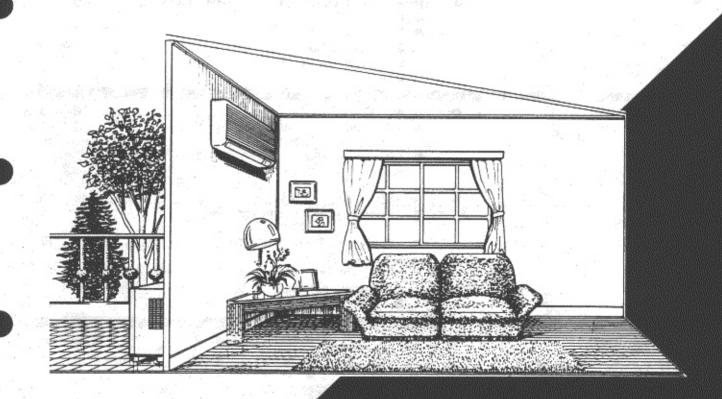
# Operating Instructions

Room Air Conditioner

Models:

CS-C73K, CS-C93K, CS-C123K Series

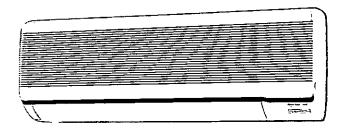


National/Panasonic

# **CONTENTS**

1 Before use	<ul> <li>► FEATURES</li></ul>
	<ul> <li>When the remote control is opened</li> <li>How to use the remote control</li> <li>When the back cover is opened</li> <li>▶ PREPARATION BEFORE OPERATION</li></ul>
<b>2</b> How to use	<ul> <li>► HOW TO OPERATE</li></ul>
3If necessary	<ul> <li>CARE AND MAINTENANCE</li></ul>
	<ul> <li>TROUBLESHOOTING</li></ul>
	► HELPFUL INFORMATIONS24  ► ENERGY SAVING AND OPERATION HINTS

# **FEATURES**



#### AUTOMATIC OPERATION

Selects the optimum mode.

(Refer page 12)

#### SLEEP MODE

Prevent the room from getting too hot or too cold while you are sleeping.

(Refer page 16)

#### **ECONOMY MODE**

To reduce electrical power consumption.

(Refer page 17)

#### **POWERFUL MODE**

Reaches the desired room temperature quickly.

(Refer page 17)

#### REMOVABLE FRONT PANEL

For quick and easy cleaning (washable).

(Refer page 19)

# **AIR PURIFYING FILTER**

(WITH DEODORIZING FUNCTION)

Reduce dust, smoke and odours in the room.

(Refer page 20)

#### **AUTO RESTART CONTROL**

Automatically restart the unit after power failure.

(Refer page 24)



Thank you for purchasing our National/ Panasonic Room Air Conditioner.

#### Note:

Before using your air-conditioner, please read this operating instructions carefully and keep it for future reference.

# SAFETY PRECAUTIONS

### Before operating, please read the following "Safety Precautions" carefully.

To prevent personal injury, injury to others and property damage, the following instructions must be followed.

Incorrect operation due to failure to follow instructions will cause harm or damage, the seriousness of which is classified as follows:



#### Warning

This sign warns of death or serious injury.



#### Caution

This sign warns of damage to property.

■ The instructions to be followed are classified by the following symbols :



This symbol (with a white background) denotes an action that is PROHIBITED.







These symbols (with a black background) denote actions that are COMPULSORY.

### Installation Precautions



### Warning

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

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



### Caution

This room air conditioner must be earthed.



Improper grounding could cause electric shock.



Ensure that the drainage piping is connected properly.

Otherwise, water will leak out.

Do not install the unit in a place where there may be explosive gas leaks.



Gas leaks near the unit could cause fires.

# Operation Precautions



This sign warns of death or serious injury.



Do not insert plug to operate the unit. Do not pull out plug to stop the unit.



Plug in properly.



Do not operate with wet hands.





Use specified power cord.



Do not damage or modify the power cord.

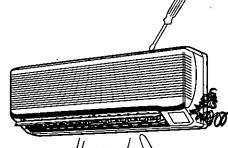


Do not repair by yourself.





If abnormal condition (burnt smell, etc) occurs, switch off and unplug the power supply.



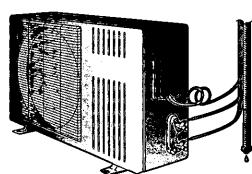


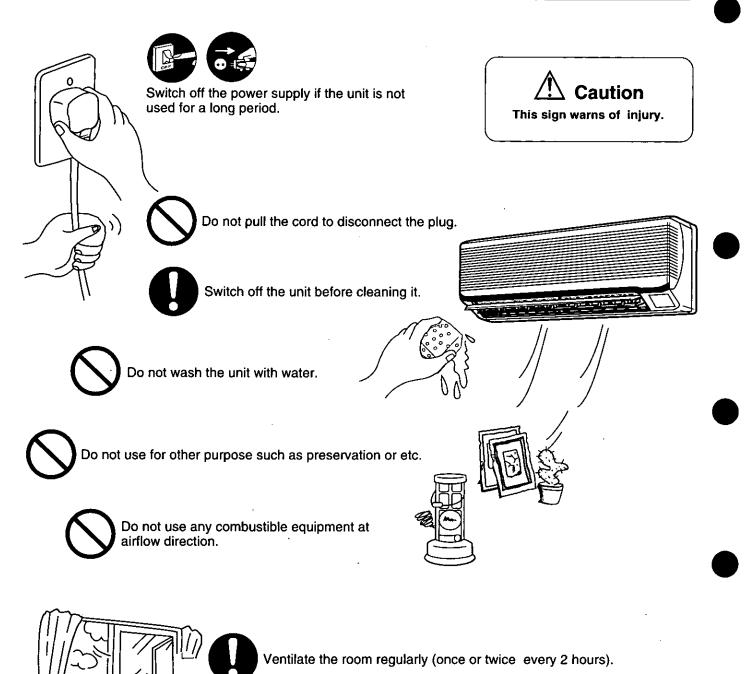
Do not insert finger or other objects into the indoor or outdoor units.

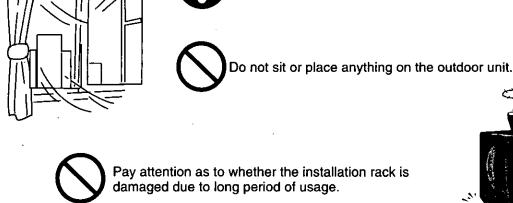


Do not exposed directly to cool air for a long period.



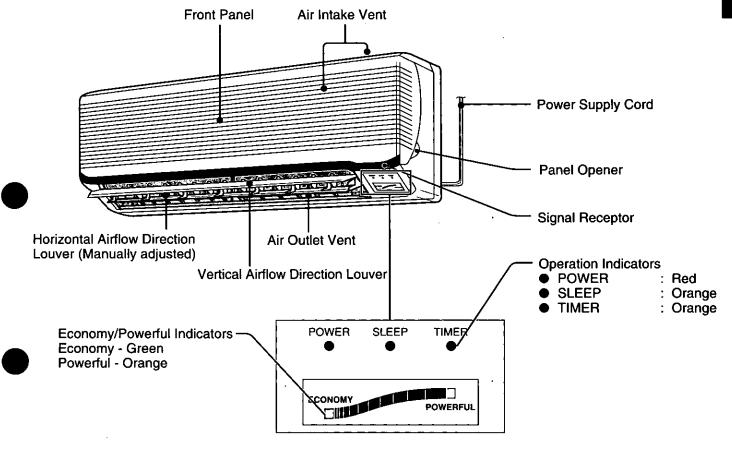




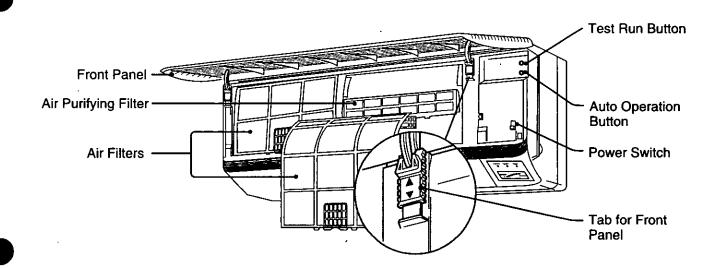


# NAME OF EACH PART

# Indoor Unit

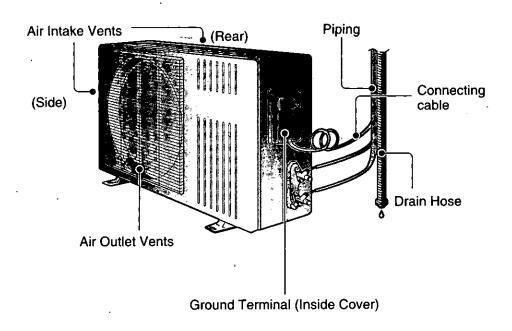


### ■ When the front panel is opened

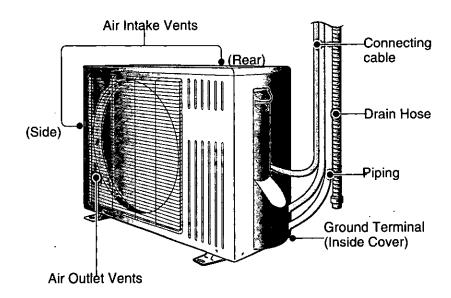


# Outdoor Unit

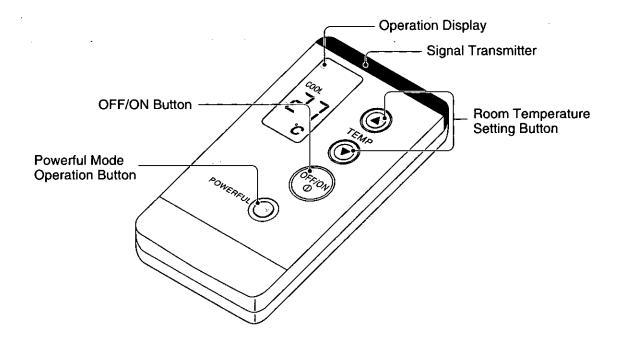
# CU-C73K CU-C93K



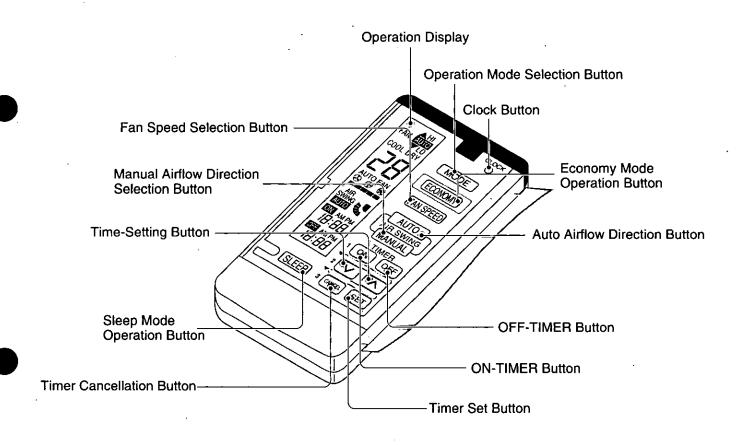
# **CU-C123K**



## Remote Control



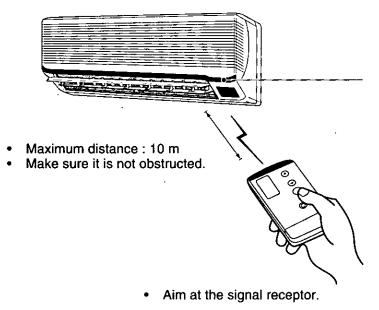
#### ■ When the remote control cover is opened



#### How to use the remote control

#### **Notes**

- Do not throw or drop
- Do not get it wet
- Certain type of flourescent lamps may affect signal reception. Consult your dealer.



Signal receptor

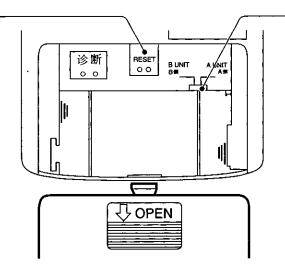
Signal received sound.
 One short beep or one long beep.

#### \_\_\_\_

When the back cover is opened

#### Reset points

 short to clear the memory



Signal [B  $\leftrightarrow$  A] switch

- Used when 2 or more units are installed in 1 room. (Consult your dealer)
- Set to A. (If one unit is installed)

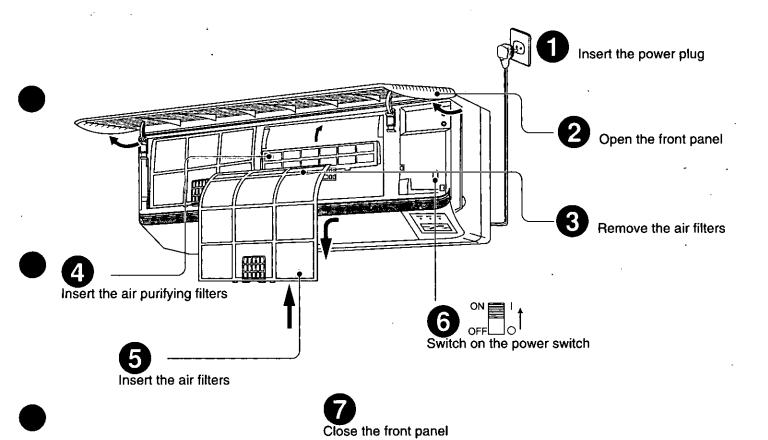
# PREPARATION BEFORE OPERATION

Indoor Unit

**Warning** 

Ensure the power plug is securely inserted.

A loose plug may cause a fire or an electric shock.



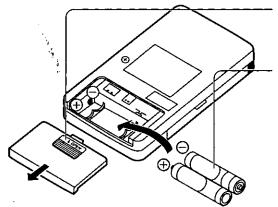
#### Notes

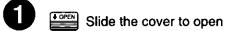
- If the unit is not going to be used for an extended period
  of time, turn off the Power switch. If it is left at the ON
  position, approximately 2.5 W of electricity will be used
  even if the indoor unit has been turned off with the
  remote control.
- If operation is stopped, then restart immediately, the unit will resume operation only after 3 minutes.

Use under the following conditions (Unit in °C)				
OBT: Dry Bulb Temp	Indoor		Outdoor	
WBT: Wet Bulb Temp	DBT	WBT	DBT	WBT
Maximum Temperature	32	23	43	26
Minimum Temperature	16	11	16	11

## Remote Control

### ■ Inserting batteries





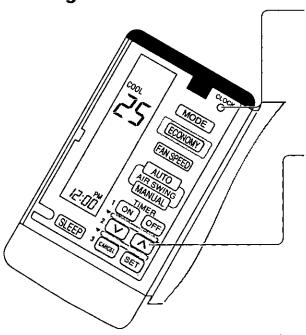




 Open the remote control cover and confirm the display 12:00 PM is flashing.

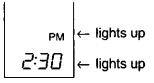
※ Set the current time (Clock) immediately to prevent battery exhaustion.





## Press the clock button

- Press to set the current time
  - ( ) Press continuously for fast forwarding.
  - Press continuously for fast reversing.
- Press the clock button



#### About the batteries

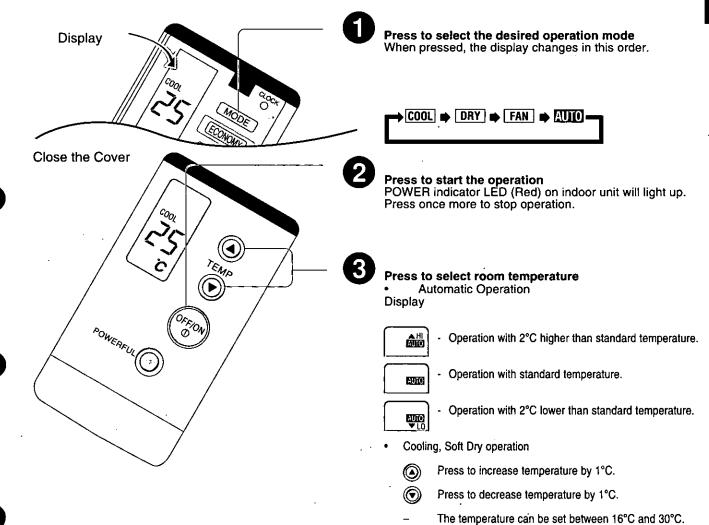
Can be used for approximately one year.

Observe the following when replacing the batteries

- Replace with new batteries of the same type.
- Do not use rechargeable batteries (Ni-Cd).
- Remove the batteries if the unit is not going to be used for a long period.

# **HOW TO OPERATE**

# ● Automatic, Cooling, Soft Dry, Fan



### Operation details

**AUTO – Automatic Operation** 

 Once the Automatic Operation is selected, the indoor temperature sensor operates automatically to select the desired operation mode with Cooling or Soft Dry. DRY - Soft Dry Operation

For Cooling

For Soft Dry

 A very gentle Cooling Operation. Consisting primarily of dehumidifying. It does not lower the room temperature.

26°C - 28°C

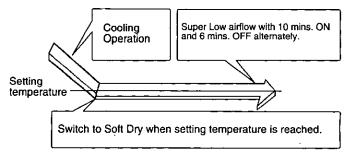
temperature.

1°C - 2°C lower than room

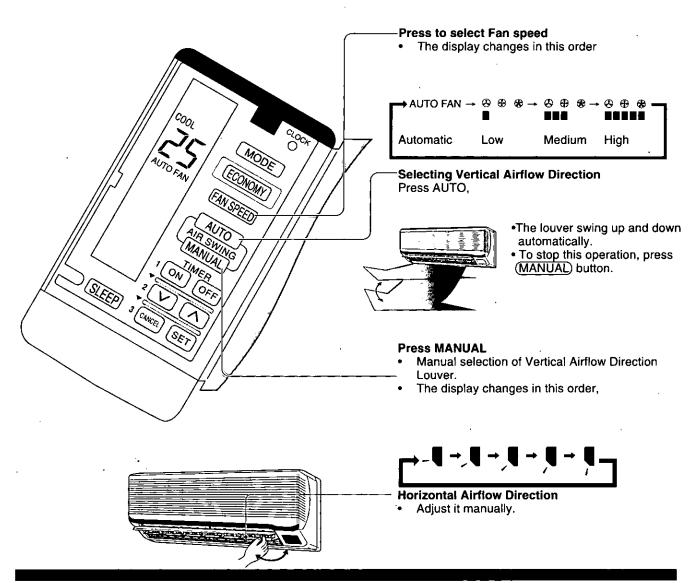
Recommended temperature



Operation	Standard temperature
COOLING	25°C
SOFT DRY	` 22°C



# Adjusting Airflow Direction And Fan Speed



### ■ Operation details

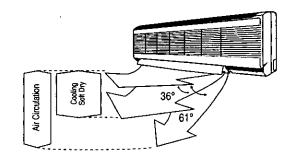
#### FAN - Air Circulation Operation

 When the room temperature reaches the setting temperature, operation commences at Low airflow volume. It stops when the room temperature drops to 2°C below the setting temperature. (It is useful when using a heater).

#### **Automatic Airflow Volume**

 The speed of the Indoor fan is adjusted automatically according to the operation. The Indoor fan stops occasionally during cooling operation.

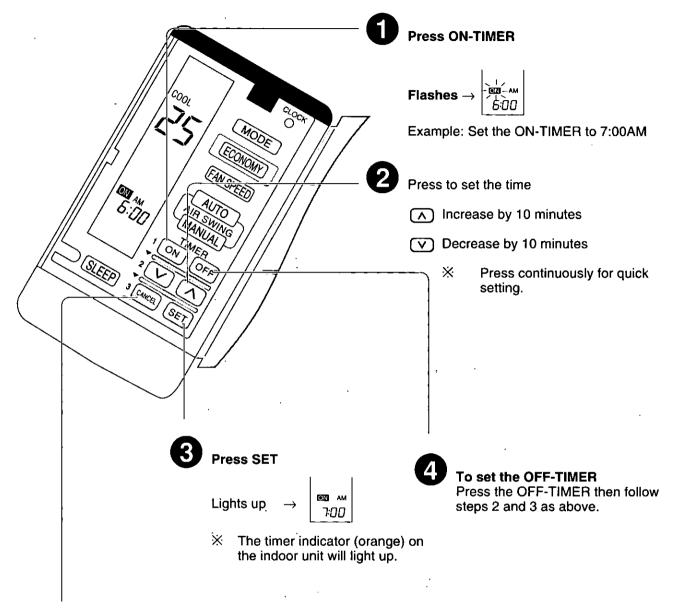
#### Louver adjustment range



Five stages of adjustments can be made in this range.

# **SETTING THE TIMER**

Ensure that the current time is correct before setting the timer. The timer cannot be set if the time display is flashing.



■ Timer Cancellation Button •

(To cancel the Timer)

Press the ON-TIMER or OFF-TIMER then press CANCEL.

\* The timer indicator on the indoor unit will go off.

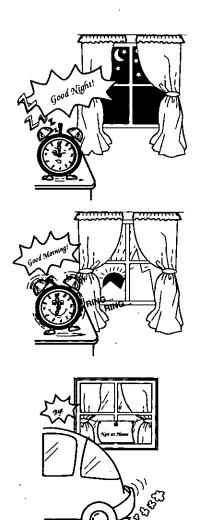
#### Timer details

• When the ON-Timer is set, operation will start before the actual set time. This is to allow the room temperature to reach the setting temperature by the setting time (maximum of 15 minutes in advance).

■ To change the setting time, follow the above steps.

Once the ON-Timer is set, operation will start at the setting time everyday.

# Recommended Setting of Timer



#### ■ When you sleep

 Set the time at which you will go to sleep with the OFF-TIMER. This prevent wastage of electricity.

#### When you wake up

 Set the time at which you will wake up with the ON-TIMER. You can start the new day at a comfortable temperature.

#### When going out

- Set the time at which you will go out with the OFF-TIMER. Set the time at which you will come back with the ON-TIMER.
- This will prevent the air conditioner from being left on while you are out, and the temperature will be pleasant when you return.

#### ■ When you return

- Set the time at which you will return with the ON-TIMER.
- This will make the temperature pleasant when you return, and it will prevent the air conditioner from being left on.

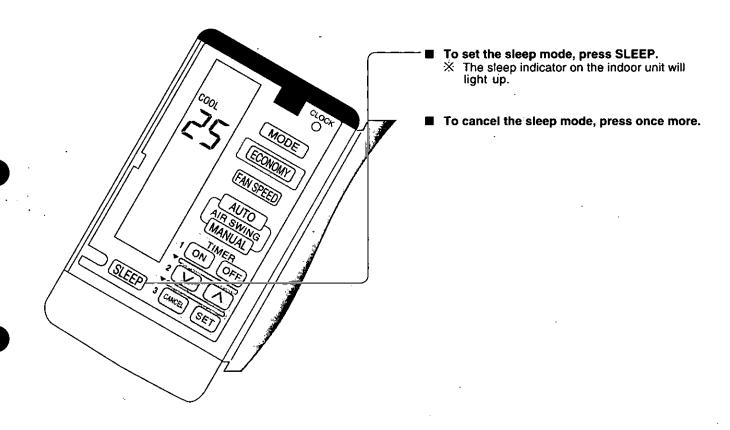
#### Timer details

- The current time is not displayed when the timers are set.
- When both timers are used together, the TIMER LED on the indoor unit remains lit even if the operation is stopped by the OFF-TIMER.

# **CONVENIENCE OPERATION**

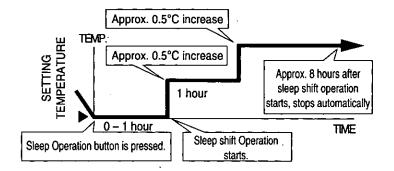
# Sleep Mode

This is to obtain a comfortable room temperature while sleeping.



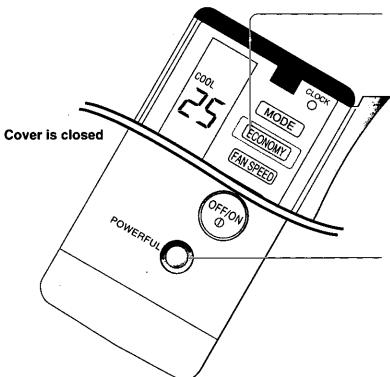
### Operation details

- When the room temperature reaches the setting temperature, the airflow volume will automatically change to low.
- Sleep Mode Operation time is 8 hours.
- When used together with the timer, the timer has priority.
- Cooling or Soft Dry Operation for sleep mode movement will start to avoid overcooling.



# Economy or Powerful Mode

Economy and Powerful operation cannot be selected simultaneously.



#### **Economy Mode**

To save electrical power consumption.

- Press ECONOMY
- X Economy indicator (Green) on indoor unit lights up.
- Press once more to cancel this operation.

#### **Powerful Mode**

To obtain the setting temperature quickly.

- Press POWERFUL
- \* Powerful indicator (Orange) on indoor unit lights up.
- X Powerful mode will operate for 15 minutes only.
- To cancel this operation, press once more.

### ■ Operation details

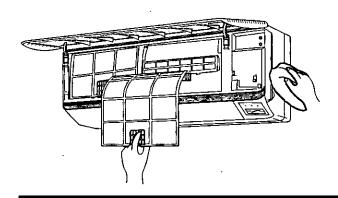
	Economy operation		Powerful operation	
	Temperature	Airflow volume	Temperature	Airflow volume
Cooling/Soft Dry	0.5°C higher than set temp.	Low (on and off)	3°C lower than set temp.	· Super High

- The changes of the temperature and airflow volume are automatic.
  - The remote control display remain unchanged.
  - If sleep button or operation mode button is pressed, economy or powerful operation is cancelled.
  - During Fan-Air circulation operation, the powerful and economy operation are not available.
  - During Economy mode, indoor fan operates on and off at Low speed.

# **CARE AND MAINTENANCE**

# Cleaning the Indoor Unit and Remote Control

- · Wipe gently with a soft, dry cloth.
- Do not clean with water hotter than 40°C or with polishing fluids.
- The front panel can be removed and cleaned with water.





# Cleaning the Air Filter

(Recommendation:- If the unit is operated in a dusty environment, clean the filters every two weeks, continuous use of this dirty filters will reduce cooling efficiency)

Open the front grille and remove the two air filters. Hold the tab, lift up slightly then pull down.

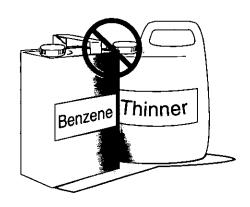
Wash back of the air filter with water.

Remove dirt using a vacuum cleaner.



If badly soiled, wash it with soap or a mild household detergent.

- Let it dry and reinstall it.
  Be sure the "FRONT" mark is facing you.
  - X Damaged air filter. Consult the nearest authorized dealer. Part No.: CWD00240.
- Do not clean using benzene, thinner, scouring powder or clothes soaked in caustic chemicals.



## Cleaning the Front Panel

(Must be removed before washing)



#### Caution

- Stand on a level surface when removing the front panel.
- Do not touch the metal parts in the indoor unit after removing the front
- Do not leave water on the panel after cleaning. Dry thoroughly to prevent electric shock.

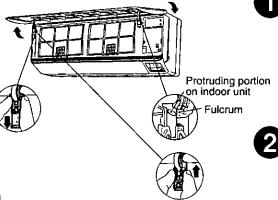
### Removing the front panel



Raise the front panel to its full extent.

Slide the two tabs (left and right) to the UNLOCK position.

> Raise the front panel to a position slightly higher than horizontal and pull to remove.

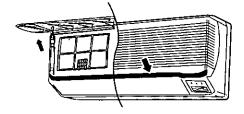


match the protruding portion on the indoor unit to the fulcrum and push into place.

Raise the front panel horizontally,

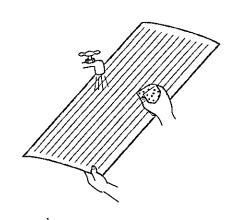
Slide the two tabs up to the Lock position. (Click sound) Note: If the tabs are left in the UNLOCK position, the front

panel will not close. × If the panel does not close completely, check the tabs positions and try again.



### Cleaning the front panel

- Gently wash with water and a sponge. (Do not use a scrubbing brush or other hard cleaning aids).
- Do not press the front panel too hard when washing. (Excess pressure may damage the panel).
- When cleaning with kitchen cleaning fluids (neutral detergents), rinse thoroughly. (Do not use non neutral detergents)
- Do not dry the front panel in direct sunlight. (Exposure to direct sunlight may discolor or deform the panel).

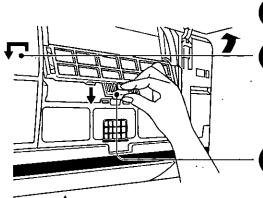


# Replacing the Air Purifying Filters

(Once every 3 month)

- Do not reuse dirty filters. Consult the nearest authorized dealer. (Air Purifying filter No. CZ-SF5N)
- · These filters function effectively for not more than three months.
- · If the air conditioner operates with dirty filters:-
  - Air is not purified
  - Cooling capacity decreases
  - Foul odours are emitted

## ■ Removing the air purifying filters

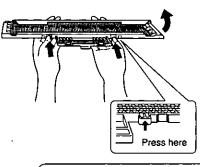


- 1 Raise the front panel to its full extent.
  - Remove the air filters (left and right).

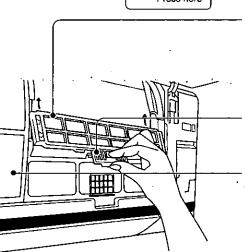
    Lift up slightly then pull down
  - Hold the tabs of the air purifying filters and pull.

Caution - Be careful not to hurt your hands on metal parts.

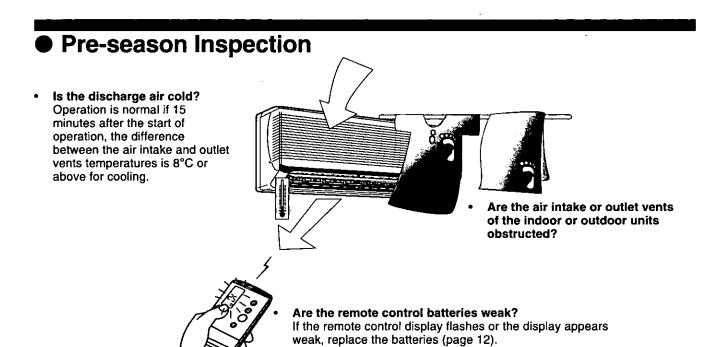
### ■ Reinstalling the air purifying filters



Open the filter frame to insert the new filters.



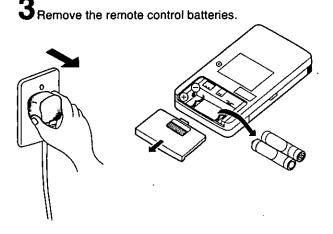
- Insert the new air purifying filter.
  (Be sure the "FRONT" mark is facing you)
- Push until you hear a click.
- Reinsert the air filters.
- Close the front panel after reinstalling the air purifying filters.



# When the Air Conditioner is Not Used For an Extended Period of Time

- To dry the internal parts of the indoor unit, operate the unit for 2 3 hours using Fan operation.
- 2 Turn off the power switch and remove the power supply

Note: If the unit is not switched off by the remote control, it will start operating when you plug in (because a Auto Restart Control is provided).



# Recommended Inspection

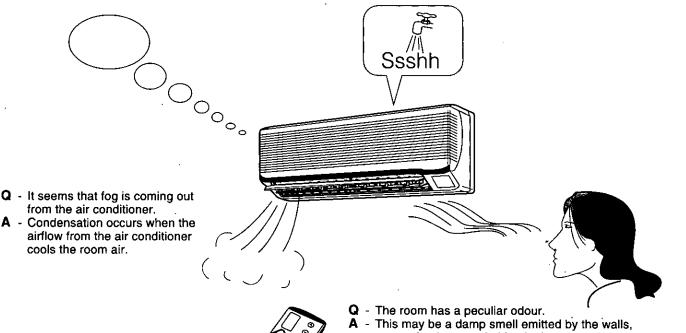
The unit will become dirty after use over several seasons, reducing performance.
 Depending on the operation condition, a dirty unit may produce foul odours and dust may pollute the dehumidifying drainage.

Seasonal inspection is recommended, in addition to regular cleaning. Consult an authorized dealer.

# **TROUBLESHOOTING**

# Normal Operation

- Q Is it okay?
- A This is the answer.
- **Q** Air conditioner has been restarted, but does not operate for 3 minutes.
- A This is to protect the air conditioner. Wait until the air conditioner begins operating.
- A sound like water flowing can be heard.
- A This is the sound of refrigerant flowing inside the air conditioner unit.





- **Q** During soft dry mode operation the air conditioner stops.
- A Soft Dry Mode operation is a very gentle cooling operation consisting primarily of dehumidifying. The air conditioner may stop for approximately 6 minutes in order to prevent overcooling. If the room temperature rises again, the operation will recommence.

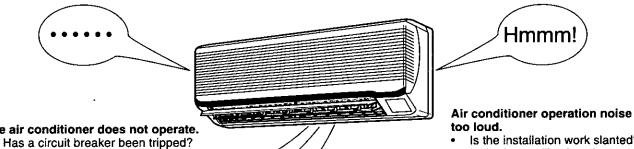
# **AUTO FAN**

 Q - During Automatic Airflow Volume setting, Indoor fan stops occasionally.

carpet, furniture or clothing in the room.

A - This is to remove the smell emitted by the surroundings.

# **■ Abnormal Operation**



- Is the installation work slanted?
- Is the front grille closed properly?

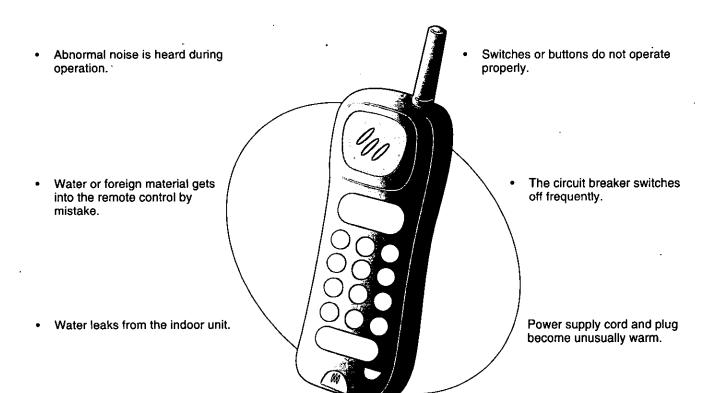
- The air conditioner does not operate.
- Has the power plug been removed from the wall outlet?
- Is the power switch at "O" (OFF) position?
- is the timer being used correctly?
- Has the remote control B⇔A switch been set correctly?

#### The air conditioner does not cool effectively.

- Has the temperature been set incorrectly?
- Are the filters dirty?
- Are the intake or outlet vents of the outdoor unit obstructed?
- Are all windows and doors closed?

# Call the Dealer Immediately

If the following conditions occur, immediately turn the power switch to "O" (OFF) and unplug.

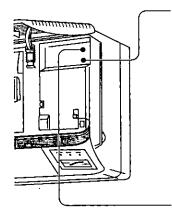


# HELPFUL INFORMATION

### **Auto Operation and Test Run Button**

#### **Auto Operation Button**

(If remote control fails to function or misplaced)





Press the Auto Operation Button for automatic operation. But the temperature cannot be adjusted.

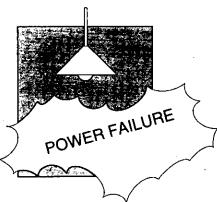
- The power LED on indoor unit blinks until the operation mode is selected automatically.
- 2 To cancel, press once more.

#### **Test Run Button**

For installation or servicing purpose only.



 To switch off the beep (signal received) sound, press the Auto Operation Button at the indoor unit for 10 seconds or longer.
 Repeat the above if you want to switch on the beep sound.

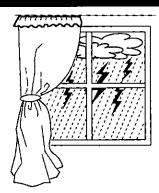


#### Auto Restart Control

- If power is resumed after a power failure, the operation will restart automatically after 3 - 5 1/2 minutes.
- Operation will be automatically restart under the previous operation mode and airflow direction when power is resumed as the operation is not stopped by remote control.

### Timer Setting

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



### Thunder and Lighting

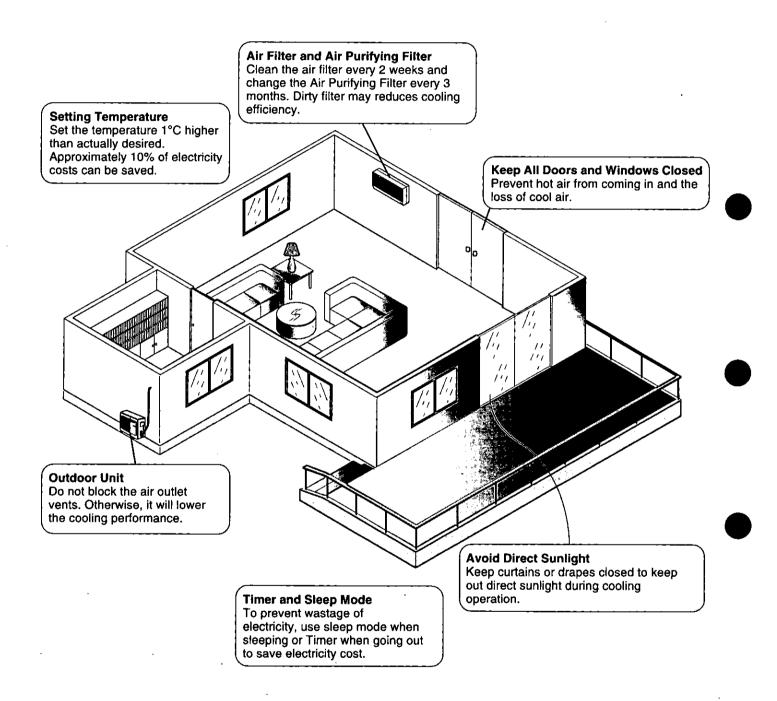
 Whenever there is lighting, stop operation to protect the air conditioner.

The the appropriate to OFF, they upply good the

Turn the power switch to OFF, then unplugged the power supply plug.



# **ENERGY SAVING AND OPERATION HINTS**



# $ilde{\mathbb{A}}$ Warning

- 1) This appliance must be earthed.
- 2) If the supply cord is damaged or need to be replaced, it must be replaced by the manufacturer or its service agent or a similarly qualified person in order to avoid a hazard.
- 3) Remove power plug or disconnect from the mains before servicing this appliance.
- 4) Do not repair by yourself. In case of malfunction of this appliance, do not repair by yourself. Contact to the sales dealer or service dealer for a repair.
- 5) Do not use in an explosive atmosphere.

Do not use this appliance in a potentially explosive atmosphere.

6) Turn off the power (Isolation from main power supply). Pull off the power plug from the receptacle, or switch off the breaker, or switch off the power disconnecting mean to isolate the equipment from the main power supply in case of an emergency.



DISCONNECT THE MAINS PLUG FROM THE SUPPLY SOCKET WHEN NOT IN USE, WHERE SUPPLY CONNECTION IS VIA MAINS PLUG.

Airborne noise.

A-weighted sound pressure level of this appliance is less than 70dB (A) under the JIS C 9612 test conditions.

Maximum cooling operation

1 m from the unit

#### IMPORTANT

The wires in this mains lead are coloured in accordance with the following code:

Green and Yellow

Earth

Blue Brown Neutral Live

"As the colours of the wires in the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured green and yellow must be connected to the terminal in the plug which is marked by the letter E or by safety earth symbol  $\oplus$  or coloured green or green and yellow.

The wire which is coloured blue must be connected to the terminal which is marked with letter N or coloured black.

The wire which is coloured brown must be connected to the terminal which is marked with letter L or coloured red."

Matsushita Air conditioning Group P.O. Box 1012, Jalan Semangat 46966, Petaling Jaya, Selangor Darul Ehsan, Malaysia