

COMPASS
GSM/GPS

OPERATING MANUAL



AUTHOR
ALARM

Dear car owner!

Please note that the AUTHOR Alarm anti-theft devices are not intended for self-installation.

We strongly recommend to install and configure the purchased equipment only in certified installation centers. Devices installed by non-certified installers are not subjected to warranty and service!

The manufacturer is not responsible for any damage resulting from the use of the device not for its intended purpose and non-compliance with safety rules.

Do not leave this manual and plastic card with secret codes and instructions inside the car!

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General information

COMPASS is innovative GSM/GPS tracker used to determine your car location via mobile application on your smartphone. The tracker can be both controlled via Author Connect mobile app for iOS and Android or via sending SMS-commands.

An external output of the tracker allows to do remote start of additional devices (such as navigator or car dash camera). An external input allows to inform the car owner about vehicle's units and systems condition changing.

COMPASS GSM/GPS tracker can be completed with IGLA anti-theft system and AUTOSTART module to provide additional car security and remote engine start.

Benefits of the system

- Smart and convenient control via smartphone app.
- GPS/GSM positioning geolocation
- Remote engine start for a time period you need (when AUTOSTART module is connected)
- Central lock* opening and closing
- Choose Tracker mode or Beacon mode
- SIM-card account balance information displayed in your smartphone
- Small size and easy installation
- Powered by the vehicle's +12V
- Service mode option

* If IGLA anti-theft system is connected and the vehicle supports this function.

OPERATION CONCEPT

You can use **Author Connect** mobile app. for iOS and Android to control the tracker or send SMS commands and receive SMS notifications.

Car location tracking

COMPASS GSM/GPS defines vehicle's location by GPS satellites' signals or by GSM network data. According to the user's request, current location can be displayed in mobile app screen or sent via SMS at specified time.

Remote engine start

Remote engine start is available when the AUTOSTART module is installed and connected. The system allows to warm up the engine and the car interior in cold weather, as well as to cool down the interior before the ride on hot days. On some vehicles, it can also control pre-installed Webasto engine heater.

Vehicle systems control

The system monitors and analyzes vehicle units condition 24 hours and promptly informs car owner if someone tries to get into the car or open the hood, switch on the ignition or start driving (depends on additional devices plugged into external input or CAN-bus).

MOBILE APPLICATION

Tracker installation is to be made by professional automotive electrician who will also make initial registration and adjust settings in **Author Connect** mobile app.

ATTENTION! When the COMPASS GSM/GPS module installation is finished, create an account in **Author Connect** mobile app and register the tracker immediately for security reasons.

1. Download and install **Author Connect** app for iOS (10.0 and higher) or Android (4.1 and higher):

<https://itunes.apple.com/ru/app/author-connect/id1394124230>

<https://play.google.com/store/apps/details?id=com.dma.author.connect>



ATTENTION! While changing settings make sure that COMPASS GSM/GPS tracker is switched on and registered in the network. Your smartphone should also be connected to the Internet.

2. Run **Author Connect** mobile app. Press «Create new account» and register your mobile phone number in the system. Specify account settings:

- Phone number – your mobile phone number including international country code (e.g. +49 111 1111111 for Germany. Indicate only numbers).
 - Password - from 8 to 64 symbols with no spaces (Latin letters, numbers, special characters)
 - First Name and Last Name - at least 3 symbols (letters, spaces, dashes). Don't use spaces and dashes in the beginning and the ending of the words.
3. Follow the instructions on the screen and pair COMPASS GSM/GPS tracker to your account. Use the plastic card from the set that has device serial number and PIN-code, hidden under the protective layer.

The screenshot shows the 'AUTHOR CONNECT' app interface. At the top is an orange header with a person icon and the text 'AUTHOR CONNECT'. Below this is the title 'DEVICE BINDING' and the instruction: 'Enter the SERIAL NUMBER and PIN CODE from plastic card to bind the device'. There are two input fields: 'Device serial number' and 'PIN from plastic card'. Below the input fields is a 'CONFIDENTIAL INFORMATION' card. This card contains a table with the following information:

Device phone number	PIN
+0-000-000-00-00	12345678
Device serial number	1234
 0000	

At the bottom of the card, it says 'Consumer Service: +7-812-425-62-29'. A 'NEXT' button is located at the bottom right of the screen.

COMPASS GSM/GPS tracker is ready for use!

To delete your account - open your profile by clicking the icon at the upper left corner of the screen and press «Delete Account». COMPASS GSM/GPS will be unpaired and your profile will be completely deleted from the server.

To pair your COMPASS GSM/GPS again - use plastic card from the set with device serial number and PIN-code hidden under the protective layer. There are 3 PIN-codes printed on the card. Each of them can be used for re-pairing.

ATTENTION! Don't erase protective layer and don't use new PIN-code without need. After you use new PIN-code the previous one becomes invalid!

ATTENTION! If all PIN-codes are were used please call to AUTHOR Alarm international technical support team (+7812-425-62-29 Russia) or contact your local sales & service office.

Master-phone and password setting

ATTENTION! When the COMPASS GSM/GPS module installation is finished, set the master-phone number immediately for security reasons. Master- phone is used to control the tracker without password request.

ATTENTION! The password **1234** is set in the system by default. We strongly recommend to change it before use.

COMPASS GSM/GPS tracker can be configured and controlled by SMS commands sent from any phone to the tracker's SIM-card phone number.

For most cases password is required to execute SMS commands. Some commands can be executed with no password - to provide this your phone number should be set in the system as master-phone. Master-phone is also required to configure tracker timers.

To set master-phone number send SMS to the tracker's SIM-card phone number:

[password]+[master phone number]

Master-phone number should be in the international format including country code, with digits only (no spaces, dashes or brackets).

For example: *1234+49112223344*

Be sure to receive SMS confirmation*:

Master phone is set to: +49112223344.

ATTENTION! If the master-phone number was not specified, then the phone number from which you send the first command will be set automatically as master-phone number.

To change password set by default send SMS to the tracker's SIM-card phone number:

[password] pass [new password]

A new password should consist of 4 digits from 0 to 9.

For example: *1234 pass 5678*

Be sure to receive SMS confirmation*:

Password successfully changed to 5678.

* If COMPASS GSM/GPS is operating in the Beacon mode, then SMS commands are received and executed only upon wake-up.

TRACKER CONTROL

This section describes how to control the tracker via **Author Connect** mobile app. To find out how to control the tracker via SMS commands, see page 20.

Car location tracking

COMPASS GSM/GPS finds your vehicle location via GPS positioning. If the signal from satellites is weak or the location is lost, it will be determined via GSM network.

Coordinates accuracy depends on geolocation method:

- GPS - vehicle location is detected by the satellites signals with accuracy up to several meters;
- GSM - vehicle location is detected by LBS technology (Location-Based Service). Positioning accuracy within the city limits is up to tens/hundreds of meters. Outside the city - up to several kilometers.

ATTENTION! Due to the GPS technology features car positioning may take some time.

There are 2 ways to get the vehicle coordinates, depending on current operating mode:

ATTENTION! You can change COMPASS GSM/GPS operating mode by sending SMS-commands, see p.20.

1. Tracker mode (coordinates on request)

This mode is set by default. To display current vehicle location on the map run **Author Connect** mobile app, open Map screen and press Refresh button.



2. Beacon mode (coordinates by timer)

Vehicle's location is sent via SMS to master-phone number at a certain time or within certain intervals set by the user. At all other times the beacon is sleeping to reduce power consumption and not to be discovered by radio scanners.

SMS sample with GPS-coordinates

<i>N 58.998866 E 30.456789</i>	vehicle's coordinates
<i>216 km/h 165°</i>	speed, azimuth
<i>TTF 56 sec 6 sats CN 24</i>	time to receive the first satellite signal, number of satellites, average signal level
<i>https://maps.google.com?daddr=58.998866,30.456789</i>	link to the Google map

SMS sample with GSM-coordinates

<i>N 58.998866 E 30.456789</i>	vehicle coordinates
<i>https://maps.google.com?daddr=58.998866,30.456789</i>	link to the Google map

The exact time and frequency of SMS requests for car coordinates can be set in 2 timers.

By default, **Timer №1** is set to wake up every hour and wait for 10 minutes to receive user's SMS commands sent before.

By default, the **Timer №2** is set to wake up every day at 12:00 (UTC+0), to send SMS message with current car GPS-coordinates to master-phone number and to wait for 10 minutes to receive user's SMS commands sent before.

If the signal from satellites at wake-up time is weak or lost the location will be determined via GSM network.

You can change the timers' configuration by sending SMS-commands, see p.21.

Engine remote START/STOP*

For remote engine start or to start pre-installed Webasto engine heater run **Author Connect** mobile app and open to Control screen. Press and hold START button for 3 seconds. Engine will be started for 15 or 30 minutes at your choice.

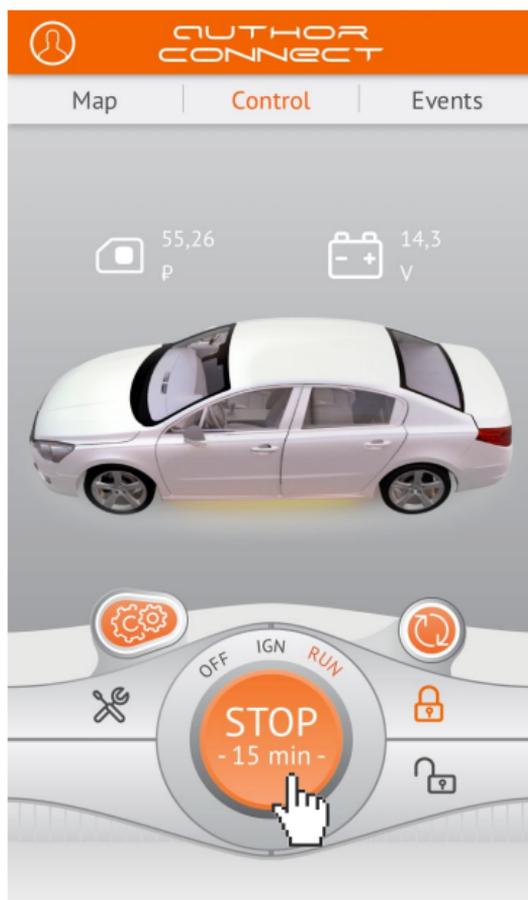


Execution of start engine command will be confirmed by vibration of your smartphone (if enabled, see you phone settings). IGN and RUN indicators will be highlighted with orange. Countdown timer will be displayed on the STOP button until the engine is shut off.

* If AUTOSTART module is installed and connected for joint work.

To stop the engine started by AUTOSTART module press and hold STOP button for 3 seconds. After the engine was successfully shut off the RUN indicator will change color to gray and the STOP button changes to START.

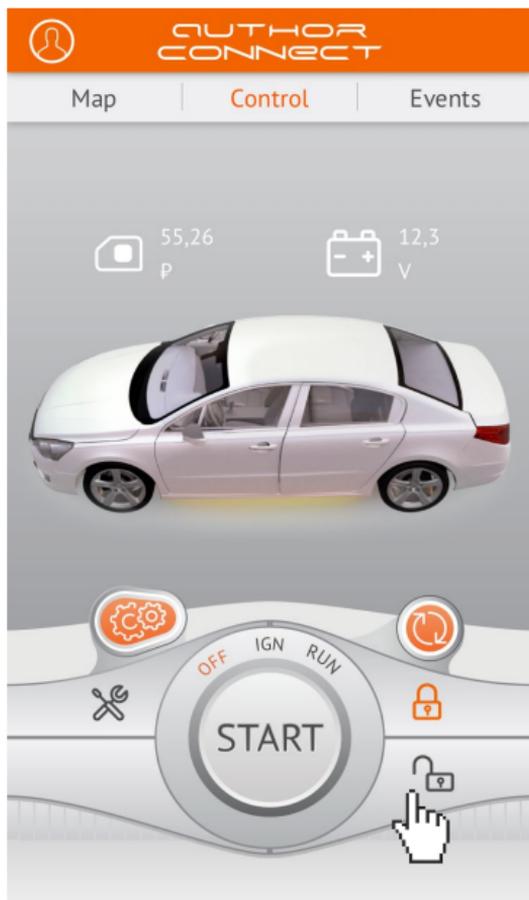
Status indicators are highlighted with orange (when IGLA or AUTOSTART is connected via CAN-bus):



- OFF - engine is shut off
- IGN - ignition is switched on
- RUN - engine is running

Central lock opening/closing*

To open or close central lock run Author Connect mobile app. Open Control screen and press the central lock button to Open or Close. The buttons are highlighted with orange depending on the central lock current status (opened/closed).



* Only when anti-theft system IGLA is installed and connected. Opening and closing of central lock is available only if your vehicle supports this function.

Service mode

The Service mode is used for temporary deactivation of anti-theft system IGLA when you give your car for the maintenance (without giving away the PIN-code and saying about the device).

To activate or deactivate Service mode run **Author Connect** app and press Service mode button on the Control screen. The button is highlighted with orange color when Service mode is ON.



INDICATIONS AND NOTIFICATIONS*

COMPASS GSM/GPS provides continuous monitoring of the vehicle's units and systems and instantly notifies the car owner about their status changing via **Author Connect** mobile app using the following ways:

1. Status indicators at the Control screen.

- Currently displayed SIM-card balance**
- Vehicle battery voltage
- Service mode status (ON/OFF)
- Central lock status (opened/closed)
- OFF - engine is shut off
- IGN - ignition is switched on
- RUN - engine is running

2. Events screen contains notification notes in chronological order and is updated by swap down.

- Switching to roaming mobile network and switching back to local network
- Ignition ON/OFF
- Engine is started/shut off
- Remote engine start via AUTOSTART
- Central lock is opened/closed
- Doors, hood, trunk are opened/closed
- IGLA security activation and authorization
- Alarm! IGLA immobilizer triggered
- Alarm! Anti-Hi-Jack mode triggered
- Alarm! Car security system triggered
- Alarm! Attempt to register new key
- Service mode ON/OFF
- Key fobs connecting and smartphones pairing

* Some notifications depend on whether IGLA or AUTOSTART systems are installed or not.

** Only if the mobile operator of SIM-card that installed in tracker supports this function.

AUTHOR CONNECT		
Map	Control	Events
	16:08:00 28.05.2018 Switch to Roaming network	
	16:07:00 28.05.2018 Ignition ON (CANbus)	
	16:06:00 28.05.2018 Engine is ON	
	16:05:00 28.05.2018 ALARM !!! Car security system triggered	
	16:04:00 28.05.2018 Central lock is opened	
	16:03:00 28.05.2018 Service mode OFF	
	16:02:00 28.05.2018 ALARM !!! Attempt to register new key	
	16:01:00 28.05.2018 Ignition OFF (CANbus)	

3. Push notifications (pop-up messages)

- Standard alarm system was activated
- Engine start was blocked by IGLA
- Anti-Hijack was activated
- Service mode was activated
- Attempt to register new key

Status messages will also appear if signal received from additional device connected to external input «-» (for example, engine status, sensors data, door, trunk or hood lock status). When signal is received from external input, the tracker wakes up and sends notification and current location to the car owner.

Notification text can be set by the car owner according to expected event. The default text is: «Input #1 is activated for 1 second». To change it send SMS to the SIM-card phone number that is installed in tracker:
[password] intext [notification text]

For example: *1234 intext Engine is ON*

Be sure to receive SMS confirmation*:
Notification text is set to: Engine is ON

* If COMPASS GSM/GPS is operating in the Beacon mode, then SMS commands are received and executed only upon wake-up.

SYSTEM SETTINGS

Operating mode selection

COMPASS GSM/GPS tracker can work in the following modes:

1. Tracker mode (set by default)
2. Beacon mode

If Tracker mode is selected the device is always ON and ready to receive and execute commands from **Author Connect** mobile app or by SMS commands. Timers are not used in this mode!

If Beacon mode is selected, the device sends coordinates and executes commands only upon wake-up by timer. All the time between wakes up the tracker is in sleep mode and doesn't receive commands until:

1. Frist of second timer is activated.
2. Signal appears at external input.
3. Alarm event has occurred*
 - IGLA immobilizer was activated
 - Anti-Hijack mode was activated
 - Standard alarm system was activated
 - New key registration attempt
 - Service mode ON/OFF

The period of the beacon activity before going to sleep mode is 10 minutes from the last activity (wake-up timer, presence of signal at external input, alarm event occurred, SMS command received).

* When IGLA anti-theft device is connected.

To switch COMPASS GSM/GPS to Beacon mode send SMS to the SIM-card phone number that is installed in tracker: **[password] set mode beacon**

For example: *1234 set mode beacon*

Be sure to receive SMS confirmation*:

Device mode is set to beacon.

To switch COMPASS GSM/GPS to Tracker mode send SMS to the SIM-card phone number that is installed in tracker: **[password] set mode track**

For example: *1234 set mode track*

Be sure to receive SMS confirmation*:

Device mode is set to tracker.

Timer settings

To change timer settings that was set by default, send SMS to the SIM-card phone number that is installed in tracker:

[password] set t<N> [W][G][L] [origin period repeats]

- <N> - timer number (1 or 2)
- [W] - to wake up
- [G] - to wake up and get GPS coordinates
- [L] - to wake up and get GSM coordinates (LBS)
- [origin] - time of the first daily wake-up
- [period] - interval between wake-ups
- [repeats] - number of wake-ups

* If COMPASS GSM/GPS is operating in the Beacon mode, then SMS commands are received and executed only upon wake-up.

Wake-up time is specified in current time zone. To set time and period of wake-ups use the following format (value range is from 00:00:00 to 23:59:59):

- [h] - hours
- [hh:mm] - hours, minutes
- [hh:mm:ss] - hours, minutes, seconds

Be sure to receive SMS confirmation*:

*Timer #<N> configuration is updated:
origin: [origin]
period: [period]
repeats: [repeats]
actions: [W][G][L]
time to next action: [time to next action]*

By default the timers are configured as follows:

1234 set t1 W 00:00 1 24 **Timer №1** is set for wake-up every 1 hour and waiting for owner's SMS-commands

1234 set t2 G 12:00 0 0 **Timer №2** is set for wake-up every day at 12:00 (UTC), GPS-coordinates definition and waiting for owner's SMS-commands

See the timer configuration example:

We want to set Timer №1 to wake up at 00:00 and to add two additional wake-ups in 3 hours intervals. Upon wake-up the tracker should define current car location, send GPS-coordinates via SMS message and wait for 10 minutes for user's commands.

SMS commands

1234 set t1 G 0 3 2
or
1234 set t1 G 00:00 03:00 2
or
1234 set t1 G 00:00:00 03:00:00 2

SMS message

*Timer #1 configuration is updated:
origin: 00:00:00 UTC
period: 03:00:00
repeats: 2
actions: G
time to next action: 02:00:59*

If the timer is set to define GPS-coordinates but the signal from satellites is weak or lost, the location will be determined via GSM network.

To find out timer current configuration send SMS command like **[password] set t<N> ?**

To deactivate the timer, send SMS command like **[password] set t<N> -**

<N> is the timer number (1 or 2).

Additional device activation via external output

To switch ON the additional device connected to the tracker's external output (for example, navigator or car dash camera), send SMS to the SIM-card phone number that is installed in tracker: **[password] out**

For example: *1234 out*

Be sure to receive SMS confirmation*:

Output #1 is activated for 1 second.

How to check SIM-card account balance and USSD codes

You can perform additional actions by sending standard USSD codes to mobile network operator of the tracker's SIM-card: to check the account balance, to activate/deactivate additional services, to change tariff of your mobile account etc. Visit the mobile operator's website to find out the whole list of USSD codes (for mobile operator of the SIM-card installed in the tracker, not for your mobile phone number operator).

* If COMPASS GSM/GPS is operating in the Beacon mode, then SMS commands are received and executed only upon wake-up.

To make USSD request send SMS to the SIM-card phone number that is installed in tracker:

[password] USSD [code]

For example: *1234 USSD *100#*

Be sure to receive SMS confirmation* (depends on USSD code sent): *USSD: Remaining balance is €5,00.*

Adding funds to SIM-card account

To keep control of COMPASS GSM/GPS, it is necessary to funds to the account of the SIM-card phone number that is installed in tracker. This phone number is usually printed on mobile operator's plastic card. Visit mobile operator's web-site to find out account details.

Tracker operation in roaming network

To save internet traffic in roaming mobile network, it is possible to switch off data transfer through the server. **Author Connect** mobile app will be unavailable. However, you keep tracker control via SMS commands. To switch mobile data transfer OFF send SMS to the SIM-card phone number that is installed in tracker:

[password] set server off

For example: *1234 set server off*

Be sure to receive SMS confirmation*:

MQTT server disabled.

* If COMPASS GSM/GPS is operating in the Beacon mode, then SMS commands are received and executed only upon wake-up.

To switch mobile data transfer ON send SMS to the SIM-card phone number that is installed in tracker:
[password] set server on

For example: *1234 set server on*

Be sure to receive SMS confirmation*:

MQTT server enabled.

SIM-card replacement

The tracker is protected by a single layer thermos-shrink case. To replace pre-installed SIM-card, remove the thermos-shrink case. Insert new SIM-card and use additional thermos-shrink case to protect the tracker.

ATTENTION! Make sure that new SIM-card phone number and account supports GPRS data transfer service (mobile Internet). If you change SIM-card in COMPASS **do not forget to set new APN settings** (Internet Access Point Name), see below.

Mobile Internet settings change

Mobile Internet settings are required when you change the SIM-card supplied with the device and after updating the COMPASS GSM/GPS firmware.

To set the parameters of the APN (Internet Access Point Name) in automatic mode, send the following SMS to the SIM-card phone number that is installed in tracker:
[password] set APN+

* If COMPASS GSM/GPS is operating in the Beacon mode, then SMS commands are received and executed only upon wake-up.

For example: *1234 set ANP+*

Be sure to receive SMS confirmation*:

APN is set to auto mode.

ATTENTION! Some mobile operators do not support automatic setup for APN (Internet Access Point Name).

In this case, you must set the APN (Internet Access Point Name) manually. To do that send SMS to the SIM-card phone number that is installed in tracker:

[password] set APN <apn_name>, <apn_user>, <apn_pass>

- *<apn_name>* - APN name (Internet Access Point Name)
- *<apn_user>* - login (if needed)
- *<apn_pass>* - password (if needed)

For example:

1234 set ANP internet.beeline.ru, beeline, beeline

or

1234 set ANP internet.beeline.ru

You can check with your mobile operator what APN parameters you have in your SIM-card.

Be sure to receive SMS confirmation*:

SET APN OK

APN: internet.beeline.ru

USER: beeline

PASS: beeline

* If COMPASS GSM/GPS is operating in the Beacon mode, then SMS commands are received and executed only upon wake-up.

How to change language in SMS notifications and map interface

To change the language in SMS notifications to English and display Google Maps in the Author Connect application send SMS to the SIM-card phone number that is installed in tracker:

[password] set lang en

For example: *1234 set lang en*

Be sure to receive SMS confirmation*:

English language is set by default.

To change the language in SMS notifications back to Russian and display Yandex Maps in the Author Connect application send SMS to the SIM-card phone number that is installed in tracker:

[password] set lang ru

Password reset

To set the password back to **1234** do the following:

1. Disconnect RED wire from the power supply +12V.
2. Connect RED wire to the power supply +12V again.
3. Within 10 minutes send SMS command with an emergency **Reset code** to the SIM-card phone number that is installed in tracker. You can find the Reset code under the protective layer on the Plastic card from the set.

The confirmation SMS will be sent to the phone number from which the code was sent. The password will be changed to **1234**.

* If COMPASS GSM/GPS is operating in the Beacon mode, then SMS commands are received and executed only upon wake-up.

SMS COMMANDS AND NOTIFICATIONS

You can configure and control COMPASS GSM/GPS tracker by SMS commands, sent from your mobile phone to the SIM-card phone number that is installed in tracker.

For most cases password is required to execute SMS command. Some commands can be executed with no password - to do this your phone number should be set in the system as master-phone. Otherwise you **must** enter the password for each SMS command.

ATTENTION! By default the password is **1234**. We strongly recommend to change it before you start to use COMPASS GSM/GPS tracker (see p.30).

ATTENTION! If COMPASS GSM/GPS tracker is operating in the Beacon mode, then SMS commands are received and executed only upon wake-up. Thus the SMS confirmation to your command may come after a long time.

List of SMS commands

SMS command	Action
[password]+[master phone number]	To set master-phone number. If the master-phone number is not specified, then a current phone number will be set as master-phone number. Number must include international country code. Password is required to execute the command.
SMS command sample: 1234+79112223344	SMS response sample: <i>Master phone is set to: +79112223344</i> SMS error response samples: <i>Wrong password</i> <i>Invalid phone number format (the quantity of digits should be from 7 to 21)</i> <i>Password is needed for the master phone changing</i>
[password] pass [new password]	To change the password. New password should consists of 4 digits from 0 to 9. Password is required to execute the command.
SMS command sample: 1234 pass 5678	SMS response sample: <i>Password successfully changed to 5678</i> SMS error response samples: <i>Password must contain exactly 4 digits</i> <i>Password must contain only digits</i>
???	To define current location by GSM.
SMS command sample: 1234 ???	SMS response sample: <i>N 58.998866 E 30.456789</i> <i>https://maps.google.com?daddr=58.998866,30.456789</i> (coordinates, link to map)

SMS command	Action
?	To define current location by GPS. The maximum waiting time after you've sent the command is 3 minutes. If the coordinates were not received within the specified time, make car location request by GSM (see above).
SMS command sample: <i>1234 ?</i>	SMS response sample: <i>N 58.998866 E 30.456789</i> <i>216 km/h 165 °</i> <i>TTF 56 sec 6 sats CN 24</i> <i>https://maps.google.com?daddr=58.998866,30.456789</i> (coordinates, traveling speed, azimuth of motion, time to receive the first satellite signal, number of satellites, average signal level, link to the map)
log	To upload log file to server.
SMS command sample: <i>1234 log</i>	SMS response samples: <i>Log uploading started</i> <i>Log uploading finished</i>
info	To get general information about device.
SMS command sample: <i>1234 info</i>	SMS response sample: <i>LBC_P2 HW 2.0 FW 0.0.l</i> <i>IMEI 869384759238792</i> <i>GSM: CSQ 27 GPRS OK (FAIL – in case of connection error)</i> <i>TRACK off (ON – if track mode is ON)</i> <i>GPS: 4 sats CN 28 TTF:28 sec E OK (E FAIL – when EPO load was failed, if it was required to switch tracking ON or to get coordinates)</i>

SMS command	Action
out	To activate the external output №1 for 1 second.
SMS command sample: <i>1234 out</i>	SMS response sample: <i>Output #1 is activated for 1 second</i>
intext [notification text]	To set notification text, which will be sent on input №1 status changing. The text should consists of no more than 60 symbols.
SMS command sample: <i>1234 intext Engine is ON</i>	SMS response sample: <i>Notification text is set to: Engine is ON</i> SMS error response samples: <i>Notification text must be less than 60 characters</i> <i>Notification text is missing</i>
USSD [beacon operator's USSD-code]	To check the account balance at tracker's SIM-card phone number and other USSD requests.
SMS command sample: <i>1234 USSD *100#</i>	SMS response sample: <i>USSD: Remaining balance is €5,00.</i>
[password] fwupdate	To update tracker's firmware. Password is required to execute the command. After you have sent the command don't send SMS again and don't request coordinates! Be sure to receive SMS confirmation of successful update.
SMS command sample: <i>1234 fwupdate</i>	SMS response sample: <i>FW UPDATE OK</i> SMS error response samples: <i>FW UPDATE FAIL</i> <i>Fail connect to server</i> <i>Firmware update error</i> <i>There is no available firmware updates</i>

SMS command	Action
<p>[password] set APN <apn_name>, <apn_user>, <apn_pass></p> <p>[password] set APN +</p>	<p>Set APN parameters (Access Point Name). Password is required to execute the command. <apn_name> - APN name <apn_user> - login <apn_pass> - password</p> <p>If you indicate «+» symbol instead of APN parameters the Internet Access Point will be chosen automatically (supported not by all mobile operators).</p>
<p>SMS command samples: <i>1234 set APN internet. beeline.ru, beeline, beeline</i></p> <p><i>1234 set APN +</i></p>	<p>SMS response sample: <i>SET APN OK APN: internet.beeline.ru USER: beeline PASS: beeline</i></p> <p><i>APN is set to auto mode</i></p>
<p>[password] engine start [xx]</p>	<p>To start an engine for specified period of time. The period is specified in minutes [xx] and can range from 01 to 99. If the period is not specified, the engine will run for 10 minutes by default. Password is required to execute the command.</p>
<p>SMS command sample: <i>1234 engine start 30</i></p>	<p>SMS response sample: <i>Autostart ON</i></p> <p>SMS error response samples: <i>Engine is already STARTED Autostart communication timeout error (when trying to start engine with the door open)</i></p>
<p>[password] engine stop</p>	<p>To stop the running engine. Password is required to execute the command.</p>
<p>SMS command sample: <i>1234 engine stop</i></p>	<p>SMS response sample: <i>Autostart is turned off</i></p>
<p>[password] engine ?</p>	<p>To ask information about engine current status: ON/OFF, started by (command /autostart module/ by car key). Password is required to execute the command.</p>
<p>SMS command sample: <i>1234 engine ?</i></p>	<p>SMS response samples: <i>Engine ON, 9 min left Engine OFF, Autostart OFF</i></p>

SMS command	Action
<p>[password] set t<N> [W][G] [L] [origin period repeats]</p>	<p>To set the timer. Upon wake-up by timer the device defines current coordinates and sends them via SMS to the master-phone number. Wake-up time is specified in the current time zone (for firmware version 0.2.23 or higher). Password is required to execute the command.</p> <p><N> - timer number (1 or 2) [W] - to wake up [G] - to wake up and get GPS coordinates [L] - to wake up and get GSM coordinates (LBS) [origin] - time of the first daily wake-up [period] - interval between wake-ups [repeats] - number of wake-ups</p>
<p>SMS command samples: 1234 set t1 WG 0 1 1 or 1234 set t1 WG 00:00:00 01:00:00 1</p> <p>1234 set t2 L</p> <p>1234 set t2 12:00 00:00 0</p>	<p>The timer №1 will wake up at 00:00 and once again in 1 hour. Upon wake-up the beacon will determine current location by GPS, send SMS and wait for 10 minutes for owner's command.</p> <p>Upon wake-up by the timer №2 the tracker will determine GSM coordinates (LBS).</p> <p>The timer №2 will wake up at 12:00 once a day.</p>
<p>[password] set t<N> ?</p>	<p>To ask for the timer configuration.</p>
<p>SMS command sample: 1234 set t1 ?</p>	<p>SMS response sample: <i>Timer #1 configuration is updated:</i> <i>origin: 00:00:00 UTC</i> <i>period: 01:00:00</i> <i>repeats: 1</i> <i>actions: WG</i> <i>time to next action: 00:00:59</i></p>
<p>[password] set t<N> -</p>	<p>To switch OFF the timer.</p>
<p>SMS command sample: 1234 set t2 -</p>	<p>SMS response sample: <i>Timer #2 is disabled</i></p>

SMS command	Action
<p>[password] set mode beacon</p> <p>[password] set mode b</p>	<p>To set Beacon mode. The device will go to sleep until one of two timers is activated, a signal at external input appears or alarm event occurred. The period of activity before going to sleep is 10 minutes. Password is required to execute the command.</p>
<p>SMS command sample:</p> <p><i>1234 set mode beacon</i></p>	<p>SMS response sample:</p> <p><i>Device mode is set to beacon</i></p> <p>SMS error response sample:</p> <p><i>Invalid device mode</i></p>
<p>[password] set mode track</p> <p>[password] set mode t</p>	<p>To set Tracker mode (the device will be always ON). Password is required to execute the command.</p>
<p>SMS command sample:</p> <p><i>1234 set mode track</i></p>	<p>SMS response sample:</p> <p><i>Device mode is set to tracker</i></p> <p>SMS error response sample:</p> <p><i>Invalid device mode</i></p>
<p>[password] set mode ?</p>	<p>To ask for the current operating mode. Password is required to execute the command.</p>
<p>SMS command sample:</p> <p><i>1234 set mode ?</i></p>	<p>SMS response samples:</p> <p><i>Current mode is beacon</i></p> <p><i>Current mode is tracker</i></p>
<p>[password] set server on</p>	<p>To switch server data transfer ON. You can control the device via Author Connect mobile app or via SMS commands. Password is required to execute the command.</p>
<p>SMS command sample:</p> <p><i>1234 set server on</i></p>	<p>SMS response sample:</p> <p><i>MQTT server enabled</i></p>
<p>[password] set server off</p>	<p>To switch server data transfer OFF. You can control the device only via SMS. Password is required to execute the command.</p>
<p>SMS command sample:</p> <p><i>1234 set server off</i></p>	<p>SMS response sample:</p> <p><i>MQTT server disabled</i></p>

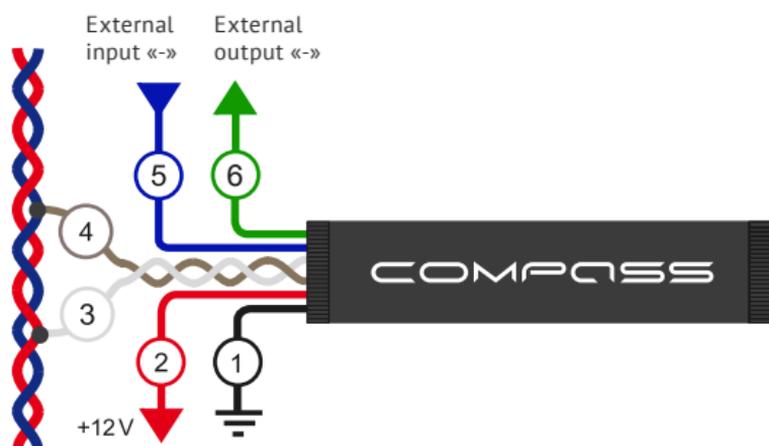
SMS command	Action
[password] set lang [ru en]	To change the language in SMS notifications to Russian/English and display Yandex/Google Maps.
SMS command sample: <i>1234 set lang en</i>	SMS response sample: <i>English language is set by default</i>
[password] set lang ?	To ask for the current language in SMS notifications.
SMS command sample: <i>1234 set lang ?</i>	SMS response sample: <i>Current language: Russian</i>
[password] reset	To reset device settings to factory settings.
SMS command sample: <i>1234 reset</i>	SMS doesn't return a response.

List of SMS notifications

Event	SMS notification
Changing of external input №1 state	<i>Input #1 is activated for 1 second</i> You will receive SMS-response including the text set by intext command earlier.
Sending an incorrect command	<i>Unknown command</i>
Sending an empty message	<i>Command not found</i>
The device can't process the command at the moment	<i>Device is busy at this moment, try again later</i> If you have received this message, try to send SMS command later (in 2-3 minutes).

DEVICE INSTALLATION

Wiring diagram



1. **Black.** Ground/Earth.
2. **Red.** +12V permanent power supply.
3. **White.** CAN-L.
4. **Brown.** CAN-H.
5. **Blue.** External input «-».
6. **Green.** External output «-».

Installation recommendations

Don't connect CAN-L and CAN-H wires to CAN-bus if you will not use COMPASS GSM/GPS in joint work with IGLA or AUTOSTART.

ATTENTION! If you want to use IGLA system (or AUTOSTART module) you should choose between ATLAS GSM module or COMPASS GSM/GPS tracker. It's impossible to pair IGLA (or AUTOSTART) with both devices.

ATTENTION! When installing COMPASS GSM/GPS together with ATLAS GSM-module, only one device should be connected to CAN-bus by CAN-L and CAN-H wires.

Don't install the tracker directly under the metal parts of the car body. Direct the tracker's antenna into sky to get strong and certain signal from satellites. Check the operation of GPS-positioning before final assembling.

Tracker account registration on server via mobile app (for installer)

1. Download and install **Author Connect** app for iOS (10.0 and higher) or Android (4.1 and higher):

<https://itunes.apple.com/ru/app/author-connect/id1394124230>

<https://play.google.com/store/apps/details?id=com.dma.author.connect>



2. Run the **Author Connect** app. Press «Create new account» and register in the system with your mobile phone number. Specify account settings:
 - Phone number – your mobile phone number including international country code (e.g. +49 111 1111111 for Germany. Indicate only numbers)

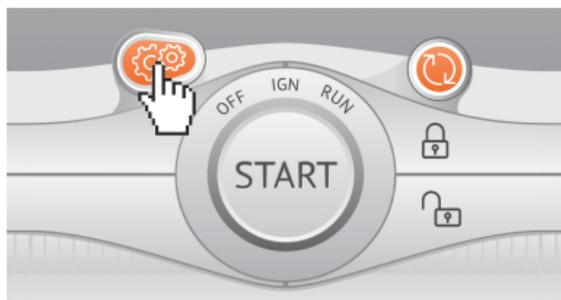
- Password - from 8 to 64 symbols with no spaces (Latin letters, numbers, special characters)
 - First Name and Last Name - at least 3 symbols (letters, spaces, dashes). Don't use spaces and dashes in the beginning and the ending of the words.
3. Pair COMPASS GSM/GPS tracker with the created account. Use the plastic card from the set with a serial number and an **open PIN-code**.

ATTENTION! Don't erase protective layer from the plastic card! PIN-codes under the protective layer are intended for car's owner registration. To pair COMPASS GSM/GPS use **only opened PIN-code**. Opened PIN-code can be used only one time for system registration and settings.

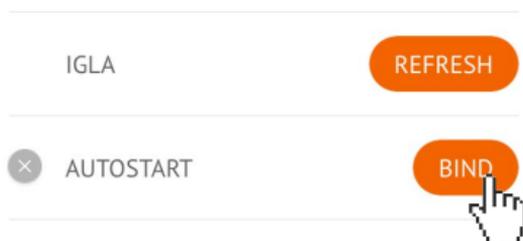
Tracker coordination with IGLA or AUTOSTART

After you have connected IGLA anti-theft system or/ and AUTOSTART module to CAN-bus, it is necessary to coordinate them with COMPASS GSM/GPS for joint work:

1. Supply +12V power to the devices.
2. Switch IGLA system to PIN-code change mode and AUTOSTART module to Firmware update mode (see operating manuals).
Don't switch OFF the ignition!
3. Open **Author Connect** mobile app and on Control screen press SETTINGS button.



4. Press REFRESH buttons for IGLA and AUTOSTART. After the devices have been detected, press BIND buttons.



Choose device for receiving data

All data could be received from vehicle systems and displayed in **Author Connect** app depending on whether IGLA or AUTOSTART are installed or not.

If you use COMPASS GSM/GPS tracker together with anti-theft system IGLA **or** AUTOSTART module, then the connected device (IGLA or AUTOSTART) is to be the CAN-data source.

If you use COMPASS GSM/GPS tracker together with both anti-theft system IGLA **and** AUTOSTART module, then the anti-theft system IGLA must be the CAN-data source.

Firmware update

Timely automatic firmware update allows the car owner to use new functions of COMPASS GSM/GPS tracker and to optimize device operation. Firmware update can be done via GSM server and does not require the device to be dismantled from the vehicle.

To update tracker's firmware send SMS request with the **[password] fwupdate** (for example, *1234 fwupdate*) to the SIM-card phone number that is installed in the tracker. Be sure to receive SMS confirmation*: *FW UPDATE OK*. In case of error send SMS request again later.

ATTENTION! After updating the COMPASS GSM/GPS firmware, make sure that the tracker parameters (master phone, APN Internet access point, etc.) remain unchanged. Otherwise, set these parameters again using the appropriate SMS commands or mobile app **Author Connect**.

* If COMPASS GSM/GPS is operating in the Beacon mode, then SMS commands are received and executed only upon wake-up.

REFERENCE INFORMATION

Specifications

GSM frequency band 900-1800 MHz

Operating voltage 7-36 V (12 V nom.)

Operating temperature range from -40 to +85°C

Current consumption:

in sleep mode not more than 1,5 mA

in standby mode not more than 9 mA

in data transfer mode not more than 200 mA

Contents of the set

COMPASS GSM/GPS tracker 1 pcs.

Plastic card with PIN-codes 1 pcs.

Operating manual 1 pcs.

Packing 1 pcs.



Made in Russia
Manufacturer: LLC «DMA Group»
C-RU.AЛ14.B.10097

The developer and the manufacturer retain the right to make technical updates not specified in this operating manual. For more information visit our web-site:

<http://author-alarm.com>



WARRANTY CERTIFICATE

Warranty time is 12 months from the date of the purchase. During this period technical support and maintenance are guaranteed free of charge. The warranty does not apply to the items with:

- mechanical damage, burnt and char pieces, components, conductive tracks etc.;
- traces of an independent and not professional repair;
- damage caused by natural hazards, fire, social factors;
- damage in the warranty seal, damage or absence of a factory/ trade labels.

Only devices with full completeness of set and with the original packing are taken for warranty service.

Absence of packing is regarded as noncompliance with transportation rules. The warranty does not apply to the damage incurred to another equipment operating together with this device.

Item (model) _____

Date of sale ____/____/_____

The contents of the set ____, device operation ____ and absence of mechanic damage ____ are checked.

I am acquainted and agree with the conditions of warranty service:

Buyer _____

Seller _____ seal



Supported Cars List App.

