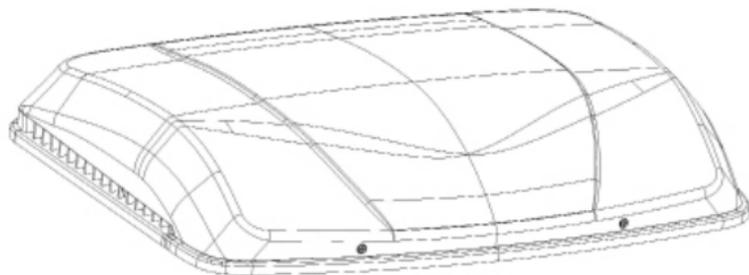




## **S7i Owner's Manual**



[www.fresair.com](http://www.fresair.com)

# Dear **User**

*Congratulations for buying a Fresair 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 with extreme comfort in hot and humid climates.*

*Fresair is a company that takes care of your life quality, that's why we have prepared this guide. 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 achieve more comfort and satisfaction to our customers.*

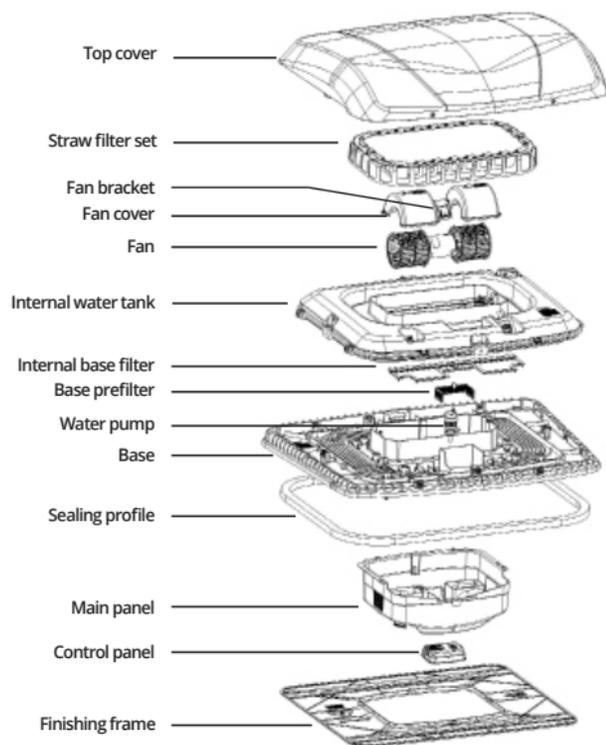
## Certified Company



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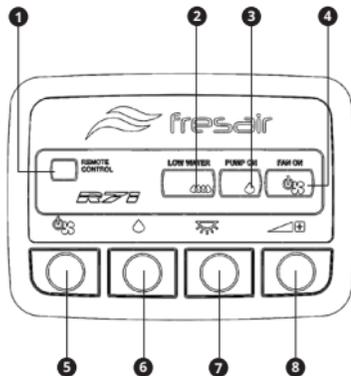
# 1. Main Components



## 2. Control Panel

R6 Model:

- 1 - Remote control IR receiver (**remote not included**)
- 2 - Low water signal lamp / fill up (yellow)
- 3 - Water injection on signal lamp (green)
- 4 - Fan on signal lamp (Red)
- 5 - Fan On/Off
- 6 - Water injection On/Off
- 7 - Dome light On/Off
- 8 - Change fan speed (5 fan speeds)



• **TURNING THE ROOF AIR COOLER ON/OFF:** To turn the roof air cooler on, press button **5** on the control panel. To turn the roof air cooler off, press button **5**.

• **FAN SPEED:** R6 control panel has 5 speeds controlled by button **8**. Pressing multiple times cycles between low, medium and high speeds. The fan is factory set to start at the minimum speed when pressing the button **8**.

• **WATER FUNCTION:** To turn on/off the water function (ventilation with water cooling process) press button **6**. The green led **3** will light showing the water function is on. If the green led **3** is continuously on, it means that the water function is in operation, but the injection pump is not working. Green led **3** blinking means that water function is operating and the injection pump is working too.

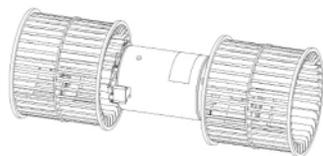
**Note:** When the fan starts, water function starts working automatically.

- **LACK OF WATER:** The control panel has a sensor to detect lack of water inside the tank. When the water level is lower than minimum, the yellow led **2** starts blinking, informing the user needs to refill the water tank. After filling it, the water function will automatically be activated.

**Note:** When lack of water is detected, water function stops automatically.

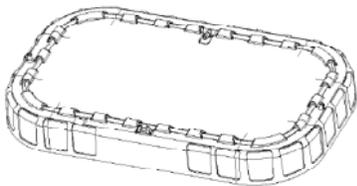
### 3. Maintenance Items

- **FAN:** 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 six months and, if necessary, replaced. It is suggested to change the fan every two years.



- **STRAW FILTER SET:** Located inside the water tank, 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 water tank.

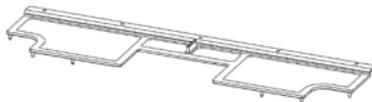
**Note:** It is suggested the cleaning of the straw filter be done every two months and the straw refill replaced every six months. This cleaning or exchange may vary according to the severity of the roof air cooler's application.



• **INTERNAL BASE 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 least, every two months, apply an air blast through the tissue or wash it, since if there is too much dirt in the filter, it will stop the passage of the water, leading to a possible leakage.

**Note:** In case of most severe application of the roof air cooler, with high accumulation of dirt, cleaning should be performed more often.



• **WATER PUMP:**

- **INJECTION:** Located in the water tank, it sends the water to the straw filter set.

- **RETURNING:** Located in the base, it sends the excess of water back to the water tank.

**Note:** Take out the pumps every two months and clean them with air blast. It is recommended to replace them every six months.

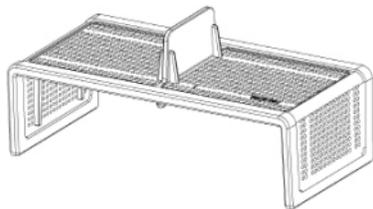


A periodical maintenance is essential for the best performance of your Fresair roof air cooler.

• **BASE PREFILTER:** Located at the base, it is responsible for second filtering process, avoiding the entrance of dirt into the pump. It avoids clogging and the breakdown of the pump.

**Procedure:** At least every two months apply some air blast and/or wash it. Accumulation of dirt interrupts the passage of water, what can cause water spilling.

**Note:** In case of most severe application of the roof air cooler, with high accumulation of dirt, cleaning should be performed more often.



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

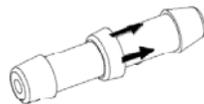
• **WATER LEVEL SENSOR (BUOY):** Responsible for controlling water level inside the tank, indicating lack of water.



• **CHECK VALVE:** Anti-return or check valves are used to allow free flow in one direction and block flow in the opposite direction.

**Note 01:** If the check valve is replaced, observe the mounting direction. The arrows MUST be directed towards the return pump to the tank.

**Note 02:** The removal of the check valve will cause accumulation of water in the base and water may leak into the outside of the vehicle.



• **CONTROL PANEL R6:** It controls all equipment functions. It doesn't have a fixed useful life since this depends on the handling and periodical revisions. This product is equipped with an internal safety circuit against fan and pumps short-circuits. In case your roof air cooler stops working, always check the fan and pumps first, since the defect could not be on the control panel. The control panel may have turned off, protecting itself against some other electrical defects. Check also the general fuse in the battery.



## 4. Fault codes

### Control Panel R6

| OPERATIONAL FAULTS CAUSE                                | CAUSE   |
|---|---|
| Failure beep and water, fill up and sleep leds flashing | Short-circuit fan                               |
| Failure beep and key leds flashing                      | Fan overload                                    |
| Failure beep and water led flashing                     | Failed injection pump (located inside the tank) |
| Failure beep and fill up led flashing                   | Failed return pump (located at the base)        |

## 5. Technical data

- **Dimensions:**
  - Height: 5.5"
  - Width: 34.5"
  - Length: 25"
- **Product weight:**  
(without packaging)
  - 35lbs, 70lbs including full 15L water tank
- **Average water consumption:**
  - 500 to 1500ml/h depending on external temperature and humidity
- **Capacity and autonomy:**
  - 15L water tank
  - autonomy from 8 to 22 hours
- **Fan:**
  - Double turbine without resistance
- **Tension:**
  - 12 or 24 VCC
- **Maximum nominal current:**
  - 12V:10A / 24V:8A
- **Fan speed:**
  - 4000 rpm
- **Maximum air flow:**
  - 400 m<sup>3</sup>/h

Battery consumption in amperes/hour according to fan speed, including water pumps consumption:

|       |  | <b>Internal Roof<br/>Air Cooler<br/>12V</b> | <b>Internal Roof<br/>Air Cooler<br/>24V</b> |
|-------|---|---|---|
| Speed | <b>Minimum</b>  | 0,15 A/h                                    | 0,12 A/h                                    |
|       | <b>Medium</b>   | 3,4 A/h                                     | 2,5 A/h                                     |
|       | <b>Maximum</b>  | 10 A/h                                      | 8 A/h                                       |

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

## 6. Remarks

**Note 1:** If the roof air cooler keeps off for a long period, you can feel some slight unpleasant smell when you turn it on again, as a result of features of its straw filter. After a few continuous cycles this smell stops (it varies according to air humidity and environment temperature).

**Note 2: This model has exclusive application for on road uses. We do not recommend off road uses.**

**ATTENTION:** Never add softener, essences, perfumes or similar to water in the tank. These products make foam, what may cause leak allowing water to enter into the cab. Keep the container always clean and with pure water.

### ENVIRONMENTAL INFORMATION

**Disposal:** When discarding this product, at the end of its useful life, we suggest you observe the current local legislation, so that the disposal be done in the most appropriate way.

## 7. Warranty

Your Fresair Roof Air Cooler has warranty against eventual defects in materials or production for one year (12 months) , with exception to the water pump that has warranty of 6 months , counted from the purchase date.

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

In no case, will Fresair change the product for a new one solely because it has a defective component.

**This warranty does not cover the following items:**

- a) Damages caused by accidents;
- b) Plastic items: superior cover in ABS plastic, main panel, finishing frame and base;
- c) Electric harness or hoses cut or damaged;
- d) Control panel with any signal of violation or if it was used in other roof air cooler brand;
- e) Fan with broken airscrew or with natural brush wear;
- f) Air filter obstructed by dirt or dust;
- g) Any component in which the label with the date of manufacture/ assembly is violated;
- h) Use of non-original Resfri Ar pieces and modifications or repair made in unauthorized places or technicians;
- i) Off road application
- j) Unsatisfactory product performance due to improper installation;
- k) Damage caused by fall, scratches, kneading and use of chemical/ abrasive products inside and outside the product;
- l) If the product is switched on at a different voltage than it was intended for;
- m) Removal and/or modification of the serial number or the product identification label.

*Customer:* .....

Sale/Installation date: \_\_\_\_/\_\_\_\_/20\_\_\_\_

*Warranty validity date:* \_\_\_\_/\_\_\_\_/20\_\_\_\_

*Equipment series N°:* .....

.....

*Invoice N°:* .....



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CERTIFIED COMPANY  
ISO 9001 • IATF 16949 • ISO 14001

**Fresair, LLC.**  
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