LED LIGHT BOX ISSUES

Why LED Light Boxes Trip Breakers

Even though LEDs are energy-efficient, the drivers (internal power supplies) behave differently than traditional Lamps

The Earth Leakage Problem

Every LED driver "leaks" a tiny amount of current to the earth as part of its normal operation

The Limit: All installed sockets are protected by a 30mA RCD (Residual Current Device).

The Cumulative Effect: While one light box is harmless, plugging 4 boxes into a single 4-way extension lead can exceed that 30mA limit.

The Fix: Order additional socket outlets. This isn't for more power, it’s to spread leakage across multiple RCDS with sockets being on separate RCDS, avoiding any nuisance tripping

Inrush Current (The Startup Surge)

When power is turned on to the LED Light Boxes, the capacitors in the LED drivers charge up instantly. This creates a massive surge of power for a short period

The Result: This surge can trip the MCB (Miniature Circuit Breaker)

The Fix: Sequence your start up. Turn your light boxes on one at a time, rather than all at once.

Safety

If your MCB trips with only one light box plugged in, you night have a genuine issue

Physical Inspection: Check for pinched cables, exposed wires, or damaged plugs.

PAT Testing: Ensure all equipment has undergone In-Service Inspection and Testing (PAT) before arriving on-site. This confirms the equipment is internally safe and won't compromise the venue's or nominated electrical contractors’ electrical system.