



AC INFINITY

# SUNCORE

SEEDLING HEATING MAT

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](http://www.acinfinity.com) and click contact for our contact information.

### EMAIL

[support@acinfinity.com](mailto:support@acinfinity.com)

### WEB

[www.acinfinity.com](http://www.acinfinity.com)

### LOCATION

Los Angeles, CA

## MANUAL CODE SC2008X1

### PRODUCT

SUNCORE A1  
SUNCORE A3  
SUNCORE A5  
SUNCORE A7  
SUNCORE T3  
SUNCORE T5  
SUNCORE T7

### MODEL

AC-SMA1  
AC-SMA3  
AC-SMA5  
AC-SMA7  
AC-SMT3  
AC-SMT5  
AC-SMT7

### UPC-A

819137021167  
819137021174  
819137021181  
819137021198  
819137021211  
819137021218  
819137021235

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# **PRODUCT WARNING**

**DO NOT** SUBMERGE IN WATER.

**DO NOT** place heated objects under this seedling mat.

**DO NOT** puncture or tear open this seedling mat.

**DO NOT** wrap or cover with insulated material.

**DO NOT** use this mat outdoors.

This mat is not recommended for use by children 12 years and under. Children should be supervised to ensure they do not play with this heating mat.

This mat's controller has a polarized plug (one blade wider than the other) and will only fit in your electrical plug one way. If the plug doesn't fit, flip it and try again. If it still doesn't fit, contact us or an electrician for assistance. **DO NOT** trim, cut, or otherwise modify the polarized plug.

Improper use of this seedling mat may result in electrical shock, fires, serious injuries or death.

# KEY FEATURES

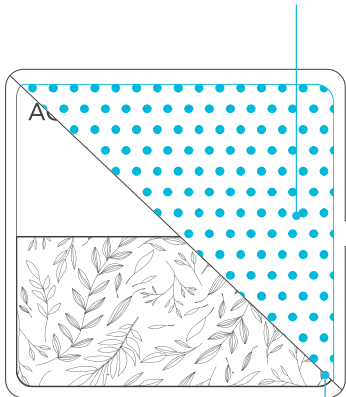
## STORAGE BAG

A water resistant bag made with nylon fabric and drawstring opening to easily store your seedling mat.



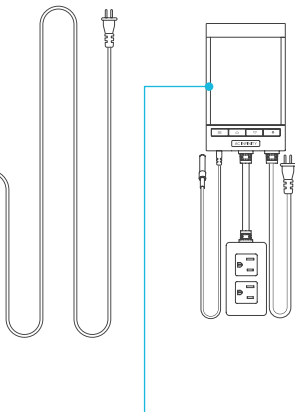
## HEAT DISTRIBUTION

Improve germination and rooting, emitting a steady stream of heat and insulating your seed tray.



## WATER-RESISTANT MAT

IP-67 rated heating pad using multiple layers of PVC matting providing high durability and preventing liquid damage.



## EXTREME TEMP.

Durable build with materials designed to last under extreme temperature and climate conditions.

## HEATING FILM

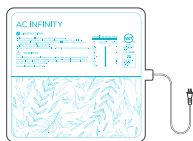
Lined with far infrared technology to evenly provide uniform heating distribution throughout your seedling trays.

## SMART CONTROLLER

T-series models includes a controller that triggers the mat to turn on based on temp., humidity, timer, or schedule.

# PRODUCT CONTENTS

## SUNCORE SEEDLING MAT (Included in both Series)



SEEDLING  
MAT  
(x1)



STORAGE  
MAT COVER  
(x1)



PRODUCT  
MANUAL  
(x1)

---

## SUNCORE SEEDLING MAT (Included in T-Series ONLY)



WALL HANG  
CONTROLLER  
(x1)



SENSOR  
PROBE  
(x1)



WALL-HANG  
WOOD SCREWS  
(x2)



WIRE  
TIE  
(x1)



CABLE TIE  
MOUNT  
(x1)



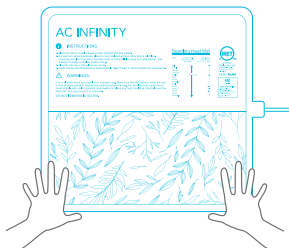
# INSTALLATION

## ALL MODELS

### STEP 1

Unroll the seedling mat flat on to the ground.

**\*Do not allow the mat to overlap on to itself.**

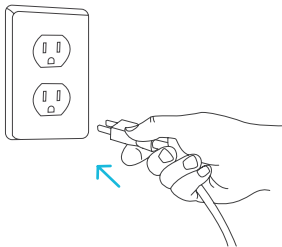


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### STEP 2

Connect the AC power plug to a power outlet to turn on the seedling mat.

For T-series models, please continue to pages 10 to 12 to setting up the controller with the mat.

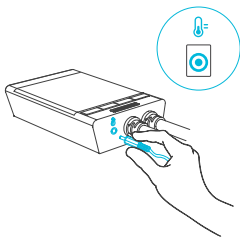


# INSTALLATION

## T-SERIES MODELS

### STEP 1

Locate the connector plug of the sensor probe and plug it into the sensor port at the bottom side of the controller.

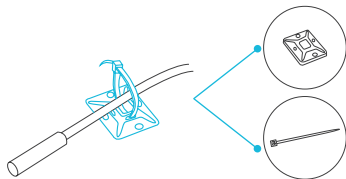


### STEP 2

Position the corded sensor probe and secure it by using the included zip ties and tie mounts if needed.

The probe can be placed inside a humidity dome seedling tray to monitor the current levels.

\*Do not allow the probe to be submerged in water.

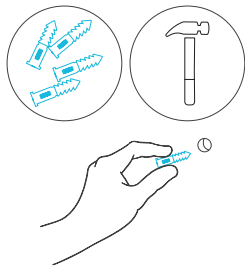


# INSTALLATION

## T-SERIES MODELS

### STEP 3

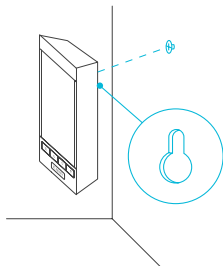
To mount the controller, locate a spot free of obstruction. Secure the controller using the included mounting screw set.



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### STEP 4

On the back end of the controller is an opening to hang the device.

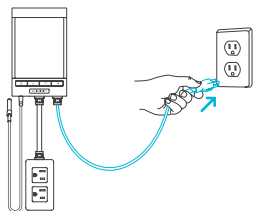


# INSTALLATION

## T-SERIES MODELS

### STEP 5

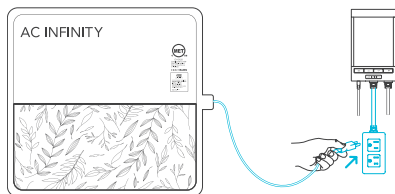
Lastly, to power the controller, plug the outlet's power cord into an AC power outlet.



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### STEP 6

To power the seedling mat with the controller, plug it into of the two ac outlets located on the controller.



# STARTER GUIDE

## GROWING SEASONS

Use this seedling mat to get a head start on the gardening season. Start the germination process during late winter or spring, especially if you are in a colder region.

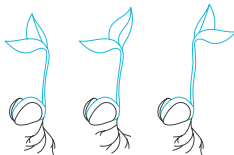
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## GERMINATION

Different seeds require different temperatures to germinate. Before you begin, refer to your seed package and the table on the seedling mat for recommended temperature settings.

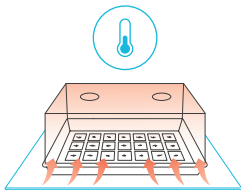
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## TEMPERATURE

If your seed packet does not specify a temperature, keep the temperature between 65°F and 75°F (18-24°C).

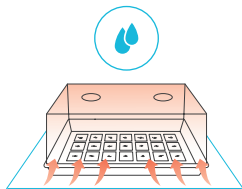
Note: Make sure to also keep track of the ambient room temperature; along with your local weather, this can also affect your germination process.



# STARTER GUIDE

## HUMIDITY

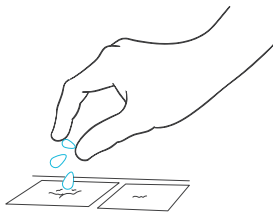
Humidity domes and plastic covered pots can be used alongside the seedling mat to introduce moisture, which help accelerate plant growth.



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## SOWING SEEDS

Sow 2-3 seeds per cell; not every seed will germinate. Cover the seeds completely with your grow media. Set the optional humidity dome over the tray. Place the seed tray on the seedling mat and turn it on to begin heating.

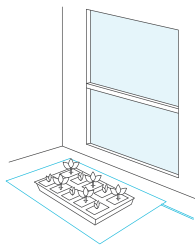


# STARTER GUIDE

## LIGHTING

If you have a lot of light coming into your home, you may place the container by a bright, south-facing window. Rotate the tray daily.

Be careful when using the seedling mat along with grow lights; this may dry out your soil and overheat your seedlings' roots.

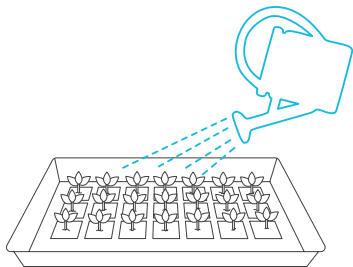


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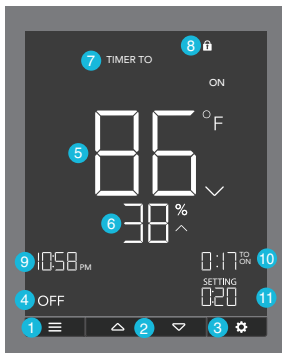
## WATERING

Before you use your seedling mat, water your seed tray's starter mix/pellets, which should appear dark brown. Dry off any excess water. Add small amounts of water whenever the mix/pellets appear light brown.

Once the seeds begin to germinate, prop up your greenhouse dome about 1-1.5 inches. When half of the tray has germinated seedlings, remove the tray from the seedling mat and greenhouse dome.



# PROGRAMMING



## 1. MODE BUTTON

This button cycles through each of the controller's mode: OFF, ON, AUTO (4 triggers), TIMER TO ON, TIMER TO OFF, CYCLE (On and Off), and SCHEDULE (On and Off).

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## 2. UP / DOWN BUTTON

Adjusts the parameters of the mode that you are in. In most modes, the up button increases and down button decreases the setting. Holding both buttons simultaneously sets the parameters to off.

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## 3. SETTING BUTTON

This button cycles through each of the controller's settings: DISPLAY BRIGHTNESS, F/C, CLOCK, CALIBRATION (Temperature and Humidity), and BUFFER (Temperature and Humidity).

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## 4. OUTLET STATUS

Displays the outlet controller's power status, indicating whether or not electricity is being fed to your device. ON will display if your device is being powered and OFF will display if your device is not being powered.



# PROGRAMMING

## 5. PROBE TEMPERATURE

Current temperature that the probe is detecting. Displays "--" if no probe is plugged in. Includes a trend indicator that signals a rise, steady, or fall in temperature within the last hour.

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## 6. PROBE HUMIDITY

Current humidity that the probe is detecting. Displays "--" if no probe is plugged in. Includes a trend indicator that signals a rise, steady, or fall in humidity within the last hour.

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## 7. CONTROLLER MODE

Displays the mode that the controller is currently in. Pressing the mode button cycles through the available modes.

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## 8. STATUS ICONS

Flashes or displays the alert icons from the controller. Icons include TIMER ALERT and DISPLAY LOCK.

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## 9. CURRENT TIME

Displays the current time. The internal battery sustains the clock so it does not default to 00:00 if power is cut off. Please see page 18 for instructions on how to set up the clock time.

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## 10. COUNTDOWN

Displays TO ON or TO OFF countdown to show the amount of time before the timer to on, timer to off, cycle, or schedule modes activates or deactivates the fan. TO ON represents the amount of time that is left before your device turns on. TO OFF represents the amount of time that is left before your device turns off.

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## 11. USER SETTING

Displays the value you have set for the current mode that you are in. Press the up or down button to adjust the value.

# PROGRAMMING

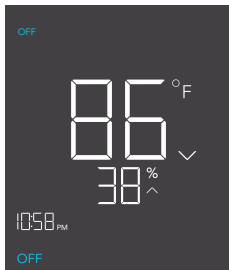
## CONTROLLER MODES

Pressing the mode button will cycle through the controller's available programming modes: OFF, ON, AUTO (4 triggers), TIMER TO ON, TIMER TO OFF, CYCLE (On and Off), and SCHEDULE (On and Off).

### OFF MODE

Your device will be off regardless of temperature humidity, and time-based triggers.

Note that you can hold the mode button while in any other mode or settings to quickly jump back to OFF Mode.



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### ON MODE

Your device will be on regardless of temperature humidity, and time-based triggers.



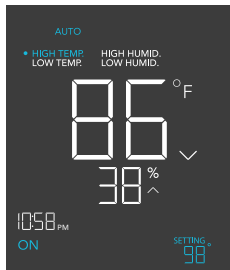
# PROGRAMMING

## AUTO MODE (HIGH TEMPERATURE TRIGGER)

Pressing the up or down button sets the high temperature trigger. Your device will be turned on if the probe's reading meets or exceeds this threshold.

If the probe's reading falls below this trigger point, your device will be turned off. This turn-off point can be adjusted using the buffer setting as shown on page 26.

You may also set this trigger below the low temperature trigger to create a specific range, in which your device will only be on when it's within this range.



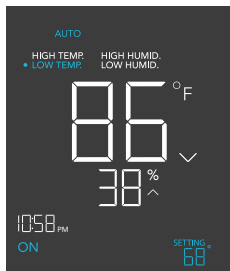
Note that this trigger can activate as long as you are in AUTO Mode, even if you are viewing a different trigger within AUTO Mode.

## AUTO MODE (LOW TEMPERATURE TRIGGER)

Pressing the up or down button sets the low temperature trigger. Your device will be turned on if the probe's reading meets or falls below this threshold.

If the probe's reading rises above this trigger point, your device will be turned off. This turn-off point can be adjusted using the buffer setting as shown on page 26.

You may also set this trigger above the high temperature trigger to create a specific range, in which your device will only be on when it's within this range.



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.

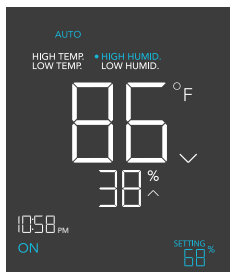
# PROGRAMMING

## AUTO MODE (HIGH HUMIDITY TRIGGER)

Pressing the up or down button sets the high humidity trigger. Your device will be turned on if the probe's reading meets or exceeds this threshold.

If the probe's reading falls below this trigger point, your device will be turned off. This turn-off point can be adjusted using the buffer setting as shown on page 26.

You may also set this trigger below the low humidity trigger to create a specific range, in which your device will only be on when it's within this range.



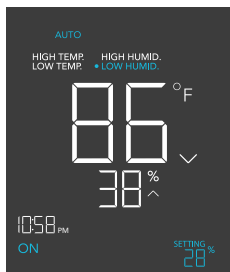
Note that this trigger can activate as long as you are in AUTO Mode, even if you are viewing a different trigger within AUTO Mode.

## AUTO MODE (LOW HUMIDITY TRIGGER)

Pressing the up or down button sets the low humidity trigger. Your device will be turned on if the probe's reading meets or falls below this threshold.

If the probe's reading rises above this trigger point, your device will be turned off. This turn-off point can be adjusted using the buffer setting as shown on page 26.

You may also set this trigger above the high humidity trigger to create a specific range, in which your device will only be on when it's within this range.



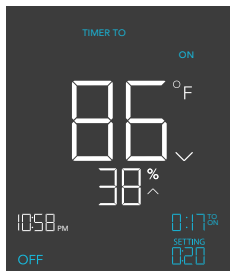
Note that this trigger can activate as long as you are in AUTO Mode, even if you are viewing a different trigger within AUTO Mode.

# PROGRAMMING

## TIMER TO ON MODE

In this mode, press the up or down button to set a countdown time. During the countdown, your device will be set to off. Once the countdown ends, your device will trigger to turn on.

The countdown will begin if no buttons are pressed for 5 seconds. The time left on the countdown is shown on the display, in the section above the setting. Leaving the timer mode while the countdown is running will pause it until you return to this mode.

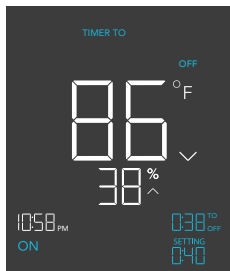


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## TIMER TO OFF MODE

In this mode, press the up or down button to set a countdown time. During the countdown, your device will be set to on. Once the countdown ends, your device will trigger to turn off.

The countdown will begin if no buttons are pressed for 5 seconds. The time left on the countdown is shown on the display, in the section above the setting. Leaving the timer mode while the countdown is running will pause it until you return to this mode.

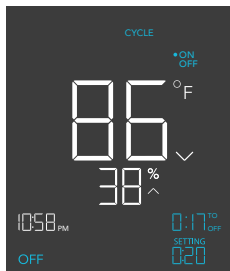


# PROGRAMMING

## CYCLE MODE (ON AND OFF)

In this mode, set an on duration and an off duration for your device to cycle through continuously. Press the up or down button to first set a duration for your device to be on and then press the mode button again, to set a duration for device to be off.

The countdown will begin if no buttons are pressed for 5 seconds. The time left on the countdown before the next on or off phase is shown on the display, in the section above the setting. Leaving the cycle mode while the countdown is running will pause it until you return to this mode.

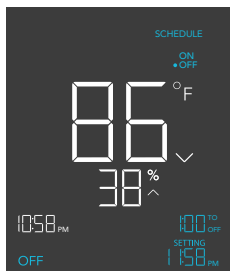
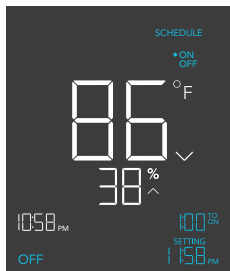


# PROGRAMMING

## SCHEDULE MODE (ON AND OFF)

In this mode, set an on clock-time and an off clock-time schedule for your device to follow through daily. Press the up or down button to first set up an on clock-time for when your device will be on and then press the mode button again, to set an off clock-time for when your device will be off. Please be sure to set the current clock time under settings.

The countdown will begin if no buttons are pressed for 5 seconds. The time left on the countdown before the next on or off phase is shown on the display, in the section above the setting. Your device will not follow this schedule if you leave this mode. If you reenter the schedule mode, it will continue to follow the latest schedule you have set.



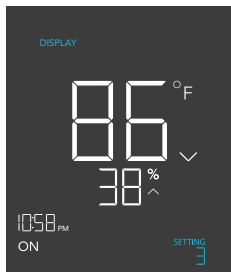
# PROGRAMMING

## CONTROLLER SETTINGS

Pressing the setting button will cycle through the controller's available settings: DISPLAY, F/C, CLOCK, CALIBRATION TEMPERATURE, CALIBRATION HUMIDITY, BUFFER TEMPERATURE, and BUFFER HUMIDITY.

### DISPLAY SETTING

In this setting, adjust the brightness of the display and auto-dimming. Press the up or down button to cycle through 1, 2, 3, A2 and A3. The highest brightness is 3 while the lowest brightness is 1. The settings 1, 2, and 3 are not auto-dimming, and the display will continuously be shown at that brightness level. In A2, the display will be shown at brightness 2 but fall to brightness 1 whenever the controller is not being adjusted after 15 seconds. In A3, the display will be shown at brightness 3 but fall to brightness 1 whenever the controller is not being adjusted after 15 seconds.



### F/C SETTING

In this setting, change the displayed units to Fahrenheit or Celsius. Press the up or down button to cycle through F and C. All displayed units on the controller will change automatically with your setting.

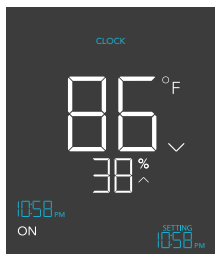




# PROGRAMMING

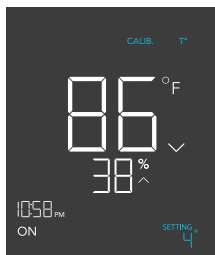
## CLOCK SETTING

In this setting, adjust the current clock time. Press the up or down button to increase or decrease the time. Once you cycle through 12:00 each time, the units will automatically change to AM or PM. The current clock time will be shown at the lower left corner of the display.



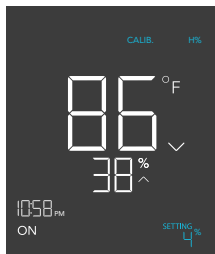
## CALIBRATION TEMPERATURE SETTING

In this setting, adjust the temperature reading that the sensor probe is measuring. Press the up or down button to increase or decrease the data figure by 2°F (or 1°C) increments. The calibration cycle ranges from -8°F to 8°F (or -4°C to 4°C) and will be applied to the sensor probe's measurements.



## CALIBRATION HUMIDITY SETTING

In this setting, adjust the real humidity reading that the sensor probe is measuring. Press the up or down button to increase or decrease the data figure by 1% increments. The calibration cycle ranges from -8% to 8% and will be applied to the sensor probe's measurements.



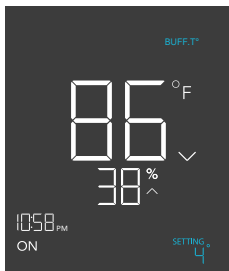
# PROGRAMMING

## BUFFER TEMPERATURE SETTING

The buffer that used in auto mode temperature trigger can be adjusted to prevent the device from turning on and off too quickly due to variations in the environment.

For high temperature triggers, once your device is on, it will only turn off when the measured temperature falls below the set temperature by the buffer number you have set here.

For low temperature triggers, once your device is on, it will only turn off when the measured temperature rises above the set temperature by the buffer number you have set here.



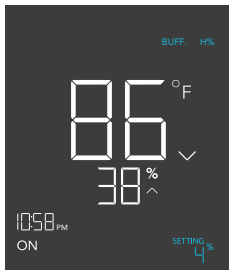
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## BUFFER HUMIDITY SETTING

The buffer that used in auto mode humidity trigger can be adjusted to prevent the device from turning on and off too quickly due to variations in the environment.

For high humidity triggers, once your device is on, it will only turn off when the measured humidity falls below the set humidity by the buffer number you have set here.

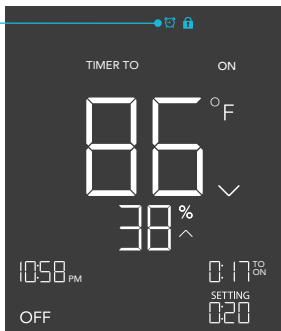
For low humidity triggers, once your device is on, it will only turn off when the measured humidity rises above the set humidity by the buffer number you have set here.



# 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.



### TIMER ALERT

This icon will flash when a countdown has completed for TIMER TO ON, TIMER TO OFF, CYCLE, or SCHEDULE Mode.



### DISPLAY LOCK ALERT

This icon will display when you lock the controller. The icon will flash and beep if you attempt to adjust the controller while it is still locked.

# OTHER SETTINGS

## FACTORY RESET

To reset the controller back to factory settings, hold the mode button, the up button, and the down button simultaneously for four or more seconds. Resetting the controller will clear all user set parameters in every controller mode and settings.

---

## CONTROLLER LOCK

To lock the controller to prevent settings to be changed accidentally, hold the settings button for two or more seconds. While the display locked, you will not be able to switch modes or change any settings. You will be able to hide the screen by pressing the settings button while the controller is locked. Holding the settings button for two or more seconds will unlock the controller.

---

## HIDE SCREEN

The screen on the display can be hidden but all programs and settings will continue to run in the background. This can be done by first holding the settings button to lock the controller. Once locked, pressing the setting button will hide and unhide the screen.

---

## JUMP TO OFF MODE

Holding the mode button for two or more seconds while in any mode or settings will automatically jump to OFF Mode. This will not work if the controller is locked.

---

## SET MODE PARAMETERS TO OFF

Holding the up and down button simultaneously will automatically set the parameter for the mode you are in to OFF or 0. For trigger modes, the OFF parameter is usually located between the highest and lowest settings point. This shortcut allows the user to quickly jump to OFF without cycling.

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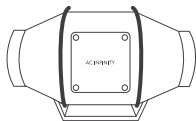
## AUTO INCREASING OR DECREASING

Holding the up or down button will increase or decrease user parameters automatically until the user releases the up or down button.

# AC INFINITY PRODUCTS

## Inline Fans

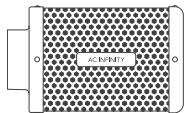
The CLOUDLINE series is a line of duct fans designed to quietly ventilate AV rooms and closets, as well as various DIY air circulation and exhaust projects. Features a thermal controller with intelligent programming that will automatically adjust duct fan speeds in response to changing temperatures.



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## Carbon Filter

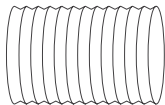
The duct carbon filter is designed to eliminate odors and chemicals for grow tents and hydroponic spaces. It utilizes premium grade Australian charcoal that features greater absorption power and a longer lifespan. Enables maximum airflow pass through as part of an intake or an exhaust system.



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## Ducting Tubes

The four-layer ducting tube is used to direct airflow, designed for ventilation systems in applications like HVAC, dryers, and grow rooms. It is highly durable and flexible, and can be used anywhere from tight spaces to wide open areas.



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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 expressly 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.

For more information about our dealers and distributors, please contact our customer service at support@acinfinity.com or (626) 923-6399 Monday to Friday (9:00 am to 5:00 pm PST).



**If you run into any issues with this product, contact us and we'll happily issue a replacement or a full refund!**

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