



Room to Room Fan

Model No.: RTR75, RTR140

INSTALLATION & USER MANUAL

Please read and save this manual.

Thank you for purchasing this **SUPROCKY** product.

Please read this manual carefully before attempting to install, operate, or service the products. Failure to follow the instructions may result in personal injury or property damage.

Please retain this manual for future reference.

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Safety Considerations

WARNING

To reduce the risk of fire, electric shock or personal injury, please observe the following:

- Please use this equipment in the manner prescribed by the manufacturer. If you have any questions, please contact the manufacturer.
- Installation work and electrical wiring must be completed by qualified personnel in accordance with all applicable codes and standards, including fireproof construction.
- The installed wall must be able to withstand five times or more the weight of the product.
- Do not damage electrical wiring or other hidden utilities when cutting or drilling into walls.
- Before servicing or cleaning unit, switch power off at the service panel and lock the service disconnecting mains to prevent power from being switched on accidentally. When the service disconnecting mains cannot be locked securely, fasten a prominent warning device, such as a tag, to the service panel.
- Do not set the power supply in a wet place or electric shock can occur.
- Do not disassemble the unit for reconstruction. It may cause fire or electric shock. This product must be grounded.
- The RTR75/RTR140 may not be installed on ceilings or exterior walls. The RTR75/RTR140 may not be installed in a wall rated as a “fire wall.” The RTR75/RTR140 may not be used to move air from one floor (story) to another floor.
The RTR75/RTR140 may not be used to move moisture-laden air from sources such as bathrooms and kitchens.
The RTR75/RTR140 may not be used in a window.

IMPORTANT

IMPORTANT:

- An in depth investigation of the wall layout is required prior to installation. Avoid a stud wall section that is a path for plumbing supply lines, drains or vents. Avoid a stud wall section that is insulated or being used as a return air duct for a forced air system. If stud walls are constructed with metal studs the Diffuser must be mounted within 3" of the Blower opening since metal studs typically are not solid throughout. If diffuser is not mounted within 3" of the Blower any metal stud openings must be plugged or sealed.
- Do not install this fan in areas where the temperature may exceed 60°C (140°F).
- Before installation, make sure the unit is facing the correct direction.
- Ensure that the power supply voltage is 120V, 60Hz. or 115V,60Hz.
- Comply with all local electrical and safety codes, as well as the National Electrical Code (NEC) and the Occupational Safety and Health Act (OSHA).
- Protect wires from sharp edges, oil, grease, hot surfaces, chemicals or other objects.
- Do not bend the wires.
- Do not use to discharge hazardous or explosive substances or vapors.
- Always turn off the power before working near the fan or motor.

Description

The Suprocky RTR75/RTR140 room-to-room ventilator distributes air from one conditioned space to another. Almost every home has an uncomfortably hot or cold room. Some of the air from that room can be shared with an adjacent room, allowing for a more comfortable temperature balance between the two rooms.

The RTR75/RTR140 transfers air through a wall cavity formed between two wall studs. The machine gives the user unique option to move air up or down within the wall cavity, allowing for room optimal heat/cooling transfer between them – a typical application will affect the temperature by 3°F per hour. In addition, placing grilles and diffusers high and low prevents the transfer of light and sound between these adjacent rooms.

Unpacking

Each SUPROCKY RTR75/RTR140 room-to-room ventilator is factory tested for electrical wiring prior to shipment.

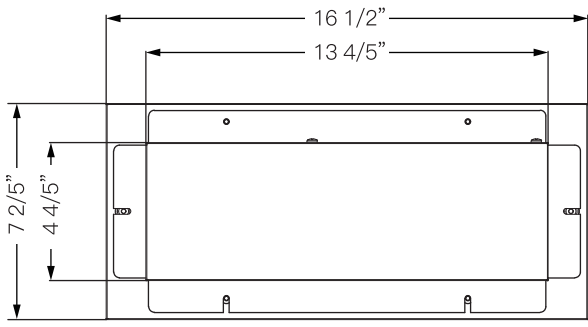
After opening the carton, be sure to thoroughly inspect the product for shipping damage. The impeller should rotate freely and all wiring and connections should be secured. If any damage is found, notify the shipping company and your distributor immediately and file a concealed damage claim.

Specifications

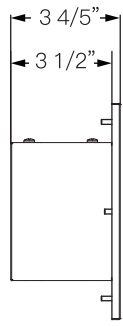
	RTR75	RTR140
Blower:	90CFM	200CFM
Motor:	115 Volts ~ 60 Hz 0.15 Amps Maximum	115 Volts ~ 60 Hz 0.4 Amps Maximum
Impeller:	Transtangential, cross-flow	Centrifugal
Color:	Neutral White	

| Dimensions

RTR75 Grille:

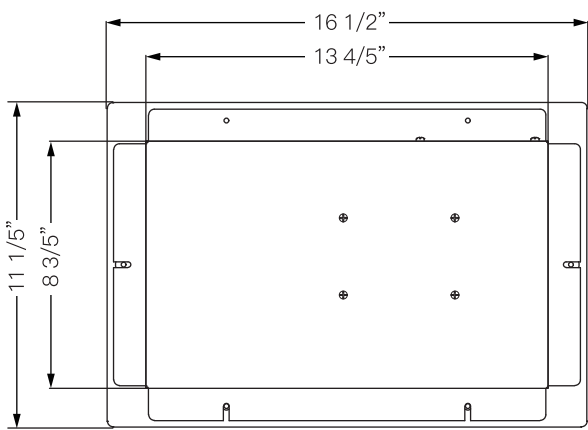


Front

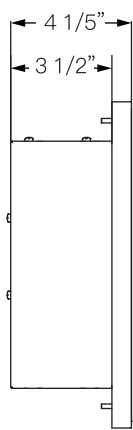


Side

RTR140 Grille:

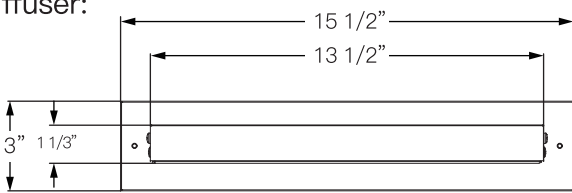


Front

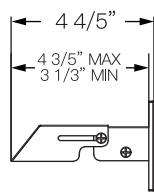


Side

Diffuser:



Front



Side

Installation Note

⚠ WARNING

- Disrupt power at circuit breaker to outlets within the stud wall you will be working.
- When sawing through sheetrock you must stop if you detect the saw blade coming in contact with any wiring or plumbing. Investigate further to determine if it is possible to safely continue to use this wall cavity space. Switch to another stud wall cavity if necessary.

Before Start:

Determine the stud wall section that you want to use to mount the Blower and Diffuser. It may be preferable to select a stud wall section that contains an electrical outlet for wiring. **IMPORTANT:** Wall studs must be spaced a minimum of 16" o.c..

Mark the inside edges of the studs where the RTR75/RTR140 will be installed between and verify there is at least 14" between the inside edges. Slide a stud finder down the wall between the studs to verify the stud wall cavity is completely open (See Diagram 1).

Tools Required:

- Sheetrock • Saw Phillips & Straight
- Screwdrivers • Level • Tape • Measure
- Utility • Knife or Scissors • Wire Stripper



Diagram 1

Installing Discharge Diffuser

IMPORTANT: Install Diffuser first, if mounting the Blower down low and the Diffuser high. This ensured sheetrock from the Diffuser cut out does not fall into wall cavity and damage Blower. Install the Blower first if mounting the Blower high and Diffuser low. This ensures sheetrock from the Blower cut out does not fall into wall cavity and damage Diffuser.

NOTE: Typical installations will have the Diffuser high and the Blower low, but there may be instances where it is desirable to have the Blower mounted high and the Diffuser low to take air from the ceiling level.

1. Determine if you would like a high or low discharge. The Diffuser may be mounted as close as 3" above the top of Blower cut out opening or as close as 3" to the ceiling.
2. Level and mark a line between studs where you want the top of the Diffuser (See Diagram 2)
3. Using a hand sheetrock saw carefully make a horizontal cut along the line. Cut the sheetrock completely until you come in contact with the opposite stud. **NOTE:** If studs are spaced greater than 16" o.c., the horizontal cut line should not exceed 14" (See Diagram 3).

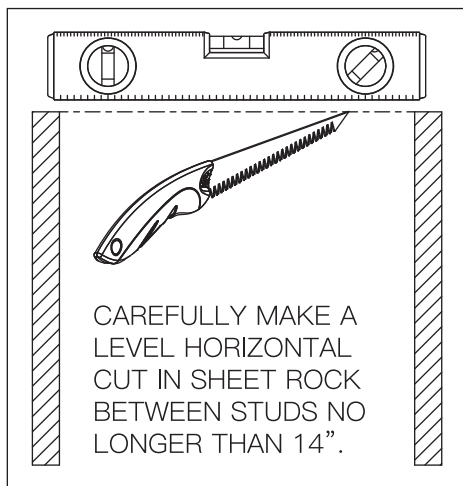


Diagram 2

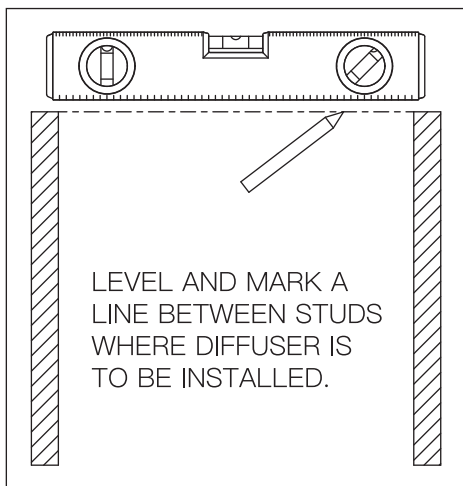


Diagram 3

Installing Discharge Diffuser

4. Cut out Diffuser template on dashed lines. Align the top of template with the wall cut and center it so that there is an equal space between the right and left edges of the template and ends of the cut in the sheetrock. Mark all 4 corners of template, connect with a straight edge and cut Diffuser opening in wall (Diffuser opening should be $1\frac{1}{3}$ " high x $13\frac{1}{2}$ " wide), (See Diagram 4).

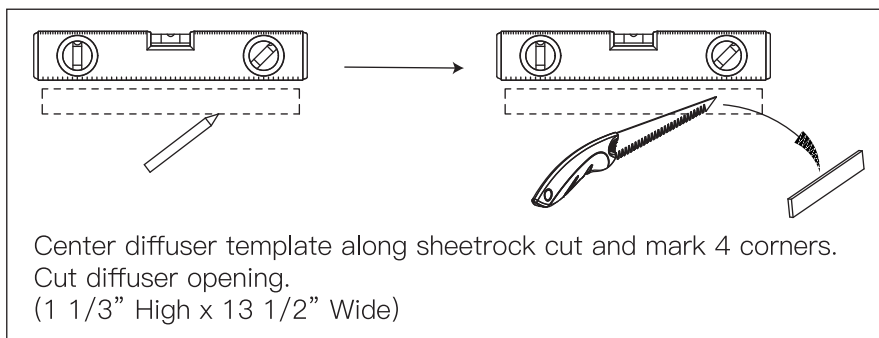


Diagram 4

5. Insert Diffuser with the air scoop on the back pointing towards the Blower. Adjust tangs on the sides if necessary to secure a tight fit into the wall opening and lock the plasterboard screws.

Note: The depth of the diffuser can be adjusted to accommodate a variety of wall thicknesses. Please adjust according to the thickness of your wall and then put in the diffuser (See Diagram 5).

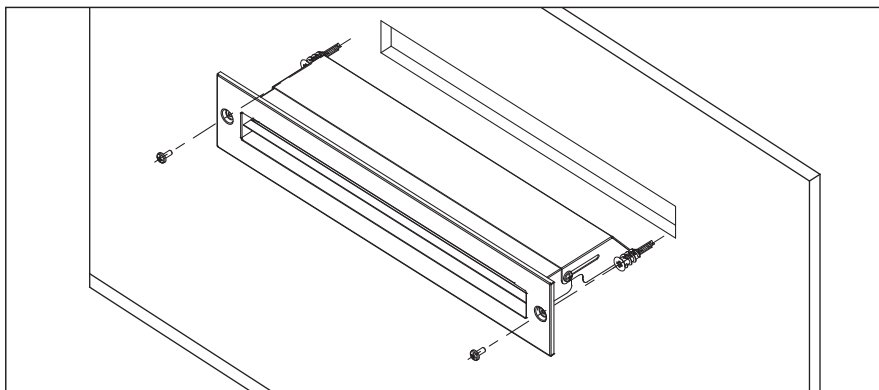


Diagram 5

Blower Installation

IMPORTANT: Install Diffuser first if mounting the Blower down low and the Diffuser high so sheetrock from the Diffuser cut out does not fall into wall cavity and damage Blower. Install the Blower first if mounting the Blower high and Diffuser low so sheetrock from the Blower cut out does not fall into wall cavity and damage Diffuser.

NOTE: Typical installations will have the Diffuser high and the Blower low, but there may be instances where it is desirable to have the Blower mounted high and the Diffuser low to take air from the ceiling level.

1. If installing in a stud wall section with an electrical outlet, place blower Intake Grille in desired position on the stud wall, verifying that the bottom edge is above the floor molding and that the top edge is below the bottom of any electrical outlet cover. Flatten the top edge and trace the outline of the four corners with a pen, as accurately as possible. NOTE: This is assuming the Blower is mounted down low and the Diffuser high (See Diagram 6).
If installing the Blower up high and the Diffuser low, the top of the blower Intake Grille must be mounted at least 2" below the ceiling.

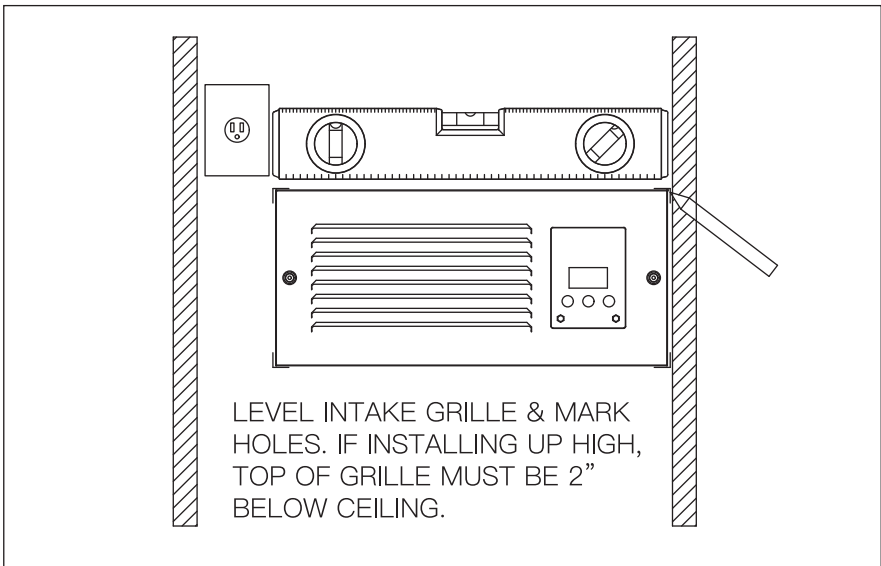


Diagram 6

Blower Installation

2. Use a level to draw four vertical and parallel lines 1 1/3" from each marked line (you can connect them according to the template we bring you). Using a manual gypsum board saw, carefully make horizontal and vertical cuts along the line away from the exit. Cut completely through the gypsum board until you touch the opposite studs. Note: If studs are spaced more than 16" apart, horizontal cut lines should not exceed 14" (See Diagram 7).

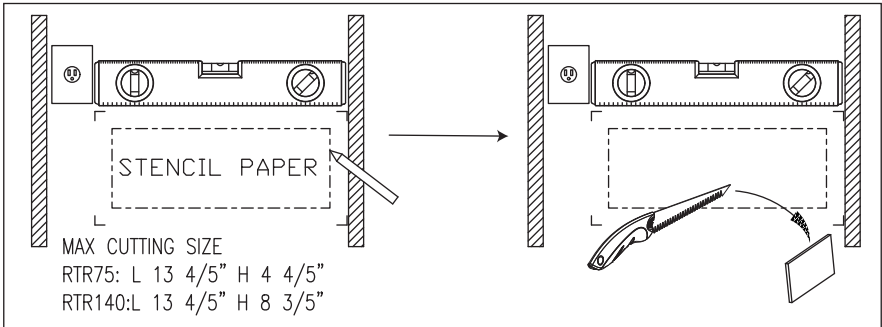


Diagram 7

3. Provide a switched 115 VAC power source with leads long enough to connect to the motor leads of the RTR75 while it is positioned just outside Blower opening cut in sheetrock (See Diagram 8).

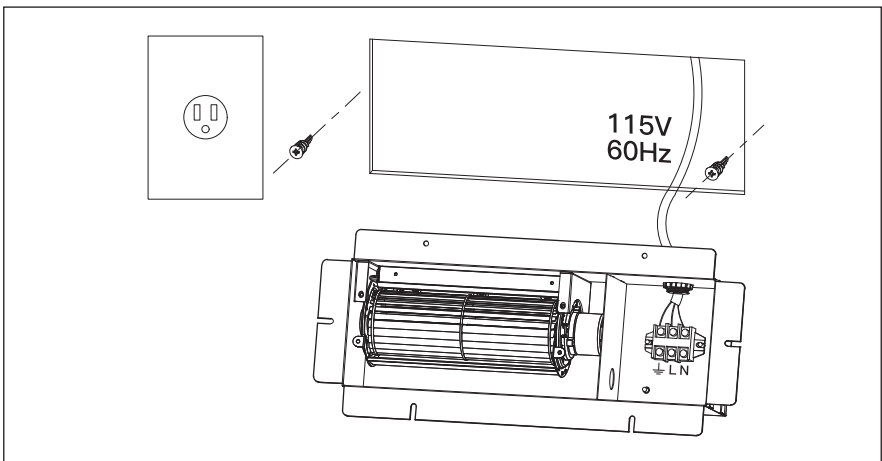


Diagram 8

Blower Installation

4. Carefully insert the Blower into the cutout. Level the top flange and mark the larger Blower flange mounting holes. Using the provided wood screws, secure the blower to the wall studs. Use the provided wall anchors if not installing into studs (See Diagram 9).

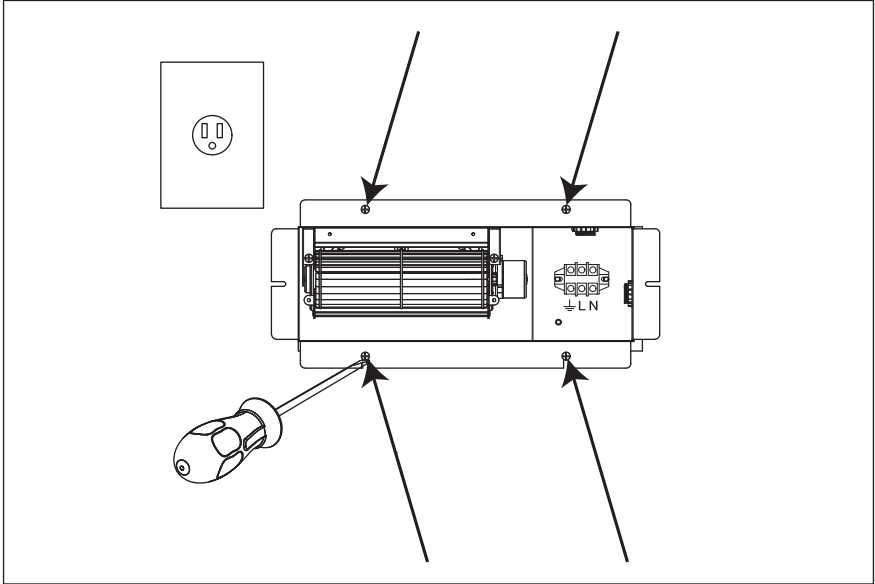


Diagram 9

Operating Instructions

After completing the above installation steps, the next step is to install the panel and display the operation panel.

Please read the following operations carefully to complete the installation and use of the product.

Note: No lines can be energized until the installation is completely finished!

1. Once you have installed the blower and safely and properly connected the power supply, you will see two counter ports in the product cavity, follow the circuit diagram to properly connect the corresponding ports (See Diagram 10)

Operating Instructions

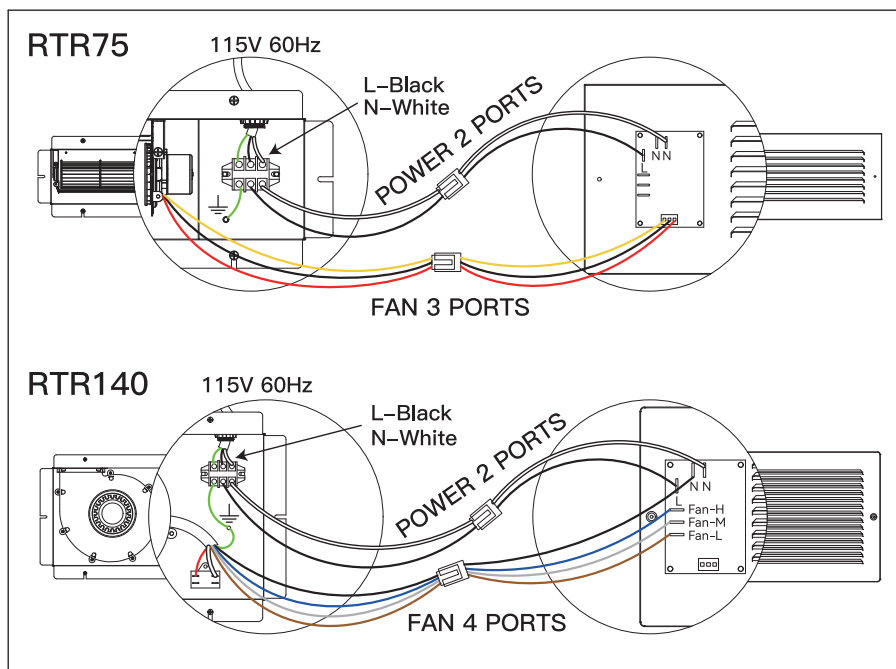


Diagram 10

2. After confirming that the interfaces are all properly connected, organize the internal cables without any wires touching the fan, and then mount the panel to the wall (See Diagram 11)

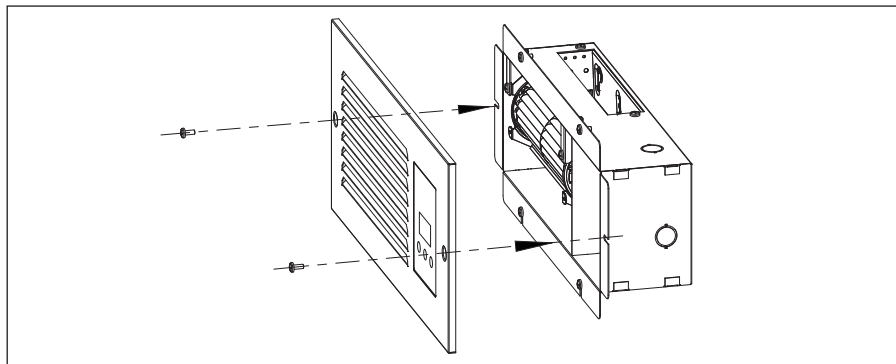
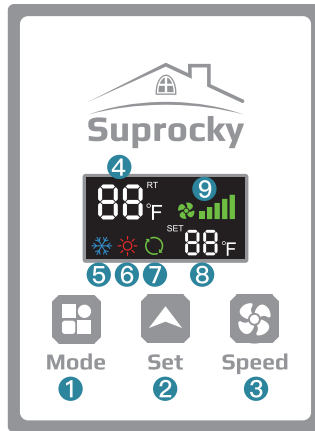


Diagram 11



1. Mode Button

Toggles the cooling trigger, heating trigger and continuous operation. Press and hold to turn on/off.

2. Up Button

Adjust the temperature setting, press and hold to set the value quickly.

3. Fan Speed Button

Change the current fan speed, press and hold this button for rest screen operation.

4. Real-Time Temperature Display

Displays the current temperature measured by the probe.

5. Cooling Trigger Display

In the cooling trigger mode, this icon stays on to assist your air conditioner in cooling the room on the other side of the air outlet.

6. Heating Trigger Display

In heating trigger mode, this icon is always on to assist the central heating system to heat the room on the side of the air outlet.

7. Continuous Operation Display

In the continuous run mode, this icon stays lit and the fan runs all the time.

8. Temperature Setting Display

Displays the value of cold trigger mode, hot trigger mode setting, and on/off for continuous operation.

9. Wind Speed Display

Displays the current wind speed.

⚠ IMPORTANT NOTES — PLEASE READ

This product is used to boost your existing AC or heater's airflow. It allows you to set temperature points where the fans will turn on if the airflow's temperature falls below or rises above the cooling or heating trigger's setting, respectively.

Keep in mind the faster the fans spin, the louder they will be.

We've designed the fans to ramp up or down, instead of quickly turning on or shutting down to minimize noise and power consumption.

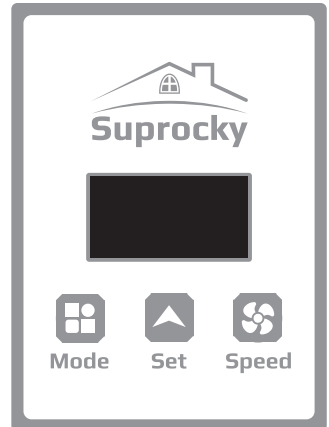
When not changing settings, we recommend staying on the temperature display mode to monitor and accurately gauge your airflow's temperature. Do not use your AC or heater's thermostat reading; it does NOT display the airflow's temperature.

Hiding the Display:

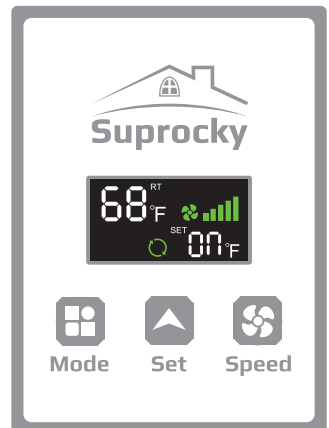
You can hide the display and turn off its backlight by pressing the wind speed button. All programs and settings will still work in the background. Press any button to redisplay the display.

Continuous Operation:

In this mode, the fan is unaffected by temperature and will run continuously until you manually turn it off. Pressing the up button will change the on/of. This mode allows you to adjust the air speed. Please note that the faster the air speed is, the louder they will sound.



Hiding the Display



Continuous Operation

Programming

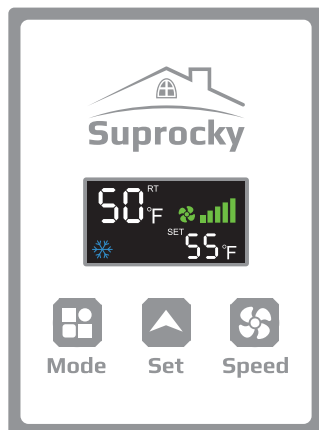
Cooling Trigger:

Use this mode to set the temperature trigger for your air conditioner.

Please note that you are not setting your desired temperature.

In this mode, the fan will run if the probe temperature is at or below the low temperature setting of the trigger. If the probe temperature is higher than the low temperature setting of the trigger, it will not run.

Press the up button to set the cooling trigger temperature. To calibrate your RTR75/RTR140, turn on your air conditioner and wait a few minutes until the probe temperature stabilizes. Set your cooling trigger to this number or higher. To avoid confusion, we recommend disabling the cooling trigger when the air conditioner is not in use.



Cooling Trigger

Heating Trigger:

Use this mode to set the temperature trigger for your heater.

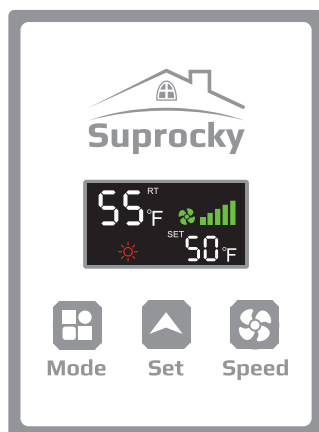
Please note that you are not setting your desired temperature.

In this mode, the fan will run if the probe temperature reaches or exceeds the temperature setting of the trigger.

If the probe temperature is below the thermal temperature setting of the trigger, it will not run.

Press the Up button to set the heat trigger temperature.

To calibrate your RTR75/RTR140, turn on your heater and wait several minutes until the probe temperature stabilizes. Wait several minutes until the probe temperature stabilizes to set your heater. To avoid confusion, we recommend disabling the heating trigger when the heater is not in use.



Heating Trigger

Warranty

SUPROCKY ensures the product components will be free of material defects in workmanship or materials for a period of 1 year following the date of initial purchase of such product by a customer. This warranty is limited to the repair or replacement of defective equipment.

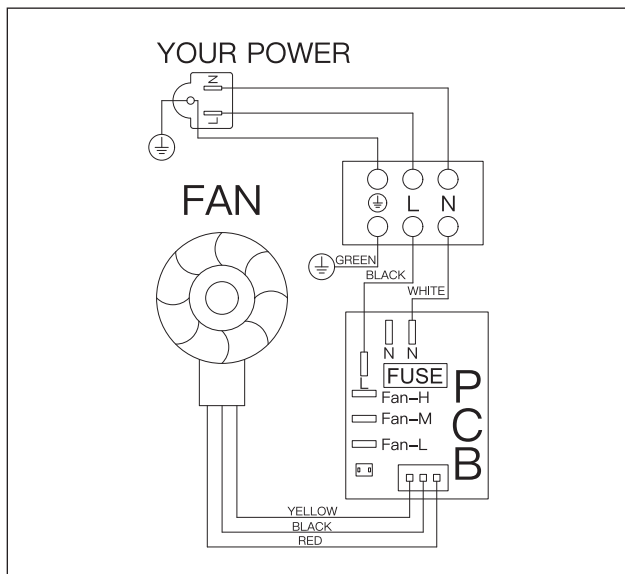
If it is necessary to return unit for service, the customer is solely responsible for proper packaging and transportation costs. The customer must initiate warranty process by contacting SUPROCKY. Do not send any component or product back to SUPROCKY without return material authorization.

This limited warranty does not apply to any part or component that is damaged in transit or when handling, has been subject to misuse, corrosion, chemicals, acts of God, has not been installed, operated or serviced according to the seller's instructions, or has been operated beyond the factory rated capacity or has been altered in any way. Routine maintenance is not covered by this warranty.

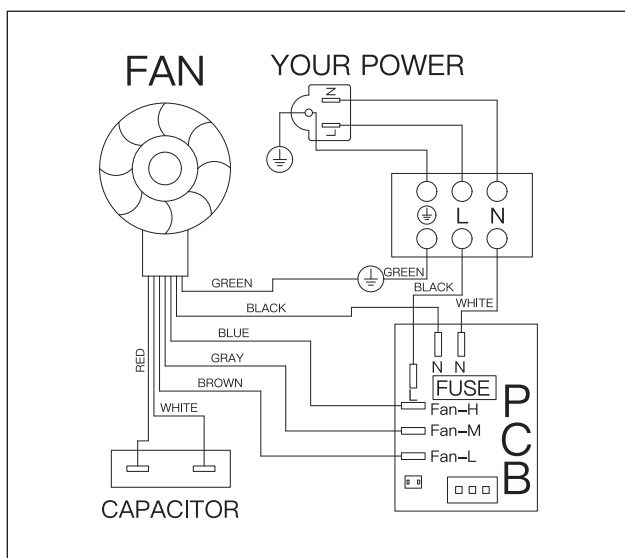
This limited warranty is void if defect(s) result from failure to have this unit installed by a qualified heating and air conditioning contractor.

SUPROCKY shall not be responsible for loss of use of any product, loss of time, inconvenience, or damage to other equipment, or any other indirect or consequential damage with respect to property whether as a result of breach of warranty, neglect, or otherwise.

| Wiring Diagram



RTR75



RTR140

Extraordinary Quality
Led by SUPROCKY



Warranty
QR Code

www.suprocky.com/warranty
support@suprocky.com
(888) 907-7328
(8:00 am to 7:00 pm PST), Monday to Friday