



## User manual GeoChaser Guard/ ECO (RRS)



### Important information

Before you start installation and commissioning the GeoChaser, Read these instructions carefully. Keep this document for future reference.



For all manuals and information visit  
<http://12trace.nl/track-trace/downloads>



## 1. General

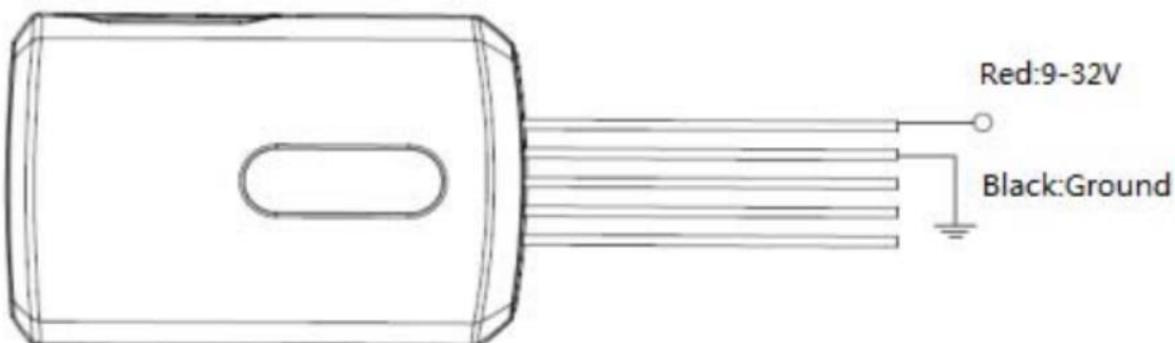
The GeoChaser is a water resistant GPS tracker designed for applications requiring low current drain such as motorcycles, cars and boats. Its built-in GPS receiver has superior sensitivity and fast time to first fix. Its quad band GPRS/GSM subsystem supports 850/900/1800/1900 MHz allowing the GMT200's location to be monitored in real time or periodically tracked by a backend server and mobile devices. Its built-in 3-axis accelerometer allows motion detection and extends battery life through sophisticated power management algorithms. Further reduction in current drain is achieved by configuring alternative recharge schemes for the internal battery. The GeoChaser supports a wide variety of reports including emergency, geo-fence boundary crossings, low battery and scheduled GPS position.

- Your GeoChaser uses the Global Positioning System (GPS). The GPS system is maintained by the US government. Changes in the availability and accuracy of the system may adversely affect the operation of the GeoChaser. 12Trace cannot take responsibility for the reliability, availability and accuracy of the GPS system due to third parties. You can find more information in the disclaimer of 12Trace.
- High buildings and metal structures can adversely affect the determination of the position by the GeoChaser.

## 2. Interface Definition:

There are 5 wires on the GeoChaser Eco/ Guard User cable which contain the connection for power, ignition input, digital input etc. The user cable's definition is shown in following table.

Colour	Description	Comment
Red	External power	External DC power input, 9-32 V
Black	Ground	System ground connect to the vehicle's frame directly
White	Ignition	Ignition input, positive trigger
Blue	Digital input	Digital input, negative trigger
Yellow	Digital output	Digital output, low side 150mA max with latch



### 3. GeoChaser activation

To activate the GeoChaser, it must be registered.

#### 3.1 New user

New users must first create an account on [www.12trace.nl](http://www.12trace.nl). Go to the site, click on the 'login' button and then on 'create account'. You will be asked to enter a number of details. You need the product code here. The product code can be found on the bottom of the GeoChaser. To activate your account you will receive an e-mail message from [support@12trace.nl](mailto:support@12trace.nl) at the e-mail address you provided, follow the instructions in this e-mail. Your account and GeoChaser are now activated.

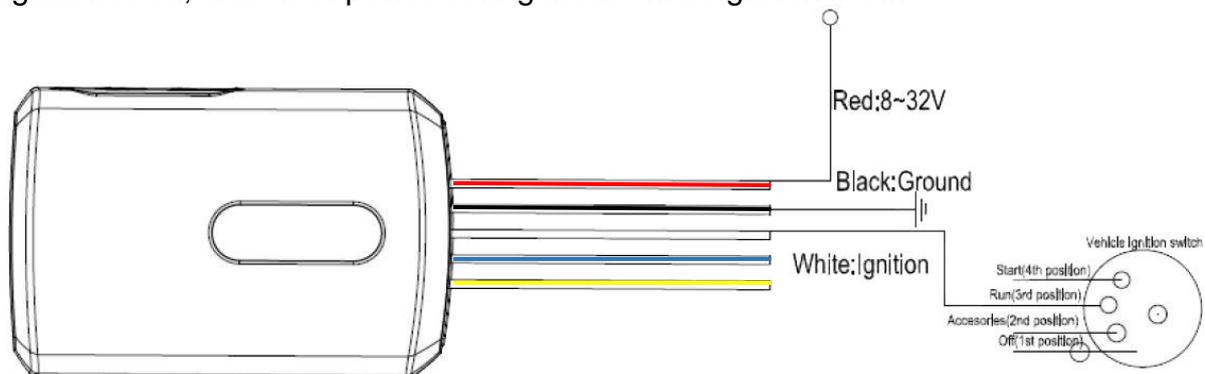
Note: The GeoChaser is equipped with a SIM card. You cannot change the PIN code of the SIM card. It is not possible to place another SIM card, which leads to a malfunction of the device.

#### 3.2 Do you already have an account?

If you already have a 12Trace account, you can add the GeoChaser to your account. Log in to your account with the 'log in' button and click on 'Add GeoChaser', and fill in the requested data. Your GeoChaser is now activated.

### 4. Typical Ignition Detection (Ride registration/ kilometer registration)

The white wire is used for ignition detection. It is strongly recommended to connect this wire to ignition key "RUN" position as shown up. An alternative to connecting to the ignition switch is to find a non-permanent power source that is only available when the vehicle is running. For example the power source for the FM radio. Ignition signal can be configured to start transmitting information to backend server when ignition is on; and enter power saving mode when ignition is off.



### 5. Installation of your GeoChaser

For optimal operation of your GPS tracking system, it is important that the GeoChaser is NOT completely enclosed by metal or metal-containing glass. This can seriously disturb or even prevent the system from functioning. In general, plastic and non-tinted glass are no obstacle to receiving a GPS signal. The GPS antenna is built into the GeoChaser at the top under status LED lights.



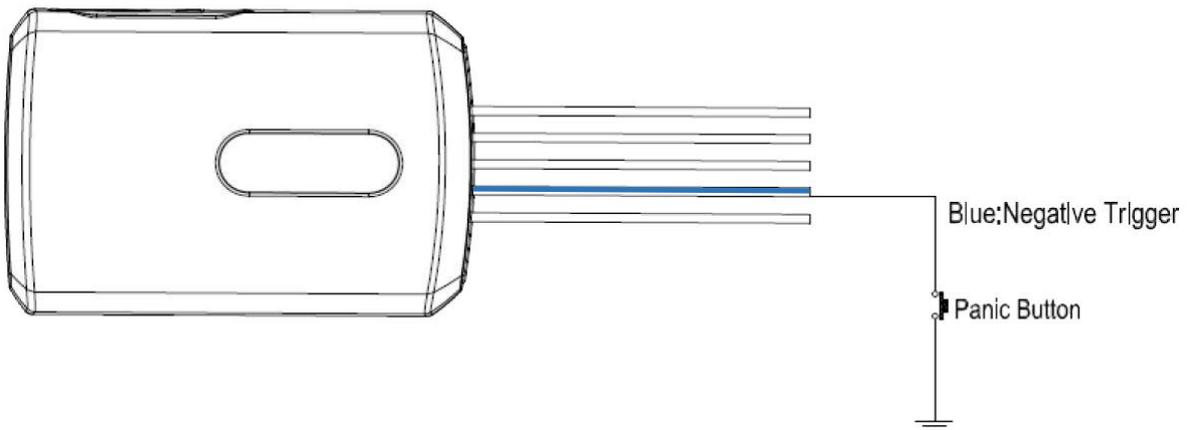
## LED status

LED	led status	Device status
GSM	Fast flashing	searching GSM network
	Slow flashing	registered to GSM network
GPS	off	GPS off
	Slow flashing	no data
	Fast flashing	searching GPS info
	on	GPS info found
PWR	off	No external power
	Slow flashing	No external power and backup battery voltage is lower than 3.35V
	Fast flashing	Backup battery is charging
	on	Backup battery is fully charged

## 6. Additional connections (optional)

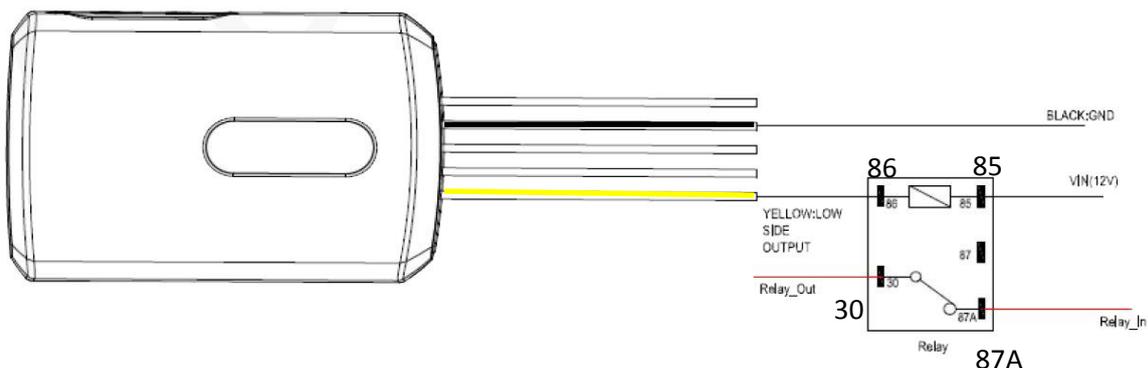
### 6.1 Digital Input

There is a general digital input, this wire is blue. This input is "active" when it is switched to the ground. You can use this input for example. use for a panic button or a float and for connecting the optional private / business switch.



### 6.2 Digital output

The digital output is available via the yellow wire. This output switches to ground with a maximum control current of 0.15A. If a higher current has to be switched, this can be done as shown in the diagram below with an external relay.



## 7. Instellen van de GeoChaser

After logging in to your account the website 12Trace, you will receive an overview of the GeoLockers and GeoChasers known to your account. After selecting the device you will enter the main screen of your device. From here you can change settings, see what the current position is and what the routes you have traveled, get the current location and top up your credit balance.

**Menu**

- Log out
- Account
- Customers
- Users
- Keyholder
- Search in database
- Output Overview
- Devices Overview
  - Gmt200 Eco
    - Settings

**GeoChaser Eco**

**Owner**

Name: Arjan

Address

Tel.

**Data**

Name: Gmt200 Eco

Note

Product code: 868850020058433

Product version: v1.5

Software version: 01V00\*

**Location**

Address (approx.): Oosterkade, 9725 Groningen, Nederland

GPS Location: 53.216976, 6.578522 Perfect precision

**Status**

Last Contact: 10-07-2018 08:12:06

Last Position: 10-07-2018 08:12:03

Backup Battery: 100.00 %

External Power: 0.0 Volt

Credit: 3246 Credits European Prepaid 150, valid until 01-03-2020

**Usage administration**

Machine hours: 279:50:00

Tripmeter: 279:50:00

Milage: 13754.0

Next report: no service available

Last Report: no service available

Depending on the settings and type, different buttons are hidden or grayed out depending on whether the button is relevant or not.

Click on **Settings**

In the institutions we distinguish 4 institutions, namely:

- Timetrace: This is the interval between 2 place GPS positions
- Geo Motion: This is the interval of location and dispatch. It is also possible to also respond to a change of course. When the km administration option is activated, the other settings are defined here.

- Sample interval: This is the interval at which positions are stored.
- Transmit after: This is the interval with which locations will be sent to 12Trace.
- Heading filter: Send location when the vehicle has changed direction
- Milage adm. : To use the milage administration, it needs to be activated. With this the settings for Geomotion are set with a pre-defined value.



- Geo Fence: The setting switches on a virtual fence. With the button next to it you can set the position of the fence and the range of the fence.
- Alarm: Here you can switch various alarms on and off. There are also alarms that are always on because they guarantee the continuity of the device.  
Automatic check: This specifies that 12Trace must monitor the GeoChaser on missed communications, you will receive these notifications by e-mail.

Outside of the basic settings there are also settings with which you can further optimize the functioning of your GeoChaser. Here we find the following settings:

- External connections: Your GeoChaser has possibilities to communicate with peripherals. You can make various settings here.
- Product information: Here you can see some basic information and you can delete the history of your GeoChaser.

*Note: if you change a setting and press 'Save', a pink clock will appear after the changed setting. This means that the setting has not yet been sent to the GeoChaser. This will happen the next time the GeoChaser connects to the 12Trace website (for example with a location update). With the help of the [retrieve current location] button, the changed settings become active immediately.*



### **8. Milage administration (only available for the GeoChaser Eco)**

To keep track of the milage administration, it is important that the Milage administration setting in the basic settings Geo Motion Live Tracking is checked. These settings are essential for the accurate tracking of the odometer readings. When this option is checked, the Rides overview button on the main screen changes to "km administration". After clicking this button, the Mileage administration screen appears.

Locations become visible when you open the milage administration screen.

Note: this may take a few minutes because the location information is retrieved from google maps.

Default journeys are business with a driver from the last trip. In the private column you can lose the share of private kilometers of the business trip. It is also possible to place a comment on the trip and to change the driver. Do not forget to save the settings. The saved data can be exported to Excel (CSV) for processing or as an attachment to your tax return.

**Attention:** default shows only the last week. You can change this period with both dates at the top of this screen, then click the "Show rides" button.



In the menu “milage and hour values” correction can be made and the odometer readings can be corrected to the counter of your vehicle. For a correct administration, the tax authorities state that this happens at least once a month.

### 8.1 Milage administration business trip/ privately trip switch (only available for the GeoChaser Eco)

Install the private / business switch (optional) if you want to indicate the character of the journey via a switch in the vehicle. By default, every ride has a business character. When the private / business switch is activated, the current or coming ride is given a private character. The indication of a character per trip can also be done via your online account, so the private / business switch is not necessary.

### 8.2 Milage administration business/ privately or combination trip (only available for the GeoChaser Eco)

Within the kilometer administration, a business trip is indicated with a **Z** button and a private ride with the **P** button. By clicking here you can change the nature of the trip. It may happen that part of a ride is private, you can enter the number of private kilometers driven within a ride, so this ride is indicated as a combination ride **C**.

22-10-2016		Vertrek		Aankomst		Her-berekenen	Opslaan
Nr	Zak. / Prive Duur	Tijd Km stand	Locatie	Tijd Km stand	Locatie	Bestuurder	Opmerkingen
3	29.9 / 1.0 00:25:52	<b>C</b> 18:19 55961.2	De Voorwaarts 55, 7321 Apeldoorn, Nederland	18:45 55992.1	Koerbergseweg 4l, 8181 LL Heerde, Nederland	Arjan	
2	0.0 / 4.0 00:10:34	<b>P</b> 17:21 55957.2	Stadskade 260, 7311 XV Apeldoorn, Nederland	17:32 55961.2	De Voorwaarts 55, 7321 Apeldoorn, Nederland	Arjan	
1	32.4 / 0.0 00:37:22	<b>Z</b> 13:23 55924.8	Koerbergseweg 4l, 8181 LL Heerde, Nederland	14:00 55957.2	Stadskade 260, 7311 XV Apeldoorn, Nederland	Arjan	
<b>Dagtotaal</b>		<b>Totale tijd 01:15:20</b>		<b>Totale afstand 67.3 km</b>			
5 ritten				Prive 5.0 km, Zakelijk 62.3 km			

Apart from the automated administration by 12Trace, it remains responsible for which trips are private, or business-like with private part for the user. Also the detours and the reason for it is up to the user and can be noted in the comments column. The tax authorities will ask for verification of the locations and proof of the address designated as business.



## 9. Hours administration (only available for the GeoChaser Eco)

Uren administratie		Uren overzicht
Machine uren	180:29:16	
Dagteller	62:07:11	Reset dagteller
Volgende melding	Geen service meldingen beschikbaar	Melding ingeven
Laatste Melding	Geen service meldingen beschikbaar	

Hours administration is registering the start and end times of the machine. The trip meter is a machine hour counter which can be manually set to the "0" position by click the button: "reset tripmeter". The registered times are clearly displayed in a clear state per week, month, last year or a selected period. A complete hours registration system that can easily be exported to Excel.

It is also possible to enter a report. Click the Enter notification button

- Limits: enter the number of hours until the next interval
- Notification text: enter the message you will receive when you reach the limit of the entered value
- E-mail address: enter an e-mail address you'd like to use for notifications and alarms.

Machine urenteller			
Nieuwe melding ingeven			
<input type="text" value="0:13:05"/>	<input type="text" value="Onderhoud gewenst"/>	<input type="text" value=""/>	<input type="button" value="Voeg toe"/>
Opgeslagen meldingen			
Geen service meldingen beschikbaar			

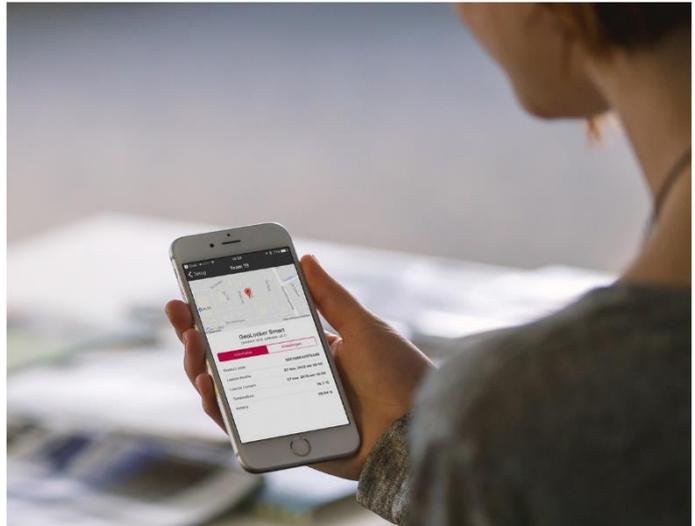
*12Trace is bound by the Personal Data Protection Act. She endorses the Code of Conduct for Processing of Personal Data. 12Trace will work carefully when processing your personal data. 12Trace uses only those data that are necessary for optimal service. Insofar as this does not arise from the law or from obligations that 12Trace has entered into with you, no personal data will be provided to third parties without your consent.*



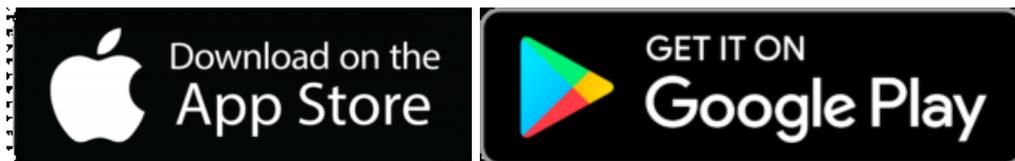
## Use the 12Trace App.

Once you have installed a 12Trace GPS Track and Trace system, you can find, track and monitor all your objects with this app. You can log in and view your details wherever you are.

In addition, the app has various options for switching on / off your Geofence. Handy !! The app also provides various information such as machine running administration and temperature.



Download the 12Trace App here



Keep the next information :



You can write down your Tracker data below, for your administration.

Name of your Tracker

Username

Password

Place your product sticker here:

**Productcode:**  
**35955103188529** 

To register the productcode is needed.

Serial no. 00000006.00521

Manufactured in The Netherlands 

12Trace.nl | Oosterkade 5 9711 RS Groningen | 050 313 03 16 | support@12Trace.nl



### Specifications

Dimensions	70mm*46mm*17.5mm
Weight	62g
Backup Battery	Li-Polymer 650 mAh
Standby Time	Without reporting: 140 hours 5 minutes reporting: 80 hours 10 minutes reporting: 90 hours
Water Resistant	PX6 compliant
Working Voltage	9V to 32V DC
working Temperature	-20°C ~ +80°C (without battery) -40°C ~ +85°C for storage (without battery)

#### FCC Warning:

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's 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 can not be used, and (2) this device must accept any interference received, including interference that may cause undesired operation.

#### FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment .This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.





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