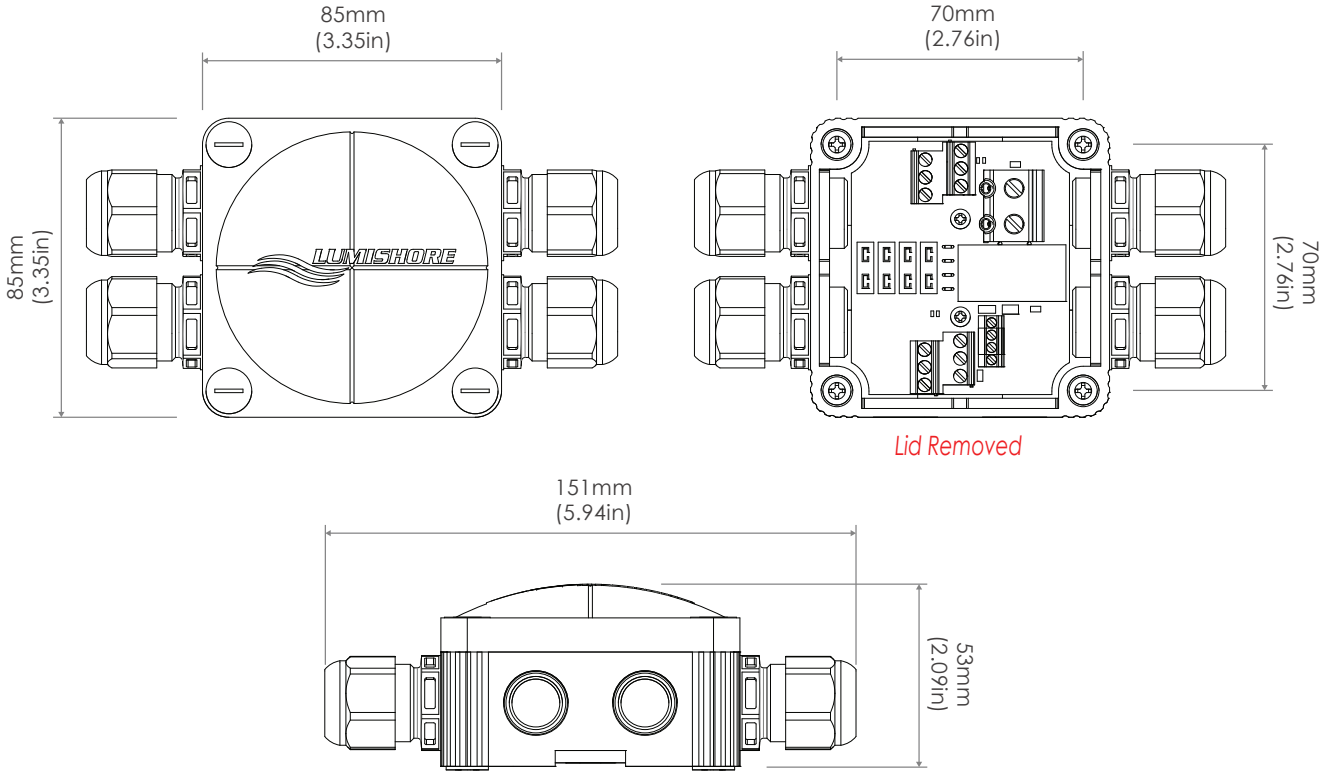
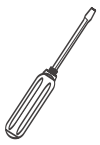
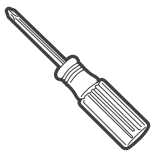
SMX Lumi-Hub Installation Guide



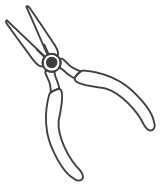
Tools Required



Small Flat-Blade Screwdriver

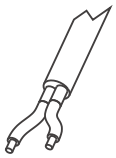


Large Screwdriver

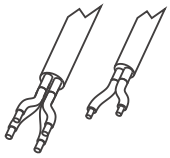


Long Nose Pliers

4x Mounting Screws



2-Core Power Wire

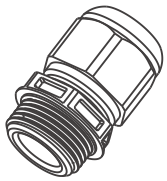


2 or 4-Core Switch Wire

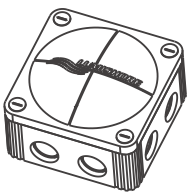
Components Supplied

2x Dual Entry Insert

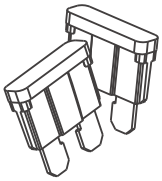
3x Reducing Insert



4x M20 Cable Gland



1x Lumi-Hub



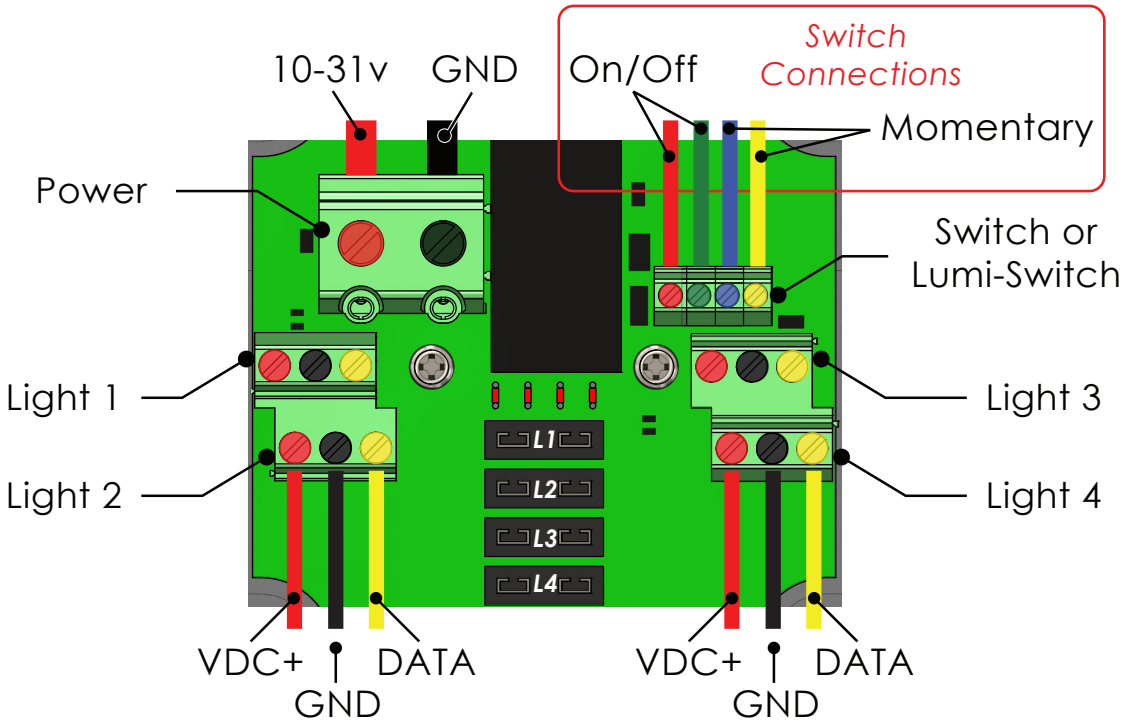
1x Fuse Kit

Before you start!

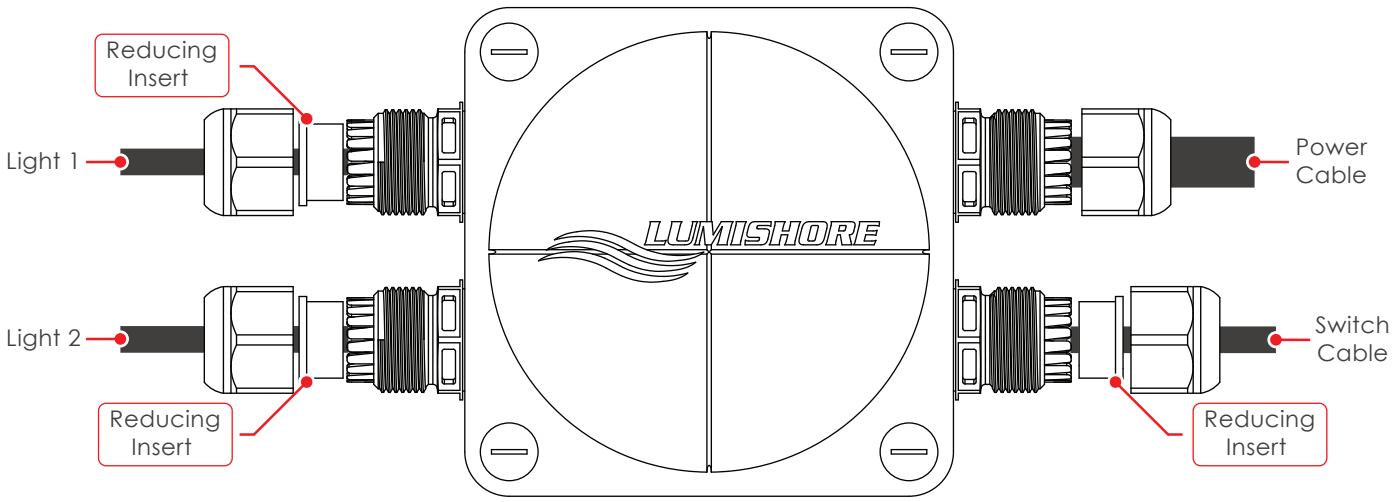
Always ensure that the vessel's power source and battery are disconnected or isolated prior to installation. A qualified professional should carry out both the electrical and mechanical installation. If in doubt please contact LUMISHORE. Refer to product support section.

Installation Instructions:

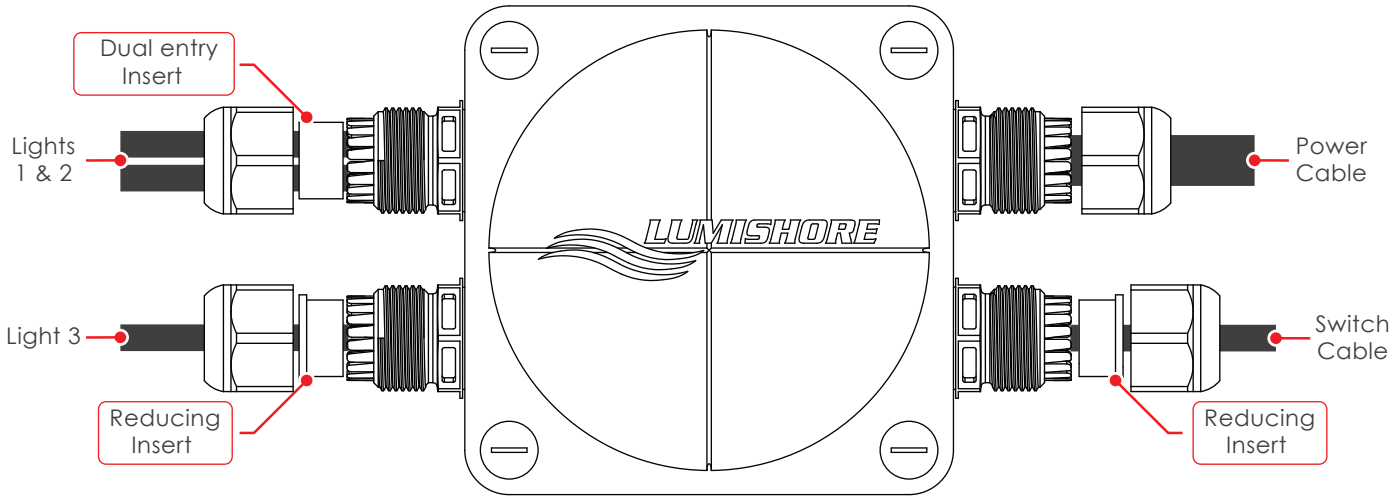
1 Using suitable screws, mount the Lumi-Hub in an accessible **dry** location within reach of the lights and close to the vessel's power supply.
2 Use the fuse table on page 6 to select the appropriate fuse size for the model of light and vessel supply voltage. Insert the fuses securely into the fuse holders.
3 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.
6 Feed the cable through the cable glands and wire accordingly to the figure below. LUMISHORE recommends using long nose pliers to guide the cable into the screw terminals. Check each wire has located correctly and has sound connection.
7 *Note : Cable between the Lumi-Hub and lights can be extended using 16AWG cable. Follow the table on page 6 to find the maximum overall cable length.*
8 Tighten all cable glands and replace lid, ensure they are sealed correctly.



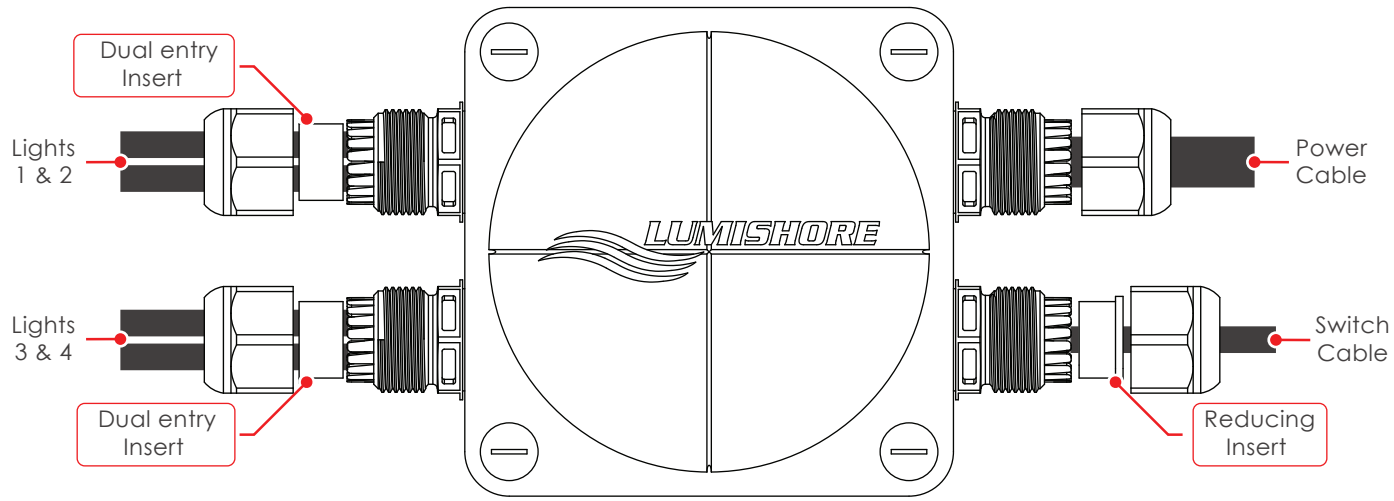
2 Light Install



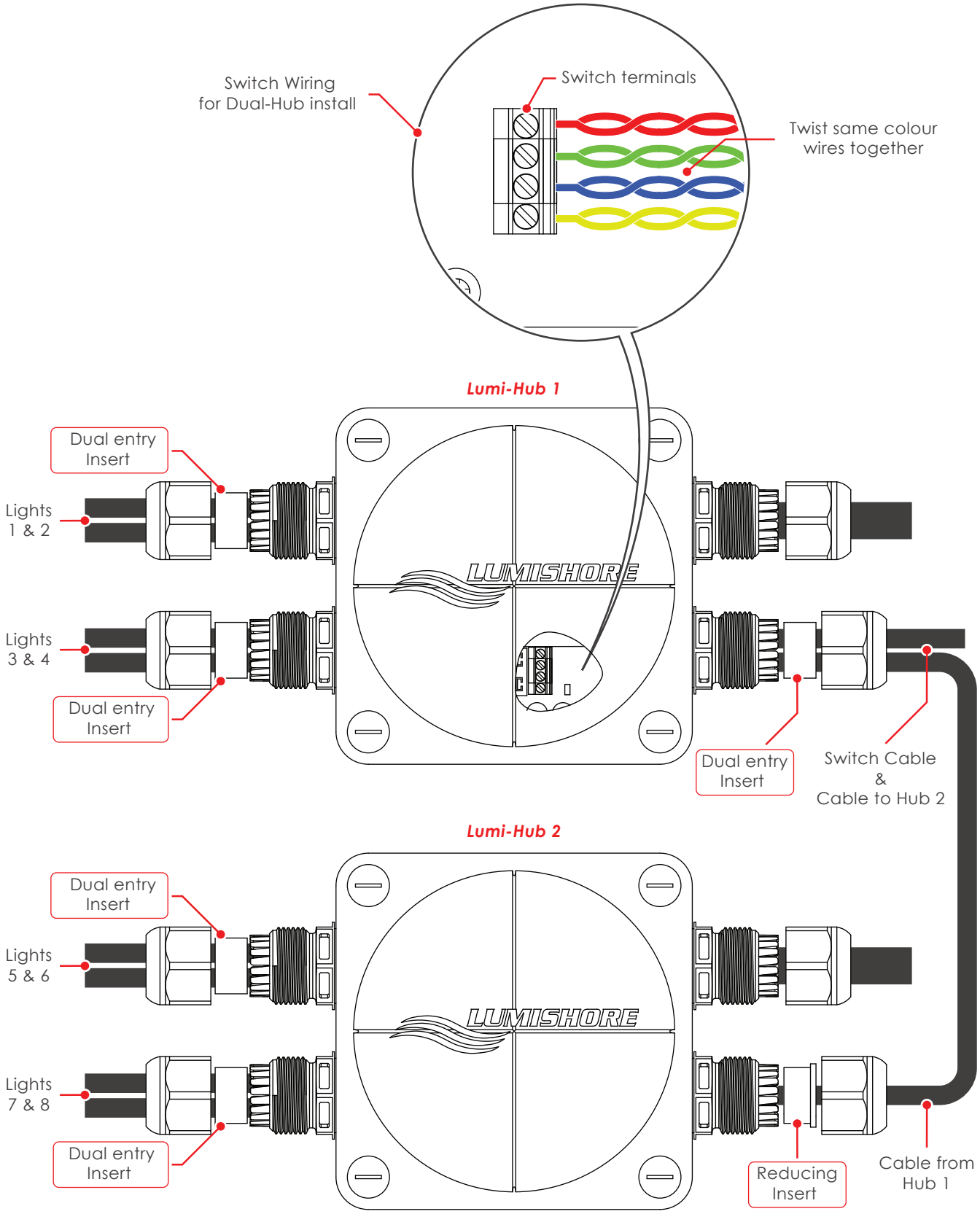
3 Light Install



4 Light Install



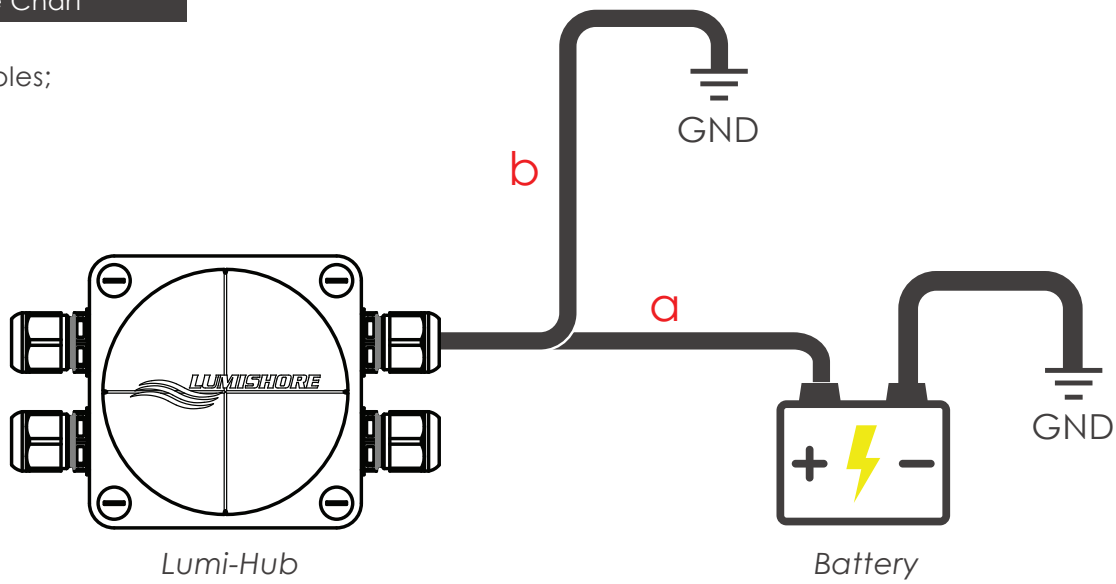
4+ Light Install



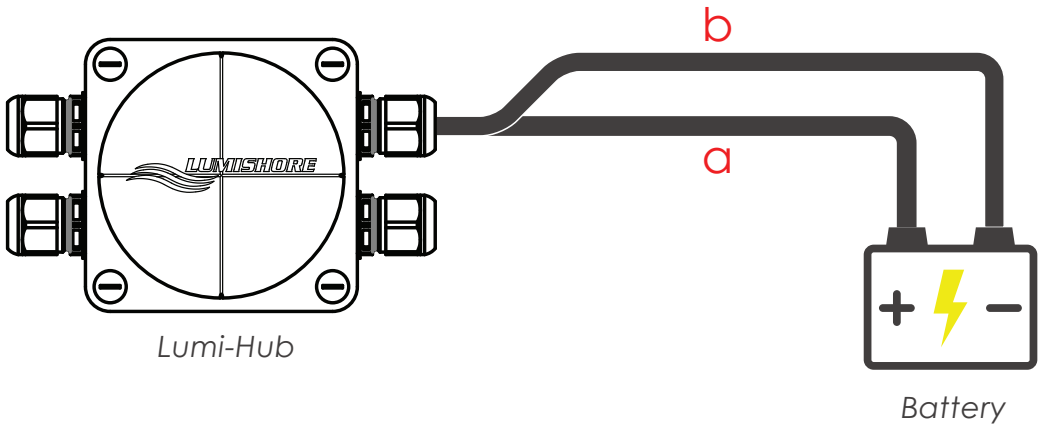
Power Cable Chart

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

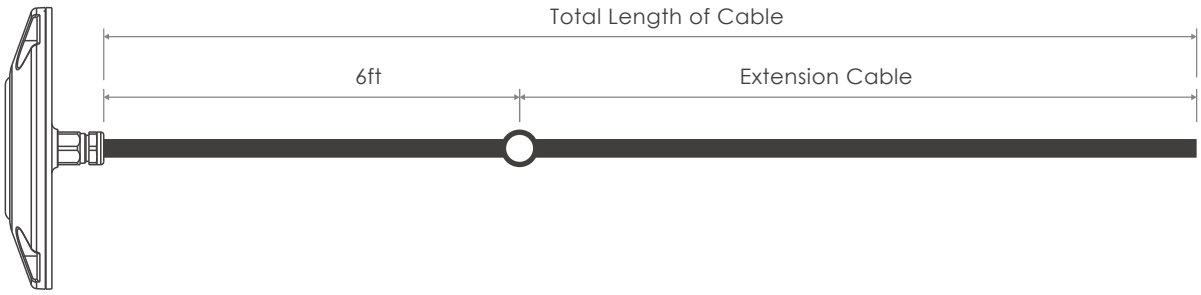
Total Max Current = 10Amps (4 x SMX 152)

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