

VEHICLE ALARM SYSTEM

Installation Manual for 'GN5S', 'GN5G', 'GN5A', 'GN6A' models

1. TECHNICAL SPECIFICATIONS:

- ✓ operating temperature - 40° C to +85° C;
- ✓ rated supply voltage 9 – 15V DC;
- ✓ average consumption without sensor connected..... <14mA;
- ✓ average consumption with US2 sensor connected..... <20 mA;
- ✓ siren current 2A;
- ✓ average distance of remote control 5 – 10m.

2. INSTALLATION OF THE COMPONENTS OF THE ALARM SYSTEM.

Vehicle alarm system 'GN' is designed for all types of vehicles (except cabriolets) with petrol or diesel engines, 12V negative earth batteries.

Vehicle alarm system must be installed inside the vehicle passenger compartment, in difficult access area as recommended by the wiring instructions supplied by manufacturer.













Manufacturer of the alarm system is recommending the following:






- a) selecting a qualified installer of vehicle alarm systems;
- b) mounting system unit in place free from penetration of moisture and other corrosion-causing materials, as far away as possible from heating elements in the passenger compartment and sources of electromagnetic interference (vehicle computer, conditioner, block of relays);
- c) avoid mounting system unit directly onto metal parts of vehicle to prevent accumulation of condensate in the system unit;
- d) mounting system unit in a way wire connectors are going from the bottom side of the unit;
- e) avoid placing wires adjacent to moving or hot parts of vehicle;
- f) avoid overloading circuits of the alarm system:

CIRCUIT	CIRCUIT MARK		MAX VALUE
	'GN5'	'GN6'	
lock impulse current	⑥	④	0,13 A
unlock impulse current	⑦	③	0,13 A
cut-off circuit /CC1	④	⑥/⑧	0,13 A
siren activation circuit	⑦	⑦	2 A
right direction indicator control circuit	⑤	⑤	7 A
left direction indicator control circuit	②	②	7 A

3. SETTING FUNCTIONS OF THE ALARM SYSTEM.

Depending on the program version, 'GN' can incorporate up to 49 system settings. Due to these settings 'GN' can be adjusted to some particular vehicle or to country related traditions, or existing requirements for vehicle alarm systems. 'GN' functions are set using **PIN** (personal identification number), **FN** (function number) and **SN** (setting number) codes. Actions to be performed in the following sequence:

- a) Open vehicle doors and leave it opened;
- b) Enter **PIN** code (see User Manual 6.2.), close the doors;
- c) Wait for approximately 12 seconds (intended for remote control pre-programing), till system LED stops flashing in triple bursts of light and starts flashing rapidly;
- d) Within 8 minutes following the **PIN** code entry enter the **FN** number (by analogy with the **PIN** code) of the function you want to change. Short flash of direction indicators indicates correct FN entry. No flashing of direction indicators, means either incorrect **FN** or dedicated 8 minutes have elapsed;
- e) If **FN** code has not been entered due to elapsed time, press remote control button  or  or , enter the **PIN** code once more and wait for 12 seconds;
- f) If **FN** code has not been entered due to the error, turn the ignition off, wait until system LED starts flashing rapidly and repeat the **FN** code. After correct entry of the **FN** code the system extends control time for 8 minutes awaiting a code from remote control button  or  or . Within this control time check current **SN** settings or enter a new one. The system again extends control time to 8 minutes;
- g) Check **SN** setting only with the ignition OFF. Press remote control button  or  or  counting short flashes of direction indicators;
- h) If function setting is not met, turn the ignition ON. Press button  or  or  with 1 second intervals as many times as the desired number of **SN**. Wait for 3 seconds until short siren chirp and flash of direction indicators appear. New setting has been entered into memory. Therefore, turn the ignition OFF and check **SN** setting as described in article "3g".

Note: If icons are used for remote control buttons, then remote control button  matches button , and button  matches . Button  matches the button in single button remote control.

4. SUMMARY OF ALARM SYSTEM SETTING SEQUENCE.

CONDITION	ACTION	CONTROL TIME	REMOTE CONTROL	DIRECTION INDICATORS	SIREN	SYSTEM LED
Doors opened	PIN ENTRY	-	-	-	-	Double flashing
PIN entered	REMOTE CONTROLS PROGRAMMING	12 seconds, extended for 12 seconds after each remote control programming	Ⓜ + Ⓛ or Ⓜ or Ⓜ + Ⓛ + Ⓟ or Ⓜ + Ⓛ + Ⓟ	-	-	Triple flashing, 1 second flash after remote control pre-programming
12 seconds after PIN entry of a remote control programming	FN ENTRY	8 minutes	-	Indicates correct FN entry	-	Double flashing
FN entered, ignition OFF	SN CHECK	8 minutes	Short press of Ⓛ or Ⓜ or Ⓟ	Indicates SN value	-	Frequent flashing
FN entered, ignition ON	SN CHANGE	8 minutes	Short presses of Ⓛ or Ⓜ or Ⓟ	Indicates SN change in 3 seconds	Indicates SN change in 3 seconds	Double flashing
SN checked or set	FOLLOWING FN ENTRY	8 minutes	-	Indicate correct FN entry	-	Double flashing
Following FN entered, ignition ON	SN CHANGE	8 minutes	Short presses of Ⓛ or Ⓜ or Ⓟ	Indicates SN change in 3 seconds	Indicates SN change in 3 seconds	Double flashing
END of setting	FN=11 ENTRY or using remote control	8 minutes	Short press of Ⓛ or Ⓜ or Ⓟ	-	-	Double flashing /-

5. OPERATION TESTS OF THE SYSTEM.

While operating the system performs self-testing on regular basis. If malfunction is detected, the system generates audible 1.5 second signal. Such signal is generated only at the moment of turning the alarm ON or OFF. It differs by its duration from the audible signals confirming that the protection has been turned ON or OFF. Do not confuse this signal with external "warning" zone signal often triggered by incorrect tuning of the sensor. For ease of installer's work, 'GN' saves 3 last alerts in the memory. By using the memory, causes of the false alarm can be ascertained. To perform this enter FN=71, 72, or 73, press button Ⓛ or Ⓜ or Ⓟ and count flashes of the direction indicators:

REASON OF FALSE ALARM	NUMBER OF FLASHES FOR DIFFERENT MODELS			
	'GN5_S'	'GN5_G'	'GN5_A'	'GN6_A'
Triggering of a sensor	1	1	1	1
Door opening	2	2	2	2
Engine bonnet opening	3	3	3	3
Luggage compartment opening	4	4	4	2
Turning ignition ON	5	5	5	5


6. CERTIFICATE OF INSTALLATION.

I, undersigned qualified installer _____ (Name, Surname) certify that installation of the below described vehicle alarm system has been carried out by myself pursuant to installation manual supplied by the manufacturer of the system.

Vehicle description:
 Manufacturer and model: _____
 Serial number: _____ Registration number: _____

Description of vehicle alarm system:
 Type: 'GN'. Model: _____ Official approval number: _____
 Installation date: _____
 Installing company: _____

Installer: _____ (Position, signature)



After installation of the alarm system installer must fill in CERTIFICATE OF INSTALLATION! It is recommended to mark selected settings in the TABLE OF ALARM SYSTEM SETTINGS (underline SN).

7. SUMMARY OF ALARM SYSTEM SETTINGS.

7.1. MARKED FIELD MEANS:

FS- factory setting;

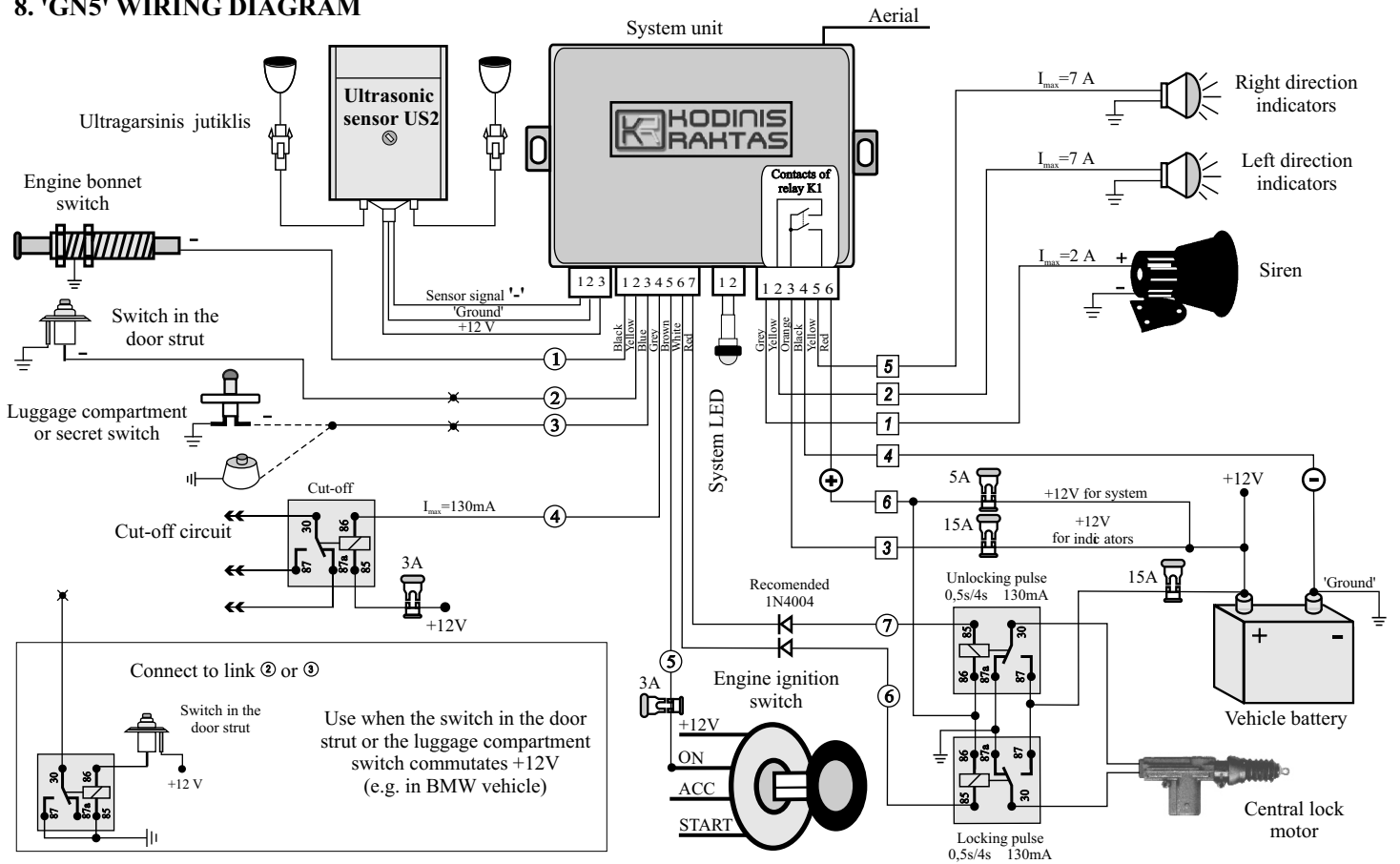
EU - setting meets requirements of EU Directives. Selection of settings not meeting EU requirements is possible if vehicle is operated in non EU state. In this case the system is considered having no conformity certificate, so it is imperative to cross out the approval number in the installation certificate;

GN5_S, GN5_G, GN5_A, GN6_A - function is in appropriate program version.

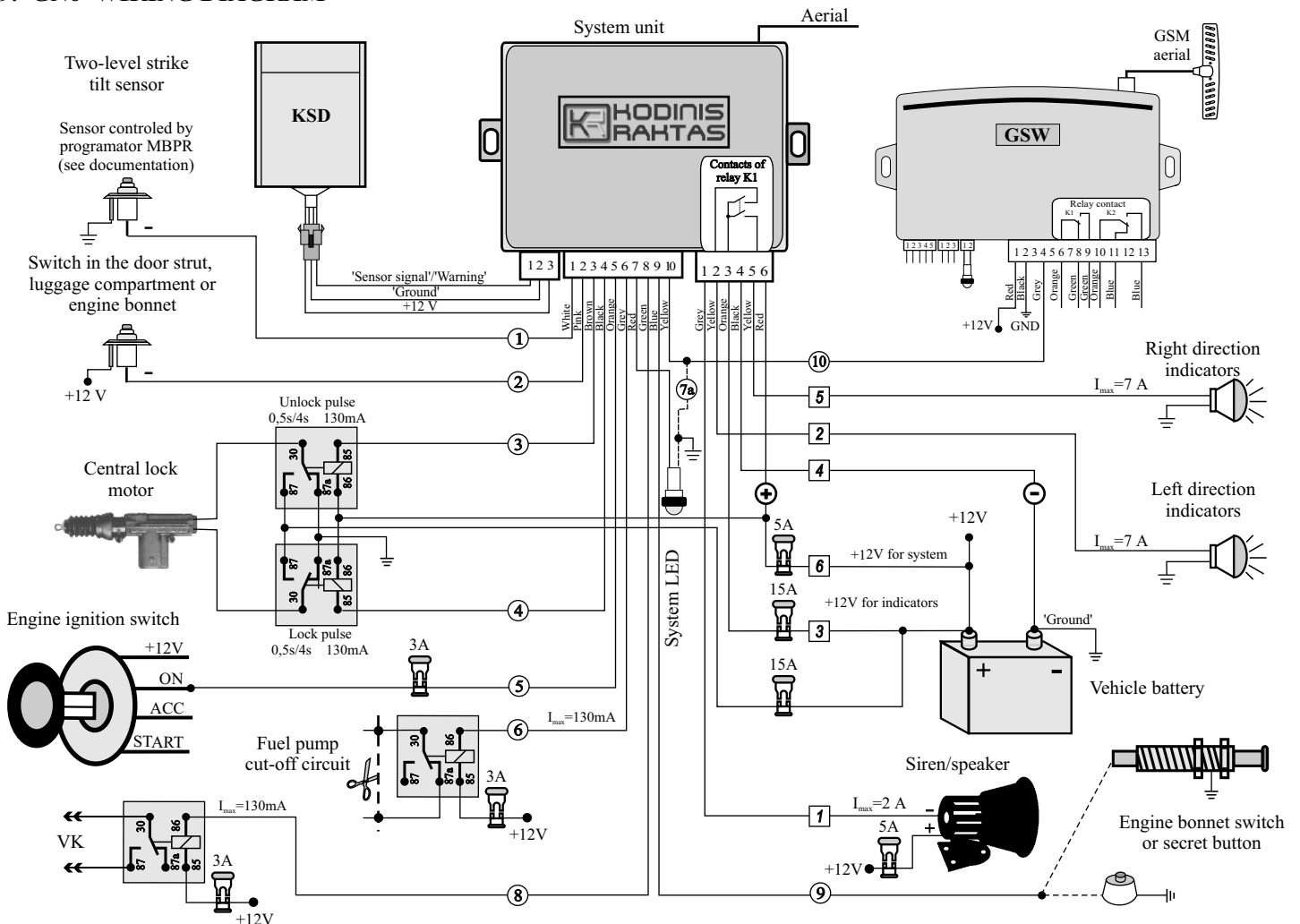
7.2. TABLE OF ALARM SYSTEM SETTINGS.

FUNCTION		ES	GN5_S	GN5_G	GN5_A	GN6_G	GN6_A
FN=11	Function: END OF FN SETTING						
FN=22	Function: ADDITIONAL ALARM FUNCTION.						
SN=1	Additional alarm function is turned OFF.	☑					
SN=2	Remote control-operated inner immobilizer. Immobilizer disables the engine after 40 seconds since the ignition or alarm disabling. Immobilizer can be switched OFF by pressing button or or . Immobilizer function can be turned ON or OFF (only for version GN5.A, GN6.A) with ignition ON by pressing together buttons and or and and holding them down till short siren chirp.	✓	✓	✓	✓	✓	✓
SN=3	Inner immobilizer operated by secret button. Immobilizer disables the engine after 40 seconds since the ignition or alarm disabling. Immobilizer can be turned OFF only by pressing a secret button. Immobilizer function can be turned ON or OFF (only for version GN5.A, GN6.A) by pressing a secret button and then pressing together button and or and and holding them down till short siren chirp.	✓		✓	✓	✓	
SN=4	'Anti-Carjack' triggered upon ignition turn ON or door opening with ignition ON. On triggering, a 40 second countdown begins and 'Anti-Carjack' is set in the final stage (FN=23). 'Anti-Carjack' or engine immobilization can be disabled only by pressing secret button. 'Anti-Carjack' function cannot be turned OFF using remote control.	✓		✓	✓	✓	
SN=5	'Anti-Carjack' triggered upon ignition turn ON. On triggering, a 40 second countdown begins and 'Anti-Carjack' is set in the final stage (FN=23). 'Anti-Carjack' or engine immobilization can be disabled only by pressing secret button. 'Anti-Carjack' function cannot be turned OFF using remote control.	✓		✓	✓	✓	
SN=6	'Anti-Carjack' triggered upon ignition turn ON or door opening with ignition ON. On triggering, a 40 second countdown begins and 'Anti-Carjack' is set in the final stage (FN=23). 'Anti-Carjack' or engine immobilization can be disabled only by pressing secret button. 'Anti-Carjack' function can be turned OFF / ON with ignition OFF by pressing secret button and afterwards pressing together remote control buttons and or and and holding them down till short siren chirp.			✓	✓	✓	
SN=7	'Anti-Carjack' triggered upon ignition turn ON. On triggering, a 40 second countdown begins and 'Anti-Carjack' is set in the final stage (FN=23). 'Anti-Carjack' or engine immobilization can be disabled only by pressing secret button. 'Anti-Carjack' function can be turned OFF / ON with ignition OFF by pressing secret button and afterwards pressing together remote control buttons and or and and holding them down till short siren chirp.			✓	✓	✓	
FN=23	Function: OPERATION OF 'ANTI-CARJACK'.						
SN=1	With 40 seconds elapsed since 'Anti-Carjack' triggering, the siren starts sounding and direction indicators flashing. After ignition turn - OFF, the engine is immobilized, the system rearms. If alarm is ON, cancelling of engine immobilization is possible only by disabling the alarm and pressing a secret button.		☑		☑	☑	☑
SN=2	With 40 seconds elapsed since 'Anti-Carjack' triggering, the siren starts sounding and direction indicators flashing. 10 seconds after the engine is immobilized, the system rearms. If alarm is ON, engine immobilization can be cancelled only by disabling the alarm and pressing a secret button.	✓		✓	✓	✓	
FN=32	Function: ENTRANCE 'DOOR+.'						
SN=1	When voltage in the entrance is +12V, security system finds the door opened, and when voltage is 0V, or entrance is suspended security system finds it closed.	☑				☑	☑
SN=2	When voltage in the entrance is +12V, security system finds the door closed, and when voltage is 0V, or entrance is suspended security system finds it opened.	✓				✓	✓
FN=33	Function: UNRESPONSE TIME AFTER ARMING.						
SN=1	Unresponsive time is 5 seconds. Engine bonnet, luggage compartment switches and sensors monitoring starts after 5 seconds of alarm enabling.	☑	☑	☑	☑	☑	☑
SN=2	Unresponsive time is 45 seconds. Engine bonnet, luggage compartment switches and sensors monitoring starts after 45 seconds of alarm enabling.	✓	✓	✓	✓	✓	✓
FN=41	Function: ARMING WITHOUT A REMOTE CONTROL.						
SN=1	Arming without a remote control function is turned OFF	☑	☑		☑	☑	☑
SN=2	Arming without a remote control will be turned ON if, secret button is pressed twice with the ignition OFF, door opened and then closed. Central lock is locked.	✓	✓		✓	✓	✓
FN=42	Function: WARMING-UP THE ENGINE.						
SN=1	Warming-up the engine function is turned OFF	☑	☑		☑	☑	☑
SN=2	With ignition ON and secret button pressed twice in the later time, alarm is enabled and central locking is possible by pressing remote control button or or . The system will not respond to shock or volume sensor, however in case of door opening, engine bonnet or luggage compartment, the siren starts sounding, direction indicators flashing. Depending on 'Anti-Carjack' function settings (FN=23) the engine is immobilized within 10 seconds and the system rearms or immediately after the ignition turn OFF the engine is immobilized and alarm enabled. Alarm is disabled by pressing button or or .		✓		✓	✓	✓
FN=44	Function: AUTO-REARM.						
SN=1	Auto-rearm with no central locking. The alarm will be activated automatically if vehicle doors, engine bonnet and luggage compartment remain unopened within 30 seconds after disarming. Central lock is not locked.	☑	☑	☑	☑	☑	☑
SN=2	Auto-rearm with central locking. The alarm will be activated automatically if vehicle doors, engine bonnet and luggage compartment remain unopened within 30 seconds after disarming. Central lock is locked.	✓	✓	✓	✓	✓	✓
SN=3	Auto-rearm is disabled. Auto-rearm function is non-operational after the alarm disarming.	✓	✓	✓	✓	✓	✓
SN=4	Setting of a time, per which doors can be opened or closed after alarm activated. Arming is on central lock is not locked.	✓				✓	✓
SN=5	Setting of a time, per which doors can be opened or closed after alarm activated. Arming is on central lock is locked.	✓				✓	✓
FN=45	Function: CENTRAL LOCK OPERATION ON WHEN TURNING IGNITION ON/OFF.						
SN=1	When ignition is turned ON, central lock is locked. When ignition is turned OFF, central lock is unlocked.	☑	☑				
SN=2	Central lock does not respond to turning ignition ON/OFF.	✓	✓				
FN=51	Function: PURPOSE OF CCI.						
SN=1	Additional disabling. CCI controls relay (with normally closed contacts) that cuts off fuel pump.	☑	☑	☑	☑		
SN=2	Additional disabling. CCI controls a relay (with normally opened contacts) that cuts off starter circuit	☑	☑	☑	☑	☑	☑
SN=3	Engine bonnet or luggage compartment release impulse. Pressing remote control button or or for more than 2 seconds generates negative polarity impulse in CCI equal to the time of button pressing. (For model GN5.S it is necessary to turn ignition ON).	✓	✓	✓	✓	✓	✓
SN=4	40 seconds duration negative polarity pulse, generated on arming, is used to close the automatic windows or a sunroof	✓	✓	✓	✓	✓	✓
SN=5	If any door, engine bonnet or luggage compartment is opened with alarm enabled, inner zone of the sensor is triggered generating impulse for pager message.	✓	✓	✓	✓	✓	✓
SN=6	If any door, engine bonnet or luggage compartment is opened with alarm enabled, outer zone of the sensor is triggered generating impulse for pager message.	✓	✓	✓	✓	✓	✓
SN=7	CCI designed for controlling GSM module GSW.	✓	✓	✓	✓		
SN=8	Upon alarm turn ON CCI generates negative polarity impulse which is terminated with alarm disabling.	✓	✓	✓	✓	✓	✓
FN=55	Function: CENTRAL LOCK CONTROL.						
SN=1	Short impulse. Central lock is operated by 0.5 second impulse.	☑	☑	☑	☑	☑	☑
SN=2	Long impulse. Central lock is operated by 4 second impulse.	✓	✓	✓	✓	✓	✓
SN=3	Short impulse to lock, double impulse to unlock. Alarm arming generates 0.5 second pulse, disarming two 0.5 second impulses with 1 second intermission.	✓	✓	✓	✓	✓	✓
SN=4	Double impulse. Central lock is operated by two 0.5 second impulses (with 1 second pause) generated by alarm arming and disarming.	✓	✓	✓	✓	✓	✓
FN=65	Function: TYPE OF SIREN AND SOUND LEVEL.						
SN=1	Siren with no inner modulation (speaker with coil impedance at least 4 Ohm). Maximum sound level.	☑				☑	☑
SN=2	Siren with no inner modulation (speaker with coil impedance at least 4 Ohm). Sound level reduced 2 times.	✓				✓	✓
SN=3	Siren with no inner modulation (speaker with coil impedance at least 4 Ohm). Sound level reduced 4 times.	✓				✓	✓
SN=4	Siren with no inner modulation (speaker with coil impedance at least 4 Ohm). Sound level reduced 8 times.	✓				✓	✓
SN=5	Siren with inner modulation (standard) controlled by voltage.	✓				✓	✓
FN=66	Function: SIREN SIGNAL ON ARMING OR DISARMING.						
SN=1	Silent. Arming and disarming with no siren signal.	☑	☑	☑	☑	☑	✓
SN=2	Loud/silent. Short press of remote buttons arms/disarms the system with sound signals, while long press (1 second) – without sound signals.		✓	✓	✓	✓	✓
SN=3	Silent/loud. Short press of remote buttons arms/disarms the system without sound signals, while long press (1 second) – with sound signals.		✓	✓	✓	✓	✓
FN=71	Function: MEMORY OF THE 3rd (recent) ALARM ZONE.						
SN=1	Number of flashes of direction indicators indicates number of the triggered alarm zone.	✓	✓	✓	✓	✓	✓
FN=72	Function: MEMORY OF THE 2nd ALARM ZONE						
SN=1	Number of flashes of direction indicators indicates number of the triggered alarm zone.	✓	✓	✓	✓	✓	✓
FN=73	Function: MEMORY OF THE 1st ALARM ZONE.						
SN=1	Number of flashes of direction indicators indicates number of the triggered alarm zone.	✓	✓	✓	✓	✓	✓
FN=77	Function: SENSOR TYPE.						
SN=1	One-level.	☑	☑	☑	☑	☑	☑
SN=2	One-level with no siren signal	✓	✓	✓	✓	✓	✓
SN=3	Two-level.		✓	✓	✓	✓	✓
SN=4	Two-level with no warning zone siren signal.		✓	✓	✓	✓	✓
SN=5	Two-level with no siren signal		✓	✓	✓	✓	✓
FN=88	Function: CHANGING THE PIN CODE.						
FN=99	Function: FACTORY SETTINGS.						
SN=1	Restoring factory settings and the default PIN code.	✓	✓	✓	✓	✓	✓

8. 'GN5' WIRING DIAGRAM



9. 'GN6' WIRING DIAGRAM



*Note: 1. Ⓣ wire can be connected to the ground or to the Ⓢ wire.

2. If Ⓣ is connected with a secret button, engine bonnet sensor must be connected to the Ⓢ wire.