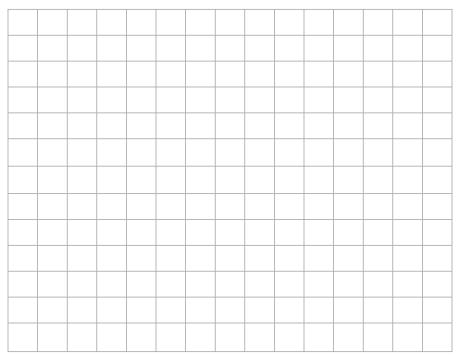
Notes:

1 Square = 1 Foot





Revision H - 2/19/2013 © Titan Controls®



SATURN 4

Digital Environmental Controller

Instruction Manual





VANCOUVER, WASHINGTON U.S.A.



Saturn[™] 4 Digital Humidity Controller

- Warnings and Cautions
- Saturn[™] 4 Digital Environmental Controller
- Instructions for Operation
- Troubleshooting Tips

- Controller Specifications
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Warnings & Cautions

- Read all instructions before operating controller.
- Do not put your controller in an area where it can get wet or sprayed.
- Mount your controller securely to the wall.
- When using "bug bombs" in area, cover sensor completely to avoid corrosion.
- There are no serviceable parts in controller. Do not attempt to repair the unit.
- Breaking tamper proof seal will void your warranty.
- Do not put paper clips, tools, etc. into unit. Possible electrocution may occur.
- Plug controller into surge protector to avoid potential damage to the unit.
- Confirm that your power source is 120 Volts/15 Amps prior to plugging controller into outlet.
- Check that all equipment that will be activated by this controller is the proper voltage(s).
- Verify that the equipment you are controlling does not exceed a total of 14.5 Amps.
- This controller is designed for "inside use" only.
- Avoid placing the controller near heat generating sources such as a CO₂ generator.
- Use caution if operating controller in extremely humid environments (90% and above).
- Do not use controller for purposes other than the unit was designed to function
- Use controller within defined environmental specifications.
- Ask your Dealer for tips and techniques regarding the use of this controller.
- Be conscientious when disposing of any products.
- Enjoy your Titan Controls® environmental controller for years to come.

<u>CAUTION</u>: DO NOT install your controller near electronic/digital ballasts, ozone generators and other devices that emit large amounts of electromagnetic interference (EMI) & radio frequency interference (RFI), it will disable the controller. Maintain a minimum distance of 8 feet between the controller & sensor, and all high EMI/RFI devices.

Saturn[™] 4 – Digital Environmental Controller

The simplicity in the design of the Saturn^{\odot} 4 is what makes it such a unique environmental controller. It provides the grower with the essential controls for temperature, humidity and CO₂ in their garden. The Saturn^{\odot} 4 offers three options to maintain the environment in your garden. 1) It can independently lower the temperature via an exhaust fan and decrease humidity using a dehumidifier (Mode A). 2) It can simultaneously lower the temperature via an exhaust fan and decrease humidity using a dehumidifier (Mode B) or 3) Independently lower the temperature via an exhaust fan and increase humidity using a humidifier (Mode C). The Saturn^{\odot} 4 also allows you to integrate an optional CO₂ system using a CO₂ monitor/controller. The CO₂ Output only operates during daytime hours and is defeated when the Cooling Output is activated so you're not wasting your valuable CO₂ that you've provided for your garden. The Night Output allows you to activate a circulation fan or other devices during the nighttime hours. The Saturn^{\odot} 4 provides you with the total control you're looking for in your garden. Titan Controls^{\odot}...keepin' it simple.

WARRANTY SERVICE: Please read warranty information first

If after reviewing the troubleshooting tips the unit will still not work, you should return it to the Dealer where you purchased it. They may be able to further evaluate the unit and test its various components and quite possibly will be able to identify and/or fix any problems. If the Dealer is unable to fix the unit, they will return it to us for factory repair.

If there are no Dealers in your area, you may contact us directly for technical support. If we cannot help you resolve the problem over the phone, we will issue you a Return Merchandise Authorization (RMA) number authorizing you to return the unit to us for factory reconditioning (if the controller is currently under warranty). Contact the number below for a RMA number and shipping address. Please complete the form below and include it with your unit, and write the RMA number clearly on the outside of the box.

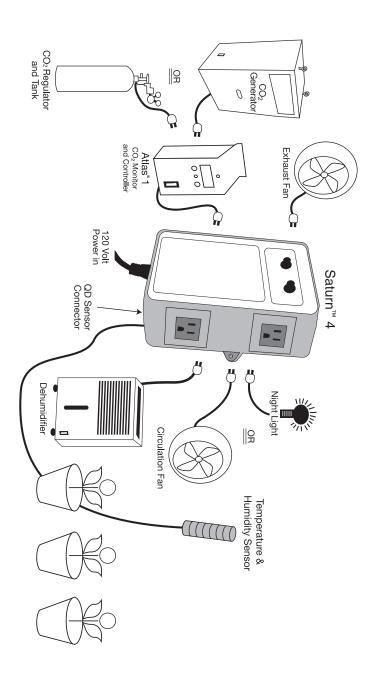
Please package the unit in its original packaging. If it is damaged in shipment we cannot be held responsible. Insuring the parcel is recommended.

Once we receive the unit back, we will repair it within 48 hours (business) and return it to you freight prepaid via UPS ground shipment.

Include the following if returning directly to Titan Controls®
Proof of purchase copy This completed form RMA # on the outside of the box
Return Merchandise Authorization Number (Required
Dealer/Customer's Name:
Dealer/Customer's Contact Name:
Shipping Address:
Phone #:
Email address:
What is the nature of the problem? Please provide as much information as possible
What is the nature of the problem? Please provide as much information as possible

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Installation Example



Instructions for Operation

- Securely mount your Saturn™ 4 in your grow area and away from any moisture, spray, pesticides or other materials that could harm the unit.
- Ensure that all of the devices being connected to the controller are 120 Volt only and will not exceed the maximum amperage rating for the Saturn™ 4.
- 3. Connect your gear (exhaust fan, CO₂ controller, night circulation fan, dehumidifier, etc.) to the Saturn™ 4. The sensor has a quick connect cord set to easily connect or move the sensor. Secure the quick connect cord to the Saturn™ 4 by plugging it in and securing the QD screw to the unit.
- 4. Place the sensor in an area with good air movement, and where it is exposed to your grow lights and not shaded or covered. Avoid placing the sensor in direct sunlight or under direct HID lighting. NOTE: Do not place sensor anywhere it might get wet. SENSOR IS NOT WATER PROOF.
- 5. Plug the power cable into a standard 120 Volt wall outlet.
- 6. Adjust the knobs to the desired settings on the Saturn™ 4.
- The Saturn™ 4 should now activate and deactivate your equipment based on the preferred settings you selected.

COOLING OUTPUT:

This outlet is intended to active an exhaust fan to ventilate the garden due to high temperature conditions.

CO₂ OUTPUT:

This outlet is for a CO_2 device and powers ON during the daytime period only. It will deactivate when the 'Cooling Output' is activated. By achieving this, you are not ventilating the CO_2 as you're enriching your grow area and wasting your CO_2 .

NIGHT OUTPUT:

The outlet can be used for a variety of devices that only require power at night. This outlet activates only during the nighttime period.

HUMIDITY OUTPUT:

This output is for use with a humidifier or dehumidifier.

USING THE TEMPERATURE & HUMIDITY DIALS:

Temperature Dial:

Use the dial on the left to set the maximum temperature for the growing area. If the temperature reaches or rises above this set point, the controller will activate the cooling device, and the cooling device will remain on until the temperature is reduced to 3° F below the set point. *For instance:* If the temperature set point is 75°F, the Saturn™ 4 will activate the exhaust fan at 75°F and deactivate the fan when the temperature drops below 72° F.

Humidity Dial:

Use the dial on the right to set the maximum humidity level for the growing area. If the humidity your garden rises or falls above or below this setting (depending on whether you're using a humidifier or dehumidifier) the Saturn™ 4 will activate the humidity device, and it will stay active until the level is raised or lowered by 5%. *For instance*: If the **dehumidify** set point is 50%, then the Saturn™ 4 will activate at 50% and deactivate when the humidity level goes below 45%. Conversely, if the **humidify** set point is 50%, then the Saturn™ 4 will activate at 50% and deactivate at 55%.

OPERATING MODES:

The Saturn™ 4 has three operating modes. This selection depends on the type of devices being connected to the controller. Press the Select Mode button to change from MODE A, B or C. A green LED will let you know what MODE you are operating in.

Mode A: This mode <u>independently lowers your temperature and humidity.</u> If you are connecting a cooling device (such as a exhaust fan) to lower the temperature AND a dehumidifier to lower the humidity level, the controller will activate these devices independently based on the temperature and humidity levels in your grow room and your preferred set points. The 'Cooling Output' is activated when the temperature set point is exceeded and the 'Humid/Dehumid Output' is activated when the humidity set point is exceeded

Mode B: This mode <u>simultaneously lowers your temperature and humidity.</u> If you are connecting a cooling device (such as an exhaust fan) to lower your temperature AND a dehumidifier to lower the humidity levels, the controller will activate the devices simultaneously if the temperature rises above the set point AND/OR the humidity level rises above the set point. The 'Cooling Output' and 'Humid/Dehumid Output" will both be activated until both the temperature and/or humidity set point is reached.

Mode C: This mode <u>independently lowers the temperature and increases the humidity.</u> If you're connecting a cooling device (such as a fan) to lower your temperature AND a humidifier to raise the humidity level, the controller will activate these devices independently based on the temperature and humidity levels in your grow room and your preferred set points. The 'Cooling Output' is activated when the temperature set point is exceeded, and the 'Humid/Dehumid Output' is activated when the humidity set point is exceeded.

Troubleshooting Tips

- The Saturn™ 4 has no power? Verify power source is providing 120 Volts A/C. Reset the circuit breaker on the Saturn™ 4 by turning OFF the unit. then turn ON.
- The circuit breaker keeps tripping on my Saturn™ 4? Check to see that you are not exceeding the maximum amperage (14.5 Amps) of the Saturn™ 4.
- The CO₂ Output is not working? This could be because your Saturn™ 4 is not exposed to light. Put the Saturn™ 4 in a location in your grow room so that the PHOTOCELL is not shaded or covered from lights. It also could be because your Cooling Output is active. When this occurs it deactivates the CO₂ Output so you don't 'dump your room' and exhaust all the CO₂ you've injected.
- The MODE LED's are flashing? The Saturn™ 4 has detected a problem with the remote sensor. This can normally be remedied by turning OFF the Saturn™ 4 & disconnecting the sensor, then re-attaching the sensor back to the Saturn™ 4 and turn the unit back ON. The Saturn™ 4 should be functioning properly again. If not, contact our Technical Service Specialist at 888-808-4826 to assist you further.
- The humidity is increasing instead of decreasing or decreasing instead of increasing? Verify that your MODE is correct. MODE's A & B are used to decrease humidity and MODE C is used to increase humidity.

Controller Specifications

Size = 9"H x 7"W x 3 ¾ "D
Input Voltage = 120 Volts
Output Voltage = 120 Volts
Maximum Amperage = 14.5 Amps
Operating Hertz = 60 Hz.
Minimum/Maximum Humidity Control Levels = 5% to 95% RH (non-condensing)
Humidity Accuracy = +/-3% RH of desired setting

Humidity Deadband = 5% RH
Minimum/Maximum Temperature Controls = 41°F to 113°F
Temperature Accuracy = +/- 1°F
Temperature Deadband = 3°F

Warranty Information

- Titan Controls® warrants the original purchase of this product against defects in material
 and workmanship under normal use for three (3) years from the date of purchase.
- During the warranty period, Titan Controls® will, at our option, and without charge, repair or replace this product if the controller or any of its components fail or malfunction.
- All returns or repairs must be accompanied by a Return Merchandise Authorization (RMA) number prior to any service of the product.
- This warranty is in lieu of all other warranties, expressed or implied, including the warranties of merchantability and fitness for use, and of all other obligations or liabilities on the part of the seller.
- This warranty shall not apply to this product or any part thereof which had been damaged by accident, abuse, misuse, modification, negligence, alteration or misapplication.
- Controllers with serial numbers or date tags that have been removed, altered or obliterated; broken seals that show evidence of tampering or nonconforming parts, are excluded from coverage.
- Titan Controls® makes no warranty whatsoever in respect to accessories or parts not supplied by Titan Controls®.
- Monetary refunds of the warranty will not be given.
- The Buyer assumes all responsibility regarding the proper use & installation of this controller.
- All warranty service is provided through the Titan Controls[®] factory.
- This warranty shall apply only to the United States, including Alaska, Hawaii & territories of the United States and Canada.
- Defective controllers are required to be returned with the "proof of purchase/receipt" for warranty coverage.
- For additional warranty information, contact the Titan Controls® Technical Service Representative at 888-808-4826 or your local Dealer.
- NOTE: Titan Controls® is a Manufacturer of environmental, timing, lighting, ventilation and CO₂ controls. All sales offerings to the public are done through a nationwide group of Dealers. No sales offerings will be made directly to the general public.

Service & Repair Program

- For all service and repairs, please contact by our Technical Service Representative at 888-808-4826 for troubleshooting your gear and attaining a Return Merchandise Authorization (RMA) number, if applicable.
- All factory service & repairs will be completed within 48 hours of receipt of controller at the factory.

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- Titan Controls® will, at its discretion, repair or replace the controller.
- Factory calibration services are available for all Titan Controls®.
- Returning Units: Please contact your retail store for information regarding returns.