**ORIGINAL INSTRUCTIONS** 

IGLISH



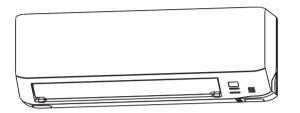
# USER'S MANUAL AIR-CONDITIONER

SER'S MANUAL	EN
AIR-CONDITIONER	

MANUEL DE L'UTILISATEUR FRANÇAIS CLIMATISEUR

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- ANWENDERHANDBUCH DEUTSCH
  - ISTRUZIONI PER L'USO ITALIANO CONDIZIONATORE D'ARIA
- MANUAL DEL PROPIETARIO ESPAÑOL ACONDICIONADOR DE AIRE
- GEBRUIKERSHANDLEIDING NEDERLANDS
  - MANUAL DO UTILIZADOR PORTUGUÊS APARELHO DE AR CONDICIONADO
    - ΟΔΗΓΙΕΣ ΧΡΗΣΗΣ ΕΛΛΗΝΙΚΑ ΚΛΙΜΑΤΙΣΤΙΚΟ
- РУКОВОДСТВО ПО ЭКСПЛУАТАЦИИ РУССКИЙ КОНДИЦИОНЕР ВОЗДУХА
  - KULLANIM KILAVUZU TÜRKÇE

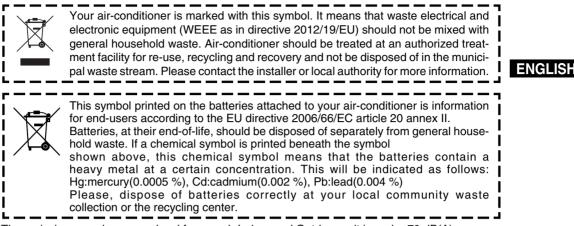


SRK25ZSP-W SRK35ZSP-W SRK45ZSP-W

SKM20ZSP-W SKM25ZSP-W SKM35ZSP-W



Thank you for purchasing a MITSUBISHI HEAVY INDUSTRIES THERMAL SYSTEMS, LTD. Air-Conditioner. To get the best long-lasting performance, please 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.



The emission sound pressure level from each Indoor and Outdoor unit is under 70 dB(A).

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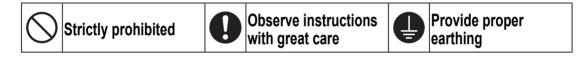
# Safety precautions

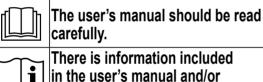
- Before starting to use the system, please read these "Safety precautions" carefully to ensure proper operation of the system.
- When you have read this user's manual, please keep it safely. If someone else takes over as user, make sure that the manual is also passed on to the new user.

Indicates a potentially hazardous situation which, if not avoided, can result in serious consequences such as death or severe injury.
Indicates a potentially hazardous situation which, if not avoided, can result in personal injury or property damage.

Please observe these precautions with great care, since they are essential to your safety.

- This unit is designed for 2 types refrigerants (R32 or R410A). See a label on the outdoor unit to check refrigerant information.
- Symbols which appear frequently in the text have the following meaning:





A service personnel should be handing this equipment with reference to the installation manual.

## Following precaution is only for R32.

in the user's manual and/or

installation manual



This equipment uses flammable refrigerants. If the refrigerant is leaked, together with an external ignition source, there is a possibility of ignition.

## 

- Strict compliance of the domestic laws must be observed when disposing the appliance.
- Do not use means to accelerate the defrosting process or to clean, other than those recommended by the manufacturer.
- The appliance shall be stored in a room without continuously operating ignition sources (for example: open flames, an operating gas appliance or an operating electric heater).
- Do not pierce or burn.
- Be aware that refrigerants may not contain an odour.

- The appliance shall be stored in a wellventilated area where the room size corresponds to the room area as specified for operation.
- The staff in servicing operations must hold the national qualification or other relevant qualifications.
- The indoor unit shall be stored in a room that has a minimum area of 4.0 m<sup>2</sup>.\*
- \*This value is for split system.

## **INSTALLATION PRECAUTIONS**

		NING
$\bigcirc$	• The system is for domestic and reside If used in severe environments, such as a function poorly.	ential use. an engineering workplace, the equipment may
0	• The system must be installed by your It is not advisable to install the system by leakage of water, electric shock or fire.	-
	<b>∆ CAU</b> 1	ΓΙΟΝ
$\bigcirc$	• Do not install it where flammable gas Gas leaks may cause fire.	may leak.
0	• Make sure that an earth leakage breaker is installed. If you do not install an earth leakage breaker, you may get an electric shock.	<ul> <li>Make sure to install the drain hose properly so that all the water is drained out.</li> <li>Improper installation may lead to water drop in the room resulting in wet furniture.</li> </ul>
		<b>roperly earthed.</b> a gas pipe, water pipe, lightning conductor ation of the earth wire may cause an electric

- This Product contains fluorinated greenhouse gases.
- Do not vent R32 into the atmosphere: R32 is a fluorinated greenhouse gas with a Global Warming Potential (GWP) = 675.
- Do not vent R410A into the atmosphere: R410A is a fluorinated greenhouse gas with a Global Warming Potential (GWP) = 2088.
- Refer to a label on outdoor unit for the weight of fluorinated greenhouse gas and CO<sub>2</sub> equivalent.

## **IOPERATION PRECAUTIONS**

	<u>∧</u> WARN	ING
$\bigcirc$	<ul> <li>Children shall not play with the air-conditioner.</li> <li>Do not expose yourself to the cooling air for a long period. This could affect your physical condition and cause health problems.</li> </ul>	<ul> <li>Cleaning and user maintenance shall not be made by children without supervision.</li> <li>Do not insert anything into the air outlet. This may cause injury, as the internal fan rotates at high speed.</li> </ul>
0	<ul><li>involved.</li><li>Store the remote control out of reach of</li></ul>	ory or mental capabilities or lack of been given supervision or instruction n a safe way and understand the hazards
	<b>∆CAUT</b>	ION
$\bigcirc$	<ul> <li>Only use approved fuses. Use of steel or copper wire instead of an approved fuse is strictly prohibited, as it may cause a breakdown or fire.</li> <li>Do not handle the switches with wet hands. This may cause an electric shock.</li> <li>Do not swing from the indoor unit. If the indoor unit falls down,you may get injured.</li> <li>Do not place a flammable insecticide or paint spray near the air-conditioner, nor spray it directly on the system. This may result in a fire.</li> <li>Do not expose any combustion appliance directly to the air stream of the air-conditioner. The combustion appliance may malfunction.</li> <li>Do not wash the air-conditioner with water. This could cause an electric shock. Using a high pressure washer may cause damage to the aluminum fins, resulting in performance decrement.</li> </ul>	<ul> <li>Do not use for preservation of food, plants or animals, precision devices or works of art. The system is only intended for use in ordinary domestic rooms. Any other use of the system may damage the quality of food, etc. </li> <li>Do not place anything containing water, like vases, on top of the unit. Water entering the unit could damage the insulation and therefore cause an electric shock. </li> <li>Do not install the air-conditioner where the airflow direction is aimed directly at plants or animals. This will damage their health. </li> <li>Do not step/sit on the unit nor put anything on it. If the unit falls down or things drop from it, people could get hurt. </li> <li>After a long period of use, check the unit's support structure regularly. If you do not repair any damage right away, the unit may fall down and cause personal injury.</li></ul>

	<b>∆</b> CAUT	ION
$\bigcirc$	<ul> <li>Do not touch the aluminum fins on the heat exchanger. It may result in injury.</li> <li>Do not place household electrical appliances or household items underneath the indoor or outdoor units. Condensation falling from the unit may stain objects and cause accidents or electrical shock.</li> <li>Do not operate the system without the air filter. It can cause malfunction of the system due to clogging of the heat exchanger.</li> </ul>	<ul> <li>Do not shut off the power source immediately after stopping the operation.</li> <li>Wait at least 5 minutes, otherwise there is a risk of water leakage or breakdown.</li> <li>Do not control the system with main power switch.</li> <li>It can cause fire or water leakage. In addition, the fan can start unexpectedly, which can cause personal injury.</li> <li>Do not pour liquid into the unit and do not put water container on the unit.</li> <li>Water entering the unit could damage the insulation and therefore cause an electric shock.</li> </ul>
	<ul> <li>If you operate air-conditioner together with a combustion appliance, you must regularly ventilate the indoor air. Insufficient ventilation may cause accidents due to oxygen deficiency.</li> <li>Stand firmly on a stepladder or other stable object when removing the inlet panel and filters. Failure to observe this may result in injury through insecure objects toppling over.</li> <li>When you clean air-conditioner, stop the unit and turn off the power source. Never open the panel while the internal fan is rotating.</li> <li>Do not place objects near the outdoor unit or allow leaves to gather around the unit. If there are objects or leaves around the outdoor unit, small animals may enter unit and contact electrical parts and may cause a break-down, smoke or fire.</li> </ul>	<ul> <li>Contact your dealer to clean inside the indoor unit, do not attempt to do by yourself.</li> <li>The use of a non-approved detergent or improper washing method may damage the unit's plastic components and cause leaks. Damage, smoke, or fire may also happen if the detergent comes in contact with electrical parts or the unit's motor.</li> <li>Stop the unit and turn off the power if you hear thunder or there is a danger of lightning. It may damage the unit.</li> <li>If the power cable becomes damaged, contact your dealer or a qualified installer. If it is not replaced, it may cause a breakdown or fire.</li> </ul>

### ■PRECAUTIONS FOR RELOCATION OR REPAIRS

#### **WARNING** • Do not perform any repairs or modifications by yourself. Consult the dealer if the unit requires repair. If you repair or modify the unit, it can cause water leaks, electric shocks or fire. • Consult your dealer for repairs. If the air-conditioner fails to cool or warm the room, it may have a Wrong repairs could cause an electric refrigerant leakage. Contact your shock, fire, etc. dealer. In case the air-conditioner is relocated If refrigerant needs to be added. elsewhere, contact your dealer or a check with your dealer for proper qualified installer. instructions. Faulty installation may cause water If the refrigerant comes in contact with the leakage, electric shock, fire, etc. If you notice anything abnormal (smell bare skin, it may cause cold injury. If the refrigerant gas is inhaled of burning, etc.), stop the system, turn excessively, it may cause deterioration off the power source and consult your of nerve function like dizziness and dealer. headache, or deterioration of heart Continued use of the system in function like irregular heartbeat and heart abnormal circumstances can result in palpitation temporarily. If refrigerant malfunctioning, electric shock, fire, etc. unexpectedly leaks from the unit onto a fan heater, stove, hotplate or other heat source, harmful gases could be generated.

## Tips for effective operation

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

Set a suitable room temperature.

I	Excess	sivel	y high	or low	temperatures	are not	good	for your	health	and	waste o	of electricity	1.

Clean the filters frequently. Clogged filters may block the airflow and cause less efficient operation.

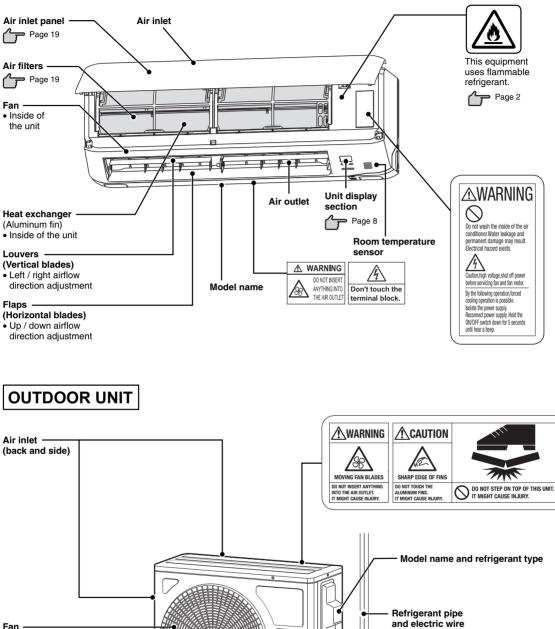
Avoid direct sunlight and draught. Cut out direct sunlight by drawing the curtains or blinds when cooling. Keep windows and doors shut, except when ventilating. Adjust the airflow direction properly.
 Adjust the up/down and left/right airflow to ensure a steady room temperature

- Operate the unit only when needed. Use the timer properly to operate the unit only when needed
- Keep heat source away when cooling.
- Keep heat sources out of the room as much as possible.

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# Name of each part and its function

## INDOOR UNIT



Fan —
Inside of the unit

Heat exchanger (Aluminum fin)

\* The appearance varies by models

Drain hole

Air outlet

<u>/</u>{\

Don't touch the terminal block.

pipings and

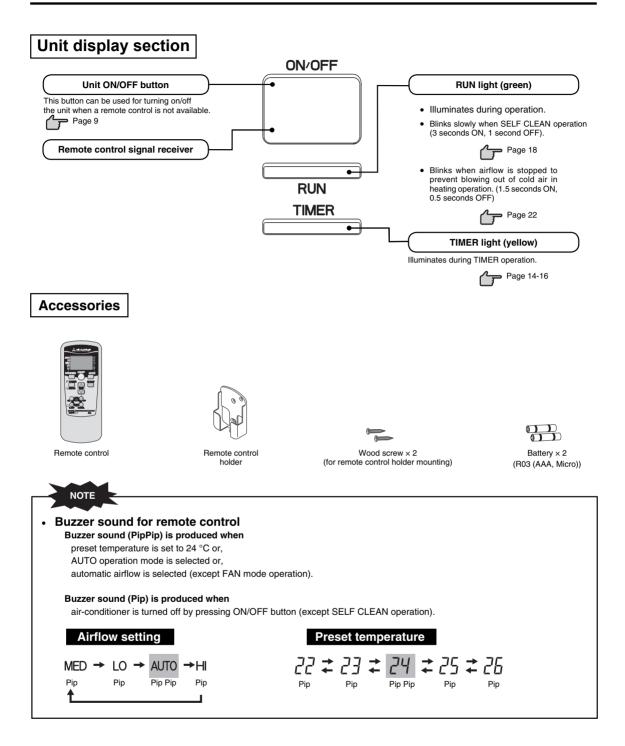
connections

Drain hose

This equipment

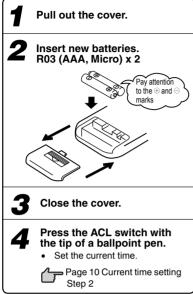
uses flammable refrigerant.

Page 2 (only R32 models)



## **Remote control**

## Setting the batteries



NOTE

- Do not use old and new batteries together.
- Remove the batteries when the remote control is not used for a long period.
- The recommended effective period of a battery conforming to JIS or IEC should be 6 to 12 months with normal use. If used longer, or when an unspecified battery is used, liquid may leak from the battery, causing the remote control to malfunction.
- The recommendable effective period is printed on the battery. This may be shorter due to manufacturing time to the unit. However, the battery may still be in working order after expiry of its nominal life.
- When the display shows any abnormal condition, press the ACL switch with the tip of a ballpoint pen.

### Using the remote control holder

The remote control can be attached to a wall or pillar by using the remote control holder. Before installing the remote control, check that the air-conditioner receives the signals properly.

For installing or removing the remote control, move it up

The following cases show exhausted batteries. Replace old batteries with new ones.

- Receiving beep is not emitted when a signal is transmitted. .
- Display fades away.

### Warning note for remote control

#### **○** Strictly prohibited

or down in the holder.

<ul> <li>Do not take remote control near high temperature places, such as an electric heating carpet or a stove.</li> </ul>	<ul> <li>Do not leave the remote control exposed to direct sunlight or other strong lighting.</li> </ul>	• Do not drop the remote control. Handle with care.
<ul> <li>Do not put any obstructing obstacles between the remote control and the unit.</li> </ul>	Do not spill any liquid on the remote control.	Do not place heavy objects on the remote control, or step on it.

## **Operation failure with the remote control**

Are the batteries running down?

"Setting the batteries" above.

If the operation fails, operate the unit with temporary run operation function.

 "Temporary run operation" below.  $\int$ 

Replace the batteries with new ones and retry the operation.

Contact your dealer to have the remote

control checked

## **Temporary run operation**

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

**Operation program** OPERATION MODE :

	OF ERVITION MODE	•	7.010
•	FAN SPEED	:	AUTO
•	AIR FLOW	:	AUTO

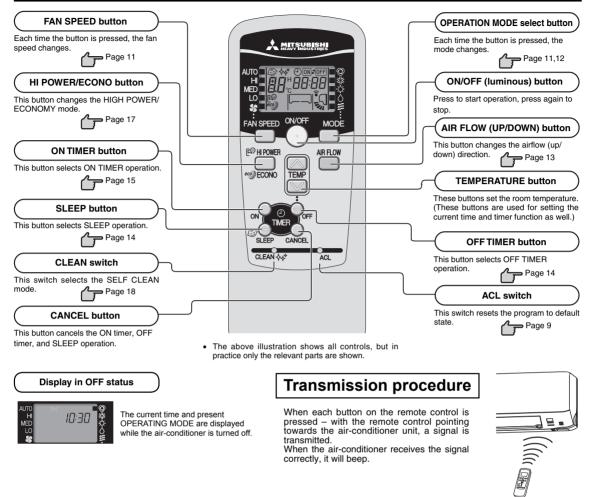
Operation starts by pressing the unit ON/OFF button; it stops if you press the button again.



모 Unit ON/OFF button

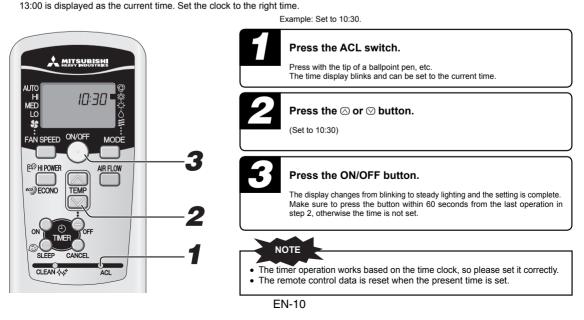
- Do not keep pressing the unit ON/OFF button down for 5 seconds or more.
- (Pressing it 5 seconds or more sets the forced cooling operation used during servicing or when relocating the air-conditioner.)

# Operation and display section for remote control



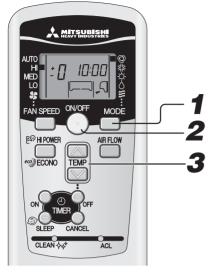
## **Current time setting**

When inserting the batteries, the current time is automatically set to time setting mode. 12:00 is displayed as the surrent time. Set the sleet to the right time.

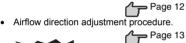


# **AUTO mode operation**

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



If you do not want the AUTO mode program, • change to COOL, HEAT or FAN instead of AUTO.





Press the MODE button. The mode changes whenever the button is pressed. Set to ® Press the ON/OFF button. Press the  $\bigtriangleup$  or  $\heartsuit$  button. Default preset temperature during AUTO mode is 24 °C for both cooling and heating mode. However, it can be adjusted (Minimum 18 °C, Maximum 30 °C) using (A button or (V) button. When it is a little cold Press the 🛆 button. ■ Each time the button is pressed, the switch over occurs in the following order  $-6 \rightarrow -5 \rightarrow \dots -1 \rightarrow \pm 0 \rightarrow \pm 1 \dots \pm 6.$ When +6 is indicated, even if the 🛆 button is pressed, the indicator does not change. When it is a little hot Press the <sup></sup> button. ■ Each time the <sup>()</sup> button is pressed, the switch over occurs in the following order  $+6 \rightarrow +5 \rightarrow \dots +1 \rightarrow \pm 0 \rightarrow -1 \dots -6.$ When -6 is indicated, even if the 🖸 button is pressed, the indicator does not change.

					Re	mote	Contro	ol disp	olay				
Setting	-6	-5	-4	-3	-2	-1	±0	+1	+2	+3	+4	+5	+6
temp.(°C)	18	19	20	21	22	23	24	25	26	27	28	29	30

- To stop:
- Press the ON/OFF button.

#### FAN SPE

■ The FAN SPEED can be set except for DRY mode.

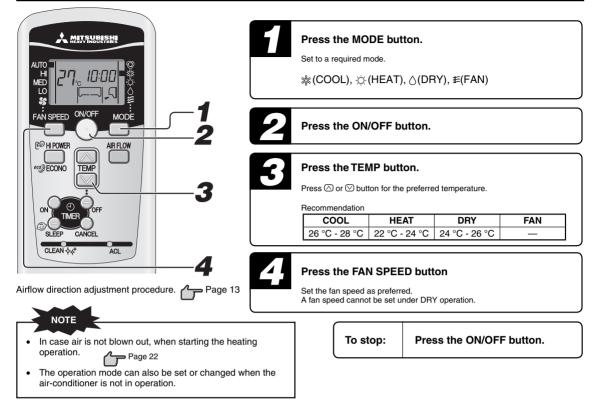


	Press the FAN SPEED button.	
	Each time the button is pressed, the fan spee	d changes.
	$\longrightarrow \text{AUTO} \longrightarrow \text{HI} \longrightarrow \text{MED} \longrightarrow$	
Operatio	on capacity by your choice	FAN SPEE
	on capacity by your choice matically by microcomputer	FAN SPEE AUTO
Set auto		
Set auto Powerful	matically by microcomputer	AUTO



- When FAN SPEED is changed from HI to LO, the sound of refrigerant may be heard.
- When COOL mode is used if outside temperatures are low, the FAN SPEED may change automatically to protect the air-conditioner.

# **COOL/HEAT/DRY/FAN** mode operation



## Air-conditioner operation temperature range

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

	COOL mode operation	HEAT mode operation
Outside temperature	Approximately -15 to 46 °C	Approximately -15 to 24 °C
Inside temperature	Approximately 18 to 32 °C	Approximately 10 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 drops.	

## **Characteristics of HEAT mode operation**

### Mechanism and capacity of HEAT mode operation

- The unit draws heat from the cold outside air, transfers it to indoors and heats the room. As a characteristic of heat pump system, the heating capacity reduces when the outside air temperature gets colder.
- It may take some time to supply hot air after turning on the air-conditioner.
- If the outside temperature becomes extremely low, it would be better to use an additional source of heating.

## Defrosting

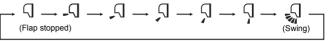
If the outside temperature becomes low and humidity is high, the heat exchanger in the outdoor unit may frost over, which prevents efficient heating. If this happens, the automatic defrost function is activated and the heating operation stops for 5 to 15 minutes during defrosting.

- Both indoor and outdoor fans stop and the RUN light blinks slowly (1.5 seconds ON, 0.5 seconds OFF) during defrosting.
- The outdoor unit may release 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.

# Airflow direction adjustment

Up/down direction can be adjusted with the AIR FLOW button on the remote control. Every time you press this button, the mode changes as follows: Changes as follows:

Change on AIR FLOW (UP/DOWN) mode.





The actual position of the flap and louver may differ from the display shown.

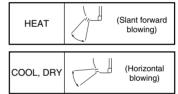
#### NOTE FOR HEATING OPERATION

- When heating operation starts, the flap direction is fixed at the horizontal position in order to avoid cold draft. It returns to the set
  position when the warm air supply is started.
- The flap direction will be controlled to the horizontal position when the room temperature reaches the set temperature and compressor stops or when defrosting is in operation.
- The airflow direction cannot be set during the period mentioned above. Change the airflow direction settings after the warm air is supplied and the flap goes to the set position.

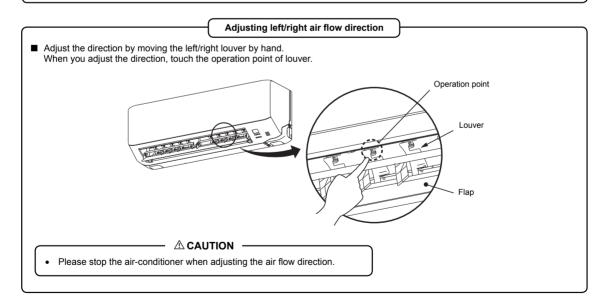
## Memory flap (Flap stopped)

When you press the AIR FLOW button once while the flap is operating, it stops swinging at the position. Since this angle is memorized in the microcomputer, the flap will automatically be set at this angle when the next operation is started.

- Do not expose directly to airflow from the air-conditioner for a long time.
- Recommended angle of the flap when stopping
- M CAUTION —
   When in COOL or DRY operation, do not operate for a long period with the airflow blowing straight down. Otherwise, condensation may appear on the outlet grill and drip down.



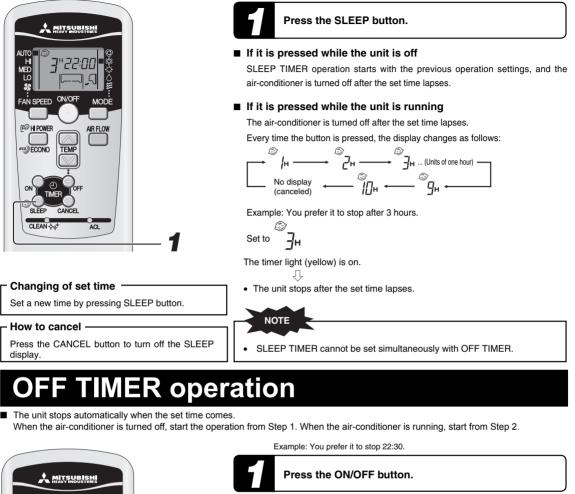
• Do not try to adjust the flaps by hand, as the control angle may change or the flap may not be closed completely.

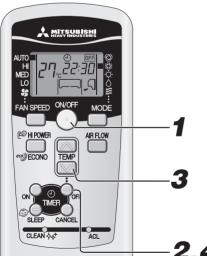


# EEP TIMER operation

■ The unit will stop automatically after the set time lapses.

The set temperature is automatically adjusted according to the lapse time in order to avoid too much cooling or heating. Page 16





#### Changing of set time -

Set a new time by using the OFF TIMER button.

#### How to cancel

Press the CANCEL button to turn off the timer display.

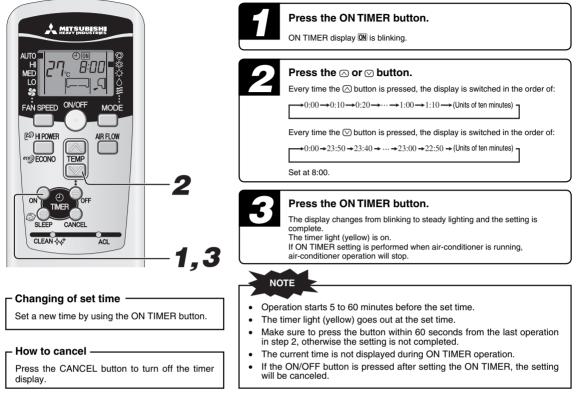
1	Press the ON/OFF button.
2	Press the OFF TIMER button. OFF TIMER display OFF is blinking.
3	Press the $\bigcirc$ or $\bigcirc$ button.         Every time the $\bigcirc$ button is pressed, the display is switched in the order of: $\rightarrow 0:00 \rightarrow 0:10 \rightarrow 0:20 \rightarrow \dots \rightarrow 1:00 \rightarrow 1:10 \rightarrow$ (Units of ten minutes)         Every time the $\bigcirc$ button is pressed, the display is switched in the order of: $\rightarrow 0:00 \rightarrow 23:50 \rightarrow 23:40 \rightarrow \dots \rightarrow 23:00 \rightarrow 22:50 \rightarrow$ (Units of ten minutes)         Set at 22:30.
4	<b>Press the OFF TIMER button.</b> The display changes from blinking to steady lighting and the setting is complete. The timer light (yellow) is on.
• The • Ma	e unit stops at the end of the set period of time. ke sure to press the button within 60 seconds from the last operation step 3, otherwise the setting is not completed.

- The current time is not displayed during OFF TIMER operation.
- Different from SLEEP TIMER operation, automatic set temperature adjustment is not done during OFF TIMER operation.

# **ON TIMER** operation

Operation starts 5 to 60 minutes before the set time so that the room temperature reaches the optimum temperature at the set time. Page 16 ON TIMER operation can be set regardless of whether the air-conditioner is running or not.

Example: When the preferred room temperature is required at 8:00.



# **SLEEP TIMER + ON TIMER operation**

This is the combined timer operation of SLEEP TIMER and ON TIMER.



- Changing of set time Set a new time by using the SLEEP or ON TIMER button. Example: When it is required to stop after 3 hours and then start operation at 8:00, near the set temperature.

#### SLEEP TIMER setting

Set by the procedures on page 14.

s

#### ON TIMER operation setting

Set by the above procedure mentioned in ON TIMER.

The setting of the lighting of the timer light (yellow) of this unit is complete.

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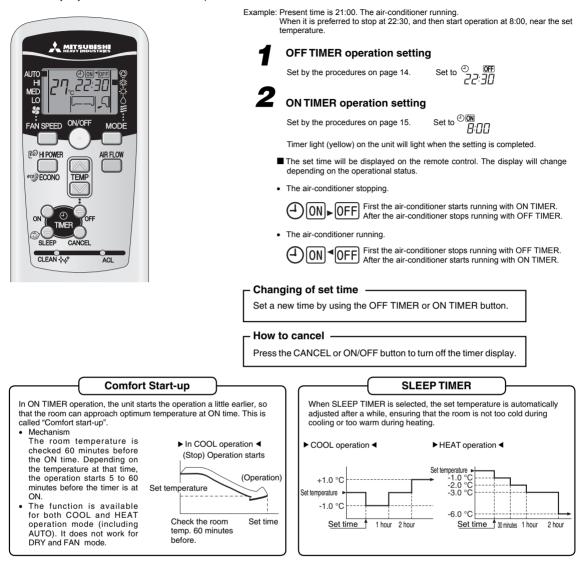
- After the SLEEP TIMER set time has lapsed, the operation stops, and it starts from 5 to 60 minutes before the ON TIMER's set time.
- · The timer light is turned off when ON TIMER set time comes.

How to cancel

Press the CANCEL button to turn off the timer display.

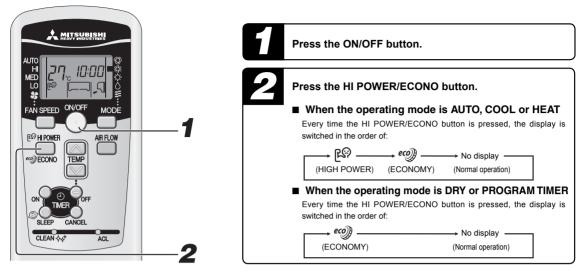
# **PROGRAM TIMER operation**

The timer operations of the combination of ON and OFF TIMER. Once this has been set the timer operations will be repeated at the same time every day unless the ON/OFF button is pressed.



# **HIGH POWER/ECONOMY operation**

When the air-conditioner is turned off, start the operation from Step 1. When the air-conditioner is running, start from Step 2.



#### - 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 displays (Lev) and the FAN SPEED display is disappeared.



- 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 again to cancel the HIGH POWER operation.
- HIGH POWER operation is not available during the DRY and the program timer operations.
- When HIGH POWER operation is set after ON TIMER operation, HIGH POWER operation will start from the set time.
- After HIGH POWER operation, the sound of refrigerant flowing may be heard.
- When the following operations are set, HIGH POWER operation will be canceled.
  - When the HI POWER/ECONO button is pressed again. (The operation mode will be changed to the ECONOMY operation)
  - ② When the operation mode is changed.
  - ③ When it has been 15 min. since HIGH POWER operation has started.
- Not operable while the air-conditioner is OFF.

#### - Concerning ECONOMY operation

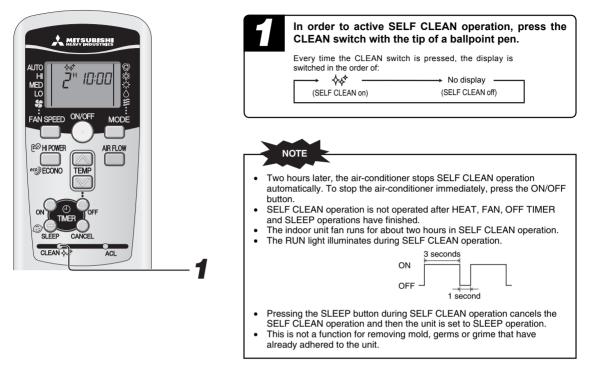
Pressing the HI POWER/ECONO button initiates a soft operation with the power suppressed in order to avoid an excessive cooling or heating. The unit operates 1.5 °C higher than the setting temperature during cooling or 2.5 °C lower than that during heating. The remote control displays and the FAN SPEED display is disappeared.



- It will go into ECONOMY operation at the next time the air-conditioner runs in the following case.
  - ① When the air-conditioner is stopped by ON/OFF button during ECONOMY operation.
  - ② When the air-conditioner is stopped in SLEEP or OFF TIMER operation during ECONOMY operation.
  - ③ When the operation is retrieved from SELF CLEAN operation.
- When the following operations are set, ECONOMY operation will be canceled.
  - (1) When the HI POWER/ECONO button is pressed again.
  - ② When the operation mode is changed from DRY to FAN.
- Not operable while the air-conditioner is OFF.

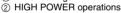
## **SELF CLEAN operation**

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



## Auto restart function

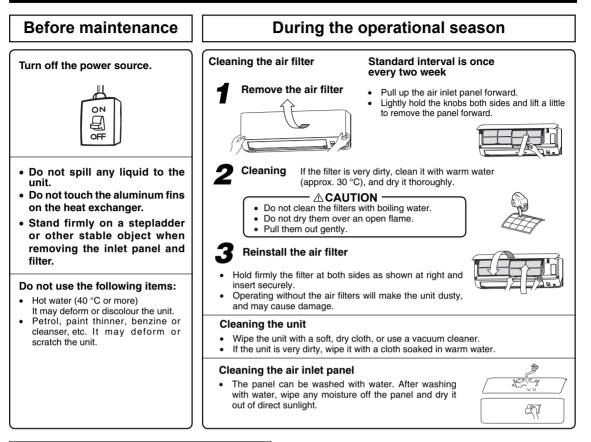
- Auto restart function records the operational status of the air-conditioner immediately prior to be switched off by a power cut, and then automatically resumes operations after the power has been restored.
- The following settings will be canceled:
  - (1) Timer settings





- 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 canceled. Once power is resumed, set the timer again.

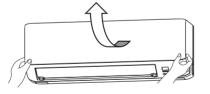
## Maintenance



#### How to open and close the air inlet panel

#### Open

Place fingers at the corners on both sides of the panel and pull up the panel forward so that it will be open by about 70 degrees.



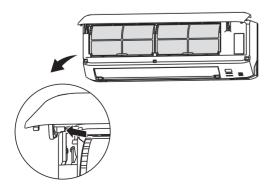
#### Close

Push both corners of the panel evenly and press further lightly at the center.

#### How to remove and install the air inlet panel

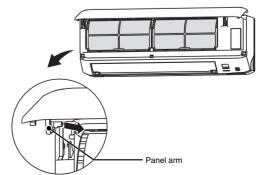
#### Removing

When removing the air inlet panel for internal cleaning or others, open the panel by 90 degrees and then pull it forward.



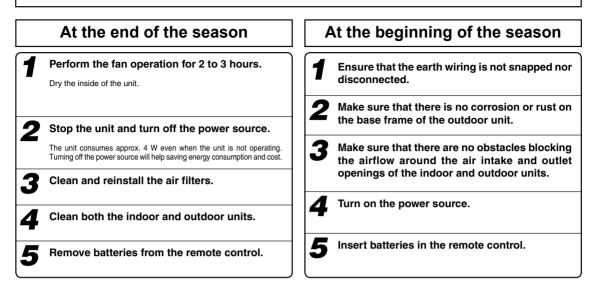
#### Installing

Insert the panel arm into the slot on the front panel from the position shown below, hold the panel at both ends of lower part, lower it downward slowly, then push it slightly until the latch works.



NOTE

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.



# **Proper installation**

### Suitable installation position

- Do not put any obstruction in front of the indoor unit, preventing proper ventilation and functioning.
- Do not install the unit in any of the following places:
  - Where there is a danger of leaking flammable 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 meter 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 vibration is 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, 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

Depending on operating environment, the inside of the air-conditioner may become dirty after a few year operations. This will reduce performance. In addition to normal cleaning, we would recommend inspection and maintenance. (This may lead the air-conditioner to having 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.

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 22, or if things

happen as shown below, switch

off the power and contact your

dealer

## Troubleshooting

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

#### The air-conditioner does not work at all.

- Has the power switch been turned off?
- Has the timer been set in the "ON" position?
- Is there a power failure or a blown fuse?
- Poor cooling or heating
- · Have you set the thermostat at a suitable temperature?
- Is the air filter clean? (Not clogged?)
- Have you left any doors or windows open?
- Is there any direct sunlight entering the room?
- Is there a heat source in the room?
- Are there too many people in the room?

## **Contact your dealer**

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

- · The fuse or switch blows continuously.
- The cable becomes extremely hot.
- The covering of the cable is cracked.
- The TV, radio or other equipment starts to malfunction.
- A switch does not activate properly.
- A strange noise is heard during operation.
- When abnormalities occur, turn off the power source immediately and turn it on after 3 minutes. Restart the operation with ON/OFF button of the remote control and the abnormalities still continue.
- The RUN and TIMER lights on the unit display section blink quickly (0.5 seconds ON; 0.5 seconds OFF) or the lights do not work.

# Notice

### Airflow

Air is not blown out when starting the HEATING operation. RUN light blinks slowly (1.5 seconds ON, 0.5 seconds OFF)	Airflow has stopped to prevent blowing out of cold air until the indoor heat exchanger has warmed up. (2 to 5 minutes)
Air is not blown out for 5 to 15 minutes or cool air is	When outdoor temperature is low and humidity is high, the
blown out for a moment at HEATING operation.	unit sometimes performs defrosting automatically. Please
RUN light blinks slowly	wait. During defrosting, water or steam may release from the
(1.5 seconds ON, 0.5 seconds OFF)	outdoor unit.
Air is not blown out when starting the DRY operation.	The indoor fan may stop to prevent re-evaporation of
(RUN light is on)	dehumidified moisture and to save energy.

### Noise

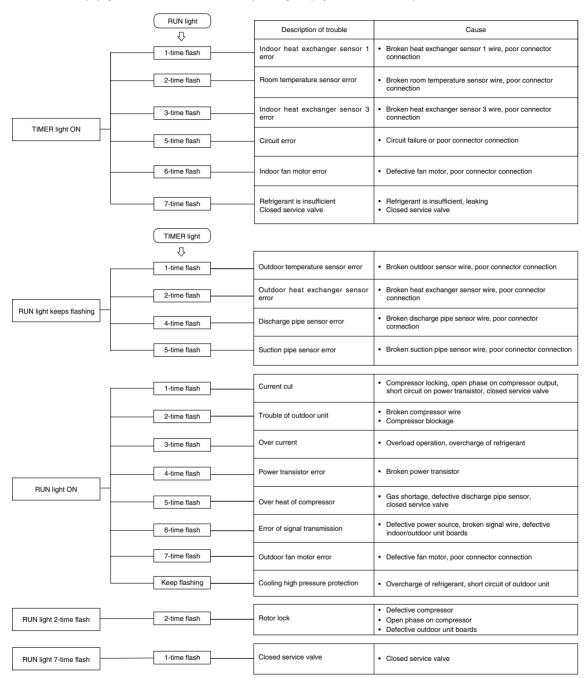
You hear a slight gurgling sound.	This is caused by refrigerant moving within the unit.
You hear a slight cracking sound.	This is caused by heat expansion or contraction.
You hear a hissing or clicking sound.	This is caused by the operation of the refrigerant control valves or electric components.
Whistling noise is heard from the outdoor unit.	This means that the rotation speed of the compressor is increasing or decreasing.
Sometimes a "Shooooo" sound might come for a short time from the unit that is turned off.	This is the sound when operation of another indoor unit is stopped.

### Others

The unit does not restart immediately after you have stopped it. (RUN light is on)	Restart is blocked for 3 minutes after you have stopped the operation to protect the unit. The 3 minutes protection timer in the microcomputer automatically starts it up again.
Some steam releases 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. Close all windows and doors to prevent outside humidity from entering.
There is a slight smell.	Air blown out during operation may smell. This is caused by tobacco or cosmetics adhering to the unit.
After a power cut, the unit does not restart even if power has been restored.	If the auto restart function is not set, the unit will not restart automatically. 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, block 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.
Fan will not stop immediately after unit operation is stopped.	Indoor fan       : Fan will not stop after 2 hours if set to SELF         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 SELF CLEAN operation. Run light will turn off when SELF CLEAN operation ends.

# Self diagnosis function

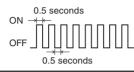
We are constantly trying to do better service to our customers by installing such judges that show abnormality of each function as follows



# About the multiple air-conditioners

### Simultaneous operation

- The air-conditioners cannot be in different operating modes at the same time, such as one unit being in the "Cool" mode and one
  unit being in the "Heat" mode.
- When conducting different operations, the air-conditioner that was operated first will be given priority, so the air-conditioner that is
  operated after that will conduct air blowing operation.
- When you want to give priority to the air-conditioner that was started later, either stop the air-conditioner that has priority or change
  the operation type of the unit operated first to match that of the unit operated second.
- · When other indoor units are operating in different modes, the RUN light illuminates.



### Automatic operation

- When the remote control operation switch is in the "AUTO" mode the air-conditioner automatically selects either "COOL," "DRY," or "HEAT" when operation is started depending on the room temperature.
- During simultaneous operation of air-conditioners, operation modes may be automatically changed in response to the temperatures
  of the individual rooms; this will result in the operation of the outdoor unit being stopped. In such a case, COOL or HEAT mode
  should be used instead of AUTO mode. (This is only relevant when more than one air-conditioner unit is being used.)

## Refrigerant (oil) recovery operation

If the all of the indoor units are not operated at the same time for an extended period, the cooling or heating performance may
temporarily decrease. This is in order to control the recovery of the refrigerant (oil) in the stopped indoor unit(s). At this time, the
sound of refrigerant flowing may be heard from the stopped indoor unit(s).



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