



## PLANT LIGHTING SMART CONTROLLER



### USER MANUAL

ACTIVE GROW®

### Safety Warnings

WARNING – Keep the Plant Lighting Smart Controller in a cool and dry environment away from dust, heat and moisture.

WARNING – Make sure all RJ and power cords are safely routed away from heat, moisture, mechanical movement and anything else that may damage the cords.

WARNING – Do not use abrasive materials, acids or solvents to clean the Plant Lighting Smart Controller. Use a soft, dry cloth when cleaning the controller.

WARNING – Do not disassemble or repair the Plant Lighting Smart Controller. Doing so will void the warranty.

WARNING – The Plant Lighting Smart Controller is designed to work with GC RJ14 data cords. Using other brands or non-RJ14 data cords may cause malfunctions and will void the controller's warranty.

WARNING – This product contains a battery and other materials which must be disposed of properly and in a lawful way through an electric recycling center.

### Plant Lighting Smart Controller (PLSC)

The PLSC is capable of controlling up to 160 total fixtures across 2 groups (80 fixtures per group) in separate grow areas. This LED touch-screen programmable module offers 24-hour and 48-hour cycle options. Sunrise and Sunset settings let growers dim to their preference to mimic natural light conditions. Each controller comes with temperature and humidity sensors that relay data back to the unit for each group. The PLSC also includes safety features to dim or shut off lights to protect plants from overheating.

### Controller Specifications

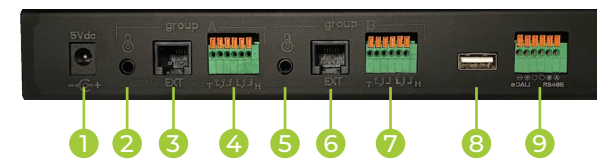
Dimensions (l x w x h)	8.2"x5.2"x1.3"
Weight	1.54 lbs (0.7 kg)
Input voltage	DC 5V/1000mA
Control voltage outputs	2 groups, A/B
No. of LoPro Max fixtures per output	80 pcs max
Max cable length per group	328' (100m)
Overheat protection	Yes
Sunrise/Sunset setting	Yes
Warranty	3 years

### Components



- A. Controller module
- B. Power cable
- C. Temperature & humidity sensor x2
- D. RJ14 network data cable x2
- E. RJ14 daisy chain connector x2
- F. Screw anchor x2
- G. Mounting screw x2
- H. User manual

### Interface Connection



1. DC power input
- 2/5. Temperature & humidity sensor jacks
- 3/6. RJ14 network data cable ports
- 4/7. Relay switch ports for temp/humidity sensors
8. USB port
9. eDALI/RS485 signal output

### Installation & Setup

- 1) Mount the controller to a secure surface away from heat sources using provided screws. The distance between the center of each mounting hole is 3.94" (10cm).
- 2) Connect the power cable to controller and power source (Fig. 1).
- 3) Connect the temperature and humidity sensor to the controller's GROUP A port (Fig. 2). Hang the sensor at canopy height making sure the sensor and cable are away from direct heat sources. Repeat for GROUP B if necessary.
- 4) **IMPORTANT:** When using the Active Grow LoPro Max Luminaire (G1), make sure the rotary dimmer is set to 100% before connecting the RJ14 cable to the fixture. If multiple fixtures are daisy chained, make sure each fixture's rotary dimmer is set to 100% (Fig. 3). After connecting the RJ14 cable to the fixture, only use the PLSC to adjust light levels. Do not use the rotary

dimmer on any fixture while connected to the PLSC. Doing so may damage the dimming functionality and will void the fixture's warranty.

5) Connect the RJ14 network data cable to the PLSC's GROUP A port (Fig. 4) and the other end to the luminaire (Fig. 5).

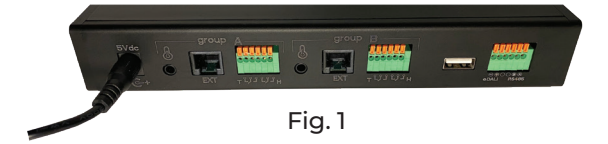
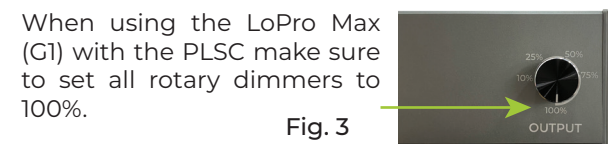


Fig. 1



Fig. 2



When using the LoPro Max (G1) with the PLSC make sure to set all rotary dimmers to 100%.

Fig. 3



Fig. 4

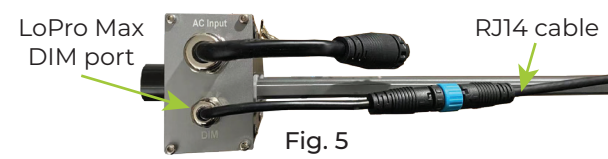
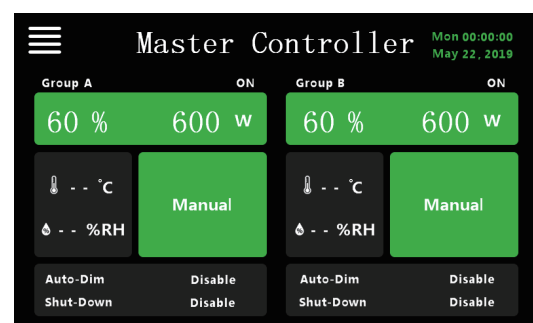
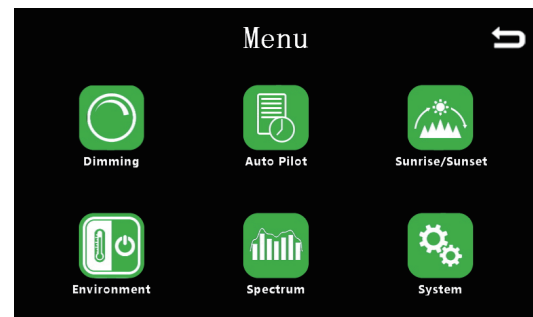


Fig. 5

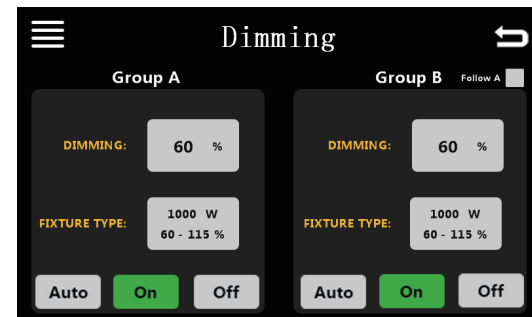
### Menu Operation Instructions



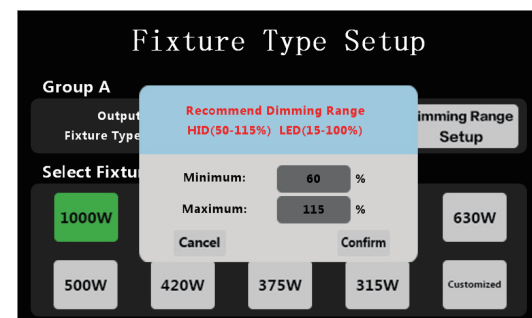
- 1) Group tab displays power level in percentage and watts. Touch to access dimming settings.
- 2) Touch Auto-Dim to access temperature and auto-dim settings.
- 3) Touch time and date to access clock and calendar settings. Time default is military time.
- 4) Touch top left button to open main menu.



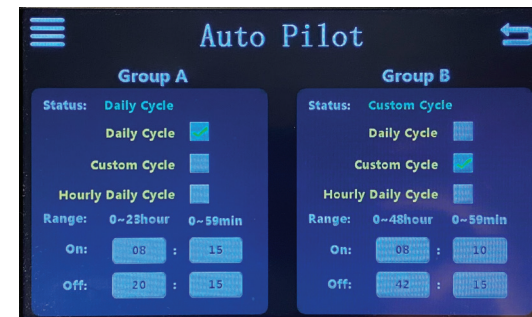
- 1) Touch to access Dimming, Auto-Pilot, Sunrise/Sunset, Environment, Spectrum\* and System settings.



- 1) Touch Group A or Group B to adjust or view dimming settings. **NOTE:** Dimming for HID must be set from 50-115% to ignite the lamp. LED must be set from 15-100%.
- 2) Touch Auto to turn lights on and off based on timer settings in Auto Pilot.
- 3) Touch Fixture Type to select fixture type and power levels.



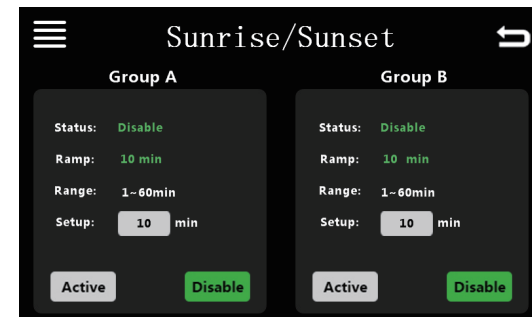
- 1) Touch Dimming Range Setup to program min and max power levels.
- 2) Select Customized if wattage is not shown.



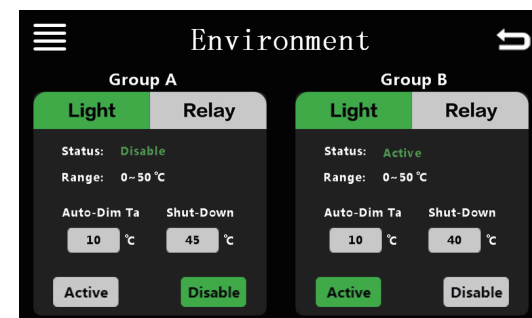
- 1) Select Daily Cycle to set On and Off times for a 24-hour cycle.
- 2) Select Custom Cycle to set the number of hours the fixture will be on and off for a 48-hour cycle. **NOTE:** A Custom Cycle example setting of On: 9:00 and Off: 19:00 means the fixture is set for 9 hours on and 19 hours off.



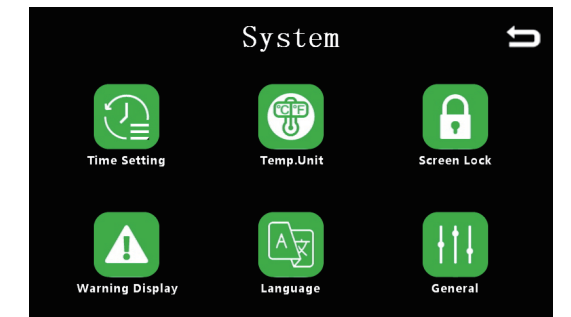
- 1) Select Hourly Daily Cycle and enter the power level percentage for each hour throughout a 24-hour cycle.



- 1) Enter a minute value to select the amount of time it takes the lights to dim on and dim off at the beginning and end of each cycle.



- 1) Enter temperature thresholds for Auto-Dim and Shut-Down protocols in case of excessive heat.



- 1) Touch to access Time Setting, Temp. Unit, Screen Lock, Warning Display, Language and General settings.



- 1) Press the button on the left side of the controller to lock the screen. The indicator light will blink green when locked and turn off when unlocked.

\* Not compatible with the Active Grow LoPro Max (G1). For spectral tuning grow lights only.

