

SY Series EOS Driver Installation and Operating Instructions (Note: EOS Driver for use with SY 220, SY 225, SY 250, SY300, 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.

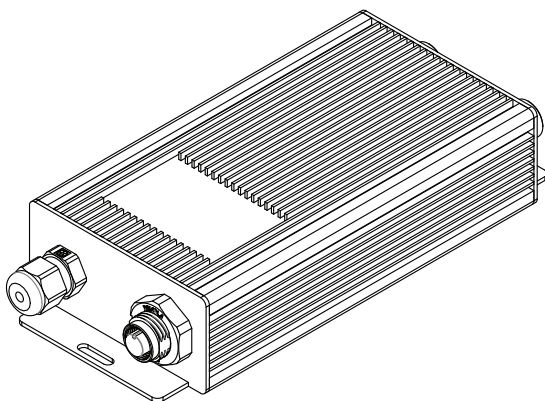
LUMISHORE high intensity underwater lights are designed for those owners who prefer the integrity of a Weld-in installation in a light that employs the most powerful, efficient and cost effective underwater LED lighting on the market today. The LUMISHORE Weld-in lighting system is suitable for many sizes 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

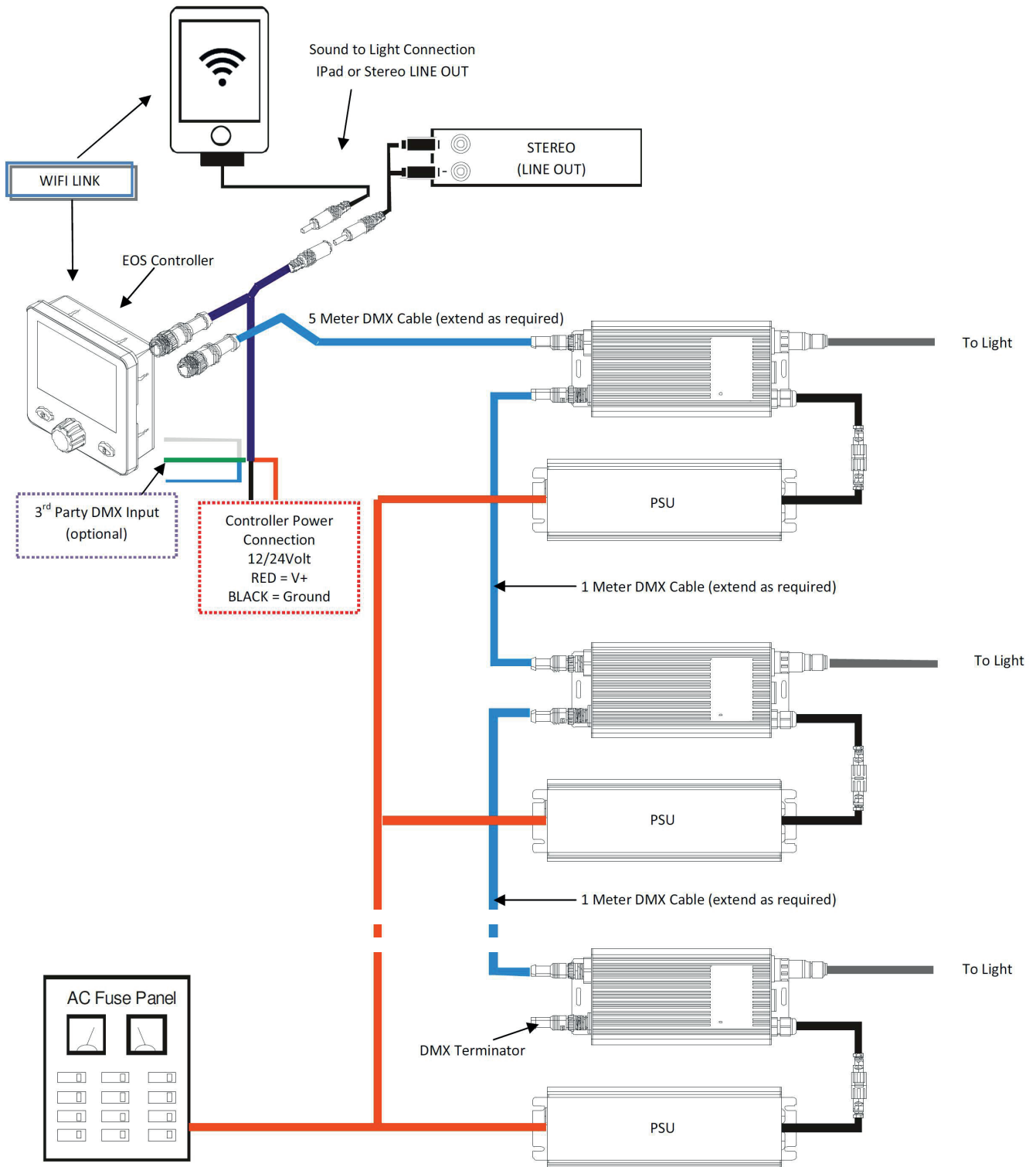


SY Series EOS Driver Part Numbers

Product	No
SY 220	28-0073
SY 225	28-0102
SY 250	28-0067
SY 300 / 310	28-0071
TRX 802	28-0074

Note: For Mains installations an AC / DC Power Supply is also supplied (part number 39-0014)

TYPICAL INSTALLATION



DMX CABLING

Pre-molded DMX Extension cables are available from Lumishore in 1 meter, 5 meter and 15meter lengths if required. Multiple extensions cables can be combined together if a longer distance is required.

ALL DMX cables must conform to the DMX 512 standard, and have a grounded screen.

DMX Extension	Part Number
1m	24-0077
5m	24-0078
15m	24-0099

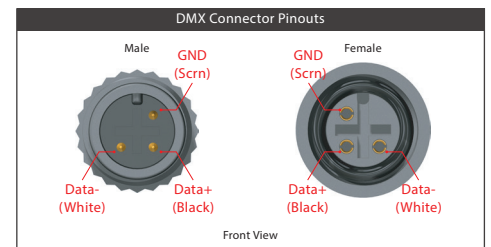
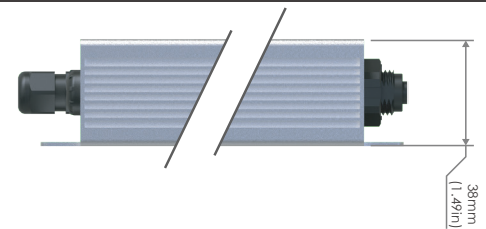
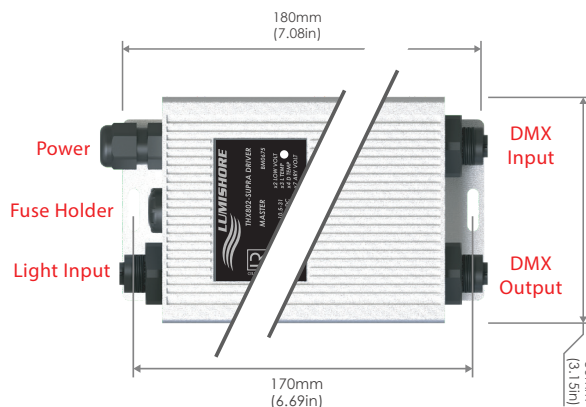
For installations requiring custom cable lengths Lumishore can supply the DMX cable solution as a reel of cable, and field installable DMX connectors.

DMX Part	Part Number
Male DMX Connector	09-0052
Female DMX Connector	09-0053
DMX Cable Reel*	24-0079

* Please contact Lumishore for more information regarding cable lengths

SY 220 / TRX 802 DRIVER DIMENSIONS

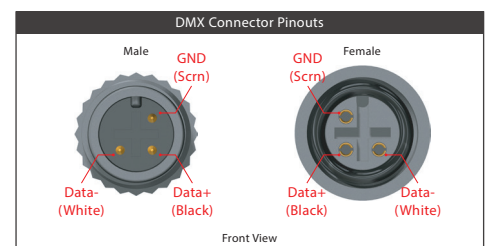
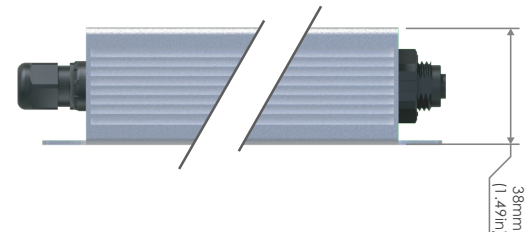
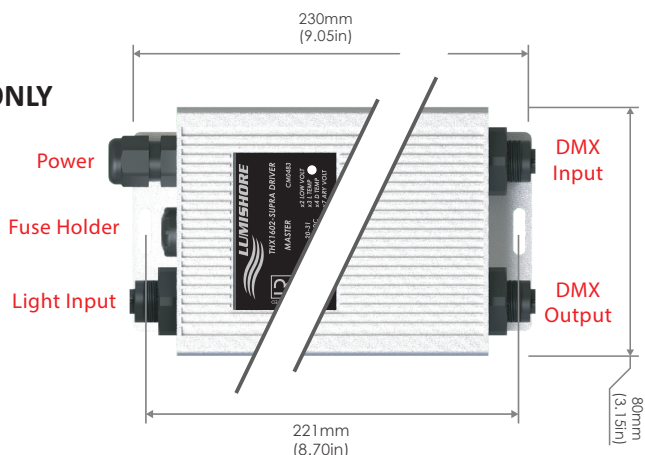
Input Voltage: 24 V DC ONLY
Max Current: 5A
IP 67 Rated Case
Fuse Rating: 7.5A



Note: If the driver is to be installed into a cabinet then leave a minimum of 80mm clearance at either end for connectors, and cables

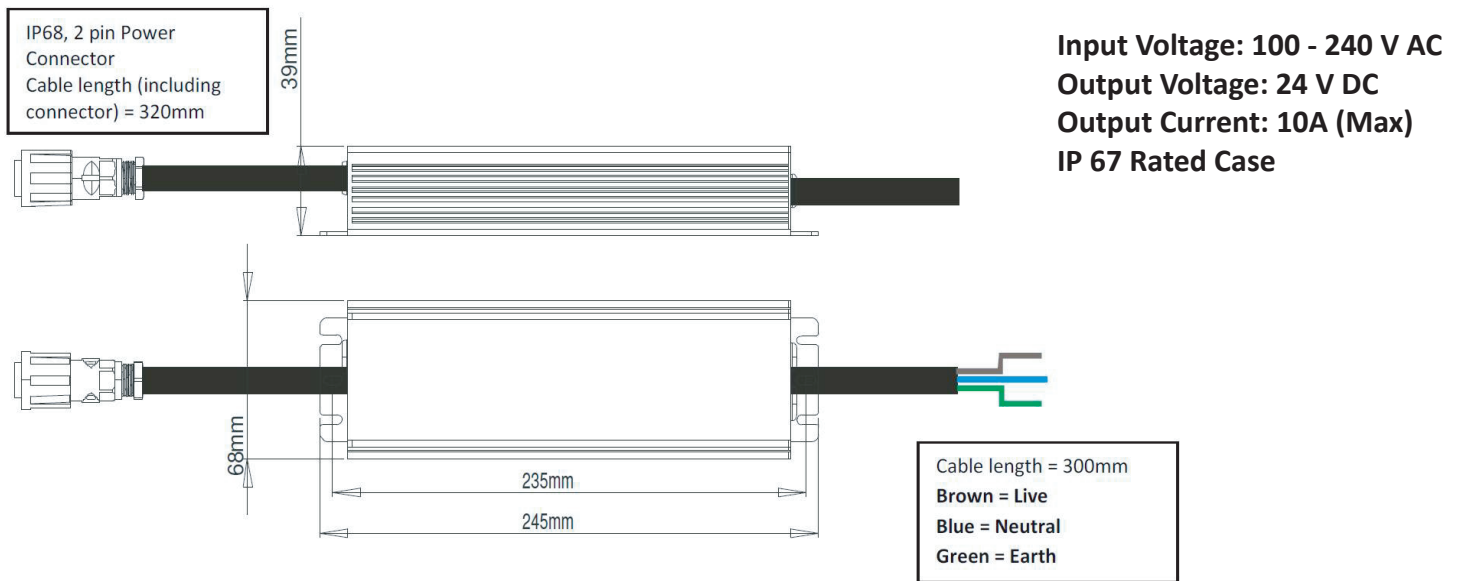
SY 250 / SY 300 / SY 310 DRIVER DIMENSIONS

Input Voltage: 24 V DC ONLY
Max Current: 7A
IP 67 Rated Case
Fuse Rating: 10A



Note: If the driver is to be installed into a cabinet then leave a minimum of 80mm at either end for connectors, and cables

AC / DC POWER SUPPLY - DIMENSIONS AND CONNECTIONS



DRIVER / PSU INSTALLATION

1. Select a suitable location to mount the driver / PSU. This should be in a dry location, with free airflow around the driver.
2. The driver should be mounted onto an flat surface.
3. Use the mounting holes at either end of the case to secure the driver.
4. Each driver / PSU must be connected to a fuse panel or RCD breaker.
6. Refer to the wiring example at the beginning of this manual for further guidance.
7. Plug the light into the driver
8. Refer to the EOS controller manual for setup instructions.



Ensure correct electrical polarity. Incorrect installation will invalidate warranty!

Note: Care must be taken when plugging in the light to the driver module as the connectors are keyed and if forced may bend/break a pin on the connector.

WARRANTY

LUMISHORE Ltd warrants the Weld-in lighting system to be free from defects in workmanship for a period of 3 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.

DRIVER / PSU INSTALLATION

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 controller is operating correctly Check EOS/DMX connections Check intensity is turned up
Flashing 2 times	Low input voltage to driver	Check power connections or battery voltage
Flashing 3 times	Light temp too high	Could happen when light is out of water or next to exhaust
Flashing 4 times	Driver temp too high	Driver is mounted too close to an engine or exhaust
Flashing 7 times	LED array voltage out of range	Check the connections between light and driver Check light in each colour to determine if all colours are working
Flashing 8 times	Light not detected	Light is not connected or cable is cut or pinched Light has been connected incorrectly to the driver
Continuous rapid flashing	Driver program corrupt	Reset driver by switching off power for 1 minute, and then switching on again Contact LUMISHORE if problem persists

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

Thank you!

For purchasing LUMISHORE lights

* Subject to commissioning review - contact Lumishore for further details