

# SUPRA Driver Installation and Operating Instructions (Note: SUPRA Driver for use with SY 225, SY 250, SY 300, SY310 and TRX 802 Lights)

Congratulations! You have purchased a LUMISHORE advanced technology underwater light. Every care has been taken to ensure your LUMISHORE lights and drivers arrives in perfect condition, so please enjoy the ultimate experience in underwater lighting.

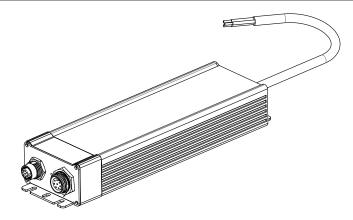
LUMISHORE high intensity underwater lights are designed for those owners who prefer the integrity of a Weld-in installation in a light that employs the most powerful, efficient and cost effective underwater LED lighting on the market today. The LUMISHORE Weld-in lighting system is suitable for many sizes and types of watercraft, including Sports Boats, Cruisers, Yachts and Super Yachts. LUMISHORE Weld-in LED lights come with a compact electronic driver module to ensure trouble free operation for years to come.

Please read the following pages before attempting installation to ensure complete understanding of the LUMISHORE LED lights.

#### **BEFORE YOU START**

- High Intensity LED light Do not stare into the LED module at close proximity.
- · Always ensure that the vessel's power source is 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
- The Driver supplies voltage and current to the Underwater lights. **Under no circumstances should the light cable be cut and connected directly to voltage**
- Always use a suitable fuse or circuit breaker to protect the complete system. Each light to be individually fused.
- The light should be installed 6" 10" (150-250mm) below the minimum load waterline.
- For best results install the lights between 2.5ft (0.8m) and 6.5ft (2m) apart.
- Never try to install or remove light with the vessel in the water.
- Lights should not be exposed to any temperatures in excess of 150°F (65°C). For example, next to hot engine components or where exhaust emissions could be expelled onto the light while underwater

## **SUPPLIED PARTS**

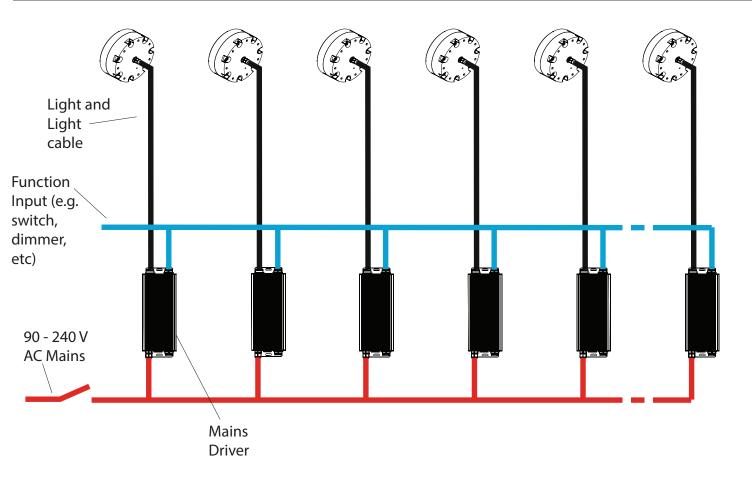


## **SUPRA Mains Driver Part Numbers**

Product	No	
SY225	39-0292	
SY250	39-0167	
SY 300 / 310	39-0168	
TRX 802	39-0170	



# **TYPICAL INSTALLATION**



The Supra Mains driver can be configured to give any combination of the following modes of operation (See page 4 in this manual for instructions on how to connect the drivers to give the required functions).

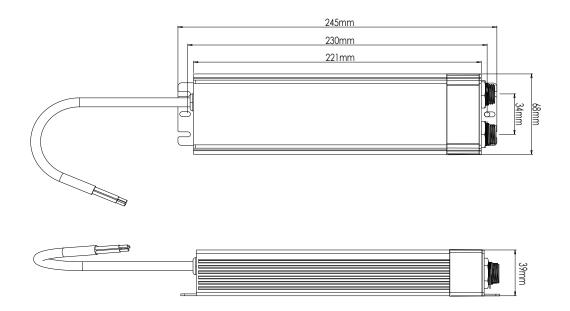
Note: These instructions cover SUPRA White/Blue & SUPRA Cold White/Warm White depending on which are being installed;

- Solid White / Cold White
- Solid Blue / Warm White
- Solid White / Cold White or Solid Blue / Warm White (Selectable via a switch)
- Strobe (via external input to the driver)
- Dimming (via external input to the driver)

For details on the light installation please refer to the light installation instructions.



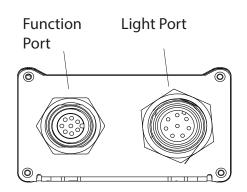
## **INSTALLING THE MAINS DRIVER**



Input Voltage Range: 90-240VAC (50/60Hz)

Maximum Input Current: 2.1Amp

Input Wiring:
Brown Wire: LIVE
Blue Wire: NEUTRAL
Green/Yellow: EARTH



When Installing the drivers these instructions shall be followed:

- The driver should be mounted in an accessible area within reach of the light cable length supplied. Take care to plan the cable route to the light
- The driver should be mounted to a flat, insulating surface using the two mounting holes at either end
- The input voltage cable used should be a suitable marine approved mains cable

For details on the light installation please refer to the light installation instructions.



## **OVERVIEW**

The Supra Mains driver can be configured to give any combination of the following modes of operation:

- · Solid White
- · Solid Blue
- Solid White or Blue (Selectable via a switch)
- Strobe (via external input to the driver)
- Dimming (via external input to the driver)

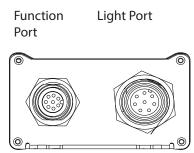
## HOW TO CONFIGURE THE DRIVER FOR WHITE ONLY or BLUE ONLY

The driver has two connections - one is for the light, and the other is for the function port.

As supplied, the driver is set to come on in WHITE ONLY mode (Jumper wires supplied connected to the function port). To enable Blue only the jumpers need to be moved as shown below.

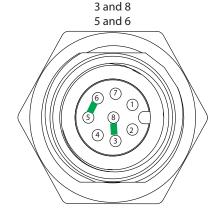
NOTE: If NO jumpers are connected the light will NOT come on.

NOTE: A cap is supplied with each driver for the function port. This cap should always be fitted unless replaced by a connector.



## WHITE / COLD WHITE ONLY 2 and 8

Move Jumper Positions...



**BLUE / WARM WHITE ONLY** 

## HOW TO FIT A SWITCH FOR WHITE / COLD WHITE AND BLUE / WARM WHITE SELECTION

Using the optional Switch Assembly (39-0146), and the supplied Y-Splitter Cable (24-0208), The Supra Mains driver can be configured to work with an external switch to select between White / Cold White - Off - Blue / Warm White. Field installable connectors are also available to allow cable runs to be made to the correct length onsite. Contact Lumishore to discuss your requirements.

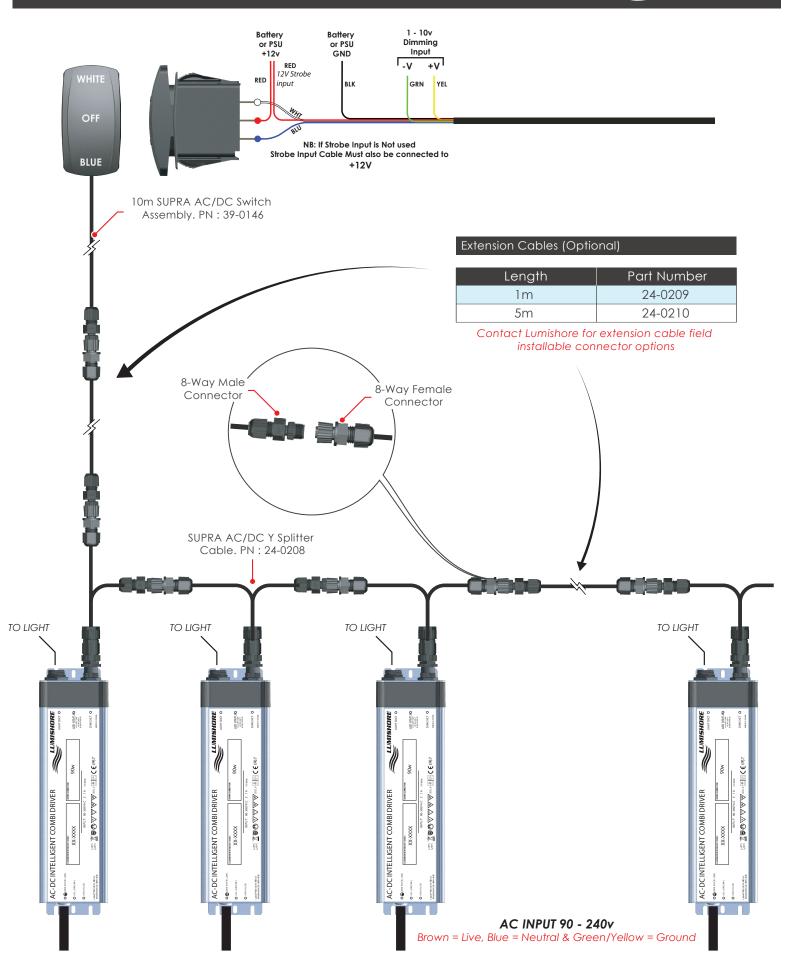
The switch requires an external power supply to be fitted. Use a 12Volt DC power supply or the vessels 12Volt Battery. Allow a power of 0.5 Watts per light.

Remove the Jumper wires and connect the supplied Y- Split cable into the function port, connect the switch assembly into the first Y split cable and then daisy chain the others together. Extension cables are available if required.

The diagram on the following page shows how the system connects together.

The switch assembly also allows for connection to a 3rd party 1-10volt dimming control and 3rd party Strobe input signal.

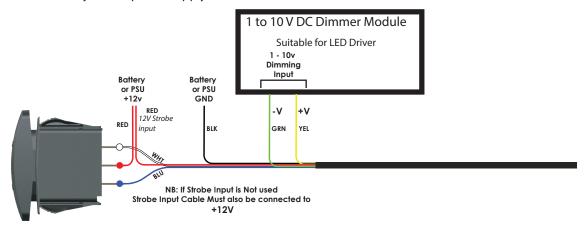






# How to Add 3rd party 1-10V for dimming control

The Lights can be dimmed using a 3rd party 1-10volt dimming module. Connect the 1-10volts between the green and yellow wires of the Switch assembly. Note: The dimming module must be a Current Sink Module with a capacity >10mA **per light** - do not use a current source module or adjustable power supply!

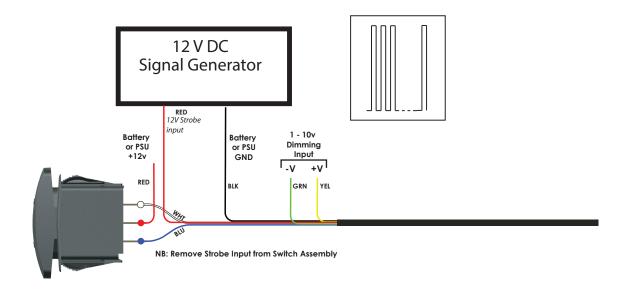


#### How to connect a STROBE FUNCTION

The lights can be strobed using a 12V Switching Signal Generator. When the signal generator is switched ON the lights will come ON, when the signal is switched OFF, the lights will switch OFF.

Remove the strobe input cable from the switch assembly and connect to a 12Volt Strobe / signal generator. Note when strobe function is not in use the strobe input should be kept to +12volts

Note: In this mode, when the lights are initially switched ON they will light up and wait for a signal. Once they receive this signal they will respond (NO signal = OFF, Signal = ON). This will remain the case until the lights are switched off and on again using the switch.





#### **TESTING THE LIGHTS**

The underwater lighting system should always be tested before the boat goes back in the water. Check that each light comes on, and all lights change in sequence as per the system operation section above. See the problem solving guide for advice on resolving any issues.

#### WARRANTY

LUMISHORE Ltd warrants the lighting system to be free from defects in workmanship for a period of three years, starting from the date of original purchase. Should your lighting system have a problem during this period, please contact your dealer as soon as you become aware of the defect.

Misuse, abuse, improper installation, neglect, improper shipping, damage caused by disasters (e.g. fire, flood and lightning), installation by unqualified personnel, unauthorized repair or modification will void this warranty. For the avoidance of confusion and doubt, non compliance with all installation, maintenance and operating instructions in this document constitute non conformance with warranty terms.

Full warranty details are available at www.lumishore.com.

#### **TROUBLESHOOTING**

In the event of one or more of the lights not lighting up then check the LED status on the driver. The LED will either be continually ON (healthy), OFF (no power to driver) or flashing. Please refer to the table below for what the number of flashes means and what action to take..

LED Status	Meaning	Action to take / Things to check
No LED light on driver	No power to driver	Check fuse / breaker Check connections Check voltage at input to driver connections
Solid LED	Power On	Driver is receiving voltage and operating properly Check the switch is operating correctly
Flashing 5 times	Driver cannot detect light	Check power connection to light Check the connection on the back of the light (if present)

In the event of an issue then:

- 1. Check the operation of the light and driver with only that light and driver powered
- 2. If the light is still not operational then swap the driver with the flashing LED with a driver which is known to be working and re-test the light
- 3. Test the driver with a known good light
- 4. This will determine if the issue is with the light or the driver
- 5. Record the serial numbers of both the light and the driver and contact your local dealer



If a light does not switch on, or function normally it should be disconnected from the power source