

# TOUCHSCREEN LED CONTROLLER 0-10V

Advanced Control for Large-Scale Growing Projects



**USER MANUAL**

## SAFETY RECOMMENDATIONS

Please carefully read recommendations and warnings before installing and using the controller!  
The installation and use of the controller is the responsibility of the end user. Incorrect installation can cause damage to the product. The warranty shall become void if the product and/or electronic components are damaged due to incorrect installation.

### **WARNING**

1. Always adhere to the local building and electrical codes (local rules and regulations) when installing or using the controller with light fixtures.
2. Do not use the product when either the controller or its power cable are damaged. Modifications to the cables can lead to unwanted electromagnetic effects which may damage the product.
3. Protect power cables from being pinched, walked on, or otherwise damaged.
4. Do not use the controller near flammable, explosive or reactive substances.
5. Keep the controller in a cool and dry environment, away from dust, heat and moisture.
6. Make sure all RJ and power cords are safely routed away from heat, moisture, mechanical movement, or anything that may damage cords.
7. The controller is designed to work with GC Rj14 data cords. Using other brand or non-RJ14 data cords could cause malfunctions and may void the warranty.

### **CAUTION**

1. Do not use abrasives, acids, or solvents to clean the controller. Use a soft, dry cloth to clean the controller.
2. Do not open and/or disassemble the controller as it contains no serviceable parts inside. Opening and/or modifying the controller can be dangerous and will void the warranty.
3. The product may not be exposed to moisture, condensing humidity, contamination, or dust.

## PACKING ACCESSORIES



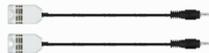
LED Controller x1



0-10V Cable x2



Cable and Adaptor for 15V DC Power Supply x1



Temperature & Humidity Sensor x2



Screws x2



Screw Anchor x2

## SPECIFICATIONS



A B C D E F G H

Input Power: 5V / 2A

Out Signal: 0-10V / 50mA

Ambient Temperature: 0-40°C

Max Linked Quantity: 160 pcs

Daisy Chain Ports: 0-10V & single port RS485

Housing: Plastic (black)



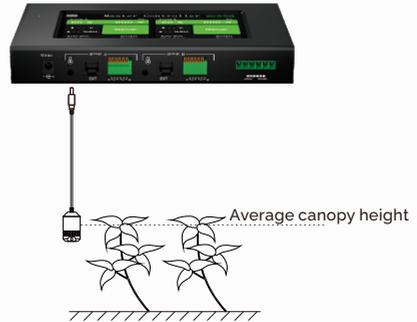
Press this button for lock screen, the indicator light blinking, press again for unlock screen, the indicator light off.

### CONNECTIONS

CONNECTIONS	
A	DC 5V Power Input
B	3.5mm jack aux temperature/ humidity sensor
C	RJ14 aux port for controlling up to 160pcs fixtures
D	Relay switch controlled by temperature/ humidity sensor
E	3.5mm jack aux temperature/ humidity sensor
F	RJ14 aux port for controlling up to 160pcs fixtures
G	Relay switch controlled by temperature/ humidity sensor
H	EDALI/RS485 Signal Output

# USE TEMPERATURE HUMIDITY SENSORS

The "TEMP-RH" port shown in the figure is connected to temperature and humidity sensors. Find a suitable place for the temperature sensor and the controller. Hang the sensor between the plants on average canopy height and preferably not against the wall. Do not position it in direct airflow and kept away from direct heat.



## PRODUCT INSTALLATION

### HOW TO CONNECTING:

Attach the controller to a vertical surface with provided screws and screw anchors.

**Note: Keep the controller away from heat.**

The distance between the two mount holes is 6.7cm.

### CONNECTION OF LED FIXTURE:

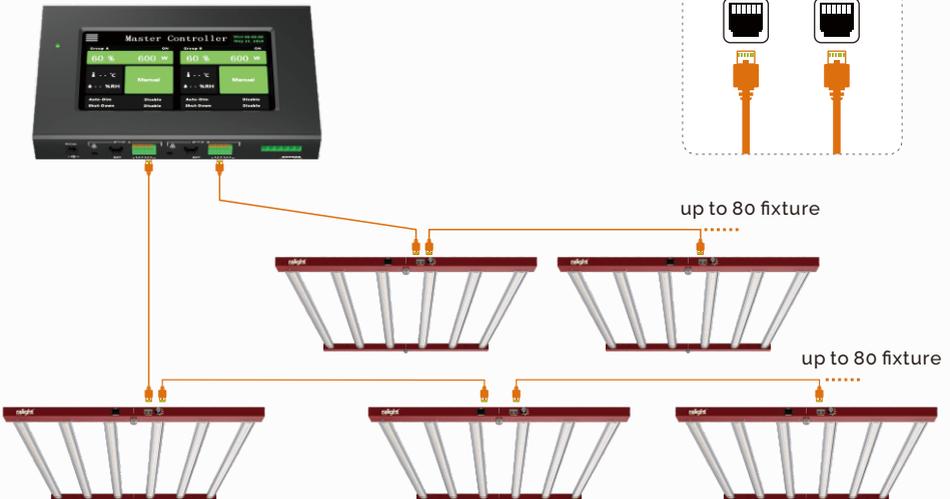
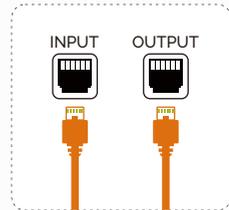
Make sure the rotary knobs are all set to "EXT"(external control).

Connect one end of the cable to "0-10V" port or "PWM" port.

As shown in the following figure and the other end to the first connected fixture.

Use the supplied interconnect cables to daisy chain up 30 LED fixture (depends on quantity of driver or ballast). Plug all ballasts power cords and the controller power supply directly into mains.

Set the ballasts dial to "EXT" (external control)



## MENU DISPLAY

1. Displays power level in percentage and watts.  
Touch this tab to access the "Dimming Menu".
2. Touch the date and time for access to the controller clock and calendar
3. Displays "Auto Dim" mode. Touch for access to temp and auto dim settings. Shows ambient temperature and relative humidity data.
4. Touch the top left button to access the main menu



## MENU

1. Touch "Dimming" to access power level settings.
2. Touch "Auto Pilot" to access "Daily or Custom Cycle" options and program timer settings.
3. Touch "Sunrise/Sunset" options to set graduated timers, activate and deactivate settings.
4. Touch "Environment" to access emergency dim and shut off options that protect the
5. crop from excessive heat in the event the environment exceeds selected a temp range.
6. Touch "Spectrum" for spectrum selection.
7. Touch "System" to access general settings and system options.



## DIMMING MENU

1. Touch to select Group A or Group B to adjust or view settings. Touch "Dimming" to adjust dim settings from 50%-115% with HID and 15%-100% with LEDs.  
Touch "Auto" to turn on or turn off the light according to the timer setting.
2. Touch "Fixture Type Setup" to select fixture type and power levels. Touch and select fixture type or select "Customized" if wattage is not shown. Touch "Dimming Range Setup" to program min. and max. Power levels.

**NOTE: Minimum settings for HID must be at 50% or higher for lamps to ignite and Minimum setting for LED 15% or higher.**



## AUTO PILOT

Touch and select "Daily Cycle" to run dimmer in conjunction with the clock.  
Touch and choose "Custom Cycle" to select the number of hours the clock fixture will be on or off.  
Touch "On" and "Off" time settings to adjust Auto Pilot timers. Be aware of cycle setting when programming timers.

**NOTE: Custom Cycle example setting 9:00 and 19:00 would mean the light is set for 9 hours on and 19 hours off and NOT on at 9:00 and off 19:00 hours.**

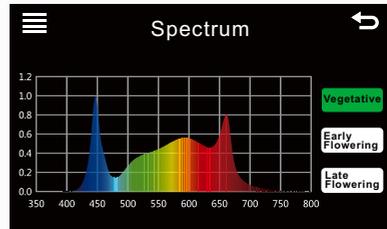


## SPECTRUM MENU

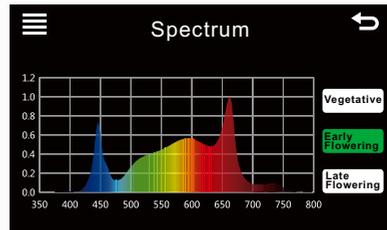
Select the spectrum which is suitable for different stage of the plants.

**Note: This function needs to match with the switchable spectrum grow light produced by our company, or it is ineffective**

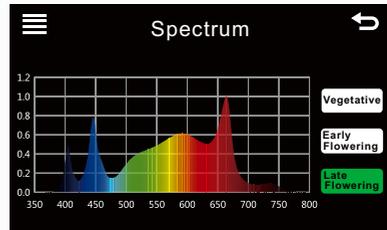
### Vegetative Stage



### Early Flowering Stage



### Late Flowering Stage



## SUNRISE / SUNSET MENU

Touch the minute value to adjust "Sunrise/Sunset" settings from 10-60 minutes. Touch to Activate or Disable the Sunrise/Sunset settings.

**NOTE: Sunset setting will dim lights before scheduled off time and lights will be off by scheduled time.**

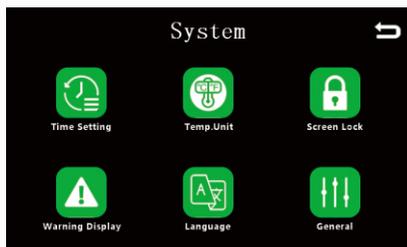


## ENVIRONMENT MENU

Touch "Auto-Dim" to set the temperature at which the controller will dim the lights in case of excessive heating. Touch "Shut-Down" to set the temperature at which the controller will turn off lights in case excessive heat continues.



## SYSTEM MENU



1. Touch for access to "Time Settings".
2. Touch for access to Fahrenheit or Celsius temperature selection.
3. Touch for access to "Screen Lock".
4. Touch for access to "Warning Display".
5. Touch for access to "Language" option.
6. Touch for access to "General" settings.



# TOUCHSCREEN LED CONTROLLER

## 0-10V