AC INFINITY

AIRLIFT SERIES

SHUTTER EXHAUST FAN SYSTEM

USER MANUAL

WELCOME

Thank you for choosing AC Infinity. We are committed to product quality and friendly customer service. If you have any questions or suggestions, please don't hesitate to contact us. Visit www.acinfinity.com and click contact for our contact information.

EMAIL
support@acinfinity.com

WEB
www.acinfinity.com

LOCATION
Los Angeles, CA

MANUAL CODE AL2005X1

PRODUCT	MODEL	UPC-A
AIRLIFT S10	AC-ALS10	819137021433
AIRLIFT S12	AC-ALS12	819137021440
AIRLIFT S14	AC-ALS14	819137021457
AIRLIFT S16	AC-ALS16	819137021464
AIRLIFT T10	AC-ALT10	819137020900
AIRLIFT T12	AC-ALT12	819137020917
AIRLIFT T14	AC-ALT14	819137020924
AIRLIFT T16	AC-ALT16	819137020948
AIRLIFT T18	AC-ALT18	819137020948
AIRLIFT T20	AC-ALT20	819137020955
AIRLIFT T22	AC-ALT22	819137020962
AIRLIFT T30	AC-ALT30	819137020986
AIRLIFT T36	AC-ALT36	819137020993

SERIOUS INJURY OR DEATH. Please do not touch the fan's impeller and blades. Secure all nearby objects including wires and cables from coming into contact with the fan’s impeller and blades. Use caution when deciding where to install this fan.

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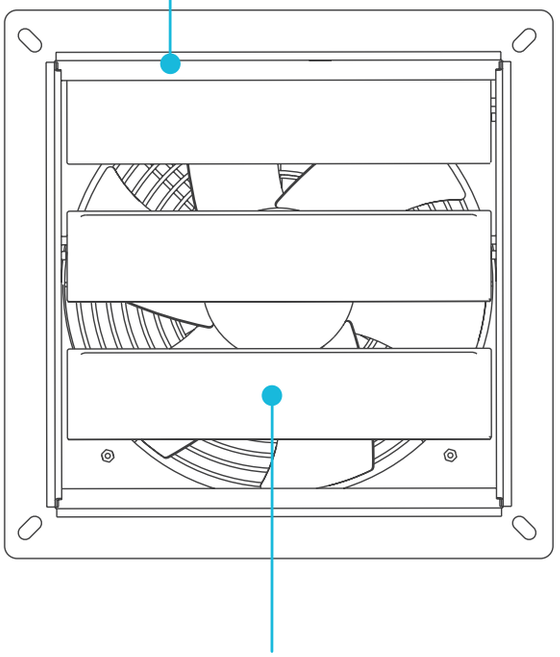
KEY FEATURES

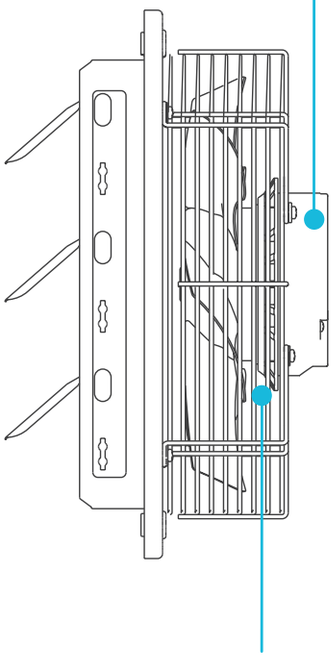
HEAVY DUTY BUILD

Fans are enclosed in steel and wire guards to withstand shocks and harsh environments.



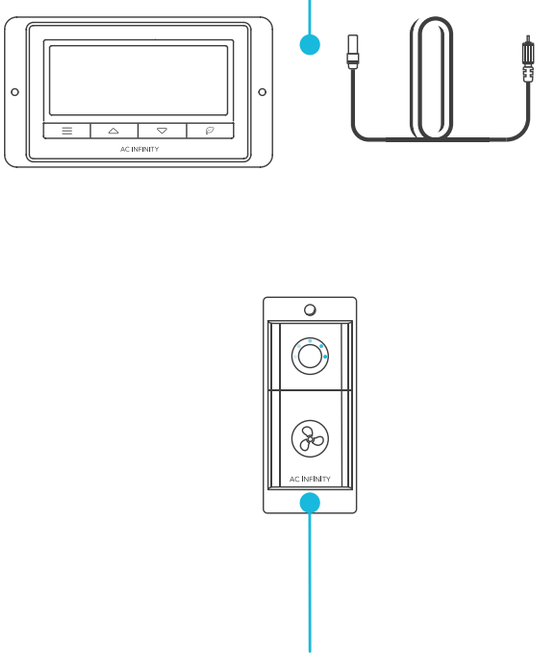
EFFICIENT EC-MOTOR

PWM controlled EC-motor enables precise speed control, low noise, and higher energy efficiency.



SMART CONTROLLER

Programmable controller with corded sensor can adjust airflow in response to temperature and humidity.



WEATHERPROOF

The shutter fan unit is sealed to Ingress Protection 44 standards to be resistant to liquid and dust.

DUAL BALL BEARINGS

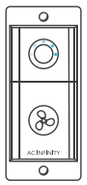
Long life bearings rated at 67,000 hours. Also allows the fan to be mounted in any direction.

SPEED CONTROLLER

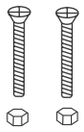
Single button controller with circular readout display that enables fan speed control in eight speeds.

PRODUCT CONTENTS

AIRLIFT S-SERIES



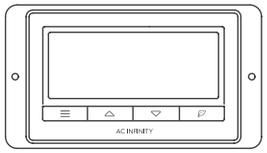
SPEED CONTROLLER (x1)



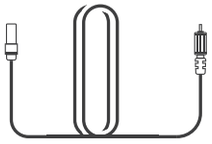
MACHINE SCREWS (WALL MOUNT) (x2)

WOOD SCREWS (WALL MOUNT) (x2)

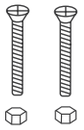
AIRLIFT T-SERIES



SMART CONTROLLER (x1)

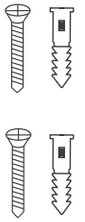


SENSOR PROBE (x1)



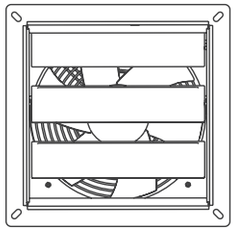
MACHINE SCREWS (WALL MOUNT) (x2)

WOOD SCREWS (WALL MOUNT) (x2)

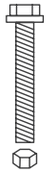


WOOD SCREWS (WALL HANG) (x2)

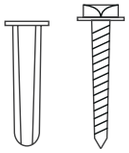
FAN UNIT



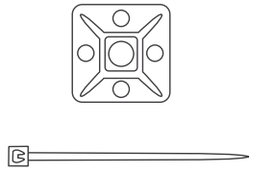
SHUTTER FAN UNIT (x1)



MACHINE SCREWS (SHUTTER MOUNT) (x4)



WOOD SCREWS (SHUTTER MOUNT) (x4)

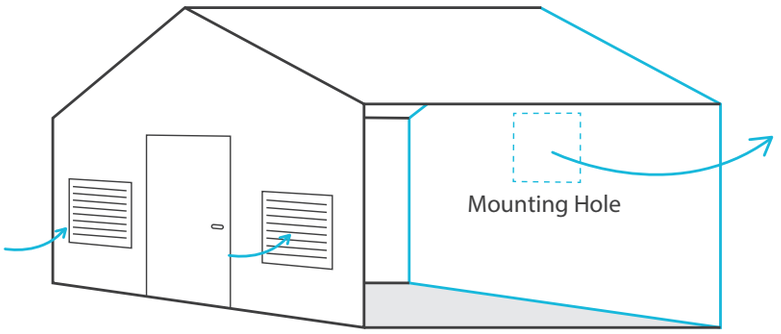


WIRE TIES (x4)

MOUNTING

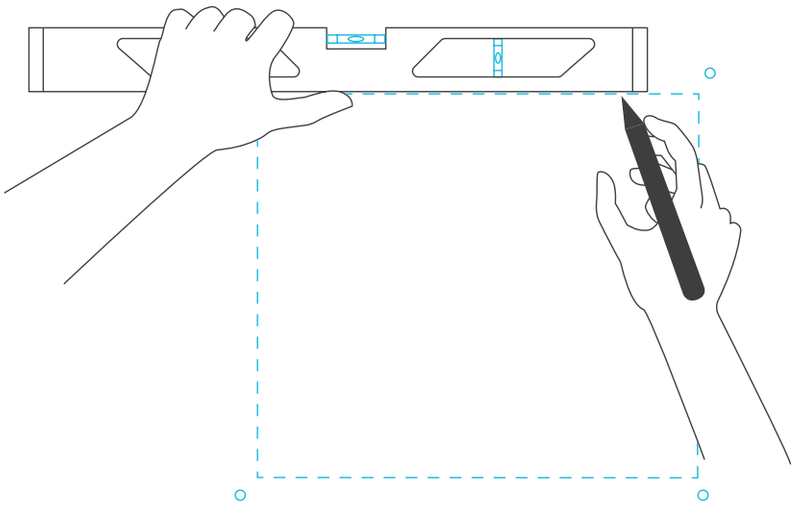
STEP 1

When installing in a large room like a green house, barn, or garage, it is recommended that the shutter fan should be mounted on the opposite side of any ventilation openings for better air circulation. The fan should also be positioned higher in the room to exhaust out heated air, which will rise on its own due to natural convection.



STEP 2

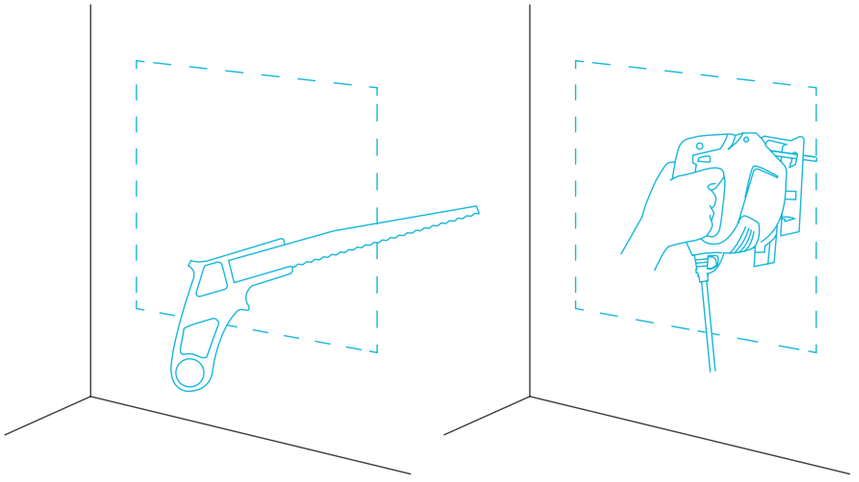
Measure the dimensions of the shutter fan's mounting frame which will go through the wall. Select a location on the wall where you will be mounting the fan. Please make sure that the wall is free of any wires or pipes. Using the measurements of the shutter fan, use a level and ruler to draw an outline of the area to be drilled and cut.



MOUNTING

STEP 3

Depending on your mounting surface material, use the appropriate tools to cut into the wall. Use a drill or a hand saw to create an opening large enough to insert a saw blade or jigsaw inside the outlined area of the wall panel.

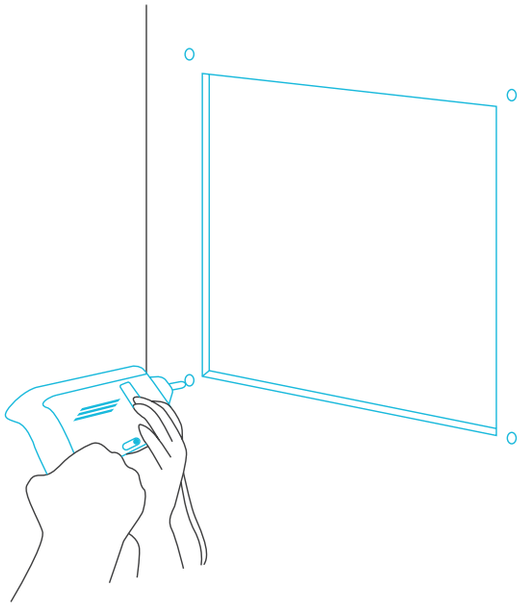


Thinner Woods or Plastic

Woods, Tougher Plastic or, Metal

STEP 4

Position the shutter fan through the hole cut in step 3. Use it to measure the positioning of the mounting screws then remove the fan unit. Then using a drill bit, create the four mounting holes.

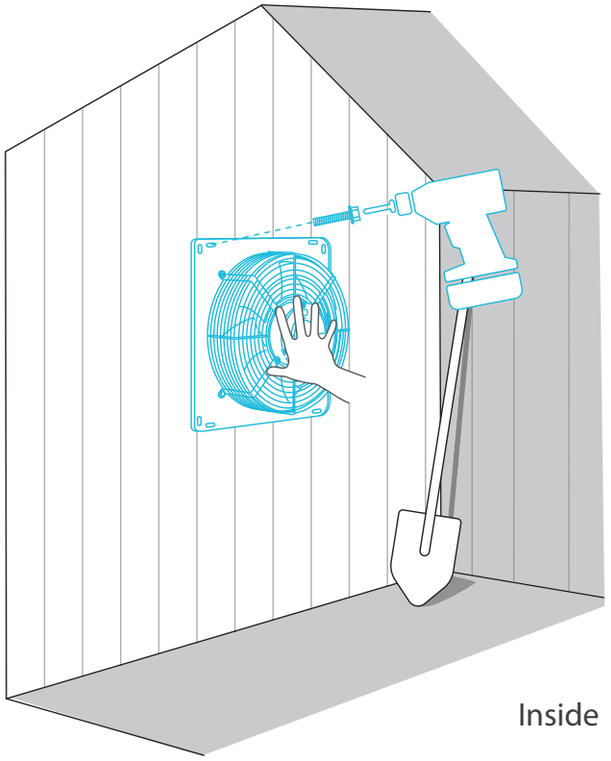


MOUNTING

STEP 5

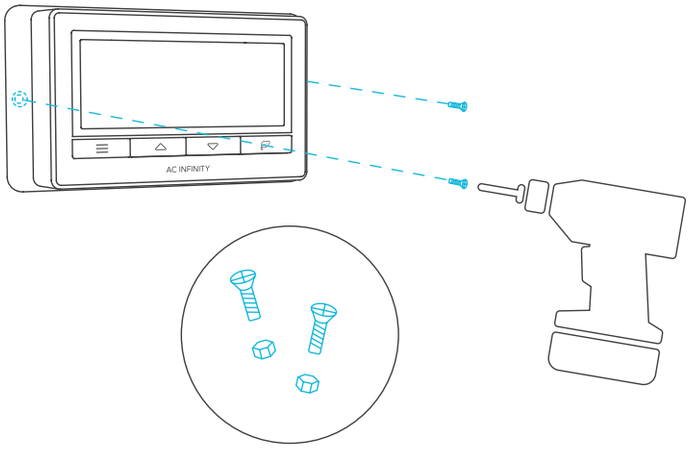
From inside the room, position the shutter fan back into the opening of the fan. Make sure the controller connectors and power cord is on the inside of the room. Then, use the included hardware to secure the fan.

If you are using your own shutter, remove the AIRLIFT's shutter by unscrewing the nuts and bolts from the fan guard. Reassemble the fan guard onto your existing shutter by reapplying the nuts and bolts in the same mounting locations.



STEP 6

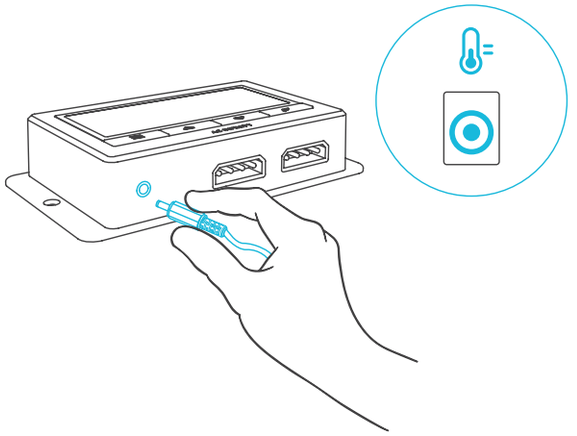
Once the fan is mounted securely you can then mount the controller using the included hardware. Place the controller near the fan in order to power the controller.



POWERING

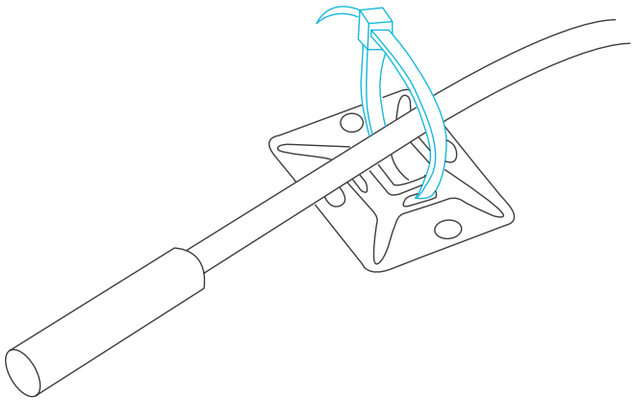
STEP 1

Locate the connector plug of the sensor probe and plug it into the bottom of the thermal controller.



STEP 2

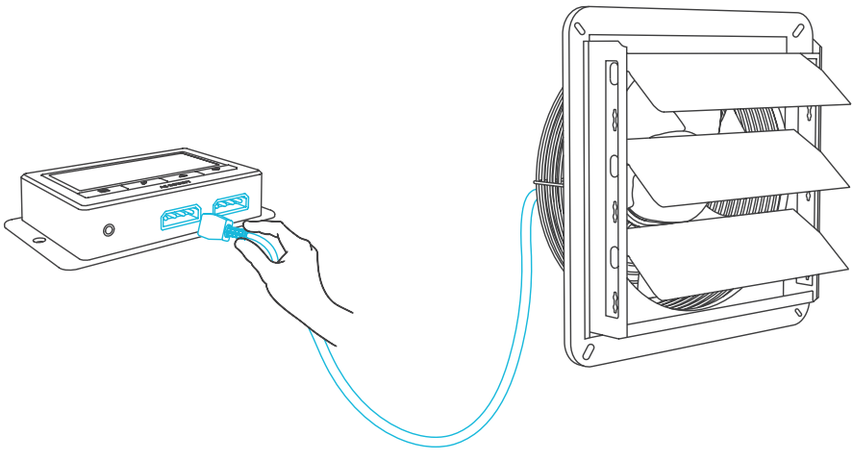
Secure the sensor probe head near by, preferably in the hottest area of the room. You can use the wire tie to secure the probe away from the fan blades.



POWERING

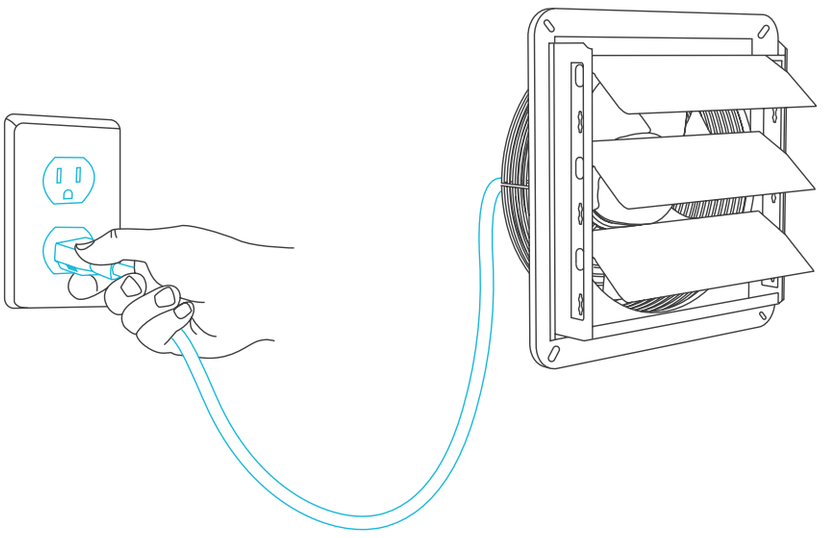
STEP 3

Connect the molex end from the fan into the bottom of the controller.



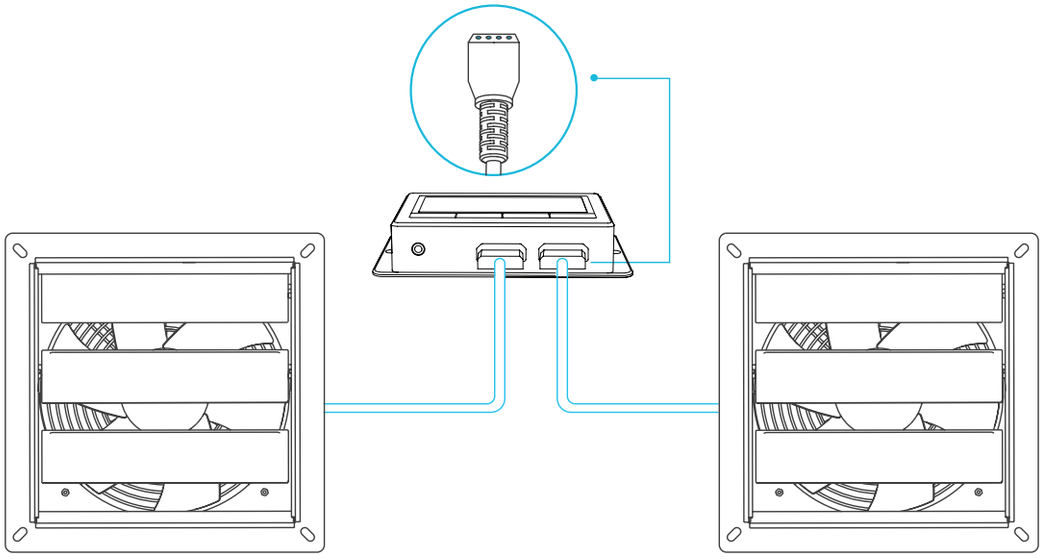
STEP 4

Lastly, to power the fan and the controller, plug the fans power cord into an AC power outlet.

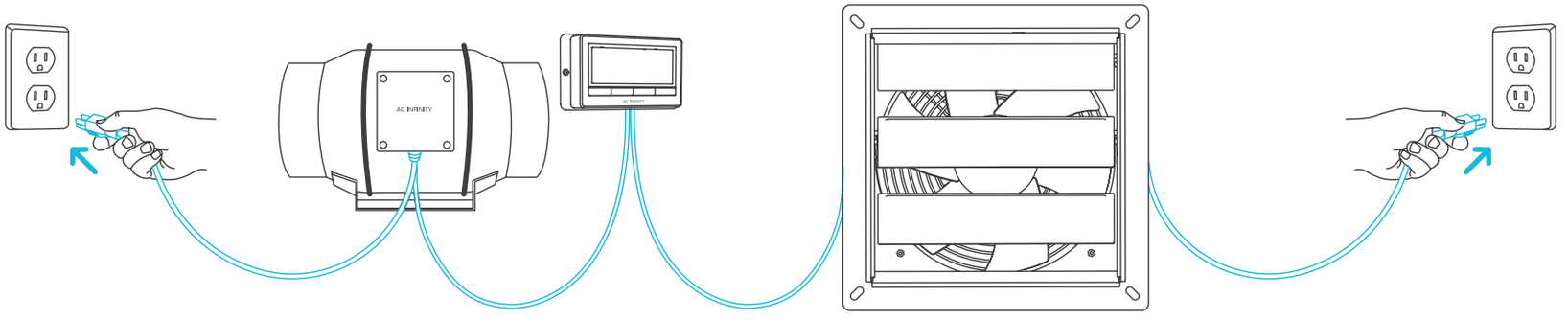


DAISY CHAIN AND SETUP

The fan controller can power up to two compatible fans to share the same programming.



The controller included is compatible with AC Infinity fan models that contain an EC-motor. Typically, EC-motor fans will have a separate cord coming out of it for the power and the controller. The compatible fans do not need to be the same model or part of the same product series.

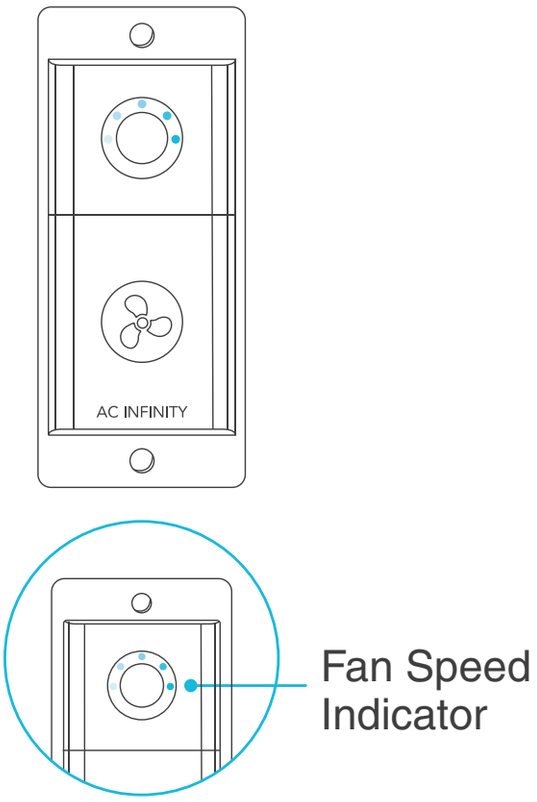


EC Motor - Compatible

PROGRAMMING

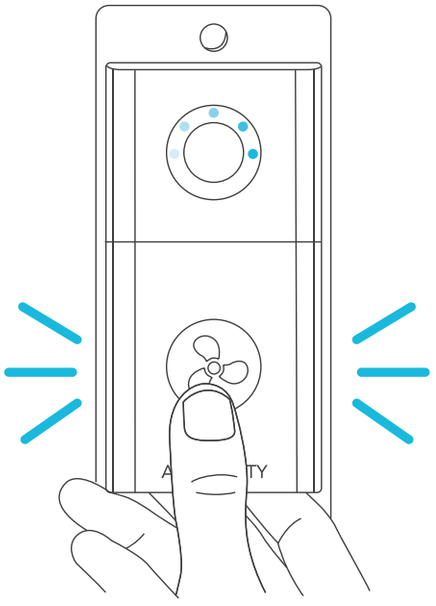
FAN SPEED ADJUSTING

The controller features a single button that controls the fan speed from 0-8. Pressing the speed button increases the fan speed in one unit increments. Pressing the button at the 8 setting will set the fan speed back to 0.



POWERING ON AND OFF

Holding the speed button for 4 seconds will turn the fan OFF. Pressing it again from OFF will turn the fan ON at its last speed setting.

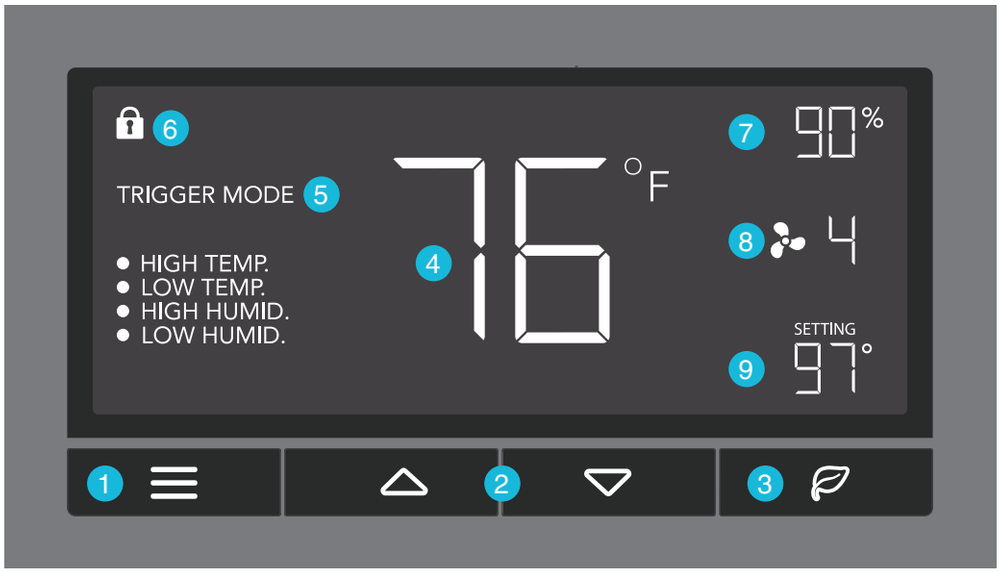


PROGRAMMING

1. MODE BUTTON
This button cycles through each of the controller's modes: ON, OFF, TIMER, AUTO (4 triggers), and ALARM (4 settings).

2. UP / DOWN BUTTON
The up and down buttons adjusts the settings of the mode that you are in. Up button increases and down button decreases.

3. LEAF BUTTON
This turns the display off while programs run in the background. Hold for two seconds to lock or unlock the display.



4. PROBE TEMP.
Displays the current temperature that the corded sensor probe is measuring. Shows “- -” if no probe is plugged in.

5. CONTROLLER MODE
This area displays the mode that the controller is currently in. Press the Mode Button to cycle through the modes.

6. ALERT ICONS
This area displays the alerts and statuses from the controller including alarms and screen lock.

7. PROBE HUMIDITY
Displays the current humidity that the corded sensor probe is measuring. Shows “- -” if no probe is plugged in.

8. FAN SPEED
Displays the current speed the fan is running at, or what speed it should be running at if no fans are plugged in.

9. SETTING
Displays the value you have set for the current mode. Press the up or down button to change.

PROGRAMMING

MODE SETTING

Press the Mode button to cycle through the controller's available programming modes and settings: ON Mode, OFF Mode, TIMER Mode, AUTO Mode (4 triggers), ALARM Settings (4 settings).

ON MODE

In this mode, the fans will run continuously regardless of temperature or humidity. The speed set in this mode will be the max speed the fans can reach in AUTO Mode.

OFF MODE

In this mode, the fans will not run regardless of temperature or humidity. While in this mode, pressing the up or down button will change the display's brightness. There are four settings for brightness, (Setting:1/2/3/A3). On setting A3, if the device is left unattended for 30 seconds, the display will automatically dim its brightness back to setting 1. Holding up or down button will change the display's units F or C.

TIMER MODE

In this mode, press the up or down button to set a time for the timer. The fans will run at the speed set in ON Mode until the timer's clock runs out, in which the fans will stop running. The clock will begin counting down if no buttons are pressed for 3 seconds. Leaving the timer mode while the countdown is running will pause the clock until you return to this mode.

PROGRAMMING

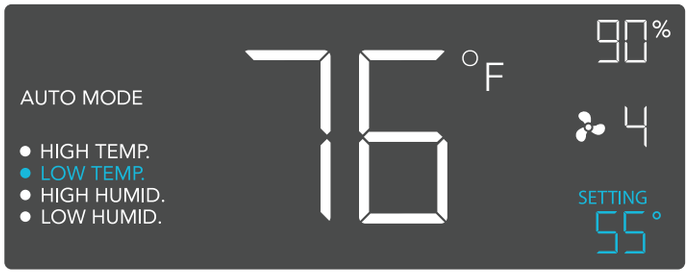
AUTO MODE: HIGH TEMP.

In this mode, press the up or down button to set a high temperature trigger. The fans will activate if the probe's measured temperature exceeds the temperature you have set in this mode. The activated fans will slowly increase in speed until it reaches the speed set in ON Mode. Whenever the measured temperature falls below your set temperature, the fans will slowly decrease in speed until the fans stop. You may also hold the up and down button simultaneously to turn off this trigger, in which the digits under settings will show OFF.

Note that this trigger can activate as long as you are in AUTO Mode, even if you are viewing a different trigger within AUTO Mode.

AUTO MODE: LOW TEMP.

In this mode, press the up or down button to set a low temperature trigger. The fans will activate if the probe's measured temperature falls below the temperature you have set in this mode. The activated fans will slowly increase in speed until it reaches the speed set in ON Mode. Whenever the measured temperature rises above your set temperature, the fans will slowly decrease in speed until the fans stop. You may also hold the up and down button simultaneously to turn off this trigger, in which the digits under settings will show OFF.



Note that this trigger can activate as long as you are in AUTO Mode, even if you are viewing a different trigger within AUTO Mode.

PROGRAMMING

AUTO MODE: HIGH HUMID.

In this mode, press the up or down button to set a high humidity trigger. The fans will activate if the probe's measured humidity exceeds the humidity you have set in this mode. The activated fans will slowly increase in speed until it reaches the speed set in ON Mode. Whenever the measured humidity falls below your set humidity, the fans will slowly decrease in speed until the fans stop. You may also hold the up and down button simultaneously to turn off this trigger, in which the digits under settings will show OFF.

Note that this trigger can activate as long as you are in AUTO Mode, even if you are viewing a different trigger within AUTO Mode.

AUTO MODE: LOW HUMID.

In this mode, press the up or down button to set a low humidity trigger. The fans will activate if the probe's measured humidity falls below the humidity you have set in this mode. The activated fans will slowly increase in speed until it reaches the speed set in ON Mode. Whenever the measured humidity rises above your set temperature, the fans will slowly decrease in speed until the fans stop. You may also hold the up and down button simultaneously to turn off this trigger, in which the digits under settings will show OFF.

Note that this trigger can activate as long as you are in AUTO Mode, even if you are viewing a different trigger within AUTO Mode.

PROGRAMMING

ALARM SETTING: HIGH TEMP.

In this settings mode, press the up and down button to set a high temperature alarm. The alarm will activate if the probe's measured temperature exceeds the temperature you have set in this mode. When the alarm triggers, the fan will start spinning at max speed regardless of your other settings. You may also hold the up and down button simultaneously to turn off this alarm, in which the digits under settings will show OFF. You will need to be in AUTO, ON, or TIMER mode for this alarm to be able to activate.

Note that alarm triggers can only activate in AUTO, ON, or TIMER Mode. Please leave ALARM SETTING to arm the controller.

ALARM SETTING: LOW TEMP.

In this settings mode, press the up and down button to set a low temperature alarm. The alarm will activate if the probe's measured temperature falls below the temperature you have set in this mode. When the alarm triggers, the fan will start spinning at max speed regardless of your other settings. You may also hold the up and down button simultaneously to turn off this alarm, in which the digits under settings will show OFF. You will need to be in AUTO, ON, or TIMER mode for this alarm to be able to activate.

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Note that alarm triggers can only activate in AUTO, ON, or TIMER Mode. Please leave ALARM SETTING to arm the controller.

PROGRAMMING

FAHRENHEIT OR CELSIUS

To change to displayed units between Fahrenheit and Celsius, please set the controller to OFF Mode, then hold the up button for Fahrenheit (°F) or hold the down button for Celsius (°C).

DISPLAY BRIGHTNESS

To adjust the brightness of the display, please set the controller to OFF Mode, then press the up or down button to increase or decrease the brightness level. Four brightness settings are available.

TEMPERATURE CALIBRATION

To adjust the temperature that the probe sensor is measuring, please press the MODE and UP button simultaneously. This can be done while the controller is any mode or setting. The calibration cycle ranges from -8°F to 8°F (or -4°C to 4°C) and will be applied to the probe sensor's measurements.

HUMIDITY CALIBRATION

To adjust the humidity that the probe sensor is measuring, please press the MODE and DOWN button simultaneously. This can be done while the controller is any mode or setting. The calibration cycle ranges from -8% to 8% and will be applied to the probe sensor's measurements.

CONTROLLER LOCK

To lock the controller to prevent settings to be changed accidentally, hold the LEAF button for two or more seconds. While the display is locked, you will not be able to switch modes or changes any settings. You will only be able to put the controller in ECO display by pressing the LEAF button. Holding the LEAF button for two or more seconds will unlock the controller.

ECO-MODE

The controller can be put into ECO display in which the screen will be turned off but all programs, settings, and alarms will be running in the background. This can be done by pressing the LEAF button. You may also do this while the controller is locked. To exit ECO display, simply press any buttons.

PROGRAMMING

ALERT ICONS

On the top left of the display is the alert icon section. Icons may flash when the controller wishes to alert you that a particular function or alarm is being triggered.

DISPLAY LOCK ALERT

This icon is visible when the controller has been locked. The icon will flash to alert you that the controller is locked if you try to change the mode or settings.

HUMIDITY ALARM ALERT

This icon will flash when the high or low humidity alarm that you have set has been triggered.

TEMPERATURE ALARM ALERT

This icon will flash when the high or low temperature alarm that you have set has been triggered.

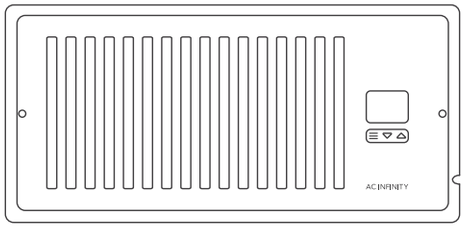
CHECK FAN ALERT

This icon will flash when the fan's sensor detects interference to its operation. Please check the fan for possible issues. If the fan is rotating, it may be static pressure resistance and operating as intended. If the fan is not rotating, please see the warranty page for replacement information. (This is only available on certain models.)

AC INFINITY PRODUCTS

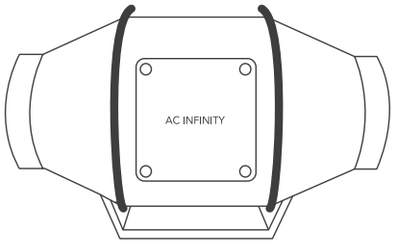
Register Booster Fans

The AIRTAP series is a line of register booster fans designed to quietly increase airflow coming from your central heat and air conditioning systems, increasing comfort for your home. Features a thermal controller with intelligent programming that will automatically adjust airflow strength in response to heating and cooling temperatures you have set.



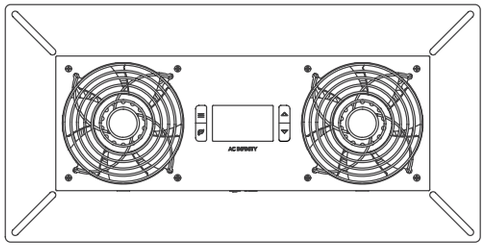
Duct Fans

The CLOUDLINE series is a line of duct fans designed to quietly ventilate AV rooms and closets, as well as various DIY air circulation and exhaust projects. Features a thermal controller with intelligent programming that will automatically adjust duct fan speeds in re-sponse to changing temperatures.



Crawlspace Fans

The AIRTITAN is a line of weather-proof fans designed to provide ventilation, odor, and moisture control for crawl spaces and basements. It features a digital controller with intelligent programming that will adjust airflow strength in response to high and low temperatures, as well as humidity.



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WARRANTY

This warranty program is our commitment to you, the product sold by AC Infinity will be free from defects in manufacturing for a period of two years from the date of purchase. If a product is found to have a defect in material or workmanship, we will take the appropriate actions defined in this warranty to resolve any issues.

The warranty program applies to any order, purchase, receipt, or use of any products sold by AC Infinity or our authorized dealerships. The program covers products that have become defective, malfunctioned, or expressively if the product becomes unusable. The warranty program goes into effect on the date of purchase. The program will expire two years from the date of purchase. If your product becomes defective during that period, AC Infinity will replace your product with a new one or issue you a full refund.

The warranty program does not cover abuse or misuse. This includes physical damage, submersion of the product in water, incorrect Installation such as wrong voltage input, and misuse for any reason other than intended purposes. AC Infinity is not responsible for consequential loss or incidental damages of any nature caused by the product. We will not warrant damage from normal wear such as scratches and dings.

To initiate a product warranty claim, please contact our customer service team at support@acinfinity.com

If you are not 100% satisfied with this product, we will be happy to replace it or issue you a full refund. Please contact us!

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