AC INFINITY

CLOUDLINE SERIES

MIXED FLOW DUCT FAN SYSTEM

USER MANUAL

WELCOME

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EMAIL
support@acinfinity.com

WEB
www.acinfinity.com

LOCATION
Los Angeles, CA

MANUAL CODE CL1610X1

PRODUCT	MODEL	UPC-A
CLOUDLINE T4	AI-CLT4	854759004785
CLOUDLINE T6	AI-CLT6	854759004792

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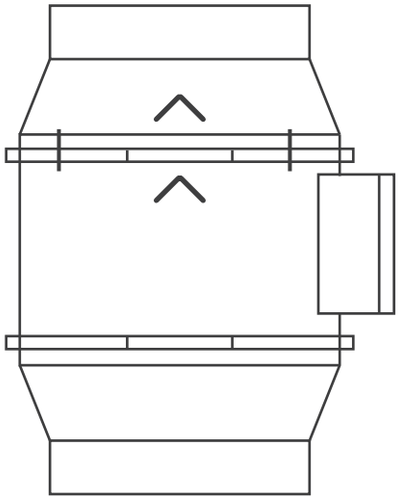
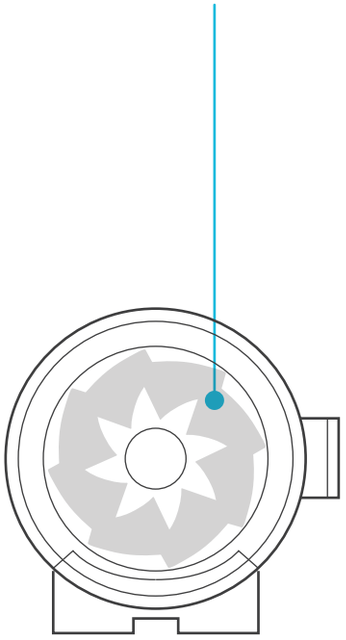
KEY FEATURES

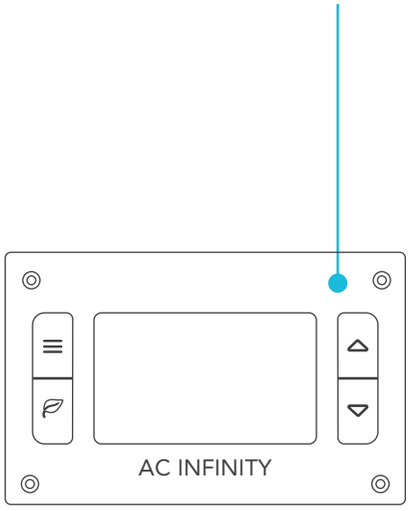
QUIET PWM MOTOR
PWM-controlled motor features precise speed control, reduced rotor noise, and energy efficient DC voltage.

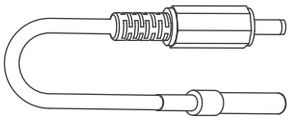
STATOR BLADE DESIGN
Hydro mechanical stator blades enables air flow to travel farther even in high static pressure environments.

SMART CONTROLLER
LCD display enables temp monitoring, thermal control, speed control, alarms, and SMART energy mode.









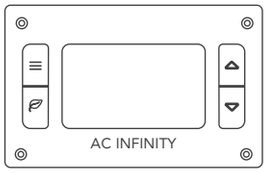
IP 44 PROTECTION
Fans are IP44 rated; is highly resistant to liquids and dust; able to withstand hot and humid environments.

DUAL BALL BEARINGS
Motor contains ball bearings rated at 67,000 hours. Also enable the duct fan to be mounted in any direction.

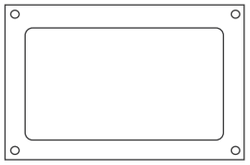
THERMAL PROBE
The corded sensor probe constructed of stainless steel ensures an accurate temperature reading.

PRODUCT CONTENTS

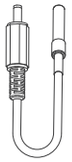
CLOUDLINE T4 AI-CLT4
CLOUDLINE T6 AI-CLT6



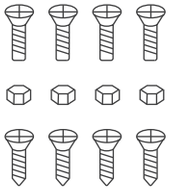
THERMAL CONTROLLER (x1)



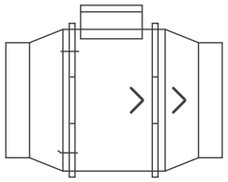
CONTROLLER PLASTIC STENCIL (x1)



THERMAL PROBE (x1)

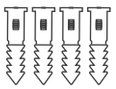


CONTROLLER SCREW SET (x4)

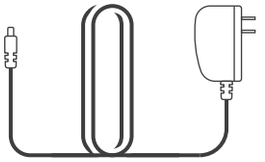


DUCT FAN SYSTEM (x1)

DUCT FAN SCREW SET (x4)



DUCT FAN Wall Anchor (x4)

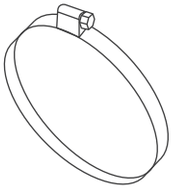


POWER ADAPTER (x1)

WIRE TIE (x6)

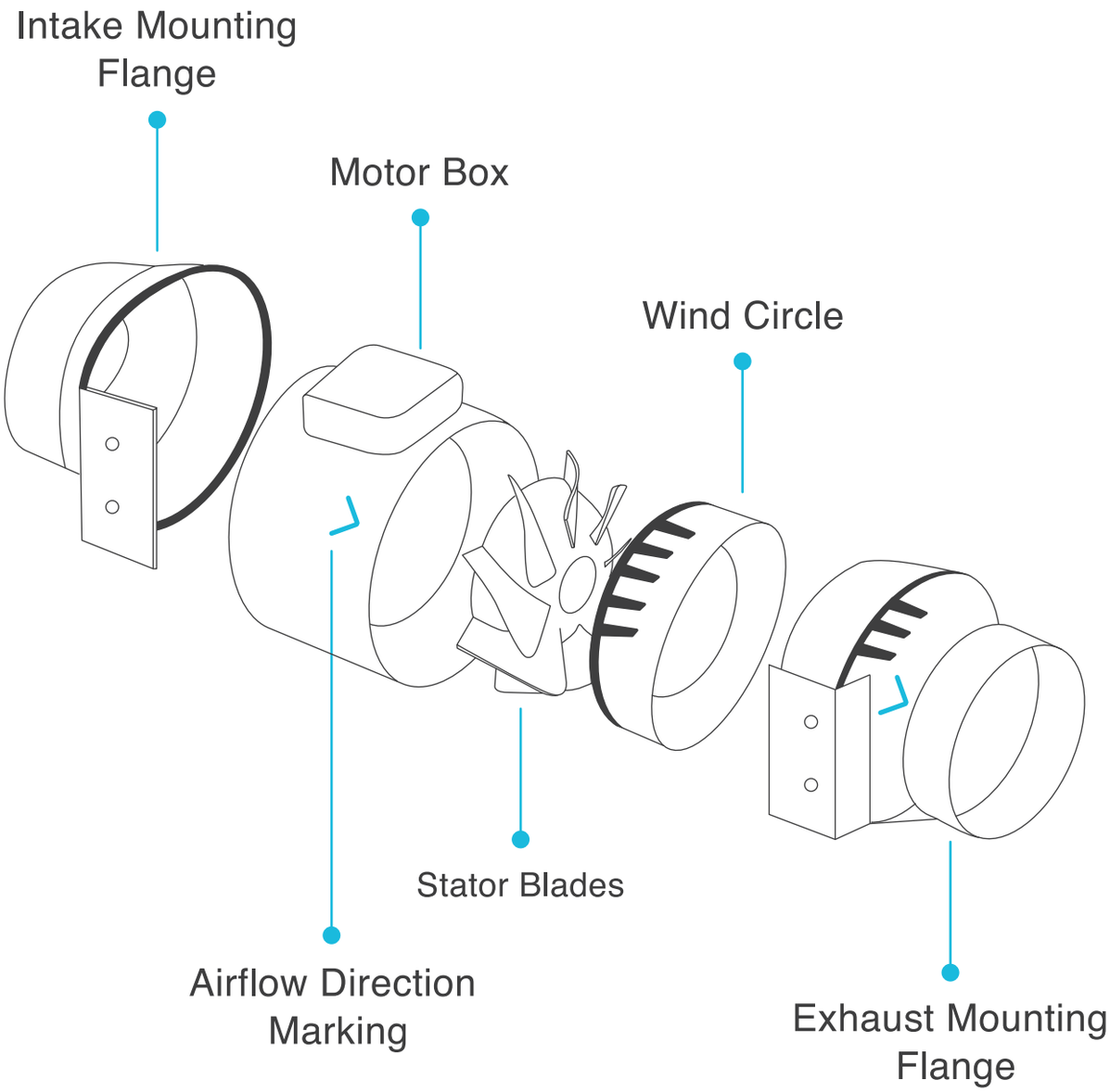
CABLE TIE MOUNT (x6)

WOOD SCREW (x6)



DUCT TUBE CLAMPS (x2)

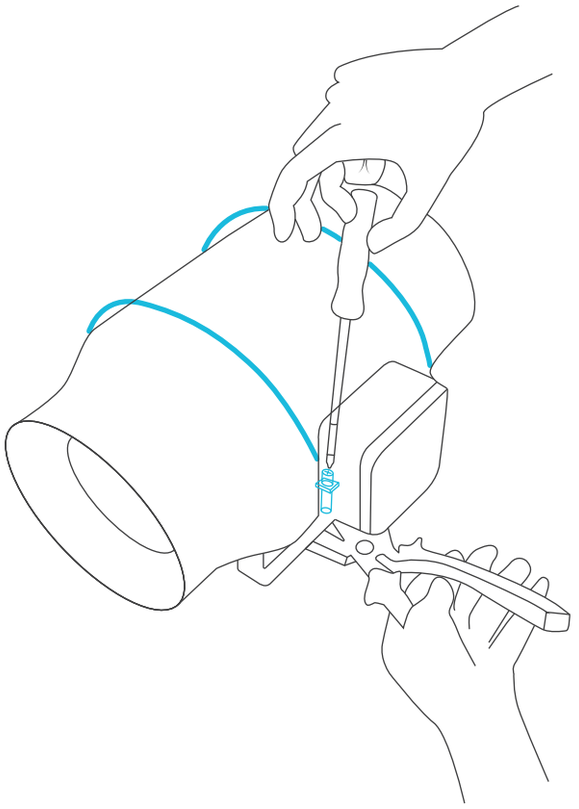
PRODUCT CONTENTS



INSTALLATION

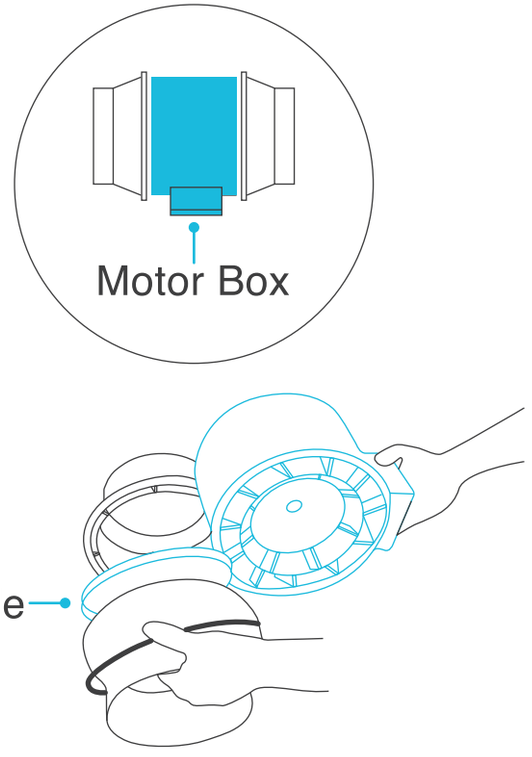
STEP 1

If your model has fixing clamps, use a phillips screw driver and pliers to unscrew the clamps. If your model has built in plastic clamps, pull on the buckle to release it.



STEP 2

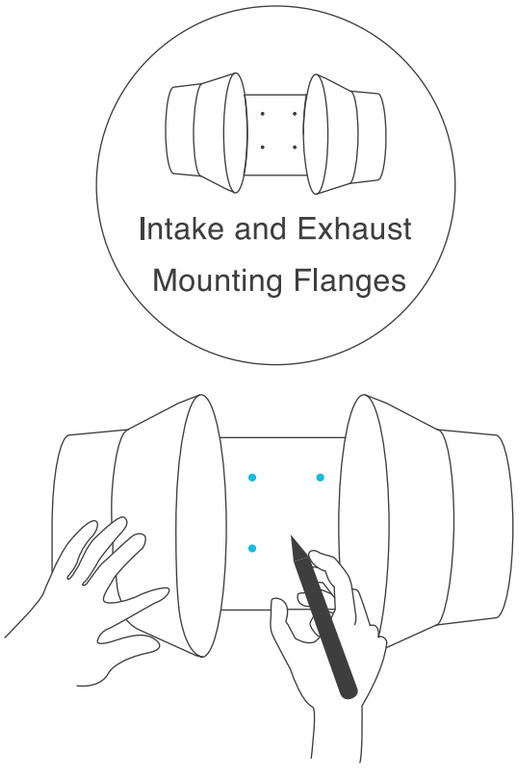
After loosening the fixing clamps, carefully remove the motor box from the intake and exhaust mounting flanges. Also remove the wind circle found between the motor box and intake flange.



INSTALLATION

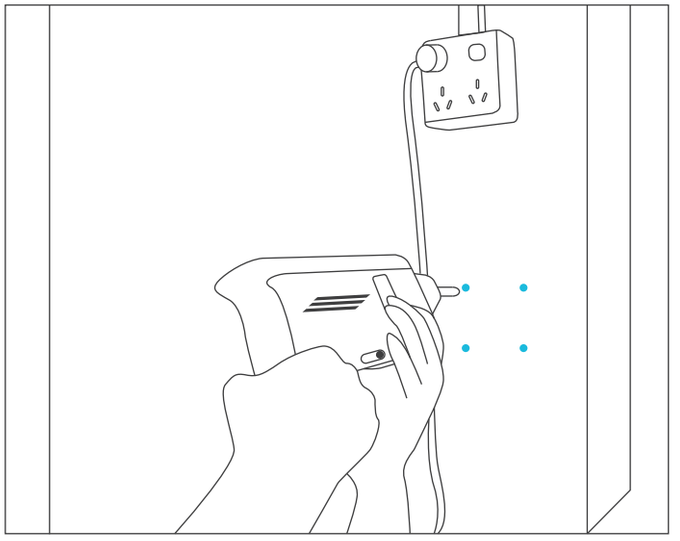
STEP 3

Use the intake and exhaust mounting flanges to position where you wish the mount the duct fan. Use a pen or pencil to mark the four mounting holes.



STEP 4

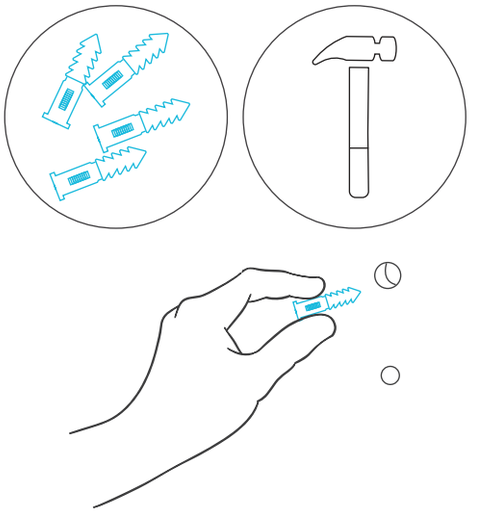
Double check to make sure the location is structurally sound and free from obstructions. Use a power drill to drill the four mounting holes.



INSTALLATION

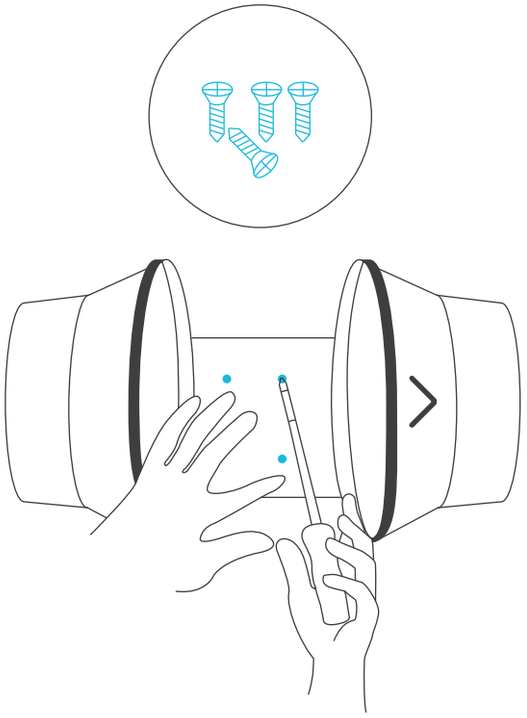
STEP 5

Insert the four wall anchors included with this product in each of the drilled mounting holes. You may need to use a hammer to secure them through the holes.



STEP 6

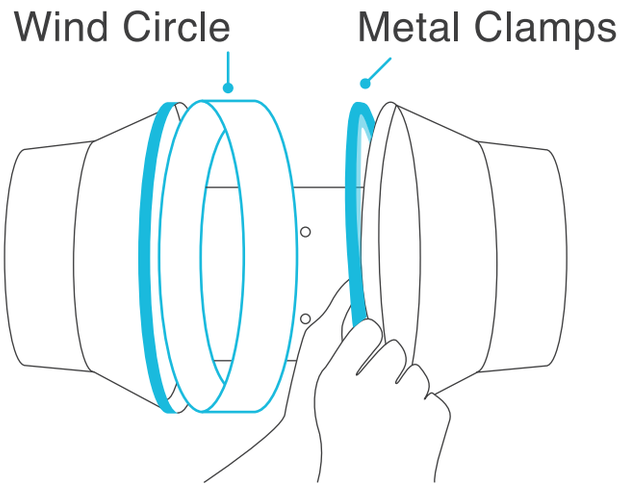
Position the mounting flanges and align the mounting holes with the wall anchors. Use a screw driver or drill to secure the four wood screws through the mounting frame and into the wall anchors. Please make sure the airflow direction marking is aligned with your intended direction.



INSTALLATION

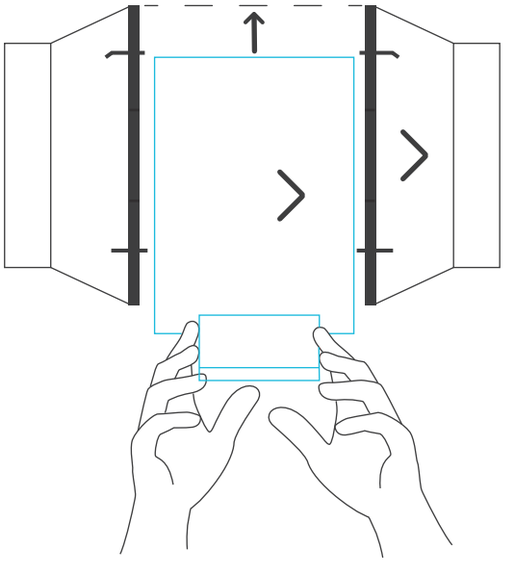
STEP 7

If your model has metal fixing clamps, position them back onto the input and exhaust flanges. Also, remember to position the wind circle back to the flange. Do not tighten the screws yet.



STEP 8

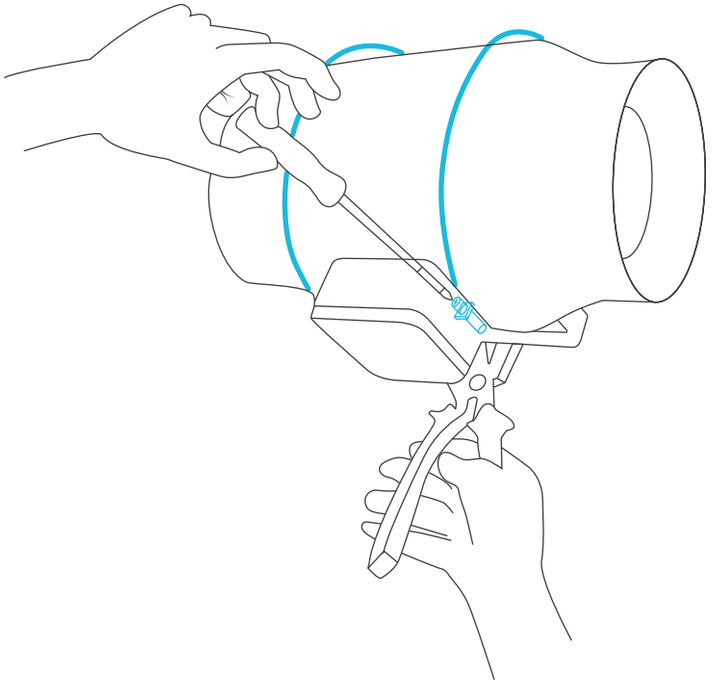
Secure the motor box back onto mounting flanges. Please make sure the airflow direction marking on the motor box matches the marking on the exhaust flange.



INSTALLATION

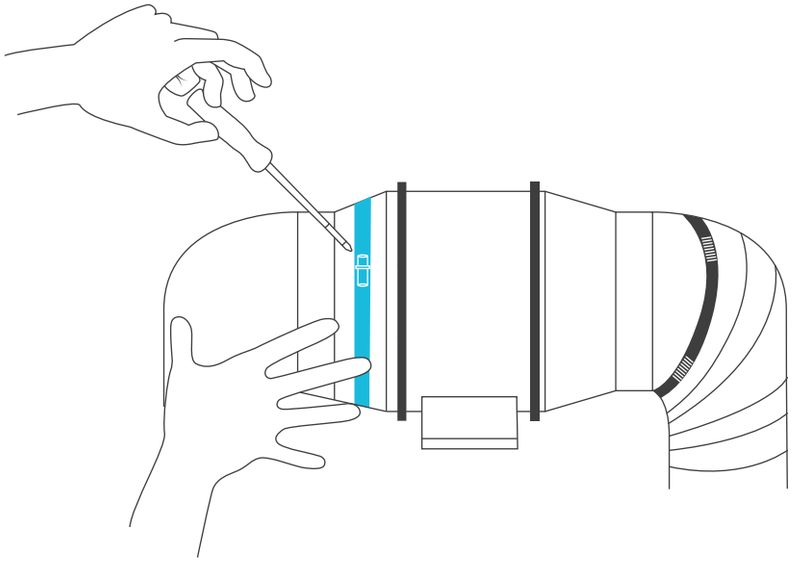
STEP 9

If your model has metal clamps, tighten the clamps using a phillips screw driver and pliers. If your model has plastic clamps, push the buckle back down to tighten.



STEP 10

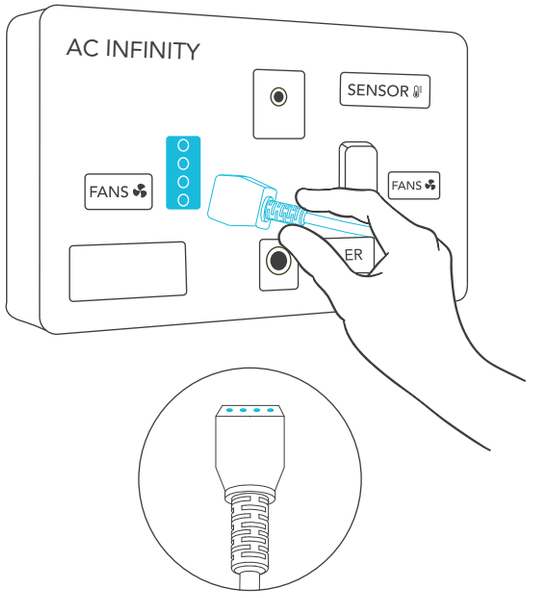
If using a duct tube, position it to fully cover the hole of the exhaust or intake flange. Secure the fan included duct tube clamp over it and tighten with a flathead screw driver.



POWERING AND SETUP

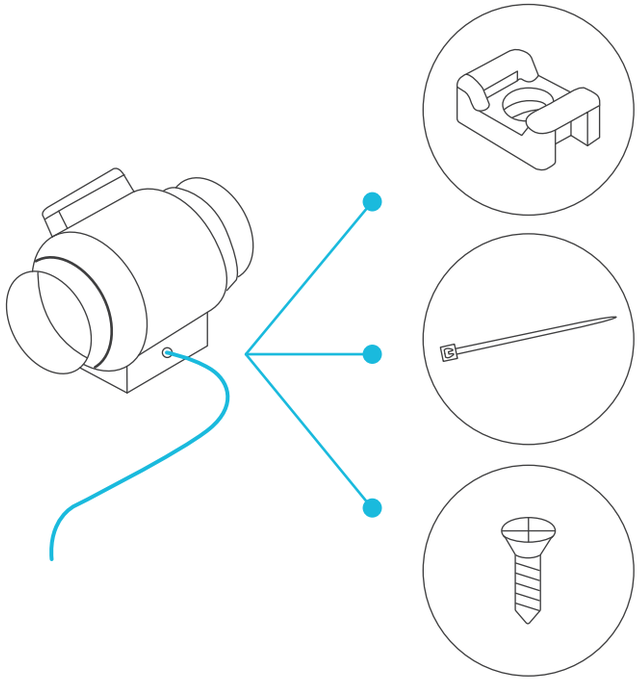
STEP 1

The duct fan unit comes corded with a 4-pin molex connector. Locate the connector and plug it into the back side of thermal controller under “FANS”.



STEP 2

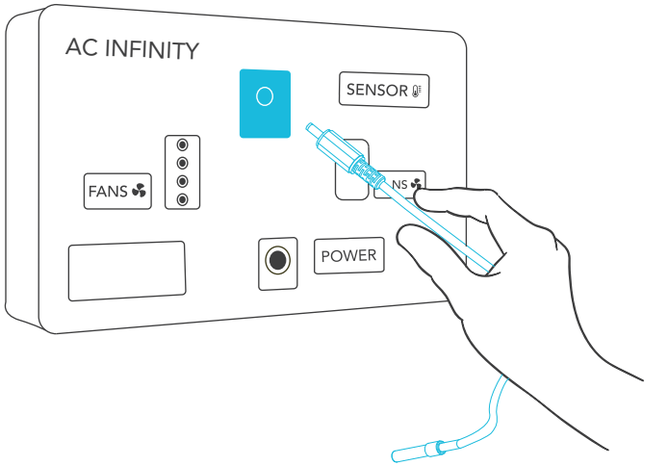
Remember that cord length can be organized using the tie mount, wood screw, and wire tie included with your product. You can secure the tie mount onto a surface using the wood screw. Then wrap the wire tie around the powercord into the tie mount.



POWERING AND SETUP

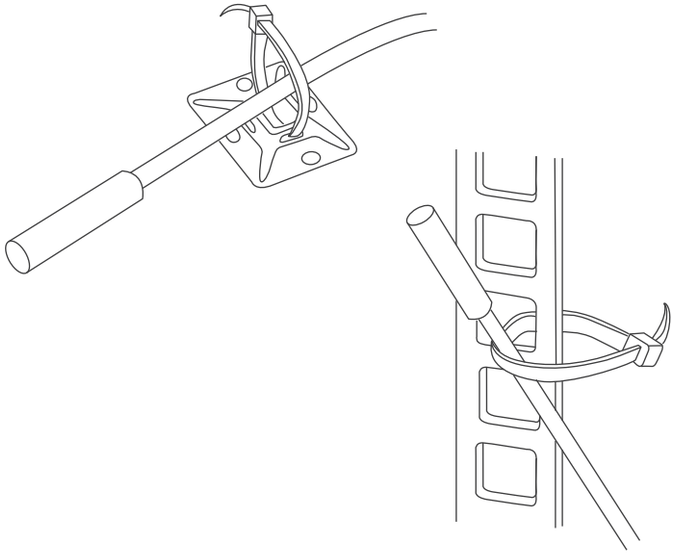
STEP 3

Locate the connector plug of the thermal probe and plug it into the backside of the thermal controller under “SENSOR”.



STEP 4

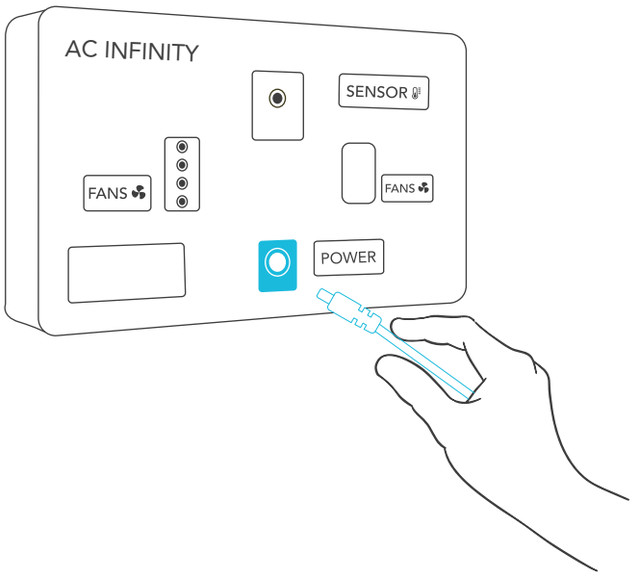
Secure the thermal probe head next your electrontics, preferably near the hottest device. You can use the wire tie to secure the probe onto a rack rail or the cable tie mount to a surface.



POWERING AND SETUP

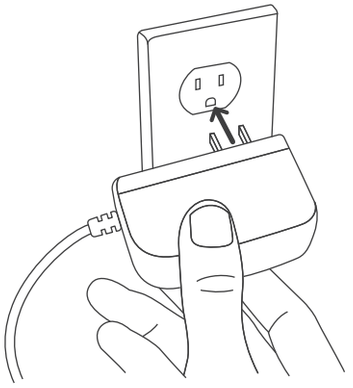
STEP 5

Plug the DC connector of the power adapter into the backside of the thermal controller under “POWER”.



STEP 6

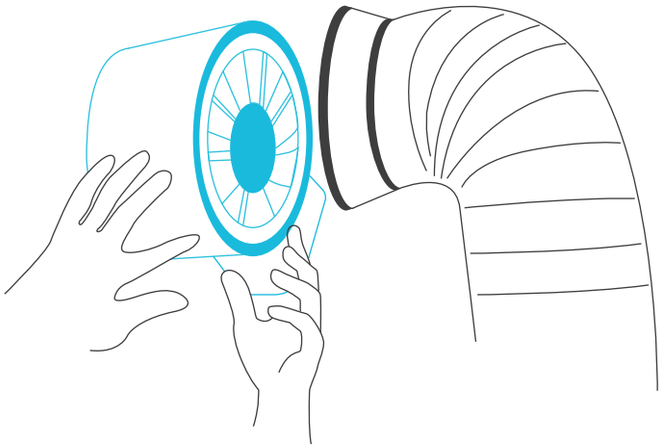
Lastly, plug the power adaper into an AC power outlet. The adapter is rated at 100 to 240V AC 50/60 Hz and a plug adapter can be attached to make it compatible to various outlet types.



CLEANING

STEP 1

Remove the motor box from the mounting flange. Please refer to steps 1 and 2 on page 9 for more information on proper motor box removal.



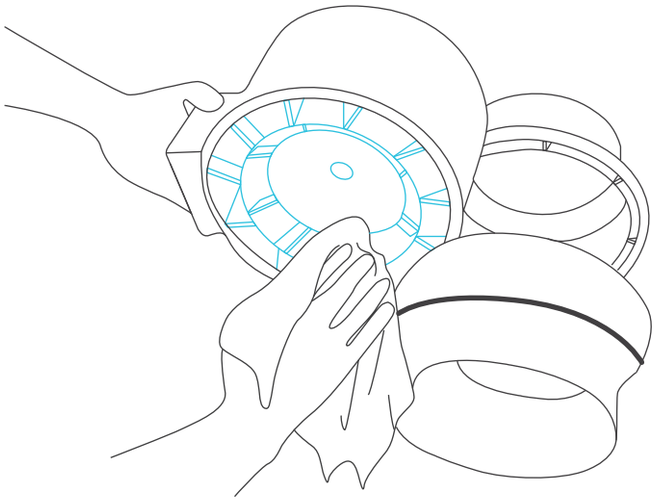
STEP 2

Use a damp cloth to clean the dust and dirt off the impellar and fan blades. Remove the wind circle that's between the motor box and input flange for cleaning.

CLEANING

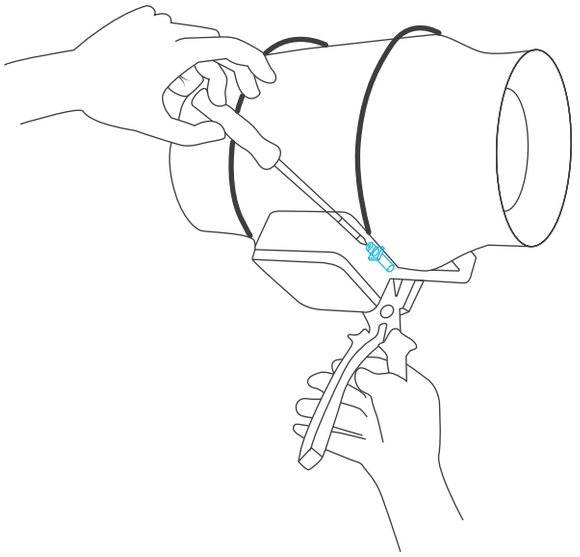
STEP 3

Clean the dust and dirt off the stator blades on the opposite side. Remember to clean the area inside the output and exhaust flanges.



STEP 4

Lastly, secure the motor box back onto the mounting flanges. Please refer to steps 7 through 9 on page 12 and 13 for more information on securing the motor box.



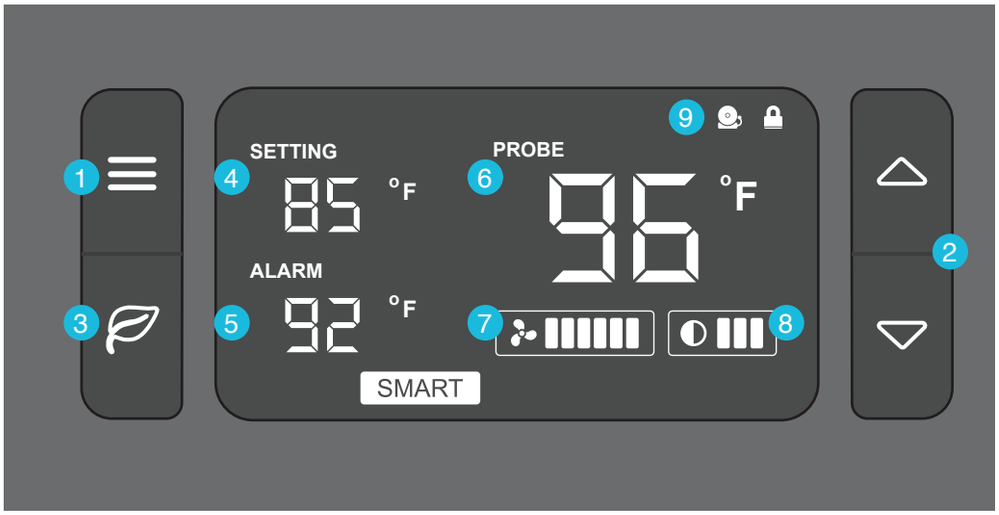
T-SERIES CONTROLLER

PROGRAMMING

1. MODE BUTTON
Cycles through the unit's modes: AUTO, SMART, OFF, ON, ALARM. Hold for three seconds will lock or unlock the display.

2. UP / DOWN BUTTON
The up and down buttons change the setting temp, alarm temp, display brightness, or the speed of the fan.

3. LEAF BUTTON
This turns the display off while allowing the programs to run. Holding will change degrees to Fahrenheit or Celsius.



4. SETTING TEMP
Shows the temperature you set the fans to trigger in AUTO and SMART Mode.

5. ALARM TEMP
Shows the temperature that you set the fan's alarm system to trigger.

6. PROBE TEMP
Actively shows current temperature that the probe is measuring.

7. FAN SPEED
Shows what speed the fans are currently running at. Six speeds are available.

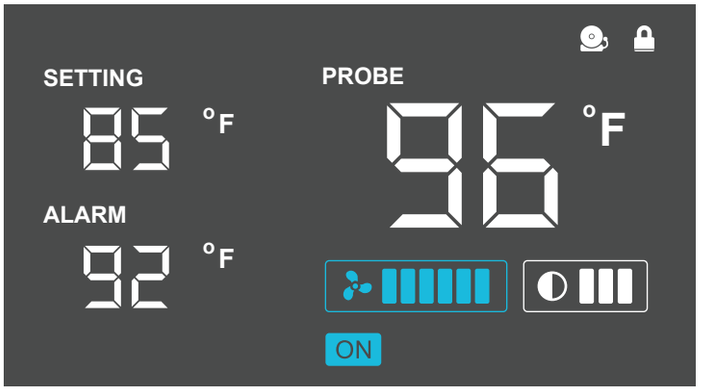
8. BRIGHTNESS
Shows the brightness of the display. Three settings are available.

9. ALERT ICONS
Flashes to indicate if fan failure, alarm, or display lock is being triggered.

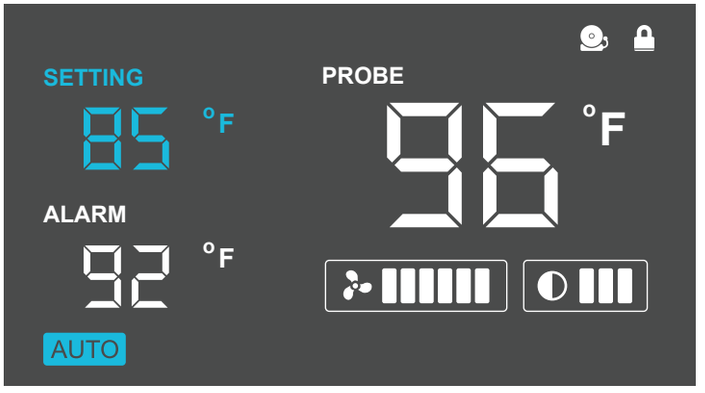
T-SERIES CONTROLLER
PROGRAMMING

QUICK START
Press the MODE button until you are on AUTO mode. This mode works like a thermostat. Press the up and down triangle buttons to change the SETTING temperature on the screen. The PROBE temperature is what the thermal probe is measuring. When the PROBE temperature exceeds the SETTING temperature, the fans will start running.

ON MODE
In this mode, the fans will run non-stop regardless of temperature. Pressing the up and down buttons while in this mode will change the speed of the fan. Whichever speed is designated in this mode will also be the speed used in AUTO Mode and the max speed of the fans in SMART Mode.

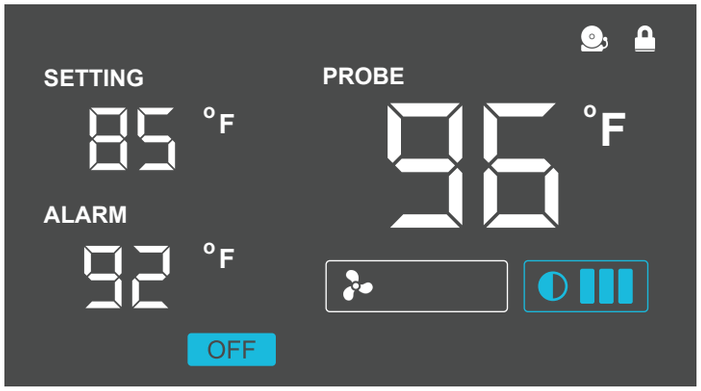


AUTO MODE
This is the thermostat setting where the fans will start running when the PROBE temperature reaches or surpasses the SETTING temperature. The SETTING temperature can be designated by pressing the up and down buttons while in this mode. Once the fans start running, the PROBE temperature would need to fall at least 4° F below the SETTING temp for the fans to stop running. This variation buffer can be changed to 2° F.
See page 23 for more information.

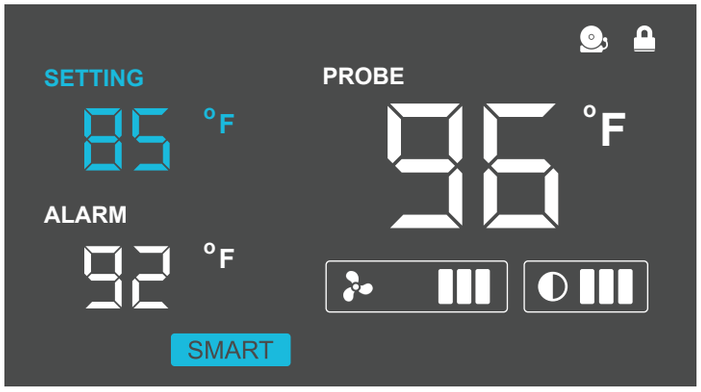


T-SERIES CONTROLLER
PROGRAMMING

OFF MODE
In this mode, the fans are powered off regardless of set temperature or set speed. The backlight setting can be increased or decreased by pressing the up or down buttons while in this mode.



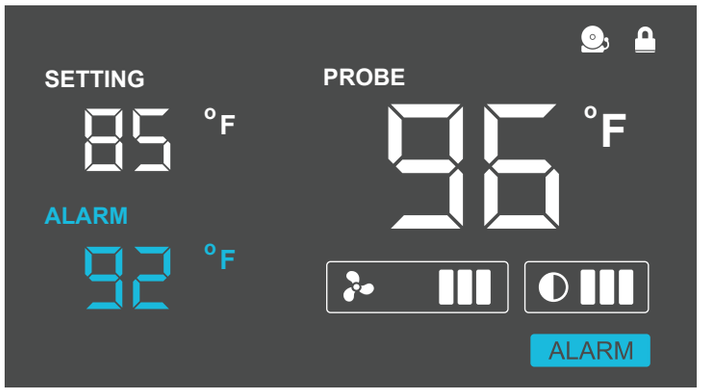
SMART MODE
This is the energy saving mode where the fans will change speed depending on the temperature. The SETTING temperature can be designated by pressing the up and down triangle buttons while in this mode. For every 4°F increment that the PROBE temperature is below the SETTING temperature, the speed of the fans will decrease by one level. This increment can be changed to 2°F; please see page 23 for more information. The fan speed you designated in ON Mode will also be the max speed the fan's can reach. This occurs when the PROBE temperature reaches or exceeds the SETTING temperature.



T-SERIES CONTROLLER
PROGRAMMING

ALARM SETTING

In this mode, you can set what temperature the system's alarm will trigger by pressing the up and down triangle buttons. When the PROBE temperature reaches or exceeds the ALARM temperature, the alarm will activate. The alarm will only activate while the controller is in ON, AUTO, or SMART Mode so please remember to exit ALARM Mode once the alarm has been set. When the alarm is triggered, the fan will run at max speed regardless of mode and will make an audible beep every three seconds. This will keep occurring until the temperature drops below the ALARM temp or if any buttons are pressed.The alarm can be disabled by pressing the UP/DOWN button until the ALARM temp says "OF"



FAHRENHEIT OR CELSIUS

The temperatures displayed can be set to Fahrenheit or Celsius scale by holding the LEAF button until °F or °C is shown after the digits. All digits displayed will be automatically converted to the designated scale.

T-SERIES CONTROLLER
PROGRAMMING

VARIATION BUFFER

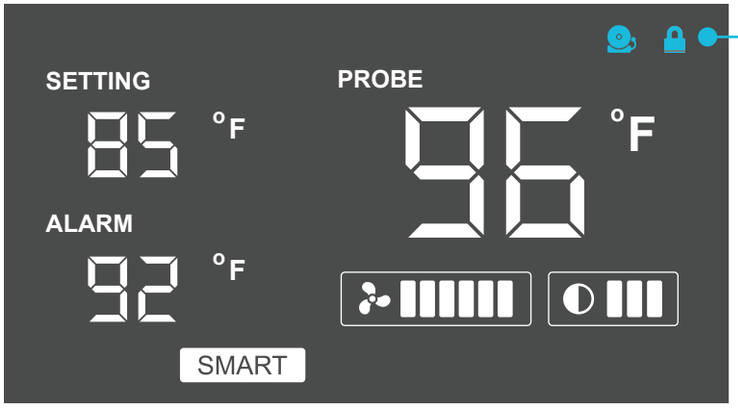
In AUTO mode, a buffer is built in to prevent your fan from turning on and off too quickly due to small variations in the environment. When the PROBE temperature exceeds your SETTING temperature, the fan will start running immediately. The PROBE temperature will need to fall below your SETTING temperature by 4° Fahrenheit or 2° Celsius or more to stop the fans from running. In SMART mode, the speed of the fan will decrease by one level for every 4° Fahrenheit or 2° Celsius that the PROBE temperature is below the SETTING temperature. To change this buffer or increment setting to 2° Fahrenheit or 1° Celsius, hold the MODE button and DOWN button together for three seconds. To change back to 4° Fahrenheit or 2° Celsius, hold the MODE button and UP button together for three seconds.

CONTROLLER LOCK

Holding the MODE button for three or more seconds will lock the controller. The controller will still work as programmed; however, pressing any buttons will not have an effect and will cause the screen lock icon to flash. This option was designed to prevent your controller settings from being changed by accident. Holding the MODE button again for three or more seconds will unlock the controller.

T-SERIES CONTROLLER
PROGRAMMING

ALERT ICONS
On the top right of the display there are two alert icons. They are visible to show that the system's functions are being monitored. They will flash when the controller wishes to alert you that a particular function is being triggered.



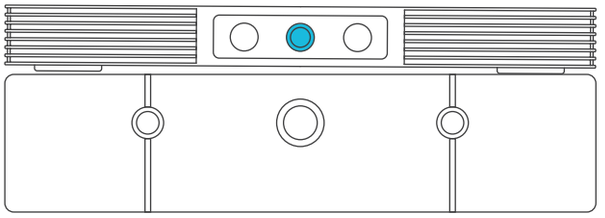
ALARM ALERT
The alarm alert icon will flash when the probe temperature reaches or exceeds the alarm temperature you have set. Please see page 22 for more information on setting up the alarm.

DISPLAY LOCK ALERT
This icon is not visible when the controller is unlocked. The icon will flash when any buttons are pressed while the controller is locked. Please see page 23 for more information on locking the display.

AC INFINITY PRODUCTS

AIRCOM SERIES

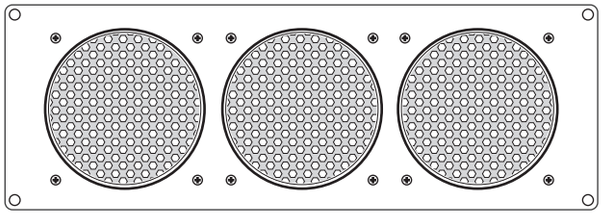
The AIRCOM component fan system cools receivers, amplifiers, and other AV components. S-Series models feature a thermal trigger and speed control. T-Series features a LCD digital display with thermal and speed control, alarm alerts, failure triggers, and backup memory.



PRODUCT	MODEL	DIMENSIONS
AIRCOM S6	AI-ACS6	11.6 x 6.3 x 1.5 in.
AIRCOM S7	AI-ACS7	11.6 x 6.3 x 1.5 in.
AIRCOM S8	AI-ACS8	17 x 13.5 x 1.5 in.
AIRCOM S9	AI-ACS9	17 x 13.5 x 1.5 in.
AIRCOM T8	AI-ACT8	17 x 13.5 x 1.5 in.
AIRCOM T9	AI-ACT9	17 x 13.5 x 1.5 in.

AIRPLATE SERIES

The AIRPLATE series is designed to cool home theater and audio video cabinets. The fans be powered by USB port or power outlet. Includes an inline speed controller and Boost Speed Adapter. The fans can also be temperature controlled with an Advance Thermal Controller (sold separately).



PRODUCT	MODEL	DIMENSIONS
AIRPLATE S1	AI-CFS80BA	4.6 x 4.6 x 1.3 in.
AIRPLATE S3	AI-CFS120BA	6.3 x 6.3 x 1.3 in.
AIRPLATE S5	AI-CFD80BA	8.4 x 4.4 x 1.3 in.
AIRPLATE S7	AI-CFD120BA	11.7 x 6.1 x 1.3 in.
AIRPLATE S9	AI-APS9	17.5 x 6.1 x 1.3 in.

WARRANTY

This warranty program is our commitment to you, the original purchaser, that each product sold by AC Infinity will be free from defects in manufacturing for a period of one year 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 from AC Infinity. 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 one year 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.

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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