

***Congratulations!*** You have chosen a GEMEL car alarm, a truly outstanding product. Please take the time to read this manual as it is indispensable. Locate the system, that is hi-lighted on the cover, in the chart on page 1. On the left of the chart is the function column numbered 1 to 25. The stars under your alarm indicate the section numbers you need to refer to learn about the features associated with that system.

⊗ ***Function to be selected at the time of installation.***

# ***In the Belgium version these functions are masked and cannot be changed.***

⚠ ***The alarm can be integrated with additional modules, i.e. Shock sensor (GMS), Anti-Tilt (GMA), Window lift, Ultrasonic & Bi-volumetric modules (this function is already included in GR48) and Engine Immobiliser (This function is already included the ND5, ND6, and GR48).***

## 1) ROLLING CODE TRANSMITTERS

Today's technology has enabled these alarms to be manufactured with a rolling code system. The codes are changed randomly every time the ON/OFF button is pressed. This guarantees the highest level of security available against any attempt to scan or grab the activating code. It is possible to have up to a maximum of 4 transmitters programmed to the system at any one time. Each time the ignition switch is turned OFF the alarm LED will flash once for each transmitter programmed.

In the event of a transmitter being lost or stolen, the remaining transmitter/s can be reprogrammed to the alarm thus cancelling the lost/stolen transmitter.

If a transmitter appears to be working but does not activate/de-activate the alarm, refer to the RE-SYNCHRONISATION section.

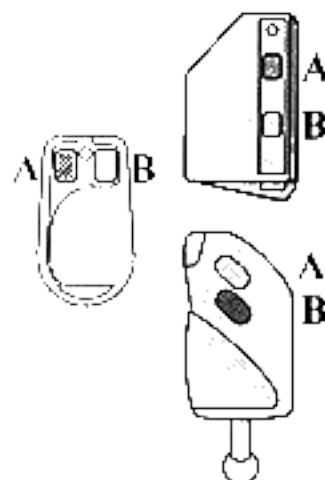
## 2) ARMING THROUGH REMOTE CONTROL

Press push-button (A).

The alarm arming will be signalled by:

- 2 flashes of direction lights facility;
- 2 audible tones; ⊗ (With GR 48 version only with GS3A98 siren)
- Doors will lock (if this function is connected);
- Windows will close, (when connected), by keeping the push-button pressed up to the wished position); ⊗
- Illumination of the alarm LED. After 45 seconds it will start to flash.

NB During the 45 seconds arming period, triggering any of the alarm lines will be signalled by a single audible tone (with GR48 version only with GS3A98 siren) and a short extinction of the dashboard LED.



## 3) OPTIONAL MODULE EXCLUSION (ND5, ND6, ND14) ⚠

Arm the alarm system and then press push-button (B).

If this operation is carried out within 45seconds from the arming, all the installed optional sensor modules are excluded.

The exclusion will be signalled by:

- 3 buzzer sounds; ⊗
- 3 flashing lights of direction lights facility;
- 3 flashes of the LED.

## 4) U.S., SHOCKS AND ANTI-TILT OPTIONAL MODULES EXCLUSION (Only for GR48) ⚠

The ultrasonics and optional modules can only be excluded during the first 45 seconds from the alarm arming, this can be done by one of two separate actions. Arm the alarm system and press the push-button (B). The ultrasonics are excluded when pressing the push-button for the first time.

The exclusion will be signalled by:

- 3 buzzer sounds; ⊗ (Only with GS3A98 siren)
- 3 flashes of the direction lights facility;
- 3 flashes of the dashboard LED.

By pressing the (B) push-button again, you will exclude any remaining optional modules. The alarm confirms this exclusion, by repeating the above signals.

## 5) DISARMING THROUGH REMOTE CONTROL

Disarm the alarm system by pressing push-button (A).

Disarming will be signalled by:

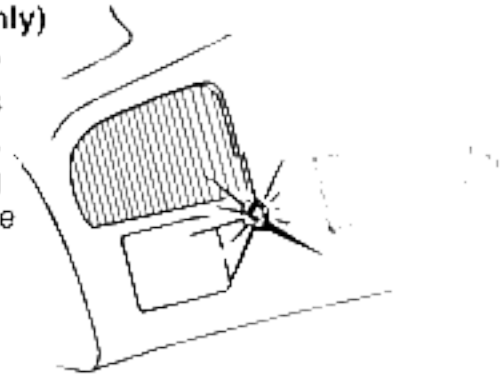
- 1 flash of the direction lights facility;
- 1 buzzer sound; ⊗ (With GR48 version only with GS3A98 siren)
- Doors will unlock (if this function is connected);
- The dashboard LED will extinguish.

(Only with GR 48 versions) - It will be possible to illuminate the ceiling lamp for about 20 seconds, if the vehicle allows this.

## 6) ARMING THROUGH ELECTRONIC KEY (GR48 Only)

It is also possible to arm the alarm system with the Electronic Override key by touching the key end onto the dashboard LED. When armed with this key the doors will not lock and the Car Check function will not be available. The acoustic alarm will be operative only after 45 seconds. When arming with the Electronic Override key there will be a delay of 5 seconds the following circuits:

- Door push-button;
- Ultrasonics;
- Voltage Drop. ⊗



## 7) DISARMING THROUGH ELECTRONIC KEY (GR48 Only)

It is possible to disarm the alarm system using the Electronic Override key by touching the key end onto the dashboard LED.

## 8) PANIC ALARM ⊗ (Acoustic alarm only)

This function is activated for 5 seconds by pressing push-button (B) 45 seconds after the arming period or with the alarm is in the disarmed state. It can be deactivated by pressing the push-button (B) again (without changing the alarm condition).

## 9) DASHBOARD LED

The Dashboard LED has the following functions:

- It signals the arming time (first 45 seconds after arming the system) with a static signal;
- It signals the change from the arming time to the fully armed state by starting to flash;
- It signals the exclusion of the siren sound;
- It signals the number of programmed remote controls and electronic keys (only on GR48), each flash signals one remote control programmed and two seconds after the first signalling it signals number of electronic override keys programmed each time you switch the engine off);
- It signals the alarm memory;
- It signals alarm causes during arming time;
- Selection/confirmation during function programming.
- It signals the passive and anti-distraction arming.

Also, during the 45 second arming period it is possible to test the alarm to ensure correct operation. Activating the various alarm triggers during this period will be acknowledged by a buzzer tone and the dashboard LED will flash. Triggering the system after 45 seconds will cause the main siren to sound.

## 10) ENGINE IMMOBILISER AUTOMATIC ARMING (PASSIVE FUNCTION) ⊗ #

(If connected and enabled by programming)

The immobiliser is automatically engaged 16 seconds after the ignition is turned OFF and the driver's door opened and closed. If the door is not opened then the immobiliser will be engaged after 5 minutes, activation will be signalled by:

- 1 flash of direction lights;
- 1 buzzer sound; ⊗ (With GR48 version only with GS3A98 siren)
- Illumination of the LED.

## To disarm:

- Press the transmitter push-button (A) twice or turn the ignition key to the ON position (without starting the vehicle) and then press push-button (A) once. After disarming the system with the transmitter, if one of the doors is NOT OPENED within 2 minutes, the immobiliser will re-activate with the same signals as before.

## 11) ENGINE IMMOBILISER AND ALARM SYSTEM AUTOMATIC ARMING ⊗ # ⚠

Passive arming, if enabled by programming, will be activated in the following manner.

Turn the ignition key to the OFF position, open and close the driver's door. After 45 seconds the dashboard LED will illuminate, the direction indicators will flash twice and 2 buzzer tones will be heard. At this point the engine will be immobilised. After a further 45 seconds the alarm will be armed. This is signalled by the dashboard LED starting to flash. Automatic Arming does not activate the door locking. Disarm by pressing push-button (A) on the transmitter.

If you wish to temporarily disable the automatic arming function, refer to section VEHICLE MAINTENANCE OR GARAGE STOP.

## 12) SIREN MUTING

With the siren sounding it is possible to mute the noise by pressing push-button (B).

This action does not disarm the system or change the alarm state.

## 13) SIREN FUNCTION EXCLUSION

Depending on the 'Rules in Force' at a particular parking area i.e. near Hospitals etc, it is possible to arm the alarm but exclude the siren in case the system is triggered. To activate this feature carry out the following steps:

**Before** turning the ignition OFF, press push-button (A) for approximately 2 seconds (the dashboard LED will illuminate for a moment). Turn the ignition OFF **within 10 seconds**. Now, arming the alarm in the normal way will exclude the siren for that armed period.

## 14) ALARM PROTECTIONS AND CAUSES ⚠

Your car can be protected by:

- Perimetric protection (push-buttons);
- Protection through external module;
- Starting attempt;
- Volumetric protection; (Only for GR 48 versions)
- Interior lighting.

## 15) CAR CHECK

At the time of arming the system, the alarm checks the position of the doors/boot/bonnet switches to ensure they are in the correct position i.e. It checks if the doors are open or closed. If one of the doors/boot/bonnet has been left open the alarm will respond by giving a single buzzer tone after the normal arming signals (if programmed) and a single blink of the dashboard LED.

## 16) ANTIDISTRACTION ⊗ #

After the disarming through the remote control, if one of the doors **IS NOT OPENED** within 2 minutes, then the alarm will automatically rearm. (Without locking the doors).

## 17) ALARM LIMITATION ⚠

For every arming cycle the alarms are limited to a maximum of:

### STANDARD VERSION

6 due to each of the following causes:

- Doors (PP);
- Voltage Drop (3W); \*
- Ignition Attempt (TA);
- Bonnet and boot opening (PC)
- Voltage drop with armed alarm (CA) (All except ND 5 - ND 13 - GR48).

3 due to each for:

- Ultrasonics (US) (Only for GR 48)
- Optional sensor (SO)

**N.B: IN UK VERSION, ALL ALARMS ARE LIMITED TO 9.**

18)

### ALARM STORAGE

PC-PP

If after disarming the alarm, the dashboard LED continues to flash, this will signal that one or more acoustic alarms have occurred during your absence. To identify the alarm cause, consult adjacent table and the associated letters in the previous section. The alarm system goes on storing this signal until you either turn the ignition ON or rearm the alarm.

US

3W

TA

CA

SO

19)

### AUTOFEED (ND6 & GS3A98 only)

The alarm module is provided with internal batteries. If the alarm wires are cut or the vehicle battery is disconnected, while the system is armed, the siren will sound on its own power supply. When the battery is re-connected, the sound will stop within 30 seconds after the connection.

Autofeed will follow for a cycle of 30 seconds.

When arming the alarm if the back-up battery is dead then instead of the two normal buzzer sounds, two different sounds will follow.

**NB In GR48 version the function is active only if integrated with GS3A98**

### REMOTE CONTROL BATTERY REPLACEMENT INDICATION

Your remote control contains an alkaline battery.

Once the battery is runned down this can be signalled in two ways:

- while disarming the alarm system the buzzer sound will be followed by a less high sound;
- the remote control LED will light up only for a instant (20 msec), afterwards it will remains off even if you go on pressing.

### BATTERY REPLACEMENT

It is important to carry out the battery replacement near the vehicle.

Remove the screw at the back of the transmitter and separate the 2 halves of the case. Remove the old battery and replace it with a new one. Be sure to replace it the right way round. Reassemble the transmitter and replace the screw.

When replacing a LITHIUM battery use model CR2032 3v. Ensure the battery is placed with the + sign on top and that contact is not made with adjacent electronic components.

Following battery replacement the transmitter LED will be on constant.

To extinguish the LED press push-button (B). If the alarm does not respond carry out the re-synchronisation procedure. SEE NEXT SECTION.

**NOTE:** Take care in ensuring that you dispose the old battery so as not to harm the environment.

### RE-SYNCHRONIZATION

If the transmitter push-button is pressed more than 256 times out of the maximum range of the receiver then it will be necessary to carry out the procedure of re-synchronisation:

Press buttons (A) and (B) simultaneously and hold until the transmitter LED goes out. (Approximately 10 seconds).

- Releasing the buttons will cause the LED to illuminate.
- Press one of the push-buttons within range of the alarm.
- The alarm should now respond.

20)

### IMMOBILISER

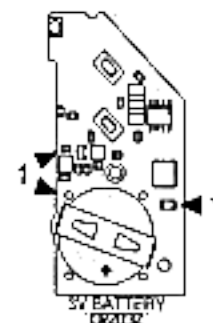
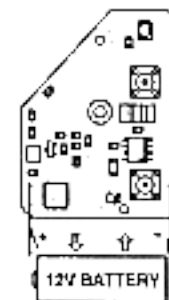
The immobiliser module enables to carry out a multiple engine immobiliser in additional to the current alarm device system. By arming the alarm device the immobiliser module sets itself automatically and starts working at any motor starting attempt. Disarming is set through a coded control of the alarm device.

On activated alarm the module is always active even if disconnected from the alarm.

**Required function in the Kit:** ND 14 BMC

**Not required function in the Kit but which can be coupled:** ND 14 - ND 14 BM - ND 14 C - GR 48

**Not required function in the Kit but which can not be coupled:** ND 5 - ND 6 - ND 13



## 21) ENGINE IMMOBILISER

The ND5, ND6 and GR48 have the facility for a single circuit IMMOBILISATION. This feature is activated from the moment the alarm is turned on.

An auxiliary relay is required for ND13 and ND14.

## 22) ELECTRONIC OVERRIDE KEY

In case of a lost or faulty transmitter it is possible to enter into the car via the original car key and then disarm the alarm system with the electronic override key. This will cancel the alarm and allow the vehicle to be driven.

## 23) MECHANICAL OVERRIDE KEY

In cases of lost or faulty transmitters it is possible to override the alarm by inserting the override key into the alarm unit and turning it anti-clockwise. This will cancel the alarm and allow the vehicle to be driven.

## 24) VEHICLE MAINTENANCE OR GARAGE STOP

If the Automatic Arming feature has been selected at programming and vehicle maintenance is required or a garage visit to refuel is made it is recommended that this feature should be disengaged especially if passengers are left in the vehicle. Never leave the emergency key within the vehicle.

- 1) Turn the ignition switch from 'ON' to 'OFF' with the doors closed.
- 2) Press transmitter push-button (A) within 5 seconds.

The alarm will signal the exclusion of the Automatic Arming with a single buzzer tone (for GR48 version only with GS3A98 Siren) and 4 flashes of the direction indicators.

Automatic arming will be restored at the next arming cycle.

## 25) SAFETY LOCK ⊗

This is a Programmable function. After 5 seconds of the engine being switched ON, the central locking will automatically operate. The doors will not lock if the driver's door is left open or it is opened and closed within the 5 second of the engine been switched ON. When the engine is switched OFF, the function is disabled and hence the doors unlock.

## TECHNICAL SPECIFICATIONS

- Arming time	45"
- Acoustic alarm duration	30"
- Resetting	5"
- Working temperature	-40°C +85°C
- Transmitter range	10 m

## ADVICE

- Do not keep the spare transmitter or emergency key in the vehicle.
- Never leave the transmitter or override key with anyone.
- Ensure the stickers, supplied, are clearly displayed on the vehicle windows.
- If you leave your vehicle for long periods in a secure area it is suggested that the ultrasonics are disabled to reduce battery drain.
- Protect the alarm module/siren if the engine is to be washed or steam cleaned.
- Do not subject the transmitter to heat, water or knocks.
- Before removing the vehicle ensure the guarantee coupon, on the back of this booklet, has been completed by the installer.
- It is recommended that the installation is periodically checked by a competent installer.
- Keep code numbers, spare transmitters and emergency keys in safe place.
- In the event that a transmitter or emergency override key is lost, a duplicate should be obtained, from the installer, as soon as possible.

**IMPORTANT:**

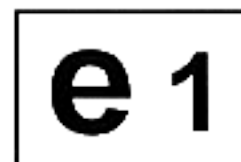
This product conforms to European Directives 95/54/EC concerning electromagnetic compatibility, and 95/56/EC on alarm devices.

In cases of checks by the relevant Authorities, it is necessary to show the installation certificate with all sections duly completed.

It must form part of the car's documentation.

**N.B.** The certificate must contain the homologation number which can be found on the closing label of the package or on the label/pad printing of the product itself.

Example:



HOMOLOGATION NUMBER



**A -00 0311**

**CAUTION:**

The alarm has only a deterrent function against possible thefts. In no case it can be considered as a theft insurance. The manufacturer takes no responsibility for damages or operation anomalies of the alarm, of the accessories or of the vehicle electric system caused by a bad installation and/or by the overcoming of the specified features in the installation certificate.

The manufacturer reserves the right to execute modifications whenever it is needed without prior notice.