

## Digital RGB COB LED Strip - 24V, IP20

720 LEDs/m | 12mm wide | WS2811 | 50mm cut interval

**5 Years**  
WARRANTY

**IP20**  
BODY RATING

**10m**  
CONTINUOUS RUN

**50mm**  
CUT INTERVAL

**24V DC**  
SUPPLY

### SPECIFICATIONS

|                       |                         |
|-----------------------|-------------------------|
| LED type              | COB LED Strip           |
| Voltage               | 24V DC constant voltage |
| Colour output         | RGB colour mixing       |
| Strip size            | 12x3mm                  |
| Connector width       | 12mm                    |
| Cable length          | 20cm                    |
| LEDs per metre        | 720                     |
| Lumens per metre      | 810 lm/m                |
| Power                 | 19 W/m                  |
| Control               | WS2811                  |
| Pixel density         | 18 pixels/m             |
| Cut interval          | 50mm                    |
| Order length          | 1m to 10m               |
| Continuous run        | 10m                     |
| Body protection       | IP20                    |
| Warranty              | 5 Years                 |
| Operating temperature | -25°C to 40°C           |
| Lifetime              | 50,000 hours            |
| Beam angle            | 180°                    |
| Continuous operation  | 15 hours                |
| Certification         | UKCA, CE, RoHS          |



RGB COB digital strip (catalogue illustration).

### COLOUR AND CONTROL

RGB colour mixing for decorative and ambient lighting. Addressable control supports gradients, colour chases and animated scenes with the matching SPI controller.

Power supply and controller are selected separately for the installation. Check every connection against the actual strip markings.

### CUTTING, FIT AND ORDERING

Cut only at the marked 50mm positions. The strip is 12mm wide; allow for connectors and verify the profile's internal channel. Order lengths are 1m to 10m. A longer roll or project length does not increase the 10m continuous-run limit.

#### Made to measure

ATOM LED supplies custom-cut lighting for UK projects. Choose the required length at permitted cut marks or contact our team before ordering a longer installation.

## Power, connection and installation

RGB | 24V DC | IP20 | WS2811

### DIMENSIONS AND CUTTING REFERENCE



Overall width

**12mm**

Finished dimensions

**12x3mm**

Cut interval

**50mm**

RGB COB digital strip (catalogue illustration). ATOM dimensions and cutting interval are listed alongside; image is not to scale.

### ELECTRICAL PLANNING

Use a regulated 24V DC constant-voltage supply. Rated strip load is 19 W per metre. Size the driver, controller and cables for the connected load and their own installation requirements.

Keep within the 10m continuous-run limit. Have the feed arrangement checked for your planned layout. For longer layouts, plan separate runs and check voltage at the strip under load.

|                   |                     |
|-------------------|---------------------|
| 1m connected load | 19 W                |
| 5m connected load | 95 W                |
| Current per metre | 0.79 A (calculated) |

Calculated from the listed W/m and 24V; not a driver size or an additional run-length rating.

### FIT AND HANDLING

#### Measure before cutting

Confirm the marked 50mm cut position and final length. Isolate the power before cutting or connecting.

#### Mount without stress

Use a clean, dry surface and a suitable aluminium profile. Keep the strip clear of sharp edges; do not bend sharply, twist, crease, crush or pull on the connections.

#### Confirm control compatibility

Use a WS2811 controller matched to this product.

### PROTECTION AND COMMISSIONING

IP20 is for dry interiors. Keep the strip away from water, splashes and exposed outdoor locations. Fully unroll the strip before testing. Check voltage, polarity, channel mapping and connections before final fixing. Stop and isolate the power if a section overheats, flickers or is damaged.

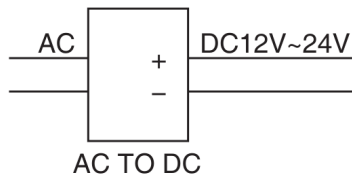
#### Installation guide and warranty

Read Install-COB24V-Colour.pdf before fitting. Warranty: 5 Years. Follow the product and component instructions. Contact ATOM LED before altering a sealed strip or preparing a wet-location connection.

## Wiring and connector reference

24V DC | IP20 | WS2811

### POWER SUPPLY AND SPI CONNECTION

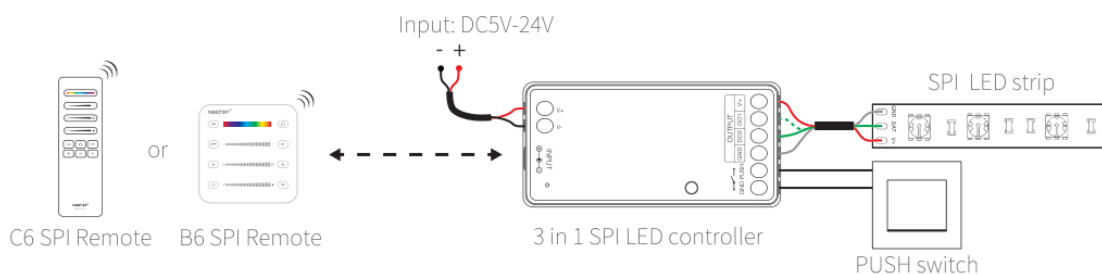


#### AC mains to 24V DC

Use a regulated 24V DC constant-voltage supply. Match its + and – outputs to the required DC input. Follow the PSU's own mains and protective-earth instructions.

Power-supply stage: original MiBoxer manual example

## Connection Diagram



Original MiBoxer SPIR3 connection diagram and supported chips

SPIR3 supports WS2811; select its RGB output mode. The manual says chip-type selection is not required. Follow the actual strip's input arrow and V+, GND and data markings. Supply this strip with 24V DC.

SPIR3 output maximum: 10A. Check controller, connector and cable ratings against the connected load. A roll length is not permission to exceed the listed continuous run.

### CONNECTOR AND TERMINATION

#### 12mm 3-Pin Connectors Kit for RGB IC SPI COB LED Strip Light IP20

For 12mm PCB, 3 contacts, IP20.

Listed for this strip family. Align every copper pad and confirm the connector current rating for the connected load before fitting.



View matching connector on ATOM LED

The photo shows the connection detail; cable colour alone does not identify a terminal. PCB fit and outer connector-body width are different measurements.

Isolate power before cutting, wiring or changing connections. Use the product figures and cut marks on pages 1–2 for the strip itself.