MASTER CONTROLLER

USER MANUAL

Product description

Master controller is available to control two lighting groups in a greenhouse. Output 0-11.5v adjustable DC voltage to control ballast output power or switch on/off the ballast. The controller operates on a 24-hour time cycle. The controller also has the ability to simulate sunrise and sunset cycle from 10-60 minutes. Each of the two-lighting group channels has a room overheat protection function that can be set as needed. You can use the LCD touchscreen to view and modify the current settings for each channel easily. Moreover, the controller is portable, easily installed and operated.

Controller Specifications

Output range	10%~115%
Numbers of ballasts per output	100 Max
Max cable length per group	100M
Control voltage outputs	2 group, A/B
Temperature sensor	2 group, A/B
Over heat protection	Yes
Sunrise/sunset period	Yes
Setup ballast type	1000W/945W/750W/630W/600W/500W /315W/ Not Sure
Alarm port	2 group, NO/NC
ECM port	2 group, A/B;
Input voltage	5VDC/2000mA
Weight	0.5KG
Warranty	3 years

Components

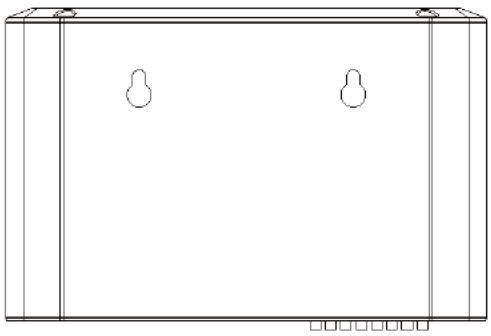
A. Master controller
B. Power adaptor(DC5V/2000mA)
C. 5M Temperature sensor cord*2
D. Controller wire(5m)*2, RJ9(4P4C) —RJ14(6P4C)
E. User Manual

Interface connection

DC5V/2A:	Power interface
GROUP B:	Group B port for controlling\RJ9(4P4C)
T B:	Group B Temperature Sensor
GROUP A:	Group A port for controlling\RJ9(4P4C)
T A:	Group A Temperature Sensor
ECM B :	External contactor module B\ output:13.8V/50mA
ECM A :	External contactor module A\ output:13.8V/50mA
ALARM NC:	Alarm normally closed output
ALARM NO:	Alarm normally open output

Placing the controller

-The controller can be mounted to the Wall. Ensure all wires of are secure. Install a nail/screw and then insert the mounting hook of the controller over the nail/screw.
-The distance between two nails is 70cm.

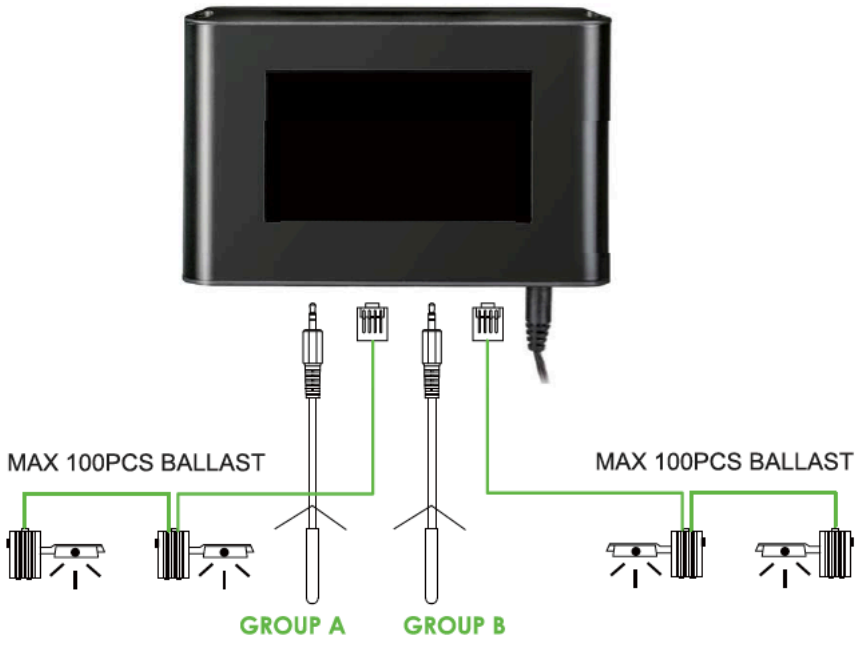


Installing and connecting the temperature sensor

-The controller has two temperature sensors to monitor the temperature in the greenhouse. For safety considerations, the controller will automatically dim or shut down the lights when temperature of the greenhouse becomes too high.
-Keep the sensor away from grow light, to make sure that measured temperature is accurate.
-Insert the sensor plug into TA(which is for Group A), Insert the sensor plug into TB if there is another room.
-Connecting the controller to the ballasts

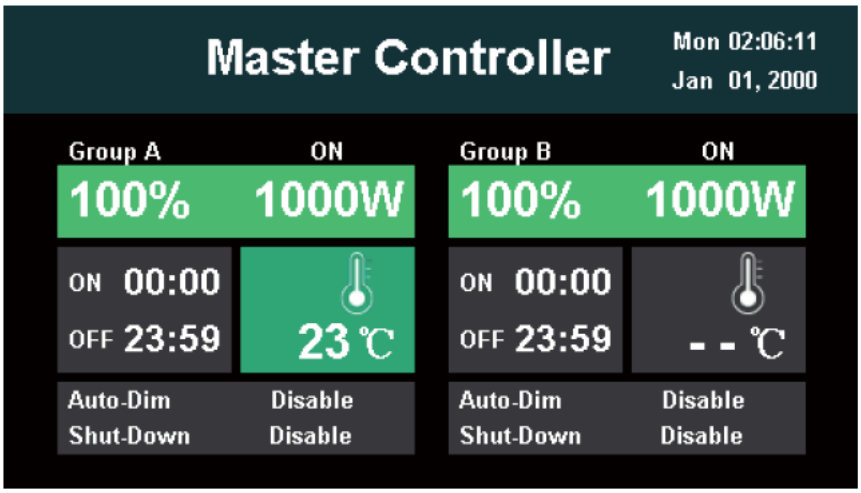
Controller connecting to the lighting ballast

-Plug the RJ9 port of phone cable into the either RJ9 port on the controller.
-Plug the RJ14 port on the phone cable into the RJ14 port on the ballast
-Connect the ballast to ballast with RJ14 phone cable
-100 ballasts Max can be daisy chained on per group.



Menu operation instructions

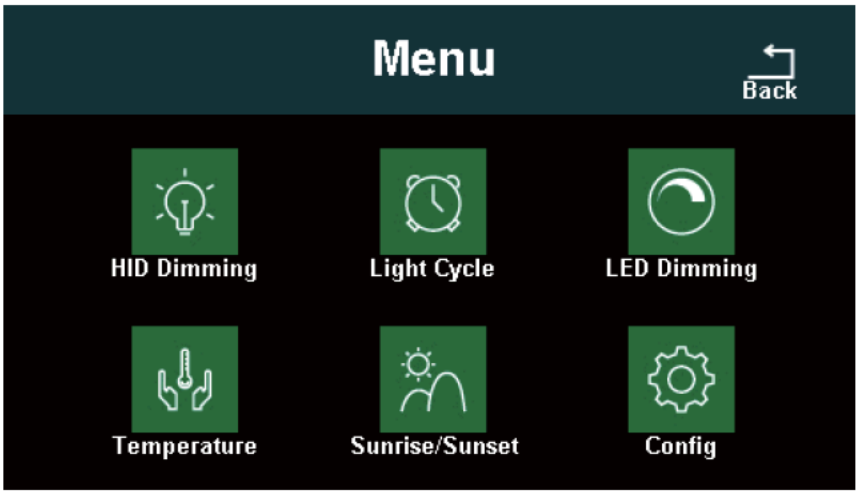
Main Interface



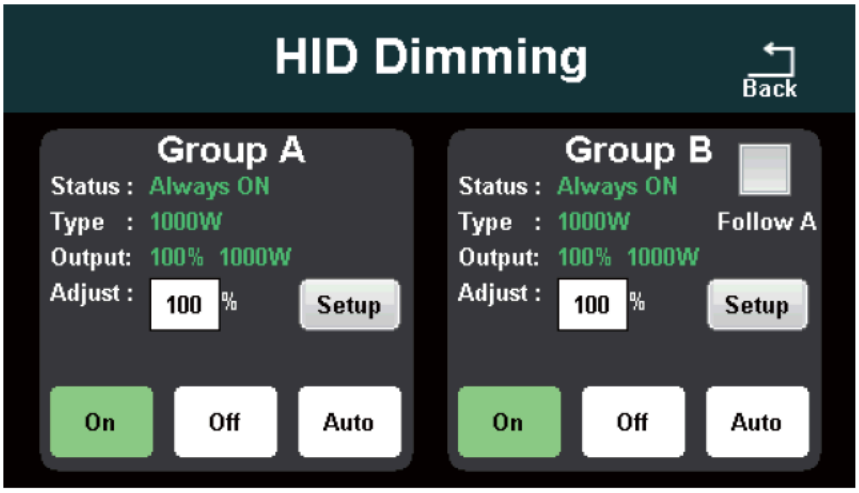
-Touch any place of the screen, The controller will enter into setting Meun.
-When the controller is not in the main interface, or without operation in 60 seconds, the display will automatically be back to main interface.
-When there is no operating within 10 minutes, the display will automatically turn off the backlight, and the controller will turn on the backlight when touch anywhere of the screen.

Menu:

-The controller shows 6 operating ico as follows.



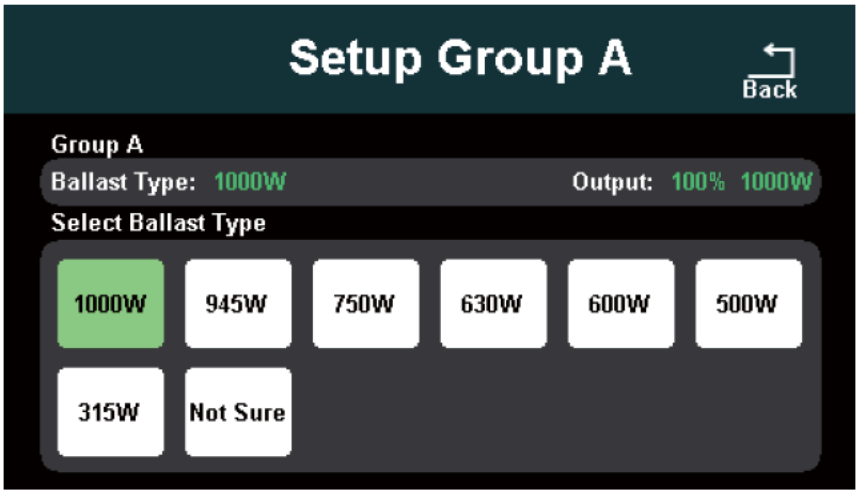
Function Key : HID Dimming



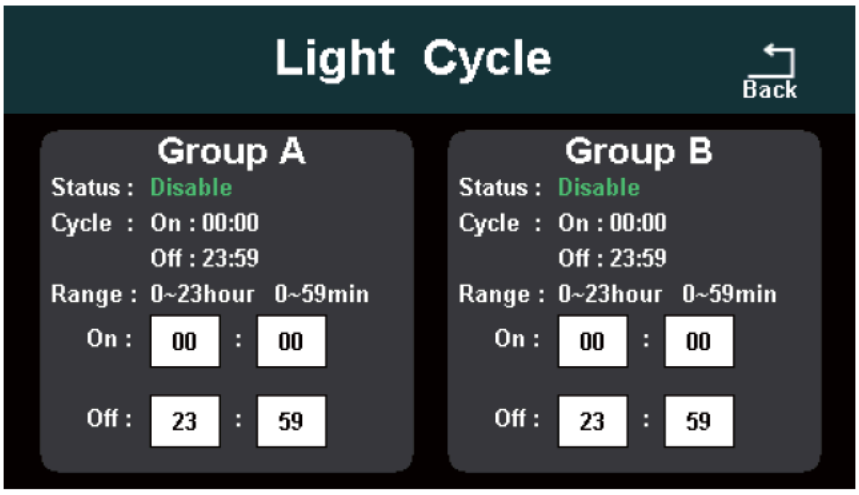
-Three mode available: On\Off\Auto set control mode.
-On means Always ON; Off means Always OFF; Auto means Auto Mode.
In Auto Mode, the controller will be working according to Light Cycle and Sunrise/Sunset.
-Adjust range: 50%~110%.
-Output voltage: 5.0 V ~11.0V.

-When check “Follow A”, Status of Group B will be the same as Group A

-Setup ballast type as 1000W/945W/750W/630W/600W/ 500W/315W/ Not Sure

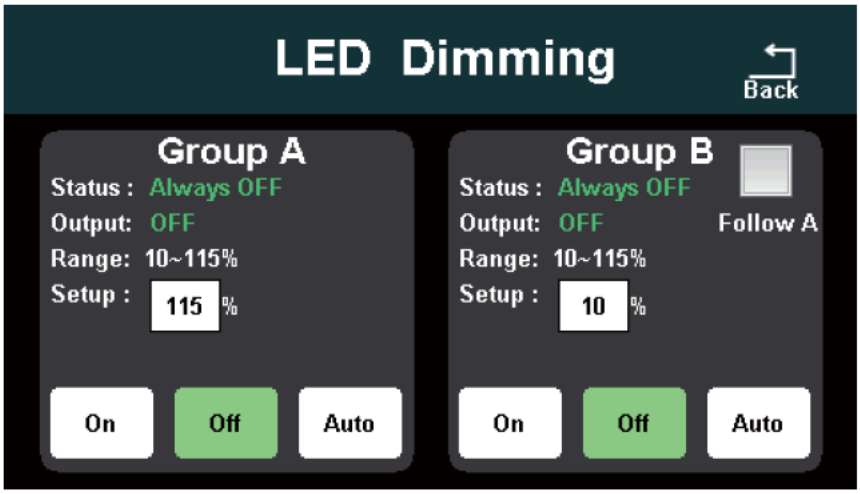


Function key : Light Cycle



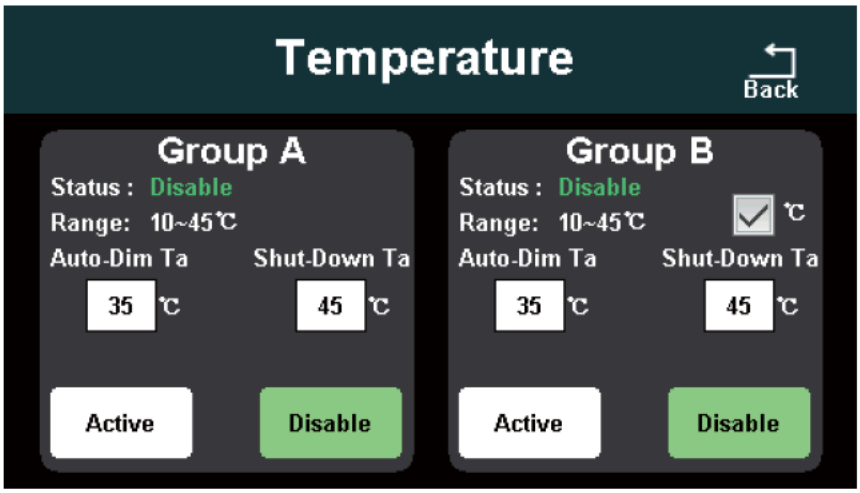
IN Auto mode, set turn on time and turn off time, timing cycle is 24 hours.

Function key : LED Dimming



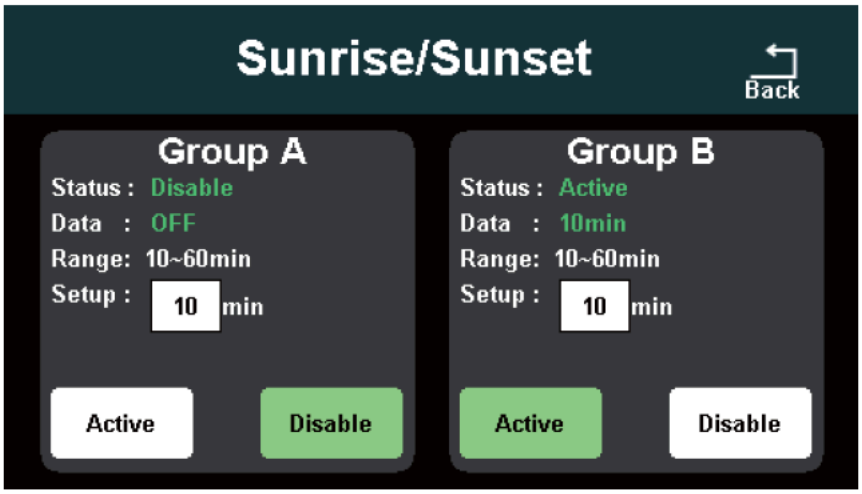
-Adjust range: 10%~115%.
-Output voltage: 1.0 V ~11.5V.

Function Key: Temperature



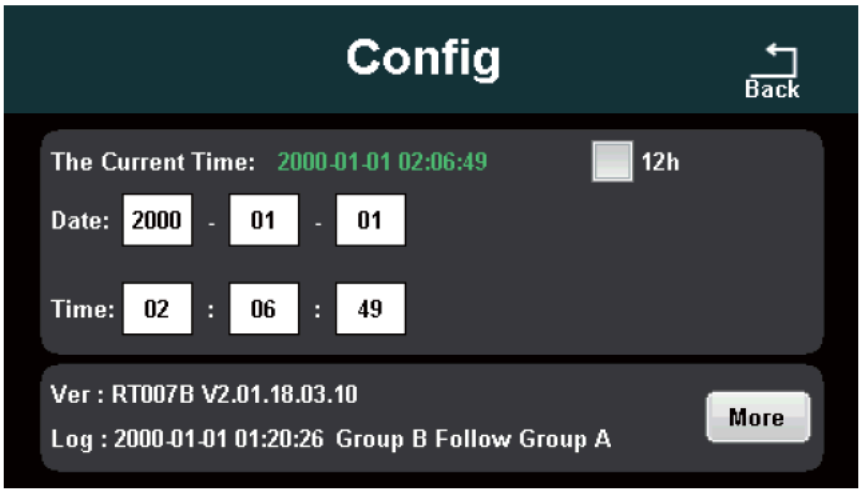
Temperature protect setting interface.
check <˚C> switch Fahrenheit to Centigrade.

Function Key: Sunrise/Sunset



Sunrise/Sunset is the same function as Sun-rise/Sun-down. Function in use at Auto mode. Output voltage slowly increase or decrease accourding to setup time.

Function Key: Config



Work Log: You can review work log when press ”More”
Time setting: the default is 24 hours time system; when click “12h”,it will enter into 12 hours time system.