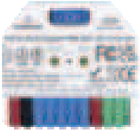
DOMRAEM

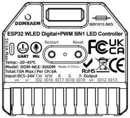
Ultimate Mini WLED Controller User Instruction

Email: jackzhou@domraem.com



DOM-WLE-306DM

ESP32 WLED Digital LED Controller

Model NO.	DOM-WLE-306DM	 DOMRAEM 0891015.NXS ESP32 WLED Digital+PWM 5IN1 LED Controller 5V/3A Max UART Mic Restart Reset FC UK CA Temp:-20~45°C Model: DOM-WLE-306DM Made in China Total:10A Max | Per CH:6A RoHS CE Input:DC5-24V CW WW B G R Output v+ v- IO2 IO16 IO17 IO18 IO19 v+ IO12 IO13 ESP32 WLED Digital+PWN 5IN1 Ultimate Mini LED Controller
Input	5V/3A Max	
Input Voltage	DC 5V-12V-24V	
Total Output Current:	10A Max	
Output Current/Channel	6A Max	
Working Temperature	-20~45℃	
Wireless communication	WiFi	
Dimensions	43x38.5x17mm	

Description of Bu

Restart: Short press-Reboot

Reset:

Short press On/Off , Longls Adjust

IO13 Pin Multiplex - Two Modes

Default: Digital Output Mode

On-board Reset(GPIO0) works

IO12 + IO13 two digital outputs

Set G

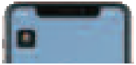
⚠ Ext

⚠ On

⚠ IO1

⚠ IO1

⚠ Assigning GPIO13 to push-switch
digital output channel



Step Six:

After successful connection,open WLED APP.

Step seven:

Click on “Blank Space” to enter the WLED page.

Step eight:

Enter the WLED page for configuration.

Step one:

Enter the WLED page and click on “Config”

Step two:

Click on Usermods to configure.

Step Three:

First check “Enabled” , then scroll down to find “Digitalmic”

1. Type: Generic I2S PDM
2. Pin I2S SD: 32
3. Pin I2S WS: 15

After configuration,click “Save”

NOTE

After configuring the microphone parameters, you need to turn off and on the controller once to use the microphone function.

tton Functions:

color , Long10s Factory Reset.

cannot work simultaneously

PIO13=Pushbutton in WLED Web-UI
ternal switch takes over Reset functions
-board Reset button inactive
13 used for switch inputl ONLY
12 digital output remains

consumes this pin. You will lose one

FIRMWARE UPDATE (OTA):

Please update the firmware carefully, you must select the correct file. Otherwise, this will result in functional abnormalities and even damage to the device, Please refer to the OTA instructions for details.

Please choose corresponding firmware according to different product modes :

Product mode: DOM-WLE-306DM

Firmware: WLED_x.xx.x _ESP32.bin

WLED Official Repository URL:https://github.com/wled

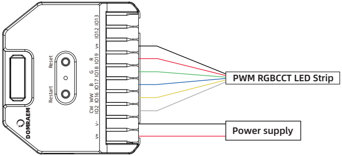
OUTPUT Digital+PWM 5 in 1

V+	V-	×	×	×	×	IO19 V-	V+	IO12	IO13
V+	V-	×	×	×	IO18 CW	IO19 WW	V+	IO12	IO13
V+	V-	×	×	IO17 B	IO18 G	IO19 R	V+	IO12	IO13
V+	V-	×	IO16 WW	IO17 B	IO18 G	IO19 R	V+	IO12	IO13
V+	V-	IO2 CW	IO16 WW	IO17 B	IO18 G	IO19 R	V+	IO12	IO13

Wiring Configuration Guide

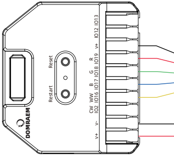
PWM RGB+CCT Mode:

Supports full connection of PWM RGB+CCT light strips. All corresponding terminals must be wired completely.
Important: Do NOT connect to "IO13" and "IO12" terminals.



PWM RGBW Mode:

Supports full connection of PWM RGBW
terminals must be wired completely.
Important: Do NOT connect to "IO13","I



Step Four:

Go to the WLED control page,click on "Info" at the top,click on the button next to "AudioReactive" to use the Mic.

MIC Configuration (If This Feature Is Available)

Step one:

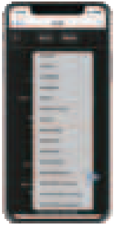
Enter the WLED page and click on "Config"

Step tow:

Click on WLED Preferences.

Step Three: Set Up PWM RGBCCT Strip

Click "WS281x"



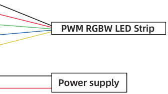
Click "PWM RGB+CCT"

Five configuratio

Step Four:

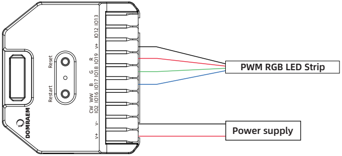
Enter "19, 18, 17, 16, 2" in the GPIOs field, Then click "Save" light strips. All corresponding

O12" and "IO2" terminals.



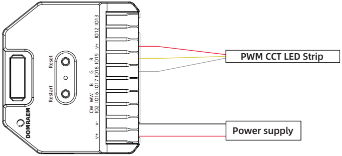
PWM RGB Mode:

Supports full connection of PWM RGB light strips. All corresponding terminals must be wired completely.
Important: Do NOT connect to "IO13","IO12","IO16" and "IO2" terminals.



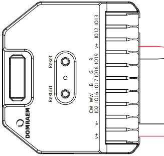
PWM CCT Mode:

Supports full connection of PWM CCT light strips. All corresponding terminals must be wired completely.
Important: Do NOT connect to "IO13","IO12","IO17","IO16" and "IO2" terminals.



PWM White Mode:

Supports full connection of PWM white
terminals must be wired completely.
Important: Do NOT connect to "IO13","I



ns of LED strips

Step Five: Set Up PWM RGBW Strip

Click “PWM RGBW”

Enter “19, 18, 17, 16” in the GPIOs field,
Then click “Save”

Step Six: Set Up PWM RGB Strip

Click “PWM RGB”

Enter “19, 18, 17” in the GPIOs field,
Then click “Save”

Step Seven: Set Up PWM CCT Strip

Click “PWM CCT”

Enter “19, 18 ” in the GPIOs field,
Then click “Save”

Step Eight: Set Up PWM White Strip

Click “PWM White”

Enter “19” in the GPIO field, Then click “Save”

Step Nine: Set Up Digital Strip

Click “Digital”

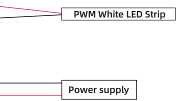
Enter “12” and “13” in the GPIO field,
Then click “Save”

Push-switch Co

Step One: Go to
LED & Hardware page

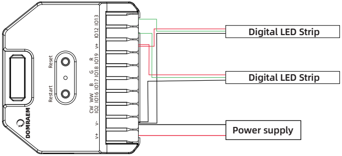
light strips. All corresponding

O12","IO18", "IO17","IO16","IO2" terminals.



Digital Mode:

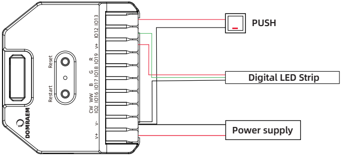
Supports full connection of PWM white light strips. All corresponding terminals must be wired completely.
Important: Do NOT connect to "IO19","IO18","IO17", "IO16", "IO2" terminals.



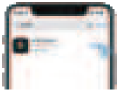
Digital + PUSH Mode:

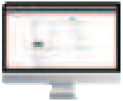
Supports full connection of PWM white light strips. All corresponding terminals must be wired completely.
Important: Do NOT connect to "IO19","IO18","IO17", "IO16", "IO2" terminals.

⚠ Assigning GPIO13 to push-switch consumes this pin.
You will lose one digital output channel



APP Dov





nfiguration Guide

Step Two: Default GPIO13 setting

Step Three: Set GPIO13 pin function to Pushbutton, then click Save to confirm.

Note: After this setting, ONLY IO12 digital output left

⚠

Assigning GPIO13 to push-switch consumes this pin. You will lose one digital output channel

Reset to factory settings

Step one:

Enter the WLED page and click on “config”

Step two:

Clickon “Security & Updates”

Step Three:

Scroll down to find “Factory Reset” and check it, then click “save” to reset the controller.

Troublesh

Number	Symptoms
1	Indicator light is not on
2	APP shows “offline”
3	APP is connected,but the light strip is not controllable
4	The brightness of the light strip is low, and the front and back colors are significantly different

wnload method

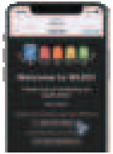
Step one:

IOS : “App Store” Search and download
WLED or WLED Native within the app.

Step two:

Android:
1. Procure e baixe o WLED Native na Google Play Store.
2. Download pela Web: https://github.com/Aircoookie/WLED-App/releases

APP Configuration steps



Step one:

1. Power on the WLED controller.
2. Open the phone settings and enter WiFi settings, find “WLED-Ap” and connect to it with the password “wled1234”

Step two:

After successful connection, it will automatically redirect to the WLED page (or open a browser to enter the WLED page).

Click on “WIFI SETTINGS”

Step Three:

Click “Scan” to display the account.

NOTE

Be sure to choose a 2.4GHz WiFi network, otherwise it will not work.

Step Four:

Enter the password,then click “Save” at the top of the screen after entering the password.

Step Five:

Connect your phone and WLED controller to the same WIFI.

ooting and solution

Solution
Check whether the input power connection is correct
1. Check if the phone is on the same network as the controller. 2. Check if the controller is out of the range of the WIFI connection, causing unstable connection. 3. Turn off and on the controller to retry.
1. Check if the power supply is working properly. 2. Check if the power supply voltage matches the light strip. 3. Check if the input power connection is correct. 4. Check if the light strip connection is correct. 5. Check if the GPIO settings in the APP are correct. 6. Check if the light strip IC model in the APP is set correctly.
1. Check if the power supply is working properly. 2. Check if the power supply matches the light strip. 3. Check if all connections are good.and use conductive and short wires as much as possible for connection. 4. Add power supply at an appropriate position. 5. Check if the APP has set a limit on brightness or current.

DISCLAIMERS

1. Our company will update the content of this manual based on the improvement of product functionality. The updates will be displayed in the latest version of this manual, without further notice.
2. Due to our continuous adoption of new technologies, product specifications may change without further notice.
3. This manual is provided for reference and guidance only and does not guarantee complete consistency with the actual product.The actual application should be based on the actual product.
4. The components and accessories described in this manual do not represent the standard configuration of the product.The specific configuration is subject to the packaging.
5. All text, tables, and images in this manual are protected by relevant national laws and may not be used without our permission.
6. This product may be compatible with third-party products (such as apps, hubs,etc.),but our company does not take responsibility for compatibility issues or partial loss of functionality caused by changes in third-party products.

⚠ ATTENTION

1. The controller does not change the voltage, the power supply needs to be selected based on the voltage and current requirements of the LED strip.
2. Before turning on the power, please ensure that all connections are correct and secure, and do not operate whilethe power is on.
3. The product should be used under the rated voltage. Using it under excessive or insufficient voltage may cause damage.
4. Do not disassemble the product, as itmay cause fire and electric shock.
5. Do not use the product in environments exposed to direct sunlight, moisture, hightemperatures,etc.
6. Do not use the product in metal shielded areas or around strong magnetic fields as this may severely affect the wireless signal transmission of the product.

Supported chips

Supports addressable RGBIC chips: WS2811, WS2811F, WS2812, WS2812B, WS2813, WS2814, WS2814A, WS2815, WS2805, SK6812, SK19703, SK16703, SM16703SP3, FL19038, FW1935, TM1814, etc.

Supports non-addressable standard PWM LED strips: single color, WW/CW, RGB, RGBW, RGBCCT

EU | REP

SUCCESS COURIER SL
CALLE RIO TORMES NUM.1,PLANTA 1, DERECHA
OFICINA 3,Fuenlabrada,Madrid,28947 spain
successservice2@hotmail.com

DOM-WLE-306DM_ V1.1