

Dear Client,

To install AUTHOR-ALARM equipment, please use authorized dealerships or certified installation centers **only**.

The developer and manufacturer cannot be held liable for any damage resulting from the use of equipment for other than its intended purpose, non-compliance with safety rules, or neglecting the requirements set out herein. AUTHOR-ALARM equipment installed by any other third parties or individuals is not subject to warranty and service maintenance.

CONTENTS

BACKGROUND INFORMATION	3
DEFINITIONS	5
Service indication	5
Service button	5
PIN code	5
Authorization	
HOW TO UPDATE FIRMWARE	6
Preparation for firmware update	6
Firmware update	
INSTALLATION	8
Functions of IGLA ALARM wires	
Functionality of AR20 relay wires	
Wiring notes	
Installation recommendations	
HOW TO SET OR CHANGE PIN CODE	12
Set the initial PIN code	
Change the PIN code via the current PIN	
Change the PIN code via the Emergency code	
HOW TO PAIR DEVICES	
How to pair with AUTOSTART system	16
How to pair with COMPASS module	
How to pair with KEYLESS BLOCK system	18
How to pair with TOR relay	
How to pair with CONTOUR or KORD module	20

HOW TO CONFIGURE THE SYSTEM22	2
Feature Status Change algorithm22	
Table of IGLA ALARM features23	ó
How to configure the system via Bluetooth32	2
Alternative service button	2
CONFIGURATION VIA AUTHOR FLASHER	
Configuration of universal channels	
Selection of signal inversion	
Analog blocking logic	
Analog management of central lock	
Analog management of hazard lights	
Source of hood limit switch status	
Neglected buttons)
Output to car horn40)
SOS button40	
Alternative button for external indication control41	-
HOW TO CONFIGURE KEYFOBS AND SMARTPHONES41	
How to pair keyfobs42	2
How to pair smartphones43	ó
How to unpair keyfobs and smartphones46	5
How to unpair smartphones47	7
	,
OPERABILITY CHECK	
Control via standard equipment47	'
Authorization47	7
Emergency authorization process49	
Operating modes)
Armed mode	
Alarm mode	

Security features	.51
Engine blocking	
Additional blocking of the standard immobilizer	
Anti-carjacking	
Perimeter protection	
Searching for a keyfob when the system is disarmed	
via the standard keyfob	
Protection against keyfob reprogramming	
Service features	.56
Service mode	.56
Transport mode	.56
Comfort features	.57
Find My Car	
Control the central lock by event	
Ventilation	
Comfort	
Fold mirrors	
Control the START-STOP system	
Hands Free	
Extra option	
REFERENCE INFORMATION	.60
Check if the serial number matches	
the system number	.60
Configuration via Author Config	
How to detect the keyfob serial number	
Keyfob indication	
Indication	.63
IGLA ALARM indication	
Violated zones indication	
Specifications	.65

BACKGROUND INFORMATION

IGLA ALARM is a unique system designed to protect your car against theft or carjacking. It is innovative in a way it combines car perimeter control with the technology of engine blocking via standard electrical circuits, which does not require any additional wiring.

Key benefits:

- Advanced algorithms of engine blocking are implemented via standard electrical circuits CAN and LIN digital buses. You do not have to break control circuits. Remote activation is available.¹
- Intelligent perimeter security the system alerts the car owner about any attempt to break into the car.
- The integrated three-axis sensor of shock, tilt, and motion helps you detect any impact on the car.
- Secure authorization via a keyfob, smartphone, or PIN code entered with the car's standard buttons.
- **Standard indicators** on the car's dashboard to ensure stealth of operation.
- It can work together with other AUTHOR-ALARM devices via the car's standard wiring the CAN bus.

¹ Subject to availability of COMPASS.

Attention!

- The manufacturer reserves the right, without prior notice to the user, to introduce changes to the product design to improve its operation and technical specifications.
- These features may vary depending on the car's brand, model, equipment, and year of manufacture.
 For more details, please contact official dealerships,¹ certified installation centers, or AUTHOR-ALARM's Technical Support.
- It is not recommended to keep the personal owner card inside the car.
- It is not recommended to scratch off the protective layer of the personal owner card unless really needed.
- It is not recommended to disclose to third parties the PIN code and information indicated in the personal owner card.
- It is not recommended to keep authorization keyfobs together with a standard key or keyfob.
- It is recommended to verify that the personal owner card's number matches the one of IGLA ALARM. For the verification algorithm, go to Page 60.

¹ Centers authorized to install AUTHOR-ALARM devices.

DEFINITIONS

Service indication

Indication notifies you of disabled engine blocking and any changes in the system's settings. Indication is produced via standard symbols on the dashboard and it depends on the car's brand, model and equipment. See <u>service portal</u>. The system can also produce an analog service indication via an optional LED or buzzer.

Service button

It is the car's standard control located in the passenger compartment that helps you enter the PIN code, switch into the Service mode, and change the system's settings. These buttons may vary depending on the car's brand, model, equipment, and year of manufacture. See <u>service portal</u>.

PIN code

PIN code is a combination of button pushes that helps you unblock the engine. The initial PIN code is set when installing the system. For more details, see Page 12.

Authorization

This algorithm is designed to unblock the engine. Depending on a mode, you get authorized via a keyfob/

smartphone paired with the system and/or PIN code when ignition is on, or by pushing UNLOCK on the standard keyfob. If successful, two service indication signals will follow. For more details, see Page 47.

HOW TO UPDATE FIRMWARE

Update firmware via the Author Flasher tool (Version 4.0 and higher) and the BLED112 dongle. You can download Author Flasher alongside with the BLED112 driver, as well as installation and user manuals from the <u>service</u> <u>portal</u>.



For stable connection, ensure that BLED112 and IGLA ALARM are as close as possible to each other.

Preparation for firmware update

To prepare IGLA ALARM for update, follow these steps:

- 1. Go to the service portal and download the latest firmware that matches your car's brand, model, equipment, and year of manufacture.
- Insert the BLED112 dongle into a USB port of your PC.
- 3. Switch device the Firmware Update mode.
 - If IGLA ALARM is not installed in your car yet:
 - a) Connect the black wire to the "--" ground.
 - b) Connect the red and gray wires to "+12V" power supply **simultaneously**.
 - If IGLA ALARM is already installed in your car:
 a) Turn on ignition but do not start the engine.

- b) Get authorized.
 If successful, two service indication signals will follow.
- c) Switch IGLA ALARM into the PIN Change mode by entering the PIN code. For more details, see Page 14. Service indication will be occurring once per three seconds.
- 4. Update the firmware.

Firmware update

To update the firmware, follow these steps:

- 1. Launch Author Flasher.
- 2. In the navigation bar, select the **RF** interface.
- 3. Select IGLA ALARM out of available devices and click Connect.
- 4. Specify the path to the downloaded firmware.
- 5. Launch the firmware update process by clicking **Install**.
- 6. Once completed, click **OK**.
- 7. **If IGLA ALARM is not installed in your car yet**, disconnect the red and gray wires from power supply. Connect back the red wire only.

If IGLA ALARM is already installed in your car, turn off ignition.

INSTALLATION



Connect IGLA ALARM to the car only when ignition is off.

To configure universal channels, please use Author Flasher. For available settings, see Page 33.



For a detailed wiring diagram, go to the <u>service por-</u> <u>tal</u>, then go to Documentation and files, and click on the device you wish to install.

Functions of IGLA ALARM wires

- 1. Black. Ground "-".
- 2. Red. Permanent "+" (12V).
- 3. Brown. CAN1-H.
- 4. White. CAN1-L.
- 5. **Yellow.** Universal channel. Default setting: analog ignition input "+".
- 6. Gray. Input for initial set-up "+".
- 7. **Purple.** Universal channel. Default setting: Input for alarm from an external device "–".
- 8. Green. CAN2-L.
- 9. **Pink.** CAN2-H.
- 10. **Blue.** Universal channel. Default setting: output to blocking (NC) "-".
- 11. **Orange.** Universal channel. Default setting: output to siren "-" (max 250mA).
- 12. White-red. Universal channel. Default setting: LIN1.
- Orange-black. Universal channel. Default setting: Output to analog service indication (LED/buzzer) "-".



The manufacturer cannot be held liable for potential consequences of failure to observe safety measures (including damage to the car or malfunction of standard electrical equipment).

Functionality of AR20 relay wires

- 1. Purple. Normally closed contact.
- 2. Black. Common contact.
- 3. Green. Normally open contact.
- 4. Blue. Input. Relay control "-".
- 5. Yellow. Input. Relay control "+".

Wiring notes

- Bundle the wires and protect them with an insulating tape or corrugated tubing.
- Do not allow wires to be pinched with lining boards of the car's interior.
- Do not bend wires over sharp edges of the car's metal parts.
- Use the car's standard places for laying wires or rubber lead-throughs.
- Use corrugations when passing from the car's stationary part to the moving one and when installing any optional devices.
- Use a wire of the same or larger cross-section if you need to extend another wire.
- To ensure stealthiness of operation, choose insulating materials similar to those used in the car.

Installation recommendations

IGLA ALARM

For the motion, shock and tilt sensor to work correctly, firmly attach the device to stationary parts of the car body. Start adjusting the sensitivity of sensors only after attaching the device.

Siren

Install the siren in the engine room. The place must be protected from moisture and heat. Direct the horn of the siren downwards to avoid moisture accumulation. To manage the siren, use the orange¹ wire "-". Maximum current: 250mA.

You can also control the siren via CAN-based TOR relay or CONTOUR module. To get connected, use the appropriate wire. Please see a relevant installation manual for your device.



When using a siren with a higher current consumption in active mode, please use a discharging relay.

Hood opening sensor

IGLA ALARM makes it possible to detect an open hood status. You can detect the status of the hood limit switch via:

- The car's digital buses. The status is detected via the CAN/LIN bus.
- Analog limit switch. The status is detected when the "-" signal occurs on the purple¹ wire.

1 By default. Configuration of universal channels is available.

COMPASS module

The place of installation must meet the following criteria:

- Connect the module only to the CAN bus to which IGLA ALARM's CAN1 (white and brown wires) is connected.
- Availability of constant power supply circuits (+12V and the ground).
- It is recommended to install the module in accordance with the inscription "This side up".
- It is recommended to install the module at the distance of more than 5 cm from metal parts of the car's body to avoid shielding.
- When laying the GPS antenna, avoid sharp bends, strains, or pinching of the antenna cable.

CAN-based TOR relay

Hide the TOR relay inside the car's s wiring harness. The wiring harness must meet the following criteria:

- Connect TOR only to the CAN bus to which IGLA ALARM's CAN1 (white and brown wires) is connected.
- Availability of constant power supply circuits (+12V and the ground).
- Availability of a circuit in which the positive signal (+12V) occurs when ignition is on and disappears once ignition is off.
- Availability of a circuit to implement blocking.

CONTOUR or KORD modules



It is recommended to use a fuse to protect the power circuit.

It is recommended to install the CONTOUR/KORD modules in the underhood space. The place of installation must meet the following criteria:

- Connect CONTOUR/KORD only to the CAN bus to which IGLA ALARM's CAN1 (white and brown wires) is connected.
- Availability of constant power supply circuits (+12V and the ground).
- If you are connecting an additional blocking relay or siren, it is a must to have a circuit in which the positive signal (+12V) occurs when ignition is on and disappears once ignition is off.

HOW TO SET OR CHANGE PIN CODE

Set the initial PIN code

The initial PIN code is set by the installation center when installing the IGLA ALARM system into the car. The PIN code can include from 3 to 20 pushes. The interval between button pushes must not exceed two seconds. There is no difference between long and short pushes. You can use various button combinations and push sequences. When setting the PIN code, each push must be confirmed with a service indication signal.

The list of buttons used in the PIN combination depends on the car's brand, model, equipment, and year of manufacture. For more details, go to the <u>service portal</u> or contact AUTHOR-ALARM's Technical Support.



The PIN code combination can also include the service button. The number of service button pushes must not exceed four in a row.

To set the initial PIN code, follow these steps:

- 1. Connect the system to the car as per the wiring diagram.
- 2. Connect the red and gray wires to "+12V" power supply **simultaneously**.
- Turn on ignition but do not start the engine. The system will switch into the PIN Change mode¹ while service indication will be occurring once per three seconds.
- Enter the PIN code with the buttons available for programming.² When the PIN code is entered, three service indication signals will follow.
- 5. Enter the PIN again.

If the codes match, two service indication signals will follow. The system will save the combination and exit the PIN Change mode.

If the codes do not match, four service indication signals will follow. In this case, turn off ignition and repeat Steps 3-5.

6. Turn off ignition.

¹ If you install the system for the first time.

² It depends on the car's brand, model, and equipment. For more details, see the <u>service portal</u>.

7. Disconnect the red and gray wires from power supply. Connect back the red wire only.

Change the PIN code via the current PIN

Follow these steps:

- 1. Turn on ignition but do not start the engine.
- 2. Get authorized. If successful, two service indication signals will follow.
- 3. Press the gas pedal as far as it goes and hold it.¹



If the current PIN includes "Slight press on gas pedal", enter the PIN once again after authorization and then press the gas pedal as far as it goes.

- 4. Enter the current PIN code. The system will switch into the PIN Change mode while service indication will be repeating once every three seconds.
- 5. Release the gas pedal.
- Enter the new PIN code with the buttons available for programming.² When the PIN code is entered, three service indication signals will follow.
- 7. Enter the new PIN again.

If the codes match, two service indication signals will follow. The system will save the new PIN code and exit the PIN Change mode.

For some cars, another control is used instead. For more details, see the <u>service portal</u>.
 It depends on the car's brand, model, and equipment. For more details, see the <u>service portal</u>.

If the codes do not match, four service indication signals will follow. In this case, turn off ignition and repeat Steps 1-7.

8. Turn off ignition.

Change the PIN code via the Emergency code

Follow these steps:

- 1. Turn on ignition but do not start the engine.
- 2. Press and hold the brake pedal.
- Press the gas pedal¹ as far as it goes the number of times equal to the first digit of the Emergency code specified in the personal owner card.
- 4. Release the brake pedal. The system will read the code digit.
- 5. To enter the next digit of the code, press the brake pedal no later than in two seconds.
- Enter the rest of digits in the same way. (Steps 2-5) If the Emergency code is correct, the system will switch into the PIN Change mode. Service indication will be occurring once per three seconds.

If the Emergency code is incorrect, no confirmation will follow at all. You can enter the PIN code again in five seconds or after turning off ignition for 10 seconds and turning it on again.

7. Enter the new PIN code with the buttons available for programming.²

If successful, this will be confirmed with 3 service indication signals.

¹ For some cars, another control is used instead. For more details, see the <u>service portal</u>. 2 It depends on the car's brand, model, and equipment. For more details, see the <u>service portal</u>.

8. Enter the new PIN again.

If the codes match, two service indication signals will follow. The system will save the new PIN code and exit the PIN Change mode.

If the codes do not match, four service indication signals will follow. In this case, turn off ignition and repeat Steps 1-8.

9. Turn off ignition.

If you change the PIN code using this method:

- The system will exit the Service mode or Transport mode.
- The system will exit the Armed or Alarm mode.
- The Engine Block Disabling mode will be reset to Multi-authorization.
- If the engine is blocked via Author Connect, the blocking will be disabled.¹

HOW TO PAIR DEVICES

How to pair with AUTOSTART system



IGLA ALARM is paired with AUTOSTART via the CAN1 bus.

To pair the devices, follow these steps:

- 1. Install both devices as per the wiring diagrams.
- 2. Switch AUTOSTART into the Firmware Update mode:
 - 2.1 Press and hold the gas pedal.²
 - 2.2 Turn on ignition but do not start the engine.

¹ Subject to availability of COMPASS.

² For some cars, another control is used instead. For more details, see the service portal.

2.3 Release the gas pedal.

The system will switch into the Configuration mode while service indication will be occurring once per three seconds.

2.4 Press the gas pedal as far as it goes 20 times. Each button push must be confirmed with an indication signal.

Service indication will produce 20 signals. The system will switch into the Firmware Update mode.

3. Switch IGLA ALARM into the PIN Change mode by entering the PIN code. For more details, please go to Page 14.

Service indication will be occurring once per three seconds.

- 4. If successful, two service indication signals will follow.
- 5. In three to five seconds after the end of indication, turn off ignition.

How to pair with COMPASS module



Before you start the pairing process, add the module to your account via Author Connect. For more details, please see relevant manuals for the module or mobile application.

- (I) IGLA ALARM is paired with the module via the CAN1 bus.

Connect the module to the same CAN bus to which IGLA ALARM is connected.

You can pair IGLA ALARM only with a single COMPASS module.

To pair the devices, follow these steps:

- 1. Install both devices as per the wiring diagrams.
- 2. Switch IGLA ALARM into the PIN Change mode by entering the PIN code. For more details, please go to Page 14.

Service indication will be occurring once per three seconds.

- 3. Launch Author Connect and sign in.
- 4. Click $\bigotimes \rightarrow$ Engineer settings \rightarrow confirm the action by clicking Yes, continue.
- 5. Go to Manage optional devices and click on the IGLA ALARM status (Not paired) → the process will start. If successful, two service indication signals will follow. In Settings and Engineer settings, Author Connect will update the device pairing status (Paired).
- 6. Turn off ignition.

How to pair with KEYLESS BLOCK system

Coni whice

Connect KEYLESS BLOCK to the same CAN bus to which IGLA ALARM is connected.



IGLA ALARM is paired with KEYLESS BLOCK via the CAN1 bus.

To pair the devices, follow these steps:

- 1. Install both devices as per the wiring diagrams.
- In KEYLESS BLOCK, set Authorization via keyfob mode and pair keyfobs and/or smartphones. For more details, please see the KEYLESS BLOCK manual.
- 3. Switch KEYLESS BLOCK into the Firmware Update mode:

- 3.1 Get authorized in KEYLESS BLOCK.
- 3.2 Turn on ignition but do not start the engine.
- 3.3 Press the gas pedal¹ as far as it goes 20 times. Press the pedal no later than 10 seconds after you have turned on ignition. The system will switch into the Firmware Update mode, which will be confirmed with 20 service indication signals. The service indication signal will
 - be repeating once every 3 seconds.
- 4. Switch IGLA ALARM into the PIN Change mode by entering the PIN code. For more details, please go to Page 14.

Service indication will be occurring once per three seconds.

- 5. If successful, two service indication signals will follow.
- 6. Turn off ignition.

How to pair with TOR relay



You can pair only a single TOR relay with IGLA ALARM. Once you have paired another TOR relay, the previous one will automatically be unpaired from the system.



Connect the blocking wires and TOR's yellow wire only upon completion of the pairing process.

To pair the devices, follow these steps:

1. Connect IGLA ALARM as per the wiring diagram and set an initial PIN code.

¹ For some cars, another control is used instead. For more details, see the service portal.

- Connect the CAN bus and TOR's black wire as per the wiring diagram. Do not connect the blocking circuit or TOR's gray, red, and yellow wires.
- Switch IGLA ALARM into the PIN Change mode by entering the PIN code. For more details, please go to Page 14. Service indication will be occurring once per three

Service indication will be occurring once per three seconds.

4. Apply power "+" to the gray and red wires of the TOR relay **simultaneously**.

If successful, two service indication signals will follow.¹ The built-in relay will operate twice within five seconds after power is supplied. The "-" signal will occur twice on the orange wire.

- 5. In three to five seconds after the end of indication, turn off ignition.
- 6. Disconnect the red and gray wires of the TOR relay from "+" to get restarted.
- 7. Connect other TOR's wires as per the wiring diagram. Do not connect the gray wire.

How to pair with CONTOUR or KORD module



You can pair two CONTOUR/KORD modules with IGLA ALARM.



When pairing each successive device, disconnect all previously paired devices from the CAN bus or power supply.

1 Depending on the firmware version, service indication signals may be repeating until ignition is turned off.

To pair the devices, follow these steps:

- 1. Connect both devices as per the wiring diagram. Do not connect CONTOUR's gray, red, or yellow wires. Do not connect KORD's gray or red wires.
- Switch IGLA ALARM into the PIN Change mode by entering the PIN code. For more details, please go to Page 14.

Service indication will be occurring once per three seconds.

3. Apply power "+" to the gray and red wires **simultaneously**.

If successful, two service indication signals will follow. The electric drive of the hood lock will run three times (it will open, shut down, and open again) within five seconds after power is supplied.

- 4. In three to five seconds after the end of indication, turn off ignition.
- 5. Disconnect the red and gray wires of the module from "+" to get restarted.
- Connect the red wire to the "+" power supply circuit, then connect the yellow wire to the ignition circuit.¹ Do not connect the gray wire.

¹ For extra blocking or siren.

HOW TO CONFIGURE THE SYSTEM

To configure IGLA features, use Author Flasher tool, Author Connect application or follow the algorithm below. Its features are specified in the table on Page 23.



Some features may vary depending on the car's brand, model, and equipment. For more details, please see the <u>service portal</u>.

Feature Status Change algorithm

To change the status of a feature at question, follow these steps:

- 1. Turn on ignition but do not start the engine.
- 2. Get authorized.

If successful, two service indication signals will follow.

- 3. Press the gas pedal as far as it goes and hold it¹.
- 4. Push the service button the number of times equal to a feature status.

To confirm the setting of a feature status, service indication signals will be occurring the number of times equal to the value of the feature being configured.

- 5. Release the gas pedal.
- 6. Turn off ignition.



You can change the status of only one feature as part of this algorithm.

¹ For some cars, another control is used instead. For more details, see the service portal.



Carefully push the service button the number of times equal to a feature status. Otherwise, you may set up some other feature by mistake.

Table of IGLA ALARM features

Starting from Version 3.11 and higher, the default setting may depend on the car's brand, model, and equipment. For availability of a certain feature and its description, see Section "Firmware and Comments" on the <u>service</u> <u>portal</u>.

Feature	On	Off
Service mode	5	Automatically or via PIN code
Opening of central lock by event	6	7
Drive-away locking	8	9
Ventilation	10	11
Comfort	12	13
Fold mirrors	14	15
Anti-carjacking	16	17
Engine Start Inhibit	18	19
Engine Shut-off	19	18
Extra option	20	21
Step-by-step authorization	23	Select a
Two-factor authorization	24	different authorization mode
Multi-authorization	25	
Additional blocking of the standard immobilizer	26	27

Feature	On	Off		
Classic mode	29	28		
HID mode	28	29		
Super Anti-carjacking	30	17		
Factory reset	31	-		
Turn off START-STOP system	32	33		
Hands Free	34	35		
Blocking of diagnostic exchange	36	37		
Features configurable via Author Flasher only				
Authorization via standard keyfob				
Car driving period for automatic exit from Service mode	Configurable value			
Maximum parking time for automatic exit from Service mode	Configurable value			
Alarm logic				
Speeding warning				
Speeding threshold (km/h)	Configurable value			
Speed reduction range to reset speeding warning (km/h)	Configurable value			
Enable Start Inhibit after Engine Shut-off				
Search for a keyfob when the system is disarmed via the standard key				
Maximum time of keyfob search when the system is disarmed via the standard key, seconds	Configurable value			
Digital indication				

Feature	On	Off
Siren information signals		
Pulse duration of siren information signal (ms)	Configurable value	
Accelerometer		
Motion sensor sensitivity	Configurable value	
Tilt sensor sensitivity	Configurable value	
Light shock sensor sensitivity	Configurable value	
Heavy shock sensor sensitivity	Configurable value	
Digital blocking of automatic transmission		

Description of table features

Service mode

It helps you disable the system's anti-theft and comfort features when taking your car to the service center.

Opening of central lock by event

The feature is designed to open the central lock once ignition is off.

Drive-away locking

The feature is designed to shut the central lock after the start of driving. The central lock closes when you reach the speed of 10 km/h.

Ventilation

The feature is designed to ventilate the passenger compartment. Push UNLOCK on the standard keyfob three times to lower the windows by 3-5 cm. Once you have put the car into the Armed mode, the windows will remain open even if COMFORT is on.

Comfort

The feature is designed to close windows and the sunroof when switching into the Armed mode.

Fold mirrors

The feature is designed to fold mirrors when switching into the Armed mode.

Anti-carjacking

The feature is designed to prevent theft by means of force or intimidation. In case of carjacking, IGLA ALARM will block the engine when the car is at a safe distance from the owner (about 300-500 m).

Engine Start Inhibit

The feature is designed to choose an engine blocking algorithm. The system will prevent the engine from starting until you get authorized.

Engine Shut-off

The feature is designed to choose an engine blocking algorithm. The system will not prevent the engine from starting. However, at any driving attempt before you get authorized, it will shut off the engine.

Extra option

The feature is designed to introduce extra functionality for your car. For availability of a certain feature and its description, see Section "Firmware and Comments" in car description on the <u>service portal</u>.

26

Step-by-step authorization

The feature helps you choose an algorithm to unblock the engine (authorization). Turn on ignition, provide a paired keyfob/smartphone, start the engine, and enter the PIN code before you start driving.



To enable the Step-by-step Authorization mode, pair at least one keyfob/smartphone with the device and set a PIN code.

Two-factor authorization

The feature helps you choose an algorithm to unblock the engine (authorization). Turn on ignition, provide a paired keyfob/smartphone, then enter the PIN code before you start the engine or begin driving.¹



To enable the Two-factor Authorization mode, pair at least one keyfob/smartphone with the device and set a PIN code.

Multi-authorization

The feature helps you choose an algorithm to unblock the engine (authorization). Turn on ignition, provide a paired keyfob/smartphone, or enter the PIN code before you start the engine or begin driving.¹

Additional blocking of the standard immobilizer

The feature is designed to enable/disable the Engine Start Inhibit algorithm alternatively by blocking the standard immobilizer via the digital CAN bus.

1 It depends on a blocking algorithm.

Classic mode

The feature helps you select a radio module operation mode when using your smartphone as a keyfob. To get authorized, use the Author ID app. It helps your smartphone find the IGLA ALARM system. The advantage of this mode is high secrecy of operation: the system does not go online until it is detected by the smartphone.

HID mode

The feature helps you select a radio module operation mode when using your smartphone as a keyfob. In this mode, IGLA ALARM is always online and in search of a paired smartphone. The mode is used in cases when pairing a smartphone in the Classic mode is impossible due to technical features. In the HID mode, you do not need any Author ID to get authorized.

Super Anti-carjacking

The feature is designed to prevent theft by means of force or intimidation. This algorithm is a specific instance of the Anti-carjacking mode. For more details, go to Page 52.

Factory reset

The feature is designed to reset all settings to default.

Turn off START-STOP system

The feature is designed to disable the standard START-STOP system. With this feature on, the engine will not automatically shut off when the car stops at traffic lights or traffic jams, for example.

Blocking of diagnostic exchange

The feature prevents any unauthorized access to car diagnostics, which helps you protect your car against theft attempted by reprogramming of standard keys or changing the configuration of standard electronic units, for example. With this feature on, access to diagnostics is granted only after authorization, as well as in the Service or Transport mode.

Authorization via standard keyfob

The feature helps you choose an algorithm to unblock the engine (authorization). To disable the blocking, push UNLOCK on the standard keyfob. For more details, please see Page 48. For configuration, follow these steps: *Settings* – *General settings* – *Authorization mode* – *Authorization via standard keyfob*.

Car driving period for automatic exit from Service mode

The feature helps you set the time period elapsing before automatic exit from the Service mode. The default value is 15 minutes.

Maximum parking time for automatic exit from Service mode

The feature is designed to set the maximum time period for which the car can be stopped during automatic exit from the Service mode. The default value is five seconds.

Alarm logic

The feature is designed to enable/disable car perimeter protection, the accelerometer, and the shock/tilt/motion sensor after switching into the Armed mode.

Speeding warning

The feature is designed to warn the driver about speeding. When the speed threshold of 77 km/h (by default) is reached, 1 service indication signal will follow. The next warning will follow after you reduce speed by 3 km/h (by default) but exceed it again up to this speed threshold.

Speeding threshold (km/h)

The feature is designed to configure the speed threshold. If you exceed it, the speeding warning will follow. The default value is 77 km/h.

Speed reduction range to reset speeding warning (km/h)

The feature is designed to set the minimum value by which the car's speed must decrease after exceeding the speed threshold in order to reset the speeding warning. The default value is 3 km/h.

Enable Start Inhibit after Engine Shut-off

The feature is designed to enable/disable Engine Start Inhibit after the engine is shut off via the Engine Shutoff feature.

Search for a keyfob when the system is disarmed via the standard key

The feature allows to disable car perimeter protection only if there is a paired keyfob/smartphone within the system's recognition range. For more details, please see Page 54.

Maximum time of keyfob search when the system is disarmed via the standard key, seconds

The feature helps you set the maximum time during which

the system keeps searching for a paired keyfob/smartphone within its range.

Digital indication

The feature is designed to enable/disable service indication on the dashboard. With this feature off, you have to use an analog service indication in the car's interior via an optional LED or buzzer.

Siren information signals

The feature is designed to enable/disable information signals that are produced via the siren. For more details, please see Page 64.

Pulse duration of siren information signal (ms)

The feature is designed to configure the duration of information signals. The default value is 60 ms.

Accelerometer

The feature is designed to enable/disable the accelerometer and adjust sensitivity of shock, tilt, and motion sensors. When you configure enabling or disabling of the accelerometer, this also affects the operation of the shock, tilt, and motion sensor. When you turn off the accelerometer, you will not be able to use sensors or change their sensitivity.

Digital blocking of automatic transmission

The feature is designed to enable/disable the blocking of automatic transmission via the CAN bus.

How to configure the system via Bluetooth

You can change IGLA ALARM settings using Author Connect¹ via Bluetooth. Configuration is available even if the system is not paired with COMPASS. To carry out the configuration, follow these steps:

- 1. Turn on ignition but do not start the engine.
- Get authorized. If successful, two service indication signals will follow.
- 3. Switch IGLA ALARM into the PIN Change mode by entering the PIN code. For more details, please go to Page 14.

Service indication will be occurring once per three seconds.

- 4. Open Author Connect.
- 5. Go to Bluetooth Settings in one of the following ways:
 - Click Bluetooth Settings on the app's start screen.
 - Click $\bigotimes \rightarrow$ click **Bluetooth Settings**.²
- 6. Select IGLA ALARM out of available devices.
- 7. Once completed, turn off ignition.

Alternative service button

In IGLA ALARM, you can assign an alternative service button to be used alongside with the standard button set by default.

 Author Connect supports smartphones operated by iOS 10.2 and higher, or Android 5.0 and higher. You can download the app in App Store, Google Play Store, and HUA-WEI AppGallery.

 $\mathbf 2$ It requires joint installation and pairing with the COMPASS module added to your account.

To add an alternative service button, follow these steps:

- 1. Turn on ignition but do not start the engine.
- 2. Get authorized. If successful, two service indication signals will follow.
- 3. Switch IGLA ALARM into the PIN Change mode by entering the PIN code. For more details, please go to Page 14.

Service indication will be occurring once per three seconds.

4. To set a new service button, press 21 times the button you wish to use as a service button. Each push must be confirmed with an indication signal. If successful, this will be confirmed with 21 service in-

If successful, this will be confirmed with 21 service in dication signals.

To delete the alternative service button, set the standard service button as an alternative one, as described above.

CONFIGURATION VIA AUTHOR FLASHER



Start configuring features only after updating the firmware.



To reset all settings to default, enable the relevant feature in Extra options.

Configuration of universal channels

Author Flasher v.4.6 or higher will help you configure universal channels as per system parameters you prefer. For default features of universal channels, see Page 8.



Firmware v.3.10 or higher is required.

Wire color	Function	Available settings
Yellow	Input "+" only	Analog ignition ¹
		Hood limit switch
Durala	Input "+" or input "–"	Alarm input ²
Purple		Function 1-5 ³
		Output to additional blocking (NC)
		Output to additional blocking (NO)
		Analog service indication ⁴
Orange		Hazard warning lights (or other external indication)
		Alternate hazard warning light control
		Analog shutting ⁵
	Only "-" output	Analog opening ⁵
	(up to 250mA)	Alternative management of the central lock (pulse-based, via a single wire) ^s
		Siren output
Blue		Authorization status ⁶
		Output to car horn
		Function 1-5 ³
		Test signal to check operability of device and output ⁷

 When implementing an additional blocking, it is connected to a wire on which +12V occurs every time you turn on ignition and disappears right after you turn off ignition.
 The alarm input allows IGLA ALARM to receive signals about violation of security zones from auxiliary devices.

3 The feature is designed to introduce extra functionality for your car. For availability of a certain feature and its description, see Section "Firmware and Comments" in car description on the <u>service portal</u>.

4 Output to analog service indication (LED/buzzer).

5 With this setting on, you will not be able to manage the central lock via the CAN bus. 6 Depending on inversion settings, the "-" control signal occurs/disappears when you pass authorization and disappears/occurs after switching into the Armed mode.

7 With this setting enabled, a signal will be sent to the output once per second to confirm its operability. To produce indication, connect a LED or buzzer to the wire.

		1.151
White/red		LIN
		Analog ignition ¹
	Input "-" or output "-" or LIN	Hood limit switch
		Alarm input ²
		Output to additional blocking (NC)
		Output to additional blocking (NO)
		Analog service indication ³
		Hazard warning lights (or other external indication)
Orange/black		Alternate hazard warning light control
		Analog shutting ^₄
		Analog opening ⁴
		Alternative management of the central lock (pulse-based, via a single wire) ⁴
		Siren output
		Authorization status ⁵
		Output to car horn
		Function 1-56
		Test signal to check operability of device and output ⁷

1 When implementing an additional blocking, it is connected to a wire on which +12V occurs every time you turn on ignition and disappears right after you turn off ignition. 2 The alarm input allows IGLA ALARM to receive signals about violation of security zones from auxiliary devices.

3 Output to analog service indication (LED/buzzer).

4 With this setting on, you will not be able to manage the central lock via the CAN bus. 5 Depending on inversion settings, the "-" control signal occurs/disappears when you pass authorization and disappears/occurs after switching into the Armed mode.

6 The feature is designed to introduce extra functionality for your car. For availability of a certain feature and its description, see Section "Firmware and Comments" in car description on the <u>service portal</u>.

7 With this setting enabled, a signal will be sent to the output once per second to confirm its operability. To produce indication, connect a LED or buzzer to the wire.

Selection of signal inversion

For inputs. This feature determines whether the device will respond to a signal occurring at or disappearing from the input.

For outputs. This feature determines whether the device will:

- Apply the control signal to the output while the feature is triggered.
- Release the control signal from the output while the feature is triggered.

Analog blocking logic

The feature helps you block the engine via an auxiliary analog relay connected to IGLA ALARM's blue wire.¹ You can manage the relay both via the normally closed (NC) and normally open (NO) schemes.



The NC Blocking mode is set by default.



For correct operation of the analog blocking, be sure to connect the yellow wire (Input IGN1 "+").

NC scheme

The logic of the wire when using the NC scheme depends on an engine blocking algorithm:

 Engine Start Inhibit. The control signal "-" occurs on the wire when trying to start the engine if CAN blocking is not supported or its operation is hindered.

1 By default. Configuration of universal channels is available.

 Engine Shut-off. The control signal "-" occurs on the wire after shifting the automatic transmission selector from the P position or starting to drive with manual transmission if CAN blocking is not supported or its operation is hindered.

Once blocking is triggered, the control signal "-" disappears from the wire after you turn off ignition.

NO scheme

The logic of the wire when using the NO scheme depends on an engine blocking algorithm:

- Engine Start Inhibit. The control signal "-" occurs on the wire after you get authorized.
- Engine Shut-off. The control signal "-" occurs on the wire after you turn on ignition and disappears after shifting the automatic transmission selector from the P position or starting to drive with manual transmission if CAN blocking is not supported or its operation is hindered.

Once blocking is triggered, the control signal "-" disappears from the wire after you get authorized.

Operation logic when the CAN bus is short-circuited

If ignition is on, authorization is not passed and IGLA ALARM receives no data from the CAN bus (short circuit or open circuit), the control signal "-" occurs or disappears, depending on the operating mode of the wire (NC/NO).

Blocking is resumed after you turn off ignition (ignition control is via the yellow wire) and fix the short circuit or open-circuit fault of the CAN bus.

Analog management of central lock

The feature helps you manage the central lock without the CAN bus. You can use the feature if your car does not support digital management. Any wires used as outputs (blue, orange, or a LIN bus) can be configured as control wires.

Two management methods are supported:

- Pulse-based management via two wires. When you try to shut or open the central lock, a pulse with the duration of 600 ms is applied to a relevant wire.
- **Pulse-based management via a single wire**. When you try to shut or open the central lock, a pulse with the duration of 600 ms is applied to a single wire.

If you configure wires, so they manage the central lock, you will not be able to manage it via the CAN bus.

Analog management of hazard lights

The feature helps you manage the hazard lights even without the CAN bus. You can use the feature if your car does not support digital management.

It is designed only for producing sound indication signals if Anti-carjacking is triggered.

Two management methods are supported:

- **Direct management**. In parallel with CAN control, a 400 ms pulse is applied to the configured wire.
- Alternative control. In parallel with CAN control, a 150 ms pulse is first applied to the wire to turn on the hazard lights. In 250 ms, a pulse of the same duration is applied to turn it off.

Source of hood limit switch status

You can detect the status of the hood limit switch via:

- Automatic selection (by default). The status is detected via a signal from any active source.
- **CAN bus.** If the car is equipped with the standard limit switch of the hood, its status is detected via the CAN bus, provided that there is not any analog hood limit switch connected to IGLA ALARM.
- Analog limit switch. The status is detected via the analog limit switch connected to IGLA ALARM.¹
- **SIREN BT**. The status is detected via an auxiliary SI-REN BT to which an analog limit switch of the hood is connected.

Neglected buttons

The feature helps you add standard buttons that cause "false pushes" and impede correct PIN code authorization to the list of neglected buttons. The device will neglect all pushes on such buttons while their functionality will remain unchanged.

¹ To get connected, use Author Flasher to select the appropriate wire setting.

If the button is used in the current PIN code, it is impossible to add it to the list of neglected buttons.

Output to car horn

The setting helps you connect IGLA ALARM to the car horn directly or via a relay. The horn will imitate the following siren signals (see Page 64 "IGLA ALARM Indication"):

Information signals	Switching into to the Armed mode
	Arming a perimeter zone
	Exiting the Armed mode, with a perimeter zone violated
	Find My Car is on
Alarm signals	If IGLA ALARM is in the Alarm mode, the horn will be producing 0.5-second sound signals at 1.5-second intervals.

SOS button

The feature is available when using IGLA ALARM jointly with the COMPASS module.

The feature helps you assign the car's standard button as an SOS button. You can select any non-locking¹ button available for assigning the PIN code. The list of buttons depends on the car's brand and model. It is available on the <u>service portal</u>. The newly assigned SOS button can also be used to assign a PIN code.

1 This button must be non-locking – physically and digitally.

For activation, click on and hold the SOS button for two seconds. The car owner will be alerted with a push notification in Author Connect.

Alternative button for external indication control

The feature helps you assign the car's standard button as an alternative button to manage external light indication. You can select any button available for assigning the PIN code. The list of buttons depends on the car's brand and model. It is available on the <u>service</u> <u>portal</u>.

After pushing the button twice, two signals of external light indication will occur twice at the interval of two seconds between the flashes.

If the engine is blocked, it is impossible to enable this feature.

HOW TO CONFIGURE KEYFOBS AND SMARTPHONES

Keyfobs and smartphones are used for authorization and must be paired with the system. IGLA ALARM supports pairing with no more than two keyfobs and two smartphones at once.



In the Pairing mode, IGLA ALARM's recognition range is limited. For successful pairing, stay in the passenger compartment.

How to pair keyfobs



If other keyfobs were previously paired with the system, clear the memory before you pair a new one. See Section "How to unpair keyfobs and smartphones" on Page 46.

To pair a new keyfob, follow these steps:

- 1. Remove batteries from all keyfobs (including those paired with the system).
- 2. Turn on ignition but do not start the engine.
- 3. Get authorized. If successful, two service indication signals will follow.
- 4. Switch IGLA ALARM into the PIN Change mode by entering the PIN code. For more details, please go to Page 14.

Service indication will be occurring once per three seconds.

- 5. Push the service button twice.
- 6. Push and hold the button on the keyfob body.
- Insert the battery and release the button. *The keyfob LED will be blinking green once per second.* **If successful**, the LED will blink red once. **If unsuccessful**, the LED will stop blinking green in 30 seconds.
- 8. Go back to Steps 6-7 if you wish to pair another keyfob.
- 9. Turn off ignition.

How to pair smartphones



Some smartphone models may be incompatible with IGLA ALARM.



Before pairing your smartphone with the system, make sure that the smartphone is not paired via Bluetooth with third-party devices. There should be no active keyfobs within IGLA ALARM's recognition range (remove batteries from all keyfobs). Bluetooth must be turned off on the paired smartphone.



When launching the app, if a message appears saying that the smartphone does not support the Keyfob mode (Bluetooth Peripheral mode not supported), use an alternative pairing method (HID mode).

Classic mode

You pair your smartphone with the system via Author ID in the Classic mode (enabled by default). The advantage of this mode is high secrecy of operation: the system does not go on the radio until it is detected by the smartphone, which makes it difficult for radio search devices to detect it.

The app is free. It is available in App Store and Google Play Store for smartphones operated by iOS (10.2 and higher) and Android (5.0 and higher).





To pair a smartphone working as a keyfob, follow these steps:

- 1. Turn on Bluetooth in your smartphone.
- 2. Launch Author ID.
- 3. Turn on ignition but do not start the engine.
- Get authorized. If successful, two service indication signals will follow.
- 5. Switch IGLA ALARM into the PIN Change mode by entering the PIN code. For more details, please go to Page 14.

Service indication will be occurring once per three seconds.

- 6. Push the service button once.
- 7. To pair a new device, click "+" in the upper right-hand corner of Author ID.
- In the pop-up window, enter the Bluetooth pairing code indicated in the personal owner card → confirm the action.

If successful, two service indication signals will follow.

- 9. Get back to the main screen.
- 10. On the main screen of Author ID, click on the key button to enable the Keyfob mode. Once the mode enabled, the button will be highlighted in orange.
- 11. Turn off ignition.

12. Click on the key button and minimize Author ID. Smartphone authorization is available only if Bluetooth is on.

HID mode

It is an alternative operating mode of IGLA ALARM's radio module. You can use it where pairing in the Classic mode is impossible due to technical features of your smartphone. In this mode, the device is constantly on the radio and in search of a paired smartphone.

Before you pair your smartphone in the HID mode, set the relevant operating mode for the radio module via the Feature Status Change algorithm (see Page 22) or via Author Flasher.

To pair a smartphone working as a keyfob, follow these steps:

- 1. Turn on Bluetooth in your smartphone.
- 2. Turn on ignition but do not start the engine.
- 3. Get authorized. *If successful, two service indication signals will follow.*

4. Switch IGLA ALARM into the PIN Change mode by entering the PIN code. For more details, please go to Page 14.

Service indication will be occurring once per three seconds.

- 5. Push the service button once.
- 6. Search for new Bluetooth devices on your smartphone.
- 7. Select IGLA ALARM out of available devices.

In the pop-up window, enter the Bluetooth pairing code indicated in the personal owner card → confirm the action.

If successful, two service indication signals will follow. Turn off ignition.

How to unpair keyfobs and smartphones



9.

If you have lost your keyfob or smartphone, unpair it from the system for security reasons.



Once completed, all previously paired keyfobs and smartphones will be deleted from IGLA ALARM and the authorization mode will be reset to Multi-authorization.

To unpair a keyfob or smartphone, follow these steps:

- 1. Turn on ignition but do not start the engine.
- 2. Get authorized. If successful, two service indication signals will follow.
- Change the current PIN code to the same one. See Page 14. To confirm changing of the PIN code, 2 service indica-

tion signals will follow.

- 4. Do not turn off ignition. Push the service button 10 times. Push the service button no later than 10 seconds after the PIN change is confirmed. *In 5-10 seconds, two service indication signals will confirm unpairing.*
- 5. Turn off ignition.

How to unpair smartphones

To unpair a smartphone, change the current PIN code to the same one. See Page 14.



Once you have unpaired the smartphone from the system, disconnect the devices in Bluetooth settings of your smartphone.

OPERABILITY CHECK

CONTROL VIA STANDARD EQUIPMENT

You can manage IGLA ALARM via the car's standard keyfob or the standard Keyless Access feature. They help you enable and disable car perimeter protection, or activate some comfort features.

AUTHORIZATION

Authorization is an algorithm designed to unblock the engine. Depending on a mode, you get authorized via a keyfob/smartphone paired with the system and/or PIN code when ignition is on, or by pushing UNLOCK on the standard keyfob. If successful, two service indication signals will follow.



Authorization is required each time before starting the engine or driving, depending on a blocking algorithm. IGLA ALARM offers the following modes to unblock the engine:

- Multi-authorization. Before you start the engine or begin driving, turn on ignition and get authorized via a paired keyfob/smartphone or via a PIN code.¹ Set by default.
- Step-by-step authorization. Turn on ignition, provide a paired keyfob/smartphone, start the engine, and enter the PIN code before you start driving.
- Two-factor authorization. Before you start the engine or begin driving, turn on ignition, provide a paired keyfob/smartphone, then enter the PIN code¹.
- Authorization via standard keyfob.² Push UNLOCK on the standard keyfob. When this mode is implemented, it is not required to use any keyfob/smartphone paired with the system or enter any PIN code to start the engine or drive. However, you may still use them to get authorized.

To configure an authorization mode, use either the Feature Status Change algorithm (see Page 22) or Author Flasher.



Do not keep the keyfob inside the car once your trip is over: in this case, anti-theft features will be disabled.

¹ It depends on a blocking algorithm.

² You can configure this authorization mode via Author Flasher only.

Emergency authorization process

If it is impossible to get authorized via a keyfob/smartphone, standard key, or PIN code, follow the emergency authorization process. Follow these steps:

- 1. Unlock the driver door via the standard key through the lock cylinder.
- 2. Open the door. The system will go into the Alarm mode.
- 3. Turn on ignition but do not start the engine.
- 4. Change the current PIN code via the Emergency code. For more details, please see Page 15. *Alarm indication will be disabled and the system will exit the Alarm mode.*
- 5. Turn off ignition.

OPERATING MODES

Armed mode

In the Armed mode, the system blocks the engine at any attempt to start the engine or begin driving.¹

You can switch into the Armed mode in one of the ways:

- Automatically in 10 seconds after you turn off ignition if there is not any paired keyfob/smartphone within the system's range.
- Push LOCK on the standard keyfob.²

¹ It depends on a blocking algorithm.

² It depends on the status of Feature "Authorization via standard keyfob".

Stages of switching into the Armed mode:

- The system blocks the engine in three seconds after you turn off ignition.¹
- The system turns on car perimeter protection in two seconds after you push LOCK on the standard keyfob or use the standard Keyless Access feature.
- 3. Switching into the Armed mode will be confirmed with light and sound indication signals.

When IGLA ALARM switches into the Armed mode and the **perimeter is violated** (for example, one of the car doors is not closed), three short sound signals will follow. All perimeter zones, except for the violated one, will be armed. Once the violated zone is closed, it will also be armed. That will be confirmed with light and sound indication signals.

Automatic switching into the Armed mode

IGLA ALARM will automatically switch into the Armed mode in one minute if no door (driver's, passenger's or baggage compartment door) remains open after you disable car perimeter protection.

You can exit the Armed mode in one of the following ways:

- Authorization via keyfob/smartphone, or via PIN code.
- Push UNLOCK on the standard keyfob.²

1 It is a standard value that depends on the car's brand, model, and equipment. Please see the <u>service portal</u>. Configuration is available via Author Flasher.
2 It depends on the status of Feature "Authorization via standard keyfob". With the Armed mode on, if a security perimeter zone is violated, additional sound signals will occur upon exiting the mode. The number of signals depends on the violated perimeter zone. For more details, see Table "Violated zones indication" on Page 65.

Alarm mode

The mode is designed to alert the car owner and others about any attempt of unauthorized start, movement, or violation of a security zone. Alerts are carried out via sound (siren and/or horn) and light (external light indication) indication signals. The number and frequency of signals depends on a specific event. For more details, please see Table "IGLA ALARM indication" on Page 64.

The signals stop occurring once you get authorized or in 30 seconds (by default) if ignition is off and there are no conditions for switching into the Alarm mode.

SECURITY FEATURES

Engine blocking

IGLA ALARM offers the following modes to block the engine:

- Engine Start Inhibit. The system prevents the engine from starting unless authorization has been passed.
- Engine Shut-off. The system shuts off the engine¹ at any driving attempt unless authorization has been

1 For some car models, it requires installing an additional blocking relay.

passed. Once Engine Shut-off is triggered, the system will automatically¹ switch into the Engine Start Inhibit mode. Once authorized, the system will switch into the Engine Shut-off mode again.

Additional blocking of the standard immobilizer

If it is possible to implement blocking of the standard immobilizer, you can use this feature instead of an analog blocking. The Standard Immobilizer Blocking feature does not affect other blocking types or that of the AUTO-START module (subject to joint installation and pairing with IGLA ALARM).

Anti-carjacking

The mode helps you prevent any theft attempted by means of force or intimidation. In case of carjacking, IGLA ALARM will block the engine when the car is at a safe distance from the owner (about 300-500 m).

Activation stages

- 1. **Standby.** The feature is enabled, the system is waiting for conditions to be activated.
- Activation. With the engine running, if the driver door remains open for longer than three seconds and the brake pedal is not pressed, the algorithm will be activated.

¹ It depends on the car's brand, model, and equipment. For more details, see the <u>service portal</u>. Enabled by default.

- 3. **Warning.** If the car passes the safety distance while authorization is not passed yet, the system will be producing service indication signals for 20 seconds. This is how the system reminds you to get authorized to avoid engine blocking (enter the PIN code or provide a paired keyfob/smartphone).
- 4. **Engine blocking.** The system will block the engine at five km/h or at a complete stop. Once the engine blocked, restart will be disabled until you get authorized via the PIN code.
- 5. Alarm. The car will be issuing sound and light indication signals to draw attention of the people nearby and warn of a possible stop. The Alarm stage may precede the Engine blocking stage if the driving speed is higher than 5 km/h. When the engine is blocked and the car stops, the system will be returning to the Alarm mode every time that ignition is on. The signals will stop occurring once you have passed authorization or in 30 seconds once ignition is off.

The engine is shut off at the speed below five km/h.

Super Anti-carjacking

This algorithm is a specific instance of the Anti-carjacking mode. Under this mode, the engine can be started without authorization. Thus, the owner allows the thief to drive away in a car that will be blocked after passing the safety distance. **To disable Engine stall** after the Anti-carjacking or Super Anti-carjacking algorithm has been triggered, turn on ignition and enter the authorization PIN.

Perimeter protection

IGLA ALARM enables car perimeter protection in two seconds after you switch the system into the Armed mode by pushing LOCK on the standard keyfob or by using the standard Keyless Access feature. The system monitors the following security zone:¹

- Ignition on (the key inserted into the ignition lock or the Start/Stop button pushed).
- Door opened (the driver's, passenger's or the one of the baggage compartment).
- Hood opened.
- Shock, tilt, and motion sensor triggered.
- Cylinder of the driver's door lock turned.
- Sunroof opened.



The system activates the shock, tilt, and motion sensor in 60 seconds after switching into the Armed mode.

To disable car perimeter protection, exit the Armed mode by pushing UNLOCK on the standard keyfob or use the standard Keyless Access system.

¹ It depends on the car's brand, model, and equipment. For more details, see the <u>service portal</u>.

Searching for a keyfob when the system is disarmed via the standard keyfob

The feature allows to turn off car perimeter protection only if a paired keyfob/smartphone is detected within the system's recognition range. If no keyfob/smartphone is detected within 15 seconds (by default) after opening one of the car's doors, the system will keep producing alarm signals via the siren for 30 seconds. Then the system will switch into the Armed mode again.

To turn off alarm signals and exit the Armed mode, do either of the following:

- Place a keyfob/smartphone within the system's recognition range.
- Get authorized via the PIN code.
- Exit the Armed mode via Author Connect.¹

If the system has detected the keyfob/smartphone, two short siren signals will follow.

Protection against keyfob reprogramming

The feature protects your car against the keyfob reprogramming attempted by getting connected to the OBD port or to the certification unit.



The feature turns off if you switch into the Service mode. Any time the keyfob reprogramming is attempted, the car owner gets a push notification in Author Connect.¹

1 Subject to availability of COMPASS.

SERVICE FEATURES

Service mode

The mode is designed to disable anti-theft and comfort features when taking your car to the service center.

To switch into the Service mode, turn on ignition, get authorized, and push the service button five times. Switching into the Service mode will be followed by five service indication signals.

You can exit the Service mode in one of the following ways:

- Automatic after reaching the speed of 50 km/h once and then driving for 15 minutes without stopping or with stops of no longer than five seconds. The time to exit is set by default and can be changed via Author Flasher.
- On the user's command after authorization via the PIN code.

Exiting the Service mode will be followed by two service indication signals.

Transport mode

The Transport mode is designed for long-term car operation with the anti-theft and comfort features off.

To switch into the Transport mode, follow these steps: 1. Turn on ignition but do not start the engine.

- 2. Press and hold the brake pedal.
- Press the gas pedal¹ as far as it goes the number of times equal to the **first digit of the Emergency code** specified in the personal owner card.
- 4. Release the brake pedal.
- Enter the rest of digits in the same way. (Steps 2-4) If the Emergency code is correct, the system will switch into the PIN Change mode. The service indication signal will be repeating once every 3 seconds.
- 6. Push the service button five times. Switching into the Transport mode will be followed by five service indication signals.

 The system will switch into the Transport mode only if there is not any active keyfob/smartphone within the system's recognition range and authorization is not passed.

To exit the Transport mode, turn on ignition and get authorized via the PIN code. If successful, two service indication signals will follow.

COMFORT FEATURES

Find My Car

The feature is designed to find your car in the parking lot. To enable the feature, push LOCK twice on the standard keyfob. In confirmation, the system will issue 1 sound and 2 light indication signals twice.

¹ For some cars, another control is used instead. For more details, see the service portal.

You can enable "Find my car" in 1 minute after switching into the Armed mode.

Control the central lock by event

To ensure safety of the driver, the system shuts the central lock after the start of driving.

- The central lock closes¹ when you reach the speed of 10 km/h.
- The central lock opens² when you turn off ignition. This feature becomes active only after getting authorized.

Ventilation

The feature is designed to ventilate the passenger compartment. To enable the feature, push UNLOCK three times on the standard keyfob. The windows will go down by 3-5 cm.

If the feature is enabled, the windows will not close when switching into the Armed mode. To completely close the windows, exit the Armed mode, and then enable it again.

Comfort

The feature is designed to close windows and the sunroof automatically when switching into the Armed mode.

¹ It depends on Feature "Drive-away locking".

² It depends on Feature "Opening of central lock by event".

Fold mirrors

The feature is designed to fold mirrors automatically when switching into the Armed mode. The mirrors open after you exit the Armed mode.

Control the START-STOP system

The feature is designed to disable the standard START-STOP system, which is used for automatic shut-off and restart of the engine during short stops to save fuel, reduce harmful emissions, and noise levels.

Hands Free

The feature is designed to control the central lock, arm or disarm the system when approaching your car via keyfob/ smartphone paired with the system.

When you approach your car with a paired keyfob/smartphone, the central lock will open and the system will exit the Armed mode. Once the keyfob has disappeared from the system's recognition range, the central lock will close, and the system will switch into the Armed mode.

If required, the feature can be temporarily disabled. Just push UNLOCK twice on the standard keyfob (while the system is not in the Armed mode). To enable the feature again, insert the key into the ignition lock (ACC or IGN positions) or arm and then disarm the system via the standard key. The feature becomes inactive after the central lock is shut via the standard keyfob or Author Connect.¹ The feature will become active again after opening the central lock using the methods above.



The feature is inactive if the car is in the Service mode.

Extra option

The feature is designed to introduce extra functionality for your car. For availability of a certain feature and its description, see Section "Firmware and Comments" in car description on the <u>service portal</u>.

REFERENCE INFORMATION

Check if the serial number matches the system number

This check is required to verify that the number of the personal owner card matches the one of IGLA ALARM.

Follow these steps:

- 1. Turn on ignition but do not start the engine. There should be no active keyfobs/smartphones within the system's range.
- 2. Press and hold the brake pedal.
- 3. Press the gas pedal² as far as it goes the number of times equal to the **first digit of the card number**.

¹ Subject to availability of COMPASS.

² For some cars, another control is used instead. For more details, see the service portal.

- 4. Release the brake pedal. The first digit of the number will be read.
- Enter the rest of digits in the same way (Steps 2-4) If the serial number is correct, two service indication signals will follow.

If the serial number is incorrect, no confirmation will follow at all. This means that an error has occurred when entering the number, or the entered number does not match the internal number of the device.

Configuration via Author Config

Author Config¹ helps you change the recognition range of keyfobs and smartphones, adjust accelerometer sensitivity, enable the Service mode, and monitor the keyfob charge level. For more details, go to <u>help.author-alarm.com</u>.

To get connected to IGLA ALARM, follow these steps:

- 1. Turn on Bluetooth in your smartphone.
- Switch IGLA ALARM into the PIN Change mode (see Page 14) or connect the red and gray wires to "+12V" power supply simultaneously.
- 3. Open Author Config.
- 4. Select IGLA ALARM out of available devices.
- 5. Enter the **Bluetooth pairing code** in the pop-up window \rightarrow click **NEXT**.
- 6. If successful, the app will connect to the system and the screen will display the general settings.

¹ Author Config is only available for Android OS (Version 5.0 and higher).

How to detect the keyfob serial number

To detect the keyfob serial number,¹ follow these steps:

- 1. Make sure the keyfob is out of IGLA ALARM's recognition range.
- 2. Push and hold the button on the keyfob body.
- 3. Insert the battery into the keyfob.
- 4. Open Author Config.²
- Wait for the keyfob to appear on the app screen. Make sure the keyfob is within the Bluetooth range of the smartphone.
- 6. The serial number will be displayed in the field under the keyfob name.

Keyfob indication

The keyfob LED informs about its status. LED indication values are shown in the table.

Color	Indication	Event	
Green	One flash	High battery power	
Green	Two flashes	Keyfob recognition within the system's range	
Green	Group of flashes with the duration of 30 sec	Pair keyfobs	
Red	One flash	Low battery	
Red	One flash with the duration of 3 sec	Keyfob pairing confirmed	
Orange (green + red)	One flash with the duration of 5 sec	Malfunction of the built-in accelerometer	

 $1 \mbox{ The serial numbers of keyfobs supplied together with IGLA ALARM are identical to the serial number of the device.$

2 Author Config is only available for Android OS (Version 5.0 and higher).

Indication

IGLA ALARM offers the following indication types:

- Service indication is produced via standard indication signals in the passenger compartment. The system can also produce an analog service indication (LED/buzzer). Service indication is produced when engine blocking is disabled and in the modes that change the system's settings.
- Sound indication is produced with an auxiliary siren or standard horn¹ in the following modes: Armed, Alarm, Find My Car, and Anti-carjacking.
- Light indication is produced with the car's external lighting devices in the following modes: Armed, Alarm, Find My Car, and Anti-carjacking.

Indication signals are divided into the following types:

- Information signals are designed to keep the car owner updated on the system status and events not related to security or anti-theft features.
- Alarm signals are designed to keep the car owner updated on any unauthorized actions, any attempts of theft or breaking into the car.

1 Available subject to additional connection.

IGLA ALARM indication

IGLA ALARM produces the following indication signals when in the Armed mode.

Event	Sound indication	Light indication		
Alarm signals				
Security zone violation ¹	Three signals lasting 30 sec. with the interval of 30 sec.	Three groups of flashes at the frequency of once per sec. and the interval of 30 sec.		
Ignition is on ²	Continuously	Flashes at a frequency of once per sec.		
Heavy shock, tilt, or motion sensor triggered	1 signal with the duration of 30 sec.	1 group of flashes at the frequency of once per sec. and the duration of 30 sec.		
Information signals				
Triggering of light shock sensor	One signal	One flash		
Switching into to the Armed mode	One signal	One flash		
Switching into the Armed mode when security zones are violated ³	Three signals at the frequency of once per sec.	Three flashes		
Exiting the Armed mode after alarm notifications occurred	Three signals at the frequency of once per sec.	Three flashes		
Trunk opened in the Armed mode	None			
Trunk opened and then closed when in the Armed mode	One signal	None		

1 Opened hood, one of the doors (driver, passenger door, or baggage compartment), or an alarm triggered on command from an external device

2 Start/Stop button pushed or key inserted into the ignition lock

3 It depends on the car's brand, model, and equipment. For more details, see the service portal.

Violated zones indication

If the security perimeter is violated, IGLA ALARM produces the following indication signals.

Event	Indication	Quantity
Ignition on, key in the ignition lock, key in the door cylinder	Sound	Five signals
Security zone violation ¹	Sound	Three signals
Accelerometer and shock, tilt, and motion sensors triggered.	Sound	One signal

Specifications

Current consumption	
In the Stand-by mode (ignition off)	Not over 10mA
In the Active mode (ignition on)	Not over 30mA
Operating voltage	8V-15.5V
Operating temperature	- 40°C to +80°C
Radio channel frequency	2.4 GHz
Keyfob battery type	CR2032

1 Opened hood, one of the doors (driver, passenger door, or baggage compartment), or an alarm triggered on command from an external device

65



The developer and manufacturer reserves the right to make technical improvements that are not specified in this manual. For more details, please go to the website:

author-alarm.com



Version as of 12 February 2024



