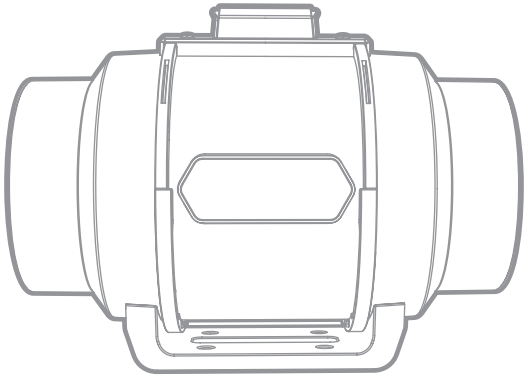
AITEC AC



CLOUDSTORM

MIXED FLOW INLINE FAN SYSTEMS

User Manual

WELCOME

Thank you for choosing AITECAC. We place great emphasis on product quality and friendly customer service. If you have any questions or suggestions, please don't hesitate to contact us.

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E-MAIL
support@aitecac.com

WEB
www.aitecac.com

TEL
(888) 990-7469

PRODUCT	MODE
CloudStorm S4	Manual control
CloudStorm S6S	Manual control
CloudStorm S8	Manual control
CloudStorm T4	Program control
CloudStorm T6S	Program control
CloudStorm T8	Program control

SECURITY WARNING

Please install the fan in a fixed place and tighten the fixing screws. Make sure there are no obstacles nearby before operating it.

Don't touch the blades with your hands when the fan is running.

Don't remove or modify the motor yourself.

Please unplug the power cord if you don't use the device for a long time.

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KEY FEATURES

QUIET PWM MOTOR

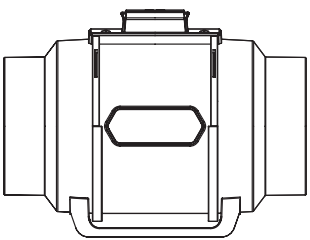
Brushless DC PWM motor —— precise speed control, reduced motor noise, and energy-efficient performance.

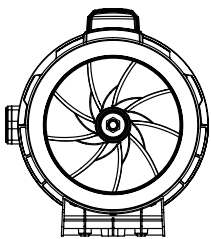
BOOST TURBO BLADE

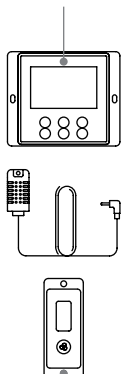
Turbocharged turbine blades provide a high static pressure output for stronger wind.

SMART CONTROLLER

Programmable control, temp., humidity and time parallel control to meet your needs.







QUICK RELEASE DESIGN

Quick release design, easy to disassemble and assemble, with IP-44 seal protection, rated with high resistance to liquids and dust.

DUAL BALL BEARINGS

Double ball bearing and standard with each factory products in the action balance test, so that the product run more quiet longer life.

SPEED CONTROLLER

Controls five speeds with a single button. Controller with memory function, after switching on, the last setting can be restored.

PRODUCT CONTENTS

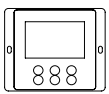
CLOUDSTORM S-Series

SPEED CONTROLLER (×1)

MACHINE SCREWS (WALL MOUNT) (×2)

WOOD SCREWS (WALL MOUNT) (×2)

CLOUDSTORM T-Series



SMART CONTROLLER (×1)

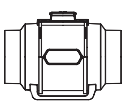
SENSOR (×1)

WOOD SCREWS (WALL MOUNT) (×3)

MACHINE SCREWS (WALL MOUNT) (×2)

WOOD SCREWS (WALL HANG) (×2)

FAN UNIT (Included in both S-Series and T-Series)



DUCT FAN SYSTEM (×1)

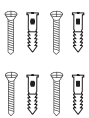
DUCT CLAMP (×2)

Cable Tie (×2)

CABLE TIE MOUNT (×2)

WOOD SCREWS (×4)

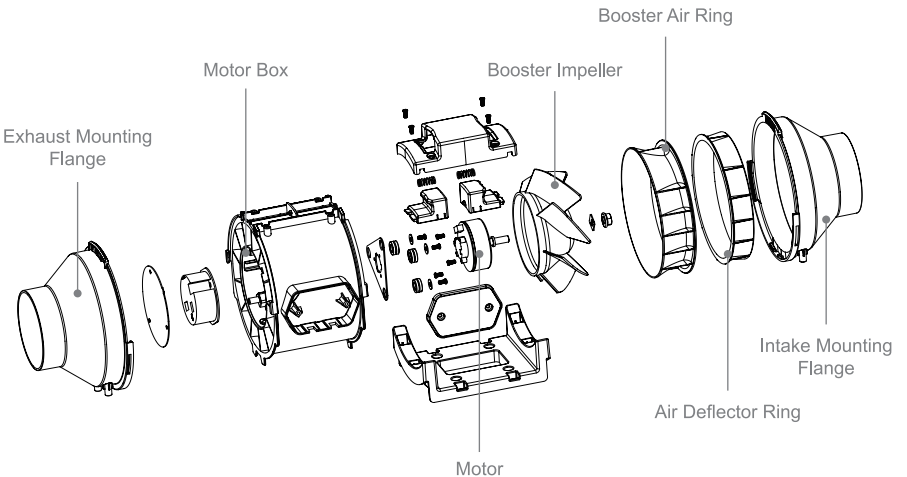
MACHINE SCREWS (WALL MOUNT) (×4)



WOOD SCREWS (WALL HANG) (×4)

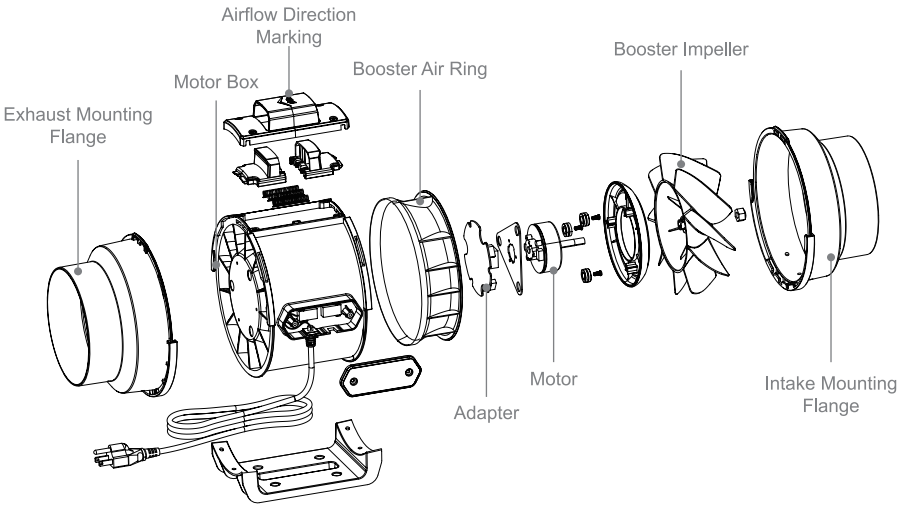
PRODUCT CONTENTS

T4/S4



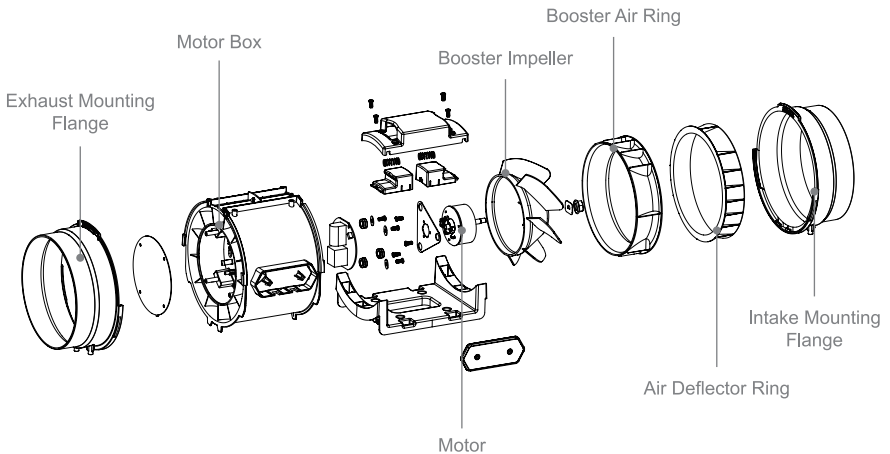
PRODUCT CONTENTS

T6S/S6S



PRODUCT CONTENTS

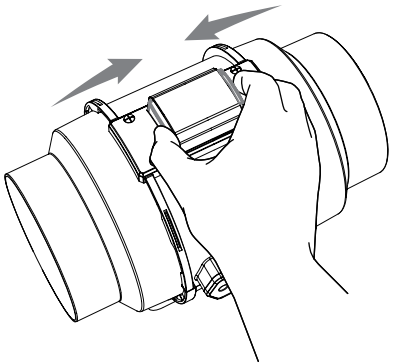
T8/S8



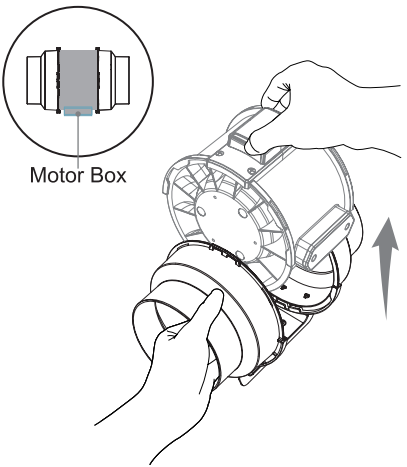
INSTALLATION

MOUNTING

STEP 1
Hold the quick-release button at the top.



STEP 2
Remove the motor box from the flange bracket.

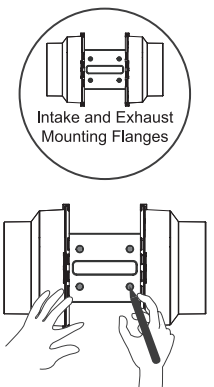


INSTALLATION

MOUNTING

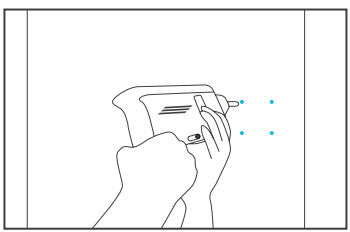
STEP 3

Use the flange brackets to locate where you want to install the fan. Mark the four mounting holes.



STEP 4

Drill four holes at the marked locations. Make sure that your installation site is structurally sound and free of installation obstructions.

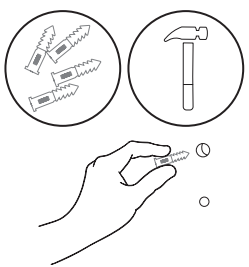


INSTALLATION

MOUNTING

STEP 5

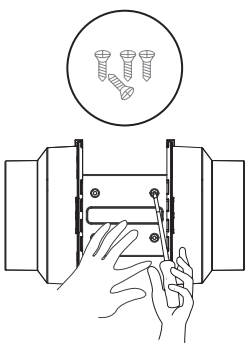
If you're mounting to a concrete/brick wall, you'll need to use expansion screws, which are plastic anchors inserted into the wall's mounting holes. You must use a hammer to make sure they're in the right place.



STEP 6

Align the mounting hole of the fan with the mounting position of the wall plate and fasten the flange frame to the mounting position with four screws or expansion screws.

Make sure that the arrow of the airflow points in the desired direction.

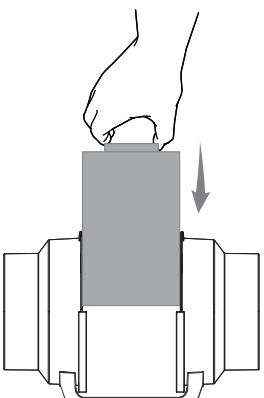


INSTALLATION

MOUNTING

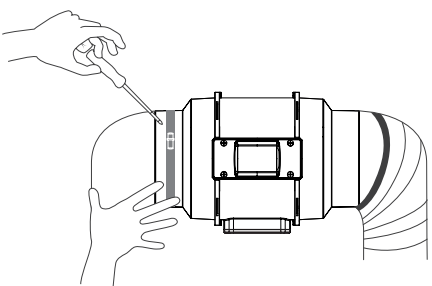
STEP 7

Put the motor box back into the flange bracket, ensuring that the direction of the airflow arrow is consistent with the direction of the airflow you need.



STEP 8

If you're installing ductwork, attach it to both ends of the fan with the supplied pipe clamps to ensure a tight seal.

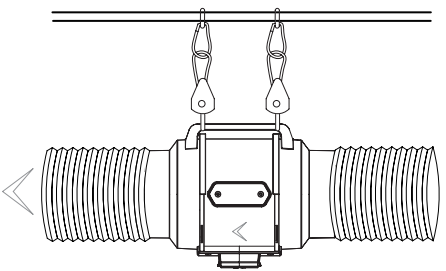


INSTALLATION

CONFIGURATION SET-UP

STEP 9 (a) - Hanging Upward

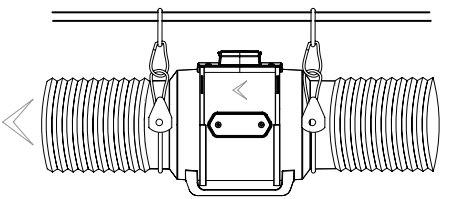
When installing with rope hangers (sold separately), loop the ropes around the flanges and pull the rope tight to secure the fan.



STEP 9 (b) - Hanging Downward

You can also hang the fan by looping the rope hangers around the mounting plate.
Tighten the rope to secure the fan.

Make sure the fan's airflow arrow is pointing towards your desired direction.



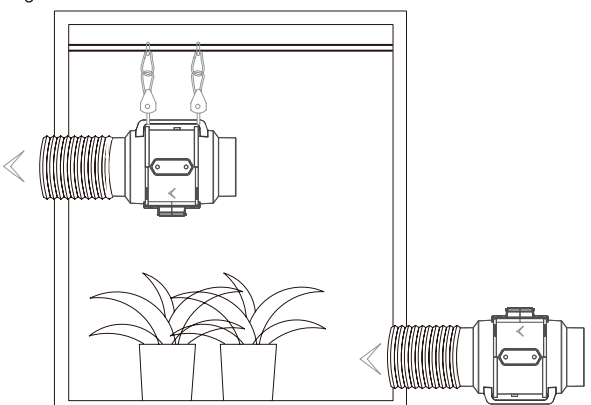
INSTALLATION

CONFIGURATION SET-UP

Intake and Exhaust

This fan can be used as both intake and exhaust fan in grow rooms and larger grow tents.
For optimal ventilation of the entire room, the intake fan or vent - if you aren't using a fan - must be located in a lower corner of your grow room. The exhaust fan must be hung (see below) or mounted at the highest possible opposite corner.

Make sure that the arrow of the supply fan points towards your grow tent and the arrow of the exhaust fan points away from your grow tent.

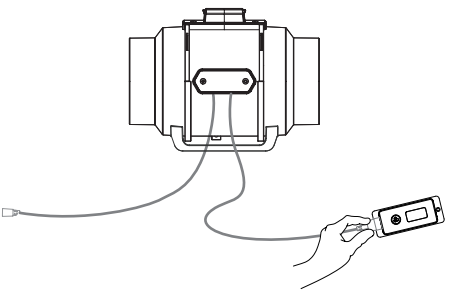


POWERING AND SETUP

S-SERIES

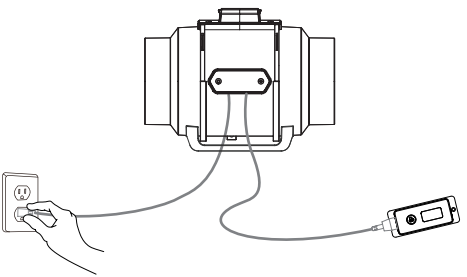
STEP 1

Plug the 4-pin connector of the duct fan into the connector of the speed controller on the top side.



STEP 2

Finally, to power the both the fan and controller, plug the fan's power cord into an AC power outlet.

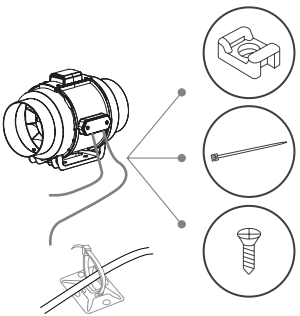


POWERING AND SETUP

T-SERIES

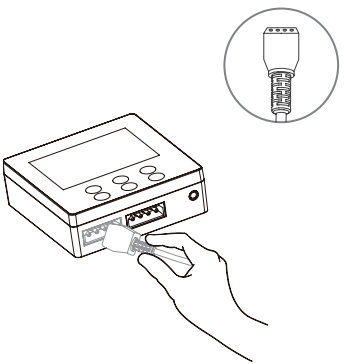
STEP 1

You can fix the cables with cable ties, wood screws and cable ties included with this fan.



STEP 2

Plug the duct fan's 4-pin plug connector into the universal controller's port signified by the sketch.

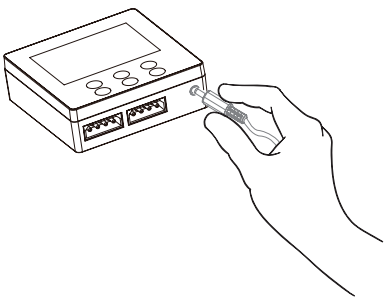


POWERING AND SETUP

T-SERIES

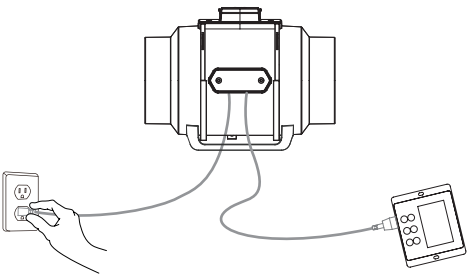
STEP 3

Plug the sensor plug into the 3.5 mm jack on the controller. Place the probe near your plants in your grow tent to get the most accurate readings.

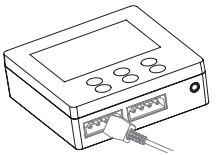


STEP 4

Finally, to power both the fan's and controller, plug the fan's power cord into an AC power outlet.

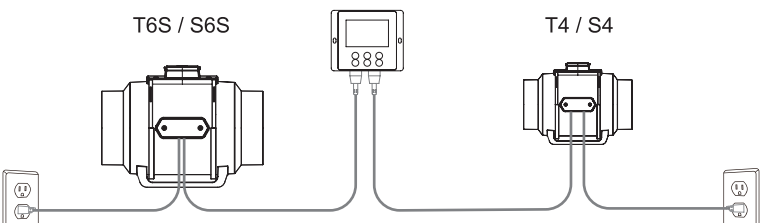


ADDING MORE FANS



The Smart Controller for the CLOUDSTORM T-Series has an additional port so you can add an S-Series fan to power and control two fans together.
Please see below for limitations.

Dual Connection

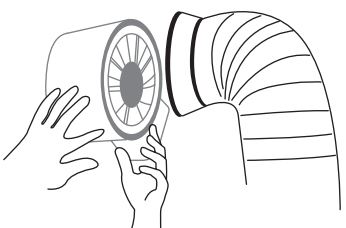


CLEANING

STEP 1

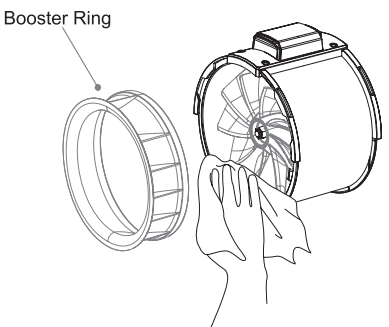
CLEANING

Remove the motor box from the mounting flag. (Refer to the “Installation” section of this manual for instructions on how to remove the motor box).



STEP 2

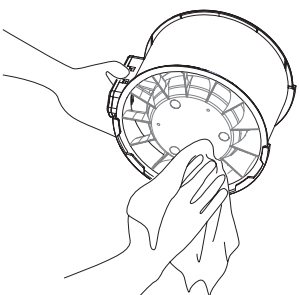
Remove the booster ring between the motor housing and the input flange. Use a damp cloth to remove dust and dirt from the impeller and fan blades.



CLEANING

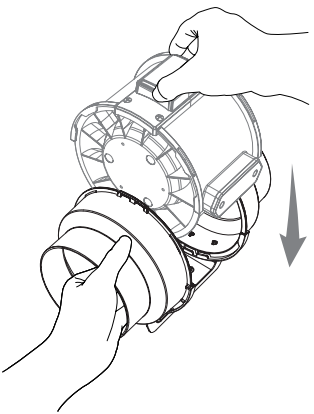
STEP 3

Clear dust and debris from the stator blades on the opposite side. Clean the area inside the exhaust and exhaust flanges.



STEP 4

Attach the motor box to the mounting flanges.

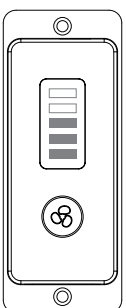


PROGRAMMING

S-SERIES

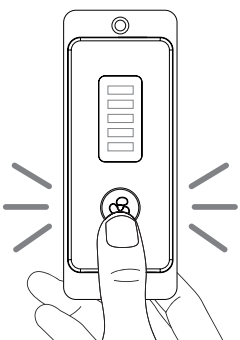
FAN SPEED ADJUSTING

The controller only has one button to control the fan speed, ranging from level 0-5/OFF. Press the button to increase the fan speed by one level.



POWERING ON/OFF

To power the device on, press the fan speed button once; to power it off when operating at level 5, press the button again. If the fan is set to any other speed level, long press the fan speed button to turn it off.



PROGRAMMING

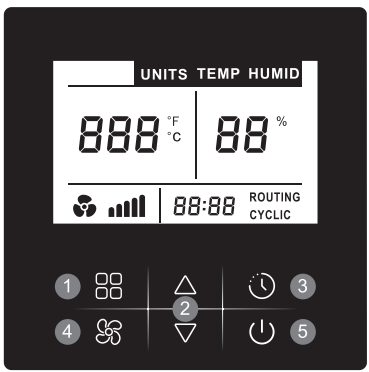
1. MODE BUTTON
Switch between different options by pressing the mode button, allowing you to set temperature, choose units, and adjust humidity.

2. UP / DOWN BUTTON
Change the settings within the mode you're in. Use the up button to increase values, the down button to decrease them, and switch between units.

3. TIME BUTTON
Start setting the time with the first press, move to time cycle mode with the second, and exit time setting mode with the third press.

4. FAN SPEED BUTTON
Adjust the fan speed by pressing the button, cycle through levels 1-5 with each press.

5. POWER BUTTON
Turn the device on or off by pressing the power button.



PROGRAMMING

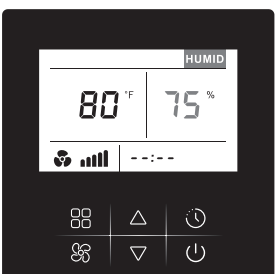
TRIGGER MODE: HIGH HUMIDITY

To activate the High Humidity trigger mode, navigate to the HUMID by pressing the MENU button. Select the HUMID option. Use the UP/DOWN button to set the desired humidity level, and the fan will automatically start when the humidity exceeds this set value.

Adjust the humidity range from 0% to 99% RH or set it to OFF. Each press of the UP/DOWN button changes the value by 1%, and a long press allows for quicker adjustments.

When set to OFF, the High Humidity trigger mode is disabled.

The default factory setting is 50% RH.



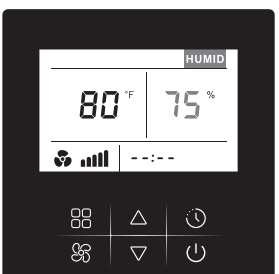
TRIGGER MODE: HIGH TEMPERATURE

Activate the High Temperature trigger mode, using the MENU button to navigate and select the TEMP option. Press the UP/DOWN button to set the temperature threshold, triggering the fan to operate when the temperature exceeds the set value.

Adjust the temperature range between 37°F to 176°F / 1°C to 80°C, or set it to OFF. Each press of the UP/DOWN button changes the value by 5°F / 1°C, and a long press enables quicker adjustments.

When set to OFF, the High Temperature trigger mode is disabled.

The default factory setting is 86°F.



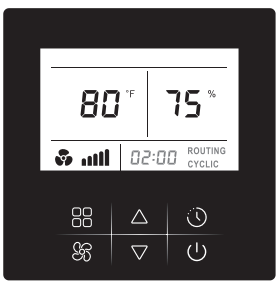
PROGRAMMING

TIME MODE

Engage the Time Mode by utilizing the TIME button to access ROUTING. Utilize the UP/DOWN buttons to establish the desired runtime duration. Once configured, the device will automatically stop operation after the set time elapses.

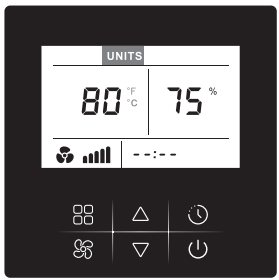
Use the TIME button to select the CYCLIC option. Adjust the standby time using the UP/DOWN buttons. After completing the settings, the device will autonomously start and end its operation on a schedule.

Note: "–:–" indicates that the time control function is off.



UNIT SETTING

Access the Unit Setting by pressing the MENU button and selecting the UNITS option. Use the UP/DOWN buttons to choose the preferred temperature unit, facilitating the conversion between °F and °C.



NOTE:

- When both TEMP and HUMID control programs are configured, the fan will start if one or both conditions are met.
- Simultaneous processing is possible for the TEMP/HUMID control program and the TIME control program.
- If the temperature (TEMP) and humidity (HUMID) conditions are suitable for your requirements, you can establish the operation cycle based on time.
- If the specified conditions for TEMP and HUMID cannot be met, the process ends.

CLOUDSTORM FAQ

Q: I am missing my controller; it was not included in my package.
A: Refer to page 4 for an image of the controller included in your package. It should be neatly placed inside the box.

Q: Where is the best place to position the sensor probe?
A: Optimal placement involves positioning the sensor probe as close as possible to the hottest or most humid spot in your space.

Q: Do I need to remove the plastic cap from the probe?
A: No, you do not need to remove the plastic cap. It acts as a protective casing for the sensor, ensuring accurate weather condition readings.

Q: Can I mount this inline duct fan vertically?
A: Yes, the CLOUDSTORM can be mounted in any orientation, including vertically.

Q: Will I be able to hardwire this fan to my own controller or thermostat?
A: We do not recommend hardwiring or splicing the fan's power wires. Such modifications may compromise electrical safety and will void this product's warranty.

Q: Do I need to use a power converter if I am outside the US?
A: This product operates within a voltage range of 100-240V AC. For use outside the US, a travel adapter may be needed. If your country uses a different voltage, consider using a power converter.

Q: Does the controller retain its settings after power is shut off?
A: Yes, the controller retains its settings even if the power is cut off. Your programmed configurations will be preserved when the controller is powered back on.

Q: I am not getting enough airflow even after setting the fan speed to 5. What can I do?
A: Reduced airflow may result from bends in the ducting, impacting the fan's CFM performance. To enhance airflow, straighten the ducting and minimize bends as much as possible.

WARRANTY

Upon receiving the product(s), customers are required to visit www.aitecac.com and complete the warranty registration form, submitting it to AITECAC. This process ensures that we have your purchase and installation details on record. In the event that the warranty registration is not submitted, the warranty period begins from the date the product(s) leave the warehouse. Keep record of the serial number and installation date.

This information is important for obtaining a Return Authorization (RA) number. The product is covered by a two-year warranty. Should warranty service be needed, customers must contact AITECAC technical support via email at support@aitecac.com or by calling the local technical service number (888) 990-7469, available Monday to Friday (7:00 AM to 4:00 PM PST) to obtain an RA number. Upon receiving the equipment, AITECAC will conduct an initial inspection. If the warranty is deemed invalid, the customer will be responsible for all associated maintenance and transportation costs related to unit maintenance.

The warranty plan excludes coverage for abuse or misuse of the unit, encompassing physical damage, product immersion, incorrect installation (such as incorrect voltage input), and usage for purposes other than the intended ones. AITECAC is not liable for any indirect losses or incidental damages caused by the product.

From the date of replacement, new equipment will be provided to the customer during the warranty period of the same year.

After AITECAC repairs or replaces parts, the original warranty will continue to apply until the due date.

AITECAC

WARRANTY REGISTRATION CARD

PRODUCT REGISTRATION FORM

Register your product by filling in the product registration form below.

ORDER NUMBER: _____

MODEL: _____

SERIAL #: _____

INSTALLER: _____

INSTALLATION DATE: _____

NAME: _____

ADDRESS: _____

CITY: _____

STATE: _____

ZIP: _____

PHONE #: _____

EMAIL: _____

NOTE: If you have any questions, please feel free to contact us at *(888) 990-7469* or *support@aitecac.com*

Add: 14752 Yorba Ct Chino CA 91710 US
Tel: (888) 990-7469
Email: support@aitecac.com