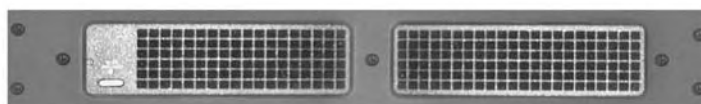


ROTEL

Owner's manual

RFK-100

Cooling Fan Kit



Thank you so much for your decision to purchase the model RFK-100 Cooling Fan Kit. We take enormous pride in the design and build quality of all of our products and we are confident that our provide you with many years of enjoyable and product will trouble-free service. Should you have any need to call upon our services please feel free to contact us at the address shown at the end of this booklet; or, of course, you can contact the dealership from which you purchased the product. Full details of the warranty coverage provided by Rotel can be found at the end of this booklet.

Safety Instructions

1. Important Safety Instructions! Please read all the safety and operating instructions shown in this manual before operating this equipment.

2. The lightning flash within an equilateral triangle shown above is intended to alert you to the presence of uninsulated 'dangerous voltage' within the product's enclosure that may be of sufficient magnitude to constitute an electric shock.



3. The exclamation point within an equilateral triangle shown above is intended to alert you to the presence of important operating and maintenance (servicing) instructions in the literature accompanying this appliance.

4. Please retain this manual in a safe place for future reference about safety and operating matters.

5. Adhere to all warnings and follow all operating instructions.

6. Warning: To reduce the risk of fire or electrical shock, do not expose this equipment to rain or moisture.

There are no user serviceable parts inside. Refer servicing to qualified personnel.

7. Caution: To prevent electrical shock do not use this (polarized) plug with an extension cord, receptacle or other outlet unless the blades can be fully inserted to prevent blade exposure.

8. For added protection for this product during a lightning storm or when it is left unattended and unused for long periods of time, it is recommended that you unplug the unit from the wall outlet. This will prevent damage to the product due to lightning or power line surges.

9. Do not use attachments not recommended in this owner's manual as they may cause hazards.

10. Do not use the equipment near water; for example near a bathtub, washbowl, kitchen sink, a wet basement, swimming pool, etc. This product is meant for indoor use only.

11. Do not place the product on an unstable cart, stand tripod, bracket or table. The equipment is heavy and should it fall, it could cause serious injury to a person and/or serious damage to the equipment.

Caution For Installation

1. The dealership from which you purchased the product is an expert on custom installation procedures and can provide invaluable advice to help you make an aesthetically pleasing and trouble free installation.

Caution For Connections

1. Connect this equipment only to the type of AC power source as marked on the unit. Always route AC power cords so they are not likely to be walked on, or tripped over, or where they may be pinched by items placed on or against them. Always pay particular attention to cords at plugs and/or convenience receptacles, and at the point where they exit from the product.

2. Do not defeat the inherent design features of the polarized plug. Non-polarized line cord adapters will defeat the safety provided by the polarized AC plug. If the plug should fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the grounding-type plug. If you use this product in a country which only has two slotted receptacles in the house, you must use a three-pin adapter plug to earth ground which is the "E" (earth pin) of the power cord connected to this product.

3. Do not overload wall outlets, extension or integral convenience receptacles, as this could result in a risk of fire or shock.

Operating Voltage

The Fan System is factory-set for 110V, 120V or 230V AC operation at either 50 or 60 Hz, according to the country for which the unit was manufactured (230V in European Union countries, in compliance with CE regulations). The operating voltage cannot be changed by the user and any attempt to do so will void the warranty.

Care of the Product

Clean the product by dusting with a dry cloth. Do not permit objects of any kind to be pushed and/or fall into the product through the enclosure openings.

General Description

The RFK-100 is a multi-directional fan system that uses three 4.75-inch (120 mm) whisper quiet fans, the speeds of which are governed by thermal sensing circuitry. The RFK-100 is designed to be used in three different formats -intake/blow/exhaust air. The required mode can be configured locally according to the cooling requirements of your system.

The RFK-100 has many other features and functions that are all described in the following pages.

Front Panel Description

The (removable) rack mountable front panel houses a switch for controlling the on/off and auto functions. A blue LED indicates when the unit's fans are actually working.

Behind the grille front is a removable air-filter pad.

It is important to note that the only time the switch needs to be in the 'on' position is during an initial test when the fans will be operating at their maximum speed. Once the RFK-100 has completed its test, it is recommended that the switch be placed in its 'auto' position. In this mode neither the fans nor the LED will operate until the selected ambient temperature is reached.

Rear Panel Description

The following description identifies each of the main controls /connections and follows the rear panel from left to right.

Temperature Sensor

This input enables you to connect the (supplied) pigtail sensing cord. The magnetized 'head' should be placed on the 'hot spot' of your installation whereupon it will measure the ambient temperature, which in turn will govern the speed of the three fans.

Please note that there is also an in-built sensing device located on the underside of the chassis that is by-passed if the pigtail sensor is used. If the pigtail sensor is not used, then the in-built sensor will automatically activate once the selected minimum temperature has been reached.

Trigger In/Out 12VDC Mode

With the mode switch in the 12V position, and the 'in' input being used, the RFK-100 will move into its 'auto' mode whenever a 6V to 15V input signal is supplied and the prescribed initial temperature has been reached.

Should you want to use one or more RFK-100's within the same location you can synchronize the units by using the 'sync' switch. For this situation you should use the 'out' jack from one unit (which then becomes the 'master') and go into the 'in' jack for the second unit (which then becomes the 'slave'). The two units will now be 'in sync' and will start to work in unison once the prescribed initial temperature of the 'master' unit has been reached.

Note that in this type of multi-unit installation all of the internal temperature sensors of the 'slave' units are defeated.

Fan Auto-On Temperature

This switch enables you to pre-select one of two temperature settings for activating the RFK-100. The low setting is 95 degrees Fahrenheit (35 degree Celsius) and the high setting is 104 degrees Fahrenheit (40 degrees Celsius). This important feature ensures that the fans only work above the selected ambient temperature.

If you want to want to exhaust the hot air to the outside you will need to remove the two 'plugs' and attach flexible tubing (supplied by Rotel). Please see page 3 for a fuller description of this feature.



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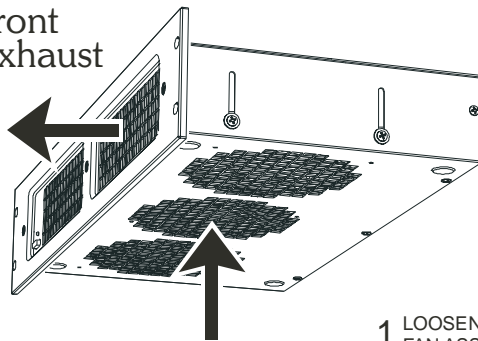
www.rotel.com

How To Configure The RFK-100 For Different 'Air-Direction' Flow

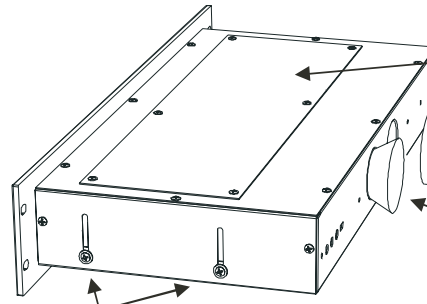
The RFK-100 is a versatile system that enables you to configure the direction of the airflow in many different ways according to the specific needs of your installation.

Be sure to disconnect the power supply before removing the top cover.

Front Exhaust



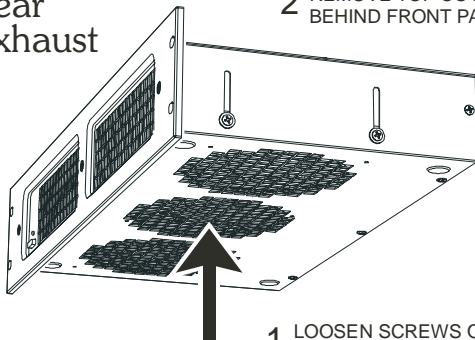
- 1 LOOSEN SCREWS ON BOTH SIDES AND LOWER INSIDE FAN ASSEMBLY TO BOTTOM POSITION AND RETIGHTEN



- 2 SCREW PLASTIC COVER OVER TOP COVER VENTS

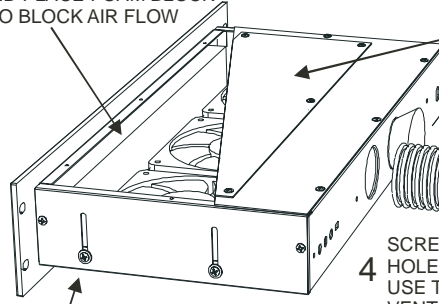
- 3 SQUEEZE FOAM CYLINDERS AND INSERT IN BOTH REAR HOLES TO BLOCK AIR

Rear Exhaust



- 1 LOOSEN SCREWS ON BOTH SIDES AND LOWER INSIDE FAN ASSEMBLY TO BOTTOM POSITION AND RETIGHTEN

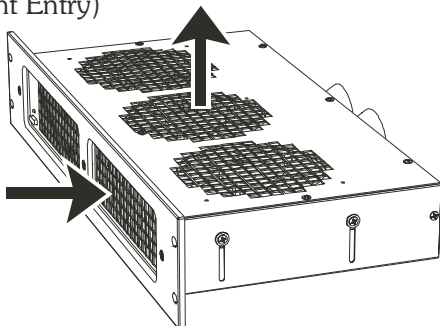
- 2 REMOVE TOP COVER AND PLACE FOAM BLOCK BEHIND FRONT PANEL TO BLOCK AIR FLOW



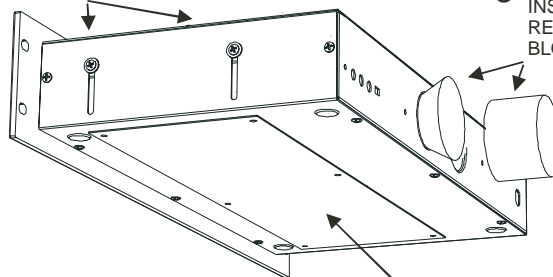
- 3 REPLACE TOP COVER AND SCREW PLASTIC COVER OVER AIR VENTS

- 4 SCREW AIR TUBING IN REAR PANEL HOLE FOR TWO TURNS TO SECURE. USE TWO TUBES FOR MAXIMUM VENTING OR BLOCK AIR IN SECOND HOLE WITH FOAM CYLINDER AS SHOWN ABOVE.

Top Exhaust (Front Entry)



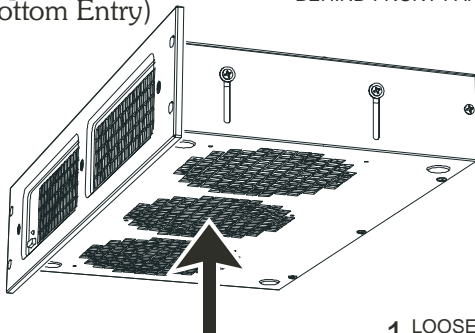
- 1 LOOSEN SCREWS ON BOTH SIDES AND RAISE INSIDE FAN ASSEMBLY TO TOP POSITION AND RETIGHTEN



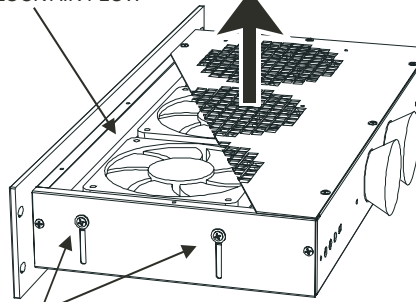
- 2 SCREW PLASTIC COVER OVER BOTTOM COVER VENTS

- 3 SQUEEZE FOAM CYLINDERS AND INSERT IN BOTH REAR HOLES TO BLOCK AIR

Top Exhaust (Bottom Entry)



- 2 REMOVE TOP COVER AND PLACE FOAM BLOCK BEHIND FRONT PANEL TO BLOCK AIR FLOW



- 3 SQUEEZE FOAM CYLINDERS AND INSERT IN BOTH REAR HOLES TO BLOCK AIR

- 1 LOOSEN SCREWS ON BOTH SIDES AND RAISE INSIDE FAN ASSEMBLY TO TOP POSITION AND RETIGHTEN