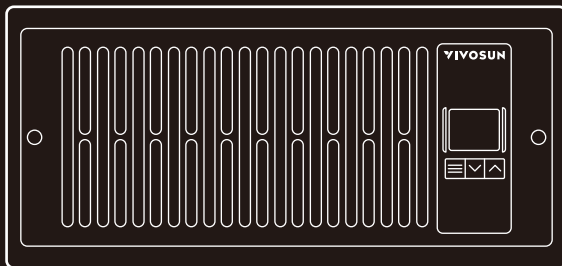


# VIVOSUN



## Register Booster Fan USER MANUAL

# Love what you grow™

Welcome to **VIVOSUN**

Thank you for choosing VIVOSUN. We are committed to product quality and friendly customer service. If you have any questions or suggestions, please don't hesitate to contact us.

## PRODUCTS APPLICABLE TO THIS MANUAL

Product	SKU
Register Booster Fan White 4" x 10"	VSF-R410-W
Register Booster Fan Brown 4" x 10"	VSF-R410-B

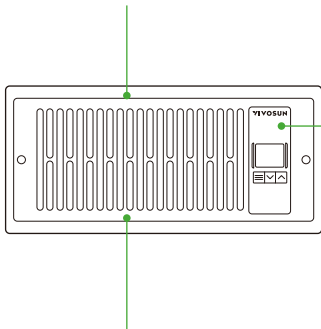
# CONTENTS

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# KEY FEATURES

## ALUMINUM FRAME

Features an aluminum frame with CNC-machined corners and a white or bronze finish to give cabinets a clean look.

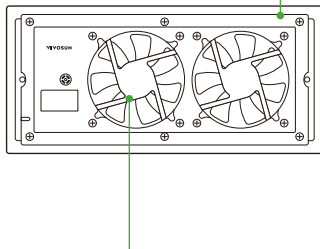


## QUIET PWM MOTOR

PWM-controlled motor features precise speed control, reduced noise, and energy-efficient DC power.

## SMART CONTROLLER

Enables airflow temperature monitoring, hot and cold temperature triggers, and fan speed control.

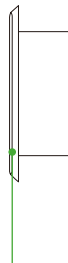


## STATOR BLADES

Hydro-mechanical stator blades enable air to travel farther even in high static pressure environments.

## DUAL BALL BEARINGS

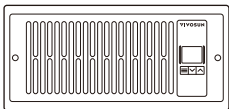
Enables unit to be mounted in any direction. Motor features dual-ball bearings with a 67,000 hours lifespan.



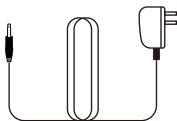
## PROTECTIVE BACK

Enclosed in a thermo-plastic casing with fan guards to protect users from high speed fans and prevent clogging.

# PRODUCT CONTENTS



Register Fan  
x 1pc



Power Adapter  
x 1pc

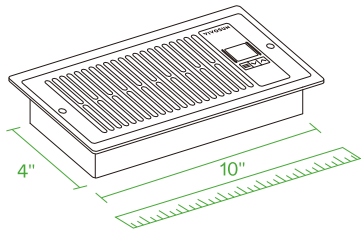


Screw Set  
x 2set

# INSTALLATION

## STEP 1

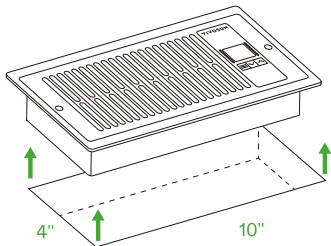
Measure your register vent to make sure this model will fit. Standard sizes come in 4" x 10".



# INSTALLATION

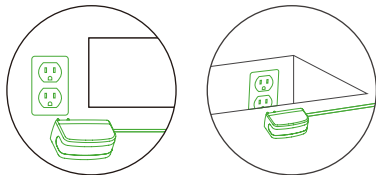
## STEP 2

Remove your register grille. You may need to use a Philips screwdriver to remove the mounting screws.



## STEP 3

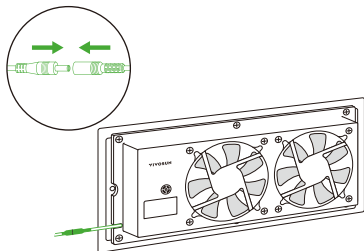
Plug the power adapter into an outlet. This may be next to your register or inside your register.



# INSTALLATION

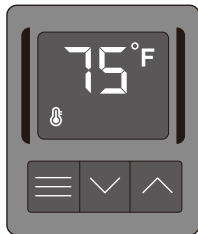
## STEP 4

Plug the power adapter's cord into the power receptacle on the register fan unit.



## STEP 5

Check the LCD display to make sure it is lit and displays a numeric value.

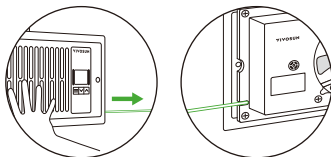


# INSTALLATION

## STEP 6

Position the register fan to be mounted.

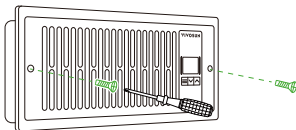
If the outlet is external, make sure the cord goes through the gap between the wall and the mounting plate.



## STEP 7

Drill your existing screws into the mounting holes to secure the register fan. If necessary, use the screws included with your register fan.

If the screw holes do not align, you may need to drill new holes into your wall.





# PROGRAMMING

## 1. MODE BUTTON

Cycles through the unit's modes: temperature display, cooling trigger, heat trigger, and fan speed.

## 3. TEMPERATURE DISPLAY

Displays the current airflow temperature (not room temperature) as measured by the probe on the fan's back case. Used as the default display.

## 5. HEATING TRIGGER

Allows you to set a temperature trigger for the fans to run when your central heating system is on.

## 6. FAN SPEED

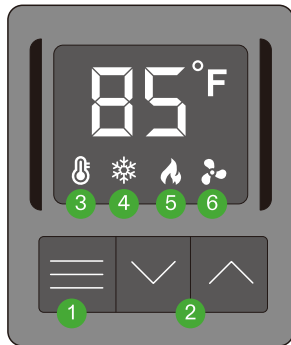
Sets the fan's maximum running speed when the cooling or heating triggers are tripped to run.

## 2. UP / DOWN BUTTON

Changes the temperature setting in the cooling trigger, the heating trigger, and the fan speed.

## 4. COOLING TRIGGER

Allows you to set a temperature trigger for the fans to run when your air conditioner system is on.



# PROGRAMMING

## 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 when the temperature of the airflow falls below or rises above the cooling or heat trigger setting, respectively.

This product has 10 fan speeds from 1-10. Use the fan speed setting to set your desired airflow boost. Keep in mind that 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 that you stay in Temperature Display mode to monitor and accurately measure the temperature of your airflow. Do not use your AC or heater's thermostat reading; it does NOT display the airflow's temperature of the airflow.

## TEMPERATURE DISPLAY

This mode displays the airflow temperature measured by the probe. While in this display mode, the cooling and heating triggers and the maximum fan speed setting, are still active unless you have disabled them.



# PROGRAMMING

## CONTROLLER LOCK OR UNLOCK

To **lock** or **unlock** the controller, enter the **Temperature Mode** and then press the **mode button** for three or more seconds. While the display is locked, It will shows "LC" for one second, you will not be able to switch modes or adjust settings, but the fans will be working in the background. Holding the **mode button** for three or more seconds will unlock the controller, It will shows "UL" for one second, you will be able to switch modes or adjust settings.



## HIDE DISPLAY

While the controller is locked, you can hide the display and turn off its backlight by pressing the mode button. All programs and settings will continue to work in the background while the display is hidden. Press any button to restore the display again.



# PROGRAMMING

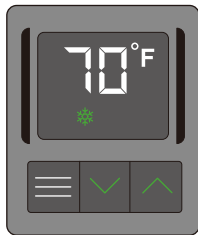
## COOLING MODE

Use this mode to set the temperature trigger for your air conditioner. Please note that you are NOT setting your desired temperature.

In this cooling mode, the fans will run if the probe temperature meets or falls below the trigger's cold temperature setting; the fans will not run if the probe temperature is above the trigger's cold temperature setting.

Press the up or down buttons to set the cooling trigger temperature. To calibrate your register booster fans, turn on your AC and wait for 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 not using your AC. To disable it, hold the mode button for three seconds. The display will show **OF**. It is also recommended that you return to the temperature display mode once you finish adjusting your cooling trigger.



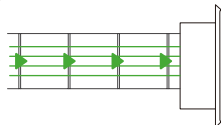
# PROGRAMMING

## COOLING MODE

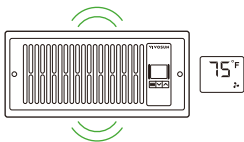
- 1 Your air conditioner turns on.



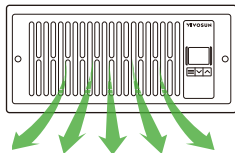
- 2 Cold air blows through the duct and into your room.



- 3 When the probe detects that airflow temperature has fallen below your **Cooling Trigger**, it will activate the fans.



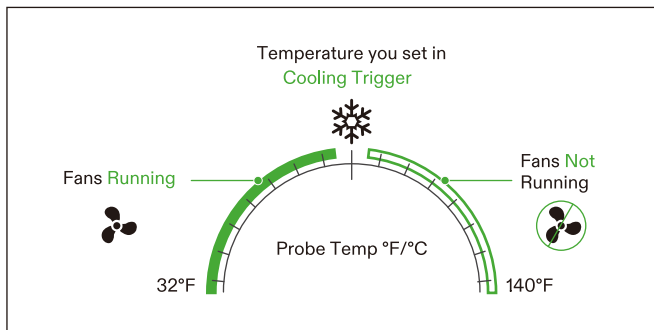
- 4 The fans will pull cold air from your duct to **boost** your AC output.



# PROGRAMMING

In this cooling mode, the fans will run if the probe temperature meets or falls below the trigger's cold temperature setting; the fans will not run if the probe temperature is above the trigger's cold temperature setting.

To switch off the cooling mode, press and hold the MODE button for 3 seconds. Press and hold the MODE button for 3 seconds again to resume the cooling mode.



# PROGRAMMING

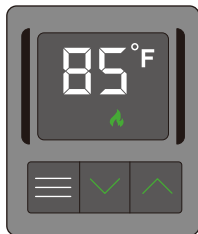
## HEATING MODE

Use this mode to set the temperature trigger for your heater. Please note you are NOT setting your desired temperature.

In this heating mode, the fans will run if the probe temperature reaches or exceeds the trigger's heating temperature setting; the fans will not run if the probe temperature is below the trigger's heating temperature setting.

Press the up or down buttons to set the heating trigger temperature. To calibrate your register booster fans, turn on your heater and wait for a few minutes until the probe temperature stabilizes. Set your heating trigger to this number or lower.

To avoid confusion, we recommend disabling the heater trigger when not using your heater. To disable it, hold the mode button for three seconds. The display will show **OF**. It is also recommended that you return to the temperature display mode once you finish adjusting your heating trigger.



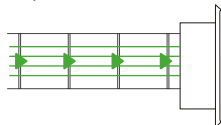
# PROGRAMMING

## HEATING MODE

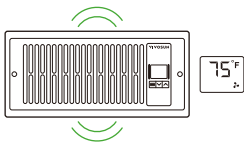
- 1 Your central heating system turns on.



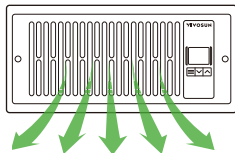
- 2 Heated air blows through the duct and into your room.



- 3 When the probe detects the airflow temperature has risen above your Heating Trigger, it will activate the fans.



- 4 The fans will pull heated air from your duct to boost your heater output.

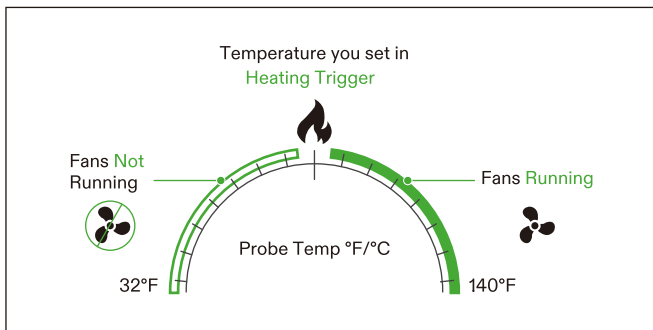




# PROGRAMMING

In this heating mode, the fans will run if the probe temperature reaches or exceeds the trigger's heating temperature setting; the fans will not run if the probe temperature is below the trigger's heating temperature setting.

To switch off the heating mode, press and hold the MODE button for 3 seconds. Press and hold the MODE button for 3 seconds again to resume the heating mode.



# PROGRAMMING

## TEMPERATURE MODE

We recommend that the operating state should be set to the cooling mode OR the heating mode during the usage, the fans will be working as following:

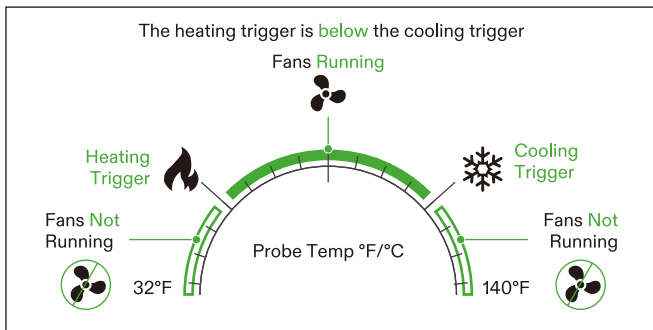
If the heating mode is set to **OF** state, the fans will be working in the **cooling mode** as Page 11;

If the cooling mode is set to **OF** state, the fans will be working in the **heating mode** as Page 14.

When the heating trigger is **below** the cooling trigger:

the fans will **run** if the probe temperature stays **between the heating trigger and the cooling trigger**;

the fans will **NOT run** if the probe temperature is **below** the heating trigger OR **above** the cooling trigger.



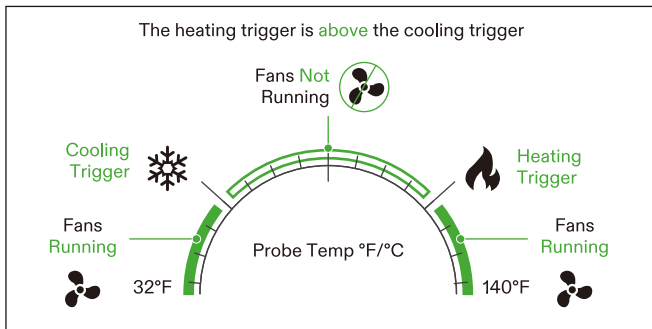
# PROGRAMMING

## TEMPERATURE MODE

When the heating trigger is **above** the cooling trigger:

the fans will **NOT run** if the probe temperature stays **between the heating trigger and the cooling trigger**;

the fans will **run** if the probe temperature is **above** the heating trigger OR **below** the cooling trigger.



# PROGRAMMING

## AIR FLOW MODE

This mode allows you to set a maximum fan speed at which they will actively run until you leave it. In Air Flow Mode, the fan will always operate at the set speed without being limited by the temperature setting. Pressing up or down will change the fan speed and determine the level of airflow boosting. Holding the MODE button will set the fan speed to 0. Keep in mind that the faster the fans spin, the louder they will be.



## FAHRENHEIT OR CELSIUS

To change the temperature scale between Fahrenheit and Celsius, press both the up and down buttons simultaneously until the letters change. All digits displayed will be automatically converted to the designated scale.



## FAQ

**Q: Can I be able to mount this fan on my ceiling?**

A: For safety reasons, we do not recommend mounting the fan on your ceiling.

**Q: Will I be able to mount this fan on a baseboard style register?**

A: No. Because of the tilted design, the fan will not have the clearance to be properly mounted.

**Q: My register is bigger than my fan's rear insert. How can I fit this fan onto my register?**

A: We can only recommend using the appropriately sized fan for your register. Contact customer service for fitment issues.

**Q: Does this register booster fan have fittings to use a filter with?**

A: This product is not specifically designed to be used with filters.

**Q: Can I reverse this fan's airflow?**

A: The fan's boosted airflow cannot be reversed, nor can the fans be flipped.

**Q: What temperature does the register booster fan detect?**

A: The fan's backside probe reads the airflow temperature of your register vent. Please note this temperature may vary from your home thermostat's reading.

# FAQ

**Q: My register booster fan is too loud. How do I decrease the fan noise?**

**A:** To minimize the noise coming from the fan, decrease the maximum fan speed. Refer to page 17.

**Q: My fan runs all the time when I don't need it to. How do I turn it off?**

**A:** The heating and cooling triggers may be active at the same time. Disable the trigger you are not using by holding the mode button until the screen displays **OF**.

# WARRANTY

## WARRANTY TERMS

1. We offer a 2-year warranty against manufacturing defects for all of our products from the date of purchase. If you need warranty assistance, please contact us as soon as possible.
2. The warranty does not cover damage due to high moisture levels, water damage, power surges, improper hanging/mounting, improper use, dust build-up, or users' unauthorized modifications.
3. In the USA, if any fans ceases working within 30 days of use, you can choose:
  - (A) Exchange: We will email you a pre-paid return label. Please ship the product back to our USA warranty center and a replacement will be sent to you free of charge as soon as we receive the defective product.
  - (B) Refund: We will email you a pre-paid return label. Please ship the product to our USA warranty center and we will issue a refund as soon as the product has been received. Refund periods may depend on the processing time of your bank or institution—usually, a refund takes about 5 business days to be processed.
4. Our company reserves all rights to the final explanation of this warranty structure. If you have any questions about our warranty policy, please contact us.

Designed by **VIVOSUN** in California.  
Made in China