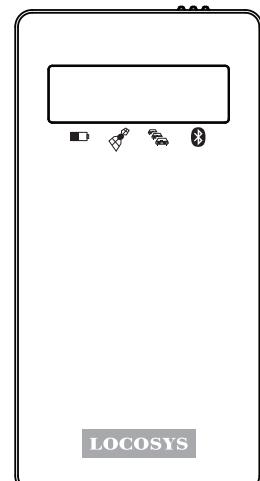


LOCOSYS

Pyramid

Bluetooth GPS/TMC Receiver

User Manual

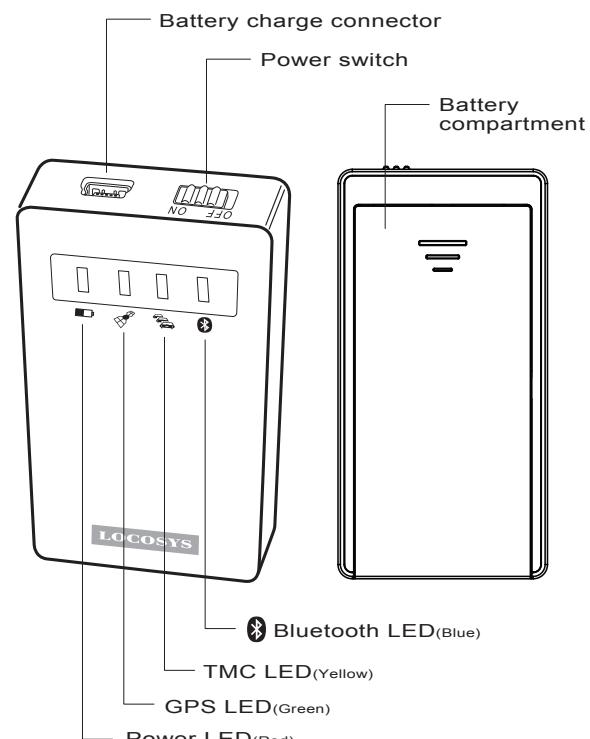


English

CE FCC

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Introduction



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Introduction

Features

- SiRF Star III low power chip.
- Built-in GPS patch antenna.
- Superior sensitivity and performance even in urban canyon and dense foliage environment.
- Capable of SBAS (WAAS, EGNOS, MSAS).
- Auto-search tuning for TMC.
- Worldwide FM band supported (US/Europe).
- Built-in acceptable FM antenna and use USB/charge cable as good external antenna.
- Operation time of battery is up to 11 hours in full function mode.
- Standby time is over 1 month.
- Slim design with dimensions: 86 x 44 x 13.1 mm.

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Welcome

Congratulations for choosing Pyramid. We hope you would agree it is an excellent positioning aid. We want you to have a very pleasant navigation experience with it, so please check the content in the package first. If you find any parts missing, please contact your LOCOSYS authorized dealer immediately. All our dealers are ready and willing to help.

This manual provides detailed instructions for operation. To fully understand all the features and functions, please take some time to read through the manual before using it. Some useful tips are also included in this manual.

Please visit our website and send us your comments. From time to time, we will have updates and upgrades available - based on your suggestions and recommendations. Have fun with it!

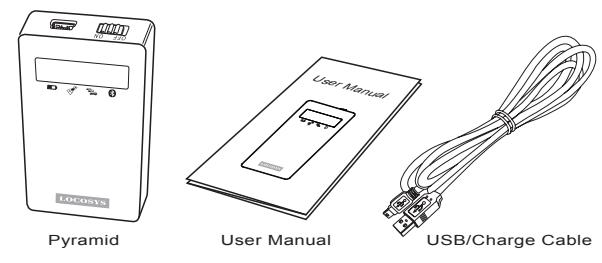
Sincerely yours,
LOCOSYS Technology Incorporation

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Introduction

Package contents



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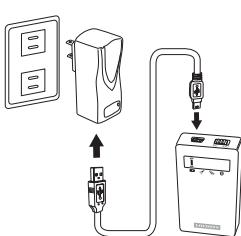
Getting Start

Charging the battery

It is recommended to charge the battery before starting to use this unit. You may use the travel adapter or the car adapter that included in the package:

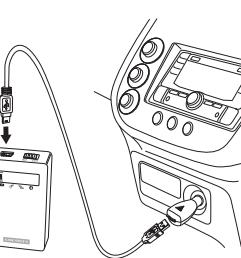
• Travel Adapter:

1. Connect the smaller end of the USB cable to the unit and the larger end to the Travel Adapter.
2. Plug the adapter into an available wall outlet to charge the battery.



• Car Adapter:

1. Connect the smaller end of the USB cable to the unit and the larger end to the Car Adapter.
2. Plug the adapter into the cigarette lighter jack in the car to charge the battery.



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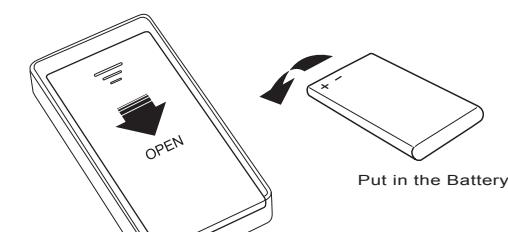
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Getting Start

Changing the battery

To remove or change the battery, follow steps below:

1. Press the tab on the cover of battery compartment and slide the cover as illustrated.
2. Take out the cover and remove the battery.
3. Insert the new battery into the battery compartment in the direction as shown.
4. Slide the cover into the correct position and push it forward to close the compartment as shown.



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Using The LOCOSYS Pyramid

LED indication

	• Power LED (Red)
Pulse	-----Battery needs to be charged
On	-----Battery is currently charging
Off	-----Battery is OK
	• GPS LED (Green)
Pulse	-----There is a fix
Off	-----No fix, looking for fix
	• TMC LED (Yellow)
Pulse	-----There is TMC reception
Off	-----There is no TMC reception, looking for broadcast
	• Bluetooth LED (Blue)
Pulse	-----There is a Bluetooth connection
Pulse fast	-----There is no Bluetooth connection, looking for connection

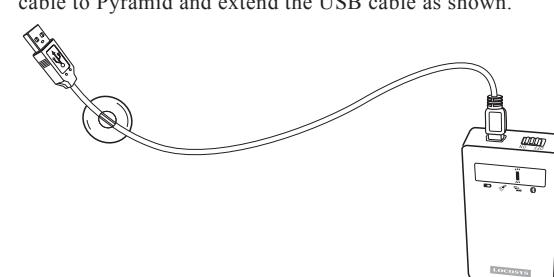
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Using LOCOSYS Pyramid

External TMC antenna

To enhance the TMC reception, please connect the USB cable to Pyramid and extend the USB cable as shown.



Connecting to Bluetooth host device

Please follow these steps to connect Pyramid to a Bluetooth host device, such as PDA, Smart phone and PC.

1. Switch on Pyramid.
2. Switch on your Bluetooth host device. Then check its manual to establish a Bluetooth connection to the other Bluetooth device (SPP slave). Your host device will find Pyramid as "Bluetooth GPS" in its Bluetooth search screen.
3. During the connection, a pairing of codes may be asked. Enter "0000". Now it creates a new COM port that will be used by your navigation application. Note that any baud rate is acceptable.

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Appendix

Specifications

GPS performance	
Chip	SIRF Star III Low Power, GSC3f/LP-7979
Frequency	L1 1575.42MHz, C/A code
Channels	20
Update rate	1 Hz
Acquisition time	Hot start (Open Sky) < 2 s Cold start (Open Sky) 38 s, average
Position accuracy	Autonomous < 10m (2D RMS) SBAS < 5m (2D RMS)
Dynamics	Speed (max.) 1,000 knots Altitude (max.) 60,000 ft
Differential GPS	SBAS
Datum	Default WGS-84
Antenna	Built-in patch antenna
Bluetooth™	
Chip	RFMD, SiW3500
Frequency	2.400 to 2.480 GHz
RF Channels	80 channels
Bluetooth Certified	Version 1.2 certified (Support class 2 and class 3, up to 10 meters range)
Antenna	Built-in chip type antenna
TMC	
Chip	Silicon Laboratories, Si4701
Frequency	87.5MHz – 108MHz (US/Europe)
Antenna	Built-in acceptable antenna and the USB charge cable can be used as a FM external antenna for better signal reception.

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Appendix

Specifications

Power	
Battery type	Removable lithium-ion rechargeable battery (1000mAh) May use Nokia BL-5C/BL-6C battery, too
Operation time	Continuous 11 hours Standby > 1 month
Charge time	4 ~ 5 hours
Charge connector	USB mini-B
Interfaces	
Connection	Bluetooth Serial Port Profile
Protocol	Combine NMEA-0183 version 3.0 with open TMC 2.0
Physical	
Size	86H x 44W x 13.1D mm
Weight	60 g (with battery)
Environmental	
Operating temp	-10 ~ +60 °C
Storage temp	-20 ~ +70 °C
EMC standard	CE, FCC

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Appendix

Warranty

LOCOSYS Technology Inc. warrants this product to be free from defects in material and workmanship for a period of one(1) year from the original date of purchase.

This warranty does not cover the damage due to the shipping of the product, external causes, including accident, abuse, misuse, problems with electrical power, usage not in accordance with product instruction, product that has been repaired or altered by other than LOCOSYS Technology Inc. authorized service person/dealer, problem(s) caused by the use of parts and components not supplied by LOCOSYS Technology Inc. upon request. This warranty does not cover any accessories or parts added to product after the product shipped from LOCOSYS Technology Inc.

Product is treated as out of warranty when it is out of the warranted one(1) year period, or it has been repaired or altered by other than LOCOSYS Technology Inc. authorized service person/dealer, or which has been subjected to misuse, abuse, accident, or improper installation.

In no event shall LOCOSYS Technology Inc. be liable for any incidental, special, indirect or consequential damages, whether resulting from the abuse, misuse, or inability of use this product or from defects in the product.

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Appendix

Repair

LOCOSYS Technology Inc. will repair the defective products covered under this limited warranty, if they are returned to LOCOSYS Technology Inc. If the product does prove defective, it will be repaired at no charge during the warranty period and at normal repair charge rates when out of the warranty.

To obtain warranty service, contact your local LOCOSYS Technology Inc. dealer. An original or copy of the sales receipt from the original dealer is required. LOCOSYS Technology Inc. will not repair or replace missing components from any package purchased not from authorized dealer.

The repaired product will be warranted subjected to the original warranty only. LOCOSYS Technology Inc. reserves the right to charge a "No Fault Found" fee for product returned as defective where no fault could be found by LOCOSYS Technology Inc. LOCOSYS Technology Inc. owns all parts removed from repaired product.

Product returned by LOCOSYS Technology Inc. to other location beside the customers' site will bear extra charge and should be credited to the customers. It is customers' responsibility to ensure that the package containing the defective product is durable enough to be resistant against further damage and deterioration during transportation. In case of damages occurring during the transportation, the repair is treated as "Out of Warranty".

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It is herewith confirmed that this device complies with the requirements set out in the Council Directive on the Approximation of the Laws of the Member States relating to Electromagnetic Compatibility (89/336/EEC), Low-voltage Directive (73/23/EEC) and the Amend-ment Directive (93/68/EEC), the procedures given in European Council Directive 99/5/EC and 89/336/EEC.



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FCC

Warning

A. for fcc15b devices
This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the installation, may cause harmful interference to radio communication. However, there is no guarantee that interference will not occur in a particular installation; if this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
-Reorient or relocate the receiving antenna
-Increase the separation between the equipment and receiver
-Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
-Consult the dealer or an experienced radio / TV technician for help

You are cautioned that changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions
(1) This device may not cause harmful interference and
(2) This device must accept any interference received, including interference that may cause undesired operation

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