



BLACK KING I

LED GROW LIGHT CONTROLLER

Instruction Manual





PACKING LIST



(1) BlackKing I LED Lighting Controller



(1) RJ45 CORD (6')



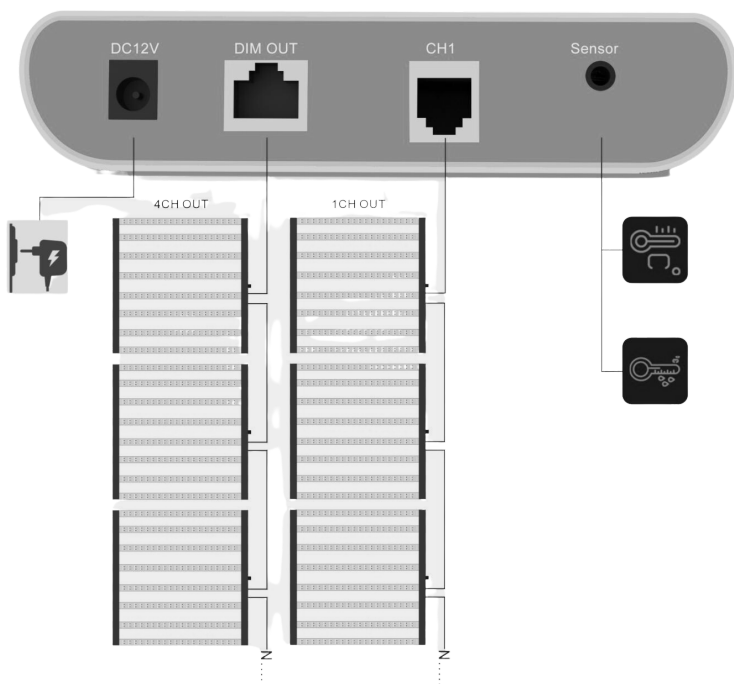
(1) Power Adapter



SPECIFICATIONS

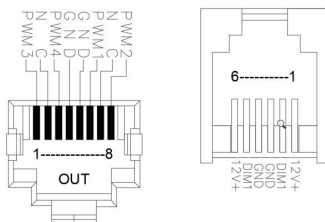
Actual Power Usage:	< 0.1W
Voltage Input:	DC12V / 120V / 240V
Working Temperature:	32° to 140°
RJ45 Connection Ports:	1
RJ12 Connection Ports:	1
Sensor Signal Input:	3.5 mm Audio Jack PJ393
DCIN	DC 5.5mm x 2.1mm
Lamp Body Material:	ABS
Unit Dimensions:	5.6" x 3.7" x 1.25"
Unit Weight:	2.2 lb

Connection Diagram

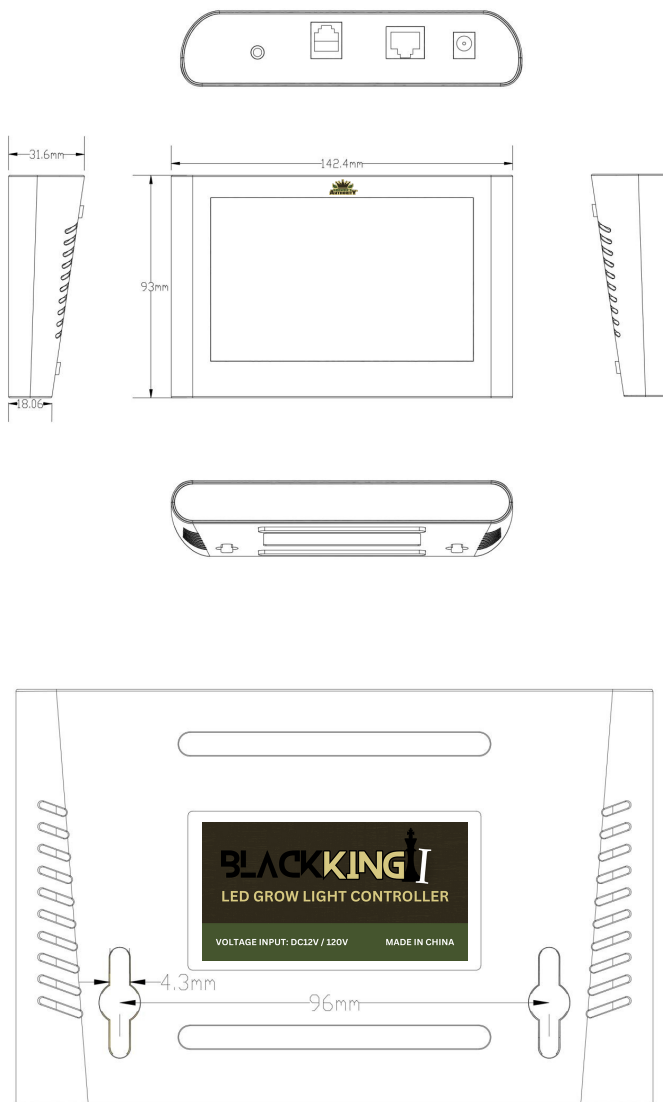


Interface Definition Diagram

The sensor in the picture is an optional accessory. The primary sensor is already built into the controller. An external sensor should only be used if the controller and the location to be monitored are different. RJ45 interface outputs four channel signals that are named CH1, CH2, CH3 and CH4. The RJ12 interface can only output CH1 signals.



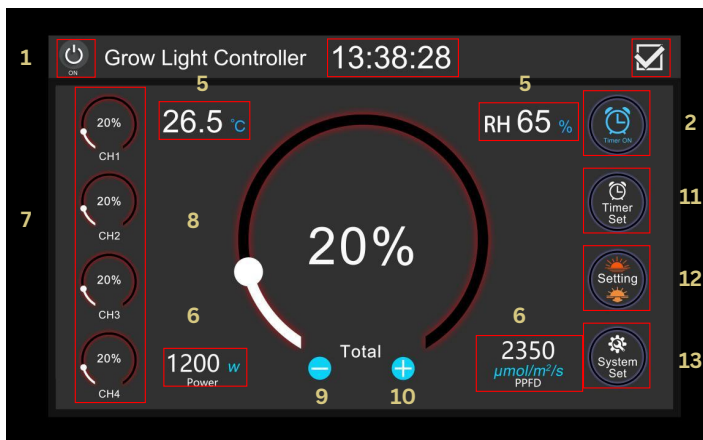
PRODUCT SIZE DRAWING



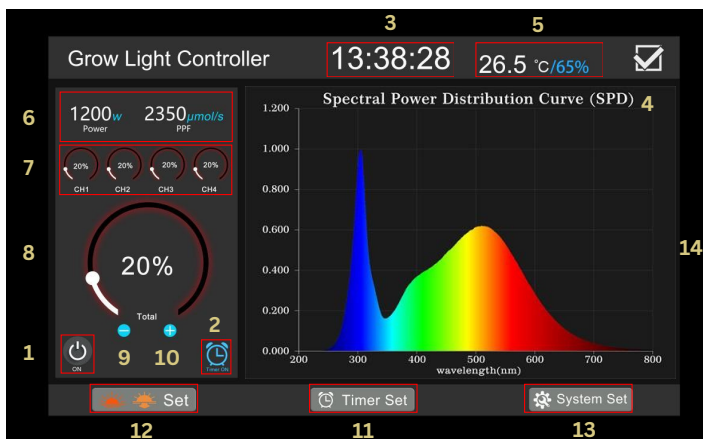


OPERATING INSTRUCTIONS

"Dimming Mode" Viewing Screen



"Spectral Mode" Viewing Screen





OPERATING INSTRUCTIONS

- 1 : **Complete Unit** : ON OFF When unit is off, the screen will remain bright.
- 2 : **Timer Master Switch** : ON OFF When off, all set times are turned off.
- 3 : **System Time** : Press the red area for 2 seconds to enter the setting below.

Year	Month	Day	Hour	Minute
2020	04	23	08	59
2021	05	24	09	00
2022	06	25	10	01
2023	07	26	11	02
2024	08	27	12	03

Move up and down to adjust the system time. Once adjusted, press the check mark in the top right corner to confirm and exit.

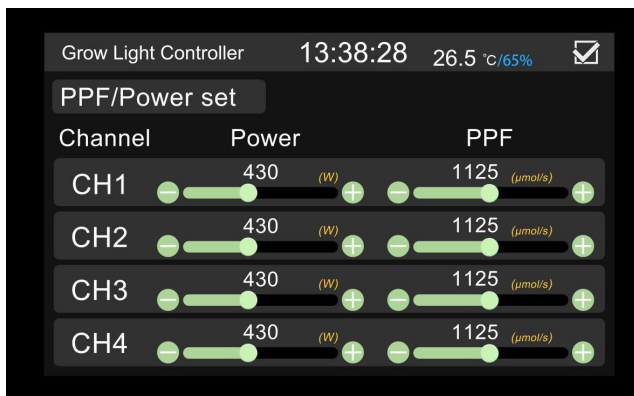
- 4 : **Check Mark Button** : To save current settings, press this button.
- 5 : **Temperature / Humidity Display** : Displays real-time data. To change between Fahrenheit and Celsius, simply click the left temperature position.

26.5 °C	79.7 °F
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OPERATING INSTRUCTIONS

6 : Power & PPF Display : The actual power and PPF values are displayed here. Press the red area for 2 seconds to enter the settings interface as shown below.



Adjust these settings according to the actual light parameters. For the power setting, it can be adjusted between 0-1500 watts. For the PPF setting, it can be adjusted between 0-4800. After all the settings have been adjusted, press the check mark in the top right corner to save the settings.

7 : Channel Brightness Adjustment - By clicking on any small circle in this area, it will focus on it and enlarge it to the large circle area shown in #8.

8 : Total Bright Adjustment : The selected small circle's settings can then be adjusted. Each light's brightness can be adjusted between 0-100%. After all the settings have been adjusted, press the check mark in the top right corner to save the settings. Channels 1-4 are adjusted the same way.



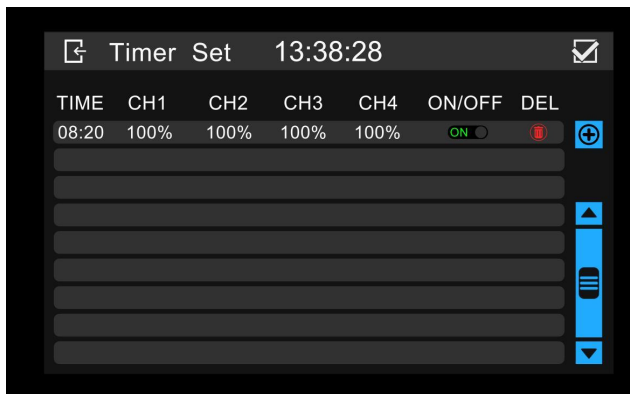


OPERATING INSTRUCTIONS

9 : **Reduce Brightness** : Press this button to reduce the brightness.

10 : **Increase Brightness** : Press this button to increase the brightness.

11 : **Timer Settings** : Press this button to adjust the timer settings.



Turns on this timer setting. This does not turn on the lights.



Turns off this timer setting. This does not turn off the lights.




Press to delete this timer setting.

Up to 9 different timers can be set simultaneously.



OPERATING INSTRUCTIONS

Click the  icon on the right to add a timer setting as follows:

Timer Set 13:38:28

Execute time: 08 30

Channel Brightness

CH1 43%

CH2 43%

CH3 43%

CH4 43%

The "Execute Time" represents the time that this timer setting will execute. The time is in military time (00:00 - 23:59). The brightness can be adjusted by moving the slider to the left or right. It can also be adjusted by clicking on either the "-" or "+" buttons located on the sides of the slider. 0% brightness indicates that the light will be turned off. After all the settings have been adjusted, press the check mark in the top right corner to save the settings.

If the number of timer settings exceed 9, the below message will appear.

Timer Set 13:38:28

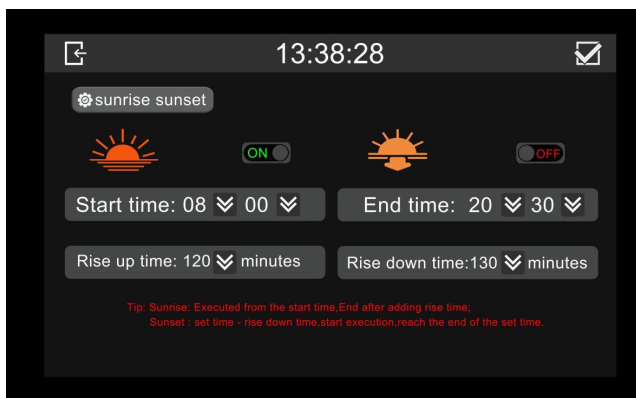
TIME	CH1	CH2	CH3	CH4	ON/OFF	DEL
08:20	100%	100%	100%	100%	ON	
09:20	10%	50%	100%	100%	OFF	
10:00	100%	50%	100%	100%	ON	
11:20	50%	100%	100%	100%	ON	
12:00	0%	100%	100%	100%	ON	
14:20	100%	100%	100%	100%	ON	
16:00	50%	100%	100%	100%	ON	
18:20	100%	100%	100%	100%	ON	
22:00	0%	0%	0%	0%	ON	

Warning: The number of schedules has reached the upper limit, please modify, delete and increase!



OPERATING INSTRUCTIONS

12 : Sunrise / Sunset Feature : Press this button to utilize this feature. The sunrise / sunset feature allows the user to set a sunrise / sunset time for which the unit will incrementally increase / decrease the light's brightness to mimic real life sunrises / sunsets. Upon clicking the button, the settings interface will appear. This will allow the user to adjust the settings according to their own preferences. The time is in military time (00:00 - 23:59). The minimum "Rise up time" is 10 minutes. The maximum "Rise down time" is 180 minutes.



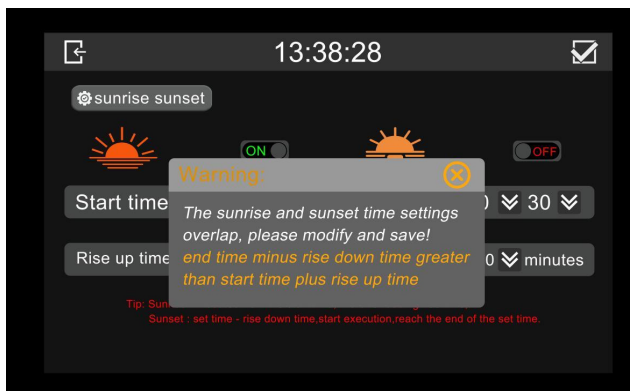
For example, set the sunrise start time to 8:00 and the rise up time to 120 minutes. The rise up time will be performed in 120 minutes. It will rise evenly to the light's preset brightness value within 120 minutes after 8:00 (start time). The sunset feature works the same way except it will start the dimming process the exact amount of minutes set for "Rise down time" prior to the "End Time". For example, if the end time is set to 20:30 and the rise down time is set to 130 minutes then the unit would start dimming the lights at 18:20. The lights will be fully turned off by 20:30 in this example.

The "ON" button means that this feature is enabled.

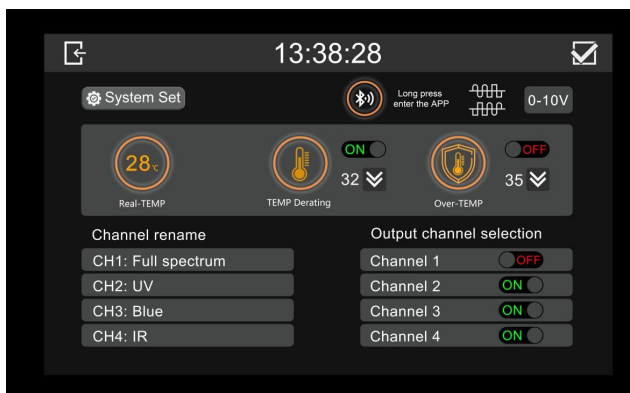
The "OFF" button means that this feature is not enabled.

After all the settings have been adjusted, press the check mark in the top right corner to save the settings. If the settings overlap, the following error message will appear.

Note: "Settings Overlap" is defined as the end time minus rise down time being greater than the start time plus rise up time. An error message will appear if these settings are less than or equal to each other.



13: **System Settings** : Press this button to enter the settings interface.



The "Real-TEMP" feature collects the temperature and displays it in real-time. The "TEMP Derating" feature is a temperature reduction & protection safeguard. When the temperature reaches the preset value, all the light's that are currently on will decrease in brightness 1% every 5 minutes until the temperature returns to 5 degrees lower than the preset value. If the temperature maintains under the preset temperature, then the lights will automatically start increasing 1% every 5 minutes until the original brightness value has been restored.

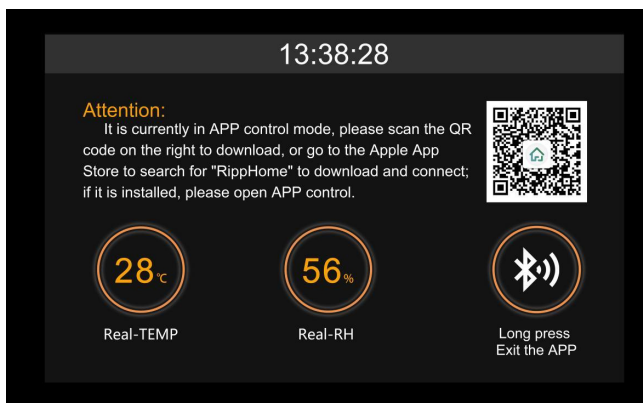
For example, if the temperature setting is set to 32°C, and the temperature in the room reached 33°C, then the brightness will start to decrease until the temperature in the room is at 27°C. At this time, the lights will start increasing again as long as the temperature remains under 32°C (the preset value).



OPERATING INSTRUCTIONS

ON The "ON" button means that this feature / channel is enabled.

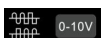
OFF The "OFF" button means that this feature / channel is disabled.



The "Real-TEMP" is the actual real-time temperature display.

The "Real-RH" is the actual real-time humidity display.

The signals can be switched. The output signal options are "0-10V" or "PWM" depending on your application and if the controller is located inside the room that you are monitoring.



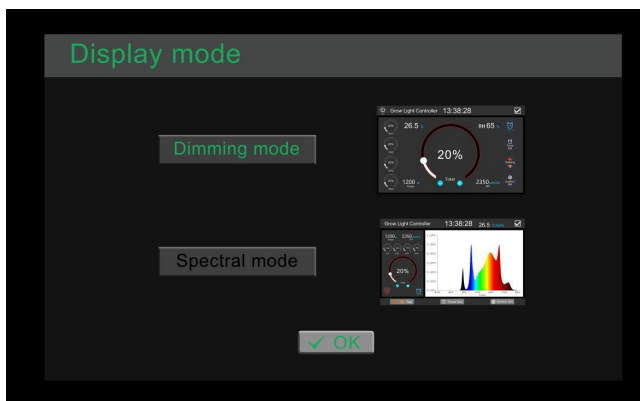
To rename a channel simply click on it's current name. A popup keyboard will appear. This will allow you to adjust the name of each channel according to your preferences.





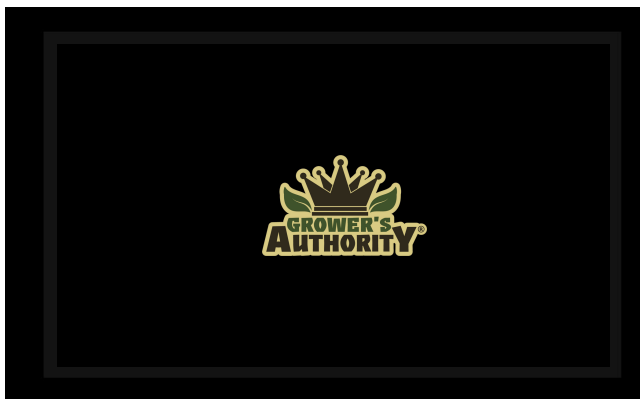
OPERATING INSTRUCTIONS

14 : **Spectrum Map Display** : This area gives the user the ability to change their primary interface display. Please note that while these spectrum charts are very accurate, they will not update if the light's brightness changes.



The option with the green font is the active & selected option. The option with the black font is the inactive & non-selected option. To change, simply click the option that best suits your needs, confirm by clicking "OK", and then exit.

The below screen is the typical boot up screen and is normal. After a short time, the actual controller screen will appear with all of it's features.





WARRANTY

Rest assured, our company provides you with high quality warranty service!

1 Year Manufacturer Warranty. The warranty covers all parts but does not include labor or repair costs. Please reach out to the dealer you purchased this unit from for any warranty claims.

Grower's Authority reserves the right to accept or deny any manufacturer warranty claims at their sole discretion for any or no reason. Some examples of denial reasons include improper use such as incorrect power source, water damage, etc.

This product was distributed by Garden Dominion Supply (GDS) located at 18113 Maugans Ave Hagerstown, MD 21740 United States. You can reach us at (240) 347-7072.

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