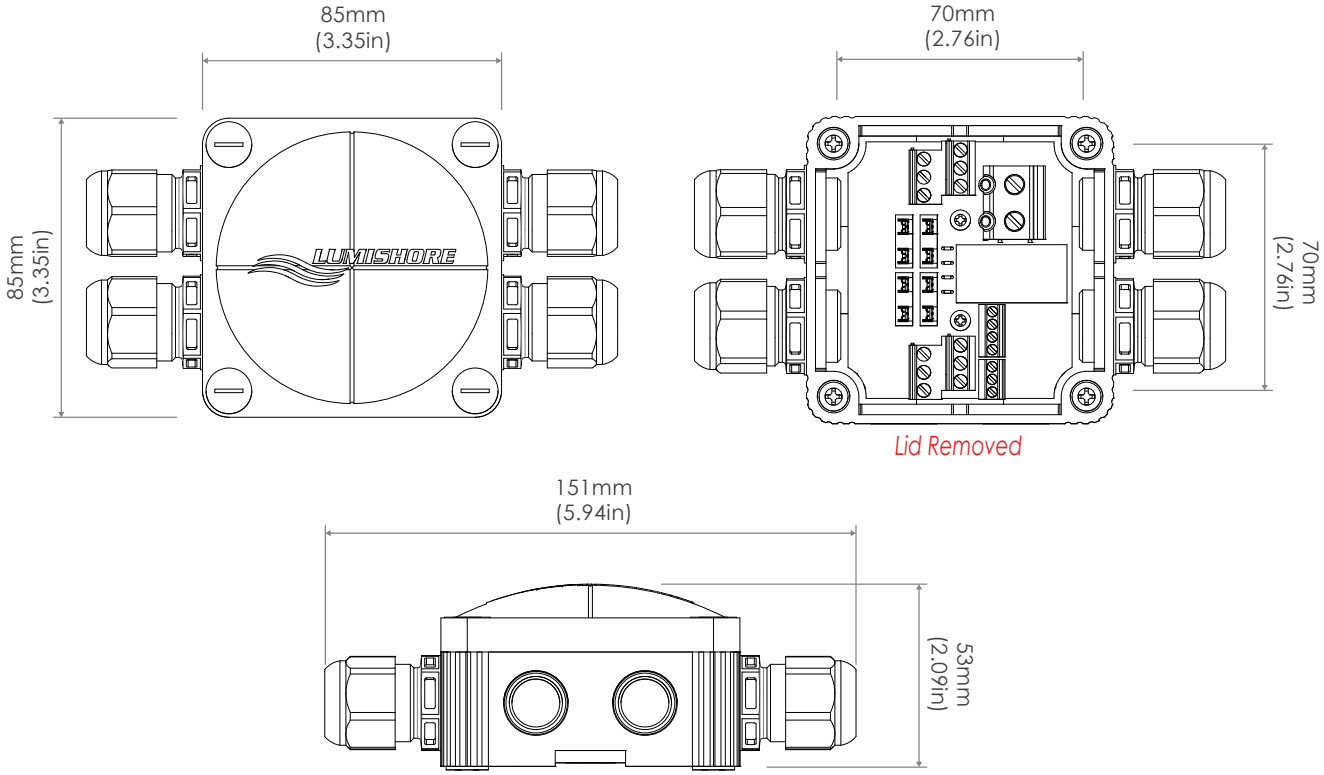
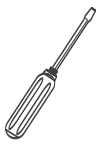
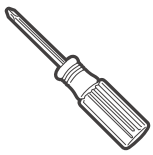
SMX Lumi-Hub Installation Guide



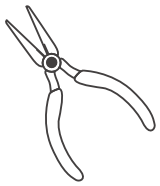
Tools Required



Small Flat-Blade Screwdriver

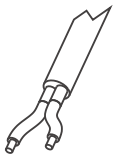


Large Screwdriver

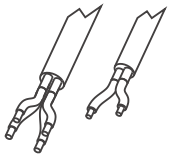


Long Nose Pliers

4x Mounting Screws



2-Core Power Wire

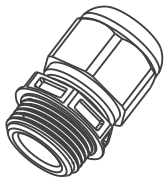


2 or 4-Core Switch Wire

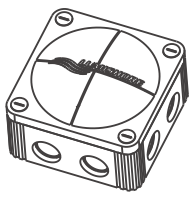
Components Supplied

2x Dual Entry Insert

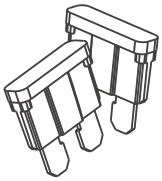
3x Reducing Insert



4x M20 Cable Gland



1x Lumi-Hub



1x Fuse Kit

Before you start!

Always ensure that the vessel's power source and battery are disconnected or isolated prior to installation. A qualified professional should carry out both the electrical and mechanical installation. If in doubt please contact LUMISHORE. Refer to product support section.

Before you start:

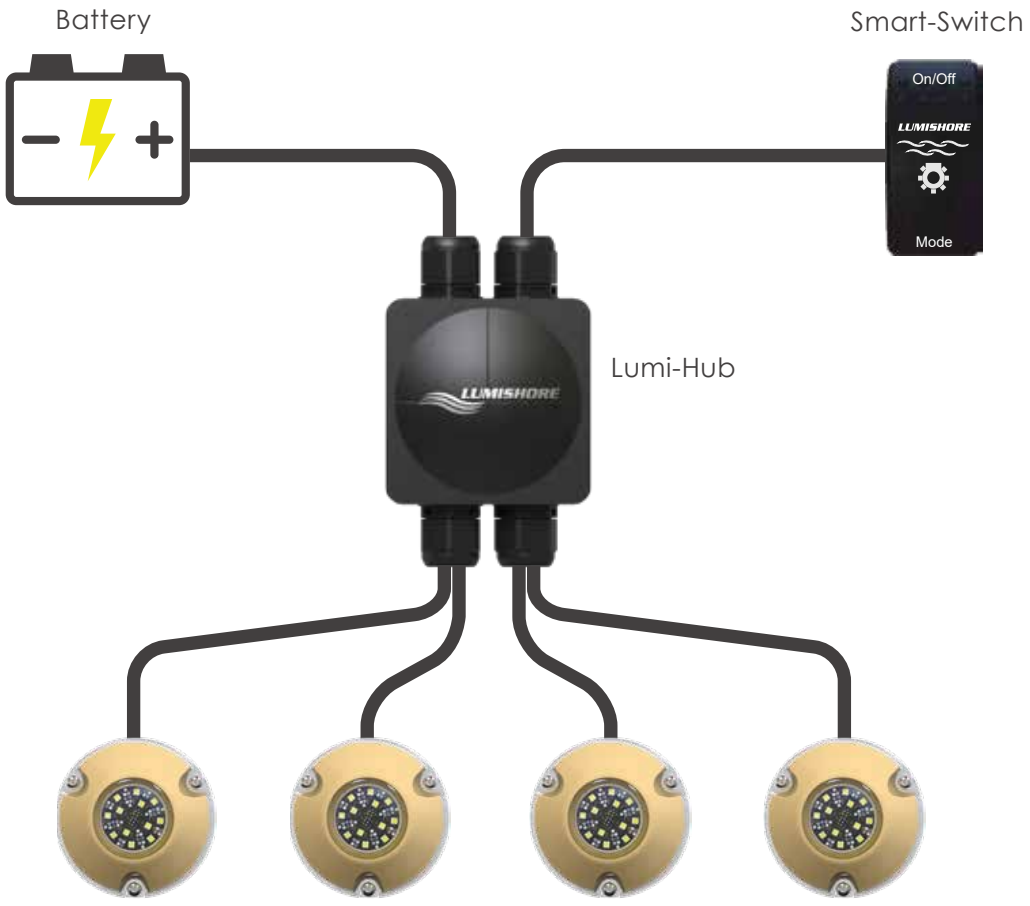
1 Using suitable screws, mount the Lumi-Hub in an accessible **dry** location within reach of the lights and close to the vessel's power supply.

2 Select the Power cable following the cable gauge guide on page 5. *Note : To reduce voltage drop along the cable, keep the power wire from the Battery to the Lumi-Hub as short as possible.*

4 Use a suitable wire for the switch cable (20-24AWG), the wire should be 2-Core if using a standard "On/Off" switch, or a 4-Core if using the optional "Lumi-Switch". *Note : The switch wire does not carry any current so can be over 100ft in length.*

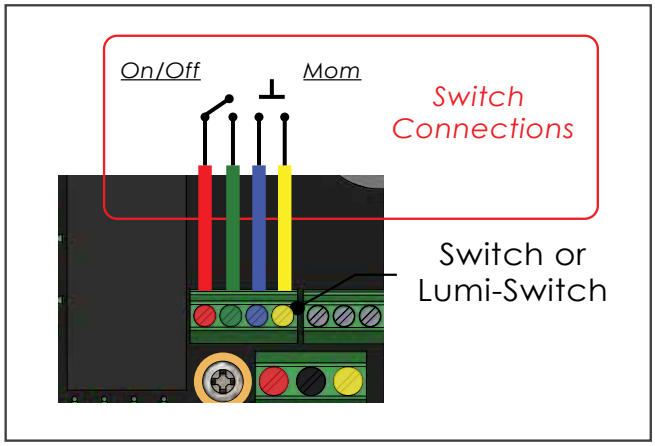
5 Follow the guides on pages 3 to 4 to select the appropriate cable gland insert for the number of lights. The hubs can be daisy chained together if installing more than 4 lights. See page 6.

Typical diagram of a 4 light install:



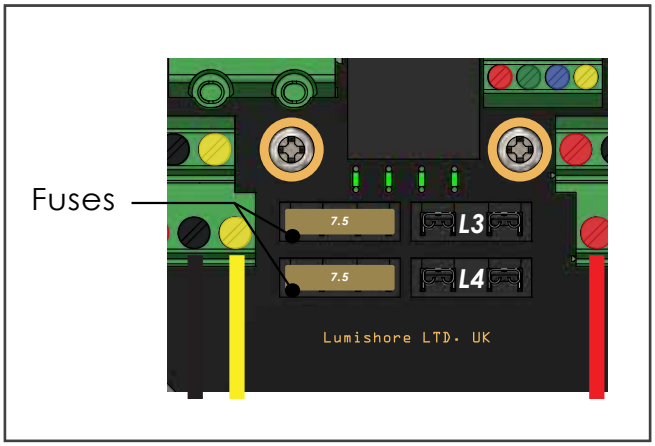
Installation instructions:

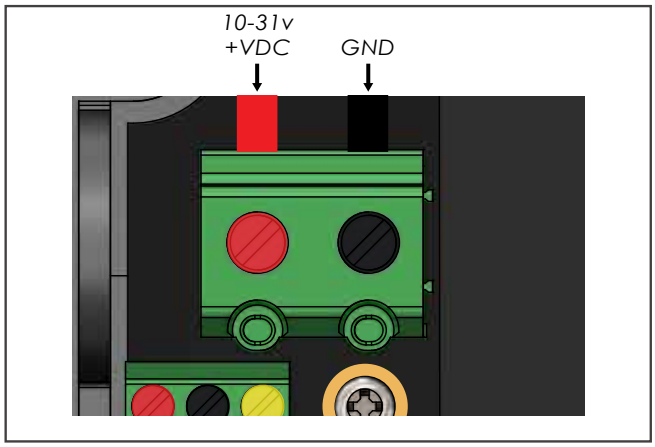
1 Mount the Lumi-Hub(s) in place. Run all cables to the Lumi-Hub.



2 Wire the switch in acordance to the diagram on the left. Viewing from above going from left to right Red (VDC+), Green (VDC-), Blue (Mom) & Yellow (Mom). Check each wire has located correctly and has sound connection.

3 Insert fuses into the fuse holders. The number of fuses required will depend on the number of lights connected to the hub. If only 2 lights are connected, use only the first (being at the top) and second fuse holders. Use the fuse table on Page 8 to select the correct fuses for your product.

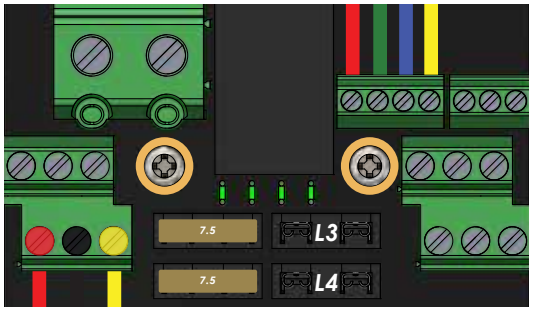




4 Next step is to wire the hub up to the power. The power connector is located at the top left of the Lumi-Hub, where the Red (VDC+) connection is on the left and Black (GND) connection is on the right. Check each wire has located correctly and has sound connection.

5 Once you have carried out the previous steps it is now time to test the hub. Using your installed switch turn the power On. If eveything has been installed correctly the Lumi-Hub should power up and the fuse LED's will illuminate (depending on number of fuses installed). If none of the LED's light up, power the system Off check all connections have been located correctly and have sound connection, power system back On. If the fuse LED's remain Off please contact Lumishore.

6 Once the hub has been tested the next step is to connect the lights. With the location of the lights on the vessel in mind the lights should be connected to their respective connectors. Lights 1 & 2 on the left, and Lights 3 & 4 on the right. Refer to wiring card supplied with hub.



Light 1

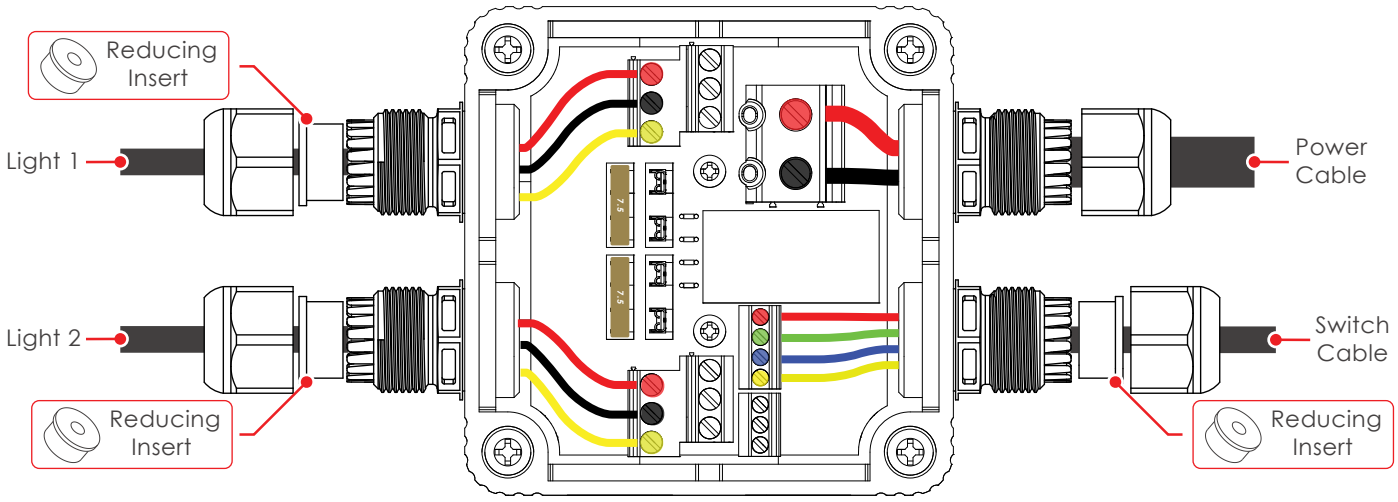
Note : Cable between the Lumi-Hub and lights can be extended. Follow the table on pages 7 & 8 to find the maximum overall cable length.

7 Tighten all cable glands and replace lid, ensure they are sealed correctly.

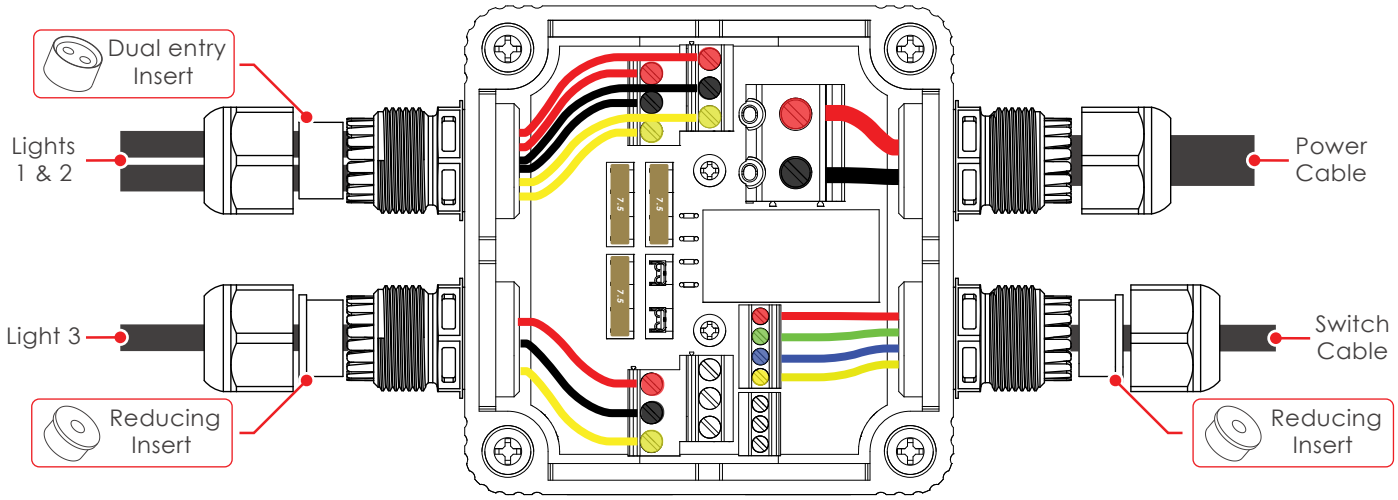
Light installation instructions

For instructions on how to install the lights, please refer to:
Lumishore Supra SMX 22- 52 - 102 Installation Manual - **45-0051**
Installation guides can be downloaded via our website

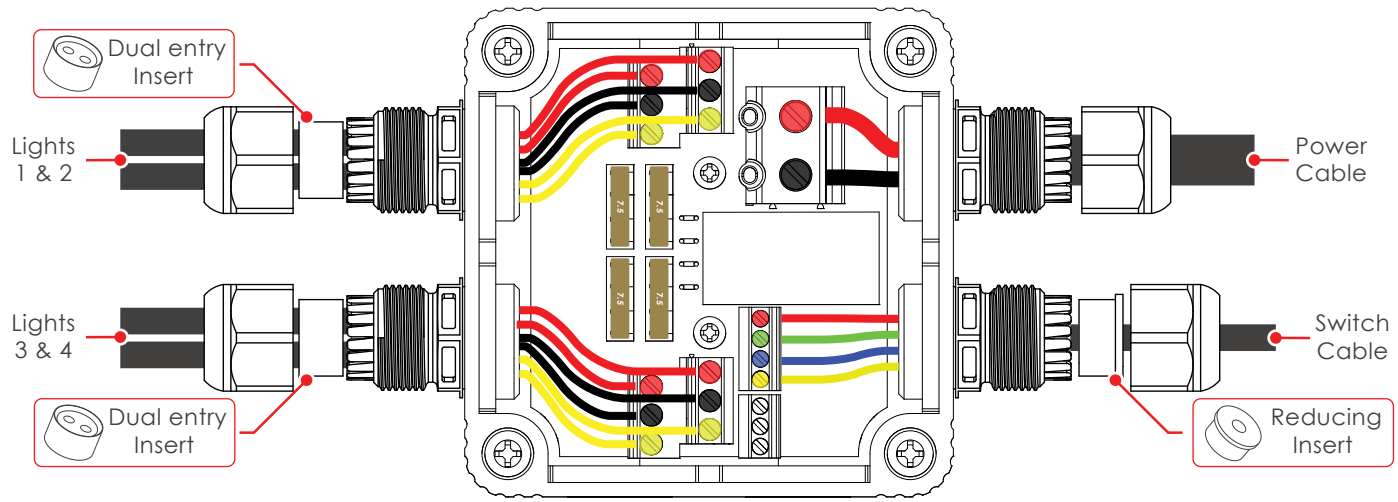
2 Light Install



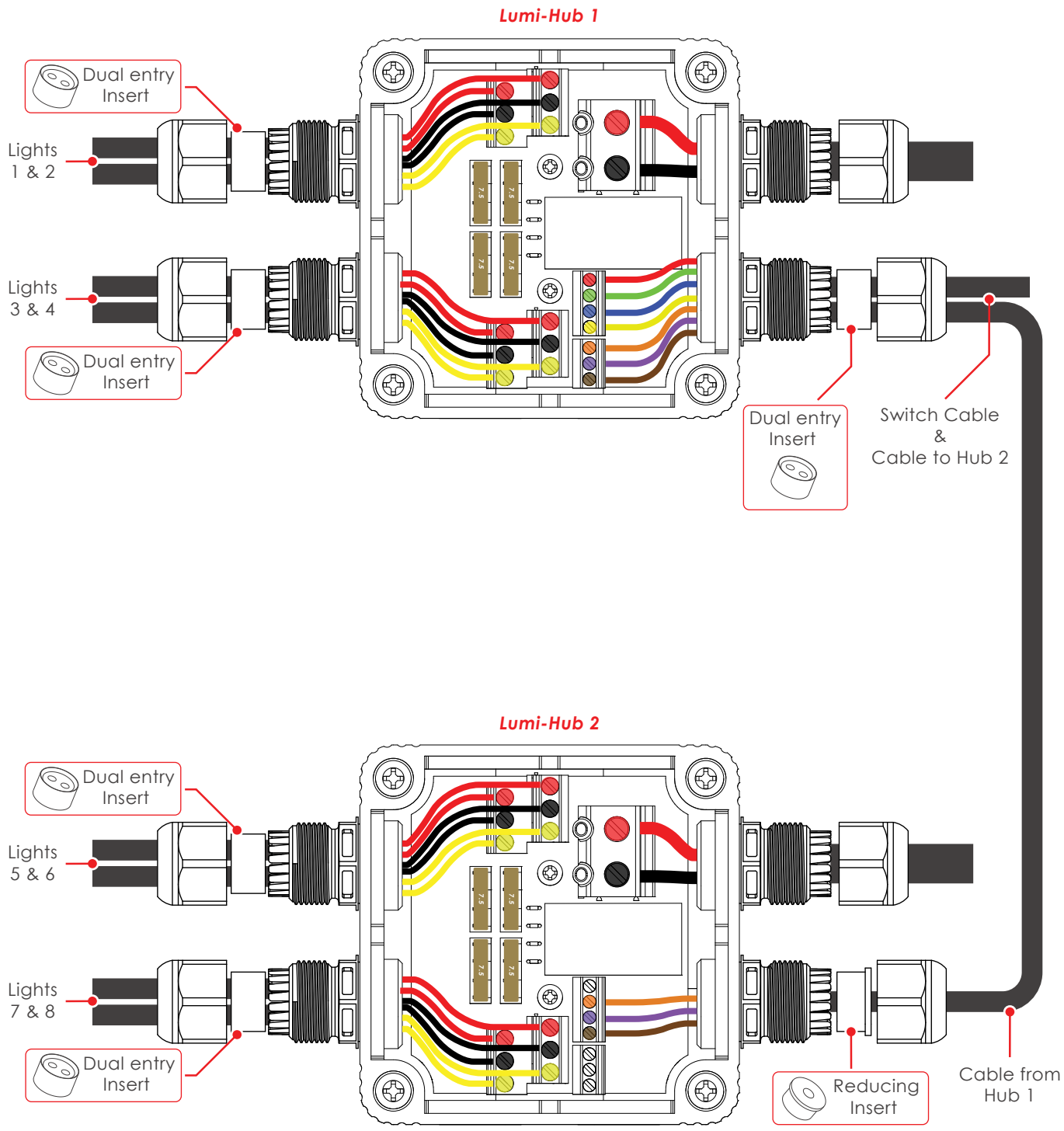
3 Light Install



4 Light Install



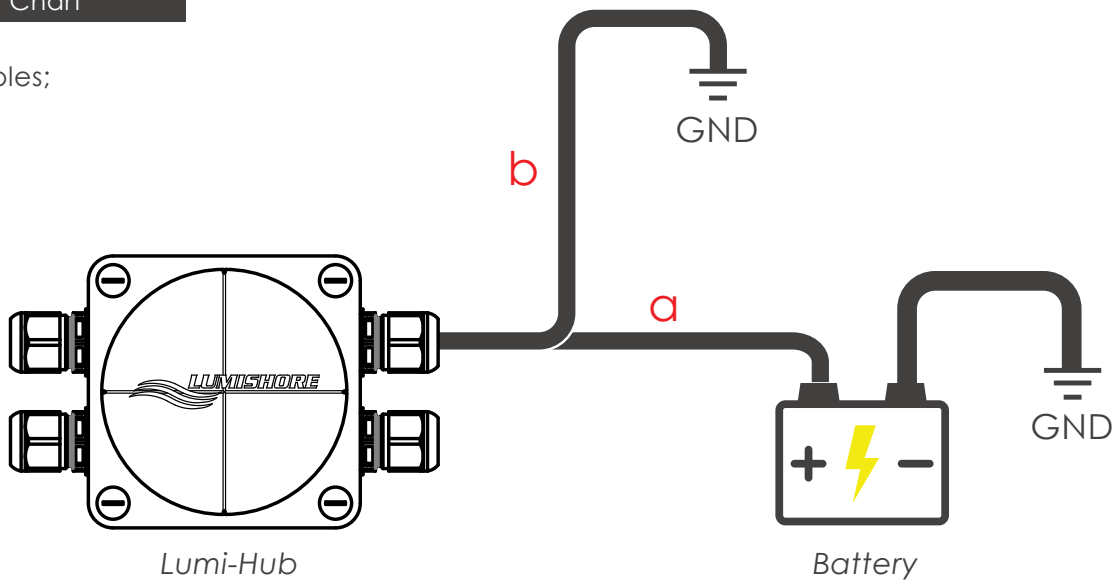
4+ Light Install



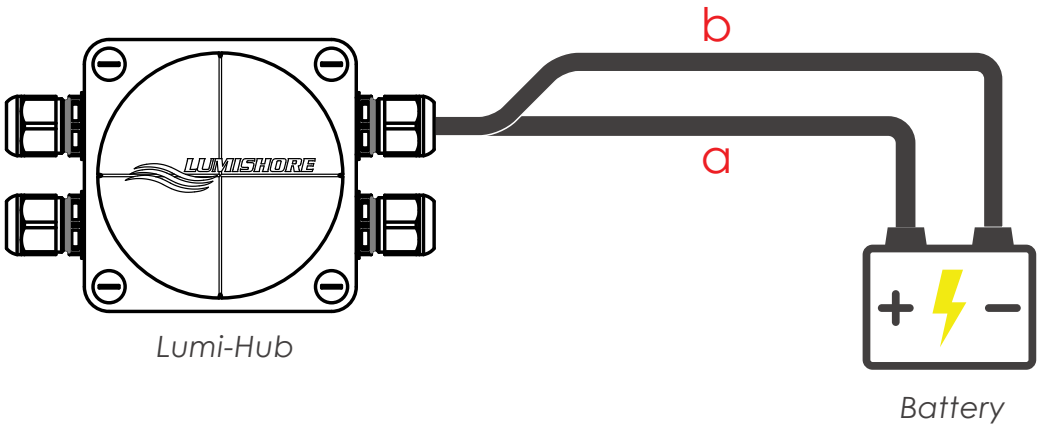
Power Cable Chart

Wiring examples;

Example 1



Example 2



Length of cable run = Length a + Length b.

12 Volt

Total Max Current = 20Amps (4 x SMX 152)

Allowing 3% voltage drop.

Length of cable run (a+b)			
0 - 10ft	10 - 15ft	15 - 20ft	20 - 40ft
12AWG	10AWG	8AWG	6AWG

24 Volt

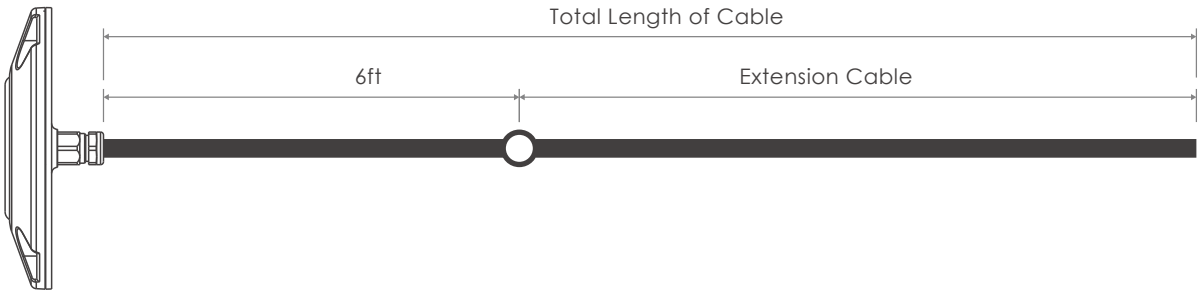
Total Max Current = 10Amps (4 x SMX 152)

Allowing 10% voltage drop.

Length of cable run (a+b)			
0 - 20ft	20 - 30ft	30 - 50ft	50 - 100ft
16AWG	14AWG	12AWG	10AWG

Light Cable Extensions

Extension example;



Total length of cable = Length of light cable and extension

Model	Gauge	Total Length of Cable	
		12V	24V
SMX22	16AWG	20ft	50ft
SMX52	16AWG	12ft	50ft
SMX102	16AWG	12ft	40ft

Fuse Table

Model	Fuse Rating	
	12V	24V
SMX22	3.0A	3.0A
SMX52	4.0A	3.0A
SMX102	7.5A	4.0A

AWG to Metric conversion table

AWG Size	Cross sectional Area	Cable diameter
18	1mm²	0.8mm
16	1.3mm²	1.3mm
14	2.0mm²	1.6mm
12	3.3mm²	2.0mm
10	5.2mm²	2.5mm
8	8.3mm²	3.2mm
6	13mm²	4.1mm
4	20mm²	5.1mm
2	33mm²	6.5mm