



ECOLED SYSTEMS MASTER CONTROLLER - INSTRUCTION

**The Master Controller** with dual channel module and each channel is program-mable. It allowing to control two separate grow areas or rooms. This controller uses LED touch screen to facilitate navigation. The timer of the controller is based on the standard 12-hour clock (standard time) or 24-hour system (military time, 1: 00-24: 00)  
(Note: The clock may show am and pm, set the timer on 1-24 hours mode, 1:00 = 1:00am, 24:00=12:00pm.  
For example, when the time setting is 18:00, the clock will show 6:00pm.)  
There is no timer setting for am and pm.

The master controller III has 2 cycle option for selection. The Daily Cycle which is for operating within a 1-24 hour time frame(1-24 hours) and Custom Cycle which is for operating within a 48 hour cycle(1-48 hours). Please notice these setting when programming the timer. Sunrise/Sunset settings allow you to slowly dim on and off your lights mimicking the natural light cycle. The master controller also has safety features to dim or shut off lights, plants could be injured if the grow area is too hot, such as HVAC failure.

TECHNICAL SPECIFICATIONS

① : DC 5V Power Input                      ②/⑤ : Temperature and humidity sensor Port  
③/⑥ : EXT(RJ14 Port) 0~11.5V        ④/⑦ : Relay Switch Port(Input voltage not exceeding 36V)  
⑧ : RS485 Up /RS485 Down Output

Dimension	208mm(L)*132mm(W)*33mm(H)	Over heat protection	Yes
Input voltage	DC5V/2000mMA	Sunrise/sunset setting	Yes
Control voltage outputs	2 Groups A/B	Weight	0.7KG
Numbers of ballasts per output	100Pcs Max	Warranty	3 Years
Max cable length per group	100m		

Package Contains



SAFTY WARNING

- ⚠ 1. Keep the master controller III in a cool and dry environment, away from dust, dust, heat and moisture.
- ⚠ 2. Make sure all RJ and power cords are safely routed away from heat, moisture, mechanical movement or any thing that may damage cords.
- ⚠ 3. Do not use abrasives, acids or solvents to clean master controller. Use a soft, dry cloth to clean controller.
- ⚠ 4. Do not attempt to disassemble or repair the master controller. This will void controller warranty
- ⚠ 5. Master controllers III are designed to work with GC RJ14 data cords. Using other brand or non-RJ14 data cords could cause malfunctions and may void warranty

**Notice:** THIS PRODUCT CONTAINS A BATTERY AND OTHER MATERIALS, WHICH MUST BE DISPOSED OF PROPERLY AND IN A LAWFUL WAY, THROUGH AN ELECTRIC RECYCLING CENTER.

Power Supply And Initial Setting

1. Mount controller onto a secure surface using the screws supplied with the controller.
- Notice:** Make sure the controller away from heat sources.
- The distance between the center of each mount hole is 10cm.
2. Connect the power cord into the master controller III and power source.(Figure 1)



Figure 1



Figure 2

**Information of temperature and humidity sensor and Installation:**

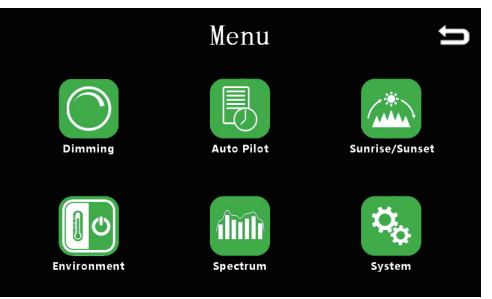
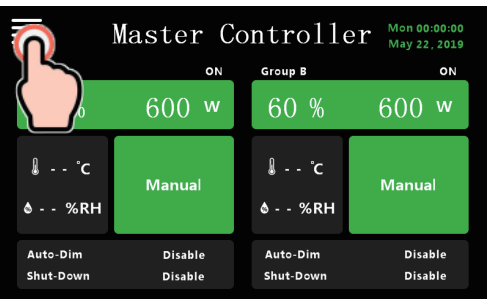
Connect the temperature and humidity sensor plug into the master controller III temperature and humidity sensor port in Group A. Hang the sensor at canopy height making sure the sensor and cord are hung and routed away from direct heat sources. Repeat install with port in Group B, if necessary.(Figure 2)



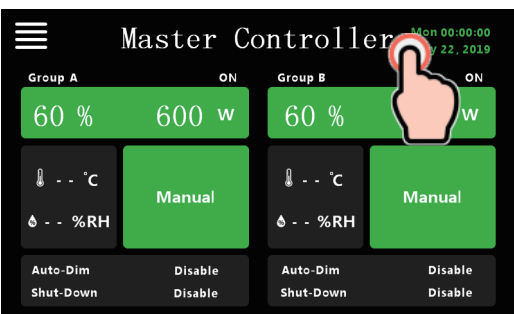
**Connecting the master III controller to light fixtures:**

Connect one end of the RJ14 cord to the master controller III A port, the other end to the A port of the light fixture. Repeat install with port in B port, if necessary.

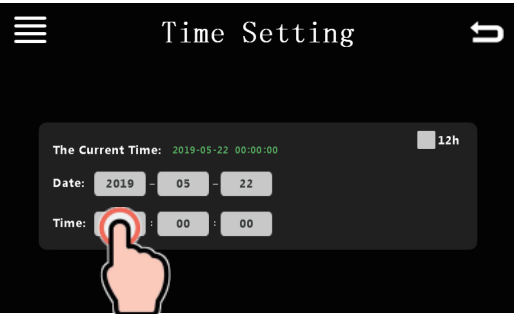
Menu Display



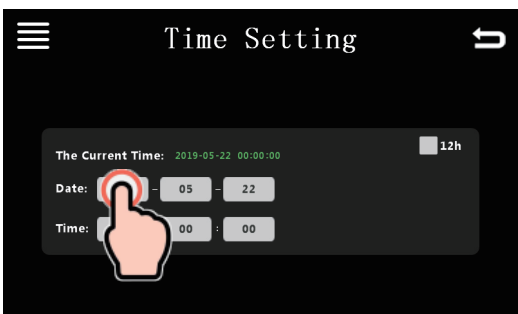
Touch the top left button to access the main menu



Touch the date and time for access to the controller clock and calendar.



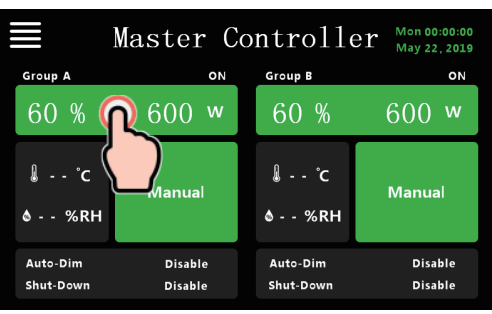
Touch Time options to set the clock.



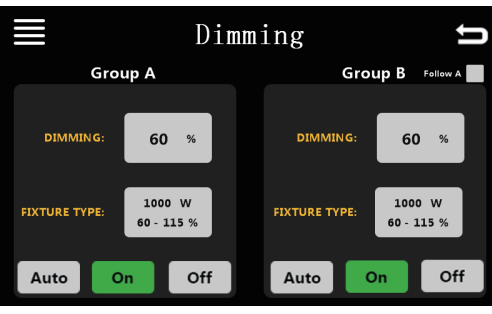
Touch Date options to set the date.



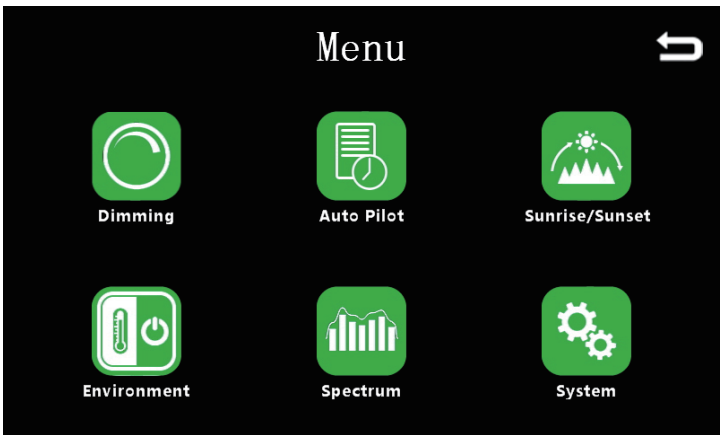
The controller timer defaults to a 24-hour time system (military time, hours 00: 00-23: 59).



Displays power level in percentage and watts. Touch this tab to access the “Dimming Menu”.



Displays “Auto Dim” mode. Touch for access to temp and auto dim settings.Shows ambient temperature and relative humidity data.



Touch “**Dimming**” to access power level settings.

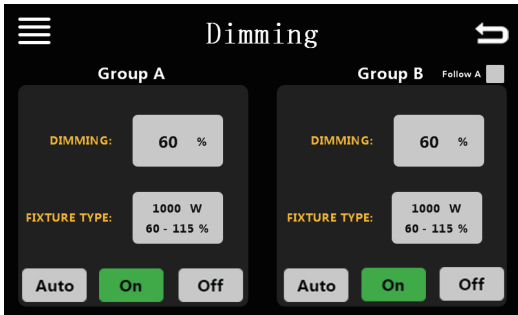
Touch “**Auto Pilot**” to access “Daily or Custom Cycle” options and program timer settings.

Touch “**Sunrise/Sunset**” options to set graduated timers, activate and deactivate settings.

Touch “**Environment**” to access emergency dim and shut off options that protect the crop from excessive heat in the event the environment exceeds selected a temp range.

Touch “**Spectrum**” for spectrum selection.

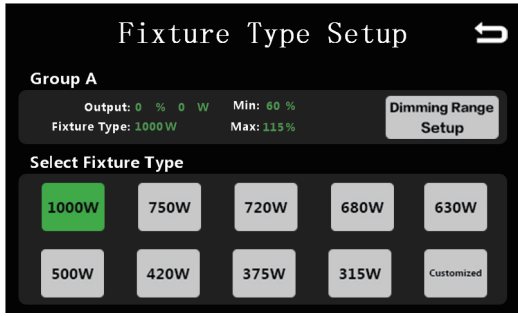
Touch “**System**” to access general settings and system options.



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.



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.



Touch “Minimum” or “Maximum” to set dimming range. Touch “Confirm” to save setting.(Figure 1)  
**NOTE:** Minimum settings for HID must be at 50% or higher for lamps to ignite and Minimum setting for LED 15% or higher.

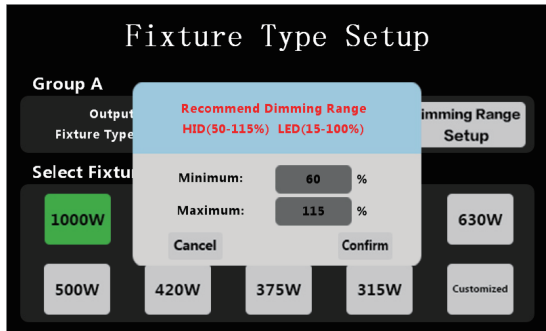


Figure 1

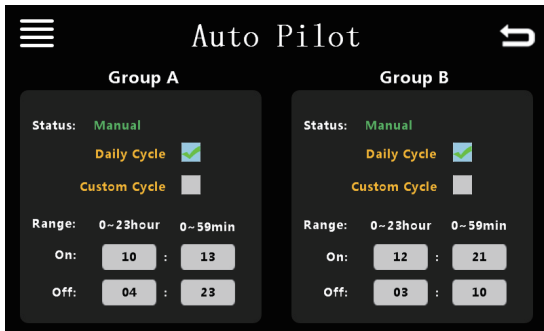


Figure 2

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.(Figure 2)  
**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.

Touch the minute value to adjust “Sunrise/Sunset” settings from 10-60 minutes.  
Touch to Activate or Disable the Sunrise/Sunset settings.(Figure 1)  
**NOTE:** Sunset setting will dim lights before scheduled off time and lights will be off by scheduled time.

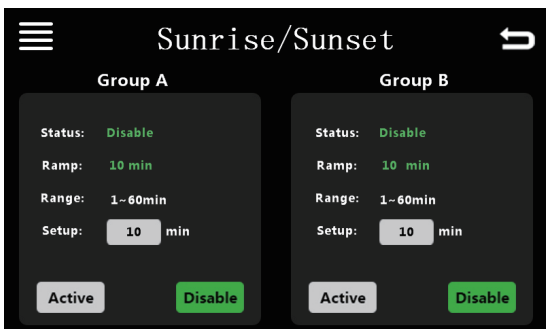


Figure 1

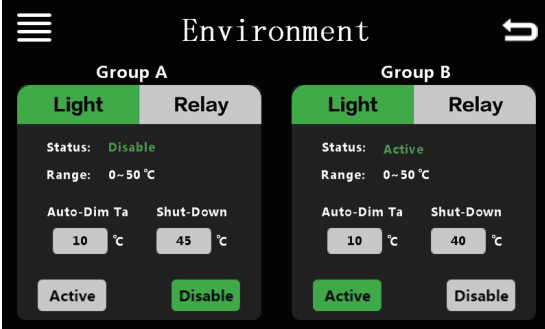
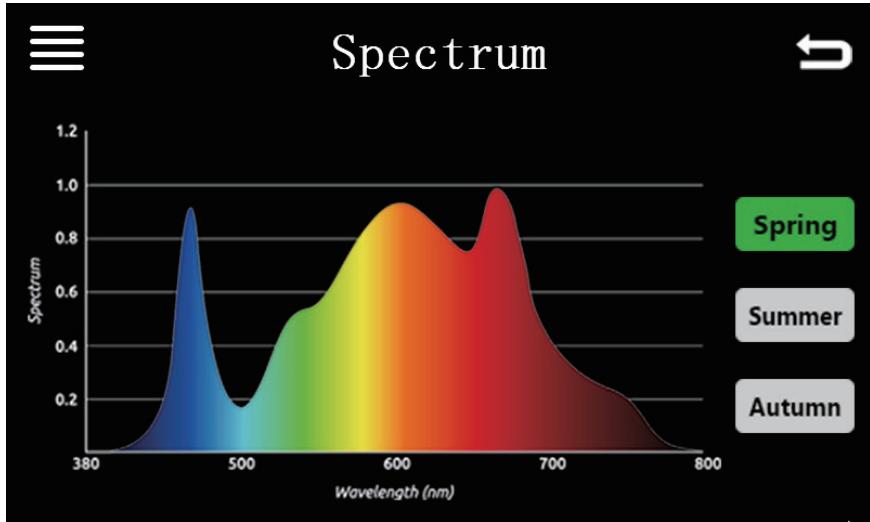
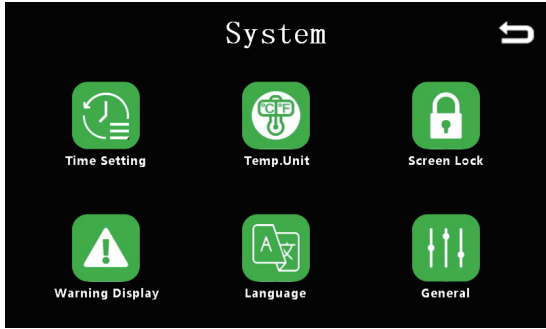


Figure 2

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.(Figure 2)



Select the spectrum which is suitable for different stage of the plants.  
Spring → Leaf stage      Summer → Flowering stage      Autumn → Fruiting stage  
**Note:** This function needs to match with the adjustable spectrum grow light produced by our company, or it is ineffective.



Touch for access to “Time Settings”.  
Touch for access to “Screen Lock”.  
Touch for access to “Warning Display”.  
Touch for access to “Language” option.  
Touch for access to “General” settings.  
Touch for access to Fahrenheit or Celsius temperature selection.



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