em-trak

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## BUOY-Tracker AIS Transponder
INSTALLATION GUIDE

> ⚠ **Enabling BUOY-Tracker mode activates functionality which is outside of the AIS Type 1 specifications and therefore may not be permtted in some countries.**
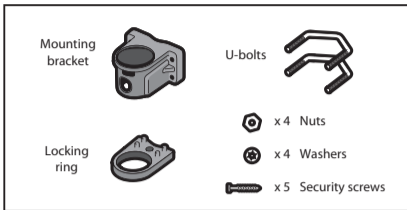>
> If you are in any doubt, please check with your local authorities.
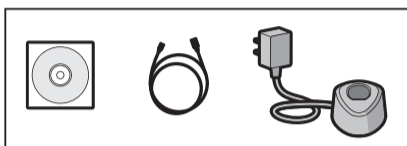
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1. What do I need?

Included

Mounting bracket

U-bolts

x 4 Nuts
x 4 Washers
x 5 Security screws

Locking ring
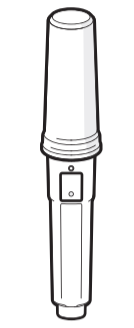
Fixings kit (417-0025)

BUOY-Tracker

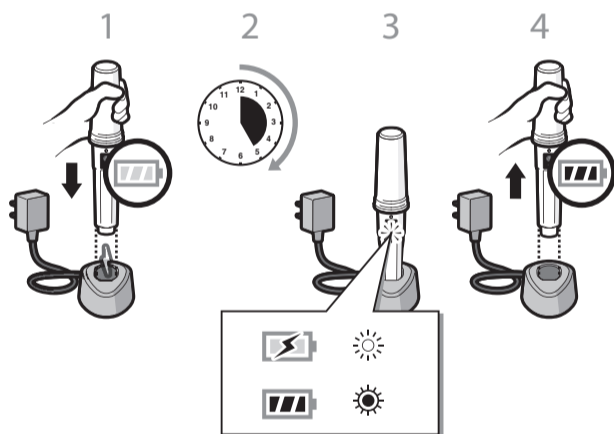Configuration charger (417-0068)

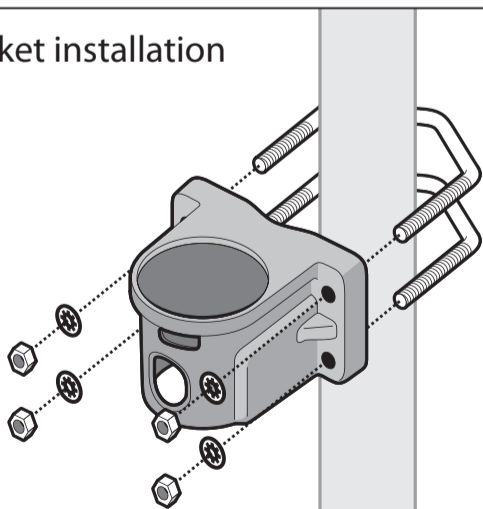Protective cap

Not included
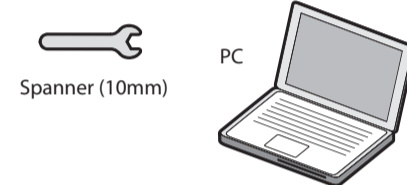
Spanner (10mm)
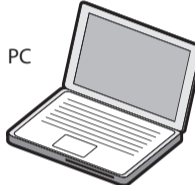
PC

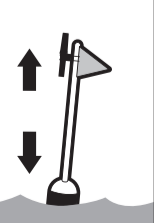---

2. Charging BUOY-Tracker

Fully charge BUOY-Tracker before first use.

1   2   3   4
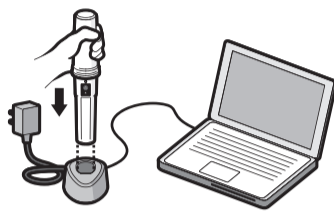
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3. Bracket installation

Install at the highest point

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4. BUOY-Tracker configuration

1. Install the supplied proBUOY-Tracker software from the CD provided.

2. Connect the configuration charger to a PC via the supplied USB cable and insert BUOY-Tracker into the powered configuration charger.

3. Run the BUOY-Tracker software and select the required mode of operation. The primary mode of operation is AIS AtoN mode.

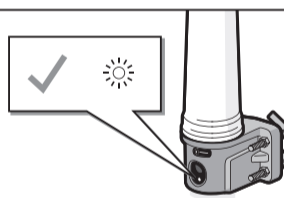## 5. Install BUOY-Tracker

1

⚠ The protective cap must be used.

2   4   3

BUOY-Tracker must be inserted into the supplied bracket when deployed.
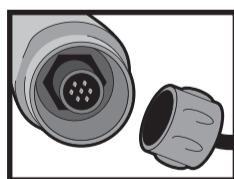BUOY-Tracker will be deactivated when removed from the bracket.

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6. Check operation

BUOY-Tracker is working correctly when the light flashes once every 5 seconds.

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7. Recharge BUOY-Tracker

Charging will be required approximately once every 5 days. The indicator will flash twice to indicate battery is low.

⚠ Before charging check that the connector is dry.

Charge as shown in Step 2.

LED Flash codes

In operation

|	
1 short flash in 5 seconds	Operating normally
2 short flashes in 5 seconds	Low battery
5 short flashes in 5 seconds	Waiting for GPS fix
7 short flashes in 5 seconds	No MMSI

In the charger

1 long flash in 5 seconds	Charging
Continuous	Charge complete

AIS AtoN mode

AIS ATON CONFIGURATION MODE (PRIMARY)

1. Select AIS AtoN mode.

2. Connect to BUOY-Tracker by selecting the required COM port and clicking 'Connect'.

3. Configure BUOY-Tracker as required (see CONFIGURATION FIELDS below).
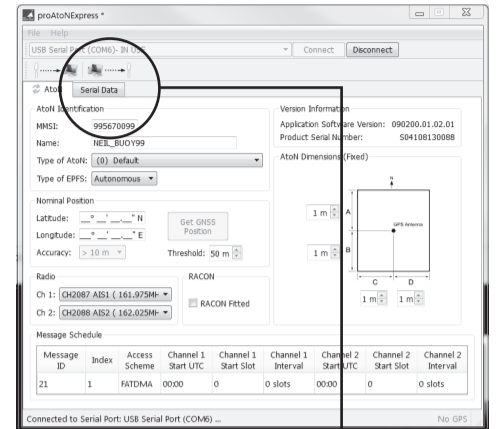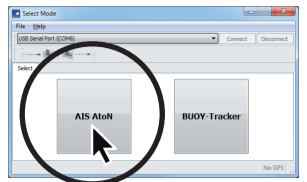
4. Click the icon shown to send the configuration to BUOY-Tracker.

5. Disconnect from BUOY-Tracker by clicking 'Disconnect'.

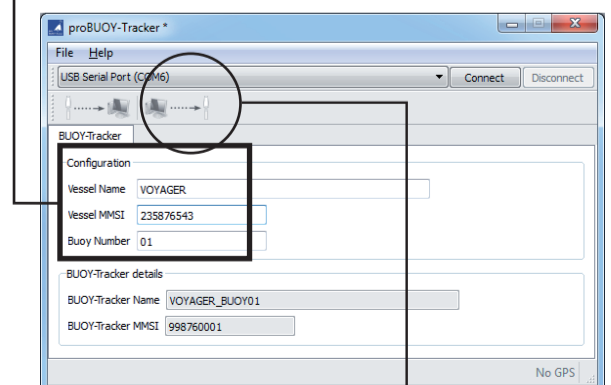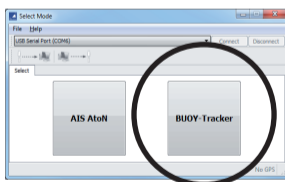6. Repeat steps above to configure additional BUOY-Tracker's in this mode.

CONFIGURATION FIELDS

AtoN name: Enter the AtoN name or other identification.
MMSI number: Enter the AIS AtoN's 9 digit MMSI number.
AtoN type: Select the most appropriate AtoN type from the drop down list.
Type of EPFS: The EPFS used by the AtoN can be set to either Autonomous (uses the GNSS fix) or Surveyed (uses the nominal position entered). For surveyed positions the accuracy of the measurements (less than or greater than 10m) can be added.
Nominal Position: The charted (or intended) location of the structure being marked.
Off Position Threshold: The distance (m) by which the AtoN may vary from its nominal position before it reports being off position.
RACON Fitted: Allows the setting of the racon fitted flag in the message #21 to indicated that a radar beacon is also available at the reported location.
Message Schedule: The start slot, interval between messages and start UTC for both channels A and B can be configured for the message #21.
AtoN's dimensions: Enter the AtoN dimensions, referenced to the location of the AIS AtoN, to the nearest whole metre.
Configuration of AIS operating frequencies: Select the required operating VHF frequencies for transmissions.
The default channels are:
 Channel A = 161.975MHz
 Channel B = 162.025MHz
The default channels are intentionally reserved for AIS and should not normally be adjusted.

Fishing Buoy Tracker mode

AIS FISHING BUOY CONFIGURATION MODE

1. Select BUOY-Tracker mode.
Enabling BUOY-Tracker mode activates functionality which is outside of Type 1 AtoN specifications and therefore may not be permitted in some countries.

2. Enter the parent vessel name, parent vessel MMSI and a unique number from 1 to 99 for the BUOY-Tracker.

3. Click the icon shown to send the details to BUOY-Tracker and disconnect from BUOY-Tracker.

4. Disconnect from BUOY-Tracker by clicking 'Disconnect'.

5. Repeat steps above to configure additional BUOY-Tracker's in this mode.