

INSTALLATION CERTIFICATE

The undersigned qualified installer attests to have personally fitted the here described vehicle security system following the manufacturer instructions.

By :

Sold on :

Product type :

823

822

Vehicle :



823

822

INSTALLATION AND USE MANUAL



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Made in Italy

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Dear Customer, the present manual illustrates the most fully featured alarm system; not all functions, electrical connections etc. will therefore apply to all models. Before installing, identify your alarm model and refer to it for the correct instructions.

822: same as 823 without self-powered battery.

The following signs are used throughout the manual to emphasize important instructions or special information:



For the user.
This sign highlights useful information.



For the installer.
This sign indicates that the system will work according to the connections and the programming selected or it simply provides useful installation tips.

USER MANUAL

2.0 - SYSTEM OPERATION

2.1 - SYSTEM TOTAL ARMING

Press the lock button on the vehicle original remote control. System arming is confirmed by a Beep (selectable feature) and a flash of the turn indicators.

The system has a 30 sec. arming delay during which the LED is ON steady.

2.2 - SYSTEM PARTIAL ARMING

The system can be armed without activating the volumetric protection, the external sensors (infrared wireless) and the comfort feature. To exclude these features proceed as follows:

- Disarm the alarm system and turn ignition key OFF.
- Open the driver door, touch the override key to its receptacle, close the door and press the lock button on the vehicle original remote control.



Exclusion is bound to each single arming cycle.

2.3 - PASSIVE ARMING

When passive arming is enabled, the system automatically arms approx. 60 sec. after ignition is switched OFF and the last door is opened and closed. Arming is confirmed by a Beep (selectable feature) and a flash of the turn indicators..



When the system arms passively, interior protection and comfort output (automatic window roll-up) are excluded.
Opening a door during the 60 sec. arming countdown will cause the procedure to interrupt; it will resume once the door is closed.

2.4 - ARMING DELAY

There is a 30 sec. activation delay from the time the system is armed to allow you to exit the vehicle without setting off an alarm. The arming delay is signaled by the LED ON steady.

2.5 - SYSTEM ARMED

After the activation delay the system is fully armed and ready to detect any alarm event. The LED will start flashing to confirm the armed status.

2.6 - ALARM, INHIBIT TIME BETWEEN ALARMS AND ALARM CYCLES

Alarm events are signaled by optical/acoustic signals. There is a 5 sec. delay (inhibit time) between each alarm cycle.

Each alarm event can generate up to ten 30-sec. cycles for each input and for each arming cycle.

2.7 - SYSTEM DISARMING

Press the unlock button on the vehicle original remote control. Disarming is confirmed by 2 Beeps (selectable feature) and 2 flashes of the turn indicators.

An alarm event detected while the system is armed will be signaled upon disarming by 5 Beeps (selectable feature) and 5 flashes of the turn indicators.

2.8 - EMERGENCY DISARMING BY OVERRIDE KEY

In case of emergency (remote control lost or inoperative), the system can be disarmed by touching the override key to its receptacle. This procedure disarms and switches off the system which will temporarily not rearm via remote control.



To restore normal operation, touch the override key to its receptacle.
A Beep and a flash of the status LED will confirm that the system is back to the normal operating mode.

2.9 - ALARM MEMORY

The LED memory allows to identify the last alarm event signaled by 5 flashes of the turn indicators and 5 Beeps (selectable feature) when the system is disarmed. Turn ignition key ON, the status LED will flash according to the last alarm detected prior to disarming (see table below).

The flash sequence is repeated 3 times; to interrupt, turn ignition key OFF.

LED FLASHES	ALARM CAUSES	ALARM CYCLES
* * ● * *	Ignition attempt (+15/54)	10
* * * ● * * *	Door tamper	10
* * * * ● * * * *	Bonnet tamper	10
* * * * * ● * * * * *	Boot tamper	10
* * * * * * ● * * * * * *	Volumetric or external sensor	10
* * * * * * * * ● * * * * * * *	Wire tampering	10
● LED OFF (2 seconds) * LED ON (1 second)		

3.0 - WASTE ELECTRICAL AND ELECTRONIC EQUIPMENT

The present device falls within the field of application of the current WEEE Directive. The crossed-out wheeled bin symbol on the equipment or on its packaging indicates that the product, at the end of its useful life, must be discarded separately from other waste to allow adequate treatment and recycling. The user must therefore take the equipment, at the end of its useful life, to an appropriate waste collection facility.



INSTALLER MANUAL

4.0 - CONNECTOR PINOUTS

20-PIN CONNECTOR

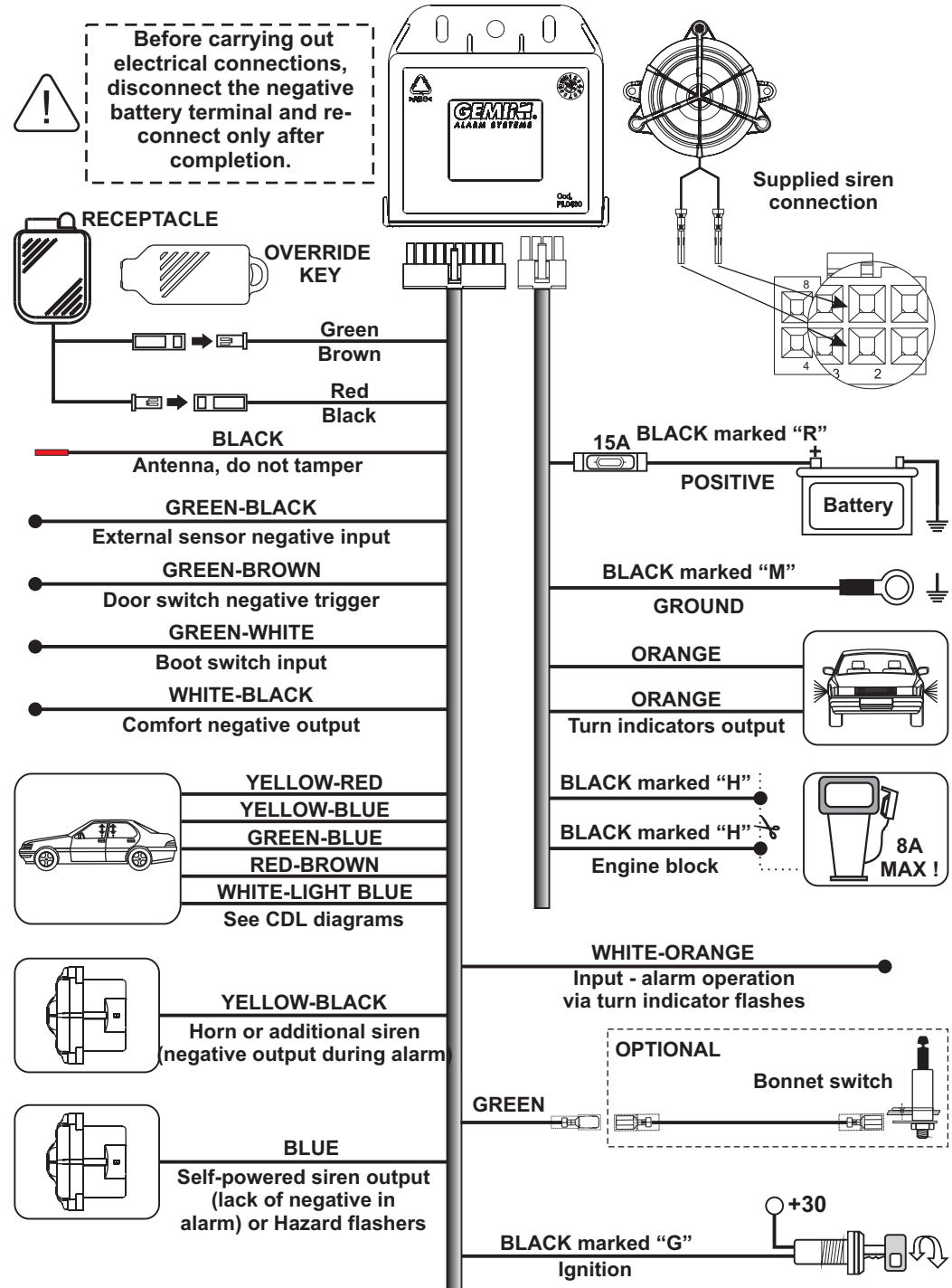
POSITION	WIRE FUNCTION	WIRE COLOUR
- 1 -	Door pin switch input (negative)	YELLOW-RED
- 2 -	Arm activation signal	YELLOW-BLUE
- 3 -	Disarm activation signal	GREEN-BLUE
- 4 -	Positive/negative boot switch trigger	GREEN-WHITE
- 5 -	Door switches negative trigger	GREEN-BROWN
- 6 -	Override key receptacle input	GREEN
- 7 -	Override key receptacle ground	BROWN
- 8 -	LED negative output	BLACK
- 9 -	LED positive output	RED
- 10 -	Ignition	BLACK marked "G"
- 11 -	Door switch input (positive)	RED-BROWN
- 12 -	Door switch input (configurable)	WHITE-LIGHT BLUE
- 13 -	-----	-----
- 14 -	External sensors negative trigger	GREEN-BLACK
- 15 -	Bonnet switch negative input	GREEN
- 16 -	Selectable output for self-powered siren (lack of negative during alarm) or Hazard flashers	BLUE
- 17 -	Comfort negative output	WHITE-BLACK
- 18 -	Negative output for additional siren or horn (negative output during alarm)	YELLOW-BLACK
- 19 -	Antenna	BLACK
- 20 -	Learn input and system arm/disarm via turn indicator flashes	WHITE-ORANGE

! WHITE-ORANGE wires must ALWAYS be connected if system is to operate via the turn indicators.

8-PIN CONNECTOR

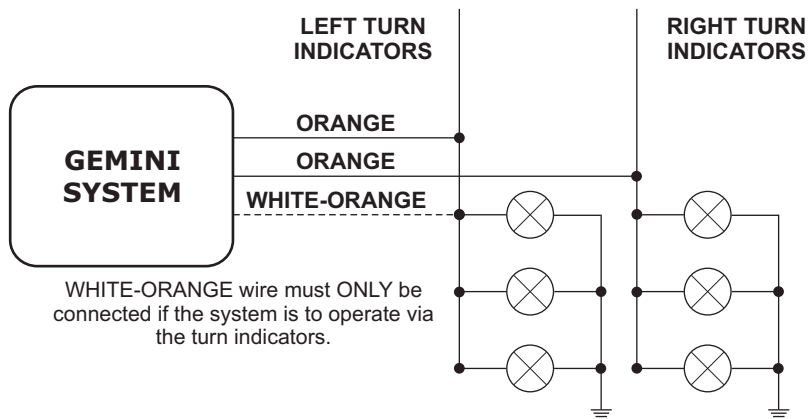
POSITION	WIRE FUNCTION	WIRE COLOUR
- 1 -	Ground	BLACK marked "M"
- 2 -	Siren output	-----
- 3 -	Positive	BLACK marked "R"
- 4 -	Turn indicators positive output	ORANGE
- 5 -	Engine lock	BLACK marked "H"
- 6 -	Siren output	-----
- 7 -	Engine block	BLACK marked "H"
- 8 -	Turn indicators positive output	ORANGE

5.0 - WIRING DIAGRAM

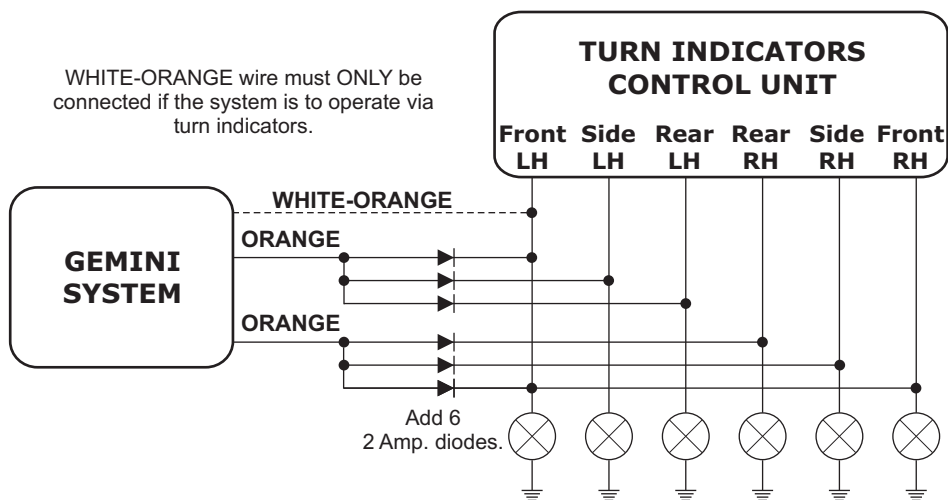


6.0 - TURN INDICATORS CONNECTIONS

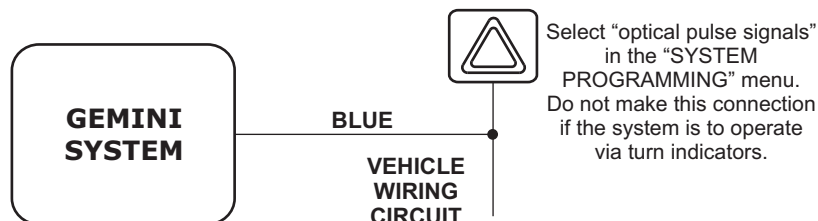
6.1 - STANDARD CONNECTIONS



6.2 - CONNECTIONS FOR VEHICLES WITH SEPARATE LINES



6.3 - CONNECTION TO HAZARD SWITCH



7.0 - SELECTABLE CONNECTIONS TO ARM/DISARM THE SYSTEM

Power door locks must be connected according to vehicle type (see installation specifications in the restricted area of our website: www.gemini-alarm.com). Check out the various possibilities described below and proceed with the applicable connection.

- Arming via door lock motors.
- Arming via door lock motors and door lock switches.
- Arming via turn indicator flashes.
- Arming via turn indicator flashes and door lock motors.
- Arming via turn indicator flashes, door lock motors and lock switches.

7.1 - CONNECTION TO DOOR LOCK MOTORS WITH SEPARATE RADIO RECEIVER

Arm/disarm connections for vehicles where the remote control receiver is separate from the CDL module (connection diagram "A" available in the restricted area of our website). Set dip-switch N. 4 "ON".

7.2 - CONNECTION TO DOOR LOCK MOTORS WITH DOOR SWITCH

Arm/disarm connections for vehicles that require not only connections to the door lock motor unit but also require control of the door switch or of the internal door lock buttons (connection diagrams "C", "D", "E" available in the restricted area of our website). Set dip-switch N. 4 "ON".

7.3 - CONNECTION TO TURN INDICATORS



If the turn indicators lock/unlock flashes are identical, connect the door lock motors. If the turn indicators flash when unlocking via the car mechanical key, do not make this connection.

To arm/disarm via the turn indicator flashes, connect the WHITE-ORANGE wire to the turn indicators.

- If arming/disarming is only activated via the turn indicators, set dip-switch N. 4 "OFF".
- If arming/disarming is activated via the turn indicators and door lock motor unit, set dip-switch N. 4 "ON".

8.0 - HOW TO LEARN TURN INDICATOR LOCK/UNLOCK FLASHES

In order to arm/disarm via the turn indicators, the system must learn the vehicle lock (arm) and unlock (disarm) flashes.

Connect the WHITE-ORANGE wire to the turn indicators and proceed as follows:

- Disconnect the 8-pin harness connector from the 8-pin alarm connector.
- Turn ignition key ON.
- Connect the 8-pin harness connector to the 8-pin alarm connector; the LED will turn ON steady.
- Turn ignition key OFF, close all doors and press the lock button on the original remote control.
- When the turn indicators stop flashing, a Beep will confirm the learning of the arming flashes.
- Press the unlock button on the vehicle original remote control.
- When the turn indicators stop flashing, 2 Beeps will confirm the learning of the disarming flashes and the end of the procedure.

9.0 - SYSTEM PROGRAMMING

The table below applies to the factory settings. Accessing the programming procedure will reset the features to their initial settings.

The procedure must be carried out entirely by scrolling from one feature to the other using either the ignition key or the override key (see par. 11.0).

A lack of power during electrical system maintenance will not affect the settings.

	FEATURE	DEFAULT SETTING	LED FLASHES
1	“Exclusion” of arming/disarming optical signals	Disabled	*
2	“Exclusion” of arming/disarming acoustical signals	Enabled	**
3	Passive arming	Disabled	***
4	<i>For Gemini only</i>	Key OFF/ON	****
5	Boot input, positive signal	Disabled	*****
6	Optical pulse signals (Hazard flashers)	Disabled	*****
7	Pulsed ground output during alarm (Horn)	Disabled	*****

9.1 - OPTICAL SIGNALS

Optical signals (turn indicators) to confirm arming/disarming. (Default setting: optical signals ON).



If the vehicle already has optical lock/unlock signals, the turn indicator alarm flashes should be disabled

9.2 - ACOUSTIC SIGNALS

Acoustic signals (siren chirps) to confirm arming/disarming. (Default setting: acoustic signals OFF).

9.3 - PASSIVE ARMING

If passive arming is enabled the system will automatically arm 60 sec. after ignition is switched off and the last door is opened and closed. Opening a door during the 60-sec. passive countdown will cause the procedure to interrupt; it will resume when the door is closed.

9.4 - BOOT SWITCH POLARITY SELECTION

This feature modifies the alarm input signal (positive or negative) according to the signal generated by the boot switch.

9.5 - HAZARD FLASHERS (OR SELF-POWERED SIREN)

Selectable output to either enable the optical signals (according to the connection made and only for vehicles where hook-up is to the Hazard switch) or to manage a self-powered siren.



Optical signals activated by connection to the Hazard switch ONLY turn ON during an alarm condition.
The alarm BLUE wire must be connected to the Hazard switch. In this case, do not connect the ORANGE wires (see chapter 6.3).

If the feature is disabled, the BLUE wire carries a negative signal under normal operating conditions and, during an alarm cycle, there is a lack of negative.

9.6 - NEGATIVE OUTPUT SELECTION (DURING ALARM) FOR HORN OR ADDITIONAL SIREN

Programmable output used to sound the siren (steady) or the horn (pulsed). (Default setting: siren)
If the vehicle's horn is preferred, this feature changes the output from steady to pulsed, allowing the use of the horn for the alarm's audible responses.

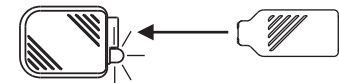
10.0 - SYSTEM PROGRAMMING EXAMPLE

Here below is an example that illustrates the steps to follow to modify the programmable features.
NB: Cycling ignition key OFF/ON disables the features while using the override touch key enables them. A Beep or a Bop will confirm the operation and the LED will flash as indicated (par. 9.0).

With the alarm system disarmed, cycle ignition key ON.



The LED will power ON for approx. 2 sec.; while the LED is ON, touch the override key to its receptacle.



A Beep, a Bop and 2 flashes of the turn indicators will confirm that the system is in programming mode.

DISABLE



To disable the feature cycle ignition key OFF and then back ON.

A Bop will confirm the operation.
The LED will flash according to the selected feature (from 1 to 7).



ENABLE



OR

To enable the feature, touch the override key once to its receptacle.

A Beep will confirm the operation.
The LED will flash according to the selected feature (from 1 to 7).



In both cases, the system moves on to the next feature.

Repeat the above steps to enable or disable the other features.

When the last feature is configured, in addition to the confirmation tone, 2 Bops, 1 Beep and 2 flashes of the turn indicators will confirm the end of the programming procedure.

11.0 - DIP-SWITCH SETTINGS



Set dip-switches BEFORE connecting the alarm system.
If settings must be modified after installation, FIRST disconnect the alarm and then reset the dip-switches.

SWITCH N.	POSITION	FUNCTION
1	ON	WHITE/LIGHT BLUE wire reads POSITIVE polarity
1	OFF	WHITE/LIGHT BLUE wire reads NEGATIVE polarity
2	ON	-----
2	OFF	Standard operation mode
3	ON	Negative arm/disarm input
3	OFF	Positive arm/disarm input
4	ON	Arm/disarm via door lock motors only or via motors and turn indicators (par. 7.0)
4	OFF	Arm/disarm via turn indicators only

12.0 - ULTRASONIC VOLUMETRIC PROTECTION

12.1 - CONNECTIONS AND POSITIONING

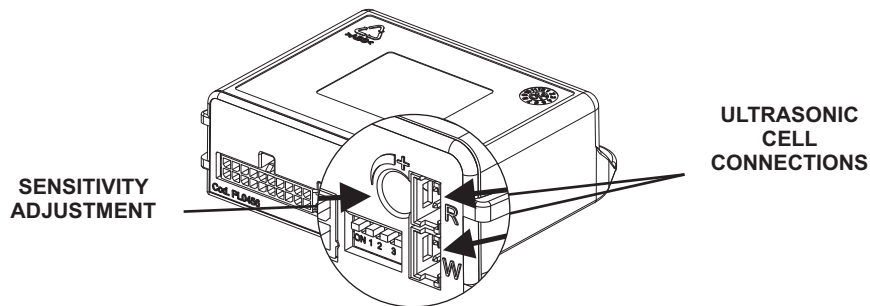
Insert the WHITE connector in the "W" marked socket and the RED connector in the "R" marked socket (see figure below).

Install the ultrasonic sensor cells, inside the cabin. in the top corners of the front window pillars, away from the air vents and point them towards the center of the rear window.

12.2 - SENSITIVITY ADJUSTMENT

To check sensor sensitivity level proceed as follows:

- With the alarm system disarmed, roll down the front window approx. 20 cm.
- Set the trimmer to an intermediate position (medium sensitivity).
- Close all doors, bonnet and boot and arm the system.
- During the arming delay, introduce an object in the cabin through the window and move it around; the status LED will turn OFF to signal a presence.
- If the sensitivity level is too high or too low, readjust the trimmer and repeat the above procedure.



13.0 - PROGRAM NEW DEVICES



To carry out the operation successfully, make sure the required electrical connections (door/bonnet switches and ignition) are properly connected.



Storing memory is for 55 devices. Adding an extra device will automatically delete the first device stored in the alarm memory.

To enter in programming mode proceed as follows:

- With the system disarmed, open the driver door and the bonnet and leave them open.



The "ON-OFF" cycles must be carried out within 4 seconds otherwise the procedure is invalidated.

- Cycle ignition key 4 times within 4 sec. ("ON-OFF"- "ON-OFF"- "ON-OFF"- "ON") ending the cycle with the key in the "ON" position.
- A Beep, a Bop and a flash of the turn indicators will confirm the system is in learn mode. The LED will also power ON steady.



Do not close the bonnet otherwise all previously programmed devices will be deleted as described in the next paragraph.

The system is ready to receive the device codes:

- Touch the override key to its receptacle.
- A Beep will sound and the status LED will turn OFF briefly to confirm the device has been learned.
- Repeat the above procedure to program other devices.
- Turn ignition key OFF.
- A Bop and a flash of the turn indicators will confirm the end of the procedure. The status LED will also power OFF.

14.0 - DELETE PROGRAMMED DEVICES



To carry out the operation successfully, make sure the required electrical connections (door/bonnet switches and ignition) are properly connected.

To clear the alarm memory proceed as follows :

- With the system disarmed, open the driver door and the bonnet and leave them open.



The “**ON-OFF**” cycles must be carried out within 4 seconds otherwise the procedure is invalidated.

- Cycle ignition key 4 times within 4 sec. (“**ON-OFF**”-“**ON-OFF**”-“**ON-OFF**”-“**ON**”) ending the cycle with the key in the “**ON**” position.
- A Beep, a Bop and a flash of the turn indicators will confirm the system is in delete mode. The status LED will also power ON.
- Close the bonnet and keep it closed for at least 8 sec. to fully clear the memory.



If the bonnet is opened before 8 seconds, devices will not be deleted.

- The status LED will power OFF to confirm the memory has been cleared.
- Turn ignition key OFF.
- A long Bop will confirm the end of the procedure.

15.0 - SYSTEM RESET



A system reset will return the device to the factory default settings.
This procedure must therefore only be used in case of need.

To reset the system proceed as follows:

- Disconnect the alarm power supply.
- Short-circuit the RED and BLACK wires of the 2-pin LED connector.
- Power the system; 4 Beeps and 4 flashes of the turn indicators will confirm the operation.
- Remove the previously created short-circuit; the status LED will light up steady.
- Turn ignition key ON; reset is confirmed by a Beep and the siren will sound for approx. 3 seconds.
- Turn ignition key OFF; the LED will power OFF.
- No acoustic signals will confirm the end of the procedure.

16.0 - TECHNICAL SPECIFICATIONS

Power supply 823 - 822	12 Vdc
Current absorption @ 12Vdc with system armed and LED flashing	15mA
Working temperature range	-30°C to +70°C
Turn indicators relay contact capacity	8A @ 20°C
Engine immobilizer relay contact capacity	8A @ 20°C
Alarm cycle duration	30 sec.
Siren output current capacity	1A