

Owner's Manual

Resfriar **6 Series** Roof Air Coolers.



Resfriar **SIX**
Climatizadores

Our Company

Congratulations for buying a **Resfri ar Roof Air Cooler**.

From now on, you will have in your vehicle an innovative product with the most renowned quality worldwide.

This product will provide you much comfort and safety, supported by more than 1,200 dealers and service network in Brazil and other countries, from Latin America to Europe.

From east to west, from north to south, wherever you stay, you will be among friends, because when you buy a **Resfri ar** product there will always be a skilled professional to serve you.

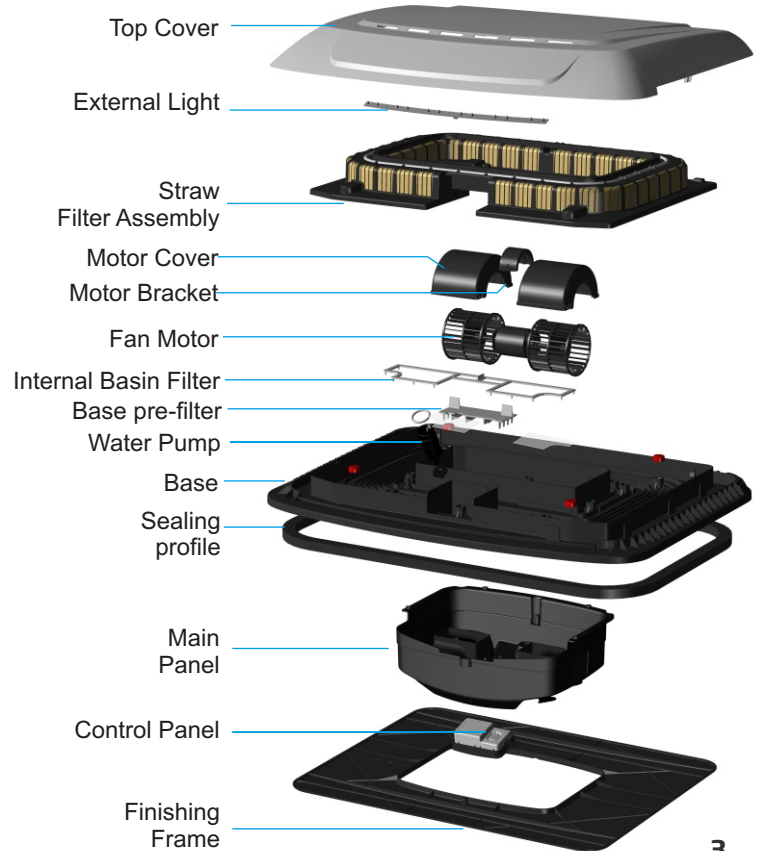
Resfri ar is a company that takes care of your life quality, that's why we have prepared this manual. Here you will find simple and easy instructions to obtain the best performance from your roof air cooler. Our main focus is to reach and develop new technologies to afford more comfort and satisfaction to our customers. For this reason, we are leader and worldwide renowned in the roof air coolers market for roads and agriculture.

If you have comments and/or suggestions about our products, please get in touch with us through our phone +55 54 3511.1111 or through our website www.resfriar.com.br.



Main Components

Main Panel



Control Panel

Internal (cabinet) lamp intensity control: Press the internal lamp button **2** during 5 seconds, then the lamp brightness will vary in 5 levels. Release the button when you get the best intensity for your convenience. This new selection will be kept in memory inside the Control Panel, then every time you light the lamp it will show the same intensity level.

SLEEP programming: Turn on the fan **7**, then the red led is continuously on to inform that the fan is in operation but still the sleep is without programming. Press the sleep button **3**, the led **10** blinks once to inform that the sleep is programmed for 1 hour. Press again the same button **3** and the lamp **10** will blink twice showing that the sleep time is for 2 hours. If you need more time for Sleep, you can program this function up to 5 blinks (or 5 hours).

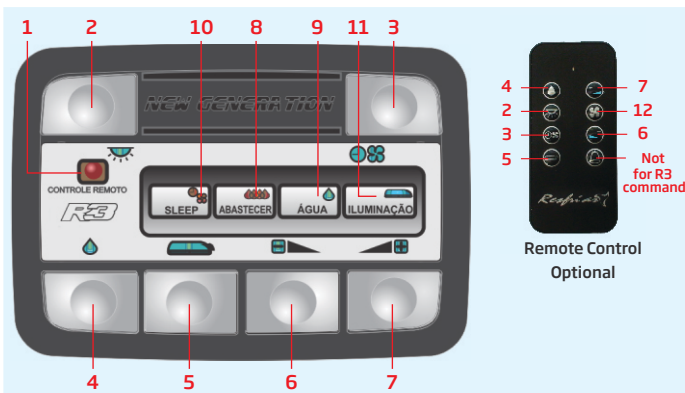
If the button **3** is pressed again, the led **10** will stay on to show that the sleep function is not programmed. To get a new programming, just follow the steps above mentioned.

Remarks: *If the fan is stopped using the button **6** all the sleep programming will be automatically off.*

Water function: To on/off the water function (ventilation with cooling process) press the button **4**. The green led **9** will lights showing the function is on. If the green led **9** is continuously on, it means that the water function is in operation, but the injection pump is not working.

The green led **9** blinking means that the water function is operating and the injection pump is working too.

Note: *When the fan starts, automatically the water function starts working.*



Model

- 1 - Remote control IR receiver
- 2 - On/Off internal lamp (cabinet)
- 3 - Sleep programming
- 4 - On/Off water injection
- 5 - On/Off the external placard
- 6 - Off/Decrease the fan speed
- 7 - On/Increase the fan speed
- 8 - Lack of water (yellow) signal lamp
- 9 - Water injection working signal lamp (green)
- 10 - Fan on and Sleep on signal lamp (red)
- 11 - External placard on signal lamp
- 12 - On/off fan (function only in the remote control)

Lack of WATER: The Control Panel has a sensor to detect lack of water inside the tank. Whether the water level is lower than minimum, the yellow led **8** starts blinking to notice the user to refill the tank with the water.

After filling it, the led **8** will stay on.

When the water function starts again, the led **8** will turn off.

Note: When it's noticed that there is lack of water, the water function will automatically turn off.

FAN speed: This R3 Control Panel has 10 speeds controlled by the buttons **6** Off/Decrease and **7** On/Increase.

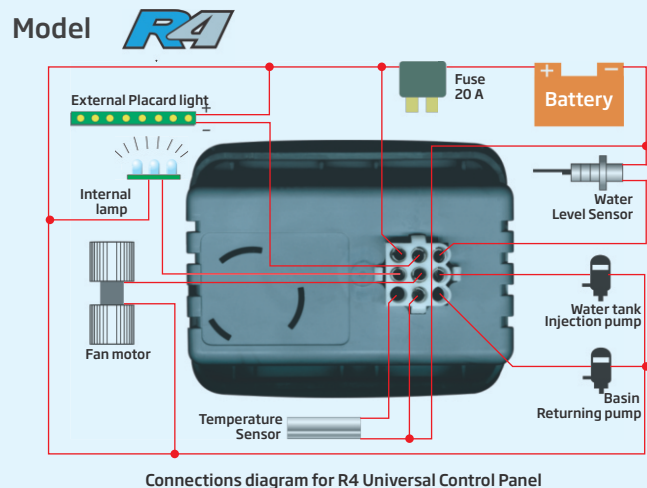
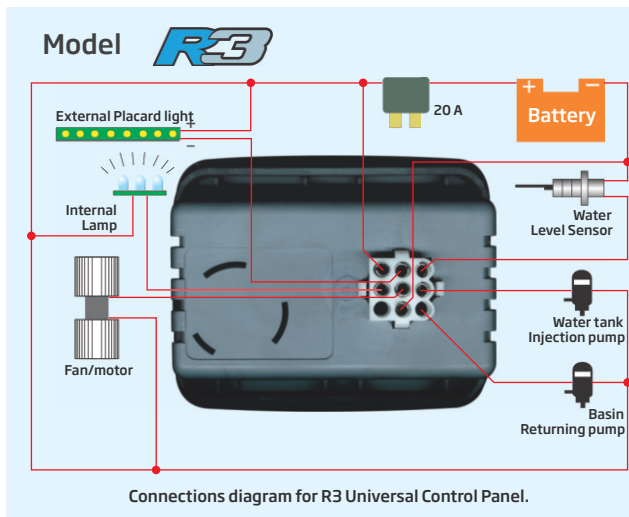
The fan is set in the factory to start at the minimum speed when pressing the button **7**.

You will note that the fan reaches its maximum or minimum speed levels when you hear a longer beep coming from the panel.

EXTERNAL light : Press the button **5** to On/Off the external light in the placard. The blue led **11** lights informing this function is on.

REMOTE Control (Optional): This device has all the Panel functions as detailed above plus an exclusive command **12** for turning On/Off the fan.

Note: If all the functions are not controlled by the Remote Control, verify the battery charge. When replacing, use the CR.2032 battery model.



Control Panel

Internal (cabinet) lamp intensity control: Press the internal lamp button **4** during 5 seconds, then the lamp brightness will vary in 5 levels. Release the button when you get the best intensity for your convenience. This new selection will be kept in memory inside the Control Panel, then every time you light the lamp it will show the same intensity level.

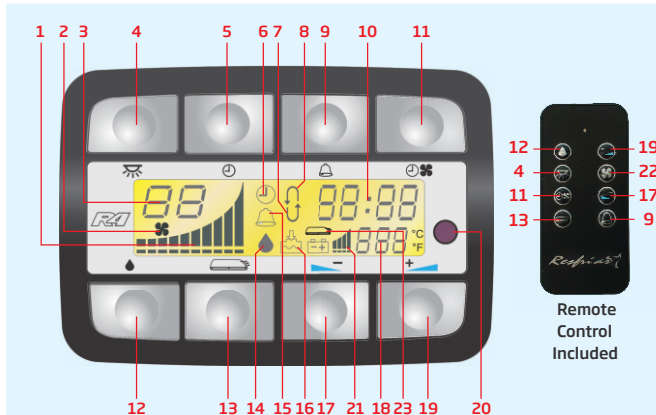
Alarm Clock: To program the time to wake up, hold pressed the button **5** during 3 seconds. The symbol **15** will blink so you can verify if the time showed in the display **10** is the correct one. To adjust it again, use the buttons **17** and **19**.

When you make a pause for more than 5 seconds without pressing any button, the display will return to the standard settings.

Sleep Function: It's possible to program the time the fan will turn on/off. To program the sleep function you must program the alarm clock first, then press again the button **5**. The symbol **11** will blink and the symbol **Li** will appear in the display to inform you are programming the turning on time. If you press the same button again, the display will show **DE** indicating the turning off time. To turn on the sleep function, press the button **11**, then the symbol **11** will appear in the display.

When you make a pause for more than 5 seconds without pressing any button, the display will return to the standard settings.

*Note: Using the sleep function, the fan will turn on in the same speed when it was turned off. If you turn on using the button **19** the fan will start in the minimum speed.*



Model **R4**

- 1 - Bar graph showing the fan speed
- 2 - Fan on symbol
- 3 - Fan speed showed in numbers
- 4 - On/off internal light button
- 5 - Clock, alarm and sleep programming button
- 6 - Sleep on symbol
- 7 - Returning pump working symbol
- 8 - Injection pump working symbol
- 9 - On/off alarm clock button
- 10 - 24 hours digital clock
- 11 - On/off sleep button
- 12 - On/off water function button
- 13 - On/off external light
- 14 - Water function on symbol
- 15 - Alarm clock activated symbol
- 16 - Symbol to fill the tank with water
- 17 - Off/reduce fan motor speed button
- 18 - Temperature in °C
- 19 - On/increase fan motor speed button
- 20 - Remote control IR receiver
- 21 - Battery charge bar graph
- 22 - On/off fan motor button (exclusive function for the remote control)
- 23 - External light on symbol

Water Function: To On/Off the water function (ventilation with the cooling process) press the button **12**. The water function symbol **14** will appear in the display.

The symbol **8** will appear in the display showing that the injection pump in the water tank is working and the symbol **7** will appear in the display when the returning pump in the basin is working.

Note: Before the pump in the water tank starts to inject water, the returning pump in the basin will work to empty it.

When the fan starts, automatically the water function starts working.

Lack of water: The Control Panel has a sensor to detect lack of water inside of the water tank. When the water level is lower than minimum, the symbol **16** starts to blink informing the user to refill the water tank. After filling it, the symbol **12** will stay on and it will disappear when you turn on the water function again.

Note: When the lack of water is detected, the water function will stop.

Fan Speed: This R4 Control Panel has 10 speeds controlled by the buttons Off/Decrease and **17** On/Increase **19**.

You will note that the fan reaches its maximum or minimum speed levels when you hear a longer beep coming from the panel.

To turn on, press the button **19**, it will start automatically in the minimum speed. To increase the speed, keep it pressed until you reach the desired speed.

To turn off, keep pressed the button **17** until the fan stops.

EXTERNAL light : Press the button **19** to On/Off the external light in the placard. The symbol **23** will appear in the display to show this function is on.

Clock time adjustment: After programming the sleep function, press again the button **5**, the display will show the current hour blinking. In case you would like to adjust it, use the buttons **17** and **19**. If you don't press any button for the next 5 seconds, the display will be back to the normal.

REMOTE Control: This device has all the Panel functions as detailed above plus an exclusive command **22** for turning On/Off the fan.

Note: If all the functions are not controlled by the Remote Control, verify the battery charge. When replacing, use the CR.2032 battery model.

*The temperature indicator reads from -9°C to 50°C. If the display shows **EE** then the operation temperature is out of the range or some disturb may have happened with the sensor.*

Important parts for Maintenance

Motor: Located in the center of the base, it is responsible for the ventilation, getting the air from outside and carrying it to inside of the cabin, already cooled.

Its carbon brushes must be inspected every 6(six) months and, if necessary, changed. We suggest to change them every 2(two) years.



Evaporative Straw Filter: Located in the base, it filters dirt, dust and insects. It humidifies the air coming from outside, through an evaporation process where the air, passing through the straw filter, joins the water and an exchange of heat occurs. The filter has a water tubing(hose) that spreads the water sent by the pump. Take out the straw and clean the water exit holes with a needle to remove obstructions. Pass an air blast in the holes and put the filter back in the base.

Note: We suggest that the inspection should be done every 2 months and the straw filter changed every 6 months.



Remote Control: It controls the panel from a short distance up to 2 meters. If some failure happens, we suggest to check its battery first.



A periodical maintenance is essential for the best performance of your Resfriar roof air cooler

Base internal filter: Located in the base, it is responsible for filtering the water excess that decants from the straw filter. The water is recycled and sent back to the water tank totally clean. That's why it is essential to keep it always clean.

Procedure: At most, every 2 (two) months, pass an air blast through the tissue, since if there is too much dirt in the filter, it will stop the passage of the water, leading to a possible leakage.



Water pump:

Injection: Located in the water tank, it sends the water to the evaporative straw filter.

Returning: Located in the base, it sends the excess of water back to the water tank.

Note: Take out the pumps every 2 months and clean them with an air blast. We suggest to change them every 6 (six) months.



Sensor: In case the water tank is filled and the signal of lack of water is still on,



Technical Assistance

Control Panels R3/R4:

They control all the product functions and can be used for roof air coolers in two voltages: 12 and 24V. It doesn't have a defined life time, since this depends on the maintenance and regular checks done. This product is equipped with an internal safety circuit against motor, lamps and pumps short-circuits. In case your roof air cooler stops working, always check the fan motor, the pumps and the lamps first, since the defect could not be on the control panel. The control panel may turn off, protecting itself against some other electrical defects. Check also the general fuse in the battery.

Remarks:

For this S6 roof air cooler, only use control panels with two pumps, universal model.



Remarks:

Never add into the water tank clothes softeners, essences, perfumes or other substances. These products generates bubbles, leading to water leakage inside of the cabin.

Keep the water tank always clean and with pure water.

We recommend to use our Resfriar original antibacterial flavoring.

Resfriar is always worried with the proper functioning of its products, during its whole life time.

The technical assistance should be done by an authorized Resfriar distributor.

In case of any doubt or to verify where is the nearest technical assistance, please call to +55 54 3511.1111.

In case there is a proof that the product defect was caused by external factors, not being Resfriar responsibility, as per this warranty certificate, the cost of labor and components will be on customer's charge.



Technical Characteristics

Dimensions:

Height: 9,7 cm

Width: 84,4 cm

Length: 63,9 cm

Product weight: 12kg

Set weight*: 13,9kg

(* Includes the 18 liters water tank empty.

Average water consumption:

500 to 1500 ml/h depending on the external moisture and temperature.

Capacity and autonomy:


18 L water tank


Autonomy from 8 to 22 hours

30 L cylindrical water tank

Autonomy from 15 to 42 hours

Battery consumption in amperes/hour according to the fan speed and the control panel model, including water pumps consumption:

		Universal Roof air cooler 12V	Universal Roof air cooler 24V
speed	Minimum	0,05 A/h	0,05 A/h
	Medium	3,4 A/h	2,5 A/h
	Maximum	10 A/h	7,9 A/h

		Universal Roof air cooler 12V	Universal Roof air cooler 24V
speed	Minimum	0,17 A/h	0,17 A/h
	Medium	3,55 A/h	2,65 A/h
	Maximum	10,15 A/h	8,05 A/h

Internal temperature reduction in comparison to the external temperature

Minimum: 2°C

Maximum: 8°C

Varies according to the temperature and moisture of the external environment.

For a better efficiency of the roof air cooler, keep the windows opened in 2cm.

Fan:

Double fan without ohmic resistance

Tension: 12 or 24 VCC

Maximum nominal current: 12V:10A / 24V:8A

Motor rotor speed: 4000 rpm

Maximum air volume: 400m³/h

Insulation Class: 1Ω

Warranty Certificate

Authorized dealer - stamp and sign

Bar Code label

Customer: _____

Vehicle: _____

Model: _____ License: _____

Sale/installation date: ___/___/20___

Warranty valid until ___/___/20___

Product Series number:

Invoice number _____



Dealer copy

Warranty Conditions

Resfri ar Roof Air Cooler has warranty against eventual defects in materials or production for one year (twelve months), with exception to the water pump that has warranty of 6 months, counted from the warranty certificate issue date.

In case your product presents any kind of defect within the warranty time, get in contact immediately to the distributor who sold the product to you, in order to repair the problem.

In no case, Resfri ar will change the product for a new one only because it has a defective component.

This warranty does not cover the following items:

- a)** Damages caused by accidents;
- b)** Superior cover in ABS plastic;
- c)** Main panel and finishing frame;
- d)** Harness wire or hoses cut or damaged;
- e)** Control panel with any signal of violation or if it was used in other roof air cooler brand;
- f)** Motors with broken airscrew or with brushes natural wearing;
- g)** Air filter obstructed by dirt or dust;
- h)** All and any component with production date sticker violated;
- i)** Usage of no original Resfri ar pieces and maintenance in no authorized services or technicians;
- j)** Remote control battery.

In case of any doubt, call to: +55 54 3511.1111.

Warranty Certificate

Authorized dealer - stamp and sign

Bar code label

Customer: _____

Vehicle: _____

Model: _____ License: _____

Sale/installation date: ___/___/20___

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Resfriar
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Technical Assistance

+55 54 3511.1111

MADE IN BRAZIL

Resfriar

Climatizadores



ISO 9001
Certified
Company

ISO TS 16949
Certified
Company



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