

OWNER'S MANUAL

AIR CONDITIONER

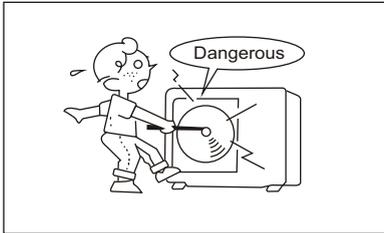
ONE-THREE SPLIT TYPE

Thank you very much for purchasing our air conditioner, please read this owner's manual carefully before using your air conditioner, and save it in a safe place for future reference.

CONTENTS

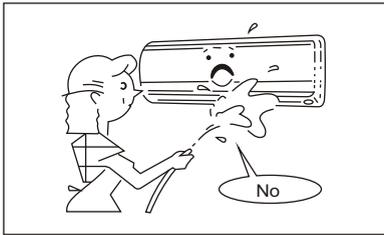
IMPORTANT SAFETY INFORMATION.....	1
HINTS FOR ECONOMICAL OPERATION.....	2
PARTS NAMES.....	3
NAMES AND FUNCTIONS OF INDOOR UNIT CONTROLS.....	4
REMOTE CONTROLS AND THEIR FUNCTIONS.....	5
NAMES AND FUNCTIONS OF INDICATORS.....	6
ON REMOTE CONTROLLER.....	7
HANDLING THE REMOTE CONTROLLER.....	8
SETTING THE CLOCK.....	9
LOCK AND RESET BUTTON FUNCTION.....	10
AUTOMATIC OPERATION.....	11
COOLING/HEATING/FAN ONLY OPERATION.....	12
DRY OPERATION.....	12
TIMER OPERATION.....	13
EXAMPLE OF TIMER SETTING.....	14
ADJUSTING AIR FLOW DIRECTION.....	15
HOW THE AIR CONDITIONER WORKS.....	17
TEMPORARY OPERATIONS.....	17
MAINTENANCE.....	18
AIR CONDITIONER OPERATIONS AND PERFORMANCE.....	20
INSTALLATION.....	21
TROUBLES AND CAUSES.....	22
TROUBLES AND CAUSES (CONCERNING REMOTE CONTROLLER).....	23

IMPORTANT SAFETY INFORMATION



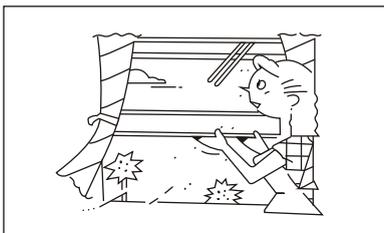
⚠ CAUTION

Do not attempt to install this unit yourself. This unit requires installation by qualified persons.



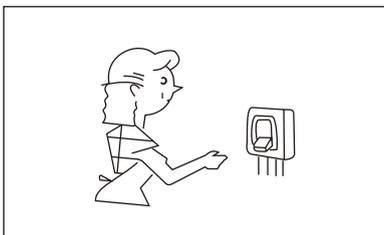
⚠ DANGER

Do not attempt to service the unit yourself. This unit has no user serviceable components, opening or removing the cover will expose you to dangerous voltage. Turning off the power supply will not prevent potential electric shock.



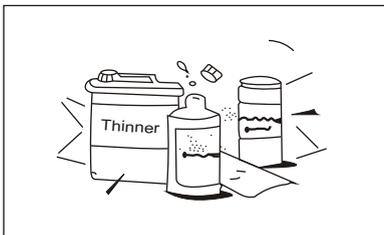
⚠ DANGER

Never put hands or objects into the air outlet of indoor and outdoor units. These units contain a fan running at high speed. Contact with the moving fan will cause serious injury.



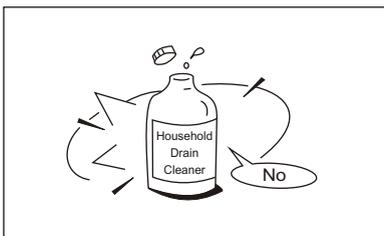
⚠ DANGER

To avoid the risk of serious electrical shock, never sprinkle or spill water or liquids on the unit.



⚠ WARNING

Ventilate the room occasionally while the air conditioner is in use, especially if there is also a gas appliance in use in this room. Failure to follow these directions may result in a loss of oxygen in the room.



⚠ WARNING

To prevent electric shock, turn off the power or disconnect the power supply plug before beginning any cleaning or other routine maintenance. Follow the directions for cleaning in the Owner's Manual.

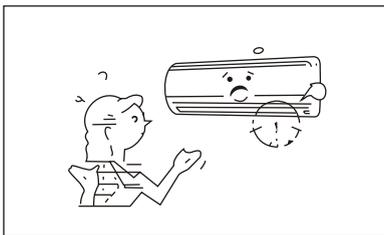
⚠ WARNING

Do not use liquid cleaners or aerosol cleaners, use a soft and dry cloth for cleaning the unit. To avoid electric shock, never attempt to clean the unit by sprinkling water on it.

⚠ CAUTION

Do not use caustic household drain cleaners in the unit. Drain cleaners can quickly destroy the unit components (drain pan and heatexchanger coil etc.)

IMPORTANT SAFETY INFORMATION

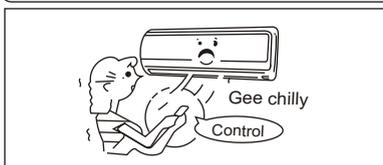


NOTE

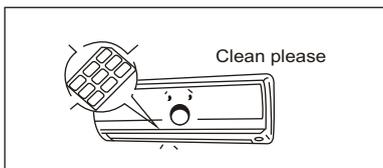
For proper performance, operate the unit under the usable operating temperature and humidity conditions indicated in this owner's manual. If the unit is operated beyond these conditions, it may cause malfunctions of the unit or dew dripping from the unit.

- The appliance is not intended for use by young children or infirm persons without supervision.
- Young children should be supervised to ensure that they do not play with the appliance.
- Set moderate temperature, especially these are young children, old men or infirm persons in the room.

HINTS FOR ECONOMICAL OPERATION

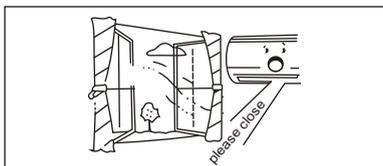


Maintain room temperature at comfortable level.



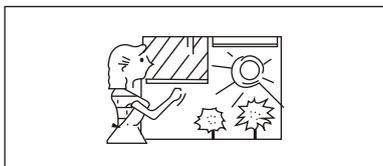
clean air filter

A clogged air filter reduce cooling efficiency.
Clean it once two weeks.



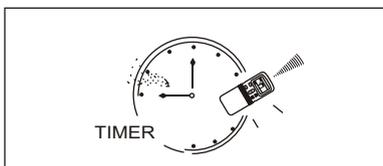
Never open doors and windows more often than necessary.

To keep cool or warm air in the room, never open doors and windows more often than necessary.



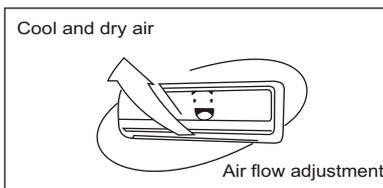
Window curtains

In cooling, close the curtains to avoid direct sunlight.



Use the timer effectively

Set the timer for the desired operation time.



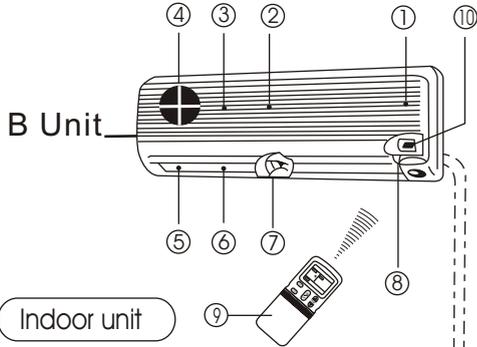
Cool and dry air

Get uniform circulation of room air

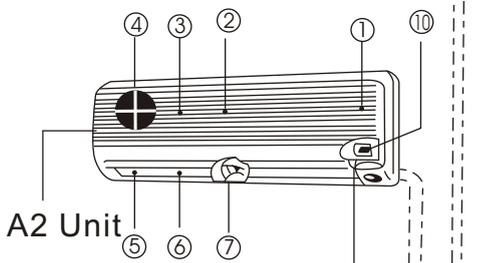
Adjust air flow direction for even circulation of room air.

PARTS NAMES

Indoor unit

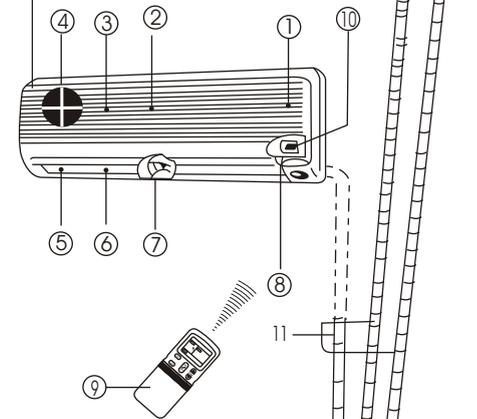


Indoor unit

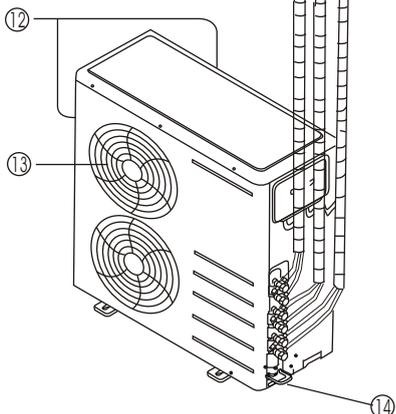


A2 Unit

A1 Unit



Outdoor unit



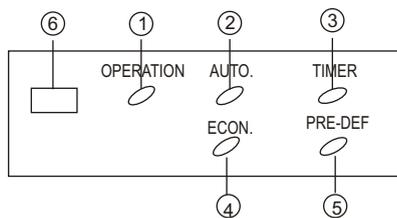
Indoor unit

- 1 Room temperature sensor
- 2 Front panel
- 3 Air inlet
- 4 Air filter
- 5 Air outlet
- 6 Vertical air flow louver
- 7 Horizontal air flow grille
- 8 Display panel
- 9 Remote Controller
- 10 Control panel

Outdoor unit

- 11 Drain hose, refrigerant connecting pipe and electric wiring.
- 12 Air inlet (side and rear)
- 13 Air outlet
- 14 Water tray

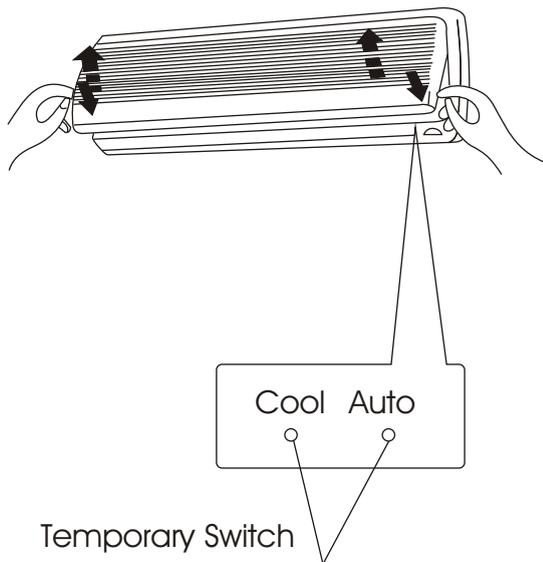
Display panel



Display panel

- ① Operation Lamp
- ② Automatic Lamp
- ③ Timer Lamp
- ④ Economic Lamp
- ⑤ Pre-defrost Lamp(Cooling only type without)
- ⑥ Infrared signal receiver

NAMES AND FUNCTIONS OF INDOOR UNIT CONTROLS



Control panel

Lift the front panel to perform control panel settings.

- Opening the front panel
Pull up from two ends of the front panel. Open the panel and lift the panel up to an angle where it remains fixed. Do not lift the panel any further when it stops with a clicking sound.
- Closing the front panel
Lower ends of the front panel, push the ends on both sides. Close the panel firmly.

Temporary operation switch

Normally set this switch to remote control. If you miss the remote controller or its batteries are exhausted, set this switch to the Auto/Cool Position for temporary operation.

▲ NOTE

Heating Priority: when one of the three Indoor Unit (as A1 Unit) shifts to Heating, the other two Indoor Units (as A2 Unit and B Unit) will stop cooling and shift to FAN ONLY (The operation light will keep on illuminating). When A1 Unit shifting to Cooling, A2 Unit and B Unit will restart Cooling automatically.

REMOTE CONTROLS AND THEIR FUNCTIONS

Mode select button

Each time you push the button, a mode is selected in a sequence that goes from AUTO, COOL, DRY, HEAT (cooling only type without), FAN ONLY and back to AUTO.

Fan speed button

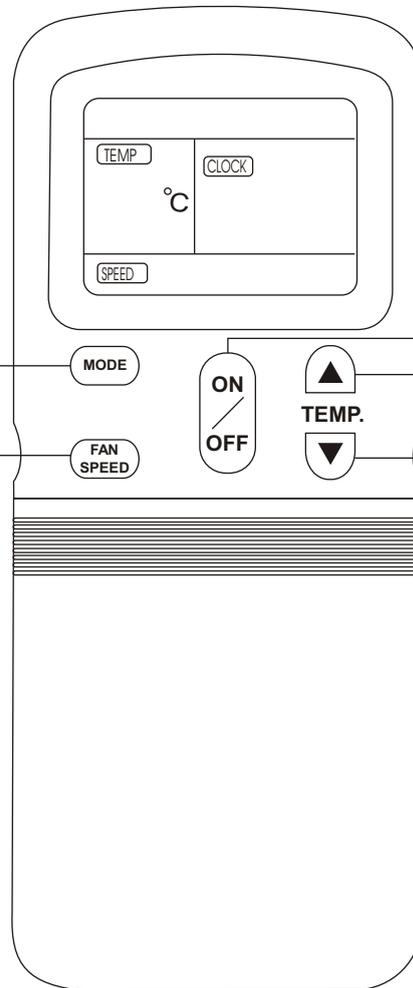
This button is used for selecting fan speed. Each time you push the button, a fan speed is selected in a sequence that goes from AUTO, LOW, MED, HIGH, and back to AUTO.

ON/OFF BUTTON

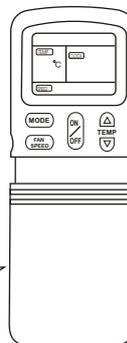
Push the button to start operation, push the button again to stop operation.

Temperature button

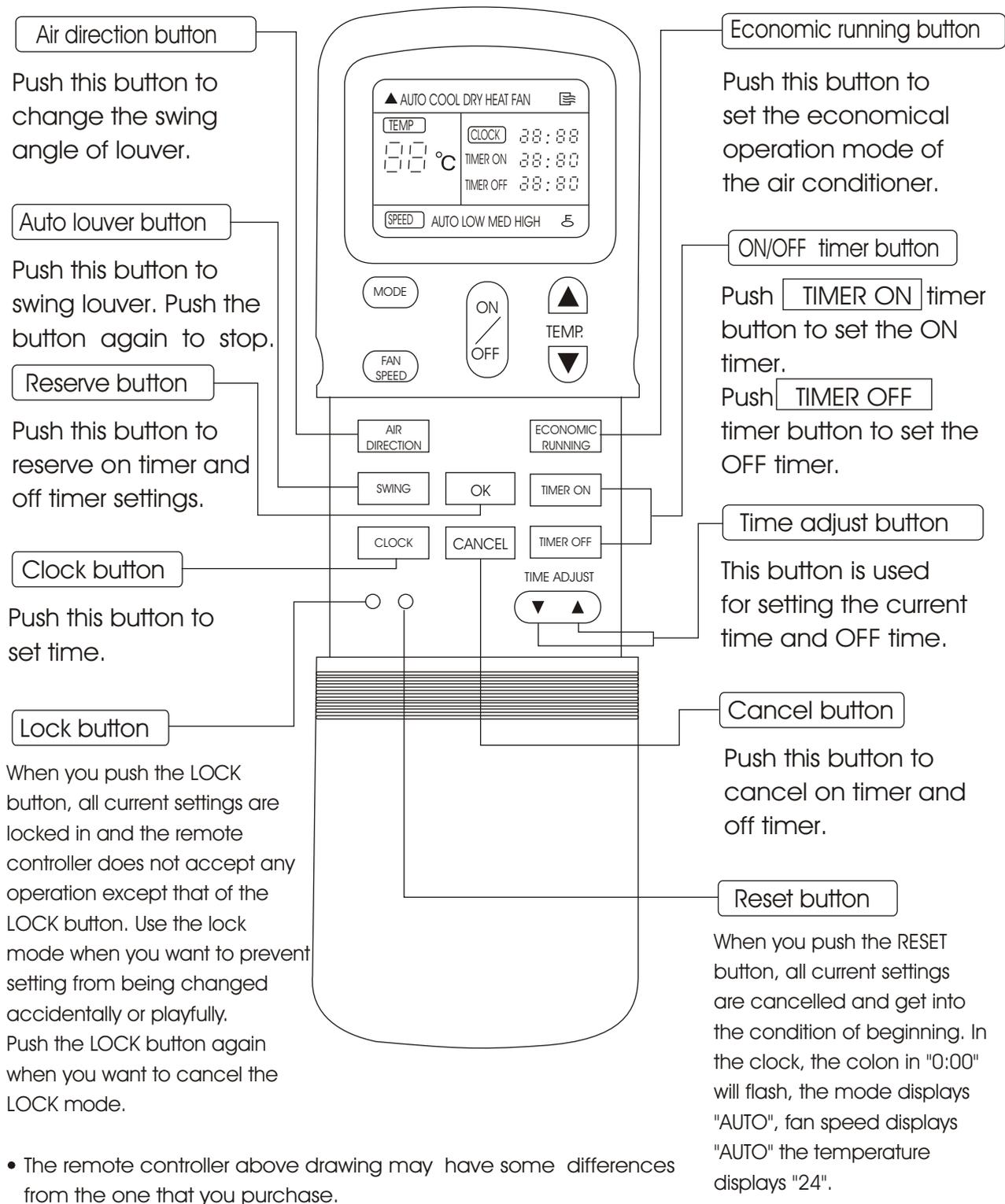
- ▲ : The set temperature is increased to 30 C
- ▼ : The set temperature is decreased to 17 C



Slide the cover

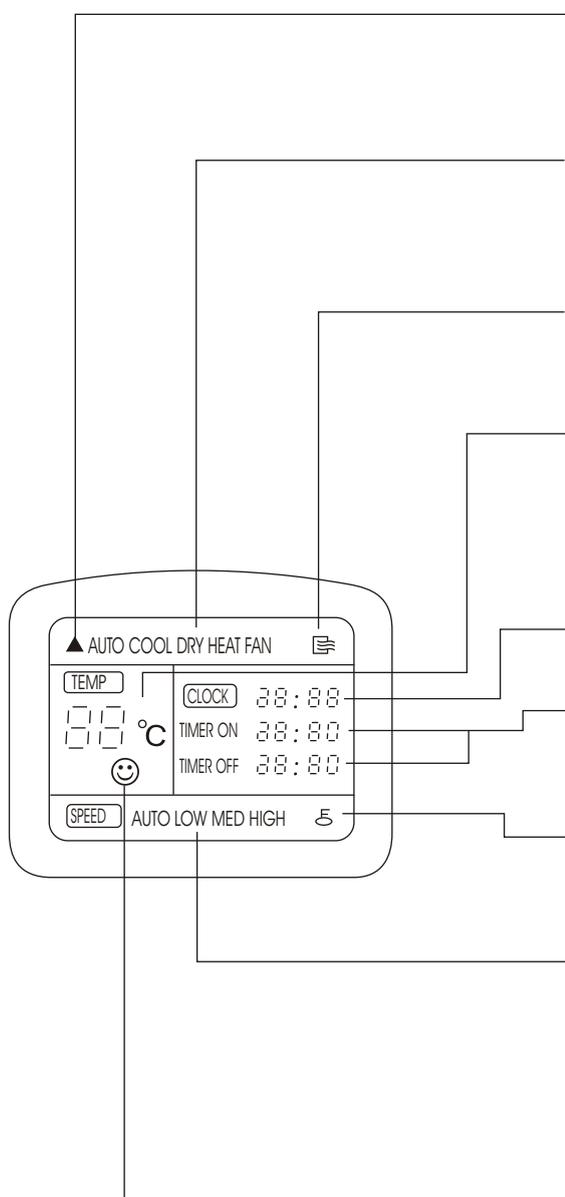


REMOTE CONTROLS AND THEIR FUNCTIONS



• The remote controller above drawing may have some differences from the one that you purchase.

NAMES AND FUNCTIONS OF INDICATORS ON REMOTE CONTROLLER



Transmission Indicator

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

Mode display

Displays the current operation mode. Including AUTO, COOL, DRY, HEAT(cooling only type without), FAN ONLY and back to AUTO.

ON/OFF display

Displayed by pushing the **ON/OFF** button. Push the **ON/OFF** button again to disappear.

Temp. display

Displays the temperature setting (17 C to 30 C)

When you set the operating mode to FAN ONLY, no temperature setting is displayed.

Clock display

The current time is indicated.(0 ~ 24 hours)

Timer display

The time set for timer operation is indicated.(0 ~ 24 hours)

Lock display

Displayed by pushing the **Lock** button. Push the **Lock** button again to disappear.

Fan speed display

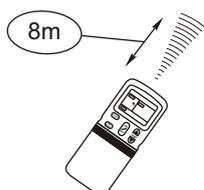
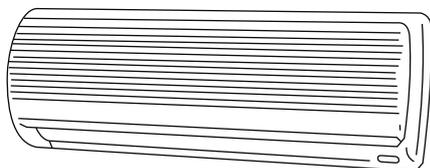
Displays the selected fan speed, AUTO and three fan speed levels "LOW" "MED" "HIGH" can be indicated. Displays AUTO when the operating mode is either AUTO or DRY.

Econo. Display

Display by pushing the **ECONO.** button. Push the **ECONO.** Button again to disappear.

- In the illustration, all displays are indicated for the sake of clarity. During operation, only the relevant displays will be shown on the remote controller.

HANDLING THE REMOTE CONTROLLER



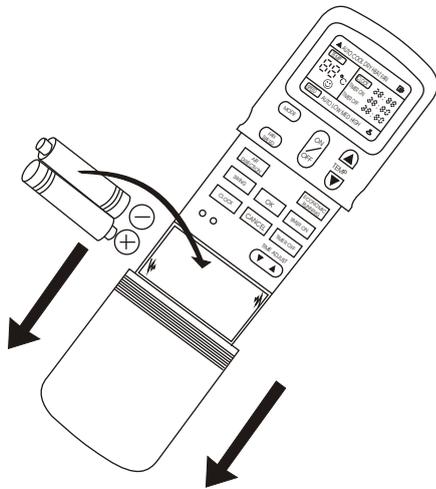
Location of the remote controller.

- Keep the remote controller where its signals can reach the receiver of the indoor unit. (a distance of 8m is allowed).
- When you select the timer operation, the remote controller automatically transmits a signal to the indoor unit at the specified time.

If you keep the remote controller in a position that hinders proper signal transmission, a time lag of up to 15 minutes may occur.

CAUTIONS

- 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 local dealer.



Replacing batteries

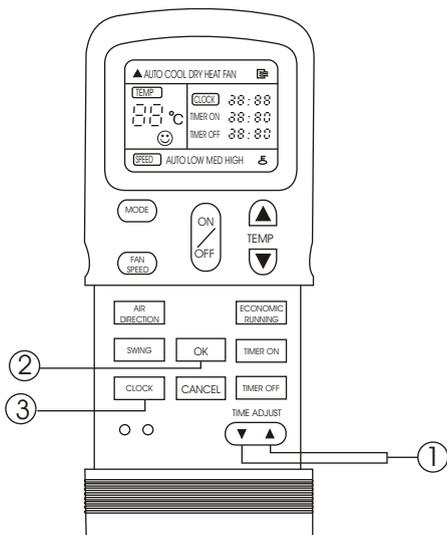
The remote controller uses two alkaline dry batteries (R03/LR03X2)

- (1) Slide the cover of the battery compartment. Remove the used batteries and insert new batteries.
 - (2) After you remove the old batteries to insert new batteries, push the Reset button in the battery compartment.
 - (3) Before replacing the battery compartment cover, confirm that the clock panel on the remote controller displays "0:00" and that the colon is flashing.
- After replacing batteries, set the remote controller clock.

NOTES

- When replacing batteries, do not use old batteries or different type batteries. Such use may cause the remote controller to malfunction.
- If you do not use the remote controller for more a few weeks, remove the batteries. Otherwise, battery leakage may damage the remote controller.
- The average battery life during normal is approximately half a year.
- Replace the batteries when there is no receiving beep from the indoor unit or if the transmission indicator on the remote controller fails to light.

SETTING THE CLOCK



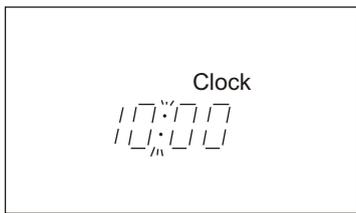
Before you start operating the air conditioner, set the clock of the remote controller using the procedures given in this section. The clock panel on the remote controller will display the time regardless of whether the air conditioner is in use or not.

Initial Setting or the Clock

When batteries are inserted in the remote controller, the clock panel will display "0:00" and the colon will flash.

1. Time adjust button (TIME ADJUST)

- push this button to set time.
 - ▲ Forward.
 - ▼ Backward.
- Each time you push the button, the time moves forward or backward by one minute depending on which side you Push. If you push the button quickly, the time will alter much quickly.



2.OK button.

- When you push the OK button, the clock time display stops flashing and the clock starts operating.

3.Readjusting the Clock

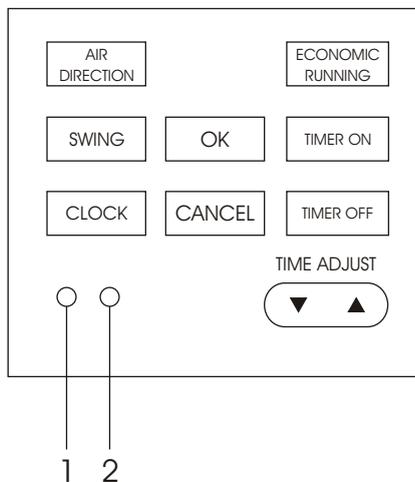
Push the CLOCK button in the battery compartment, the colon in the clock display will start to flash. To set the new time, follow 1 and 2 of "Initial Setting of the Clock".

* Clock accuracy is within 10 seconds per day.

CAUTIONS

Static electricity or other factors (in case of extremely high voltage) can cause remote controller clock initialise. If your remote controller is initialized (flashing of the colon in "0:00"), readjust the clock before you start operation.

LOCK AND RESET BUTTON FUNCTION



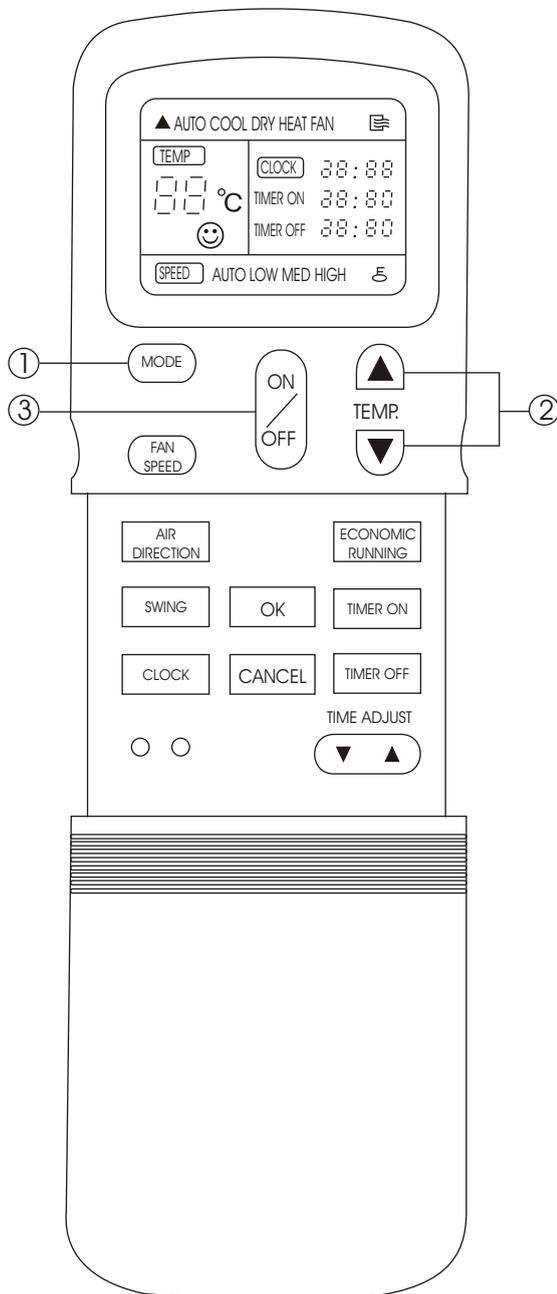
1. When you push the LOCK button, all current settings are locked in and the remote controller does not accept any operation except that of the LOCK button. Use the lock mode when you want to prevent settings from being changed accidentally or playfully.

Push the LOCK button again when you want to cancel the LOCK mode.

2. When you push the RESET button, all current settings are cancelled and get into the condition of beginning.

In the clock, the colon in "0:00" will flash, the mode displays "Auto", fan speed displays "Auto", the temperature displays "24".

AUTOMATIC OPERATION



When you set the air conditioner in AUTO mode, it will automatically select cooling, heating (cooling only type without), or fan only operation depending on the room temperature.

Once you select the operating mode, the operating conditions are saved in the unit's microcomputer memory.

Thereafter, the air conditioner will start operating under the same conditions when you simply push the ON/OFF button of the remote controller.

Start

The OPERATION lamp on the display panel of the indoor unit starts flashing.

1. Mode select button (MODE)
Select AUTO.
2. Temperature button (TEMP)
Set the desired temperature. Normally, set it between 21 °C to 28 °C
3. ON/OFF button
Push this button to start the air conditioner. The OPERATION lamp on the display panel of the indoor unit lights. The operating mode is selected in accordance with the room temperature and operation starts after approximately 3 minutes.

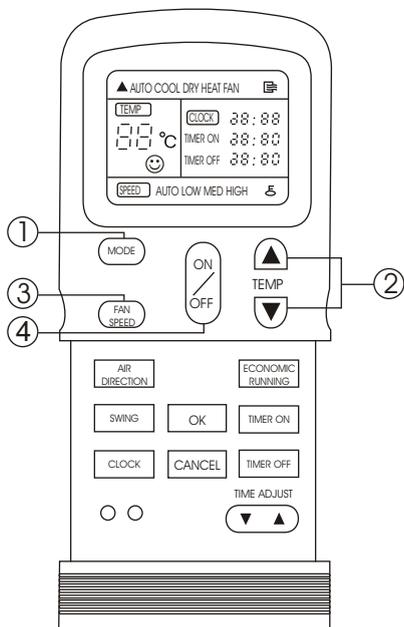
Stop

ON/OFF button

Push this button again to stop the air conditioner.

If the AUTO mode is uncomfortable, you can select the desired conditions manually. When you select the AUTO mode, you do not have to set the fan speed. The FAN speed display will show AUTO and the fan speed will be automatically controlled.

COOLING/HEATING/FAN ONLY OPERATION



Start

Connect the unit with the power.

The OPERATION lamp on the display panel of the indoor unit starts flashing.

1. Mode select button (MODE)
Select COOL, HEAT (cooling only type without), or FAN ONLY
2. Temperature button (TEMP)
Set the desired temperature.
Cooling 21 C or higher
Heating 28 C or lower

3. Fan speed button (FAN SPED)
Select any of the "AUTO" "LOW", "MED" and "HIGH"

4. ON/OFF button

Push this button to start the air conditioner.

The OPERATION lamp on the display panel of the indoor unit lights. The operating mode is selected in accordance with the room temperature and operation starts after approximately 3 minutes (If you select FAN ONLY mode, the unit will start immediately.)

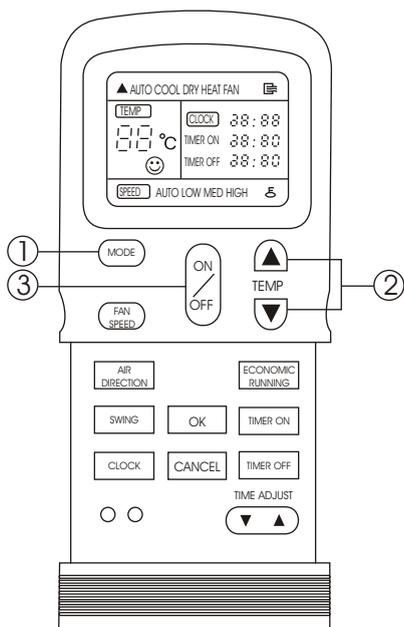
Stop

- ON/OFF button

Push this button again to stop the air conditioner.

The FAN ONLY mode does not control temperature. Therefore, perform only steps 1,3, and 4 to select this mode.

DRY OPERATION



Start

Connect the unit with the power.

The OPERATION lamp on the display panel of the indoor unit starts flashing.

1. Mode select button (MODE)

Select DRY.

2. Temperature button (TEMP)

Push the "TEMP." Button.

The fan speed indicator displays AUTO. The Indoor fan speed will be automatically selected low.

3. ON/OFF button

Push this button to start the air conditioner.

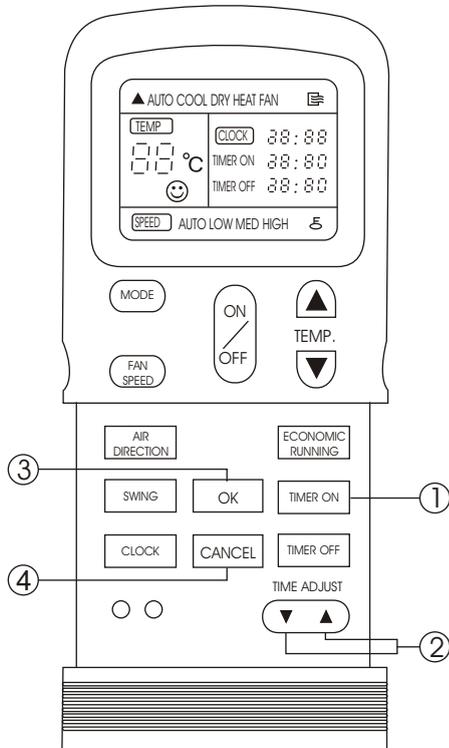
The OPERATION lamp on the display panel of the indoor unit lights, and operation starts after approximately 3 minutes.

Stop

- ON/OFF button

Push this button again to stop the air conditioner.

TIMER OPERATION



1. ON / OFF TIMER button

Push the ON or OFF TIMER button as required

- The current timer setting is displayed along with ON/OFF TIMER indicator, and the colon in the timer setting will flash.

2. Time adjust button (TIME ADJUST)

- Push to set the desired time.

▲ Forward

▼ Backward

- Each time you push the button the time moves forward or backward by 10 minutes depending on which side you push. If you push the button quickly, the time will alter much quicker.

3. Reserve button (OK)

Push this button. Check the TIMER lamp on the display panel of the indoor unit is lit.

Canceling

4. Cancel button(CANCEL)

Push the CANCEL button to cancel the timer setting.

Changing

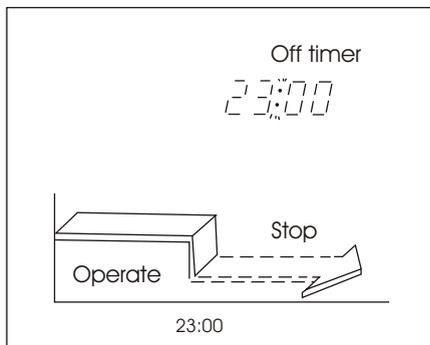
Perform steps 1, 2 and 3 to change the setting.

CAUTIONS

When you select the timer operation, the remote controller automatically transmits the timer signal to the indoor unit at the specified time. Therefore, keep the remote controller in a location from which it can transmit the signal to the indoor unit properly.

The effective operation time set by remote controller is limited in 24 hours.

EXAMPLE OF TIMER SETTING



OFF timer

(Operation Stop)

The OFF timer feature is useful when you go to sleep. The air conditioner will stop automatically at the time set.

Example:

To stop the air conditioner at 23:00 p.m.

1. Push the OFF TIMER button.
2. Use the TIME ADJUST button to display "23:00" on the OFF timer indicator.
3. Push the OK button.

ON timer

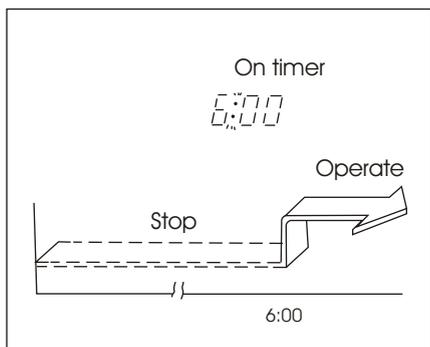
(Stop Operation)

The ON timer feature is useful when you wake up in the morning or when you return home. The air conditioner will automatically start operating at the time set.

Example:

To start the air conditioner at 6:00.

1. Push the ON TIMER button.
2. Use the TIME ADJUST button to display "6:00" on the ON timer indicator of the remote controller.
3. Push the OK button.

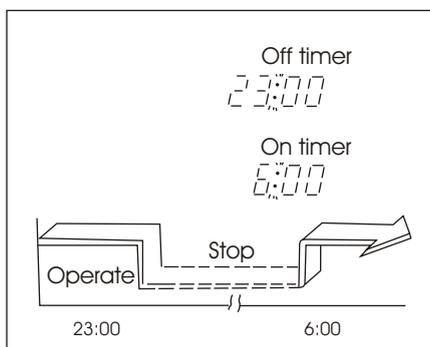


COMBINED TIMER (Setting both ON and OFF timers simultaneously)

OFF timer ON timer

(Operation Stop Operation)

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

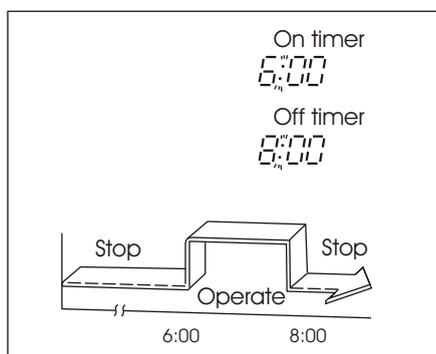


Example:

To stop the air conditioner at 23:00 and start it again next morning at 6:00.

1. Push the OFF TIMER button.
2. Use the TIME ADJUST button to display "23:00" on the OFF timer indicator.
3. Push the ON TIMER button.
4. Use the TIME ADJUST button to display "6:00" on the ON timer indicator.
5. Push the OK button.

EXAMPLE OF TIMER SETTING



On timer OFF timer
(Stop Operation Stop)

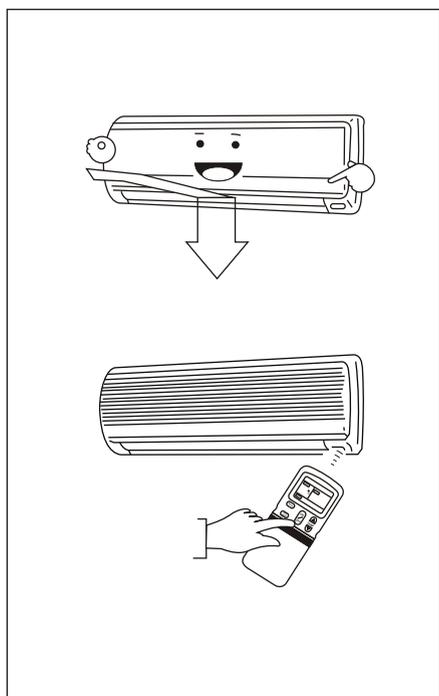
You can use this setting to start the air conditioner when you wake up and stop it when you leave the house.

Example:

To start the air conditioner at 6:00 next morning, and stop it at 8:00.

1. Push the ON TIMER button.
 2. Use the TIME ADJUST button to display "6:00" on the ON timer indicator of the remote controller.
 3. Push the OFF TIMER button.
 4. Use the TIME ADJUST button to display "8:00" on the OFF timer indicator.
 5. Push the OK button.
- The timer function (ON or OFF) which in time is closest to the actual time will be activated first.
 - If the same time is set for both ON and OFF timers, no timer operation is performed. Also, the air conditioner may stop operating.

ADJUSTING AIR FLOW DIRECTION



- Adjust the air flow direction properly. Otherwise, it might cause discomfort and make the room temperature uneven.
- Adjust the vertical air flow louver using the remote controller.
- Adjust the horizontal air flow grilles manually.

Adjusting the Vertical Air Flow Direction

The air conditioner automatically adjust the vertical air flow direction in accordance with the operating conditions.

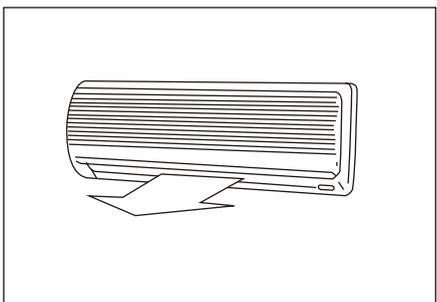
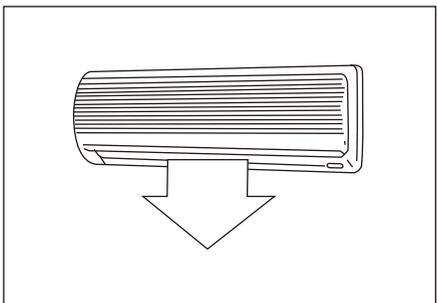
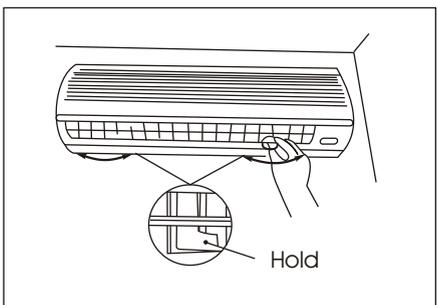
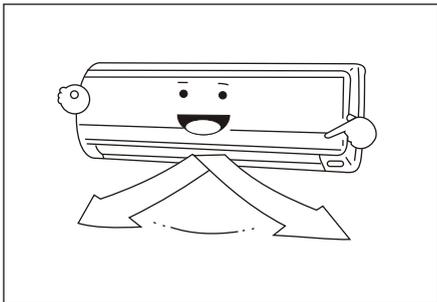
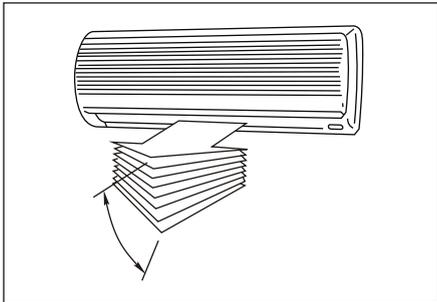
To set the air flow direction you desire

Perform this function while the unit is in operation.

Keep pushing the AIR DIRECTION button on the remote controller to move the louver to the desired direction.

- Change the vertical air flow louver direction within the range indicated.
- In subsequent operations, the vertical air flow is automatically set in the direction to which you adjusted the louver using the AIR DIRECTION button.

ADJUSTING AIR FLOW DIRECTION



To automatically swing the air flow direction Perform this function while the air conditioner is in operation. Push the SWING button on the remote controller.

- To stop the function, push the SWING button again.
- To change the swing direction, push the AIR DIRECTION button.

⚠ CAUTIONS

- The AIR DIRECTION and SWING buttons will be disabled when the air conditioner is not in operation (including when the ON TIMER is set).
- Do not operate the air conditioner for long hours with the air flow direction set downward during the cooling or dry operation. Otherwise, condensation may occur on the surface of the vertical air flow louver and cause dew dripping.
- Do not move the vertical louver manually. Always use the AIR DIRECTION button. If you move the louver manually, it may malfunction during operation. If the louver malfunctions, stop the air conditioner once and restart it.
- When the air conditioner is started immediately after it was stopped, the vertical air flow louver might not move for 10 seconds or so.

Adjusting the Horizontal Air Flow Direction Preparation:

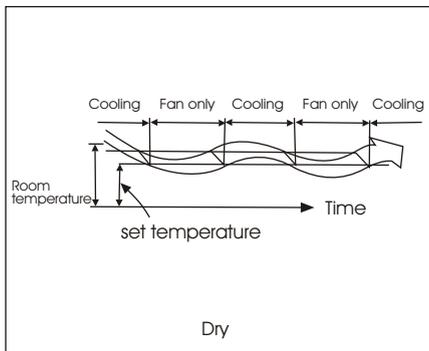
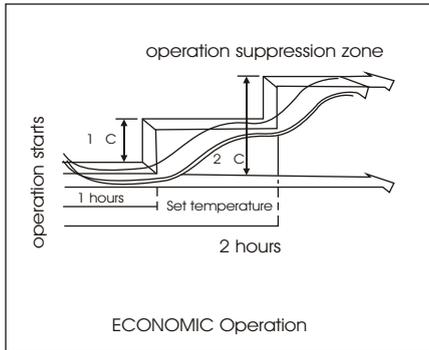
For the cooling or dry operation, move the vertical air flow louver downward using the AIR DIRECTION button on the remote controller.

- Take hold of the lever on the horizontal air flow grilles and move them to adjust the air flow direction as required.
- For the cooling or dry operation, return the vertical air flow louver to the original position using the **AIR DIRECTION** button on the remote controller.

If you use the **AIR DIRECTION** button to set the vertical air flow direction, the direction will move downward at first, then turn automatically to the direction as you desire.

When you stop operating with the remote controller, the vertical air flow louver will shut automatically.

HOW THE AIR CONDITIONER WORKS



AUTOMATIC OPERATION

- The air conditioner selects and operates in one of the operating modes of cooling, heating (cooling only type without) or fan only, depending on the room temperature.
- The air conditioner will control room temperature automatically round the temperature point set by you.
- If the Auto mode is uncomfortable, you can select the desired conditions manually.

ECONOMIC OPERATION

When you push ECONO button during cooling, heating (cooling only type without), or AUTO operation, the air conditioner will start following operation. The fan speed will be automatically controlled. In the operation suppression zone where capacity is kept to the minimum, overcooling is prevented by raising the temperature setting by 1 C after 1 hour and by 2 C after 2 hours of operation. The room temperature is thus regulated between the operation suppression zone and the set temperature. (It depends on the outdoor temperature.)

DRY OPERATION

The dry mode will automatically select the cooling dry operation based on the difference between the set temperature and the actual room temperature.

The temperature is regulated while dehumidifying by repeating turning on and off of the cooling operation or fan only.

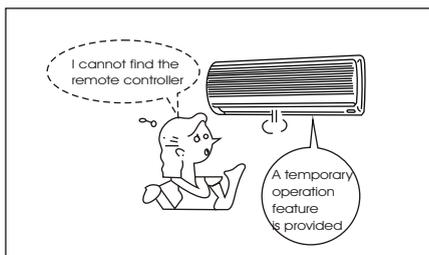
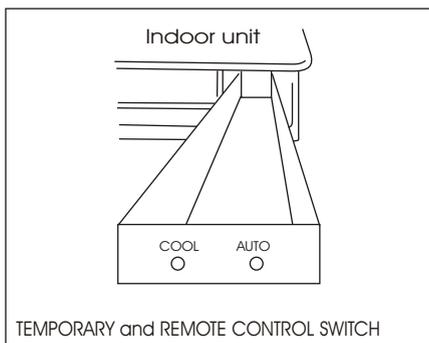
The fan speed indicator will display AUTO and low speed will be used.

Temporary Operation

This function is used to operate the unit temporarily in case you misplace the remote controller or its batteries are exhausted.

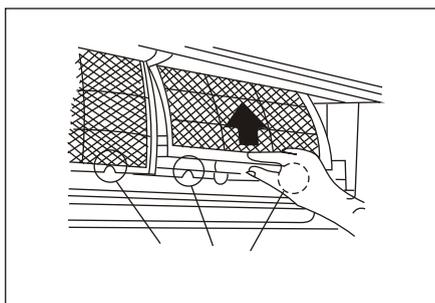
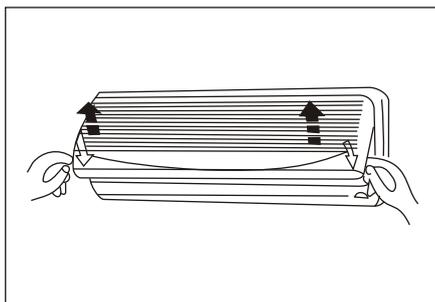
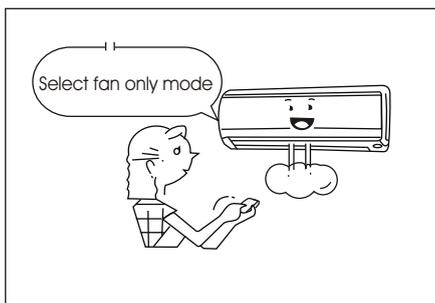
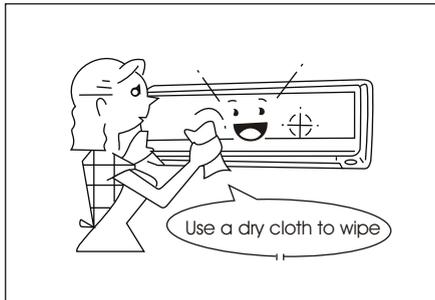
- Set the TEMPORARY switch to the AUTO position in order to start the automatic operation.

TEMPORARY OPERATIONS



- The COOL position is provided for test runs of the unit, and automatic temperature control is cut off at this position. Never use the position for ordinary operation.

MAINTENANCE



⚠ WARNING

WARNING

Before you clean the air conditioner, be sure to disconnect the power supply plug.

Cleaning the indoor unit and the remote controller

⚠ CAUTIONS

- Use a dry cloth to wipe the indoor unit and remote controller.
- A cloth dampened with cold water may be used on the indoor unit if it is very dirty.
- Never use a damp cloth on the remote controller. Do not use a chemically-treated duster for wiping or leave such materials on the unit for long. It may damage or fade the surface of the unit.
- Do not use benzine, thinner, polishing powder, or similar solvents for cleaning. These may cause the plastic surface to crack or deform.

If you do not plan to use the unit for at least 1 month.

- (1) Operate the fan for about half a day to dry the inside of the unit.
- (2) Stop the air conditioner and disconnect power.
- (3) Remove the batteries from the remote controller.

Checks before operation

⚠ CAUTIONS

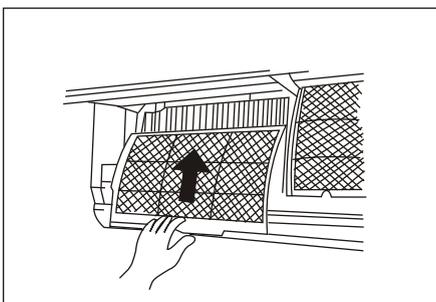
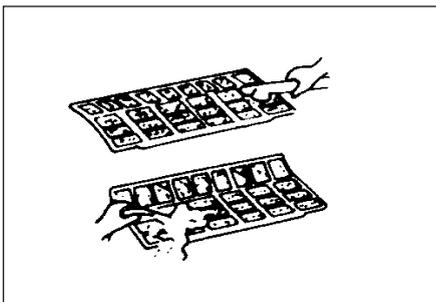
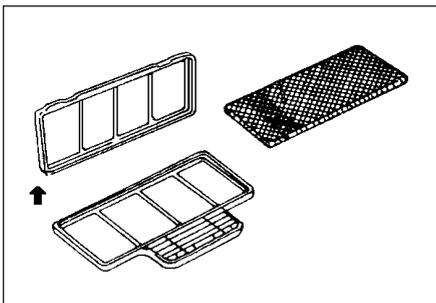
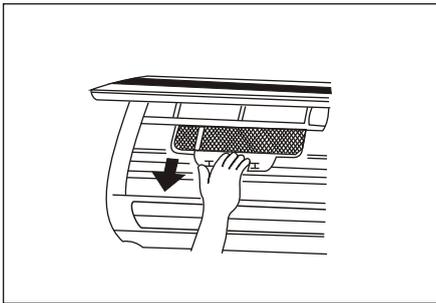
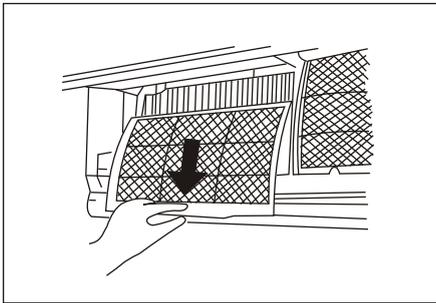
- Check that the flar wiring is not broken off or is not connected.
- Check that the air filter is installed.
- Check that the outdoor unit air outlet or inlet is not blocked.

Before you clean the air conditioner, be sure to disconnect the power supply plug.

Cleaning the air filter

1. Pull up from two ends of panel. Open the panel and lift the panel up to an angle where it remains fixed. Do not lift the panel any further when it stops with a clicking sound.
2. Take hold of the left and right handles of the air filter and lift it up slightly to take it out from the filter holder.

MAINTENANCE



3. Take hold of the handles and pull the air filter downward.

4. Remove the AIR FILTER from the indoor unit.

- Clean the AIR FILTER once two weeks.
- Clean the AIR FILTER with a vacuum cleaner or water, then dry it up in cool place.

*5. Remove the ACTIVE CARBON FILTER/ELECTROSTATIC FILTER from the indoor unit and take it out from its support frame.

- Clean the filter every month, immerse the filter in the water with the mild detergent for 20 minutes and wash it slightly (do not rub), then expose it in the sun to dry it out for more than 3 hours. (put the black side face up)

6. Install the filters into their support frames and set the support frames back in position. The black side of the filters be at the outsides.

7. Insert the AIR FILTER from the top side into the unit until it is fixed thoroughly and close the front panel of the indoor unit tightly.

* Optional filter

AIR CONDITIDNER OPERATIONS AND PERFORMANCE

Three-minute protection feature

A protection feature prevents the air conditioner from being activated for approximately 3 minutes when it is restarted immediately after operation.

This will protect the machine. (cooling only type without)

- Heating characteristics preheating operation

The air conditioner will not deliver warm air immediately after it is started. Warm air flows out after approximately 5 minutes when the indoor heat exchanger warms up.

- Warm air control

When the room temperature reaches the set temperature, the fan speed is automatically reduced to prevent a cold draft. At this time, the outdoor unit will stop.

- Defrosting

If the outdoor unit is frosted during heating operation, defrosting is started automatically (for approximately 5 to 10 minutes) to maintain the heating effect, and the PRE.-DEF. lamp is on.

- The fans in both the indoor and outdoor units stop during the defrost operation.

- During defrost operation, defrosted water is drained from the bottom plate of the outdoor unit.

- Heating capacity

In the heating operation, heat is absorbed from outdoor and released into the room. that is so-called heat pump system. When the outdoor temperature is too low, you are recommended to use another heating apparatus in combination with the air conditioner.

Consideration for accumulated snow

Select the position for the outdoor unit where it will not be subjected to snow drifts, accumulation of leaves or other seasonal debris. It is important that the air flow for the outdoor unit is not impeded as this will result in reducing heating or cooling performance. During the heating mode (cooling only type without) and at sub-zero temperatures, the water drained off the outdoor unit as a result of the automatic defrost may accumulate and freeze. It is important that adequate drainage or a soakway is provided.

Power failure

Power failure during operation will stop the unit completely.

- The OPERATION lamp on the indoor unit will start flashing when power is restored.

- To restart operation, push the ON/OFF button on the remote controller.

● Lighting or a car wireless telephone operating nearby may cause the unit to malfunction. Disconnect the unit with the power and then connect the unit with the power again. Push the ON/OFF button on the remote controller to restart it.

Air conditioner operating conditions

For proper performance, run the air conditioner under the following temperature conditions:

Cooling operation	Outdoor temperature: 18 to 43 C
	Room temperature: 17 to 32 C
	CAUTION 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.
Heating operation	Outdoor temperature: -7 to 24 C
	Room temperature: 0 to 27 C
Dry operation	Outdoor temperature: 11 to 43 C
	Room temperature: 17 to 32 C

If air conditioner is used outside of the above conditions, safety protection features may come into operation.

INSTALLATION

Location:

- In cooling operation, the air conditioner will dry the room air, so please fix a pipe to drain all the water away in the air conditioner.
- Please let the indoor unit away from the TV set and the radio more than one metre in order to avoid the picture and noise interference.
- Powerful radio transmitters or any other devices radiating high frequency radio waves can cause the air conditioner to malfunction. Please consult the dealer where you purchased the air conditioner before installing it.
- Don't fix the unit in the dangerous region with combustible gas and volatile matter.
- If the air conditioner is operated in an atmosphere containing oils (machine oil), salt near a coastal area, sulfide gas near a hot spring, etc., such substances may lead to failure of the air conditioner.
- If wrong using, installation, maintenance cause the air conditioner to malfunction, please consult your dealer.

Be careful with noise or vibrations

- Please fix the unit in the stable place to avoid the noise or vibrations.
- The noise near the air outlet of the outdoor unit may enter the air exit.
- Locate the outdoor unit where noise emitted by it or hot air from its air outlet will cause no nuisance to your neighbours.
- If the air conditioner sounds abnormal during operation, contact the dealer where you purchased the air conditioner.

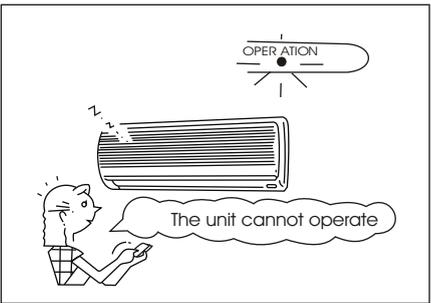
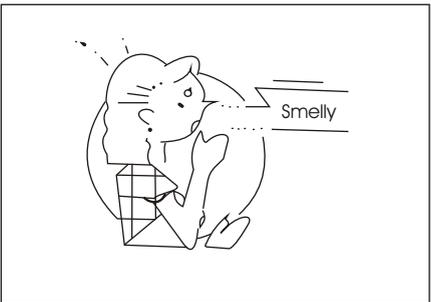
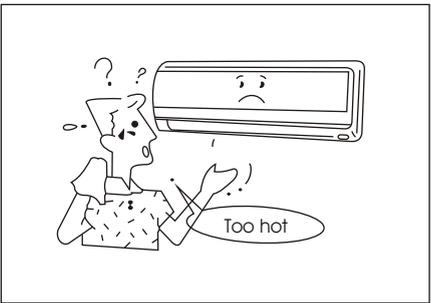
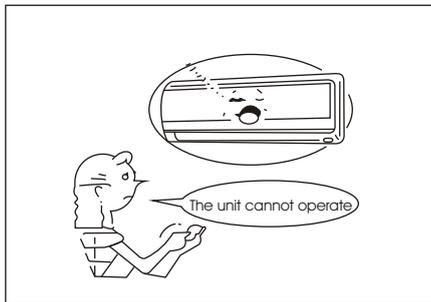
Wire

- To prevent the voltage, please link the air conditioner with the floor. The plug in the air conditioner has been joined the floor wiring, please don't change freely.
- The power socket is used as the air conditioner specially.
- Don't pull the power wiring hard.
- When linking the air conditioner with the floor observe the local rulers.
- If necessary, use the power fuse or the circuit, breaker of the corresponding scale ampere.
- If you want to change the power wiring, please contact the local dealer where you purchased the air conditioner..

Relocation

If you move out or if it is desired to relocate the air conditioner, consult your dealer, because special skills to withdraw Freon, purge air and perform other operations are required.

TROUBLES AND CAUSES



Before you ask servicing or repairs, check the following points.

Recheck	<p>Inoperative</p> <ul style="list-style-type: none"> • The power fuse is blown or the circuit breaker has been tripped. • The batteries in the remote controller are exhausted. • The timer is set. <p>Does not cool or heat well.</p> <ul style="list-style-type: none"> • The air inlet or outlet of the outdoor unit is blocked. • Doors or windows are open. • The air filter is clogged with dust. • The louver is not at the correct position. • The fan speed is set to low. • The temperature setting is too high or too low.
---------	---

These are not failures	<p>Room air is smelly.</p> <p>A bad odor comes from the air conditioner.</p> <ul style="list-style-type: none"> • Smells impregnated in the wall, carpet, furniture, clothing, or furs, are coming out. <p>A white mist of chilled air or water is generated from the outdoor unit.</p>
------------------------	---

⚠ CAUTIONS

If any of the following conditions occur, stop the air conditioner immediately, set to off the power switch, and contact the dealer:

- The indicator lamps flash rapidly (five times per second), you disconnect the unit with the power and then connect the unit with the power again after two or three minutes but the lamps still flash.
- Switch operations are erratic.
- The fuse is blown frequently or the circuit breaker is tripped frequently.
- Foreign matter or water has fallen inside the air conditioner.
- Any other unusual condition is observed.

TROUBLES AND CAUSES (CONCERNING REMOTE CONTROLLER)

Before you ask for servicing or repairs, check the following points.

Setting Change Is Impossible		
Symptoms	Causes	Reason and Disposal
The fan speed can not be changed.	<ul style="list-style-type: none"> Check whether the MODE indicated on the display is "AUTO" <p style="text-align: center;">AUTO</p>	When the automatic mode is selected, the air conditioner automatically selects the fan speed.
	<ul style="list-style-type: none"> Check whether the MODE indicated on the display is "DRY" <p style="text-align: center;">DRY</p>	When dry operation is selected, the air conditioner automatically select the fan speed. The fan speed can be selected during " COOL " and " FAN ONLY " and " HEAT " (cooling only type without)

The Transmission Indicator "▲" Never Comes On		
Symptoms	Causes	Reason and Disposal
The remote control signal is not transmitted even when the ON/OFF button is pushed.	<ul style="list-style-type: none"> Check whether the ON TIMER is indicated on the display. 	The remote control signal is not transmitted, because the air conditioner is off.

The Display Never Comes On		
Symptoms	Causes	Reason
The TEMP. indicator does not come on.	<ul style="list-style-type: none"> Check whether the MODE indicated on the display is "FAN ONLY". <p style="text-align: center;">FAN ONLY</p>	The temperature cannot be set during fan only operation.

The Display Goes Off		
Symptoms	Causes	Reason
The indication on the display disappears after a lapse of time.	<ul style="list-style-type: none"> Check whether the timer operation has come to an end when the OFF TIMER is indicated on the display. 	The air conditioner operation stops since the set time elapsed.
The TIMER indicators go off after a lapse of certain time.	<ul style="list-style-type: none"> Check whether the timer operation is started when the ON TIMER is indicated on the display. 	When the time set to start the air conditioner is reached, the air conditioner will automatically start and the appropriate indicator will go off.

The Signal Receiving Tone does Not Sound		
Symptoms	Causes	Disposal
No receiving tone sounds from the indoor unit even when the ON/OFF button is pushed.	<ul style="list-style-type: none"> Check whether the signal transmitter of the remote controller is property directed to the receiver of the indoor unit when the ON/OFF button is pushed. 	Direct the signal transmitter of the remote controller to the receiver of the indoor unit, and then repeatedly push the ON/OFF button twice.

A