NAVILOCK®

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Bluetooth GPS Receiver
BT-399

User manual

BT-399

User Manual (60311-a)

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1. Introduction

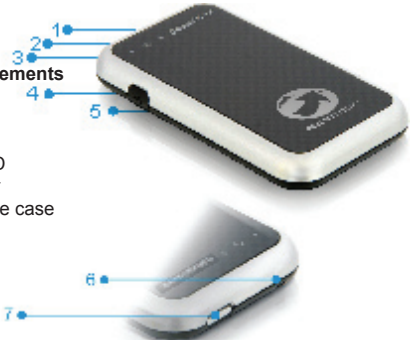
The BT-399 is a Bluetooth GPS receiver with internal antenna and Sirf3 20 channel GPS chipset. The Bluetooth interface enables a connection to a PDA, SmartPhone, mobile phone or notebook. Due to its extremely compact design it acts as ideal companion on every tour.

1.1. Package content*

1x Navilock BT-399
1x Power supply
1x Car-Charger
1x USB Mini cable
1x 3,7 Volt 850mA rechargeable battery (internal)
1x User manual
1x 8cm CD ROM
1x Navilock key strap

*Make sure that the product package contains all items before operation. If any item is missing or damaged, then please contact your dealer immediately.

1.2 Connectors / Operation elements



1= Bluetooth LED
2= Satfix LED
3= Battery status indication LED
4= Mini-USB charger connector
5= GPS Patchantenna under the case
6= Key strap whole
7= ON/OFF switch

Important health- and security information
If you use this product you should take precautions to avoid damages and legal consequences. Follow precisely all security- and handling advice and keep it carefully. Pay attention to all warning notices in the manual and on the device. To avoid injury, electric shock, fire and damages on the device, please pay attention to the following notices.

Electrical Security
This product is intended for operation with power of rechargeable battery or the stated power supply. Any other application can be dangerous and lead to loss of any warranty claim for this product. Please use only the original accessory and never charge the re-chargeable battery with a charger from other producers.

Careful handling of the rechargeable battery
There is danger of fire and burning, when the re-chargeable battery wont be used properly. Do not disassemble, destroy, perforate, short-out or throw it into water or fire or expose it to temperature higher than 60°C (140°F).

NOTE: RECYCLE OR DISPOSE USED BATTERY ACCORDING TO THE LOCAL INSTRUCTION OR THE ENCLOSED INSTRUCTIONS, FOR THIS PRODUCT.

Li-ion

SECURITY ADVICE REGARDING DIRECT SUNLIGHT
Make sure the device is not exposed to over humidity and extreme temperature. Don't let the device, the battery or the re-chargeable battery for too long in a vehicle or other places where the temperature can rise up to 60°C (140°F), e.g. on the dashboard, window sill or behind a glas panel, which is exposed to high UV-Light or the sun. In this case the device or the vehicle can be damaged and the battery superheated.

Damages, which require a repairing
Disconnect in the following cases the device from the grid and contact an authorized repairing specialist or the dealer:
• Liquidity or any item came into the product or an object got into the device.
• The product was exposed to rain or liquidity.
• The product fell down and is damaged.
• There are visible signs of overheating.
• The product does not work properly despite of correct operation.

Avoid using the device after high variation in temperature
If you expose the device to high variation in temperature or humudity, there may be condensation in the device. In order to avoid damages wait until the humidity is evaporated, before using it.

NOTE: If you bring the device from a cold into a warm or from a warm into a cold environment, let the device take over the temperature before switching it on.

2. Operation

2.1. Plug the Mini USB cable with the bigger connector into the charger. Connect the charger to a wall socket.

2.2. The Mini USB connector has to be plugged into the Mini USB female port (4) of BT-399.

2.3. The red LED lights. Charge the batter completely. Unplug the Mini USB cable after the red LED turned off.

3. LED Indication

- Blinking, no Bluetooth pairing
- Blazing, Bluetooth pairing established, no LED indication after 1 minute
- Blinking, no satellite fix
- Blazing, more than three satellite fixes available
- Blinking, if battery status is not enough
- Blazing, when recharge the battery

4. Operating surrounding

The BT-399 can be used under all common OS Systems as Bluetooth GPS receiver. Drivers are not required.

5. Application

5.1. For a Notebook with Bluetooth

1. Turn the BT-399 on.
2. Please refer to the Notebook's user's guide for instructions to activate Bluetooth for connection to the BT-399. As these are always a little bit different. Usually you proceed as follows:
3. Enter the Bluetooth-Manager and search for devices in the Bluetooth surroundings.
4. As soon as the Bluetooth GPS-receiver is found, connect it to your PC / Notebook.
5. Depending on the Bluetooth-Software you have to choose the Com-port before pairing the device.
6. Choose the Com-Port between Com3 to Com10, since some old software solutions often do not see a Com-Port over 10.
7. If your Bluetooth-Software chooses the Com-Port automatically, please follow the instructions step by step to finish.
8. Make sure which Com-port was chosen, by showing the features of the linked Bluetooth device.
9. Some Bluetooth-Applications or- programs require an access code for linking the device. In case this request appears, the access code is: 0000
10. Exit the Bluetooth-Manager.
11. Launch the suitable software for mapping/navigation, and select the correct COM Port and set the baud rate between 4800 and 115200.

5.2. For PDA/SmartPhone with built-in Bluetooth

1. Turn the BT-399 on.
2. Go to Bluetooth-settings and search for devices in the Bluetooth environment.
3. Choose the GPS receiver as to be paired device.
4. Some Bluetooth-Applications or- programs require an access code for linking the device. In case this request appears, the access code is: 0000
5. Exit the Bluetooth-Manager.
6. Launch the suitable software for mapping/navigation, and select the correct COM Port and set the baud rate between 4800 and 115200.

1. Perform a softreset on your device if you have any errors or configurationproblems. It can be performed before or after pairing, in order to exclude blocked ComPorts or applications.
2. If your BT-399 interlinked correctly and your Mapping- and Navigationssoftware does not receive any data, please perform the following steps. Go to: Start--> Settings-->Connection-->Transfer/Data reception. Check if there is a tick for automatic receiving. If yes, please take out the tick, leave this window with OK and the following windows with „X“, until you get back to the Desktop. After that run a softreset. Go to the Bluetooth-Manager, delete the interlinked GPS mouse and set a new connection.
3. For devices based on Windows Mobile please note that an output connection for the GPS-receiver is already placed. If this is not the case, please provide a new output connection for BT-399 in the Bluetooth manager in the tab „ Com connections“. All free Com Ports are being offered.
4. When interlinking the device a question about a safe connection may occur. Take out the tick for safe connection.

5.3. General note for pairing !!!

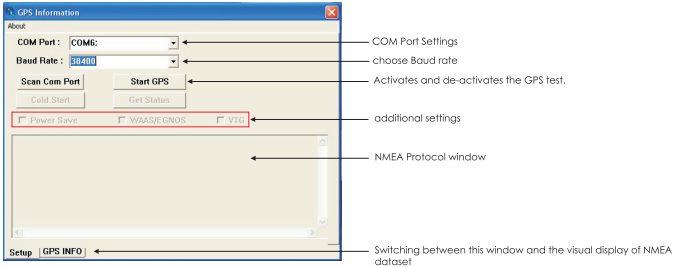
As soon as the receiver is connected to the PDA or SmartPhone, the blue LED will light up and hence stops blinking. Once a navigation software application, or a test software application, has access to the COM Port and data starts flowing, the LED will be turn off after roughly one minute.

6. Functiontest with GPS Info

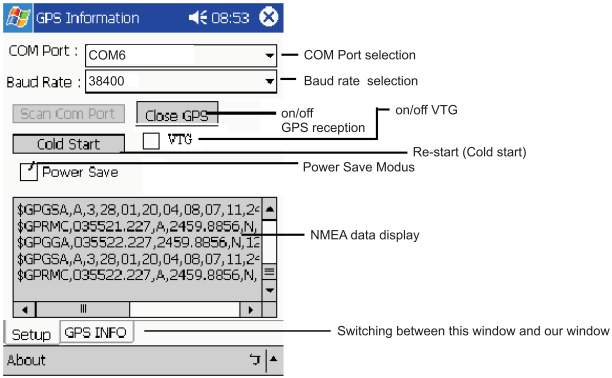
1. Install the GPS Info software on your device. Choose the respective version for your system. On the CD you can find versions for Windows 98SE, Me,

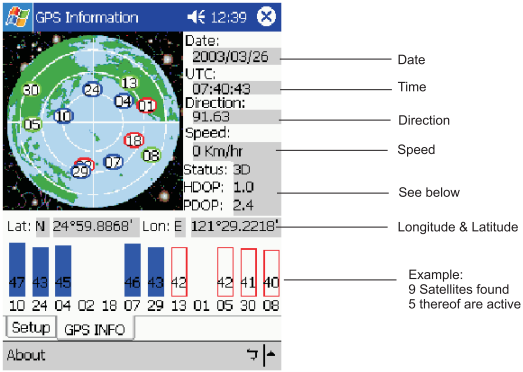
W2K, XP, Windows Vista and WM5 – also usable for WM6.

2. GPS Info is only a Testprogram and cannot be used for navigation or orientation. After testing it has to be closed! Please make sure on a Pocket PC that it is really closed and not still active in the background. It blocks the Com-Port and doesn´t give access to a navigation- or routing software on the Com-Port.
3. The PC version differs basicly only in its appearance from the Pocket PC version. The amount of function remains the same.
4. PC Version



5. Pocket PC Version





HDOP - Horizontal Dilution Of Position -

Should you see the NMEA protocol in the GPS Info but you cannot find a receiver in your application software, then it is not a mistake of the receiver but of the setting in the software. The support of the software producer may help you.

Risk of explosion when exposed to fire !
Don't expose the receiver to permanent temperature above 60°C/140° F!

7. Possible Sources of Malfunction and Troubleshooting

7.1 The device cannot be switched on. Check if the battery is fully charged. Plug the charger to BT-399 and into the socket. If the LED lights up in red. Wait for 10min. unplug the receiver and switch it on. If you can see some function as the green LED flashes, the battery was not fully charged. Switch on the BT-399 again and charge it completely until the red LED turns off.

7.2 The battery was charged and the BT-399 can still not be switched on. Please contact the Navilock Support.

7.3 Your PC does not support the Autostart function and does not start the CD ROM automatically. Please read http://msdn2.microsoft.com/en-us/library/Aa969329.aspx

7.4. Your BT-399 cant find a FIX or takes too much time for it.
The GPS reception is a reception requiring a free view to the sky. But today´s high sensitive chipsets enable a reception, even without enough view to

the sky. That is only possible if there are enough good signals of satellites available. Even with a bright blue sky the signals of the satellites can be so distorted because of electro-magnetic disturbance so that it cannot be used as Signals for the receiver. This is not due to the receiver but due to the physical basic law of the electro-magnetic radiation. Switch off the BT-399 and try later again. Try to find a location which is not near to a house wall. There can be also reflections which can disturb the reception.

7.5. If you use the BT-399 for the first time, the first Satfix can take up to 30min. The same can happen when you use the receiver on another continent.

7.6. The BT-399 got wet. Do not connect the receiver to the charger. Thus it will be definitely and not reparable destroyed. Please send the receiver with statement „Water damage“ to our support. The Support will open and dry it and test the function again.

7.7. You used the BT-399 with a wrong charger. In this case only the Navilock Repair Center as well can identify the damage and give a cost estimate. Please send the device franked and state as error description „KVA – falsche Stromversorgung“.

The Navilock Repair Center aims to be as fair as possible. So we kindly ask you to give a true error description. The error analysis helps to find out if there was a water damage, interference by a third party, a fall, overvoltage or wrong handling.

Often malfunctions are caused by minor errors. It is not always necessary to immediately replace a product, because this will not correct a malfunction that is not caused by the GPS hardware.

Before contacting your dealer, please contact Navilock support. This will provide you with help in a fast and easy manner, and help avoid unnecessary replacement.

In such cases, describe the malfunction as accurately as possible in writing, add the details for your device and the software you are using as well as operating surrounding (Operating system, Servicepack version, CPU size and type, memorysize, type of HDD and interface, etc. and send an email to support@navilock.de.

A member of the support team will take care of your problem and work on a solution.
We hope you enjoy your Navilock product!

8. Technical data

Chipset/type	SiRF star III GSC3FLP
Channels	20 channel
Sensibility	-158dBm
Frequency	L1, 1575.42MHz
C/A Code	1.023MHz Chip Rate
Accuracy:	
Horizontal position	5m CEP (S/A off)
Time	1 micro-sec synchronized to GPS-time
Speed	0.1m/sec 95% (SA off)
Date:	WGS-84
Protocol:	NMEA-0183 V3.01 GGA(1sec), GSA(1sec), GSV(5sec), RMC(1sec)
Acquisition rate:	
Hot start	3.5s average (with ephemeris and almanac)
Warm start	38s average (with almanac but without ephemeris)
Cold start	42s average (either almanac nor ephemeris)
Reacquisition	1s average (recovery time after interruption)
UP-DATE Rate:	1Hz
Dynamic requirements:	
Acceleration	less than 4g
Altidue	18000 meter (60000 feet) maximum
Speed	515 meter/sec. (1000 knots) maximum
Performance:	
Operation time	maximum 10 hours
Rechargeable battery	3,7 Volt 700mA Li-ION battery
Connector:	USB
Bluetooth:	CSR BC4 Bluetooth Chipset V1.1 (Class 2) Serial Port
Operation temperature:	-10°C ~ 60°C
Weight:	30g with battery
Dimensions:	40.0 mm x 70.0 mm x 9.2 mm

9. Certificate

CE	08214018/AA/00
R&TTE	08214018/AA/00 „CE0506“
E-Mark	e13 02749

10. Warranty period

Your GPS receiver will be repaired free of charge during the legal warranty period, provided the damage was not caused by external impact, moisture, fall or improper use.

11. Support

If you have further questions, please contact our customer support:
support@navilock.de / www.navilock.com or phone +49 30 84716503*.
You can contact our service hotline during the following times:
Mon. – Fri: 9:00am – 16:30 pm

* A connection fee applies according to fee schedule of your local telephone provider.

You can find current product information on our homepage: www.navilock.com

Please send your repairing transmittals franked to this address:

Navilock Repair Center
Beeskowdamm 13/15
D-14167 Berlin-Zehlendorf

Please include a proof of purchase and a detailed error description. “doesn´t work” or “defect” is not detailed. Please pay attention to the occurrence of the error. Transmittals which are not franked cannot be accepted, due to logistic reasons.

12. Final clause

Information and data contained in this manual are subject to change without notice in advance. Errors and misprints excepted.

13. Copyright

Navilock is a registered trademark and cannot be used without the written permission of its trademark owner. In no case shall it be modified or amended.

14. Third party trademarks
Marks, trademarks, products names and logos of third parties that are shown in this documentation are marks or trademarks of their respective owners.

Declaration of conformity
Products with a CE symbol fulfill the R&TTE- directives (99/5/EC), the EMC-directives (89/336/EEC) and the low voltage directives (73/23/ EEC), which were released by the EU-comission. The compliance with these directives implicates the conformity with the following European standards (in brackets you will see the equivalent international standards).

EN 300 328 V1.7.1 (2006-10)

EN 300 440-1 V1.3.1 (2001-9)

EN 300 440-2 V1.1.2 (2004-07)

EN 300 328 V1.7.1 (2006-10)

EN 301 489-1 V1.6.1(2005-09)

EN 301 489-17 V1.2.1(2002-08)

EN 301 489-19 V1.2.1 (2002-11)

EN 50371 (2002-3)

EN 60950-1:2001+A11:2004

RoHS Compliant e13 027 49 CE 0560 FC

WEEE-notice
The WEEE (Waste Electrical and Electronic Equipment)-directive, which became effective as European law on February 13th 2003, resulted in an all out change in the disposal of disused electro devices. The primarily purpose of this directive is the avoidance of electrical waste (WEEE) and at the same time the support of recycling and other forms of recycling in order to reduce waste. The WEEE-logo on the device and the package indicates that the device should not be disposed in the normal household garbage. You are responsible for taking the disused electrical and electronical devices to a respective collecting point. A separated collection and reasonable recycling of your electrical waste helps handling the natural resources more economical. Furthermore recycling of electrical waste is a contribution to keep the environment and thus also the health of men. Further information about disposal of electrical and electronical waste, recycling and the collection points are available in local organizations, waste management enterprises, in specialized trade and the producer of the device.

Compliance with RoHS
This product complies with the directive 2002/95/EC of the European parliament and the council from January 27th 2003 concerning the restricted use of dangerous substances in electrical and electronical devices (RoHS) as well as its modification.

e- and E-mark
This product complies to the EMV guidelines 2006/28/EG and ECE regulation no.10 as electronic device or sub-assembly.

Version: 06/2008