DAIKIN

DAIKIN ROOM AIR CONDITIONER

OPERATION MANUAL AND INSTALLATION MANUAL

English

عربي

MODELS

- ☑ FT18HEVLK
- ☑ FT24HEVLK
- ☑ FT30HEVLK
- ☑ FTY18HEVLK
- ☑ FTY24HEVLK
- ☑ FTY30HEVLK

English

◆CONTENTS

OPERATION MANUAL

INSTALLATION MANUAL

This symbol stands for the items which are forbidden.

This symbol stands for the items which must be followed.

Thank you for purchasing this DAIKIN air conditioner. Before use, carefully read this owner's manual and keep it in a safe place for future reference.

The product in this manual may differ from the model you have purchased. Some models do not have a display. Please refer to the model you have for the correct position and shape of the display.

This appliance should not be operated by people who have reduced physical, sensory or mental capabilities. People who have no experience using this air conditioner should read and understand the manual before operation, or be supervised by a knowledgeable person. Children should be supervised to ensure that they do not play with the appliance.

Do not dispose of this product as unsorted municipal waste. Such waste must be collected separately for special treatment.

Safety Precautions

- Keep this manual where the operator can easily find them.
- Read this manual attentively before starting up the unit.
- For safety reason the operator must read the following cautions carefully.
- This manual classifies precautions into WARNING and CAUTION. Be sure to follow all precautions below: they are all important for ensuring safety.

⚠ WARNING	⚠ CAUTION
If you do not follow these instructions exactly, the unit may cause property damage, personal injury or loss of life.	If you do not follow these instructions exactly, the unit may cause minor or moderate property damage or personal injury.

Never do.

Be sure to earth the air conditioner.

Never touch the air conditioner (including the remote controller) with a wet hand.

Be sure to follow the instructions.

Never cause the air conditioner (including the remote controller) to get wet.

⚠ WARNING

- In order to avoid fire, explosion or injury, do not operate the unit when harmful, among which flammable or corrosive gases, are detected near the unit.
- It is not good for health to expose your body to the air flow for a long time.
- Do not put a finger, a rod or other objects into the air outlet or inlet. As the fan is rotating at a high speed, it will cause injury.
- Do not attempt to repair, relocate, modify or reinstall the air conditioner by yourself. Incorrect work will cause electric shocks, fire etc.
  For repairs and reinstallation, consult your Daikin dealer for advice and information.

- The refrigerant used in the air conditioner is safe. Although leaks should not occur, if for some reason any refrigerant happens to leak into the room, make sure it does not come in contact with any flame as of gas heaters, kerosene heaters or gas range.
- If the air conditioner is not cooling properly, the refrigerant may be leaking, so call your dealer. When carrying out repairs accompanying adding refrigerant, check the content of the repairs with our service staff.
- Do not attempt to install the air conditioner by your self. Incorrect work will result in water leakage, electric shocks or fire. For installation, consult the dealer or a qualified technician.
- In order to avoid electric shock, fire or injury, if you detect any abnormally such as smell of fire, stop the operation and turn off the breaker. And call your dealer for instructions.

⚠ CAUTION

- The air conditioner must be earthed. Incomplete earthing may result in electric shocks. Do not connect the earth line to a gas pipe, water pipe, lightening rod, or a telephone earth line.

- In order to avoid any quality deterioration, do not use the unit for cooling precision instruments, food, plants, animals or works of art.
- Never expose little children, plants or animals directly to the air flow.
- Do not place appliances which produce open fire in places exposed to the air flow from the unit or under the indoor unit. It may cause incomplete combustion or deformation of the unit due to the heat.
- Do not block air inlets nor outlets. Impaired air flow may result in insufficient performance or trouble.

- Do not stand or sit on the outdoor unit. Do not place any object on the unit to avoid injury, do not remove the fan guard.
- Do not place anything under the indoor or outdoor unit that must be kept away from moisture. In certain conditions, moisture in the air may condense and drip.
- After a long use, check the unit stand and fittings for damage.
- Do not touch the air inlet and aluminum fins of outdoor unit. It may cause injury.
- The appliance is not intended for use by young children or infirm persons without supervision.
- Young children should be supervised to ensure that they do not play with the appliance.

- To avoid oxygen deficiency, ventilate the room sufficiently if equipment with burner is used together with the air conditioner.

- Before cleaning, be sure to stop the operation, turn the breaker off or pull out the supply cord.
- Do not connect the air conditioner to a power supply different from the one as specified. It may cause trouble or fire.
- Depending on the environment, an earth leakage breaker must be installed. Lack of an earth leakage breaker may result in electric shocks.
- Arrange the drain hose to ensure smooth drainage. Incomplete draining may cause wetting of the building, furniture etc.
- Do not place objects in direct proximity of the outdoor unit and do not let leaves and other debris accumulate around the unit.
  Leaves are a hotbed for small animals which can enter the unit. Once in the unit, such animals can cause malfunctions, smoke or fire when making contact with electrical parts.

- Do not operate the air conditioner with wet hands.

- Do not wash the indoor unit with excessive water, only use a slightly wet cloth.
- Do not place things such as vessels containing water or anything else on top of the unit. Water may penetrate into the unit and degrade electrical insulations, resulting in an electric shock.

Installation site.

■ To install the air conditioner in the following types of environments, consult the dealer.

- Places with an oily ambient or where steam or soot occurs.
- Salty environment such as coastal areas.
- Places where sulfide gas occurs such as hot springs.
- Places where snow may block the outdoor unit.

The drain from the outdoor unit must be discharged to a place of good drainage.

Consider nuisance to your neighbours from noises.

■ For installation, choose a place as described below.

- A place solid enough to bear the weight of the unit which does not amplify the operation noise or vibration.
- A place from where the air discharged from the outdoor unit or the operation noise will not annoy your neighbours.

Electrical work.

- For power supply, be sure to use a separate power circuit dedicated to the air conditioner.

System relocation.

- Relocating the air conditioner requires specialized knowledge and skills. Please consult the dealer if relocation is necessary for moving or remodeling.

◆Introduction to basic functions

Basic cooling functions

Air conditioner function:

To bring the ambient temperature to a comfortable level, the air conditioner absorbs heat from inside the room and discharges it outside.

Anti-freezing function:

If the unit is running in COOL mode and in low temperature, there will be frost formed on the heat exchanger, when indoor heat exchanger temperature decreased below 0°C, the indoor unit microcomputer will stop compressor running and protect the unit.

Basic heating functions

Heating function:

* Heat is generated from the outdoor unit is discharged inside to increase the temperature of the room. The heating effect will decrease in very cold outdoor conditions.
* If outside temperatures become very low, it may be necessary to use additional heating equipment.

Defrosting:

* When the unit is on for long periods of time and outside temperatures are low with high humidity, frost will form on the outdoor unit. The auto defrosting function will start, and the heat will stop for 8-10 minutes.
* During auto defrosting the fan motors will stop.
* During defrosting the indoor indicator light flashes and the outdoor unit will possibly give off some water vapor. This is not a malfunction.
* After defrosting is complete, heating will start automatically.

◆Introduction to basic functions

Anti-cool wind function:

To prevent cool wind from blowing in Heat mode, the indoor fan will not start if the indoor heat exchanger has not reached the correct temperature within 2 minutes. The anti-cool wind function operates in these conditions:

1. When Heating starts.
2. After Auto Defrost is complete.
3. When temperatures are low.

Gentle Breeze:

The indoor unit may blow a gentle breeze, and the guide louver rotate when:

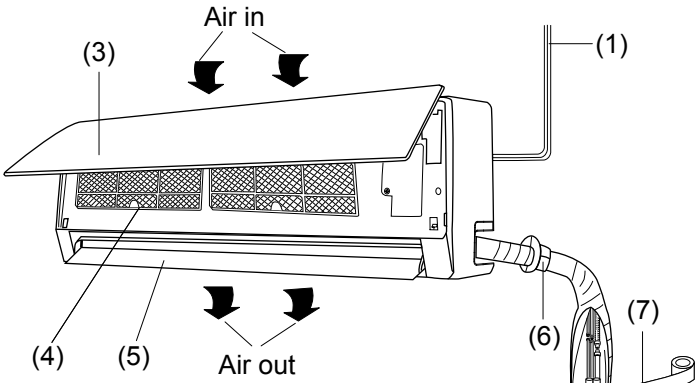
1. When the unit is turned on in Heat mode and the compressor has not started.
2. In Heat mode, when the unit has not reached the correct temperature and the compressor is stopped.

* Working temperature range		
	Indoor DB/WB (°C)	Outdoor DB/WB (°C)
Maximum cooling	32/23	52/31
Minimum cooling	21/15	18/ –
Maximum heating	27/ –	24/18
Minimum heating	20/ –	–7/–8

The operating temperature range (outdoor temperature) for the cooling unit is 21°C - 52°C; for the cooling and heating unit –7°C - 52°C.

◆Description of parts

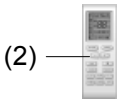
Indoor unit



Symbol shown on the display:

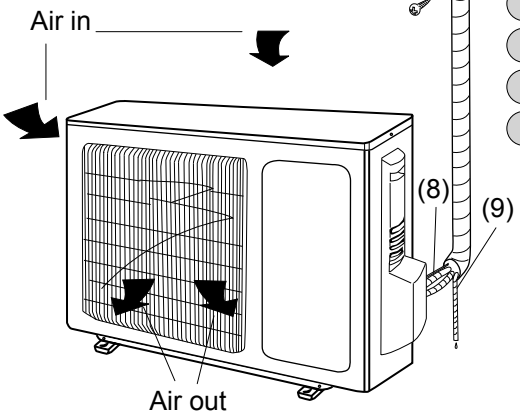
: Run

: Timer



Remote controller

Outdoor unit



(1) Power cable
(2) Remote controller
(3) Front panel
(4) Air filter
(5) Guide louver
(6) Wall pipe
(7) Bind tape
(8) Connection wire
(9) Drainage pipe

◆Remote control operation

Description of remote control functions

Note: Make sure there are no obstructions between the receiver and remote controller. Do not drop or throw the remote controller. Do not allow liquid to get on the remote controller. Do not put the remote controller in direct sunlight or places that are hot.

Signal transmitter

Remote controller

ON/OFF

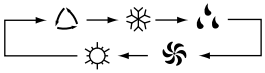
ON/OFF button

- Press this button, the unit will be turned on, press it once more, the unit will be turned off. The Timer and Sleep functions are canceled when the unit is turned on or off, but preset times are kept.

MODE

MODE button

- Press the MODE button to select Auto, Cool, Dry, Fan, or Heat modes. While the power is on the default mode is Auto. In Auto mode, the temperature is not displayed. In Heat mode the initial temperature is 28°C (82°F). In other modes the initial temperature is 25°C (77°F).



AUTO
COOL
DRY
FAN
HEAT
(for cooling and heating units only)

SLEEP

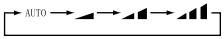
SLEEP button

- Press the SLEEP button to select Sleep On and Sleep Off. The default setting is Sleep Off. After the unit is turned off, the Sleep function is canceled. After the Sleep function has been set up, the Sleep symbol will show on the display. The timer can be adjusted in this mode. In Fan and Auto modes, this function is not available.

FAN

FAN button

- Press the FAN button to set the fan speed. Auto, Low, Middle, or High speed can be selected. The default fan speed is Auto. In Dehumidify mode, only Low fan speed can be selected.



Low Middle
High

Note: The fan speed is not adjustable in Dry mode.

CLOCK

CLOCK button

- Press the CLOCK button to set the clock. 🕘 will blink and in 5 seconds, it can be set by pressing the + or – buttons. Press and hold this button for 2 seconds or more and for each half second held, the tenth place numeral will increase by 1. While 🕘 is blinking, press the CLOCK button again to accept and keep the setting. After the unit powered on, 12:00 is the default setting. The 🕘 symbol usually indicates the current time. It displays the hour set for the timer function only when the timer is set.

LIGHT

LIGHT button

- Press the LIGHT button to turn the light on or off. When the LIGHT is turned on 💡 will show and the display indicator light will be on. When the LIGHT is turned off the 💡 will show and the display indicator light will be off.

◆Remote control operation

Description of remote control functions

Notice: This remote controller is for general use and can be used for multifunction air conditioners. Some functions are not available on certain models, and even if the corresponding button for such functions on the remote controller is pressed, the unit will be operating at the current running status.

Remote controller

+

+ button

- Press this button to increase the preset temperature. Press and hold this button for more than 2 seconds will quickly increase the increments of temperature. When the button is released the current temperature °C (°F) is shown. In Auto mode, the temperature can not be set. Celsius temperature range: 16-30°C. Fahrenheit temperature range: 61-86°F.

–

– button

- Press this button to decrease the preset temperature. Press and hold this button for more than 2 seconds will quickly decrease the increments of temperature. When the button is released the current temperature °C (°F) is shown. In Auto mode, the temperature can not be set.

BLOW

BLOW button

- Press the BLOW button to turn the drying function on or off.
  When you press this button in Cool and Dehumidifying mode BLOW appears to show that the Blow function is on. When the button is pressed again BLOW will disappear and the Blow function will turn off.
  The default the Blow setting is OFF. When operating the ON/OFF button, or switching to Cool or Dehumidifying mode, the Blow function setting will be kept. In Auto, Fan, or Heat modes, BLOW does not appear and the Blow function can not be set up.

TEMP

TEMP button

- After the unit is powered on, the preset temperature is displayed. If no icon is shown on the remote controller, the preset temperature is displayed.
  When ⌂ is displayed by pressing this button, it indicates the preset temperature. When ⌂ is displayed by pressing this button again, it indicates the indoor ambient temperature. When ⌂ is displayed by pressing this button one more time, the currently displayed item will be maintained.
  If the remote controller is used to execute other operations while the indoor ambient temperature is displayed, the preset temperature will be displayed once and then the indoor ambient temperature will be displayed after 5 seconds.

TURBO

TURBO button

- In Cool or Heat mode, press this button can turn on or turn off the Turbo function. After turned on the Turbo function, its signal will be displayed. When switching the mode or changing fan speed, this function will be canceled automatically.

◆Remote control operation

Description of remote control functions

Notice: This remote controller is for general use and can be used for multifunction air conditioners. Some functions are not available on certain models, and even if the corresponding button for such functions on the remote controller is pressed, the unit will be operating at the current running status.

Remote controller

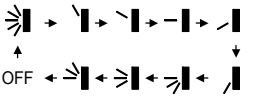
TIMER ON

TIMER ON button

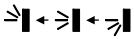
- **When this button is pressed, the ◴ symbol will disappear and the "ON" symbol will blink. The displayed numbers will indicate the Timer-On Setting status. While the "ON" symbol is blinking for 5 seconds, set the timer to the desired time by pressing either the "+" or the "–" button.**
  Each time the button is pressed, the number will increase or decrease by 1 minute. If the "+" or "–" button is pressed for 2 or more seconds, the value will change quickly in increments of 10 minutes.
  After you finish setting the timer, press this button again. If the timer setting is not completed while the "ON" symbol is blinking for 5 seconds, the setting will be cancelled.
  Before setting the timer, please adjust the clock to the current time.

SWING UP and DOWN button

- **Press this button to set a desired swing angle.**



This is a universal remote controller. The three kinds of swing status on main unit are:



If the swing function is turned off when the guide louver is swinging it will stop at its current position.

The symbol indicates the guide louver is swinging up and down in all five positions.

TIMER OFF

TIMER OFF button

- **Press this key one time to enter the TIMER OFF setup. The TIMER OFF icon will blink. The setting procedure is the same as TIMER ON.**

◆Remote control operation

General Operation

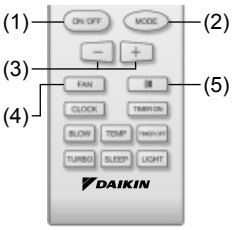
(1) Turn the power on and press the ON/OFF button to start/stop operation.
(Note: When the unit is powered off, the main unit's guide louver closes automatically.)

(2) Press the MODE button to select a desired operation mode, or enter COOL or HEAT operation modes directly.

(3) Press + or – button to set the desired temperature (not available in AUTO mode).

(4) Press the FAN button to set the fan speed. (AUTO, LOW, MID, HIGH)

(5) Press button to select the swing angle.



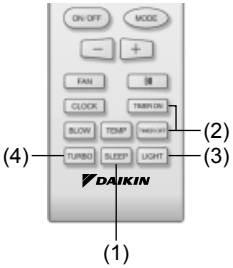
Options

(1) Press SLEEP button to set to sleep mode.

(2) Press TIMER ON and TIMER OFF button to set the scheduled timer ON/OFF.

(3) Press the LIGHT button to turn the LIGHT ON/OFF. (This function is not available on some units.)

(4) Press the TURBO button to turn the TURBO function ON/OFF.



Special functions

■ **Blow function**
After the unit is stopped, this function blows moisture off the indoor unit's evaporator to prevent mould.

1. Blow function on: After turning off the unit, the indoor fan operates for about 10 minutes at low speed. At this time, you can press the blow button to stop the indoor fan.
2. Having set blow function off: After turning the unit off by pressing the ON/OFF button, the blow function will stop running.

■ **AUTO RUN**
When AUTO RUN mode is selected the temperature setting does not show on the LCD.
The unit automatically selects a suitable operation mode and adjusts to create a comfortable ambient temperature.

■ **Turbo function**
The turbo function operates the fan at high speed to bring the ambient temperature up to the preset temperature as quickly as possible.

◆Remote control operation

■ **Lock**

Press + and – buttons simultaneously to lock or unlock the keyboard. If the remote control is locked, 🔒 is shown. Press any button and the symbol will flicker three times. The symbol disappears when the keyboard is unlocked.

■ **Swing Up/Down**

1. Pressing the swing up and down button for more than 2 seconds starts the main unit swing up and down function. Release the button to stop the guide louver at the desired position.
2. In Swing mode when the status is changed from off to ⇶, if you press this button again 2 seconds later ⇶ status will change to off. The swing status change depends on the position of the swing.

■ **Fahrenheit/Celsius**

When the unit is off, press MODE and "–" buttons simultaneously to switch between °C and °F.

■ **Defrost mode**

If the unit has been in defrost and is turned off with the remote controller, the unit will not stop until defrosting is complete. Additionally, settings made with the remote controller will not be carried out until defrosting is complete.

Switching this function on/off: If the remote control is off, press the mode and blow buttons simultaneously to enter or cancel this function. If the unit is in defrost mode, the dual eight position on the remote controller displays H1. When changing to heat mode, H1 is displayed and flickers for 5 seconds. Press +/– button to display the temperature setting. When turned on next, the default defrost mode will be set to close.

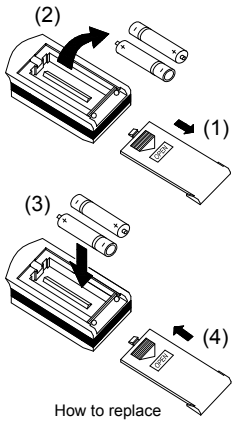
Battery replacement

(1) Push lightly on the symbol in the direction of the arrow and open the battery compartment.

(2) Remove the old batteries.

(3) Insert two new AAA1.5V dry batteries with the polarity in the correct position.

(4) Attach the back cover of the remote controller.



How to replace batteries

■ **NOTE:**

- Do not use old or unspecified batteries. Doing so can cause the remote controller to malfunction.
- Remove the batteries from the remote controller when it is not in regular use.
- Use the remote controller within receiving range of the AC.
- Keep the remote controller approximately 1m away from TV or stereo equipment.
- If the remote controller does not operate correctly, remove the batteries, wait 30 seconds, and reinsert them. Replace the batteries if this does not help.

◆ Emergency operation

Indicator light control (indoor unit)

Use this feature to turn the indicator light on or off.

- Turn indicator light on: The symbol displayed on the remote controller shows when the indicator light has been turned on.
- Turn indicator light off: The symbol displayed on the remote controller disappears when the indicator light has been turned off.

Emergency operation

Use the manual switch if the remote controller is lost or broken. The unit will run in Auto mode, but the temperature and fan speed can not be changed.

To use the manual switch:
Open the panel and find the manual switch on the display box.

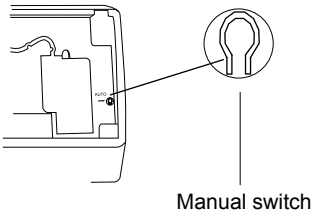


Fig. 3

- Turn on the unit: Press the power button to start operation. The unit will operate in Auto mode. The microcomputer adjusts the indoor temperature to a comfortable level.
- Turn off the unit: Press the power button to stop operation.

◆Cleaning and maintenance

CAUTION

- Make sure to the turn power off and disconnect the power plug before cleaning the air conditioner to prevent the risk of electric shock.
- Do not put water directly on surfaces of the indoor or outdoor units. There is a risk of electric shock.
- Flammable liquids (thinner, gasoline, etc.) will damage the air conditioner. (Clean the units with a dry soft cloth, or a cloth dampened with water, or gentle cleanser.)

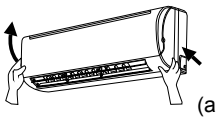
Clean the front panel

Clean the front panel with a damp cloth and wipe dry.
Note: Do not immerse the front panel in water. Doing so can cause damage to the microcomputer components and circuit diagrams on the front panel.

Clean the air filter (Recommended once every three months)

NOTE: The air filters must be cleaned regularly if there is a lot of dust around the air conditioner. After you remove the air filter, be careful not to touch the fin on indoor unit to prevent injury to your fingers.

(1) Remove the air filter
At the opening of the front panel pull the air filter downward to remove it. See Fig. 4 (a, b).


(a)

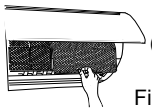
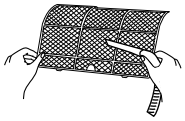

(b)

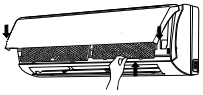
Fig. 4

(2) Clean the air filter
Remove dust from the air filters with a vacuum cleaner, or wash with warm water (water with neutral detergent below 45°C). Dry air filters in the shade.

NOTE: Do not use water above 45°C. Doing so can cause deformation or discoloration. Keep away from sparks or flame, which can start a dangerous fire.

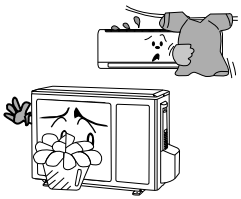


(3) Insert the air filter
Insert the air filters to agree in the direction of the arrow symbol, replace cover, and clasp in position.



◆Cleaning and maintenance

Check before use



(1) Make sure nothing blocks the air outlet and intake vents.

(2) Make sure the ground wire is properly connected.

(3) Make sure the air conditioner’s batteries are changed.

(4) Make sure the outdoor unit's installation stand is not damaged. If it is damaged, please contact your dealer.

Maintenance after use

(1) Turn main power off.

(2) Clean the air filter and the exterior of the indoor and outdoor units.

(3) Remove all dust and debris from the outdoor unit.

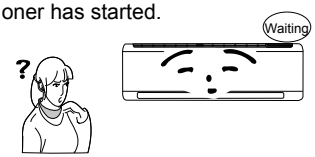
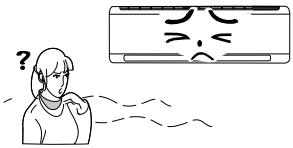
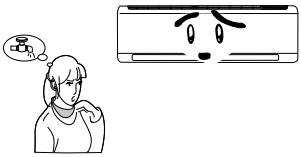
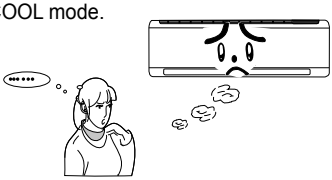
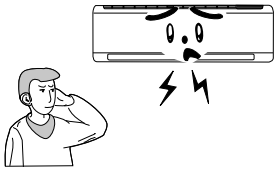
(4) Paint over rusted areas on the outdoor unit to prevent the rust from spreading.

(5) Use the special shield to guard against rust and to prevent water and dust from entering the unit.

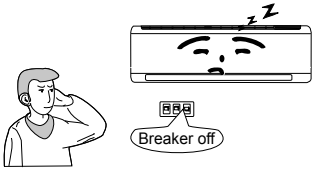
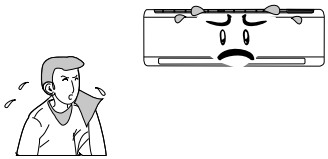
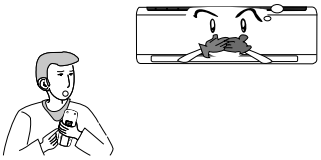
◆Troubleshooting

CAUTION

Do not try to repair the air conditioner; there is danger of electric shock or fire. Please refer to the troubleshooting section before requesting service; you may be able to save time and money.

Condition	Troubleshooting
There is a delay in operation after the air conditioner has started. 	• As a precaution, operation cannot be resumed for approximately 3 minutes after the air conditioner has stopped.
An unusual smell is coming from the air conditioner. 	• This unit does not have any particular odour. If you detect an odour, it will be the odour of accumulated substances. • Solution method: Cleaning the air filter. If the problem persists, the air conditioner requires further cleaning. (Please contact an authorized maintenance center.)
Sound of water flowing heard during operation. 	• When the air conditioner is started or stopped, the compressor starts and sometimes creates gurgling sounds. The sounds are caused by the flowing of refrigerant.
Sometimes mist comes out of the air outlet vent in COOL mode. 	• If indoor temperatures and relative humidity are high, this can happen when air in the room is cooled down too quickly. Indoor temperatures and humidity will decrease after operating for a while.
Creaking noise heard during start or stop. 	• This is caused by deformation of the plastic due to changes in temperature.

◆Troubleshooting

Condition	Troubleshooting
The unit does not operate. 	• Make sure the power is on. • Make sure the power cord is connected. • Make sure the circuit protection device has not been tripped. • Voltage maybe too high or too low. (To be tested by professionals only) • Make sure the TIMER is being used correctly.
Cooling (Heating) effect is not sufficient. 	• Check the temperature setting. • Make sure inlet and outlet vents are not blocked? • The air filter may be dirty. • Make sure windows and doors are closed. • The fan speed may be set too low. • Other contributing sources of heat/cold.
Remote controller does not operate. 	• If the unit functions are too frequently switched, sometimes the controller will not operate. At this time, disconnect the plug, connect again and try to start operation. • Make sure the remote controller is within range. Check for obstructions. Replace the batteries in the remote controller. • The remote controller may be damaged.
Water leakage in the room.	• High relative humidity • Condensed water • The indoor unit drainage pipe connection is loose.
Water leakage is coming from the outdoor unit.	• When the unit operates in COOL mode, the pipe and connection are cooled down which creates condensed water. • When the unit operates in Auto Defrost mode ice thaws into water. • When the unit operates in HEAT mode water on the heat exchanger drips off.
Noise is coming from the indoor unit.	• The sound comes from the fan or compressor relay switching on or off. • When defrosting is started or stopped this sound is given out. Refrigerant flowing in the reverse direction causes this to happen.

◆Troubleshooting

Condition	Troubleshooting
Indoor unit does not deliver air.	• In HEAT mode, air delivery is delayed until the indoor heat exchanger reaches the correct temperature. (Within 2 minutes.) • In HEAT mode, when the outdoor temperature is cold, frost on the outdoor heat exchanger is defrosted automatically and the indoor unit stops delivering air for 3-12 minutes. During defrost there is water or vapor given out. • In dehumidifying mode, the indoor fan will sometimes stop, this prevents water condensation from being vaporized.
Moisture gathers on the air outlet vent.	• If the unit is operates in high humidity for a long time, moisture can condense on the air outlet grill and drip off.

Stop all operations immediately and disconnect the power plug. Contact the dealer in the following situations:

Loud or unusual sounds are given out during operation.

Unusual odors are given out during operation.

Water is leaking.

Air switch or protection switch often breaks.

Water or liquid enters into the unit.

Unusually hot power supply cord or power plug.

▶ Stop operation and disconnect the power plug.

Safety Precautions

- Read these Safety Precautions carefully to ensure correct installation.
- This manual classifies the precautions into WARNING and CAUTION.
  Be sure to follow all the precautions below: they are all important for ensuring safety.

⚠ WARNING	⚠ CAUTION
Failure to follow any of WARNING is likely to result in such grave consequences as death or serious injury.	Failure to follow any of CAUTION may result in grave consequences in some cases.

- The following safety symbols are used throughout this manual:

Be sure to observe this instruction.

Be sure to establish an earth connection.

Never attempt.

- After completing installation, test the unit to check for installation errors. Give the user adequate instructions concerning the use and cleaning of the unit according to the Operation Manual.

⚠ WARNING

- Installation should be left to the dealer or another professional.
  Improper installation may cause water leakage, electrical shock, or fire.
- Install the air conditioner according to the instructions given in this manual.
  Incomplete installation may cause water leakage, electrical shock, or fire.
- Be sure to use the supplied or specified installation parts.
  Use of other parts may cause the unit to come to lose, water leakage, electrical shock, or fire.
- Install the air conditioner on a solid base that can support the weight of the unit.
  An inadequate base or incomplete installation may cause injury in the event the unit falls off the base.
- Electrical work should be carried out in accordance with the installation manual and the national electrical wiring rules or code of practice.
  Insufficient capacity or incomplete electrical work may cause electrical shock or fire.
- Be sure to use a dedicated power circuit. Never use a power supply shared by another appliance.
- For wiring, use a cable length enough to cover the entire distance with no connection.
  Do not use an extension cord. Do not put other loads on the power supply, use a dedicated power circuit.
  (Failure to do so may cause abnormal heat, electric shock or fire.)
- Use the specified types of wires for electrical connections between the indoor and outdoor units.
  Firmly clamp the interconnecting wires so their terminals receive no external stresses.
  Incomplete connections or clamping may cause terminal overheating or fire.
- After connecting interconnecting and supply wiring be sure to shape the cables so that they do not put undue force on the electrical covers or panels.
  Install covers over the wires. Incomplete cover installation may cause terminal overheating, electrical shock, or fire.

- If any refrigerant has leaked out during the installation work, ventilate the room.
  (The refrigerant produces a toxic gas if exposed to flames.)
- After all installation is complete, check to make sure that no refrigerant is leaking out.
  (The refrigerant produces a toxic gas if exposed to flames.)
- When installing or relocating the system, be sure to keep the refrigerant circuit free from substances other than the specified refrigerant (R22), such as air. (Any presence of air or other foreign substance in the refrigerant circuit causes an abnormal pressure rise or rupture, resulting in injury.)

- During pump-down, stop the compressor before removing the refrigerant piping.
  If the compressor is still running and the stop valve is open during pump-down, air will be sucked in when the refrigerant piping is removed, causing abnormal pressure in the freezer cycle which will lead to breakage and even injury.
- During installation, attach the refrigerant piping securely before running the compressor.
  If the compressor is not attached and the stop valve is open during pump-down, air will be sucked in when the compressor is run, causing abnormal pressure in the freezer cycle which will lead to breakage and even injury.

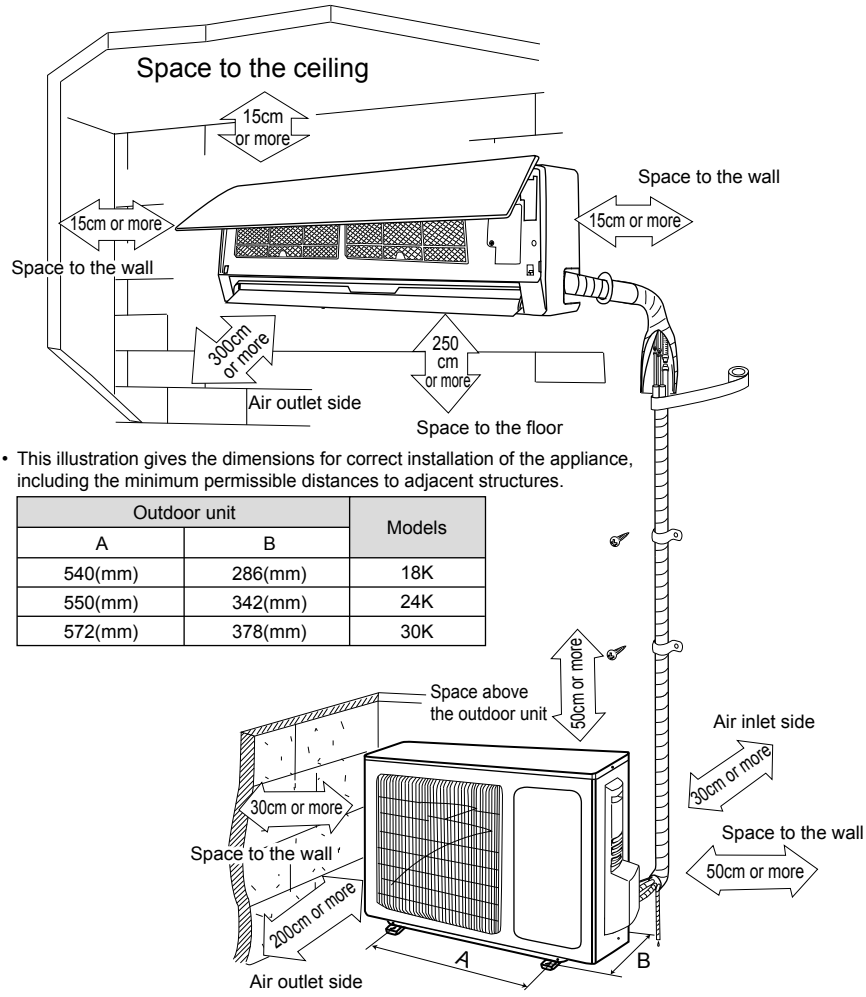
- Be sure to establish an earth. Do not earth the unit to a utility pipe, arrester, or telephone earth. Incomplete earth may cause electrical shock, or fire. A high surge current from lightning or other sources may cause damage to the air conditioner.
- Be sure to install an earth leakage breaker. Failure to install an earth leakage breaker may result in electric shocks, or fire.

⚠ CAUTION

- Do not install the air conditioner in a place where there is danger of exposure to inflammable gas leakage.
  If the gas leaks and builds up around the unit, it may catch fire.
- Establish drain piping according to the instructions of this manual. Inadequate piping may cause flooding.
- Tighten the flare nut according to the specified method such as with a torque wrench.
  If the flare nut is tightened too hard, the flare nut may crack after a long time and cause refrigerant leakage.
- Make sure to provide for adequate measures in order to prevent that the outdoor unit be used as a shelter by small animals.
  Small animals making contact with electrical parts can cause malfunctions, smoke or fire. Please instruct the customer to keep the area around the unit clean.

◆Installation dimensions

Installation dimensions



- This illustration gives the dimensions for correct installation of the appliance, including the minimum permissible distances to adjacent structures.

Outdoor unit		Models
A	B	
540(mm)	286(mm)	18K
550(mm)	342(mm)	24K
572(mm)	378(mm)	30K

Item \ Model	FT18HEVLK	FTY18HEVLK FT24HEVLK	FTY24HEVLK	FT30HEVLK FTY30HEVLK
Max. Pipe Length (m)	25m	25m	25m	30m
Amount of Additional Refrigerant to be Filled (For Extra Length of Pipe)	15g/m	20g/m	50g/m	50g/m
Max. Height Difference between Indoor and Outdoor Unit (m)	10m	10m	10m	15m

Note: The standard pipe length is 5m. When the length of the connecting pipe is less than or equals 5m, there is no nee to and refrigerant. If the connecting pipe is longer than 5m, it is required to add refrigerant. In the above table, the amounts of refrigerant to be added for the models are listed for each additional meter of pipe length.

◆Indoor unit installation

Rear panel installation

1. Initially, mount the rear panel horizontally. The indoor unit has drain outlets on the both sides. Adjust the unit so that one of the drain outlets is a little lower than the other one so that flocculated water will be drained from the drain pan.
2. Attach the rear panel to the wall with screws. (pre-covered with plastic)
3. Make sure the rear panel is firmly attached. The weight should be evenly shared by each screw.

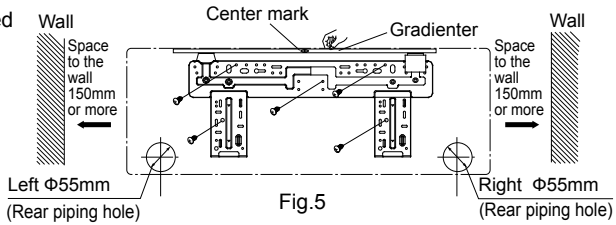
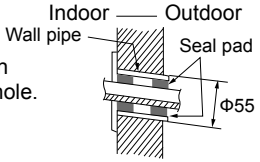


Fig.5

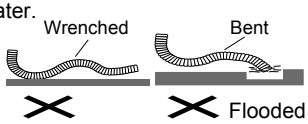
Piping hole installation

1. Make the piping hole (55mm) in the wall to angle slightly downward to the outdoor side.
2. Insert the piping-hole sleeve into the hole to prevent the connection piping and wiring from being damaged when passing through the hole.



Drainage pipe installation

1. For proper drainage the drain hose should be placed at a downward angle.
2. Do not wrench or bend the drain hose, or flood its end with water.
3. Wrap the insulation materials when passing a long drainage hose through indoor unit.



Indoor/outdoor electric wire connection

1. Open the surface panel.
2. Remove the wiring cover Fig.6.
3. Route the power connection cord and signal control wire (for cooling and heating unit only) from the back of the indoor unit and pull it toward the front through the wiring hole.
4. Connect the interconnection cord to the terminal block, and then attach the cord with cord anchorage.
5. Assemble the clamp and wiring cover.
6. Cover the surface panel.

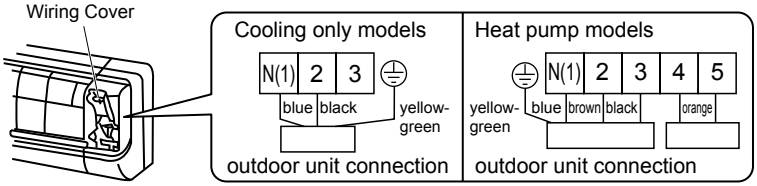


Fig.6

◆Indoor unit installation

NOTE:

If you find the electrical wiring is of insufficient length for correct installation, please contact an authorized service shop.

- The electric wiring must be correctly connected. Incorrect connection can cause spare parts to malfunction.
- Tighten the terminal screw correctly.
- After tightening the screw, lightly pull the wire to confirm that it is firmly in place.
- If the ground wire is incorrectly connected, there is danger of electric shock.
- The cover plate must be attached, and the connection must be tight. Incorrect installation can let moisture enter in, which increases the danger of fire or electric shock.

Indoor unit installation

- The piping can extend out from the right, right rear, left, or left rear.

1. When routing the piping and wiring from the left or right side of the indoor unit, you can cut off the frame tailings if necessary. (Show in Fig.7)
   (1) Cut off tailings 1 when routing the wiring only;
   (2) Cut off tailing 1 and tailing 2 when routing both the wiring and piping.
2. Remove the piping from the body case, wrap the piping electrical wiring and water pipe with tape and pull them through the piping hole. (See Fig.8)
3. Hang the mounting slots for the indoor unit on the upper tabs of the rear panel and check if it is correctly attached. (See Fig.9)
4. The installation height should be 2.5m or above the floor.

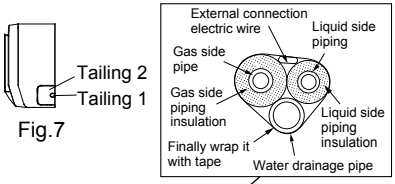


Fig.7

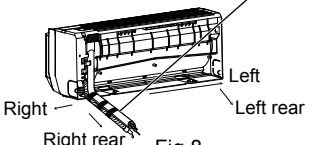


Fig.8

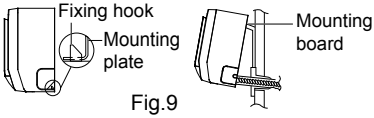
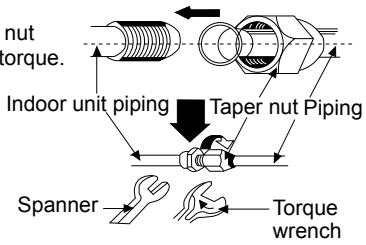


Fig.9

Install the connection pipe

1. Align the center of the piping flare with the valve.
2. Screw in the flare nut by hand and then tighten the nut with a spanner and torque wrench to the specified torque.

Hex nut diameter	Tightening torque (N·m)
6mm	15-20
9.52mm	31-35
12mm	50-55
16mm	60-65
19mm	70-75

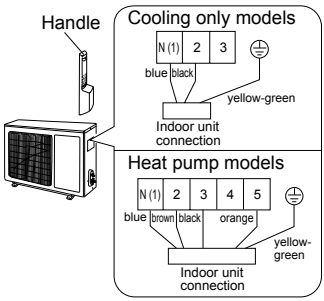


NOTE: Connect the pipe to the indoor unit, then to the outdoor unit. Be careful not to bend or damage the connection pipe. Do not overtighten the joint nut. Overtightening the joint nut can cause leakage.

◆Outdoor unit installation

Electrical wiring

1. Remove the handle from the outdoor unit's right side plate.
2. Remove the cord anchorage. Connect the power cord (for cooling and heating unit, connect the power cord and signal control wire) to the terminal block.
3. Attach the power cable with the cord anchorage, (for cooling and heating units, use the cord anchorage to attach the power cable and the signal control wire).
4. Make sure the wire is securely connected.
5. Install the handle.



NOTE:
- Incorrect wiring can cause parts to malfunction.
- After the cable is connected, make sure there is space between the connection and the place where the lead wire is attached.

Air leakage test

1. Connect the charging hose on the manifold valve to the charge end of the low pressure valve (both high/low pressure valves must be tightly shut).
2. Connect charging hose joint to vacuum pump.
3. Turn the handle and open the Lo manifold valve completely.
4. Open the vacuum pump to release the air. Slowly loosen the joint nut on the low pressure valve to check for air leakage. (If the vacuum pump noise changes, the multimeter reading will be 0.) Tighten the nut.
5. Release the pressure for 15 minutes or more and make sure the multi-meter reading is 1.0×10^5 pa (–76cmHg).
6. Fully open high/low pressure valves.
7. Remove charging hose from charging end of low pressure valve.
8. Tighten the bonnet on the low-pressure valve. (As shown in Fig.10)

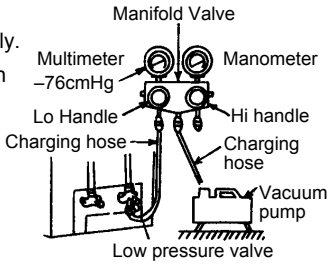
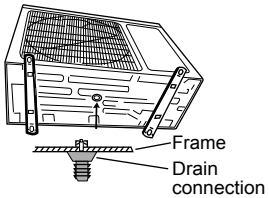


Fig.10

Drain of condensation from the outdoor unit (Heat pump models)

Condensed water that forms during heating must be properly discharged through the drainage pipe.

Installation method: Put the drain connection through the 25mm hole in the frame and connect the drainage pipe to the drain nozzle.



◆Installation and test operation checklist

Check after installation

Items to be checked	Possible malfunction
Make sure the unit is securely attached.	The unit shakes, makes noise, or falls out of position.
Refrigerant leakage test.	Decreased cooling (heating) effect.
Make sure there is sufficient heat insulation.	Water condensation or leakage.
Make sure water is draining properly.	Water condensation or leakage.
Make sure the voltage agrees with the specified voltage shown on the nameplate.	Incorrect voltage can cause electrical malfunction or damage to parts.
Install electric wiring connections and piping correctly and securely.	Incorrect installation can cause electrical malfunction or damage to parts.
Connect the unit to a secure ground connection.	Insecure ground connections can cause electrical leakage.
Use the specified power cord.	Use of other than specified electric power cords can cause malfunction or damage the part.
Make sure the inlet and outlet have been properly covered.	Inlets or outlets that have not been properly covered can cause insufficient cooling (heating) capacity.
Check the length of the connection pipes and refrigerant capacity.	The refrigerant capacity is not correct.

Test Operation

1. Before test operation
   (1) Do not turn on power before installation is complete.
   (2) Electric wiring must be connected correctly and securely.
   (3) Cut-off valves on the connection pipes should be opened.
   (4) Debris and contaminants must be removed from the unit.
2. Test operation procedure
   (1) Turn on power. Press ON/OFF button on the remote controller to start operation.
   (2) Press MODE to select COOL, HEAT (not available on cooling only units), or FAN. Make sure operation is normal.

Specifications

MODEL	INDOOR UNIT		FT18HEVLK	FT24HEVLK	FT30HEVLK
	OUTDOOR UNIT		R18HEVLK	R24HEVLK	R30HEVLK
RATED VOLTAGE		V	220	220	220
RATED FREQUENCY		Hz	60	60	60
COOLING (T1) (INDOOR 27DB°C/19WB°C OUTDOOR 35DB°C/24WB°C)	RATED CURRENT	A	10.2	12.4	15.1
	RATED POWER INPUT	kW	2.20	2.54	3.32
	CAPACITY	Btu/h	18,650	21,000	28,000
		kW	5.45	6.15	8.25
	EER	(Btu/h)/W	8.48	8.27	8.43
COOLING (T3) (INDOOR 29DB°C/19WB°C OUTDOOR 46DB°C/24WB°C)	RATED CURRENT	A	11.7	14.2	18.2
	RATED POWER INPUT	kW	2.52	2.95	4.00
	CAPACITY	Btu/h	16,370	18,060	25,150
		kW	4.80	5.30	7.37
	EER	(Btu/h)/W	6.50	6.12	6.29
HEATING (INDOOR 20DB°C/---- OUTDOOR 7DB°C/6WB°C)	RATED CURRENT	A	-	-	-
	RATED POWER INPUT	kW	-	-	-
	CAPACITY	Btu/h	-	-	-
		kW	-	-	-
	COP	W/W	-	-	-
NET WEIGHT	INDOOR UNIT	kg	13	15.5	17.5
	OUTDOOR UNIT	kg	45	48	90
REFRIGERANT	R22	kg	1.08	1.60	3.00
COUNTRY OF ORIGIN			CHINA		
NAME OF MANUFACTURER			DAIKIN INDUSTRIES, LTD.		

MODEL	INDOOR UNIT		FTY18HEVLK	FTY24HEVLK	FTY30HEVLK
	OUTDOOR UNIT		RY18HEVLK	RY24HEVLK	RY30HEVLK
RATED VOLTAGE		V	220	220	220
RATED FREQUENCY		Hz	60	60	60
COOLING (T1) (INDOOR 27DB°C/19WB°C OUTDOOR 35DB°C/24WB°C)	RATED CURRENT	A	10.4	11.9	15.1
	RATED POWER INPUT	kW	2.26	2.47	3.30
	CAPACITY	Btu/h	18,650	21,350	27,350
		kW	5.45	6.25	8.01
	EER	(Btu/h)/W	8.25	8.64	8.29
COOLING (T3) (INDOOR 29DB°C/19WB°C OUTDOOR 46DB°C/24WB°C)	RATED CURRENT	A	12.1	13.3	18.1
	RATED POWER INPUT	kW	2.63	2.77	3.81
	CAPACITY	Btu/h	16,100	18,330	24,200
		kW	4.70	5.37	7.10
	EER	(Btu/h)/W	6.12	6.62	6.35
HEATING (INDOOR 20DB°C/---- OUTDOOR 7DB°C/6WB°C)	RATED CURRENT	A	10.3	11.7	15.5
	RATED POWER INPUT	kW	2.13	2.42	3.22
	CAPACITY	Btu/h	22,000	23,300	30,600
		kW	6.45	6.83	8.96
	COP	W/W	3.03	2.82	2.78
NET WEIGHT	INDOOR UNIT	kg	13	15.5	17.5
	OUTDOOR UNIT	kg	46	52	90
REFRIGERANT	R22	kg	1.30	1.60	3.00
COUNTRY OF ORIGIN			CHINA		
NAME OF MANUFACTURER			DAIKIN INDUSTRIES, LTD.		

NOTE : This product is not designed for repacking. In case of repaking, contact to Daikin Dealer.

MEMO

DAIKIN INDUSTRIES, LTD.

Head office:
Umeda Center Bldg., 2-4-12, Nakazaki-Nishi,
Kita-ku, Osaka, 530-8323 Japan

Tokyo office:
JR Shinagawa East Bldg., 2-18-1, Konan,
Minato-ku, Tokyo, 108-0075 Japan
http://www.daikin.com/global_ac/

Two-dimensional bar code is a code for manufacturing.

3V007382-3J M09B304D (1009) HT