SMART TOUCHSCREEN CONTROLLER

RS485 CONTROL FOR SPECTRUM ADJUSTABLE LED

PRO GROW

SUITABLE FOR USE WITH:

- *780 W Model Z*

USER MANUAL

Tips: We recommend using a hard object (pen, etc) to operate on the screen in order to improve your user experience.

INDEX

PACKING ACCESSORIES

A LED Controller x1

B Cable and Adaptor for 12V DC Power Supply x1

C RJ12 Networking Cable x1

D Temperature & Humidity Sensor x1

E Screws x2

F Screw Anchor x2

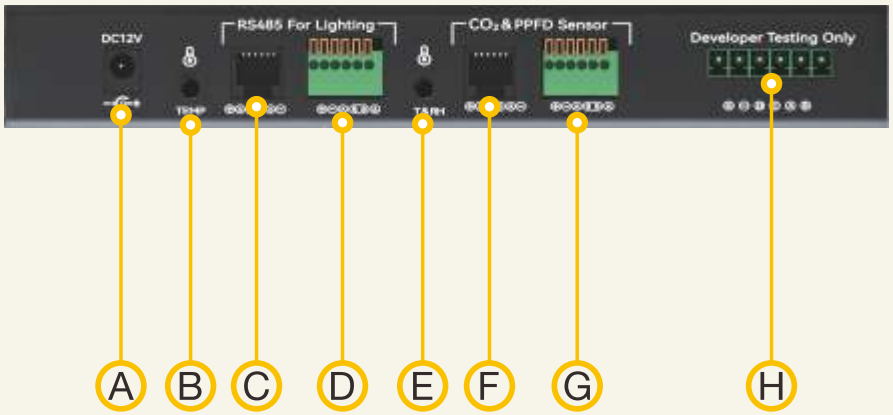
PPFD Sensor Module:

1. PPFD Sensor x1
2. RJ12 Networking Cable x1

Note: The PPFD Sensor Module needs to be purchased separately.

INTERFACE CONNECTION

Screen Lock Button



CONNECTIONS	
A	12V DC Power Input
B	3.5mm jack aux temperature sensor
C	RJ12 aux port for controlling up to 80pcs fixtures
D	Relay switch controlled by temperature/ humidity sensor
E	3.5mm jack aux temperature/ humidity sensor
F	RJ12 aux port for PPFD Sensor
G	Relay switch controlled by temperature/ humidity sensor
H	Developer Testing Only (Upgrade software or fix bugs, etc)

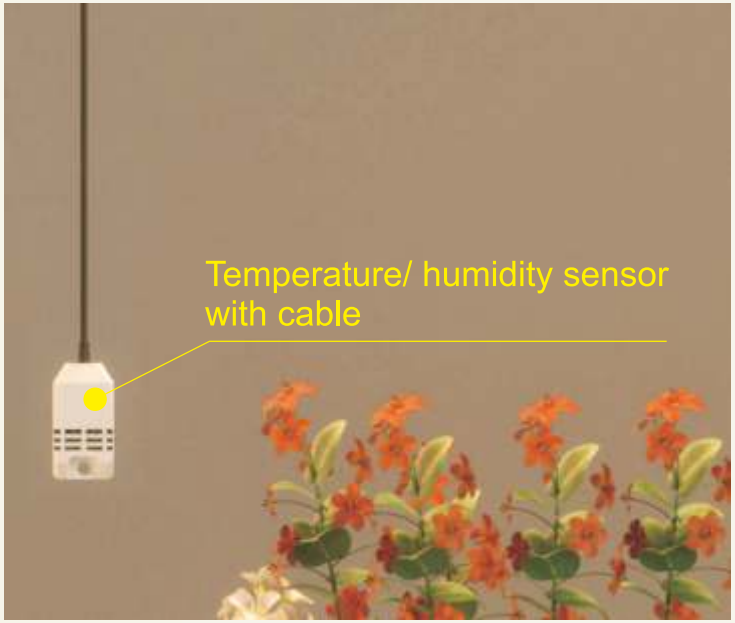
SETUP

1. 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 10cm.

2. Connect the controller to a receptacle with the power cable.

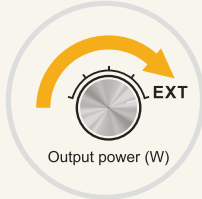
INSTALLATION

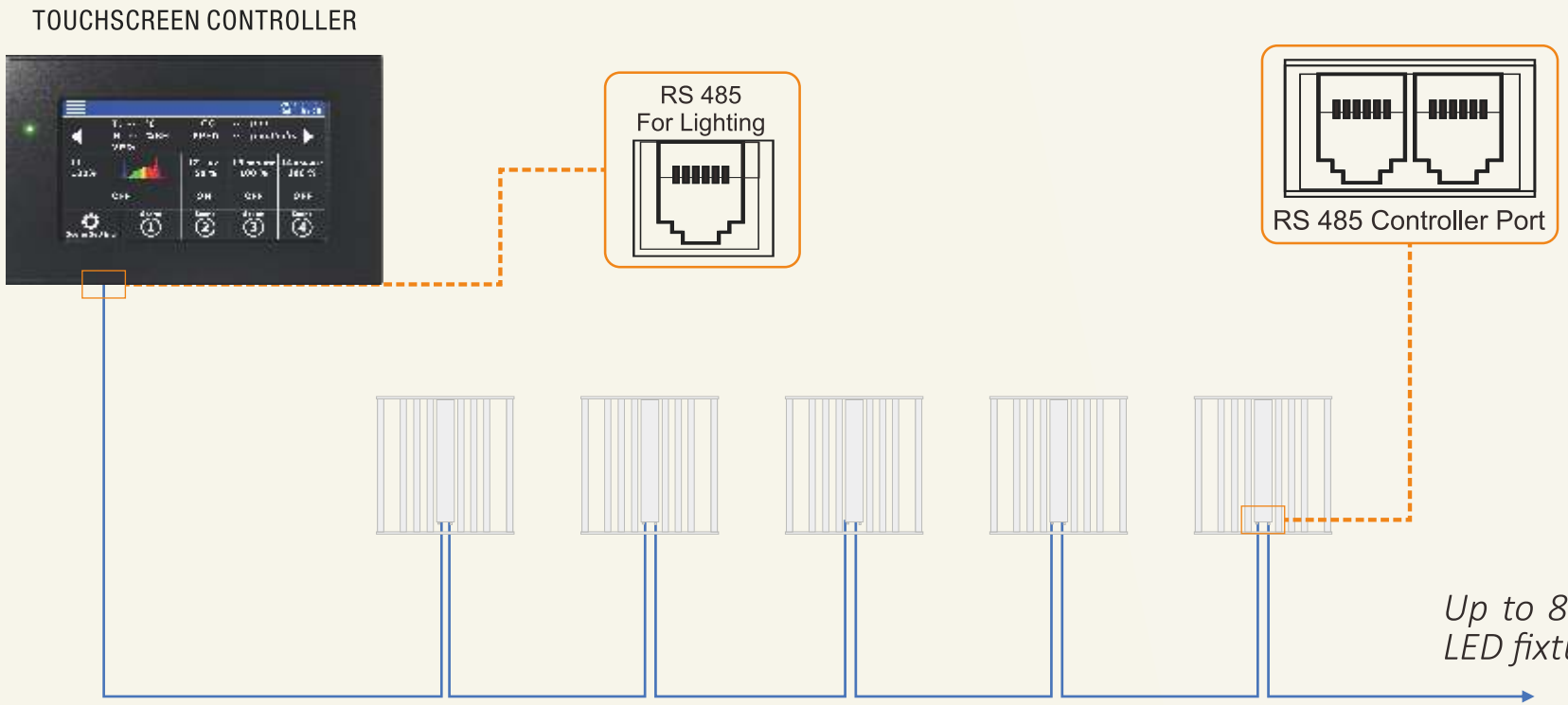
Connect port E showed in page 4 with temperature and humidity sensor. Hang the sensor at canopy height making sure the sensor and cord are hung and kept away from direct heat. Repeat the installation on other ports, if necessary.



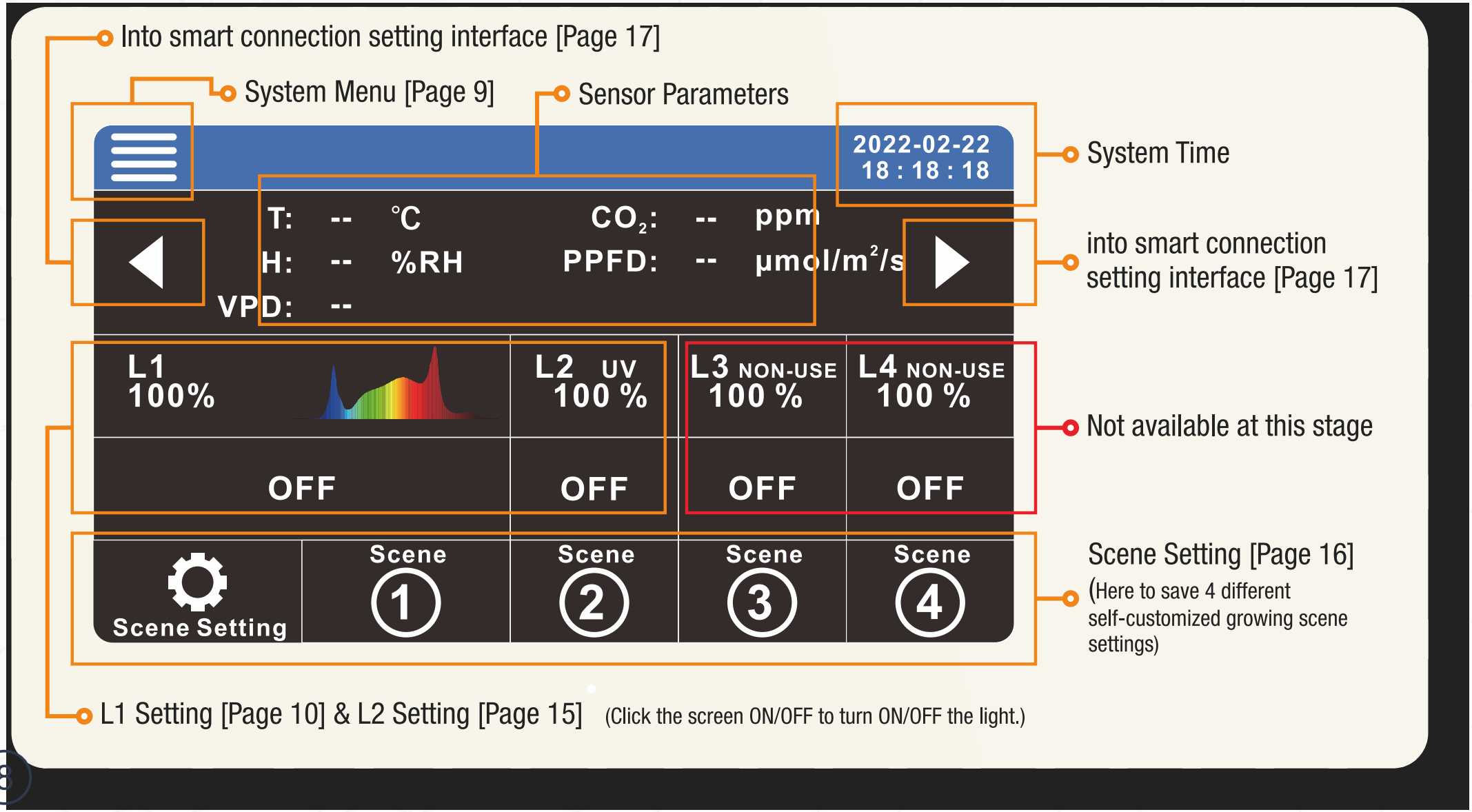
CONNECTION BETWEEN SMART CONTROLLER AND LED FIXTURE

1. Make sure the rotary knobs are all set to “EXT”.
2. Connect one end of the RJ12 networking cable to Port C showed in page 4 and the other end to the first connected fixture.

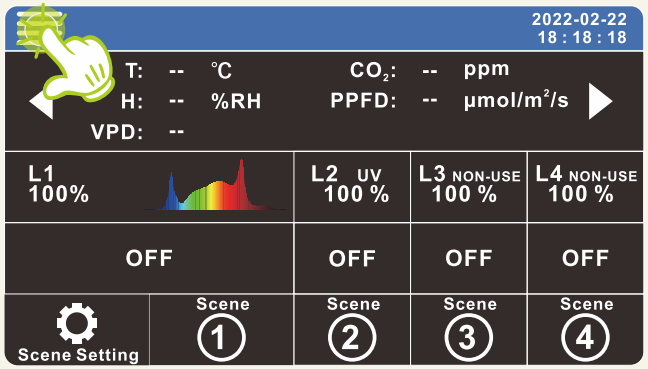




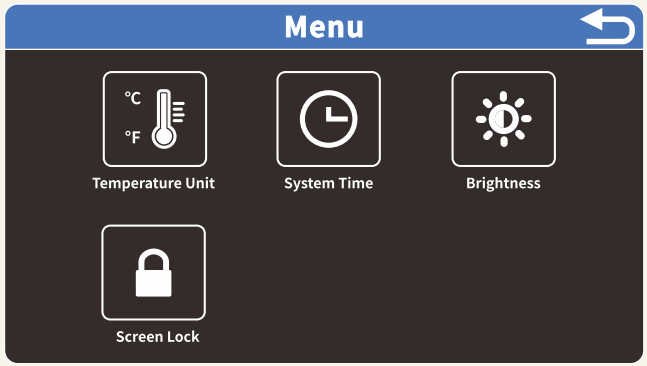
MAIN INTERFACE



SYSTEM MENU

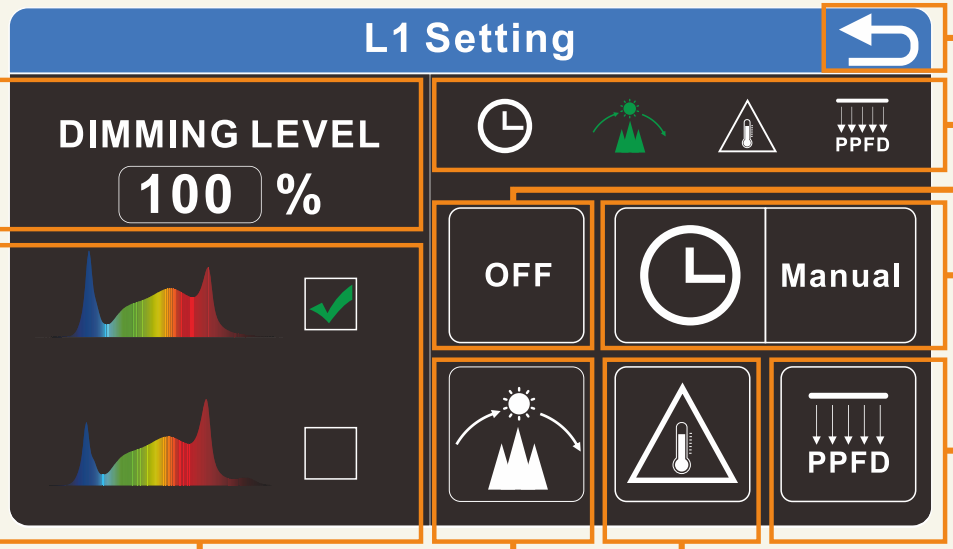


1. Click the icon in the upper-left corner to enter the setting interface where settings for temperature unit, system time, brightness and screen lock are displayed.



1. Click “Temperature Unit” for access to Fahrenheit or Celsius temperature selection.
2. Click “System Time” to modify system time.
3. Click “Brightness” to adjust controller screen brightness.
4. Click “Screen Lock” to set up the screen display variables.
(**Remarks:** In the off-screen setting, “Slide to unlock”: it means that after pressing the on-screen button, you need to manually swipe to open the screen.)
5. Click the top right arrow icon to access the main interface.

L1 SETTING



1. Adjust LED Power Input (Enter the percentage of higher than 15% to turn on the LED fixtures.)

2. Return To The Main Interface

3. Status Icon (Green for activated, white for disabled.)

4. Switch for L1

5. Time Setting [Page 11]

5.1. Click into the " ⏲ " icon where you can set up the timers for three different customizable operation modes.

5.2. "Manual" goes to "Auto" after a tap, and the above setting will be in effect.

6. PPFD Setting [Page 14]

Click " PPFD " to enter the PPFD setting interface where the PPFD value can be set, your LED will increase or decrease power input accordingly.

Note: Although any number within the range can be put it and activated on the device, when the figure of PPFD exceeds what your fixtures are capable of, the setting will not be activated in reality.

7. Spectrum

Select the spectrum suitable for plants' growth stage.

Note: L1 refers to full-spetrum LED.

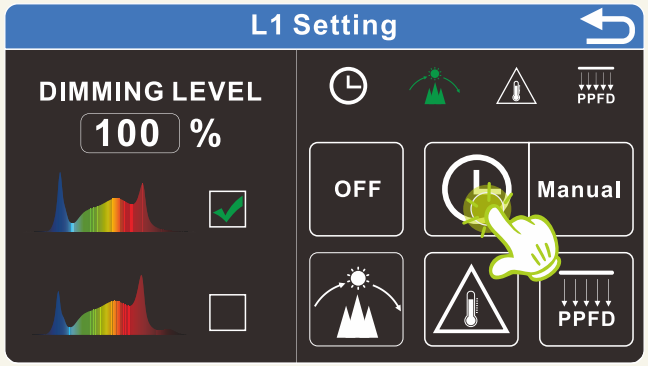
8. Sunrise/Sunset [Page 12]

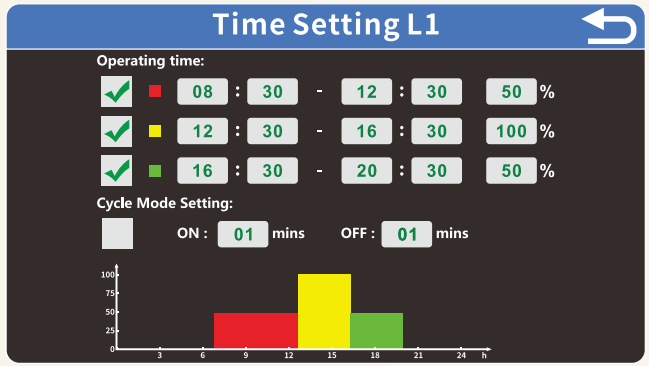
Click to set up a starting value and activate it for Sunrise or Sunset modes to be in effect with time length self-customized ranging from 1 to 60 minutes.

9. Temperature [Page 13]

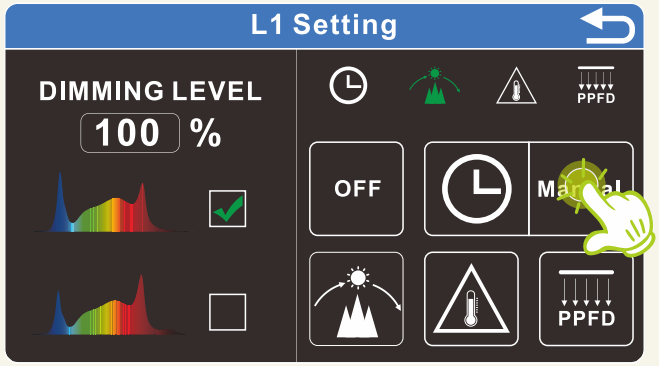
Click "Auto Dim-Target" to set the temperature at which the controller will dim the lights in case of excessive heating. Click "Shut Down-Target" to set the temperature at which the controller will turn off lights in case excessive heat continues.

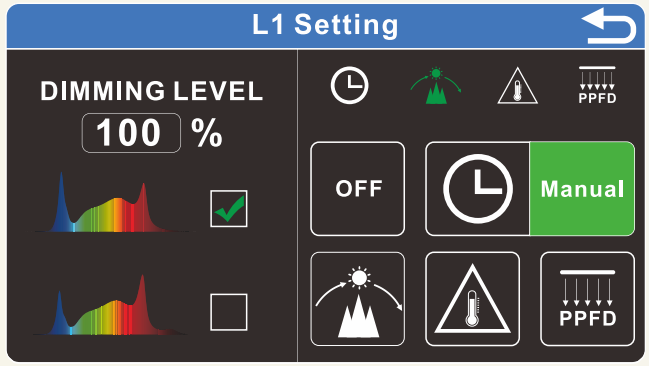
L1 SETTING





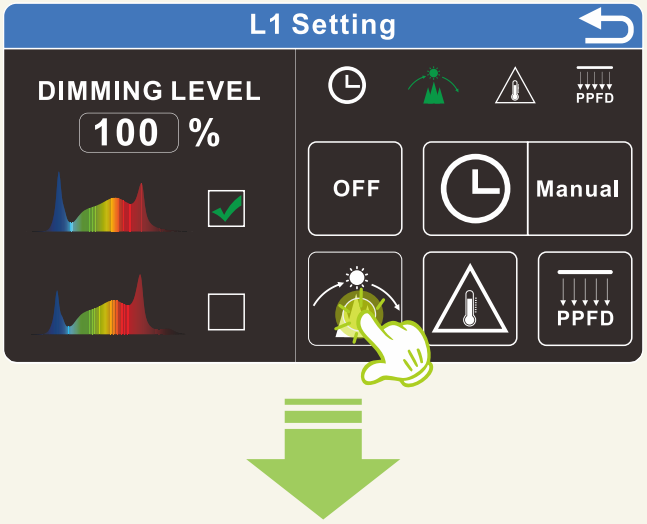
1. Click " " icon to enter the time setting interface where you can set up different operating time periods in the day with corresponding dimming level, then tick the corresponding boxes for them to take effect. Cycle Mode Setting is to additionally add intervals during operating time set above.



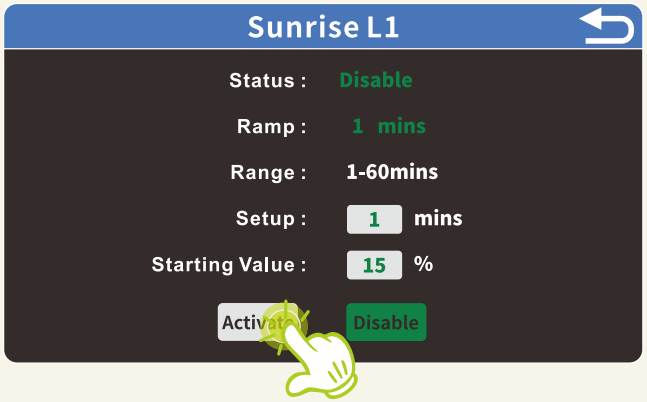


2. Once you click "Manual", it will go to "Auto" and the above setting will take effect.

L1 SETTING



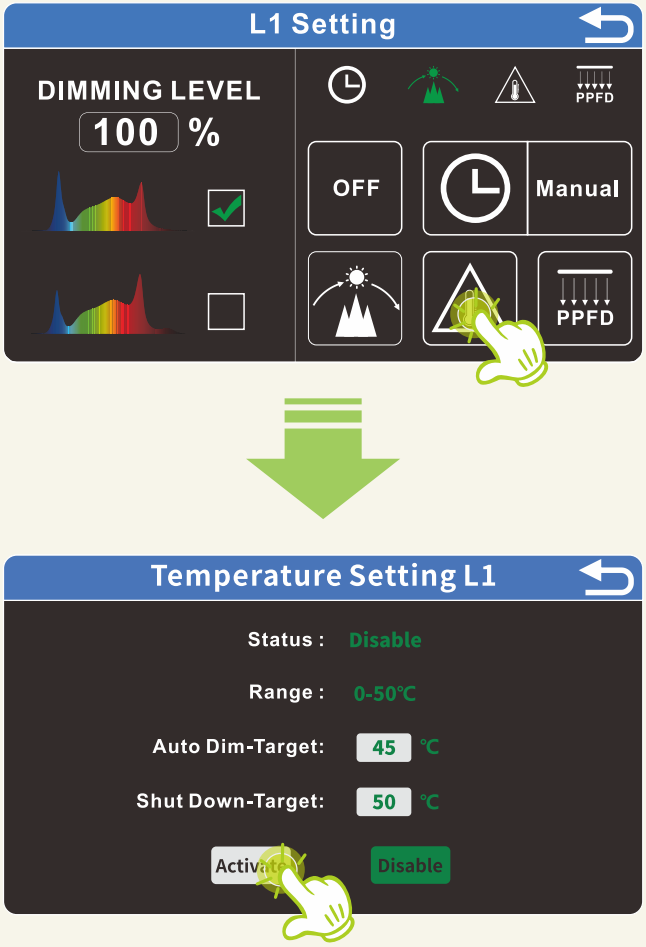
1. Click " " icon to enter the interface and set the time period control for sunrise and sunset.



2. This page is for setting the sunrise and sunset. After parameter setting, click the icon "Activate" to enable it.

Note: The LED fixture will not be turned on when the starting value is lower than 16%, and when the sunrise variables are set, the corresponding sunset will apply accordingly.

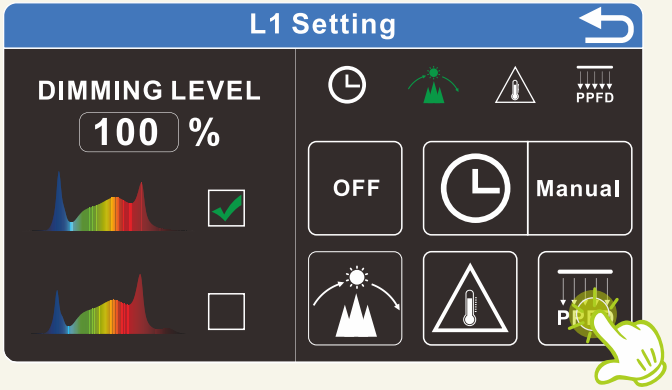
L1 SETTING



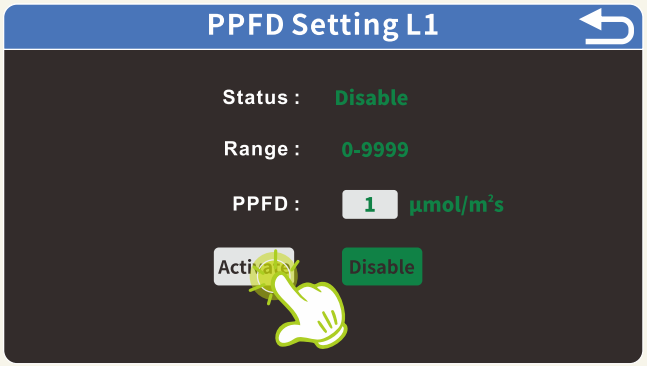
1. Click “ ” icon to set temperature control.

2. The power input percentage will be reduced to 50% once the temperature reaches 45°C, and the light will be shut off when it reaches 50°C.

L1 SETTING

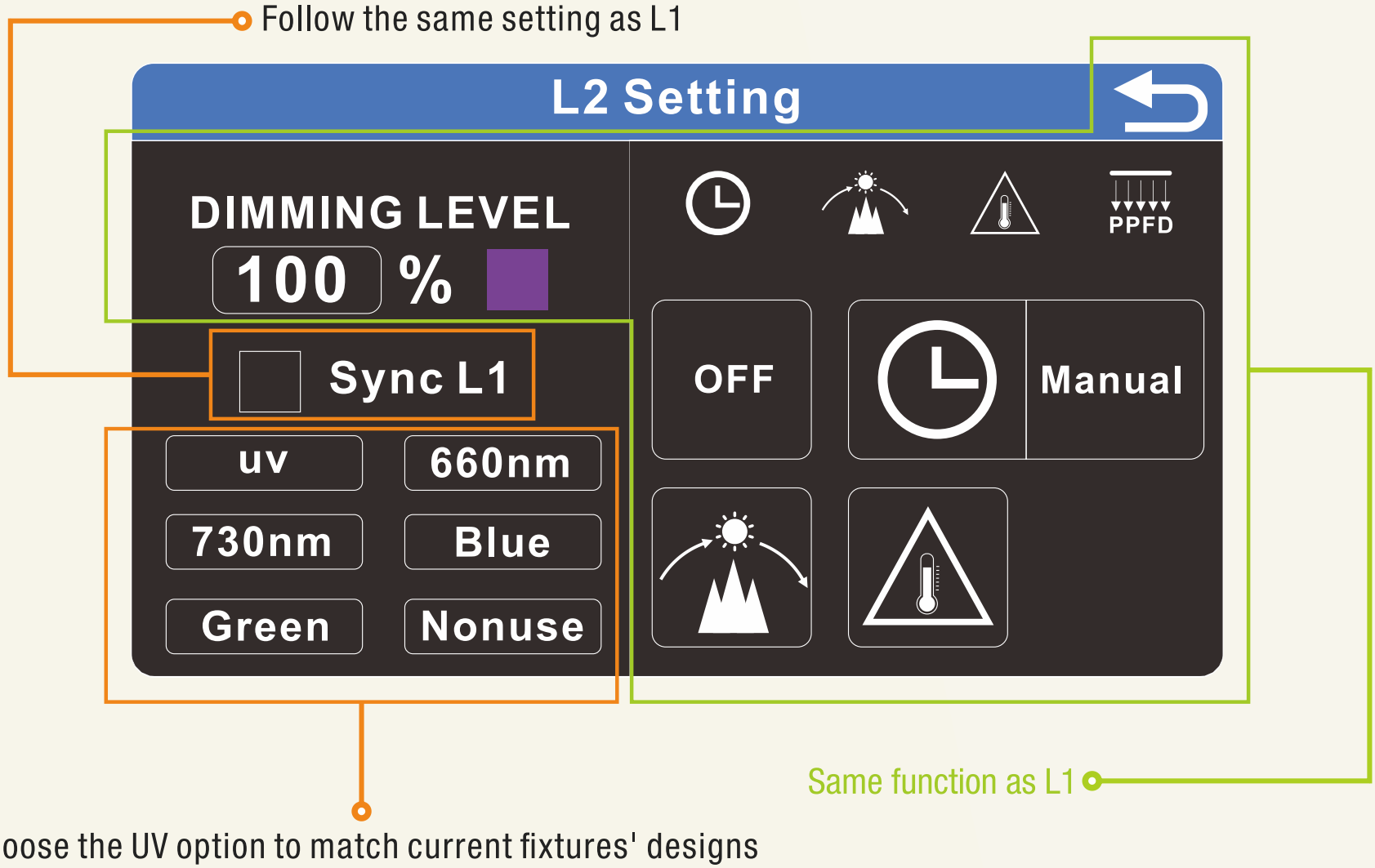


1. Click " PPFD " to set up PPFD value.

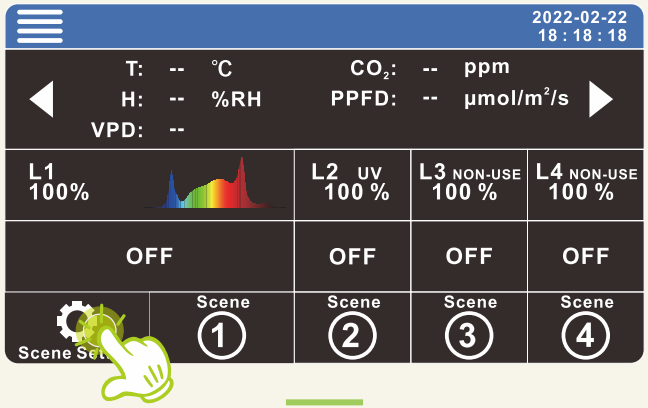


2. Then click "Activate". The light will be adjusted to the corresponding power to reach the entered PPFD value.
Note: Although you can virtually put in any number range from 0-9999 in the box, the actual PPFD can only apply when it is within the capacity of your LED.

L2 SETTING


Follow the same setting as L1
L2 Setting
DIMMING LEVEL
100 %
Sync L1
uv
660nm
730nm
Blue
Green
Nonuse
PPFD
OFF
Manual
Same function as L1
Choose the UV option to match current fixtures' designs

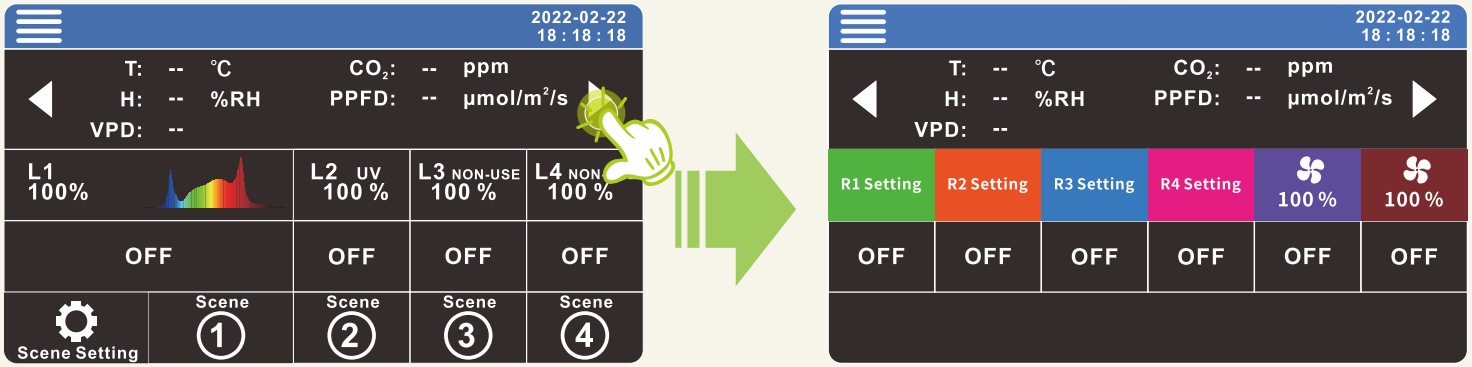
SCENE SETTING



1. Enter the main page and click "⚙" . You can manually set up and save four different scenes.

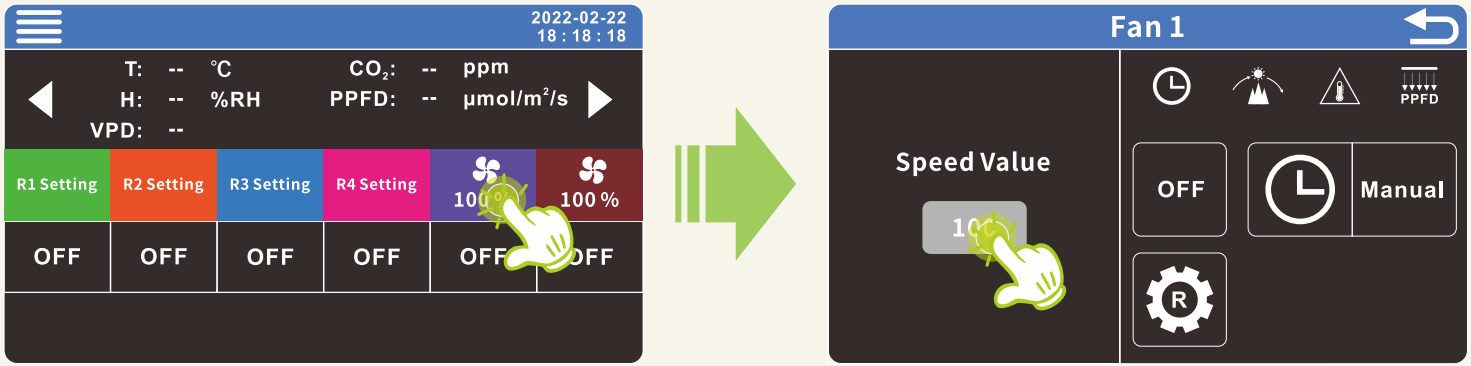
2. To set up a scene, please set up different variables first, then click "Scene Setting" and finally click save.

SMART CONNECTION

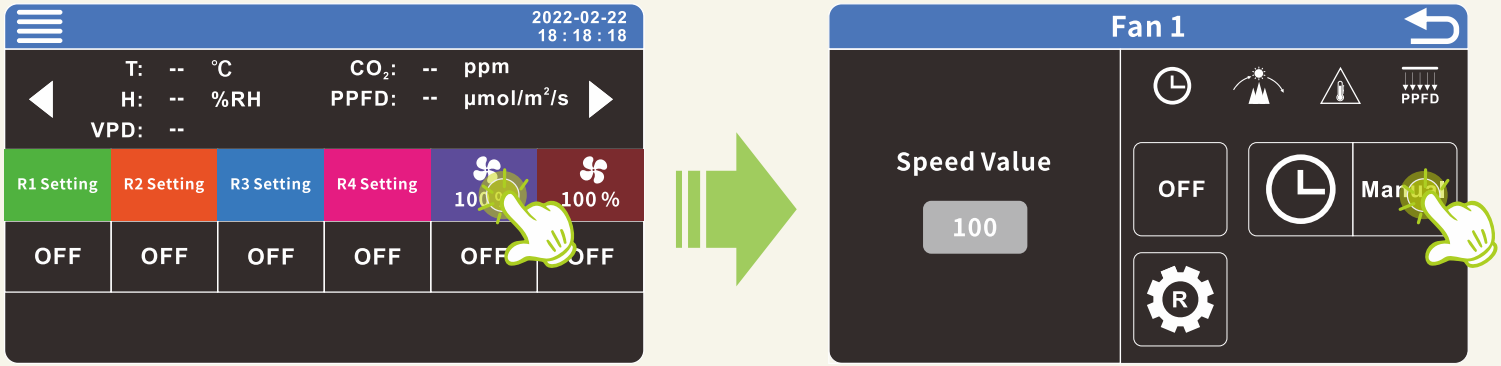


Take the setting of the fan as an example, insert the plug of the fan into the dedicated socket for smart thyristor wind speed adjustment, and connect the controller and the socket at the same time.

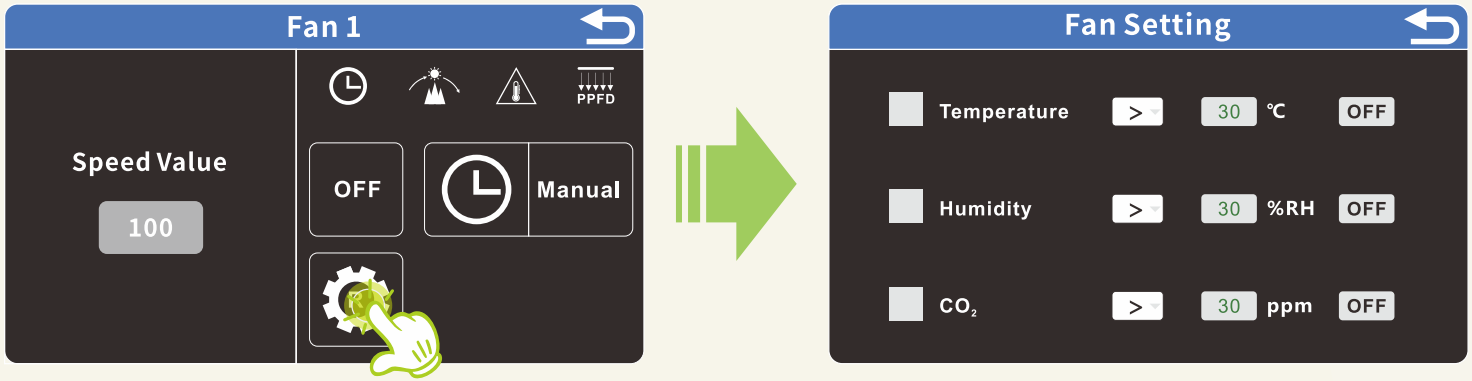
1.Enter the main page and click " ▶ " in the upper right corner to enter the next page.



2. Click " 100 % " icon to enter the corresponding value in Speed Value to adjust the wind speed.



3.Click " 100 % " to enter the time period setting, and then click Manual to change to Auto to take effect.



Take the figures in the picture as an example, when the temperature is greater than 30 Celsius, or when the humidity is greater than 80, and or when the PPM is greater than 450, the controller will turn off the fan.

4. Click " R " icon to enter the temperature, humidity and CO_2 setting.

SAFETY WARNIN

1. Keep the touchscreen controller in a cool and dry environment, and away from dust, dust, heat and moisture.
2. Make sure all RJ and power cords are kept away from heat, moisture, environment or anything that may damage the 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. We will not be responsible for any damage to the product that occurs during the repair process that is a result of any unauthorized modification or repairs or replacement not performed by us.
5. Touchscreen controller are designed to work with GC RJ12 data cords. Using other brand or non-RJ12 data cords could cause malfunctions and we are not responsible for the damage.

PRO GROW

SMART TOUCHSCREEN CONTROLLER

Provides your plants with all wavelenghts they need to grow healthy from seedling to blosoom