

# ECOLIGHT DUAL SPLIT AIR CONDITIONERS – R32

# **USER and INSTALLATION MANUAL**

Split Air Conditioner – Dual 9+9 – 9+12

ECOLIGHT DUAL 14000 UE ECOLIGHT 9000 UI



Please read this manual carefully before installing and using the air conditioner, and retain for future reference.

# **Contents**

Information for use The Refrigerant Precautions for use Description of components	41 42 44
Guide to the remote control and display Remote control buttons Getting to know the display icons Getting to know the remote control buttons Getting to know the button combination functions Operating guide Replacing the remote control batteries Optional WiFi kit module guide Emergency operation	45 46 46 47 49 50 51 56
Maintenance Care and cleaning	57
Troubleshooting Possible faults and solutions Analysing faults and solutions	58 59
Installation instructions Installation diagrams Choosing a location for installation Electrical connection requirements	61 62 63
Installation Indoor unit installation Outdoor unit installation Vacuum pump Post-installation checks	63 67 69 70
Testing and operation Safety operation of flammable refrigerant Functional testing	71 72
Appendices Piping configuration Procedure for extending the piping	73 74

# INFORMATION FOR CORRECT DISPOSAL OF THE PRODUCT IN ACCORDANCE WITH THE EUROPEAN DIRECTIVE 2012/19/EU



At the end of its working life this equipment must not be disposed of as an household waste. It must be taken to special local community waste collection centres or to a dealer providing this service. Disposing of electrical and electronic equipment separately avoids possible negative effects on the environment and human health deriving from an inappropriate disposal and enables its components to be recovered and recycled to obtain significant savings in energy and resources. In order to underline the duty to dispose of this equipment separately, the product is marked with a crossed-out dustbin.



Appliance filled with flammable gas R32.



Before using the appliance, read the owner's manual.



Before installing the appliance, read the installation manual.



Before repairing the appliance, read the service manual.

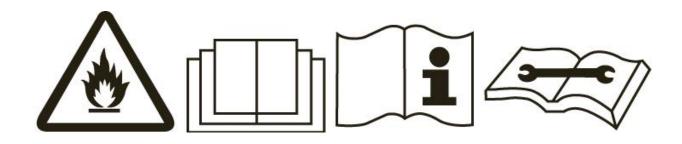
# The Refrigerant

- To realize the function of the air conditioner unit, a special refrigerant circulates in the system. The refrigerant is the fluoride R32 = GWP (Global warming potential). This refrigerant is flammable and inodorous. It can lead to explosions under certain conditions, however the flammability of this refrigerant is very low and it can be ignited only by fire.
- Compared to other common refrigerants, R32 is a non-polluting refrigerant with no harm to the
  ozonosphere and a lower effect upon the greenhouse effect. R32 has very good
  thermodynamic features which lead to a really high energy efficiency. The units therefore need
  less filling.

# Warning:

Do not try to accelerate the defrosting process or to clean the appliance in different ways other than those recommended by the manufacturer. Should repair be necessary, contact your nearest authorized Argoclima Service Centre. Any repairs carried out by unqualified personnel may be dangerous. The appliance has to be stored in a room that doesn't have any continuously operating ignition sources. (for example: open flames, an operating gas appliance or an operating electric heater.) Do not pierce or burn.

Appliance has to be installed, operated and stored in a room with a floor area larger than X m2. (Please refer to table "a" in section of " Safety Operation of Inflammable Refrigerant" for Space X.) For repairs, strictly follow manufacturer's instructions only for appliances filled with R32 flammable gas. Be aware that refrigerants do not have any odour.



# INFORMATION FOR USE Precautions for use



- •This product is not a toy. Children of less than 3 years should be kept away unless continuously supervised.
- This device is not intended for persons (including children aged from 8 years and above) with reduced physical, sensory or mental capabilities, or without the necessary experience and knowledge, unless they have received the necessary supervision or instruction concerning use of the appliance by a person responsible for their safety.
- Children aged from 3 and less than 8 years shall only switch on/off the appliance provided that it has been placed or installed in its intended normal operating position and they have been given instruction concerning use of the appliance in a safe way and understand the hazards involved. Children aged from 3 years and less than 8 years shall not plug in, regulate and clean the appliance or perform user maintenance.
- To prevent the risk of fire, do not connect the air conditioner to a multifunction socket.
- Always disconnect the power before servicing or cleaning the unit.
- To prevent the risk of electric shock or malfunction, do not spray water on the indoor unit.
- Do not spill water on the remote control.
- To prevent the risk of electrical shock or damage, do not attempt to repair the air conditioner yourself. After performing the checks in the troubleshooting section, contact an authorised service centre.
- Do not obstruct the inlet or outlet. Otherwise, a fault may occur.
- Contact a qualified technician if it is necessary to move the air conditioner to another location.
- Do not climb on or place heavy objects on the top panel of the outdoor unit. Otherwise, there is a risk of damage or personal injury.
- Do not put fingers or other objects in the air inlet/outlet grilles. Otherwise, there is a risk of damage or personal injury.
- The air conditioner must be properly earthed. Improper earthing can cause electrical shock.
- Always install a circuit breaker. Otherwise, a fault may occur.

• The unit must be installed and serviced by a qualified technician. Otherwise, there is a risk of damage or personal injury.

# WARNING It is necessary that power supply

★ In case of smoke or burning smell, turn off the power supply and contact the service center.





If the problem persists, the unit could be damaged and cause electrical shock or fire. adopts the special circuit with protection through an air switch and ensure it has sufficient capacity. The unit switches on or off automatically according to user needs: do not turn on or turn off the device frequently otherwise it could suffer harmful effects.

★ Do not cut or damage the power cords and control cables. If the power cable and the cable of the control signal are damaged, they must be replaced by a professional technician.



The power supply must be equipped with a special circuit to



Otherwise, it may result in fire or electric shock.

 Disconnect the power supply if the air conditioner is not used for a long time





Otherwise, the accumulation of dust can cause overheating.

Do not damage the power cord or use an unauthorized cable.



Otherwise, it may cause overheating or fire.

★ When cleaning the unit, stop operation and turn off the power.



Otherwise, may occur electric shock or damage.

★ The voltage rating of this product is 220 - 240V, 50Hz. The compressor vibrates strongly if the voltage is too low, causing damage to the cooling system. The electrical components are easily damaged if the voltage is too high.

★ Do not attempt to repair the air conditioner yourself.



An improper repair can cause fire or electric shock. For this reason, it is advisable to contact a service center for repairs.

c Check if the installed media is sufficiently stable.



If damaged, it can cause the equipment to fall and cause injury.

★ Do not climb on the outdoor unit or place anything on it.



The falling of the outdoor unit can be dangerous

★ Earthing: The unit must be properly grounded. The cable grounding must be connected with the appropriate device in the building.





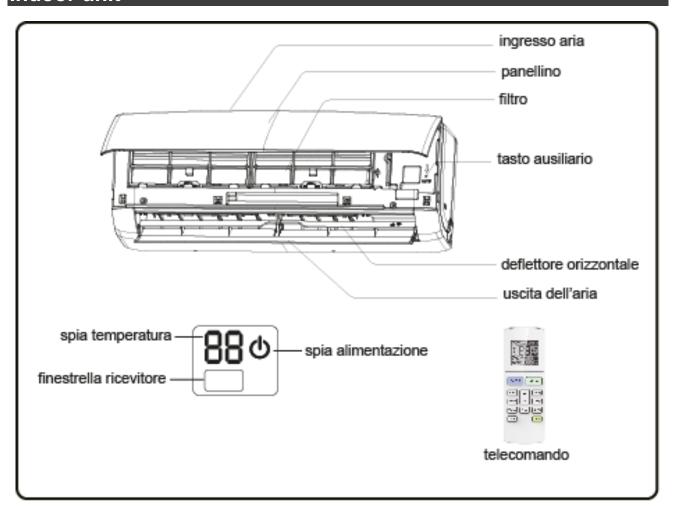
#### Operating limits

Operating range:

Cooling mode: from -15°C to +43°C (outdoor temperature) Heating mode: from -15°C to +24°C (outdoor temperature)

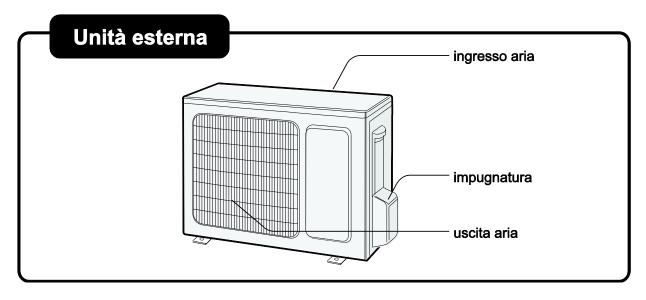
# **Description of components**

# **Indoor** unit



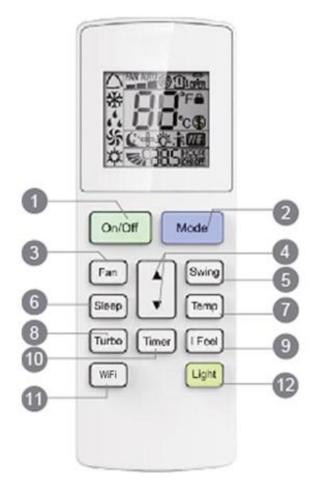
ingresso aria	air inlet
pannellino	panel
filtro	filter
Tasto ausiliario	auxiliary button
Deflettore orizzontale	horizontal flap
uscitadell'aria	air outlet
Spia alimentazione	power indicator
Finestrella ricevitore	receiver window
Spia temperatura	temperature indicator
telecomando	remote control

The display may vary from the graphic above. Please refer to the purchased product for the actual display content and positions)



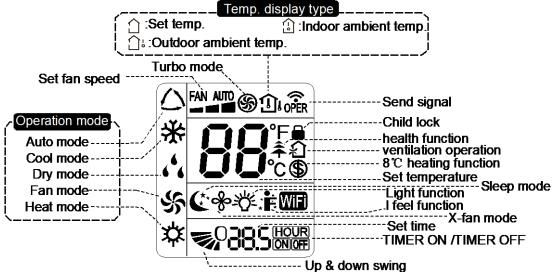
Unitàesterna	Outdoor unit
ingresso aria	air inlet
impugnatura	handle
uscita aria	air outlet

# **GUIDE TO THE REMOTE CONTROL AND DISPLAY Remote control buttons**



- On/Off buttor
- Mode button
- San button
- Swing button
- 6 Sleep button
- Temp button
- 8 Turbo button
- 9 I Feel button
- 10 Timer button
- WIFI button
- Light button

# Getting to know the display icons



**NOTICE:** "Will" This is a general remote controller. Some models have this function while some do not. Please refer to the actual models.

# Getting to know the remote control buttons N.B.:

- This is a general use remote controller, it can be used for the air conditioners with multifunction. For some functions, which the model doesn't have, if you press the corresponding button on the remote controller the unit will keep the original running status.
- •Once connected to the power source, the air conditioner will make a sound. At this point the operation indicator "()" is ON (red indicator). You can now operate the air conditioner by using the remote controller.
- Pressing the ON/OFF button on the remote controller, the signal icon "" on the display of remote controller will blink once and the air conditioner will make a sound, this means that the signal has been sent to the air conditioner. In the ignition state, the display shows the corresponding function icons.
- Pressing once again the ON/OFF button to turn off the unit, the set temperature and the clock icon will be displayed on the display of remote controller (If timer on, timer off and light functions are set, the corresponding icons will be displayed on the display of remote controller at the same time);

#### 1. On/Off button

Press this button to turn on or off the unit. The sleep function will deactivate when the unit is turned off.

#### 2. Mode button

Each time you press this button, a mode is selected in a sequence that goes from: AUTO, COOL, DRY, FAN, and HEAT \*, as the following:



- When you select automatic mode, the air conditioner will operate automatically according to the factory settings. The set temperature cannot be adjusted and will not be displayed. Pressing the "FAN" button will allow you to adjust the fan speed. Pressing the "SWING" button will allow you to adjust the angle of airflow.
- When you select cool mode, the air conditioner will run in cool mode. The \$\psi\$ indicator will illuminate on the display. Press "▲" or "▼" to adjust the set temperature. Press the "FAN" button to adjust the fan speed. Pressing the "SWING" button will allow you to adjust the angle of airflow.

- When you select dry mode, the air conditioner will run at low speed in dry mode. The indicator will illuminate on the display. The fan speed cannot be adjusted in this mode. Pressing the "SWING" button will allow you to adjust the angle of airflow.
- When you select fan mode, the air conditioner will operate only the fan, blowing air without cooling or heating. All the indicators will switch off. Press the "FAN" button to adjust the fan speed. Pressing the "SWING" button will allow you to adjust the angle of airflow.
- When you select heat mode, the air conditioner will run in heat mode. The <sup>™</sup> indicator will illuminate on the display. Press "▲" or "▼" to adjust the set temperature. Press the "FAN" button to adjust the fan speed. Pressing the "SWING" button will allow you to adjust the angle of airflow.

#### N.B.:

To prevent blasts of cold air from being blown into the room, there will be a delay of 1-5 minutes after selecting heat mode before operation begins. (The actual delay will depend on the indoor ambient temperature).

The temperature can be set between  $16 - 30^{\circ}$ C and four fan speeds are available: automatic, low, medium and high.

#### 3. FAN button

Pressing this button will allow you to cycle through and set the fan speed: automatic (AUTO), low ( ), medium ( ) or high ( ). When turning on the unit, the AUTO ventilation speed is activated automatically. With automatic speed, the unit automatically selects the fan speed best suited according to the factory settings. In DRY mode (dehumidification), only the low ventilation speed can be set.

#### 4. ▲/ ▼ button

Press "▲" or "▼" once to increase or decrease the set temperature by 1°C. (The temperature cannot be adjusted in automatic mode).

When setting the TIMER ON, TIMER OFF, press "▲" or "▼" to adjust the time.

#### 5. SWING button - vertical oscillation

Press this button to set the swing angle (up/down). You can cycle through and set the fan's angle of airflow as shown below:



nessuna visualizzazione (il deflettore orizzontale si arresta nella posizione corrente) no display (the horizontal flap stops in the current position)

#### 6. SLEEP button

In cool, heat or dry mode, press this button to start the SLEEP function. The con will appear on the remote control display. Press the button again to exit the SLEEP function. The circumstance icon will disappear from the display.

The temperature will increase or decrease by 2 degrees over two hours according to the function selected (cool/heat).

#### 7. TEMP button

Pressing this button will allow you to display the set temperature, the indoor ambient temperature, or the outdoor ambient temperature on the indoor unit's display. You can cycle through the settings on the remote control display as shown below:

	nessuna — visualizzazione	
Nessuna visualizzazione		no display
	^	

- When you select  $\Box$  or "no display" with the remote control, the set temperature will appear on the indoor unit's display.
- When you select with the remote control, the indoor ambient temperature will appear on the indoor unit's display.
- When you select his with the remote control, the outdoor ambient temperature will appear on the indoor unit's display.

#### N.B.:

- It is not possible to display the outdoor ambient temperature on all models. The indoor unit will receive the  $\widehat{\ }$  signal but will display the set temperature.
- The set temperature will appear on the unit's display on start-up, if enabled to do so.
- When you select to display the indoor or outdoor ambient temperature, the indoor unit will display the corresponding temperature for three to five seconds, after which it will automatically revert to displaying the set temperature.

#### 8. TURBO button

In cool/heat mode, press this button to switch to rapid cool/heat mode. The sicon will appear on the remote-control display. Press this button again to exit the TURBO function. The sicon will disappear from the display.

#### 9. I FEEL button

Press this button to start the I FEEL function. The icon will appear on the remote control display. When you select this function, the remote control will send the detected ambient temperature to the indoor unit, which will then adjust its operation automatically based on the difference between the detected temperature and the set temperature.

Press the button again to exit the I FEEL function. The icon will disappear from the display. The remote control should be positioned near the user when this function is selected. The remote control should not be placed anywhere high or low temperatures may occur to avoid inaccurate ambient temperature detection.

#### 10. TIMER ON/OFF button

On a working unit, press this button to set the unit's power off time. When the unit is off, press this button to set the unit's power-up time. By pressing this button, the HOUR ON or HOUR OFF indicator starts blinking: if you press "▲" or "▼" buttons you can set the time (from 0.5 to 24) to switch the unit off or on. Hold down the button "▲" or "▼" for 2 seconds to quickly change the time until the desired time is reached. Press the TIMER button to confirm the TIMER settings and the HOUR ON or HOUR OFF indication will stop blinking.

If the "HOUR" message flashes but does not follow any setting, it will stop flashing after 5 seconds. If the TIMER ON or OFF function is activated, press the TIMER button to cancel the setting.

#### 11. Wi-Fi button

Press this button to start the Wi-Fi function. When the Wi-Fi function is active, the "Wi-Fi" icon will appear on the remote control display. When the remote control is off, press and hold the "Mode" button and the "Wi-Fi" button simultaneously for 1 sec to return to the factory settings.

#### 12. LIGHT button

Press this button to turn off the indoor unit's display light. The icon will disappear from the remote control display.

Press this button again to turn on the display light. The icon will appear on the display.

# Getting to know the button combination functions

#### **Energy saving function**

In cool mode, press the TEMP and CLOCK buttons simultaneously to start or stop the energy saving function. When you start the energy saving function, "SE" will appear on the remote control display and the air conditioner will automatically adjust the set temperature according to the factory settings to achieve the best energy-saving effect. Press TEMP and CLOCK again simultaneously to exit the energy saving function.

#### N.B.:

- When the energy saving function is enabled, the fan will operate at the default automatic speed and cannot be adjusted.
- When the energy saving function is enabled, the set temperature cannot be adjusted. The remote control will not send a signal to the unit when the TURBO button is pressed.
- The SLEEP and energy saving functions cannot operate simultaneously. If the energy saving function was set in cool mode, press the SLEEP button to cancel it. If the SLEEP function was set in cool mode, start the energy saving function to cancel it.

#### 8°C heating function

In cool mode, press the TEMP and CLOCK buttons simultaneously to start or stop the 8°C heating function. When this function is enabled, \$\sigma\$ and 8°C will appear on the remote control display and the air conditioner will continue to operate at 8°C. Press TEMP and CLOCK again simultaneously to exit the 8°C heating function.

#### N.B.:

- When the 8°C heating function is enabled, the fan will operate at the default automatic speed and cannot be adjusted. The remote control will not send a signal to the unit when the TURBO button is pressed.
- The SLEEP and 8°C heating functions cannot operate simultaneously. If the 8°C heating function was set in cool mode, pressing the SLEEP button will cancel it. If the SLEEP function was set in cool mode, starting the 8°C heating function will cancel it.
- When the temperature display is in °F, the remote control will show that the unit is operating at 46°F.

#### Remote control button lock function

Press "▲" and "▼" simultaneously to enable or disable the remote control button lock function. When this function is enabled, will appear on the remote control display. If you attempt to operate the remote control, the icon will flash three times and no signal will be sent to the unit.

#### Switching temperature display

In OFF mode, press the "▼" and "MODE" buttons simultaneously to switch from a temperature display in °C to °F.

# **Operating guide**

#### **General operations**

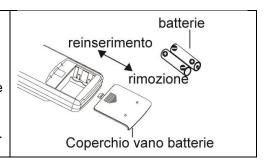
- 1. When you connect the power, press the "ON/OFF" button on the remote control to turn the air conditioner on.
- **2.** Press the MODE button to select the desired operating mode: AUTO, COOL, DRY, FAN or HEAT.
- 3. Press "▲" or "▼" to adjust the desired temperature. (The temperature cannot be adjusted in automatic mode.)
- **4.** Press the "FAN" button to set the desired fan speed: automatic, low, medium or high.
- **5.** Press the "SWING" button to adjust the fan's angle of airflow.

#### **Optional Operations**

- Press the SLEEP button to set the function sleep
- 2. Press the timer ON/ timer OFF button to set the timer ON or timer OFF
- 3. Press the LIGHT button to check the switching on or off of the different parts of the display (this function may not be possible for some units)
- 4. Press the TURBO button to activate or deactivate the function TURBO.

# Replacing the remote-control batteries

- 1. Remove the battery compartment cover, marked with (see image to right), by sliding it in the direction of the arrow.
- 2. Use only two AAA LR03 1.5V batteries. Make sure the + and ends are facing the correct direction.
- 3. Slide the battery compartment cover back into place.



batterie	batteries
reinserimento	close
rimozione	open
Coperchio vano batterie	battery compartment cover

#### N.B.:

- When the unit is operating, point the remote control's signal transmitter at the indoor unit's receiver.
- The distance between the transmitter and the receiver must not exceed 8 metres and should remain free of obstacles.
- If the room contains a fluorescent light or cordless telephone, signal interference can occur.
- When the remote control is not used for a month or more, remove the batteries.
- Use batteries of the same type when replacing the batteries, as necessary.
- If the icons on the remote control display are blurred or not visible, replace the batteries.

# INFORMATION FOR THE CORRECT DISPOSAL OF BATTERIES IN ACCORDANCE WITH EUROPEAN DIRECTIVE 2006/66/EC



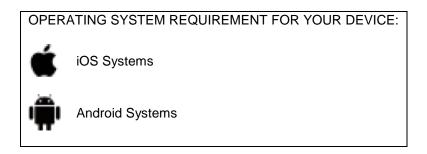
Replace batteries when they are depleted. At the end of their life, batteries must be disposed of separately from unsorted waste. They must be taken to designated recycling centres or returned to a retailer providing this service. Separate disposal of batteries helps to reduce the potential harmful effects on the environment and human health caused by their improper disposal and also enables the recovery and recycling of component materials, saving significant energy and resources. The requirement for separate disposal is indicated by the crossed-out wheelie bin label affixed to the appliance. Illegal disposal of the product by the user is subject to administrative penalties as per current regulations.

#### **OPTIONAL WIFI KIT MODULE**

For the installation of the EWPE wifi kit module, please refer to the installation guide provided with the wifi module.

#### **INSTALLING THE EWPE SMART APP**

The EWPE SMART app is compatible with devices using standard Android or iOS operating systems.





#### Adding the EWPE SMART app to your device

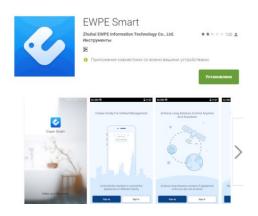
#### 1. SELECT AND DOWNLOAD THE EWPE SMART APP.

Scan the QR code to open the EWPE SMART app selection page.

From the EWPE SMART app selection pade, choose either the Apple Store for iOS or Google Play Store for Android Operating Systems to download the EWPE SMART app to your device.

#### 2. ADD THE APP TO YOUR PHONE.

Download the EWPE SMART app directly to your phone from the Apple Store or Google Play Store. Then the EWPE SMART app has successfully downloaded to your phone, close the app store,



#### REGISTERING THE UNIT ON THE EWPE SMART APP

#### 1. TURN ON THE UNIT'S WIFI INTERFACE.

If your unit remote control have a WiFi button hold It for 10 seconds, the WiFi icon will appear ?...



If your remote control don't have a WiFi button please refer to your unit user manual for more instructions on how to activate WiFi.

If your unit have a WiFi button on the control panel, hold It for about 10 seconds, when you hear a beep sound the WiFi is activated.

V 12/18 51

#### 2. LAUNCH THE EWPE SMART APP ON YOUR SMARTPHONE.

Locate the EWPE SMART icon on your device . Tap the icon to launch the app.



#### 3. SIGN UP FOR THE WIFI ACCESS.

The app login screen will be displayed.

For first-timer users, select the "Sign up" button to create an account and register your unit.

On the sign up screen, you should:

- -Create a Username
- -Enter your email address
- -Create a password
- -Select region

Then tap "Sign up" button.





Login screen

1st time Sign up screen

#### Please take note of your Username and Password.

USERNAME: \_\_\_\_\_\_PASSWORD: \_\_\_\_\_

#### 4. ADD YOUR WIFI NETWORK TO THE EWPE SMART APP.

This is the local WiFi network the unit will be connected to and communicating through.

From the My Home screen, tap the "+" button to add your WiFi network. Select your home or office WiFi network and enter the WiFi network password. If you want EWPE app to remember your network password check the box. Tap the "Search for device" button.

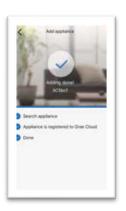




WiFi network screen

#### 5. ADD YOUR UNIT TO THE EWPE SMART APP.

Ewpe Smart will search your WiFi network for new units to match. When a new unit is found, It will automatically be registered on the app. EWPE SMART will display the device name of your unit.



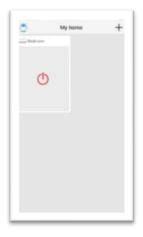
#### 6. RETURNING TO THE HOME SCREEN.

Tap the back "<" button to return to the My Home screen. Your unit will be displayed on the My Home screen.

Turn your unit "ON" and "OFF" by tapping the circle button  $oldsymbol{\Phi}$  .



For a full screen display view tap the unit display.







Unit "OFF" My Home screen

Unit "ON" My Home screen

Unit "ON" Full screen

#### **CUSTOMIZE THE EWPE SMART APP ON YOUR SMARTPHONE**

#### 1. SETTINGS.

Tap the "Settings" button to open the settings screen. From the setting screen, you can customize the unit name, lock the device and check the firmware version.





V 12/18 53

#### 2. CUSTOMIZE.

Set a custom name for your unit for easy and quick identification (ex. Living room, kitchen ...). To change the device name, tap on the current device name and the type a new name.

#### 3. TURN ON/OFF PRIVACY LOCK MODE.

Privacy Lock Mode prevents unauthorized access to the unit controls and prevents unauthorized users from tampering with system settings. Turn Lock on and off by sliding the Device Lock button to the right or left to lock or unlock.

#### 4. RETURN TO FULL SCREEN DISPLAY.

Tap the "Save" button.

#### 5. RETURNING TO THE HOME SCREEN.

Tap the back "<" button to return to the My Home screen.

You can add up to 4 units, just repeat the "Register a new unit" instructions.



Single unit screen

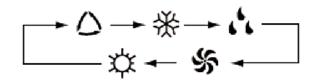


Multiple units screen

#### START UP AND OPERATION

#### **OPERATING MODE**

Select "Auto", "Cool", "Dry", "Fan" or "Heat" by sliding the mode icon right or left on the smartphone display. The modes will be displayed as follows.



See unit instructions for detailed operation of these modes.





"Cool" mode

"Heat" mode

#### **ADJUST TEMPERATURE SETTINGS**

Room temperature setting can be adjusted according to the unit temperature settings range. Set the desired temperature by scrolling the room temperature icon right or left on the smartphone display.





#### FAHRENHEIT °F / CELSIUS °C SCREEN

To switch the display to °C, tap the °F icon on the smartphone screen. Repeat the procedure to switch the display back to °F.





Fahrenheit °F screen

Celsius °C screen

#### **FAN MODES**

Fan mode can be adjusted by sliding the fan icon right or left on the device screen The fan modes will be displayed as follows:



See Unit instructions for detailed operation.







Fan mode screens

#### **SPECIAL FUNCTIONS**

The EWPE SMART app has multilple special functions to improve your comfort, save time and lower energy usage.

Tap the "function" icon to open the special functions window.

According to the unit, more then 14 special function can be activated/deactivated from this screen.





Special functions

Special functions screen

#### **TROUBLESHOOTING**

#### **COMMON NETWORK SETTINGS PROBLEMS**

If the WiFi control fails, check the following items one by one:

- Make sure electrical power is turned on to the outdoor and indoor units.
- Make sure WiFi function is turned ON as normal

#### TO RESET WIFI MODULE

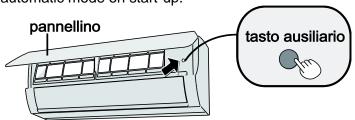
If the remote controller or the unit have a "WIFI" button, hold it until the unit emits a beep sound. WiFi module is successfully reset.

If the remote does not have a WiFi button, please refer to the instruction manual of your unit: the same buttons combination to turn on or off the WiFi function should be holded for 10 seconds to reset the WiFi module. When the unit emits a beep, WiFi module is successfully reset.

# **Emergency operation**

In the event of loss or failure of the remote control, use the emergency button located under the indoor unit's front panel to turn the air conditioner on or off.

The unit will operate in automatic mode on start-up.



pannellino	panel
Tasto ausiliario	auxiliary button

#### **MAINTENANCE**

# Care and cleaning

N.B.:

Disconnect the power before servicing or cleaning the unit.

#### Cleaning the casing of the indoor unit

Use a soft, damp cloth to clean the outer surface of the unit.

Do not use water that is too hot, solvents, petrol or other aggressive chemical compounds, talcum powder or brushes. These may damage the colour or surface of the casing.

To remove stains, use warm water with a little neutral detergent.

Do not pour water onto the air conditioner to clean it. This may damage the internal components or cause a short circuit.

**N.B.:** Do not remove the panel when cleaning the unit.

#### Cleaning the filters

#### Open the panel

Lift the front panel of the indoor unit, as shown.



#### Remove the filters

Remove the filters by lifting one of the bottom corners and pulling them downwards, as shown.



#### Clean the filters

- Use a vacuum cleaner to clean the filters.
- If they are very dirty, use water (below 45°C) and leave to dry in a cool, dark place.



#### Refit the filters

Refit the filters and close the front panel.



#### N.B.:

The filters should be cleaned every three months, or more frequently if the room is very dusty.
 WARNING!

When you remove the filters, avoid contact with the heat exchanger (there is a risk of cuts or abrasion).

Do not use a hairdryer to dry the filters; the heat can cause damage and warping.

#### Before-use checks

- 1. Check that the air inlet and outlet are free of obstructions.
- 2. Check that the circuit breaker, plug and socket are in good working order.
- 3. Check that the filters are clean.
- 4. Check that the outdoor unit's support bracket is not damaged or corroded. If it is, contact the service centre.
- 5. Check that the piping is not damaged.

#### After-use checks

- 1. Disconnect the power supply.
- 2. Clean the indoor unit's panel and filters.
- 3. Check that the outdoor unit's support bracket is not damaged or corroded. If it is, contact the service centre.

#### N.B.

1. Many packaging materials are recyclable materials. Please dispose of them in the appropriate recycling unit.

2. If you want to remove the air conditioner, please contact your local dealer or local service provider for the correct disposal method.

# TROUBLESHOOTING Possible faults and solutions WARNING

Do not attempt to repair the unit yourself. Improper repair can cause electric shocks or fire. Disconnect the unit from the power supply before contacting your local Technical Service Centre. Carry out the following checks before contacting your Technical Service Centre:

Fault	Check	Solution
	Is there noticeable interference (e.g. static	Pull out the plug. After about 3 minutes
	electricity, stable voltage)?	reinsert the plug and restart the unit.
	Is the remote control within the signal	The maximum signal reception distance
	reception range?	is 8 m. The remote control will not work
The indoor unit	Are there any obstacles between the	beyond this distance.
does not receive	remote control and the receiver?  Is the remote control pointed at the	Remove the obstacles.  Point the remote control at the receiver
the signal from remote control or	receiver?	on the indoor unit.
the remote	Is the remote control's sensitivity low? Are	Check the batteries. If the batteries are
	icons blurred or missing?	very low, replace them.
seem to be	Do icons fail to appear on the display	Check if the remote control is damaged.
working	when you operate the remote control?	If it is, replace it.
	Is there a fluorescent light in the room?	Position the remote control next to the
		indoor unit.
		Turn off the fluorescent light and try again.
	Is the indoor unit's air inlet or outlet	Remove the obstruction.
	blocked?	Tromore and exemperation
	In heat mode, has the indoor temperature	Once the set temperature has been
No air comes out	reached the set temperature?	reached, the indoor unit will stop blowing
of the indoor unit		out air.
	Has heat mode only recently been	To prevent blasts of cold air from being
	selected?	blown out, there will be a delay of
		several minutes before operation begins (this is normal).
	Is there a power cut?	Wait for the power to be restored.
	Has the plug come loose?	Reinsert the plug.
	Has the circuit breaker tripped or has the	Have the circuit breaker or fuse replaced
The air	fuse blown?	by a qualified technician.
conditioner is not	Is the wiring faulty?	Have it replaced by a qualified
working	Mag the cost westered improved stell coften	technician.
	Was the unit restarted immediately after shutdown?	Wait 3 minutes and then restart the unit.
	Is the setting on the remote control	Reset the function.
	correct?	
The indoor unit's	Is the indoor temperature and humidity	Indoor air cools rapidly. Wait for the
air outlet	high?	indoor temperature and humidity to fall
produces a mist	Is the unit operating in automatic mode?	and the mist to disappear.  The temperature cannot be adjusted in
The set	ino and operating in automatic mode!	automatic mode. Change the operating
temperature		mode if you want to adjust the
cannot be		temperature.
adjusted	Does the desired temperature fall outside	The available temperature range is: 16 –
	the available temperature range?	30°C.
	Is the voltage too low?	Wait for the voltage to return to normal.
of heating/cooling	Is the filter dirty?	Clean the filter.

cannot be achieved	Does the set temperature fall within the available temperature range?  Are there any doors or windows open?	Adjust the temperature to within the available range.  Close any doors and windows.
The unit is emitting unpleasant smells	Is there an odour source (e.g. furniture, cigarettes, etc.)?	Eliminate the odour source. Clean the filter.
The air conditioner turns on suddenly	Are there any sources of interference (e.g. lightning, wireless devices, etc.)?	Disconnect the power supply and then reconnect it. Turn the unit on again.
The outdoor unit produces steam	Has heat mode been selected?	Steam production when defrosting in heat mode is a normal phenomenon.
Sound of running water	Has the air conditioner recently been turned on or off?	The noise is produced by the refrigerant flowing inside the unit (normal phenomenon).
Creaking/cracking noises	Has the air conditioner recently been turned on or off?	It is the sound of the friction caused by the expansion and/or contraction of the panel or other parts due to temperature changes.

# **Analysing faults and solutions**

#### **Error codes**

In the event of a fault, the temperature indicator on the indoor unit will flash to display the corresponding error code. Refer to the following list to identify the error code.

Error code	Faults and solutions
E5	Can be eliminated by turning the unit off and on again. Otherwise, contact a qualified technician for assistance.
E6	Can be eliminated by turning the unit off and on again. Otherwise, contact a qualified technician for assistance.
U8	Can be eliminated by turning the unit off and on again. Otherwise, contact a qualified technician for assistance.
E8	Can be eliminated by turning the unit off and on again. Otherwise, contact a qualified technician for assistance.
C5	Contact a qualified technician for assistance.
F0	Contact a qualified technician for assistance.
F1	Contact a qualified technician for assistance.
F2	Contact a qualified technician for assistance.
Н3	It can be eliminated switching off the unit and switching it back on. If this doesn't work contact a qualified technician to assist.
Н6	It can be eliminated switching off the unit and switching it back on. If this doesn't work contact a qualified technician to assist.

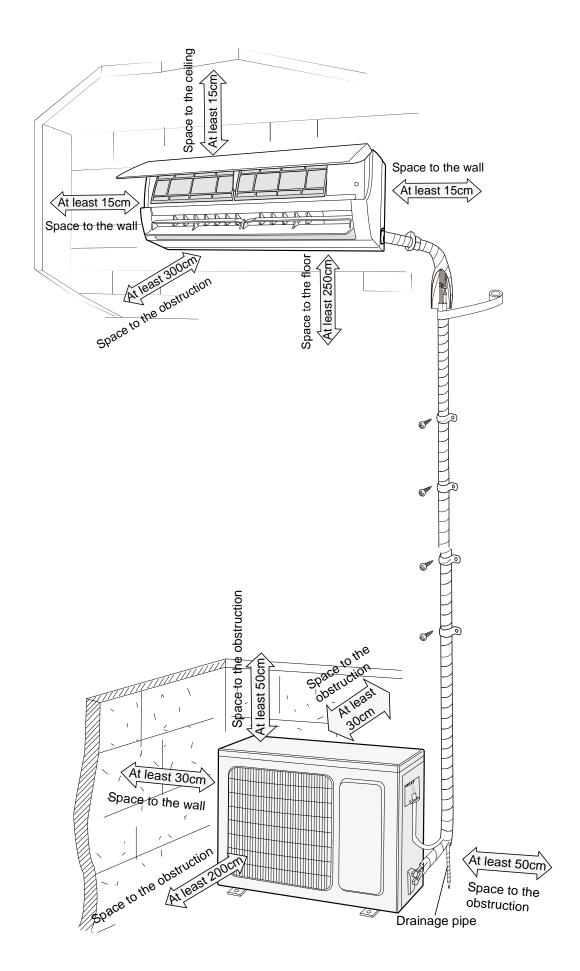
N.B.: In the event of other error codes, contact a qualified technician for assistance.

# Warning

If you experience any of the following problems, turn the air conditioner off and immediately disconnect the power. Then contact your local Technical Service Centre.

- The power cable is damaged or has overheated.
- The unit makes an unusual noise during operation.
- The circuit breaker keeps tripping.
- The air conditioner emits a burning smell.
- The indoor unit is leaking.
- Do not attempt to repair or reinstall the air conditioner yourself.
- If the air conditioner is operated in abnormal conditions, <u>malfunction</u>, <u>electric shock or fire</u> may result.

# **INSTALLATION INSTRUCTIONS Installation diagrams**



#### **INSTALLATION WARNINGS**

WARNING: Make sure that the power supply is disconnected before carrying out any work on the unit.

WARNING: Wear appropriate personal protective equipment before carrying out any work on the unit.

WARNING: The appliance must be reinstalled in accordance with national system regulations.

WARNING: Wiring and installation must only be performed by a qualified technician trained to install, modify, extend and service the unit and perform safety and functionality tests.

WARNING: Install a device, master switch or electric plug that will allow all the power from the appliance to be switched off.

The following information is essential for correct unit installation. However, the installer should use his or her experience to install the unit according to specific requirements.

Do not install the unit in locations where there are flammable gases or acid or alkaline substances that may irreparably damage the copper-aluminium heat exchangers or internal plastic components.

Do not install the unit in offices or kitchens where oil vapours mixed with treated air may settle on the exchange coils, reducing performance, or on the unit's internal parts, damaging the plastic components.

ATTENTION: For the connection between the units, use only annealed and deoxidized copper pipe for conditioning and refrigeration and insulated with expanded polyethylene of min. 8 mm.

# Choosing a location for installation

#### **Essential requirements Indoor unit** 1. There should be no obstructions near the air Do not install the unit in the following locations. Otherwise, a fault may occur. inlet or outlet. 1. Locations with extreme heat sources or 2. Choose a location where the condensate can flammable or explosive gases or vapours. drain out easily without causing a nuisance. 3. Choose a convenient location to connect the 2. Locations with high-frequency devices (e.g. welding machines, medical equipment). outdoor unit to the power outlet. Locations close to coastal areas. 4. Choose a location out of the reach of children. Locations with oils or fumes in the air. 5. The site should be strong and solid enough to Locations with sulphide gas. support the weight of the indoor unit and prevent Other locations that have special conditions. noise or vibration. 6. The unit should be installed 2.5 m from the floor. 7. Do not install the indoor unit directly above Do not operate the unit in the immediate vicinity of laundrettes, bathtubs, showers or swimming electrical equipment. pools. 8. Try to keep a certain distance from fluorescent liahts. **Outdoor unit**

- 1. Choose a location where the noise and airflow produced by the outdoor unit will not annoy neighbours.
- 2. The location should be well ventilated and dry; the outdoor unit must not be exposed to direct sunlight or strong winds.
- 3. The site should be able to support the weight of the outdoor unit.
- 4. Check that the installation complies with the requirements of the dimensional drawing for
- 5. Choose a location out of the reach of children and away from animals or plants. If this is not possible, install safety fencing.

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## **Electrical connection requirements**

#### Safety precautions

- 1. Electrical safety standards must be met when installing the unit.
- 2. Use a power supply circuit and circuit breaker that comply with local safety regulations.
- 3. Make sure that the power supply matches the requirements of the air conditioner. An unstable power supply or incorrect wiring may result in a fault. Install suitable power cables before switching on the air conditioner.
- 4. Correctly connect the live, neutral and earth wires to the power outlet.
- 5. Disconnect the power supply before carrying out any work on the electrical circuit or carrying out any safety work. For models with a plug, make sure the plug is easily accessible after installation.
- 6. Do not connect the power before installation is complete.
- 7. Do not use the appliance if the power cable or plug are damaged. If the power cable is damaged it must be replaced by the manufacturer, retailer or other qualified person to avoid a hazard.
- 8. Since the temperature of the cooling circuit is high, keep the interconnecting cable away from the copper pipe.
- 9. The unit must be installed in accordance with national wiring regulations.
- 10. Installation must only be performed by trained individuals in accordance with regulations.

The unit is charged with a slightly inflammable refrigerant, R32. Improper handling of this gas may expose people and materials to serious damage. More details on this refrigerant are given at the beginning of this manual.

#### **Earthing**

- The air conditioner is a Class I appliance. The unit must be earthed with an appropriate device by a qualified technician. Ensure the unit is always properly earthed. Otherwise electric shock may result.
- 2. The green-yellow wire of the air conditioner is the earthing wire and may not be used for other purposes.
- 3. The earth resistance must meet national standards for electrical safety.
- 4. The unit must be positioned so that the plug is accessible.
- 5. An all-pole isolating switch with a minimum contact gap of 3mm in each pole must be connected to the fixed cable.

## **INSTALLATION**

#### Indoor unit installation

#### Step one: choose of indoor unit position

Decide where to install the unit based on room design, architectural limitations and customer requirements. Check that in the selected location the unit can be accessed for servicing and cleaning the filters. To install, use the installation plate as a template to identify the exact position for the wall plugs and through-hole in the wall. The plastic casing has stoppers which if necessary can be removed to route the refrigerant lines and cables. When operating in cool or dry mode, the moisture in the air condenses on the coil of the indoor unit, collects in the basin and drains out through the special rubber hose. The hose must be connected to a pipe with a suitable gradient, ensuring no unnecessary bends are created. Do not run siphons and do not immerse in water.

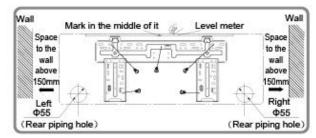
#### Step two: mount the wall-installation plate

- 1. Position the installation plate on the wall. Use a level to position it horizontally and mark the holes for the bolts on the wall.
- 2. Drill the holes for the screws in the wall with a hammer drill (the drill bit must match the plastic wall plug). Then insert the wall plugs into the holes.
- 3. Secure the plate to the wall with the self-tapping screws (ST4.2X25TA). Check it is securely attached by pulling on the bracket. If a plastic wall plug is loose, drill another hole nearby with the hammer drill.

#### Step three: drill the hole for the piping

Select the position for the piping hole according to the direction of the outlet pipe. The piping hole must be slightly lower than the wall-installation frame, as shown below.

#### 09K -12K

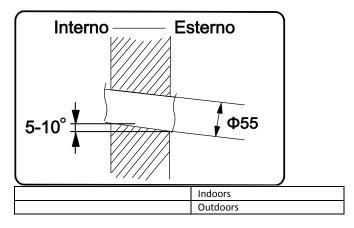


Drill a piping hole of diameter  $\Phi$ 55 or 70 at the chosen location for the outlet pipe. To allow for proper drainage, the piping hole in the wall must slant slightly downwards to the outdoor side, with a gradient of 5 – 10°.

Piping hole	Model
Ø 55	Cooling capacity < 6000 W

#### N.B.:

- Take the necessary safety measures when drilling the hole and do not allow dust to enter.
- The plastic wall plugs are not supplied but must be purchased on site.



#### Step four: outlet pipe

The pipe can be brought out in various different directions: right, rear right, left or rear left.



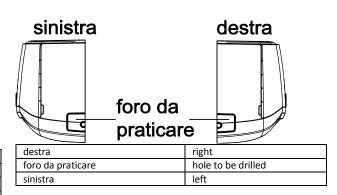
destra	right
Posteriore destra	rear right
sinistra	left
Posteriore sinistra	rear left

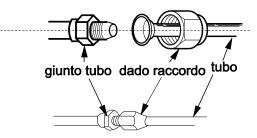
#### Step five: connect the indoor unit pipe

Position the pipe joint in the corresponding bellmouth.

Pre-tighten the union nut by hand.

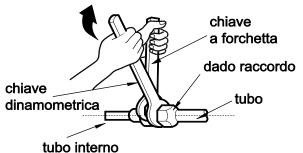
Once you have selected the direction of the outlet (left or right), drill the corresponding hole at the bottom.



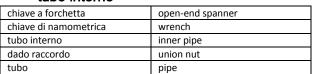


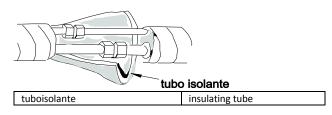
giunto	pipe
tubo	joint
dado	union
raccordo	nut

Adjust the torque according to the following table. Position the open-end spanner on the pipe joint and position the torque wrench on the union nut. Tighten the nut with the wrench.



Hex nut diameter	Tightening torque (Nm)
Ф6.35	15 – 20
Ф9.52	35 – 40



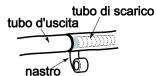


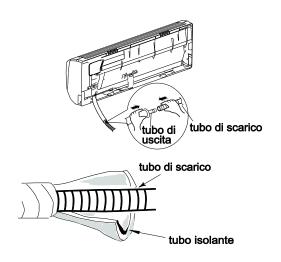
Wrap the indoor pipe and the joint of the connecting pipe with an insulating tube. Then wrap with tape.

#### Step six: install the condensate drain pipe

Connect the drain pipe to the outlet pipe of the indoor unit.

Bind the joint with tape.





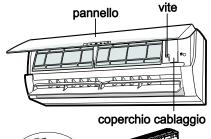
tuboisolante	insulating tube
tubo di uscita	outlet pipe
tubo di scarico	drain pipe
nastro	tape

#### N.B.:

- Add an insulating tube to the indoor drain pipe to prevent condensation.
- The plastic wall plugs are not supplied.

#### Step seven: connect the indoor unit electrical cable

1. Open the panel. Remove the screw that secures the small panel covering the terminal board.



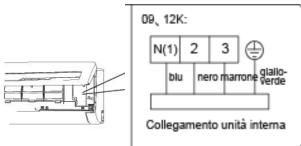
2. Insert the indoor and outdoor unit connecting cable into the rear hole corresponding to the terminal block. Then pull it out of the front.



pannello	panel
vite	screw
coperchio cablaggio	wiring cover
foro di passaggio	cable
cavo	through-hole
cavo di alimentazione	power cable

3. Remove the cable clip. Connect the power cable to the terminal block according to colour. Tighten the screw and secure the power cable with the clip.

4.



blu	blue
nero	black
marrone	brown
giallo-verde	yellow-green
collegamento unità esterna	Outdoor unit connection

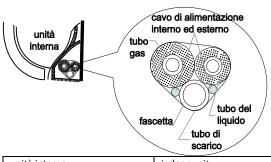
- 4. Reposition the terminal block cover and tighten the screws.
- 5. Close the panel.

#### N.B.:

- All wiring must be connected as shown on the unit's wiring diagram. All indoor and outdoor unit cables must be connected by a qualified technician.
- If the power cable is not long enough, contact the supplier for a new one. Do not attempt to extend it yourself.
- For air conditioners equipped with a plug, the plug must be easily accessible upon completion of installation.
- For air conditioners without a plug, install a circuit breaker on the line. The circuit breaker must be single-pole and the contact gap must be greater than 3mm.

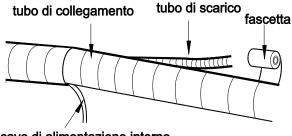
#### Step eight: bind the pipes

1. Bind together the connecting pipe, the power cable and the drain pipe with binding tape.



unità interna	indoor unit					
cavo di alimentazione interno	indoor and outdoor power cable					
ed esterno						
tubo gas	gas pipe					
fascetta	binding tape					
tubo di scarico	drain pipe					
tubo del liquido	liquid pipe					

2. Reserve a section of the drain pipe and power cable for installation when binding. When you



#### cavo di alimentazione interno

tubo di collegamento	connecting pipe
tubo di scarico	drain pipe
fascetta	binding tape
cavo di alimentazione interno	Indoor powercable

- 3. Bind them evenly.
- 4. The liquid pipe and gas pipe must be bound separately at the end.

#### N.B.:

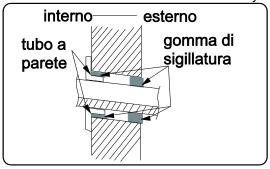
The power cable and signal control cable must not be rolled or coiled.

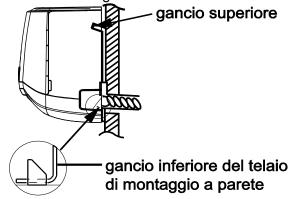
The drain pipe must be bound at the bottom.

have bound up to a certain point, separate the indoor power cable and then the drain pipe.

#### Step nine: hang the indoor unit

- 1. Insert the bound pipes into the wall pipe and route them through the hole in the wall.
- 2. Hang the indoor unit on the wall-installation plate.
- 3. Fill the gap between the pipes and the hole in the wall with sealant.
- 4. Secure the wall pipe.
- 5. Check that the indoor unit is securely installed and flush against the wall.





interno	indoors
esterno	outdoors
tubo a parete	wall pipe
gomma di sigillatura	rubber sealant
gancio superiore	upper hook
gancio inferiore del telaio di montaggio a parete	lower hook of wall-installation frame

#### N.B.:

Avoid bending the drain pipe too much in order to prevent clogging.

## **Outdoor unit installation**

For all connections refer to the wiring diagrams supplied with the unit. If the outdoor unit was connected to a higher level than the one of the indoor unit, you must make a siphon. The outdoor unit must be installed outdoors, in a perfectly horizontal position, respecting the minimum distances to allow the air to flow and the execution of any maintenance. The unit is built with resistant materials to protect it from any weather condition so it's not necessary to protect it in a particular way. Make sure however that the heat exchanger is not exposed to the danger of hail. If you want to attach the unit to a wall, use brackets appropriately sized to support the weight of the unit. Condensation produced due to the operation in heating can be piped to a drain using the appropriate predisposition.

# Handling the unit



After unpacking make sure that the content is intact and complete



The handling of the product must be made by qualified and prepared personnel, who are supplied with suitable equipment made to support the weight of the product.



The outdoor unit must always be kept upright.

# Installation diagram and technical spaces



The installation should be performed by qualified service personnel and experienced, reliably and in compliance with this manual.



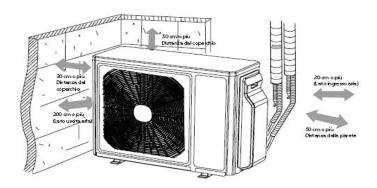
Contact your service centre prior to installation to prevent malfunction due to a unprofessional installation.



In taking and moving the units it is necessary to be guided by qualified and experienced people.



Make sure there is plenty space around the unit.



#### Collocation



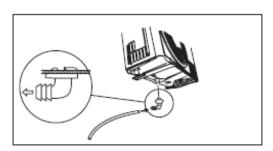
Use bolts to secure the unit to the floor, which must be a solid ground. When installing the unit on the wall or on the roof, make sure the support is firmly secured so that it cannot move in the event of severe vibration or high winds.

Warning: The installation must be performed in compliance with NEC/CEC rules by authorized personnel only.

•Do not install the outdoor unit in cavities or air vents.

Install junction and drain hose (only for models with heat pump)

When the unit is in heating mode it produces condensation, which flows from the outdoor unit. In order not to disturb neighbors and to respect the environment, install a fitting and a drain hose that can steer the condensation water. Install the discharge fitting and the rubber gasket on the frame of the outdoor unit and connect a drain hose as shown in figure.



# Refrigerating connections



Use equipment and connecting pipes suitable for R32 refrigerator.



Suitable for 132 fer	ngc
MODELS	14
Pipes lenght with a standard refrigerating charge	10
Maximum pipes lenght with additional charge	20
Maximum pipes lenght per unit	10
Additional charge g/m	20

- Keep sealed all open extremities of the pipes with a cap until the connection is completed. Be sure not to let anything in the pipes or in the system, such as dirt, water, etc.
- The piping connected to the indoor and outdoor unit must be new. Required thickness of pipes is 0.8 mm or more.
- Only use R32 refrigerant in line woith the one already loaded in the outdoor unit to fill the refrigerant in the system.



Always write the additional refrigerant charge on the data label affixed to the unit outside.

The maximum height difference between indoor and outdoor unit is 5m.



Wrap with straps all refrigerant pipes and joints.



Tighten connections using two keys operated in opposite directions.

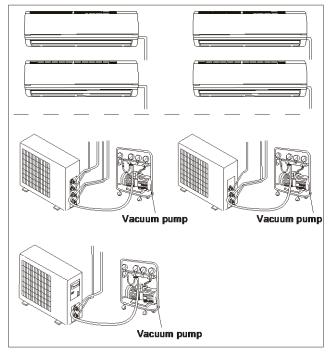
# Vacuum pump

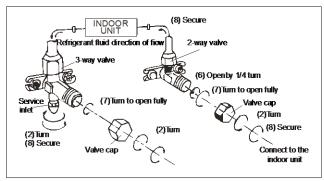
Humid air left inside the refrigerant circuit can cause compressor malfunction. After having connected the indoor and outdoor units, bleed the air and humidity from the refrigerant circuit using a vacuum pump.

- (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.

Diameter (mm)	Twisting moment (N.m)
Ф6	15-20
Ф9.52	35-40
Ф16	60-65
Ф12	45-50
Ф19	70-75

- Additional charge of refrigerant and oil
- If the length of the connecting pipe is increased by 10 m compared to the standard length, add 5 ml of refrigerant oil for every 5 m of pipe added.
- Method for calculating the amount of additional refrigerant charge (liquid pipe): amount of additional refrigerant charge = additional length of pipe liquid x amount of additional refrigerant charge per meter.





## Maintenance

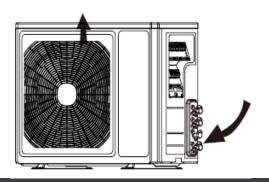


Only use adequate equipment for the R32 refrigerant

Do not use a different refrigerant from R32.



Do not use mineral oils to clean the unit.



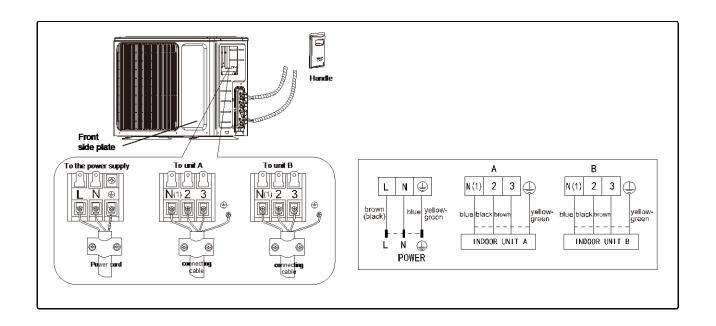
# **Electrical connections**

- 1. Remove the cover of the terminal block on the right side of the outdoor unit. (one screw)
- 2. Connect the wires to the unit as shown in the figure, make sure that each cable is properly connected to the terminal boards of the two units.
- 3. Reassemble the cover of the terminal



Insert a magneto thermic switch with sufficient power and observe the following table:

	observe the follow	ing table.
Po	wer circuit breaker	
	14K - 10A	
$\wedge$		t against short circuits,
\ \tag{1}	mount on the	power line amagneto
	thermalomni polai	r switch (IG) curve C
	250V with a minim	num contact opening of
	3mm.	
٨	Wrong connection	of cable may cause
\!\	malfunctions of	•
<u> </u>		
	•	fixed the cables, make
		between the links and
	the fixing point a	re separated by some
	space	
٨	The connection	pipes and connection
<b>/!</b> \		A and unit B must
_	correspond to each	
A .	•	
$\Lambda$		ust be installed in
<b>∠∴</b>		national regulations of
	wiring.	



#### Qualification requirement for installation and maintenance man

- All the work men who are engaging in the refrigeration system should bear the valid certification awarded by the
  authoritative organization and the qualification for dealing with the refrigeration system recognized by this industry.
  If it needs other technician to maintain and repair the appliance, they should be supervised by the person who
  bears the qualification for using the flammable refrigerant.
- . It can only be repaired by the method suggested by the equipment's manufacturer.

#### Installation notes

- The air conditioner is not allowed to use in a room that has running fire (such as fire source, working coal gas ware, operating heater).
- . It is not allowed to drill hole or burn the connection pipe.
- The air conditioner must be installed in a room that is larger than the minimum room area. The minimum room area is shown on the nameplate or following table a.
- Leak test is a must after installation.

table a- Minimum room area ( m2)

	Charge amount (kg)	≤1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2	2.1	2.2	2.3	2.4	2.5
Minimum	floor location	1	14.5	16.8	19.3	22	24.8	27.8	31	34.3	37.8	41.5	45.4	49.4	53.6
	window mounted	1	5.2	6.1	7	7.9	8.9	10	11.2	12.4	13.6	15	16.3	17.8	19.3
area( III-)	wall mounted	/	1.6	1.9	2.1	2.4	2.8	3.1	3.4	3.8	4.2	4.6	5	5.5	6
	ceiling mounted	1	1.1	1.3	1.4	1.6	1.8	2.1	2.3	2.6	2.8	3.1	3.4	3.7	4

#### Maintenance notes

- Check whether the maintenance area or the room area meet the requirement of the nameplate.
  - It's only allowed to be operated in the rooms that meet the requirement of the nameplate.
- · Check whether the maintenance area is well-ventilated.
  - The continuous ventilation status should be kept during the operation process.
- Check whether there is fire source or potential fire source in the maintenance area.
  - The naked flame is prohibited in the maintenance area; and the "no smoking" warning board should be hanged.
- · Check whether the appliance mark is in good condition.
  - Replace the vague or damaged warning mark.

#### Welding

- If you should cut or weld the refrigerant system pipes in the process of maintaining, please follow the steps as below:
  - a. Shut down the unit and cut power supply
  - b. Eliminate the refrigerant
  - c. Vacuuming
  - d. Clean it with N2 gas
  - e. Cutting or welding
  - f. Carry back to the service spot for welding
- The refrigerant should be recycled into the specialized storage tank.
- . Make sure that there isn't any naked flame near the outlet of the vacuum pump and it's well-ventilated.

#### Filling the refrigerant

- Use the refrigerant filling appliances specialized for R32. Make sure that different kinds of refrigerant won't contaminate with each other.
- The refrigerant tank should be kept upright at the time of filling refrigerant.
- . Stick the label on the system after filling is finished (or haven't finished).
- Don't overfilling.
- After filling is finished, please do the leakage detection before test running; another time of leak detection should be done when it's removed.

#### Safety instructions for transportation and storage

- Please use the flammable gas detector to check before unload and open the container.
- No fire source and smoking.
- According to the local rules and laws.

## Post-installation checks

Checks	Possible fault
Has the unit been installed securely?	The unit could fall, move or produce excessive noise.
Is the thermal insulation of the pipes sufficient?	Risk of condensation and dripping water.
Has the check for gas leaks been executed?	Risk of cooling (heating) not satisfactory.
Does the water drain properly?	Risk of condensation and dripping water.
Does the supply voltage match the voltage indicated on the data plate?	Risk of malfunction or damage to components.
Have the piping and electrical wiring been installed correctly?	Risk of malfunction or damage to components.
Has the unit been properly earthed?	Risk of electric leakage.
Does the power cable meet requirements?	Risk of malfunction or damage to components.
Are there any obstructions at the air inlet or outlet?	The cooling (heating) capacity may be insufficient.
Have the dust and other particles produced during installation been removed?	Risk of malfunction or damage to components.
Are the gas valve and liquid valve of the connecting tube fully open?	The cooling (heating) capacity may be insufficient.
Have the length of the refrigerating tube and the amount of the refrigerant charge been registered?	It is not easy to decide the amount of the refrigerant charge to add.

## **TESTING AND OPERATION**

# **Functional testing**

Connect the power and press the ON/OFF button on the remote control to start operation. Press the MODE button to select AUTO, COOL, DRY, FAN and HEAT mode and check the air conditioner operates normally.

If the ambient temperature is below 16°C, the air conditioner will be unable to start cooling.

# **APPENDICES Piping configuration**

Connecting pipe diameter		Additional refrigerant
Liquid pipe (mm)	Gas pipe (mm)	(g/m)
Ф6.35	Ф9.52	20

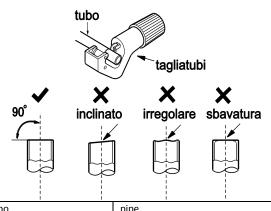
# Procedure for extending the piping

#### N.B.:

Improper extension of piping is the main cause of refrigerant leaks. Proceed as shown below:

#### 1. Cut the pipe

- Check the length of the pipe based on the distance between the indoor unit and outdoor unit.
- Cut the required pipe using a pipe cutter.



tubo	pipe
tagliatubi	pipe cutter
inclinato	slanted
irregolare	uneven
sbavatura	burred

#### 2. Remove burrs

• Remove burrs with a file, ensuring they do not go into the pipe.

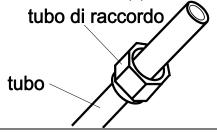


tubo	pipe
limatrice	file
verso il basso	downwards

#### 3. Secure an insulating tube

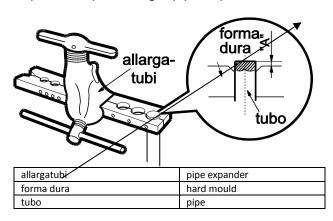
#### 4. Install a union nut

• Remove the union nut on the indoor connecting pipe and outdoor valve. Install the union nut on the pipe.



#### 5. Expand the port

Expand the port using a pipe expander.



#### N.B.

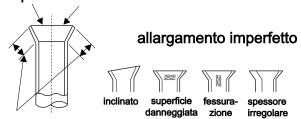
• "A" varies according to diameter:

Outdoor diameter	A (mm)	
(mm)	Max.	Min.
6.35 (1/4")	1.3	0.7
9.52 (3/8")	1.6	1.0

#### 6. Inspection

Check the quality of the expanded port. If defective, expand the port again following the procedure described above.

#### superficie liscia



### lunghezza uguale

superficie liscia	smooth surface
allargamento imperfetto	defective expansion
lunghezza uguale	equal length
inclinato	slanted
superficie danneggiata	surface damaged
fessurazione	cracked
spessore irregolare	uneven thickness

tubo di raccordo	union pipe
tubo	pipe

#### REGULATION (EU) No. 517/2014 - F-GAS

The unit contains R32, a fluorinated greenhouse gas with global warming potential (GWP) = 675.

Do not release R32 into the atmosphere.

**ECOLIGHT DUAL 14000 UE** Kg. 1,05 = 0,709 Tonn CO2 equiv.



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