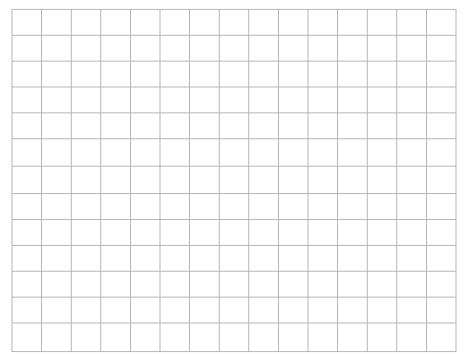
Notes:

1 Square = ____ Foot / Feet





WWW.titancontrols.net

Revision G - 01/28/2015 © Titan Controls®

Part #111233



HELIOS 1

4 Light - 120 Volt Controller Instruction Manual





VANCOUVER, WASHINGTON U.S.A.



Helios® 1

- Warnings & Cautions
- Helios® 1 120 Volt / 4 Light Controller Overview
- Instructions for Operation
- Troubleshooting Tips
- Controller Specifications
- Installation Examples
- Warranty Information
- Service and Repair Program

Warnings & Cautions

- Read all instructions before operating the Helios® 1 controller.
- This controller is designed for use with MAGNETIC OR ELECTRONIC BALLASTS.
- Do not put your controller in an area where it can get wet or sprayed.
- Mount your controller securely to the wall using hardware provided.
- 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 "warranty" seal will void your warranty.
- Do not put paperclips, tools, etc. into unit. Possible electrocution may occur.
- Make sure to verify your power source is 120 Volts prior to wiring controller into power source.
- Check that all equipment that will be activated by this controller is 120 Volts.
- This controller is designed for 'Inside Use' only.
- Avoid placing the controller near heat generating sources.
- Use caution when operating controller in extremely humid environments.
- 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.
- \bullet Be conscientious when disposing of any products.
- Enjoy your Titan Controls® lighting controller for years to come.

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 the controller. They will 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 an RMA # (return merchandise authorization) authorizing you to return the unit to us for factory reconditioning (if the unit is under warranty). Contact the number below for an RMA # and shipping address. Complete the form below and include it with your unit. Also please write the RMA # on the outside of the box.

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

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

nclude the following if returning directly to Titan Controls® Proof of purchase • This completed form • RMA # on the outside of the box Return Merchandise Authorization Number (Required): Company Name: Contact Name: Contact Name: Phone #: Email address: What is the nature of the problem? Send to your nearest location – shipping address will be given when the RMA # is issued: WWW.titancontrols.net TITAN® For technical assistance call us at 1-888-80-Titan or 1-888-808-4826.		
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controls Representative available Monday – Friday, 8 a.m. – 5 p.m. PST.		ur nearest location – shipping address will be given when the RMA # is issued

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 expressly 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 or that show evidence of tampering; mismatched board serial numbers 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 use & installation of this controller.
- All warranty service is provided through the factory or an authorized service representative.
- This warranty shall apply only to the United States, including Alaska, Hawaii, territories of the United States and Canada.
- Defective controllers need to be returned with the "proof of purchase/receipt".
- For additional warranty information, contact a Titan Controls® Technical Service Representative at 888-808-4826 or your Dealer. Our normal business hours are Monday Friday, 8 a.m. to 5 p.m. Pacific Standard Time. We are closed most major holidays.
- NOTE: Titan Controls® is a manufacturer of environmental 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 and Repair Program

- For all service and repairs please contact one of our Technical Service Representatives for a Return Merchandise Authorization (RMA) number.
- All factory service & repairs will be completed within 48 hours of receipt of controller and after authorization by customer for repairs.
- 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 returns.

Helios® 1 – 120 Volt / 4 Light Controller Overview

The Helios® 1 lighting controller is specifically designed for operation of high intensity discharge (HID) lighting systems. The controller will operate your lights for any sequence over a 24 hour period by using premium German manufactured analog timer. The controller can handle up to a maximum of four (4) 1000 watt HID metal halide or high pressure sodium (HPS) grow lights. There is a 120 Volt accessory outlet located on the front of the controller. This outlet is only active when your lights are 'ON' and may be used to power devices up to 2 amps, such as an in-line lamp ventilation fan. The Helios® 1 lighting controller provides up to 50 amps of capacity on a standard single phase 120 Volt circuit. The Helios® 1 is built with only the highest quality components and will provide the user with years of trouble free service.

Instructions for Operation

- Must be installed by a certified electrician.
- DO NOT install this controller yourself if you DO NOT fully understand these instructions. High voltage is dangerous!
- Connect your incoming 120 Volt power to the 3 screws under the protective back cover. Black/hot (left screw), green/ground (center screw) & white/neutral (right screw).
- Securely mount your Helios® 1, using the hardware included, near your enclosure and away from any spray/water/mist, etc.
- Hardwire or plug the controller into a confirmed 120 volt power source.
- Verify that all your wiring connections are tight and that no loose wires are exposed.
- Plug your lights into the outlets on the right and left side of the controller.
- Each time tripper represents a 15 minute segment.
- The time switch is programmed by pushing the captive trippers to the inner ring position for the entire time period the lights are to be turned ON.
- When the time trippers are pushed to the outer ring, the lights will be turned OFF.
- To set the current time of day, turn the minute hand clockwise. DO NOT set the time by
 rotating the "outer" dial. (i.e. To set time of day at 10:30 AM for 24 hour dial, turn the minute
 hand clockwise until 10:30 AM is aligned with the triangle on the inner dial. The hour and the
 minute dial will show exactly 10:30 AM.)
- Make sure that all wires and cables have been properly secured.
- Turn on the power switch to activate your light bank. When the relay is activated you will hear a "Clunk" sound.
- Your Helios® 1 will now control your lights at the desired settings until the power is defeated.
- Caution: Lamps are hot and should be allowed to cool completely before handling.

ONLY FOR USE WITH 120 VOLT BALLASTS

To maintain warranty you MUST retighten incoming power connections every 90 days.

Troubleshooting Tips

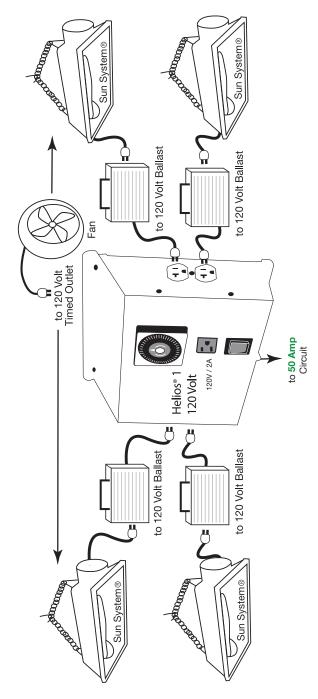
If the Helios® 1 is not performing as expected, try the following:

- a. Confirm that your power input is active from your breaker panel and providing 120 Volts/50 Amps/60 Hz to the controller.
- b. Check the voltage input of your incoming cord set using a voltage test meter to verify power is flowing to the controller.
- c. Make sure all of your connections are tight. Loose connections can cause "arching".
- d. Then confirm that power is active and proper at your 120 volt outlets.
- e. Verify that your power cords and ballasts are functioning properly and that there are no shorts or arching occurring.
- f. Should you find your circuit breaker keeps tripping, check your breakers to verify that they are the right amperage for your application. Replace if necessary.
- g. If you turn 'OFF" the power switch and your lights remain on, contact us immediately for resolution.
- h. Still having problems with your Helios® 1? Please contact our Technical Service Representative to assist you further.

Controller Specifications:

- Size = 11"H x 11"W x 4"D
- Weight = 7 lbs.
- Voltage Input = 120 VAC
- Voltage Output = 120 VAC
- Relay Coil Voltage = 120 Volts
- Maximum Input Amperage = 50 Amps
- Maximum Output Amperage = 40 Amps
- Maximum Wattage = 4000 Watts (1000 watts per outlet)
- Hertz = 60Hz
- RoHS compliant = Yes
- Storage Temperature = 32°F (0°C) to 135°F (57°C)
- Operating Temperature = 40°F (5°C) to 125°F (52°C)

Installation Example



Controlling a 4 Light Bank