Panasonic

Operating / Installation Instructions

Air Conditioner



Model No.

Indoor Unit Outdoor Unit

CS-UE12WKF-9 CS-UE18WKF-9 CS-UE24WKF-9 CU-UE18WKF-9 CU-UE24WKF-9



User Manual Air Conditioner

Thank you for purchasing Panasonic Air Conditioner. Installation instructions are described in this manual. Before operating the unit, read these operating instructions thoroughly and keep them for future reference.



English

Quick guide

Preparation before use

Before using the air conditioner, be sure to check and preset the following.

Remote Controller presetting

The remote controller is **NOT** presetting as Cooling Only Air Conditioner or Heat Pump by manufacturer.

Each time after the remote controller replaces batteries or is energized, the arrowhead will flashes on the front of "Heat" or "Cool" on LCD of the remote controller.

User can preset the remote controller type depending on the air conditioner type you have purchased as follows:

Press any button when the arrowhead flashes on the front of "Heat", Heat Pump is set.

Press any button when the arrowhead flashes on the front of "Cool", Cooling Only is set.

If you don't press any button within 10 seconds, the remote controller is preset as Heat Pump automatically.

Note:

If the air conditioner you purchased is a Cooling one Only, but you preset the remote controller as Heat Pump, it doesn't bring any change. But if the air conditioner you purchased is a Heat Pump one, and you preset the remote controller as Cooling Only, then you CAN NOT preset the Heating operation with the remote controller.

· Auto-restart Presetting:

the appliance is preset as no auto-restart function by manufacturer.If Auto-restart function is needed, follow the below step to activate this function:

- 1) Make sure air conditioner is turned off;
- Press down and hold the Emergency button (ON/OFF)on the indoor unit until air conditioner is turned on.
- 3) Keep pressing the Emergency button for over 10s until three short beeps are heard, then Auto-restart function is activated. To cancel the Auto-restart function, repeat above procedure until four short beeps are heard.

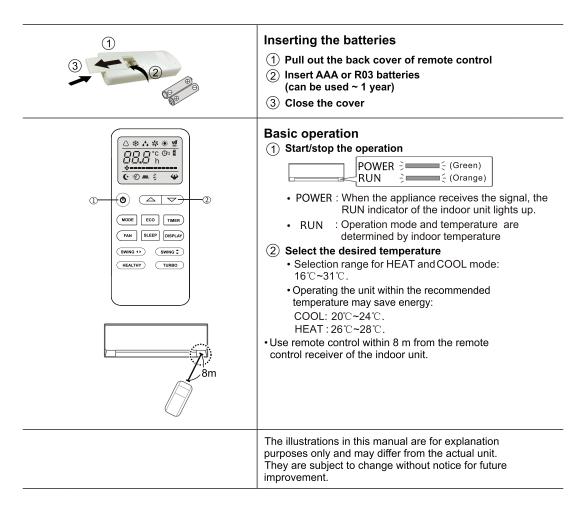
English

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Accessories

- Remote control
- AAA or R03 batteries × 2



Safety precautions

To prevent personal injury, injury to others or property damage, please comply with the following: Incorrect operation due to failure to follow instructions below may cause harm or damage, the seriousness of which is classified as below:



WARNING

This sign warns of death or serious injury.



CAUTION

This sign warns of injury or damage to property.

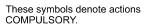
The instructions to be followed are classified by the following symbols:

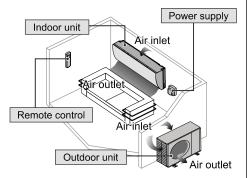


This symbol denotes an action that is PROHIBITED.











WARNING

Indoor unit and outdoor unit



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.

Please consult authorised dealer or specialist to clean the internal parts, repair, install, remove and reinstall the unit. Improper installation and handling will cause leakage, electric shock or fire.

Confirm with authorised dealer or specialist on usage of any specified refrigerant type. Using refrigerant type other than the specified may cause product damage, burst and injury etc.



Do not install the unit in a potentially explosive or flammable atmosphere. Failure to do so could result in fire

Do not insert your fingers or other objects into the air conditioner indoor or outdoor unit, rotating parts may cause injury.



Do not touch the outdoor unit during lightning, it may cause electric shock.

Do not expose yourself directly to cold air for a long period to avoid excess cooling.

Do not sit or step on the unit, you may fall down accidentally.



Remote control



Do not allow infants and small children to play with the remote control to prevent them from accidentally swallowing the batteries.

Power supply



Do not use a modified cord, joint cord, extension cord or unspecified cord to prevent overheating and fire.



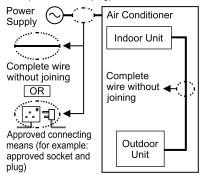


To prevent overheating, fire or electric shock:

- Do not share the same power outlet with other equipment.
- Do not operate with wet hands.
- Do not over bend the power supply cord.
- Do not operate or stop the unit by inserting or pulling out the power plug.



Use complete power supply cord without joining. In unavoidable circumstances that complete power supply cord without joining is impossible, use an approved connection means (for example: socket and plug).



If the supply cord is damaged, it must be replaced by the manufacturer, service agent or similarly qualified persons in order to avoid a hazard.

It is strongly recommended to be installed with Earth Leakage Circuit Breaker (ELCB) or Residual Current Device (RCD) to prevent electric shock or fire.

To prevent overheating, fire or electric shock:

- · Insert the power plug properly.
- Dust on the power plug should be periodically wiped with a dry cloth.

Stop using the product if any abnormality/failure occurs and disconnect the power plug or turn off the power switch and breaker.

(Risk of smoke/fire/electric shock) Examples of abnormality/failure

- The ELCB trips frequently.
- Burning smell is observed.
- Abnormal noise or vibration of the unit is observed.
- · Water leaks from the indoor unit.
- · Power cord or plug becomes abnormally hot.
- · Fan speed cannot be controlled.
- The unit stops running immediately even if it is switched on for operation.
- The fan does not stop even if the operation is stopped.

Contact your local dealer immediately for maintenance/repair.



This equipment must be earthed to prevent electrical shock or fire.



Prevent electric shock by switching off the power supply and unplug:



Before cleaning or servicing,
When extended non-use, or

- During abnormally strong lightning activity.



CAUTION

Indoor unit and outdoor unit



Do not wash the indoor unit with water, benzine, thinner or scouring powder to avoid damage or corrosion at the unit.

Do not use for preservation of precise equipment, food, animals, plants, artwork or other objects. This may cause quality deterioration, etc.

Do not use any combustible equipment in front of the airflow outlet to avoid fire propagation.

Do not expose plants or pet directly to airflow to avoid injury, etc.

Do not touch the sharp aluminium fin, sharp parts may cause injury.



Do not switch ON the indoor unit when waxing the floor. After waxing, aerate the room properly before operating the unit.

Do not install the unit in oily and smoky areas to prevent damage to the unit.

Do not dismantle the unit for cleaning purpose to avoid injury.

Do not step onto an unstable bench when cleaning the unit to avoid injury.

Do not place a vase or water container on the unit. Water may enter the unit and degrade the insulation. This may cause an electric shock.

Do not open window or door for long time during COOL/DRY mode operation.

Prevent water leakage by ensuring drainage



- pipe is:
 Connected properly,
- Kept clear of gutters and containers, or
- Not immersed in water

After a long period of use or use with any combustible equipment, aerate the room regularly.

After a long period of use, make sure the installation rack does not deteriorate to prevent the unit from falling down.

Remote control



Do not use rechargeable (Ni-Cd) batteries. It may damage the remote control.



To prevent malfunction or damage of the remote control:

- Remove the batteries if the unit is not going to be used for a long period of time.
- New batteries of the same type must be inserted following the polarity stated.

Power supply



Do not disconnect the plug by pulling the cord to prevent electric shock.

HOW TO USE

REMOTE CONTROLLER

Remote controller DISPLAY

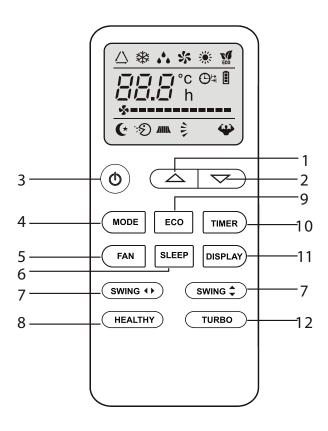
No.	Buttor	Function				
1	▲ (TEMP UP)	Press it to increase temperature / time setting.				
2	(TEMP DN)	Press it to decrease temperature/ time setting.				
3	0	Press it to start or stop operation.				
4	MODE	To select the mode of operation				
5	FAN	To select the fan speed of auto/low/mid/high				
6	SLEEP	To activate the function "SLEEP"				
7	SWING ◆ ▶	To activate or deactivate of the movement of the horizontal deflectors. (If applicable)				
	SWING 💠	To activate or deactivate of the movement of the vertical deflectors.				
X UEALTU '*		To switch - on /off HEALTH funtion.lt is a button which controls the ionizer or plasma generator. (If applicable)				
9	Press this button to activate / deactivate the ECO function which en unit automatically to sets the operation to achieve energy savings.					
10	TIMER	Press it to set auto-off timer.				
11	DISPLAY	To switch on/off the display. (If applicable)				
12	TURBO	Press this button to activate/deactivate the Super function which enables the unit to reach the preset temperature in the shortest time.				

The out looking and some function of remote controller maybe difference.

The unit confirms the correct reception of each press button with a beep.

↑ HEALTH/MUTE/CLEAN/I FEEL/I SET,SWING(left and right), these are optional function buttons, you will hear a beep when press it though the actual model haven't this function, we express our apologies.

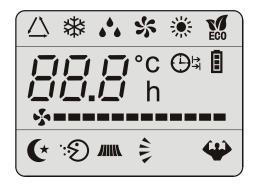
REMOTE CONTROLLER



REMOTE CONTROLLER

Remote control DISPLAY Meaning of symbols on the liquid crystal display

No.	Symbols	Meaning
1	\triangle	FEEL mode indicator
2	*	COOLING indicator
3	***	DEHUMIDIFYING indicator
4	*	FAN ONLY OPERATION indicator
5	*	HEATING indicator(For cooling only type, fanning function is activated.)
6	EGO	ECO indicator
7	88:88	CLOCK indicator
8	⊕≒	TIMER ON & TIMER OFF indicator
9	8	BATTERY indicator
10	%	LOW/MIDDLE/HIGH FAN SPEED indicator
11	C *	SLEEP indicator
12	·:Ð	HEALTHY indicator
13	1	FLAP SWING indicator
14	₩	TURBO indicator



SWING CONTROL OF THE AIR FLOW

SWING

- · The air outlet flow is uniformly distributed in the room.
- · It is possible to position the direction of the air in the optimal.

The key(swing) or swing activates the "FLAP", the air flow is directed alternatively from up to down .In order to guarantee an even diffusion of the air in the room.

The key swing 10 activates the motorized "deflectors", the air flow is directed alternatively from left to right. (Optional function, depends on the models)

- · In cooling mode, orient the flaps in horizontal
- · In heating mode, orient the flaps downward as the warm air tends to rise.

The deflectors are positioned manually and placed under the flaps .They allow to direct the air flow rightward or leftward.



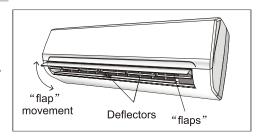
This adjustment must be done while the appliance is switched off.



Never position "Flaps" manually, the delicate mechanism might seriously damaged!



Never poke fingers, sticks or other objects in the air inlet or outlet vents. Such accidental contact with live pants might cause unforeseeable damage or hurt.



HOW TO TAKE OUT THE SCREW COVER

- 1) Put IDU unit in flatted location.
- 2 Turn up the vane.
- ③ Insert the screw driver 3-5mm.
- 4 Lever the screw cover cover slowly.
- ⑤ Take out the screw cover by hand properly.
- (6) The screw cover is taken out.







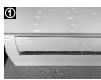






HOW TO TAKE OUT THE INDICATION PART

- 1) Put IDU unit in flatted location.
- ② Open the IDU unit panel.
- 3 Use screw driver to remove IDU.
- 4 Use screw driver to remove IDU frame.
- ⑤ Push the lock.
- 6 Take out the indication part.





















COOLING MODE

COOL

The cooling function allows the air conditioner to cool the room and at the same time reduces Air humidity.

To activate the cooling function (COOL), press the MODE | button until the symbol (COOL ▲) appears on the display.

The cooling function is activated by setting the button A or ▼ at a temperature lower than that of the room.

To optimize the function of the Air conditioner, adjust the temperature (1), the speed (2) and the direction of the air flow (3) by pressing the button indicated.

HEATING MODE

HEAT

The heating function allows the air conditioner to heat the room.

To activate the heating function (HEAT), press the MODE button until the symbol (HEAT▲) appears on the display.

With the button ▲ or ▼ set a temperature higher than that of the room..

To optimize the function of the Air conditioner adjust the temperature (1), the speed (2) and the direction of the air flow (3) by pressing the button indicated

↑ If the appliance is fitted with a electrical heater, which delays appliance to startup in a few seconds to ensure an immediate output of hot air (Optional, depends on the model).



↑ In HEATING operation, the appliance can automatically activate a defrost cycle, which is essential to clean the frost on the condenser so as to recover its heat exchange function. This procedure usually lasts for 2-10 minutes during defrosting, indoor unit fan stop operation. After defrosting ,it resumes to HEATING mode automatically.

TIMER MODE----TIMER ON



To set the time of the air conditioner

To program the automatical switching-on time, the appliance should be power off.

Press TIMER at the fist time, set the temperature with pressing the button ▲ or ▼;

Press TIMER at the second time, set the rest time with pressing the button ▲ or ▼;

Press TIMER at the third time, confirm the setting, then the rest time to next automatical switching-on could be read on the display.

NOTE!

Before proceeding with the time: program the working mode with the button MODE (2) and the fan speed with the button FAN (3). Switch the conditioner off (with the key ON/OFF).

Note:To cancel the setted function ,press the TIMER button again.

Note:In case of power off,it is necessary to set TIMER ON again

TIMER MODE----TIMER OFF

OFF TIMER

To set the automatic switching-off of the air conditioner

The timed stop is programmed by pressing TIMER, Set the rest time by pressing the button ▲ or ▼,until the rest time displayed is to your demand then press TIMER again.

Note:To cancel the setted function, press the TIMER button again.

Note:In case of power off,it is necessary to set TIMER OFF again

Note: The TIMER function can be set at half-hour intervals.

FAN MODE

FAN

The conditioner works in only ventilation.

To set the FAN mode, Press MODE untill (FAN ▲) appears in the display.

Whith pressing FAN button the speed changes in the following sequence: LOW/ MEDIUM/HIGH /AUTO in FAN mode.

The remote control also stores the speed that was set in the previous mode of operation.

In FEEL mode (automatic) the air conditioner automatically chooses the fan speed and the mode of operation (COOLING or HEATING).

DRY MODE

DRY

This function reduces the humidity of the air to make the room more comfortable.

To set the DRY mode, Press MODE untill (DRY ▲) appears in the display. An automatic function of alternating cooling cycles and air fan is activated.

FEEL MODE

FEEL

Automatic mode.

To activate the FEEL (automatic) mode of operation, press the $\boxed{\text{MODE}}$ button on the remote controller until the symbol (FEEL \blacktriangle) appears on the display.

In FEEL mode the fan speed and the temperature are set automatically according to the room temperature (tested by the temperature sensor which is incorporated in the indoor unit).

Ambient temp	Operation mode	Auto temp.	
< 20℃	HEATING (FOR HEAT PUMP TYPE) FAN (FOR COOL ONLY TYPE)	23℃	
20℃~26℃	DRY	18℃	
> 26℃	COOL	23℃	

To optimize the function of the air conditioner

- (1) adjust the temperature(only ±2°C)
- (2) the speed
- (3) the direction of the air flow by pressing the buttons indicated

SLEEP MODE

To activate the SLEEP mode of operation, press the SLEEP button on the remote controller until the symbol (SLEEP) appears on the display.

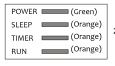
The function "SLEEP" automatically adjusts the temperature to make the room more comfortable during the night. In cooling or dry mode, the set temperature will automatically raise by1 °C every 60 minutes, to achieve a total rise of 2 °C during the first 2 hours of operation.

In heating mode the set temperature is gradually decreased by 2 $^{\circ}$ C during the first 2 hours of operation.

After 10 hours running in sleep mode the air conditioner is swicthed off automatically.

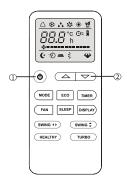


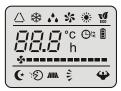
Remote control receiver and indicator



25 ℃ (Temperature display)

Remote control display





To adjust horizontal airflow direction

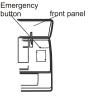


· Manually adjustable.

Auto OFF/ON button



Emergency button



misplaced or a malfunction occurs. (1) For 9k 12k 18k

• One press of the emergency button(one beep) will lead to the forced COOLING operation

Use when remote control is

- Two press of the emergency button within 3 seconds (two beeps) will lead to the forced HEATING operation.
- To switch off the unit , you just need to press the button again (a single long beep). After 3 minutes in forced operation, the air conditioner will automatically start working in 23℃ cooling mode, auto fan speed.

(2) For 24k

Open the front panel to access the emergency button.

- One press of the emergency button(one beep) will lead to the forced COOLING operation
- Two press of the emergency button within 3 seconds (two beeps) will lead to the forced HEATING operation.
- To switch off the unit , you just need to press the button again (a single long beep). After 3 minutes in forced operation, the air conditioner will automatically start working in 23℃ cooling mode, auto fan speed.

Operation conditions

Use this air conditioner under the following temperature range.

DBT: Dry bulb temperature WBT: Wet bulb temperature

Temperature		Indoor		Outdoor	
(℃)		DBT	WBT	DBT	WBT
COOL	Max.	35	24	46	27
COOL	Min.	16	11	16	11
LIEAT	Max.	30	_	24	15.5
HEAT	Min.	16	-	0	-

Cleaning instructions

To ensure optimal performance of the unit, cleaning has to be carried out at regular intervals. Please consult authorised dealer.

- Switch off the power supply and unplug before cleaning.
- Do not touch the aluminium fin, sharp parts may cause injury.
- Do not use benzine, thinner or scouring powder.
- Use only soap (\simeq pH 7) or neutral household detergent.
- Do not use water hotter than 40 °C.

Indoor unit

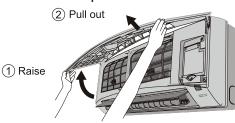
Wipe the unit gently with a soft, dry cloth.



Front panel

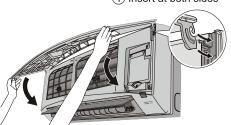
Wash gently and dry.

Remove the front panel



Close it securely

(1) Insert at both sides



- (2) Close down
- (3) Press both ends of the front panel

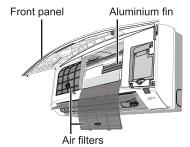
Air filters

Every 2 weeks

 Wash/rinse the filters gently with water to avoid damage to the filter surface.



Indoor unit



- Dry the filters thoroughly under shade, away from fire or direct sunlight.
- · Replace any damaged filters.

Remove air filter



Attach air filter



Insert into the unit

For seasonal inspection after extended non-use

- · Checking of remote control batteries.
- No obstruction at air inlet and air outlet vents.
- After 15 minutes of operation, it is normal to have the following temperature difference between air inlet and air outlet vents:

COOL: ≥8 °C | HEAT:≥14°C

For extended non-use

- Activate HEAT mode for 2-3 hours to remove moisture left in the internal parts thoroughly to prevent mould growth.
- Turn off the power supply and unplug.
- Remove the remote control batteries.

Troubleshooting

The following symptoms do not indicate malfunction.

Symptom	Cause
Mist emerges from indoor unit.	Condensation effect due to cooling process.
Water flowing sound during operation.	Refrigerant flow inside the unit.
The room has a peculiar odour.	This may be due to damp smell emitted by the wall, carpet, furniture or clothing.
Indoor fan stops occasionally during automatic fan speed setting.	• This helps to remove the surrounding odour.
Operation is delayed a few minutes after restarting.	The delay is a protection to the unit's compressor.
Outdoor unit emits water/steam.	Condensation or evaporation occurs on pipes.
Indoor fan stops occasionally during heating operation.	To avoid unintended cooling effect.
Cracking sound during operation.	Changes of temperature caused the expansion/ contraction of the unit.
Discoloration of some plastic parts.	Discoloration is subject to material types used in plastic parts, accelerated when exposed to heat, sun light, UV light, or environmental factor.

Check the following before calling for servicing.

Officer the following before calling for servicing.						
Symptom	Check					
Operation in HEAT/COOL mode is not working efficiently.	Set the temperature correctly. Close all doors and windows. Clean or replace the filters. Clear any obstruction at the air inlet and air outlet vents.					
Noisy during operation.	Check if the unit has been installed at an incline. Insert the air filter properly.					
Remote control does not work. (Display is dim or transmission signal is weak.)	Insert the batteries correctly. Replace weak batteries.					
The unit does not work.	Check if the circuit breaker is tripped. Check if timers have been set.					
The unit does not receive the signal from the remote control.	Make sure the receiver is not obstructed. Certain fluorescent lights may interfere with signal transmitter. Please consult authorised dealer.					

NON SERVICEABLE CRITERIAS

TURN OFF POWER SUPPLY AND UNPLUG then please consult authorised dealer under the following conditions:

- · Abnormal noise during operation.
- Water/foreign particles have entered the remote control.
- · Water leaks from Indoor unit.

- · Circuit breaker switches off frequently.
- · Power cord becomes unnaturally warm.
- · Switches or buttons are not functioning properly.

INSTALLATION INSTRUCTIONS

Required tools for Installation Works

- Philips screw driver
- Level gauge
- 3 Electric drill, hole core drill (ø70 mm)
- Hexagonal wrench (4 mm) 4
- Spanner
- Pipe cutter

- Knife 9 Gas leak detector
- 10 Measuring tape
- 11 Thermometer
- 12 Megameter
- 13 Multimeter
- 14 Torque wrench 18 N•m (1.8 kgf.m)

42 Nem (4.3 kgf.m)

- 55 Nem (5.6 kgf.m) 65 N•m (6.6 kgf.m)
- 100 N•m (10.2 kgf m)
- 15 Vacuum pump 16 Gauge manifold

SAFETY PRECAUTIONS

- Read the following "SAFETY PRECAUTIONS" carefully before installation.
 Electrical work must be installed by a licensed electrician. Be sure to use the correct rating of the power plug and main circuit for the model to be installed.
 The caution items stated here must be followed because these important contents are related to safety. The meaning of each indication used is as below. Incorrect installation due to ignoring of the instruction will cause harm or damage, and the seriousness is classified by the following indications.

<u></u> MARN	ING	This indication shows the possibility of causing death or serious injury.
		This indication shows the possibility of causing injury or damage to properties only.

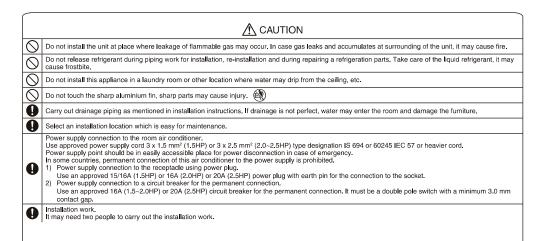
The items to be followed are classified by the symbols:

\bigcirc	Symbol with white background denotes item that is PROHIBITED.
0 0	Symbol with dark background denotes item that must be carried out.

. Carry out test running to confirm that no abnormality occurs after the installation. Then, explain to user the operation, care and maintenance as stated in instructions. Please remind the customer to keep the operating instructions for future reference.

	<u> </u>
0	Do not install outdoor unit near handrail of veranda. When installing air-conditioner unit on veranda of a high rise building, child may climb up to outdoor unit and cross over the handrail causing an accident.
0	Do not damage or use unspecified power supply cord. Otherwise, it will cause fire or electrical shock.
0	Do not use modified cord, joint cord or extension cord for power supply cord. Do not share the single outlet with other electrical appliances. Poor contact, poor insulation or over current will cause electrical shock or fire.
\bigcirc	Do not tie up the power supply cord into a bundle by band. Abnormal temperature rise on power supply cord may happen.
$\overline{\Diamond}$	Do not insert your fingers or other objects into the unit, high speed rotating fan may cause injury.
0	Do not sit or step on the unit, you may fall down accidentally.
0	Keep plastic bag (packaging material) away from small children, it may cling to nose and mouth and prevent breathing.
0	When installing or relocating air conditioner, do not let any substance other than the specified refrigerant, eg. air etc mix into refrigeration cycle (piping). Mixing of air etc will cause abnormal high pressure in refrigeration cycle and result in explosion, injury etc.
0	Do not add or replace refrigerant other than specified type. It may cause product damage, burst and injury etc.
$\overline{0}$	Engage authorized dealer or specialist for installation. If installation done by the user is incorrect, it will cause water leakage, electrical shock or fire.
$\overline{0}$	Install according to this installation instructions strictly. If installation is defective, it will cause water leakage, electrical shock or fire.
0	Use the attached accessories parts and specified parts for installation. Otherwise, it will cause the set to fall, water leakage, fire or electrical shock.
0	Install at a strong and firm location which is able to withstand the set's weight. If the strength is not enough or installation is not properly done, the set will drop and cause injury.
0	For electrical work, follow the local national wiring standard, regulation and this installation instruction. An independent circuit and single outlet must be used. If electrical circuit capacity is not enough or defect found in electrical work, it will cause electrical shock or fire.
0	Do not use joint cable for indoor/outdoor connection cable. Use the specified indoor/outdoor connection cable, refer to instruction ③ CONNECT THE CABLE TO THE INDOOR UNIT and connection for indoor/outdoor connection. Clamp the cable so that no external force will have impact on the terminal. If connection or fixing is not perfect, it will cause heat up or fire at the connection.
$\overline{0}$	Wire routing must be properly arranged so that control board cover is fixed properly. If control board cover is not fixed perfectly, it will cause fire or electrical shock.
0	This equipment is strongly recommended to be installed with Earth Leakage Circuit Breaker (ELCB) or Residual Current Device (RCD). Otherwise, it may cause electrical shock and fire in case of equipment breakdown or insulation breakdown.
0	During installation, install the refrigerant piping properly before running the compressor. Operation of compressor without fixing refrigeration piping and valves at opened condition will cause suck-in of air, abnormal high pressure in refrigeration cycle and result in explosion, injury etc.
0	During pump down operation, stop the compressor before remove the refrigeration piping. Removal of refrigeration piping while compressor is operating and valves are opened will cause suck-in of air, abnormal high pressure in refrigeration cycle and result in explosion, injury etc.
0	Tighten the flare nut with torque wrench according to specified method. If the flare nut is over-tightened, after a long period, the flare may break and cause refrigerant gas leakage.
0	After completion of installation, confirm there is no leakage of refrigerant gas. It may generate toxic gas when the refrigerant contacts with fire.
0	Ventilate if there is refrigerant gas leakage during operation. It may cause toxic gas when the refrigerant contacts with fire.
Ŏ	This equipment must be properly earthed. Earth line must not be connected to gas pipe, water pipe, earth of lightning rod and telephone. Otherwise, it may cause electrical shock in case of equipment breakdown or insulation breakdown.

INSTALLATION INSTRUCTIONS



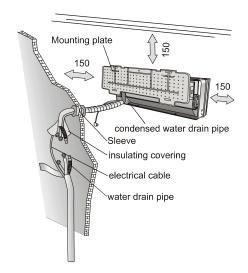
SELECTING THE INSTALLATION PLACE

Attached accessories

No.	Accessories part	Qty.	No.	Accessories part	Qty.	No.	Accessories part	Qty.
1	Installation plate	1	5	Drainage hose	2	8	Pipe sleeve	1
2	Installation plate fixing screw (\frac{\pinninn}{\pinninn}	8	6	Wall casing		9	Binder	
3	Remote Control with Holder	1	0	Davis allege	1			1
4	Battery ⊕ ⊖	2	7	Drain elbow	1	10	copper nut	4

INDOOR UNIT

- Install the indoor unit level on a strong wall that is not subject to vibrations.
- The inlet and outlet ports should not be obstructed:the air should be able to blow all over the room.
- Do not install the unit near a source of heat, steam,or flammable gas.
- · Install the unit near an electric socket or private circuit.
- Do not install the unit where it will be exposed to direct sunlight.
- Install the unit where connection between indoor and outdoor unit is as easy as possible.
- Install the unit where it is easy to drain the condensed water.
- Check the machine operation regularly and leave the necessary spaces as shown in the picture.
- Install the indoor unit where the filter can be easily accessible.

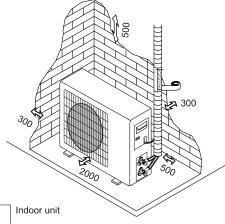


SELECTING THE INSTALLATION PLACE

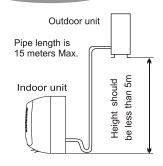
OUTDOOR UNIT

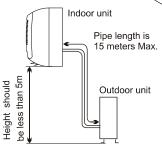
- Do not install the outdoor unit near sources of heat, steam or flammable gas.
- · Do not install the unit in too windy or dusty places.
- Do not install the unit where people often pass. Select a place where the air discharge and operating sound level will not disturb the neighbours.
- Avoid installing the unit where it will be exposed to direct sunlight (other wise use a protection, if necessary, that should not interfere with the air flow).
- Leave the spaces as shown in the picture for the air to circulate freely.
- · Install the outdoor unit in a safe and solid place.
- If the outdoor unit is subject to vibration, place rubber gaskets onto the feet of the unit..

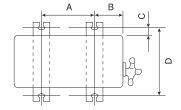
minimum space to be left (mm) showing in the picture



Installation Diagram







Model	А	В	С	D
CS-UE12WKF-9 CU-UE12WKF-9	439 mm	134 mm	11 mm	278 mm
CS-UE18WKF-9 CU-UE18WKF-9	520 mm	150 mm	15 mm	328 mm
CS-UE24WKF-9 CU-UE24WKF-9	623 mm	137 mm	32 mm	345 mm

Only persons and/or companies qualified and experienced in the installation, service and repair of refrigerant products should be permitted to do so. The purchaser must ensure that the person and/or company who is to install, service or repair this air conditioner has qualifications and experience in refrigerant products.

Before starting installation, decide on the position of the indoor and outdoor units, taking into account the minimum space required around the units

Install the indoor unit in the room to be air conditioning, avoiding to install in corridors or communal areas.

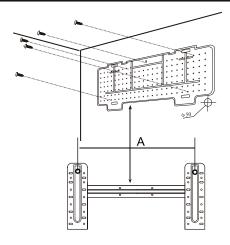
Install the indoor unit at a height of at least 2.5 m from the ground.

To install, proceed as follows:

HOW TO FIX INSTALLATION PLATE

- 1. By using a level, put the mounting plate in a perfect square position vertically and horizontally.
- 2. Drill 32 mm deep holes in the wall to fix the
- 3. Insert the plastic anchors into the hole;
- 4. Fix the mounting plate by using the provided tapping
- 5. Check that the mounting plate is correctly fixed;

Note: The shape of the mounting plate may be different from the one above, but installation method is similar.



Model	А
CS-UE12WKF-9	382 mm
CS-UE18WKF-9	555 mm
CS-UE24WKF-9	555 mm

Storage and Tips for Using the Remote Controller

Recommendations for locating and using the remote controller holder (if present) The remote controller be kept in a wall-mounted holder



TO DRILL A HOLE IN THE WALL AND INSTALL A SLEEVE OF PIPING

- Decide where to drill the hole in the wall for the piping (if necessary) according to the position of the mounting plate;
- 2. Install a flexible flange through the hole in the wall to keep the latter intact and clean.

↑ The hole must slope downwards towards the exterior

Note: Keep the drain pipe down towards the direction of the wall hole, otherwise leakage may occur.

CONNECT THE CABLE TO THE INDOOR UNIT

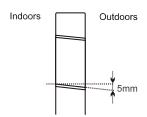
- 1. Lift the front panel.
- Take off the cover as indicated in the piciure (by removing a screw or by breaking the hooks).
- 3. For the electrical connections, see the circuit diagram on the right part of the unit under the front panel.
- 4. Connect the cable wires to the screw terminals by following the numbering ,Use wire size suitable to the electric power input (see name plate on the unit) and according to all current national safety code requirements.
- 5. The cable connecting the outdoor and indoor units must be suitable for outdoor use.
- The plug must be accessible also after the appliance has been installed so that it can be pulled out if necessary.
- 7. An efficient earth connection must be ensured.
- 8. If the power cable is damaged, it must be replaced by an authorised Service Centre.

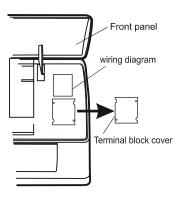
Note:The cable wires has been connected to the main PCB of indoor unit by manufacturer according to the model without terminal block

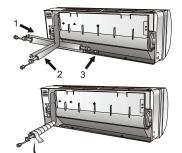
Refrigerant piping connection

The piping can be run in the 3 directions indicated by numbers in the picture. When the piping is run in direction 10r3, cut a notch along the groove on the side of the indoor unit with a cutter.

Run the piping in the direction of the wall hole and bind the copper pipes, the drain pipe and the power cables together with the tape with the drain pipe at the bottom, so that water can flow freely.







Connecting the pipes

- Do not remove the cap from the pipe until connecting it, to avoid dampness or dirt from entering.
- If the pipe is bent or pulled too often, it will become stiff. Do not bend the pipe more than three times at one point.
- When extending the rolled pipe, straighten the pipe by unwinding it gently as shown in the picture.

Connections to the indoor unit

- Remove the indoor unit pipe cap (check that there is no debris inside).
- 2. Insert the fare nut and create a flange at the extreme end of the connection pipe.
- 3. Tighten the connections by using two wrenches working in opposite directions

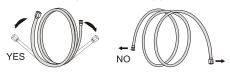
Do not overtighten, overtightening may cause gas leakage.			
Piping size	Torque		
6.35 mm (1/4")	[18 N•m (1.8 kgf.m)]		
9.52 mm (3/8")	[42 N•m (4.3 kgf.m)]		
12.7 mm (1/2")	[55 N•m (5.6 kgf.m)]		
15.88 mm (5/8")	[65 N•m (6.6 kgf.m)]		
19.05 mm (3/4")	[100 N•m (10.2 kaf.m)]		

Indoor unit condensed water drainage

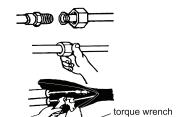
The indoor unit condensed water drainage is fundamental for the success of the installation.

- 1. Place the drain hose below the piping, taking care not to create siphons.
- 2. The drain hose must slant downwards to aid drainage.
- 3. Do not bend the drain hose or leave it protruding or twisted and do not put the end of it in water. If an extension is connected to the drain hose, ensure that it is lagged when it passes into the indoor unit.
- 4. If the piping is installed to the right, the pipes, power cable and drain hose must be lagged and secured onto the rear of the unit with a pipe connection.
- 1) Insert the pipe connection into the relative slot.
- 2) Press to join the pipe connection to the base.



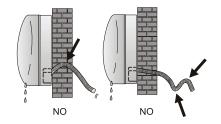


Extending the rolled pipe





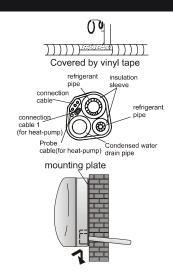
YES



INSTALLATION OF THE INDOOR UNIT

After having connected the pipe according to the instructions, install the connection cables. Now install the drain pipe. After connection,lag the pipe, cables and drain pipe with the insulating material.

- 1. Arrange the pipes ,cables and drain hose well.
- 2. Lag the pipe joints with insulating material, securing it with vinyl tape.
- Run the bound pipe , Cables and drain pipe through the wall hole and mount the indoor unit onto the upper part of the mounting plate securely.
- 4. Press and push the lower part of the indoor unit tightly against the mounting plate



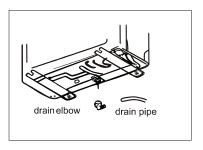
INSTALLATION MANUAL---Installation of the outdoor unit

- The outdoor unit should be installed on a solid wall and fastened securely.
- The following procedure must be observed before connecting the pipes and connecting cables: decide which is the best position on the wall and leave enough space to be able to carry out maintenance easily.
- Fasten the support to the wall using screw anchors which are particularly suited to the type of wall;
- Use a larger quantity of screw anchors than normally required for the weight they have to bear to aviod vibration during operation and remain fastened in the same position for years without the screws becoming loose.
- The unit must be installed following the national regulations.

Outdoor unit condensed water drainage (only for heat pump models)

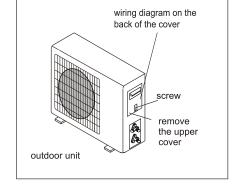
The condensed water and the ice formed in the outdoor unit during heating operation can be drained away through the drain pipe

- 1. Fasten the drain port in the 25mm hole placed in the part of the unit as shown in the picture.
- Connect the drain port and the drain pipe.Pay attention that water is drained in a suitable place.



ELECTRICAL CONNECTIONS

- 1. Take the cover away.
- 2. Connect the cable wires to the terminal board using the same numbering as in the indoor unit.
- 3. For the electrical connections, see the wiring diagram on the back of the cover
- 4. Fasten the cables with a cable-clamp.
- 5. An efficient earth connection must be ensured.
- 6. Replace the covers .

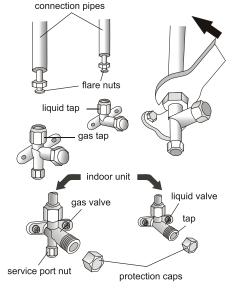


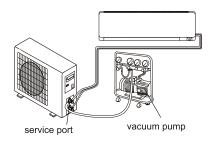
CONNECTING THE PIPES

Screw the flare nuts to the outdoor unit coupling with the same tightening procedures described for the indoor unit.

To avoid leakage, pay attention to the following points:

- 1. Tighten the flare nuts using two wrenches. Pay attention not to damage the pipes.
- If the tightening torque is not sufficient, there will probably be some leakage. With excessive tightening torque there will also be some leakage, as the flange could be damaged.
- The surest system consists in tightening the connection by using a fix wrench and a torque wrench:in this case use the table on page 22.

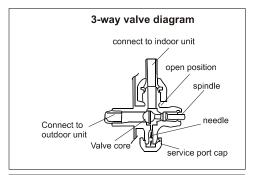


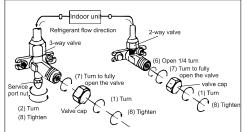


EVACUATION OF THE EQUIPMENT

The air and humidity left inside the refrigerant circulation can cause compressor malfunction. After having connected the indoor and outdoor units, bleed the air and humidity from the refrigerant circulation using a vacuum pump.

- (1) Unscrew and remove the caps from the 2 way and 3-way valves.
- (2) Unscrew and remove the cap from the service port.
- (3) Connect the vacuum pump hose to the service port.
- (4) Operate the vacuum pump for 10 15 minutes until an absolute vacuum of 10 mm Hg has been reached.
- (5) With the vacuum pump still in operation, close the low - pressure knob on the vacuum pump coupling. Stop the vacuum pump.
- (6) Open the 2 way valve by 1/4 turn and then close it after10 seconds. Check all the joints for leaks using liquid soap or an electronic leak device.
- (7) Turn the body of the 2-way and 3-way valves. Disconnect the vacuum pump hose.
- (8) Replace and tighten all the caps on the valves.





TESTING OF INDOOR AND OUTDOOR UNIT

- 1. Wind insulating covering around the joints of the indoor unit and fix it with insulating tape.
- 2. Fix the exceeding part of the signal cable to the piping or to the outdoor unit.
- Fix the piping to the wall (after having coated it with insulating tape) using clamps or insert them into plastic slots.
- 4. Seal the hole in the wall through which the piping is passed so that no air or water can fill.

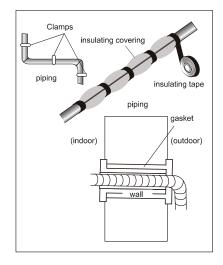
Indoor unit test

- · Do the ON/OFF and FAN operate normally?
- · Does the MODE operate normally?
- · Do the set point and TIMER function properly?
- Does each lamp light normally?
- Do the flap for air flow direction operate normally?
- · Is the condensed water drained regularly?

Outdoor unit test

- Is there any abnormal noise or vibration during operation?
- Could the noise, the air flow or the condensed water drainage disturb the neighbours?
- · Is there any coolant leakage?

Note: the electronic controller allows the compressor to start only three minutes after voltage has reached the system.



English

GENERAL INFORMATION FOR THE INSTALLER

FIXED-SPEED TYPE MODEL CAPACITY (Btu/h)	9k	12k	18k	24k
Liquid pipe diameter	1/4 " (φ 6)	1/4 " (φ 6)	1/4 " (φ 6)	3/8 " (\$\phi 9.52)
Gas pipe diameter	3/8 " (3/8 " (φ 9.52)	1/2 " (φ 12)	5/8 " (4 15.88)
Lenght of pipe with standard charge	3m	3m	4m	4m
Maximum distance between indoor and outdoor unit	15m	15m	15m	15m
Additional gas charge	20g/m	20g/m	30g/m	30g/m
Max. diff. in level between indoor and outdoor unit	5m	5m	5m	5m
Type of refrigerant(1)	R410A	R410A	R410A	R410A

(1) Refer to the data rating label sticked on the outdoor unit.

TIGHTENING TORQUE FOR PROTECTION CAPS AND FLANGE CONNECTION

PIPE	TIGHTENING TORQUE [N x m]	CORRESPONDING STRESS (using a 20 cm wrench)		TIGHTENING TORQUE [N x m]
1/4 " (ф 6)	15 - 20	wrist strength	Service port nut	7 - 9
3/8 " (4 9.52)	31 - 35	arm strength	Protection caps	25 - 30
1/2 " (φ 12)	35 - 45	arm strength		
5/8 " (ф 15.88)	75 - 80	arm strength		

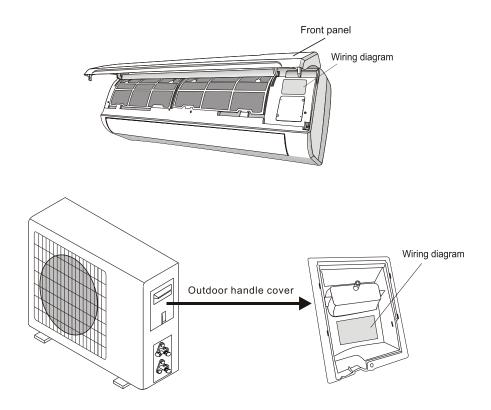
GENERAL INFORMATION FOR THE INSTALLER

WIRING DIAGRAM

For different models, the wiring diagram may be different. Please refer to the wiring diagrams pasted on the indoor unit and outdoor unit respectively.

On indoor unit, the wiring diagram is pasted under the front panel;

On outdoor unit, the wiring diagram is pasted on the backside of the outdoor handle cover.



Please see the pasted diagram instruction on the unit first

Note: For some models the wires has been connected to the main PCB of indoor unit by manufacturer without terminal block.

GENERAL INFORMATION FOR THE INSTALLER

CABLE WIRES SPECIFICATION

MODEL CAPACITY (Btu/h)		9k	12k	18k	24k
		sectional area			
	N	1.0mm² AWG18	1.0mm² (1.5mm²) AWG18 (AWG16)	1.5mm² AWG16	2.5mm² AWG14 H05RN-F
Power Supply Cable	L	1.0mm² AWG18	1.0mm² (1.5mm²) AWG18 (AWG16)	1.5mm² AWG16	2.5mm² AWG14 H05RN-F
	Е	1.0mm² AWG18	1.0mm² (1.5mm²) AWG18 (AWG16)	1.5mm² AWG16	2.5mm² AWG14 H05RN-F

Capacity (Btu/h)	Powe	er cord	Power connecting cord		Power connecting cord1(for heat pump)	
	Туре	Normal cross - sectional area	Type	Normal cross - sectional area	Туре	Normal cross - sectional area
12K	H05VV-F	1.5mm²X3	H05RN-F	1.5mm²X3	H05RN-F	0.75mm ² X2
18K	H05VV-F	1.5mm ² X3	H05RN-F	1.5mm ² X3	H05RN-F	0.75mm ² X2
24K	H05VV-F	2.5mm ² X3	H05RN-F	2.5mm ² X3	H05RN-F	0.75mm ² X2

Type for 220V of fuse used on indoor unit controller for 9K, 12K, 15K, 16K, 18K, 22K, 24K, 30K, 36K is 50T with rating 3.15 A, 250V Type for 110V of fuse used on indoor unit controller for 7K, 9K 12k is 50T with rating 3.15 A, 125V, ; Type of fuse used on inverter outdoor unit controller for 7K, 9K, 12K is 61T with rating 15 A, 250V, for 18K, 22K, 24K is 65TS with rating 25A, 250V.

MAINTENANCE

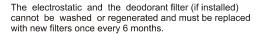
Periodic maintenance is essential for keeping your air conditioner efficient.

Before carrying out any maintenance, disconnect the power supply by putting the installation on/ off switch to "off"

INDOOR UNIT

ANTIDUST FILTERS

- 1. Open the front panel following the direction of the arrow
- Keeping the front panel raised with one hand, take out the air filter with the other hand
- Clean the filter with water; if the filter is soiled with oil,it can be washed with warm water (not exceeding 45°C).
 - Leave to dry in a cool and dry place.
- 4. Keeping the front panel raised with one hand, insert the air filter with the other hand
- 5. Close



CLEANING THE HEAT EXCHANGER

- Open the front panel of the unit and lift it till its greatest stroke and then unhooking it from the hinges to make the cleaning easier.
- Clean the indoor unit using a cloth with the water (not higher than 40°C) and neutral soap. Never use aggressive solvents or detergents.
- If the battery of the outdoor unit is clogged, remove the leaves and the waste and remove the dust with air jet or a bit of water.

END OF SEASON MAINTENANCE

- 1. Disconnect the automatic switch or the plug.
- 2. Clean and replace the filters
- 3. On a sunny day let the conditioner work in ventilation for some hours , so that the inside of the unit can dry completely..

REPLACING THE BATTERIES

When: • There is no confirmation beep from the indoor unit.

The LCD doesn't activate.

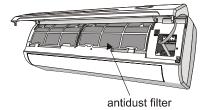
How: • Take off the cover at back.

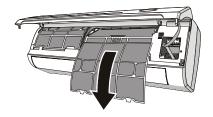
Place the new batteries respecting the symbols + and - .

N.B: Use only new batteries. Remove the batteries from the remote control when the conditioner is not in operation

WARNING! Do not throw batteries into common rubbish, they should be disposed of in the special containers situated in the collection points.







TROUBLESHOOTING

ЕБ

flashes 6 times

MALFUNC	TION	POSSIBLE CAUSES			
		Power failure/plug pulled out			
		Damaged indoor/outdoor unit fan motor			
		Faulty compressor thermomagnetic circuit breaker			
The applianc	e does not	Faulty protective device or fuses.			
operate		Loose connections or plug pulled out			
		It sometimes stops operating to protect the appliance.			
		Voltage higher or lower than the voltage range			
		Active TIMER-	ON function		
		Damaged elect	tronic control board		
Strange odou	ır	Dirty air filter			
Noise of runn	ning water	Back flow of lig	uid in the refrigerant circulation		
A fine mist co the air outlet	mes from		en the air in the room becomes very cold, for example in the or "DEHUMIDIFYING/DRY" modes.		
A strange nois	se can be	This noise is moto variations in	ade by the expansion or contraction of the front panel due temperature and does not indicate a problem.		
		Unsuitable temperature setting.			
		Obstructed air conditioner intakes and outlets.			
Insufficient air	rflow either	Dirty air filter.			
hot or cold	,	Fan speed set at minimum.			
		Other sources of heat in the room.			
		No refrigerant.			
Th		Remote control is not near enough to indoor unit.			
The appliance respond to co		The batteries of remote control nearly has no power.			
respond to ce	minanas	Obstacles between remote control and signal receiver in indoor unit.			
The display is	off	Active LIGHT function			
The display is	5 011	Power failure			
		Strange noises during operation.			
Switch off the		Faulty electronic control board			
tioner immed		Faulty fuses or switches.			
cut off the por in the event o		Spraying water or objects inside the appliance.			
		Overheated cables or plugs.			
		Very strong sm	nells coming from the appliance.		
ERROR SIGNALS ON THE DISPLAY					
In case of en	ror, the disp	lay on the indoor	r unit shown the following error codes:		
RUN lamp		-	Description of the trouble		
	flashes once		The fault ofindoor temperature sensor		
_	flashes twice		The fault of indoor pipe temperature sensor		
			• • •		

Malfunction of indoor fan motor.

Information

English

Information for Users on Collection and Disposal of Old Equipment and Used Batteries



These symbols on the products, packaging, and/or accompanying documents mean that used electrical and electronic products and batteries should not be mixed general household waste.

For proper treatment, recovery and recycling of old products and used batteries, please take them to applicable collection points, in accordance with your national legislation and the Directive 2002/96/EC and 2006/66/EC.

By disposing of these products and batteries correctly, you will help to save valuable resources and prevent any potential negative effects on human health and the environment which could otherwise arise from inappropriate waste handing.

For more information about collection and recycling of old products and batteries, please contact your Local municipality, your waste disposal service or the point of sale where you purchase the items. Penalties may be applicable for incorrect disposal of this waste, in accordance with national legislation.



For business users in the European Union

If you wish to discard electrical and electical equipment, please contact your dealer or supploer for further information.

[Information on Disposal in other Countries outside the European Union]



These symbols are only valid in the European Union, if you wish to discard there items, please contact your local authorities or dealers and ask for the correct method of disposal,

Note for the battery symbol (bottom two symbol examples):

This symbol might be used in combination with a chemical symbol. In this case it complies with the requiement set by the Directive for the chemical involved.

EUROPEAN DISPOSAL GUIDELINES

Users in European Countries may be required to properly dispose of this unit. This appliance contains refrigerant and other potentially hazardous materials. When disposing of this appliance, the law requires special collection and treatment.

DO NOT dispose of this product as household waste or unsorted municipal waste.

When disposing of this appliance, you have the following options:

- Dispose of the appliance at designated municipal electronic waste collection facility.
- When buying a new appliance, the retailer will take back the old appliance free of charge.
- The manufacturer will also take back the old appliance free of charge.
- Sell the appliance to certified scrap metal dealers.

Note: Disposing of this appliance in the forest or other natural surroundings endan gers your health and is bad for the environment. Hazardous substances may leak into the ground water and enter the food chain.

Memo