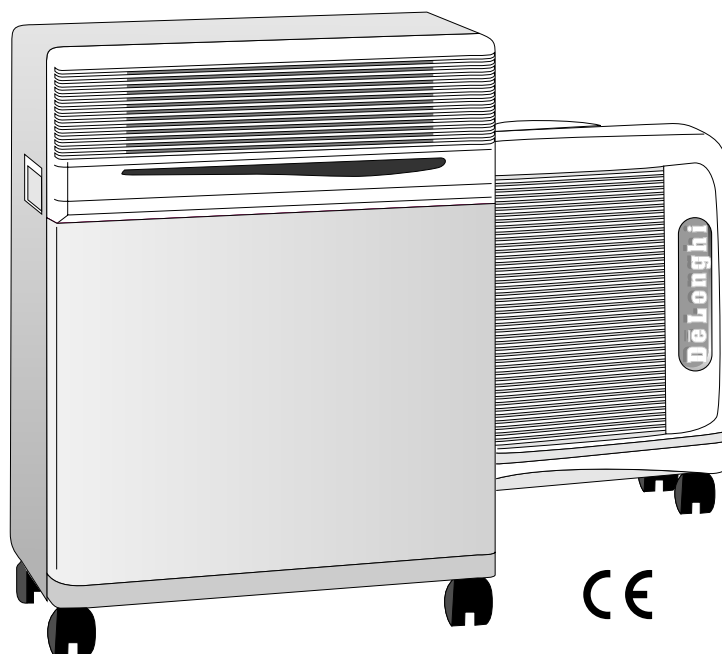


Pinguino Hi-tech split



Air-conditioner PAC 180



CE

Instructions for use

Carefully read this instructions booklet before installing or using this appliance. Only by doing so will you have the best results and enjoy the greatest safety when using the appliance. Please pay particular attention to the warnings on page 30.



INTRODUCTION

This is a conditioner of the air-to-air type composed of two units: one internal (which operates inside the room) and the other external (to be installed outside). These two units are joined together by a sheathing (of about 3 m.) containing the refrigerant pipes, electrical power cables and condensation-discharge tube.

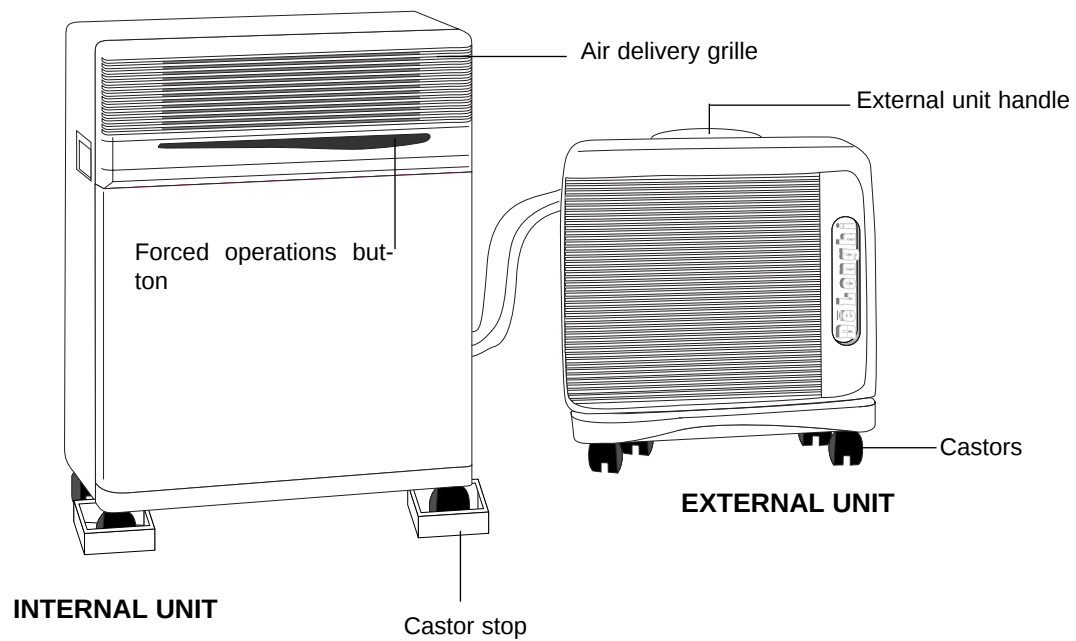
TECHNICAL FEATURES

Power supply	
voltage	See the features plate
Maximum absorbed power	"
Cooling capacity*	"
Number of fan speeds	3
Max. air flow rate	560 m ³ /h
Flexible tube length	3000 mm
Sheathing section	20 x 44 mm
Dimensions: indoor unit	
• length	560 mm
• height	735 mm
• depth	355 mm
• weight	44 kg
Dimensions: outdoor unit	
• length	570 mm
• height	475 mm
• depth	260 mm
• weight	18 kg
* Standard conditioning:	
Inside temperature	27°C
	relative humidity: 47%
Outside temperature	35°C
	relative humidity: 41%

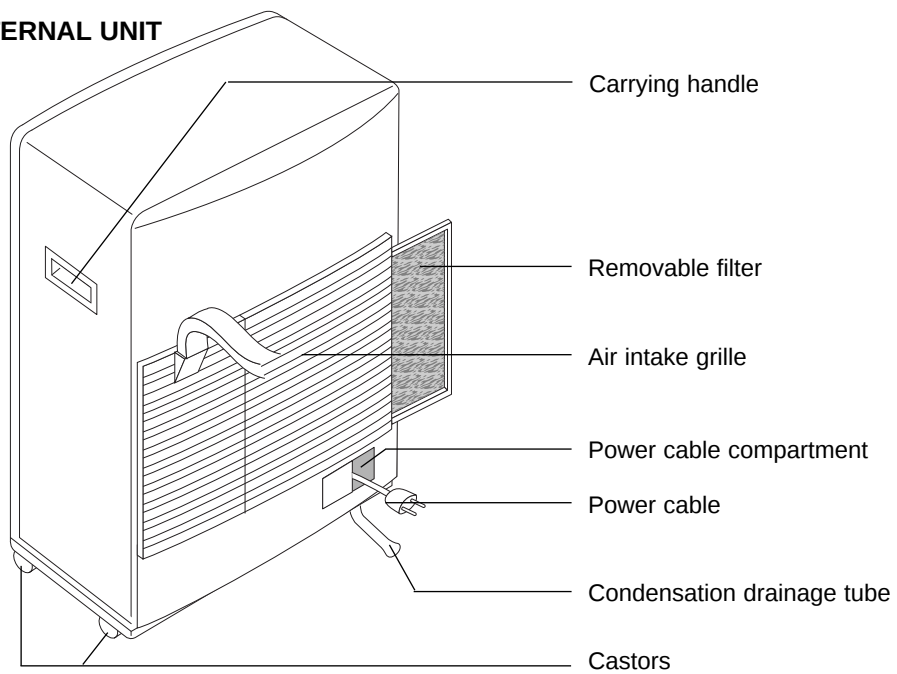
OPERATIONAL AIR-CONDITIONING LIMITS

Room temperature	21 ÷ 32°C
Outside temperature	21 ÷ 43°C

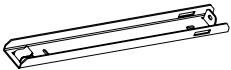
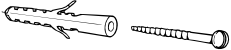
DESCRIPTION



INTERNAL UNIT



ACCESSORIES

DRAWING	DESCRIPTION	NO. PIECES PROVIDED
	Wall-attachment bracket	2
	Support block for external unit	2
	Anchor screws + screws ø 6 mm	4
	Screws M6 mm	2
	Screws M4x25 mm	4
	Belt with hooks	2
	Screw eye for a belt	2
	Sheathing frame	1
	Castor stop	2
	Drain connection for condensation with seal and two 4.2 penetrating screws	1
	Castors for the external unit and washers	4

TECHNICAL SERVICE

Keep the list of Technical Service Centres in a safe place and check to find the closest Centre (though we hope you will never have to seek their help).

This appliance has been fitted with an **HE** (High Efficiency) system for low energy consumption, so after turning the appliance on you may have to wait a few minutes for cool air to begin circulating.

ELECTRICAL CONNECTION (U.K. ONLY)

- A) If your appliance comes fitted with a plug, it will incorporate a 13 Amp fuse. If it does not fit your socket, the plug should be cut off from the mains lead, and an appropriate plug fitted, as below.
WARNING: Very carefully dispose of the cut off plug after removing the fuse: do not insert in a 13 Amp socket elsewhere in the house as this could cause a shock hazard.
 With alternative plugs not incorporating a fuse, the circuit must be protected by a 15 Amp fuse.

WARNING - THIS APPLIANCE MUST BE EARTHED **IMPORTANT**

The wires in the mains lead are coloured in accordance with the following code:

Green and yellow:

Blue:

Brown:

Earth

Neutral

Live



- If the plug is a moulded-on type, the fuse cover must be re-fitted when changing the fuse using a 13 Amp Asta approved fuse to BS 1362. In the event of losing the fuse cover, the plug must NOT be used until a replacement fuse cover can be obtained from your nearest electrical dealer. The colour of the correct replacement fuse cover is that as marked on the base of the plug.

- B) If your appliance is not fitted with a plug, please follow the instructions provided below:

As the colours of the wires in the mains lead may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The green and yellow wire must be connected to the terminal in the plug marked with the letter E or the earth symbol  or coloured green or green and yellow.

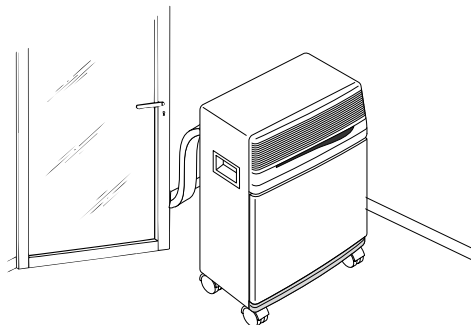
The blue wire must be connected to the terminal marked with the letter N or coloured black.

The brown wire must be connected to the terminal marked with the letter L or coloured red.

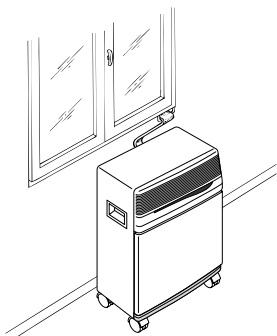
INSTALLATION

The sheathing that connects the external to the internal unit may pass:

- a) through a slightly-open window or door;

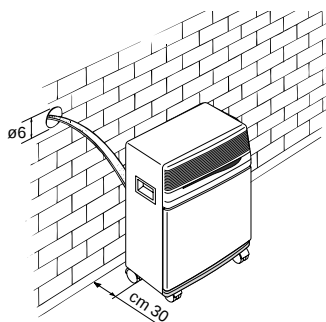


- b) through a small hole (5.5 cm x 2.5 cm) drilled in the lower part of a door or in a window frame by using the frame provided.



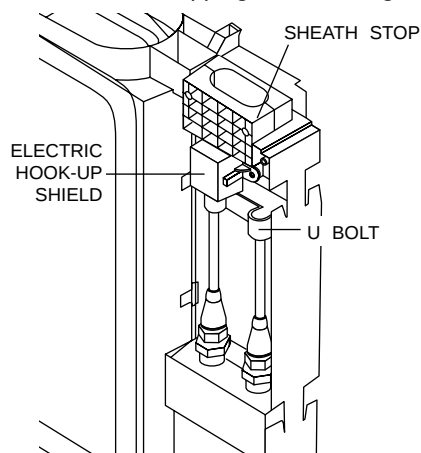
USE OF RAPID COUPLINGS

In addition to the methods described above, the sheathing that joins the external to the internal unit may also be drawn through a hole (about 6 cm. in diameter) drilled in a wall linked to the outside.

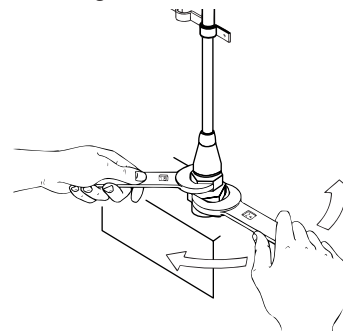


In this case, the hook-ups with the external unit must be disconnected as follows:

- 1) Remove the plug from the electric outlet;
- 2) Remove the handle by loosening the two screws and then slipping off the facing.



- 3) Remove the U bolt by loosening the two screws.
- 4) Remove the sheath stop by loosening the two screws.
- 5) Using a 24-version wrench, unscrew the union on the coupling. At the same time, hold the end of the flexible tube tight by using a 21-version wrench. Repeat this operation for the second union using a 24- and a 19-version wrench.



- 6) Disconnect the condensation tube from the rubber holder.
- 7) Loosen the shield's two self-threading screws and disconnect the electric hook-up unit.

The path of the connecting sheath should be as straight as possible, without sharp curves or kinks.

To re-connect the detached ends of the sheath to the internal unit, you must repeat operations 1 through 7 in reverse order, being careful to observe the following precautions:

- Before drawing the sheath through the hole in the wall, you should wrap the threaded ends of the speedy couplings with friction tape or the like as a protective measure.
- Fit the upper two cooling junctures into the two lower ones and hand-screw them several turns while checking to be certain they are well-fitted, and then tighten them with the wrenches used earlier.
- After having hooked up the two cooling junctures, tighten the U bolts.
- Check the grip on the cooling junctures by wetting the joints with a little soapy water. No bubbles should appear.

Caution:

We recommend that the disconnecting and connecting of the rapid couplings be carried out only by qualified technicians.

INTERNAL UNIT

Install the internal unit inside the room to be air-conditioned. This is usually done under a window or at least close to an outside wall.

The internal unit must be placed "on the level", with the help of the castor-stops provided. No obstacles should block this unit's in-take (suction grille) or out-take (outlet grille) areas.

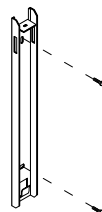
EXTERNAL UNIT

The external unit may be placed on a terrace or balcony, in which case the brackets need not be used.

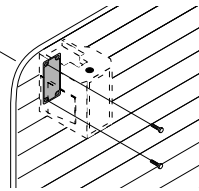


The external unit can be attached to a wall with the accessories included as follows:

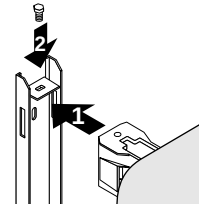
- 1) Attach the bracket to the wall while taking care to place it as indicated in the drawing. Use the included template located on the plastic cover in order to drill the holes.



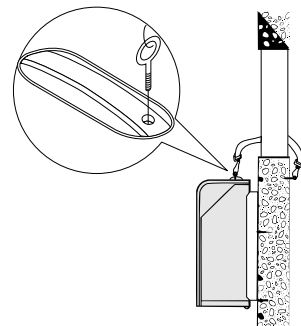
- 2) Screw the support blocks to the external unit with the included M4mm screws while taking care to place them so that the hole for the screws is on the upper side.



- 3) Attach the external unit to the bracket by means of the M6mm screws.



For temporary installation it is possible to hang the external unit as illustrated in the drawing. In this case, use the included straps by attaching them to the eye hooks. Before inserting the eye hooks remove the rubber plugs.



The external unit may be installed above or at the same height as the internal unit, on the condition that the difference is no more than 1.5 m.

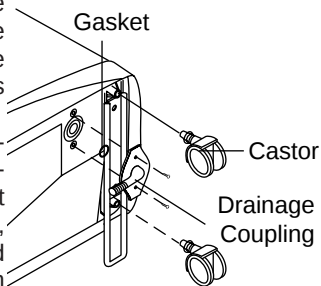
The suction and air-delivery portions of external unit must not be blocked by obstacles of any nature.

The distance between the back of the appliance and the wall must be six (6) cm.

The condensation which forms while this appliance is running (summertime operations) is disposed of by evaporation from the external unit.

If the humidity is too high (in special cases), you must use the drainage coupling provided to get rid of condensation. This device must be mounted on the bottom of the external unit (see drawing) after the rubber plug has been removed.

We strongly recommend that you protect the external unit from rain, snow, direct sunlight and water dripping from the roof.



ELECTRICAL CONNECTIONS

Before putting the plug in an electrical outlet, you must check to be certain that:

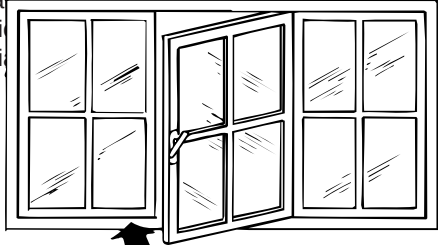
- the voltage is the same as that indicated in the technical features;
- the socket and the mains circuit are of sufficient size to handle the power required;
- the socket is suitable for the plug, because otherwise the socket must be replaced;
- the socket is connected to a good earthing system, because **the manufacturer shall in no way be held responsible for situations resulting from the failure to comply with this accident-preventing measure.**
- when replacing the feed cable, use only cables of the HO5VV-F type having a section measuring $3 \times 1.5 \text{ mm}^2$
- We recommend the installation (just past the electrical outlet) of a bipolar switch with a delayed protection fuse.

This appliance complies with the EN 55014 norms on the suppression of radio interference.

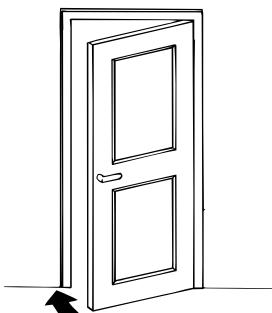
A LAST LOOK AT THE ROOM

There are several precautions you should keep in mind so as to get the best use out of your air-conditioner:

- Close the doors and windows in the room to be air conditioned (except for temporary installation).



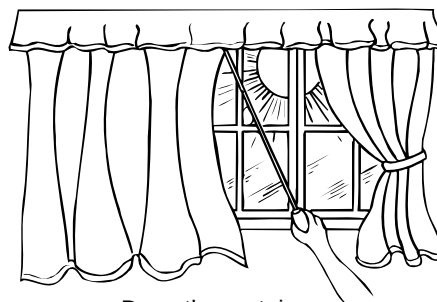
Close the windows



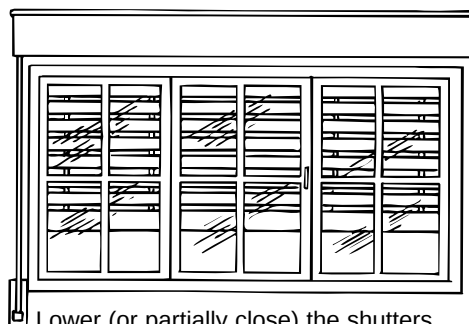
Close the doors

This appliance is equipped with a safety system which prevents the compressor from turning on until at least three (3) minutes have elapsed since the appliance was last turned off.

- In order to insure low-cost operations, protect the room from direct sunlight by drawing the curtains and/or by partially lowering or closing the shutters or blinds



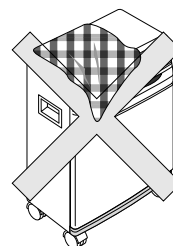
Draw the curtains



Lower (or partially close) the shutters

- Do not place objects atop the air-conditioner.
- Do not block the suction and air delivery areas.
- Make certain there are no heating sources in the room.

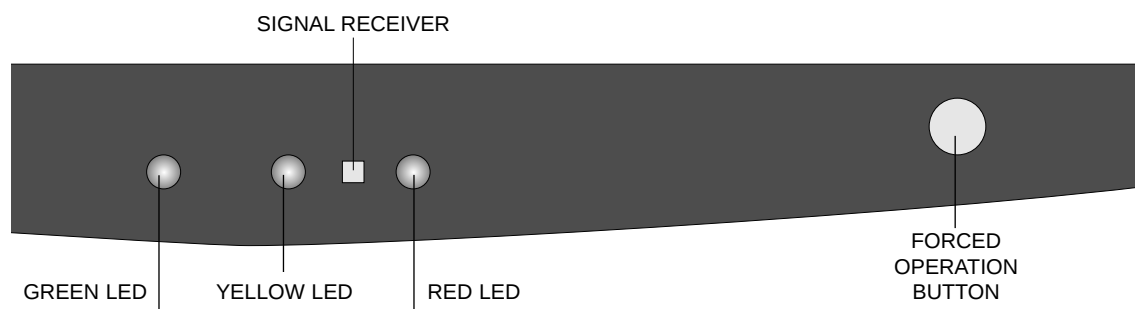
N.B: Before connecting this appliance to the electrical circuit, make certain that all the buttons on the control panel are switched off.



Do not cover

IN THIS WAY, YOUR AIR-CONDITIONER IS READY TO WORK, so now let's familiarise ourselves with its controls.

BUTTONS AND INDICATORS ON THE INTERNAL UNIT



THE LEDS

These lights turn on depending on the operation selected or to indicate breakdowns.

FUNCTION	RED LED	YELLOW LED	GREEN LED
OFF (1)	off	off	off
AIR-CONDITIONING	off	off	on
DEHUMIDIFYING	on	off	on
FULL AUTO (2)	*	*	*
VENTILATION	off	on	off
DIRTY FILTERS (3)	off	blinking	off
ALARM (4)	blinking	blinking	blinking

- (1) The three leds stay lighted even with the appliance turned off if at least one of the TIMER functions has been set.
- (2) (*) As soon as this operation is selected, all the leds will stay on for several seconds until the controls have decided how to run (air-conditioning, dehumidifying or ventilation).
- (3) This warning light serves to remind you that it is necessary to periodically clean the air filters. Check therefore that the filters are clean. Then, in order to extinguish the warning light, press the by-pass button for about 6 seconds until you hear a beep and then a double beep.
- (4) The alarm messages indicated with these lights are of various types. In order to determine the problem it is advisable to consult an authorized service center.

FORCED OPERATIONS

This is a way of operating to be selected if there are problems with the remote control (broken or lost, or the batteries run-down).

Push the button to start the unit and then press it again to get the sequence of the different operational procedures (air-conditioning, dehumidifying, ventilation, full auto, turn off) with an automatic setting.

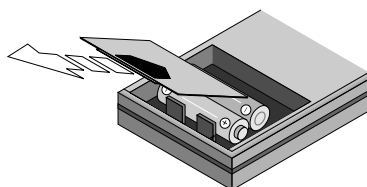
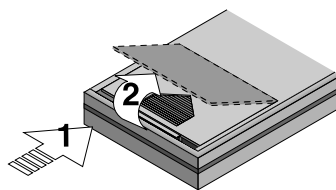
REMOTE CONTROL

Inserting the batteries

- Push down and forward on the case's pebbled cover. The cover will lift up automatically.
- Insert two new non-rechargeable batteries, being careful to place them in the correct positions (+) and (-).
- Put the cover back on, letting it slide into its original position.

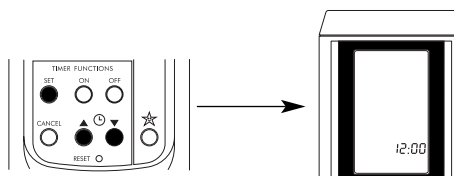
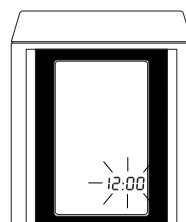
At this point, the clock on the display terminal will read 12:00 and blinking will begin.

WE STRONGLY RECOMMEND THE USE ONLY OF ALKALINE BATTERIES.



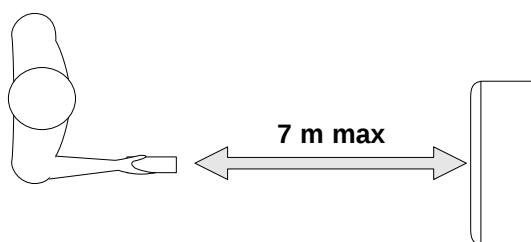
SETTING THE CLOCK

- If the time is not set within two minutes of the reset or of battery replacement, the remote control will automatically read 12:00.
- To programme the hour, push the ▲ ⌚ ▼ keys to move ahead or back. The segments are of one minute.
If you hold the buttons down, the minute designations will run more quickly.
- The clock will continue to blink. Push the SET button to confirm the time set: the clock will then stop blinking.
- If you have to adjust the time, you must push the RESET button and then enter the correct time. (There is no other way to do this).



PROPER USE

- Point the remote control toward the air-conditioner's signal receiver.
- Maximum distance: about seven (7) metres (without any obstacle between remote control and receiver).
- The remote control must be handled with **great care**: do not drop it, expose it to direct sunlight, or leave it close to heat sources.



DESCRIPTION OF THE REMOTE CONTROL

The display

Once the air-conditioner is turned on, all the symbols will be shown.

When the appliance is turned off, only the clock will remain visible.

A. Beep

Display of beep and start of the air-conditioner; it also activates every time an operation is carried out.

B. Symbols

Air-conditioning, dehumidifying, ventilation, Full Auto.

C. Room temperature

Shows the room temperature.

D. Fan speed

Shows the various speeds: minimum, medium, maximum, automatic and silent (only in Sleep).

E. On/Off Timer

Shows the times programmed for turning the appliance on and off.

F. Sleep/Silent Timer

Shows the desired operating time, only with the fan in the Silent setting.

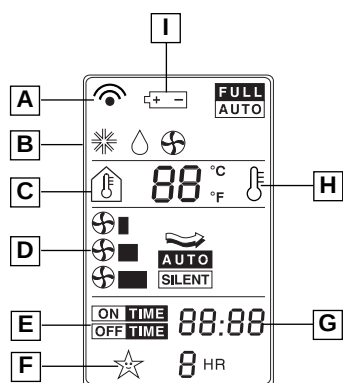
G. Clock

Shows the time.

H. Set temperature

Shows the temperature set.

I. Battery-replacement indicator



BUTTONS

1. On / Off

The display lights up when you press this button.

Pressing it again, the display goes out.

2. MODE: Function selecting

This button selects the various functions: air-conditioning, dehumidifying, ventilation and Full Auto.

3. Fan speed

Determines fan speed: minimum, medium, maximum and automatic.

4. Room temperature display

Gives you the current room temperature. After about four (4) seconds, the display will show the temperature set previously.

5. Sleep

This button controls the night-time operations.

6. CANCEL: Timer

Cancels the setting on the ON/OFF timer.

7/8. ON / OFF: Timer programming

These buttons program the turning on and off of the air-conditioner.

9. SET: Clock and timer verification

Confirms the setting of the clock and the ON/OFF timer.

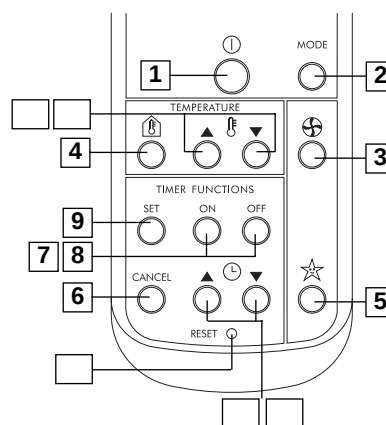
10/11. Room thermostat

These two buttons select the desired room temperature: button 11 lowers the temperature, button 10 increases it.

12/13. Clock and timer programming

These buttons set the hour and minutes for both the clock and timer.

14. Reset



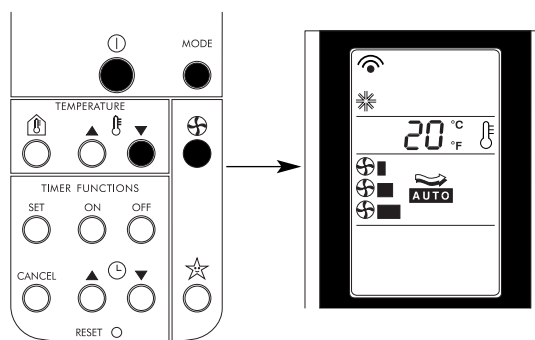
AIR-CONDITIONING FUNCTION

This operation is ideal on especially hot days.

First press the  button to turn the appliance on. A beep will indicate that the air-conditioner has turned on, and the  symbol will begin to blink. Now press the MODE button until the air-conditioning symbol  appears on the display.

At this point, set the temperature: to lower it, press the  button.

To select the fan speed, simply press the  button repeatedly until you obtain the speed desired (minimum, medium, maximum and automatic).



DEHUMIDIFYING FUNCTION

It is a good idea to activate this operation when there is high humidity.

First press the  button to turn the appliance on. A beep will indicate that the air-conditioner has turned on and the  symbol will begin to blink. Now press the MODE button until the dehumidifying symbol  appears on the display.

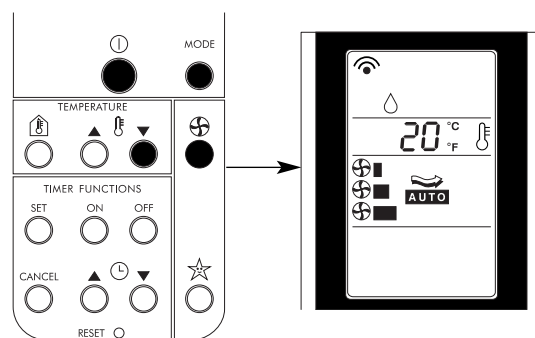
We should emphasise the importance setting the temperature so that it is lower than the room temperature: use the  button until you get a temperature 4° C. lower than that in the room.

When that takes place, the air-conditioning function will switch on.

If the temperature difference between the room and that set up is already 4° C. or less, the dehumidifying operation alone will immediately switch on. (For further explanation, see the table.)

To select the fan speed, simply press the  button until you get the desired speed.

You should keep in mind that if the dehumidifying operation is running, cooling will take place automatically with the fan at low speed, and the compressor will turn on and off intermittently.



COOLING

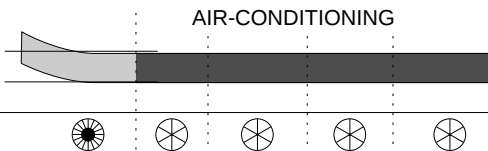
START OF THE DE-HUMIDIFYING FUNCTION +4°C
TEMPERATURE SET X°C

AIR-CONDITIONING

INSIDE FAN



LOW-SPEED FAN FUNCTION

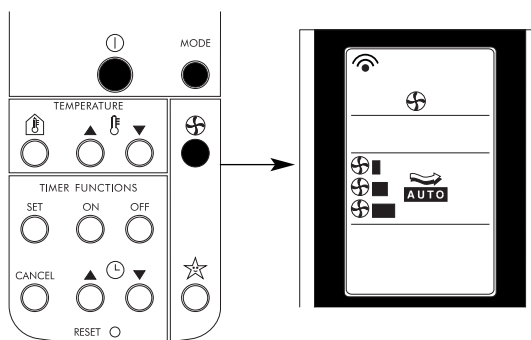


VENTILATION FUNCTION

If it is a truly sweltering day, you can activate the ventilation function by pressing the ① button. A beep will indicate that the air-conditioner has turned on, and the 🌀 symbol will begin to blink. Now press the MODE button until the ventilation symbol 🌀 appears on the display.

Once the ventilation has been activated, press the 🌀 button repeatedly until you get the desired fan speed.

It should be pointed out that when the automatic ventilation functions are activated, the appliance itself will choose the proper speed.

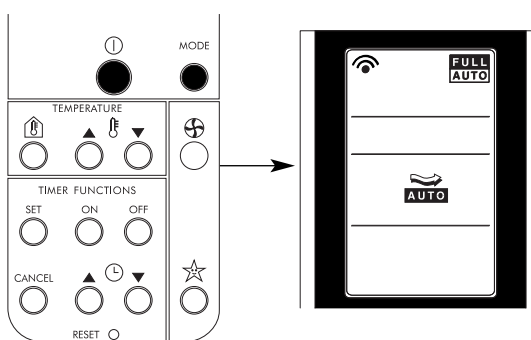


FULL AUTO FUNCTION

FULL AUTO automatically activates the air-conditioner, including the temperature, fan speed thus assuring the best possible conditions for the room.

First push the ① button to turn the appliance on. A beep will indicate that the air-conditioner is working and the 🌀 symbol will begin to blink. Now use the MODE button until the FULL AUTO symbol appears on the display.

You should be advised that the air-conditioner will need several seconds to start working.



AUTOMATIC SLEEP FUNCTION

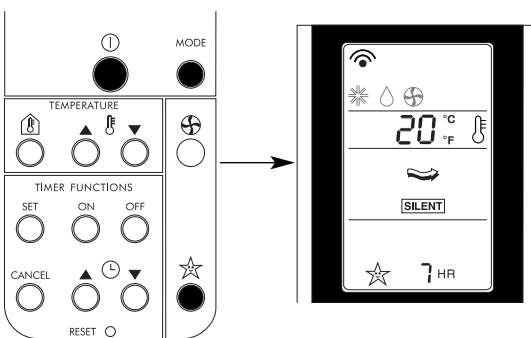
If you want to sleep peacefully in a room perfectly air-conditioned, press the ① button to start the appliance. A beep will indicate that the air-conditioner has turned on, and the 🌀 symbol will begin to blink.

Now use the MODE button until you get the symbol for the function you want.

Next select the desired temperature by pushing the ▲ 🔧 ▼ buttons.

Now press the ☆ to set up the night-time function: the ☆ symbol will appear. By pushing the ☆ button repeatedly until you get the number of hours you want (from 1 to 7), you will set the time for the appliance to switch off.

Under this function, the fan runs at low speed (silent).



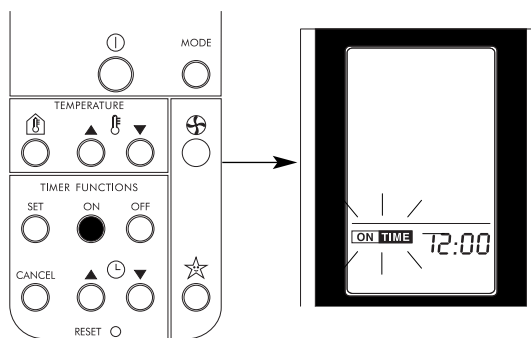
N.B: The night-time function makes it possible to keep a room at a perfect temperature, thus preventing an excessive rise or a drop in temperature while the silent operation is in effect. The air-flow will decrease, while the room temperature will vary gradually to provide the ideal condition: during the air-conditioning stage, the temperature will increase by 1° C. after 30 minutes and by 2° C. after one hour.

PROGRAMMING THE TIMER

Programming the ON function

With the air-conditioner already running, press the ON button: the ON TIME symbol will start blinking and the clock will read 12:00.

Remember that the timer turns the air-conditioner on, thereby resetting all the functions and procedures operating before the appliance was last turned off.



If the programming is the one you want, simply press the SET button.

To put the clock ahead, use the ▲ ⌚ button; to put the clock back, use the ⌚ ▼ button.

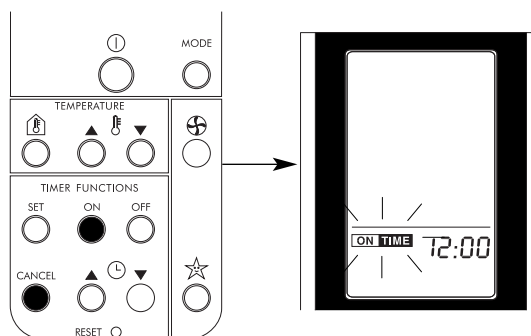
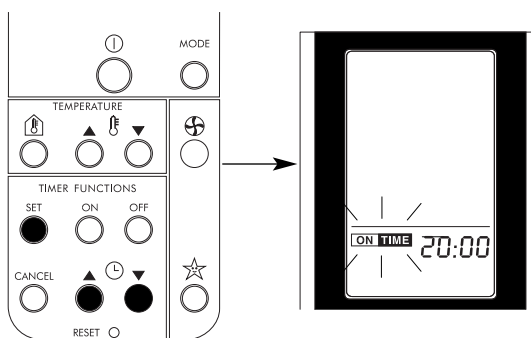
The increase or decrease will be in ten-minute (10-minute) segments for each press of the button, whereas if you hold the button down the time will change more quickly.

The ON TIME marking will continue to blink.

By pressing down on the SET button again, you will get confirmation of the time set for the appliance to turn on.

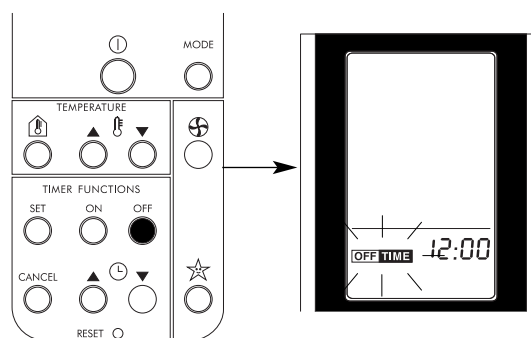
To cancel the programming, push the ON button: the ON TIME marking will blink while showing the turn-on time.

At this point, use the CANCEL button: the clock will show the correct time at that moment.



PROGRAMMING THE TURN-OFF FUNCTION

The procedure for programming the turn-off and cancellation operations is similar to the one just described: the only difference is that you must push the OFF instead of the ON button.



MAINTENANCE

Always pull the plug from the electrical outlet before beginning any cleaning or maintenance operations.

For safety reasons, never wash the air-conditioner with water.

CLEANING THE UNIT

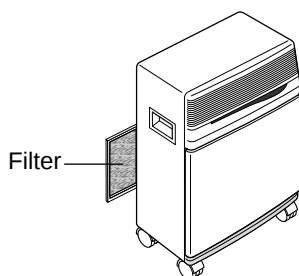
Clean your air-conditioner with a damp cloth and then wipe it with a dry cloth.

Precautions:

Never use gasoline, alcohol or solvents to clean this appliance. Never spray it with insecticide or similar liquids, because the paint might then peel away and the plastic portions might lose their true shape.

CLEANING THE AIR FILTER

- If the air filter gets dirty, it will be difficult for the air to circulate and the air-conditioner will lose much of its efficiency, thus leading to about an 8% increase in electrical consumption. For this reason, it is a good idea to clean the filter
- Remove the air filter as shown below.



- Use a vacuum cleaner to remove the dust on the filter. If the filter is very dirty, dip it in warm water (of less than 40° C.) and rinse it several times. After having washed the filter, let it dry completely before putting it back in place.

CHECKS TO MAKE AT A SEASON'S BEGINNING

Check to make certain that the power cable and the electrical outlet are in perfect condition and that there is a suitable earthing system.

Give strict observance to all installation norms.

WORK TO BE DONE AT A SEASON'S END

Turn off the air-conditioner.

Clean the filter and dry it before putting it back in place.

Cover the air-conditioner with a plastic bag to keep the appliance from getting dusty.

Remove the batteries from the remote control

device.

IMPORTANT ADVICE

- This appliance has been built to air-condition, dehumidify and ventilate rooms in the home and must not be used for other purposes.
 - Changing or altering the features of this feature in any way is dangerous.
 - If repairs are needed, always contact only a Technical Assistance Centre authorised by the manufacturer. Repairs by unauthorised personnel may be inherently dangerous.
 - This appliance must be connected to an efficient "earthing" system. Have your electrical system checked out by a qualified electrician.
 - Avoid using extension cords for the electric feed cable.
 - Before any cleaning or maintenance, always pull the plug from its electric outlet.
 - Never pull on the feed cable to move this equipment.
 - Do not install this appliance in rooms where the air may contain gas, oil or sulphur or in the close proximity of a heat source.
 - Never place heavy or hot objects on this air-conditioner.
 - Clean the air filter at least once a week.
 - When being moved, this appliance must be kept in an upright position or placed carefully on one side.
 - Do not make use of heating equipment in the close proximity of this air-conditioner.
- After having moved this appliance, wait for at least one (1) hour before turning it on again.

IF SOMETHING GOES WRONG

Most malfunctions are caused by a very minor and easily solved problem. So carefully check this list before contacting the Authorised Technical Service Centre in your area.

PROBLEMS	CAUSES	REMEDIES
The air-conditioning is not working	• Lack of electrical power • The plug has not been inserted • The timer has been set improperly	• Wait • Insert the plug in the electrical outlet • Set the timer correctly
The cooling is insufficient	• Dirty air filter • Room too warm • Temperature set incorrectly • The air in-take & out-take grilles are blocked	• Clean the air filter • Wait for the cooling to begin • Set the temperature correctly • Clean the grilles
Strange odour in the room	• Dirty air filter	• Clean the air filter
Build-up of condensation from the air-conditioner's internal unit	• Internal unit water tray full • Appliance not installed correctly	• Drain the water through the condensation tube located on the back of the unit • See p. 21 for information on proper installing
Remote control signals are weak or inexistent	• Batteries run down • Batteries may be inserted incorrectly	• Change the batteries • Check the batteries' (+) and (-) poles
The air-conditioner does not start working until 3 min. after it has been turned on	• The safety device will click on	• Wait for 3 minutes to pass
The compressor turns on and off intermittently	• The air-conditioner is operating as a dehumidifier • The anti-icing safety device switches on	

SERVICE

If the problem persists after these checks have been made, contact your nearest authorised Technical Service Centre. Specify the model you own and the type of defect encountered.

