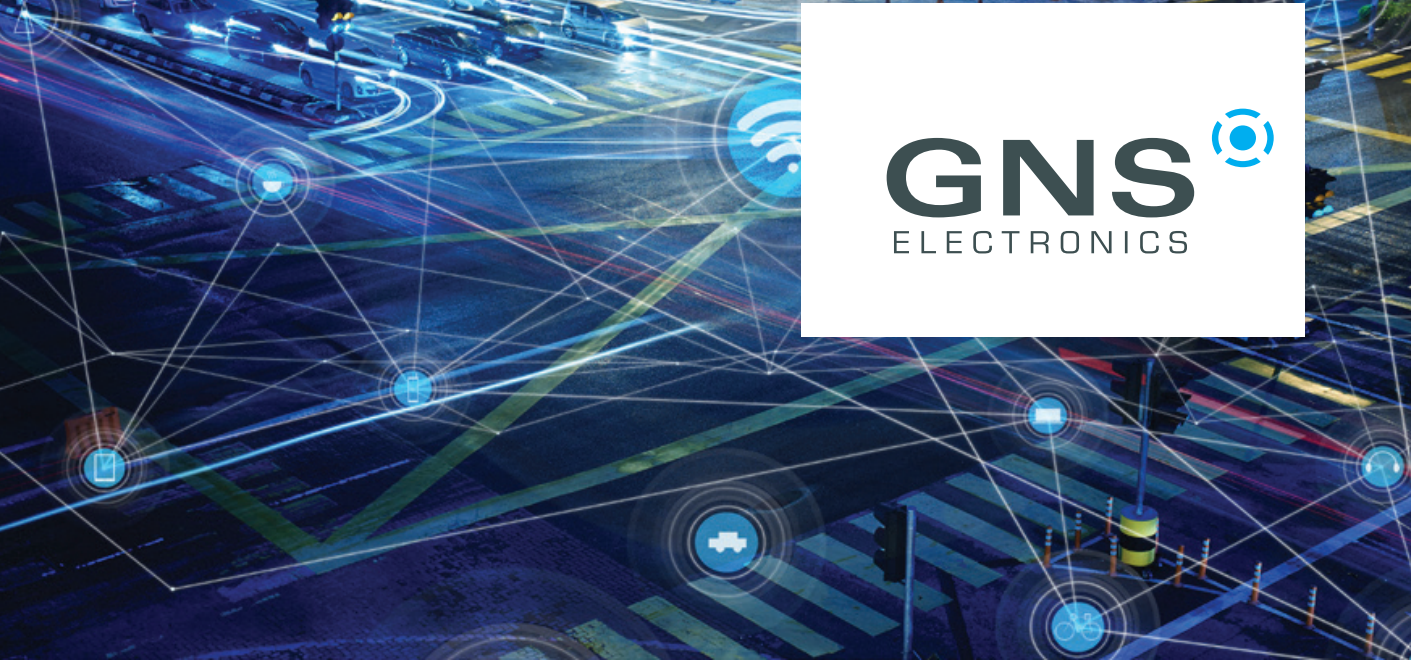


GNS ELECTRONICS

# GNS 3000

## GPS/ GALILEO/ GLONASS TRICEIVER

- 99 Channels
- Logger Function
- SD Card Support
- High Sensitivity
- Up to 10 Hours Operation Time

Bluetooth®

Made for iPhone | iPad | iPod

android

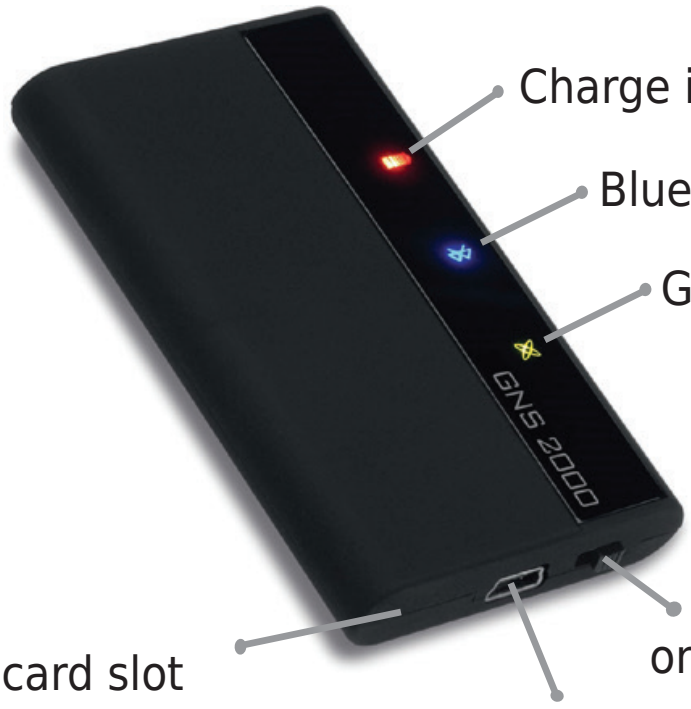
QR Code GNS 3000
Support Page

GNS ELECTRONICS

USER MANUAL

# GNS 3000

## GPS/ GALILEO/ GLONASS TRICEIVER




Charge indicator

Bluetooth status

GPS status

Micro SD card slot

on-/off-switch

USB power supply jack

Made for iPhone | iPad | iPod

android

## Dear Customer,

thank you for purchasing the *GNS 3000.* Please read the following information carefully to ensure problem-free and optimal functionality.

The *GNS 3000* is a GPS/GALILEO/GLONASS receiver with Bluetooth technology. The powerful 99-channel GNSS receiver allows simultaneous reception of GPS, GALILEO and GLONASS signals. The *GNS 3000* supports the SBAS System for accuracy improvement, all worldwide standards (WAAS, EGNOS, QZSS, MSAS, GAGAN) are supported. Due to its state of the art GNSS and Bluetooth technology the *GNS 3000* supplies Apple's **iPhone** version 3G *(IOS 3.0.1)*, **iPad** *(iPad 2),* **iPad mini**, as well as **Android™** devices *(Android 2.3 Gingerbread)*, and **other handhelds** *(Smartphones, PDAs, Notebooks)*, with highly accurate position information.

**Note:** The *GNS 3000* is **not a USB device**, the USB port can only be used for charging the battery. **Data transfer over USB port is not possible.**

## Safety notices

- Do not manually operate your GPS navigation system while driving.
- Protect the *GNS 3000* from moisture; observe the limits on operating and storage temperatures.
- This device contains a Li-Ion battery and should only be operated at temperatures between 0° and +50°C (32 and 122°F). Do not expose the *GNS 3000* to direct sunlight or heat.
- Do not open or modify. Failure to comply will result in the guarantee and warranty becoming void. There are no components inside that can be serviced by the user.
- Only connect the *GNS 3000* to the devices and connector types described in these this instructions manual.
- Be sure to respect the laws of the country you are in with respect to operation of devices whilst driving.

- Do not operate the *GNS 3000* with a damaged cord or if the unit has been dropped or damaged.
- Do not bend the cable forcibly or place a heavy object on it. This will damage the cord and may cause fire or electrical shock.
- Ensure that you're *GNS 3000* is firmly fixed in your vehicle to avoid damage.

## Package contents

- *GNS 3000* GPS/GALILEO/GLONASS Triceiver charger cable
- This instruction booklet
- Should anything be missing, please contact your dealer. Please remove protective film on the LED display before use!

## Operating buttons and LEDs

To switch on your *GNS 3000,* move the switch from left to the right. The green and blue LEDs will start flashing. Move the switch back to the left to switch off.

## Logger Function

The *GNS 3000* provides a logger with an 11 hour internal memory. The position is logged every 5 seconds. After 11 hours of independent position data collection the data is overwritten automatically.
To turn on the logger function, please use the switch as follows: Move the switch as follows within one second. ON-OFF-ON. The green GPS LED will flash 3 times to confirm that the logger function is activated. During operation the activity of the logger is indicated by the green LED turning off briefly every second while a GPS fix is available. To deactivate the logger function, switch off the device as usual. Using the GNS tool, *GNS 3000* Track the logged data can be transferred to your computer and saved in NMEA- or KML-(Google™ Earth) format. *GNS 3000* Track can be downloaded from our webpage, please pay attention to the listed compatibility information.

**Note:** Apple Mac Books can use the *GNS 3000 Bluetooth* GPS receiver as well. The log data stored in the *GNS 3000* can be read out and displayed on Mac Books with a software e.g. „MyTracks4Mac“ (see https://www.mytracks4mac.info/index.php/de/).

**The log data always will be transmitted via a Bluetooth connection, the USB port has only a charging and power supply function.**

## LED indicators and their meanings

| | red charging light | Blue Bluetooth status | Green GPS status |
|---|---|---|---|
| **off** | Normal battery operation | *GNS 3000 plus* is off | *GNS 3000* is off |
| **on** | Charger cable attached, battery fully charged | Bluetooth connection established | GPS position available |
| **blinking** | Charger cable attached, battery charging | No Bluetooth connection established | GPS position not (yet) available |
| **fast blinking** | Battery almost empty, device switching off in about 10 min. | - | - |
| **flashes 3 times** | - | - | Logger is activated |
| **on with short interruptions** | - | - | GPS position is available and position data is recorded (logged) |

## Charging

The *GNS 3000* is equipped with a Li-Ion battery. The operation time is over 10 hours. Charging: Charging time is approximately 3.5 hours (empty battery). Connect the *GNS 3000* with the supplied charging cable to a USB port of your choice. This can be, for example, the USB port of a PC, or any external USB charger like a cigarette lighter charger, for example. The red charge indicator light will blinking to indicate charging. It remains lit when charging is complete.

## Installation and Bluetooth mode

Position the *GNS 3000* so that it has an unobstructed ,,view" of the sky. (no metal parts between sky and device). Secure the receiver to avoid slipping. Switch on the *GNS 3000*. Activate the Bluetooth mode in your Apple- / Android device / PDA / PC and initiate a search for the *GNS 3000* with your Apple / Android / PDA / Handheld / Tablet / PC devices Bluetooth manager. This is described in the manual for your device. When you are asked for the PIN to establish the link, enter ,,0000". Start your navigation software and select the appropriate interface under the GPS settings if required. The *GNS 3000* can be connected with up to 3 Android devices or SPP (serial port profile) devices simultaneously. For Apple (IOS) devices only one exclusive connection at the same time is possible.

## Special feature for Apple devices:

After the first connection with an Apple device, the connection will be automatically re-established when restarting the *GNS 3000*. This automatic connection establishment will be interrupted when you connect your *GNS 3000* with another device intermediately.

## GPS data transfer to Android devices:

The *GNS 3000* can also be used with Android devices. The Android Operating System does not support external Bluetooth GPS receivers by itself, but when you use an external freeware app such as „Bluetooth GPS" (available in every App Store) you can pass the data from the *GNS 3000* GPS receiver to your Android device via Bluetooth.

After you have installed the „Bluetooth GPS“ app, set up a partnership between the *GNS 3000* and your Android device. Start the „Bluetooth GPS“ app and select the GNS 3000 receiver. Then choose the „Enable Mock GPS Provider“ option and make the connection by pressing the „Connect“ button. Your Android device will now receive the GPS data from the *GNS 3000* via Bluetooth.

**Dear Customer,**

for more information and guidance on the Bluetooth installation on your Apple or Android device, please refer to our Installation Tutorial on https://www.gns-electronics.de/support-gns3000/

## Operation over car ignition

For fixed and unfixed installation and operation in motor vehicles with 12-24V power supply. Due to the power management features described below the *GNS 3000* is prepared for fixed installation in motor vehicles. If your vehicle is equipped with a cigarette lighter socket which is connected to the car ignition and the *GNS 3000* is connected via USB charging adapter and the included USB cable, the *GNS 3000* will turn on automatically when the car ignition is activated and will shut down automatically 15 minutes after switching off the car ignition (on/off switch of the *GNS 3000* has to be in the position „on“).

## Power management

**1.** Without external power supply (cable/car ignition off) the *GNS 3000* will shut down automatically after 15 minutes without a Bluetooth connection to reduce battery consumption

**2.** The *GNS 3000* can be turned on again easily using the on/off switch or by powering the device with an external charging cable.

## Reset

For technical reasons the *GNS 3000* is not equipped with a RESET switch. If you should experience an unexpected malfunction - e.g. no data is sent or the partner device does not recognize the *GNS 3000* - simply plug in the external charging cable to perform a full RESET. An existing Bluetooth connection should be terminated first.

## Technical data

| General | | |
|---|---|---|
| **Weight** | GNS 3000 only | xxg |
| **Dimensions** | 79.1mm x 45.3mm x 11.3mm | |
| **Ambient temperatures** | Storage | -10…+50°C (14…122°F) |
| | Operation | 0... +50°C (32…122°F) |
| **Power supply and consumption** | Charging & operation | 5.0V DC (+5%) 500mA |
| | Via car adapter | 12..24V DC 10...300mA |
| **Battery operating time** | > 10 h | |
| **Battery charging time** | 0-90% ca. 3.5h | |
| **Connectors** | Supply | Mini-USB socket |
| **Data interface** | Via Bluetooth | Multi connection only for Android and SPP devices |
| **Bluetooth** | | |
| Class2 Bluetooth V5.0 | | |
| **Range** | 10m | |
| **Chip set** | MediaTek MT 3333 99-channel GPS / GALILEO / GLONASS receiver | |
| **GPS** | | |
| **GPS** | SBAS (default) [WAAS, EGNOS, QZSS, MSAS, GAGAN] | |
| **Typical start times** | Cold start<br>Warm start<br>Hot start | 35 s<br>33 s<br>< 1 s |

## Compliance

The declaration of conformity is available on request from the manufacturer.

CE: The *GNS 3000* complies with the related R&TTE directives and the EMC directives as issued by the EU comission.

FCC Compilance: 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.

MIC certification for Japanese Radio Law: This device conforms with the Radio Equipment specified in Article 2-1-19 of the Certification Ordinance.

R&TTE Bluetooth EMC: This device also complies with EN 62479:2010; EN 60950-1:2006+A1+A11+A12; EN 301 489-1 V1.9.2; EN 301 489-17 V2.1.1; EN 300 440-2 V1.4.1; EN 300 328 V1.7.1 and is listed under Bluetooth.

Qualified Products:
Although the *GNS 3000* conforms to the current strict guidelines and norms it cannot be guaranteed that other devices will not be affected by interference.

## Safety notice, Bluetooth operation

FCC Warning Statement

NOTE: 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 instructions, may cause harmful interference to radio communications. 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

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Bluetooth should not be used in the proximity of the following devices or in the following locations: Medicinal devices, pacemakers, automatic control devices, automatic doors, fire alarms, aeroplanes, public transport. If you are unsure if the operation of wireless devices is permitted in certain environments, please enquire before operating the device.

## WEEE declaration

This device is labelled in accordance with the European directive 2012/19/EU concerning waste electrical and electronic equipment - WEEE. The directive sets down a Europe-wide framework for the return and recycling of end-of-life devices.

WEEE reg. no. DE 6443033

## Warranty notice

The product is to be repaired at no cost within the legal warranty period of 24 months assuming that there is no damage by third-party interference, moisture, drop, or other improper handling. The internal Li-Ion battery has a warranty period of 6 months and is excluded from the 24 months warranty!

## Technical Support

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,,for iPhone“ means that an electronic accessory has been designed to connect specifically to iPhone and has been certified by the developer to meet Apple per- formance standards. Apple is not responsible for the operation of this device or its compliance with safety and regulatory standards. Android is a trademark of Google Inc.

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FCC ID: XXXXXXXXXXXX