



OPERATING INSTRUCTIONS

INDOOR UNIT
MSC-A07YV
MSC-A09YV
MSC-A12YV



OPERATING INSTRUCTIONS

- To use this unit correctly and safely, be sure to read the instructions carefully before use.

Bedienungsanleitung

- Um diese Einheit richtig und sicher zu betreiben, lesen Sie bitte die Bedienungsanleitung vor der Inbetriebnahme durch.

NOTICE D'UTILISATION

- Pour avoir la certitude d'utiliser cet appareil correctement et en toute sécurité, lisez attentivement cette notice d'instructions avant utilisation.

GEBRUIKSAANWIJZING

- Om dit apparaat op de juiste manier te gebruiken, lees de gebruiksaanwijzing aandachtig door te vóór gebruik.

MANUAL DE INSTRUCCIONES

- Para emplear correctamente este aparato, lea atentamente este manual de instrucciones de manejo antes de utilizarlo.

LIBRETTO D'ISTRUZIONI

- Per utilizzare correttamente quest'unità, legga attentamente e per intero il libretto d'istruzioni.

ΟΔΗΓΙΕΣ ΛΕΙΤΟΥΡΓΙΑΣ

- Για να χρησιμοποιήσετε αυτή την μονάδα σωστά, διαβάστε προσεκτικά το εγχειρίδιο οδηγιών πριν από την χρήση.

INSTRUÇÕES DE OPERAÇÃO

- Para utilizar esta unidade correctamente, leia atentamente este manual de operação antes da utilização.

BRUGSANVISNING

- Læs denne brugsanvisning før brugen af anlægget sikres.

BRUKSANVISNING

- För att använda enheten på rätt och säkert sätt, läs bruksanvisningen innan enheten tas i bruk.

İŞLETME TALİMATLARI

- Bu birimi doğru ve güvenli olarak çalıştırmak için talimatlarını mutlaka okuyun.

РУКОВОДСТВО ПО ЭКСПЛУАТАЦИИ

- Для обеспечения правильного и безопасного использования до начала его эксплуатации внимательно прочтите руководство по эксплуатации.

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SAFETY PRECAUTIONS

- Since rotating parts and parts which could cause an electric shock are used in this product, be sure to read these "Safety Precautions" before use.
- Since the cautionary items shown here are important for safety, be sure to observe them.

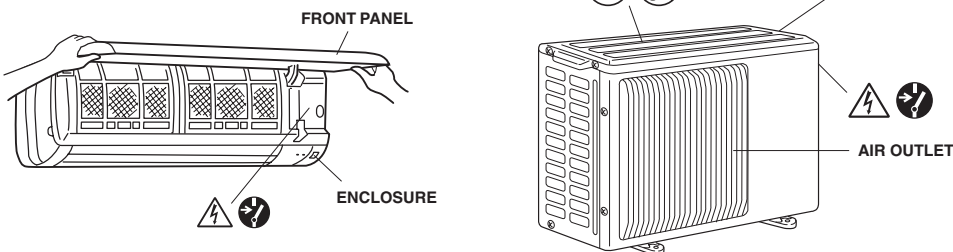
Marks and their meanings

- ⚠ **WARNING:** Incorrect handling could cause a serious hazard, such as death, serious injury, etc. with a high probability.
- ⚠ **CAUTION:** Incorrect handling could cause a serious hazard depending on the conditions.

Meanings of symbols used in this manual

- The colour of the sticker affixed to the unit is written in the parentheses.
- ⊘ : Be sure not to do.
- ⚠ : Be sure to follow the instruction.
- ⊘ (Black) : Never insert your finger or stick, etc.
- ⊘ (Black) : Never step onto the indoor/outdoor unit and do not put anything on them.
- ⚠ (Yellow) : Danger of electric shock. Be careful.
- Ⓜ (Blue) : Be sure to disconnect the power supply plug from the power outlet.
- Ⓜ (Blue) : Be sure to shut off the power.
- After reading this manual, keep it together with the installation manual in a handy place for easy reference.

Warning mark positions and safety devices







• This air conditioner is NOT intended for

⊘	<p>Do not use intermediate connections</p> <p>Do not connect many devices to one AC</p> <ul style="list-style-type: none"> • A fire or an electric shock may occur due to an excessive current, etc.
⊘	<p>Do not scratch or process the power supply cord</p> <ul style="list-style-type: none"> • Do not put heavy object on the power supply cord. The cord may be damaged and this may cause a fire or electric shock.
⊘	<p>Do not turn the breaker off/on or disconnect the power supply plug</p> <ul style="list-style-type: none"> • This may cause a fire due to sparking. • Be sure to turn off the breaker or disconnect the power supply unit off with the remote controller.
⊘	<p>Do not expose your skin directly to the fan</p> <ul style="list-style-type: none"> • This could damage your health.
⚠	<p>The customer should not install the unit</p> <ul style="list-style-type: none"> • If this is done incorrectly, it may cause a fire or electric shock, leaking, etc. Consult your dealer.
⊘	<p>Do not insert your finger or a stick into the fan</p> <ul style="list-style-type: none"> • Since the fan rotates at high speed, it may cause a fire or electric shock. • Young children should be supervised.
Ⓜ	<p>When an abnormality (burning smell) occurs, disconnect the power supply plug or turn off the breaker</p> <ul style="list-style-type: none"> • If the unit continues to be operated, it may cause a fire or electric shock. Consult your dealer.
Ⓜ	<p>Repairs or relocation should not be attempted</p> <ul style="list-style-type: none"> • If this is done incorrectly, it may cause a fire or electric shock, leaking, etc. Consult your dealer. • If the power supply cord is damaged, it may cause a fire or electric shock. Consult your dealer to avoid a hazard.



⊘	<p>When the air filter is to be removed, be careful</p> <ul style="list-style-type: none"> • This may cause an injury.
⊘	<p>Do not use an insecticide or flammable liquid</p> <ul style="list-style-type: none"> • This may cause a fire or deformation.
⊘	<p>Do not put a pet or houseplant where the unit is installed</p> <ul style="list-style-type: none"> • This could injure the pet or plant.
⊘	<p>Do not leave the unit on an unstable bench</p> <ul style="list-style-type: none"> • The unit may fall and this may cause a fire or electric shock.
⊘	<p>Do not step onto an unstable bench</p> <ul style="list-style-type: none"> • This may cause an injury, etc. if you fall.
⊘	<p>Do not pull the power supply cord</p> <ul style="list-style-type: none"> • The core wire of the power supply cord may be damaged and this may cause a fire or electric shock.
⊘	<p>Do not charge or disassemble the battery</p> <ul style="list-style-type: none"> • This may result in leakage, fire or electric shock.
⊘	<p>Do not operate the unit for a long time</p> <ul style="list-style-type: none"> • In the cooling mode, if the unit is operated for a long time, water condensed in the air conditioner may drip.
⊘	<p>Do not use the unit for special purposes</p> <ul style="list-style-type: none"> • Do not use this air conditioner to power a stove, etc. This may cause deterioration of quality.
⊘	<p>Do not put a stove, etc. where they are installed</p> <ul style="list-style-type: none"> • This may cause imperfect combustion.

SAFETY PRECAUTIONS

 CAUTION	
	When the unit is to be cleaned, switch it off and disconnect the power supply plug or turn off the breaker. <ul style="list-style-type: none"> Since the fan rotates at high speed during operation, this may cause an injury.
	When the unit is not going to be used for a long time, disconnect the power supply plug or turn off the breaker. <ul style="list-style-type: none"> Otherwise, dirt may collect and this may cause a fire.
	Replace the 2 batteries with new ones of same type. <ul style="list-style-type: none"> Using an old battery together with a new one may result in heat generation, leakage or an explosion.
	If liquid from the batteries gets onto your skin or clothes, wash it well with clean water. <ul style="list-style-type: none"> If liquid from the batteries gets into your eyes, wash them well with clean water and consult a doctor at once.
	Ventilate well in using the unit with a stove, etc. <ul style="list-style-type: none"> An oxygen shortage may occur.
	Do not operate switches with wet hands. <ul style="list-style-type: none"> This may cause an electric shock.
	Do not clean the air conditioner with water. <ul style="list-style-type: none"> Water may enter the unit and degrade the insulation. This may cause an electric shock.
	Do not step or put anything on the indoor/outdoor unit. <ul style="list-style-type: none"> This may cause an injury, etc. if you or something falls down.

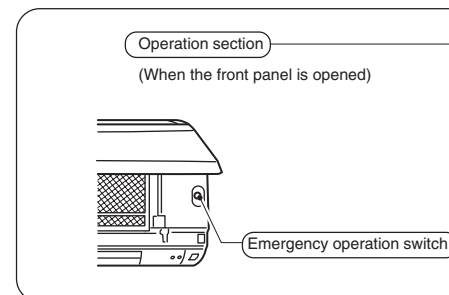
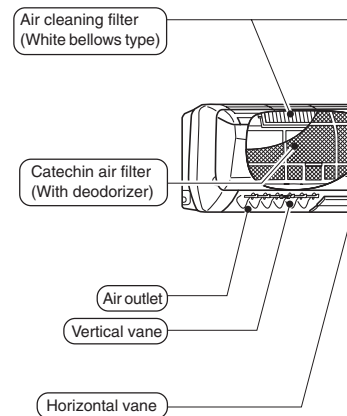
For installation

 WARNING	
<ul style="list-style-type: none"> Consult your dealer for installation of the air conditioner. 	

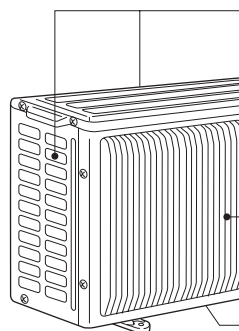
 CAUTION	
	Do not install the unit where flammable gas could leak. <ul style="list-style-type: none"> If gas leaks and collects around the unit, it may cause an explosion.
	Earth the unit. <ul style="list-style-type: none"> Do not connect the earth to a gas pipe, water pipe, lightning rod or the earth of a telephone. If the earthing is incorrect, it may cause an electric shock.
	Install an earth leakage breaker depending on the place where the air conditioner is to be installed (humid places, etc.). <ul style="list-style-type: none"> If the earth leakage breaker is not installed, it may cause an electric shock.
	Drain should be fully drained. <ul style="list-style-type: none"> If the drainage route is incomplete, water may drop from the unit. This may wet and damage the furniture.

NAME OF EACH PART

Indoor unit

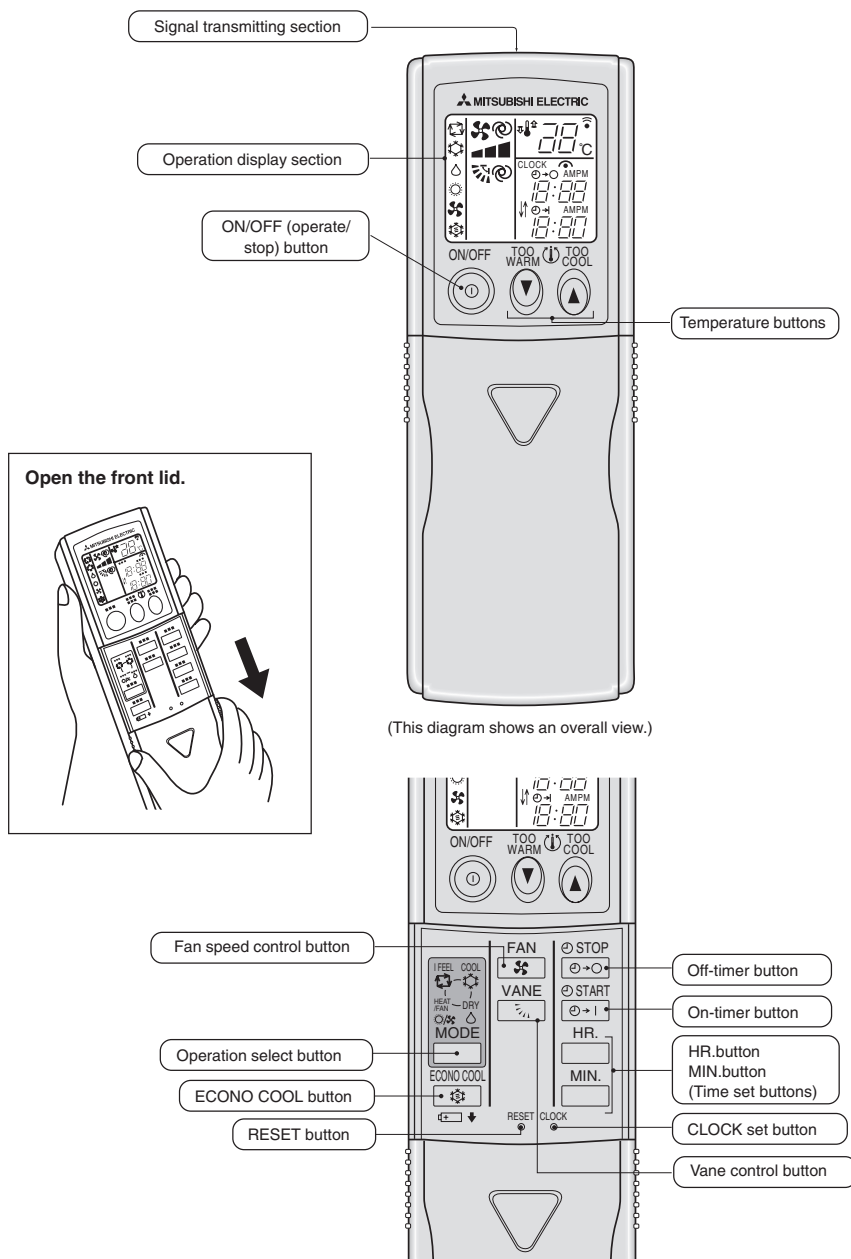


Outdoor unit



NAME OF EACH PART

Remote controller



PREPARATION BEFORE USE

Auto restart function

These models are equipped with an auto restart function. For details, please consult the service representative.

Auto restart function is ...

When the indoor unit is controlled with the remote controller, the current mode is stored in the memory. If a power failure occurs or the power is cut off, the indoor unit automatically starts operating in the same mode as before. (Refer to page 6 for details.)

Indoor unit

Insert the power supply plug into the power outlet.

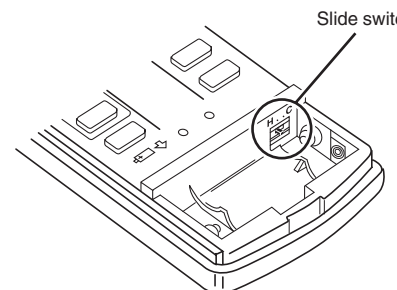
WARNING:

Remove dirt from the power supply plug and insert it into the power outlet. If dirt adheres to the plug or insertion is incomplete, the indoor unit may not operate.

Remote controller

How to set the type

This remote controller setting needs to be set to **COOL & HEAT or COOL ONLY**. If the setting is incorrect, the air conditioner will not operate. The setting corresponds to the type of your indoor unit. See the page below.



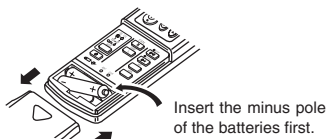
PREPARATION BEFORE OPERATION

Remote controller

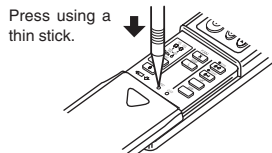
How to set the batteries and the current time

- 1 Remove the front lid and insert batteries. Then reattach the front lid.

Insert the minus pole of the batteries first. Check if the polarity of the batteries is correct.

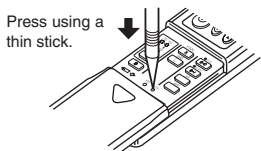


- 2 Press the RESET button.

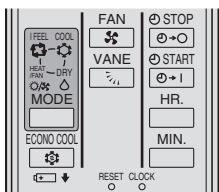


- If the RESET button is not pressed, the remote controller may not operate correctly.

- 3 Press the CLOCK set button.



- 4 Press the **HR.** and **MIN.** buttons (TIME SET buttons) to set the current time.



- Each time the **HR.** button is pressed, the set time increases by 1 hour, and each time the **MIN.** button is pressed, the set time increases by 1 minute.

- 5 Press the CLOCK set button again and close the front lid.

Handling of the remote controller

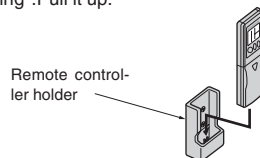
- The range that the signal can reach is about 6 m when the remote controller is pointed at the front of the indoor unit.
- When a button is pressed, one or two beeps will be heard from the indoor unit. If no sound is heard, operate again.
- Use the remote controller carefully. If it is dropped, thrown or it gets wet, the remote controller may not operate.

When installing on a wall, etc.

- Install the remote controller holder in a position where the signal reception sound (beep) can be heard from the indoor unit when the **ON/OFF** button is pressed.

How to install/remove the remote controller

Installing : Insert the remote controller downward.
Removing : Pull it up.



Dry-cell batteries

Reference for replacing batteries

Replace the batteries with new AAA alkaline batteries in the following cases:

- When the indoor unit does not respond to the remote control signal.
- When the display on the remote controller becomes dim.
- When a button of the remote controller is pressed, all displays appear on the screen, and then disappear immediately.

Do not use manganese batteries. The remote controller could malfunction.

- The service life of an alkaline battery is about 1 year. However, a battery whose time limit is approaching may be exhausted soon. The recommended usable time limit is indicated (month/year) on the bottom of the battery.
- To prevent liquid leakage, take out all batteries when the remote controller is not going to be used for a long time.

CAUTION:

If liquid from the batteries gets onto your skin or clothes, wash it well with clean water.

If liquid from the batteries gets into your eyes, wash them well with clean water and consult a doctor at once.

- Do not use rechargeable batteries.
- Replace the 2 batteries with new ones of the same type.
- Dispose of exhausted batteries in the correct manner.

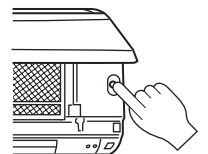
When the remote controller cannot be used

When the batteries of the remote controller run out, the following can be done using the EMERGENCY OPERATION switch.

COOL & HEAT type

- 1 Press the EMERGENCY OPERATION switch.

- Each time the EMERGENCY OPERATION switch is pressed, the unit will operate in order of EMERGENCY COOL MODE, EMERGENCY HEAT MODE and STOP MODE. However, when the EMERGENCY OPERATION switch is once pressed, the unit will operate for 30 minutes and then the operation mode shifts to EMERGENCY MODE.



- Details of EMERGENCY MODE are as shown in the table below. However, the temperature control does not work for 30 minutes in test run and the unit shifts to continuous operation. The fan speed is High in test run and shifts to Medium after 30 minutes.

Operation mode	COOL	HEAT
Set temperature	24°C	24°C
Fan speed	Medium	Medium
Horizontal vane	Auto	Auto

- The operation mode is indicated by the Operation Indicator lamp on the indoor unit as follows.

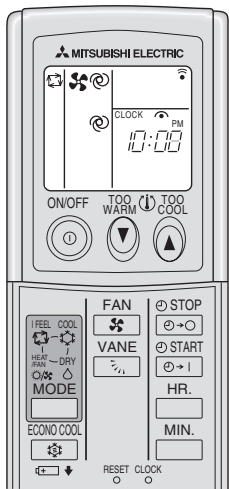
Operation Indicator lamp

EMERGENCY COOL Operation Indicator		<input type="checkbox"/>
EMERGENCY HEAT Operation Indicator		<input type="checkbox"/>
STOP Operation Indicator		<input type="checkbox"/>

- To stop the emergency operation, press the EMERGENCY OPERATION switch once (in case of EMERGENCY HEAT MODE) or twice (in case of EMERGENCY COOL MODE).

I FEEL... AUTO OPERATION

With the “I FEEL...” (I FEEL...)” auto operation mode, the optimum room condition can be set automatically with a one-touch operation.



To start operation:

Press the button.

When the “I FEEL...” mode is selected, the air conditioner is automatically controlled at the optimum temperature.

To stop operation:

Press the button.

If you feel slightly warm:

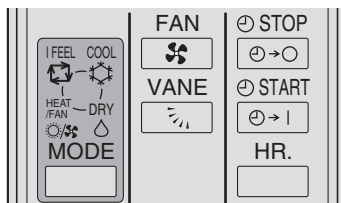
Press the button to lower the temperature.
One press lowers the temperature by about 1°C.

If you feel slightly cool:

Press the button to raise the temperature.
One press raises the temperature by about 1°C.

When “I FEEL...” is not selected, press the button until it is set.

Each time the button is pressed, the operation mode is changed in sequence: I FEEL... → COOL → DRY → HEAT/FAN



Description of “AUTO RESTART FUNCTION”

- These units are equipped with an auto restart function. When the main power is turned on, the air conditioner will start operation automatically in the same mode as the one set with the remote controller before the shutoff of the main power.
- If the unit was set to off with the remote controller before the shutoff of the main power, it will remain stopped even after the main power is turned on.
- If the unit was in the emergency operation before the shutoff of the main power, it will start operation, when main power comes on, in the same mode as the one set with the remote controller before the emergency operation.
- If the unit is operated in “I FEEL...” mode before power failure, the operation mode (COOL, DRY or HEAT) is not stored in the memory. When the main power is turned on, the unit decides the operation mode by the initial room temperature at restart and starts operation again.

Description of “I FEEL...” mode

Details of operation

According to the room temperature when the operation is started, the air conditioner will operate in HEAT. However, when operation is started again with a different operation mode, the operation mode is stopped. The operation mode is selected. The operation mode is selected. If the operation mode does not match the room condition, the operation mode is stopped.

Details of auto operation

	COOL & HEAT type	
Room temperature when started	Operation mode	Target temperature (in °C)
About 25°C or higher	COOL	About 26°C
About 25°C - 23°C	DRY	About 24°C
About 23°C or lower	HEAT	About 24°C

NOTE:

COOL: When the room temperature is 2°C higher than the target temperature, the air conditioner will stop operation and wait until the room temperature drops to the target temperature.

HEAT: When the room temperature is 2°C lower than the target temperature, the air conditioner will stop operation and wait until the room temperature rises to the target temperature.

Details of display on the indoor unit

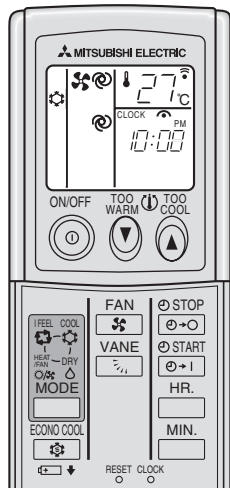
The operation indicator on the right side of the indoor unit displays the operation mode.

Operation Indicator Lighted
Blinking
Not lighted







Operation indicator lamp

Indication	Operation mode
	This shows that the air conditioner has reached the target temperature. Please wait until the target temperature is obtained.
	This shows that the room temperature is not yet at the target temperature.
	(In case of outdoor unit MXZ) Please refer to Information for MXZ (Page 7)

MANUAL OPERATION (COOL, DRY, HEAT/FAN)



To select the COOL, DRY or HEAT/FAN mode:



- 1 Press the  button.
- 2 Select the operation mode by pressing the  button.
Each time this button is pressed, the operation mode is changed in sequence:
 (I FEEL...) →  (COOL) →  (DRY) →  (HEAT/FAN)

HEAT/FAN mode



Check the type of the air conditioner.

Type	Operation mode
COOL & HEAT	HEAT
COOL ONLY	FAN

To stop operation:

- Press the  button.
After the operation mode is set once, the operation starts in the same mode as the one set previously from the next time by simply pressing the  button.

When the set temperature is to be changed:

- Press the  button to lower the temperature. One press lowers the temperature by about 1°C.
- Press the  button to raise the temperature. One press raises the temperature by about 1°C.

In HEAT operation

- If the air conditioner absorbs too much heat from the air, it may be overloaded. Following a judgement made by the microprocessor, the fan in the outdoor unit is automatically stopped to protect the air conditioner. When the outdoor unit's fan is stopped, frost may form on the outdoor unit, but this is not a problem.

In DRY operation

- The temperature control (temperature setting) cannot be done.
- The room temperature is slightly lowered in this operation mode.

The details of the display on the indoor unit are explained on page 6.

NOTE:

When the ambient temperature is too high, the room temperature may not reach the set temperature since the unit operates to cool the room under a high load.

Information for multi system air conditioner (Outdoor unit: MXZ series)

Multi system air conditioner (Outdoor unit: MXZ series) can connect two or more indoor units with one outdoor unit. According to the capacity, two or more units can operate simultaneously.

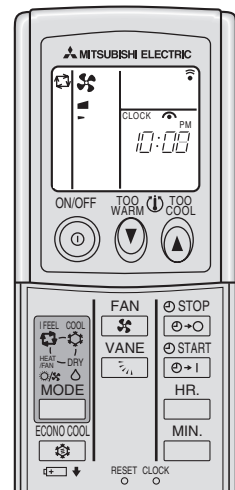
- When you try to operate two or more indoor units with one outdoor unit simultaneously, one for the cooling and the other for heating, the operation mode of the indoor unit that operates earlier is selected. The other indoor units that will start the operation later cannot operate, indicating an operation state. (Refer to the table of Operation Indicator lamp on page 6.) In this case, please set all the indoor units to the same operation mode.
- When indoor unit starts the operation while the defrosting of outdoor unit is being done, it takes a few minutes (max. 10 minutes) to blow out the warm air.
- In the heating operation, the indoor unit that does not operate may get warm or the sound of refrigerant flowing may be heard. This is not a malfunction since the refrigerant continuously flows into the indoor unit that does not operate.

Description of "AUTO RESTART FUNCTION"

Refer to page 6.

AIR FLOW VELOCITY

AIR FLOW velocity and direction can be set.



- To c
- Each
- (L
- U
- If
-
- To c
- VANE
- (A
- Each
- sequ
- (A

SWING

Use the


Recomr

Use the
Use pos
and use
when ac

NOTE:

- In the cooling operation, when the air c , (4) or (5) for 1 hour, the AIR FLOW direc from dropping.
- Adjust the vertical AIR FLOW direction using the cause trouble.
- In the heating operation, if the air flow temperat position is set to " (1).

Auto air flow direction control opera

When the AUTO mode is selected with the  button, the position of the horizontal vane is automatically set to correspond to the operation mode effective operation.

(1) HEAT

- When the air flow temperature is too low, the air is blown out horizontally.
- When the air flow temperature rises, the air is blown out downwards.

(2) COOL, DRY

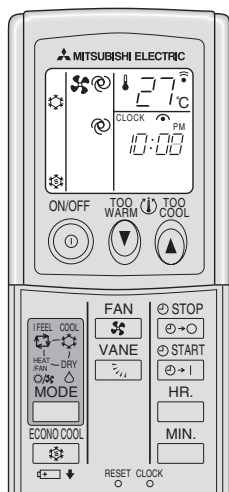
The air is blown out horizontally.

(3) FAN

The air is blown out downwards.


ECONO COOL OPERATION

Use this operation when you want to be comfortable in COOL mode even with energy saved.







Perform the following operations while the unit is operating in the MANUAL COOL mode.

Press the  button.

When the  (ECONO COOL) operation is selected in COOL mode, the air conditioner performs swing operation in various cycle according to the temperature of air conditioner.
Also SET TEMPERATURE is automatically set 2°C higher than in COOL mode.

To release the ECONO COOL operation:

Press the  button again.

- When the  button is pressed or the operation mode is changed during the ECONO COOL operation, ECONO COOL operation is released.
- The  button, the  or  button and ON/OFF timer (explained below) are available.

What is "ECONO COOL"?

Swing air flow (change of air flow) makes you feel cooler than constant air flow. So, even though the set temperature is automatically set 2°C higher, it is possible to perform cooling operation with keeping comfort. As a result, energy can be saved.



TIMER OPERATION (ON/OFF TIMER)



It is convenient to set the timer when you go to bed, when you get home, when you get up, etc.

How to set the ON timer

1 Press the  button during operation.

Each time the button is pressed, the ON timer mode alternates between ON and OFF.

2 Set the time of the timer using the  and  buttons.

Each time the  button is pressed, the set time increases by 1 hour; each time the  button is pressed, the set time increases by 10 minutes.

To release the ON timer:

Press the  button.

Programming timer operation

The ON timer and the OFF timer can be used in combination. The timer of the set time that is reached first will operate first. ("1" mark indicates the order of timer operations.)

- If the current time has not been set, the timer operation cannot be used.



NOTE:



If the main power is turned off or a power failure occurs while AUTO START/STOP timer is active, the timer setting is cancelled. As these models are equipped with an auto restart function, the air conditioner starts operating with timer cancelled at the same time that power is restored.

How to set the OFF timer

1 Press the  button during operation.

Each time the button is pressed, the OFF timer mode alternates between ON and OFF.

2 Set the time of the timer using the  and  buttons.

Each time the  button is pressed, the set time increases by 1 hour; each time the  button is pressed, the set time increases by 10 minutes.

To release the OFF timer:

Press the  button.

WHEN THE AIR CONDITIONER IS USED FOR A LONG TIME

When it is not going to be used for a long time:

1 Perform the FAN operation for 3 or 4 hours to dry the inside of the air conditioner.

COOL & HEAT type:

- To perform FAN operation, set the remote controller to the highest temperature in the MANUAL mode. (Refer to page 7.)

COOL ONLY type:

- Select the FAN mode. (Refer to page 7.)

2 Turn off the breaker and/or disconnect the power supply plug.



CAUTION:

Turn off the breaker or disconnect the power supply when the air conditioner is not going to be used for a long time. Dirt may collect and this may cause a fire.

3 Remove the batteries from the remote controller.

CAUTION:

To prevent liquid leakage, take out all batteries when the remote controller is not going to be used for a long time.

MAINTENANCE

Before starting maintenance

Turn off the breaker and/or disconnect the power supply plug.



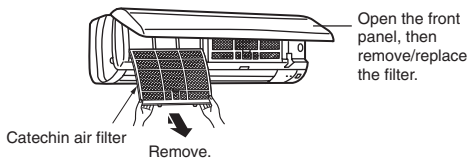
CAUTION:

When the unit is to be cleaned, switch it off and disconnect the power supply plug or turn off the breaker. The fan rotates at high speed during operation, so cause an injury.

CLEANING THE CATECHIN AIR FILTER

Cleaning the catechin air filter (about once every 2 weeks)

1 Remove the catechin air filter.

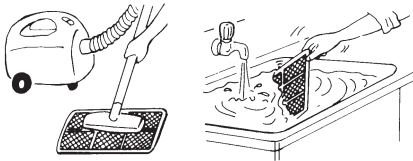


⚠ CAUTION

When the catechin air filter is to be removed, do not touch the metal parts of the indoor unit. This may cause an injury.

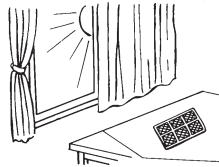
2 Remove dirt from the catechin air filter using a vacuum cleaner or by washing the filter with water.

- If the dirt is noticeable, wash the filter with a solution of mild detergent diluted in lukewarm water.
- If hot water (50 °C or more) is used, the filter may be deformed.

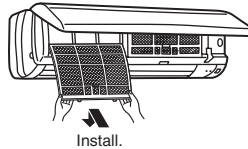


3 After washing with water/lukewarm water, dry the catechin air filter well in the shade.

- Do not expose the catechin air filter to direct sunlight or heat from a fire when drying it.



4 Install the catechin air filter.

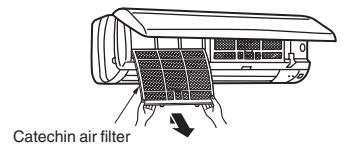


REPLACEMENT OF THE

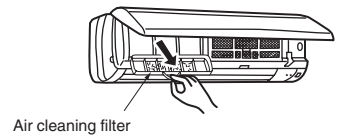
When the capacity is lowered because of d

Air cleaning filter replacement (a

1 Remove the catechin air filter.



2 Remove the air cleaning filter (White be type).



Air cleaning filter

- If the air cleaning filter is clogged, it may lower
- The air cleaning filter is disposable. The standa to dark brown, replace the filter at once.

Optional parts Optional parts are available from

Name of parts	AIR CLEANING FILT
Parts number	MAC-1300FT

What is "Catechin air filter"?

The air filter is dyed with a natural material, catechin, that is contained in tea. The catechin air filter deodorizes odor and noxious gases such as formaldehyde, ammonia, and acetaldehyde. Moreover, it restrains the activity of the viruses adhering to the filter.



BEFORE CONTACTING THE SERVICE REPRESENTATIVE, CHECK THE FOLLOWING AGAIN

Question	Check points or Remedy
The air conditioner cannot be operated.	<ul style="list-style-type: none"> Is the breaker turned on? Is the fuse blown? Is the ON timer set? (Page 8)
The room cannot be cooled or heated sufficiently.	<ul style="list-style-type: none"> Is the temperature setting correct? (Page 7) Is the filter clean? (Page 9) Are there any obstacles blocking the air inlet or outlet of the indoor or outdoor unit? Is a window or door open?
The air from the indoor unit smells strange.	<ul style="list-style-type: none"> Is the filter clean? (Page 9)
The display on the remote controller does not appear or it is dim. The indoor unit does not respond to the remote control signal.	<ul style="list-style-type: none"> Are the batteries exhausted? (Page 5) Is the polarity (+, -) of the batteries correct? (Page 5) Are any buttons on the remote controller of other electric appliances being pressed?
When a power failure occurs.	<ul style="list-style-type: none"> Does the air conditioner start operating again? If the air conditioner had operated before the power failure, as these models are equipped with an auto restart function, the air conditioner should start operating again. (Refer to Description of "AUTO RESTART FUNCTION" on page 6.)

Even if the above items are checked, when the air conditioner does not recover from the trouble, stop using the air conditioner and consult your dealer.

In the following cases, stop using the air conditioner and consult your dealer.

- When water leaks from the indoor unit.
- When the left operation indicator lamp blinks.
- When the breaker trips frequently.
- The remote control signal may not be received in a room where an electronic ON/OFF type fluorescent lamp (inverter-type fluorescent lamp, etc.) is used.
- Operation of the air conditioner may interfere with radio or TV reception in areas where the reception is weak. An amplifier may be required for the affected device.
- When thunder is heard, stop operation and disconnect the power supply plug or turn off the breaker. Otherwise, the electrical parts may be damaged.

WHEN YOU THINK THAT TROUBLE HAS OCCURRED

Question	Answer (not a malfunction)
The air conditioner cannot be operated for about 3 minutes when restarted.	<ul style="list-style-type: none"> This protects the air conditioner according to instructions from the microprocessor. Please wait.
Cracking sound is heard.	<ul style="list-style-type: none"> This sound is generated by the expansion/contraction of the front panel, etc. due to change in temperature.
The air from the indoor unit smells strange.	<ul style="list-style-type: none"> The air conditioner may suck in an odor adhering to the wall, carpet, furniture, cloth, etc. and blow it out with the air.
The fan stops during the DRY operation.	<ul style="list-style-type: none"> In DRY operation, the unit operates using the same refrigerant circuit as in COOL operation. DRY operation time has to be reduced in order to lower humidity without much room temperature decreasing. So the compressor sometimes stops, and at the same time the indoor fan stops. This prevents water condensed on the heat exchanger from evaporating again.
The sound of water flowing is heard.	<ul style="list-style-type: none"> This is the sound of refrigerant flowing inside the air conditioner. This is the sound of condensed water flowing in the heat exchanger. This is the sound of the heat exchanger defrosting.
The sound as burbling is heard.	<ul style="list-style-type: none"> This sound is heard when the outside air is absorbed from the drain hose in turning on the range hood or the ventilation fan and that makes water flowing in the drain hose spout out. This sound is also heard when the outside air blows into the drain hose in case the outside wind is strong.
The room cannot be cooled sufficiently.	<ul style="list-style-type: none"> When a ventilation fan or a gas cooker is used in a room, the cooling load increases, resulting in an insufficient cooling effect. When the outside air temperature is high, the cooling effect may not be sufficient.
Mist is discharged from the air outlet of the indoor unit.	<ul style="list-style-type: none"> The cool air from the air conditioner rapidly cools moisture in the air inside the room, and it turns into mist.

INSTALLATION, RELOCATION AND INSPECTION

Installation place

Avoid installing the air conditioner in the following places.

- Where flammable gas could leak.

⚠ CAUTION:

Do not install the unit where flammable gas could leak. If gas leaks and collects around the unit, it may cause an explosion.

- Where there is much machine oil.
- Salty places such as the seaside.
- Where sulfide gas is generated such as a hot spring.
- Where oil is splashed or where the area is filled with oily smoke.
- Where there is high-frequency or wireless equipment.

⚠ WARNING :

If the air conditioner operates but does not cool or heat (depending on model) the room, consult your dealer since there may be a refrigerant leak. Be sure to ask the service representative whether there is refrigerant leakage or not when repairs are carried out.

The refrigerant charged in the air conditioner is safe. Refrigerant normally does not leak, however, if refrigerant gas leaks indoors, and comes into contact with the fire of a fan heater, space heater, stove, etc., harmful substances will be generated.

Electrical work

- Provide an exclusive circuit for the power supply of the air conditioner.
- Be sure to observe the breaker capacity.

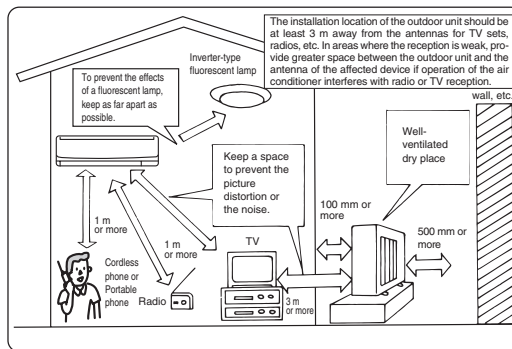
⚠ WARNING :

- **The customer should not install this unit.**

If installation is done incorrectly, it may cause a fire, an electric shock, or injury from the unit falling, water leaking, etc.

- **Do not use intermediate connection of the power supply cord or the extension cord and do not connect many devices to one AC outlet.**

A fire or an electric shock may result from poor contact, poor insulation, exceeding the permissible current, etc. Consult your dealer.



⚠ CAUTION:

- **Earth the unit. Do not connect the earth to a gas pipe, water pipe, etc. If done incorrectly, it may cause an electric shock.**
- **Install an earth leakage breaker depending on the local regulations. If the earth leakage breaker is not installed, it may cause an electric shock.**

Inspection and maintenance

- When the air conditioner is used for several years, an odor may be generated from the dust, etc.
- It is recommended that the unit be inspected and cleaned regularly. Consult your dealer.

Operating sound considerations

- Do not put an object around the air outlet of the indoor unit to prevent the operating sound.
- If an abnormal sound is heard during operation, consult your dealer.

Relocation

- When the air conditioner is to be removed or relocated, the unit and indoor unit are required.

⚠ WARNING :

Repairs or relocation should not be done by the customer. If this is done incorrectly, it may cause a fire, an electric shock, or injury. Consult your dealer.

Disposal

To dispose of this product, consult your dealer.

If you have any

SPECIFICATIONS

Model	Set name		MSH-A07YV		MSH-A09YV		MSH-A12YV		MS-A07YV		MS-A09YV		MS-A12YV			
	Indoor		MSC-A07YV		MSC-A09YV		MSC-A12YV		MSC-A07YV		MSC-A09YV		MSC-A12YV			
	Outdoor		MUH-A07YV		MUH-A09YV		MUH-A12YV		MU-A07YV		MU-A09YV		MU-A12YV			
Function			Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling							
Power supply			~ /N, 230V, 50Hz													
Capacity			kW		2.3	2.5	2.55	3.05	3.5	3.9	2.3		2.55			
Input			kW		0.715	0.69	0.795	0.84	1.09	1.08	0.715		0.795			
Weight			kg		9				10		9					
			kg		35		38		40		34					
Refrigerant filling capacity (R410A)			kg		0.62		1.00		1.00		0.60		0.60			
IP code			Indoor								IP20					
			Outdoor								IP24					
Permissible excessive operating pressure			LP ps		MPa								1.64			
			HP ps		MPa								4.15			
Noise level			Indoor (High/Med./Low)		dB(A)		36/31/25	36/31/25	39/32/25	40/33/26	39/33/26	36/31/25				
			Outdoor		dB(A)		47		49				45			



NOTE



NOTE

This product is designed and intended for use in the residential, commercial and light-industrial environment.

The product at hand is based on the following EU regulations:

- Low Voltage Directive 73/23/ EEC
- Electromagnetic Compatibility Directive 89/336/ EEC