

Plan the strip, power and controls

Single-colour 10mm FreeCut COB strip | 9W/m | IP20 dry indoor use

10mm PCB

CUT ANYWHERE

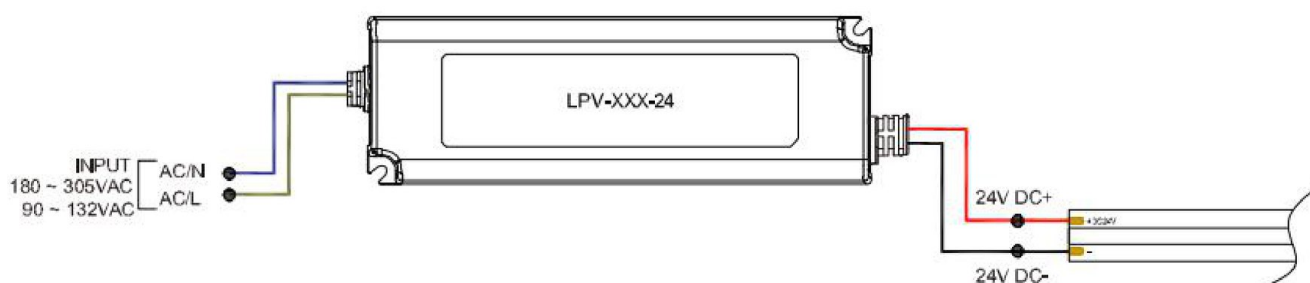
10m SINGLE END

24V DC

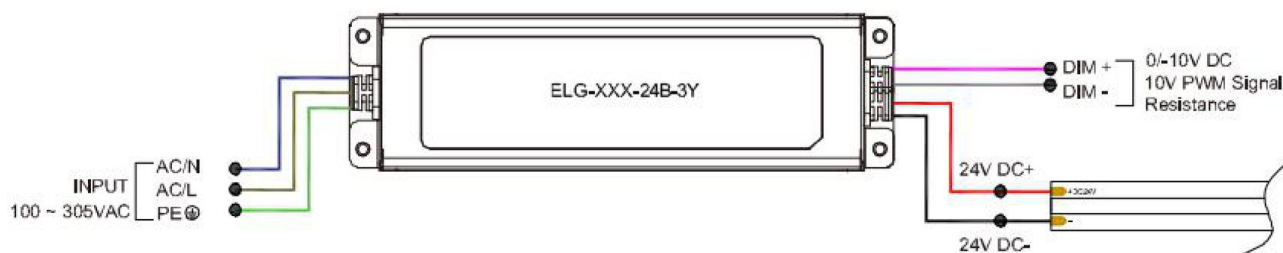
1. Measure and plan

Measure each finished run and plan the cable routes. Allow space for connections, the driver and any dimmer. Use up to 10m of strip powered from one end. Longer or branched projects need separately powered sections.

Non-dimmable



3 in 1-dimmable



Original 24V driver artwork from the established ATOM COB documentation. Illustrative equipment only; supplied items are defined by your order.

Select the correct supply

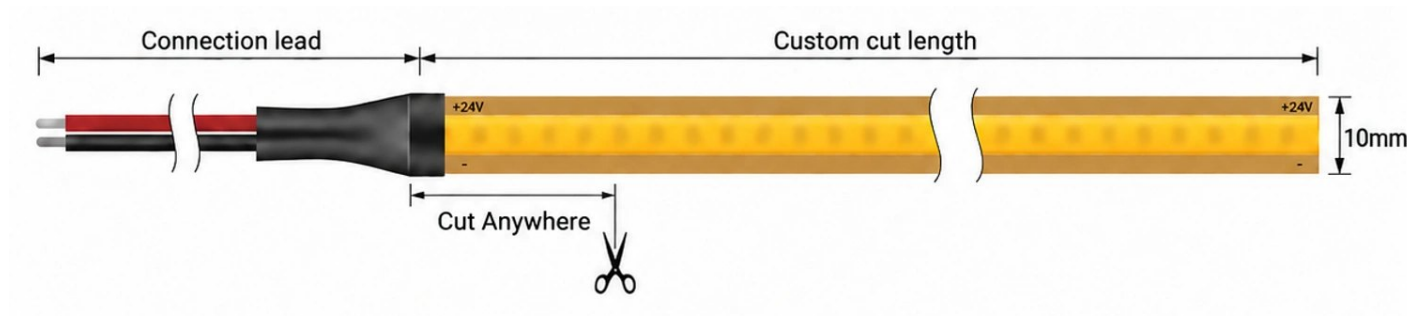
Use a regulated 24V DC constant-voltage supply. Strip load = length x 9W; 5m uses 45W and 10m uses 90W. Follow the driver manufacturer's headroom and ventilation requirements. Check controller, cable and connector ratings.

Never connect the strip directly to 220-240V mains. Isolate power before work. Mains wiring belongs to a competent installer.

Measure, cut and make the connection

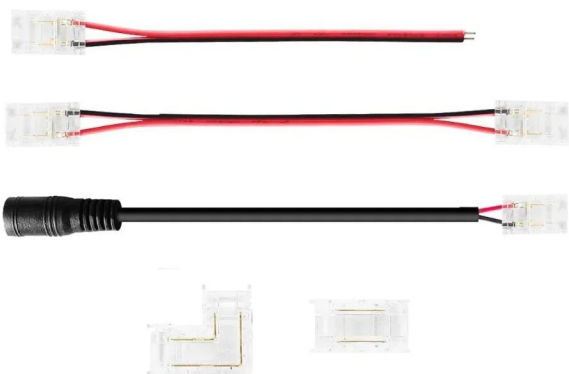
2. Isolate, support and cut

Confirm that you have the 10mm FreeCut product. Disconnect its supply. Keep the strip flat and supported, then make a clean square cut to the required length. This range has no fixed cutting interval. Do not tear, crush or pierce the PCB.



3. Choose the correct connection

Use a suitable 10mm, two-contact COB connector or a correctly prepared soldered connection. The ATOM accessories shown identify available forms; select the correct width and verify pad contact and load capacity.



A cut point is not automatically a ready-made connector contact. Connect only to the correct, accessible electrical pads. If a cut end cannot accept your intended connector, ask ATOM LED to prepare it.

4. Match polarity and inspect

Follow the strip's printed + and - labels and the driver/controller output labels. Confirm both contacts are secure. For soldered joints, avoid bridged pads, loose strands and excess heat. Insulate exposed contacts and support the cable.

Prepare the surface and mount carefully

5. Fit the support first

Fit a suitable aluminium profile on a clean, dry, stable surface. Remove swarf and sharp edges. Check clearance for the strip, connectors and diffuser before fixing the channel. Keep screws and tools clear of the strip.

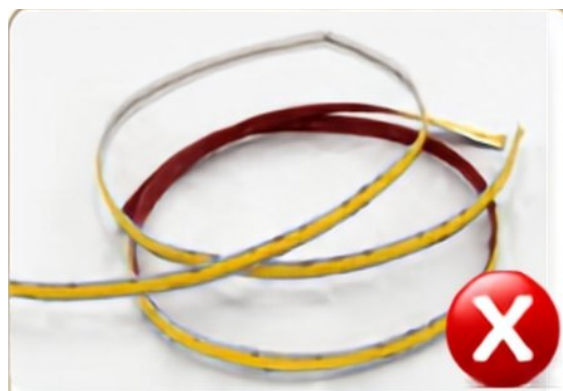
6. Lay in the strip and support the cable

Position the strip progressively without stretching it. Press the backing into place, avoiding pressure on the COB emitting face. Keep it flat at joints and support leads so they cannot pull on the strip or become trapped by a cover.



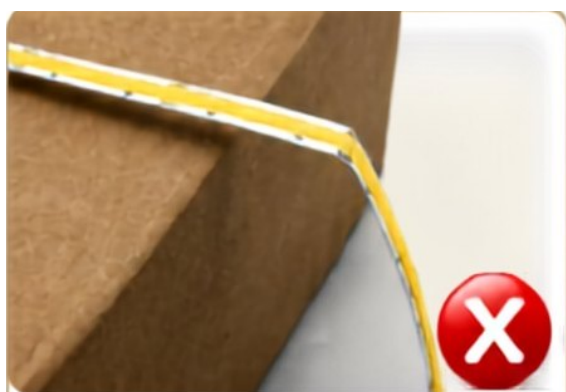
Unroll gradually and keep the strip supported

Feed the strip from the reel as you position it. Keep the PCB flat and support it along the route.



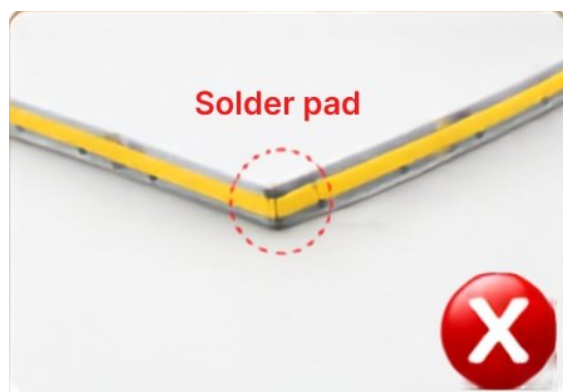
Avoid pulling the full reel into loose loops

Keep the unused strip controlled on the reel during fitting. Do not let loose loops twist, tangle or pull on the installed strip.



Do not fold around a sharp corner

Avoid tight right-angle folds and creases. Use a suitable connection or a gently planned route instead.



Keep stress away from solder pads

Do not bend at a solder pad or joint. Support the lead so it cannot pull, twist or lever the connection.

Testing, commissioning and care

7. Test before final closing

Fully unroll the strip. With power isolated, check all connections, polarity and conductor security. Verify the supply is set to 24V DC. Reconnect for a short functional test, then isolate again before adjusting connections or fitting the final cover.

Check	What to confirm
Supply and load	24V DC; total strip load and driver/controller limits checked.
Feed arrangement	Maximum 10m of strip powered from one end.
Connections	No exposed strands, bridged pads, loose contacts or cable strain.
Mounting	Strip supported; no twists, sharp folds or pressure on the emitting face.
Environment	Dry indoor location; driver ventilated and accessible.
Appearance	Correct fixed colour, stable brightness and correct dimming.

Troubleshooting

Symptom	Check with power safely isolated
No light	Supply voltage, polarity, connection seating and controller mode.
Dim far end	10m run limit, cable voltage drop, contacts and load. Do not simply increase driver wattage.
Flicker	Loose connections, driver load, dimmer compatibility and stable supply.
Hot or damaged area	Switch off. Inspect mounting and connections; replace damaged parts before use.

Keep polarity consistent. Do not connect separate driver outputs together unless their manufacturer explicitly permits it. Have cable sizes, protection and power distribution checked for the actual installation.

Keep the strip dry and isolate power before cleaning or maintenance. This range carries a 7-year warranty; contact ATOM LED for help with a fault or the correct fitting method.