



AMPIRE®

[Installation-
& Owners-Manual]

M O D E L
LOC200

Contents



- Introduction..... 5**
- Installation into the vehicle 7**
 - LOC200 installation into the vehicle..... 7
- Installation example 10**
 - GPS locator installation into the vehicle 10
 - Connection of external car alarm 11
- Configuration 13**
 - Entering of authorized phone numbers for alarm SMS and controlling of „GPS higher level protection“ mode 13
 - Switch relay configuration at alarm activation..... 15
 - STOP function (relay switching)..... 16
 - Setting of time period for sending a current position information at GPS alarm activation..... 17
 - Configuration of SMS text sent at GPS alarm activation..... 18
 - Configuration of SMS text sent at INPUT alarm activation 19
 - Setting of alert call in case of alarm activation 20
 - Way of sending GPS coordinates in SMS's..... 21
 - Setting of confirmation message for SMS commands 22
 - Reset – renewal of factory default setting..... 23
 - Configuration identification 24

User's functions	25
• Thief protection	25
• GPS protection	25
• GPS higher level protection (GPSS)	28
• INPUT protection.....	29
• Position SMS request	30
• Relay switching for unlimited time.....	32
• Relay switching for preset time	32
• Relay switching for time preset by command RELAY	33
• Request for remaining credit in pay as you go SIM card used in the LOC200	33
• Setting the LOC200 in STAND BY mode	34
 Finding a vehicle position	 36
• Finding a vehicle position on server SATMAPS.NET	36
 Troubleshooting	 37
 Technical Data.....	 39

Introduction



Dear customer,

thank you for purchasing our product. It is a modern and technologically advanced LOC200. This product will help you to secure and protect your vehicle (car, truck, motorcycle, caravan, construction machine, agricultural machine, motorboat etc.). In case the guarded vehicle is stolen the LOC200 will send you a current position to your mobile phone. Via mobile phone you can easily view the current map with vehicle position on the display. This service of a displaying on a map is completely free of charge. You can also view the position of a guarded vehicle via PC and website <http://www.satmaps.net> free of charge.

The system consists of a LOC200 unit and a satellite GPS antenna. The LOC200 unit is usually placed in a hidden and a difficult to approach place (e.g. under a car dashboard). SIM card of the GSM mobile operator is placed inside the LOC200 unit (the LOC200 has its own telephone number).

It is possible to use a contract or a pay as you go SIM cards. In case you decide to use a pay as you go SIM card, you can check its remaining credit using your mobile phone. Charging of the pay as you go SIM card can be done from your mobile phone or for example using ATM (check possible options for a remote pay as you go SIM card charging with your GSM operator).

The system will communicate with you using SMS's, therefore it is essential to pay attention to rates for SMS services while choosing your mobile operator. We recommend you to acti-

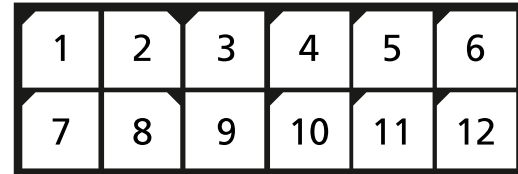
vate roaming on the SIM card just in case of localization of the vehicle abroad. The LOC200 unit connects to a vehicle onboard power 12V DC. We recommend you to connect the unit to a backup battery just in case the main power source is stolen or inactivated. The LOC200 allows other functions, which are described in details in this user's manual.

Installation



LOC200 installation into the vehicle

Pin 1	Brown	Switching relay – common contact (COM)
Pin 2	Green	Switching relay – opening contact (NO)
Pin 3	Blue	Switching relay – closing contact (NC)
Pin 4	White	External alarm input (A0)
Pin 5	Yellow	Input – ignition
Pin 6	Orange	External alarm input (A1)
Pin 10	2x black	Frame (-), - 12V backup power source
Pin 11	Red	+ 12V
Pin 12	Red-white	+ 12V backup power source



View into the connector

The LOC200 is intended either for separate connection or as an addition to a car alarm.

1. Push the releasing button and slide out the SIM card holder. Insert the SIM card in the holder and slide back in the LOC200 together with the SIM card.

Note!

At first the SIM card needs to have PIN code protection deactivated. The PIN code protection can be deactivated for example in a mobile phone.

2. Connect particular wires from cable as seen on the right. The cable connector must be disconnected from the LOC200 during wire connecting process.

Yellow, red and black wires must be always connected. Connection of remaining wires is optional. In case particular wires are not connected relevant functions of the system will not be active. The output of external alarm can be connected to input of the LOC200 using white or orange cable.

- **A0** (white cable) - INPUT alarm is activated by signal 0V
- **A1** (orange cable) - INPUT alarm is activated by signal +12V

The maximum current carrying capacity of the switching relay is 12V DC/5A. While controlling an appliance with a higher current load use an auxiliary relay with appropriate technical parameters.

3. Connect the GPS antenna and the cable connector to the unit. GPS antenna must be placed horizontally and must not be obstructed from the top by metal parts.
4. Switch car ignition ON and OFF. The unit is ON now. Wait approximately 2 minutes for the unit initialization completion. The unit is ready to receive configuration SMS commands after that time.

Note!

The LOC200 allows connection of backup battery to the cable connector wires (black and red-white wire). Charging of the backup battery is done automatically while driving. We recommend to use gel battery 12V/1,3Ah. The battery endurance is 30 to 60 hours depending on momentary operating mode of the LOC200.

Red LED – indicates GSM

LED blinking quickly (1x per second)	The device is connecting to GSM network
LED blinking slowly (1x per 3 seconds)	The device is connected to GSM network
LED is not blinking	The device is switched OFF

Green LED – indicates GPS

LED blinking quickly (1x per second)	The device is trying to receive GPS data
LED blinking slowly (1x per 3 seconds)	The device receives actual GPS data
LED is not blinking	GPS module is switched OFF



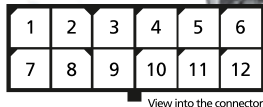
Installation example

GPS locator installation into the vehicle

It is recommended to place the GPS locator for example under the dashboard. Remove the necessary covers of the dash-board and choose a suitable place for GPS locator and backup battery.



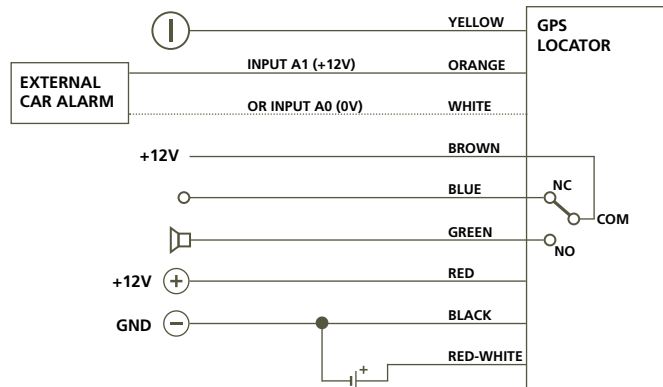
Basic connection of GPS locator can be done via three wires (red, black and yellow). During the wires connection the cable connector must be disconnected from the GPS locator!



- **Red wire** connect to +12V power supply. Power supply must be continuous and must not be interrupted even if the vehicle is parked!
- **Black wire** connect to a car frame (-).
- **Yellow wire** connect to contact 15 (circuit which is powered +12V when the ignition is ON).

Connection of other wires from the cable harness is optional!

Pin 1 Braun	Relais – gemeinsamer Kontakt (COM) 30
Pin 2 Grün	Relais – normal offen (NO) 87
Pin 3 Blau	Relais – normal geschlossen (NC) 87a
Pin 4 Weiß	Externer Alarm Eingang (A0) Masse
Pin 5 Gelb	Eingang – Zündung
Pin 6 Orange	Externer Alarm Eingang (A1) +12Volt
Pin 10 2x Schwarz	Masse
Pin 11 Rot	+12V Dauerplus
Pin 12 Rot-Weiß	+12V Backup-Batterie



Connection of external car alarm

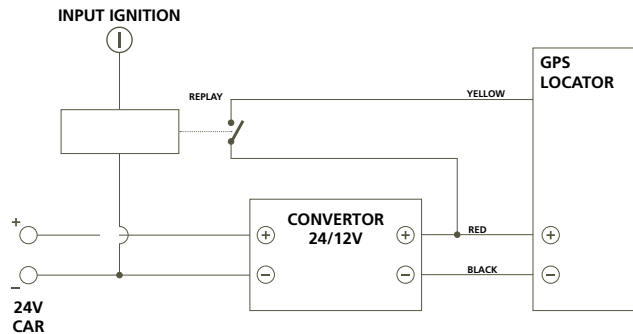
The output of external alarm can be connected to input of the GPS locator using white or orange cable.

- A0 (white cable) - INPUT alarm is activated by signal 0V, which must be longer than 0,8s
- A1 (orange cable) - INPUT alarm is activated by signal +12V, which must be longer than 0,8s

Connect the backup battery (gel battery 12V/1,3Ah) to black (-) and red-white (+) cable fitted with faston connector.

Beware of the polarity of battery contact!

Schema GPS locator connection into the the vehicle with onboard power 24V:



Configuration



The LOC200 configuration is performed using instructions sent as an SMS from your mobile phone to the phone number of the LOC200. Command is always sent together with PIN code which defines authorized user(s). The PIN code is a fourdigit number which can be changed. The PIN code is set by manufacturer to value 4321 (symbols **** are used instead of PIN code in the text below). The commands can be typed both in regular or capital letters. In case the command is not sent in a correct form, the LOC200 will send SMS with the text **COMMAND ERROR**. In case the command is sent with incorrectly entered parameters, the LOC200 will send SMS with the text **key word ERROR**.

Entering of authorized phone numbers for alarm SMS and controlling of „GPS higher level protection“ mode

Command format: **** PHONE +aaaz +bbbz +cccZ

+aaa – first authorized number in international format
+bbb – second authorized number in international format
+ccc – third authorized number in international format

Z – determines whether alarm SMS to this phone number will be sent during INPUT alarm or GPS alarm
Z = I – INPUT alarm SMS will be sent to this number only
Z = G – GPS alarm SMS will be sent to this number only



Parameter z is optional. If this phone number is entered without this parameter, it means that SMS's will be sent to this phone number from both INPUT alarm and GPS alarm (the value IG is set automatically).

Up to 3 telephone numbers can be as signed. All entered (authorized) numbers can control GPS higher level protection mode by ringing the LOC200 number (see below). The telephone numbers must be entered in international format, so the number must always begin with the symbol +.

Note!

Authorized telephone numbers must have identification of calling number CLIP activated. In case this function is not active, function of GPS higher level protection cannot be controlled and it is not possible to control the LOC200 by ringing.

The first authorized number set by command **PHONE** is called in case of **INPUT** alarm or GPS alarm activation. Condition for calling the first authorized number is activation of this function by a command **CALL**.

Switch relay configuration at alarm activation

Command format: **** RELAY xy z

- x – time for which the relay stays switched (0 to 240)
- y – time unit of the number entered by parameter x
 - y = s – seconds
 - y = m – minutes
- z – determines under what circumstances the relay will be switched
 - z = I – relay will be switched when INPUT alarm is activated
 - z = G – relay will be switched when GPS alarm is activated
 - z = IG – relay will be switched when both INPUT and GPS alarm are activated

Default setting: 1s IG



Parameter z is optional. If the command RELAY is entered without parameter z the relay will be switched in both INPUT alarm and GPS alarm activation (the value IG is set automatically). This command sets the time for which the relay will be

switched at alarm activation or while sending the command SWITCH without parameter.

STOP function (relay switching)

Command format: **** STOP n

n = 1 switches the relay for 240 minutes after the vehicle has stopped

n = 0 immediately sets the relay to a normal contact position



Example: Switch the relay for 240 minutes after the vehicle has stopped.

Command **STOP 1** switches the relay in GPS locator for 240 minutes if speed of the vehicle is 0 Km/h. In case of sending command while current speed of the vehicle is higher than 0 Km/h the relay will switch after the vehicle has stopped. After the command execution (relay switch) the unit sends SMS with exact location where the relay switched.

Note!

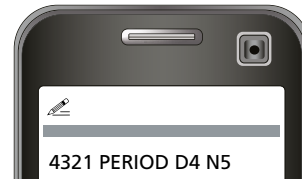
By sending command STOP 1 repeatedly the relay switched time can be extended. Device ETLOC-30 is not an immobilization device and mustn't be used to immobilize a vehicle.

Setting of time period for sending a current position information at GPS alarm activation

Command format: **** PERIOD xy Nz

- x – determines whether next alarm SMS will be sent after a certain time or distance covered
x = D – (Distance) after distance covered (Km)
x = T – (Time) after a certain time (minutes)
- y – determines the number of kilometers or minutes (y = 1 to 60)
- z – determines the number of alarm SMS within one activated GPS alarm (z = 1 to 30). This parameter is optional and will be automatically set to value N10 in case the parameter was not entered.

Default setting: T5 N10



First alarm SMS is sent immediately after GPS alarm activation and next alarm SMS's are sent every time after either set distance in kilometers is covered or set time in minutes. Number of sent alarm SMS's within one activated GPS alarm

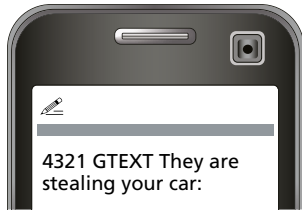
is determined by parameter Nz. The GPS alarm is automatically deactivated when all SMS's are sent. However, the set mode of protection is still active. If the vehicle keeps moving, new GPS alarm is activated.

Configuration of SMS text sent at GPS alarm activation

Command format: **** GTEXT xxxxx

xxxxx – your text of the message (max. 74 symbols)

Default setting: **Alarm! Position and speed of your car:**



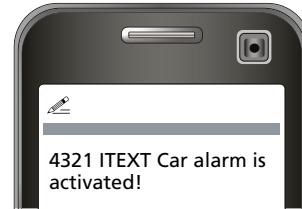
The SMS with **GTEXT** will be sent to a preset telephone numbers after GPS alarm activation. The GPS data will follow after this text in the alarm SMS.

Configuration of SMS text sent at INPUT alarm activation

Command format: **** ITEXT xxxxx

xxxxx – your text of the message (max. 74 symbols)

Default setting: **Alarm! Your car was attacked.**



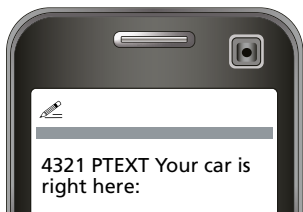
The SMS with **ITEXT** will be sent to a preset telephone numbers after **INPUT** alarm is activated. In case the **ITEXT** ends with symbol „:“, the GPS data will follow after the **ITEXT** in the alarm SMS.

Configuration of SMS text sent as a response to a position request

Command format: **** PTEXT xxxxx

xxxxx – your text of the message (max. 74 symbols)

Default setting: **Position and speed of your car:**



The SMS with PTEXT is sent as a response to a vehicle position request (see below for the command POSITION) to the telephone number used for sending the request. This text will be in SMS always followed by GPS data.

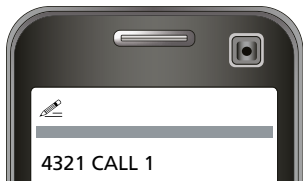
Setting of alert call in case of alarm activation

Command format: **** CALL x

x = 0 – call function is OFF

x = 1 – call function is ON

Default setting: 0



If the function is ON, the first set authorized telephone number is automatically called after alarm activation. This

alert call is only warning the user about activated alarm. We recommend not to accept the call, the locator does not dispose of any voice functions.

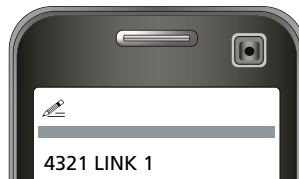
Way of sending GPS coordinates in SMS's

Command format: **** LINK x

x = 0 – sending GPS coordinates in the text form

x = 1 – sending GPS coordinates in the form of a link, which shows the vehicle position on the internet

Default setting: 0



If this function is ON, the LOC200 sends a message with GPS coordinates in form with a link. Now the user can just click on the link contained in SMS and view the position of the vehicle on internet maps.

Note!

If you want to use this function your mobile phone must be connected to the internet and must support the web browser function. The service of displaying a vehicle position on the map is completely free of charge.

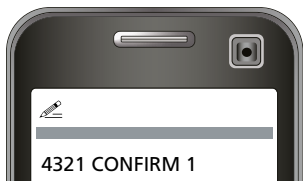
Setting of confirmation message for SMS commands

Command format: **** CONFIRM x

x = 0 – confirmation messages OFF

x = 1 – confirmation messages ON

Default setting: 1



If the confirmation message function is ON, after successful command processing, the LOC200 sends SMS with the text command OK to the telephone number sending original command. The confirmation SMS is not sent at the commands where there is a different SMS response.

Reset – renewal of factory default setting

Command format: **** RESET



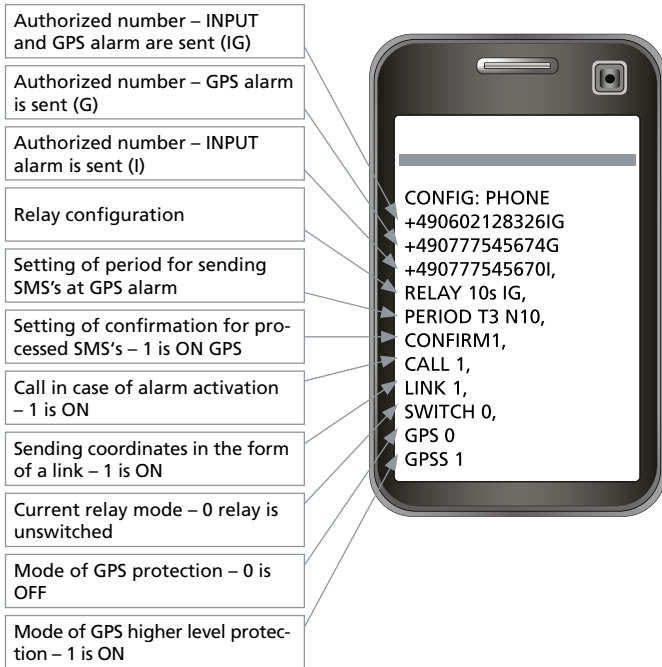
The function resets all parameters to factory default setting. After the command is sent, initialization of the LOC200 will be done and it is necessary to wait at least 2 minutes before the LOC200 is ready to process next commands.

This function does not affect assigned PIN code.

Configuration identification

Command format: **** CONFIG

The LOC200 sends SMS with current configuration as a response to CONFIG command.



User's function



User's functions of the LOC200 are controlled by commands sent as an SMS from your mobile phone to the LOC200 telephone number. Command is always sent together with PIN code which defines authorized user(s). The PIN code is a four-digit number which can be changed. The PIN code is set by manufacturer to value 4321 (symbols **** are used instead of PIN code in the text below).

The commands can be typed both in regular or capital letters. In case the command is not sent in a correct form, the LOC200 will send SMS with the text COMMAND ERROR. In case the command is sent with incorrectly entered parameters, the LOC200 will send SMS with the text key word ERROR.

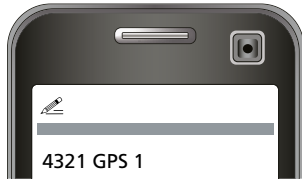
Thief protection

The LOC200 can be used for protection either separately or together with external alarm. Modes "GPS" protection" and "GPS higher level protection" can be used if the LOC200 is used without car alarm. Mode "INPUT protection" can be used in addition to the two above mentioned modes if external car alarm is connected to the LOC200.

GPS protection

The GPS protection activates alarm if the vehicle starts moving while the car ignition is OFF. This is protection against towing the car away. We recommend to keep this kind of protection permanently ON. This protection does not need

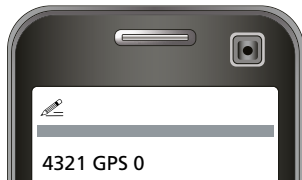
to be deactivated before driving. The GPS protection sets itself automatically OFF for the time of driving after car ignition is set ON.



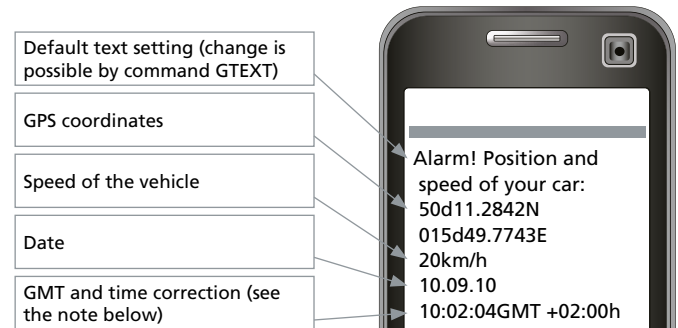
- **Activation of protection:** The GPS protection is activated using command ****** GPS 1**. If the protection is activated, the car will be automatically protected every time after ignition is set OFF.

Default setting: **1**

- **Deactivation of protection:** The GPS protection can be deactivated using command ****** GPS 0**. There is no need to deactivate protection using any command before every single driving, since protection is deactivated automatically after car ignition is set ON.



- **GPS alarm activation:** GPS alarm is activated when the vehicle starts moving while car ignition is OFF (e.g. towing).
- **Reaction to alarm:** Alarm SMS's with a car position data are being sent during the whole alarm duration. The total number of alarm SMS's depends on a momentary configuration (see configuration command PERIOD). The activated GPS alarm can be deactivated by ringing the telephone number of LOC200 from authorized telephone number (alarm deactivation is confirmed by immediate rejection of the call by LOC200). Function of GPS protection stays active until deactivated by command ****** GPS 0**.



Note!

The LOC200 shows GMT in the SMS's. The GMT is a part of the GPS info. Some GSM operators provide local time correction in relation to GMT. If your GSM operator supports such service, the LOC200 adds time correction info to the SMS (e.g. 10:02:04GMT +02:00h), if not only GMT time is shown (e.g. 10:02:04GMT).

GPS higher level protection (GPSS)

This mode is identical with GPS protection mode, but does not evaluate car ignition status. GPS alarm gets activated every time when the vehicle starts moving.

- **Activation of protection:** GPS higher level protection is activated by ringing the LOC200 telephone number from authorized telephone number (the LOC200 rings 2x and then rejects the call).
- **Deactivation of protection:** GPS higher level protection is also deactivated by ringing the LOC200 from authorized telephone number (alarm deactivation is confirmed by immediate rejection of the call by LOC200). Deactivation must be done prior to any drive.
- **GPS alarm activation:** GPS alarm is activated when the vehicle starts moving.
- **Reaction to alarm:** Alarm SMS's with the car position data are being sent during the whole alarm duration. The total number of alarm SMS's depends on a momentary configuration (see

configuration command PERIOD). The activated GPS alarm can be deactivated by ringing the telephone number of LOC200 from authorized telephone number (alarm deactivation is confirmed by immediate rejection of the call by LOC200). By ringing you also deactivate the mode of GPS protection.



INPUT protection

To be able to utilize INPUT protection mode it is necessary to have external car alarm installed which output is connected to input contact of the LOC200. INPUT protection sends SMS to authorized telephone number in case that the condition for INPUT alarm activation on input contact of the LOC200 is met.

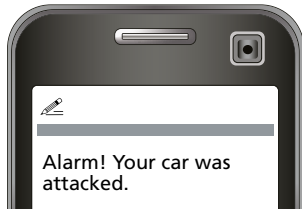
Note!

We recommend to have the external alarm connection done by a professional service.

- **Activation of protection:** INPUT protection is permanently

active (considering proper installation and connection of external car alarm with the LOC200 was done).

- **Deactivation of protection:** **INPUT** protection can be deactivated by disconnecting external alarm from input contact of the LOC200.
- **INPUT alarm activation:** **INPUT** alarm is activated when external car alarm gets activated. In case the GPS alarm was already activated, the **INPUT** alarm will not be activated (protection against cyclic communication with external car alarm).
- **Reaction to alarm:** One alarm SMS informing about car attack is sent after **INPUT** alarm is activated. Such SMS may contain also information about a position of a car.



Position SMS request

Command format: ****** POSITION**

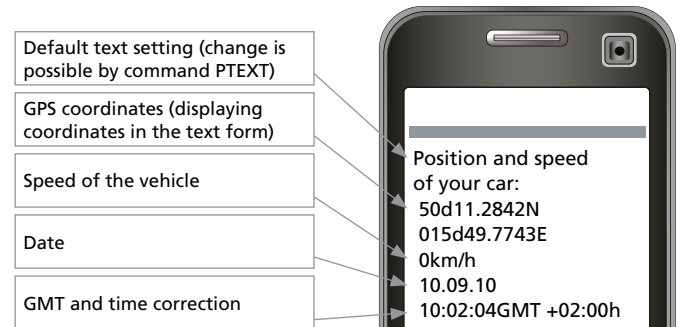
The LOC200 responds to **POSITION** command with one SMS

containing GPS data. The time in which the device responds, depends on the fact if the GPS module is momentarily switched ON (at least one GPS protection is ON or the car engine is ON) and it can also depend on the strength of GPS signal reception. In case the locator does not manage to detect valid GPS data within 5 minutes after receiving the request, the device sends SMS with last known data marked as ***OLD*** (in case this position was detected after the device is switched ON).

Note!

The user can send the command **POSITION** request independently on the state of protections and on the state of activated alarms.

In case of setting the function **LINK** to value 1 (function is switched ON), the LOC200 sends SMS with GPS coordinates in the form of a link to display the vehicle position on the internet.





GPS coordinates (displaying coordinates in the form of a link)

Relay switching for unlimited time

Command format: **** SWITCH n

n = 0 – unswitched relay

n = 1 – switched relay

The relay in the LOC200 can be switched using command **SWITCH** with parameter n, so that particular devices in the vehicle can be remotely switched **ON** or **OFF** for unlimited time (e.g. alarm sound).

Relay switching for preset time

Command format: **** SWITCH xy

x – time for which the relay stays switched (from 0 to 240)

y – time unit of the number entered by parameter x

y = s – seconds
y = m – minutes

The relay in the LOC200 can be switched using command **SWITCH** with parameter xy, so that particular devices can be remotely switched **ON** or **OFF** for limited time.

Relay switching for time preset by command RELAY

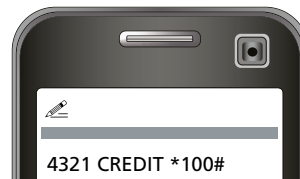
Command format: **** SWITCH

In case you enter command **SWITCH** without any parameters, the data preset by command **RELAY** are automatically accepted.

Request for remaining credit in pay as you go SIM card used in the LOC200

Command format: **** CREDIT xxxxx

xxxxx – dialed number for info about remaining credit in the pay as you go SIM card. Contact your GSM operator for the information.



The system will respond by message from your operator containing info about current credit in the SIM card. This function is applicable only if a pay as you go card is used.

Setting the LOC200 in STAND BY mode

Command format: **** OFF

In STAND BY mode the LOC200 is switched OFF and its power consumption is 0 mA. STAND BY mode is recommended to be used for long time car parking (e.g. in winter time).

Mode	Description	Power consumption
Ready	The device is ON and responds to all SMS commands. GPS protection and GPS higher level protection are OFF.	Max. 20mA* Recommended maximum time for not using (driving) the car is 6 weeks.
GPS protection	The device is ON and responds to all SMS commands. At least one GPS protection is ON.	Max. 40mA* Recommended maximum time for not using (driving) the car is 2 weeks.
Standby	The device is OFF and does not respond to any SMS commands.	0mA Empfohlen bei sehr langer Parkzeit.

The power consumption will be temporarily increased by 20mA when the relay is in the switched mode.

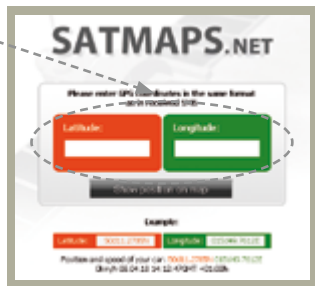
In STAND BY mode the LOC200 does not respond to SMS commands and ringing. The LOC200 can be "woken up" from this mode by either switching car ignition ON or by signal on external input (external alarm activation). Under such conditions the protection mode set before STAND BY mode activation remains active. The only limitation will be during protection against car towing away (without either alarm activation or switching ignition ON).



Finding a vehicle position

Finding a vehicle position on server SATMAPS.NET

1. Enter internet address www.satmaps.net to your internet browser.
2. Type the GPS coordinates received by SMS in Latitude and Longitude fields.
3. Click the button „Show position“ and wait for showing the position of your vehicle on a map



Troubleshooting

Problem	Solution
The device does not switch ON	Check the connection of power supply wires and wire "input – ignition" and switch car ignition ON.
The device does not log in GSM network – red LED is blinking in interval 1x per second	Check whether the SIM card is properly inserted. Check availability of GSM operator signal. Check whether inserted SIM card has disabled PIN code protection. After successful logging the red LED must blink in interval 1x per 3 seconds
The device does not respond to SMS commands	Check whether the device is switched ON and logged in GSM network. The logging in the GSM can be also verified by ringing the device. Make sure that commands are entered in correct format with valid PIN code. In case you use a pay as you go SIM card, make sure that the SIM is still active and that there is enough credit for sending SMS's. After the device is switched ON it is necessary to wait for device initialization completion (it can last up to 2 minutes) before first command can be sent. Previous SMS command must be processed before next SMS command can be sent.
The device responds to SMS commands, but does not respond to ringing from authorized telephone number	Check the validity of entered authorized telephone number (including a country code) by using command CONFIG. Verify whether the authorized telephone number has CLIP service activated (identification of a calling number).

Problem	Solution
The device does not activate GPS alarm	<p>Check whether appropriate GPS protection was activated (GPS 1, GPSS 1). Check whether the GPS antenna is properly connected and placed. Check whether entered telephone numbers for sending alarm SMS's are correct.</p>
False GPS alarm	<p>Check whether the GPS antenna is placed horizontally and is not obstructed from the top by metal parts of the vehicle. The device dispose of a sophisticated algorithm for activation of GPS alarms. In very rare cases an activation of false alarm may occur which does not have to be caused by defect of the device or wrong installation. This situation might happen in garages and close to high buildings where the device can receive for longer time bad or reflected GPS signal.</p>
Forgotten PIN code of the device	<p>Please contact your dealer, the device can be set to its default factory setting including the PIN only by a manufacturer.</p>
Das Gerät antwortet auf SMS-Befehle, aber nicht auf Anrufe von autorisierten Telefonnummern	<p>Überprüfen Sie die Gültigkeit der autorisierten Telefonnummern (einschließlich der Ländervorwahl), indem Sie den Befehl CONFIG benutzen. Überprüfen Sie, ob die autorisierten Nummern den CLIP Service aktiviert haben. (Identifizierung einer Anrufnummer)</p>

Technical Data



GSM-Modul

- Quad-Band GSM 850/900/1800/1900MHz
- Compliant to GSM phase 2/2+:
 - Class 4 (2 Watt @ GSM850/900MHz)
 - Class 1 (1 Watt @ GSM1800/1900MHz)
- Modern integrated GSM antenna 900/1800/1900 MHz

GPS-Modul

- Receiver 20 channels, L1 1575.42 MHz, C/A code 1,023 MHz chip rate
- Accuracy Position 2.5 m CEP
- Chip set SiRF star III GSC3f
- Hot start < 1 s, average, open sky
- Warm start: 35 s, average, open sky
- Cold start: 35 s, average, open sky
- Support AGPS
- Low power consumption 160mW at 3.3 V (full power)
- Protocols
- NMEA-0183
- SiRF binary
- RTCM SC-104
- Crystal oscillator (TCXO), temperature compensated with frequency stability of ± 0.5 ppm

Stromversorgung / Stromverbrauch

- Vehicle onboard power (12V DC)
- Ready: The device is ON and responds to all SMS commands (GPS protection is OFF) — max. 20mA.
- GPS protection: The device is ON and responds to all SMS commands (at least one GPS protection is ON) — max. 40mA.
- STAND BY: The device is OFF and does not respond to any SMS commands — 0mA.

Backup battery

We recommend gel battery 12V/1,3Ah. The battery endurance is 30 to 60 hours (depending on momentary operating mode of the LOC200). Charging of the backup battery is done automatically while driving (yellow wire).

Functions / Construction

- Inserting the SIM card via side-drawer (no need to open the device)
- LEDs indicating the GSM and GPS status are integrated in the device
- The maximum current carrying capacity of the switching relay is 12V DC/5A
- Highly improved remote control of integrated switching relay
- Possibility to control remotely particular vehicle devices via your mobile phone (e.g. heater remote control)
- Input for external car alarm with a possibility to use GPS locator also as GSM pager (input is activated by signal 0V or 12V)
- Function CALL at alarm activation enables automatic call to preset telephone number – better alert in case of alarm activation
- Displaying the vehicle current position on the map directly on your mobile phone display (this service is without any additional fees – completely free of charge)
- Simplified searching of the vehicle position on internet via portal satmaps.net (this service is without any additional fees – completely free of charge)
- Possibility to edit embedded texts of alert and information SMS's
- LOC200 setting is done using mobile phone
- 4 digit PIN code to guarantee security

Weight / Dimensions

- 72g
- 68 x 20 x 60mm

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