

Coastal Nomad Drifter

Quick Start Guide



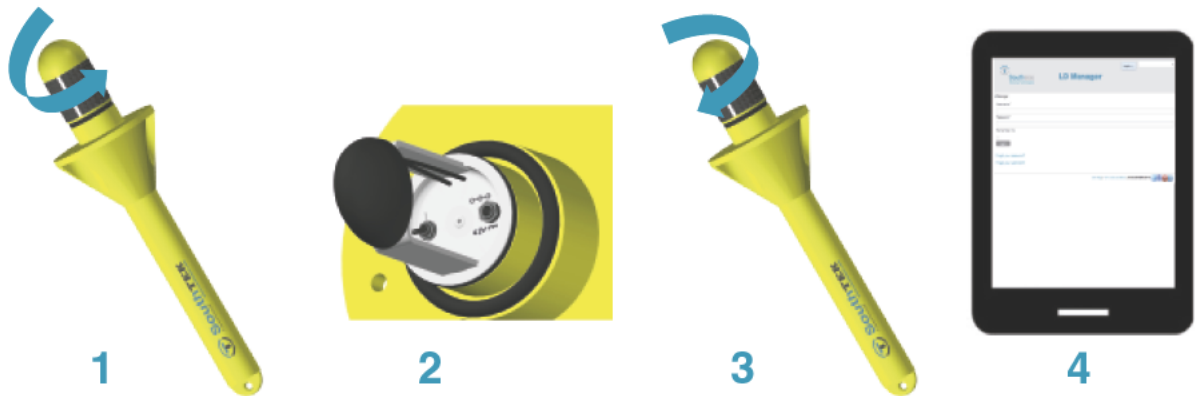
Key features

- 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



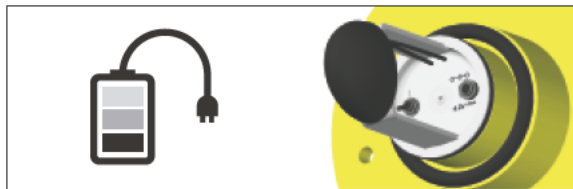
Everyday use of the Coastal Nomad drifter

Turning on the drifter



1. Unscrew cap from the float.
2. Move the switch of the localizer to the ON (I) position.
3. Screw cap firmly onto float, 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>



6

7. Main screen of LD Manager

LDManager v2.0

7

Devices

Refresh Events & alarms Configure device Search mode Update software Data available Export data

	Model	Id	Status	Power	RC	EC	CED	ARC	AEC	ACRD	Actions
<input type="checkbox"/>	Coastal NOMAD-B	LCA00018	●	30%	2047	2	2016-03-31				
<input type="checkbox"/>	Coastal NOMAD-D	LCA00019	●	34%	2044	120	2016-03-31				
<input type="checkbox"/>	Coastal NOMAD-M	LCA00020	●	37%	2044	120	2016-03-31				

Devices info Communications info Actions

Display # 20

User menu

Notifications Reports

User info

User: user@mail.com


User information


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


 Refresh


 Events & alarms

 **4** Configure device










 **5** Search mode

 **7** Update software

 **8** Data available

 **9** Export data

6 Devices

	Model	Id	Status	Power	RC	EC	CED	ARC	AEC	ACRD	Actions
<input type="checkbox"/>	Coastal NOMAD-B	LCA00018			2047	2	2016-03-31				
<input type="checkbox"/>	Coastal NOMAD-D	LCA00019			2044	120	2016-03-31				
<input type="checkbox"/>	Coastal NOMAD-M	LCA00020			2044	120	2016-03-31				


1


2


3


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

Configure device

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

Schedule

Sample interval:

Transfer interval:

Device info

Id:

IMEI:

Model:

Top-up date:

Device status:

Current config

Sample interval:

Transfer interval:

Schedule tab panes:

Choose the Sample interval and Transfer interval. Click on the SAVE button 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.



Search mode

 Apply  Deny  Cancel

Schedule

Id:

Sample interval:

Recipient email:

Activation/deactivation SEARCH MODE through LDManager:

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

Deactivate SEARCH MODE clicking on Deny button.

Activation/deactivation SEARCH MODE from e-mail:

Send an e-mail to activate/deactivate SEARCH MODE
E-mail address: 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

Send an email

Email Address:

Subject:

Message:

LD Manager: Web application

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

Events & alarms

- Enabled
- Disabled
- Alarms notified

Device: LCA00048

Name	Status	
(*) Credit expiration alarm		
Low battery alarm		
(*) Low credit alarm		
Position request response		
Very low battery alarm		
Zone alarm		Edit



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.

Selected devices
LCA00032

Configure

North
(±dd.ddddd°)

43

West
(±dd.ddddd°)

-47

East
(±dd.ddddd°)

-22

South
(±dd.ddddd°)

28

☒ Notify exit
☐ Notify entry

Coordinates

Map tool

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- Software version OK.
- Software update request not allowed.
- New software version available.
- Soft. version update in progress (with motion).
- Error updating software version.

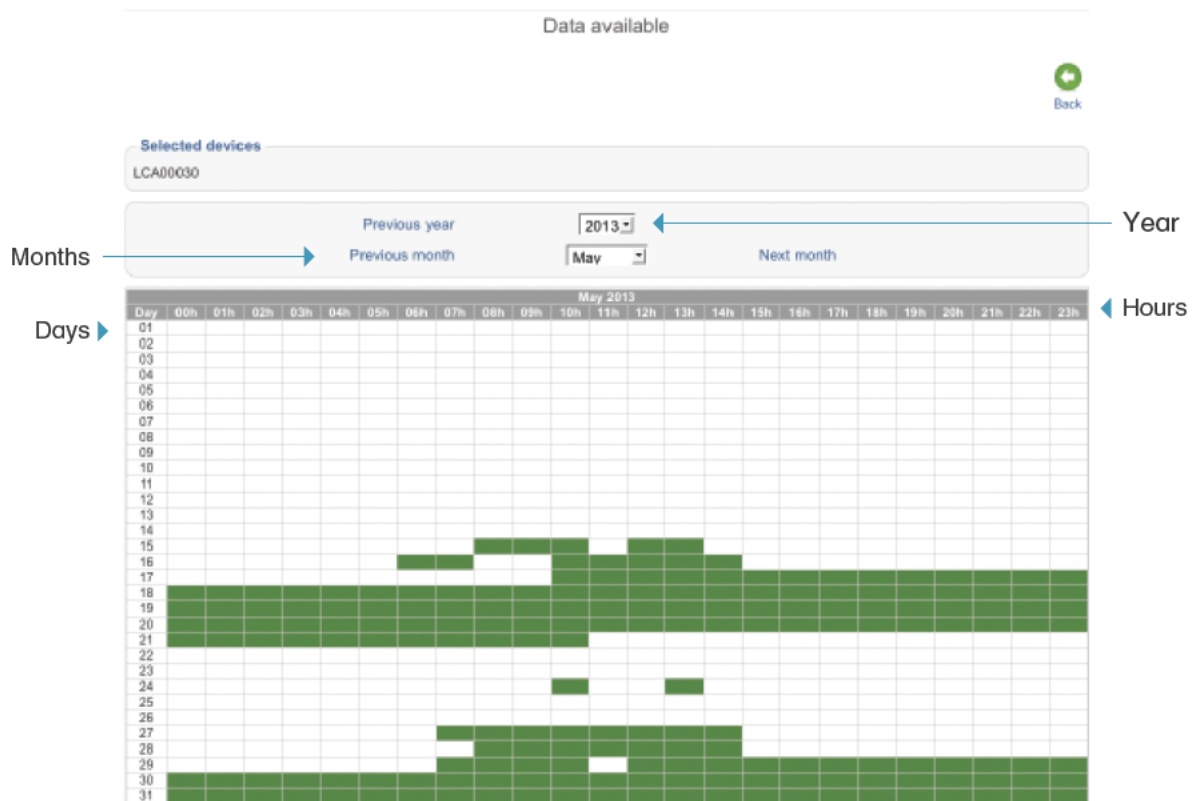
LD Manager: Web application

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Data available

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



9



Export data

Export data

Save Back

Details

a Report name:

b Initial date & hour: 2012-11-15 00:00:00

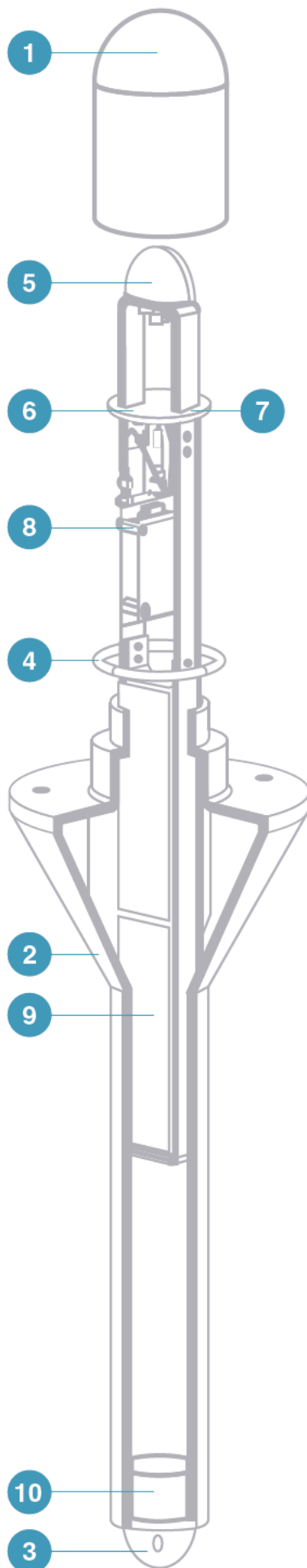
Final date & hour: 2012-11-19 12:59:59

c Devices:

d File format:

- Plain text (.txt)
- Spread sheet (.xls)
- 3D Position (.kmz)
- Matlab file (.mat)

- Include the Report name.
- Select the initial and final date for data export.
- Choose the Devices for data export.
- 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
Processor	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)

South-TEK Sensing Technologies S.L. is not responsible for any direct or indirect damages resulting from the use of these devices