# IQ / IC Monoblock

# **ENGLISH**

# Technical manual



#### 1. 1 INTRODUCTION

Please note: Don't dispose of any packaging until the installation of the air conditioner is completed.

After having removed the packing, check that all the content is intact and complete. (See list of accessories). In the event of missing parts, contact your retailer.

This air conditioner has been designed to cool or heat the air of a room and should only be used for this purpose.

The manufacture can not be held liable for damage caused to property or injury to persons or animals due to incorrect installation, regulation and maintenance or improper use. This air conditioner contains R410A refrigerant, at the end of its life, the disposal of this air conditioner must be accordance with the strict regulation governing the recycling of this product, please operate with caution during the disposal. Please contact your local authority for regulation advice.

Don't switch on before having totally assembled the air conditioner and before installing in its correct operating position.

Before starting the appliance, check that it is correctly earthed, according to the legislation in force in the country concerned.

### 1. 2 IMPORTANT SAFETY INSTRUCTIONS



When using electrical appliance, basic safety precautions should always be followed:

Don't place objects on the products or allow objects to obstruct the inlet or outlet openings. Extreme care should be taken when any product is used by, or near children and pets, and whenever the products is left operating and unattended.

#### Please note:

Before operating the product, remove the air conditioner from its packaging and check if it is in good condition.

Do not let child play with the package, for example the plastic bags.

Do not operate any products with a damaged cord or plug, or after the air conditioner malfunctions, has been dropped, or damaged in any manner.

Return the air conditioner to an authorised

service centre for examination and repair to avoid a hazard.

Do not attempt to repair or adjust any electrical or mechanical functions on this air conditioner as this may void warranty, contact your service engineer.

Always operate the product from a power source of the same voltage, frequency and rating as indicated on the product identification plate.

This air conditioner is not intended for use in wet or damp locations.

Do not place the air conditioner near an open flame, cooking or heating appliance, or hot surface.

Do not let the power cord hand over the edge of a table or counter. Arrange the power cord away from an area where it may be tripped over.

Never place the power cord under a carpet or rug. Do not operate the air conditioner in areas where petrol, paint, or other flammable liquid are used or stored.

Do not carry out any cleaning or maintenance or access internal parts until the air conditioner has been disconnected from the mains electricity supply.

Do not alter the safety or regulating devices without the permission and instructions of the air conditioner manufacturer.

Do not pull, remove or twist the electric cable connected to the air conditioner, even if disconnected from the mains electricity supply avoid prolonged direct contact with the flow of the air from the air conditioner and the room being closed with no ventilation for a long period of time.

Repair or maintenance work must be carried out by a service engineer or by qualified technicians in compliance with the instructions given in this booklet. Do not alter the appliance, since hazardous situations could be created while the manufacture of the appliance will not be liable for any damage or injury caused.

This instruction booklet is an integral part of the appliance and should therefore be carefully preserved and always accompany the appliance in the event of transfer to another owner or user or another installation engineer. Should the booklet be damaged or lost, please request an additional.

#### 1.3 RECEIVING THE GOODS

The air conditioner is delivered in a protective packaging and is accompanied by an instruction manual. This manual is an integral part of the air conditioner and should therefore be carefully read and preserved. When the air conditioner is unpacked, please check that the air conditioner and accessory packed are complete and undamaged.

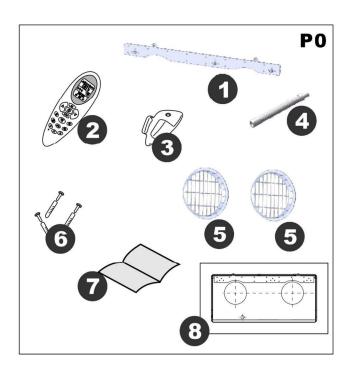
#### 1.4 HANDLING

Be fully aware of the weight of the air conditioner before attempting to lift it. Take all necessary precautions to avoid damaging the product or causing personal injury. It is advisable to remove the packaging only when the air conditioner has been located in the point of installation. Carefully remove the adhesive strips positioned on the air conditioner. Packaging components must be tidied up correctly and not left within reach of children, since they are hiding of danger.

#### 1.5 LIST OF ACCESSORIES(P0)

- 1.FASTENING BRACKET
- 2.REMOTE CONTROL
- 3.REMOTE CONTROL HOLDER
- 4.DRAINAGE PIPE
- **5.EXTERNAL GRATING**
- 6.KIT OF SCREWS
- 7.INSTRUCTION MANUAL
- 8.PAPER TEMPLATE FOR WALL DRILLING (SEE PAGE)

iCOOL 2.3 can be connected only to a supply with system impedance no more than 0.216 ohm. In case necessary, please consult your supply authority for system impedance information.



This product has been manufactured to comply with 2006/95/EC and with amendments 92/31/EEC and 93/68/EEC.



DISPOSAL: Do not dispose this product as unsorted municipal waste. Collection of such waste separately for special treatment is necessary.



Any batteries used in the remote control contain materials, which are hazardous to the environment. They must be removed from the remote control when they reach the end of their life and disposed of responsibly.

#### 1.6 TECHNICAL FEATURES(P1,P2)

Model	iCOOL 2. 3	
Cooling capacity * W (BTU/h)	2346 (8000)	
Heating capacity * W (BTU/h)	2346 (8000)	
Rated voltage (V)	230	
Absorbed power in cooling* (W)	973	
Absorbed current in cooling* (A)	4. 35	
Absorbed power in heating* (W)	900	
Absorbed current in heating* (A)	4. 0	
Air flow (m³/h)	350	
Noise level (dB A)	50	
Dehumidification capacity* (L/24h)	L/24h) 12. 5	
Optional temperature (remote control)	18-30°C	
Fuse (T6. 3A)	250V	
Refrigerant	R410A	
Global warmer potential (GWP)	1900	
Dimensions H/W/D(cm)	43/95/19.5	
Net weight (Kg)	40	

<sup>\*</sup>The above datas could be change in order to improve the performances

#### STANDARD TEST CONDITIONS -EN 14511-

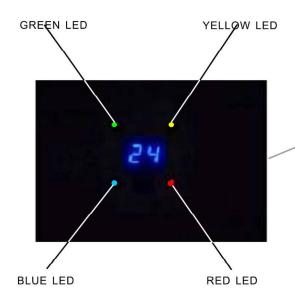
### OPERATING CONDITIONS IN COOLING AND DEHUMIDIFICATION MODE

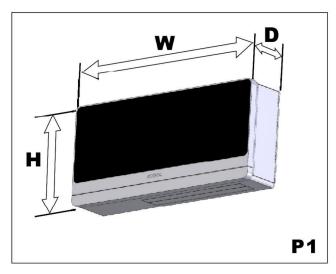
-Inside 27°C DB; 19°C WB -Outside 35°C DB; 24°C WB

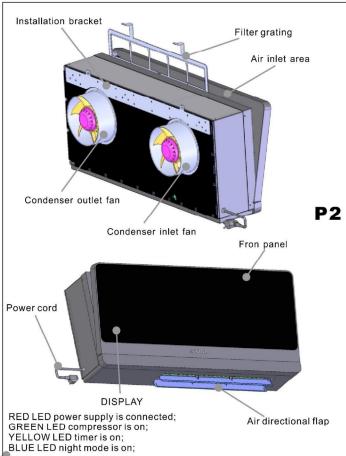
#### **OPERATING CONDITIONS IN HEATING MODE**

-Outside 7°C DB; 6°C WB

-Inside 20°C DB







The display will show both setting temperature and ambient temperature. After adjusting the setting temperature, the setting temperature will flash 15 times display, then the display will show the ambient temperature for 70 seconds. After that, the display will be off until next adjustment.

# 2.1 POSITIONING THE AIR CONDITIONER (P3)

To maintain the best performance from your air conditioner, prevent breakdowns or hazards, you must position it correctly. Please follow the guidelines and instruction below in full, as failure to do so could cause potential installation problems.

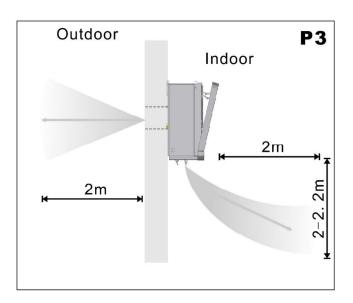
The air conditioner must be installed on an exterior wall that has access to the out side with a minimum of 2 meters clearance to the outside. (See image P3)

The air conditioner must be fitted leaving room all around as illustrated in the paper template.

The wall on which the air conditioner is installed must be sturdy and able to withstand the weight fo the air conditioner.

After determining the best place for installation as described above, please check to ensure that the wall can be drilled in the chosen area without interfering with other structures or installations (beams, piers, pipes, wires, etc.).

Please also ensure that there are no obstacles on the outside of the wall, which may obstruct air circulation through the drilled holes, for example: (plants and their leaves, slats or panelling, drain pipes, overflows and gratings, etc.). Any obstruction could interfere with the correct performances of the air conditioner.



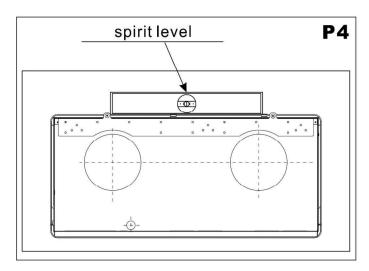
#### 2.2 PAPER TEMPLATE (P4)

Fasten the template to the wall once the following guidelines have been thoroughly checked.

Do not drill any holes until you are completely confident that there are no obstacles in the area you wish to drill and there are no obstructions, which could be hidden by the construction of the wall, for example: electrical wiring, water&gas pipes or supporting lintels or beams.

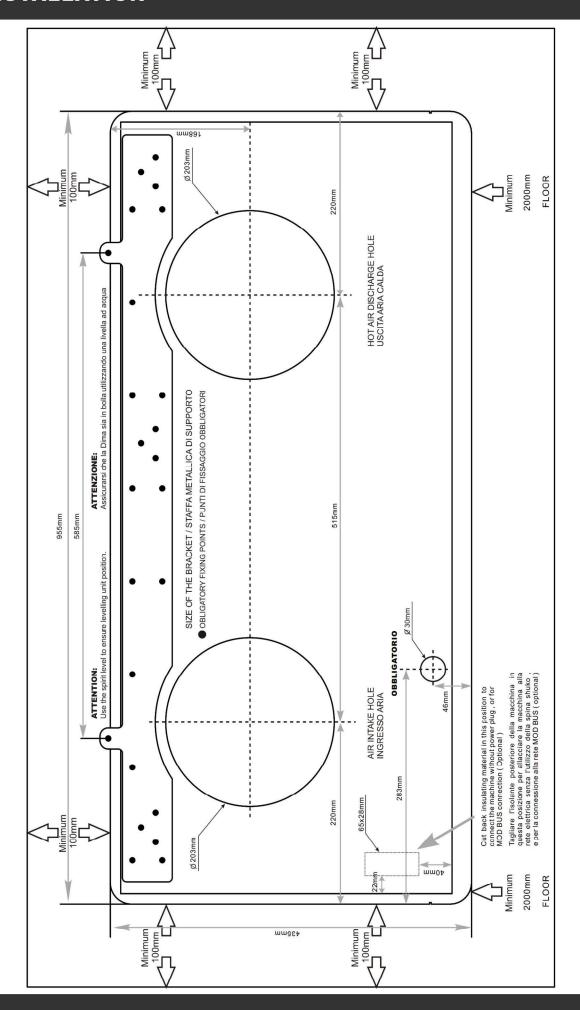
Ensure that a spirit level is used, as the air conditioner must be level.

Follow the installation instructions in full.



Fasten the template to the wall taking care to check the distance from the floor or ceiling.
Use a pilot drill to mark the centre of each core hole to be drilled. (See image P5)





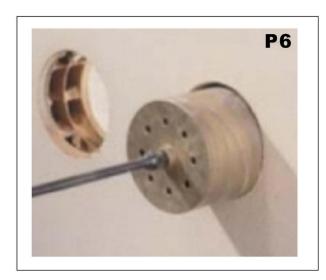
#### 2.3 DRILLING THE WALL (P6, 7, 8, 9)

Please note: If you are drilling the hole above ground floor level, please ensure that an area has been secured and while the holes are drilled the outside area is supervised, until drilling has been completed.

#### INTAKE AND OUTLET HOLES (P6)

This operation should be carried out using the proper tools (diamond tip or core borers drills with high twisting torque and adjustable rotation speed).

Find the holes center drilled before, use a core boring head having a diameter of 200mm to drill the two holes for intake and outlet the air.



It is recommended that the holes must have a slightly downward inclination of 3-5 degrees to prevent any backflow of water from the pipes. (See image P7)



Indoor

Outdoor

#### **DRAINAGE HOLE (P8)**

This air conditioner has a system to drain the condensate moisture automatically. Please read carefully the following instruction.

Drill a hole through the wall measuring 30mm in diameter in the position shown in the paper template, marked the center before. Drainage occurs by gravity. For this reason, it is essential for the drain line to have a minimum downward inclination at least 3 degrees throughout its length. With this solution, you can drain the condensate moisture to a suitable place to do not cause any problems to your neighbours.



This drainage method is more common use, and the discharge pipe goes outside where there is no problem to connect or to discharge it, this solution is OK for hot country and normal cold temperature outside.

#### WALL BRACKET HOLES (P9)

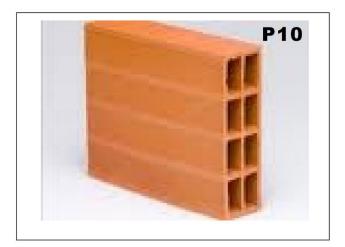


Drill the holes for anchoring the fastening bracket to the wall using preferably the 26 holes with 8mm diameter showed in black on the paper template. As the unit is installed on high wall, it is recommended that all the holes should be fixed with anchor bolts.

#### 2. 4 MOISTURE PROTECTING WALL

#### **EMPTY WALL PROTECTION (P10, 11, 12)**

If the wall is built with empty brick, and it is empty inside the wall.



For this kind of wall, it is necessary to use insulating film with tar or bitumen like P11. This film is flexible and with waterproof function, is used when building the roof where need to close from water leakage, it must positioned inside the wall, and conformed with round shape, of course the length must be less than the wall thickness. Usually the thickness of this tar or bitumen film could be 2 mm.



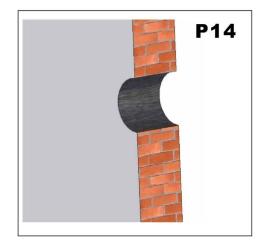
#### **SOLID WALL PROTECTION (P13, 14)**

If the wall is built with full brick or stone, and the wall is full.

With this kind of solid wall, it is recommended that using a special waterproof paint on the hole surface to protect the wall.

Before the painting, the hole surface should be cleaned by dry cloth or vacuum, and keep the hole clean.

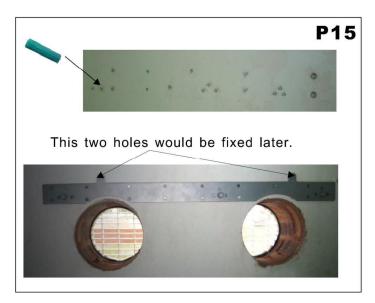




#### 2.5 FASTENING THE BRACKET (P15)

Insert the plastic rings into the holes for wall bracket, and keep them same surface with the wall. Then fix the screws one by one. And do not fix the two screws on the top.

The anchor bolts provided require a 8mm holes; the wall should be inspected to determine if provided bolts are useful or if it is necessary to use a different anchorage. The manufacture is not liable in case of underestimation of the structural consistency of the anchorage made at the time of installation.



#### 2. 6 FITTING THE GRATINGS

After drilling the holes, the plastic gratings supplied with air conditioner need to be fitted on the wall.

1. When gratings is easy accessibility, you could fix the gratings from outside, it is recommended to fasten it to the wall with wall plugs and screws with a diameter of 6mm, and keep the fins in vertical position. (See image P16)



2. When the air conditioner is installed in the high space, and impossible to reach the gratings from outdoor side, you could fix the gratings from inside.

Put the silicon gel around of the soft grating, like Fig17. Then fold the outer grating in half, insert your arm inside the hole with the grating. Let the grating unfold and pull the grating toward you. With a little patience and manipulation, the 2 gratings will fit the end of the holes. (P17,18,19)



After fixing the outside grating, we could inject more gel inside the space between the grating and wall. (See P20, 21)



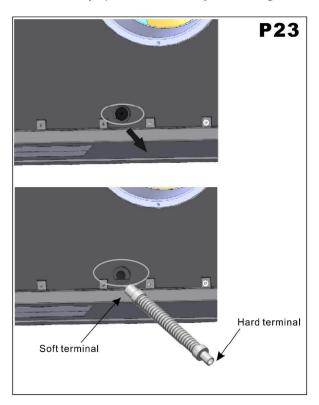
The black silicon gel is just for reference, we could use white or transparent color gel to fix the outdoor grille. (P22)



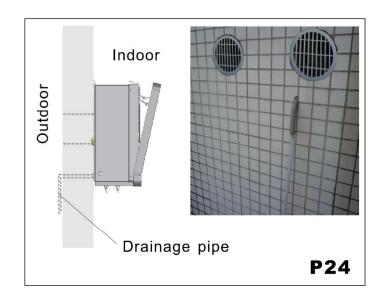
The above installation solution is just for solid wall.

#### 2.7 CONNECTING DRAINAGE PIPE

Connect the drain pipe (from rubber terminal) to the air conditioner (back side) after unplugged the black rubber cup (see P23). With this solution, you can drain the condensate moisture to a suitable place to do not cause any problems to your neighbours.

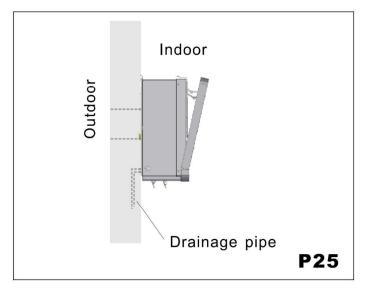


1. When the machine is installed in normal climate or hot area, we can connect the drainage pipe to outside, with a proper place. (See P24)



2.INSTALLATION ENGLISH

2. When the machine is installed in very cold area, the water in drainage pipe is frozen easily in winter, we could connect the drainage pipe inside the wall, and connect with a proper place.

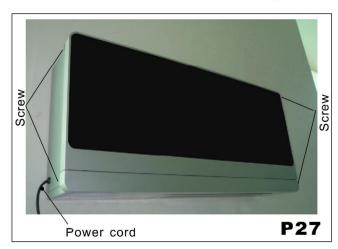


#### 2.8 POWER CORD CONNECTION

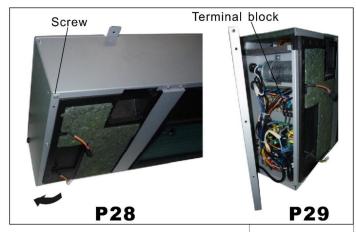
1. For every unit, there would be a power cord on the left side (P26). Connect the plug with the socket, and operate the unit.



2. For aesthetic purpose during the installation, we could change the power cord connection solution with another way.



- --Remove the 4 pcs screws on both sides of the unit. (See P27) Then remove the front panel.
- --Remove the 4 pcs screws on the left side metal plate. (See P28)
- --Open the left plate with the arrow direction, and you can see the power cord terminal block. (See P28, 29)



- --On the back of the unit, there is a hole for the wire connection, you can cut the back insulation material, then connect the additional wire accordingly. Just be careful with the operation and do not damage the wires. About the hole dimension, you can check the paper template.
- --After the operation, please assemble the components again.



## 2.9 FITTING THE AIR CONDITIONER ON BRACKET

After checking again that the fastening bracket is securely fastened to the wall, and that any necessary preparations for electric connection and condensate drainage have been made, fasten the air conditioner to its supporting bracket. (See P31)

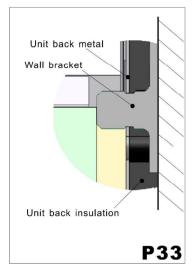
Lift it up by holding the sides at the bottom, slightly insert the outside fan rings into the two big holes on the wall. (See P32) The air conditioner can now be pushed firmly against the wall, then lift the unit and make sure the wall bracket and unit match well. (See P33)

Inspect carefully the installation to make sure that the insulating back panel must fit firmly against the wall and there are no fissures at the back of the air conditioner.

Fixing two screws with top of the machine, to make sure the unit is installed well. (See P34, 35)







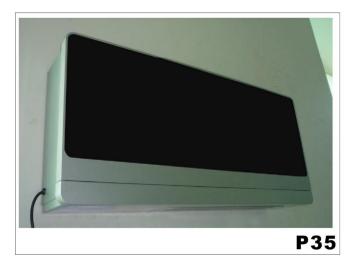


The appliance shall not be installed the laundry.

The appliance must be positioned so that the plug is accessible.

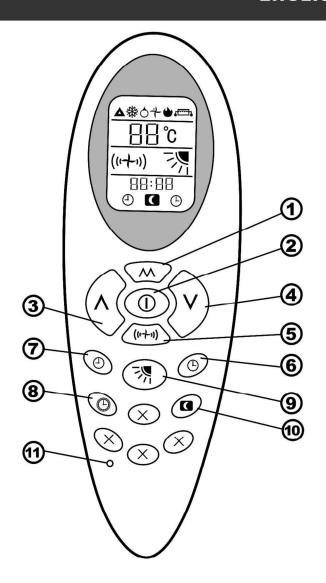
The appliance shall be installed in accordance with national wiring regulations.





#### 3.1 INTRODUCTION OF LCD ICONS

Icons	Meaning	Icons	Meaning
	Auto	((+))	Fan speed
*	Cooling		Airflow direction
$\Diamond$	DRY		Timer off
+	Fan		Timer on
•	Heating		Sleep
88:88	Clock	88°c	TEMP
X	Not Used		

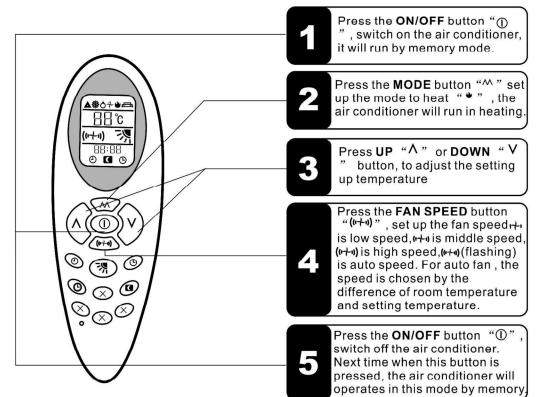


#### 3.2 REMOTE CONTROL FUNCTIONS

- 1 MODE BUTTON: Set up the air conditioner operating mode
- ② ON/OFF BUTTON: Turn on or turn off the air conditioner
- **3 UP** BUTTON: Increase the temperature and time
- 4 DOWN BUTTON: Decrease the temperature and time
- 5 FAN SPEED BUTTON: Set up the fan speed.
- **6 TIMER ON** BUTTON: Set up the time the air conditioner starts.
- (7) TIMER OFF BUTTON: Set up the time the air conditioner stops
- **8 CLOCK** BUTTON: Adjust the clock
- **9 LOUVER SWING** BUTTON: Adjust the airflow direction
- **® SLEEP** BUTTON: Automatically adjusting the setting temperature according the circadian rule.
- **11) RESET** BUTTON

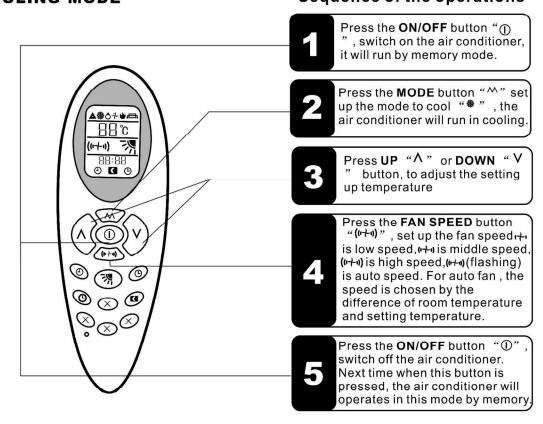
#### 3.3 HEATING MODE

#### Sequence of the operations



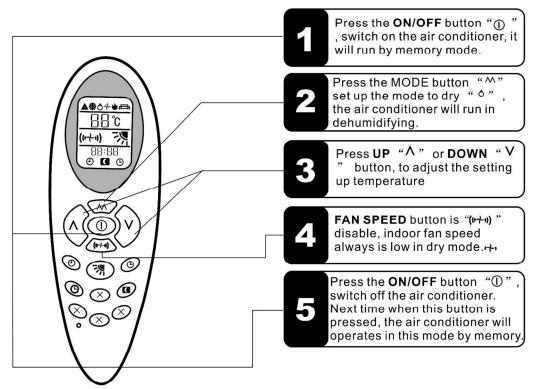
#### 3.4 COOLING MODE

#### Sequence of the operations



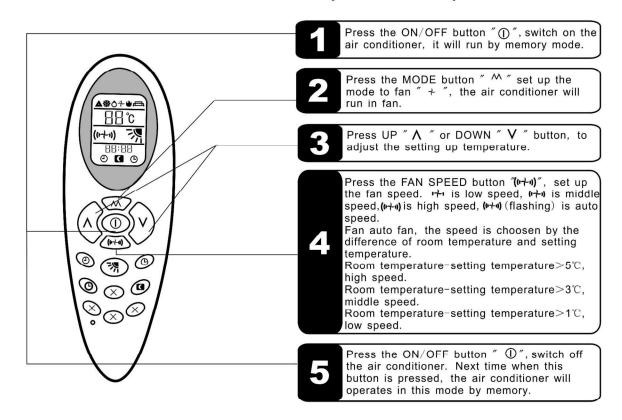
#### 3. 5 DRY MODE

#### Sequence of the operations



#### 3.6 FAN MODE

#### Sequence of the operations



#### 3.7 SLEEP MODE

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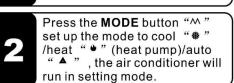
o all (1+1) 3/5

> 88:88 @ **G** ©

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#### Sequence of the operations

Press the ON/OFF button " " , switch on the air conditioner, it will run by memory mode.



Press UP "A" or DOWN "V button, to adjust the setting up temperature

> Press the SLEEP button " ", this icon will display on LCD, sleep function is set up; press it again, cancel the sleep

If the sleep function is launched, the fan speed is steady in low speed.

#### Sequence of the operations

4

#### 3.8 AUTO MODE

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(11+1)

Press the ON/OFF button "()", switch on the air conditioner, it will run by memory mode.

Press the MODE button "M", set up the mode to auto " A ", the air conditioner will run in auto mode. (Reference to "emergency operation")

According to the difference of room temperature and setting temperature automatically choose the running mode (cool, heat, fan). The temperature setting button UP  $^{''}$   $\bigwedge$   $^{''}$  and DOWN  $^{''}$   $\bigvee$   $^{''}$  are disable. When 3

room temperature ≤20°C, run with heat mode. When

20°C < room temperature < 25°C, un with fan mode. When

room temperature ≥25°C, run with cool mode.

Press the FAN SPEED button "(1+1)", set up the fan speed.

+ is low speed, (+) is middle speed, (+) is high speed, (+1)(flashing) is auto speed. For auto fan, the speed is choosen by the difference room temperature and setting temperature.

Press the ON/OFF button " 0 ", switch off the air conditioner. Next time when this button is 5 pressed, the air conditioner will operates in this mode by memory.

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#### 3.9 TIMER OFF FUNCTION

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#### Sequence of the operations

Press the **ON/OFF** button "①", switch on the air conditioner, it will run by memory mode.

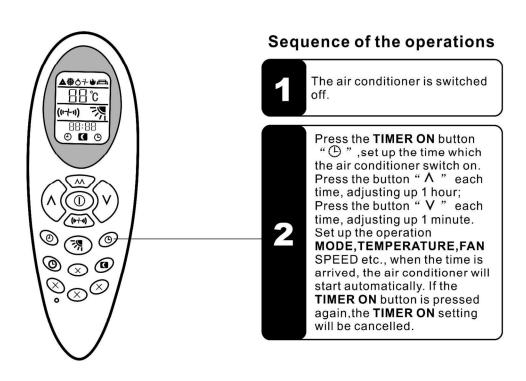
Press the **MODE** button "M" set up the mode to which you want.

Press UP "A" or DOWN "V" button, to adjust the setting up temperature

Press the FAN SPEED button
"((++))", set up the fan speed.++
is low speed,(++) is middle speed,
((++)) is high speed,(++)(flashing)
is auto speed. For auto fan, the
speed is chosen by the
difference of room temperature
and setting temperature.

Press the **TIMER OFF** button
"①", set up the time the air
conditioner switch off. Press
the button "\Lambda" each time,
adjusting up 1 hour; Press the
button "\Lambda" each time,
adjusting up 1 minute; When
the time is over, the air
conditioner will be switched off
automatically. If press this
button again before the air
conditioner switch off, the timer
off setting will cancelled.

#### 3. 10 TIMER ON FUNCTION

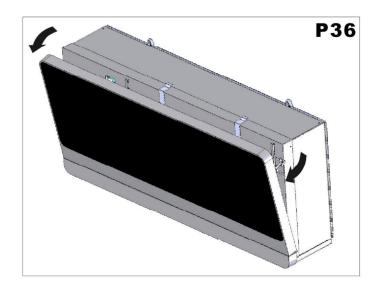


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#### 3. 11 FRONT PANEL FUNCTION

When the unit starts working, the front panel would be open first for about 15-20 seconds, then fan and compressor would work again.

During the opening period, if you find that there is no air come out from the air conditioner, please do not worry about it.



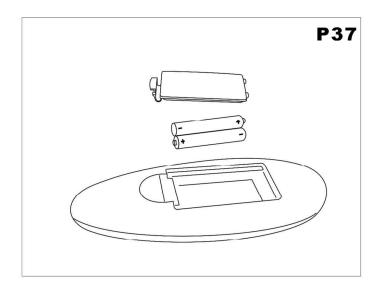
## 3. 12 INSTALL AND CHANGE THE BATTERY

Open the cover of battery, hold the hook and lightly pull up.

Insert the battery (AAA, 2pcs), the positive must be same with the mark on the plastic surface.

Reinstall the cover of battery.

Inspection: If press ON/OFF button " $\mathbb{O}$ ", no icons are displayed, please install the battery again.



# 3. 13 MAINTENANCE (P38, 39, 40) FILTERS CLEANING:

The filter should be regularly cleaned to keep the air conditioner running efficiently. Clean the filters every two weeks.

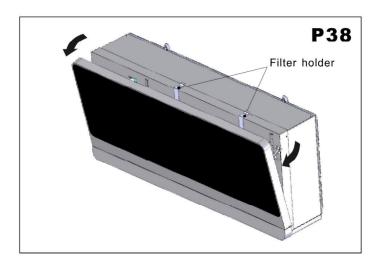
#### How to proceed:

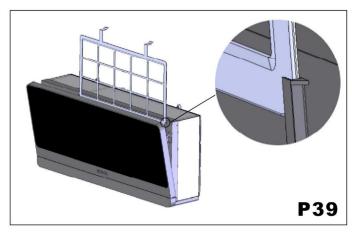
- -- Disconnect the air conditioner from the electrical supply.
- -- Open the front panel by hand.
- -- Take the filter holder (See P38), take out the filter grating from the slot. (See P39).
- -- Proceed to wash them (not hot water) and only when they are dried replace them in the same way. (See P40)

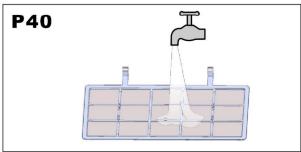
ATTENTION: Do not use the air conditioner without filters as it could seriously damage the air conditioner.

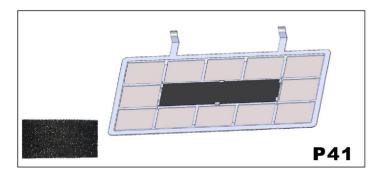
#### **EXTERNAL CLEANING:**

- -- Disconnect the air conditioner from the electrical supply.
- -- Wipe external surfaces clean with a damp cloth only.
- -- Do not use an abrasive cloth or solvents, as this may damage the surfaces.
- Do not use excessively wet cloths or sponges, as water stagnation could damage the air conditioner and compromise safety.









# ACTIVE CARBON FILTER (OPTIONAL) (P41)

The unit maybe includes active carbon filter, which not only has the function of eliminating suspended matters that a common mechanical filter has, but also can eliminate foreign matters such as free chlorine, odors, colors and toxic matters that are difficult to filter out by using conventional approaches. With active carbon filter, the room air would be fresh and good for the body health.

Is advisable to change them every three months, because it is not possible to wash or clean them.

# 3. 14 PROBLEM SOLVING PROBLEM POSSIBLE CAUSES

- -The air conditioner does not work.
- -The air conditioner does not refrigerate the room.
- -Strange smell in the room. Water drips from the air conditioner.
- -The remote control does not work.
- -The air conditioner does not work for 3 min when switched on.

#### POSSIBLE SOLUTIONS

- 1. Wrong setting of the timer/Check it.
- 2. Problems on the power supply/Call the service center.
- 3. The filter could be dirty/Clean it.
- 4. The room temperature is too high/Wait until the temperature goes down.
- 5. The temperature is not properly set/Check it.
- 6. The grids could be obstructed/Check and remove the eventual obstacles.
- -Dampness in the room, coming from walls, carpets, furnishing or similar.
- -Wrong installation of the air conditioner.
- -Wrong connection of the drainage pipe.
- -Exhausted batteries.
- -Wrong insertion of the batteries inside the remote control.
- -Protection of the conditioner. Wait for 3 min and the air conditioner will start to work again.



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

info@western.nl T. +31 33 2477800 The max operation temperature for the air conditioner: (max cooling: outdoor DB43 $^{\circ}$ C/WB26 $^{\circ}$ C,indoor DB32 $^{\circ}$ C/WB23 $^{\circ}$ C; min heating: outdoor DB-5 $^{\circ}$ C/WB-6 $^{\circ}$ C, indoor Db20 $^{\circ}$ C)

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.

