



Mariner Landscape Range

Professional DIY Garden Lighting System

Mariner Landscape lights are a range of high quality engineered landscape fixtures available in **Solid Copper**, **316 Stainless Steel & Sand Black** (over 316 Stainless Steel).

The high grade materials used make them fully suitable for coastal use and are backed with a **5 Year Warranty**.

Mariner also features a 'Quick Connect' system for wiring of plug-and-play connectors, junctions, extensions & drivers making installation simple. The range is 24VDC (Extra Low Voltage) so is safe to use without elaborate precautions.

The range of fixtures is diverse and allows for a multitude of effects and applications and can be used across the entirety of a project without needing to introduce alternative ranges.

The Mariner Landscape use is perfect for both professional installations and DIY customers looking for a premium solution.



Spotlights

Mini Spot 4W—Spike and Surface Mount

A simple spot supplied with spike and surface mount base for lighting small trees, bushes, statues and over features in your garden. Supplied with 1m Quick Connect Cable, Surface Mount and Spike Mount

Spot Diameter: 41mm
Length: 97mm
IP Rating: IP67
Finish: Copper/316 Stainless Steel/Sand Black

Lamp: LED 4W—216 lumens
Colour Temperature: 2700k
Beam Angle: 25°
Inrush Current: 0.28A
Input: 24VDC (Sold Separately)
Warranty: 5 Years



Spot 7W—Spike and Surface Mount

Standard use adjustable spotlight supplied with both spike and surface mounted base, perfect for larger trees. Supplied with 1.5m Quick Connect Cable, Surface Mount and Spike Mount

Spot Diameter: 56mm
Length: 122mm
IP Rating: IP67
Finish: Copper/316 Stainless Steel/Sand Black

Lamp: LED 7W—470 lumens
Colour Temperature: 2700k
Beam Angle: 45°
Inrush Current: 0.47A
Input: 24VDC (Sold Separately)
Warranty: 5 Years



Glare Guard Accessory



Anti-glare hoods are available for both sizes of spotlight and work with spike and telescopic pole lights. These can be added to the light after installation.

Mini Pole Lights

Mini Single Pole Spot 4W

Small scale adjustable spotlight on telescopic pole to elevate light source, great for smaller trees and features. Supplied with 2m Quick Connect Cable and Mounting Spike.

Spot Diameter: 41mm
Height: Telescopic 200-350mm
IP Rating: IP65
Finish: Copper/316 Stainless Steel/Sand Black

Lamp: LED 4W—216 lumens
Colour Temperature: 2700k
Beam Angle: 25°
Inrush Current: 0.32A
Input: 24VDC (Sold Separately)
Warranty: 5 Years



Mini Twin Pole Spot 2 x 4W

Twin adjustable spotlights on a telescopic pole to elevate light source, great for uplighting smaller trees and features. Supplied with 2m Quick Connect Cable and Mounting Spike

Spot Diameter: 41mm
Height: Telescopic 200-350mm
IP Rating: IP65
Finish: Copper/316 Stainless Steel/Sand Black

Lamp: LED 2 x 4W—2 x 216 lumens
Colour Temperature: 2700k
Beam Angle: 2 x 25°
Inrush Current: 0.52A
Input: 24VDC (Sold Separately)
Warranty: 5 Years



Pole Lights

Single Pole Spot 7W

Adjustable spotlight on telescopic pole to elevate the light source, great for larger trees and features as well as downlighting paths and driveways. Supplied with 2m Quick Connect Cable and Mounting Spike

Spot Diameter: 56mm
Height: Telescopic 480-880mm
IP Rating: IP65
Finish: Copper/316 Stainless Steel/Sand Black

Lamp: LED 7W—470 lumens
Colour Temperature: 2700k
Beam Angle: 45°
Inrush Current: 0.61A
Input: 24VDC (Sold Separately)
Warranty: 5 Years



Twin Pole Spot 2 x 7W

Twin adjustable spotlights on a telescopic pole to elevate the light source, great for larger trees and features as well as downlighting paths and driveways. Supplied with 2m Quick Connect Cable and Mounting Spike

Spot Diameter: 56mm
Height: Telescopic 480-880mm
IP Rating: IP65
Finish: Copper/316 Stainless Steel/Sand Black

Lamp: LED 2 x 7W—2 x 470 lumens
Colour Temperature: 2700k
Lumen: 2 x 470LM
Beam Angle: 2 x 45°
Inrush Current: 1.2A
Input: 24VDC (Sold Separately)
Warranty: 5 Years



Spread Lights

Mini Spread Light 4W

Mini Spreadlight on a Telescopic Pole, an indirect light that is perfect for lighting low level planting and washing light across grass and pathway spaces. Supplied with 2m Quick Connect Cable and Spike.

Hat Diameter: 110mm
Height: Telescopic 485-885mm
IP Rating: IP65
Finish: Copper/316 Stainless Steel/Sand Black

Lamp: LED 3W—60 lumens
Colour Temperature: 2700k
Beam Angle: 360°
Inrush Current: 0.33A
Input: 24VDC (Sold Separately)
Warranty: 5 Years



Mini Twin Pole Spot 2 x 4W

Spreadlight on a Telescopic Pole, an indirect light that is perfect for lighting low level planting and washing light across grass and pathway spaces. Supplied with 2m Quick Connect Cable and Spike.

Hat Diameter: 200mm
Height: Telescopic 517-917mm
IP Rating: IP65
Finish: Copper/316 Stainless Steel/Sand Black

Lamp: LED 5W—80 lumens
Colour Temperature: 2700k
Beam Angle: 360°
Inrush Current: 0.51A
Input: 24VDC (Sold Separately)
Warranty: 5 Years





Bollards

Bollard 360° - Spike and Surface Mount

360mm High Bollard for general illumination for garden, path and driveway lighting. Supplied with 1.5m Quick Connect Cable, Flange for Surface Mount and Spike for In-Garden Mount.

Diameter: 60mm
Flange Diameter: 100mm
Height: 360mm
IP Rating: IP65
Finish: Copper/316 Stainless Steel/Sand Black

Lamp: LED 7W—310 lumens
Colour Temperature: 2700k
Beam Angle: 360°
Inrush Current: 0.66A
Input: 24VDC (Sold Separately)
Warranty: 5 Years



Bollard 200° - Spike and Surface Mount

Bollard with a rear cut off, the light can only shine in 200 Degrees to the front of the light. for general illumination for garden, path and driveway lighting. Supplied with 1.5m Quick Connect Cable, Flange for Surface Mount and Spike for In-Garden Mount.

Diameter: 60mm
Flange Diameter: 100mm
Height: 360mm
IP Rating: IP65
Finish: Copper/316 Stainless Steel/Sand Black

Lamp: LED 7W—220 lumens
Colour Temperature: 2700k
Beam Angle: 200°
Inrush Current: 0.66A
Input: 24VDC (Sold Separately)
Warranty: 5 Years



Drivers

As the Mariner range is 24VDC a Constant Voltage Driver is required to convert mains voltage (230V) into the required low voltage. It is important to note that as the lighting circuit is low voltage it doesn't require extra safety precautions and the cabling can be run above ground without conduit or extra shielding.

Drivers are available as either hard-wired or pre-fitted with a 3-Pin Plug to simply plug into a convenient power outlet. The drivers are IP67 rated meaning that are suitable for use in exterior locations and are rated to be exposed to the elements. Never bury the driver directly.



Selecting the driver required is straightforward, one driver will be required for each circuit of fittings. To select an appropriate driver requires you to be aware of the Current requirement of the fittings.

Do not select a driver based on the wattage of the light fixtures. When first turned on the LEDs will draw a higher current (referred to as Inrush Current) and it is essential the driver is large enough to cope with this.

Simply add the values of Inrush Current for each fixture on the circuit and select a driver with a higher Amperage value than this total.

For example:

A circuit will consist of 3 Mini Spikes in a garden bed and

1 Telescopic Spotlight lighting a larger tree at the end of the garden

3 x Mini Spike @ 0.28A ea = $3 \times 0.28A = 0.84A$

1 x Single Pole Spotlight @ 0.61A

= 0.84A + 0.61A = 1.45A Total

Cross reference the driver chart below and we select a **40W Driver with a 1.67A capacity**

What Drivers are Available

Drivers are available in two types – **Plugged and Hard-wired**.

All of these drivers are exterior grade (IP67).

Plugged types have a 3-Pin Plug on the Primary side and a Quick-Connector on the Secondary making them perfect for a DIY install.

Hard-wired drivers are available in higher wattages and do not have either a 3-Pin or Quick-Connect Plug. These are readily adaptable to work with a Quick-Connect system on the secondary side via use of a Quick-Connect Feed Cable or a 2-Way IP68 Junction. However a registered electrician is recommended to connect these drivers to a 230V supply (either 3-Pin plug or hardwire).

Plugged Driver - IP67 Rating

	Input Voltage	Max Output	Output Current
24V 75W Driver	240V	75W	0-3.15A



Hard-Wired Drivers - IP67 Rating

	Input Voltage	Max Output	Output Current
24V 40W Driver	240V	40W	0-1.67A
24V 75W Driver	240V	75W	0-3.15A
24V 150W Driver	240V	150W	0-6.25A
24V 200W Driver	240V	200W	0-8.34A
24V 320W Driver	240V	320W	0-13.33A



Tips for selecting and using LED Drivers

- Locate driver as close to fixtures as practical to minimise run lengths
- Locate driver as centrally as possible in larger installs
- Conceal drivers behind plants or landscape features, under decking or within sheds
- If the circuit is longer than 50m or the Amperage is within 5% of maximum amperage select the next highest available driver. If this is not possible split the circuits up
- If lights are flashing or strobing this indicates the driver is not of sufficient capacity
- If a circuit is of significant length or involves a large amount of fixtures please consult us or a registered electrician

Connectors and Extensions

A full range of connectors, sockets and extensions are available for the Quick-Connect system. Additionally there are IP68 Junctions available that can be used to quickly and easily adapt cabling and non-Quick-Connect fixtures into the system. These are simple way to complete a cable join preventing the need to solder and heat-shrink.

Feed Cables

Used to adapt bare cable to the Quick-Connect system. Useful to use for Hard-Wire drivers or when using bare cable for long cable runs (instead of extensions). Can be combined with IP68 Junctions for ease of install or perform a weather-tight join through other means.

Feed Cable 1.0m

Feed Cable 10m



Extension Cables

Used to extend cable length between Quick-Connect fixtures and sockets. Fitted with one male and one female Quick-Connect adaptor.

Extension Cable 1.5m

Extension Cable 2.0m

Extension Cable 3.0m

Extension Cable 5.0m

Extension Cable 10m



Sockets

Used to create a junction to connect either fixtures or extensions.

Socket 2-Way

Socket 3-Way



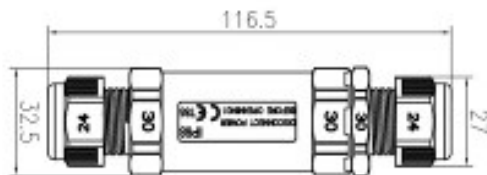
Junctions and Cable

Junctions are glanded IP68 cable junctions with screw terminals inside and a great way to further extend a system with either 24V fixtures outside the Quick-Connect range (for example ingrounds, more powerful uplights, deck lights and pond lights). These junctions require very little specialist tools (appropriate spanners and a slotted screwdriver should suffice) to use.

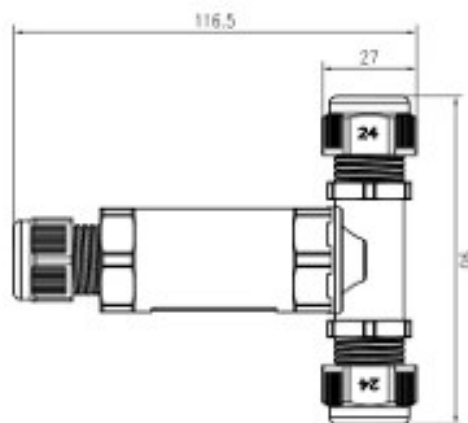
Ensure you maintain cable colour polarity when making these joins.

Loose cable is of use with Junctions and to extend cable runs longer in situation that would be Impractical with Quick-Connect Extensions. Be aware in certain in some scenarios a Quick-Connect may be required to be removed and have cables spliced, or use an additional Quick-Connect Feed Cable.

2-Way Junction



3-Way Junction



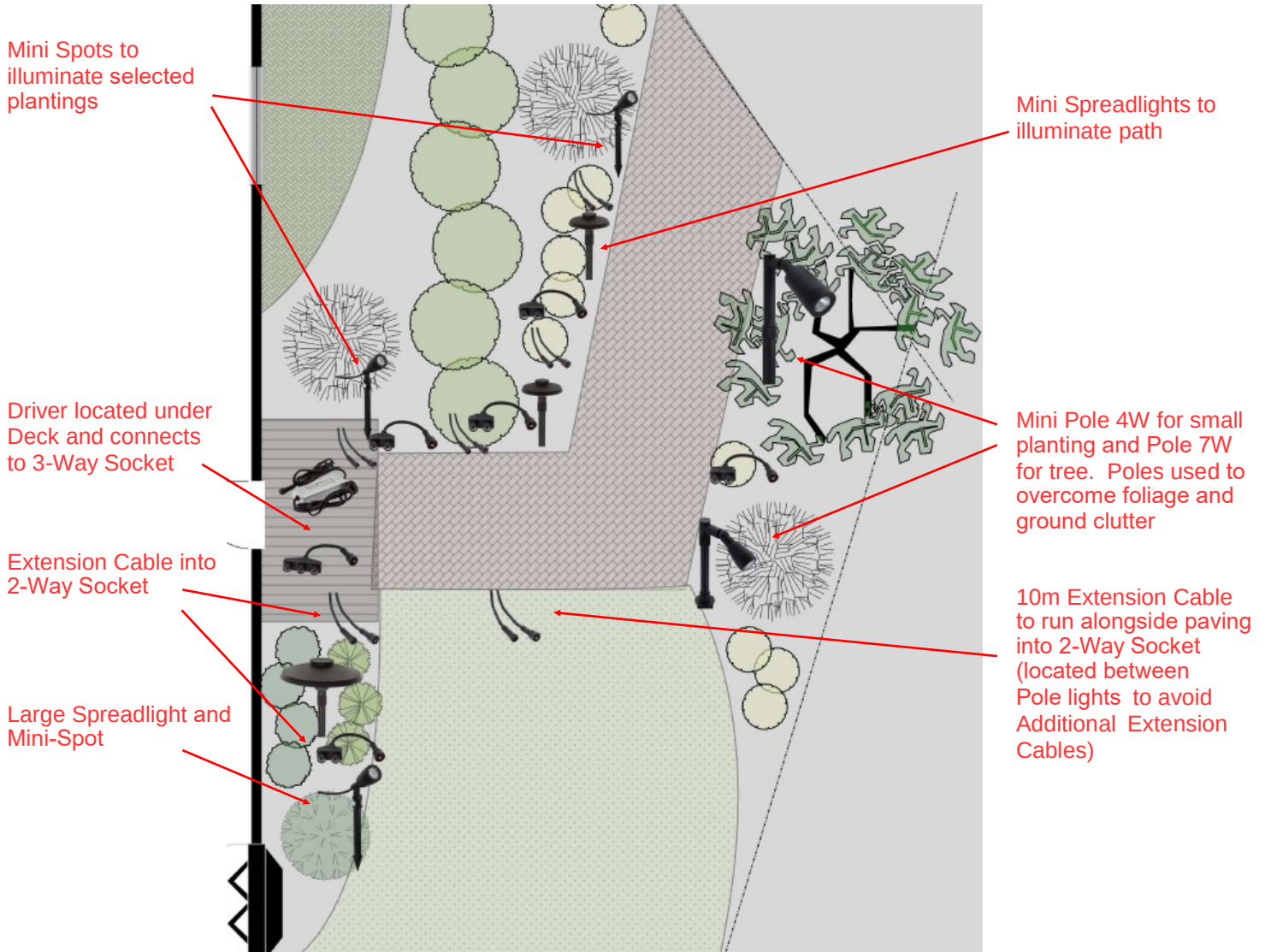
Cable

Cable type is H07RN-F 2x1.5mm Round Double-Insulated cable (Brown/Blue)

1.5mm Cable sold by the metre or 50m Roll



Example Layout



Product Requirements

Lights

Mini Spot 4W	x 3
Mini Single Pole 4W	x 1
Single Pole 7W	x 1
Mini Spreadlight 3W	x 2
Spreadlight 5W	x 1

Accessories

2-Way Socket	x 5
3-Way Socket	x 1
Extension Cable 1.5M	x 5
Extension Cable 10M	x 1
Driver 24V 75W Plugged	x 1

Driver Calculation

Mini Spot	@ 0.28A x 3 = 0.84A
Mini Single Pole	@ 0.32A x 1 = 0.32A
Single Pole	@ 0.61A x 1 = 0.61A
Mini Spreadlight	@ 0.33A x 2 = 0.66A
Spreadlight	@ 0.51A x 1 = 0.51A

Total: 2.94A

Driver 24V 75W @ 3.15A