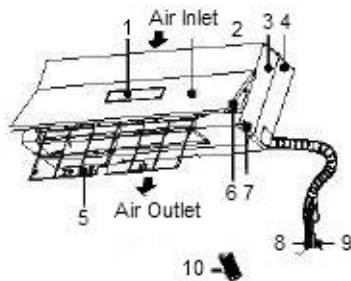
## **CAUTION**

- When cleaning the air filter, do not touch any components inside the unit as it may cause injury.
- Do not clean the unit with water as water may enter the unit and degrade the insulation. It may cause an electric shock.
- Ventilate the room when used together with a stove, etc., as an oxygen shortage may occur.
- Before cleaning the unit, power it off and turn off the breaker as it may cause fire and electric shock, or may cause an injury.
- Do not expose pets or house plants to direct air flow as this could injure the pet or plant.
- Do not use this unit for special purposes such as (but not limited to) food preservation as it may cause deterioration of quality, etc.
- Do not operate the unit with open windows.
- Do not place obstacles around air inlets or inside of air inlets. It may cause failure of the unit.
- Turn off the main breaker when storing the unit for extended periods of time.
- Do not use strong detergents to clean the unit as appearance may be deteriorated due to change of product color or scratching of its surface.
- Ensure that the proper bracket is used to support the outdoor unit as a weak or damaged bracket could cause the unit to fall causing damage or injury.
- Inspect filters monthly and clean as needed as operation without filters or with dirty filters will affect system performance and may cause unit failure.
- Do not place heavy objects on the power cord or compress the cord to avoid electrical shock or fire.
- Use caution when unpacking the unit as sharp edges could cause injury.
- If water enters the unit, turn off the breaker and call a qualified service person.

# OPERATING INSTRUCTIONS

## Part Identification

### Indoor Unit



### Indoor Unit

1. Display Window
2. Front Panel
3. Panel Frame
4. Chassis
5. Air Filter
6. Panel Brace
7. Manual Control Button
8. Connecting Pipe
9. Drain Hose
10. Remote Controller

### Outdoor Unit

12. Connecting Cable
13. Line Set
14. Service Valve

### Display Window



#### Defrost Operation Display

Displayed when the air conditioner starts defrosting automatically or when the warm air control feature is activated in heating operation.

#### Operation Frequency Display

This display is separated into five zones. The zones illuminate based on the compressor current frequency. For example, higher frequency will illuminate more zones.

#### Digital Display

Displays the current setting temperature and malfunction code when the air conditioner is in operation.

#### AUTO Operation Display

Displayed during Auto operation.

#### Timer Display

Displayed during timer operation.

## OPERATING TEMPERATURES

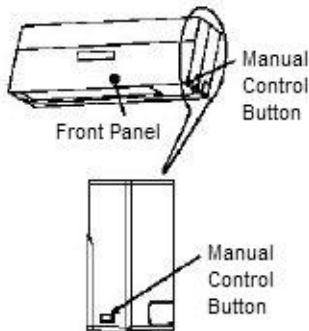
Mode	Cooling Temperature	Heating Operation	Drying Operation
Room Temperature	$\geq 62^{\circ}\text{ F}$ or $17^{\circ}\text{ C}$	$\leq 86^{\circ}\text{ F}$ or $30^{\circ}\text{ C}$	$> 50^{\circ}\text{ F}$ or $10^{\circ}\text{ C}$
Outdoor Temperature	$32^{\circ}\text{ F} - 122^{\circ}\text{ F}$ $0^{\circ}\text{ C} - 50^{\circ}\text{ C}$	$5^{\circ}\text{ F} - 86^{\circ}\text{ F}$ $-15^{\circ}\text{ C} - 30^{\circ}\text{ C}$	$32^{\circ}\text{ F} - 122^{\circ}\text{ F}$ $0^{\circ}\text{ C} - 50^{\circ}\text{ C}$

**Note:**

1. Optimum performance will be achieved within these operating temperatures. If air conditioner is used outside of the above conditions, certain safety protection features might come into operation and cause the unit to function abnormally.
2. Room relative humidity less than 80%. If the air conditioner operates in excess of this figure, the surface of the air conditioner may attract condensation. Please set the vertical air flow louver to its maximum angle (vertically to the floor) and set HIGH fan mode.

## Manual Operation

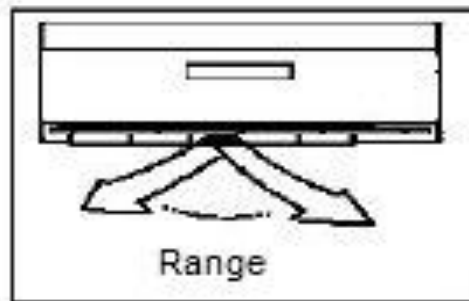
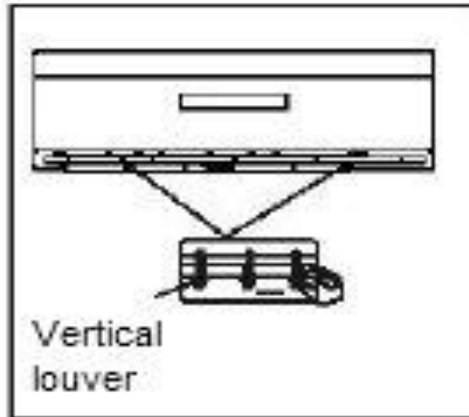
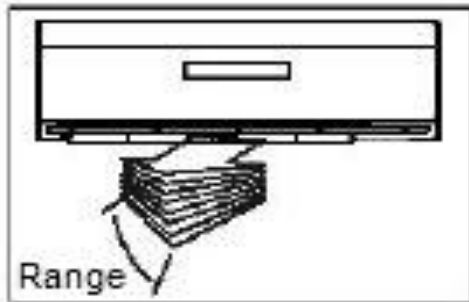
Manual operation can be used temporarily in case the remote controller is disabled or when maintenance is necessary.



**NOTE:** The unit must be turned off before operating the “manual control” button. If the unit is operational, continue pressing the manual control button until the unit is off.

1. For the convenience of operation, the manual control button is located on the right side of the panel frame.
2. One press of the manual control button will lead to the forced AUTO operation. If you press the button twice within five seconds, the unit will operate under forced COOL operation.

**⚠ CAUTION:** This button is used for testing purposes and to be used by service personnel only.



- Adjust the air flow direction properly; otherwise, it might cause discomfort or uneven room temperatures.
- Adjust the horizontal louver using the remote controller.
- Adjust the vertical louver manually.

To set the vertical air flow (Up-Down) direction, perform this function while the unit is in operation by using the remote controller to adjust the air flow direction. The horizontal louver can be moved at a range of 6° for each press, or swing up and down automatically. Please refer to the REMOTE CONTROLLER section.

To set the horizontal air flow direction (left - right) move the vertical louver manually to adjust the air flow in the direction you prefer.

**IMPORTANT:** Before adjusting the vertical louvers, the supply power must be disconnected.



### CAUTION

Do not operate the air conditioner for long periods with the air flow direction set downward in cooling or dehumidifying mode; otherwise, condensation may occur on the surface of the horizontal louver causing moisture to drop on to the floor or on furnishings.

Do not move the horizontal louver manually unless it is necessary (always use the remote controller). When the air conditioner is started immediately after it was stopped, the horizontal louver might not move for approximately 10 seconds.

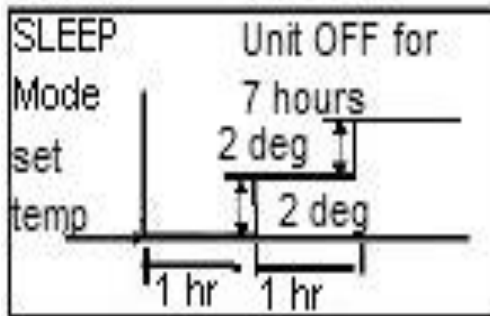
Open angle of the horizontal louver should not be set too small, as COOLING or HEATING performance may be impaired due to overly restricted air flow area.

Do not operate unit with horizontal louver in closed position.

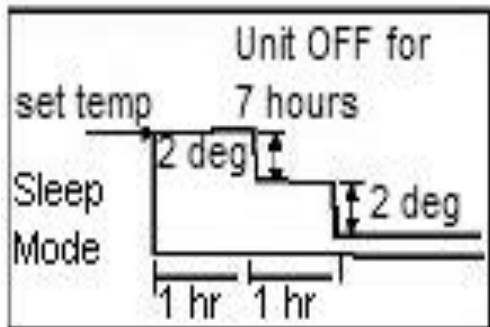
When the air conditioner is connected to power (initial power), the horizontal louver may generate a sound for 10 seconds, this is a normal operation.



## AUTO and ECONOMY OPERATION



**Cooling**



**Heating**

### AUTO operation

- When you set the air conditioner in AUTO mode, it will automatically select cooling or fan only operation depending on what temperature you have selected and the room temperature.
- The air conditioner will control room temperature automatically based on the temperature point set by you.
- If the AUTO mode is uncomfortable, you can manually select.

### Economy Operation

When you push the ECONOMY button on the remote controller during cooling, heating or AUTO operation, the air conditioner will automatically increase (cooling) or decrease (heating) the set temperature by 2 degrees F per hour for 2 hours, hold steady for the next 5 hours, and then turn off. This characteristic maintains both energy saving and comfort in night operation.

### Dehumidification

The fan speed will be automatically controlled under this operation. During this operation, if the room temperature is lower than 50°F (10°C) the compressor stops operation and restarts when the room temperature is above 54°F (12°C).

### Optimal Operation

To achieve optimal performance, please note the following:

- Adjust the temperature to achieve the highest comfort level. Do not adjust the unit to excessive temperature levels.
- Close doors and windows on COOL or HEAT modes; otherwise, performance will be reduced.
- Use TIMER ON button on the remote controller to select a time you want to start your air conditioner.
- Do not put any object near air inlet or air outlet, as the efficiency of the air conditioner will be reduced and the air conditioner may stop running.





## • Care and Maintenance

### Cleaning the Grille, Case and Remote Controller

NOTE: Power must be disconnected before cleaning the indoor unit.

IMPORTANT: Never use volatile substances (such as gasoline or alcohol) to clean the panel.

#### CAUTION

-  A cloth dampened with cold water may be used on the indoor unit if needed. Then wipe it with a dry cloth.
-  Do not use a chemically treated cloth or duster to clean the unit.
-  Do not use benzene, thinner, polishing powder, or similar solvents for cleaning. These may cause the plastic surface to crack or deform.
-  Never use water hotter than 104°F (40° C) to clean the front panel, it could cause deformation or discoloration.

## **Removing and cleaning the Indoor Unit air filters:**

A clogged air filter reduces the cooling efficiency of this unit. Please inspect filters monthly and clean as needed as operation without filters or with dirty filters may cause unit failure.

### **TURN UNIT OFF BEFORE STARTING THIS PROCESS!!!**

1. Looking directly at the indoor unit, firmly grasp both bottom corners of the front panel and firmly push the panel straight upwards approximately 2 inches until panel stops moving.
2. While still grasping both bottom corners, firmly pull panel outwards (toward you) at a slight angle (do not exceed 20 degrees) unhinging the panel from the two plastic crank hinges.
3. Use the plastic panel brace (1" wide by 2" long located 2" to the left of the right-side plastic crank) to support the front panel.
4. Remove the left-side air filter by firmly grasping the bottom edge of the filter and lifting upwards thereby releasing the two tabs from the filter support frame. Pull filter downwards to remove from unit. Remove the right-side filter using the same process.
5. Gently clean the filters with a vacuum cleaner or by water (do not use dishwasher) and dry prior to installation back into the unit.
6. Insert the left-side air filter (filter with the smaller filter attached to it) back into the unit by inserting the upper end of the filter (end without the two tabs) onto the air filter support brace (making sure the left and right filter edges are positioned properly on the rails) and firmly slide filter back into position until both tabs are secured into the front frame. Insert the right-side air filter using the same process.
7. Release plastic panel brace by pulling the front panel slightly outward (toward you) and push the panel brace back down to its original position.
8. To re-attach the front panel to the indoor unit, lift the left plastic crank (located on the unit) up (using the index and middle fingers from under the panel) and align the fixing hole on the back of the front panel to the plastic crank on the unit. Then, firmly press the panel inwards to make the crank link with the panel. Repeat the same process for the right side.
9. The panel will completely close automatically once the unit is turned on.

## Maintenance

**\*\*Check before operating\*\***

If you plan to idle the unit for a long time, perform the following:

- (1) Operate the fan for about half a day to dry the inside of the unit.
- (2) Stop the air conditioner and disconnect power. Remove the batteries from the remote controller.
- (3) The outdoor unit requires periodic maintenance and cleaning. Do not attempt to do this yourself. Contact your dealer or service provider:
  - Check that the wiring is not broken or disconnected.
  - Check that the air filter is installed.
  - Check if the air outlet or inlet is blocked after the air conditioner has not been used for a long time.

### CAUTION

- Do not touch the metal parts of the unit when removing the filter. Injuries can occur when handling sharp metal edges.
- Do not use water to clean inside the air conditioner. Exposure to water can destroy the insulation, leading to possible electric shock.
- When cleaning the unit, first make sure that the power and circuit breaker are turned off.

## OPERATING TIPS

The following events may occur during normal operation.

### 1. Compressor protection.

The compressor can't restart for 3 minutes after it stops. The unit is designed not to blow cold air on HEAT mode when the indoor heat exchanger is in one of the following three situations and the set temperature has not been reached.

- A) When heating has just starting.
- B) Defrosting.
- C) Low temperature heating.

The indoor or outdoor fan will stop running when defrosting. Frost may be generated on the outdoor unit during heat cycle when outdoor temperature is low and humidity is high resulting in lower heating efficiency of the air conditioner. During this condition air conditioner will stop heating operation and start defrosting automatically. The time to defrost may vary from 4 to 10 minutes according to the outdoor temperature and the amount of frost build-up on the outdoor unit.

**2. A white mist coming out from the indoor unit.** A white mist may generate due to a large temperature difference between air inlet and air outlet on COOL mode in an indoor environment that has a high relative humidity. A white mist may generate due to moisture generated from defrosting process when the air conditioner restarts in HEAT mode operation after defrosting.

### 3. Hissing sound from the air conditioner.

You may hear a low hissing sound when the compressor is running or has just stopped running. This sound is from the refrigerant flowing through the system or coming to a stop.

You may also hear a low "squeak" sound when the compressor is running or has just stopped running. This is caused by heat expansion and cold contraction of the plastic parts in the unit when the temperature is changing.

When power is first turned on, a noise may be heard due to louver restoring to its original position. This is normal operation.

### 4. Dust is blown out from the indoor unit.

This is a normal condition when the air conditioner has not been used for a long time or during first use of the unit.

### 5. A peculiar smell comes out from the indoor unit.

This is caused by the indoor unit giving off smells permeated from building material, from furniture, or smoke.

### 6. Compressor functionality

When the indoor temperature reaches the set temperature, the compressor will stop automatically and the air conditioner turns to FAN only mode. The compressor will start again when the indoor temperature rises on COOL mode or falls on HEAT mode to reach the set point.

**7. Dripping water** may form on the surface of the indoor unit when cooling in a high relative humidity (relative humidity higher than 80%). This is due to the angle of the horizontal louver being set too small. Adjust the horizontal louver to the maximum air outlet position and select HIGH fan speed.

**8. Heating mode.**

The air conditioner draws in heat from the outdoor unit and releases it via the indoor unit during heating operation. When the outdoor temperature falls, heat drawn in by the air conditioner decreases accordingly. At the same time, heat loading of the air conditioner increases due to larger difference between indoor and outdoor temperature. If a comfortable temperature can't be achieved by the air conditioner, we suggest you use a supplementary heating device.

**9. Auto-restart function.**

Power failure during operation will stop the unit completely. When the power restores, the unit restarts automatically with all the previous settings preserved by the memory function.


**10. Lightning**

Lightning nearby may cause the unit to malfunction. Disconnect the power to the unit and then re-connect the power to the unit. Push the ON/OFF button on the remote controller to restart operation.

## Troubleshooting Tips

<p>If one of the following faults occur, stop the air conditioner immediately, disconnect the power and then connect it again. If the problem still exists, disconnect the power and contact the nearest customer service center.</p>	
<p>Trouble</p>	<p>OPERATION/RUN Indicator(s) continue flashing.</p>
	<p>Fuse blows frequently or circuit breaker trips frequently.</p>
	<p>Other objects or water fall into the air conditioner.</p>
	<p>The remote controller won't work or works abnormally.</p>
	<p>If one of the following codes appear on the display area : E0, E1, E2, E3.....or P0, P1, P2, P3.....</p>

<p>Cold air blowing from indoor unit but room is not heating or cooling.</p>	<p>Air filter is blocked</p>	<p>Clean air filter</p>
	<p>Doors or windows are open</p>	<p>Close doors and windows and check for drafts</p>
	<p>The 3 minute delay protection has been activated</p>	<p>Wait 3-5 minutes and try again</p>
<p>If the trouble has not been corrected, please contact your local dealer. Be sure to inform them of the detailed malfunction and unit model.</p>		

 Notes: Do not attempt to “repair” the unit yourself. Always consult an authorized service provider.

Malfunction	Cause	Solution
<p>Unit does not start</p>	<p>Fuse or breaker may be blown or tripped.</p>	<p>Check fuse or breaker</p>
	<p>Battery in remote controller may be dead.</p>	<p>Replace the battery.</p>
	<p>The time you have set with timer is incorrect.</p>	<p>Wait or cancel timer setting.</p>
<p>Unit not cooling</p>	<p>Temperature setting not set correctly</p>	<p>Set temp correctly. Refer to "Using remote control" section.</p>

# Remote Controller User Guide

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### **Distance limitations of the remote:**

Use the remote within 30 feet of indoor unit for proper reception. Reception is confirmed by a beep from the unit.

### **CAUTION**

The air conditioner will not operate if curtains, doors or other materials block the signals from the remote controller to the indoor unit.

Prevent any liquid from falling into the remote controller. Do not expose the remote controller to direct sunlight or heat.

If the infrared signal receiver on the indoor unit is exposed to direct sunlight, the air conditioner may not function properly. Use curtains to prevent the sunlight from falling on the receiver.

If other electrical appliances react to the remote controller, either move these appliances or consult your dealer.

### **Replacing the batteries**



The remote controller is powered by two batteries (AAA Energizer or equivalent) housed in the rear part and protected by a cover.

- (1) Remove the cover by pressing and sliding off.
- (2) Remove the old batteries and insert the new batteries, placing the (+) and (-) ends correctly.
- (3) Reattach the cover by sliding it back into position.

NOTE: When the batteries are removed, the remote controller erases all programming. After inserting new batteries, the remote controller must be reprogrammed.

**CAUTION**

Do not mix old and new batteries. Do not store batteries in the remote for long periods of time. Properly dispose of batteries (consult your city code).

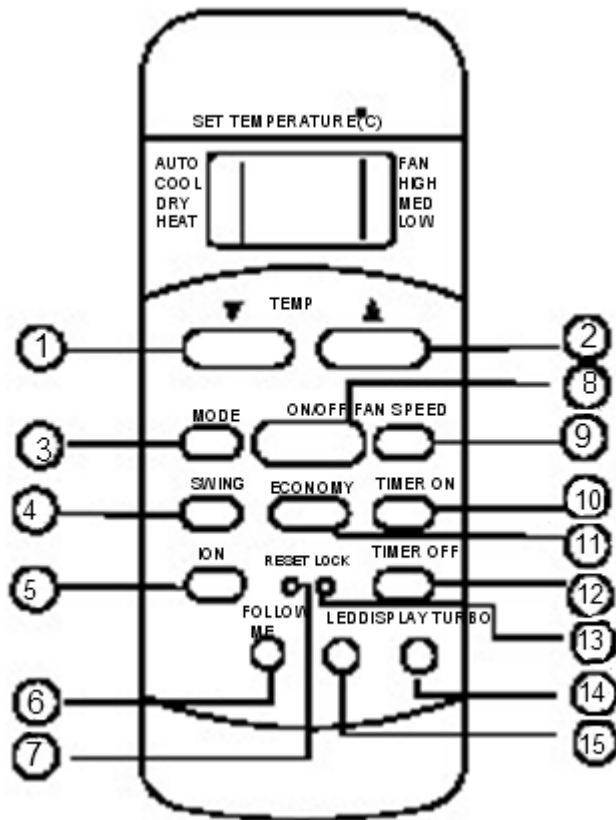
**Remote Control Specifications**

Model	<b>R51L10/BGE</b>
Rated Voltage	3.0V( AAA Dry batteries)
Lowest voltage needed to transmit signal	2.0V
Signal Receiving Range	30 ft. (when using new batteries at 3.0 DC voltage)
Operating Environment	-41 F~140 F or 5 C~ 60 C

**Performance Features**

1. Operating Mode: AUTO, COOL, DRY, HEAT, and FAN.
2. Timer Setting Function in 24 hours.
3. Indoor Setting Temperature Range : 62 F~88 F. (17 C~30 C)
4. Full functional LCD (Liquid Crystal Display)
5. Back light

## Function buttons



### 1. Temp UP button

Push this button to increase the indoor temperature setting in 2 degree increments.

### 2. Temp DOWN button

Push this button to decrease the indoor temperature setting in 2 degree increments.

### 3. MODE button

Each time the button is pressed, the operation mode is selected in the following sequence. **Auto, Cool, Dry, Heat, and Fan.**

### 4. SWING button

Used to start or stop the louver movement and set the up/down airflow direction.

### 5. ION button (not applicable to this unit)

## **6. FOLLOW ME button**

Push this button to initiate the “Follow Me” function and the remote controller begins to detect the actual temperature at its location. The remote controller will send this signal to the air conditioner every 3 minutes until you press the “Follow Me” button again. The air conditioner will beep to indicate the “Follow Me” feature has ended if it does not receive the signal during any 7 minute interval. Please insure that the signal from the remote controller is not blocked.

## **7. Reset button**

Once the recessed RESET button is pressed, all of the current settings will be cancelled, and the controller will return to the original settings.

## **8. ON/OFF button**

Operation starts when this button is pressed and stops when the button is pressed again.

## **9. FAN SPEED button**

Used to select the fan speed in the following four steps, AUTO, LOW, MEDIUM, and HIGH.

## **10. TIMER ON button**

Press this button to activate the Auto-on time setting. Each press will increase the time setting in 30 minute increments, up to 10 hours, then at 1 hour increments up to 24 hours. To cancel the Auto-on time setting, just press the button until the time setting is 0.0.

## **11. ECONOMY Button**

Select this button before going to bed. It will maintain a comfortable temperature and save energy. This function is available in COOL, HEAT, or AUTO modes only.

Note: While the unit is running under Energy-Saving Mode, it would be cancelled if MODE, FAN SPEED, or ON/OFF is pressed.

## **12. TIMER OFF Button**

Press this button to activate the Auto-off time setting. Each press will increase the time setting in 30 minute increments, up to 10 hours, then at 1 hour increments up to 24 hours. To cancel the Auto-off time setting, just press the button until the time setting is 0.0.

### **13. LOCK Button**

Press this recessed button to lock all current settings and the remote will not accept any operation except that of LOCK. Use the LOCK mode to prevent settings from being accidentally changed. Press the LOCK button again to cancel the LOCK function. A LOCK ICON, FOLLOW ME, and TURBO symbol will appear on the remote controller display.

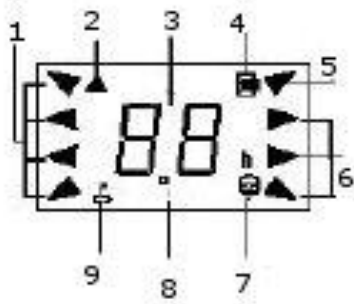
### **14. TURBO Button**

Used to start or stop the speed cooling/heating.

### **15. LED DISPLAY Button**

Press this button to clear the display on the indoor unit, press it again to light the display.

## LCD DISPLAY ON REMOTE CONTROLLER



### 1. MODE Display

Displays the current selected mode: AUTO, COOL, DRY, HEAT and FAN.

### 2. TRANSMISSION Indicator

This transmission indicator will light when remote controller transmits signals to the indoor unit.

### 3. TEMP/TIMER Display

The temperature setting (from 62F to 88F) or timer setting (0-24hr) will be displayed. If FAN mode is selected, there will be no display.

### 4. ON/OFF Display

This indicator will be displayed when the unit is operating.

### 5. MODE Display (FAN mode)

### 6. FAN SPEED Display

Displays the selected fan speed: AUTO, HIGH, MED and LOW. Nothing displays when the fan speed is selected in AUTO speed. When AUTO or DRY Mode is selected, there will be no signals displayed.

### 7. FOLLOW ME Display

When pressing the FOLLOW ME button in COOL or HEAT mode, the remote sensing function is activated and this indicator is displayed.

### 8. TIMER Display

This display area shows the settings of the TIMER. That is, if only the Auto-on time function is set, it will display TIMER ON. If only the Auto-off time function is set, it will display TIMER OFF. If both functions are set, it will display TIMER ON/OFF which indicates you have chosen both the Auto-on time and Auto-off time.

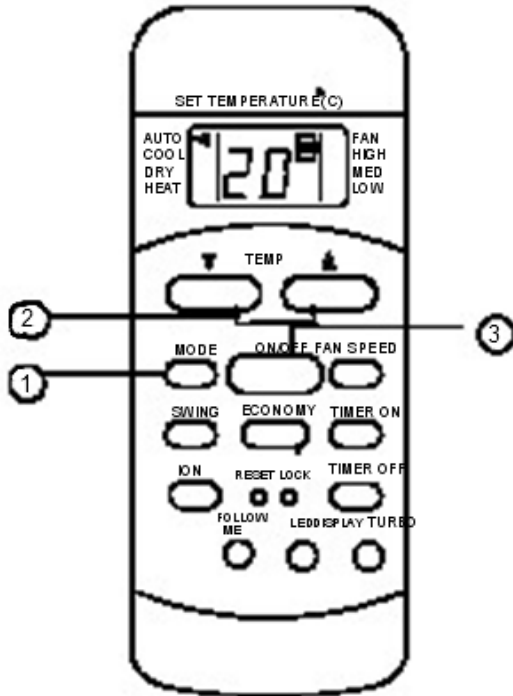
### 9. LOCK Indicator

LOCK is displayed when pushing the LOCK button. Push again to clear the display.

## How to use the buttons on the remote controller:

Ensure the unit is plugged in and power is available. The OPERATION indicator on the display panel of the indoor unit illuminates.

### Auto Operation



1. Press the MODE button to select Auto.
2. Press the TEMP button to set the desired temperature. The temperature can be set within a range of 62 F in 2 degree F increments.
3. Press the ON/OFF button to start the air conditioner.

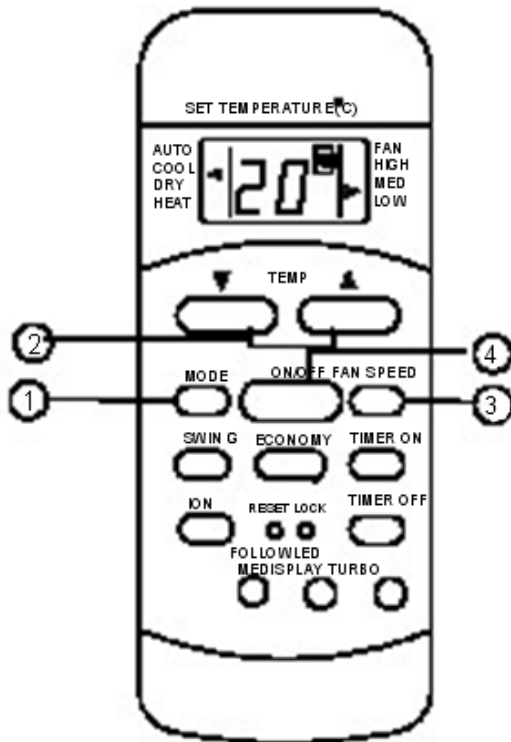
#### NOTE:

1. In the "Auto" mode, the system can logically choose the mode of Cooling, Fan, Heating and Dehumidifying by sensing the difference between the actual ambient room temperature and the set temperature on the remote controller.

2. In the "Auto" mode, you cannot switch the fan speed. It has already been automatically controlled.

3. If the "Auto" mode is not comfortable for you, the desired mode can be selected manually.

## Cooling /Heating/Fan Operation



**Ensure the unit is plugged in and power is available.**

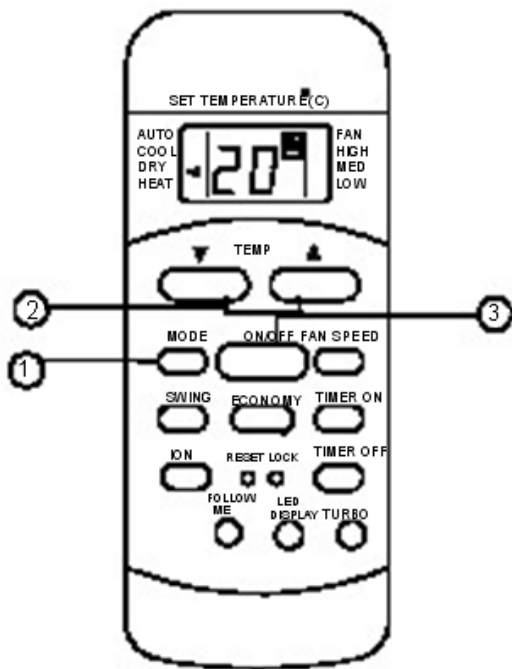
1. Press the MODE button to select COOL, HEAT, or FAN mode.
2. Press the TEMP button to set the desired temperature. The temperature can be set within a range of 62 F in 2 degree F increments to 88 degrees F.
3. Press the FAN SPEED button to select the fan speed in four steps- Auto, Low, Medium, or High.
4. Press the ON/OFF button to start the air conditioner.

### **NOTE:**

In the FAN mode, the setting temperature is not displayed in the remote controller and you are not able to control the room temperature either. In this case, only step 1, 3 and 4 may be performed.



## Dehumidifying Operation



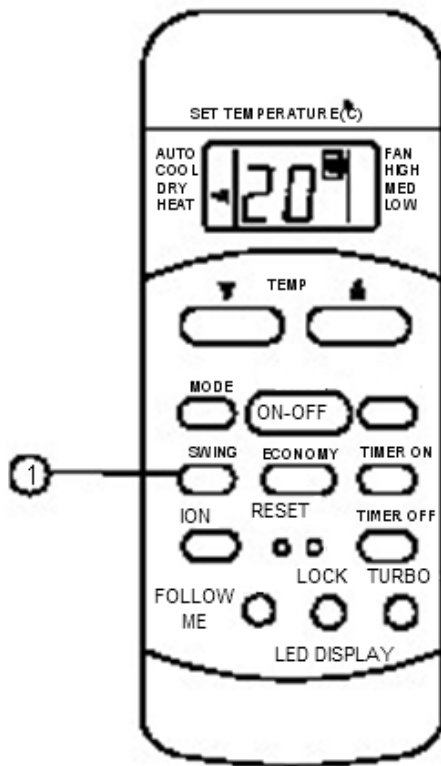
**Ensure the unit is plugged in and power is available. The OPERATION indicator on the display panel of the indoor unit illuminates.**

1. Press the MODE button to select DRY mode.
2. Press the TEMP button to set the desired temperature.
3. Press the ON/OFF button to start the air conditioner.

### NOTE

In the Dehumidifying mode, you can not switch the fan speed as it is automatically controlled.

## Swing Operation



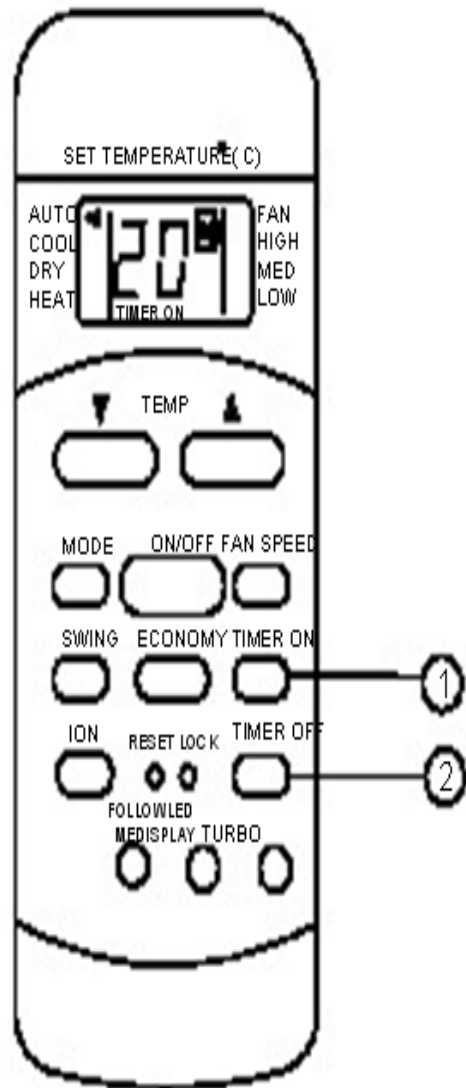
**Use the SWING button to adjust the Up/Down airflow direction.**

1. When you press the button once and quickly, the air flow direction setting feature of the louver is activated. The moving angle of the louver is 6° for each time you press. Keep pressing the button to move the louver to the desired position.

2. If you keep pressing the SWING button without releasing for 2 more seconds, the auto swing feature of the louver is activated. The horizontal louver would swing up/down automatically. Press it again to stop.

**NOTE:** When the louver swings or moves to a position which would affect the cooling and heating effect of the air conditioner, it will automatically change the swing/moving direction.

## Timer Operation



Pressing the TIMER ON button can set the auto-on time of the unit. And pressing the TIMER OFF button can set the auto-off time of the unit.

### Setting the Auto-on time.

1. Press the TIMER ON button. The remote controller shows TIMER ON, the last Auto-on setting time and the signal "h" will be shown on the LCD display area. Now it is ready to reset the

Auto-on time to START the operation.

2. Push the TIMER ON button again to set desired Auto-on time. Each time you press the button, the time increases in 30 minute increments, up to 10 hours, then at 1 hour increments up to 24 hours.

3. After setting the TIMER ON there will be a one half second delay before the remote controller transmits the signal to the air conditioner. Then, after approximately another 2 seconds, the signal "h" will disappear and the set temperature will re-appear on the LCD display window.

### Setting the Auto-off time.

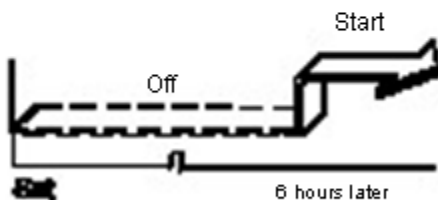
1. Press the TIMER OFF button. The remote controller shows TIMER OFF, the last Auto-off setting time and the signal "h" will be shown on the LCD display area. Now it is ready to reset the Auto-off time to START the operation.

2. Push the TIMER OFF button again to set desired Auto-off time. Each time you press the button, the time increases in 30 minute increments, up to 10 hours, then at 1 hour increments up to 24 hours.

3. After setting the TIMER OFF there will be a one half second delay before the remote controller transmits the signal to the air conditioner. Then, after approximately another 2 seconds, the signal "h" will disappear and the set temperature will re-appear on the LCD display window.

#### IMPORTANT

The effective operation time set by the remote controller for the timer function is limited to the following settings: 0.5, 1.0, 1.5, 2.0, 2.5, 3.0, 3.5, 4.0, 4.5, 5.0, 5.5, 6.0, 6.5, 7.0, 7.5, 8.0, 8.5, 9.0, 9.5, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23 and 24.



### Example of Timer Setting

#### TIMER ON

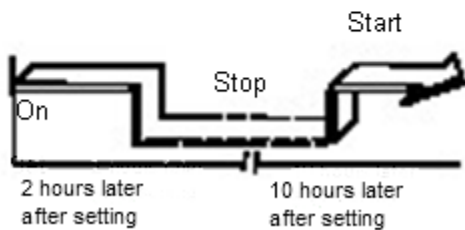
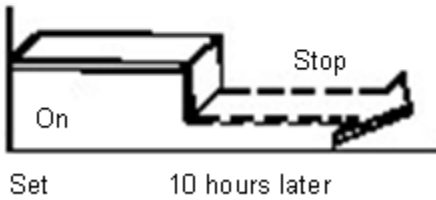
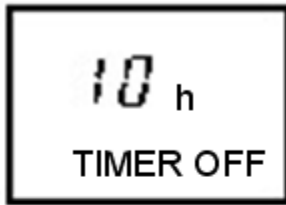
(Auto-on Operation)

The TIMER ON feature is useful when you want the unit to turn on automatically before you return home. The air conditioner will automatically start operating at the set time.

#### Example:

To start the air conditioner in 6 hours.

1. Press the TIMER ON button, the last setting of starting operation time and the signal "h" will show on the display area.
2. Press the TIMER ON button to display "6:0h" on the TIMER ON display of the remote controller.
3. Wait for about 3 seconds and the digital display area will show the temperature again. Now this function is activated.



## TIMER OFF

(Auto-off Operation)

The TIMER OFF feature is useful when you want the unit to turn off automatically after you go to bed. The air conditioner will stop automatically at the set time.

### Example:

To stop the air conditioner in 10 hours.

1. Press the TIMER OFF button, the last setting of stopping operation time and the signal "h" will show on the display area.
2. Press the TIMER OFF button to display "10h" on the TIMER OFF display of the remote controller.
3. Wait for about 3 seconds and the digital display area will show the temperature again. Now this function is activated.

## COMBINED TIMER

(Setting both ON and OFF timers simultaneously)

### TIMER OFF → TIMER ON

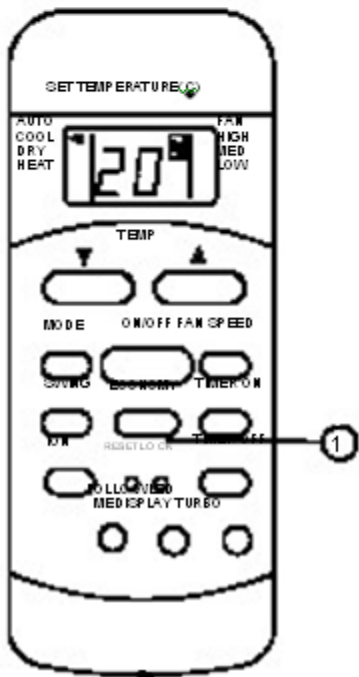
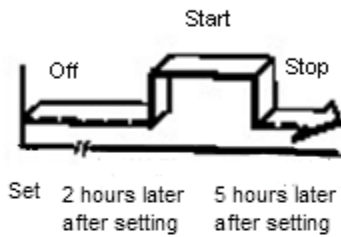
(On → Stop → Start operation)

This feature is useful when you want to stop the air conditioner after you go to bed, and start it again in the morning when you wake up or when you return home.

### Example:

To stop the air conditioner 2 hours after setting and start it again 10 hours after setting.

1. Press the TIMER OFF button.
2. Press the TIMER OFF button again to display 2.0h on the TIMER OFF display.
3. Press the TIMER ON button.
4. Press the TIMER ON button again to display 10h on the TIMER ON display .
5. Wait for the remote control to display the setting temperature.



**TIMER ON → TIMER OFF**

(Off → Start → Stop operation)

This feature is useful when you want to start the air conditioner before you wake up and stop it after you leave the house.

**Example:**

To start the air conditioner 2 hours after setting, and stop it 5 hours after setting.

1. Press the TIMER ON button.
2. Press the TIMER ON button again to display 2.0h on the TIMER ON display.
3. Press the TIMER OFF button.
4. Press the TIMER OFF button again to display 5.0h on the TIMER OFF display.
5. Wait for the remote control to display the setting temperature.

**CAUTION**

The timer setting (TIMER ON or TIMER OFF) that in sequence occurs directly after the set time will be activated first.

**ECONOMY (SLEEP) Operation**

When you push the ECONOMY button on the remote controller during cooling, heating or AUTO operation, the air conditioner will automatically increase (cooling) or decrease (heating) the set temperature by 2 degrees F per hour for 2 hours, hold steady for the next 5 hours, and then turn off. This characteristic maintains both energy saving and comfort in night operation.

**NOTE:** The ECONOMY/SLEEP function is only available under Cooling, Heating and AUTO operation.