We would like to thank you for choosing
the immobilizer

StarLine

i95 LUX, i95, i95 ECO

and wish you many pleasant
and safe drives!

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Please, read attentively!

You can download the detailed electronic version of the User Manual from the website **www.starline.ru.**

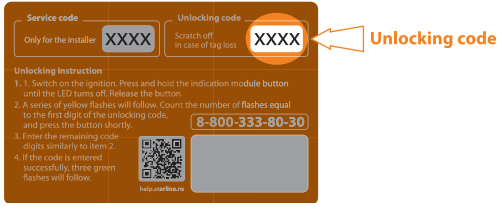
Please read this instruction paying special attention to the sections marked **ATTENTION!**

Some simple requirements must be observed for safe use of the immobilizer:

1) **Do as follows to use the car on which the immobilizer is installed:**

- carry along the tag
- know the unlocking code

The transport vehicle cannot be drove in case of tag loss and absence of the unlocking code!



You should carry along the plastic card or note down the unlocking code in an accessible place (for instance, in the mobile telephone).

2) **If you hear a sound signal, warning about blocking, during car driving, – immediately take actions for safe stop.** Engine blocking may cause increase of the force necessary for steering wheel turning and the force of brake pedal pressing. **It is extremely dangerous, particularly at high-speed driving.**

3) **If you hear a signal, warning about discharge of the tag battery, take timely actions to replace the battery.** It is recommended to have a new battery in the car, keeping its factory packing.

4) **4) The immobilizer shall be installed only by qualified specialists.** The immobilizer is connected to the car circuits related to engine operation. A radio channel is used for data exchange in the system, therefore stable tag identification depends on correct arrangement of the immobilizer components.

Table of possible indications

Event	Tag (LED)	Sound indication	Notes
Warning of upcoming engine blocking		intermittent sound signals	Take actions to stop the car
Tag battery is discharged		3 sound signals	Install new battery
Normal security mode			If the LED flashes once at button pressing, the tag is outside the coverage range Security functions are disabled in the service mode
Anti hijack mode			
Service mode			
Successful tag authorization		1 sound signal	
Tag is absent. Prompt to enter the unlocking code		long sound signal	For i95, i95 ECO
Normal mode. Tag is absent		1 sound signal every 2 minutes	If the tag was lost after driving start (in the normal security mode)
Failure of the hood lock control circuit		2 sound signals	Fix circuit failure

Delivery set

№	Component	i95 LUX	i95	i95 ECO
1	Installation manual	√	√	√
2	User manual	√	√	√
3	Plastic card	√	√	√
4	Tag with battery, 2 pcs.	√	√	√
5	Blocking module	√	√	√
6	Indication module	√	–	–
7	Buzzer	–	√	√
Function		**i95 LUX**	**i95**	**i95 ECO**
Ignition circuit control (“Hands free” mode)		√	√	–
Tag authorization output (status output)		√	√	–

Plastic card

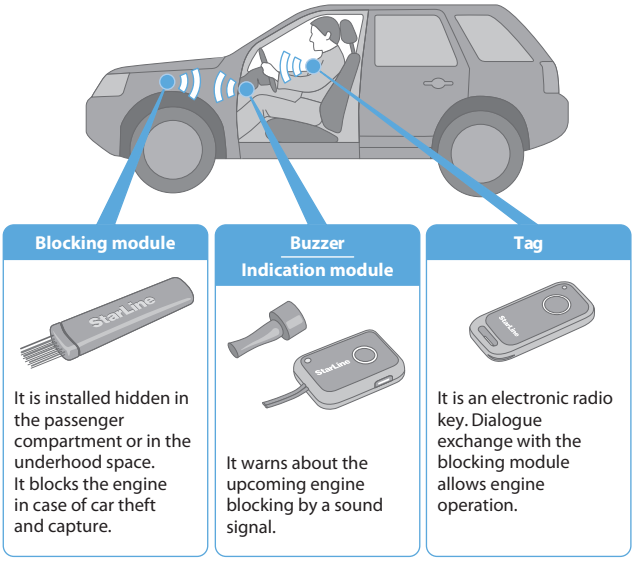
The immobilizer delivery set includes a plastic card containing the following data:

- **Service code.** It is intended for setting and programming of immobilizer parameters. The service code is provided in the open form.
- **Unlocking code.** Allows for driving the car in case of battery discharge or tag loss. The unlocking code is hidden under a scratch strip.

ATTENTION! *Do not tell the unlocking code to anyone! Remember that a malefactor, knowing the personal code, may deactivate the immobilizer’s protective functions. If you have grounds to think that the unlocking code became known to third parties, change it as soon as possible.*

Operation principle

The immobilizer is a system of access to engine operation with the protection and service functions.



To drive a car, equipped with the immobilizer, you should carry along the tag. After tag's appearance in the blocking module coverage range, they exchange codes automatically via radio communication. The car is protected by way of **engine blocking** in case of an attempt at car driving in the absence of communication.

Blocking is activated only if the car is moving with the operating engine (switched-on ignition). If the tag is absent in the coverage range, the engine is started, but the car is not moving – **blocking is not performed.** This allows using the immobilizer together with any systems of automatic and remote engine starting.

Blocking algorithm

If by the time of car motion start the communication session has not taken place (the tag is absent or tag battery is discharged), sound signals are issued, warning about the upcoming blocking (depending on the selected security mode and the settings made), and engine blocking will be started.

The engine blocking is activated for 20 seconds. If the car starts moving after the end of the blocking cycle – blocking will be activated for 20 seconds again. If blocking is repeated 3 times, the engine will be blocked until the tag appears.

f the intermittent blocking algorithm was set in the settings (see Installation Manual), **an engine failure is simulated** – the engine blocking circuit is periodically opened and restored according to the following algorithm:

Blocking stages	BLOCK	pause	BLOCK	pause	BLOCK	pause	BLOCK
Duration, s	2	2	3	2	5	2	20

The car can be driven when:

- the tag appears in the blocking module coverage range
- emergency unlocking with the unlocking code

Starting the drive

Before driving, make sure the tag is present. Get into the car and switch on the ignition. Wait for a short sound signal of successful tag authorization. The car is ready for driving.

In the **Anti hijack mode** the tag should be in the car until the driving end. In the **normal mode** the tag should be present at the time of ignition switch-on – subsequently, its presence or absence will not affect engine operation.

Warning of engine blocking

The engine will be blocked in case of an attempt at car driving without the tag.

Engine blocking is accompanied with intermittent sound signals.

ATTENTION! *If you hear the sound indication of upcoming blocking, immediately take actions for safe car stop!*

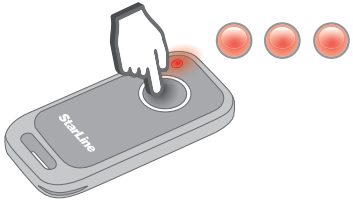
If the tag is absent in the beginning of the drive, the engine will be blocked at the time of driving start and the sound alarm will be activated simultaneously

Warning of tag battery discharge

To prevent engine blocking in case of tag battery discharge, the immobilizer monitors its charge level.

*The low charge level of the tag battery is indicated by **three short sound signals** after ignition switch-on for 5 minutes.*

In addition, tag battery discharge is displayed by three red flashes when the tag button is pressed.



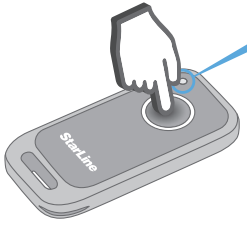
ATTENTION! *Complete discharge of the battery will cause tag switch-off. In this case the engine will be blocked. Replace the battery as soon as possible in case of discharge indication.*

Communication check and operation mode selection

Operation mode check and communication monitoring

1) Press the tag button shortly.

2) The tag LED will flash 1 or 2 times. The flash color will correspond to the current immobilizer operation mode:



Flash color	Operation mode
	normal
	anti hijack
	service

3) **The second LED flash** means **stable communication** between the tag and blocking module.

If the second flash is absent – communication between the tag and blocking module is disrupted. This is possible when the car is at a distance of over 10 m or in case of intense interference.

***i95 ECO.** With the ignition switched off, there is no communication between the tag and blocking module.*

Security mode selection

Normal

The tag is identified once after ignition switch-on. Subsequently, tag presence or absence does not affect operation – the engine will not be blocked.

Convenience for the owner

Anti hijack

Tag presence is constantly monitored. If the tag is absent for the specified time – the engine will be blocked.

Maximum protection

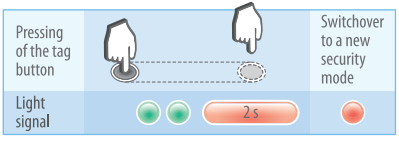
Do as follows for security mode change:

1) Press and hold the tag button. Right after pressing, the tag will indicate the current operation mode and state of communication with the blocking module. If the button is held for more than 2 seconds, the LED will light up for 2 seconds. Flash color will correspond to the next security mode.

2) Release the tag button during the 2-second indication of the next security mode.

3) Successful mode change will be confirmed by a LED flash, the color of which will correspond to the new operation mode.

Example of switchover to the Anti hijack mode:



The security modes are switched over in turns: **normal – Anti hijack – normal** – etc.

Switchover between security modes is possible even at a distance from the car. The selected operation mode will be set after the first successful code exchange between the tag and immobilizer.

ATTENTION! *Blocking in motion should be allowed in the settings for operation of the "Anti hijack" mode. Otherwise, the engine will be blocked at ignition switch-on.*

Car handover for maintenance

A special mode is provided for car handover for maintenance, in which the security functions are disabled. In the service mode the engine is not blocked and lock control is off, regardless of tag presence or absence.

Switchover to the service mode

The immobilizer is switched over to the service mode only when the car is in the tag coverage range.

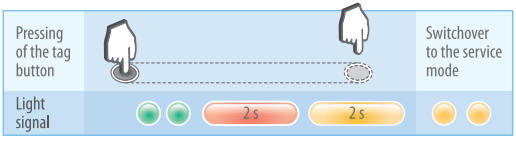
1) Press and hold the tag button. Right after pressing, the tag will indicate the current operation mode and state of communication with the blocking module. Then 2-second indication of the next security mode will be provided. Hold the button for more than 7 seconds – until the LED lights up yellow, indicating the possibility of transition to the service mode.

2) Release the tag button during the 2-second illumination of yellow color.

3) Switchover to the service mode will be confirmed by a yellow flash.

Example of switchover to the service mode:

ATTENTION! *In case of loss of all tags, registered in the immobilizer, exit from the service mode will be impossible.*

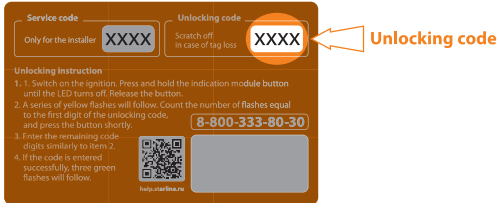


To exit from the service move, change the security mode (press the button and hold it until the LED lights up with the security mode color, release the button during the 2-second flash). The immobilizer will return to the security mode. It is recommended to check operation in one of the security modes and make sure the engine is blocked in case of an attempt at car driving without the tag.

Emergency unlocking

If the tags are lost or the battery is discharged, the car engine will be blocked. To continue driving, the immobilizer must be set to the **emergency unlocking mode.**

Switchover to the emergency unlocking mode is performed by entering the unlocking code. The unlocking code is given under the protective layer of the plastic card, included in the delivery set, it consists of four digits from 1 to 9 inclusive and can be changed by the user.



If the unlocking code was entered incorrectly, a "long" signal will be issued. If the code is entered incorrectly 5 times during 30 minutes, repeated entry will be blocked for 15 minutes. The code entry prohibition is removed when the tag appears.

At switchover to the **emergency unlocking mode** the blocking module issues a pulse for opening of the hood or door lock.

In the **emergency unlocking mode** the engine is not blocked. Exit from the mode is performed automatically after the first codes exchange with the registered tag. Ignition switch-off **does not take** the system out of the emergency unlocking mode.

Unlocking by means of the indication module for i95 LUX

For this, do the following:

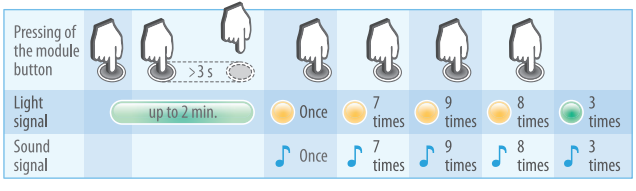
1) **Switch on the ignition.** Press and hold the indication module button for 3 seconds – until the LED turns off. Release the button.

2) Yellow flashes will follow, accompanied with sound signals. Count the number of flashes equal to the **first digit of the unlocking code** and press the indication module button shortly. Entry of the first digit is complete.

3) Enter the remaining unlocking code digits similarly to item 2.

4) If the unlocking code is **entered correctly**, 3 short signals will be issued, the system will set to the emergency unlocking mode.

Example of unlocking code entry – 1798.

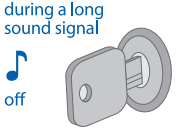


The immobilizer will set to the **emergency unlocking mode**. The engine will **NOT BE BLOCKED.**

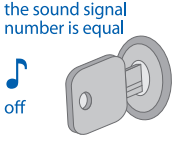
Unlocking by means of ignition key for i95 and i95 ECO

For this, do the following:

1) **Switch on the ignition.** Wait for a sound signal and switch off the ignition.



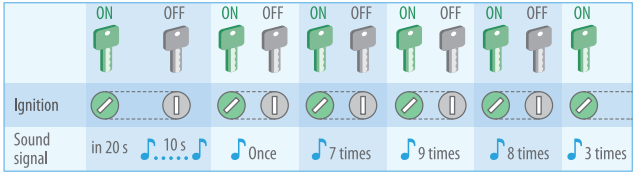
2) **Switch on the ignition** – a series of sound signals will follow. Count the number of signals equal to **the first digit of the unlocking code**, and switch off the ignition.



3) Enter the remaining unlocking code digits similarly to item 2.

4) **Switch on the ignition.** If the emergency unlocking code **is entered correctly**, 3 short signals will be heard, the system will set to the emergency unlocking mode.

Example of unlocking code entry – 1798.



The immobilizer will set to the emergency **unlocking mode.** The engine will **NOT BE BLOCKED.**

Change of unlocking code

The current unlocking code must be known in order to change the code to a new one.

The programming mode must be entered in order to change the unlocking code.

Entry in the programming mode using the unlocking code for i95 LUX

Set the immobilizer to the emergency unlocking mode. Leave the ignition on. After that do the following:

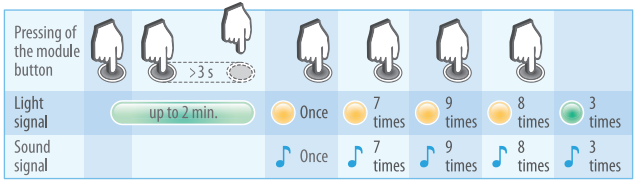
1) Press the indication module button shortly. The LED will start flashing yellow.

2) Within next 2 minutes press and hold the indication module button for 3 seconds – until the LED turns off. Release the button.

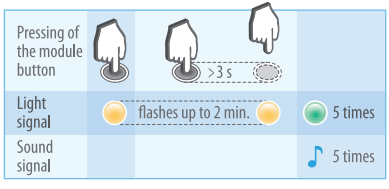
3) 5 short signals with green LED flashing will follow. The system will set to the programming mode.

4) Insert the battery in the tag. In several seconds the tag LED will start issuing three-second green flashes, waiting for parameter entry.

Switchover to the emergency unlocking mode.
Example of unlocking code entry – 1798.



Entry in the programming mode.

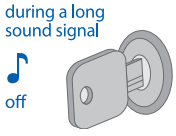


The immobilizer will be in the programming mode until ignition switch-off.

Entry in the programming mode using the unlocking code for i95 and i95 ECO

Set the immobilizer to the emergency unlocking mode. Leave the ignition on. After that do the following:

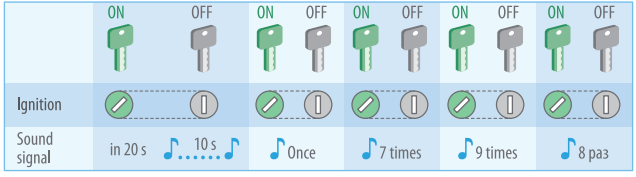
1) In 20 seconds a long (10 s) signal will follow. Switch on the ignition for the duration of the long signal.



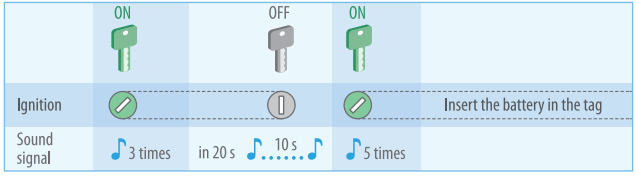
2) Switch on the ignition. 5 short sound signals will follow. The system will set to the programming mode.

3) Insert the battery in the tag. In several seconds the tag LED will start issuing three-second green flashes, waiting for parameter entry.

Switchover to the emergency unlocking mode.
Example of unlocking code entry – 1798.



Entry in the programming mode.



The immobilizer will be in the programming mode until ignition switch-off.

Change of unlocking code using the tag

ATTENTION! *Do not use trivial combinations as a new code, for instance, 1-1-1-1, 3-3-3-3, digits of the car registration number etc. Remember that a malefactor, knowing the unlocking code, may deactivate the immobilizer's protective functions.*

Do as follows after switchover to the programming mode:

1) Make sure the tag LED issues three-second green flashes.

Flashes of 3 s each

2) Press the tag button shortly while the LED is illuminated. A short green flash will follow after the end of flashing. The LED color will change to red.

Press once

3) During the red illumination of the LED, press the button the number of times corresponding to **the first digit of the new unlocking code** (from 1 to 9). After the end of illumination a series of red flashes will follow, the number of which will correspond to the number of button pressings. The LED will light up again after a short pause.

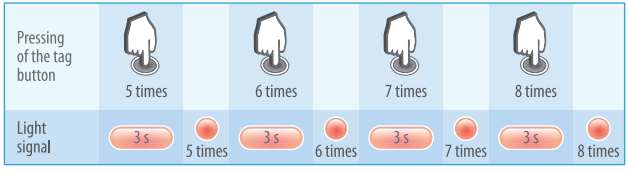
Press N times

4) Enter the remaining digits of the new unlocking code similarly to item 3.

5) Successful change of the unlocking code will be confirmed by a series of sound signals, corresponding to its new value: the number of signals of the first series will correspond to the 1st digit, of the second series – 2nd digit, the third series – 3rd digit, the fourth series – 4th digit of the new code.

Switchover to the unlocking code change mode.

Example of new unlocking code entry – 5678.



Device registration

For registration of new components the immobilizer should be set to the **device registration mode**. Switchover for immobilizer **i95 LUX** is performed using the indication module. For immobilizer **i95, i95 ECO** – using the ignition key.

*To prevent unauthorized tag registration, entry in the device registration mode is possible only after entry of the **unlocking** code (given on the plastic card). If you have told the unlocking code to the installation specialist, change it after completion of device registration*

ATTENTION! *Data exchange via the radio channel during registration is **unencrypted**. Registration should be performed in an open space far away from possible signal interception areas.*

Switchover to the registration mode from the service mode is impossible (yellow indication).

Entry in the device registration mode for i95 LUX

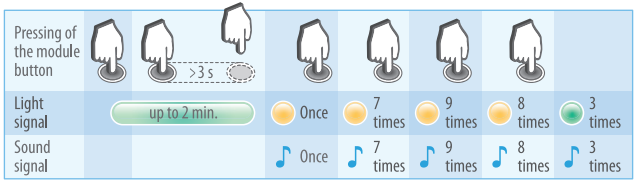
Set the system to the parameter programming mode using the **unlocking code**. After that do the following:

1) Press the indication module button shortly. The LED will start flashing yellow.

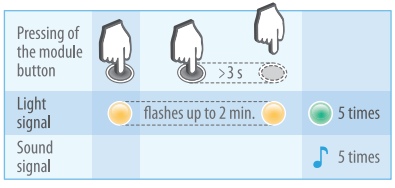
2) Within next 2 minutes press and hold the indication module button for 3 seconds – until the LED turns off. Release the button.

3) 7 short signals will follow with flashing of the green LED, the system will set to the new device registration mode.

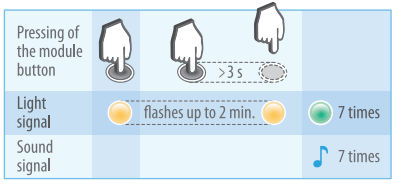
Example of unlocking code entry – 1798.



Entry in the programming mode.



Switchover to the device registration mode.

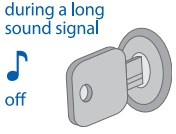


The immobilizer will be in the device registration mode until ignition switch-off.

Entry in the device registration mode for i95 and i95 ECO

Set the system to the parameter programming mode using the **unlocking code**. Leave the ignition on. After that do the following:

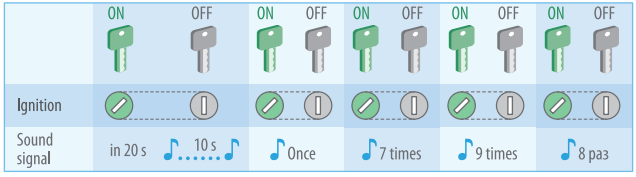
1) In 20 seconds a long (10 s) signal will follow. Switch on the ignition in the duration of the long signal.



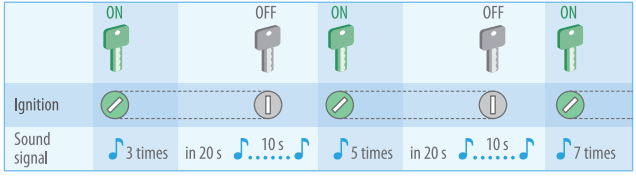
2) Switch on the ignition. 7 short sound signals will follow. The system will switch over to the device registration mode.

The immobilizer will be in the device registration mode until ignition switch-off.

Example of unlocking code entry – 1798.



Switchover to the device registration mode.

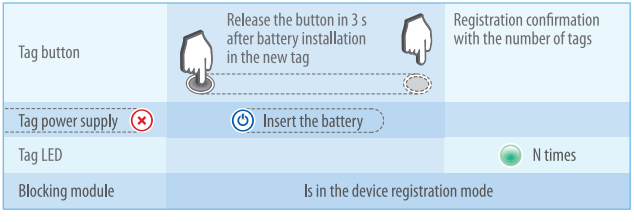


Tag registration

Set the immobilizer to the device registration mode. After that do the following:

1) Press the tag button and, holding it, insert the battery in the tag. Hold the tag button pressed for at least three seconds, then release it.
2) Successful tag registration will be confirmed by green LED flashes. The number of flashes will correspond to the total number of registered tags. In case of registration error (e.g., in case of ignition switch-off before sequence completion) the LED will light up red.
3) To set the tag to the standard operation mode, remove and then insert the battery.
4) Repeat items from 1 to 3 for the other tags being registered.
5) Switch off ignition to exit the device registration mode.

ATTENTION! *All the necessary tags should be registered sequentially within one registration cycle. Otherwise, when a new tag is registered, the information about all previous ones is deleted. The immobilizer supports registration of up to 4 tags.*

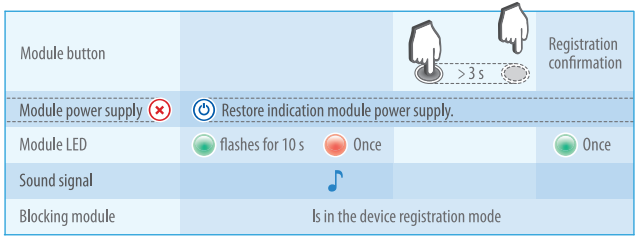


Indication module registration (i95 and i95 ECO)

To enhance convenience of immobilizer use, the indication module can be registered (purchased separately). For this, set the immobilizer to the device registration mode. After that do the following:

1) Power up the indication module.
2) Wait till the connection check is completed (10 seconds before LED flashing end).
3) Press and hold the indication module button for minimum 3 seconds, then release it.
4) Successful registration of the indication module will be confirmed by the green LED flash. In case of registration error (e.g., in case of absence of the blocking module which is in the device registration mode) the LED will light up red.
5) Switch off ignition to exit the device registration mode.

The immobilizer supports operation of only one indication module.



The manufacturer reserves the right to change
the design and elements without prior notification

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