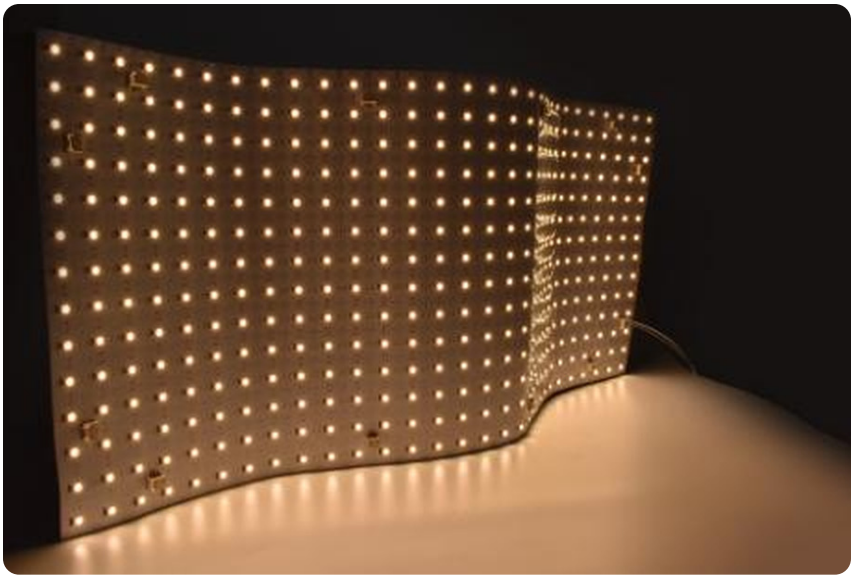
FLEXIBLE LED SHEET · 24 V DC · 15 W / SHEET

LEDSHEET-420WW-2700K-24V

Installation manual for the DayTech LEDSHEET flexible backlighting panel



AT A GLANCE

Input Voltage	24 V DC (constant voltage)
Power	15 W per sheet
LEDs	420 × SMD2835 per sheet
Light Output	1670 lm per sheet
Colour	2700K Warm White, CRI > 80
Beam Angle	120°
Sheet Size	503.1 × 235 × 6.5 mm
Rating	IP20 – indoor, dry locations
Certification	CE, RoHS, cUL

KEY RULE

Maximum 5 sheets per 96 W driver output

5 sheets × 15 W = 75 W, leaving headroom below the driver's rated 96 W.

BEFORE YOU BEGIN

- Switch off power at the breaker before installing, cutting or servicing any sheet.
- Power sheets only from a 24 V DC constant-voltage LED driver. Never connect a sheet directly to line voltage.
- Mains (line-voltage) wiring to the driver must be done by a qualified electrician to local electrical code.
- IP20: for indoor, dry locations only. Keep sheets away from water and direct moisture.
- Observe polarity (+ / -) on every connection. Reversed wiring will prevent the sheet from lighting.
- Flex sheets in gentle curves only; do not fold or crease them.

TOOLS & MATERIALS

- DayTech 96 W, 24 V DC LED driver (one output per 5 sheets)
- Supplied sheet-to-sheet jumper connectors (60 mm and 150 mm)
- Supplied power input cable (250 mm)
- Sharp scissors for trimming sheets
- Drill and screws (optional mechanical mounting)
- Isopropyl alcohol and a lint-free cloth
- Wire strippers and approved wire connectors

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Installation Steps

1 Plan the layout and power

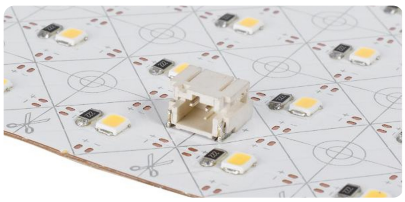
Lay out how many sheets the area needs and where the driver will sit. Each 96 W driver output can power a maximum of 5 sheets (75 W). For 6 or more sheets, use an additional driver or driver output and split the sheets into separate circuits of 5 or fewer.



MAX 5 SHEETS = 75 W
per 96 W driver output

2 Cut to size (optional)

Sheets can be trimmed with scissors to fit the space or create custom shapes. Cut only along the solid cut lines printed on the sheet. Cutting anywhere else will damage the circuit and cause that section to go dark.



3 Prepare the surface

The mounting surface must be clean, dry, smooth and free of dust, oil and grease. Wipe it with isopropyl alcohol and let it dry fully. Install at room temperature for the best adhesive bond.

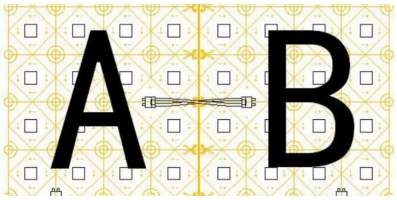
4 Mount the sheets

Peel the 3M adhesive backing off the sheet and press it firmly onto the surface, working from the centre out to remove air pockets. Where extra hold is needed, the sheet can be drilled directly through and fixed with screws; avoid drilling through an LED.



5 Jump sheets together

Connect adjacent sheets on the same circuit using the supplied jumper connectors: the 60 mm jumper for sheets that butt together, the 150 mm jumper where there is a gap. Keep each circuit to a maximum of 5 sheets.



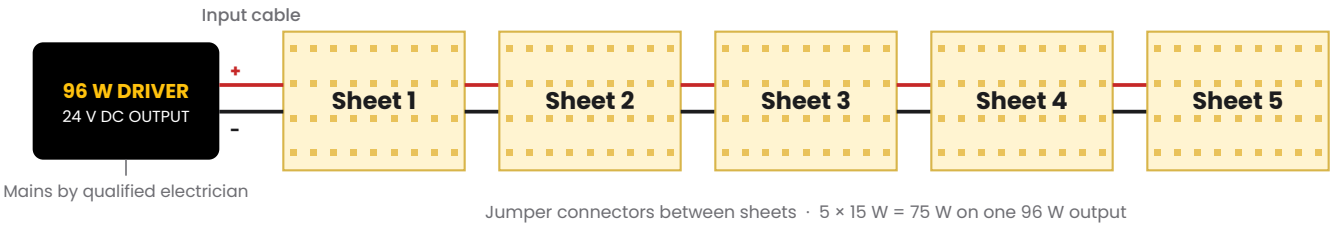
6 Connect power and test

Connect the power input cable to the first sheet and to the 24 V DC driver output, matching + to + and − to −. Have the driver's mains side connected by a qualified electrician, restore power and check that every sheet lights evenly.

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Wiring & Power Planning

SINGLE CIRCUIT – UP TO 5 SHEETS



DRIVER SIZING

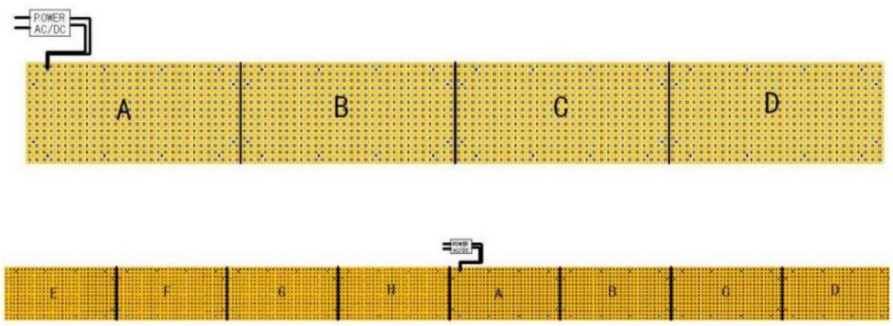
SHEETS	TOTAL LOAD	96 W DRIVER OUTPUTS
1	15 W	1
2	30 W	1
3	45 W	1
4	60 W	1
5	75 W	1
6 – 10	90 – 150 W	2 (split into circuits of ≤ 5)
11 – 15	165 – 225 W	3 (split into circuits of ≤ 5)

Never exceed 5 sheets on a single 96 W output, even if the driver has spare capacity; this keeps the load at 78% and voltage even across every sheet.

WIRING NOTES

- Use only DayTech 24 V DC constant-voltage drivers rated for LED loads.
- Feed each circuit from its own driver output. Do not link the end of one 5-sheet circuit into the next.
- Sheets can be fed from one end, or from the centre to split a run in two (see layouts below).
- Keep low-voltage wiring runs short and use wire gauge suited to the length to avoid voltage drop.
- Secure cables with the supplied cable management clips and keep them clear of sharp edges.
- Ensure the driver is accessible and ventilated; do not enclose it in insulation.

EXAMPLE LAYOUTS



Top: end-fed run, power enters at sheet A and is jumped through B, C and D.

Bottom: centre-fed run. Power enters the middle so the run splits in two directions. The total on each 96 W driver output must still be 5 sheets or fewer.

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Dimensions, Accessories & Troubleshooting

DIMENSIONS & CUT LINES (MM)



Sheet: 503.1 × 235 × 6.5 mm with 420 LEDs on an even grid for uniform, spot-free light.

Cut only along the solid lines. Each section between cut lines stays powered from the connection pads at its edge.

SUPPLIED ACCESSORIES



Short jumper
60 mm cable
4 pcs



Long jumper
150 mm cable
4 pcs



Power input cable
250 mm cable
2 pcs



Cable management clips
12.6 × 9.6 × 6 mm
4 pcs



Protective bumpers
Ø12 × 8.3 mm
8 pcs



WAGO connectors
18 × 13 × 8 mm
2 pcs

TROUBLESHOOTING

PROBLEM	LIKELY CAUSE	WHAT TO DO
Sheet does not light	No power, loose jumper or reversed polarity	Check driver output, re-seat jumpers, confirm + to + and - to -
Sheets dim toward end of run	Too many sheets on one output	Limit each circuit to 5 sheets; add a driver output
Section dark after trimming	Cut made off the solid line	Replace the section; trim only on solid cut lines
Flickering	Driver overloaded or wrong driver type	Use a 24 V DC constant-voltage driver; reduce load
Sheet lifting from surface	Dusty, oily or textured surface	Clean with alcohol and re-apply, or add screws

3-Year Warranty · 30,000-hour rated life · Operating temperature -25 °C to +45 °C

For technical support or warranty service, contact DayTech LED at 905 617 0298 or www.daytechled.com.