renkforce

Operating Instructions
Car Alarm System GKA200
Item No. 1785255

$C\epsilon$

Table of Contents

1. Introduction

Dear customer,

Thank you for purchasing this product.

This product meets the requirements of current European and national guidelines.

We kindly request the user to follow the operating instructions to preserve this condition and to ensure safe operation!

⚠️ This user manual is part of the product. It contains important information on starting up and handling the device. Bear this in mind if you pass this product to a third party. For this reason, keep these operating instructions for future reference!

If there are any technical questions, please contact:

www.conrad.com/contact

2. Symbols explained

⚠️ An exclamation mark in a triangle indicates important instructions in these operating instructions which absolutely have to be observed.

→ The arrow symbol indicates specific tips and advice on operation.

3. Intended use

The car alarm system GKA200 is used to monitor a vehicle. Various sensors and the GPS signal are available for this purpose.

Use is only permitted in enclosed areas or within the protected area of a vehicle. Exposure to splash water must be avoided at all costs.

Use only the enclosed car charger or an appropriate USB interface as power supply and to charge the rechargeable battery.

The customer is responsible for the lawful use of the product. The manufacturer cannot to held responsible/liable for any use of the product beyond the uses described here.

For safety and compliance reasons, the product must not be converted or modified in any way. If you use the product for purposes other than those described above, it may be damaged. Furthermore, improper use may cause hazards such as fire, overheating, etc.

Please read the operating instructions carefully and do not discard them. Please include these operating instructions when you pass the product on to a third party.

All names of companies and products are the trademarks of the respective owners. All rights reserved.

4. Package contents

- Car Alarm System GKA200
- GPS module
- GSM antenna
- PIR sensor
- USB cable
- Car charger
- Operating instructions

Latest operating instructions

Download the latest operating instructions via the link www.conrad.com/downloads or scan the QR code shown here. Follow the instructions on the website.

5. Safety Instructions

Please read the operating instructions carefully and pay particular attention to the safety instructions. We do not assume liability for any injuries/material damages resulting from failure to observe the safety instructions and the information in these operating instructions regarding the proper use of the product. Furthermore, in such cases, the warranty/guarantee will be null and void.

a) General Information

- The device is not a toy and is not suitable for children. Children are not aware of the potential dangers involved when using electrical devices.

- Do not carelessly leave the packaging material lying around. It may become a dangerous plaything for children.

- This is an alert system only; it does not absolve the driver from practising due diligence.

- The GPS functionalities are intended for the tracking of assets you own. The customer is responsible to observe the legal conditions with regard to other monitoring purposes.

- When installing and operating the system, always observe the applicable motor vehicle regulations and road traffic regulations.

- Protect the product from extreme temperatures, strong vibrations, high humidity, moisture, combustible gases, vapours and solvents.

- Never expose the product to mechanical stress.

- If safe operation is no longer possible, take the device out of service and secure it against unintended use. Safe operation is no longer possible, if the product:

  - shows visible damage,

  - no longer functions properly,

  - has been stored under adverse ambient conditions for an extended period of time or

  - has been exposed to considerable strain during transport.

- Please handle the product with care. It can be damaged by impact, blows, or by being dropped, even from a low height.

- Moreover, please observe the additional safety instructions in the individual chapters of this operating manual.

- If you have doubts about how the equipment should be operated or how to safely connect it, consult a trained technician.

- Maintenance, adjustment and repair work should only be carried out by an expert or a specialised workshop.

- If you have any questions that are not answered in these operating instructions, please contact our technical customer service or another specialist.

- All persons operating, installing, setting up, commissioning or servicing this device must observe these operating instructions.

b) Batteries

- Use the device only to charge the built-in battery including the additional battery (optional). Never try to remove the batteries and do not charge them with an external charger.

- Charge the battery only with the enclosed car charger or at a suitable USB port. A different charging current may damage the device and cause the battery to overheat or ignite (risk of explosion!).

- Charge the rechargeable battery on a regular basis, even if the device is not used (approximately every 3 months). Otherwise, it may lead to a deep discharge of the rechargeable battery, thus making it permanently unusable.

- Keep batteries out of the reach of children.

- Leaking or damaged batteries may burn the skin if touched. Under these circumstances, protect your hands with suitable gloves.

- Never short-circuit batteries or throw them into fire. There is a risk of fire and explosion!

- Never open or disassemble a battery!

- Stop using and charging the battery, if the battery appears somewhat deformed, shows holes or other obvious defects.

- Follow the instructions at the end of this manual on how to dispose of batteries in an environmental friendly way.

6. Product description

The car alarm system allows you to monitor a vehicle. However, the primary task is not the deterrence of the thief, but the live transmission of an alert message to up to 6 phone numbers by SMS or phone call.

If the sensors detect an unauthorized interaction, an alarm can be triggered via SMS.

The user can carry out other actions via an SMS sent from his/her mobile phone at any time including determining the current GPS position (coordinates or web link) or querying the status. Current GPS position and GPS history are accessible and tracked via an Internet portal.

The GPS receiver is used to define and monitor GPS zones (Area, GeoFence), meaning places, where the product is allowed to stay.

The product is safeguarded against tampering by an internal battery. The operating time is autonomous without external power supply and can be extended with an (optional) additional battery.

The device is supplied with power and the built-in battery is charged via the USB port.

7. Connections and components

a) Overview

1   Connecting an additional battery

2   BAT indicator

3   ACC indicator

4   GPS indicator

5   GMS indicator

6   Input USB cable

7   Input GPS module

8   Input GSM antenna

9   Input motion sensor
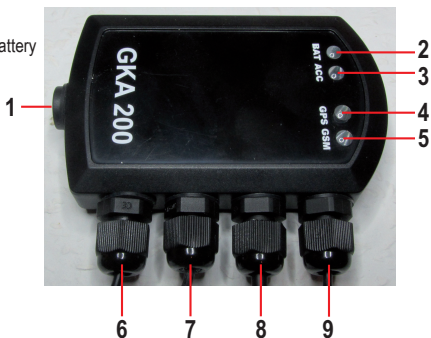
10   GSM antenna

11   USB port

12   GPS module

13   Car charger

14   Motion sensor

b) Description of the indicators

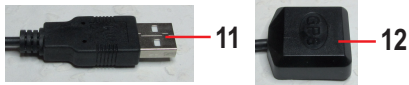| BAT indicator (2)	Meaning
off	No external power / battery not charging
green	Battery fully charged
red	Battery is being recharged.
orange	Battery not connected

ACC indicator (3)	Meaning
off	Vibration sensor did not detect movement / Alarm off
red	Vibration sensor has detected movement / Alarm triggered

GPS indicator (4)	Meaning
off	GPS module off / no GPS signal / GPS signal or coordinates not valid
Flashes blue	GPS coordinates valid

GMS indicator (5)	Meaning
off	GSM module switched off / GSM module not working / GSM module not supplied with power (explanation see page 35)
flashes green (once every second)	no SIM card or no valid PIN code / searching for GSM network
flashes green (every 3 seconds)	connected to GSM network
flashes green (twice per second)	Establishing GPRS connection

c) Internal connections
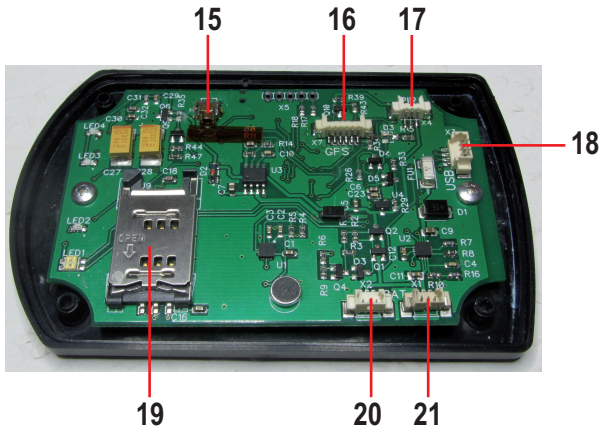
15 GSM antenna port

16 GPS module port

17 Motion sensor port

18 USB cable port

19 SIM card slot

20 Battery port

21 Battery port

8. Getting started

As a basic rule, before putting the product into operation, always check whether it is suitable for the respective application! If in doubt, please consult a person with knowledge, an expert or the manufacturer of the products before using it!

Installation and electrical connection must be carried out by a specialist.

Please select the place of installation carefully so that the device neither impacts normal driving activities nor causes distraction from the traffic.

No parts or lines may be installed within the range of the fully-expanded airbag, as this may lead to injuries of the occupants in the event of an accident.

Modifications to the vehicle, which may become necessary when installing the alarm system or other components, must always be carried out in such a manner that neither traffic safety nor design stability of the motor vehicle are impaired.

Take into account the accident hazards caused by equipment becoming dislodged in the event of an accident. Fasten thus all the components securely in a location, where they will not pose a risk to the passengers.

a) Preparing the system

Before you install the system in your vehicle, connect the integrated battery and insert a preconfigured SIM card.

You will need the following items to configure the SIM card:

• the SIM card itself (SMS-capable, prepaid or contract), which is later inserted into the device

• a mobile phone to configure the SIM card

• if necessary, a USB power supply (for example, the USB port of a computer, a power supply with USB connector) for the alarm system.

Power supply

You can also power the product via USB for testing or when you set it up for the first time. The BAT (2) indicator shows whether the correct operating voltage has been applied, regardless of the status of the device itself:

• LED off = no external power

• LED green or red = external power available, battery connected correctly

• LED orange = power available, but no battery connected

SIM card configuration and installation

First of all, you have to change the PIN code of the SIM card for the SIM card in order to work with the alarm system.

⟶ But in order to prevent tampering, you should urgently change the SIM card PIN again after the product has been put into operation. The process is described in the Configuration chapter.

• Insert the SIM card for the alarm system into your mobile phone.

• Change the PIN code of the SIM card to "1513" (check your mobile phone manual).

• Remove the SIM card from the mobile phone.

• Remove the four screws on the rear of the alarm system case and remove the cover.

• Open the slot for the SIM card (19) and insert the SIM card correctly (note the bevelled corner of the SIM card).
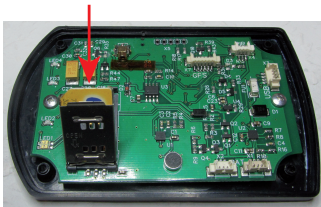
• Close the SIM card slot (19) again.

Connecting the integrated battery

• Connect the wire of the integrated battery to one of the two battery ports (20) or (21).

- If you do not want to connect an additional battery, you can screw the cover of the alarm system back on with the four casing screws.
- Read in the next chapter how to connect an additional battery.

b) Connecting an additional battery

For a longer operating time without external power supply, you can connect an optional extra battery to the alarm system. To do this, you must open the case (see above).

- Remove the dummy screw above the port for the additional battery (1).
- Draw in the wire of the additional battery into the casing.
- Connect the connection wire of the battery to the free battery port (20) or (21).
- Screw the cable gland of the additional battery to the housing.
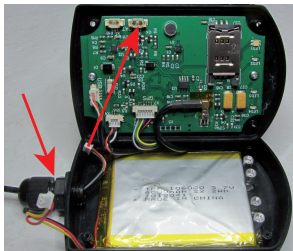
- Attach the alarm system cover and fasten it with the four casing screws.

c) Installing the alarm system

The installation position doesn't matter.

However, inside the case of the alarm system is a microphone attached for the acoustical monitoring of the vehicle interior. Therefore it is best to install the alarm system under a seat, within the passenger footwell or at any other location, where noise transmission is not impaired.

Remember that the space, where you are going to install the device, should be large enough to accommodate the cables. Heavily bent cables (in particular, directly after the connector) will increase the risk of cable breaks and can lead to contact issues in the connector. Also keep in mind that the USB cable of your installation must reach the car cigar jack.

For a good device functionality, ensure that the GSM antenna and the GPS module should have a good GSM network and GPS signal reception at your chosen mounting location.

The product is not suitable for outdoor use and must therefore be installed inside the vehicle. The mounting location should also be protected against overheating of the device and against dust.

The product should not be exposed to continuous, strong shocks (vibrating machines, direct motor/chassis contact, etc.).

• Fasten the alarm system securely with cable ties or similar at the installation site.

d) Installing the GSM antenna and the GPS module

When mounting the GSM antenna and the GPS module behind glass with window heating or behind tinted windows, you will most likely experience some GPS or GSM reception issues.

GPS module

• Route the connecting cable of the GPS module to a place from where the module has the best unobstructed view of the sky.

• The GPS module has magnetic properties at the back and sticks to metallic surfaces.

• Use double-sided adhesive tape, self-adhesive Velcro tape or similar to attach the GPS module on a non-metallic surface.

14

GSM antenna

⚠️ Adhesive mounting should be carried out in an environment with a minimum temperature of approx. 15 °C . Clean the surface with a suitable cleaning agent (e.g. rubbing alcohol) before mounting.

- Lay the connection cable of the GSM antenna up to a spot on the pane where it won't affect the driver's view and where it has good GSM reception.
- Remove the protective film and glue the GSM antenna in place.
- Once glued, the GSM antenna should not be exposed to mechanical stress for 24 hours.

e) Installing the motion sensor

The motion sensor detects movements in the vehicle and is used to safeguard the vehicle interior or the trunk.

- Choose a location for the motion sensor. The sensor's round front window should aim at the area to be monitored.
- Draw the motion sensor connection cable to the place where you want to install the alarm system.
- Attach the motion sensor by pushing it with its tab into a gap into the trim, for example.
- Align the motion sensor with the area to be monitored.

f) Connecting to power

⟶ If the device is not working once plugged into the car cigar jack, it may be necessary to switch on the car ignition first. On some vehicles, the cigarette lighter is only activated after the ignition is switched on.

On other vehicles, the cigarette lighter is not switched on and off via the ignition and is directly connected to the on-board battery. This can lead to a discharge of the on-board battery. In such a case, unplug the car charger from the cigarette lighter jack, if you do not use the unit.

- Route the USB cable to the cigarette lighter. Then insert it into one of the two car charger outlets.
- Plug the car charger into the cigar lighter jack.

9. Configuration and operation

You have to first configured it to be able to enjoy the product's full functionality. The configuration is done by means of SMS commands sent from a mobile phone to the device (or to the SIM card number used).

Once configured, you can activate, deactivate and query the device or change its settings from anywhere with SMS commands.

a) General notes

This product is not a conventional alarm system. Equipped with GSM and GPS, it features increased functionality and is thus more complex. Next we will discuss the key points that you should know and follow when using the product.

• This manual describes all the functions and much more.

• All SMS responses used here are just examples. The actual situation can be different. The examples are used to illustrate what information in which format and in which notation you can expect.

b) Operating mode

The alarm system knows only two operating modes:

"ALARM ENABLE"

Only when this mode is activated, the product can send alert messages autonomously and without interaction.

This alert is sent only if an activated alarm source detects an alarm event (vibration, voice or noise or a person moving near the motion sensor PIR). Only in this case, all phone numbers listed in the phone book of the device (not the SIM card) will receive an alert notification.

"ALARM DISABLE"

In this mode, the device is passive and no monitoring function is running. The alarm system can send SMS but it cannot trigger an alarm.

c) Configuration

⟶ The product is protected against unauthorized access and will only respond to authenticated SMS notifications.

The SMS is positively authenticated if it is accompanied by the correct PIN number (the PIN number of the SIM card used in the alarm system and not the one of the mobile phone from which the SMS was sent). The phone number sending the SMS must also correspond to a telephone number listed in the alarm system's phone book. The caller ID function of the SIM card used to sent the SMS should therefore be enabled. The alarm system responds only to telephone numbers that are stored in the telephone book.

In order to prevent tampering, you should urgently change the SIM card PIN again once the product has been put into operation. The process is described in the Command chapter.

Structure of SMS commands

The SMS commands used to program the device are structured according to the following scheme:

<ACTION> <FUNCTION> <PARAMETER1> <…> <#PIN>

Example:

SET TEL1 S +49177556644221 #1513

Meaning:

The telephone number +49177556644221 used for sending an SMS will be saved to the telephone book as TEL1 .

⚠ Every SMS sent to the alarm system must include the SIM card PIN of the alarm system for security reasons. Without the "#PIN" at the end of the message, the SMS this will be discarded and a reply SMS will not be generated!

Space follows after every individual word and every parameter. Uppercase letters are used.

Each new command overwrites data of any possibly already existing settings.

After each SMS command, the device sends back an SMS response to confirm the configuration (but only if the SMS command contains the correct PIN and the caller ID has been activated).

The SMS command "ACTION":

The following actions can be defined:

SET = switch on/enable/configure

RESET = switch off/disable/get default settings

TEST = test/check/query

The SMS command "FUNCTION":

The following functions can be executed:

TEL1 = first phone number in the alarm system's phone book

NAME = Name of the alarm system

GUARD = vibration sensor

Special commands

Some commands are of great important and differ from the previously described command format.

These commands are:

> **ALARM ENABLE #1513**

> **ALARM DISABLE #1513**

This command switches the alarm mode on or off. The effects on the behaviour of the product have already been described in the previous chapter "Operation mode".

> **STATUS #1513**

This command will send a summary of the most important settings and states of the device.

We will illustrate this by the following example below (deviations are possible depending on the firmware version).

Response:

GKA200 v1.xx	Product name, Firmware version
28.02.19 19:23:18 UTC +02	Date/time/time zone
Alarm: ENABLE	Alarm function enabled
GSM: 63%	GSM signal strength
Guard: off	vibration sensor off
Voice: on	noise sensor on
Move: off	PIR sensor off
Batt: 33%	battery charge level
IMEI: xxxxxxxxxxxxxx	IMEI No.

Setting the time, date and time zone

The product let's you set a time and date.

⟶ If time and date are set, the day of the week will be calculated automatically. SMS messages will thus include the exact time and date, regardless of when an SMS was sent or received.

Moreover, some functions require that the current time and date is set.

Command:

SET TIMEDATE <hh mm dd mm yy zz> #1513 = time and date

The following settings are possible:

Hour (hh)	Minute (mm)	Day (dd)	Month (mm)	Year (yy)	Time zone (zz)
(0-23)	(0-60)	(01-31)	(01-12)	(00-95)	(-12 bis +12)

Example: 13:24 hours, 28.09.2016, time zone +2h

SET TIMEDATE 13 24 28 09 16 +02 #1513

⟶ Single-figure numbers must always include a leading "0". Instead of "9" write "09".

Example of an SMS reply:

> **GKA200 v1.xx**
> **Time: 19:23**
> **Date: 28.02.19**
> **Zone Time: +02**

Setting the time zone only:

SET TIMEZONE <zz> #1513

zz = time zone difference in hours (-12h to + 12h)

Test the desired settings with the following command:

TEST TIMEDATE # 1513

Managing the phone book

—→ The alarm system memory can store up to 6 phone numbers.

You can program the alarm to send an SMS to the phone number in question (by an S after the phone number) or to call this phone number (by an C after the phone number).

In the case of an alarm event, all of the stored phone numbers will be notified. If multiple phone numbers are used, the notification will also accordingly be sent multiple times.

However, only phone numbers stored for incoming SMS commands will be accepted.

The alarm system can only process the international format for phone numbers.

Example:

0177/12131415 > correct +4917712131415

(+49 = country code and then area code without 0)

Setting up the phone numbers in the phone book:

SET TEL1 S +49111… #1513

SET TEL2 C +49222… #1513

…

SET TEL6 S+49666… #1513

When you send the command "SET TEL ....", you will receive an SMS response with a list of the stored phone numbers:

GKA200 v1.xx

TEL1 S +49111…

TEL2 C +49222…

….. etc. ……

Deleting phone numbers:

RESET TEL1 #1513   = phone number 1 will be deleted

RESET TEL2 #1513   = phone number 2 will be deleted

Checking how many phone numbers are stored:

TEST TEL #1513

Changing the device name

This function allows you to set the device name so that in case you are using multiple alarm systems, for example employed in different vehicles, you are able to differentiate between them.

⟶   You could enter for example the type of the vehicle.

Programming the device name:

SET NAME <NAME> #1513   NAME = new device name

Example:

Changing the device name to "Transporter":

SET NAME <Transporter> #1513

Resetting the device name to the factory settings:

RESET NAME #1513

Changing the PIN code of the SIM card

⚠   For security reasons, change the PIN code of the SIM card once the product is working, because the standard PIN "1513" is not secure.

Changing the PIN:

SET PIN <new PIN> #<old PIN>

Example:

Change the PIN from "1513" to "1234:

SET PIN 1234 #1513

From now on you must use in each new SMS command the new PIN code followed by hash (#). If you have entered an incorrect PIN code or you have forgotten your PIN, you will receive an SMS error notification.

When changing the PIN code, both the PIN settings of the car alarm system and the PIN code of the installed SIM card will change! The PIN code will always consist of 4 numbers.

If the PIN code is lost (lost or forgotten), you can restore the product's factory settings (see chapter "Reset to factory settings"). You will loose all settings on reset! After that you need to program the device from scratch.

Configuration of the vibration sensors GUARD

The alarm system has an internal vibration sensor, which can detect mechanical impacts (parking jostles, breakage of a window, etc.).

The ideal sensitivity adjustment depends on many factors such as where the sensor is mounted, how it is attached to the body, size of the vehicle, etc. and you have to experiment a little to find out.

Sensitivity should be set high enough, so that heavy, passing vehicles (for example, a truck) won't trigger an alarm.

The sensitivity can be set within the range of 0-10, whereby: 0 = off / 10 = maximum sensitivity

Configuration command:

SET GUARD <sensitivity> #1513

Switching the vibration sensor off:

RESET GUARD #1513

Establishing the current status:

STATUS #1513

Configuring the noise sensor

The alarm system has an internal sound sensor, which can acoustically monitor the interior.

→ The ideal sensitivity adjustment depends on many factors such as where the sensor is mounted, how it is attached to the body, size of the vehicle, etc. and you have to experiment a little to find out.

Sensitivity should be set high enough, so that normal ambient sound won't trigger an alarm.

The sensitivity can be set within the range of 0-10, whereby: 0 = off / 10 = maximum sensitivity

Configuration command:

SET VOICE <sensitivity> #1513

Switching the sound sensor off:

RESET VOICE #1513

Establishing the current status:

STATUS #1513

Configuring the PIR-Sensor

The alarm system has an PIR sensor, which can monitor movement in the interior of the car or the trunk.

The PIR sensor can be switched on or off.

Switching on:

SET MOVE #1513

Switching off:

RESET MOVE #1513

Establishing the current status:

STATUS #1513

Programming of alarm times

The alarm system offers the option to hold the alarm mode at certain times. This is like the automatic change to the "ALARM ENABLE" or "ALARM DISABLE" mode.

Use the following command.

SET HOLDALARM <Start hh> <Start mm> <Stop hh> <Stop mm> <Day(s)> #1513

The parameter "Day(s)" is used for the weekday(s):

mo: Monday

tu: Tuesday

we: Wednesday

th: Thursday

fr: Friday

sa: Saturday

su: Sunday

all: daily

The parameters "Start hh" and "Start mm" stand for the start time, the time at which the alarm on hold mode should stop.

The parameters "Stop hh" and "Stop mm" stand for the end time, the time at which the alarm on hold ends.

Single-figure numbers have a leading "0" (thus enter "09" not just "9").

⟶ If different times are used over the day you will also need multiple commands.

Example:

Disable the alarm mode on Mondays and Thursdays from 16:10 to 23:30 hours:

SET HOLDALARM 16 10 23 30 mo th #1513

The following confirmation SMS shows you the time limits set:

GKA200 v1.xx

mo: 16.10 – 23.30

tu: on

we: on

th: 16.10 – 23.30

fr: on

sa: on

su: on

⟶ The schedule is stored until the list is cleared by means of the RESET command.

Get status report:

TEST HOLDALARM #1513

You can reset all settings with the following command:

RESET HOLDALARM #1513

⟶ This will always delete all the configurations you have made.

GPS functions

⚠ The GPS function is only active if the alarm function is enabled.

With the help of the GPS receiver you can get your current GPS position.

You also have the option to get a notification, when the product leaves a previously defined (permitted) safety area.

→ Depending on the positioning of the GPS module, the line of sight to the sky and current weather conditions, it can take up to 5 minutes until a GPS a geolocation is returned.

The time to detect the location can be reduced by optimizing the location of the GPS module.

Within the first 30 minutes following the position measurement, the GPS position data may have a higher deviation rate. This is related to the GPS signal, which requires correction data to become highly accurate. This data is superimposed on the GPS signal and is usually transmitted once every 30 minutes.

Turning the GPS system on:

SET GPS #1513

Turning the GPS system off:

RESET GPS #1513

Retrieving GPS coordinates:

The following command queries the current GPS data. It also creates a link to Google Maps with the location shown in Google Maps. You only need to tap the link in the reply SMS.

The command is:

TEST GPS #1513

Example of an SMS reply:

|	
GKA200 v1.xx	Product name, Firmware version
28.02.19 19:23:18	Date/time
sat: 4	Number of satellites received
maps: google.com/?	Link to the position on Google-Maps
q=49+29.4392,11+44.7357	GPS coordinates
old: 437m	Height
speed: 0km/h	speed

GPS safety zones

The product can be used to monitor zones.

After the approved zones (10 max.) are set and the alarm mode is activated ("ENABLE"), an alert with the current GPS coordinates is sent to all stored phone numbers every time the approved zone (s) is crossed.
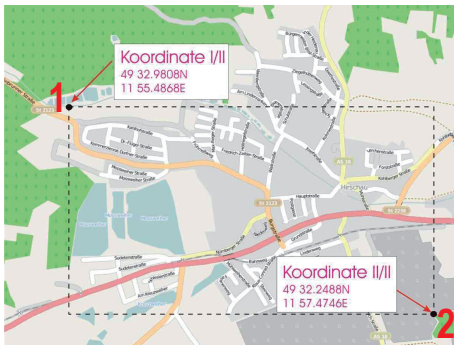
A GPS safety zone is defined by the GPS coordinates in the upper left and lower right corner.

Use the following command to configure the zones:

SET GPSZONE <Latitude1> <Longitude1> <Latitude2> <Longitude2> #1513

Latitude1 = upper boundary (to the north)

Longitude1 = left boundary (to the west)

Latitude2 = lower boundary (to the south)

Longitude2 = right boundary (to the east)

⟶ Coordinates are entered in decimal degrees.

The data is entered in the format shown in the example below:

Latitude - gg.ggggggN (degrees)

e.g. 49° 32,9808' N = 49.991763N

Longitude - gg.ggggggE (degrees)

e.g. 11° 57,0399' E = 11.950665E

⟶ Note that missing digits must be filled with "0". Example: 3° 3.23' E = 03.032300E

GPS coordinates are given in decimal degrees with six decimal places (if you have the coordinates in a different format you can use an online converter for the conversion).

You can enter data in the range from xx.000000 to xx.999999.

Example:

SET GPSZONE 49.549680N 11.924780E 49.537480N 11.957910E #1513

You will receive the following confirmation notification:

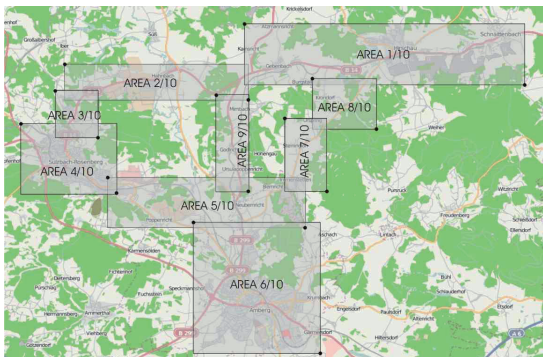|	
GKA200 v1.xx	Product name, Firmware version
GPS zone: 1	Number of the defined safety zone
Latitude1:	Latitude in left upper corner
49.549680N	
Longitude1:	Longitude in left upper corner
11.924780E	
Latitude2:	Latitude in right lower corner
49.537480N	
Longitude2:	Longitude in right lower corner
11.957910E	
Free GPS zone:	remaining free GPS safety zones
2,3,4,5,6,7,8,9,10	

⟶ With each "SET GPSZONE" command a new zone is added (max. 10). If you have reached your memory limit, an error message is returned:

Using multiple GPS zones

Multiple zones can be joined together to form a corridor. The zones belonging to a corridor should overlap each other.

The zones' boundaries follow the specified latitude and longitude.

⟶ Diagonal zones cannot be specified.

Deleting all saved zones

RESET GPSZONE ALL #1513

Deleting a single zone

RESET GPSZONE <No of the zone> #1513

Testing a programmed zone:

TEST GPSZONE <No. Of the Zone> #1513

Use the values 1 to 10 for " No. of the zone".

Example:

      TEST GPSZONE 1 #1513

The following SMS message is returned as confirmation:

GKA200 v1.xx	Product name, Firmware version
GPS zone: 1	Number of the defined safety zone
Latitude1:	Latitude in left upper corner
49.549680N	
Longitude1:	Longitude in left upper corner
11.924780E	
Latitude2:	Latitude in right lower corner
49.537480N	
Longitude2:	Longitude in right lower corner
11.957910E	
Free GPS zone:	remaining free GPS safety zones
8,9,10	

Programming an alarm pause between two alarm triggers

In the event of an alarm, the alarm system sends an alarm notification. More notifications of the same type will only be sent, if the corresponding alarm event for a defined time frame (alarm pause, factory setting: 5 minutes) is exceeded.

You can change the alarm pause settings.

To do this, use the following SMS command

      SET IDLEALARM <Time> #1513

The parameter "Time"an be set between 1 and 240 minutes.

Example:

      SET IDLEALARM 15 #1513

The time between alarm notifications is set to 15 minutes.

⚠️ During the alarm pause no new alerts about a change in the alarm situation will be sent. However, the user can check the parameters of the alarm pause.

Clearing the alarm pause:

RESET IDLEALARM #1513

Checking the settings:

TEST IDLEALARM #1513

Battery alarm

If the battery charge level has fallen to 20%, the alarm system will send an alert:

Reset to factory default settings

If you want to reset all settings to the factory defaults, use the following command:

RESET SETUP 12345678 #1513

⚠ This process will delete all previously made settings.

10. Overview of SMS commands

SMS command	Function
ALARM ENABLE #1513	Switches on the alarm mode
ALARM DISABLE #1513	Switches off the alarm mode
STATUS #1513	Status query
SET TIMEDATE 13 24 28 09 16 +02 #1513	Sets time/date/time zone
SET TIMEZONE <zz> #1513	Sets the time zone
TEST TIMEDATE # 1513	Tests the time/date settings
SET TEL1 S +49111… #1513	Saves the phone number (for SMS notifications) to the phone book
SET TEL2 C +49222… #1513	Saves the phone number (for call notifications) to the phone book

SMS command	Function
RESET TEL1 #1513	Deletes phone number from the phone book
TEST TEL #1513	Checks the number of phone numbers stored
SET NAME <Name> #1513	Changes the device name
RESET NAME #1513	Deletes the device name
SET PIN <new PIN> #<old PIN>	Changes PIN
SET GUARD <sensitivity> #1513	Sets the sensitivity for the vibration sensor
RESET GUARD #1513	Switches the vibration sensor off
SET VOICE <sensitivity> #1513	Sets the sensitivity for the sound sensor
RESET VOICE #1513	Switching the sound sensor off
SET MOVE #1513	Switches the PIR sensor on
RESET MOVE #1513	Switches the PIR sensor off
SET HOLDALARM <Start hh> <Start mm> <Stop hh> <Stop mm> <Day(s)> #1513	Configures the alarm on hold times
TEST HOLDALARM #1513	Calls up the alarm on hold times
RESET HOLDALARM #1513	Clears the alarm on hold times
SET GPS #1513	Switches GPS on
RESET GPS #1513	Switches GPS off
TEST GPS #1513	Retrieves the GPS coordinates with link to Google maps
SET GPSZONE <Latitude1> <Longitude1> <Latitude2> <Longitude2> #1513	Configures GPS safety zones

SMS command	Function
RESET GPSZONE ALL #1513	Deletes all GPS safety zones
RESET GPSZONE <No of the zone> #1513	Deletes individual GPS safety zones
TEST GPSZONE <No. Of the Zone> #1513	Retrieves GPS safety zone data
SET IDLEALARM <Time> #1513	Configures an alarm pause between two alarms
RESET IDLEALARM #1513	Deletes the alarm pause
TEST IDLEALARM #1513	Retrieves the data of an alarm pause
RESET SETUP 12345678 #1513	Resets all settings to factory

11. Geolocating via the GPS portal

You can use the GPS portal to view the location, distances travelled etc.

• You have to create an user account to get access to the portal.

• Visit the following link: https://gsh5.net/id31

• Follow the steps in the instructions on the GPS portal.

12. Troubleshooting

In purchasing the alarm system, you have acquired a product which has been designed according to state of the art technology and which is operationally reliable. Nevertheless, problems or faults may occur. Therefore, we would like to describe here how to eliminate possible faults:

Always follow the safety instructions!

The alarm system is not working

- The integrated battery is not connected. Open the device and connect the battery.
- The rechargeable battery is flat. Connect the USB port to the car charger and charge the battery.

The BAT (2) indicator is not lit

- There is no external power supply.
- Connect the USB port to the car charger and charge the battery.
- Check if the cigarette lighter is receiving power. If necessary, switch on the ignition.

The GSM (5) indicator is not lit

- The mains socket receives no power. Connect the USB port to the car charger and charge the battery.

The GSM indicator (5) flashes once a second

- You have no SIM card installed.
- The PIN code of the SIM card is set incorrectly. Enter the right PIN.
- The GSM is searching for network.
- The GSM antenna is poorly positioned and has no GSM reception. Check the position of the GSM antenna and install it in a different location. Do not place the antenna behind windows with heating wires or metallized films.
- The connection cable of the GSM antenna is damaged.

The GSM indicator (5) flashes twice per second

- The GPRS connection can't be established.

The alarm system does not respond to SMS commands

- You have no SIM card installed.
- The PIN code of the SIM card is set incorrectly. Enter the right PIN.
- The PIN code at the end of the SMS message is wrong.

The alarm system does not send an alarm notification

• You have no SIM card installed.

• The PIN code of the SIM card is set incorrectly. Enter the right PIN.

• There are no phone numbers configured for alarm notifications.

• The alarm system is not enabled. Send your activation SMS "ALARM ENABLE #<PIN>" to the alarm system.

The alarm system does not send an vibration alert

• The vibration sensor function is disabled. Use the appropriate SMS command to enable the sensor.

• The sensitivity of the vibration sender is set too low. Adjust the sensitivity with the appropriate SMS command.

• Shake the alarm system and see whether the ACC (3) indicator goes on.

The alarm system does not send alerts when it detects noise

• The sound sensor function is disabled. Use the appropriate SMS command to enable the sensor.

• The sensitivity of the sound sensor is set too low. Adjust the sensitivity with the appropriate SMS command.

• The alarm system is installed in an unfavourably location. Try a location that is more suitable for the acoustic monitoring of the area to be protected.

The alarm system does not send an alarm notification when the PIR sensor is triggered

• The PIR sensor is disabled. Use the appropriate SMS command to enable the sensor.

• The PIR sensor is installed in an unfavourably location. Try a location that is more suitable for monitoring the area to be protected.

The alarm system does not send GPS coordinates. The GPS (4) indicator is not flashing.

• The alarm function is switched off. Use the appropriate SMS command to enable the function.

• The GPS antenna is poorly positioned and has no GPS reception. Check the location of the GPS antenna. It should have a "view" towards the sky. Do not place the GPS antenna behind glass panes with heating wires or metallized film.

• The connection cable of the GPS module is damaged.

36

13. Disposal

a) Product

Electronic devices are recyclable and do not belong in the household waste. Dispose of an unserviceable product in accordance with the relevant statutory regulations.

The built-in battery must be removed before disposal.

To do this, open the case as described in the "Commissioning" chapter, separate the battery from the board and remove the built-in battery. Likewise, if an additional battery is connected, separate it from the board as well.

Dispose of the batteries separately from the product.

b) Batteries and rechargeable batteries

As the end user, you are required by law (battery regulation) to return used batteries. Do not dispose of used batteries in the household waste!

Batteries/rechargeable batteries contain harmful materials and are labelled with the symbol shown to indicate that disposal in the household waste is forbidden. The symbols of the critical heavy metals are: Cd=cadmium, Hg=mercury, Pb=lead (marking can be seen on the battery/rechargeable battery, e.g., underneath the refuse bin symbol shown on the left).

You can return your used batteries/rechargeable batteries free of charge at the official collection points of your community, in our stores, or at places where batteries or rechargeable batteries are sold! That way you fulfil your statutory obligations and contribute to the protection of the environment!

14. Care and Cleaning

⚠ Do not use abrasive cleaning agents, cleaning alcohol or other chemical solutions since these could damage the housings or even impair operation.

• Disconnect the product from the mains supply before each cleaning procedure.

• Clean the car alarm and its components with a lightly moistened cloth or a soft brush.

15. Declaration of Conformity (DOC)

We, Conrad Electronic SE, Klaus-Conrad-Straße 1, D-92240 Hirschau, hereby declare that this product conforms to the 2014/53/EU directive.

→ The full text of the EU conformity declaration is available via the following Internet address: www.conrad.com/downloads

Select a language by clicking a flag symbol and enter the order number of the product in the search field; then you will be able to download the EU declaration of conformity in PDF format.

16. Technical data

Voltage supply	12-24 V/DC (via car cigar jack)
	5 V/DC (alarm system via USB)
Battery	Li-battery 3.7 V / 6000 mAh / 22.2 Wh
Battery life	approx. 130 h
Battery charge time	approx. 3-5 h
Current drain (at 12 V)	80 mA
SIM card format	3V SIM card (standard)
Transmission frequency GSM	900 - 1800 MHz
Transmission power GSM	max. 108 dBm
GSM module	Simcom SIMM800F
GPRS	GPRS class 12: max. 85.6 kbps
Wave band	EGSM900 (880 bis 960 MHz)
	DCS 1800 (1710 bis 1880 MHz)
GSM class	Class 4 (2 W / 900 MHz)
	Class 1 (1 W / 1800 MHz)
GPS module	FMP51-TLP
GPS sensitivity	-165 dBm tracking and navigation / channels 66
Position accuracy	<3 m
GPS start time	hot start 1 s / warm start 34 s / cold start 35 s
Operating temperature	-45 °C to 85 °C
Dimensions (L x W x H)	106 x 67 x 26 mm (case only)
	111 x 90 x 26 mm (case and cable glands)
Weight	183 g (incl. battery)