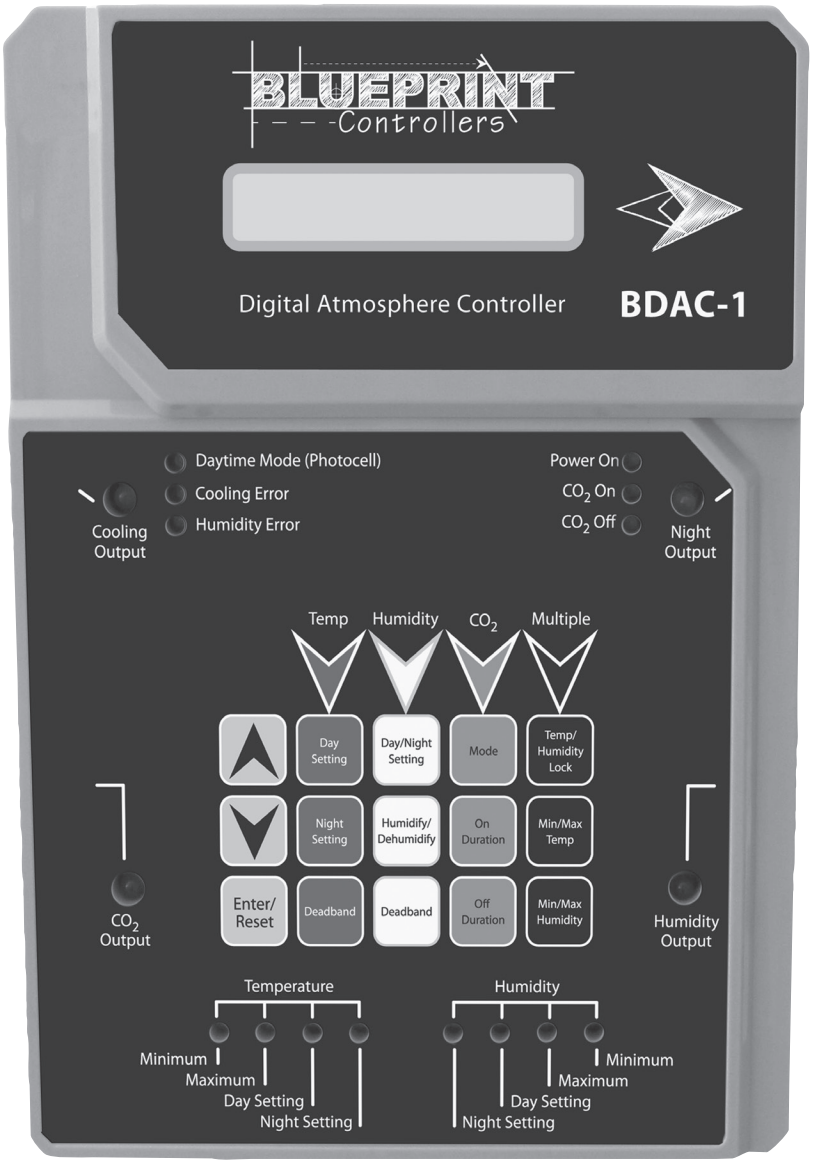
Thank you for choosing to grow with Blueprint Controllers! Your satisfaction and success are important to us. For best results, carefully read the following instructions before using your Blueprint Digital Atmosphere Controller.



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Features of your Blueprint Digital Atmosphere Controller, BDAC-1

- Precisely controls temperature, humidity and CO_2 levels
- Four dedicated NEMA 5-15 receptacles
- Separate day and night set-points for temperature and humidity
- Remote sensor on 15' cable accurately monitors temperature, humidity and light
- Integrated circuit breaker protection
- 3-year warranty

Specifications

Input Voltage: 120V
Maximum Amperage: 14.5A @ 120V
Battery Backup: 5-year lithium
Temperature Control Range: 40-99.9°F
Temperature Accuracy: ± 1°F
Temperature Deadband: Adjustable
Humidity Control Range: 35-99.9% RH
Humidity Accuracy: ± 3% RH
Humidity Deadband: Adjustable
CO_2 On Time Range: 1 second to 96 hours
CO_2 Off Time Range: 1 second to 96 hours
Dimensions: 9" x 7" x 3.75"

rev:112012

Installation

- Mount the Controller on the wall. Place the remote sensor at plant height in an area with good air circulation. Avoid placing the sensor in a location with direct, intense exposure to light.
- Connect the sensor cable to the bottom of the unit using the quick- disconnect screw.
- Plug the Controller into a 120V NEMA 5-15 wall outlet.
- Flip the switch on the bottom of the unit to the ON position.
- Program desired settings before connecting any devices.
- Plug in and power on devices to be regulated by the Controller.

Caution Ensure the devices being connected to the Controller have the proper voltage and will not exceed the maximum amperage rating of the unit.

Warning Do not expose the unit to water.

Factory Settings

The Controller is preprogrammed with the following factory settings:

- Temperature Day Setting: 80°F
- Temperature Night Setting: 70°F
- Temperature Deadband: 3°F
- Day/Night Setting: 50% RH
- Humidity Mode: Decrease
- Humidity Deadband: 5% RH
- CO_2 Mode: Dayfree
- CO_2 On Time Duration: 1 minute
- CO_2 Off Time Duration: 30 minutes
- Temperature and Humidity Lock: Split

Restoring Factory Settings

Hold the “Enter/Reset” and DOWN arrow buttons for 3 seconds. The display will read “f.Set.” Press the “Enter/Reset” button again to restore the default factory settings. When the process is complete, the display will read “donE.” Note: It may take up to 15 seconds to complete the process.

Error LEDs

When the Controller is functioning normally, the ambient temperature and humidity will change slowly but steadily. If the Controller does not detect a change in temperature or humidity within a 1-hour period, the unit will deactivate the affected output and the corresponding green error LED will flash to indicate which device may be malfunctioning. Ensure the device and remote sensor are functioning properly. To reset the error, press the “Enter/Reset” button.

Adjusting Photocell Sensitivity

- Hold the DOWN arrow button for 3 seconds. The current setting will be displayed.
- Press the UP arrow button to increase the number displayed, decreasing the amount of light required to activate the photocell.
- Press the DOWN arrow button to decrease the number displayed, increasing the amount of light required to activate the photocell.
- Press “Enter/Reset” to accept the new setting.

Selecting Temperature Settings

Temperature Display: Hold the UP and DOWN arrow buttons for 3 seconds to change the temperature display from Fahrenheit to Celsius.

Temperature Day: To set the temperature at which the cooling output will be activated during the day, press the “Day Setting” button. The display will read “dAy__F.” Use the UP and DOWN arrow buttons to adjust the setting. Press “Enter/Reset” to accept the new setting.

Temperature Night: To set the temperature at which the cooling output will be activated during the night, press the “Night Setting” button. The display will read “nit__F.” Use the UP and DOWN arrow buttons to adjust the setting. Press “Enter/Reset” to accept the new setting.

Temperature Deadband: To set the temperature deadband, press the “Deadband” button under “Temp.” The display will read “d.b___F.” Use the UP and DOWN arrow buttons to adjust the setting. Press “Enter/Reset” to accept the new setting.

Min/Max Temperature: Press the “Min/Max Temp” button to display the minimum and maximum recorded temperature values. Press the button again to cycle through the values. Press “Enter/Reset” to reset a displayed value.

Selecting Humidity Settings

Humidity Day: To select the humidity level at which the humidity output will be activated during the day, press the “Day/Night Setting” button. The display will read “dAy_rH.” Use the UP and DOWN arrow buttons to adjust the setting. Press “Enter/Reset” to accept the new setting.

Humidity Night: To select the humidity level at which the humidity output will be activated at night, press the “Day/Night Setting” button twice**.** The display will read “nit_rH.” Use the UP and DOWN arrow buttons to adjust the setting. Press “Enter/Reset” to accept the new setting.

Humidity Mode: To select between humidifying and dehumidifying modes, press the “Humidify/Dehumidify” button. The display will show the current setting, “rh_Incr” for humidifying and “rh_dEcr” for dehumidifying. Use the UP and DOWN arrow buttons to choose between modes. Press “Enter/Reset” to accept the new setting.

Humidity Deadband: To set the humidity deadband, press the “Deadband” button under “Humidity.” The display will show the current setting. Use the UP and DOWN arrow buttons to adjust the setting. Press “Enter/Reset” to accept the new setting.

Min/Max Humidity: Press the “Min/Max Humidity” button to display the minimum and maximum recorded humidity values. Press the button again to cycle through the values. Press “Enter/Reset” to reset a displayed value.

Selecting CO_2 Settings

CO_2 Mode: Press the “Mode” button to display the current setting. Use the UP and DOWN arrow buttons to select between daylock (“dAy_LOCk”) and dayfree (“dAy_FrEE”) modes. Daylock disables the CO_2 output when the cooling output is activated. Select this mode when using exhaust fans to cool the growing area. Dayfree allows the CO_2 and cooling outputs to be activated at the same time. Select this mode when using an air conditioner or to use the CO_2 output as a standard daytime recycle timer.

CO_2 On Duration: Press the “On Duration” button to display the current setting. The first two digits (hours) will blink. Use the UP and DOWN arrow buttons to set how many hours the CO_2 output will be activated. Press “Enter/Reset” to accept the setting. The middle two digits (minutes) will blink. Program how many minutes and seconds the CO_2 output will be activated by following the steps used to program the hours.

CO_2 Off Duration: Press the “Off Duration” button and follow the steps under “CO_2 On Duration” to set how long the CO_2 output will be deactivated.

Locking Temperature/Humidity Functions

The temperature and humidity functions may be set to operate locked (“connECt”) or split (“SPLit”). Press “Temp/Humidity Lock” to display the current setting. Use the UP and DOWN arrow buttons to select the setting. Press “Enter/Reset” to accept the new setting.

- Select “connEct” if using only ventilating fans for cooling and removing humidity. The fan will turn on when the sensor detects an increase above the set-point in either humidity or temperature.
- Select “SPLit” if using a ventilating fan or AC unit for cooling and a dehumidifier for removing humidity. The cooling device will turn on when the temperature rises above the set-point, and the dehumidifier will turn on when the humidity rises above the set-point.
- Select “SPLit” if using a fan or AC unit for cooling and a humidifier for adding humidity. The cooling device will turn on when the temperature rises above the set-point and the humidifier will turn on when the humidity drops below the set-point.

FAQ

- ***What if the temperature reading is high?***
  Verify the remote sensor is not in a location with direct, intense exposure to light.

- ***Do the humidity and temperature sensors need to be calibrated*?**
  No. The humidity and temperature sensors are digital and do not require calibration.

Troubleshooting

- ***Why does the display read “Err SEn”?***
  The remote sensor is not connected or not communicating with the controller. Verify the cable is connected and the remote sensor is powered.

- ***Why are the small error LEDs illuminated?***
  The sensor or a connected device is malfunctioning. See the “Error LEDs” section for more information.

- ***What if the CO_2 timer is not keeping the correct time?***
  The CR1220 3V lithium battery, located on the circuit board connected to the inside of the front faceplate, may need to be replaced. The battery has an average life of 5 years.

- ***Why isn’t the Controller powering the connected devices?***
  Reset the circuit breaker. Ensure the device to be controlled is working correctly by plugging the device into a reliable power source. Verify the Controller is being supplied the correct voltage. If the problem persists, reduce the number of connected devices or consider devices with reduced amperage requirements.

Blueprint 3-Year Limited Warranty

All Blueprint Digital Atmosphere Controllers are protected against manufacturer defect by a limited 3-year manufacturer's warranty.

Limited 3-Year Warranty Terms

Sunleaves Garden Products warrants that the Blueprint Digital Atmosphere Controller will remain free from appearance of defects in workmanship and materials for 3 years from date of original retail purchase. This warranty is subject to the following limitations: (a) manufacturer's liability is limited to the replacement or repair of the unit, as decided by the manufacturer; (b) a defective unit must be returned, prepaid, with proof of purchase to the point of purchase or as instructed below; and (c) this warranty does not apply to defects resulting from the alteration, abuse, accidental damage, unauthorized repair or misuse of the unit. This warranty is given in lieu of all other warranties, guarantees and conditions on manufacturer's part, and the manufacturer shall have no tortious or other liability in respect to this Blueprint Digital Atmosphere Controller.

Blueprint Digital Atmosphere Controller Warranty Is Void If:

- NOT ACCOMPANIED BY THE ORIGINAL PROOF OF PURCHASE.
- BLUEPRINT DIGITAL ATMOSPHERE CONTROLLER HAS BEEN USED IN A NONSTANDARD WAY, INCLUDING GENERAL MISUSE AND OUTDOOR USE.
- BLUEPRINT DIGITAL ATMOSPHERE CONTROLLER HAS BEEN DAMAGED AS A RESULT OF ACCIDENT, IMPROPER INSTALLATION, ALTERATION, OR FIRE, FLOOD OR OTHER NATURAL DISASTER.

Sunleaves Garden Products
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Bloomington, IN 47404 Email: info@sunleaves.com

Sunleaves Product Warranty Claims

To obtain warranty service in the unlikely event that your product fails to operate, return the product to the place of purchase. Often the retailer will be able to examine the product in closer detail, determine the problem and even fix the product on site.

If the retailer is unable to resolve the problem:

1. Call our toll-free number at 888-464-9676 or email info@sunleaves.com to receive warranty information and your RMA number if the product is being returned.
2. In the unlikely event you must return the defective product to Sunleaves, carefully package the problem product.
3. Complete the form below and enclose it with your shipment along with a legible copy of your properly dated sales receipt. You must write your RMA number on the outside of the package. Because Sunleaves is not responsible for products damaged in shipping, we recommend insuring your package.

Don't forget to include the following items if you are returning your Blueprint Digital Atmosphere Controller to the place of purchase:

- Legible copy of your properly dated sales receipt
- This completed form

Sunleaves.com

Name: . . . . . .

Address: . . . . . .

Phone #: . . . . . .

Email Address: . . . . . .

RMA #: . . . . . .

Explain the problem: . . . . . .

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