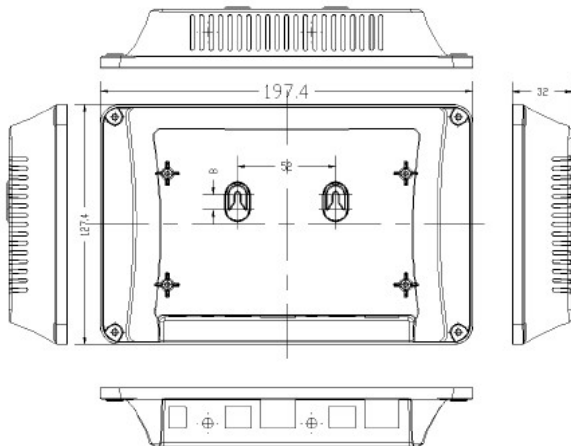


The Vela XT Grow Light Controller offers an All-in-One place controller for up to 100 total grow lights making light control in small or large horticulture facilities easy with a single controller. Includes multi-stage timer controls and dimming controls to simulate sunrise and sunset. Connect temperature and humidity sensors for even more controls on the lights. Bluetooth and WiFi capable



## DIMENSIONS



P/N: RGL-KZ01AB-ab

Note:

“RGL” = Rugged Grade Lighting

“KZ01” = LED Grow Light controller

“A “ = Signal output protocol: A1=0-10V, A2=485

“B” = Signal output port type: B1=RJ11, B2=RJ12,

B3=RJ45

“a” = Number of controller ports: a1=2way a4=4 way a6=6 way a8=8 way a10=10 way a12=12 way

“b” = Controller matching APP: b1=Android b2=

## ADVANTAGE

- Touch screen man-machine interactive interface
- Dual port signal output
- The output is suitable for all LED drive power with 0-10V signal input
- Multi-stage switch timing function, which can simulate sunrise and sunset
- Temperature and humidity detection function
- Connect to mobile phone APP with wireless transmission function
- 50m Indoor communication 50m

## APPLICATION

- Indoor;
- Green House;
- Cannabis / Marijuana Cultivation;
- Vegetable Cultivation
- Indoor Farm Facilities
- Indoor Horticulture

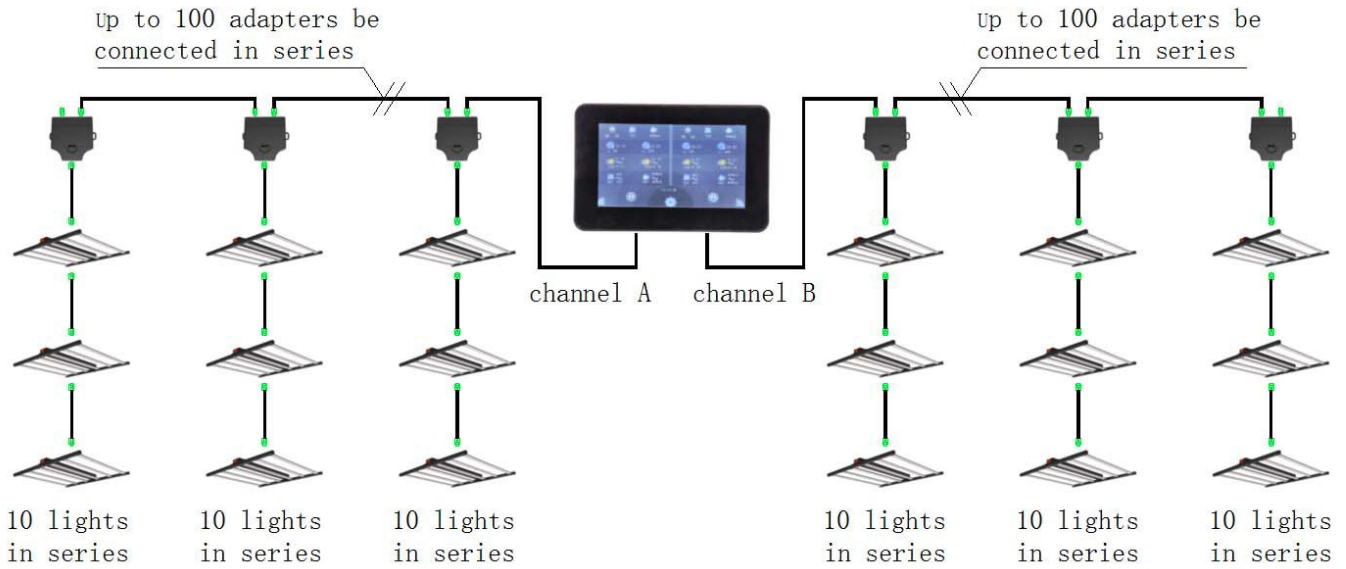
## SPECIFICATIONS

| Electrical                    |                               |
|-------------------------------|-------------------------------|
| Input Voltage                 | DC5V-12V                      |
| Working current               | ≤ 0.5A@ DC 12V                |
| Wireless frequency            | ISM Frequency band 2.4-2.5GHz |
| Indoor communication distance | 50m                           |
| Wireless transmit power       | +4dBm ( maximum )             |
| Receiving sensitivity         | -93dBm@1Mbps                  |
| Interface definition          |                               |
| DC-005 Power outlet           | Power                         |
| audio port                    | PJ-313*2                      |
| Spring type terminal          | KF141*2                       |
| Structural parameters         |                               |
| Length*width*height           | 201mm*130mm*39mm              |
| Others                        |                               |
| Operating Temperature         | -25℃ TO 70℃                   |
| Storage Temperature           | -40℃ TO 85℃                   |
| Relative humidity             | <95% ( No condensation )      |

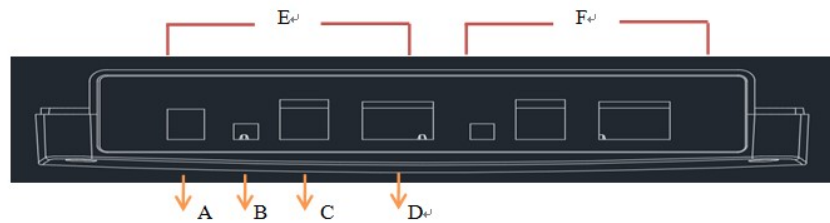
## Function Introductions

The Vela XT Series Grow Light Controller is a simple version of the plant lighting control system developed by Rugged Grade Lighting. This system is equipped with a temperature and humidity device developed by Rugged Grade Lighting to detect environmental temperature and humidity parameters, so as to provide data support for the light and temperature and humidity value control of the plant growth process. The main controller adopts a 24-bit true color touch screen to realize human-computer interaction. To make the control operation easier and more convenient, the controller outputs control signals to realize the switch and dimming control of the lamps. The system has a built-in Bluetooth function module and supports short-range wireless control

## Plant Control Diagram

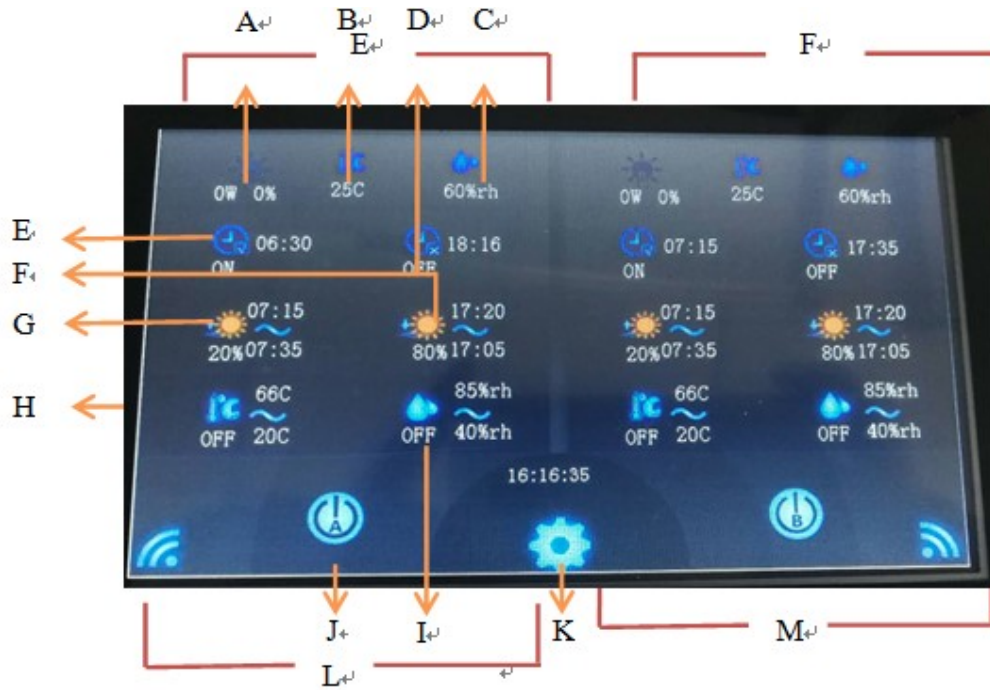


## Hardware Interface Block Diagram



|   |   |
|---|---|
| A | DC input 5V-12V   |
| B | 3.5MM Audio input port for external temperature and humidity sensor   |
| C | RJ11 Interface, used for external lamp signal connection  |
| D | Provide two external on-off switch signals, Temperature Humidity hen the temperature is normal, 2 is connected to 1 and 3 is disconnected When temperature alarms, 2 and 3 are connected and 1 is disconnected<br>1 2 3 4 5 6When the humidity is normal, 5 and 4 are connected and 6 is disconnected When the humidity alarms, 5 and 6 are connected and 4 are disconnected, and zone A and zone B are completely symmetrical. |
| E | Area A  |
| F | Area B, The function is completely symmetrical to the A zone  |

## Operation interface introduction block diagram

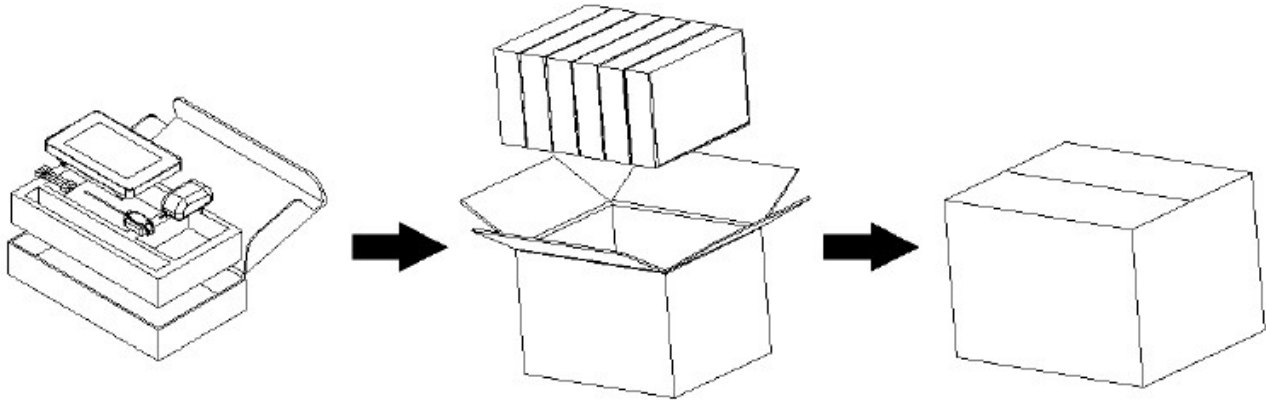


|          |   |
|----------|---|
| <b>A</b> | Display the current switch status, power value, and dimming ratio of the lamp, highlighting is on, and gray is off.   |
| <b>B</b> | Display the current ambient temperature value.  |
| <b>C</b> | Shows the current ambient temperature value.  |
| <b>D</b> | The current scheduled shutdown time is displayed. Press this key to enter the secondary page to set the scheduled shutdown time.                              |
| <b>E</b> | The current timing power-on time is displayed, press this key to enter the secondary page to set the timing of the timing light-on                            |
| <b>F</b> | Sunset light simulation display page, press this key to enter the second page to set the sunset mode parameters.  |
| <b>G</b> | Sunrise lighting simulation display page, press this key to enter the secondary page for setting of Sunrise mode parameters.                                  |
| <b>H</b> | The current temperature's high and low thresholds are displayed. Press this key to enter the secondary page to set the temperature's high and low thresholds. |
| <b>I</b> | The current high and low humidity thresholds are displayed. Press this key to enter the secondary page to set the high and low humidity thresholds.           |
| <b>J</b> | Switch the light button, press this button to realize the real-time light switch.   |
| <b>K</b> | Enter the system page button.   |
| <b>L</b> | Area A: The function is completely symmetrical to the A zone  |
| <b>M</b> | Area B  |

## PACKAGE

|                | Carton Size  | Qty / Carton | Net Weight / Carton | Gross Weight / Carton |
|----------------|--------------|--------------|---------------------|-----------------------|
| Lamp Outer box | 365*210*65mm | 6            | 5kg                 | 6kg                   |

Tolerance of Carton Size:  $\pm 15$  MM, Tolerance of Weight:  $\pm 10\%$ .



## **NOTICE FOR USER**

- Please turn off power before install or change assembly parts.
- The input voltage and lamps should be matched, after connecting the power line, Please make sure the wiring section is insulated.
- Non-professionals, must not install and disassemble the lamps.

**For more technical information, install questions, troubleshooting help or warranty claims, we have a dedicated US Tech and Customer Support Team to help solve any issues you have and can be reached by email or phone. If you need help with any of our products, we are here for you so that you are never in the dark!**



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