Coastal Nomad Drifter
Quick Start Guide

Key features

- Cost-effective drifter
- Coastal applications
- User friendly software
- Robust, precise and handy
- GPS, GLONASS and GALILEO tracking
- Up to 65 days of autonomy
- GSM communications fully integrated for geographical areas
- Flexible deployment: from an inflatable boat to an aircraft carrier

SouthTEK
Sensing Technologies

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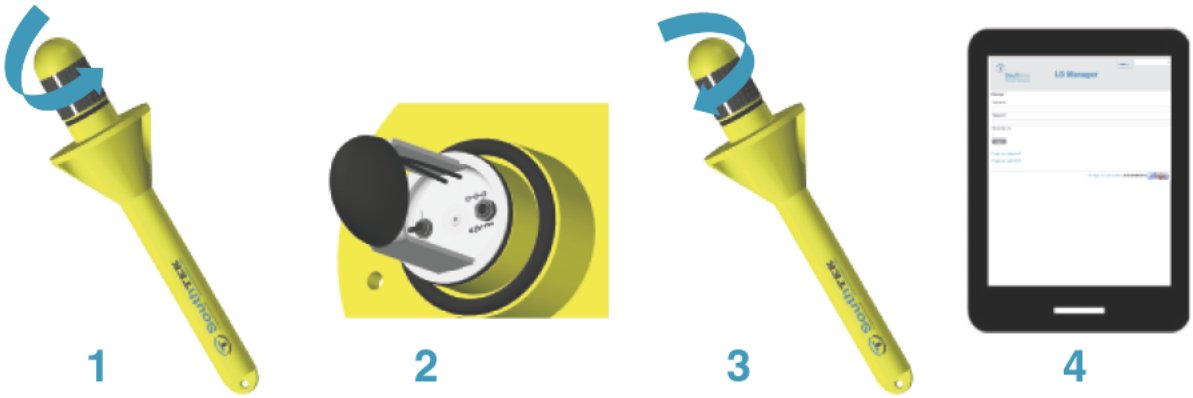
Everyday use of the Coastal Nomad drifter

Turning on the drifter



1 2 3 4

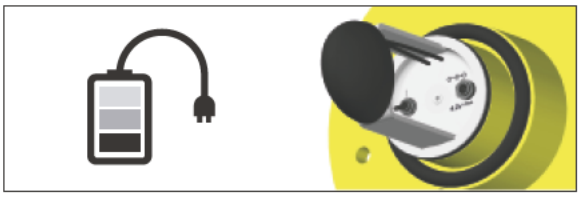
1. Unscrew cap from the floater.

2. Move the switch of the localizer to the ON (I) position.

3. Screw cap firmly onto floater, hand tight, ensuring proper seating of the gasket around its entire circumference.

4. The buoy is now ready for deployment. Please confirm proper communications through the web application LDManager: http://ldmanager.southteksl.com

Charging the internal battery



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5. Insert the connector of the appropriate charger into the localizer.

The status light on the charger indicates charging status (red charging, green charged).

Assure that the ON/OFF switch of the localizer is in the OFF(0) position.

Once the internal battery has finished charging, the NOMAD is ready for use.

Battery Life Estimation. To estimate the battery life for the drifter, you can see the Application Note #111 in http://www.southteksl.com/index.php/downloads

Caution! Users of Lithium polymer (LiPo) batteries should take extreme care when handling such batteries. Legislation regarding disposal of LiPo batteries vary from country to country.

LD Manager: Web application

6. Logging in web application
http://ldmanager.southteksl.com

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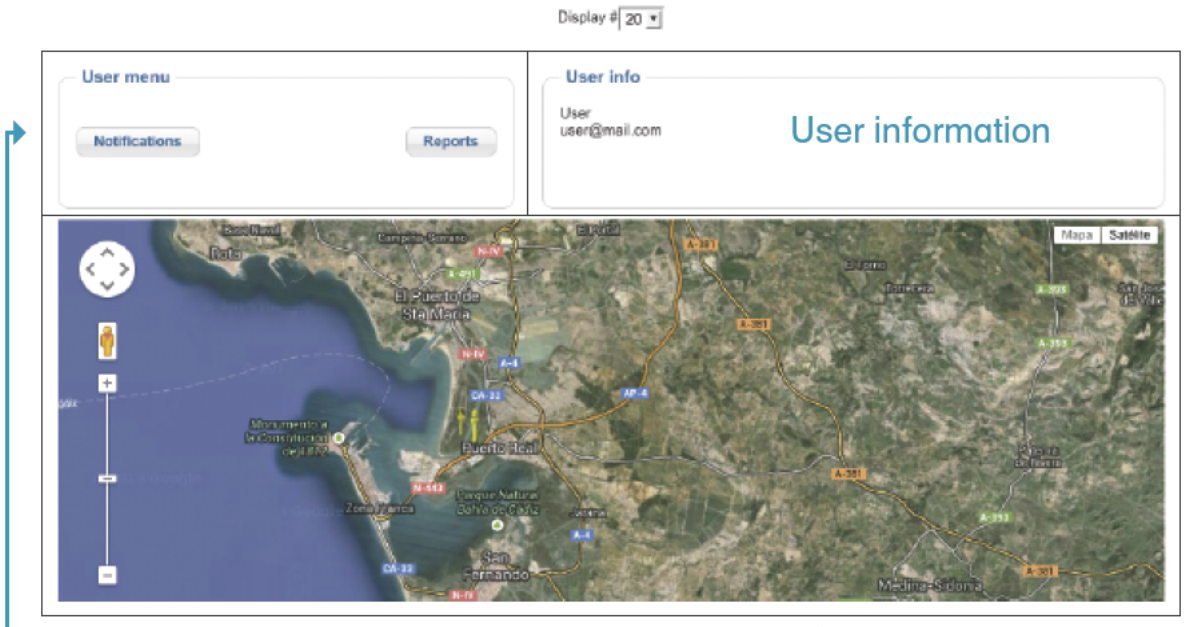
7. Main screen of LD Manager

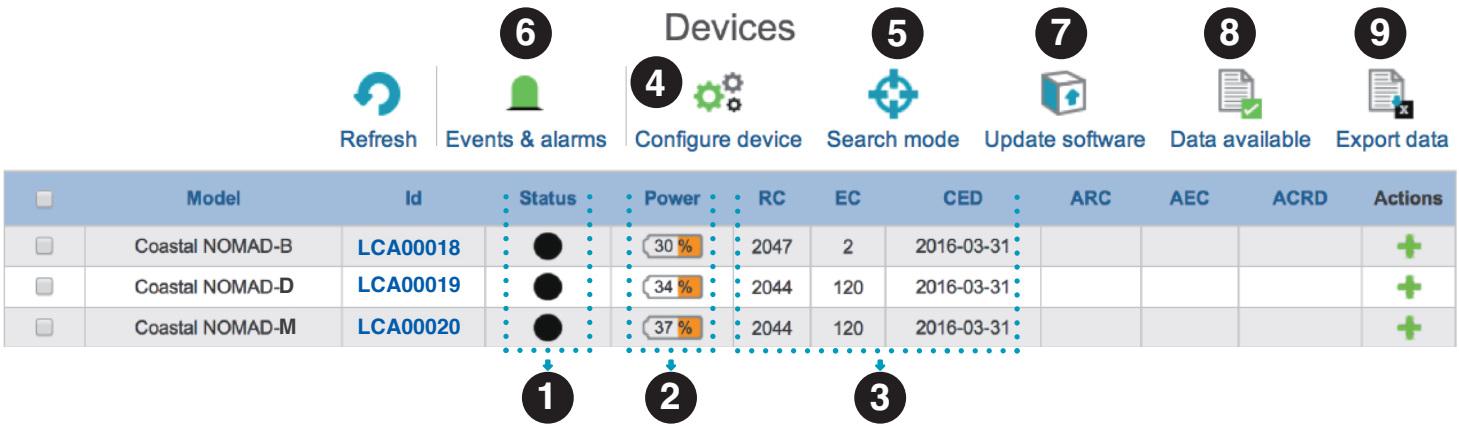


Click Notifications button: you can include your e-mail to receive the alarms generated by the device.

Location of last position acquired

LD Manager: Web application

LDManager v2.0



1 Status

- Started.
- Started with warnings.
- Startup error.
- Online
- Offline
- Lapsed
- Online with warning

2 Battery power

- Full battery
- Medium battery
- Low battery
- Very low battery

3

RC
Remaining connections

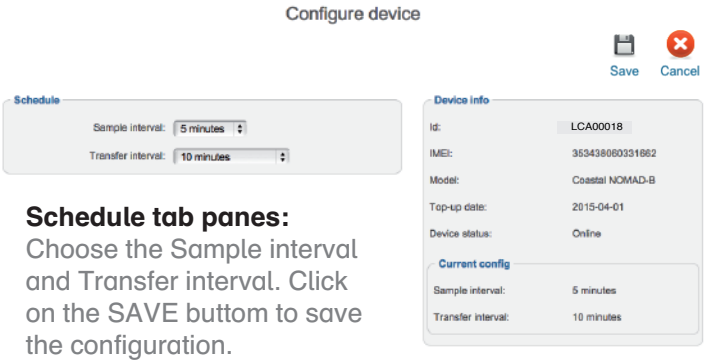
EC
Estimated consumption (conns/hour)

CED
Credit expiration date

4

- Configure device
- Config change in process (with motion)
- Error changing config

Battery life will depend on GSM coverage and sampling/transfer interval.



Schedule tab panes:
Choose the Sample interval and Transfer interval. Click on the SAVE buttom to save the configuration.

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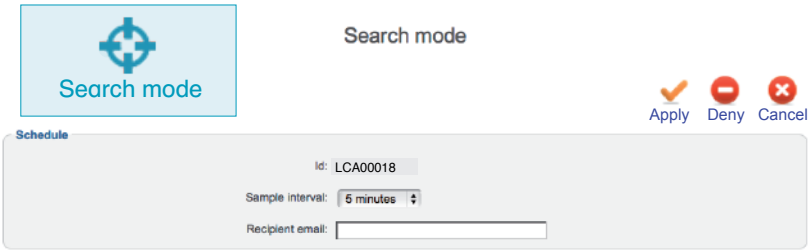
SEARCH MODE can be activated or deactivated through LD Manager (below figure) or sent by e-mail (right figure). It becomes operational after the first connection with the drifter. SEARCH MODE transfers the drifter position via email every five minutes (default) or other user-defined interval.



Activation/deactivation SEARCH MODE through LDManager:

Activate SEARCH MODE to recover easily the drifter including the recipient email and click on Apply button.

Deactivate SEACH MODE clicking on Deny button.

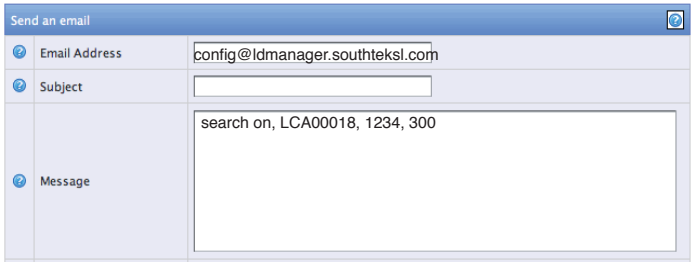
Activation/deactivation SEARCH MODE from e-mail:

Send an e-mail to activate/deactivate SEARCH MODE
E-mail adress: config@ldmanager.southteksl.com

To activate -> Message
search on, DRIFTER ID, PASSWORD, SAMPLE INTERVAL* (in sec)

To deactivate -> Message
search off, DRIFTER ID, PASSWORD

* Sample interval of 300 sec by default



LD Manager: Web application

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Events & alarms

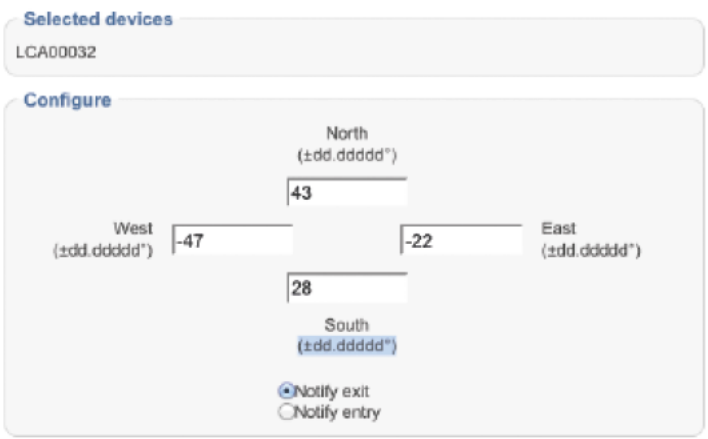
Alarms: Low Battery, Very Low Battery and Zone alarm.

Enabled

Disabled

Alarms notified

Zone alarm: Notifies exit or entry in the area chosen by the user. Insert coordinates or use the map tool chose the area of interest.



Coordinates

Map tool

7

Update software

Software version OK.

Software update request not allowed.

New software version available.

Soft. version update in progress (with motion).

Error updating software version.

LD Manager: Web application

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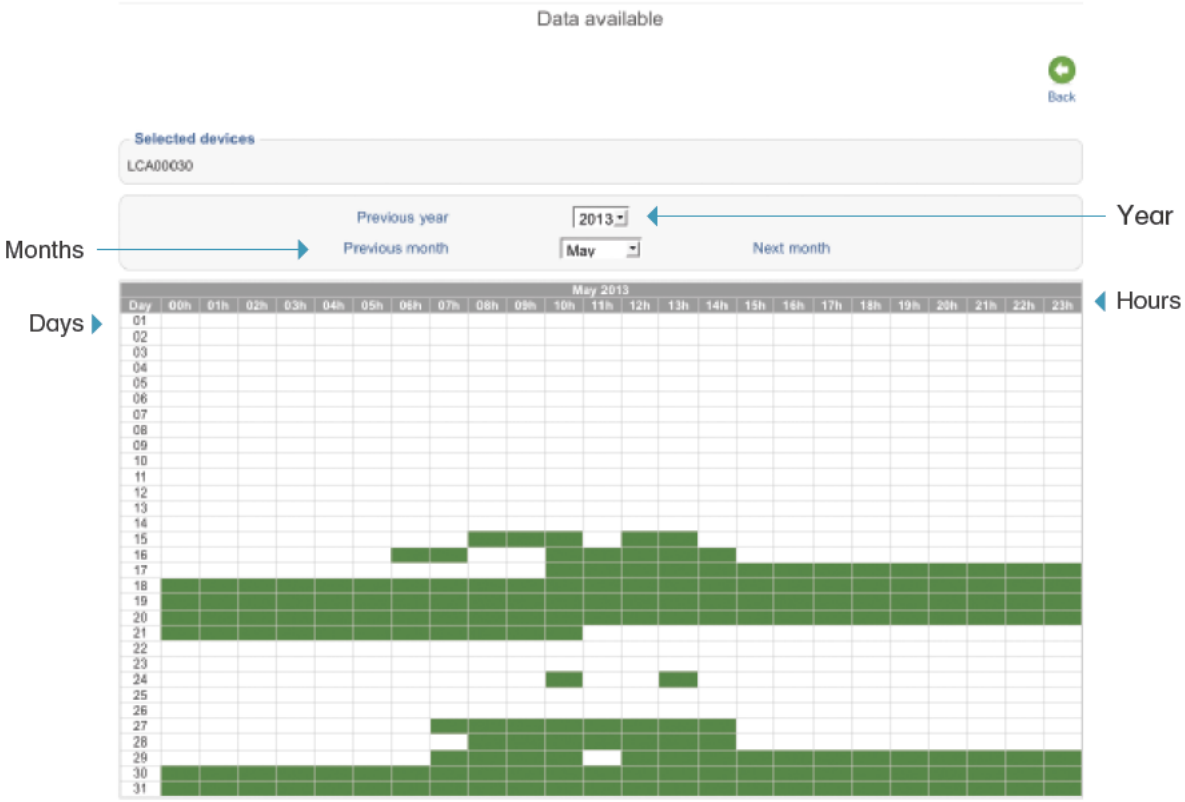
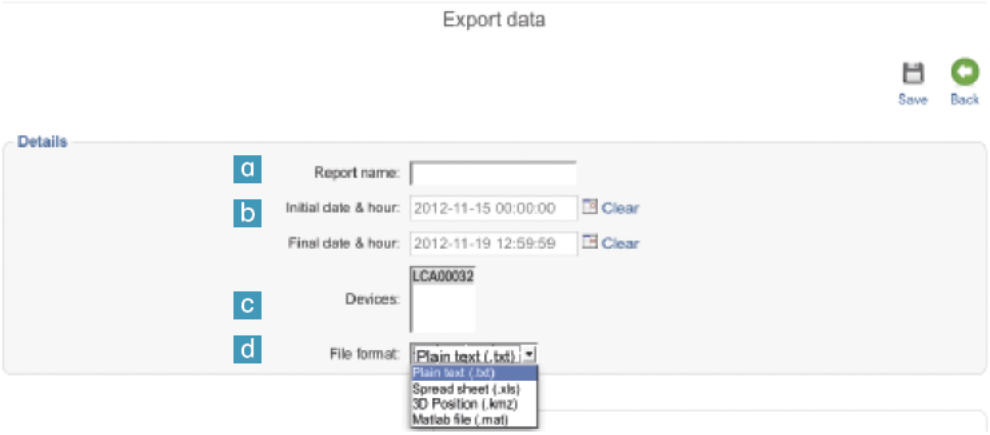
Data available

Green squares represent data availability.
Year and month can be selected for each device.

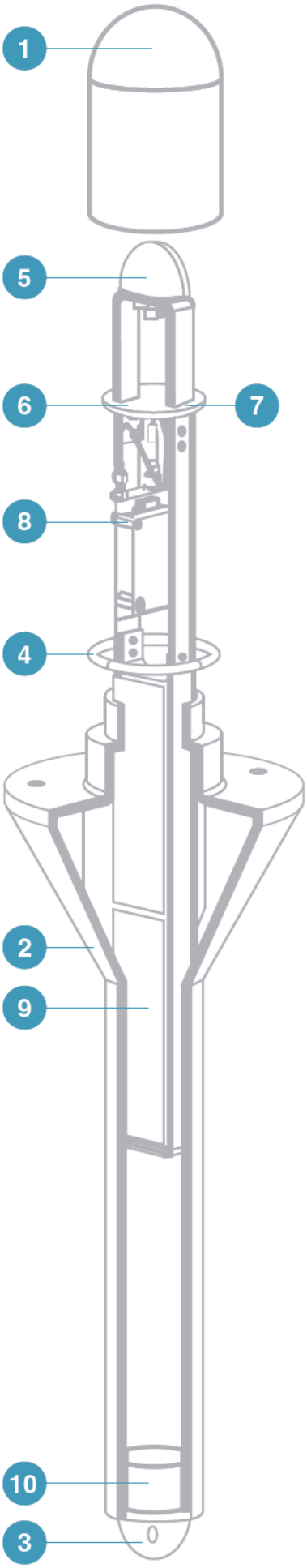


9

Export data



a) Include the Report name.
b) Select the initial and final date for data export.
c) Choose the Devices for data export.
d) Choose file format for data export.



1. Cap
2. Floater
3. Drogue attachment eye
4. Gasket
5. Antenna GPS/GPRS
6. Charge connector
7. Switch
8. Electronic device
9. Battery
10. Ballast

Specifications

GSM	Quad-Band GSM 850/900/1800/1900 MHz
GPRS	Multi-slot class 12
GPS	Receiver 16 channel, L1 1575.42 MHz Accuracy position 5 m Hot start < 3.5 sec Warm start < 33 sec Cold start < 34 sec
Proccesor	ARM Core
Memory	400KB (RAM) and 1.2 MB (Flash)
Battery	Lithium polymer (LiPo) Capacity = 5100 mAh Nominal = 3.7 V
Antennas	GSM: 0 dBi GPS: Active 27 dBi
Charging conditions	DC 4.2V 2A max
Dimensions	75 cm x 22 cm x 22 cm
Weight	2850 g

Accessories

Charger
(2A)

Pila
(Drogue)

Satis
(Drogue)

Firma
(Drogue)

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