

CarPro-Tec® GPS Plus

07/05/2019 (12)



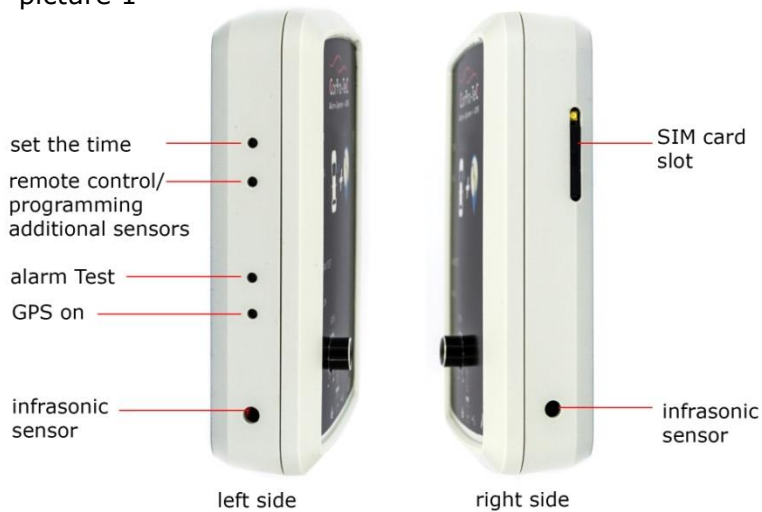
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1. View / Operating elements CarPro-Tec® GPS

side views

picture 1



picture 2



2. Power on and off

Note: The CarPro-Tec® GPS housing has **2 components/modules, an alarm module (infrasound module) and a GPS / GSM module**. The alarm and GPS modules are switched on and off separately. Both components have separate functions. To maintain all the functions of the CarPro-Tec® GPS, both components must work together and be powered up.

Turn on CarPro-Tec® GPS / Alarm Module

After the power supply is established, the alarm module must be turned on. To do this, slide the right dip switch no. 3 (see figure 2) downwards (ON).

The middle switch no. 2 activates the beep, which switches on / off during beep and beeps when the sensor is triggered. This feature is useful to set the required sensitivity. Whenever the CarPro-Tec® GPS infrasonic sensor detects vehicle opening, the beep sounds for half a second.

Please note that there is always a waiting period of at least 10 seconds between the test releases.

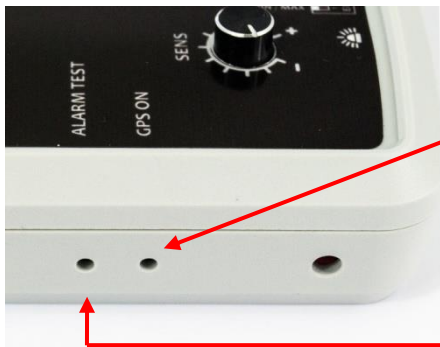
The left switch # 1 is for sensitivity adjustment: house (switch down) and car (switch up). When using the CarPro-Tec® GPS infrasound sensor in large rooms, a higher sensitivity is required.

CarPro-Tec® GPS off / alarm module

To turn off the alarm module, simply turn switch 3 back on.
To deactivate the GPS module as well, unplug the mains plug from the USB socket and hold down the buttons "GPS On" and "Alarm Test" for at least 3 seconds.

Activation of the GPS module

The GPS module starts automatically when power is connected. If you want to start it already without power connection, press the side button "GPS on" for one second.



- Slide the Dipp switch 3 downwards (see above picture 2)
- "GPS ON" - Switch the GPS function on the left side by pressing a button with the help of a pointed object -> right green LED turns on (see front section 2)

Alarm test -> for triggering a test alarm to check the alarm info forwarding

3. Front view of CarPro-Tec® GPS - LEDs

view



LED - area

Explanation of all LEDs



Power-LED=device in operation



Ready for learning process



Learning process succesful = orange LED goes out



armed



Triggering a sensor => left red LED flashes

special explanation of the right green LED



LED	green flashes short time all 3 seconds	green flashes twice all 3 seconds	Green flashes long time all 3 seconds (1 sec. On, 3 sec. Off)	Green flashes constantly
explanation	The device is connected with GSM-network	The device is connected with GPRS-network	The connection to the GSM-network is established	SIM card was not recognized

blue LED on the front view (GPS-module)



- constant flashing= GPS-module will be powered by 5V
- flashing = GPS-module without ext. Power supply and searching for GPS function test, temporarily disconnect the power and operate the unit on a battery-powered basis -> LED must flash when searching for GPS)

4. Assembly of the CarPro-Tec® GPS

A suitable mounting location for the CarPro-Tec® GPS is: a protected location in the vehicle near the power supply

1. Under the passenger seat
2. In the trunk
3. In the glove compartment
4. Place the CarProTec ®flat (with the LED area pointing upwards) so that the connection to GPS satellites can be made optimally

Recommendation: Connection of the CarPro-Tec® GPS to car power supply via the cigarette lighter by means of USB charger in the vehicle (optimally in the trunk)
 Alternatively, the CarPro-Tec® GPS can be powered via the [12 to 5-volt](#) converter available in our shop if you do not want to permanently charge the cigarette lighter.

The input voltage must be 5V. Please note that on many vehicles the cigarette lighter socket is switched off when the key is removed. In this case, the CarPro-Tec® GPS is powered by the internal battery for about 7 days. To **bridge longer lifetimes**, an optional power bank can provide a problem-free power supply of several weeks.
 In general, the CarPro-Tec® GPS should be placed so that it cannot be easily detected.

The arming LED should be routed so that it is visible from the outside. The arming LED including 5 m cable is included with the accessories.

The **siren** should be placed away from the CarPro-Tec® GPS (use of the siren extension cable) because the offender will usually first disable the siren. If you want a silent alarm, do not connect the siren to the CarPro-Tec® GPS.

5. Inserting and handling the SIM card

By pressing with a pointed object on the yellow button on the right side of the SIM slot of the CarPro-Tec® GPS you can open the SIM slot and insert your card.



Note: Pay attention to correct insertion and insertion into the slot!



Notes:

1. **Disable the PIN request of your SIM card before using it in the CarPro-Tec GPS®** (Tip: Inserting in a mobile phone and PIN query under Settings off -> check by restarting the cell phone!)
-> only with *European* SIM no PIN is activated!
2. **Please note that a prepaid card will be disabled after a period of inactivity.** Contact your GSM network provider/ SIM card provider for more information. The deactivation takes place depending on the provider after 3, 6 or 12 months.

6. Commissioning the CarPro-Tec® GPS infrasound sensor



- ⊕ Increase sensitivity ->Release earlier
- ⊖ Reduce sensitivity-> Release later

First of all, sensitivity testing must be done. In this case, the activation of the beep by the middle dip-switch (pictures 2-3 above) is helpful to acoustically indicate the switching state (arming).

The sensitivity should be set so that a "normal" opening of the windows/doors are detected.

Please note that a violent leveraging of doors and windows by a culprit causes them to be opened with a jerk. No burglar can open a locked door or window "in slow motion" very carefully and slowly. Therefore, please set the sensitivity so that the alarm will be triggered by a small jerky opening of doors or windows.

If you set the sensitivity too high, it will lead to unwanted false triggering, e.g. due to drafts due to not completely closed and tight windows, ventilation flaps etc. Certainly, fine-tuning the sensitivity will require readjustment 2-3 times during practical use.

If there is a short time after the first startup of the system to an alarm trigger, this may well be a "false" alarm due to too high set sensitivity of the sensor. In this case, reduce the sensitivity on the knobby 2-3 mm and then observe again.

7. Arming for monitoring

To start monitoring the vehicle, focus the CarPro-Tec® GPS infrasound sensor on the remote control. You will hear the beep if you have activated it with the middle dip-switch upwards.

When the arming LED is connected, you can see the switching status on this LED:

- sharp = LED flashes every 5 seconds
- out of focus = LED is off

Check if a SIM card has been inserted and the GPS module has been switched on.

8. What happens in case of alarm?

The infrasound sensor of the CarPro-Tec® GPS triggers an alarm

- CarPro-Tec® GPS turns on the siren
- CarPro-Tec® GPS sends SMS with current position to all programmed telephone numbers
- current GPS-position will be transferred to the online portal
- CarPro-Tec® GPS calls all (max.3) programmed telephone numbers one after the other
 - If a call is answered, it can be heard inside the vehicle.
 - *ATTENTION: The European SIM card can not make calls, it can only make SMS and data connections!*
- If desired -> SMS command: **PS1** (see point 24) to disable all GPS settings made to perform constant GPS tracking (new GPS position every 3-5 minutes) -> CarPro-Tec® GPS will connect to the online platform and transmit the position -> almost exact determination of the current vehicle position and tracking possible. *ATTENTION: This is of course only possible as long as the data volume of the SIM card allows. Please reset CarPro-Tec® GPS to the desired GPS setting if monitoring is no longer necessary (see commands under 11. and 12.).*

9. Fact assignment of the remote control



Remote controls can be supplied with 2 or 4 buttons (depending on availability). Important and relevant are only the following keys:

Lock opened = Plant out of focus
Lock closed = Plant sharp

10. Position monitoring on the website (online platform)

If you use a SIM card with data volume in the CarPro-Tec® GPS, then you can log on the website: www.Amgotrack.com with the access data that you find on the back of your device and see online the position. The username usually consists of **6 digits** and the **default password** is **123456**.

Under the input field for logging in you can set the language of the page, by default this is set in English. A checkmark next to "Save settings on this computer" will take the language for future visits.

If you are logged in on the page, you will see the navigation bar on the left side consisting of the following items:

- Location list:** Query the last known position of your CarPro-Tec®
 - History:** Query and display of the stored position data of your CarPro-Tec®
 - Reports:** Download possibility for the various movement data of your CarPro-Tec® GPS as PDF or Excel file
 - Map:** manual entry for longitude and latitude and display on the map
 - Chart:** Statistics on the motion profile of your CarPro-Tec® GPS
 - Manage:** Possibility to change the password for website access.
- Attention! We recommend changing this as soon as possible to prevent external access to your data.*

11. Standard programming by AMG before shipping

NOTE! Every programming of the CarPro-Tec® GPS takes place via SMS from a phone/smartphone/mobile phone to the SIM card in the CarPro-Tec® GPS!

Recommendation: Before changing the GPS mode, we recommend that you send the SMS command "RESET!" And reprogram the device if a change is not accepted.

<u>SMS-commands</u>	<u>importance</u>
TZ+01 (or 02)	set time zone winter (or summer time)
S1,internet(or LM)	APN for Blau.de-SIM (or Europa-SIM) (other SIM cards -> Inquiry from the network operator necessary)
DS1,20M	DS1 = (Deep Sleep) 20M = Activate for 30 minutes (format xxM/H) when the vehicle is moving to change the settings via SMS (in deep sleep GSM and GPS modules are inactive, they only become active after a detected movement)
TI30M	TI =Time Interval = Interval for updating the gPS position in the online portal while driving 30M = Interval for updating = 30 minutes (format xxM/H) when driving without stops

12. Customer's own/ desired programming (SMS) the CarPro-Tec® GPS

SMS commands can't contain spaces

Save telephone numbers

(max. 3 numbers!), which should be informed in case of alarm

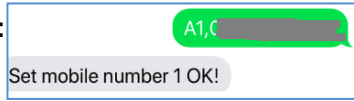
ATTENTION: Always set the country code/code of the telephone number => e. +4915212345678, so that the flow of information is also available abroad.

To save the phone numbers, please proceed as follows:

Command for 1. Telephone number: A1,telephone number

Note: without containing space in the text, Uppercase or lowercase

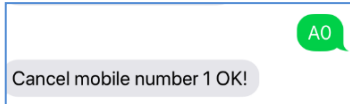
Example:



Send the content with your mobile phone: A1,xxxxxx to the phone number in the CarPro-Tec® GPS.

Upon successful entry, you will receive the message: **Mobile phone number 1 OK!**

Delete this telephone number -> SMS with content **A0** to the CarPro-Tec® GPS



Command for 2. Telephone number: B1,telephone number

Upon successful entry, you will receive the message: **Mobile phone number 2 OK!**

Delete this telephone number -> SMS with content **B0** to the CarPro-Tec® GPS

Command for 3. Telephone number: C1,telephone number

Upon successful entry, you will receive the message: **Mobile phone number 3 OK!**

Delete this telephone number -> SMS with content **C0** to the CarPro-Tec® GPS

Set the time zone

The timezone of the device can be set with the following command and depends on the Coordinated Universal Time (abbreviation UTC). The command is TZ followed immediately by the desired modifier, two digits with + and - before (see standard programming before shipping on page 8).

Battery alarm

If the battery level falls below 20% of its capacity, a message will be sent to the stored telephone numbers. The battery should then be charged at the next opportunity.

Activation of this function -> SMS-command: **Low1**
 Deactivation of this function -> SMS-command: **Low0**

A battery alarm only makes sense if you can not supply the device permanently with power and are able to charge the CarPro-Tec® GPS at short notice. For longer periods without power supply (eg vacation), please use a PowerBank, if otherwise, a constant power supply is not possible.

Alarm calls / SMS notification on-/off

SMS-notification

Activation with SMS command: **SMS1** (Standard)
 Deactivation with SMS command: **SMS0**

Call-Alarm

Activation with SMS command: **CALL1** (Standard)
 Deactivation with SMS command: **CALL0**

13. Alternative change to the default settings -> GPS-module

Calls and /or SMS + unique GPS position while alarm triggering

SMS-command: Mode4 -> Device can receive SMS / calls and reacts with alarm when triggered
1 x GPS position on the Online Plattform

→ **Without** alarm triggering, the GPS module of the device is switched off = no GPS-connection -> power save mode

Interval position transfer to online portal

Without movement of the vehicle

(= mobile data-shipping)

Note: New programming overrides previous one!

SMS-command: Mode5,xxM/H

Examples:

Mode5,**09M** = every 9 minutes, the current GPS position will be send

Mode5,**06H** = every 6 hours, the current GPS position will be send

A second-interval interval is not adjustable. Smallest possible interval = mode 5,01M = 1 minute

A shorter interval increases the data consumption. Approx. 1KB is consumed per sending the GPS position to the online portal

GPRS Binding update

SMS-command: S2

The connection to the platform is restored via GPRS.

or

SMS- command: S1,(APN des GSM-Betreibers)

The device will reconnect via GPRS if the APN is named via SMS.

Examples:

when using a SIM card from Blau.de



S1,internet

when using the Europe SIM by AMG



S1,LM

If other SIM cards are used, the APNs for mobile internet access must be requested from the network operator / SIM card dealer.

Password protection of GSM-/GPS-Module -> SMS-PIN code

SMS-command: 123456lock ->Only by sending this password 123456 is it possible to change it via command SMS (adjustment of 6 numbers, if changed!)

Deactivation with **123456unlock**

Change in own password according to the following example:

Example-SMS-command: **123456H666666** (6 digits, free choice)

123456 =standard password + H + 666666 =new, own password (in this case: 666666)

Speed alert

Speed alert only possible with GPS positioning in DS1 mode (deep sleep, see page 7 point 11) **during movement**

SMS-command: speed1,xx(x)

speed1 = Activation speed alert

xxx = speed in km/h 2 or 3 digits

Example 1: Speed alert set at 85 km/h

Example 2: Speed alert set at 2 km/h

speed1,85

speed1,02



- Answer SMS of CarPro-Tec® GPS only possible with SIM card suitable for sending SMS (eg Blau.de-SIM)!
- Prerequisite for sending alarm SMS: telephone number (s) for alarm notification is/ are stored (see point 12a), cannot be used with a pure data SIM card! **Deactivation** of the speed alert **SMS-command: speed0**

→

14. GPS-location – Information by SMS

Note Use this function only outside of buildings for free GPS access, otherwise the last known position is sent, which does not have to be the current one.

SMS-command: LOC -> current coordinates as link by SMS

Example:

„GPS Info! Time: xxxxx; Lat: xxxx; Lon: xxxxx; Spd: xxxx; Altitude: xxxx Bt: xxx
maps.google.com/maps?q=loc:22.647379,114.030998

The coordinates are always sent as longitudes (Lon) - and latitude (Lat) just with a Google Maps link, this indicates directly to the position.

→ The information in a text message about speed (Spd) and attitude (Altitude) may be different, but this is not relevant for GPS positioning

15. Silent listening function

SMS-command: L1 -> Activation „silent listening function“ -> only possible for saved telephone numbers A, B and C (see 12a page 7)!

Call the device CarPro-Tec® GPS from number A, B or C, you can hear the ambient noise of the unit, but the speaker will remain mute.

For Deactivation: SMS-command: **LO**

16. Check all settings via SMS and query

SMS-command: status on CarPro-Tec® GPS.

Example-Answer-SMS:

A+8613812345678 B13912345678 C13712345678; Speed: 0,100km/h; GEO:0,0,0;
 VB:1,10S; MV:1,100; LED:0;
 TZ:2.0; LI: 1; PS:1; DS:0,3M; FL:1; Bat: 95%; SMS:0;LOCK:0

The number "0" shows you, that a function is off.
The number "1" shows you, that a function is on.

The details in a reply SMS are as follows:

A, B, C	each programmed telephone numbers
TZ	current time zone
DS	deep sleep - mode (see page 8 point 11.)
PS	Smart-Live-Tracking (see page 14)
Bat	current Battery-charging stand
SMS	Alarm SMS
Call	Alarm call
LOCK	Protection of the device SMS-PIN
Speed	Speed alert (page 10)
LI	silent listening function (page 11 point 15)

LED, FL
GEO, VB, MV, LBS and RT

Unsupported features from
CarPro-Tec® GPS

17. Forced restart the device

SMS-command: reboot -> Restart the CarPro-Tec® GPS without changing settings

18. Set the device to factory settings

SMS-command: RESET! -> no sending a reply SMS, since all data is deleted

Note: This command will reset **all settings**, which are not to the „default settings before shipping“, so that afterward all settings have to be reprogrammed.

ALL DATA IS LOST!!!

19. Remote control / programming additional sensors

Note: By default, all sensors and remote controls of an order are delivered already taught-in. If you order additional sensors, they must be taught in.

1. Push button (programming sensors) see picture 1
2. LED (orange) is flashing
3. Trigger sensor (maybe multiple times)
4. orange LED will go off after successful programming

Instructions for additional sensors such as door/window sensors, glass-breakage sensors, motion detectors, smoke detectors and anesthetic gas detectors can be found in the AMG Shop

(<https://shop.amg-alarmtechnik.de>). Enter the article number **900941** at the top of the search field. Under the **tab instructions**, these are listed.

20. Time setting siren

The siren is activated in the event of an alarm, the factory setting is approx. 30 seconds.

You can change this time by pressing the "Time setting" button several times.

Each press after activation increases the time by 10 seconds.

- 1 x push = setting is activated, then:
- 1 x push = 10 seconds,
 - 2 x push = 20 seconds,
 - 3 x push = 30 seconds, and so on

21. Arming-LED

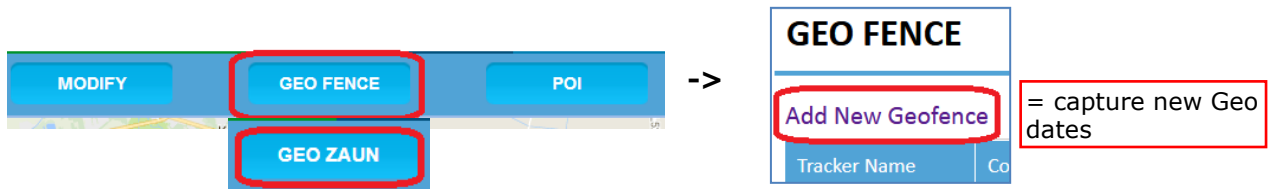
The wired red arming LED informs you of the switching status if you have armed the CarPro-Tec® GPS with the wireless remote control.

Siren and arming LED can be connected as an option and are not mandatory for the operation of the CarPro-Tec® GPS.

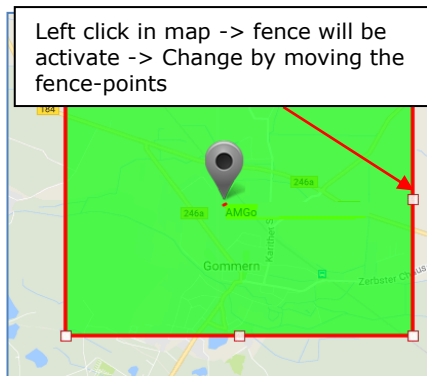
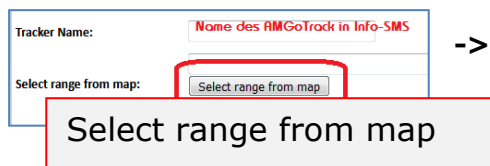
23. GeoFence-Area and Smart- Live-Tracking

GeoFence

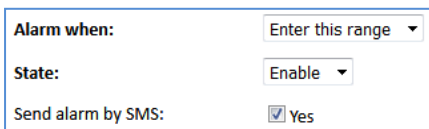
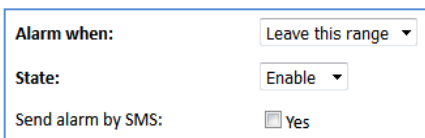
→ Recommendation -> establish the GeoFence-Area in the online portal



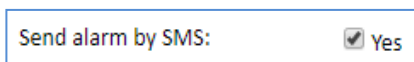
- Assign a name for AMGoTrack that is used in Info-SMS
- Set area directly in the map



Pull the fence sufficiently to ensure 1x positioning within („leaving the area“ below) of the fence
 → Otherwise no tripping possible when crossing the fence



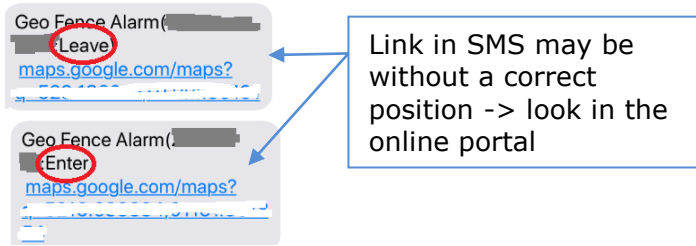
- Change: Alarm when:
 1. Leave this range
 2. Enter this range (Betreten des Bereiches)
- State
 1. enable
 2. disable
- Send Activate alarm SMS for GeoFence area by ticking the box



ATTENTION! Any SMS dispatch is only possible with a suitable SIM card. Pure data SIM cards in the CarPro-Tec® GPS cannot send SMS!

Example-SMS: Leave the area

Example-SMS: enter the area



Prior to shipping, we have already deposited and activated the GeoFence alarm info shipping by e-mail to the customer's own e-mail address from our online system (except Amazon customers!) Send us your e-mail address and we will put these in the portal). If you set up a GeoFence area, you will receive an e-mail to your e-mail address when entering/leaving the area you have set up (usable with any SIM card with data volume, including Europe SIM!). If you wish to change this to another e-mail address or to switch off this e-mail notification, please inform us by e-mail at info@amg-sicherheitstechnik.de (do not forget the name, order/customer number!)

➡ Data usage/alarm e-Mail: 1x e-Mail = 10 GPS-positions

b. Smart-Live-Tracking in the online-portal

- SMS-command: PS1** ->
1. GSM-module of the CarPro-Tec® GPS is activated and reachable (for call or SMS)
 2. GPS-module send all 3-5 minutes 1 position to the online-portal regardless of whether the vehicle is moving (GPS module switches between 2 position messages off)

NOTE: In this mode, the vehicle can be reached by call (monitoring function), but the battery is charged accordingly so that a permanent power supply should be guaranteed. Before changing the mode, all settings MUST be reset (RESET!) And the programming of the CarPro-Tec® GPS must be restarted.

24. Support

Error description	TIPS and references
The device does not send the current GPS- position	<ul style="list-style-type: none"> - SIM card with monthly data volume embedded in CarPro-Tec® GPS? - charge the internal batteries sufficiently and regularly renewed? - Prepaid SIM is not switched off? - For Europe SIM: 1,000 GPS positions consumed in the current month? -> 1,000 new posts available at the beginning of the following month - Connection to GPS satellites insufficient due to unfavorable mounting position
SIM card cannot be reached by call / SMS and does not send a position	<ul style="list-style-type: none"> - PIN request of the SIM card disabled -> Control of a mobile phone (not for Europe SIM)
„False“ alarms	<ul style="list-style-type: none"> - Reduce the sensitivity of the infrasound sensor

Unintended call/SMS-function	<ul style="list-style-type: none"> - Disable by SMS commands 1. SMS0 and/or CALL0 2. Delete telephone number
The data volume of the SIM is insufficient	<ul style="list-style-type: none"> - Buy additional data volume - Increase GPS position reporting interval (TI30M)
Settings do not change after SMS	<ul style="list-style-type: none"> - Reset the settings with RESET! And restart the programming of all settings - S1,xxxxx - TZxxxxx - A1,xxxxxx - Mode according to selection and need - etc.

25. Questions and answers (FAQ)

Frage: With which app can I monitor the position of the CarPro-Tec® GPS?

Antwort: You can access the GPS portal from any Internet-enabled device www.amgotrack.com

There is no downloading and saving software (App) required.

We recommend setting a bookmark on the home screen, then you can log in with 1 click.

user name = user ID: last 6 digits of IMEI
 Password: 1 2 3 4 5 6

By SMS (command: LOC = see page 11) you can request the current position at any time.

Our CarPro-Tec® GPS with Europe-Data-SIM can be used throughout Europe, without electricity, without your own SIM card and thus without additional SIM card costs.

Question: Why is a speed displayed even though the vehicle is not moving?

Answer: The GPS module of the CarPro-Tec® GPS receives different satellites. This is changing constantly. Depending on the position of the satellite used in relation to the GPS module, the speeds are derived from the previous and the next position calculation. This can sometimes be 5 m or less, from this the system deduces that the GPS module/vehicle has moved and shows e.g. 2 km / h, although the vehicle is stationary.

Question: Why are different heights displayed?

Answer: This also depends on the position of the satellites used for the computation, it is sometimes 5 or more satellites, the altitude is more accurately determined, it is only 3, then a height determination is much more difficult. As the satellites are constantly changing, the GPS module tries to show an average of the different calculations, and this value is subject to normal fluctuations.

Question: Why are different battery levels transmitted?

Answer: CarPro-Tec® GPS has 2 small lithium rechargeable batteries that allow you to increase the time between charging and monitoring, e.g. at night, is bypassed.

The full charge will last for up to approximately 7 days bridging, depending on various factors.

When a request is made, power is removed from the battery, the worse the radio connection for GPS and GSM, the more power is needed.

The battery level will be displayed correspondingly lower because the remaining working time would be shorter for this consumption. If the connections are good, less power is needed. The battery indicates a higher charge level or remaining working time.

As a rule, the consumption is reduced again after the signals have been sent, so that another battery indicator can be made at a different time. Add to that the temperature, it is colder, so the batteries are sluggish and less efficient than at room temperature. For smartphones, the battery indicator is also constantly changing, as this would irritate the user but the ads are "smoothed", the customer sees a slow sinking level, although this is not the reality.

Question: Why does the CarPro-Tec® GPS trip even though nobody has opened the vehicle?

Answer: The system uses a highly sensitive sensor that detects even the smallest fluctuations in air volume. Since each room is different in size, the sensor must be adjusted by means of rotary control so that it does not come to an unwanted triggering.

If the sensitivity is too high, small variations in air pressure, e.g. caused by wind blowing past the ventilation openings of the vehicle to trigger. Therefore, the sensitivity should be adjusted so that only a jerky opening of the doors leads to the triggering.

No thief can open a vehicle in slow motion. In addition, no thief expects that opening the doors or slamming the discs triggers an alarm.

In order to trigger an alarm independently of the room volume sensor, radio sensors for windows, doors and motion detectors are also available for the CarPro-Tec® GPS (see AMG shop).



AMG GmbH
Tel. 039200 77970
www.amg-sicherheitstechnik.de
WEEE-Reg.Nr. DE 8601 7380