ALARM SYSTEM GN8

For vehicles with CAN bus — User's guide

'GN8' – Alarm System with built-in **GSM modem** and **GPS receiver** designed for vehicles with central lock controlled by **Original Remote Key Fob (or Keyless Entry System)**, a CAN bus and 12V batteries, whose negative pole is connected to the vehicle body. **The CAN bus shall be compatible with the Alarm System.** Compatibility list CANDATA.xls can be found on www.kodinis.lt.

1. SAFETY REQUIREMENTS

Vehicle A|larm System 'GN8' (Pic. 1) shall be connected to the vehicle **12V DC power supply system** and **CAN bus**. The installation shall be done in accordance with the wiring diagram and recommendations given by the manufacturer of the Alarm System. Proper installation of the Vehicle Alarm System ensures vehicle's operational safety and it shall be performed by **professional installers** only. The installer must fill up the installation documents located on the **Installation Manual!**

2. SYSTEM FEATURES

Armed Alarm System detects:

- Vehicle door, trunk lid, engine hood opening.
- Ignition turning ON.
- Impact to car body (the system recognizes pre-alarm and alarm zones).
- Car body tilt.
- movement inside vehicle saloon (an external volume sensor shall be connected).

Pic. 1. Vehicle Alarm System 'GN8'. The system unit.

System actions during alarm:

- Hazard signaling by vehicle horn and direction indicators.
- Engine immobilization.
- Calls and SMS messages to preprogrammed phone numbers.
- Hazard and car location data transferring to user smart phone and/or security server.

The user can:

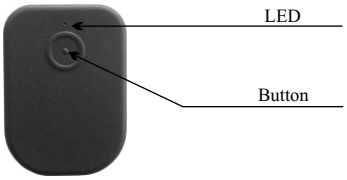
- Arm and disarm the system by a original vehicle's key fob or mobile phone.
- Get system status, arm, disarm, technical status and car location data (by LBS and/or GPS technology).
- Change System Settings by service button, original key fob, mobile phone, computer.
- Turn on and turn off the service mode (e.g. deactivate alarm system during vehicle maintenance or in case key fob battery is discharged).
- Track the driving route (car tracking).

3. ALARM SYSTEM COMPOSITION

Vehicle alarm system 'GN8' consists of a system unit – an electronic module (pic. 1), which shall be hidden inside the vehicle saloon during installation, horn, cables with attached connectors, accessories and ID card (2 pcs., **paired**, see pic. 2). The Vehicle Alarm System is controlled by **Original Vehicle Remote Key Fob (**or by **Keyless Entry System)** or by **user's mobile phone**.

4. ID CARD

ID card – driver's electronic key. Paired to the System ID card automatically maintains radio communication with the system unit. ID card's body has a button and a LED (see pic. 2.). Power supply – 3V CR2032 type battery. It is recommended to replace it every 12 months. **The ID card is not intended for use as a Remote Key Fob and shall be kept separately from the car keys.** There will be no benefit from the alarm system, if during a forced robbery you will hand over the car keys together with ID card. **The ID card must be protected from rain and snow!**



Pic. 2. Vehicle Alarm System 'GN8'. The ID card.

5. RADIO COMMUNICATION

System unit performs automatic radio communication with the ID card. **The Alarm System will not authorize a driver if he/she has no ID card**. The Alarm System will assume that the car is under unauthorized use and depending on settings, it may trigger alarm and engine immobilization or silent engine immobilization (see 21.2 clause).

6. SYSTEM LED

SYSTEM IS ARMED	SYSTEM IS DISARMED	SYSTEM IS DISARMED, HOWEVER THE ENGINE IS IMMOBILIZED	ID CARD PAIRING	SETUP MODE / SERVICE MODE	ARMED, TRUNK OR ZONE IS OPEN
The System LED blinks single flashes at an interval of 1,5 seconds	The LED doesn't shine	The System LED blinks single long flashes at an interval of 1,5 second	The System LED blinks triple flashes	The System LED blinks single frequent flashes	The System LED shines continuously

7. ID CARD AND SYSTEM STATUS

Briefly press the ID card button. The LED blinks once, the color shows ID card and system status:

green color – the ID card is active (the automatic radio communication between ID card and system unit is active);

orange color – the ID card is passive (the radio communication between ID card and system unit is established by button press only);

red color – ID card is passive and the system unit does not require an ID card to authorize a driver. The driver authorization is turned OFF by this card!

8. ALARM SYSTEM ARMING

8.1. BY ORIGINAL REMOTE KEY FOB

Briefly press the Original Remote Key Fob Button intended for Central Lock locking.

8.2. BY MOBILE PHONE

Call the alarm system phone number. As the Voice Guide asks enter the PIN code, press #, enter command 1 and press #. Finish the call by * * command. Or send SMS: **1234 A**, where 1234 – system PIN code, A – command for system arming.

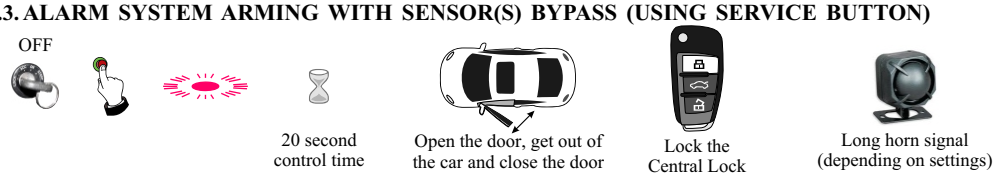
When the system is armed by phone the Central Lock is locked if **Central Lock control via CAN bus is available**.

SECOLink®

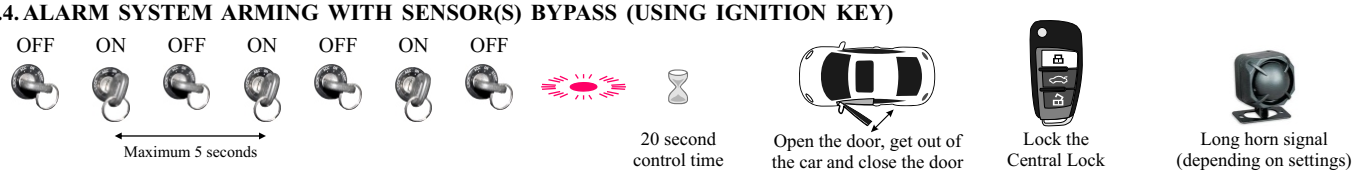
SMART PHONE APPLICATION SECOLink

For maximum system control convenience the smart phone application intended for mobile devices with the iOS and Android operating systems is developed. The application is free and available on AppStore and Google Play.

8.3. ALARM SYSTEM ARMING WITH SENSOR(S) BYPASS (USING SERVICE BUTTON)



8.4. ALARM SYSTEM ARMING WITH SENSOR(S) BYPASS (USING IGNITION KEY)



9. ALARM SYSTEM DISARMING

9.1. BY ORIGINAL REMOTE KEY FOB

Briefly press the Original Remote Key Fob Button intended for Central Lock unlocking.

9.2. BY MOBILE PHONE

Call the alarm system phone number. As the Voice Guide asks enter the PIN code, press #, enter 0 and press #. Finish the call by * * command. Or send SMS: **1234 D**, where 1234 – system PIN code, D – command for system disarming.

The car will blink by direction indicators, briefly (for 0,1 second) will turn ON confirmation sound signal (depending on the Central Lock type and system settings), The Central Lock will be unlocked. The system LED goes off.

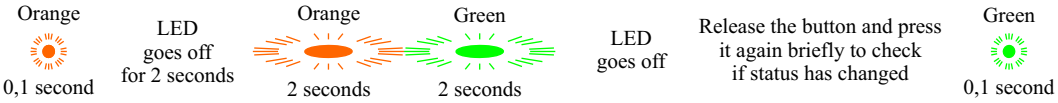
During the system disarming by phone the Central Lock is unlocked, if **Central Lock control via CAN bus is available**.

10. ALARM SIGNAL TURNING OFF

The armed system starts alarming if the ignition is turned ON, the door, the hood, the trunk is opened or built-in sensor (tilt/shock) and/or external sensor is triggered. The alarm signal may be turned OFF by this way – disarm the system and arm the system again.

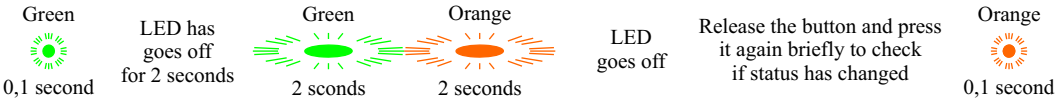
11. ID CARD ACTIVATION

The **ID card** can be **activated** only near or inside the vehicle (communication with the system unit is required). **Press and hold the button in the pressed state:**



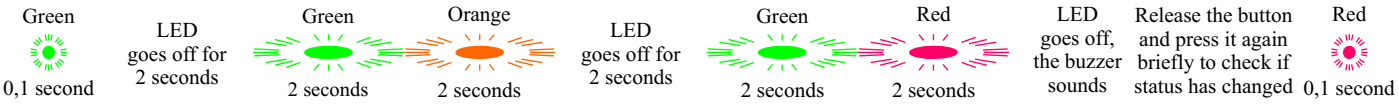
12. ID CARD DEACTIVATION

The **ID card** can be **deactivated** anywhere. It is expedient for saving of the battery. **Press and hold the button in the pressed state:**



13. DISABLE DRIVER AUTHORIZATION BY ID CARD

The **ID card** can be **deactivated** and **driver authorization** by ID card can be **disabled** only near or inside the vehicle. **Press and hold the button in the pressed state:**

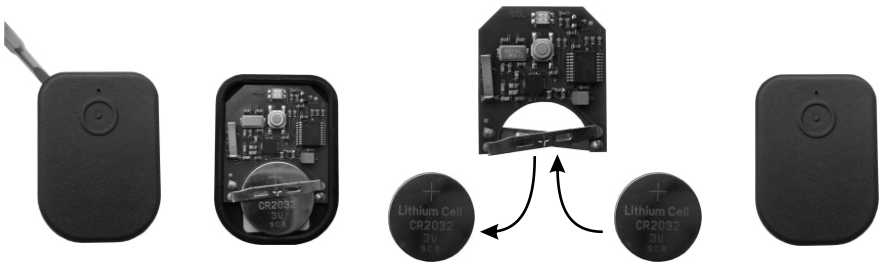


14. ENABLE DRIVER AUTHORIZATION BY ID CARD

The **ID card** can be **activated** and **driver authorization** by ID card can be **enabled** only near or inside the vehicle. **Press and hold the button in the pressed state:**

15. BATTERY REPLACEMENT

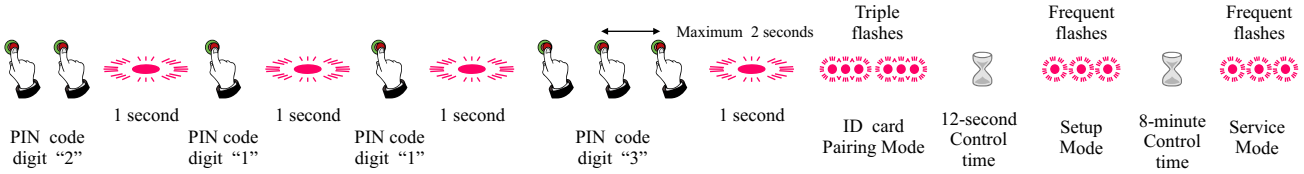
Find on a side of the ID card case a cave for a screwdriver tip. Open the ID card case using the screwdriver with a flat tip. Take off the board, pull out a battery, and replace by new CR2032 type battery. Put the board back, close the case. Pay attention to the battery polarity. If the polarity is wrong< your ID card will not operate. **ID card battery is covered by European Directive 2012/19/EU, so the batteries must be collected and disposed separately from regular household waste.**



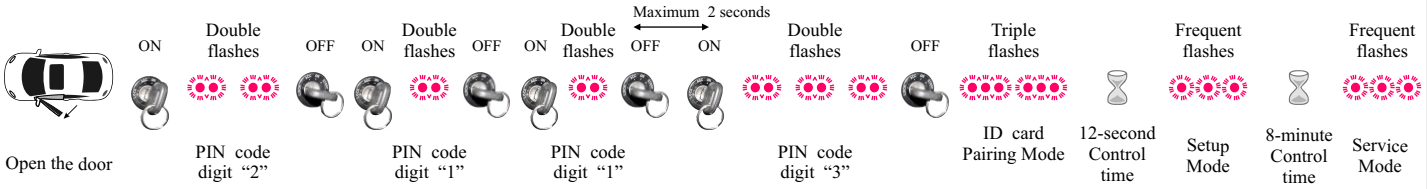
16. SERVICE MODE

In special cases (lost ID card or Remote Key Fob, discharged or failed battery, malfunction Alarm System, car repair) the Service Mode can be activated. At that time the system will not immobilize the engine, will not arm, disarm or trigger alarm, and **the system LED** blinks frequently. **Service Mode** is activated **as the 12-second Control time and the 8-minute Control time** after PIN code entering are elapsed.

16.1. ENTERING SERVICE MODE BY SERVICE BUTTON



16.2. ENTERING SERVICE MODE BY IGNITION KEY



Notes:
1. Interval between 2 presses of the Service Button no more than 2 seconds. Wait for the System LED confirmation flash.
2. Return to Normal Mode. If the 8-minute Control time after PIN has been entered is not elapsed, enter code 11. If the Control time is elapsed – enter PIN code and code 11.
3. If the 'anti-carjack' is activated or the engine is immobilized, the first Service Button press „cancels" 'anti-carjack' or engine immobilization, the following presses – enter PIN code.
4. If a mistake has been occurred during PIN code entering by ignition key, turn OFF the ignition, close the doors and repeat the procedure from the beginning.
5. If a mistake has been occurred during PIN code entering by service button, wait for LED confirmation flash, wait 2 seconds once more and repeat the procedure from the beginning.

17. LEAVING SERVICE MODE

Enter PIN code. Wait 12 seconds. The system is in Setup Mode. Enter code 11 in the same way as PIN code. The System goes into Normal Mode.

18. CHANGING ALARM SYSTEM PIN CODE

For security reasons it is recommended to change PIN code after the initial installation.

1. In Setup Mode in the same way as PIN enter code 88.
2. Enter NEW PIN code twice.
3. If PIN code is repeated correctly the System LED will indicate it by **1 second flash** and new PIN code will be saved.
4. If PIN code is not repeated correctly the System LED will indicate a mistake by **burst of short flashes**. You have start over again by entering PIN code twice.

19. ADDITIONAL SECURITY FEATURES

Additional security features allow you to increase the level of security. The installer shall explain you which additional features are activated.

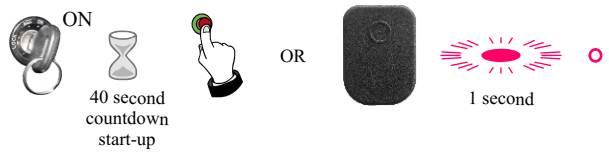
19.1. BUILT-IN IMMOBILIZER

If built-in immobilizer is activated, the engine is immobilized each time the system is disarmed or when the ignition is turned off and a preset time has passed (factory setting – 40 seconds). The immobilizer is bypassed in case of successful driver authorization (by ID card or by pressing the Service Button). Additionally it is possible to setup alarm system to trigger alarm in case unauthorized driver is entering vehicle after alarm system is disarmed.

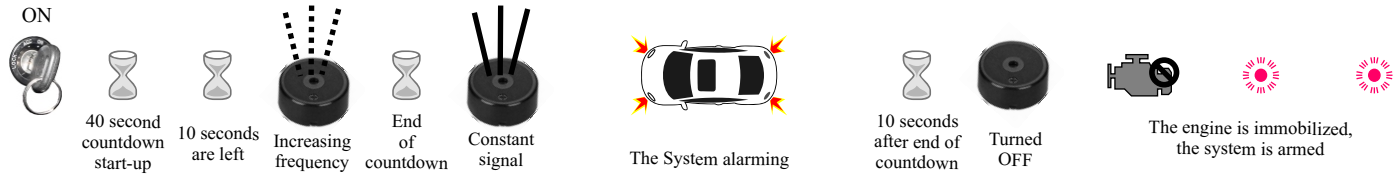
19.2. PROTECTION AGAINST ROBBERY ('ANTI-CARJACK')

This feature is not legal in the EU and other countries, which apply UNECE Regulation No. 97. Anti-Carjack procedure is started when a set of predetermined start-up conditions (conditions are) is fulfilled. The System starts countdown (default setting 40 seconds) and waits for driver authorization (by ID card or by Service Button press). The System stops countdown ("cancels" 'anti-carjack') after successful authorization. Otherwise 10 seconds before the end of the countdown buzzer starts beeping with increasing frequency and at the end of countdown alarm will be triggered. The alarm duration is at least 10 seconds. Then (depending on settings) the alarm system shuts down the running engine and rearms or continues alarming until the engine is stopped by driver. The system rearms. After the Anti-carjack procedure is over and alarm system is armed the further alarm system disarming is possible only in case of successful driver authorization (locking/unlocking car by original key fob won't arm/disarm alarm system anymore). 'Anti-Carjack' procedure can be terminated at any time in case of successful driver authorization.

'Anti-carjack' start-up by ignition turning ON (the installer shall set start-up condition) and "cancelling":



'Anti-carjack' start-up by ignition turning ON (start-up conditions shall be set by installer) and finish with running engine shut down and rearming: (finish scenario shall be set by installer):



20. GSM COMMUNICATOR

20.1. A valid SIM card is necessary for communicator. The SIM card shall be ready for use: PIN code requirement shall be disabled, SMS Center phone number shall be entered, necessary services shall be enabled, SMS messages shall be deleted. If the PIN code requirement is obligatory for you, available to program an automatic entering of PIN code via USB interface by use of PC with installed GN8 Loader software.

20.2. The user by means of Voice Menu and SMS commands can:

a) to change setting of the communicator;
b) to change settings of the Alarm System functions (it is not recommended for user);
c) to get System status data, vehicle location data, to control the Alarm System.

20.3. Registered phone numbers.

The user can save up to 5 phone numbers in the phonebook located in the memory of GSM communicator. The Alarm System calls and/or sends SMS to saved phone numbers depending on settings.

NOTE: Available communicator setup in such way, that the communicator would receive calls and execute |SMS commands only from registered phone numbers.

21. GSM COMMUNICATOR PROGRAMMING SAMPLES

+37068412345 is the phone number of the SIM card installed inside the communicator . 1234 is the Alarm System PIN code.

21.1. Phone number programming. It is necessary to program the following phone numbers: to 1st phonebook position +370 684 11111, to 2nd position – +370 684 22222, to 3rd position – +370 684 33333.

By the call. We make a call by phone number:+37068412345. The Voice Guide welcomes and asks to enter PIN code and press #. We enter: 1 2 3 4 #. The Voice Guide starts to list the Main Menu. We enter: 9 #. The Voice Guide starts listing the Phonebook Menu. We enter: 1 1 # . The Voice Guide asks to enter the phone number with an international code. There is no need to enter the sign „+", it is entered by the system automatically. We enter: 3 7 0 6 8 4 1 1 1 1 1 # . The Voice Guide reports: „OK" and starts over again listing the Phonebook menu. For saving of time we do not wait so far to list the menu, we enter: 2 1 # 3 7 0 6 8 4 2 2 2 2 2 # 3 1 # 3 7 0 6 8 4 3 3 3 3 3 # . The Voice Guide reports: „OK" and starts over again listing the Phonebook Menu. For completion of a call we enter *** * .** The System finishes a call.

By SMS command. Available to send several SMS commands inside one SMS message. The commands and data are separated by spaces. To get an analogical result we send SMS: **1234 SN1 37068411111 SN2 37068422222 SN3 37068433333**. SMS message length no more than 160 symbols. Several SMS messages are send if it is necessary.

21.2. Error correction. As soon as the key on the keypad of phone is pressed, the appropriate DTMF code immediately goes to the System. Correction of wrongly entered symbols is senseless. It is necessary to cancel the wrongly entered command or data by pressing * key. The System returns to Main Menu. It is necessary to enter over again the correct command and data. For example we start to enter a phone number and we enter not 37..., but 38...:

1 2 3 4 # 9 # 4 1 # 3 8 *** (the System returns to Main Menu)** 9 # 4 1 # 3 7 0 6 8 4 4 4 4 4 4 # . **We entered the number +37068444444 onto the 4th Phonebook position.**

Errors in SMS messages are correcting in an usual order.

21.3. If you disabled System control from unregistered phone numbers and accidentally deleted the single last phone number in the Phonebook, enter the PIN code by Service Button or Ignition Key. The System will accept commands from any phone number.

22. BLOCKING THE ENGINE BY PHONE

The user can block the engine by a call from any phone or SMS. The engine blocking is available during the System Voice Report about alarm. The engine will stay blocked till the system will receive the command to unblock the engine. System disarm does not cancel the engine blocking.

Blocking the engine by phone call:

1. Call the Alarm System number, wait for the response of the system.
2. Enter PIN code and press #. Enter 661 and press #.
3. The System will report "Engine is blocked" and will block the engine. After listening to a voice message end the call (press * * or hang up).

Blocking the engine by SMS message: 1234 99, where **1234** – system PIN code (if set so that the System would require a PIN code).

Unblocking the engine blocked by phone

Unblocking the engine blocked by the phone is impossible till the appropriate command is not sent by the phone.

Unblocking the engine by phone call:

1. Call the Alarm System number, wait for the response of the system.
2. Enter PIN code and press #. Enter 660 and press #
3. The System will report "Engine is unblocked" and will unblock the engine. After listening to a voice message end the call (press * * or hang up).

Unblocking the engine by SMS message: 1234 90, where **1234** – system PIN code (if set so that the System would require a PIN code).

23. CAR LOCATION DEFINITION BY LBS TECHNOLOGY

Average accuracy of the car location definition is from several tens meters to several hundreds meters depending on density of placement of base stations and features of the area. Information request about location is available by phone call or SMS message.

Call inquiry:

1. Call the Alarm System number, wait for the response of the system.
2. Enter PIN code and press #. Enter 41 and press #. End the call (press * * or hang up).

SMS inquiry: 1234 X5, where **1234** – System PIN code (if set so that the System would require a PIN code).

You will get SMS with a link to the location of the car. Click the link and open the map.

24. CAR LOCATION DEFINITION BY GPS TECHNOLOGY

The GPS technology provides the car location definition with an accuracy of several meters.

Call inquiry:

1. Call the Alarm System number, wait for the response of the system.
2. Enter PIN code and press #. Enter 42 and press #. End the call (press * * or hang up).

SMS inquiry: 1234 X6, where **1234** – System PIN code (if set so that the System would require a PIN code).

You will get SMS message with the date, time by Greenwich (GMT), latitude and longitude and a link, when you open it you can see the location of the car: Current position: 2018.05.07, 13:56:21 (UTC), 54.73682N, 025.26880E, http://maps.google.com/maps?f=&q=54.73682N+025.26880E.

25. REMOTE ENGINE START MODULE CONTROL

If remote engine start module compatible with the System is installed in the car and connected to the system, you can control it by the phone.

Engine start by phone call:

1. Call the Alarm System number, wait for the response of the system.
2. Enter System PIN code and press #. Enter 611 and press #.
3. The System will report "Starting the engine". End the call (press * * or hang up).

Engine start by SMS message: 1234 G, where **1234** – System PIN code (if set so that the System would require a PIN code).

After the successful start of the engine the System will send an SMS message "The engine is started" to the number in the first position of the Phonebook.

Engine stop by phone call:

1. Call the Alarm System number, wait for the response of the system.
2. Enter System PIN code and press #. Enter 610 and press #.
3. The system will report "Stopping the engine". End the call (press * * or hang up).

Engine stop by SMS message: 1234 Q, where **1234** – System PIN code (if set so that the System would require a PIN code).

After the stop of the engine the System will send an SMS message "The engine is stopped" to the number in the first position of the Phonebook.

Periodic auto engine start: The system allows to realize the periodic automatic engine start by these parameters :when the battery is discharged below the set voltage, at specified time intervals, at the set time on the alarm clock. Setting parameters for the periodic automatic start of the engine is available only by the phone whose number is stored at the first Phonebook position and by the use of SMS commands or SECOLINK Smart Application.

26. ENGINE PRE-HEATER CONTROL

If the car has a stand-alone engine pre-heater that is connected to the System, you can control it by phone.

Stand-alone engine pre-heater start by call:

1. Call the Alarm System number, wait for the response of the System.
2. Enter the System PIN code and press #.

3. Enter 621 and press #.
4. The System will report "Engine pre-heater is on" and will start the stand-alone engine pre-heater. End the call (press * * or hang up).

Stand-alone engine pre-heater start by SMS message: 1234 61, where 1234 –System PIN code (if set so that the System would require a PIN code).

Stand-alone engine pre-heater stop by call:

1. Call the Alarm System number, wait for the response of the System.
2. Enter the System PIN code and press #.
3. Enter 620 and press #.
4. The System will report "Engine pre-heater is off" and will stop the stand-alone engine pre-heater. End the call (press * * or hang up).

Stand-alone engine pre-heater stop by SMS message: 1234 60, where 1234 – System PIN code (if set so that the System would require a PIN code).

After the engine pre-heater ON/OFF the System will send an SMS message "Engine pre-heater is ON/OFF" to the number in the first position of the Phonebook.

27. TURBO TIMER CONTROL

It's recommended to cool down a turbocharger after riding a powerful car/supercar. The System can be mounted and set up to support a turbo timer mode.

Turbo timer time set up and start:

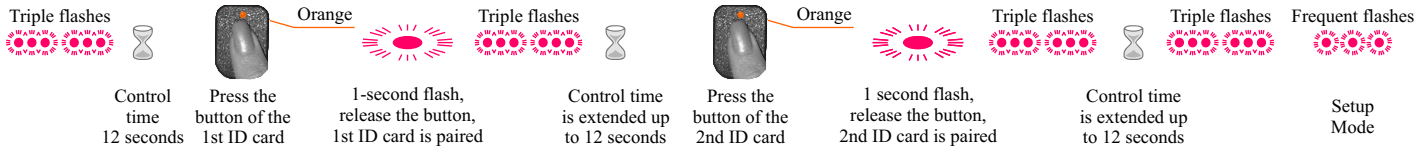
1. Open the driver door and remain opened.
2. Set the turbo timer time:

2.1. Press a brake pedal once. You will hear a single buzzer signal. The turbo timer is set to 2-minute work time.
2.2. Press the brake pedal twice. You will hear a double buzzer signal. The turbo timer time is set according to periodic engine start setting.
2.3. Press the brake pedal for three times. You will hear a long buzzer signal. The turbo timer time is reset to zero. The turbo timer will not support the ignition.

3. Turn OFF the ignition. Turn the ignition key to parking position and pull out. If the turbo timer time is set, the engine remains running.
4. Lock the Central Lock by OM remote. The Alarm System arms, but the sensors remains bypassed till the engine is running.

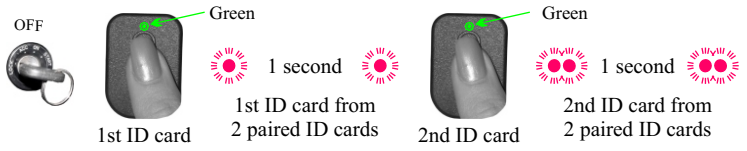
28. ID CARD PAIRING

2 paired ID cards comes with the System Unit. The user can pair up to 5 ID cards. All ID cards shall be paired one by one in the same pairing session because all previously paired cards will be deleted from the system after first successful pairing in pairing session. This is useful if the ID card is stolen or lost. ID cards before pairing shall be turned in passive mode (LED shall flash orange after the button being pressed. Enter PIN code. The system LED blinks triple flashes for 12 seconds. It is the control time for pairing the first ID card.



29. HOW MANY ID CARDS ARE THERE PAIRED?

Turn OFF the ignition. Press ID card button and check the system LED. LED flashes a number of packages in 1 second intervals. Count of packages indicates the total number of ID cards paired to the system. Number of flashes in package corresponds to the ID card number.



30. THE ALARM SYSTEM TRIGGER DATA

The Alarm System saves the information about the last triggers and can indicate the trigger reasons in 2 ways:

a) disarm the System, close the doors and turn ON the ignition. The System indicates the reason of the last trigger by flashes of the System LED.
b) enter FN71, FN72, or FN73. The System respectively indicates the reasons of the last 3 triggers by flashes of the System LED.

The count of the System LED flashes															
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Triggered built-in shock sensor	Triggered built-in tilt sensor	Triggered external ultrasonic sensor	Triggered OM sensor	Triggered Jamming sensor	Ignition was turned ON	Front left door was opened	Front right door was opened	Rear left door was opened	Rear right door was opened	Hood was opened	Trunk was opened	Door via analog input	Driver not identified	Low Main Battery	Triggered trailer sensor / switch

31. TROUBLESHOOTING

1. **After the ignition is turned ON 5 double buzzer saund signals in 2 second intervals are heard.** ID card battery is low. Replace the battery.
2. **Buzzer sound signals are heard every 5 seconds within a 3 minute interval.** ID card's signal is lost. Make sure the ID card is not missing or left at home. Also check the battery.
3. **After turning on the ignition** a short sound of a buzzer is heard. Driver authorization by ID card is disabled.
4. "**Anti-carjack" procedure is activated or vehicle engine is immobilized**. Make sure the ID card is not missing or left at home. **C**heck the battery of ID card.
5. **The buzzer keep beeping while ignition is ON.** Driver authorization by ID card is disabled and active ID card automatically communicating with alarm system. Enable driver authorization or deactivate the card.

To resolve more complex malfunctions, contact the company that installed the system.

32. SYSTEM COMPLIANCE AND WARRANTY

CE

Alarm System's manufacturer and the distributor are not responsible for possible vehicle theft! The System is made in Lithuania. A warranty term is 24 months from the date of sale or date of manufacture if there is no prof regarding date of sale. For warranty or post-warranty service please contact your alarm system installer company. The manufacturer - company "Kodinis Raktas" declares that product "GN8" complies with essential requirements of EU Directives and UNECE Regulation No.97. See manufacturers web site www.kodinis.lt for complete text of declaration.

33. END OF USE

ID CARD CONTAINS THE BATTERY that is covered by Directive 2006/66/EC of the European Parliament and of the Council. Please inform yourself about the local separate collection system for batteries. Please act according to your local rules and do not dispose your old batteries with your normal household waste. Correct disposal of batteries helps to prevent potential negative consequences for the environment and human health.

YOUR PRODUCT is covered by Directive 2012/19/EU of the European Parliament and of the Council. Please inform yourself about the local separate collection system for electrical and electronic products. Please act according to your local rules and do not dispose your old product with your normal house hold waste. Correct disposal of your old product helps to prevent potential negative consequences for the environment and human health.