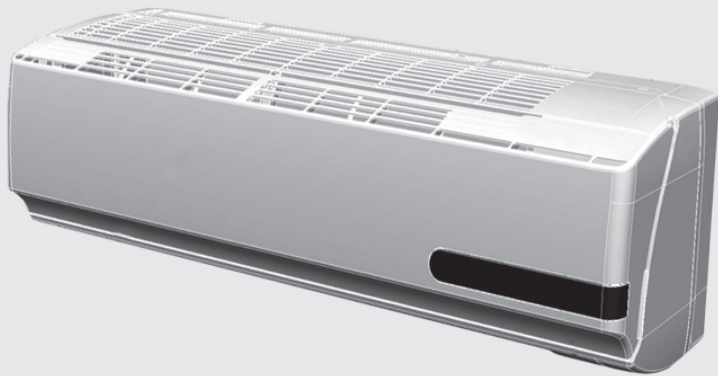




OPERATING AND INSTALLATION MANUAL



SINGLE SPLIT DC INVERTER AND ON-OFF AIR CONDITIONERS AND HEAT PUMP



**Please read this manual carefully
before using the appliance**

Dear Customer,
 Thank you for having chosen a
 or  **DeLonghi** air conditioner, which is an innovative,
 high quality product designed to ensure your wellbeing.

This instruction booklet contains important information and
 recommendations that we would ask you to comply with to
 obtain best results from your air conditioner.

We thank you once again.
DeLonghi.

In line with the company's policy of continual product improvement, the aesthetic and dimensional characteristics, technical data and
 accessories of this appliance may be changed without notice.

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CONFORMITY AND RANGE

GENERAL INFORMATION















The air conditioner you have purchased is in conformity with the following European
 Directives:

- Low Voltage 73/23/EEC
- Electromagnetic compatibility 89/336/EEC

















 ON-OFF Model	 Model
ONE On-Off 7K	ONE Inverter 9K
ONE On-Off 9K	ONE Inverter 12K
ONE On-Off 12K	ONE Inverter 18K
ONE On-Off 18K	ONE Inverter 24K
ONE On-Off 24K	

Code 5717310031, Rev. 00 (11/2007), Pages: 20

-  Read this guide before installing and using the appliance.
-  Check that air cannot enter the refrigerant system and check for refrigerant leaks when moving the air conditioner.
-  Carry out a test cycle after installing the air conditioner and record the operating data.
-  The ratings of the fuse installed in the built-in control unit are 2.5 A, E, 250V.
-  The user must ensure that the whole unit is protected by a fuse of adequate capacity in relation to the maximum input current or by another overload protective device.
-  Ensure that the mains voltage corresponds to that stamped on the rating plate. Keep the switch or power plug clean. Insert the power plug correctly and firmly into the socket, thereby avoiding the risk of electric shock or fire due to insufficient contact.
-  Check that the socket is suitable for the plug, otherwise have the socket changed.
-  Make sure that the base of the outdoor unit is firmly fixed.
-  Do not install the appliance at a distance of less than 50 cm from inflammable substances (alcohol, etc.) or from pressurised containers (e.g. spray cans).
-  If the appliance is used in areas without the possibility of ventilation, precautions must be taken to prevent any leaks of refrigerant gas from remaining in the environment and creating a danger of fire
-  The packaging materials are recyclable and should therefore be disposed of in the relative separate waste bins. Take the air conditioner at the end of its useful life to a special waste collection centre for disposal.
-  Only use the air conditioner as instructed in this booklet. These instructions are not intended to cover every possible condition and situation. As with any electrical household appliance, common sense and caution are therefore always recommended for installation, operation and maintenance.
-  The appliance must be installed in accordance with applicable national regulations.
-  Before accessing the terminals, all the power circuits must be disconnected from the power supply.

SAFETY RULES AND RECOMMENDATIONS FOR THE USER

GENERAL INFORMATION

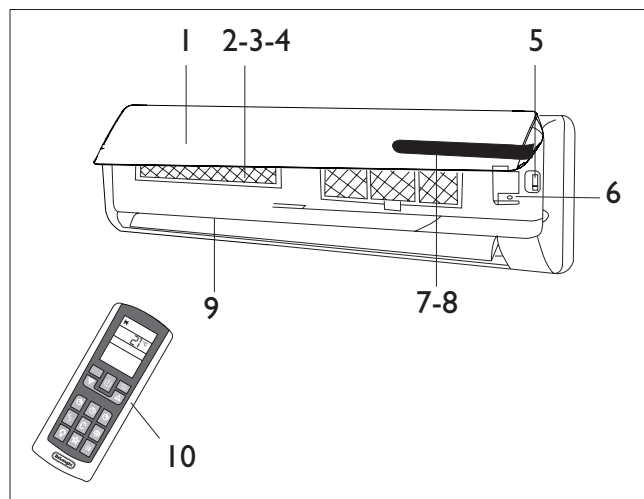
-  Ensure that the mains voltage corresponds to that stamped on the rating plate. Keep the switch or power plug clean. Insert the power plug correctly and firmly into the socket, thereby avoiding the risk of electric shock or fire due to insufficient contact.
-  Do not pull out the plug to switch off the appliance when it is in operation, since this could create a spark and cause a fire, etc.
-  The user is responsible for having the appliance installed by a qualified technician, who must check that it is earthed in accordance with current legislation and insert a thermomagnetic circuit breaker.
-  Prolonged exposure to cold air is harmful to health.
-  If the appliance gives off smoke or there is a smell of burning, immediately cut off the power supply and contact the Service Centre.
-  Have repairs carried out only by an authorised Service Centre of the manufacturer. Incorrect repair could expose the user to the risk of electric shock, etc.
-  Ensure that the appliance is disconnected from the power supply when it will remain inoperative for a long period and before carrying out any cleaning or maintenance.
-  This appliance must only be used by adults; do not allow children or persons with reduced psycho-physical-sensorial abilities to use it.
-  Selecting the most suitable temperature can prevent damage to the appliance.
-  The airflow direction must be properly adjusted. The flaps must be directed downwards in the heating mode and upwards in the cooling mode.
-  This appliance has been made for air-conditioning domestic environments and must not be used for any other purpose, such as for drying clothes, cooling food, etc.
-  The packaging materials are recyclable and should therefore be disposed of in the relative separate waste bins. Take the air conditioner at the end of its useful life to a special waste collection centre for disposal.
-  Only use the air conditioner as instructed in this booklet. These instructions are not intended to cover every possible condition and situation. As with any electrical household appliance, common sense and caution are therefore always recommended for installation, operation and maintenance.
-  Cleaning and maintenance must be carried out by specialised technical personnel. In any case disconnect the appliance from the mains electricity supply before carrying out any cleaning or maintenance.

- Do not bend, tug or compress the power cord since this could damage it. Electrical shocks or fire are probably due to a damaged power cord.
Specialised technical personnel only must replace a damaged power cord.
- Do not use extensions or gang modules.
- Do not touch the appliance when barefoot or parts of the body are wet or damp.
- Do not obstruct the air inlet or outlet of the indoor or the outdoor unit.
In no way alter the characteristics of the appliance.
- Do not install the appliance in environments where the air could contain gas, oil or sulphur or near sources of heat.
- Do not climb onto or place any heavy or hot objects on top of the appliance.
- Do not leave windows or doors open for long when the air conditioner is operating.
- Do not direct the airflow onto plants or animals.
- Do not spray water onto the air conditioner.
- Do not climb onto or place any objects on the outdoor unit
- Never insert a stick or similar object into the appliance. It could cause injury.

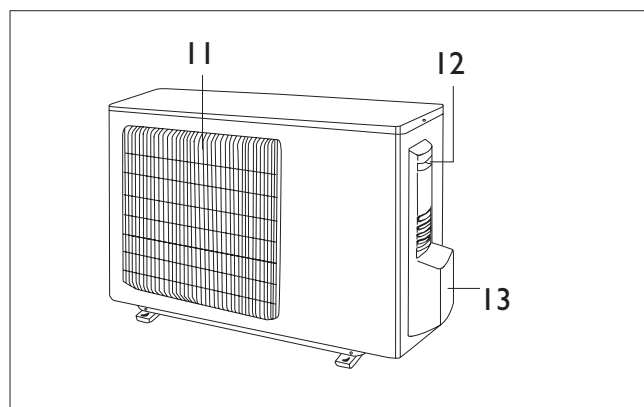
NAMES OF THE PARTS

GENERAL INFORMATION

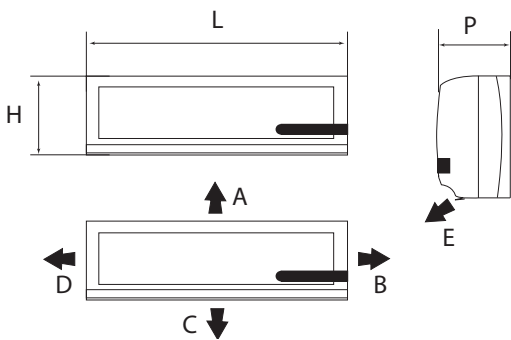
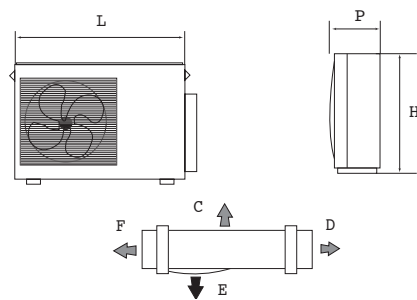
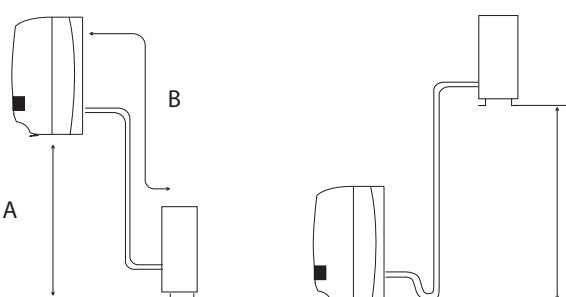
INDOOR UNIT	
No.	Description
1	Front panel
2	Air filter
3	Antibacterial silver ion filter (if installed)
4	Deodoriser biologic electrostatic filter (if installed)
5	Terminal block cover
6	Automatic restart button
7	ECC LED display
8	Signal receiver
9	Airflow direction flaps
10	Intelligent remote control



OUTDOOR UNIT	
No.	Description
11	Air outlet grille
12	Handle
13	Fittings cover (if present)



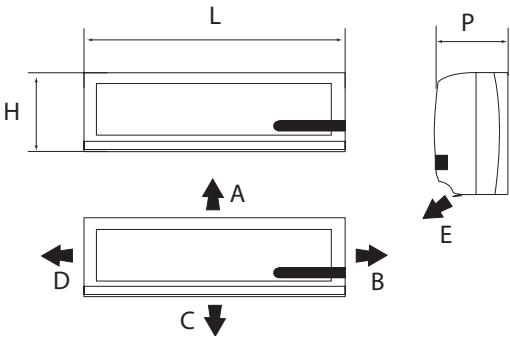
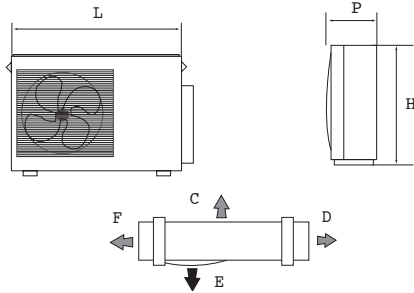
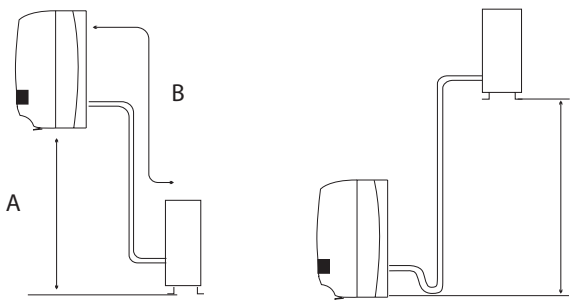
Note: the above figures are only intended to be a simple diagram of the appliance and may not correspond to the appearance of the units that have been purchased.

ONE Inverter MODELS		9K	12K	18K	24K		
General data							
Electricity supply		230~50 (*)				V~Hz	
Refrigerant gas		R410A (**)					
Fuse		10	15	15	15	A	
Minimum cable section		1,5	2,5	2,5	2,5	mm²	
Size and clearance							
		L	770	830	1020	1020	mm
		H	250	285	310	310	mm
		P	205	215	250	250	mm
		A	150				mm
		B	150				mm
		C	2500				mm
		D	150				mm
		E	300				mm
		L	763	763	848	848	mm
		P	258	258	378	378	mm
		H	515	515	620	620	mm
		C	300				mm
		D	500				mm
		F	300				mm
		E	2000				mm
Indoor unit net weight		8	11	14	14	kg	
Outdoor unit net weight		40	40	52	52	kg	
Connecting pipes							
Refrigerant pipe size		Liquid	6,0 - 1/4"	6,0 - 1/4"	6,0 - 1/4"	10-3/8"	Ø-inch
		Gas	10-3/8"	12 - 1/2"	12 - 1/2"	16-5/8"	Ø-inch
Pipe tightening torque		Liquid	20	20	20	40	Nm
		Gas	60	60	60	80	Nm
Quantity of refrigerant per metre of pipe (over 5 m)		15	15	22	22	g/m	
		A (max)	6	6	8	8	m
		B (max)	25	25	30	30	m
		C (max)	6	6	8	8	m
Refrigerant charge		(***)				g.	
Operating limits							
		Internal part bulb		External part bulb			
Cooling (Max ; Min)		36 ; 16		45 ; -10		°C	
Heating (Max ; Min)		30 ; 16		27 ; -15		°C	

(*) See the rating plate for the electricity supply.

(**) The appliance may be supplied with refrigerant gas R22 in countries where the use of refrigerant gas R410a is not compulsory.

(***) See the rating plate for the refrigerant charge.

ONE ON-OFF MODELS		7K	9K	12K	18K	24K		
General data								
Electricity supply		230~50 (*)					V~Hz	
Refrigerant gas		R410A (**)						
Fuse		10	10	15	15	15	A	
Minimum cable section		1,5	1,5	2,5	2,5	2,5	mm²	
Size and clearance								
		L	770	830	830	1020	1020	mm
		H	250	250	285	310	310	mm
		P	205	205	215	250	250	mm
		A	150					mm
		B	150					mm
		C	2500					mm
		D	150					mm
		E	300					mm
		L	763	848	848	848	950	mm
		P	258	258	258	378	420	mm
		H	515	540	592	620	840	mm
		C	300					mm
		D	500					mm
		F	300					mm
		E	2000					mm
Indoor unit net weight		8	8	11	14	15	kg	
Outdoor unit net weight		30	30	38	52	72	kg	
Connecting pipes								
Refrigerant pipe size		Liquido	6,0 - 1/4"	6,0 - 1/4"	6,0 - 1/4"	6,0 - 1/4"	10-3/8"	Ø-inch
		Gas	10-3/8"	10-3/8"	12-1/2"	12-1/2"	16-5/8"	Ø-inch
Pipe tightening torque		Liquido	20	20	20	20	40	Nm
		Gas	40	40	60	60	80	Nm
Quantity of refrigerant per metre of pipe (over 5 m)			20	20	30	50	50	g/m
		A (max)	5					m
		B (max)	10					m
		C (max)	5					m
Refrigerant charge		(***)					g.	
Operating limits								
		Internal part bulb		External part bulb				
Cooling (Max ; Min)		36 ; 16		45 ; 18		°C		
Heating (Max ; Min)		30 ; 16		27;-10		°C		

(*) See the rating plate for the electricity supply.

(**) The appliance may be supplied with refrigerant gas R22 in countries where the use of refrigerant gas R410a is not compulsory.

(***) See the rating plate for the refrigerant charge.



	Led	Function
	SMART	SMART mode
	FAN	Fan mode
	HEAT	HEAT mode
	FAN SPEED	High fan speed Medium fan speed Low fan speed

	Led	Function
	DISPLAY (temp)	Indicates the temperature in °C
	COOL	COOL mode
	DRY	Dry mode
	RUN	Indicates switching on of the appliance
	ON (led)	Shows that the unit is powered

The shape and position of switches and indicators may vary according to the model, but their function is the same.

Danger of electric shock with open grille.

If the remote control is lost, proceed as follows:

- If the unit is turned off, press the Automatic restart button on the unit to start the air conditioner in the SMART mode. The air conditioner will automatically choose the cooling, dehumidifying or heating mode according to environmental conditions to ensure maximum comfort.
- To turn off the unit, press the Automatic restart button again.

REMOTE CONTROL

USER

Per impostare l'ora corrente, procedere in questo modo:

- Premere il tasto CLOCK (🕒)
- Selezionare l'ora spostandosi con i tasti (▲) e (▼)

Nota: se premuti per più di 2 secondi, l'ora riportata sul display scorrerà velocemente.

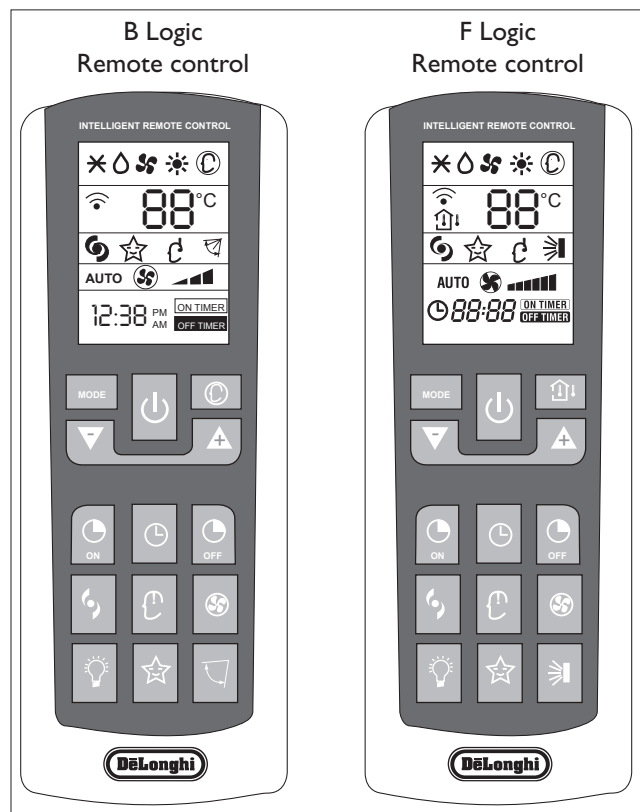
- Premere nuovamente il tasto CLOCK per confermare.

Nota: se non verrà premuto entro 10 secondi, l'orologio ritornerà all'impostazione originale.

No.	Button	Function
MODE	MODE	Selection of mode of operation
	ON/OFF	On/Off
	TEMP DN	Decrease of temperature or time by 1 unit
	TEMP UP	Increase of temperature or time by 1 unit
	T-ON	To set automatic switching-on
	CLOCK	To set the clock
	T-OFF	To set automatic switching-off
	TURBO POWER	TURBO function
	I COMFORT	I COMFORT mode
	FAN	Selection of fan speed
	LIGHT	To illuminate/darken ECC display LED of indoor unit
	SLEEP	Night function
	SWING	To adjust the position of the flaps
	SMART (*)	Automatic operation
	ROOM TEMPERATURE (**)	Temperature display mode

(*) Only on B Logic remote control

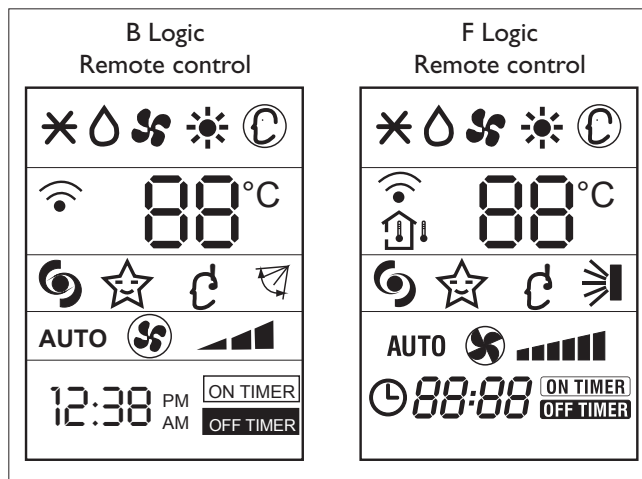
(**) Only on F Logic remote control



Remote control DISPLAY

Meaning of symbols on the liquid crystal display

	Heating indicator
	Dehumidifying indicator
	Fan only operation indicator
	Heating indicator
	SMART indicator
	Signal reception indicator
	Room temperature indicator (only on F Logic remote control)
	TURBO POWER indicator
	SLEEP indicator
	I COMFORT indicator
	Flap swing indicator
	Fan in automatic mode indicator
	FAN indicator
	Fan speed indicator
	24-hour timer indicator
	TIMER ON indicator
	TIMER OFF indicator



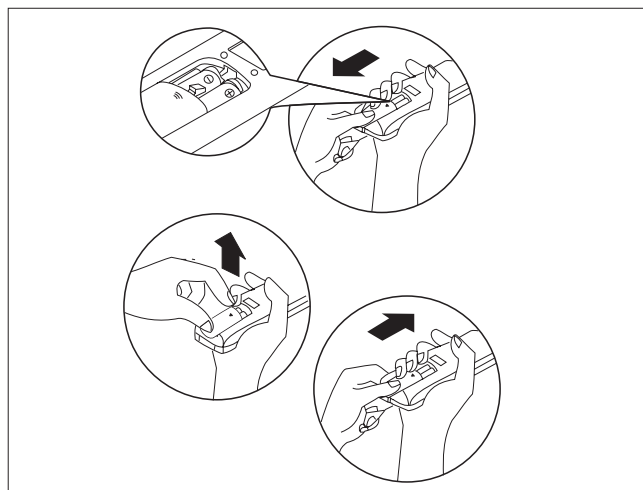
The remote control display remains active even when the unit is not in operation.

How to insert the batteries

- Remove the cover from the battery compartment, by sliding it in the direction of the arrow.
- Insert the new batteries, ensuring that the (+) and (-) directions are correct.
- Refit the cover by sliding it into place.

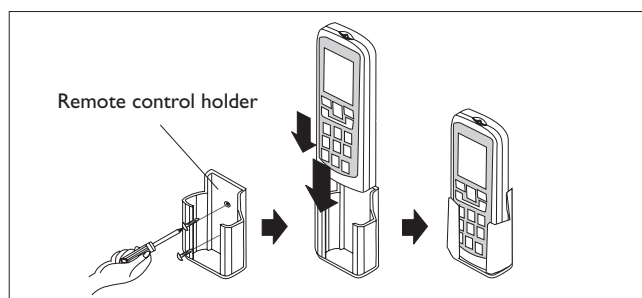


Use 2 RO3 AAA (1.5V) batteries. Do not use rechargeable batteries. Replace the old batteries with new ones of the same type when the display is no longer legible. The remote control batteries must be disposed of in accordance with the applicable laws in force in the country of use.



Recommendations for locating and using the remote control (if present)

The remote control may be kept in a wall-mounted holder.

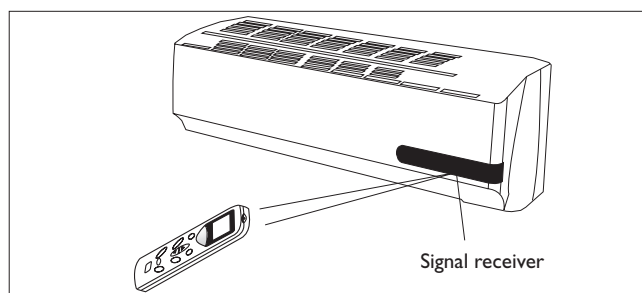









How to use the remote control

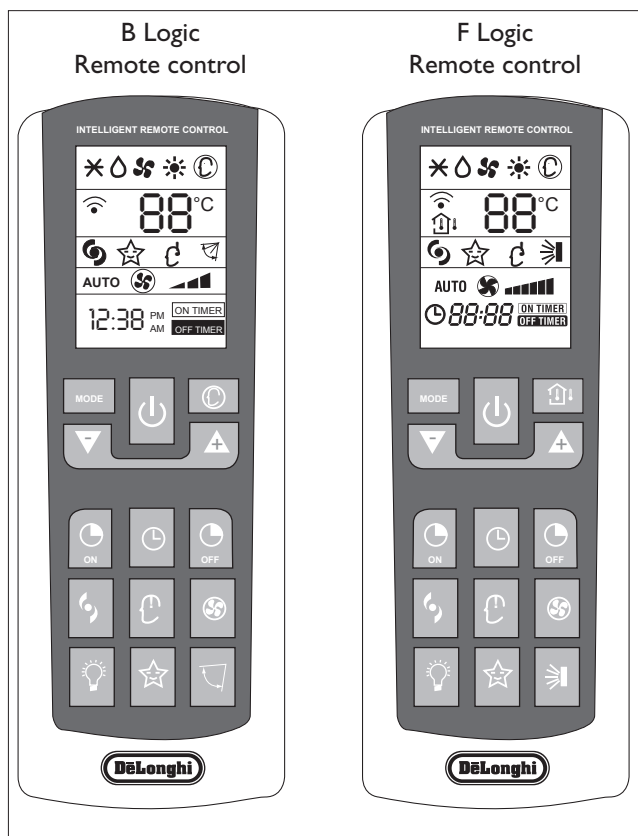
To start the air conditioner, point the remote control at the signal receiver. The remote control works up to a maximum distance of 8 metres from the indoor unit.




Keep the remote control at a distance of at least 1 m from the television or other electrical appliances.



Mode of operation									
ON/OFF 	On/Off/Stand-by. The symbol  appears on the remote control display when the conditioner is switched on								
FAN (Fan Mode) 	Every time the FAN button is pressed the speed changes in the following sequence: AUTO - LOW - MEDIUM - HIGH. If you select the AUTO FAN speed, the electronic control chooses the fan speed automatically. In AUTO mode, the electronic control chooses the operating mode (COOLING or HEATING) and the fan speed.								
SWING 	Adjustment of airflow. Press the "SWING" button to start the automatic swing of the airflow direction flaps; press the "SWING" button again to stop the movement. If the appliance is operating in the HEAT mode when the "SWING" button is pressed, the start of this function will be deliberately delayed for a few seconds to ensure the immediate outflow of warm air for user comfort (Hot-Start function).								
MODE  (F Logic)	Mode of operation selection. Every time the MODE button is pressed the mode of operation changes in the following sequence: COOLING - DRY - FAN - HEATING - SMART. Note: on the B Logic remote control the sequence is: COOLING - DRY - FAN - HEATING								
SMART  (B Logic)	Activation of the automatic mode of operation (SMART)								
TEMP DN/UP 	Setting of temperature. Press once to raise (+C°) or lower (-C°) the set temperature by 1°C. Available range of temperature settings: <table border="0"> <tr> <td>HEATING</td><td>16°C ~ 30°C</td></tr> <tr> <td>COOLING</td><td>16°C ~ 30°C</td></tr> <tr> <td>DEHUMIDIFYNG</td><td>16°C ~ 30°C</td></tr> <tr> <td>FAN</td><td>16°C ~ 30°C</td></tr> </table>	HEATING	16°C ~ 30°C	COOLING	16°C ~ 30°C	DEHUMIDIFYNG	16°C ~ 30°C	FAN	16°C ~ 30°C
HEATING	16°C ~ 30°C								
COOLING	16°C ~ 30°C								
DEHUMIDIFYNG	16°C ~ 30°C								
FAN	16°C ~ 30°C								




Note: the appliance will start in the mode of operation that was selected before switching off.

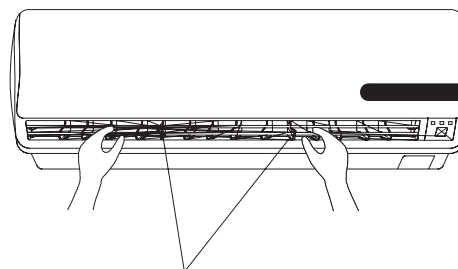
 Do not turn the vertical airflow direction flaps by hand, since this could cause malfunctioning. In the case of flap malfunction, first of all switch off the appliance, disconnect it from the power supply and then reconnect it.

Adjustment of horizontal airflow (manual)

To change the angle of the airflow, turn the adjusting cursors of the horizontal airflow direction flaps as shown.

Note: the unit shown here may be different from the air conditioner you have purchased.

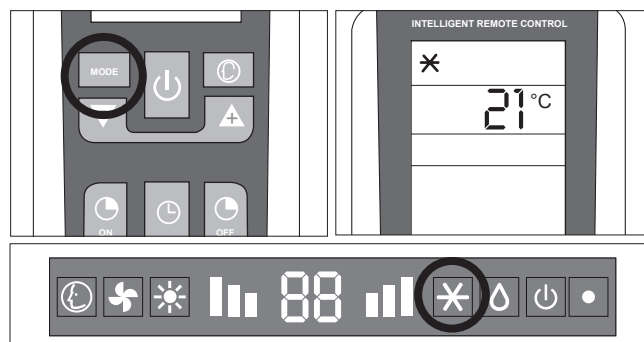
 This adjustment must be done with the appliance switched off.



Note: the appliance will start in the mode of operation that was selected before switching off.

The cooling function allows the air conditioner to be started and used as a producer of cool air.

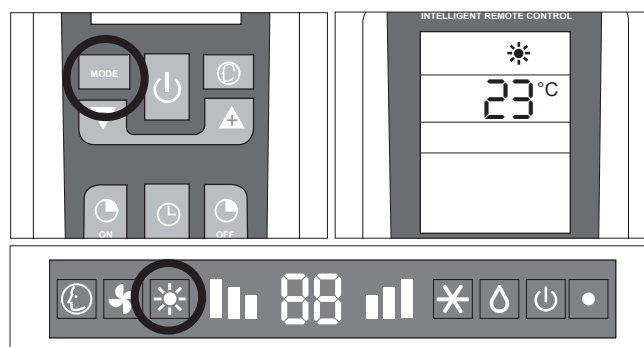
To activate the cooling function (COOL), press the MODE button until the symbol (✱) appears on the display. To change the temperature value, use the (TEMP UP and TEMP DN) buttons. Each time the buttons are pressed the set temperature value increases or decreases by 1°C.


HEATING MODE

The heating function allows the air conditioner to be started and used as a producer of hot air.

To activate the heating function (HEAT), press the MODE button until the symbol (✱) appears on the display. To change the temperature value, use the (TEMP UP and TEMP DN) buttons. Each time the buttons are pressed the set temperature value increases or decreases by 1°C.

The appliance is fitted with a Hot Start function, which delays appliance start-up for a few seconds to ensure an immediate output of hot air.


TIMER MODE

! Before setting the timer, ensure that the time on the remote control is set correctly. If it is not, consult the instructions given on page 6.

Automatic switching-on

To set the automatic switching-on of the air conditioner, proceed as follows:

- With the appliance switched off, press the button **TIMER ON** (ON).
- Set the automatic switching-on time using the ▼ and ▲ button.
- Press the **TIMER ON** button within 5 seconds to confirm otherwise the function will exit from time setting.

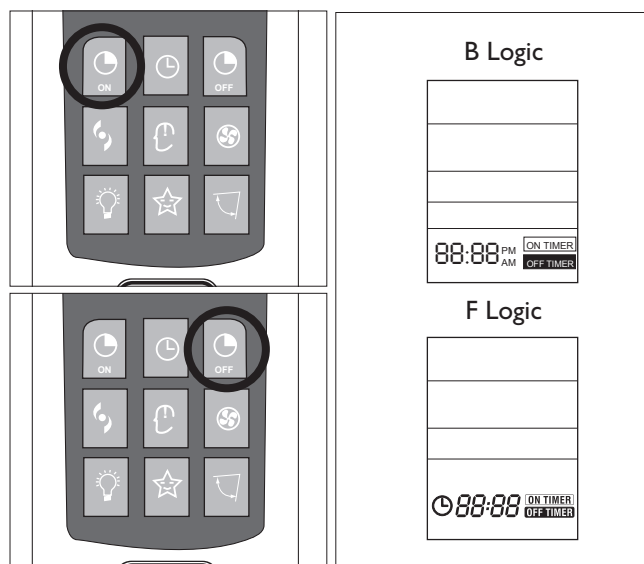
Note: to cancel the function setting, press the **TIMER ON** button again.

Automatic switching-off

To set the automatic switching-off time, proceed as follows:

- Press the **TIMER OFF** (OFF) button.
- Set the automatic switching-off time using the ▼ and ▲ button.
- Press the **TIMER OFF** button within 5 seconds to confirm, otherwise the function will exit from time setting.

Note: to cancel the function setting, press the **TIMER OFF** button again.



Note: it is also possible to set the appliance switching-on and switching-off time so as to define a specific duration of operation.

Note: the appliance will start in the mode of operation that was selected before switching off.

Fan mode

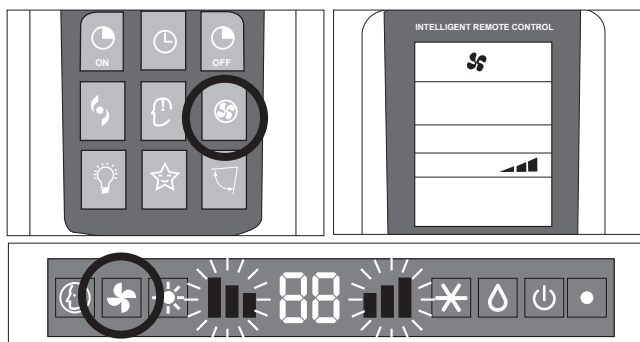
Press the MODE button until the FAN (✶) symbol appears. Every time the FAN button (✶), is pressed the speed changes in the following sequence: AUTO – LOW – MEDIUM – HIGH. The remote control also stores the speed that was set in the previous mode of operation.

In SMART mode (⌚), the air conditioner automatically chooses the fan speed and the mode of operation (COOLING or HEATING).

Note:

Once the fan speed has been set the indicator lights ■■ ■■ will start to blink from the lowest to the tallest at a speed that varies according to the set fan speed.

See the table to the side for an example.

**Indoor unit display**

Blinking	Set speed
Slow	Minimum fan speed
Medium	Medium fan speed
Fast	Maximum fan speed

DRY MODE

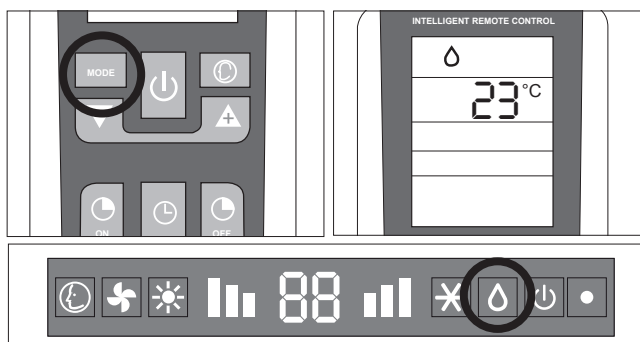
USER

Dehumidifying mode

Press the MODE button until the DRY symbol (δ) appears.

The appliance activates according to the room and the set temperature:

- If the room temperature is 2°C lower than the set temperature, the compressor and the outdoor unit stop while the indoor unit fan operates at low speed.
- If the room temperature is 2°C higher than the set temperature, the appliance automatically passes to the dehumidifying function, activating the fan at low speed.



SMART MODE

USER

Modalità automatica

B Logic Remote Control (Fig. 1):

To activate the SMART function, press the SMART button (⌚) on the remote control. The writing SMART ⌚ will appear on the remote control display.

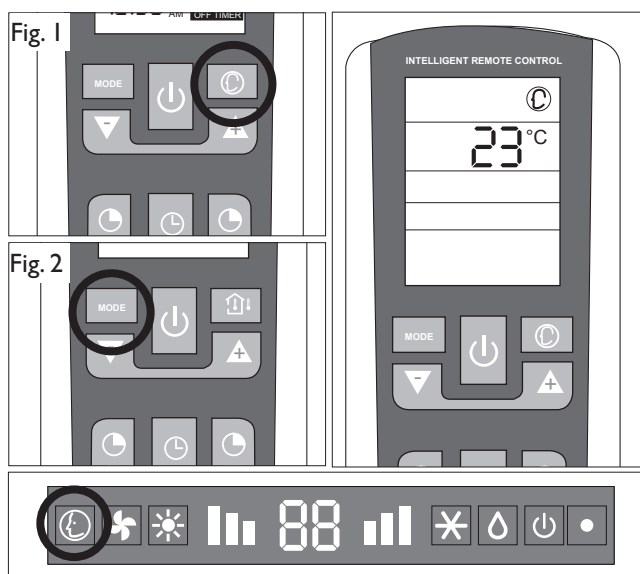
F Logic Remote Control (Fig. 2):

To activate the SMART (automatic) mode of operation press the MODE button on the remote control until the symbol ⌚ appears on the display.

In the AUTO mode the fan speed and the temperature are set automatically according to the room temperature to ensure user comfort.

Room temperature	Modr
between 22°C	HEATING
22 ~ 24°C	DRY
above 26°C	COOLING

Note: after having stopped the SMART function, the air conditioner will start up with the settings of the previously selected modes.

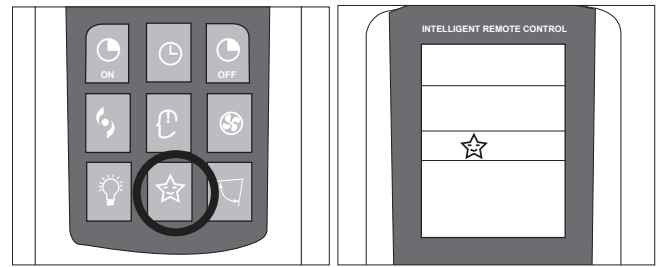


Night mode

To activate the night function in the COOL, DRY and HEAT modes, press the SLEEP button. The symbol ☆ appears on the display. To deactivate the night function, press the SLEEP (☆) button again.

During operation in the night mode, the set temperature increases by 1 °C in the first hour of operation and by another 1 °C in the following hour, maintaining this increase of 2 °C in the subsequent hours.

Selecting the night function in the heating mode, the set temperature decreases by 1 °C in the first hour of operation and by another 1 °C in the following hour, maintaining this decrease of 2 °C in the subsequent hours with the fan operating at minimum speed.



NOTE: Under FAN and SMART modes, this function is not available.

I COMFORT FUNCTION

USER

Press the I COMFORT (⌂) button and the symbol ⌂ appears on the display.

This function is used to obtain the required climate in the exact point where the remote control is located.

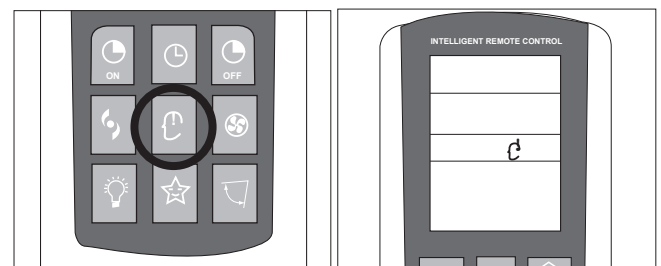
The temperature of reference is that measured by the sensor in the remote control, bypassing the temperature sensor inside the air conditioner.



The remote control must always be pointed at the unit.







If no signal is received from the remote control for 11 minutes, the unit will once again refer to its own internal sensor

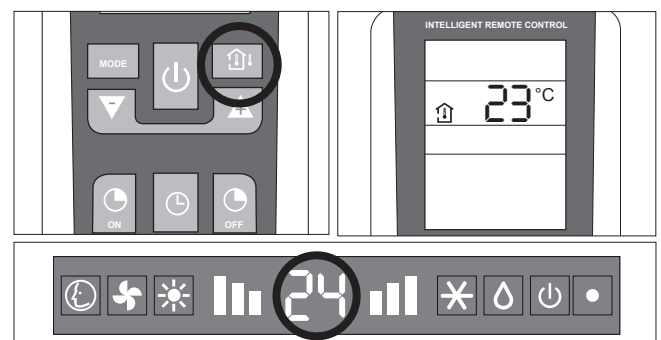
**ROOM TEMPERATURE FUNCTION**

USER

Press the ROOM TEMPERATURE (🏠) button (only on the F Logic remote control) for the various modes of measuring the temperature in the room where the appliance is installed.

A few display examples are given in the table:

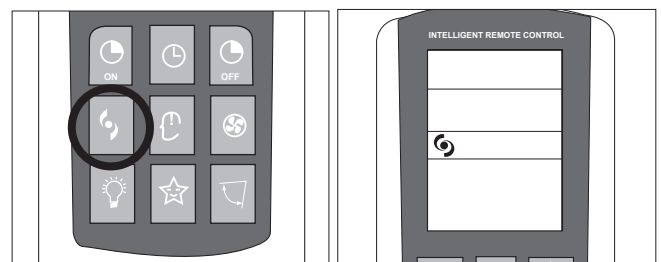
I-COMFORT function not active		
Remote control display		Indoor unit display
	Set temperature	Set temperature
	Temp. measured by indoor unit sensor	Set temperature
	Function unavailable	
I-COMFORT function active		
	Temp. measured by remote control sensor	Set temperature

**TURBO POWER FUNCTION**

USER

To activate the TURBO POWER function, press the ⚡ button. The symbol ⚡ appears on the display.

In the COOL or HEAT mode, the air conditioner will automatically operate at maximum power. To deactivate this function just change the fan speed or press the ⚡ button again.



Press the LIGHT (💡), Upon activating this function the LEDs on the indoor unit display go out while air conditioner operation remains unchanged. This function is useful at night when the display lights could be bothersome.

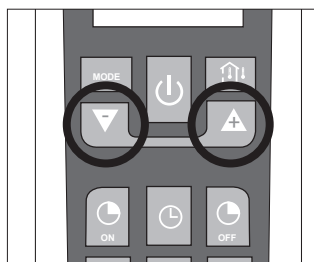


ANOTHER FUNCTIONS

USER

LOCK function (if present)

Press ▼ and ▲ buttons simultaneously to lock or unlock the keyboard. If the remote controller is locked, pressing any button, the remote control can't work, you must unlock the keyboard.



Switch between Centigrade and Fahrenheit (if present)

Under status unit off, press MODE and ▼ buttons simultaneously to switch °C and °F.





Carefully remove the adhesive strips from the appliance



After having removed the packaging, check that the contents are intact and complete.



The outdoor unit must always be kept upright.



Handling must be done by suitably equipped qualified technical personnel using equipment that is suitable for the weight of the appliance.

INSTALLING THE INDOOR UNIT

Before starting installation, decide on the position of the indoor and outdoor units, taking into account the minimum clearance required around the units (see technical data table).



Install the indoor unit in the room to be air conditioned, avoiding installations 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:

Installation of the mounting plate

- Drill 32 mm deep holes in the wall for fixing the plate;
- insert the plastic anchors into the hole;
- fix the mounting plate using the self-tapping screws provided;
- check that the mounting plate is correctly fixed;
- using a spirit level, check that it is level.

Drilling a hole in the wall for the piping

- Decide where to drill the hole in the wall for the piping (if necessary) according to the position of the mounting plate;
- 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.

Installing the refrigerant, electrical and condensate drainage pipes

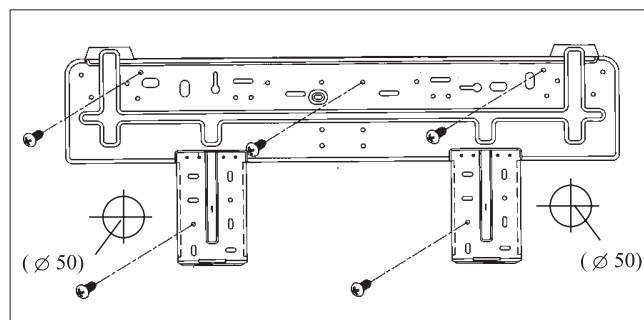
- Pass the pipe (for liquids and gas) through the hole in the wall from the exterior or install it from the indoor side, after having laid the pipes and connected the cables to the indoor unit, ready for connection to the outdoor unit.

Decide whether or not to remove the knockout according to the direction of the piping.

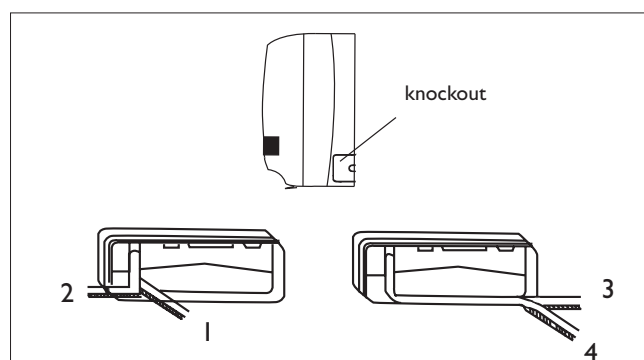
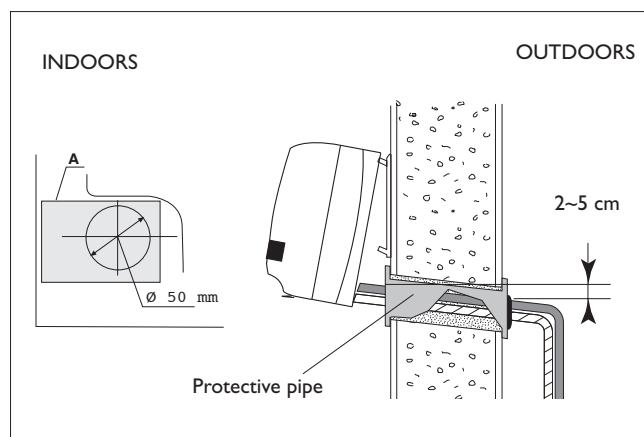
Water connections



Before installing the air conditioner, choose the direction for the pipes to exit; they may be arranged along any one of the 4 directions shown in the figure:

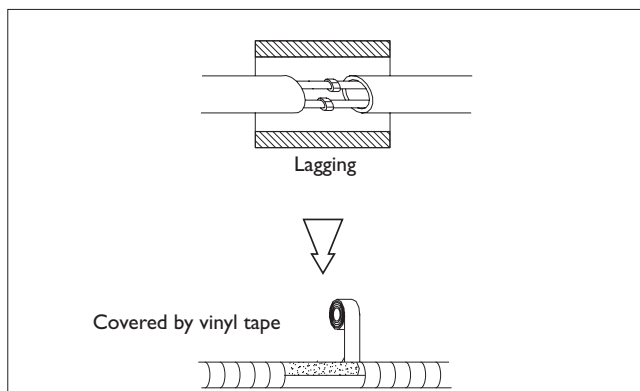


Nota: La vostra piastra di fissaggio può essere di forma diversa da quella sopra riportata, ma il metodo di installazione è simile.



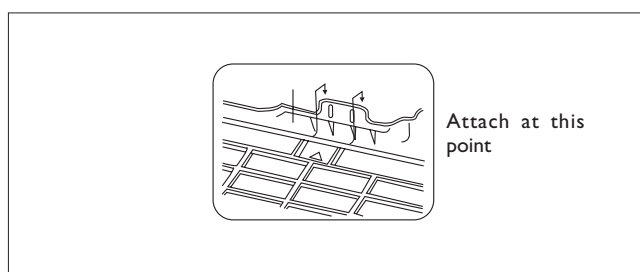
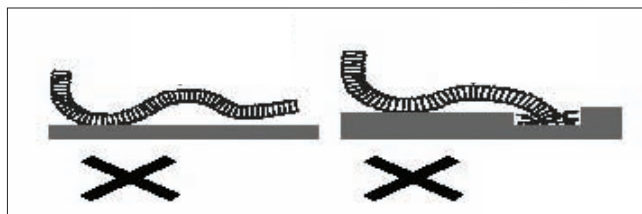
After having connected the pipe according to the instructions, install the drain hose. Now install the power cables. After connection, lag the pipe, cables and drain hose with the insulating material.

- ⚠ Lag the pipe joints with insulating material, securing it with vinyl tape.
- ⚠ Cover the through holes in the wall with elastic material that is also noise absorbing if possible.
- ⚠ Upon completion of installation, check that the condensate flows out regularly.



Lagging the pipes

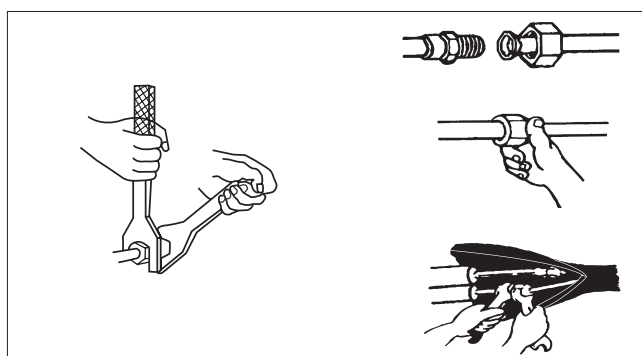
- ⚠ Place the drain hose (not provided in the kit) below the piping, taking care not to create siphons.
- ⚠ Use polythene foam with thickness exceeding 6 mm to insulate the connections.
- ⚠ The drain hose must slant downwards to aid drainage.
- ⚠ Do not bend the drain hose or leave it protruding or twisted 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.
- ⚠ 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.



Connecting the pipes











Use two wrenches to tighten the indoor unit pipe joints.

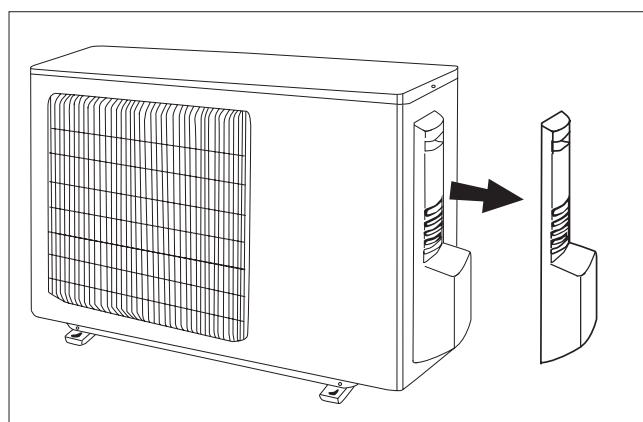
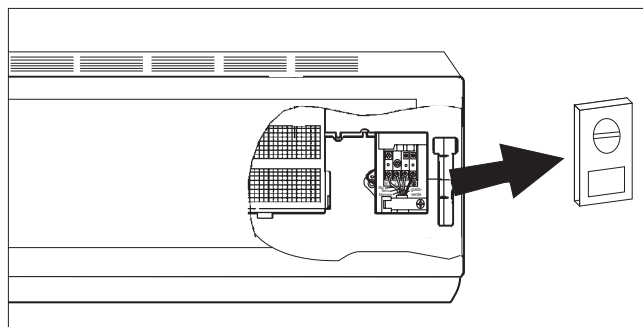
- ⚠ Pay particular attention to the torque recommended below in order not to risk deforming and damaging flared pipes, connectors and nuts.
- ⚠ Tighten the connections using two wrenches working in opposite directions (see technical data table).



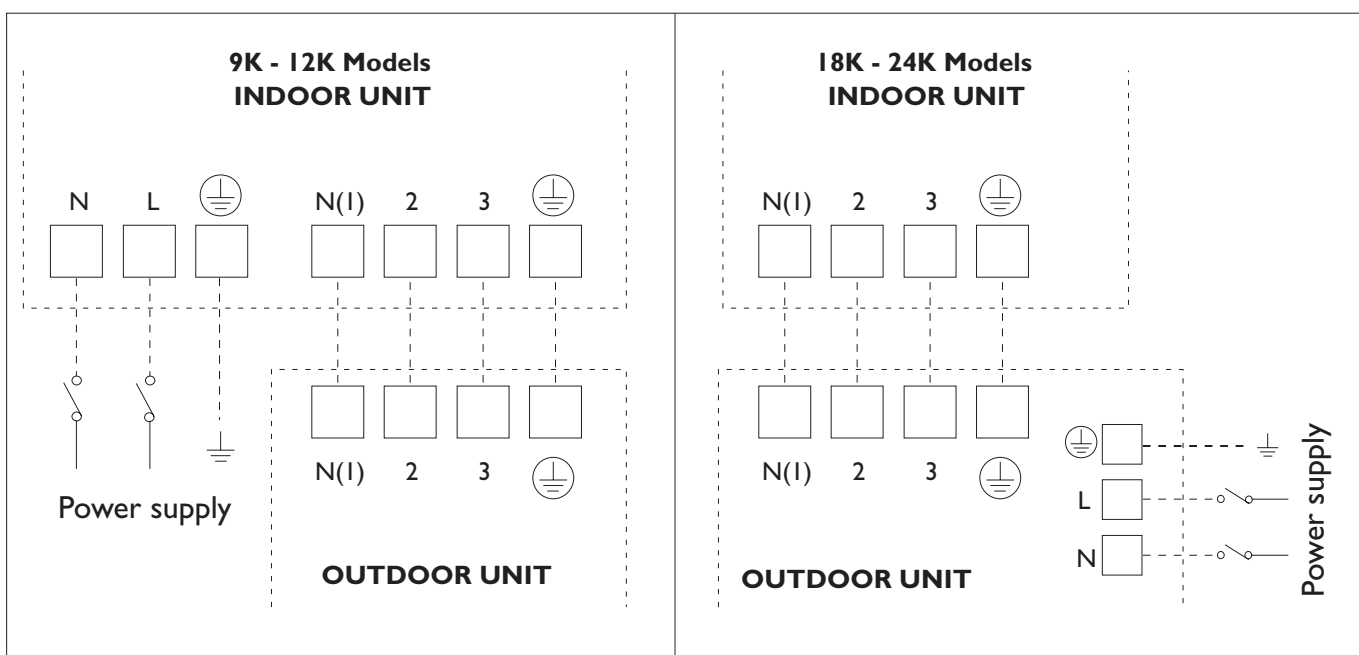
Electrical connections

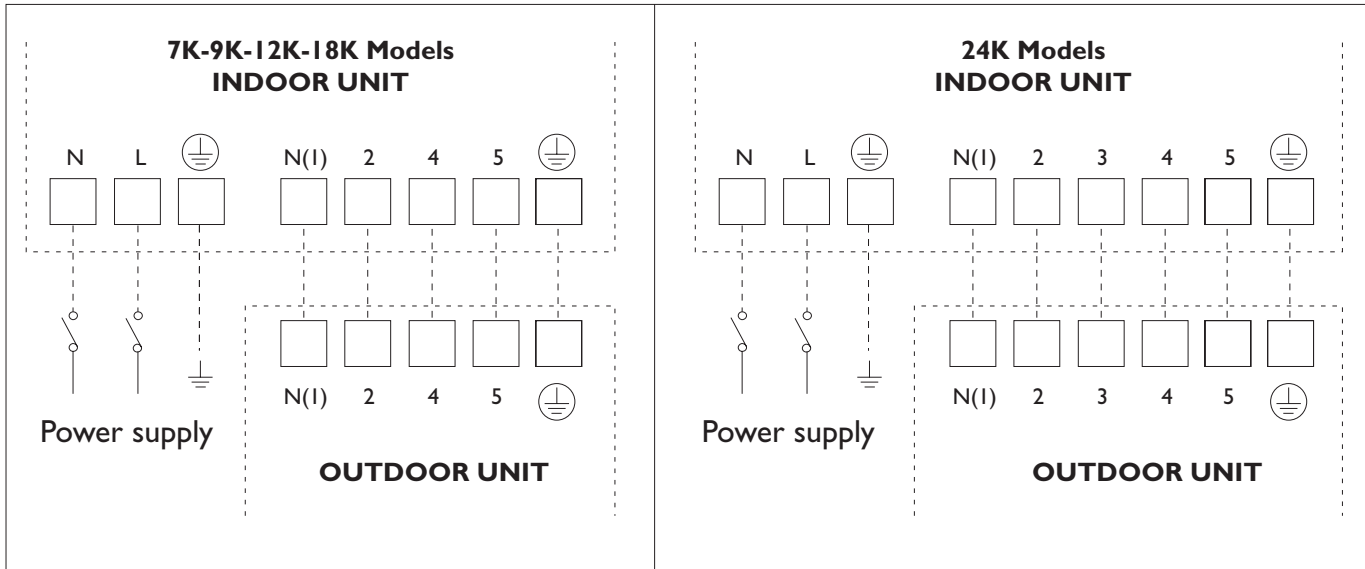
The terminal blocks on the units must be accessed to carry out the electrical connections.
See the pictures at the side.

-  To ensure correct size of the wires for the electrical connection and for connecting the units together, see the technical data table.
-  For the electrical connections, see the circuit diagram inside the access flap and refer to the information given in this manual.
-  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.
-  Installation of an omnipolar thermomagnetic line-disconnecting switch to CEI-EN standards (with contact separation of at least 3 mm) near the appliance is compulsory.
-  An efficient earth connection must be ensured.
-  If the power cable is damaged, it must be replaced by an authorised Service Centre.
-  Under no circumstances should gas or water pipes be used for earthing the appliance.
-  Upon completion of connections, secure the cables with cable glands and replace the terminal block covers.
-  Failure to comply with these instructions and accident-prevention regulations relieves the manufacturer from all liability.



WIRING DIAGRAMS FOR **ONEinverter** DC INVERTER MODELS





! Ensure that when connecting the indoor and outdoor units, the numbering on the respective terminal blocks is observed.

! We suggest the installation of RCD device with nominal differential current that doesn't exceed the 30 mA.

INSTALLING THE OUTDOOR UNIT

INSTALLER

Location

! Use bolts to secure the unit to a flat, solid floor. When mounting the unit on a wall or the roof, make sure the support is firmly secured so that it cannot move in the event of intense vibrations or a strong wind.

⊘ Do not install the outdoor unit in pits or air vents

Installing the pipes

! Use suitable connecting pipes and equipment for the refrigerant in the appliance (see rating plate).

! The refrigerant pipes must not exceed the maximum lengths given in the technical data table.

! Lag all the refrigerant pipes and joints.

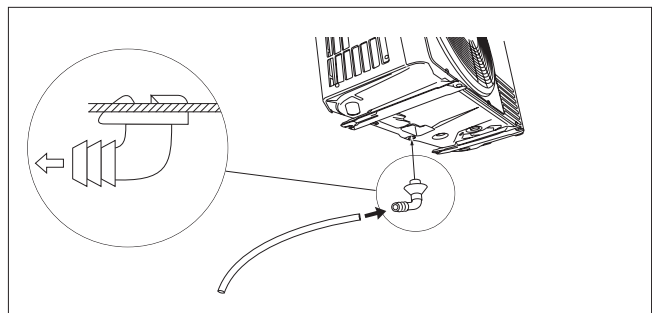
! Tighten the connections using two wrenches working in opposite directions.

Install the drain fitting and the drain hose (for model with heat pump only)

Condensation is produced and flows from the outdoor unit when the appliance is operating in the heating mode. In order not to disturb neighbours and to respect the environment, install a drain fitting and a drain hose to channel the condensate water. Install the drain fitting and rubber washer on the outdoor unit chassis and connect a drain hose to it as shown in the figure.

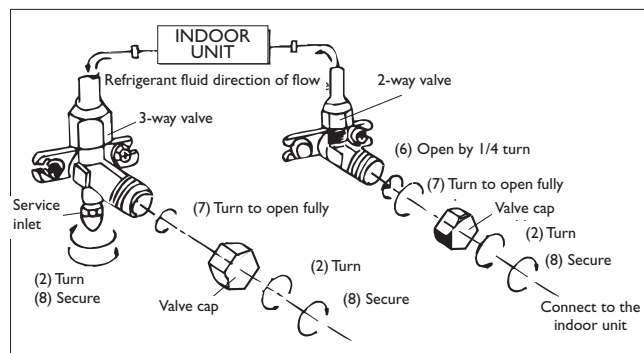
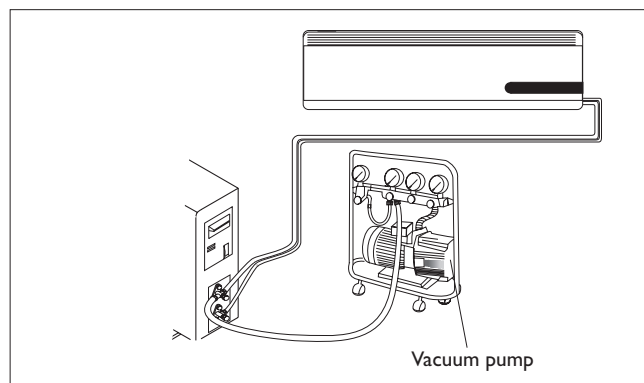
⊘ Do not install the outdoor unit where it is exposed to sunlight.

! Ensure that the recommended space is left around the appliance.



Humid air left inside the refrigerant circuit can cause compressor malfunction. After having connected the indoor and outdoor units, bleed the air and humidity from the refrigerant circuit 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 valve.
- (3) Connect the vacuum pump hose to the service valve.
- (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 after 10 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.



MAINTENANCE

INSTALLER



Periodic maintenance is essential for keeping your air conditioner efficient.

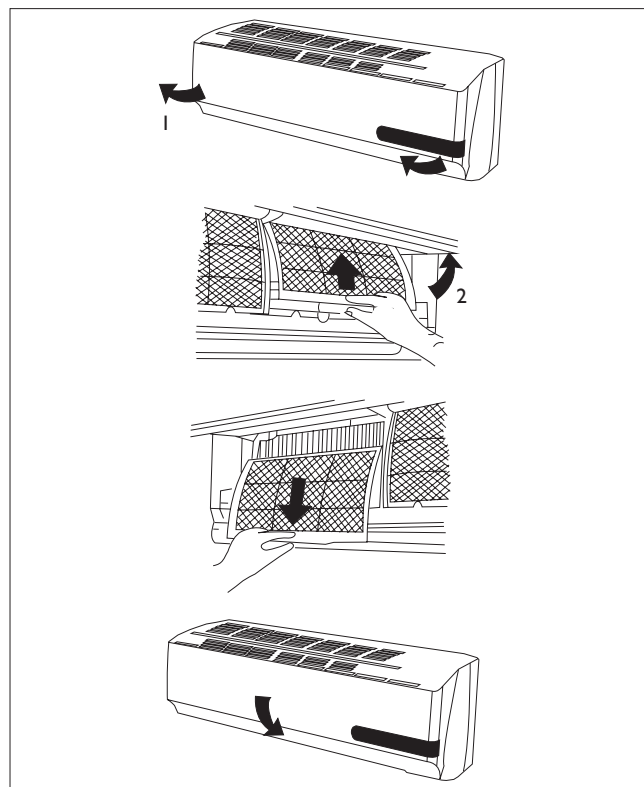
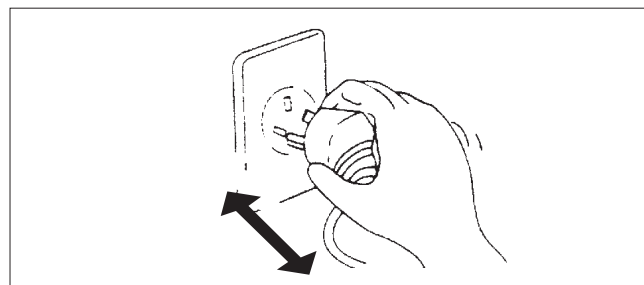


Before carrying out any maintenance, disconnect from the power supply by putting the installation on/off switch to "off".

INDOOR UNIT


Removing and cleaning the filter

- Open the front panel following the direction of the arrow (1)
- 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.





Installing the filter


- Keeping the front panel raised with one hand, insert the air filter with the other hand (see fig.)
- Insert the air filter
- Close

 The active carbons electrostatic filter (if installed) cannot be washed or regenerated. It must be replaced with new filter once every 6 months.

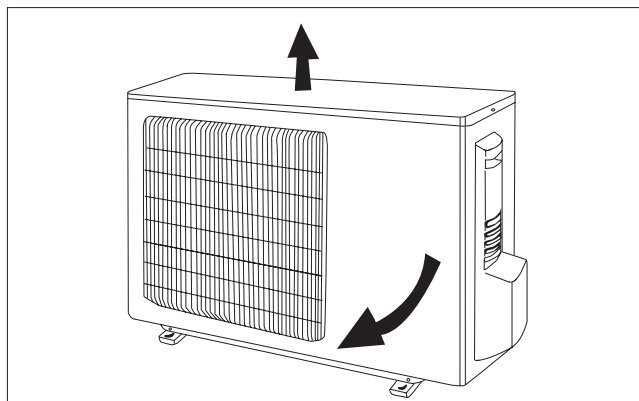
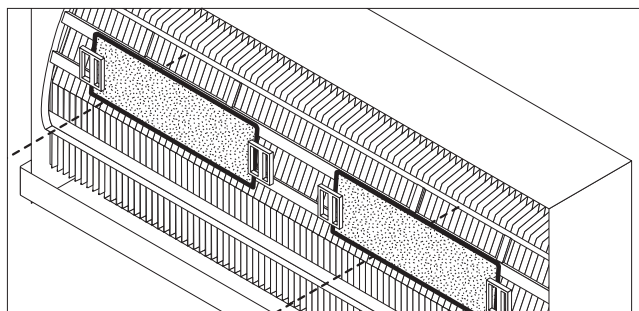
OUTDOOR UNIT

 Use suitable instruments for the refrigerant in the appliance.

 Only use the refrigerant indicated on the rating plate.

 Do not use mineral oils to clean the unit.

Note: the above figures may not correspond to the appearance of the units that have been purchased.



POSSIBLE ERRORS

INSTALLER



Error code for **ONE** inverter models

Code	Error
E1	High pressure protection
E2	Defrost protection
E3	Low pressure protection
E4	Compressor gas discharge protection
E5	Current overload protection
E6	Communication malfunction
E7	MODE conflict
E8	High temperature protection
E9	Protection against cold air
F1	Indoor unit room sensor disconnected
F2	Indoor unit pipe sensor disconnected
F3	Outdoor unit ambient sensor disconnected
F4	Outdoor unit pipe sensor disconnected
F5	Outdoor unit delivery line sensor short-circuited/disconnected
H6	No feedback from indoor motor
C2	Current leakage protection
C3	Wrong connection protection
C6	No earthing
C5	Jumper error protection
F7	Oil circle under cooling mode
F8	Current overload cause frequency decreased
F9	Exhaust overload cause frequency decreased
F0	Sistem fluorin lack or jam protection
H1	Defrosting
H2	Static dust eliminated protection
H3	Compressor overload protection
H4	System abnormality
H5	IPM Module protection

Code	Error
HC	PFC protection
H7	Synchronization failure
H8	Full of water protection
H9	Heater error
H0	High temperature(heat mode) cause frequency decreased
FR	Tube temperature overload cause frequency decreased
FH	Freezing cause frequency decreased

Error code for **ONE** ON-OFF 7-9-12K models

Code	Error
H1	Defrosting
H6	No feedback from indoor motor
C5	Jumper error protection

Error code for **ONE** ON-OFF 18-24K models

Code	Error
E5	Current overload protection
C5	Jumper error protection
F1	Indoor unit room sensor disconnected
F2	Indoor unit pipe sensor disconnected
H6	No feedback from indoor motor
H1	Defrosting

Malfunction	Possible causes
• The appliance does not operate	Power failure/Plug pulled out
	Damaged indoor/outdoor unit fan motor
	Faulty compressor thermomagnetic circuit breaker
	Faulty protective device or fuses.
	Loose connections or plug pulled out
	It sometimes stops operating to protect the appliance.
	Voltage higher than 244V or lower than 206V
	Active TIMER-ON function
	Damaged electronic control board
• Strange odour	Dirty air filter
• Noise of running water	Back flow of liquid in the refrigerant circuit
• A fine mist comes from the air outlet	This occurs when the air in the room becomes very cold, for example in the "COOLING" or "DEHUMIDIFYING/DRY" modes.
• A strange noise can be heard	This noise is made by the expansion or contraction of the front panel due to variations in temperature and does not indicate a problem.
• Insufficient airflow, either hot or cold	Unsuitable temperature setting.
	Obstructed air conditioner intakes and outlets.
	Dirty air filter.
	Fan speed set at minimum.
	Other sources of heat in the room.
	No refrigerant.
• The appliance does not respond to commands	Remote control not near enough to indoor unit.
	The remote control batteries are dead.
	Obstacles between remote control and signal receiver on indoor unit.
• The control panel display is off	Active LIGHT function
	Power failure
	Faulty control panel
	Faulty electronic control board
• Switch off the air conditioner immediately and cut off the power supply in the event of:	Strange noises during operation.
	Faulty fuses or switches.
	Spraying water or objects inside the appliance.
	Overheated cables or plugs.
	Very strong smells coming from the appliance.

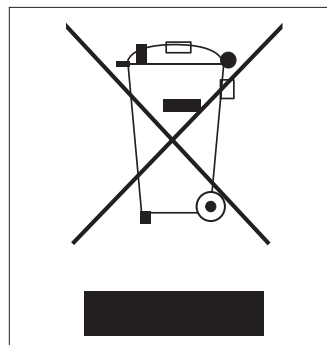
RECOMMENDATIONS FOR CORRECT DISPOSAL OF THE PRODUCT PURSUANT TO EUROPEAN DIRECTIVE 2002/96/EC

At the end of its useful life the product must not be disposed of together with municipal waste.

It may be taken to special centres for separately collected fractions set up by municipal authorities or to dealers that provide this service.

By disposing of a household electrical appliance separately, it is possible to avoid potential negative consequences for the environment and for health due to unsuitable disposal. It also allows the component materials to be recovered with consequent important saving of energy and resources.

To show the obligation to dispose of the household electrical appliances separately, the product bears the symbol of the crossed-out wheeled bin.



ENVIRONMENTAL INFORMATION

INSTALLER

This unit contains fluorinated gases with greenhouse effect covered by the Kyoto Protocol. Maintenance and disposal must be carried out by qualified persons only.

Refrigerant gas R410A, GWP=1975.

EXTRA REFRIGERANT CHARGE

INSTALLER

Pursuant to Regulation (EC) 842/2006 on certain fluorinated greenhouse gases, in case of extra refrigerant charge, it is compulsory to:

- Fill in the label accompanying the unit inserting the factory quantity of refrigerant charge (see the technical label), the extra refrigerant charge and the total charge.
- apply the label next to the technical label applied on the outdoor unit;



Use an indelible pen.

R
 1 = Kg
 2 = Kg
 1 + 2 = Kg

1 Factory charge
 2 Extra charge
 1+2 Total charge

USEFUL INFORMATION

For information on servicing and spare parts, please contact:

UFFICIO ASSISTENZA TECNICA
GRUPPO DE'LONGHI

Via L. Seitz, 47 - 31100 Treviso (ITALY)

In line with the company's policy of continual product improvement, the aesthetic and dimensional characteristics, technical data and accessories of this appliance may be changed without notice.



Living innovation

GRUPPO DE'LONGHI

Via L. Seitz, 47 - 31100 Treviso (ITALIA)