

LWS INSTRUCTIONS

READ INSTRUCTIONS FULLY BEFORE ATTEMPTING TO OPERATE A LOAD CELL

INTRODUCTION

Compact, light-weight mobile load cells for use with soft connections.

Available with in built OLED readout or Bluetooth LE data transfer.

Bluetooth LE versions have no inbuilt read out and require pairing with another Bluetooth LE capable device such as a smart phone.

USE

Can safely work between any deck eye, pad eye, strong point, traveller car and block to measure loads.

Use to calibrate other load cells or pins by connecting in line.

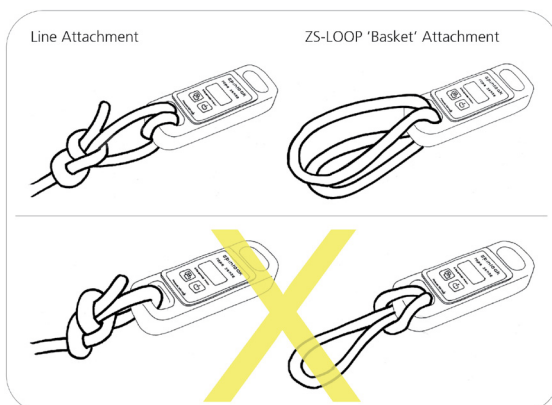
Use with ZS/OPEN mobile jammer, linked by a ZS/LOOP, to measure loads in any line.

The unit displays a continuous TRACKING load and PEAK load with a time reference.

OPERATING INSTRUCTION

Mount the load cell in the desired position.

Designed to use either ZS-LOOP attachment in a 'basket' formation or tied directly to sheets or halyards with one complete turn around the cell before termination.



BLUETOOTH LE CONNECTIVITY

iOS iPhone 4S or later, iPad Air, Mini, 3rd & 4th generation and above.

Android device version 4.3 and above. Most Google, HTC, Samsung, Huawei, LG & Sony devices supported.


For a complete list of supported devices go to www.spinlock.co.uk


Downloaded the Spinlock 'Sense' app for either Android or iOS to your Bluetooth enabled device.


With batteries installed in the load cell search for Bluetooth devices on your Bluetooth enabled device.

Open the Spinlock 'Sense' app. Any load cells within range will appear instantly. Individual load cell's can be re-named within the app to aid identification.

Tap any device to view a single read out and load graph.

Tap the  icon, on the device line, to enable or disable data logging.

Tap the  icon to log data from load cells with logging enabled.

Tap the  icon once your test is complete.

Tap 'MY DATA' to review, edit and email a logged data file in excel format. Requires appropriate programs and ability on the recording device. In 'MY DATA' you can also name the file and add notes and pictures.

OVERLOAD

If your Bluetooth enabled device screen changes to RED, in any mode, the unit has experienced a significant overload and will require re-calibration.

OVERLOADING 200% OF SWL WILL RESULT IN PERMANENT DAMAGE TO LOAD CELL.

A calibration certificate is issued with the product and valid for 12 months. The unit must be returned to Spinlock for re-calibration.

OVERLOAD WARNING

The read out Bluetooth LE device can be set to provide a visual and/or audible alarm at a pre-set load. This can be used as an early warning in any application such as mainsheets.

BATTERY LIFE

The 2 x AA batteries supplied with the unit will last between 100 and 6000 hours depending on usage.

STORAGE WITH BATTERIES INSERTED CAN RESULT IN LEAKAGE AND UNREPAIRABLE DAMAGE.

BATTERY REPLACEMENT

To change the batteries carefully unscrew the 4 socket drive stainless steel bolts with 2mm Hex Key (Allen Key). Lift of the plastic battery cover and place down without disturbing the seal. Remove and replace the batteries taking note of the polarity marking.

Check the 'O' ring seal is seated properly and re-lubricate if dry.

FAILURE TO MAINTAIN THE SEAL WILL RESULT IN WATER INGRESS & PERMANENT DAMAGE NOT COVERED UNDER WARRANTY.

Replace the plastic battery cover and carefully locate the 4 bolts, screw until the seal is compressed an even amount all round. Tighten to 0.5Nm. **DO NOT OVER TIGHTEN THE SCREWS.**

SAFETY

Make sure any operator has read and understands the safe operation before commencing any test.

Always check to use the cell is not dangerous or endangering the boat or people aboard.

Improper mounting and use can result in inaccurate results and damage.

TECHNICAL DATA

Frequency	Sampling 20Hz, App Refresh 5Hz
Max Error Band	Linear 0.2% across full range deflection
Proof Load	150% of rated load
IP Rating	IP67 (Dust Tight, Immersible to 1m for 30 minutes)
Battery	2 x AA 1.5v
Battery Life	Minimum 100 hours
Temperature range	0 - 45 degrees Celsius (Strong direct Sun light will damage the OLED)
Body Alloy	2014T6 Aeronautical specification
Plastic	Delrin type
Screen	250 micron Lexan
Adhesive (Screen)	3M 467

Weight: 5 Tonne with Batteries 0.470kg (1.04lbs)
10 Tonne with Batteries 0.725kg (1.6lbs)

Contact spt@spinlock.co.uk for custom weights

Dimensions (nominal) LDS/5 160 x 65 x 30
LDS/10 185 x 85 x 30

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Quick Start Guide

SAFETY

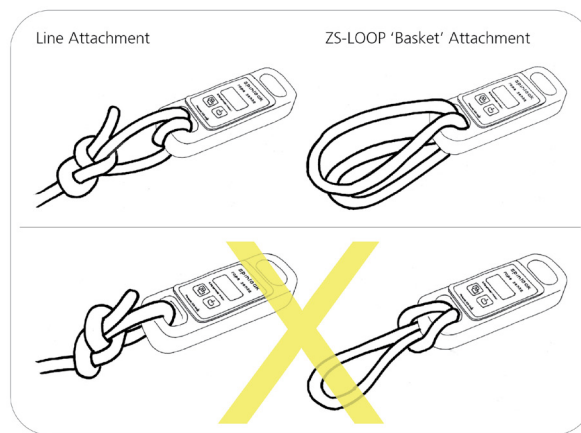
Make sure any operator has read and understands the full instructions for safe operation before commencing any test. Always check to use the cell is not dangerous or endangering the boat or people aboard.

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OPERATING INSTRUCTION

Use with ZS-LOOP or equivalent in basket formation.

Make one complete turn around the end eye and tie with a bowline for use with rope.



BATTERIES

Remove battery compartment cover with a 2mm Hex Key (Allen Key).

Insert 2 x new AA sized batteries noting polarity.

Replace battery compartment cover.

Tighten bolt to 0.5Nm.

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