



iUmutzer

## WLED Digital LED Waterproof Controller User Manual

DOM-WLE-SF/DOM-WLE-SFM



Scan to view the detail manual  
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EC REP

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DOM-WLE-SF\_V1.0

### Safety & Operation Notes

- ⚠️ **ALWAYS** power off before wiring.
- ⚠️ Verify polarity - reverse connection may damage equipment.
- ⚠️ To prevent short circuits between the data and power lines, do not remove the red protective cap until the LED strip is properly connected.
- ⚠️ Signal attenuation may occur with long cascaded strips.

### Important Notes:

1. Ensure power supply voltage matches LED strip requirements.
2. For long-distance transmission, use signal amplifiers.
3. Apply waterproof insulation in humid environments.

### Firmware update (OTA):

Please perform the firmware update carefully, and you must select the correct file. Otherwise, this may cause functional abnormalities or even damage to the device. For details, please scan the QR code to refer to the OTA instructions.



Attention

1. Ensure all wiring connections are properly installed and securely fastened before powering on the device. Never perform installation or adjustments when the device is energized.
2. Operate the product only within its rated voltage range. Overvoltage or undervoltage may cause permanent damage.
3. Do not disassemble the product, as it may cause fire and electric shock.
4. Do not use in metal-shielded areas or near strong magnetic fields, as this may severely degrade wireless signal performance.

### DISCLAIMERS

1. This manual is subject to revisions based on product improvements. Updated versions will be published without prior notice.



**Model NO.: DOM-WLE-SF**  
**Input Voltage: DC 5V-24V**  
**Total Output Current: 15A Max (15A replaceable fuse)**  
**Protection: Output Reverse Polarity Protection**  
**Working Temperature: -20~45°C**  
**Wireless Communication: WiFi**  
**Dimensions: 71.5x57x30mm**

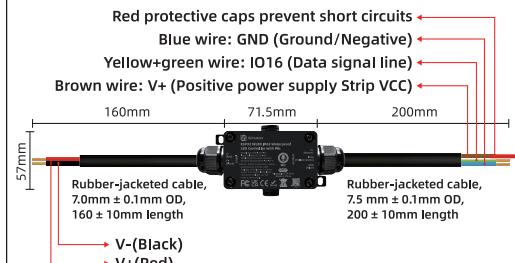


**Model NO.: DOM-WLE-SFM**  
**Input Voltage: DC 5V-24V**  
**Output Current/Channel: 15A Max**  
**Total Output Current: 20A Max (20A replaceable fuse)**  
**Protection: Output Reverse Polarity Protection**  
**Working Temperature: -20~45°C**  
**Wireless Communication: WiFi**  
**Dimensions: 64x80x37mm**



### WLED Controller Wiring Guide:

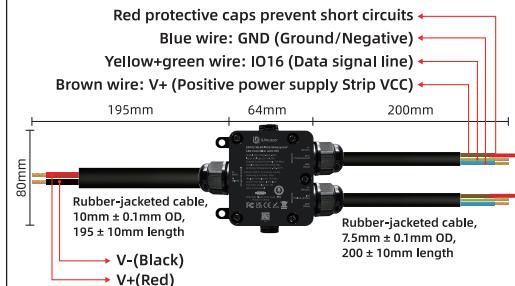
1. **Output Port Definition,**  
The controller features a 3-wire output port with the, following connections:



DOM-WLE-SF With Microphone 1-channel output

2. **Output Port Definition,**

The controller is equipped with two 3-wire output ports, featuring the following connections:



DOM-WLE-SFM with microphone 2-channel output

### Standard LED Strip Connection

V+ (Brown) → Strip VCC  
 IO16 (Yellow+Green) → Strip DATA  
 GND (Blue) → Strip GND



## LED Strip Controller Reset & Configuration Quick Guide:

1. **Reset operation:** After power off, wait for the LED to completely turn off before powering it back on, repeat 5 times. (Completed within 10 seconds)
2. **Success sign:** After the 5th power-on, wait for the LED to flash 10 times, then the yellow light stays on (30 ICs working). When powered on again, the LED does not light up. That is, the reset is successful.

### 3. Subsequent Configuration:

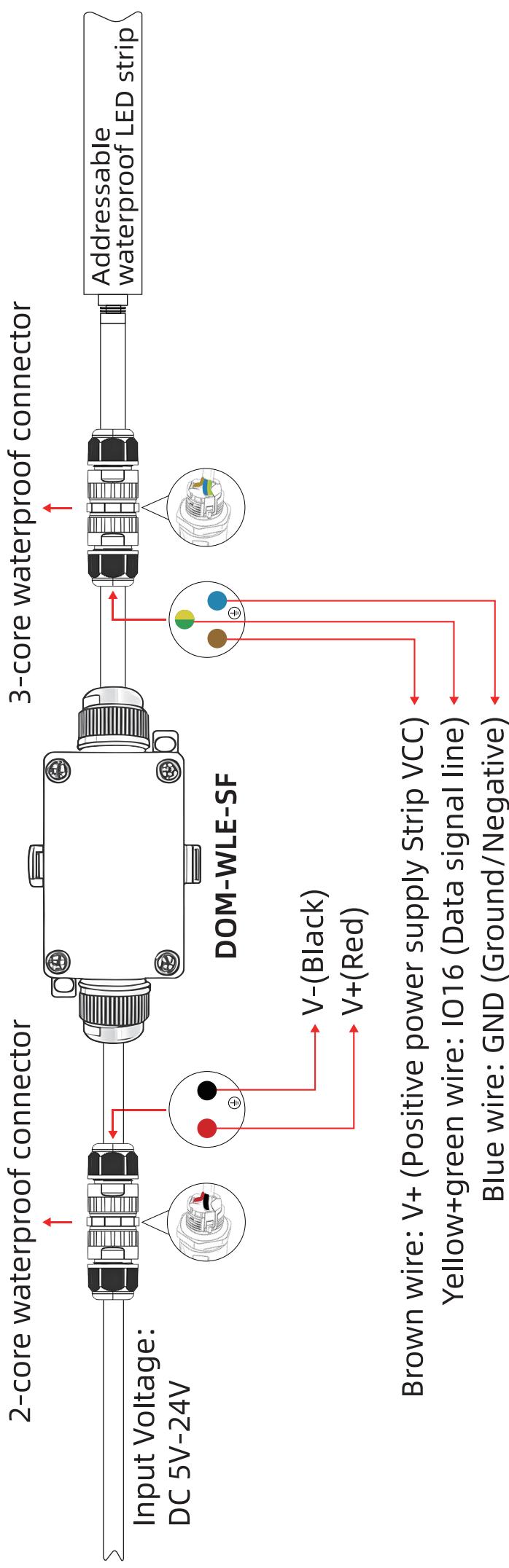
The relay GPIO12 must be configured, and the device must be powered on again; otherwise, the LED strip will not illuminate.

### NOTE:

- ① Power-on must be done only after all LEDs are completely off.
- ② The five power-on operations must be completed within 10 seconds.
- ③ GPIO12 must be configured after reset.

**Troubleshooting:** If reset fails, wait 60 seconds and then reset again (reset must be re-performed).

## Refer to the wiring diagram



The wiring mode of DOM-WLE-SF is the same as that of DOM-WLE-SF

This product supports a wide range of addressable LED strips, including but not limited to:

WS2811、WS2811F、WS2812、WS2812B、WS2813、WS2814、WS2814A、WS2815、WS2805、SK6812、SK19703、SK16703、SM16703SP3、FL19038、FW1935、TM1814,etc.

**NOTE:** When installing the controller, please fully insert the “cable sheaths” of the input and output wires into the waterproof connectors or the interior of the waterproof box. Otherwise, it will cause permanent damage to the controller. Installation must be carried out with reference to the wiring diagram.

**This product does not include waterproof connectors and light strips; it is only for reference as a wiring diagram in the instruction manual.**