USER'S MANUAL

MITSUBISHI DAIYA PACKAGED AIR CONDITIONER

FDT SERIES	FDR SERIES	FDU SERIES	FDUM SERIES	FDFL SERIES
FDT208	FDR208	FDU308	FDUM308	FDFL258
FDT258	FDR258	FDU408	FDUM408	FDFL308
FDT308	FDR308	FDU508	FDUM508	
FDT408	FDR408	FDU808		
FDT508	FDR508	FDU1008		



This air conditioner complies with EMC Directive 89/336/EEC, LV Directive 73/23/EEC.

CE marking is applicable to the area of 50 Hz power supply. Above models are effective for 220-240 V, 50 Hz and 220 V, 60 Hz power supply. Thank you for purchasing a Mitsubishi Daiya Air Conditioner. To ensure satisfactory operation for many years to come, this Owner's Manual should be read carefully before using your air conditioner. After reading, store it in a safe place. Please refer to the manual for questions on use or in the event that any irregularities occur.

This instruction manual contains the explanation of the heat pump air-conditioner. That of cooling only air-conditioner shall be referred to the same explanation , with neglecting the information on heating-operation mode.

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SAFETY PRECAUTIONS

- Before starting to use the system, read these "SAFETY PRECAUTIONS" carefully to ensure proper operation of the system.
- The safety precautions are classified as "△ DANGER" and "△ CAUTION". Precautions as shown in the column "△ 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:



Strictly prohibited.



Observe instructions with great care.



Provide positive earthing.

 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.

■ INSTALLATION PRECAUTIONS

△ DANGER

The system should be applied to places as office, restaurant, residence and the like.



Application to inferior environment such as an engineering shop, could cause equipment malfunction and serious injury or death.

The system must be installed by your dealer or a qualified professional.



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

If you need optional devices such as a humidifier, electric heater etc, use only products which have been recommended by us. These devices muts be installed by a professional electrician.



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

When installing in a small room, make sure to take countermeasures against refrigerant leakage; the leaking refrigerant density shall not exceed the limit value. Regarding countermeasures to prevent the excess leakage, please consult with your dealer.



If the refrigerant leaks and exceeds the limit density value, hypoxia could be caused

△ CAUTION

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.





If you don't install 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.

If strong winds are expected, fix the system securely to avoid any collapse.



Collapsing may cause body injury.

Install at a place which can take the weight of the air conditioner.



Careless installation may cause body injury.

Make sure that the system has been properly earthed.



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.

- 1

■ 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.



△ DANGER



This may cause injury, as the internal fan rotates at high speed.

While the fan of the outdoor unit is on operation, do not put your fingers or sticks into the unit. Even if it is not running, the unit could start running suddenly.



It could cause an injury.

If you notice anything abnormal (smell ob burning etc.), shop the system immediately, turn off the power switch, and consult vour dealer





Continued use of the system in abnormal circumstance may result in breakdown, electric shock or fire.

⚠ CAUTION

The system should only be used for its original purpose and not for anything else like, for instance, preservation of food, plants or animals, precision devices or works of art.





It may damage the quality of food etc.

Do not handle the switches with wet hands.





This may cause am electric shock.

You should not expose any combustion appliance directly to the air stream of the air conditioner.





The appliance may then work inadequately.

Do not wash the air conditioner with





This could cause an electric shocks.

Do not install the system at a place where the air stream of the blower is aimed directly at plants or animals.





This will damage their health.

Only use approved fuses.





Use of steel or copper wire instead of an approved fuse is strictly forbidden, as it may cause a breakdown or fire.

Do not sit on the air conditioner nor put anything on it.





If the unit falls over or things drop off it, people could get hurt.

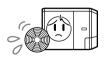
Do not place a combustible gas or liquid conditioner near the air conditioner, or aim it directly at the system.



This may result in a fire.

Do not operate the system while the exhaust grille has been removed.

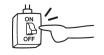




This may cause injury.

Do not use the power switch for turning the system on and off.





It could cause a fire or a leakage.

Do not touch the exhaust section while the swing flap is in operation.



You may get injured.

Do not use boiling kettles or the like near the indoor unit or the remote control.



If the system is operated near steam generating equipment, condensed water may drip during the cooling operation or a short-circuit may occur.

SAFETY PRECAUTIONS

△ CAUTION

Do not pull the remote controller's wire.





If the core wire is disconnected, it could cause a short-circuit.

Do not put water containers on the unit such as a flower vase, etc.



If water gets into the unit, the electrical insulation will be deteriorated, which could cause electric shock.

If you operate the system together with a combustion appliance, you must regularly ventilate the indoor air.





Insufficient ventilation may cause accidents due to oxygen deficiency.

After a long period of use, check the unit's support structure from time to





If you don't repair any damage straightway, the unit may fall down and cause personal injury.

When you clean the system, stop the unit and turn off the power switch.



Never clean the unit while the internal fan is rotating at high speed.

When using a stepladder, etc. to install or remove the air filter, make sure to fix it properly.



If the unit drops down or stumbles over, it could cause an injury

■ PRECAUTIONS FOR TRANSFER OR REPAIR

Modification of the system is strictly prohibited. Consult your dealer for repairs to the system.



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

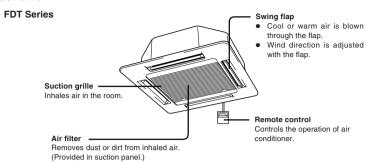
If the air conditioner is moved elsewhere, contact your dealer or a professional fitter.

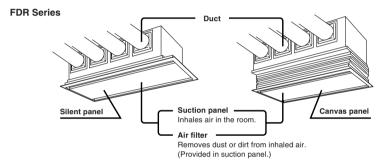


Faulty installation may cause water leakage, electric shock, fire, etc.

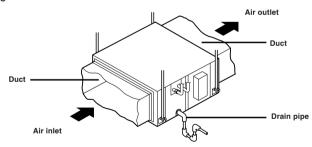
STRUCTURE AND COMPONENTS

Indoor unit

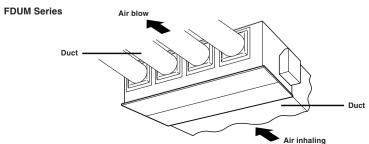




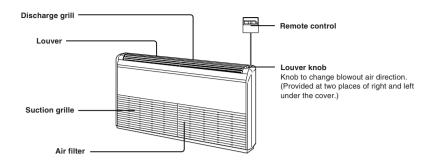
FDU Series



Remarks: Indoor units is installed on the back side of ceiling, etc. and cold (hot) air will flow through the duct.

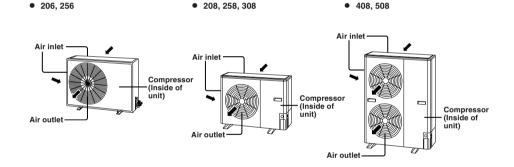


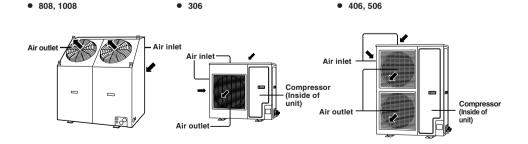
FDFL Series



Outdoor Unit

FDC Series



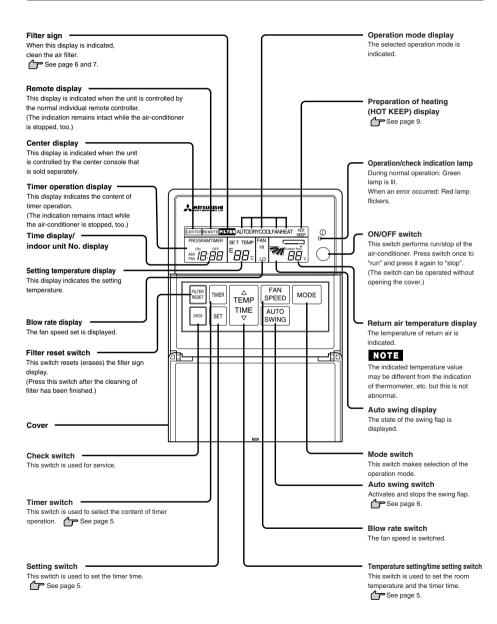


CONTROLS AND FUNCTION

The illustration below shows the status that the cover is open. The liquid crystal display area indicates the full contents of display for explanation.

Pull the knob towards you to open the cover downward.

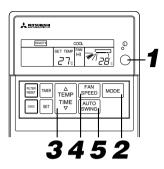
"AUTO SWING" switch are not equipped for FDR, FDU, FDUM, FDFL series.



OPERATION PROCEDURE

Request: To protect the compressor at the time of starting, turn on the power supply switch 12 hours before starting run.

Moreover, keep the power switch on in the season.



Standard of room temp, setting

..... 26 to 28°C

Air blowing Room temp. set is not necessary.

Dehumidification 21 to 24°C

Heating 22 to 24°C

1

Press the "ON / OFF" switch.

The air conditioner starts operating.

2

To select an operation mode.

Press mode switch to change to "AUTO"
→"DRY" → "COOL" → "FAN" → "HEAT".
(The AUTO and HEAT settings are not included with exclusive cooler units.)

3

Press the "ROOM TEMP." switch.

Press \triangle or ∇ to set the room temperature.

4

Press the "FAN SPEED" switch.

Fan speed varies in the following sequence.
HI ←→ LO

(In dehumidifying run, fan speed is automatically set.)

5

Press the "AUTO SWING" switch.





Cooling ...



Press the "ON / OFF" switch.

- The Operation mode, temperature setting and blow rate can be changed during the operation stop as well. When they are
 operated during stop, the corresponding display area is indicated for several seconds.
- · After several seconds since the remote controller is operated, the setting of air-conditioner unit changes.
- To operate the air conditioner every day with repetition of run/stop under the same conditions (operation mode, set temperature, blow rate and auto swing), step 1 ON/OFF alone is sufficient.
 The condition previously set is displayed on the remote controller.
- Quiet mode or a maximum performance mode on the FDT series can be set with dip switches on the circuit board of the indoor control unit. (Factory settings differ depending on model.)

NOTE

- · Avoid frequent operation of "ON" and "OFF".
- $\bullet\hspace{0.4cm}$ Do not use something with a sharp tip to press the remote controller switch.
- During raising and lowering of the setting temperature by pressing the temperature setting switch, the
 operation of unit may stop. This is caused from the activation of temperature controller and is not a
 malfunction.
- The air blow rate in the dehumidification operation repeats "weak- stop" in proportion to the room temperature automatically. The adjustment by the blow rate switch is impossible.
- When switching on the power and running the unit for the first time, a temperature of 23°C and the air flow volume are displayed in the remote control and operation begins at those auto run (exclusive cooler unit: cooling) settings. Please set the run mode and temperature at a the desired levels.
- In the case of automatic operation the [cooling] and [heating] operation are changed over automatically
 in proportion to the difference of setting temperature and the room temperature to keep the room temperature constant.

(Combined cooling and heating units only.)



PRESENT TIME SETTING PROCEDURE

• The timer is set based on the present time. Adjust the present time correctly at first.

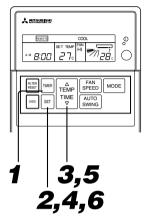
1

Press the timer switch.

The display changes with the following sequence:

No indication→Time indication→Timer ON
Program timer ←Timer OFF ←

Set to [Time indication]



Pre The

Press the setting switch.

The [Morning] indication flickers.

- In the case that the present time is in the morning, press the setting switch again.
- In the case that the present time is in the afternoon, press the time setting switch to change the indication of morning to afternoon, then press the setting switch again.
- 3

Press the time setting switch.

The "hour" area is flickering.

Press the △ or ▽ to set "hour".

4

Press the setting switch.

The [hour] setting of present time has been finished.



Press the time setting switch.

The "minute" area is flickering.

Press the ∧ or ∨ to set "minute"



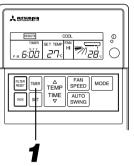
Press the setting switch.

The flickering of present time changes to continuous lighting to indicate completion of setting.

ON / OFF TIMER SETTING PROCEDURE

"OFF" timer: stops operating the air conditioner when a set time has elapsed.
"ON" timer: starts operating the air conditioner when a set time has elapsed.







Press the timer switch.

The display changes with the following sequence:

→ No indication → Time indication → Timer ON ¬

Set to [OFF] or [ON].

Set Set prod

Set the timer time.

Set the desired operation stop or start time using the same procedure as in steps 2~6 of the "PRESENT TIME SETTING PROCEDURE."

• The operation is stopped or started at the setting time and the indication on the timer changes to "No indication".



- The unit can be turned on or off by ON/OFF switch even if the timer is used.
- When the control changes to [Center] by setting of the option controller, the operation by timer becomes invalid.

Time change

Reset the desired time using the time setting switch and the setting switch.

The time that has been set before becomes invalid and the timer operation is restarted with the reset time as the starting point.

Release

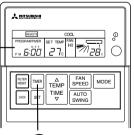
When it is desired to change to the normal operation during the operation of timer, press the timer switch to indicate no-indication or time indication.

The timer becomes invalid and the mode changes to the normal operation.

PROGRAM TIMER SETTING PROCEDURE

■ Timer operation of two actions on a day is possible by combination of OFF timer and ON timer of PROGRAM timer. Once after the PROGRAM timer is set, the air conditioner will be started and stopped at the same time everyday.







Set "OFF" of the timer.

Set the timer in the order of 1 and 2 shown in above "ON/ OFF TIMER SETTING".

2

Set "ON" of the timer.

Set the timer in the order of 1 and 2 shown in above "ON/ OFF TIMER SETTING".

3

Press the "timer" switch.

Set to "PROGRAM".

The program timer operation starts.



- The program timer operates the shorter set time first.
- If "ON" and "OFF" are set at the same time, the "OFF" timer will operate at the set time everyday.

This will work as a prevention when it is forgotten to turn off.

Timer operation indication

Timer indication

The set timer mode "PROGRAM" and the timer mode "OFF" or "ON" that operates next will be displayed.

Change of setting time and how to release the setting.
 Refer to the above item ON/OFF TIMER SETTING PROCEDURE.

ADJUSTMENT OF AIR FLOW

FDT Series



Swing flap

The swing flap swings vertically by the "AUTO SWING" switch. NOTICE (1) Following adjustment is not effective where the panel is not equipped with the auto swing mechanism. It is adjusted manually instead.

Vertical adjustment

To swing the flap



Press the "ON / OFF" switch, and press the "AUTO SWING" switch. The swing flap swings vertically in continuation with the display changing.



The movement of the swing flap is not identical to the movement displayed.



This display changes continuously. Blow-out position

recommendation

(When fixed)

HEAT

To fix the flap in a desired position



Observing the display of the auto swing, press the "AUTO SWING" switch when a desired position is displayed.

The display of the auto swing will stop at the position, and then the swing flap will stop swinging and be fixed.







Though the display of the auto swing stops immediately after the switch is pressed, the swing flap will stop later.

This is not a malfunction.

(Operation of swing flap during the heating preparation cycle)



When the message "HOT KEEP" is shown on the display, the swing flap adjusts automatically in the horizontal position.

When the heating preparation is over and the normal operation starts, the swing flap returns to the setting position.



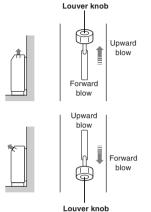
Setting position is indicated.

Request: Do not move the flap forcibly by hand, it will be sometimes broken by doing so.

To turn the wind direction in the upward or forward direction, turn by hands the Cover louver knobs provided at both sides at the blow air exit on the indoor unit.



(Louver is provided inside.)





Refrain from pressing the cover backward too strongly. Cover may be broken.

2. Turn the louver knobs to the "Upward" or "Forward" posi-

Turning it to the "Upward" position directs the air blow upward or, if it is turned to "Forward" position, the air blow is directed forward.

The louver knob is provided at each side so that it can be set at the "Upward" or "Forward" position separately from the other.

3. Install the cover as it was.

COMFORTABLE USE

Clean the air filter periodically.

If air filter is clogged:

FDFL Series

- · The cooling effect is reduced, which results in excessive use of electricity
- It may cause malfunctioning
- · Water may drip when in cooling mode operation.

When cooling or heating season is over, clean the air filter.



Set a suitable room temperature.



Excessive cooling is not healthy, and wastes electricity.

Avoid direct sunlight and draughts.	Adjust the air flow direction properly.	Use the circulator if you feel coolness around your feet during the heating operation.
Cut out direct sunlight by drawing the curtains or blinds when cooling. Keep windows and doors shut, except when ventilating.	Avoid facing the cool air for any length of time. Furthermore, take care not to aim the airflow directly at small animals or plants.	If you feel cold around your feet because of the height of the ceiling, we recommend you use a circulator. For details please consult your dealer.

■ Adjust the temperature and humidity within the following ranges

Condition Classification	Indoor temperature	Outdoor temperature	Indoor humidity
Cooling and dehumidifying operation	Approx. 21 to 32°C (Type 6, Type 208, 258) Approx. 18 to 32°C (Type 308, 408, 508, 808, 108) If you use the air conditioner at 21°C or less for a long time, the unit may frost up and cooling/dehumidifying operations may become impossible.	Approx. 10 to 43°C (Type 6 HEN model, Type 208, 258 HEN3, CEN, CEP models) Approx5 to 43°C (Type 208, 258 HEN3A, Type 308, 408, 508, 808, 1008) Approx. 10 to 54°C (Type 6 HES model, Type 6 model for cooling only)	Approx. 80% and less if the air conditioner is operated in very humid surroundings for a long time, the unit's surface may get damp and some water may drip, or some watery mist may escape from the air outlet.
Heating operation	Approx. 27°C and less	Approx10 to 21 °C (Type 6, Type 208, 258) Approx10 to 24°C (Type 308, 408, 508, 808, 1008) When the outdoor temperature goes down, the heating capacity decreases.	

• Beyond the recommended range, the equipment may malfunction and/or damage may be caused to property.

MAINTENANCE

Points to observe

Turn off the power switch.



Do not touch, the equipment with wet



Do not use hot water or volatile liquids.





A CAUTION

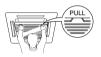
- Do not open the inlet grille until fan stops completely.
- Fan will continue rotating for a while by the law of inertia after opertion is being stopped.

Cleaning the Air Filter

Clean the air filter periodically at the end of cooling and heating seasons.

Removal

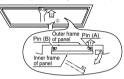
1. Take hold of the notches to the left and right and slowly pull the grille downwards.



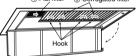
2. Hold the hooks as illustrated below (left and right) at lower end of filter and pull while gently pushing upwards.



- 1. Push up the center portion ① of the suction panel.
- 2. Pulling towards you, swing down the panel.

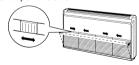


- 3. Remove the corrugated filter from the hook by turning the hook.
- 4. Slide the flat filter towards center and remove it. 4 Flat filter 3 Corrugated filter

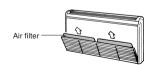


Note (1) Only one corrugated filter is used for FDR208-308 models.

1. Slide the suction grill lever toward the arrow direction (⇒) and open this side.



2. Pull out the air filter toward the up side.



Cleaning

1. Clean the air filter by tapping it or with a vacumm cleaner. It is better to clean it

If the air filter is very dirty, dissolve some neutral detergent in the lukewarm water (approx. 30°C), rinse the filter, and wash out the detergent thoroughly in clear

2. After drying the air filter, set it up on the air conditioner, and press the FILTER RESET switch.



- △ CAUTION -

- Do not dry the air filter with fire.
- . Do not run the air conditioner without the air filter.

Care and Cleaning of the unit

- Clean with soft and dry cloth.
- If it is very dirty, dissolve a neutral detergent in lukewarm water and use this for dampening the cloth. When you have finished wiping, remove the detergent with clean water.

At the end of the season

- Operate the unit for half a day in FAN mode in fair weather to dry the inside properly.
- Stop the unit and turn off the power switch. Even when the air conditioner has been stopped, it still uses electricity.
- · Clean the air filter and re-install it.

At the beginning of the season

- . Remove any objects that may obstruct the air inlet and outlet of both the indoor and outdoor units.
- Ensure that the air filter is clean.

Isn't the air conditioner under prepara-

tion of heating operation?

Switch on the power switch 12 hours before you start operating.

TROUBLESHOOTING

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

The unit does not work at all Has the power switch been turned on? Do you have a normal municipal Is your earthed plug alright? electricity supply? If not, this may be dangerous. Turn off the power supply immediately and contact your is not ON. Poor cooling or heating Have you set the thermostat at a Is the air filter clean? Are there any obstacles blocking the suitable temperature? air inlet or outlet? Did you leave any doors or windows Is swing flap in the horizontal posiopen? tion? (During heating operation) Air blow will not reach the floor if the swing flap is set horizontally. Poor cooling Is there any direct sunlight entering the room? Is there a heat source in the room? Are there too many people in the room? Cooling air is coming out. (on heating operation)

stop the operation of the air conditioner and contact your sales dealer. • The fuse or breaker often shuts down.

- Water drops off during cooling/dehumidfying operation.
- There is an irregularity in operation or abnormal sound is audible.

When the air conditioner does not operate properly after you have checked

the above mentioned items or when the following phenomenon is observed,

Inspection lamp blinks.

The following does not mean malfunctions of the unit.

You hear a slight gurgling sound.	When you start the air conditioner, when the compressor starts or stops during operation or when you stop the air conditioner, you may hear gurgling sound. this means that the refrigerating liquid is circulating, it is quite normal.		
You hear a slight cracking sound.	This is caused by heat expansion or contraction of plastic.		
Hissing or gurgling sound is heard from the unit stopped.	Those are the sounds of an air conditioner controlling itself automatically.		
You smell something.	Air blown out of the indoor unit sometimes smells. This is caused by tobacco smoke or cosmetics stuck inside the unit.		
During the operation, some white mist escapes from the indoor unit.	If the air conditioner is used in a restaurant etc with dense oil fumes around, some white mist may escape from the air outlet . If so, call the dealer to clean the heat exchanger.		
The unit switches to FAN mode during cooling.	The mist sometimes switches automatically to FAN mode to prevent accumulation of frosty film on the indoor unit heat exchanger. It will soon revert to cooling mode.		
Blower of indoor unit does not stop even if the operation is stopped during heating cycle.	In order to cool down the remaining heat on the auxiliary heater, the blower may operate continuously for about 40 seconds after the unit is stopped. Do not turn off the power supply switch before the blower stops.		
You can not restart the air conditioner immediately after you have stopped it.	Even if you switch on, you cannot use cooling, dehumidifying or heating for three minutes after the air conditioner has stopped. as a result of the protection timer being activated. (During this time the unit operates in FAN mode.)		
Air does not blow or the fan speed can not be changed during dehumidifying.	During the dehumidifying operation, the blower is operated in the weak blowing mode or stopped alternately in order to prevent an excessive cooling or rising of humidity.		
The swing flap operates by itself. (In the case of FDT.)	When the power switch is turned on, the auto swing is repeated twice. It is not a trouble. Moreover, it is automatically brought into the horizontal position in the "HOT KEEP".		
Water or steam generates from the outdoor unit during heating.	This results when frost accumulated on the outdoor unit is removed (During defrosting operation).		
The blower in the outdoor unit does not rotate during operation.	In the defrosting operation or the heating operation at high outside temperature, the function to stop the blower is activated. On the contrary, the function that automatically controls the number of blower operates at low atmospheric temperature. & WARNING		
	this will result in injury.		
Operation was started just after the power switch was turned on.	When the power failure compensation is set to "valid", after the power recovery the operation starts with the same status as that of before the power failure or before turning off the power switch.		
The setting temperature does not change. (The setting temperature indication flick-ers.)	When the temperature setting is fixed, the setting temperature does not change even if the \bigcirc \bigtriangledown switch is pressed.		

FOR POWER FAILURE COMPENSATION



The remote controller is equipped with a power failure compensation function, so it is possible to make the power failure compensation invalid. (At the delivery from the factory, it is set to valid.)

Consult the dealer you have purchased.

What is the power failure compensation?

- It means the function that when the power is restored after the power failure or the power switch is intentionally
 turned off, the operation is automatically restarted with the setting condition of remote controller before power
 failure. When the air-conditioner had been stopping before the power failure, it still keeps on stopping after
 power recovery.
- However, resetting by the remote control is necessary for the following items.
- 1. Timer setting —— It has been cancelled.
- 2. Auto swing (for the remote control equipped with this function) —— It is stopped at the horizontal position.

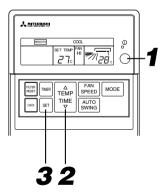


When the power failure compensation is set to valid, ensure to turn off the power switch after stopping the operation. (If the power switch is turned off during the operation mode, the blower of the indoor unit begins to rotate at the same time when the power switch is turned on. In addition, the outdoor unit begins to operate after about 3 minutes of the power switch on.)

FOR TEMPERATURE SETTING FIXATION



The temperature setting can be fixed by the following operation. After the fixation the temperature change by the temperature setting switch on the remote controller becomes impossible.





When the air-conditioner is stopped:

Press ON/OFF switch to make the air-conditioner in [Operation] mode.

2

Press the temperature setting switch.

Press \triangle or ∇ switch to set the unit to the temperature to be fixed.

3

Keep on pressing the setting switch for 3 seconds.

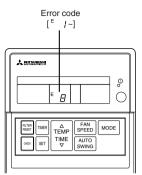
By the above operation the temperature setting can be fixed. $\label{eq:bythe} % \begin{center} \begin{center}$



- Release method: Keep on pressing the setting switch for 3 seconds during operation.
- When the temperature setting switch is pressed while the temperature setting is fixed, the setting temperature indication flickers for 4 seconds.

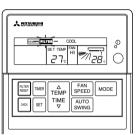
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WHEN THE CHECK INDICATION LAMP (RED) FLICKERS



- The air-conditioner is in abnormal condition.
- The air-conditioner stops at the same time when the check display lamp begins to flicker.
- The error code on the setting temperature display area, all other indication lamps and the displays go off.
- Contact the dealer from which you have purchased to inform [Error code], [Status of failure], [Type of air-conditioner] and [Model name of unit].
- Press ON/OFF switch to stop the unit.

WHEN FILTER SIGN IS INDICATED



When the accumulated operation hour reaches 360 hours, the filter sign is indicated to inform the cleaning time of air filter.

- When the filter sign is indicated, clean the air filter. See page 7.
- After the cleaning is finished, press the reset switch of the filter to make the filter sign no-indication. The accumulated operation time is reset.

FOR PREPARATION OF HEATING ("HOT KEEP")

"HOT KEEP" is displayed in the following cases.

For the following cases, "HOT KEEP" is displayed on the indication board.

. When heating is started:

In order to prevent blowing out of cool wind, the indoor unit fan is stopped according to the room temperature which heating operation is started. Wait for approx. 2 to 7 minutes, and the operation will be automatically changed to the ordinary heating mode.

• Defrosting operation (in the heating mode):

When it is liable to frost, the heating operation is stopped automatically for 5 to 10 minutes once per approx. one hour (Blowing is stopped for both indoor and outdoor unit.), and defrosting is operated. After defrosting operation is completed, operation mode is automatically changed to ordinary heating operation.

• When the room thermostat is actuated:

When room temperature increases and room temperature controller actuates, the fan speed is automatically changed to LO.

When room temperature decreases, air conditioner automatically changes over to ordinary heating operation.

During "HOT KEEP" is displayed, a micro-computer controls the quantity of air blow to prevent blowing out of cool wind.



Regarding the heating operation

Heat pump type heating

Heat pump type heating means to heat the indoor air by utilizing the refrigerant to pick up the heat in the outdoor air

Defrosting operation

When heating the indoor air with the heat pump type heating, frost will accumulate on the air inlet of the outdoor unit as the outdoor temperature drops. Since the accumulated frost reduces the heating efficiency, the operation is automatically switched to the defrosting mode. During the defrosting operation, the blowers on the both the indoor and the outdoor units are stopped and the "HOT KEEP" message is displayed on the indication board.

Outdoor air temperature and heating capacity

During the air conditioning by the heat pump type heating, the heating capacity drops along with the drop of the outdoor air temperature.

Therefore, it is necessary to operate an additional heating equipment when the outdoor air temperature dropped excessively.

Necessary time to raise the indoor air temperature

Air conditioning by the heat pump type heating takes time a little longer because the entire air in a room is heated by circulating hot air.

You should start the heating operation sufficiently earlier especially in a very cold morning.

HAS THE UNIT BEEN INSTALLED CORRECTLY?

Check the following points for safe and comfortable use of your air conditioner. Installation is the dealer's responsibility: do not attempt to do it yourself.

Suitable installation position			
Don't install the air conditioner near a place where inflammable gas may leak.	Install the unit in a well ventilated place.	Install the air conditioner on a firm foundation that can well support its weight.	
This may cause an explosion (ignition) .	Any obstacles may reduce the capacity or increase the noise.	If you don't, this may cause vibration or noise.	
Select a place where the neighbors are not inconvenienced by hot air or the noise.	You must take snow protection measures if the outside unit is blocked by snow.	It is advisable not to install the air conditioner in one of the following places, as this may cause malfunction- ing. If, however, there is no other choice, consult your dealer.	
		A place generating corrosive gases (spa area etc.). A place exposed to sea breeze (seaside etc.). A place exposed to dense soot or smoke. A place with excessively high humidity.	
	Consult your dealer for details.	A place with excessively wide voltage variation.	

Electrical works

The electrical works must be burden on the authorized engineer with qualification for electrical works and grounding work, and the work must be conducted in accordance with electric equipment technical standard.

- The power source for the unit is to be of exclusive use.
- An earth leakage breaker should be installed. (This is necessary to prevent electric shock.)
- The unit must be grounded.
- Is the remote control switch properly installed?
- In case of open wiring, is it fixed by the attached screw?
- Is the remote control cord fixed by the attached remote control clamp?
- Is it installed at the height where children can not reach.

For inspection and maintenance

The capacity of air conditioner will decrease by contamination of inside of unit when it is used for about three years although depending upon the circumstances under which it is used, and so in addition to the usual maintenance service, special inspection /maintenance service is necessary. It is recommended to make a maintenance contract (charged) by consulting your sales dealer.