

# **OPERATION MANUAL**

AIR CONDITIONER Duct type



# MODEL:

- \* Please write down the model name. (Refer to the rating label.)
- \* Veuillez inscrire le nom du modèle. (Consultez l'étiquette de côte.)
- \* Anote el nombre del modelo. (Consulte la etiqueta de clasificación.)

Before using this product, read these instructions thoroughly and keep this manual for future reference.

Avant d'utiliser cet appareil, lisez attentivement ces instructions et conservez ce manuel pour toute référence future.

Antes de utilizar este producto, lea atentamente estas instrucciones y conserve este manual para futuras consultas.



FUJITSU GENERAL LIMITED



# **OPERATING MANUAL**

PART No. 9381067244-01 Air Conditioner (Duct type)

# CONTENTS

SAFETY PRECAUTIONS	1
FEATURES AND FUNCTIONS	2
CLEANING AND CARE	2
OPERATING TIPS	
TROUBLESHOOTING	5

# SAFETY PRECAUTIONS

To prevent personal injury, or property damage, read this section carefully before you use this product, and be sure to comply with the following safety precautions. Incorrect operation due to failure to follow the instructions may cause harm or damage, the seriousness of which is classified as follows:

This mark warns of death or serious injury.
This mark warns of injury or damage to property.



This mark denotes an action that is PROHIBITED.

This mark denotes an action that is COMPULSORY.

# 

- This product contains no user-serviceable parts. Always consult authorized service personnel for repairing, installation, and relocation of this product. Improper installation or handling will cause leakage, electric shock, or fire.
  - In the event of a malfunction such as burning smell, immediately stop operation of the air conditioner, and disconnect all the power supply by turning off the electrical breaker or disconnecting the power plug. Then consult authorized service personnel.
  - Take care not to damage the power supply cable. If it is damaged, it should only be replaced by authorized service personnel.
  - In the event of refrigerant leakage, be sure to keep away from fire or any flammables, and consult authorized service personnel.
  - In the event of a thunder storm or any prior sign of a lightning strike, turn off the air conditioner via the remote controller, and refrain from touching the product or the power source to prevent any electrical hazards.
  - This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.

- Do not start or stop the operation of this product by turning on or off the circuit breaker.
- Do not use flammable gases near this product.
- Do not expose yourself directly to the cooling air flow for many hours.
- Do not insert your fingers or any other objects into the outlet port or inlet port.
- Do not operate with wet hands.

# 

- Provide occasional ventilation during use.
- Always operate this product with air filters installed.
- Ensure that any electronic equipment is at least 40 in (1 m) away from either the indoor unit or outdoor unit.
- Disconnect all the power supply when you are not using this product for extended periods.
- After a long period of use, ensure to get the mounting of the indoor unit checked to prevent this product from falling down.
- The airflow direction and the room temperature should be carefully considered when you use this product in a room with infants, children, elderly or sick persons.
- Do not direct the airflow at fireplaces or heating apparatus.
- Do not block or cover the inlet port and the outlet port.
- Do not apply any heavy pressure to radiator fins.
- Do not climb on, place objects on, or hang objects from this product.
- Do not place any other electrical products or household belongings under this product.
   Dripping condensation from this product might get them wet, and may cause damage or malfunction of your property.
- Do not expose this product directly to water.
- Do not use this product for preservation of food, plants, animals, precision equipment, art work, or other objects. This may cause quality deterioration of those items.
- Do not expose animals or plants to the direct air flow.
- Do not drink the drainage from the air conditioner.
- · Do not pull the power supply cable.
- Do not touch the aluminum fins of heat exchanger built-in this product to avoid personal injury when you maintain the unit.
- Do not stand on unstable steps when operating or cleaning this product. It may overturn and can cause injury.

# INVERTER

On start-up, the air conditioner will operate at maximum capacity to bring the room quickly down to desired temperature. Once the temperature in the room begins to achieve the set temperature, the air conditioner will reduce its capacity and energy usage to the minimum capacity and input ratings.

# ECONOMY OPERATION

When Economy operation mode is operated, the room temperature will be a little higher than the set-temp under cooling mode, and lower than the set-temp under heating mode. Therefore, the Economy operation mode is able to save more energy than other normal modes.

## AUTO CHANGEOVER

The operation mode (Cooling, Heating) is switched automatically to maintain the set temperature, and the temperature is kept constant at all times.

## WEEKLY TIMER

Use this timer function to set operating times for each day of the week. Use the Day off setting to switch off timed operation for a selected day in the coming week. Because all days can be set together, the weekly timer can be used to repeat the timer settings for all of the days.

### WIRED REMOTE CONTROLLER (OPTION)

The wired remote controller allows convenient control of indoor unit operation.

## WIRELESS REMOTE CONTROLLER (OPTION)

The optional wireless remote controller can be used.

## WIRELESS LAN CONTROL (OPTION)

The optional wireless LAN control be used.

# CLEANING AND CARE

# 

- Before cleaning the unit, be sure to stop the unit and disconnect the power supply.
  - Turn off the electrical breaker.
  - The fan operates at high speed inside the unit, and could result in personal injury.
  - As filter cleaning involves work in high places, please consult authorized service personnel.
  - Do not expose the unit to liquid insecticides or hairsprays.
- When used for extended periods, the unit may accumulate dirt inside, reducing its performance. We recommend that the unit be inspected regularly, in addition to your own cleaning and care. For more information, consult authorized service personnel.
- When cleaning the unit, do not use water hotter than 104°F (40°C), harsh abrasive cleansers, or volatile agents like benzene or thinner.
- If the unit will not be operated for a period of 1 month or more, be sure to allow the inner parts of the unit to dry thoroughly, in advance, by operating the unit in Fan mode for half a day.

# **I**NOTES

## Filter sign\*

Select appropriate intervals for displaying the filter sign on the indoor unit according to the estimated amount of dust in the air of the room.

Please consult authorized service personnel when using this function.

\*: For detailed instructions on how to operate, please refer to the Operating manual of the remote controller.

# OPERATING TIPS

Instructions relating to heating (\*) are applicable only to Heating and Cooling model (Reverse Cycle).

# Heating performance\*

- This air conditioner operates on the heat-pump principle, absorbing heat from outdoor air and transferring that heat indoors. As a result, the operating performance is reduced as outdoor air temperature drops. Also, please consult with your installation technician to ensure the unit is correctly sized for the room space required.
- Heat-pump air conditioners heat your entire room by recirculating air throughout the room, with the result that some time may be required after first starting the air conditioner until the room is heated.

### When indoor and outdoor temperatures are high\*

When both indoor and outdoor temperatures are high during use of the Heating mode, the outdoor unit's fan may stop at times.

#### Microcomputer-controlled automatic defrosting\*

- When using the Heating mode under conditions of low outdoor temperature and high humidity, frost may form on the outdoor unit, reducing the operating performance. In order to prevent this reduced performance, this product is equipped with a microcomputer-controlled automatic defrosting function. During the defrost cycle, the indoor fan will shut down, and the defrost mode will be indicated. It will take maximum of 15 minutes before the air conditioner starts up again.
- After Heating operation stops, if frost forms on the outdoor unit, the unit will start Automatic defrosting operation. At this time, the outdoor unit will automatically stop after operating for a few minutes.

#### Hot start\*

The indoor unit prevents cold drafts when Heating operation begins.

The indoor unit fan will not operate or it will operate at a very low speed until the heat exchanger reaches the set temperature.

#### Low ambient cooling

When the outdoor temperature drops, the outdoor unit's fans may switch to low speed, or one of the fans may stop intermittently.

## Mode operation

#### Auto

#### Cooling model:

 When AUTO (auto changeover) operation first selected, the fan will operate at very low speed for about a few minutes, during which time the indoor unit detects the room conditions and selects the proper mode. Room temperature is higher than the defined temperature in temperature setting → Cooling mode Room temperature is close to or lower than the defined temperature in temperature setting → Monitor operation



- When the indoor unit has adjusted your room's temperature to near the temperature setting, it will begin monitor operation. In the monitor operation mode, the fan will operate at low speed. If the room temperature subsequently changes, the indoor unit will once again select the appropriate operation (cooling) to adjust the temperature to the value set in the temperature setting.
- If the mode automatically selected by the unit is not what you wish, select one of the mode operation (Cooling, Dry, Fan).

#### Heating and Cooling model (Reverse cycle):

- When AUTO (auto changeover) is selected, the air conditioner selects the appropriate operation mode (Cooling or Heating) according to your room's present temperature.
- When Auto mode is first selected, the fan will operate at low speed for about a few minutes, during which time the indoor unit detects the room conditions and selects the proper operation mode.

Room temperature is higher than the defined temperature in temperature setting  $\rightarrow$  Cooling mode

Room temperature is close to the defined temperature in temperature setting  $\rightarrow$  Determined by outdoor temperature

Room temperature is lower than the defined temperature in temperature setting  $\rightarrow$  Heating mode



 When the air conditioner has adjusted your room's temperature to near the thermostat setting, it will begin monitor operation. In the monitor operation mode, the fan will operate at low speed. If the room temperature subsequently changes, the air conditioner will once again select the appropriate operation (Heating, Cooling) to adjust the temperature to the value set in the thermostat. If the mode automatically selected by the unit is not what you wish, select one of the mode operation (Heating, Cooling, Dry, Fan).

#### Heat\*

- · Use to warm your room.
- When Heating mode is selected, the air conditioner will operate at very low fan speed for about 3 to 5 minutes, after which it will switch to the selected fan setting. This period of time is provided to allow the indoor unit to warm up before beginning full operation.
- When the room temperature is very low, frost may form on the outdoor unit, and its performance may be reduced. In order to remove such frost, the unit will automatically enter the defrost cycle from time to time. During Automatic defrosting operation, the Heating operation will be interrupted.
- After the start of Heating operation, it takes sometime before the room gets warmer.

#### Cool

Use to cool your room.

#### Dry

- Use for gently cooling while dehumidifying your room.
- You cannot heat the room during Dry mode.
- During Dry mode, the unit will operate at low speed; in order to adjust room humidity, the indoor unit's fan may stop from time to time. Also, the fan may operate at very low speed when adjusting room humidity.
- The fan speed cannot be changed manually when Dry mode has been selected.

#### Fan

Use to circulate the air throughout your room.

# **I**NOTES

## \*During Heating mode:

Set the thermostat to a temperature setting that is higher than the current room temperature. The Heating mode will not operate if the thermostat is set lower than the actual room temperature.

#### During Cooling/Dry mode:

Set the thermostat to a temperature setting that is lower than the current room temperature. The Cooling and Dry modes will not operate if the thermostat is set higher than the actual room temperature (in Cooling mode, the fan alone will operate).

#### **During Fan mode:**

You cannot use the unit to heat or cool your room.

#### Economy operation

At the maximum outlet, Economy operation is approximately 70 % of normal air conditioner operation for cooling and heating.

If the room is not cooled (or heated), well during Economy operation, select normal operation.

#### Fan speed

Controls the fan speed.

AUTO --- HIGH --- MED --- LOW --- QUIET

When AUTO is selected, the fan speed is automatically adjusted according to the operation mode.

- Heating\*: The fan will operate at very low speed when the temperature of the air issued from the indoor unit is low.
- Cooling: As the room temperature approaches that of the set temperature, the fan speed becomes slower. Fan: The fan runs at medium fan speed.

#### Auto restart

#### In Event of Power Interruption

- Should the power supply to the air conditioner be interrupted by a power failure, the air conditioner will restart automatically in the previously selected mode once the power is restored.
- Use of other electrical appliances (electric shaver, etc.) or nearby use of a wireless radio transmitter may cause the air conditioner to malfunction. In this event, temporarily disconnect the power supply, reconnect it, and then use the remote controller to resume operation.

#### Multiple remote controller (optional)

An additional remote controller can be added up to the maximum of two remote controllers. Either remote controller can control the air conditioner. However, the timer functions cannot be used at the secondary unit.

#### Group control

One remote controller can control up to 16 air conditioners. All of the air conditioners will be operated with the same settings.

#### Firmware update (optional)

When using the wireless LAN control, the firmware will be updated as necessary.

# 

Do not pull out the power plug nor turn off the circuit breaker during the firmware update of the indoor unit or WLAN adapter. It may cause malfunction.

#### For WLAN adapter

The firmware of the WLAN adapter may be updated automatically.

During the updating, you cannot operate the air conditioner from the mobile app. It will take for a maximum of 5 minutes.

# For indoor unit

The firmware of the indoor unit may be updated. You can set the schedule of the updating or update the firmware manually from the mobile app. For details, refer to the operation manual for the mobile app.

During the updating, the air conditioner stops the operation. It will take for a maximum of 30 minutes.

#### Notices

- \*• During use of the Heating mode, the outdoor unit will occasionally commence the defrost operation for brief periods. During the defrosting operation, if the user sets the indoor unit for heating again, the defrosting mode will continue, and the Heating operation will begin after completion of defrosting, with the result that some time may be required before warm air is emitted.
- \*• During use of the Heating mode, the top of the indoor unit may become warm, but this is due to the fact that coolant is circulated through the indoor unit even when it is stopped; it is not a malfunction.

# TROUBLESHOOTING

# 

In following events, immediately stop operation of the air conditioner, and disconnect all the power supply by turning off the electrical breaker or disconnecting the power plug. Then consult your dealer or authorized service personnel. As long as the unit is connected to the power supply, it is not insulated from the power supply even if the unit is turned off.

- · Unit smells of something burning or emits smoke
- · Water leaks from the unit.

## Does not operate at all.

- Has there been a power outage?
   In this case, the unit restarts automatically after the power supply is resumed. (Refer to page 4.)
- □ Has the circuit breaker been turned off?
- $\Rightarrow$  Turn on the circuit breaker.
- Has a fuse blown out or the circuit breaker been tripped?
  - $\Rightarrow$ Replace the fuse or reset the circuit breaker.
- □ Is the timer operating?
  - $\Rightarrow$  To check or deactivate the timer setting, Refer to the operation manual of the remote controller.
- Solution 
  Sol
- During the firmware update of the WLAN adapter, you cannot operate the air conditioner from the mobile app. Operate from the remote controller or wait until the update is complete (for a maximum of 5 minutes).
- </l

conditioner stops the operation. Wait until the update is complete. (for a maximum of 30 minutes).

# Poor cooling or heating performance.

- Is the unit operating under the conditions except the permissible temperature range?
   In this case, the air conditioner may stop because of the automatic protection circuit working.
   Is the air filter dirty?
- $\Rightarrow$  Clean the air filter. (Refer to **page 2**.)
- Is the intake grille or outlet port of indoor unit blocked?
- $\Rightarrow$  Remove the obstructions.
- □ Is the room temperature adjusted appropriately?  $\Rightarrow$  To change the setting temperature, refer to the
- operation manual of the remote controller.
- □ Is a window or door left opened?  $\Rightarrow$  Close the window or the door.
- $\Rightarrow$  close the window of the do
  - ⇒ To change the fan speed, refer to the operation manual of the remote controller.
- In the Cooling mode> Is direct or strong sunlight shining into the room?
  - $\Rightarrow$  Close the curtains.
- In the Cooling mode> Are there other heating apparatus or computers operating, or too many people in the room?
  - $\Rightarrow\,$  Turn the heating apparatus or computers off, or set the temperature lower.
- Is the air conditioner in Economy mode?

# Airflow is weak or stops.

- □ Is the fan speed set to Quiet?
  - $\Rightarrow\,$  To change the fan speed, refer to the operation manual of the remote controller.
- Has the Fan control for energy saving set? In this case, the indoor unit fan may stop temporarily while the Cooling operation.
  - $\Rightarrow$  To cancel the Fan control for energy saving, refer to the operation manual of the remote controller.
  - \* This function cannot be deactivated when the fan speed is set to Auto.
- In the Heating mode> Have you just started the operation?

In this case, the fan rotates at very low speed temporarily to warm up the internal parts of the unit.

In the Heating mode> Is the room temperature higher than the set temperature? In this case, the outdoor unit stops and the indoor unit

fan rotates at very low speed.

- In the Heating mode> Is the Automatic defrosting operation working? In this case, the indoor unit stops for maximum of 15 minutes. (Refer to page 3.)
- In the Dry mode> The indoor unit operates at low fan speed to adjust the room humidity, and may stop from time to time.
- In the Auto mode> While the monitoring operation, the fan rotates at very low speed.

### Humidity does not drop.

- In the Dry operation> If the setting temperature is high, the humidity may not drop.
  - $\Rightarrow$  To lower the humidity, lower the setting temperature.

## Noise is heard.

□ Is the unit operating, or immediate after stopping operation?

In this case, refrigerant flowing sound may be heard. It may be particularly noticeable for 2-3 minutes after starting operation.

In the Heating mode> Do you hear a sizzling sound? This sound is produced by the Automatic defrosting operation.(Refer to page 3.)

## Smell coming from the unit.

The air conditioner may absorb various smells generated from interior textile, furniture, or cigarette smoke. These smells may be emitted during the operation.