# USER'S MANUAL

### ENGLISH

MANUEL DE L'UTILISATEUR CLIMATISEUR	FRANÇAIS
ANWENDERHANDBUCH KLIMAGERÄT	DEUTSCH
ISTRUZIONI PER L'USO CONDIZIONATORE D'ARIA	ITALIANO
MANUAL DEL PROPIETARIO ACONDICIONADOR DE AIRE	ESPAÑOL
GEBRUIKERSHANDLEIDING AIRCONDITIONING	NEDERLANDS
MANUAL DO UTILIZADOR APARELHO DE AR CONDICIONADO	PORTUGUÊS
ΟΔΗΓΙΕΣ ΧΡΗΣΗΣ κλιματιστικο	ΕΛΛΗΝΙΚΑ
ОДСТВО ПО ЭКСПЛУАТАЦИИ кондиционер воздуха	РУССКИЙ
KULLANIM KILAVUZU SPLIT KLIMA	TÜRKÇE
Este acondicionador de aire cumple con la directiva EMC: 89/ 336/EEC, LV Directiva 73/23/EEC.	
Deze airconditioner voldoet aan <b>EMC</b> Directive 89/336/EEC, LV Directive 73/23/EEC.	
Este aparelho de ar condicionado está em conformidade com a Directiva <b>EMC</b> 88/336/CEE e a Directiva LV 72/23/CEE.	
Αυτό το κλιματιστικό είναι σύμφωνο με τις προδιαγραφές της Οδηγίας <b>ΕΜC</b> 88/396 και της Οδηγίας LV 73/23 της ΕΟΚ. 	

Thank you for purchasing a MITSUBISHI HEAVY INDUSTRIES, LTD. Air-Conditioner. To get the best long-lasting performance, read and follow this User's Manual carefully before using your air-conditioner. After reading, please store the Manual in a safe place and refer to it for operational questions or in the event of any irregularities.

This air-conditioner is intended for domestic use.

An alternative refrigerant (R410A) is used in this air-conditioner. When asking the dealer for service or inspection and maintenance, explain the dealer about this matter.

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# Safety precautions

- Before starting to use the system, please read these "Safety precautions" carefully to ensure proper operation of the system.
- The safety precautions are classified as "A DANGER" and "A CAUTION". Precautions as shown in the column "A DANGER" indicate that improper handling could have dramatic consequences like death, serious injury, etc. Nevertheless, even precautions as shown in the column " A CAUTION" might pose a serious problem, depending on the circumstances. Please observe these precautions with great care, since they are essential to your safety.
- · Symbols which appear frequently in the text have the following meaning:



When you have read the instruction manual, please keep it near at hand for consultation. If someone else takes over as operator, make certain that the
manual is also passed on to the new operator.

#### **IINSTALLATION PRECAUTIONS**

The system is meant for domestic, residential etc. use.

#### 



If used in inferior environments, such as an engineering workplace, the equipment may function poorly.



It is not advisable to install the system yourself, as faulty handling may cause leakage of water, electric shock or fire.

The system must be installed by your dealer or a qualified pro-

#### 

Do not install near places where inflammable gas may leak.



Gas leaks may cause fire.

Depending on the place of installation, a circuit breaker may be necessary.

Make sure that the system has been properly earthed.



If you don't fit a circuit breaker, you may cause an electric shock

Make sure that you drain the hose properly, so that all the water has dripped out.



Negligence may cause flooding in the room resulting in wet furniture.

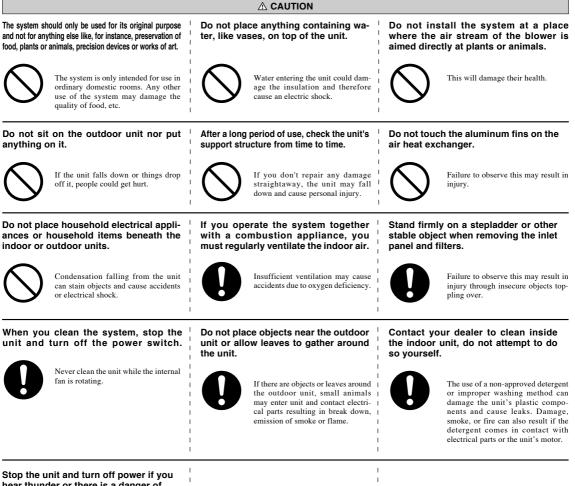


Earth cables should never be connected to a gas pipe, municipal water pipe, lightning conductor or telephone earth cable. Incorrect installation of the earth cable may produce an electric shock.

#### ■ OPERATION PRECAUTIONS

Do not expose yourself to the cooling air for prolonged periods. This could affect your physical condition and cause health problems.	Do not insert anything into the air inlet. This may cause injury, as the inter- nal fan rotates at high speed.	Store the remote control out of reach of infants. Failure to observe this may result in the batteries being swallowed or other accidents.
	▲ CAUTION	
Only use approved fuses.	Do not handle the switches with wet hands.	Don't swing from the system.
Use of steel or copper wire instead of an approved fuse is strictly forbidden, as it may cause a breakdown or fire.	This may cause an electric shock.	If the system falls down, you may get injured.
Do not place a combustible insecticide or paint spray near the blower, nor aim it directly at the system.	You should not expose any combus- tion appliance directly to the air stream of the air-conditioner.	Do not wash the air-conditioner with wa- ter.
This may result in a fire.	The appliance may then work inad- equately.	This could cause an electric shock.

#### Safety precautions



hear thunder or there is a danger of liahtnina.



Electrical storms can damage the unit.

#### PRECAUTIONS FOR TRANSFER OR REPAIRS

#### **▲ DANGER**

Consult your dealer for repairs to the system.



Wrong repairs could cause an electric shock, fire, etc.

If the air-conditioner is moved elsewhere, contact your dealer or a professional fitter.



Faulty installation may cause water leakage, electric shock, fire, etc.

If you notice anything abnormal (smell of burning, etc.), stop the system, turn off the power switch and consult your dealer.



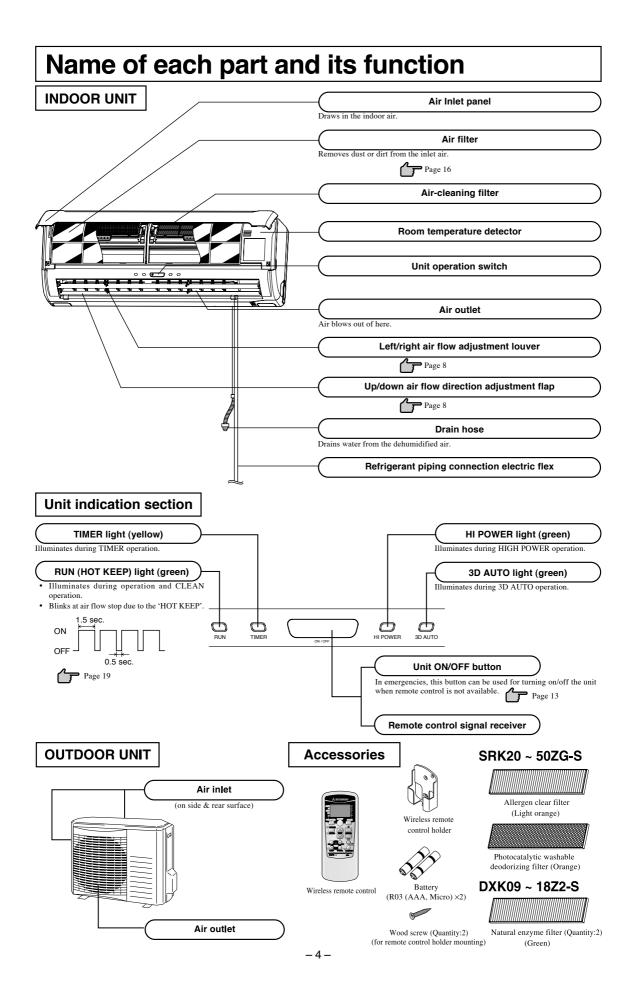
Continued use of the system in abnormal circumstances may result in malfunctioning, electric shock, fire, etc.

If the air-conditioner fails to cool or warm, it may have a refrigerant leak. Contact your dealer.

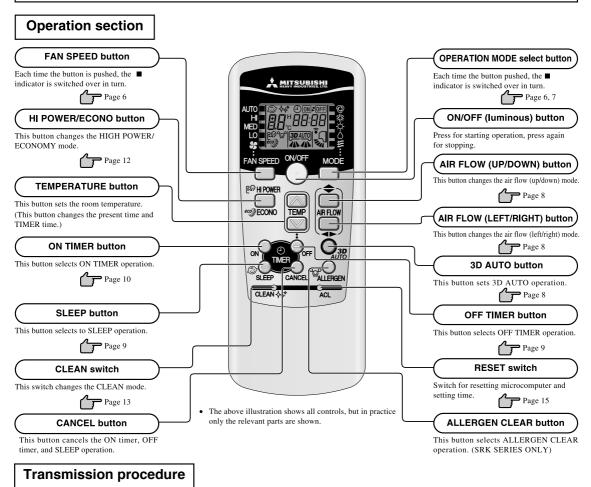
If refrigerant needs to be added, check with your dealer for proper instructions.



The refrigerant used in your air-conditioner is safe. However, if refrigerant unexpectedly leaks from the unit onto a fan heater, stove, hotplate or other heat source, harmful products could be released.



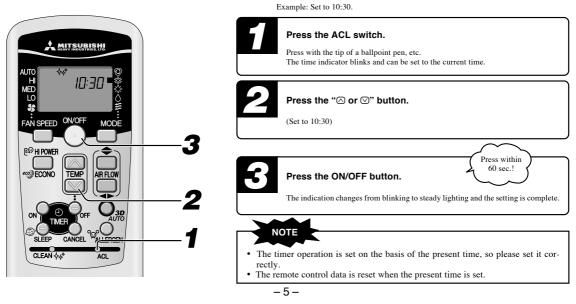
### Operation and indication section for remote control



When each button on the remote control is pressed – with the remote control pointing towards the air-conditioner unit a signal is transmitted. When the air-conditioner receives the signal correctly, it will beep.

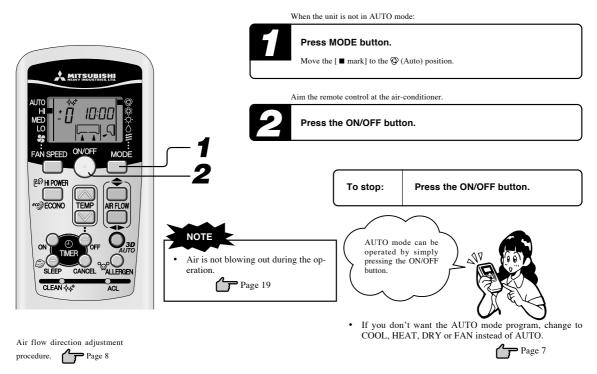
# Present time setting procedure

When inserting the batteries, the present time is automatically set to time setting mode.



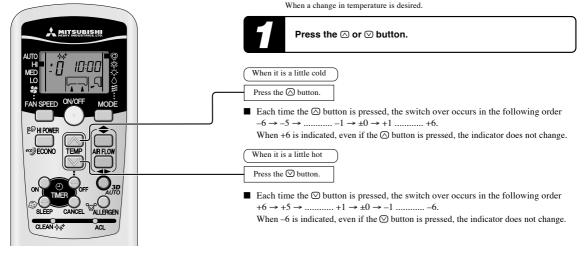
# **AUTO mode operation procedure**

Automatically selects the operation mode (COOL, HEAT, DRY) depending on the room temperature when switched on.



# **Temperature adjustment during AUTO**

Air temperature adjustment is possible even during automatic operation. There are 6 levels of adjustment possible with the 🖄 button or the 🏵 button.



# **About FAN SPEED**

■ You can choose the capacity of your air-conditioner when heating, cooling or fan.

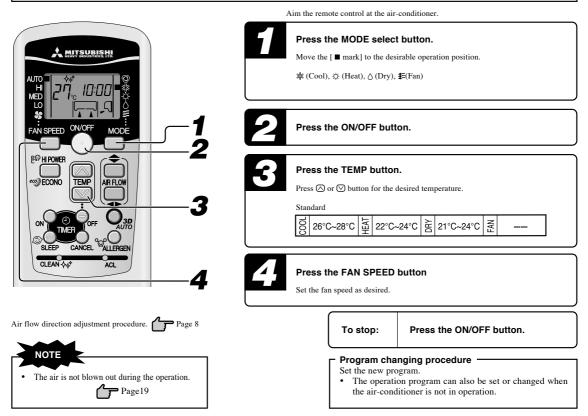
1 5 5	
Operation capacity by your choice	FAN SPEED
Set automatically by microcomputer	AUTO
Powerful operation with high capacity	HI
Standard operation	MED
Energy-saving operation	LO

#### Press the FAN SPEED button.

Move the [ mark] to the desirable fan speed position.

 $\rightarrow$  AUTO  $\rightarrow$  HI  $\rightarrow$  MED  $\rightarrow$  LO -

# COOL/HEAT/DRY/FAN mode operation procedure



# Air-conditioner operating conditions

Use within the following operational range. Operating outside of this range may result in the protection devices being activated, preventing the unit from working.

	Cooling operation	Heating operation
Outside temperature	Approximately -15 to 46 °C	Approximately -15 to 21 °C
Inside temperature	Approximately 18 to 32 °C	Approximately 15 to 30 °C
Inside humidity	Below approximately 80% The long-term use of the unit with a humidity level exceeding 80% may result in condensation forming on the surface of the indoor unit, leading to water drips.	_

### **Characteristics of HEAT mode operation**

#### Mechanism and capacity of HEAT mode operation

#### Mechanism

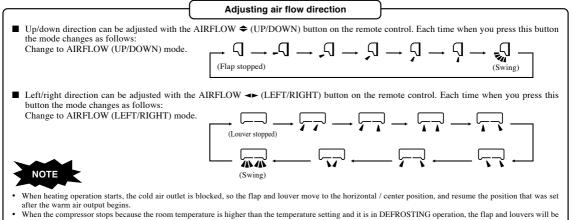
- The unit draws in heat from the cold outside air, transfers it indoors and heats the room. The heating capacity of the heat pump mechanism decreases when the outside air temperature gets colder.
- The hot air circulation system takes a while before warming up the room temperature.
- · If the outside temperature becomes extremely low, it would be better to use an additional source of heating.

### Defrosting

If the outside temperature becomes low and humidity is high, the heat exchanger in the outdoor unit may frost over, which prevents efficient heating. If this happens, the automatic defroster is activated and during defrosting the heating operation stops for 5 to 10 minutes.

- Both indoor and outdoor fans stop and the RUN light (green) blinks slowly (1.5 sec. ON, 0.5 sec. OFF) during defrosting.
- The outdoor unit may give off some steam during defrosting. This is to help the defrosting process and is not a defect.
- The HEAT operation resumes as soon as defrosting has been completed.

### Air flow direction adjustment procedure



in the horizontal / center position.
The air flow direction cannot be set in the instances above. Change the air flow direction settings after the warm air starts flowing and it moves to the airflow direction that had been set.

#### MEMORY FLAP (FLAP OR LOUVER STOPPED)

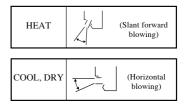
When you press the AIRFLOW (UP/DOWN or LEFT/RIGHT) button once while the flap or louver is operating, it stops swinging at an angle. Since this angle is memorized in the microcomputer, the flap or louver will automatically be set at this angle when the next operation is started.

------ 🛆 DANGER -----

Avoid constant airflow to the body for hours on end.

#### \_ A CAUTION .

• When in COOL or DRY operation, do not operate for hours on end with the air flow blowing straight down. Otherwise, condensation may appear on the outlet grill and drip down.

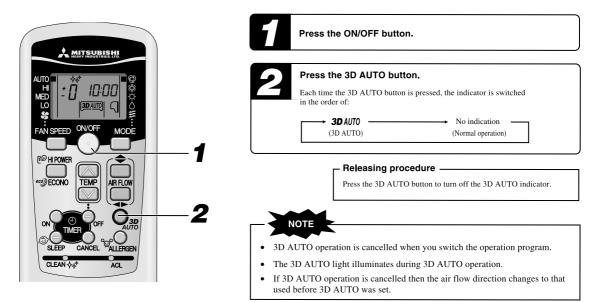


· Recommended angle of the flap when stopping

 Do not try to adjust the flaps and louvers by hand, as the control angle may change or the flap or louver may not close properly.

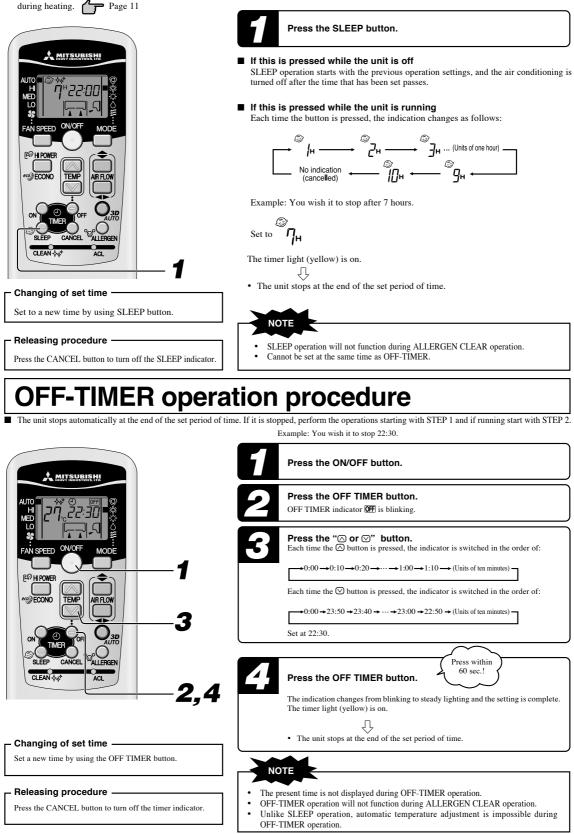
### **3D AUTO operation procedure**

■ Fan speed and air flow direction are automatically controlled, allowing the entire room to be efficiently conditioned.



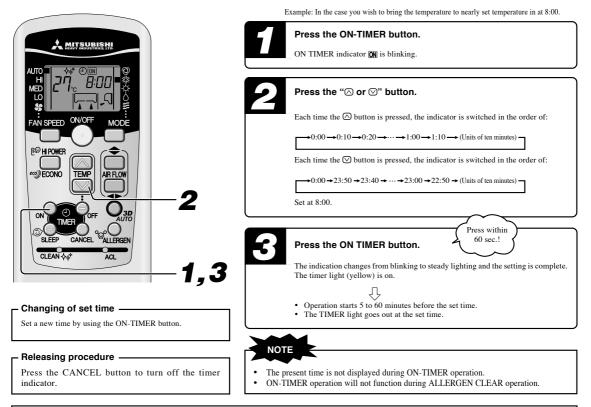
# **SLEEP** operation procedure

The unit stops automatically at the end of the set period of time. The room temperature is automatically controlled when the set time lapses, so that the room does not become too cold during cooling or too warm during beating. Page 11



# **ON-TIMER** operation procedure

Operation starts 5 to 60 minutes before the time that is set so that the room temperature reaches the optimum temperature at that time. Page 11 ON-TIMER operation can be set regardless of whether the air-conditioner is running or not.



# SLEEP operation + ON-TIMER operation procedure

■ Combined timer operation of SLEEP operation and ON TIMER.



Example: When it is desired to stop after 3 hours and then start operation at 8:00, near the set temperature.

#### SLEEP operation setting

Set by the procedures on page 9.

#### ON TIMER operation setting

Set by the above mentioned ON TIMER operation procedure.

The setting of the lighting of the timer light (yellow) of this unit is complete.  $\hfill \Box$ 

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- After the SLEEP operation set time has elapsed, the operation stops, and it starts from 5 to 60 minutes before the ON TIMER's time.
- The timer light is not lit at the ON TIMER's time.

#### Changing of set time -

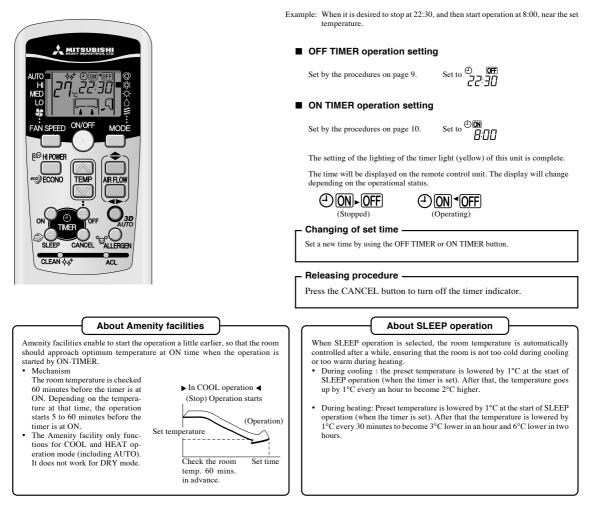
Set a new time by using the SLEEP or ON TIMER button.

#### Releasing procedure -

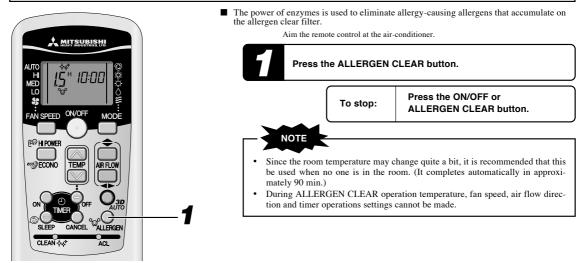
Press the CANCEL button to turn off the timer indicator.

# **PROGRAM TIMER operation procedure**

The timer operations that consist of the combination of the timer being set at both on and off. Once this has been set and operations started, operations will commence and end at the same time every day as long as the ON/OFF button is not pressed.



### ALLERGEN CLEAR operation procedure (SRK SERIES ONLY)



# HIGH POWER/ECONOMY operation procedure

	If the air-conditioner is not operating, aim the remote control at the air-conditioner.
	Press the ON/OFF button.
	<ul> <li>Press the HI POWER/ECONO button.</li> <li>When the operating mode is AUTO, COOL or HEAT Each time the HI POWER/ECONO button is pressed, the indicator is switched in the net operation.</li> </ul>
	in the order of: (HIGH POWER) (ECONOMY) (Normal operation)
ON THER OFF AUTO SLEEP CANCEL ALLERGEN CLEAN \$* ACL	<ul> <li>When the operating mode is DRY or PROGRAM TIMER Each time the HI POWER/ECONO button is pressed, the indicator is switched in the order of:</li> <li>         •••••••••••••••••••••••••••••</li></ul>

#### Concerning HIGH POWER operation -

Pressing the HI POWER/ECONO button intensifies the operating power and initiates powerful cooling or heating operation for 15 minutes continuously. The remote control  $\mathbb{E}^{\textcircled{}}$  indicates but the FAN SPEED indication is erased.



- During the HIGH POWER operation, the room temperature is not controlled. When it causes an excessive cooling or heating,press the HI POWER/ECONO button once more to cancel the HIGH POWER operation.
- HIGH POWER operation is not available during the DRY, the program timer and 3D AUTO operations.
- During ON timer operation, HIGH POWER operation will start when the ON time is reached.
- When the following operations are conducted HIGH POWER operation will be canceled.
  - (1) When the HI POWER/ECONO button is pressed again.
  - ② When the operation mode is changed.
  - ③ When it has been 15 min. since HIGH POWER operation has started.
  - ④ When the 3D AUTO button is pressed.

#### - Concerning ECONOMY operation

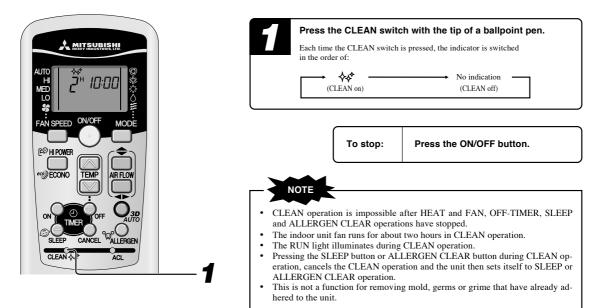
Pressing the HI POWER/ECONO button intlates a soft operation with the power suppressed in order to avoid an excessive cooling or heating. The unit operates 1.5°C higher than the setting temperature for weak wind capacity during cooling or 2.5°C lower than that during heating. The remote control <sup>econ</sup> indicates but the FAN SPEED indication is eraseed.



- It will go into ECONOMY operation the next time the air-conditioner runs in the following instances.
- When the air-conditioner is stopped using the ON/OFF button.
   When the air-conditioner is stopped in SLEEP or OFF
- TIMER operation.
- ③ When CLEAN or ALLERGEN CLEAR operation ends.
- When the following operations are conducted ECONOMY operation will be canceled.
  - ① When the HI POWER/ECONO button is pressed again.
  - (2) When the operation mode is changed DRY to FAN.

# **Concerning CLEAN operation**

CLEAN operation should be run after AUTO, COOL and DRY operation to remove the moisture from inside the indoor unit and control the growth of mold and bacteria.



## **Emergency run operation**

The unit ON/OFF button on the unit operates ON/OFF temporarily when the remote control is not used.

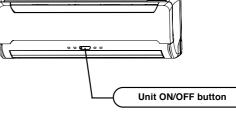
_	0	peration program —		-
		OPERATION MODE	:	AUTO
	•	FAN SPEED	:	AUTO

•	AIR FLOW	AUTO

AIR FLOW AUTC



Operation starts by pressing the unit ON/OFF button; it stops if you press the button again





Do not hold the Unit ON/OFF button down for more than 5 seconds. (Holding it down longer than 5 seconds sets the automatic cooling used during servicing or when moving the air-conditioner.)

# Power blackout auto restart function

#### What is power blackout auto restart function?

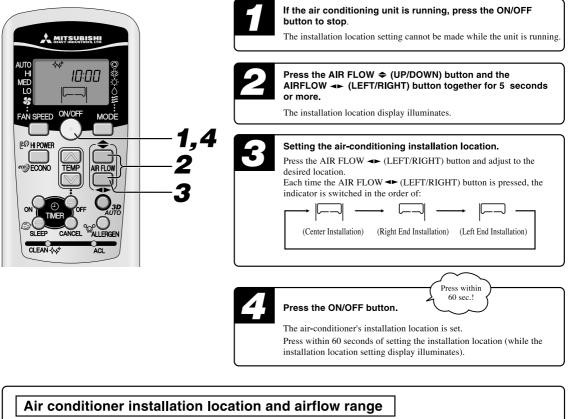
- Power blackout auto restart function is a function that records the operational status of the air-conditioner immediately prior to it being switched off by a power cut, and then automatically resumes operations at that point after the power has been restored.
- The following settings will be cancelled:
- 1 Timer settings
- 2 HIGH POWER operations



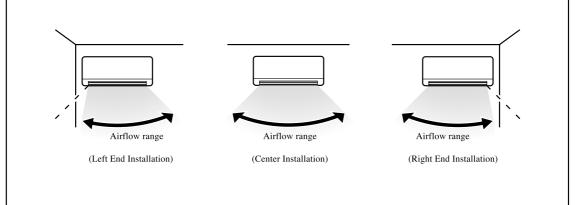
- The power blackout auto restart function is set at on when the air-conditioner is shipped from the factory. Consult with your dealer if this function needs to be switched off.
- When power failure occurs, the timer setting is cancelled. Once power is resumed, reset the timer.

# Installation location setting

Take the air conditioning unit's location into account and adjust the left/right airflow range to maximize air-conditioning.



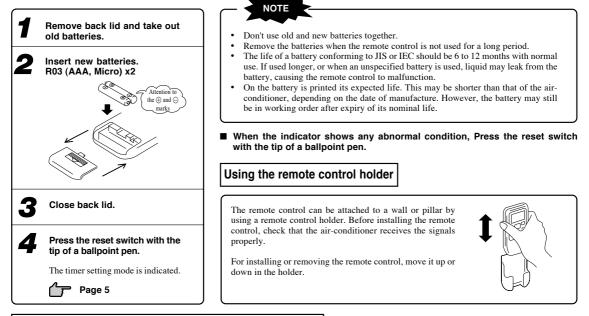
The diagram below indicates the airflow ranges corresponding to the air-conditioner's installation location. Consider your room's layout and set the airflow range to maximize conditioning effectiveness.



### **Remote control handling procedure**

#### Replacing the batteries

- The following cases signify exhausted batteries. Replace old batteries with new ones.
- Receiving beep is not emitted when a signal is transmitted.
- Indicator fades away.



#### Warning note for remote control handling

Strictly prohibited		
<ul> <li>Don't go near high temperature places, such as an electric carpet or stove.</li> </ul>	<ul> <li>Don't leave the remote control exposed to direct sunlight or other strong lighting.</li> </ul>	• Don't drop the remote control. Handle with care.
Don't put any obstructing obsta- cles between the remote control and the unit.	<ul> <li>Don't spill water etc on the remote control.</li> </ul>	Do not place heavy objects on the remote control, or step on it.

### When the operation fails with the remote control

• Are the batteries running down?

"Replacing the batteries" above.

Replace the batteries with new ones and repeat the operation.

If the operation still fails, handle as per emergency run operation. Contact your dealer.

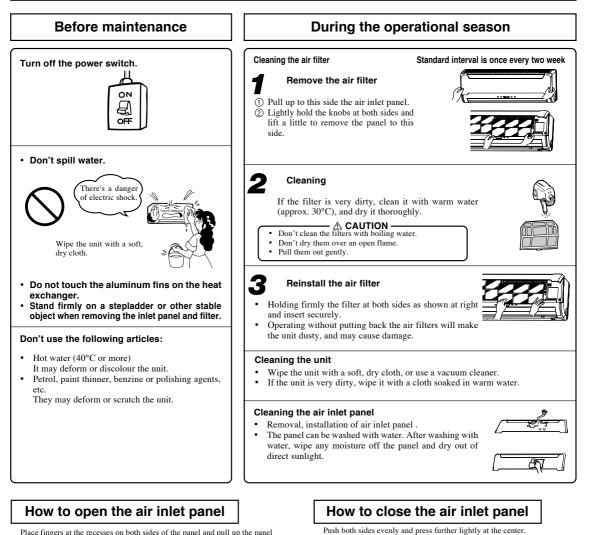
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# **Operating hints**

Please observe the following for the most economic and comfortable use of your unit.

Set a suitable room temperature.	Clean the filters frequently.	Avoid direct sunlight and draught.
Excessively high or low temperatures are not good for your health and waste electricity.	Clogged filters may block the air flow and cause less efficient operation.	Cut out direct sunlight by drawing the cur- tains or blinds when cooling. Keep windows and doors shut, except when ventilating.
Adjust the airflow direction properly.	Operate the unit only when needed.	Generate little heat when cooling.
Adjust the up/down and left/right airflow to ensure a steady room temperature.	Use the timer properly to operate the unit only when needed.	Keep heat sources out of the room as much as possible.

### Maintenance

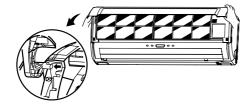


Place fingers at the recesses on both sides of the panel and pull up the panel to this side so that it will be opened by about 60 degrees.

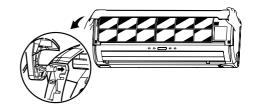


#### Removal, installation of air inlet panel

When removing the air inlet panel for internal cleaning or others, open the panel by 80 degrees and then pull it to this side.

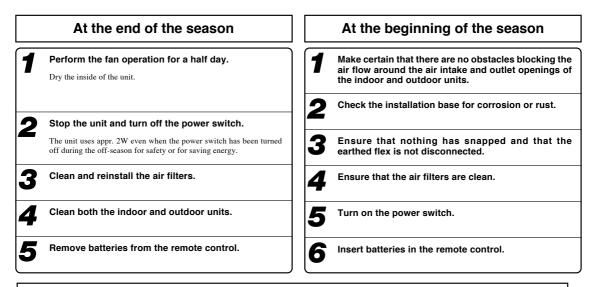


Secure the upper edge of the air inlet panel by lightly pushing it in, and then close the panel.





Cooling/heating is affected by an air filter clogged up with dust etc., and the operation noise becomes louder. It may also use extra electricity. Please clean the air filter at appropriate intervals.



#### Installing, inspecting, and replacing the air-cleaning filter

- 1. Open the air inlet panel and remove the air filters.
- 2. Remove the filter holders, with the air-cleaning filter installed in the folders, from the airconditioner.
- 3. SRK20 ~ 50ZG-S

Remove the allergen clear filter from filter holder and inspect the filter. Use a vacuum cleaner to remove any dust or dirt from the allergen clear filter. Replace the allergen clear filter if it cannot be cleaned or if it has been for about 1 year.

(The allergen clear filter should be replaced after about 1 year of use. However, the actual replacement period may vary depending on the conditions in which the filter is used.)

Remove the photocatalytic washable deodorizing filter from the filter holder and inspect the filter. Periodically, remove any dust or dirt from the photocatalytic washable deodorizing filter. If the photocatalytic washable deodorizing filter is particularly dirt, it may be washed with water. However, the filter is fragile so be sure to wash it installed in the filter holder to avoid damaging it. After washing the filter, place it in sunlight to dry. Placing the filter in sunlight revitalizes the deodorizing effect.

#### $DXK09 \sim 18Z2\text{-}S$

Remove the natural enzyme filter from each filter holder and inspect the filters. Use a vacuum cleaner to remove any dust or dirt from the natural enzyme filters. Replace the natural enzyme filters if they cannot be cleaned or if they have been used for about 1 year.

(The natural enzyme filters should be replaced after about 1 year of use. However, the actual replacement period may vary depending on the conditions in which the filters are used.)

(Do not dispose of the filter holders. They are reused. )

4. Install the air-cleaning filter in the filter holders, and then install the filter holders in the air-conditioner.

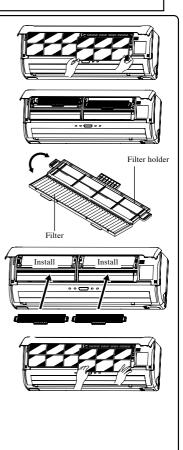


The allergen clear filter and the photocatalytic washable deodorizing filter may be installed on either the right or left side of the air-conditioner.

5. Install the air filters and closed the air inlet panel.

For replacement the air-cleaning filter, contact your dealer.

Item	Feature	Color
Allergen clear filter	The power of enzyme is used to eliminate allergy-causing al- lergens that accumulate on the filter.	Light orange
Photocatalytic washable deodorizing filter	Sources of odors on the filter are broken up, resulting in a deodorizing effect.	Orange
Natural enzyme filter	By using the work of enzyme, mold and bacteria on the filter are destroyed and the room air is kept clean.	Green



# Has the unit been installed correctly?

#### Suitable installation position

- Is there any obstruction in front of the indoor unit, preventing proper ventilation and functioning?
- Don't install the unit in any of the following places:
- Where there is a danger of leaking inflammable gases.
- Where there is substantial splashing of oil.
- Malfunctioning due to corrosion may occur if the unit is installed in a spa where sulfide gases are generated, or in a seaside resort exposed to sea breezes. Contact your dealer.
- The air-conditioner and remote control must be at least 1 metre away from a TV set or radio.
- Drain the dehumidified liquid from the indoor unit into a spot that drains well.

#### Pay attention to operating noises!

- When you install the unit, take care to choose a place that can comfortably stand the weight of the unit and does not increase the operating noise or vibration. If there is any likelihood that vibration may be transmitted through the house, fix the unit with the aid of vibration-proof pads between the unit and the fittings.
- Select a place where cold or hot air and operation noises from the indoor and outdoor units do not cause any inconvenience to your neighbours.
- Do not leave any obstacles near the outlet and inlet of the outdoor unit. This may cause malfunctioning and increased operating noise.
- If you hear an irregular noise during operation, contact your dealer.

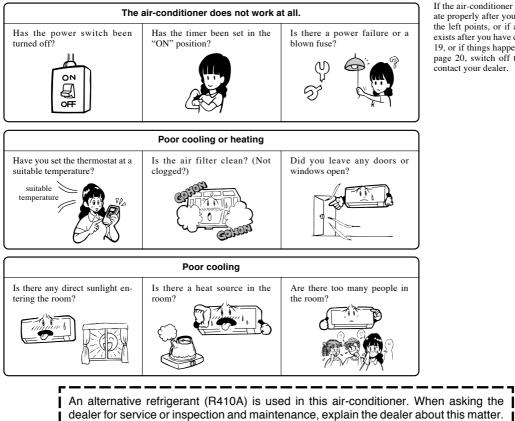
#### Inspection and maintenance

Dependent upon service conditions and operating environment, the inside of the air-conditioner may become dirty after a number of seasons' service (3 to 5 years). This will reduce performance. In addition to normal cleaning, we would recommend inspection and maintenance. (The airconditioner has a longer life without any trouble.)

- Contact your dealer, or any distributor, for inspection and maintenance. (There will be a charge for this service).
- We would recommend inspection and maintenance to be carried out during the off-season.
- If the supply cord of this appliance is damaged, it must only be replaced by a repair shop appointed by the manufacturer, because special purpose tools are required.

### Troubleshooting

Please carry out the following checks before making a service call.



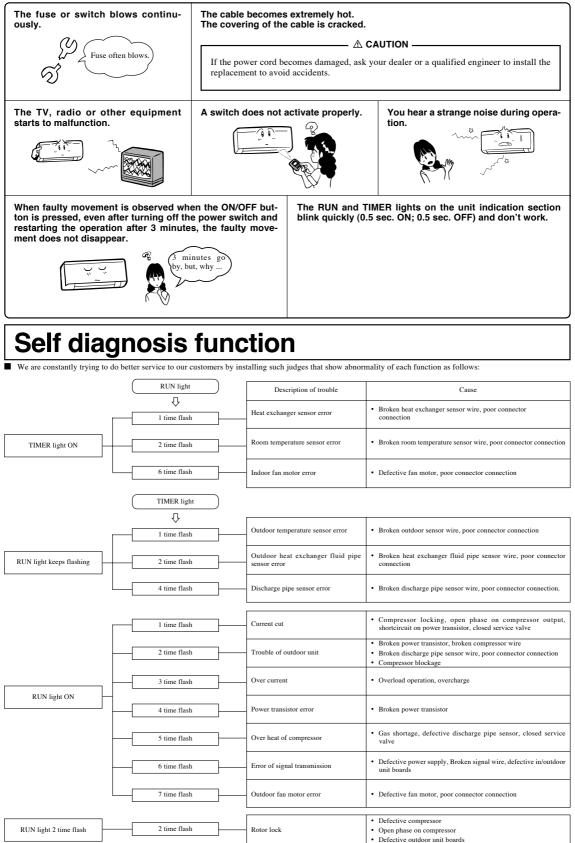
If the air-conditioner does not operate properly after you have checked the left points, or if any doubt still exists after you have consulted page 19, or if things happen as shown on page 20, switch off the power and contact your dealer.

# **Please remember!**

You cannot restart the unit immediately after you have	Restarting has been blocked for 3 minutes after you have stopped or
stopped it. (RUN light is on)	after switching off the power during operation, to protect the unit.
Not operating?	Please wait for three minutes.
	$\sum \{ \ \ H \}$ The three-minute protection timer in the microcomputer automatically starts up again.
Air is not blown out when starting the HEATING operation. RUN light blinks slowly (1.5 sec ON, 0.5 sec OFF)	Air flow has stopped to prevent blowing out of cold air until the indoor heat exchanger has warmed up. (2 to 5 min.) (HOT KEEP)
Air is not blown out for 5 to 10 min. or blown out not warm wind for a moment at HEATING operation. RUN light blinks slowly (1.5 sec ON, 0.5 sec OFF)	When outdoor temperature is low and humidity is high, the unit some- times performs defrosting automatically. Please wait. During defrost- ing, water or steam may escape from the outdoor unit.
Air is not blown out when starting the DRY operation. (RUN light is on)	The indoor fan may stop to prevent re-evaporation of dehumified moisture and to save energy.
Some steam escapes during COOL operation.	This may occur if the room's temperature and humidity are very high. It disappears as soon as the temperature and humidity decrease.
There is a slight smell.	Air blown out during operation may smell. This is caused by tobacco or cosmetics sticking to the unit.
You hear a slight gurgling sound.	This is caused by refrigerating liquid moving within the unit.
You hear a slight cracking sound.	This is caused by heat expansion or contraction.
You hear a hissing or clicking sound.	This is caused by the operation of the refrigerant control valves or electric components.
After a power cut, you cannot re-start, even if power has been re- stored, unless you have the power blackout auto restart function.	The memory circuit of the microcomputer has been wiped out. Use the remote control to start the operation again.
Remote control signals are not received.	Remote control signals may not be received if the signal receiver on the air-conditioner is exposed to direct sunlight or other bright light. If so, cut out the sunlight or reduce the other light.
Moisture may form on the air outlet grills.	If the unit is operated for a long time in high humidity, moisture may form on the air outlet grills and start dripping.
Whistling noise is heard from the outdoor unit.	The noise means that the revolution speed is picking up on the com- pressor.
Fan won't stop immediately after unit operation was stopped.	Indoor fan : Fan will not stop after 2 hours if set to CLEAN operation. Outdoor fan : Fan will not stop about a 1 minute period in order to protect the unit.
RUN light stays on even though operation was stopped.	The RUN light illuminates during CLEAN operation. Run light turns off when CLEAN operation ends.

### When to contact your distributor without delay

■ Turn off the power switch immediately and inform your dealer in any of the following situations:





#### **AIR-CONDITIONING & REFRIGERATION SYSTEMS HEADQUARTERS**

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