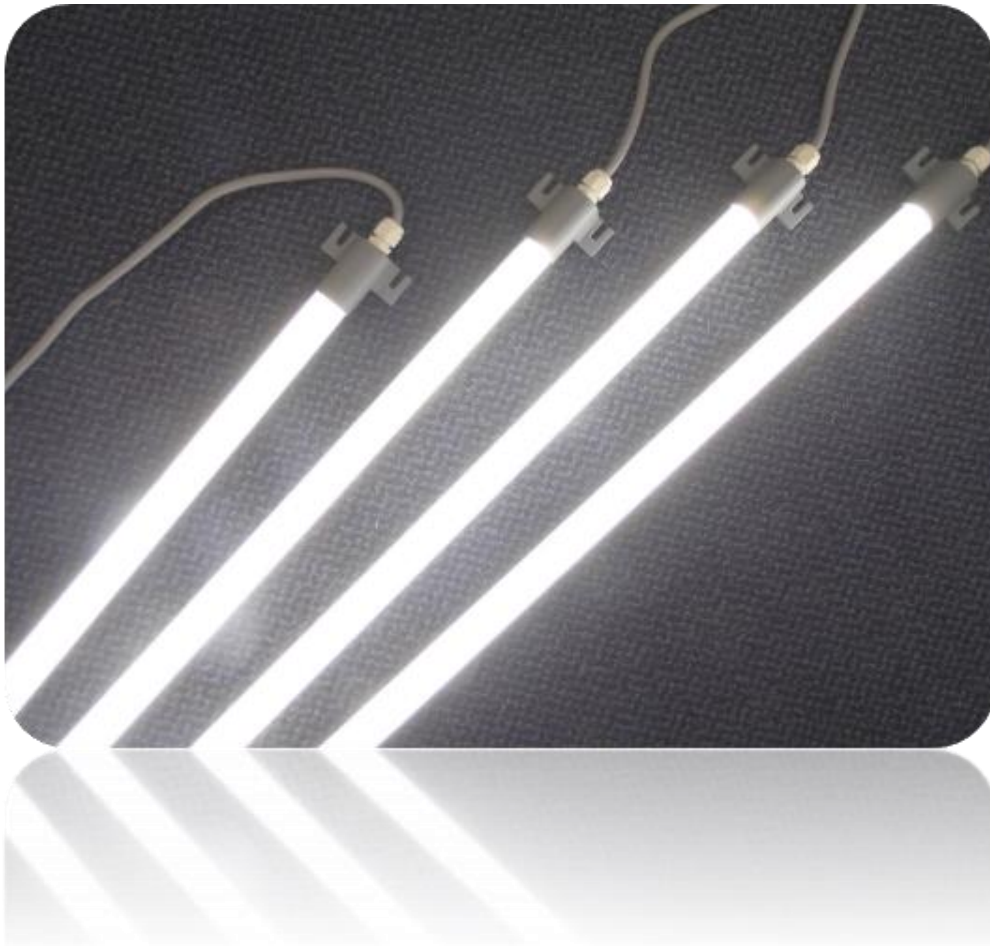


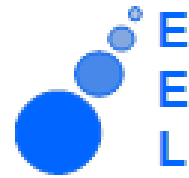
INSTALLATION & OPERATING MANUAL

LIGHT SABER



LED SHAFT LIGHTING SYSTEM – EN81-20
INNOVATION NOT IMITATION!





LIGHT SABER LED SHAFT LIGHTING

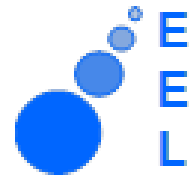
PRODUCT CODES: INTD4001, INTD4010, INTD4020, INTD4021, INTD4022, INTD4030/1,
INTD4030/5, INTD4030/10

**PLEASE READ THESE INSTRUCTIONS BEFORE COMMENCING INSTALLATION
AND RETAIN THEM FOR FUTURE REFERENCE**

Safety Warning

These warnings are provided in the interest of safety. You must read them carefully before or using this equipment

- All installation and servicing must be done by a qualified electrician or other competent person.
- It is dangerous to alter specification or modify the product in any way.
- Ensure that these instructions are passed on to the end user.
- These light tubes and switches are designed for dry conditions and must not be exposed to rain or moisture.
- Do not obstruct the light tubes so that air cannot freely circulate around the light tubes.
- This product is suitable for mounting on surface with normal flammability (e.g. wood and plasterboard). Do not mount on highly flammable surface (e.g. Polystyrene tiles).
- Do not attach to any surface which is freshly painted, damp, or otherwise electrically conductive



Introduction

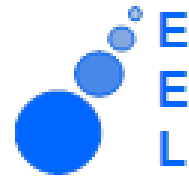
Our Light Saber LED shaft lighting system is the first LED tube lighting system with built-in emergency back up and plug & play connection. Simply click together and connect the control unit to power.

Light Saber is the perfect solution for all your shaft lighting needs and fully complies with EN81-20.

In normal operation our Light Saber LED shaft lighting exceeds 150 lux and in emergency operation exceeds 15 lux throughout the lift shaft. It's supplied with two-way switching from the machine room to the pit, with built-in pit socket. All components are installed in a single run from the top to the bottom of the lift shaft. Optional three ways switching for lift car top available. With its ultra-fast installation and light weight design, this system can be installed by a single engineer. The whole system is RCD protected within the main control unit.

Technical Specification:

Power Supply: 230VAC 50 Hz.
Battery Type: Sealed Lead Acid Type 12V/3.2Ah.
Battery Charger Type: 2 Step Bulk Charge.
Power Consumption: 10W Peak (Bulk Charging), 2.5W (Standby).
Battery Backup Load: Up to 5A at 12VDC.
Socket AC Load: Up to 1KW.
Operation Temperature: 0-80°C.
Operation Humidity: 10-80% (Non-Condensing).
Colour Temperature: 6000K
IP Protection: IP64
Lifetime: 50, 000 hours estimated.
LED Light Tune: 120 wide lighting angle.



LIGHT SABER LED SHAFT LIGHTING

PRODUCT CODES: INTD4001, INTD4010, INTD4020, INTD4021, INTD4022, INTD4030/1, INTD4030/5, INTD4030/10

INTRODUCTION

To ensure reliable and trouble-free operation of your “Light Saber” LED Shaft Lighting System, it is important to ensure that you use the following information.

Each section of the LED shaft lighting system - depending on the number of floors - must be checked before installation can be carried out to ensure that all the correct components are present as per the kit list.

Only use correct power tools and hand tools for the rawplugs and screws within the installation packs.

Firstly, identify a suitable location to install the system by carrying out an assessment of the area. The area must be suitable for the application and be free from any water or damp.

Install the Main Control unit (CEM) in the lift machine room, selecting a suitable location for easy access to the lift shaft.

LIGHT SABER LED SHAFT LIGHTING

PRODUCT CODES: INTD4001, INTD4010, INTD4020, INTD4021, INTD4022, INTD4030/1, INTD4030/5, INTD4030/10

Product Code: INTD4001 – Mains Control Unit (CEM)

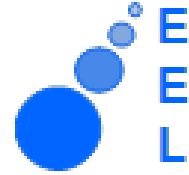


Specifications:

IP65 Plastic Box.
5 metre LSOH mains power cable.
1 metre connection cable for Machine Room Light Switch.
Input Supply 230V AC.
Internal fuse protection 10A.
LED Lights load up to 5A DC (120 LED tubes) normal operation.
Battery included 12V /7.2Ah OR 12V /3.2Ah.
EN81-20 compatible.

Connect the 10 Metre Extension Lead to the Main Control Unit (CEM). Plugs connect together by lining up the two white dots as pictured below. Once the plugs are located, screw them together- **Do not over tighten**. This 10 Metre Extension lead is to be connected to the first LED Light Tube.





LIGHT SABER LED SHAFT LIGHTING

PRODUCT CODES: INTD4001, INTD4010, INTD4020, INTD4021, INTD4022, INTD4030/1, INTD4030/5, INTD4030/10

Install the Machine Room Light Switch (MRS) in a suitable location within the lift machine room.

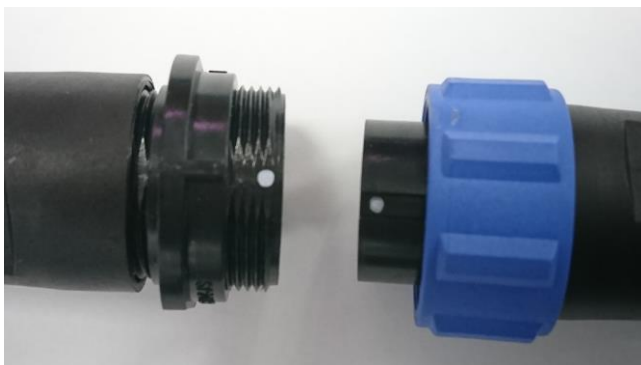
Product Code: INTD4020 – Machine Room Light Switch (MRS)

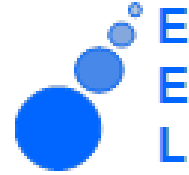


Specifications:

IP65 Plastic Box.
5 metre LSOH connection cable.

Connect the Machine Room Light Switch (MRS) to the Main Control Unit (CEM). Plugs connect together by lining up the two white dots as pictured below. Once the plugs are located, screw them together- **Do not over tighten.**





LIGHT SABER LED SHAFT LIGHTING

PRODUCT CODES: INTD4001, INTD4010, INTD4020, INTD4021, INTD4022, INTD4030/1, INTD4030/5, INTD4030/10

With the first LED Tube (T4E) positioned 500mm from the top of the lift shaft, mark and fix to the lift shaft wall.

Product Code: INTD40010 – LED Light Tube (T4E)

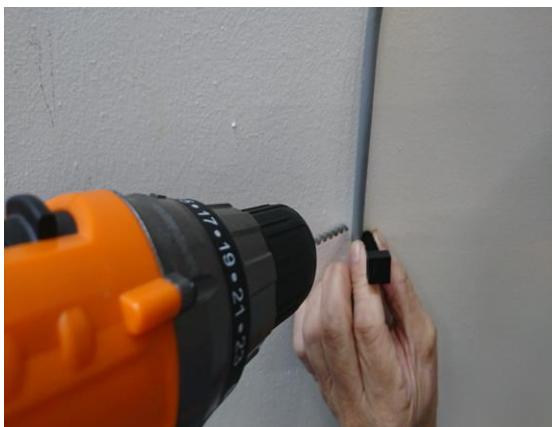


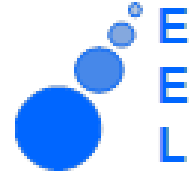
Specifications:

- 230V and 12V operation.
- 120mm length.
- 2 separate light sections at each tube.
- 75cm **LS0H** cable with connector on each side
- High efficiency LED 150 lumen/watt.
- 120 wide lighting angle.
- Normal operation 150 Lux.
- Emergency operation 15Lux.
- Wall mount end caps.

Please Note: If your machine room is at the bottom you will require extension leads from the machine room to the top of the lift shaft to connect the control unit to the first LED Tube.

Masonry mounts and cable ties are provided to fix the cable between each lamp to the lift shaft wall.





LIGHT SABER LED SHAFT LIGHTING

**PRODUCT CODES: INTD4001, INTD4010, INTD4020, INTD4021, INTD4022,
INTD4030/1, INTD4030/5, INTD4030/10**

Once you have completed your LED light tube installation, install the Pit Light Switch & Socket (PLS) to complete the system.

Product Code: INTD4021 – Pit Light Switch & Socket (PLS)



Specifications:

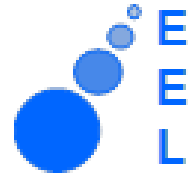
IP65 Plastic Box.
5 metre LSOH connection cable.
UK Power Socket
Max Power supply for the Socket 1KW.

Optional Extra:

Should you require, we also supply a third switching option for Top of Lift Car (CLS) to be connected via the lift trailer to our Main Control Unit (CEM)

Product Code: INTD4022 – Top of Lift Car Light Switch (CLS)





LIGHT SABER LED SHAFT LIGHTING

PRODUCT CODES: INTD4001, INTD4010, INTD4020, INTD4021, INTD4022, INTD4030/1, INTD4030/5, INTD4030/10

Three extension leads are available within our range, 1 Metre, 5 Metre and 10 Metre.

Product Code: INTD4030/1

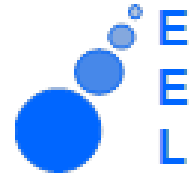


Product Code: INTD4030/5



Product Code: INTD4030/5

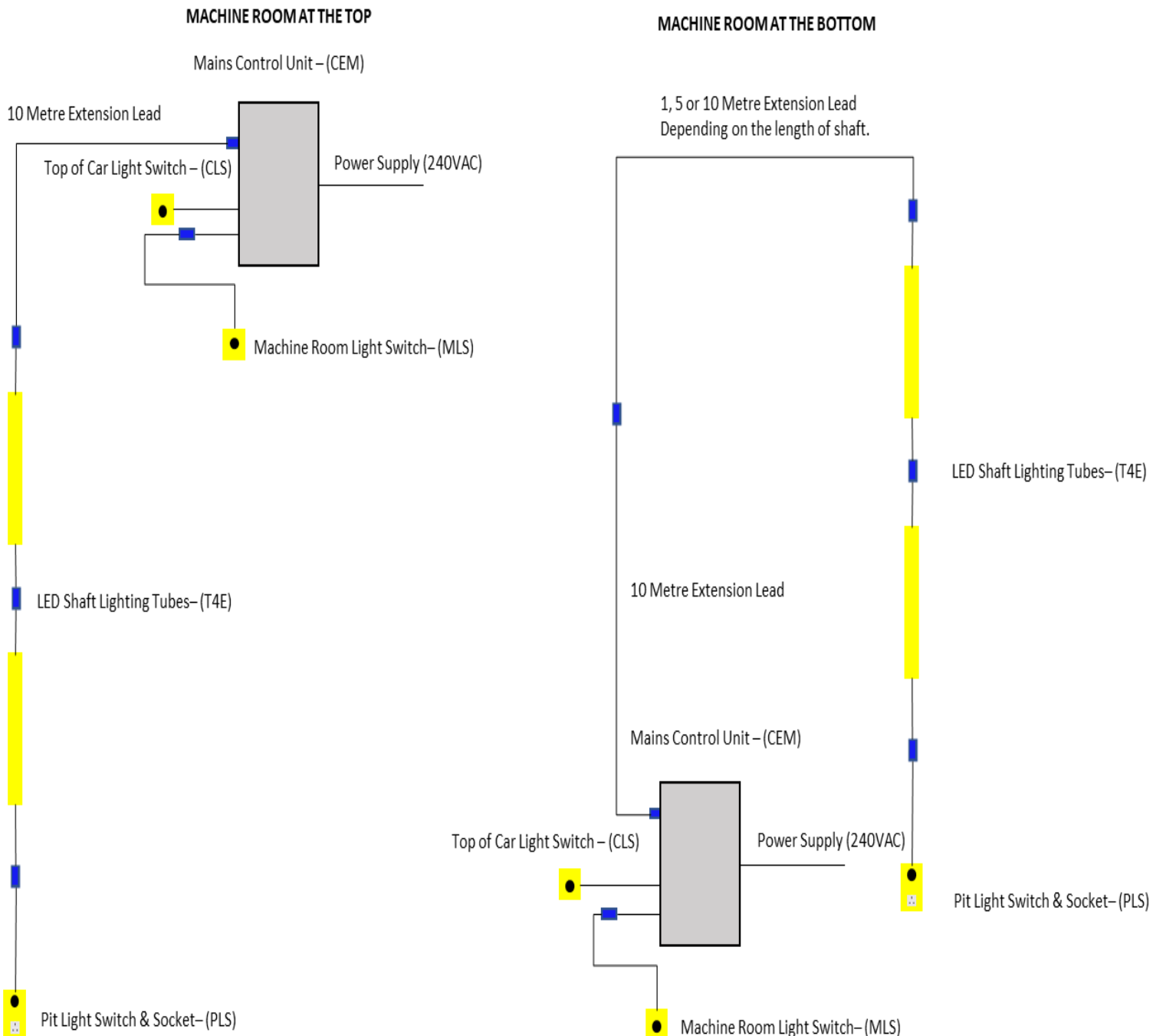




LIGHT SABER LED SHAFT LIGHTING

PRODUCT CODES: INTD4001, INTD4010, INTD4020, INTD4021, INTD4022, INTD4030/1, INTD4030/5, INTD4030/10

Layout Diagram



LIGHT SABER LED SHAFT LIGHTING

PRODUCT CODES: INTD4001, INTD4010, INTD4020, INTD4021, INTD4022, INTD4030/1, INTD4030/5, INTD4030/10

Power Supply



Before connecting to your power source, please make sure that the trip switch within the mains controller (CEM) is in the **OFF position**.



Connect the incoming main supply voltage: 230VAC to the power lead.

- (1) **Black Cable = Live**
- (2) **Black Cable = Neutral**
- Earth Cable = Earth**





LIGHT SABER LED SHAFT LIGHTING

**PRODUCT CODES: INTD4001, INTD4010, INTD4020, INTD4021, INTD4022,
INTD4030/1, INTD4030/5, INTD4030/10**

Top of Car Switching Option (three way switching)

Connect the two wires from the switch on the car top via your lift controller to the terminals indicated below.



How to Test

- With all the LED tubes and switches connected, switch on the Main Control Unit (CEM) via the trip switch.
- Press the Machine Room Light Switch (MRS) to switch the lights on or off.
- Press the Pit Light Switch & Power Unit (PLS) to switch the lights on or off.
- Press the Top of Lift Car Switch (CLS) if fitted to switch the lights on or off.

Elevator Equipment Limited reserves the right to improve the product specification without prior notice