



**GROWER'S CHOICE**  
HORTICULTURE LIGHTING



# MASTER CONTROLLER

# MASTER CONTROLLER INSTRUCTION

**T**he Grower's Choice Master Controller is a dual channel module. With each of these channels being programmable allowing the user to control two separate grow areas or rooms. This controller uses an LCD touchscreen for easy navigation. The controller timers operate on a 24 hour clock (Military Time 00:00-23:59). This controller does not have a setting for AM or PM, this is done in order to avoid repetition of numbers that could lead to possible confusion.

The Master Controller has two different options for time schedules, the Daily Cycle and Custom Cycle. The Daily Cycle operates in continuous repetition of 24 hours. This cycle is what we consider our timer meaning it will continue to turn on and off at the programmed time until the time slots are edited. The Custom Cycle operates in a 48 hour period and begins the second you program it, after the 48 hours it will reset and you will have to reprogram your time. Grower's Choice Master Controller also includes a Sunrise/Sunset setting allowing you to ramp your lights up and down at the beginning and end of your programmed times imitating natural light cycles. Safety features include auto dimming and auto-shutoff in case of excessive heat that destroy crops such as an HVAC malfunction.

## TECHNICAL SPECIFICATIONS

**T**he Grower's Choice master controller utilizes a 2-channel system allowing you to control two different cultivation areas, controlling up to 100 units. Both channels providing heat protection shutdown set by the user. This controller has dimming options and can simulate sunrise and sunset cycle from increments of 10-60 minutes. Use the LCD touchscreen to navigate, view and modify the current settings for each channel easily. Output voltage is 0-11.5v DC.

<b>Control voltage outputs</b>	<b>2 Groups, A/B</b>
<b>Numbers of ballasts per output</b>	<b>100 pcs Max</b>
<b>Max cable length per group</b>	<b>100 meters</b>
<b>Over heat protection</b>	<b>Yes</b>
<b>Sunrise/sunset period</b>	<b>Yes</b>
<b>Input voltage</b>	<b>DC5V/2000mA</b>
<b>Weight</b>	<b>1.0kg</b>
<b>Warranty</b>	<b>3 years</b>

# SAFTY WARNING

- ⚠ Keep and mount master controller in a cool and dry environment away from dirt, dust, heat and moisture.
- ⚠ Make sure all RJ and power cords are safely routed away from excessive heat, moisture, mechanical movement or any thing that may damage cords
- ⚠ Do not attempt to disassemble or repair the master controller. This will void controller warranty.
- ⚠ Do not use abrasives, acids or solvents to clean master controller. Use a soft, dry cloth to clean controller.
- ⚠ Grower's Choice master Controller and fixtures are specifically designed to work in conjunction with each other. Using non-Grower's Choice fixtures with Grower's Choice controller may cause malfunctions and may void warranty. For best results use GC controller and fixtures together.
- ⚠ Grower's Choice controllers are designed to work with GC RJ14 data cords. Using other brand or non-RJ14 data cords could cause malfunctions and may void warranty

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

# INCLUDED IN THE PACKAGE



X2



X2



# POWER SUPPLY AND INITIAL SET-UP

- 1). Mount controller onto a secure surface using the screws supplied with the controller.  
**NOTE: Make sure the controller is mounted level and away from heat sources.**  
**NOTE: The distance between the center of each mount hole is 12.5cm**



- 2). Connect the power cord into the master controller and power source.

## Temp Sensor Information and installation:



- 1). Connect the temperature sensor plug into the master controller temperature sensor port 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 B, if necessary.

## Connecting the master controller to light fixtures:



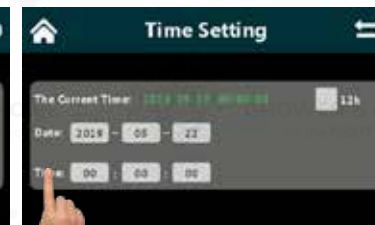
- 1). Connect one end of the RJ14 cord to the master controller A port, the other end to the A port of the light fixture.
- 2). For additional fixtures, connect one end of the RJ14 cord to the "B port" of the last light fixture and connect the other cord end to the "A port" of the added fixture.



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



Touch **Date** options to set master controller date

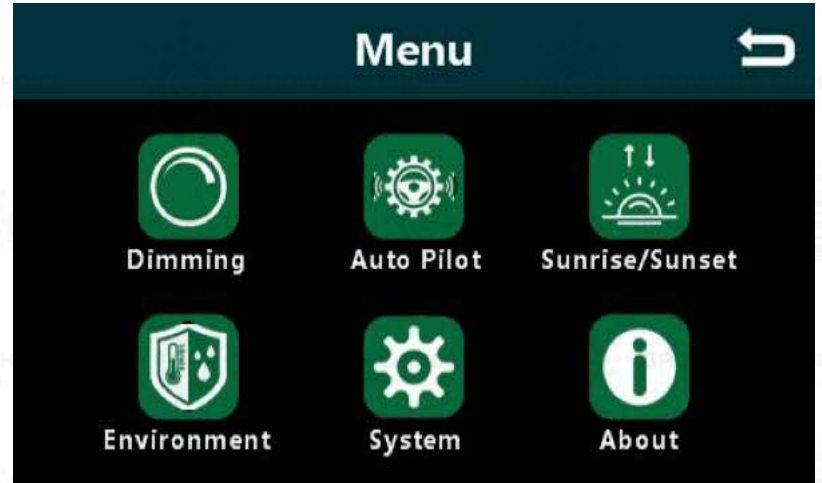


Touch **Time** options to set master controller clock





Touch the **Grower's Choice** banner to access Main Menu



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

Touch **"System"** for access to general settings and system options.



Touch to select **Group A** or **Group B** to adjust or view settings.

Touch **"Dimming Level"** to adjust dim settings from 50%-115% with HID and 15%-100% with LEDs.

To activate the **OFF**, **MANUAL ON**, or **AUTO PILOT** touch the desired one.



Touch **"Fixture Type"** to select fixture type and power levels.

Touch and select fixture type or select **"Custom"** if wattage is not shown.

Touch **"Dimming Range Setup"** to program min. and max. Power levels.



Touch **"Minimum"** or **"Maximum"** to set dimming range.

Once range is selected press **"Confirm"** to save settings.

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



**"Off"** shuts off all connected fixtures

**"Manual On"** Overrides set timers / schedules

**"Auto Pilot Enable"** turns on the autopilot which allows the controller to follow time schedules. Clicking it will also bring up the Autopilot settings.



Touch and choose **"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 8:00 and 18:00 would mean the light is set for 8 hours on and 18 hours off and NOT on at 8:00 and off 18:00 hours.



Touch the minute value to adjust **"Sunrise/Sunset"** settings from 01-60 minutes.

Touch to **Activate** or **Disable** the **Sunrise/Sunset** settings.

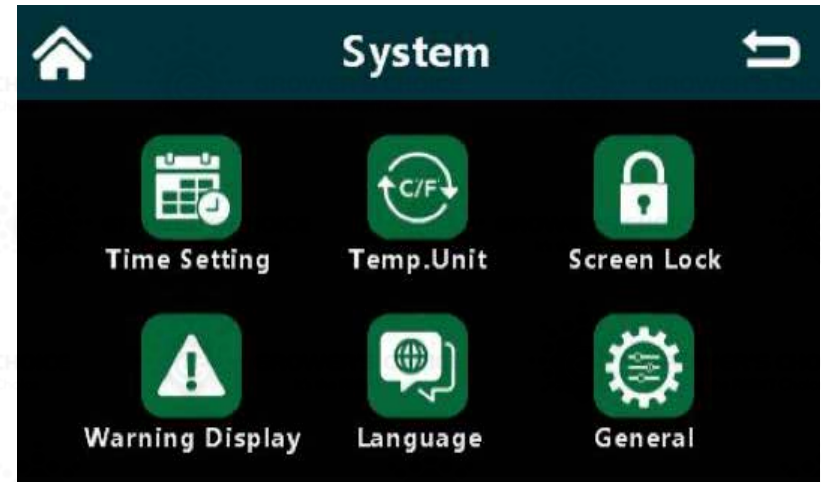
**NOTE:** Sunset setting will dim lights before scheduled off time and lights will be off by scheduled time.





Touch **"Auto-Dim"** to set the temperature at which the controller will dim the lights in case of excessive heat.

Touch **"Shut-Down"** to set the temperature at which the controller will turn off lights in case excessive heat continues.



Touch for access to **"Time Settings"**.

Touch for access to **Fahrenheit** or **Celsius** temperature selection.

Touch for access to **"Screen Lock"**.

Touch for access to **"Warning Display"**.

Touch for access to **"Language"** choice.

Touch for access to **"General"** settings.



Touch **"Active"** or **"Deactivate"** to turn **Warning Display, On** or **Off**.

Touch to enter **"Warning"** level temperature value.

Touch to enter **"Urgent"** level temperature value.

**NOTE:** In **"Warning Display mode"**, the screen will display in yellow for **"warnings"** and will turn red for **"urgent"**. If the environment is not corrected, the protective measures are activated and the lights will shut off. When the environment is managed within the chosen settings of safe operation the screen with reset back to a green display.



Touch **"Screen Auto-Lock"** to activate or deactivate screen lock and enter time before screen locks using the **"min"** option.

Touch to select the **slide lock** to be **on** or **off**.

**NOTE:** Minimum settings for HID must be at 50% or higher for lamps to ignite and Minimum setting for LED 10% or higher.