

48V Magnetic System Installation and Coordination Guide

English edition

For early coordination of the DC 48V magnetic tracks and modules listed in this technical pack.
Manufacturer-approved installation drawings are not yet available. This guide does not replace local regulations, product instructions or construction design by a qualified electrical professional.

Critical safety boundary	Requirement
Live work	Prohibited. Isolate and verify power before installation, movement, cleaning or maintenance.
System compatibility	Use only 48V tracks, supplies, connectors and luminaires confirmed as compatible by the manufacturer.
Fixing and support	Fix to reliable structure. Ceiling board, decorative layers and adhesive must not be the sole support.
Heat and covering	Do not cover track, supply or luminaire heat-dissipation surfaces. Follow final approved access and insulation clearances.
Wet or exterior areas	Do not assume wet, outdoor or corrosive suitability without verified IP-rating evidence.

Installation sequence

- 01** Confirm the system
Lock the DC 48V track family, mounting method, luminaire quantity, connected wattage and control requirements. Never mix incompatible mechanical or electrical interfaces.
- 02** Calculate the load
Total the actual luminaire wattage and include the manufacturer's required reserve. A qualified electrical professional must select supplies, protective devices, conductors and circuit arrangement.
- 03** Coordinate the substrate
Before closing the ceiling, confirm framing, ceiling thickness, slot width, access space and supply locations. Do not support the track from the finish board alone.
- 04** Install with power isolated
Disconnect and verify power before installing, removing or moving modules. Follow track polarity and latch direction; never force or twist a module into place.
- 05** Check mechanical completion
Inspect track alignment, joints, fixing points and end caps. Confirm every module is fully locked. Provide separate load support and sway control for pendants.
- 06** Test and commission
Energize the system in stages. Check abnormal heat, flicker, noise, dimming consistency and total circuit load. Retain completion photos and circuit records.

Track and luminaire coordination dimensions

The marked overall track envelope is 60 x 48 mm with a 26 mm slot. Luminaire envelopes are listed in the specification and in the DXF and IFC coordination models. Complete dimensions for slots, joints, feed boxes and fixing holes are not available, so do not use the coordination models for off-site fabrication.

Coordination item	Recorded envelope	Action before construction
Recessed track	1000 L x 60 W x 48 H mm; 26 mm slot	Obtain an approved section and fixing schedule.
Linear modules	See the core module schedule	Confirm latch, electrical contact and end clearance.
Pendant modules	40 mm body diameter; suspension varies by model	Confirm independent support, adjustment and sway control.
Spot modules	48 mm body diameter; model-specific body length	Confirm aiming clearance and adapter engagement.

Commissioning checklist

Item	Record
Track fixing is secure; alignment and joints meet the project standard	☐
All modules are fully locked; pendant support measures are complete	☐
Supply input, 48V output and polarity have been checked	☐
Actual connected load and circuit identification have been recorded	☐
No abnormal heat, flicker, noise or odour is present during operation	☐
Dimming range, groups and scenes have been tested	☐
Cleaning, spares, as-built information and maintenance guidance have been handed over	☐

Maintenance

Clean with a dry, soft cloth. Do not spray liquid or solvent. Isolate power before replacing or moving a module. Stop using the system and arrange professional inspection if discoloration, looseness, odour, abnormal temperature or flicker occurs.