User manual GeoChaser Control

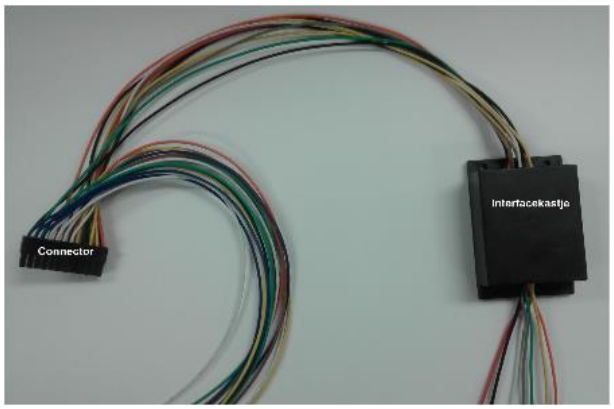
1.Introduction

The GeoControle is a GPS tracking system designed for vehicle tracking. The device has superior reception sensitivity, fast positioning and supports four-band GSM frequencies 850/900/1800/1900, the location can be viewed in real time on your personal 12Trace page. The GeoControle has several inputs / outputs that can be used for the control or control of external devices. The GeoControls communicate via the GPRS / GSM network and can alert you when a virtual fence, low back-up battery or shortage of communication credit is exceeded.

• Your GeoControle uses the Global Positioning System (GPS). The GPS system is maintained by the US government. Changes in the availability and accuracy of the system can adversely affect the operation of the GeoControl. 12Trace cannot take responsibility for the reliability, availability and accuracy of the GPS system, as a result of third parties. You will find more information in the disclaimer of 12Trace.

• Tall buildings and metal structures can adversely affect the determination of the position by the GeoControl.

2. Interface Definities:



The connector with wires must be used to connect the GeoControl. For the basic connections you can use the wires that come out of the pre-assembled interface box.

The definition is shown in the following table.

Color	Description	Note
Red	Battery voltage	External supply voltage 8-32V
Black	Mass	Connect to the vehicle's ground
Orange	Contact input	Connect to contact-switched supply voltage
Green	Release	Release Start Lock
Yellow	Ibutton indication	Connect to the Yellow wire to the Ibutton reader
Gray	Ibutton Signal	Connect to the Gray wire on the Ibutton reader
White	Ibutton mass	Connect to the White wire on the Ibutton reader

2.1 Power supply and contact detection

The red wire is plus 12 / 24V and the black wire is the minus or ground. The orange wire is for the contact detection. This detection is necessary to activate a ride and ensures a lower energy consumption once the vehicle is switched off. Connect the orange wire to a socket that has voltage only when the ignition switch of the vehicle is on.

3. Ibutton interface

An Ibutton is used for driver identification and/ or immobilizer. This Ibutton is considered a unique key and must be kept on the Ibutton holder. With a correct reading, a red light will be visible in the reader a number of times.

Color	Description	Note
Gray		Connect to gray wire interface box
White	contact	Connect to white wire interface box
Brown	+led	Connect to ***red*** wire interface box
Yellow	- led	Connect to Yellow wire interface box
Green	NC	Do not connect the green wire!

To link drivers to keys, use the 'Key holders' item in the navigation menu. Here you can enter new keys and link drivers to them. Also unknown keys used are visible here, after which a new driver can be added.

Voorbeeld code: 89000000FBC52B01

You can read the Ibutton code from the Ibutton as shown in the picture.

4. Account

Your Geocontrol must still be activated by logging in to an account. The SIM card is also activated when registering. This can take up to half an hour, which is why we recommend activating the account before installation. The activation procedure distinguishes between new and existing users.

4.1 New user

New users must first create an account on 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 for this. The product code can be found on the bottom of the GeoControle.

To activate your account you will receive an e-mail from support@12trace.nl at the e-mail address you specified, follow the instructions in this e-mail. Your account and GeoControle are now activated.

Note: The GeoControle is equipped with a SIM card. You cannot change the PIN code of the SIM card. It is not possible to insert a different SIM card, this leads to device failure.

4.2 Existing user

If you already have a 12Trace account, you can add the GeoControle to your account. Log in to your account with the "log in" button and then click on "Add GeoControl", and enter the requested information. Your GeoControle is now activated.

5. Placing your GeoControl

For the optimal functioning of your GPS tracking system, it is important that the GeoControl is NOT completely enclosed by metal or metal-containing glass. This may seriously disturb or even prevent the operation of the system. In general, plastic and tinted glass are no obstacle to receiving a GPS signal. The GPS antenna and GSM antenna is built into the GeoControle, but also an external antenna for both GPS and GSM are available in the webshop. The GeoControle has mounting holes on both sides for mounting.

LED	led status	Device status
GSM	fast flashing	Network search
	flash slowly	Connected
GPS	off	GPS off
	flash slowly	No data
	fast flashing	GPS search
	on	Found position
PWR	off	No external power connection
	flash slowly	External power low
	fast flashing	Charge the battery
	on	Battery full

6. Extra connections

Connector connections can be connected according to the table below.

6.1 Digitale Input

There is a general digital input on input 8, 10 and 12 and are white in color. This input can be e.g. use for a panic button or a floatsensor. Input 12 has an interrupt input and can be used for an alarm input. The other inputs only give status.

6.2 Analogue Inputs

The Green wires are the analogue inputs. This can measure a DC voltage of 0 to 2.7V.

Index	Color of User cable	Description	Comment
1	Black	Analog Ground	For microphone and analog inputs
2	Blue	Microphone Input	MIC+
3	Green	Analog Input 1 (Input range: 0 ~ 2.7V)	For resistance-type sensors
4	Blue	Speaker Output	Differential, Positive
5	Green	Analog Input 2	For capacitance-type sensors
6	Blue	Speaker Output	Differential, Negative
7	Green	Analog Input 3	For capacitance-type or resistance-type sensors
8	White	Digital Input 4	Negative Trigger
9	Orange	Receive Data (UART2, RS232)	Connect to TXD of external device
10	White	Digital Input 3	Positive Trigger, With interrupt
11	Orange/Gray	Transmit Data (UART2, RS232)	Connect to RXD of external device
12	White	Digital Input 2	Negative Trigger, with interrupt. Recommended for panic button
13	Orange/Brown	DTR	Data Terminal Ready. For waking up UART1 & UART2
14	White	Digital Input 1 (ACC Detect)	Positive Trigger, fixed for ignition detect
15	Orange	Receive Data (UART1, RS232)	Connect to TXD of external device
16	Yellow	Digital Output 4	Negative Trigger
17	Orange/Gray	Transmit Data (UART1, RS232)	Connect to RXD of external device
18	Black	Ground	For 5V output and UART
19	Purple	5V Output	VOUT
20	Yellow	Digital Output 3	Negative Trigger
21	Yellow	Digital Output 1	Negative Trigger
22	Yellow	Digital Output 2	Negative Trigger
23	Black	Ground	Power Ground
24	Red	Power (+8V ~ 32V)	Power (VIN)

6.3 Digitaleuitgangen

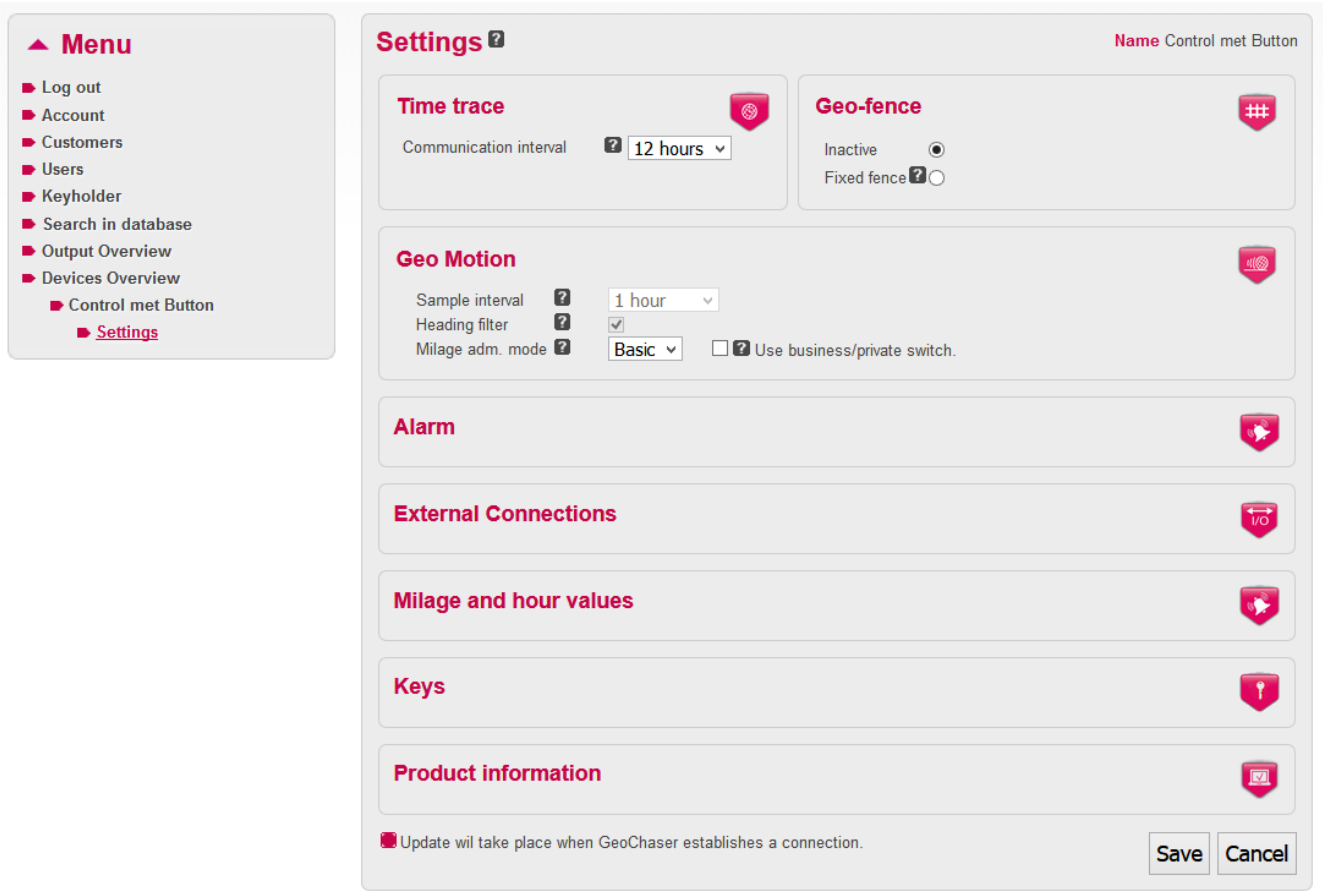
The digital outputs are the yellow wires. This output can e.g. control a siren or horn with a maximum control current of 200mA. The output switches to the ground.

7. Set up the GeoControl

After logging in and logging in to the website, you will get an overview of the GeoLockers, GeoChasers and GeoControles known on 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 routes you have traveled, request the current location and top up your credit.

Depending on the settings, different buttons are hidden or expanded depending on whether the button is relevant or not

Click on [settings]



At the institutions we distinguish 7 institutions, namely:

- **Timetrace**: This is the interval between 2 locations.
- **Geo Fence**: The setting enables a virtual fence. With the button next to it you can set where this fence should be and how large it should be.
- **Geo Motion**: This is the interval of positioning and sending. Sending locations at the same time results in savings on the credits. It is also possible to also respond to a change of course. When the km administration option is enabled, the settings are predefined.
- **Alarm**: Here you can activate and deactivate various alarms. There are also alarms that are always on because they guarantee the continuity of the device.

External connections: Your GeoControl has options for communicating with peripheral equipment. Various settings can be made for this here.

Milage and hour values: change mileage and working hours

Keys: Here you can enter the keys for the immobilizer.

Product information: Here you see some basic data and you can delete the history of your GeoControl.

8. Km administration

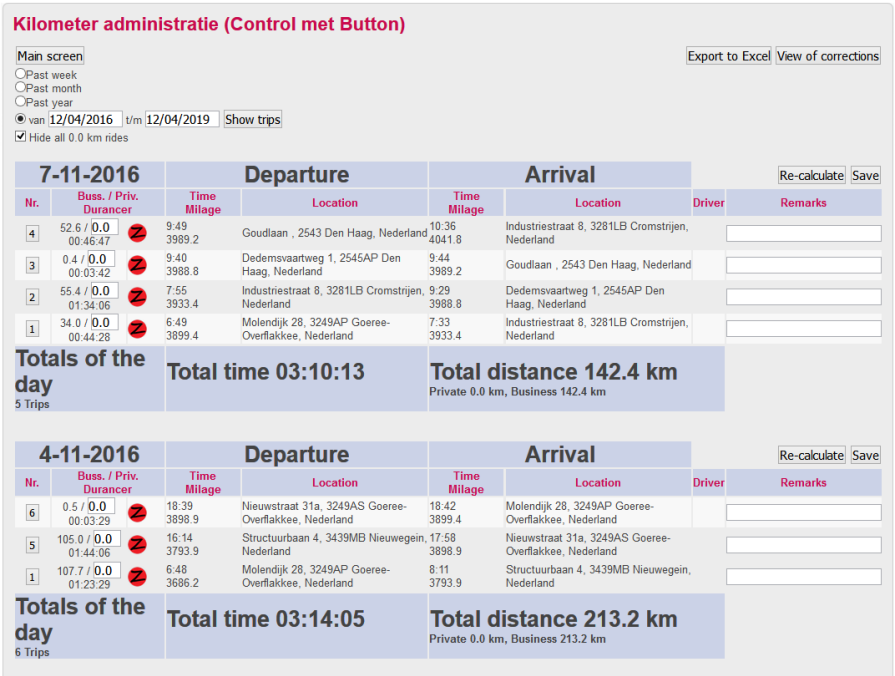
To keep track of the kilometer administration, it is important that the km administration setting in the basic Geo Motion Live Tracking settings is checked. These settings are essential for the accurate tracking of the odometer readings.

For the Kilometer settings, a choice can be made from Basic or detailed. Both are equally accurate, but the route is shown in more detail in detail, but this setting costs considerably more credits.

When this option is checked, the "Trip overview" button on the main screen changes to "km administration". After clicking this button, the km administration screen appears.

When calling the screen, locations will be entered 1 by 1. Note: this may take a few minutes because the locations are retrieved from Google maps. By default, journeys are classified as business with a driver from the last journey. When using board recognition, the identified driver will be shown. It is also possible to comment on the journey and change the driver. You must then save the data with the button at the top in “Save data”. The saved data can be exported to Excel (csv) for processing or as an attachment to your tax return.

Note: By default, only the last week is shown. You can change this period with the two dates at the top of this screen and then with the "Show trips" button. With the "Enter correction" button you can adjust the km reading to the counter in your vehicle. For a correct administration , the tax authorities state that this is done at least once a month

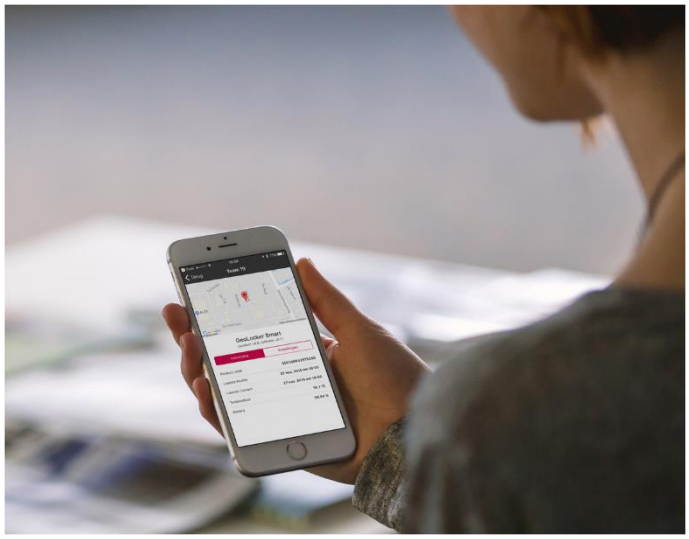


Apart from the automated administration by 12Trace, account remains for which journeys are private or business with private part for the user. Also the detour and the reason for it is up to the user and can be noted in the comments column. The tax authorities will ask for the locations and proof of the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

The free 12Trace App.

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

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



Download de 12Trace App

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