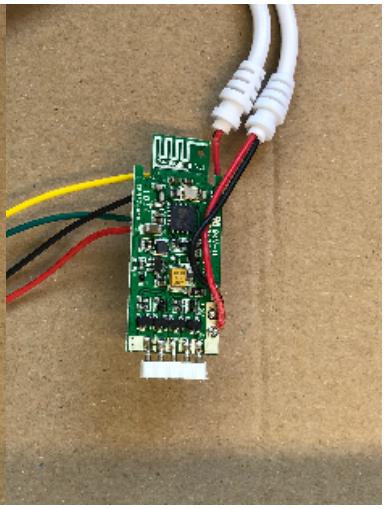
MagicHome RGB Light Strip

- Hardware Overview
- Flashing Tasmota
- Tasmota Setup
    - Module Configuration
    - IR Remote Rules
- Homebridge Integration
- Other Commands:
- Issuing Commands over HTTP
- References

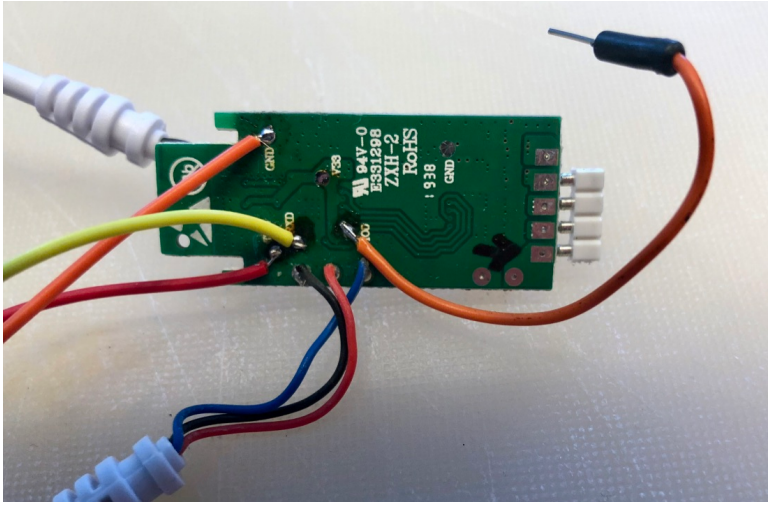
Hardware Overview

Spec	Details
Model	ZJ-WFMN-A V1.1
CHIP	**ESP8285**
Color Support	RGB
IR Receiver	Yes

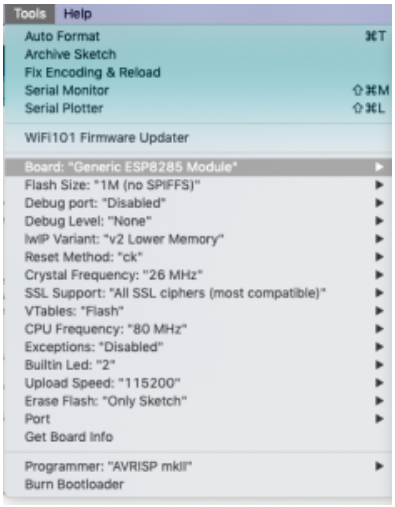


Flashing Tasmota

Get the board in firmware upload mode by grounding GPIO-0.



From the Arduino IDE, set your board as follows. This is an ESP8285 board.



Tasmota Setup

Module Configuration

ZJ-WFMN-A V1.1 (RGB version) alias Arilux LC01

Automatic configuration: (No IR Support)

Field	Value	Function
Module type	37 Arilux LC01	Module type

For IR Functionality:

Field	Value	Function
Module type	18 Generic	Module type
GPIO5	37 PWM1	RED
GPIO12	38 PWM2	GREEN
GPIO13	39 PWM3	BLUE

GPIO4	51 IRrecv	IR Receiver

IR Remote Rules

Copy this Code to your console to use the 24 Button IR Remote

```
rule1
on IrReceived#Data=0x00FFB04F do power1 on endon
on IrReceived#Data=0x00FFF807 do power1 off endon
on IrReceived#Data=0x00FF906F do dimmer + endon
on IrReceived#Data=0x00FFB847 do dimmer - endon
on IrReceived#Data=0x00FFB24D do scheme 0 endon
on IrReceived#Data=0x00FF00FF do scheme 4 endon
on IrReceived#Data=0x00FF58A7 do scheme 2 endon
on IrReceived#Data=0x00FF30CF do scheme 3 endon
```

```
rule2
on IrReceived#Data=0x00FF9867 do color2 #FF0000 endon
on IrReceived#Data=0x00FFE817 do color2 #470D00 endon
on IrReceived#Data=0x00FF02FD do color2 #381600 endon
on IrReceived#Data=0x00FF50AF do color2 #331E00 endon
on IrReceived#Data=0x00FF38C7 do color2 #332800 endon
on IrReceived#Data=0x00FFD827 do color2 #00FF00 endon
on IrReceived#Data=0x00FF48B7 do color2 #00330A endon
on IrReceived#Data=0x00FF32CD do color2 #003314 endon
on IrReceived#Data=0x00FF7887 do color2 #00331E endon
```

```
rule3
on IrReceived#Data=0x00FF28D7 do color2 #003328 endon
on IrReceived#Data=0x00FF8877 do color2 #0000FF endon
on IrReceived#Data=0x00FF6897 do color2 #0A0033 endon
on IrReceived#Data=0x00FF20DF do color2 #140033 endon
on IrReceived#Data=0x00FF708F do color2 #140033 endon
on IrReceived#Data=0x00FFF00F do color2 #280033 endon
on IrReceived#Data=0x00FFA857 do color2 #FFFFFF endon
```

and then activate the rules

```
Backlog rule1 1; rule2 1; rule3 1
```

Homebridge Integration

```
{
    "accessory": "mqttthing",
    "type": "lightbulb",
    "name": "<name of lightbulb>",
    "url": "<url of MQTT server (optional)>",
    "username": "<username for MQTT (optional)>",
    "password": "<password for MQTT (optional)>",
    "caption": "<label (optional)>",
    "topics":
    {
        "getOn":                "<topic to get the status>",
        "setOn":                "<topic to set the status>",
        "getBrightness":        "<topic to get the brightness (optional)>",
        "setBrightness":        "<topic to set the brightness (optional - if dimmable)>",
        "getHue":                "<topic to get the hue (optional)>",
        "setHue":                "<topic to set the hue (optional - if coloured)>",
        "getSaturation":        "<topic to get the saturation (optional)>",
        "setSaturation":        "<topic to set the saturation (optional - if coloured)>",
        "getHSV":           "<in HSV mode, topic to get comma-separated hue, saturation and value>",
        "setHSV":           "<in HSV mode, topic to set comma-separated hue, saturation and value>",
        "getRGB":           "<in RGB mode, topic to get comma-separated red, green, blue>",
        "setRGB":           "<in RGB mode, topic to set comma-separated red, green, blue>",
        "getRGBW":          "<in RGBW mode, topic to get comma-separated red, green, blue, white>",
        "setRGBW":          "<in RGBW mode, topic to set comma-separated red, green, blue, white>",
        "getRGBWW":         "<in RWGWW mode, topic to get comma-separated red, green, blue, warm_white,
cold_white>",
        "setRGBWW":         "<in RWGWW mode, topic to set comma-separated red, green, blue, warm_white,
cold_white>",
        "getWhite":         "<topic to get white level (0-255)> - used with getRGB for RGBW with separately-
published white level",
        "setWhite":         "<topic to set white level (0-255)> - used with setRGB for RGBW with separately-
published white level",
        "getColorTemperature": "<topic to report color temperature (optional)>",
        "setColorTemperature": "<topic to control color temperature (optional)>"
    },
    "integerValue": "true to use 1|0 instead of true|false default onValue and offValue",
    "onValue": "<value representing on (optional)>",
    "offValue": "<value representing off (optional)>",
    "hex": "true to format combined RGB/RGBW in hexadecimal instead of as comma-separated decimals",
    "hexPrefix": "format combined RGB/RGBW in hexadecimal with specified prefix (typically '#') instead of as
comma-separated decimals",
    "turnOffAfterms": "<milliseconds after which to turn off automatically (optional)>",
    "warmWhite": "in RGBWW mode, RGB value of warm white in format red,green,blue (optional)",
    "coldWhite": "in RGBWW mode, RGB value of cold white in format red,green,blue (optional)"
}
```

```
{
    "accessory": "mqttthing",
    "type": "lightbulb",
    "name": "rgb1",
    "url": "http://192.168.1.60:1883",
    "username": "homebridge",
    "password": "pass",
    "topics":
    {
        "getOn":                "stat/rgb1/POWER",
        "setOn":                "cmnd/rgb1/POWER",
        "getBrightness":        {
                                  "topic": "stat/rgb1/RESULT",
                                  "apply": "return JSON.parse(message).Dimmer;"
                                },
        "setBrightness":        "cmnd/rgb1/Dimmer",
        "getRGB":               {
                                  "topic": "stat/rgb1/RESULT",
                                  "apply": "return JSON.parse(message).Color;"
                                },
        "setRGB":               "cmnd/rgb1/Color"
    },
    "onValue": "ON",
    "offValue": "OFF",
    "startPub":
    {
        "cmnd/rgb1/POWER": "",
        "cmnd/rgb1/Dimmer": "",
                        "cmnd/rgb1/Color": ""
    },
    "confirmationPeriodms": 1000
}
```

Other Commands:

Fade - ON/OFF

http://192.168.1.176/cm?&cmnd=Fade%20ON

Speed 0-40

http://192.168.1.176/cm?&cmnd=Speed%2040

Scheme 0-4

http://192.168.1.176/cm?&cmnd=Scheme%205

Issuing Commands over HTTP

> http://192.168.1.176/cm?&user=admin&password=XXX&cmnd=Color

> http://192.168.1.176/cm?&user=admin&password=XXX&cmnd=POWER ON

References

Reference	URL
MagicHome with ESP8285	https://github.com/arendst/Tasmota/wiki/MagicHome-with-ESP8285
IR Rules	https://github.com/arendst/Tasmota/wiki/Arilux-LC04
mqttthing	https://www.npmjs.com/package/homebridge-mqttthing