CONVERTIBLE TYPE ROOM AIR CONDITIONER

OPERATION MANUAL

AC184ACMAA AU184AFMDA (HCFU-18C13)

AC284ACMAA AU284AHMBA (HCFU-28C13)

AC424ACMAA AU424AIMAA (HCFU-42CA13)

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■ CAUTIONS

Disposal of the old air conditioner

Before disposing an old air conditioner that goes out of use, please make sure it's inoperative and safe. Unplug the air conditioner in order to avoid the risk of child entrapment.

It must be noticed that air conditioner system contains refrigerants, which require specialized waste disposal. The valuable materials contained in a air conditioner can be recycled. Contact your local waste disposal center for proper disposal of an old air conditioner and contact your local authority or your dealer if you have any question. Please ensure that the pipework of your air conditioner does not get damaged prior to being picked up by the relevant waste disposal center, and contribute to environmental awareness by insisting on an appropriate, anti-pollution method of disposal.

Disposal of the packaging of your new air conditioner

All the packaging materials employed in the package of your new air conditioner may be disposed without any danger to the environment.

The cardboard box may be broken or cut into smaller pieces and given to a waste paper disposal service. The wrapping bag made of polyethylene and the polyethylene foam pads contain no fluorochloric hydrocarbon.

All these valuable materials may be taken to a waste collecting center and used again after adequate recycling.

Consult your local authorities for the name and address of the waste materials collecting centers and waste paper disposal services nearest to your house.

Safety Instructions and Warnings

Before starting the air conditioner, read the information given in the User's Guide carefully. The User's Guide contains very important observations relating to the assembly, operation and maintenance of the air conditioner.

The manufacturer does not accept responsibility for any damages that may arise due to non-observation of the following instruction.

- Damaged air conditioners are not to be put into operation. In case of doubt, consult your supplier.
- Use of the air conditioner is to be carried out in strict compliance with the relative instructions set forth in the User's Guide.
- Installation shall be done by professional people, don't install unit by yourself.

■ CAUTIONS

- For the purpose of safety, the air conditioner must be properly grounded in accordance with specifications.
- Always remember to unplug the air conditioner before opening inlet grill. Never unplug your air conditioner by pulling on the power cord. Always grip plug firmly and pull straight out from the outlet.
- All electrical repairs must be carried out by qualified electricians. Inadequate repairs may result in a major source of danger for the user of the air conditioner
- Do not damage any parts of the air conditioner that carry refrigerant by piercing or perforating the air conditioner's tubes with sharp or pointed items, crushing or twisting any tubes, or scraping the coatings off the surfaces. If the refrigerant spurts out and gets into eyes, it may result in serious eye injuries.
- Do not obstruct or cover the ventilation grille of the air conditioner. Do not put fingers or any other things into the inlet/outlet and swing louver.
- Do not allow children to play with the air conditioner. In no case should children be allowed to sit on the outdoor unit.

Specifications

- The refrigerating circuit is leak-proof.
- When installation in under ceiling, dial switch "K1" in the PC board to "D" position. When installation in floor console, dial switch to "L" position (Brand new unit is in "D" position). For series 18.



- For series 18, the all-pole discon-rexion connection method should be applied in the power supply.
- For series 28,42,the breaker of the air conditioner should be all-pole switch; and the distance between its two contacts should be no less 3mm.

Such means for disconnection must be incorporation in the fixed wiring.

■ SAFETY PRECAUTIONS

⚠ WARNING!

- For series 18, if the power supply cord of this air conditioner is damaged, it must be replaced by the manufacturer its authorized service personnel only.
- For series 28,42, the breaker of the air conditioner should be all-pole switch; and the distance between its two contacts should be no less 3mm. Such means for disconnection must be incorporation in the fixed wiring.
- Use copper wire only. All the cables shall have got the European authentication certificate.
- For series 18, the power supply connects from the indoor side. For series 28,42, the power supply connects from the outdoor side. The power cable and connecting cable are self-provided.
- The parameter of connecting cable:

For series 18, H07RN-F 3G 2.0mm².

For series 28,42, H05RN-F 4G 0.75mm²,The power cable and connecting cable are self-provided.

• The requirement of the corss section area of the power supply cord:

For series 18, H07RN-F 3G 2.5mm².

For series 28, H07RN-F 3G 4.0mm².

For series 42, H07RN-F 3G 6.0mm².

⚠ DANGER!

- Do not attempt to install this air conditioner by yourself.
- This unit contains no user-serviceable parts. Always consult authorized service personnel for repairs.
- When moving, consult authorized service personnel for disconnection and installation of the unit.
- Do not become excessively chilled by staying for lengthy periods in the direct cooling airflow.
- Do not insert fingers or objects into the outlet port or intake grills.
- Do not start and stop air conditioner operation by connecting and disconnecting the power supply cord and so on.
- Take care not to damage the power supply cord.
- In the event of a malfunction (burning smell, etc.), stop operation immediately, turn off the circuit breaker, and consult authorized service personnel.

⚠ CAUTION!

- Provide occasional ventilation during use.
- Do not direct air flow at fireplaces or heating apparatuses.
- Do not climb on place objects on the air conditioner.
- Do not hang objects from the indoor unit.
- Do not set flower vases or water containers on top of the air conditioner.
- Do not expose the air conditioner directly to water.
- Do not operate the air conditioner with wet hands.
- Do not pull power supply cord.
- Turn off power source when not using the unit for extended periods.
- Check the condition of the installation stand for damage.
- Do not place animals or plants in the direct path of the air flow.
- Do not drink the water drained from the air conditioner.
- Do not use in applications involving the storage of foods, plants or animals, precision equipment, or art works.
- Do not apply any heavy pressure to radiator fins.
- Operate only with air filters installed.
- Do not block or cover the intake grill and outlet port.
- Ensure that any electronic equipment is at least one metre away from either the indoor or outdoor unit.
- Avoid installing the air conditioner near a fireplace or other heating apparatuses.
- When installing the indoor and outdoor unit, take precautions to prevent access to infants.
- Do not use inflammable gases near the air conditioner.

■ FEATURES AND FUNCTIONS

AUTOMATIC OPERATION

• COOLING TYPE

Merely press the ON/OFF button, and the unit will begin automatic operation in the Cooling or dry modes as appropriate, in accordance with the thermostat setting and the actual temperature of the room.

HEAT & COOL TYPE

Merely press the ON/OFF button, and the unit will begin automatic operation in any of the Heating, Cooling and Blow modes as appropriate, in accordance with the thermostat setting and the actual temperature of the room.

SLEEP

COOLING TYPE

When the SLEEP button is pressed during Cooling or Dry mode, the thermostat setting gradually rises during the period of operation. When the set time is reached, the unit automatically turns off.

HEAT & COOL TYPE

When the SLEEP button is pressed during Heating mode, the air conditioner's thermostat setting gradually lowers during the period of operation; When the set time is reached, the unit automatically turns off.

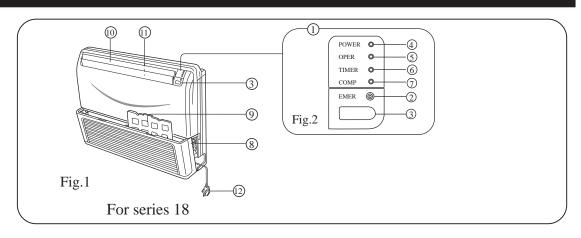
WIRELESS REMOTE CONTROL UNIT

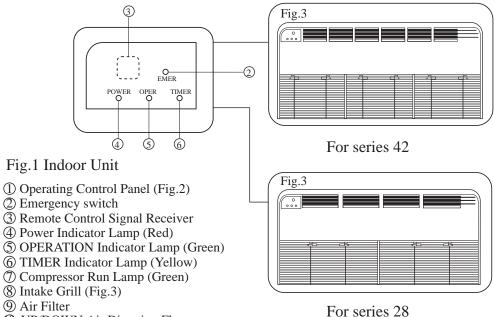
 The WIRELESS REMOTE CONTROL UNIT allows convenient control of air conditioner operation.

MILDEW-RESISTANT FILTER

• The AIR FILTER has been treated to resist mildew growth, thus allowing cleaner use and easier care.

■ NAME OF PARTS





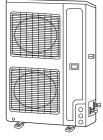
(behind UP/DOWN Air Direction Flaps)

② Power Plug

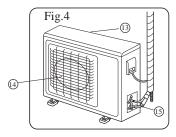


UP/DOWN Air Direction FlapsRIGHT/LEFT Air Direction Louvers

For series 28



For series 42



For series 18

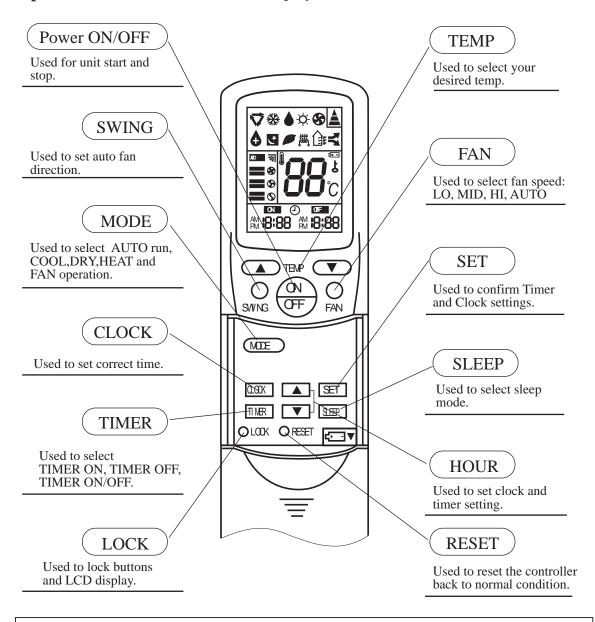
Fig.4 Outdoor Unit

(13) Intake grill (14) Outlet grill (15) Pipe Unit

■ INTRODUCTION TO SPARE PARTS

Operation

Buttons and display of the remote controller.



Cautions:

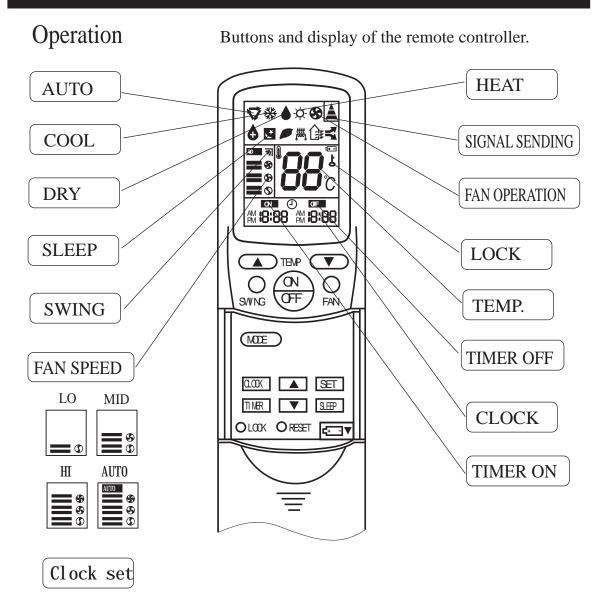
On cooling only unit, heating mode is not available. After replacing batteries, press ON/OFF, and display becomes as follows:

Operation mode: AUTO, Temp: 24 °C Timer mode: No, Fan speed: AUTO

Note:

- 1. The above information is the explanation of the displayed information therefore varies with those displayed in actual operation.
- 2. This type only has the relevant function and display as indicated in the above figure.

■ INTRODUCTION TO SPARE PARTS



When unit is started for the first time and after replacing batteries in remote controller, clock should be adjusted as follows:

Press CLOCK button, "AM" or "PM" flashes.

Press \triangle or ∇ to set correct time. Each press will increase or decrease 1min. If the button is kept depressed, time will change quickly.

After time setting is confirmed, press SET, "AM "and "PM" stop flashing, while clock starts working.

Hints

After replacing with new batteries, remote controller will conduct self-check, displaying all information on LCD. Then, it will become normal.

■ INSTALLATION

Please ask the dealer or specialist to install, never try by the users themselves. After the installation please be sure of the following conditions.

WARNING!

• Please call dealer to install the air-conditioner.

Incorrect installation may cause water leaking, shock and fire hazard.

CAUTION!

- Air-conditioner can't be installed in the environment with inflammable gases because the inflammable gases near to air-conditioner may cause fire hazard.
- Installed electrical-leaking circuit breaker.
 It easily cause electrical shock without circuit breaker.

• Connect earthing wire.

Earthing wire should not be connected to the gas pipe, water pipe, lightning rod or phone line, incorrect earthing may cause shock.



• Use discharge pipe correctly to ensure efficient discharge.

Incorrect pipe use may cause water leaking.

[Location]

- Air-conditioner should be located in well-vented and easily-accessible place.
- Air-conditioner should not be located in the following places:
 - (a) Places with machine oils or other oil vapours.
 - (b) Seaside with high salt content in the air.
 - (c) Near to hot spring with high content of sulfide gases.
 - (d) Area with frequent fluctuation of voltage e.g. factory, etc.
 - (e) In vehicles or ships.
 - (f) Kitchen with heavy oil vapour or humidity.
 - (g) Near to the machine emitting electric-magnetic waves.
 - (h) Places with acid, alkali vapuor.
- TV, radio, acoustic appliances etc are at least 1 m far away to the indoor unit, outdoor unit, power

- supply wire, connecting wire, pipes, otherwise images may be disturbed or noises be created.
- As required, take measures against heavy snow.

[Wiring]

• Air-conditioner should be equipped with special power supply wire.

[Operating noise]

- Choose the following locations:
 - (a) Capable of supporting air-conditioner weight, don't increase operating noise and vibration.
 - (b) Hot vapour from outdoor unit outlet and operating noise don't disturb neighbour.
- No obstacles around the outdoor unit outlet.

■ REMOTE CONTROLLER OPERATION

Remote controller's operation

- When in use, put the signal transmission head directly to the receiver hole on the indoor unit.
- The distance between the signal transmission head and the receiver hole should be within 7m without any obstacle as well.
- Don't throw the controller, prevent it from being damaged.
- When electronic-started type fluorescent lamp or change-over type fluorescent lamp or wireless
 telephone is installed in the room, the receiver is apt to be disturbed in receiving the signals so
 the distance to the indoor unit should be shorter.

Loading of the battery

Load the batteries as illustrated. 2R-03 batteries, resetting key (cylinder)

Remove the battery cover:

Slightly press "▼" and push down the cover.

Load the battery:

Be sure that the loading is in line with the " + " / " - " pole request as illustrated.

Put on the cover again

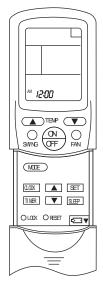
Confirmation indicator:

In disorderation, reload the batteries or load the new batteries after 5mins.

Note:

Use two new same-typed batteries when loading. If the remote controller can't run normally or doesn't work at all, use a sharp pointed item to press the reset key.

Hint: Remove the batteries in case unit won't be in usage for a long period. If there is any display after taking-out just need to press reset key.







FAN operation

(1) Unit start

Press ON/OFF button, unit starts.

Previous operation status appears on display.

(Not Timer setting)

Power indicator on indoor unit lights up.

(2) Select operation mode

Press MODE button. For each press, operation mode changes as follows:

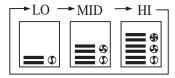


Unit will run in selected mode.

stop display at " 😘 " FAN.

(3) Fan

Press FAN button. For each press, fan speed changes as follows:



Unit will run at selected fan speed.

Adjust air flow direction if necessary, refer to page 15.

(4) Unit stop

Press ON/OFF button.

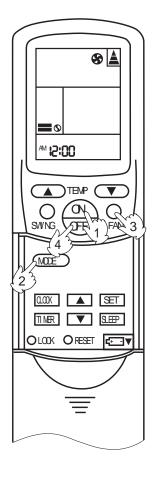
Only time remains on LCD.

All indicators on indoor unit go out.

Vertical flap closed automatically.

Hints

Remote controller can memorize settings in each operation mode. To run it next time just select the operation mode and it will start with the previous setting. No reselecting is needed.(TIMER ON/OFF needs reselecting)



AUTO run, COOL, HEAT and DRY operation

Recommendations

- Use COOL in summer.
- Use HEAT in winter.
- Use DRY in spring, autumn and in damp climate.

(1) Unit start

Press ON/OFF button, unit starts.

Previous operation status appears on display.(Not Timer setting) Power indicator on indoor unit lights up.

(2) Select operation mode

Press MDDE button. For each press, operation mode changes as follows:



Unit will run in operation mode displayed on LCD. Stop display at your desired mode.

(3) Select temp. setting

Press TEMP button

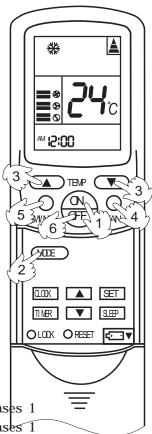
▲ Every time the button is pressed, temp. setting increases 1

▼ Every time the button is pressed, temp. setting decreases 1

Uhit will start running to reach the temp. setting on LCD.

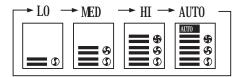
Hints

Remote controller can memorize each operation status. When starting it next time, just press ON/OFF button and unit will run in previous status.



(4) Fan speed selection

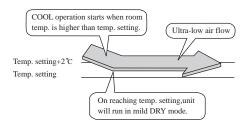
Press FAN button. For each press, fan speed changes as follows:



Unit runs at the speed displayed on LCD.

In HEAT mode, warm air will blow out after a short period of time due to cold-draft prevention function.

In DRY mode, when room temp. becomes 2°C higher than temp. setting, unit will run intermittently at LO speed regardless of FAN setting.



(5) Air flow direction adjust

After operation mode is selected, vertical flap will open automatically according to the mode.

(6) Unit stop

Press ON/OFF button.

Only time remains on LCD.

All indicators on indoor unit go out.

Vertical flap closes automatically.

Hints

As cold air flows downward in COOL mode, adjusting air flow horizontally will be much more helpful for a better air circulation.

As warm air flows upward in HEAT mode, adjusting air flow downward will be much more helpful for a better air circulation.

Be careful not to catch a cold when cold air blows downward.

It is harmful to your health in summer to go frequently in and out of places where temp. difference is above 7° C. Temp. difference of $3-5^{\circ}$ C will remove your fatigue.

More than this, unit's load can be reduced and power consumption cut down as well. So, you'd better set a temp. diff of 3-5°C between indoor and outdoor temp. in COOL mode.

TIMER operation

Set Clock correctly before starting Timer operation(refer to page 7)

You can let unit start or stop automatically at following times: Before you wake up in the morning, or get back from outside or after you fall asleep at night.

TIMER ON/OFF

(1) After unit start, select your desired operation mode.

Operation mode will be displayed on LCD.

Power indicator on indoor unit lights up.

(2)TIMER mode selection

Press TIMER button to change TIMER mode.

Every time the button is pressed, display changes as follows:



Select your desired TIMER mode (TIMER ON or TIMER OFF) ON or OFF will flash.

(3)Timer setting

Press HOUR▲/▼button.

- ▲ Every time the button is pressed, time increases 10min. If button is kept depressed, time will change quickly.
- ▼ Every time the button is pressed, time decreases 10min. If button is kept depressed, time will change quickly. Time will be shown on LCD. It can be adjusted within 24hours.

(4)Confirming your setting

After setting correct time, press SET button to confirm "ON" or "OFF" stops flashing

Time displayed: Unit starts or stops at x hour x min (TIMER ON or TIMER OFF).

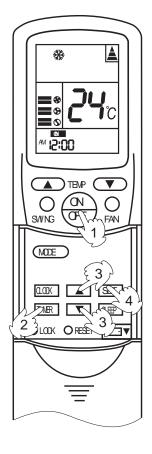
Timer mode indicator on indoor unit lights up.

To cancel TIMER mode

Just press TIMER button several times until TIMER mode disappears.

Hints

After replacing batteries or a power failure happens, Time setting should be reset. Remote controller possesses memory function, when use TIMER mode next time, just press SET button after mode selecting if timer setting is the same as previous one.



TIMER ON-OFF

(1) After unit start, select your desired operation mode

Operation mode will be displayed on LCD.

Power indicator on indoor unit lights up.

(2)Press TIMER button to change TIMER mode

Every time the button is pressed, display changes as follows:



Select TIMER ON-OFF, "ON" will flash.

(3) Time setting for TIMER ON

Press HOUR button.

- ▲ Every time the button is pressed, time increases 10min. If button is kept depressed, time will change quickly.
- ▼ Every time the button is pressed, time decreases 10min. If button is kept depressed, time will change quickly. Time will be shown on LCD.

It can be adjusted within 24hours.

AM refers to morning and PM to afternoon.

(4) Time confirming for TIMER ON

After time setting, press TIMER button to confirm.

"ON" stops blinking, While "OFF" starts blinking.

Time displayed: Unit starts at X hour X min.

(5)Time setting for TIMER OFF

Follow the same procedures in "Time setting for TIMER ON".

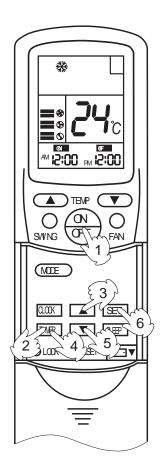
(6)Time confirming for TIMER OFF

After time setting, press SET button to confirm "OFF" stops flashing.

Time displayed: Unit starts at X hour X min.

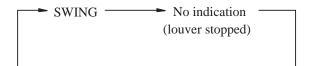
To cancel TIMER mode

- Just press TIMER button several times until TIMER mode disappears.
- According to the Time setting sequence of TIMER ON or TIMER OFF, either Start-Stop or Stop-Start can be achieved.



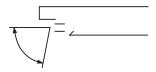
Adjusting up/down air flow direction

Up/down direction can be adjusted by using the SWING button on the remote controller. Each time pressing this button, the mode changes in the following sequence.



Change to the AIRFLOW mode.

SWING



Louver moves in upward and downward directions continuously.

▲ CAUTION

- Avoid direct air flow to the body for many hours.
- Avoid downward blowing operation of cooling mode for many hours.
- Do not touch the swing louver during swing operation.
- Please use the Swing button of remote controller. If adjusted by hand, it would cause an injure.

(Only for 28,42 series.)

LOUVER STOPPED

When the LOUVER button is pushed during SWING mode, it stops swinging at the just angle.

• Recommendable stopping angle of the louver

COOL and DRY	(Horizontal Blowing)
НЕАТ	(Downward Blowing)

Comfortable Sleep

At night, before going to bed you can press down the SLEEP button on the controller and the air-conditioner will run by the comfortable sleeping mode to make you sleep more comfortable.

Press SLEEP button once to make the air conditioner have the previous-set sleep time (first power-on is "1h"), the sleep symbol will appear. Press time button $\blacktriangle/\blacktriangledown$, you can choose the time in 1~8 hours. Each press of $\blacktriangle/\blacktriangledown$, the time increases/reduces 1 hour and "Xh" appears in the temperature setting part, "OFF" appears in "TIMER OFF" display part and timer-off time; press SLEEP button again to cancel sleep function, the sleep symbol diappears.

In cooling, dehumidifying mode

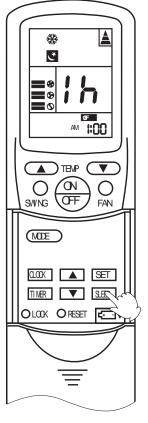
One hour after sleeping operation start, the temp. is 1°C higher than the setting one. After another hour the temp. rises 1°C and then run continuously for another 6hrs' and then close. The actual temp. is higher than the setting one which is to prevent from being too cool to your sleep.

In heating mode

One hour after start up, the temp. decrease $2^{\circ}C$ lower than the setting one. After another hour decrease by more $2^{\circ}C$.

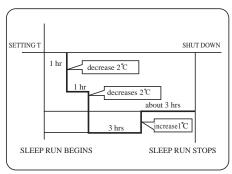
The temperature will automatically rise by 1°C after another 3hrs' operation, and then automatically close after 3hrs' continuous operation.

The actral temperature is lower than the setting one which is to prevent from being too hot to your sleep.

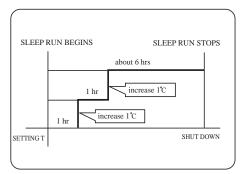


Note:

- In AUTO mode, unit will run in SLEEP function according to the operation mode.
- After setting SLEEP function, it is forbidden to calibrate clock.
- If the set sleep-time does not reach 8 hours, the unit will stop operation automatically after set time is complete.
- Set "TIMER-OFF" function first, then set SLEEP, and the sleep-set is performance; set TIMER-ON function first, the sleep function can only be set before TIMER-ON; if set the SLEEP function first, the TIMER function can not be set.
- After setting SLEEP, press CLOCK button to show the time; press TEMP. button to show the temperature; press again to change temperature.



Heat mode



Cooling mode

Remote Control:

There is a telecommunication interface for remote control on the control panel of the indoor unit. After the peripheral equipment have been installed in accordance with the instruction manual of the selected remote control detector, the air conditioner will be computerized and controlled from a faraway place.

Power Failure Compensation (to be applied for a necessary situation):

After the power failure compensation is set, if power failure suddenly occurs while the air conditioner is working, it will resume the previous working state when the power is supplied again.

Setting Method: When the remote controller is on (excluding timer mode and fan mode), press the "Sleeping" button on the remote controller 10 times within 5 seconds, and after the buzzer rings 4 times, the air conditioner will enter the state of power failure compensation.

Cancel Method: Press the "Sleeping" button on the remote controller 10 times within 5 seconds, and after the buzzer rings 2 timer, the power failure compensation mode will be cancelled.

Notes: When a power failure suddenly occurs during the air conditioner is working after the power failure compensation is set, if the air conditioner will not be used for a long time, please cut off the power supply to prevent its operation from being resumed after the power is supplied again, or press the "Switch On/Off" button after the power comes again.

■ CLEANING AND CARE

⚠ CAUTION!

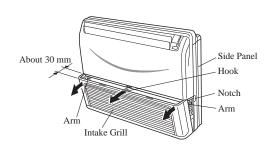
- Before cleaning the air conditioner ,be sure to turn it off and disconnect the Power Supply Cord.
- Be sure the Intake Grill is installed securely.
- When removing and replacing the air filters, be sure not to touch the heat exchanger, as personal injury may result.

Cleaning the Air Filter

(For Series 18)

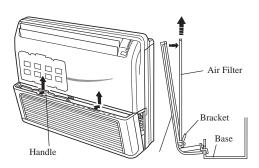
Open the Intake Grill

1. Pull out both sides and the center of the Intake Grill.



2. Pull the Air Filters upward to remove them.

Push the Air Filter handles away from the Intake Grille in direction as illustrated, then pull out Air Filters.

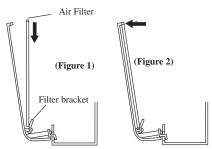


3. Clean the Air Filters.

Remove the dust from the Air Filters by vacuum cleaner or washing them. After washing, allow the Air Filters to dry thoroughly in an area protected from sunlight.

4. Re-attach the Air Filters to the Intake Grill.

- ① The Filters fit onto the inside of the intake Grill. (figure 1)
- ② The bottom edges of the Air Filters should fit into the filter brackets. (figure 1)
- ③ The Air Filters should be pushed down so that their top edges fit under the projections at the top of the Intake Grill. (figure 2)



5. Push in both sides and the center of the Intake Grill.



- Dust can be cleaned from the Air Filter either with a vacuum cleaner, or by washing the filter in a solution of mild detergent and warm water. If you wash the filter, be sure to allow it to dry thoroughly in a shady place before reinstalling.
- If dirt is allowed to accumulate on the Air Filter, air flow will be reduced, lowering operating efficiency and increasing noise.
- During periods of normal use, the Air Filters should be cleaned every two weeks.

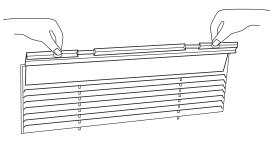
■ CLEANING AND CARE

↑ CAUTION!

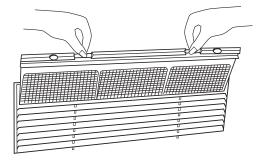
- Before cleaning the air conditioner ,be sure to turn it off and disconnect the Power Supply Cord.
- Be sure the Intake Grill is installed securely.
- When removing and replacing the air filters, be sure not to touch the heat exchanger, as personal injury may result.

The following four procedures are for series 28,42.

1. Press the two buttons on the filters, until you hear a sound of click.



2. Pull the filters upward to remove them from the Intake Grill.



- 3. Clean the air filter: Remove the dust from the filters by vacuum cleaner or washing them. After washing, allow the air filters to dry thoroughly in an area protected from sunlight.
- 4. Re-attach the air filters to the Intake Grill, press the two buttons on the filters, until you hear a sound of click.
 - When used for extended periods, the unit may accumulate dirt inside, which reduces its performance. We recommend that the unit is inspected regularly, in addition to your own cleaning and care. For more information, consult authorized service personnel.
 - When cleaning the unit's body, do not use water hotter than 40°C, harsh abrasive cleansers, or volatile agents like benzene or thinner.
 - Do not expose the unit body to liquid insecticides or hairsprays.
 - When shutting down the unit for one month or more, first allow the Fan mode to operate continuously for about half a day to allow internal parts to dry thoroughly.

■ TROUBLE SHOOTING

Followings are not problems

Sound of water flowing is not a problem.	During unit operation or at stop, a swishing or gurgling noise may be heard. This noise is generated by refrigerant flowing in the system.
Sound of cracking is heard.	During unit operation, a cracking noise may be heard. This noise is generated by the casing expanding or shrinking because of temperature changes.
Smell are generated.	This is because the system circulates smells from the interior air such as the smell of cigarettes or the painting on the furniture.
During operation, white fog or steam comes out from the indoor unit.	When unit is running at places like restaurant, etc. where dense edible oil fumes always exist, this will happen.
In cooling operation, unit switches to blowing operation.	To prevent frost from accumulating on indoor heat exchanger, unit will switch to blowing operation for a while then resume cooling operation.
Unit will not restart after stop. Won't start?	Though ON/OFF button is set to ON, unit won't resume cooling, dry or heating operation in 3 min after it is stopped, this is because of 3-min-delay protection circuit. Please wait 3 minutes
No outlet air or fan speed can't be changed in dry mode.	Unit will reduce fan speed repeatedly and automatically if room temp. is too low in dry operation.
In heating operation, water or steam are blown out of outdoor unit.	This occurs when frost accumulated on the outdoor unit is removed. (during defrosting operation)
In heating operation, indoor fan won't stop even if unit is stopped.	After unit stop, indoor fan will go on running until indoor unit cools down.

■ TROUBLE SHOOTING

Before ask for services, please first check your unit against the following.

Air conditioner won't start.						
Is power supply switch turned on? Power supply switch is not set at ON.	Is city power supply normal? Power failure?	Is leakage current breaker activated? This is very dangerous, please disconnect power supply immediately and contact your dealer.				
	Poor cooling or heating					
Are operation control adjusted correctly as specified?	Is air filter too dirty?	Are there any obstacles in inlet or outlet grill?				
Are horizontal louvers at up position (in heating mode)?	Any doors or windows left open?					
Poor cooling						
Is there any direct sunlight in the room?	If there are unexpected heat sources in the room?	Too many people in the room?				
Cold air blows out (in heating mode) Is air conditioner in standby condition in heating mode?	If your unit still can't work properly after above mentioned checks, or following problems occur, please stop it immediately and contact your dealer. • Fuses or circuit breakers often blow out. • Water comes out in cooling/dry operation. • Operation is abnormal or sound is heard.					

■ OPERATING TIPS

Operation and Performance

*Heating Performance

- This air conditioner operates on the heat-pump principle, absorbing heat from outdoor air and transferring that heat indoors. As a result, the operating performance is reduced as outdoor air temperature drops. If you feel that insufficient heating perfomance is being produced, we recommend you use this air conditioner in conjunction with another kind of heating appliance.
- Heat-pump air conditioners heat your entire room by recirculating air throughout the room, with the result that some time may be required after first starting the air conditioner until the room is heated.

Instructions relating to heating (*) are applicable only to "HEAT & COOL TYPE".

*Microcomputer-controlled Automatic Defrosting

- When using the Heating mode under conditions of low outdoor air temperature high humidity, frost may form on the outdoor unit, resulting in reduced operating performance.
- In order to prevent this kind of reduced performance, this unit is equipped with a Microcomputer-controlled Automatic Defrosting function. If frost forms, the air conditioner will temporarily stop, and the defrosting circuit will operate briefly (for about 7 to 15 minutes).

During Automatic Defrosting operation, the OPERATION Indicator Lamp will flash.

*Trouble alarming performance

Only for series 28,42

During operation, when there is any trouble, the power indicator lamp will flash.

Temperature and Humidity Range

Cooling	indoor	max°C D.B/W.B min °C D.B/W.B	32/23 18/14
	outdoor	max°C D.B/W.B min°C D.B	43/26 18
	indoor	max ℃D.B min ℃ D.B	27/- 20/-
Heating	outdoor	max°CD.B/W.B min°CD.B/W.B	24/18 -7/-8

- If the air conditioner is used under higher temperature condition than those listed, the built-in protection circuit may operate to prevent internal circuit damage. Also, during Cooling and Dry modes, if the unit is used under conditions of lower temperature than those listed above, the heat-exchanger may freeze, leading to water leakage and other damage.
- Do not use this unit for any other purposes except for the Cooling, (*) Heating, Dehumidifying, and air-circulation of rooms in ordinary dwellings.
- The wiring method should be in line with the local wiring standard.
- The waste battery should be disposed properly.
- If the fuse on PC board is broken, please change it with the type T 3.15A/250V.
- The indoor unit installation height is at least 2.5m, only for series 42.