IGLA
IGLA LITE

INSTALLATION MANUAL

AUTHOR ALARM

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.

This manual covers the following device versions:

- IGLA
- IGLA LITE.

CONTENTS

BACKGROUND INFORMATION

IGLA is a unique digital system designed to protect your car against theft or carjacking. Its innovative feature is the engine blocking technology via standard electrical circuits— CAN and LIN buses.

Key benefits:

- **Advanced engine blocking algorithms** via standard electrical circuits — CAN and LIN digital buses. No need to break control circuits. Remote activation is available[1].
- **Secure authorization** via 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.
- **The system is undetectable with any known methods.** Since it is tiny in size, it can be installed almost anywhere in the car.

1 It requires joint installation and pairing with the COMPASS module.

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 make, model, configuration, and year of manufacture. For more details, please contact official dealerships[1], 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 the standard key or keyfob.
- It is recommended to verify that the personal owner card's number matches the one of IGLA. For the verification algorithm, go to Page 50.

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 depends on the car's brand, model and equipment. Please see *service.author-alarm.com*. The system can also produce an analog service indication via an auxiliary 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 *service.author-alarm.com*.

Authorization

This algorithm is designed to unblock the engine. Depending on a mode, you can get authorized via a keyfob/smartphone paired with the system and/or the PIN code, with ignition on. If successful, two service indication signals will follow. For more details, see Page 42.

PIN code

PIN code — a combination of button pushes that helps you disable the engine blocking. The initial PIN code is set when installing the system. For more details, see Page 11.

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 website *service.author-alarm.com*.

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

Preparation for firmware update

To prepare IGLA 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.
2. Insert the BLED112 dongle into a USB port of your PC.
3. Switch device the Firmware Update mode.
   - **If IGLA 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 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 into the PIN Change mode by entering a PIN code. For more details, go to Page 13.

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** 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 is not installed in your car yet**, disconnect the red and gray wires from power supply. Connect back the red wire only.
   If IGLA is already installed in your car, turn off ignition.

INSTALLATION

Connect IGLA to the car only when ignition is off.

For a detailed wiring diagram, go to the service portal service.author-alarm.com, then go to Documentation and files, and click on the device you wish to install.

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).

To configure universal channels, use Author Flasher. For available settings, see Page 30.

Functionality of IGLA wires

1. **Black.** Ground "–".
2. **Red.** Permanent "+" (12V).
3. **Brown.** CAN-H.
4. **White.** CAN-L.
5. **Yellow.** Universal channel. Default setting: analog ignition input "+".
6. **Gray.** Input for initial set-up "+".
7. **Blue.** Universal channel. Default setting: output to blocking (NC) "–".
8. **Orange.** Universal channel. Default setting: output to analog service indication (LED/buzzer) "–".
9. **White-red.** Universal channel. Default setting: LIN.

Functions of IGLA LITE wires

1. **Black.** Ground "–".
2. **Red.** Permanent "+" (12V).
3. **Brown.** CAN-H.
4. **White.** CAN-L.
5. **Yellow.** Universal channel. Default setting: analog ignition input "+".
6. **Gray.** Input for initial set-up "+".
7. **Blue.** Universal channel. Default setting: output to blocking (NC) "–".
8. **Orange.** Universal channel. Default setting: output to analog service indication (LED/buzzer) "–".

Wiring notes

- Bundle the wires and protect them with 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

COMPASS module

The place of installation must meet the following criteria:

- Connect the module only to the CAN bus to which IGLA'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.

CONTOUR/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's CAN1 (white and brown wires) is connected.
- Availability of constant power supply circuits (+12V and the ground).
- If you are connecting an auxiliary 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 when ignition is off.

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'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.

HOW TO SET OR CHANGE THE PIN CODE

Set the initial PIN code

The initial PIN code is set by an installation center when installing the IGLA system. 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 *service.author-alarm.com* 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**.
3. Turn on ignition but do not start the engine.
   The system will switch into the PIN Change mode[1] *while service indication will be occurring once per three seconds.*
4. 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. Disconnect the red and gray wires from power supply. Connect back the red wire only.

1 If you install the system for the first time.
2 It depends on the car's brand, model, and equipment. See *service.author-alarm.com*.

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.
6. 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.
   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.

1 For some cars, another control is used instead of the gas pedal. See the website *service.author-alarm.com*.
2 It depends on the car's brand, model, and equipment. See *service.author-alarm.com*.

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.
3. Press the gas pedal[1] 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.
6. 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 PIN code using the buttons available for programming[2].
   If successful, three service indication signals will follow.
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.

1 For some cars, another control is used instead of the gas pedal. See the website *service.author-alarm.com*.

2 It depends on the car's brand, model, and equipment. See *service.author-alarm.com*.

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 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 is paired with AUTOSTART via the CAN1 bus.

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.
   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.

1 It requires joint installation and pairing with the COMPASS module.
2 For some cars, another control is used instead of the gas pedal. See the website service.author-alarm.com.

3. Switch IGLA into the PIN Change mode by entering a PIN code. For more details, go to Page 13.
   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 the COMPASS module

IGLA is paired with the module via the CAN1 bus.

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

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

You can pair IGLA only with a single COMPASS module. It is impossible to pair IGLA with both devices at the same time.

Follow these steps:
1. Install both devices as per the wiring diagrams.
2. Switch IGLA into the PIN Change mode by entering a PIN code. For more details, go to Page 13.
   Service indication will be occurring once per three seconds.
3. Launch Author Connect and sign in.

4. Click  → **Engineer settings** → confirm the action by clicking **Yes, continue**.
5. In **Manage optional devices**, click on the IGLA 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 the KEYLESS BLOCK system

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

IGLA is paired with KEYLESS BLOCK via the CAN1 bus.

Follow these steps:
1. Install both devices as per the wiring diagrams.
2. In KEYLESS BLOCK, select Authorization via keyfob mode and pair keyfobs and/or smartphones. For more details, 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 pedal[1] as far as it goes 20 times. Press the pedal no later than 10 seconds after you have turned on ignition.

1 For some cars, another control is used instead of the gas pedal. See the website *service.author-alarm.com*.

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 into the PIN Change mode by entering a PIN code. For more details, go to Page 13.
   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 the TOR relay

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

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

Follow these steps:

1. Connect IGLA as per the wiring diagram and set an initial PIN code.
2. 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.
3. Switch IGLA into the PIN Change mode by entering a PIN code. For more details, go to Page 13.
   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. 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 the CONTOUR or KORD module

You can pair two CONTOUR/KORD modules with IGLA.

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

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.
2. Switch IGLA into the PIN Change mode by entering a PIN code. For more details, go to Page 13.
   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.
6. 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.

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 21.

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 it.[2].
4. Push the service button the number of times equal to a feature status.

1 For extra blocking or siren.
2 For some cars, another control is used instead of the gas pedal. See the website *service.author-alarm.com*.

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.

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 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 service portal *service.author-alarm.com*.

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

Feature	On	Off
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 different authorization mode
Two-factor authorization	24	
Multi-authorization	25	
Additional blocking of the standard immobilizer	26	27
Classic mode	29	28
HID mode	28	29
Super Anti-carjacking	30	17
Factory reset	31	–
Turn off START-STOP system	32	33
Blocking of diagnostic exchange	36	37
Features configurable via Author Flasher only		
Car driving period for automatic exit from Service mode	Configurable value	
Maximum parking time for automatic exit from Service mode	Configurable value	
Speeding warning		
Speeding threshold (km/h)	Configurable value	
Speed reduction range to reset speeding warning (km/h)	Configurable value	

Feature	On	Off
Enable Start Inhibit after Engine Shut-off		
Digital indication		
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 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 service website *service.author-alarm.com*.

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.

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 system. The advantage of this mode

1 It depends on a blocking algorithm.

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 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 44.

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.

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.

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 Shut-off feature.

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.

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 settings via Bluetooth using Author Connect[1]. 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.
2. Get authorized.
   If successful, two service indication signals will follow.
3. Switch IGLA into the PIN Change mode by entering a PIN code. For more details, go to Page 13.
   Service indication will be occurring once per three seconds.
4. Open Author Connect.

1 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 HUAWEI AppGallery.

5. Go to Bluetooth Settings in one of the following ways:
   - Click **Bluetooth Settings** on the app's start screen.
   - Click  → click **Bluetooth Settings**[1].
6. Select IGLA out of available devices.
7. Once completed, turn off ignition.

Alternative service button

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

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 into the PIN Change mode by entering a PIN code. For more details, go to Page 13.
   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, 21 service indication signals will follow.

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

1 It requires joint installation and pairing with the COMPASS module added to your account.

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[1]

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

Wire color	Function	Available settings
Yellow	Input "+" only	Analog ignition[2]
		Hood limit switch
		Features 1-5[3]
Blue	Only "–" output (up to 250 mA)	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]

1 Firmware v.3.10 or higher is required.
2 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.
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 service website *service.author-alarm.com*.
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.

Wire color	Function	Available settings
Blue	Only "–" output (up to 250 mA)	Analog opening[1]
		Alternative management of the central lock (pulse-based, via a single wire)[1]
		Authorization status[2]
Orange		Features 1-5[3]
		Test signal to check operability of device and output[4]
White/red[5]	Input "–" or output "–" or LIN	LIN
		Analog ignition[6]
		Hood limit switch
		Output to additional blocking (NC)
		Output to additional blocking (NO)
		Analog service indication[7]
		Hazard warning lights (or other external indication)
		Alternate hazard warning light control
		Analog shutting[1]
		Analog opening[1]
		Alternative management of the central lock (pulse-based, via a single wire)[1]
		Authorization status[2]
		Features 1-5[3]
		Test signal to check operability of device and output[4]

1 With this setting on, you will not be able to manage the central lock via the CAN bus.
2 Depending on inversion settings, the "–" control signal occurs/disappears when you pass authorization and disappears/occurs after switching into the Armed mode.
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 service website *service.author-alarm.com*.
4 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.
5 IGLA LITE does not support this setting.
6 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.
7 Output to analog service indication (LED/buzzer).

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 additional analog relay connected to IGLA'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

1 By default. Configuration of universal channels is available.

hindered.

- **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 Position P or starting to drive a car with manual transmission if CAN blocking is not supported or 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 receives no data from the CAN bus (short circuit or open-circuit fault), 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 control. Any wires used as outputs (for example, blue or orange) 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 control.

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 them off.

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.

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

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 hood limit switch, its status is detected via the CAN bus, provided that there is not any analog hood limit switch connected to IGLA.
- **Analog limit switch**. The status is detected via the analog limit switch connected to IGLA[1].

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

- **SIREN BT**. The status is detected via an auxiliary SIREN BT to which an analog limit switch of the hood is connected.

SOS button

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

The feature helps you assign the car's standard button as an SOS button. You can select any non-locking button[1] available for assigning the PIN code. The list of buttons depends on the car's brand and model. It is available on the website *service.author-alarm.com*. The newly assigned SOS button can also be used to assign a PIN code.

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

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

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 website *service.author-alarm.com*.

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

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

HOW TO CONFIGURE KEYFOBS AND SMARTPHONES

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

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

You can pair keyfobs or smartphones with the system via Author Flasher.

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 41.

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 into the PIN Change mode by entering a PIN code. For more details, go to Page 13.
   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.
7. 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.

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'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 can pair your smartphone with the system via **the Author ID app** 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 application 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).

Download Author ID

Follow these steps:

1. Turn on Bluetooth in your smartphone.
2. Launch Author ID.
3. Turn on ignition but do not start the engine.
4. Get authorized.
   If successful, two service indication signals will follow.
5. Switch IGLA into the PIN Change mode by entering a PIN code. For more details, go to Page 13.
   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.

8. 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 for IGLA'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 20) or via Author Flasher.

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 into the PIN Change mode by entering a PIN code. For more details, go to Page 13.

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 out of available devices.
8. 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. Turn off ignition.

How to unpair keyfobs and smartphones

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 and the authorization mode will be reset to Multi-authorization.

Once you have unpaired the smartphone from the system, disconnect the devices in Bluetooth settings of your 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.
3. Change the current PIN code to the same one. See Page 13.
   To confirm changing of the PIN code, 2 service indication 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 13.

OPERABILITY CHECK

AUTHORIZATION

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

Authorization is required each time before starting the engine or driving, depending on a blocking algorithm.

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

IGLA offers the following modes to disable the blocking:

- **Multi-authorization**. Before you start the engine or begin driving[1], turn on ignition and get authorized via a paired keyfob/smartphone or via a PIN code. 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 code[1].

To configure an authorization mode, use either the Feature Status Change algorithm (see Page 20) or Author Flasher.

Emergency authorization process

If it is impossible to get authorized via a keyfob/smartphone or PIN code, follow the emergency authorization procedure. Change the current PIN code via the Emergency code. See Page 14.

ARMED MODE

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

The system switches into the Armed mode automatically in 10 seconds after you turn off ignition if there is

1 It depends on a blocking algorithm.

not any paired keyfob/smartphone within its recognition range.

To exit the Armed mode, get authorized.

SECURITY FEATURES

Engine blocking

IGLA 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 engine[1] at any driving attempt unless authorization has been passed. Once Engine Shut-off is triggered, the system will automatically[2] switch into the Engine Start Inhibit mode. Once authorized, the system will switch into the Engine Shut-off mode again.

Anti-carjacking

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

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

1 For some car models, it requires installing an additional blocking relay.
2 It depends on system settings and the car's brand, model, and equipment. See *service.author-alarm.com*. Enabled by default.

Activation stages

1. **Standby.** The feature is enabled, the system is waiting for conditions to be activated.
2. **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.
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.

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.

Protection against keyfob reprogramming[1]

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. Every time key reprogramming is attempted, the car owner gets a push notification in Author Connect[2].

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 AUTOSTART module (subject to joint installation and pairing with IGLA).

1 It depends on system settings and the car's brand, model, and equipment. See service.author-alarm.com.
2 It requires joint installation and pairing with the COMPASS module.

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.

3. Press the gas pedal[1] 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.
5. 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. Service indication will be occurring once per three seconds.
6. Push the service button five times.
   Switching into the Transport mode will be followed by 5 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

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[2] closes when you reach the speed of 10 km/h.

1 For some cars, another control is used instead of the gas pedal. See the website *service.author-alarm.com*.
2 It depends on Feature "Drive-away locking".

- The central lock opens[1] 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.

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.

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

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.

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 service website *service.author-alarm.com*.

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. 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 pedal[1] as far as it goes the number of times equal to the first digit of the **card number**.
4. Release the brake pedal. The first digit of the number will be read.

1 For some cars, another control is used instead of the gas pedal. See the website *service.author-alarm.com*.

5. 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 Config[1] enables the user to change the recognition range of keyfobs and smartphones, enable the Service mode, and monitor the keyfob charge level. For more details, go to *help.author-alarm.com*.

To get connected to IGLA via Author Config, follow these steps:
1. Turn on Bluetooth in your smartphone.
2. Switch into the PIN Change mode (see Page 13) or connect the red and gray wires to "+12V" power supply **simultaneously**.
3. Open Author Config.
4. Select IGLA out of available devices.
5. Enter the **Bluetooth pairing code** in the pop-up window → 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). For more details, visit the website *help.author-alarm.com*.

How to detect the keyfob serial number

Follow these steps:

1. Make sure the keyfob is out of IGLA's recognition range.
2. Push and hold the button on the keyfob body.
3. Insert the battery into the keyfob.
4. Launch Author Config[1].
5. 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 seconds	Pair keyfobs
Red	One flash	Low battery
Red	One flash with the duration of three seconds	Keyfob pairing confirmed
Orange (green + red)	One flash with the duration of five seconds	Malfunction of the built-in accelerometer

1 Author Config is only available for Android OS (Version 5.0 and higher). For more details, visit the website *help.author-alarm.com*.

Specifications

Current consumption	
In the Stand-by mode (ignition off)	Not over 4mA
In the Active mode (ignition on)	Not over 30mA
Operating voltage	8V-15.5V
Operating temperature	- 40°C to +80°C
Radio channel frequency	2.4GHz
Keyfob battery type	CR2032

FCC STATEMENT

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that inter television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Caution: Any changes or modifications to this device not explicitly approved by manufacturer could void your authority to operate this equipment.
This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

RF EXPOSURE INFORMATION

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.
This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.
Country Code selection feature to be disabled for products marketed to the US/Canada.
This device is intended only for OEM integrators under the following conditions:
1. The antenna must be installed such that 20 cm is maintained between the antenna and users, and
2. The transmitter module may not be co-located with any other transmitter or antenna,
3. For all products market in US, OEM has to limit the operation channels in CH1 to CH11 for 2.4G bandby supplied firmware programming tool. OEM shall not supply any tool or info to the end-userregarding to Regulatory Domain change. (if modular only test Channel 1-11)
As long as the three conditions above are met, further transmitter testing will not be required. However, the OEM integrator is still responsible for testing their end-product for any additional compliance requirements required with this module installed.

Manufactured by AUTHOR-ALARM

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 9 January 2024


AUTHOR
ALARM

ISED Statement

English:This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

(1) This device may not cause interference.

(2) This device must accept any interference, including interference that may cause undesired operation of the device.

The digital apparatus complies with Canadian CAN ICES-3 (B)/NMB-3(B).

French: Cet appareil contient des émetteurs/récepteurs exempts de licence qui sont conformes aux RSS exemptés de licence d'Innovation, Sciences et Développement économique Canada.

L'exploitation est soumise aux deux conditions suivantes :

(1) Cet appareil ne doit pas provoquer d'interférences.

(2) Cet appareil doit accepter toute interférence, y compris les interférences susceptibles de provoquer un fonctionnement indésirable de l'appareil.

l'appareil numérique du ciem conforme canadien peut - 3 (b) / nmb - 3 (b).

This device meets the exemption from the routine evaluation limits in section 6.3 of RSS 102 and compliance with RSS 102 RF exposure, users can obtain Canadian information on RF exposure and compliance.

cet appareil est conforme à l'exemption des limites d'évaluation courante dans la section 6.3 du cnr - 102 et conformité avec rss 102 de l'exposition aux rf, les utilisateurs peuvent obtenir des données canadiennes sur l'exposition aux champs rf et la conformité.

This equipment complies with Canada radiation exposure limits set forth for an uncontrolled environment.

Cet équipement est conforme aux limites d'exposition aux rayonnements du Canada établies pour un environnement non contrôlé.

This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

Cet équipement doit être installé et utilisé à une distance minimale de 20 cm entre le radiateur et votre corps.

AUTHOR ALARM

Important Note:

In the event that these conditions cannot be met (for example certain laptop configurations or co-location with another transmitter), then the FCC authorization is no longer considered valid and the FCC ID cannot be used on the final product. In these circumstances, the OEM integrator will be responsible for re-evaluating the end product (including the transmitter) and obtaining a separate FCC authorization

End Product Labeling

The final end product must be labeled in a visible area with the following" Contains FCC ID: 2BLHH-IGLA"

Manual Information to the End User

The OEM integrator has to be aware not to provide information to the end user regarding how to install or remove this RF module in the user ’ s manual of the end product which integrates this module.
The end user manual shall include all required regulatory information/warning as show in this manual.

Integration instructions for host product manufacturers according to KDB 996369 D03 OEM Manual v01

2.2 List of applicable FCC rules

CFR 47 FCC PART 15 SUBPART C has been investigated. It is applicable to the modular transmitter

2.3 Specific operational use conditions

This module is stand-alone modular. If the end product will involve the Multiple simultaneously transmitting condition or different operational conditions for a stand-alone modular transmitter in a host, host manufacturer have to consult with module manufacturer for the installation method in end system.

2.4 Limited module procedures

This module is Limited single modular without shielding, host manufacturer have to consult with module manufacturer for the module limiting conditions when integrate the module in the host. module manufacturer should reviews detailed test data or host designs prior to giving the host manufacturer approval

2.5 Trace antenna designs

Not applicable

2.6 RF exposure considerations

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

2.7 Antennas

This radio transmitter **FCC ID:2BLHH-IGLA"** has been approved by Federal Communications Commission to operate with the antenna types listed below, with the maximum permissible gain indicated. Antenna types not included in this list that have a gain greater than the maximum gain indicated for any type listed are strictly prohibited for use with this device.

Model	Type of antenna	Gain of the antenna (Max.)	Frequency range(MHz)
BLE	PCB	5.59dBi	2400 - 2450

2.8 Label and compliance information

The final end product must be labeled in a visible area with the following" Contains **FCC ID:2BLHH-IGLA**".

2.9 Information on test modes and additional testing requirements

Host manufacturer is strongly recommended to confirm compliance with FCC requirements for the transmitter when the module is installed in the host.

2.10 Additional testing, Part 15 Subpart B disclaimer

Host manufacturer is responsible for compliance of the host system with module installed with all other applicable requirements for the system such as Part 15 B.

2.11 Note EMI Considerations

Host manufacture is recommended to use D04 Module Integration Guide recommending as "best practice" RF design engineering testing and evaluation in case non-linear interactions generate additional non-compliant limits due to module placement to host components or properties.

2.12 How to make changes

This module is stand-alone modular. If the end product will involve the Multiple simultaneously transmitting condition or different operational conditions for a stand-alone modular transmitter in a host, host manufacturer have to consult with module manufacturer for the installation method in end system.
According to the KDB 996369 D02 Q&A Q12, that a host manufacture only needs to do an evaluation (i.e., no C2PC required when no emission exceeds the limit of any individual device (including unintentional radiators) as a composite. The host manufacturer must fix any failure.