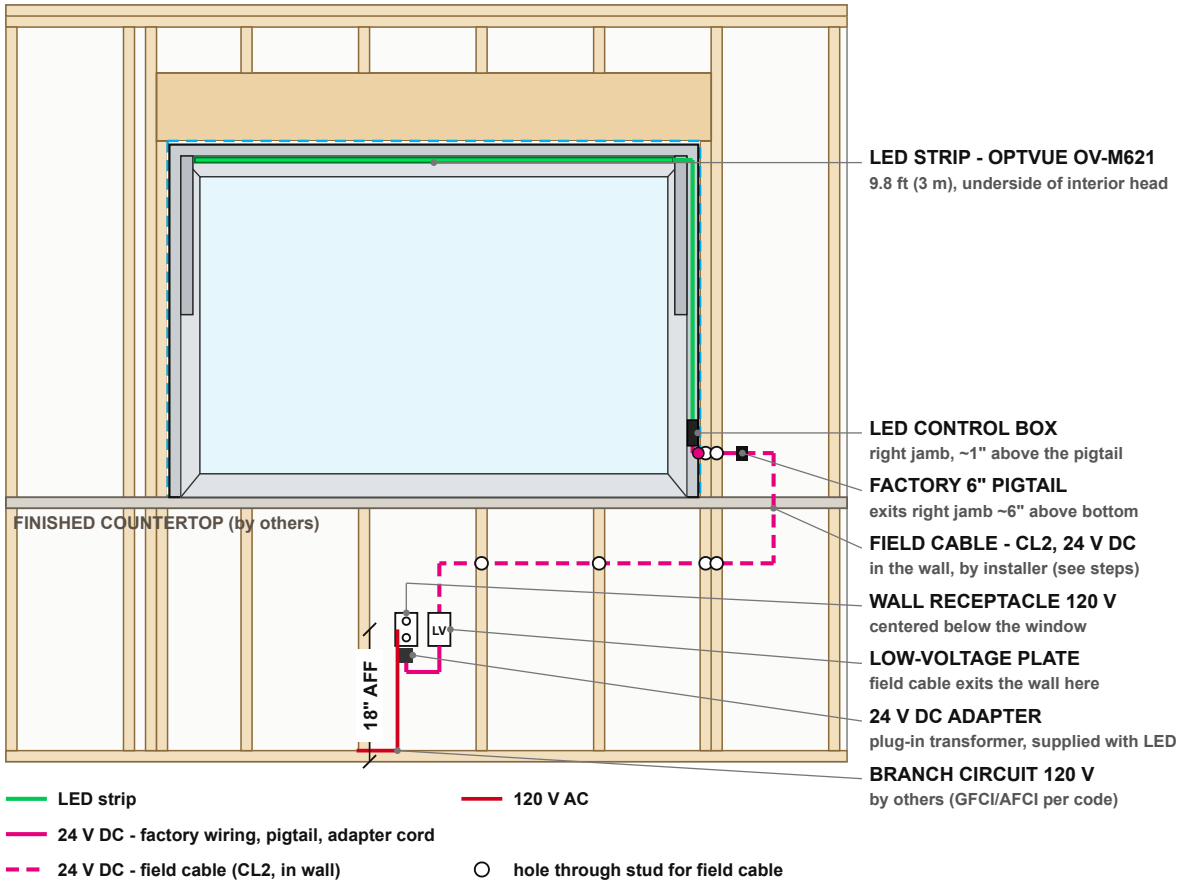
LED OVERHEAD LIGHTING - WIRING SCHEMATIC

THRUVUE INFINITY Gas Strut Window · LED lighting (patent pending) · Interior view (from inside the room) · For customer / electrician



Installing the low-voltage cable in the wall (24 V DC, Class 2) - general guidance, verify with local code

1. The window ships with a 6" low-voltage pigtail on the right jamb (interior view), about 6" above the bottom of the window. Do not cut it.
2. Plan the route before drywall: pigtail -> inside the wall -> a low-voltage plate (new-work low-voltage bracket or brush plate) beside the receptacle centered below the window.
3. Use cable listed for in-wall use: CL2 or better (CL2R, CL3, CL3R or CM are acceptable substitutes), 2-conductor. 18 AWG for runs up to about 15 ft, 16 AWG up to about 30 ft - keep voltage drop under 3% (NEC 722.135 / 722.179).
4. Never run the adapter cord, a household extension cord or other flexible cord inside the wall (NEC 400.12). The plug-in 24 V adapter stays outside the wall, plugged into the receptacle.
5. Keep the low-voltage cable out of 120 V boxes, raceways and holes, and separated from line-voltage cable (NEC 725.136). Do not bring it into the receptacle box - use the separate low-voltage plate.
6. Drill holes near the center of the studs (at least 1.25" from the face) or add steel nail plates. Support the cable with low-voltage straps; do not staple tight, pinch or kink it (NEC 722.24, 300.4 practice).
7. At the window, join the field cable to the pigtail with a matching DC connector or listed low-voltage connectors, keep polarity (+ to +, - to -), strain-relieve it and leave a 6"-12" service loop. Class 2 connections do not need a junction box under the NEC, but keep them reachable where local code requires.
8. Seal or fire-block holes through top or bottom plates per local building code.
9. Test before closing the wall: plug in the adapter, open the window, press the power button on the control box (right jamb, just above the pigtail) and confirm the strip lights.

Electrical notes - LED overhead lighting

LED LIGHTING: OPTVUE LED lighting (patent pending). This window: part OV-M621, 9.8 ft (3 m) (windows up to 114" wide). 24 V DC, 2 A (48 W max). Cuttable every 8 cm (3.125") at the marked cut lines - power OFF before cutting. Indoor use only. Details: optvue.com/led.

POWER SUPPLY: Plug-in 24 V DC adapter supplied with the strip (input AC 100-240 V). Use ONLY the supplied adapter. No hard-wiring of the LED circuit. The adapter must plug into an accessible receptacle - never inside a wall, ceiling or cabinet cavity.

RECEPTACLE: 120 V, 15/20 A duplex receptacle on a branch circuit. GFCI and/or AFCI protection where required by NEC 210.8 / 210.12 and local code (e.g. kitchen and countertop receptacles). Shown centered below the window, 18" AFF (height ASSUMED - confirm in the field). The LED / 24 V DC cable exits the right jamb (interior view) about 6" above the bottom of the window.

LOW-VOLTAGE CABLE: The window ships with a 6" low-voltage pigtail exiting the right jamb (interior view) about 6" above the bottom of the window. The cable from the pigtail to the receptacle is installed on site - see the steps under the drawing.

CONTROL: Control box / power button is on the right jamb (interior view; left side from the exterior), about 1" above the pigtail exit. App control: the LED lighting app (2.4 GHz Wi-Fi), Matter, Alexa, Google Assistant. Use an OPTVUE LED extension cable (part OV-M623) if the run to the receptacle is too long.

CODE: All electrical work by a licensed electrician per the current NEC and local codes. Optvue supplies the LED kit; receptacle, branch circuit and in-wall low-voltage cable are by others.

ASSUMED until confirmed: receptacle height (18" AFF) and countertop height. Wall studs are shown only to show the cable route.