

Wireless Load Pin Guide

Product Description

Cyclops Marine wireless load pins replace existing pins to measure loads applied to standing rigging, such as forestays and shrouds. The pins are factory calibrated, with a wireless load output from the pin and no external housing to worry about, as the amplifier is incorporated into the pin.

How it works...

Simply replace an existing pin with the load pin and secure with your chosen anti-rotation method. Easily connect the load pin to your phone via the latest smartphone app or to marine electronics via optional smartfittings gateway for immediate load data.

Correct install with keep plates

Load pins are designed to be accurate when aligned with the applied load. The pin will have an arrow marked on the body that shows the load direction for the middle span of the load pin, between the grooves.

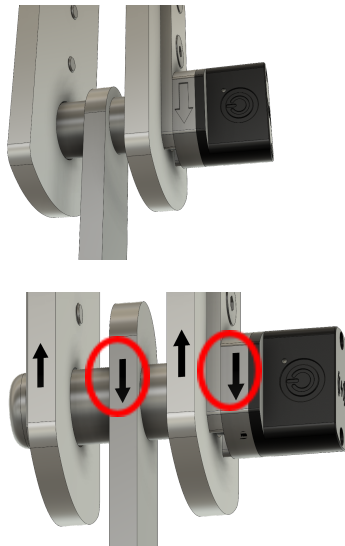


Figure 1 Typical load pin and plate setup with arrows showing load direction, note downwards pin arrow.

The supplied keep plates must be slotted into the pin and fastened to the surrounding structure so that the load pin is correctly aligned with the load.

Safety

Please read all instructions before using wireless load pins to measure loads. Always perform a safety evaluation before use to ensure that use of the load pin is not dangerous to nearby people or property.

Overload

The MWL of a wireless load pin (marked on the body in tonnes) must not be exceeded, as this may cause damage to the internal instrumentation and will invalidate the warranty.

SHOCK LOADING (i.e. stay failure) OR OVERLOADING TO 150% OF MWL WILL RESULT IN PERMANENT DAMAGE TO THE SENSOR THAT WILL REQUIRE RECALIBRATION.

Calibration

The load pins are factory calibrated before dispatch, aligned to the load as marked on the pin. There is no requirement to calibrate during installation. Please contact Cyclops Marine if there are any concerns about calibration.

If the load pin has been under load for a significant length of time, the sensor may take 1-2 minutes to return to zero when the load is removed. This is to be expected.

A significant impact to the body of the load pin can affect the calibration. This would require the device to be returned to Cyclops for inspection and re-calibration.

smartpower button

Wireless load pins have 3 modes: powered on, extended use & off.

Mode	Powered on	Extended use	Powered off
A quick button press shows	Green flash	Red flash	Red flash
How to activate mode	Long press to green flash	Long press to red flash	Very long press to red flash x2
Frequency	1 Hz	0.25Hz	No data
Ideal for	General usage	Battery saving	Shipping/storage
Battery life	2000 hrs	8000 hrs	2 years

Extended use & powered off modes can only be activated from powered on mode.

Wireless charging ((4))

To charge wireless load pins with the wireless charger, plug the supplied charger into a USB port or power plug (not supplied). A blue flash indicates it has been powered on. Place the charger onto the black plastic pin head with the wireless charging logo facing the receiving socket on the charger, as shown in figure 2.

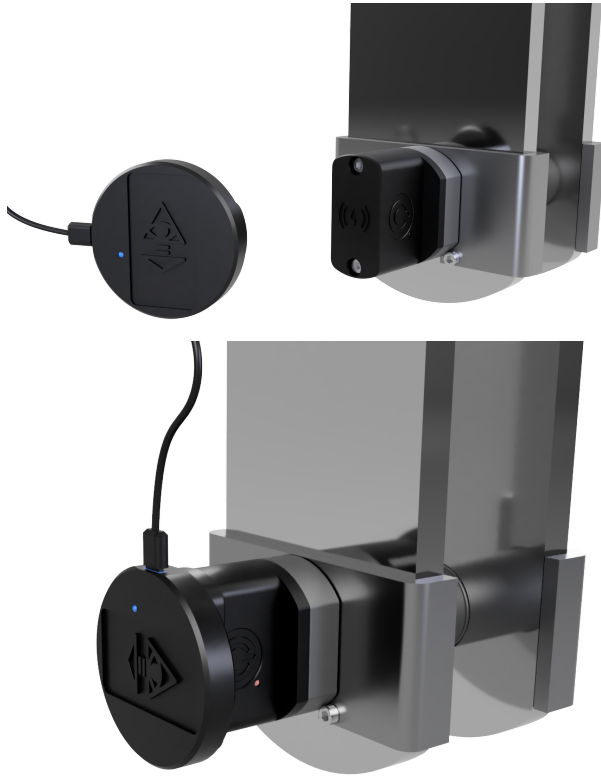


Figure 2 Wireless charging process for load pin

In powered on mode, the pin indicates charging when the LED flashes red.

A full battery charge will take approximately one hour and the LED will show constant green light when fully charged.

LED light indication

At <20% charge, LED indications during on and extended use modes will be a double flash.

Technical Data

Frequency	1Hz
Accuracy	±1% of MWL (between -10 to +40°C)
Body Material	SS 17-4 PH 925 (typical)
Housing Material	Acetal, IP67 rated
Battery	Lithium Polymer, 0.925Wh

Wireless load pins are not warranted to be accurate for the purposes of buying/selling products by weight.

Displaying Load Data

For both seeing live loads and logging load data from a sailing session, either a mobile phone or a Cyclops Marine Gateway should be used. Scan the applicable QR code below for instructions.

smartfittings manager app tutorial:



smartfittings gateway installation guide:

