

Notes:

Handwriting lines for notes.

1 Square = \_\_\_\_ Foot/Feet

Grid for drawing or calculations.



NATIONAL GARDEN WHOLESALER  
VANCOUVER, WASHINGTON U.S.A.

[www.titancontrols.net](http://www.titancontrols.net)

Revision F – 6/14/2013 © Titan Controls®



TITAN<sup>®</sup>  
CONTROLS

# HADES™ 2

## Digital Recycle and Lighting Timer with High Temp Shut-Off Instruction Manual



Sunlight Supply, Inc.

National Garden Wholesaler

VANCOUVER, WASHINGTON U.S.A.



[www.titancontrols.net](http://www.titancontrols.net)

# Hades™ 2

- Warnings & Cautions
- Hades™ 2 – Digital Recycle & Lighting Timer with High Temp Shut-Off
- Instructions for Operation
- Troubleshooting Tips
- Controller Specifications
- Installation Example
- Warranty Information
- Service and Repair Program

## 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 controller 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 CO<sub>2</sub> 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.
- 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.

**CAUTION: 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.

## 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®

- Copy of proof of purchase
- This completed form
- RMA # on the outside of the box

Return Merchandise Authorization Number (Required) \_\_\_\_\_

Dealer / Customer Name: \_\_\_\_\_

Dealer / Customer Contact Name: \_\_\_\_\_

Shipping Address: \_\_\_\_\_  
\_\_\_\_\_

Phone #: \_\_\_\_\_

Email address: \_\_\_\_\_

*What is the nature of the problem? Please provide as much information as possible:* \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Shipping address will be given when the RMA # is issued.



[www.titancontrols.net](http://www.titancontrols.net)

For technical assistance call us at 1-888-80-Titan or 1-888-808-4826.

## 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 and 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 CO<sub>2</sub> 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 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.
- 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.

## Hades™ 2 – Digital Recycle and Lighting Timer with High Temp Shut-Off

The Hades™ 2 is designed to control: HID lighting, a recycling timer for pumps or CO<sub>2</sub> enrichment and a nighttime output for use with a circulation fan or heater. It can control up to 1200 Watts (600 W per outlet) of HID lighting and incorporates an internal temperature sensor, which will automatically shut down your lights if the ‘Maximum Temp Setting’ is exceeded. It also features: a 30 second preset time delay between the 2 lighting outputs, an internal clock with a battery back-up and a ‘Hot Start Delay’ setting that controls the cool down period for your lights in case of power outages. The recycling timer can be programmed to run during the Day, Night or 24-hours and it also has a battery back-up to retain your settings in case of power failure. The Hades™ 2 keeps your garden growing.

## Instructions for Operation

1. Securely mount your Hades™ 2 in your grow area and away from any moisture, spray, pesticides or other materials that could harm the unit.
2. 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 Hades™ 2.
3. Connect your gear (lights, pump or CO<sub>2</sub> regulator, night circulation fan or heater, etc.) to the Hades™ 2.
4. The sensor has a quick connect cord set to easily connect or move the sensor. Secure the quick connect cord to the Hades™ 2 by plugging it in and securing the QD screw to the unit.
5. Place the sensor in an area with good air movement, preferably at plant height. 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.
6. Plug the power cable into a standard 120 Volt wall outlet.
7. Using the buttons, select the Lighting Timers and Recycle Timer parameters to program the Hades™ 2.

The Hades™ 2 should now activate and deactivate your equipment based on the preferred settings you selected.

### OUTPUT DESCRIPTION

#### Lighting Output 1 & 2:

- These outlets are intended to operate your HID lights. You may use up to 600 Watts per outlet. The Hades™ 2 may also be used to operate larger lighting banks by plugging the relay trigger cord set into this output and setting the timer to run your lights. **Do not exceed 600 Watts per outlet when using these outputs.**

### Night Output:

- The outlet can be used for a variety of devices that only require power at night such as a circulation fan, heater or exhaust fan. This outlet activates only during the nighttime period.

### Recycling Timer Output:

- This output is for use with a pump, CO<sub>2</sub> regulator or generator, fan, etc.

## BUTTON FUNCTIONS

There are 15 buttons located on the front faceplate of the unit that control all functions. Pressing each button will display a function and/or current setting(s) in the **green** LCD window. Some buttons are programmed to perform more than one function.

The small **green** LED lights or status indicators located on the front panel will light up to show the selected function when certain buttons are pushed.

**UP** – Press this button to increase setting.

**DOWN** – Press this button to decrease setting.

**Enter/Reset** – Press button, hold for 3 seconds to enter new setting and to reset the Min/Max range.

## LIGHTING BUTTONS

Turn Lights 'ON' Time – Press button to set the ON Time for the Lighting Outputs. The lights will turn ON once in a 24-hour time span.

Turn Lights 'OFF' Time – Press button to set the OFF Time for the Lighting Outputs. The lights will turn OFF once in a 24-hour time span.

Hot Start Delay – Press button to set the time delay that allows the HID lamps to cool before re-striking due to a power failure situation.

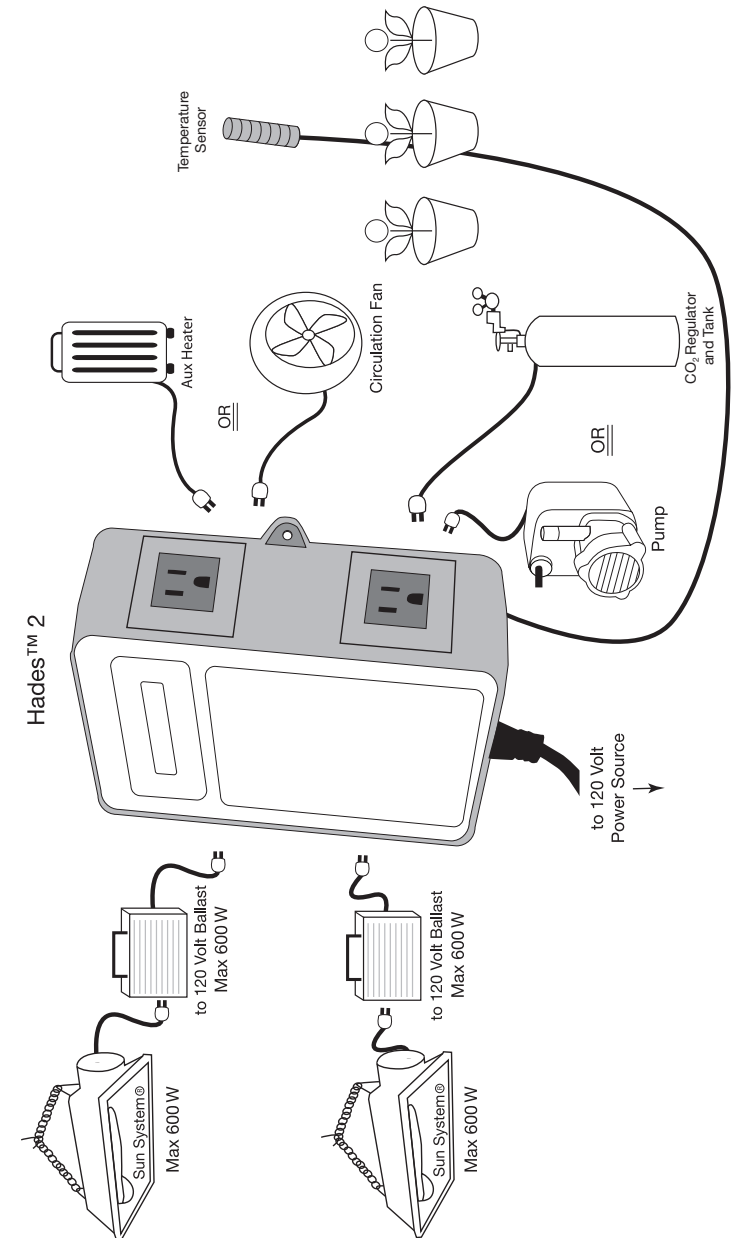
Override Light Timer – Press and hold this button for approximately 2 seconds to manually activate and/or deactivate both of the Lights ON outputs, as well as the Night Output. Press Override Light Timer button again to return to normal operation.

Set Clock – Press button to set the current time of day.

Maximum Temp Setting – Press button to set the maximum temperature level in your garden. This feature will shut off your Lighting Outputs if the temperature in your garden exceeds the Maximum Temp Setting to protect it from overheating your plants.

## Installation Example:

### Controlling Lights with Heater or Circulation Fan, & Pump or CO<sub>2</sub> Regulator



enheit, press and hold the UP and DOWN keys simultaneously for approximately 3 seconds.

## Troubleshooting Tips

- 1. The Hades™ 2 has no power?** Verify power source is providing 120 Volts A/C. Reset the circuit breaker on the Hades™ 2 by turning OFF the unit, than turn ON.
- 2. What if the recycle timer is not keeping the right time?** The CR1220 (3 Volt) Lithium battery, located on the internal circuit board that is connected to the inside of the front faceplate, may need to be replaced. The normal lifespan of the batteries is approximately 5 years.
- 3. Why is the display showing 'Hot\_F'?** The Maximum Temp Setting has been exceeded. When this occurs, the LIGHTS ON outputs will remain off, until the Maximum Temp Setting function is reset by holding the Enter/Reset button for approximately 2 seconds.
- 4. Why is the display showing, 'Err.TEP'?** The remote sensor is not connected or not communicating with the Hades™ 2. Unhook sensor from Hades™ 2, than reconnect it to the controller. Verify that the cable is not compromised and that the remote sensor has power.
- 5. Does the temperature sensor need to be calibrated?** No. The temperature sensor is digital and there is no need for calibration.
- 6. My temperature is reading quite high?** Verify that the sensor is not in a location with direct exposure to intense light and that there is air circulating freely around it.

## Controller Specifications

- Size = 9"H x 7"W x 3 ¾ "D
- Input Voltage = 120 Volts A/C
- Output Voltage = 120 Volts A/C
- Maximum Amperage = 14.5 Amps
- Remote Probe Cable Length = 3 feet
- Maximum Lighting Watts = 1200W
- ON Time Range = 1 second to 96 hours
- OFF Time Range = 1 second to 96 hours
- Lithium Battery Life = 5 years

## RECYCLING BUTTONS

Recycle 'ON' Time Setting – Press button to set the 'ON' time for the Recycling Timer Output. Press Enter/Reset to accept setting.

Recycle 'OFF' Time Setting – Press button to set the 'OFF' time for the Recycling Timer Output. Press Enter/Reset to accept setting.

Override Recycle Timer – Press and hold this button for approximately 2 seconds to manually activate and/or deactivate the Recycling Timer Output. Press Override Recycling Timer button again to return to normal operation. This is a manual override for testing the recycling devices.

Day/Night/24 Hour – Press button to select Day/Night OR 24-hour mode. Press Enter/Reset to accept setting.

Recycle Timer Mode – Press button to select Stop or Continue mode for Recycling Output. Press Enter/Reset to accept setting.

Press For Temp – Press button to display current room temperature.

## ADJUSTING THE SETTINGS:

Your Hades™ 2 has been **pre-set at the factory** with the following settings:

- Recycle 'ON' Time Setting = 1 minute
- Recycle 'Off' Time Setting = 60 minutes (1 hour)
- Recycle Timer Mode = Stop
- Day/Night/24 Hour Setting = Day
- Hot Start Delay = 10 minutes
- Maximum Temp Setting = 90°F

If you ever want to return the Hades™ 2 to the factory settings, do the following: Press and hold the Enter/Reset & Down buttons at the same time until the LED reads (f.Set). Press the Enter/Reset button again to restore the Hades™ 2 to the factory settings. Once the Hades™ 2 reset is complete, the LED screen will read (doNE).

To adjust your Hades™ 2 to your own customized settings, do the following:

## LIGHTING BUTTONS

- Turn Lights 'On' Time = Press the Turn Lights ON Time button. The first two digits (hour) on the LCD will blink. Use the UP or DOWN button to set the **hour** that you'd like your lights to come 'ON'. Press the Enter/Reset button to lock in the new setting. Next the middle two digits (minutes) will blink. Use the UP or DOWN button to set the **minute** that you'd like your lights to come 'ON'. Press the Enter/Reset button to lock in the new setting. Next the last two digits (seconds) will blink. Use the UP or DOWN button to set the **second** that you'd like your lights to come 'ON'. Press the Enter/Reset button to lock in the new setting. Finally, the AM/PM will blink. Use the UP or DOWN button

to set **AM** or **PM**. Press the Enter/Reset button to lock in the new setting.

**NOTE: The two Lighting Outputs have a 30 second pre-set time delay between the two receptacles to reduce start-up surges and high in-rush current caused by ballasts.**

- Turn Lights 'Off' Time – Press the Turn Lights Off Time button. The first two digits (hour) on the LCD will blink. Use the UP or DOWN button to set the **hour** that you'd like your lights to go 'OFF'. Press the Enter/Reset button to lock in the new setting. Next the middle two digits (minutes) will blink. Use the UP or DOWN button to set the **minute** that you'd like your lights to go 'OFF'. Press the Enter/Reset button to lock in the new setting. Next the last two digits (seconds) will blink. Use the UP or DOWN button to set the **second** that you'd like your lights to go 'OFF'. Press the Enter/Reset button to lock in the new setting. Finally, the AM/PM will blink. Use the UP or DOWN button to set **AM** or **PM**. Press the Enter/Reset button to lock in the new setting.
- Hot Start Delay – Press the Hot Start Delay button to display the current setting. This mode button is used to prevent 'Hot Starts' from occurring by allowing the HID lamps to cool before re-striking. This function is not activated unless there is a power failure situation. Use the UP and DOWN buttons to change the setting. Press the Enter/Reset button to lock in the new setting.
- Override Light Timer – Press the Override Light Timer button to bypass the Day and Night modes. Press the button for approximately 2 seconds to switch the Hades™ 2 from Night to Day mode or Day to Night mode (depending on current status). Press Override Light Timer button again to return to normal operation.
- Set Clock – To program internal clock to correct time press the Set Clock button. The first two digits (hour) on the LCD will blink. Use the UP or DOWN button to set the current **hour**. Press the Enter/Reset button to lock in the new setting. Next the middle two digits (minutes) will blink. Use the UP or DOWN button to set the current **minute(s)**. Press the Enter/Reset button to lock in the new setting. Next the last two digits (seconds) will blink. Use the UP or DOWN button to set the current **second(s)**. Press the Enter/Reset button to lock in the new setting. Finally, the AM/PM will blink. Use the UP or DOWN button to set **AM** or **PM**. Press the Enter/Reset button to lock in the new setting. **IMPORTANT:** Verify that internal clock is set to correct time of day or Outputs will not function properly.
- Maximum Temp Setting – Press the Maximum Temp Setting button to display the current setting. Use the UP and DOWN buttons to adjust the setting. Press the Enter/Reset button to lock in the new setting. This is a hi-temp shut-off feature to protect your garden for overheating.

## RECYCLING BUTTONS

- Recycling 'ON' Time Setting – Press the Recycling 'ON' Time Setting button to display the current setting. The first two digits (hour) on the LCD will blink. Use

the UP or DOWN button to set the **hour** that you'd like your recycling timer to come 'ON'. Press the Enter/Reset button to lock in the new setting. Next the middle two digits (minutes) will blink. Use the UP or DOWN button to set the **minute** that you'd like your recycling timer to come 'ON'. Press the Enter/Reset button to lock in the new setting. Next the last two digits (seconds) will blink. Use the UP or DOWN button to set the **second** that you'd like your recycling timer to come 'ON'. Press the Enter/Reset button to lock in the new setting. Finally, the AM/PM will blink. Use the UP or DOWN button to set **AM** or **PM**. Press the Enter/Reset button to lock in the new setting.

- Recycling Timer 'OFF' Time – Press the Recycling Timer 'OFF' Time button. The first two digits (hour) on the LCD will blink. Use the UP or DOWN button to set the **hour** that you'd like your recycling timer to go 'OFF'. Press the Enter/Reset button to lock in the new setting. Next the middle two digits (minutes) will blink. Use the UP or DOWN button to set the **minute** that you'd like your recycling timer to go 'OFF'. Press the Enter/Reset button to lock in the new setting. Next the last two digits (seconds) will blink. Use the UP or DOWN button to set the **second** that you'd like your recycling timer to go 'OFF'. Press the Enter/Reset button to lock in the new setting. Finally, the AM/PM will blink. Use the UP or DOWN button to set **AM** or **PM**. Press the Enter/Reset button to lock in the new setting.
- Override Recycle Timer – Press the Override Recycle Timer button for approximately 2 seconds. The Recycling Timer Output will be activated and the recycling timer will begin counting down the recycle ON TIME. After the timer counts all the way down, the recycle timer will return to current saved settings and resume normal operation. To end the test early, press the Override Recycle Timer button again.
- Day/Night/24 Hour – Press the hold the Day/Night/24 Hour button for approximately 2 seconds to program the Recycling Timer Output to operate during the **day**, at **night** or continuously for **24 Hours**. The current setting will be displayed. Press the UP and DOWN buttons to scroll through the Day / Night / 24 Hour Settings. Press Enter/Reset to select the new setting. **NOTE: There is no built-in photocell on the Hades™ 2. The recycling timer relies on the Turn Lights ON TIME & Turn Lights OFF TIME to tell the Hades™ 2 when it is Day or Night.**
- Recycle Timer Mode – Press the Recycle Timer Mode button to select either Stop mode or Cont (Continuous) mode. This mode will determine whether the recycle timer stops or continues when a power interruption occurs. The default mode is Stop from the factory. The recycling timer will Stop counting if the power to the timer is interrupted. In the Cont (continue) mode, the recycling 'ON' time will continue to count down when the power to the Hades™ 2 is interrupted. This countdown sequence will continue until the power is restored so that no time is lost during the power interruption period. Change settings using the UP and DOWN keys. Press the Enter/Reset button to lock in the new setting.
- Press For Temp – Press the Press For Temp button to display the current room temperature. To switch the temperature reading from Celsius to Fahr-