

01

INSTALLATION GUIDE

**YPHOS**



## **Congratulations on your new lights! Evenings at the boat are going to be so much better.**

This guide will assist you to install your new YPHOS lights. The following instructions refer to GRP (fiberglass) and wooden hulls – for other types of hulls please contact us for correct guidance. Always make sure that you are familiar with the operations to be done and consult a specialist to install the lights.

Always follow safety procedures and pay attention to all steps to ensure the longevity of your new lights. Always wear protective gear and take safety first.

### **Intended Use**

Model 01 is designed to operate as an LED Illumination unit for mounting on GRP or wooden boat hulls. It can be installed above water level, partially or completely submerged in both fresh and sea water and can be used anytime – while the boat is still or underway. This installation manual does not supersede any National or Local Electrical Code.

## In the Box

Make sure that all the elements shown below are in the box. If you are missing elements or parts show signs of wear or damage, do not start the installation.



Model 01 LED Fixture  
with 2m (6ft) cable



Fuse  
2 Amp



2 x Tapping Screws  
DIN7981 C PHIL 4.2x32 A4

## You will also need:



Power Drill



Drill Bit  
Ø14mm (9/16")



Drill Bit  
Ø3mm (1/8")



Crosshead  
Screwdriver



Clean Cloths



Sealant  
3M™ Marine Adhesive Sealant  
Fast Cure 4200FC  
or similar

## Important Warnings

- Installation must be performed by a qualified installer.
- Installation must be done outside of water.
- Choose a flat area, easily accessible from the inside to mount the fixture.
- Install this fixture only on transom or sides of the hull.
- Do not use power tools to secure the fixture.
- Do not use solvents to clean the fixture.
- Do not modify whole or any part of this product.
- Wear personal protection gear during installation.
- Complete an electrical mock-up before you modify the boat.
- This is a 12V DC light fixture. Do not connect to mains or higher voltage than 15V DC.
- Do not look directly at the LEDs when in operation.
- Isolate power source prior to electrical installation.
- Each light should be individually fused.
- Do not allow exposed cable ends to come in contact with water. Capillary action will allow the ingress of water through the cable, damaging the fixture or corroding the cable. This is not covered under warranty.

## Inspect & Test the Light

Apply voltage to the light and confirm that it works as intended before installation. Complete a connection mock-up with all the necessary equipment before you make any modification to the hull.



## Switch off power

This protects you and avoids damaging your equipment. Isolate the battery or power supply to make sure that your system is off.

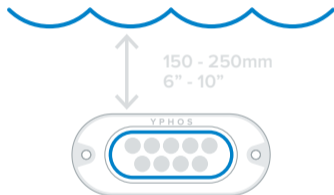


## Find the right spot

Select a flat surface to install the light fixture and make sure that you have full access to the inner side of the hull.

Make sure that no obstacles are restricting in any way the mounting screws or the cable.

Recommended installation depth is 150-250mm (6" - 10") below the water line.





## Prepare the Area

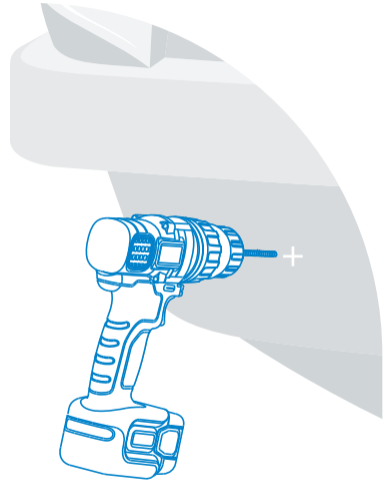
Use the provided template to mark the drilling locations.

Thoroughly clean the surface and remove any debris, coatings, fluids or solid particles to ensure proper adhesion.

## Drill

Use a  $\text{\O}3\text{mm}$  (1/8") drill bit for the screw pilot holes and a  $\text{\O}14\text{mm}$  (9/16") drill bit for the cable hole.

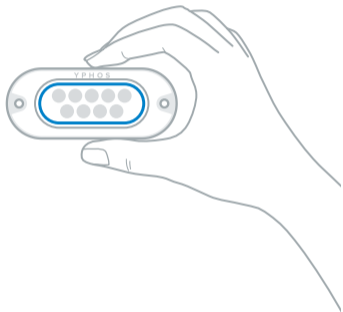
Clean again the surface before you continue.



## Dry Fit

After the surface is completely clean and dry on both sides, gently guide the cable through the cable bore and dry fit the fixture onto the hull.

Make sure that the light fixture fits properly, the holes are aligned and that the fixture sits flat on the hull before proceeding to the next steps.

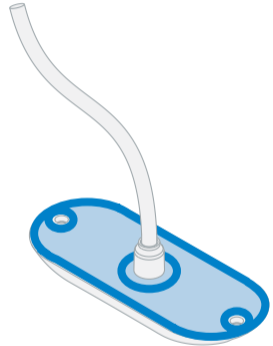


## Apply the Sealant

Gently pull the fixture away from the hull. Apply a continuous bead of sealant on the back of the luminaire and inside the drilled holes on the hull.

Align the fixture with the pilot holes and press firmly against the hull.

Use 3M™ Marine Adhesive Sealant Fast Cure 4200FC or similar.

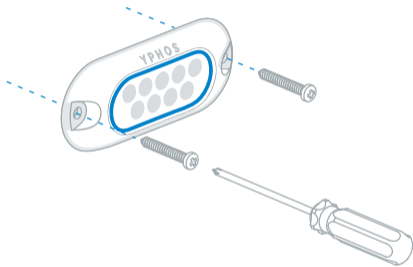


## Mounting

Use a crosshead screwdriver to fix the fixture onto the hull. During this step, sealant should be evenly squeezed around the fixture.

If there is any dry spot around the fixture, repeat the previous step and make sure that you apply more sealant.

Use a soft cloth to remove any excess of sealant. Add extra sealant in the inner side of the hull, around the hole.



Tighten the screws only with a hand tool - do not use power tools.

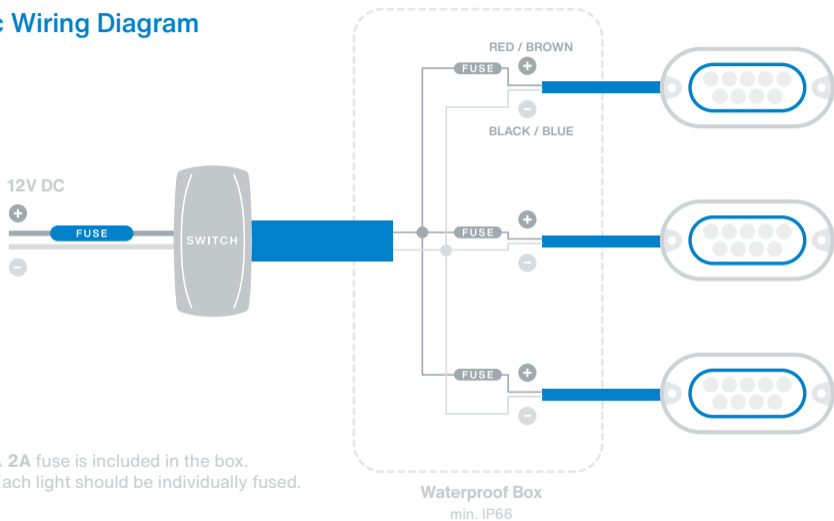
## Let the Sealant Cure

Let the sealant fully cure before you launch the boat back into the water and do not leave your boat unattended for the first 24 hours. Inspect for leaks during this time and act accordingly if needed.

Consult the sealant's manufacturer guide to learn how long it takes for the sealant to fully cure.



## Basic Wiring Diagram



A 2A fuse is included in the box.  
Each light should be individually fused.

We recommend using YPHOS fused junction boxes which have an integrated marine-grade relay and RF remote capabilities for up to 120m (400ft).

<https://yphos.com/accessories>

