



# 7590T2-1

## INSTALLATION AND USE MANUAL



Made in Italy

AC 2665 Rev.03 - 06/14



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## 1.0 - WARRANTY CONDITIONS

This product is guaranteed to be free from manufacturing defects for a period of 24 months from the installation date shown on this warranty, in compliance with Directive 1999/44/CE.

Please fill-in entirely the guarantee certificate included in this booklet and do NOT REMOVE the guarantee label from the device.

The warranty will become void if labels are missing or torn, if the installation certificate is not fully compiled or if the enclosed sale document is missing.

The guarantee is valid exclusively at authorized Gemini Technologies S.p.A. Service Centers.

The manufacturer declines any responsibility for eventual malfunctions of the device or any damage to the vehicle electrical system due to improper installation, use or tampering.

This alarm system is solely intended to be a theft-deterrent device.

Homologation number 7590T2 Cat 2-1:

TQA428

## 2.0 - PRELIMINARY ADVICE

Dear Customer,

The 7590T2 is a Thatcham homologated alarm system with built-in sensors designed to be used only on vehicles with a negatively grounded 12V battery.

The following signs, intended for the installer or the user, indicate particular functions or connections:



### For the user.

This sign highlights useful information.



### For the installer.

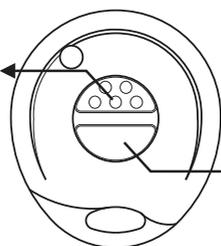
This sign indicates that the system will work according to the connections and the programming selected or it simply provides useful installation tips.

The following briefly lists some of the available functions:

- Alarm system arming/disarming via random rolling code transmitters.
- Arming/disarming optical signals.
- Intermittent or continuous siren tone (programmable).
- Perimeter protection.
- Volumetric protection (combined with an ultrasonic or hyperfrequency module, excludable during arming).
- Control for CDL, power windows and sunroof (vehicles equipped with "Comfort Pack").
- Alarm memory (optical/acoustic signals).
- PANIC or BOOT RELEASE function (programmable).
- Anti-distraction rearming function (programmable).
- Control for self-powered siren or additional siren.

## 3.0 - REMOTE CONTROL OPERATION AND BATTERY REPLACEMENT

- BUTTON 1:**
- COMPLETE SYSTEM ARMING
  - SYSTEM DISARMING



- BUTTON 2:**
- SENSOR EXCLUSION
  - PANIC ALARM OR BOOT OPENING



The remote control has a low charge battery indicator that gives early warning to avoid malfunctioning. If the batteries are low, the LED will start blinking when a button is pressed. Use only CR 16161 batteries. Different type batteries can seriously damage the remote control unit. Discard used batteries properly in special dedicated containers.

To replace the battery proceed as follows:

- Separate the remote halves taking care not to damage the internal circuit..
- Remove discharged batteries and insert new ones taking care not to invert the battery polarity.
- Close the remote halves and make sure the remote control works properly.

# USER MANUAL

## 4.0 - OPERATING INSTRUCTIONS

### 4.1 - COMPLETE SYSTEM ARMING

To arm the alarm press remote control button "1" or touch the electronic key to its receptacle. Arming is confirmed by a quick flash of the turn indicators and a chirp of the siren. The following functions are enabled:

- a- Module output (PINK wire, +A).
- b- Led output.
- c- Door-lock control with pulse time selected during programming.

If the electronic key is used to arm the system, functions **a)** and **b)** are activated but **c)** will be disabled to provide time to exit the vehicle without triggering an alarm. When using the electronic key, there is also an entry delay countdown (approx. 10 sec. LED ON steady) to provide time to get into the car and disable the alarm via the electronic key without generating an alarm.

### 4.2 - SYSTEM ARMING WITH SENSOR AND COMFORT CONTROL EXCLUSION

During the initial 25" of the arming delay, internal sensors, infrared wireless sensors and positive with system armed (+A) can be excluded and window roll-up stopped by pressing button "2" on the remote. To stop windows on their way up you need to install a dedicated module (art. 2343 or 2344) or the vehicle must be equipped with COMFORT feature.

Exclusion of the above-mentioned features is confirmed by a brief flash of the turn indicators.



Exclusion of sensors and comfort feature is bound to each single arming cycle.

### 4.3 - SIREN SOUND EXCLUSION WHEN ARMING

This function allows arming the alarm system without any siren sound in case of an alarm event.

To exclude the siren, proceed as follows:

- Turn ignition key "ON".
- Press button "2" on the transmitter within 0,5 seconds.
- Walk away from the vehicle and press button "1" on the remote control.
- The alarm system will be armed with optical/acoustic signals but the siren will not sound in case of an alarm event.



Siren sound exclusion during an alarm is bound to each single arming cycle.

### 4.4 - ARMING DELAY

A 35" arming delay (indicated by the LED turned ON steady) provides time to exit the vehicle without triggering a false alarm.

### 4.5 - SYSTEM FULLY ARMED

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

#### **4.6 - ALARM. INHIBIT TIME BETWEEN ALARMS AND ALARM CYCLES**

Alarm events are indicated by optical/acoustic signals:

- Wire tamper (by self-powered siren).
- Ignition attempt.
- Door tamper.
- Bonnet tamper.
- Motion detection by internal volumetric sensors.
- Motion detection by external sensors (optional, also wireless).
- Panic alarm by pressing remote control button 2 (if feature has been enabled during programming and only in countries where it is legal to do so). Not available on products for the Dutch market.

After the alarm is triggered, but before another alarm cycle starts, there is a 5" interval during which there will be no reaction to alarm events.

An alarm event can generate up to 10 alarm cycles, for each input and for each arming cycle, that will last 30 sec. each.

Counter is reset upon the next alarm disarming or if an IGNITION ATTEMPT alarm is triggered during the same activation cycle.



To interrupt an alarm cycle without disarming the system, press remote control button 2.

#### **4.7 - SYSTEM DISARMING**

The alarm system can be disarmed by pressing remote control button 1 OR by touching the electronic key to its receptacle.

Disarming is confirmed by 3 flashes of the turn indicators and 3 siren chirps bu.

If an alarm event has occurred while the system was armed, it will be signaled by 5 flashes of the turn indicators and 5 siren chirps (if these functions have not been excluded during programming).

#### **4.8 - ALARM MEMORY**

Five flashes of the turn indicators and 5 acoustic signals, when ignition is turned ON, will indicate an alarm event has occurred while you were away from your vehicle. The last cause of alarm can be identified by observing the status LED and counting the number of flashes.

The flashing sequence will be repeated 10 times; to interrupt, turn ignition key "OFF".

LED FLASHES	ALARM CAUSES	ALARM CYCLES
* ● *	Volumetric sensor	10
* * ● * *	Door/boot switches	10
* * * ● * * *	Ignition (+15/54)	10
* * * * ● * * * *	Bonnet switch and volumetric sensors	10
* * * * * ● * * * * *	Absorption sensor	10
* * * * * * ● * * * * * *	External magnetic contact	10
● LED OFF (2 seconds) * LED ON (400 ms)		



WIRE TAMPER will not be signaled by the alarm memory because managed by the external self-powered siren.

# INSTALLER MANUAL

## 5.0 - CONNECTOR PINEOUTS

POSITION	WIRE FUNCTION	WIRE COLOUR
- 1 -	CDL	RED-GREY
- 2 -	LED positive output	RED
- 3 -	Self-powered siren output (lack of negative during alarm)	BLUE
- 4 -	Ignition	YELLOW or BLACK marked "G"
- 5 -	Door switch input	GREEN-BROWN
- 6 -	Additional siren or horn output (negative during alarm)	YELLOW-BLACK
- 7 -	Power supply - negative	BROWN or BLACK marked "M"
- 8 -	Electronic key receptacle input	GREEN
- 9 -	Bonnet switch	GREEN or BLACK marked "V"
- 10 -	External sensors negative input	GREEN-BLACK
- 11 -	Negative output for electric boot release	GREY-BLACK
- 12 -	Positive output with system armed (+A)	PINK
- 13 -	CDL	RED-BROWN
- 14 -	CDL	RED-BUE
- 15 -	CDL	YELLOW-BLUE
- 16 -	CDL	YELLOW-BROWN
- 17 -	Turn indicators positive output	ORANGE
- 18 -	Power supply - positive	RED or BLACK marked "R"
- 19 -	Turn indicators positive output	ORANGE
- 20 -	CDL	YELLOW-GREY
- 21 -	-----	-----
- 22 -	-----	-----
- 23 -	-----	-----
- 24 -	-----	-----



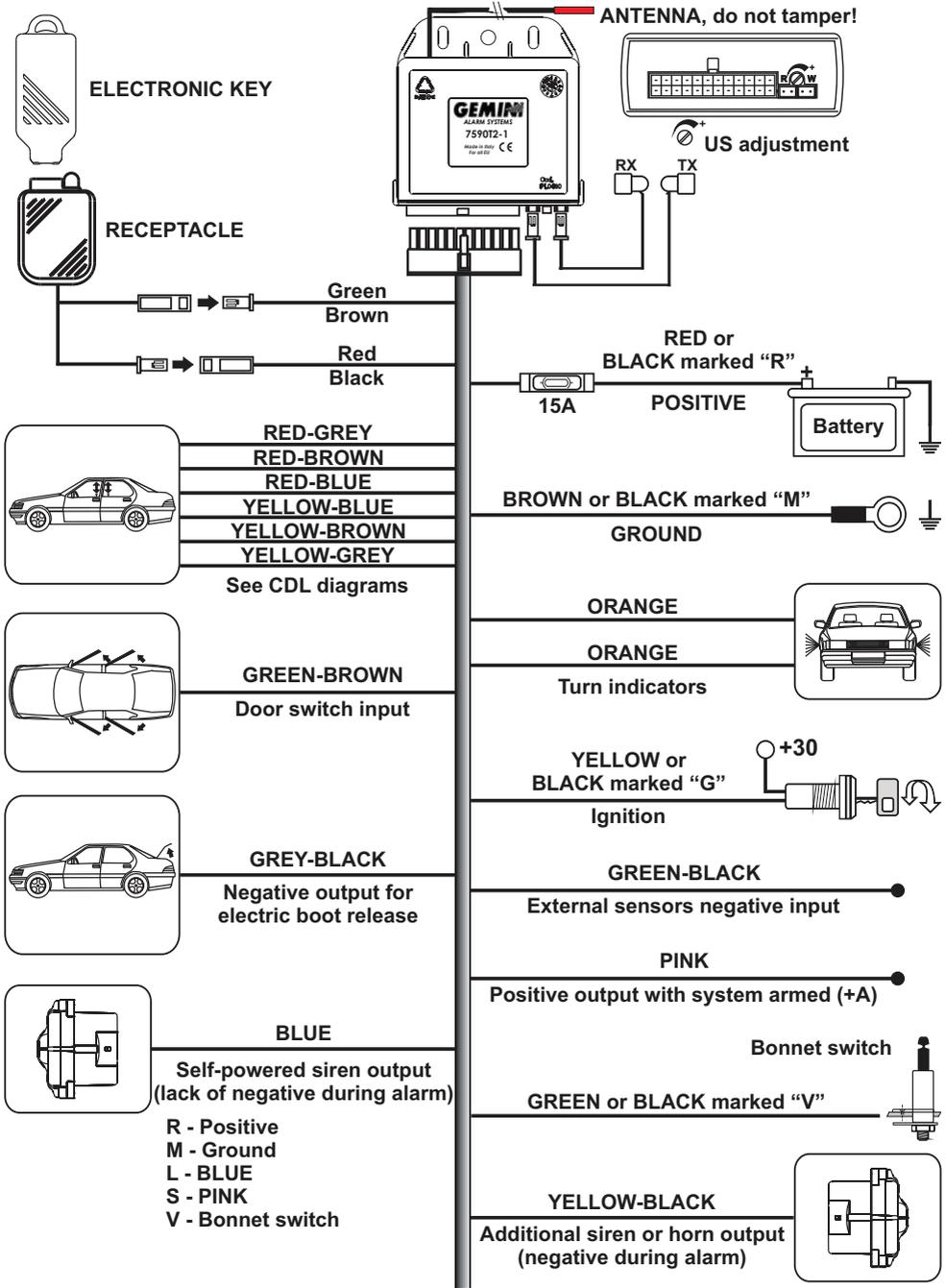
Before carrying out electrical connections, disconnect the negative battery terminal and re-connect again after completion.

## 6.0 - INTERNAL SENSOR ADJUSTMENT

To check sensitivity level proceed as follows:

- With the alarm system disarmed, roll down all windows approx. 20 cm.
- Adjust trimmer at a medium setting.
- Close all doors, bonnet and boot and arm the system and exclude sensors.
- At the end of the inhibit arming time introduce an object in the cabin through each windows and move it around; the status LED will turn ON longer to signal a presence.
- If the sensinty lelvel is too high or too low, readjust the trimmer and repeat the above procedure.

# 7.0 - WIRING DIAGRAM



## **8.0 - PROGRAMMABLE FUNCTIONS**

The alarm system has been factory configured but settings can be modified at any time. To program follow the instructions detailed in "SYSTEM PROGRAMMING".

### **8.1 - CONTINUOUS OR INTERMITTENT SIREN SOUND**

The output (YELLOW-BLACK wire, position 6) can be configured to emit an intermittent signal (horn) or a continuous signal (siren).

### **8.2 - CENTRAL DOOR LOCK SETTING TIME**

Function that allows to select the CDL lock time (1 or 6 seconds).

### **8.3 - COMFORT CONTROL**

The comfort control automatically rolls up the windows when the alarm is armed.

When this function is activated, the power window motor receives a 25" command to roll-up the windows when the alarm is armed.

### **8.4 - DOUBLE PULSE UNLOCK**

This function provides a double pulse unlock (about 0,5 second each) upon disarming.

With the two-stage unlock the first pulse unlocks the driver door and the second pulse the remaining doors.

This function is only active if the lock/unlock time is set at 0,5". Setting 6" automatically disables the double pulse.

### **8.5 - CURRENT ABSORPTION SENSOR**

This function activates the alarm system if a voltage change occurs in the vehicle electrical circuit.



Before enabling the current absorption sensor, check out the rules in force in your country regarding noise pollution.

### **8.6 - ANTI-DISTRACTION REARMING AND AUTO LOCK**

The anti-distraction function prevents the vehicle from being unintentionally left unprotected if, after the system is armed, it is accidentally disarmed. The system automatically rearms if no other activity is detected (ex. door opening, ignition ON). If a door is opened after disarming, the function will be disabled.

The door-lock security function automatically locks all doors while driving, (20" after ignition key has been turned "ON".

All doors will automatically unlock when ignition key is turned "OFF".

### **8.7 - PANIC ALARM OR BOOT RELEASE**

If enabled, the PANIC ALARM function allows the user to deliberately activate the turn indicators and the siren by pressing remote control button 2. This function works regardless of whether the alarm system is armed or disarmed.

Alarm signals last approx. 30" but they can be stopped beforehand simply by pressing button 2 again.

Between one panic alarm cycle and the next there is a 5" interval during which the alarm signal cannot be activated again.

The LED stays ON during the alarm and the neutral time.

If the PANIC function is disabled, button 2 on the remote control will activate the BOOT RELEASE function.

On cars equipped with BOOT RELEASE, the boot lid can be opened by pressing button 2 on the remote regardless of whether the alarm system is armed or disarmed.

Pressing button 2 when the alarm system is DISARMED opens the boot without any signals, pressing it when the alarm is ARMED causes the turn indicators to flash when the boot is released; the status LED turns ON steady.

If the boot is opened while the alarm system is ARMED there will be a 60" delay time for loading/unloading without triggering an alarm.

After the delay time, the status LED will start to blink again to indicate that the alarm system is back in security mode.

Pressing button 2 on the remote resets the alarm in security mode before the end of the 60" delay. The status LED will turn OFF immediately.



During the arming delay, button 2 cannot be used to release the boot because it is used to exclude the volumetric sensors and the comfort function.

## 9.0 - SYSTEM PROGRAMMING

The table below applies to the system factory set in "standard configuration".

FUNCTION	Default setting	BUTTON "1"	BUTTON "2"
Continuous or intermittent siren sound	Continuous	Intermittent sound (horn)	Continuous sound (siren)
Setting of lock/unlock time (0,5" or 6")	0,5"	6"	0,5"
25" comfort closure	Disabled	Enable	Disable
Double pulse unlock	Disabled	Enable	Disable
Current absorption sensor <b>MUST REMAIN DISABLED</b>	Disabled	-----	Disable
Anti-distraction rearming and auto-lock	Disabled	Enable	Disable
Panic alarm or boot release	Panic function	Enable panic	Enable boot release

To modify settings proceed as follows:

- With the alarm system disarmed, open and keep open the driver door.
- Turn ignition key "ON".
- The status LED turns ON for 0,5 seconds; while the LED is ON, simultaneously press both buttons on the remote control.
- The turn indicators flash twice to confirm that the system has entered in programming mode.
- Enable and/or disable the functions as indicated in the table above. Keep in mind that each time a button is pressed the LED flashes and the system will go to the next function.
- When the last function is set, the turn indicators and the LED flash twice to confirm the end of the programming procedure.
- Turn ignition key "OFF".



When ignition key is turned "OFF", the alarm system automatically exits programming mode.

## 10.0 - LEARNING NEW DEVICES



To carry out the operation successfully, make sure the required electrical connections (door/bonnet switch and ignition) have been completed.



Storing memory is for 8 devices.  
If an extra device is added, it automatically deletes the first device stored in the system memory.

To activate the learning procedure proceed as follows:

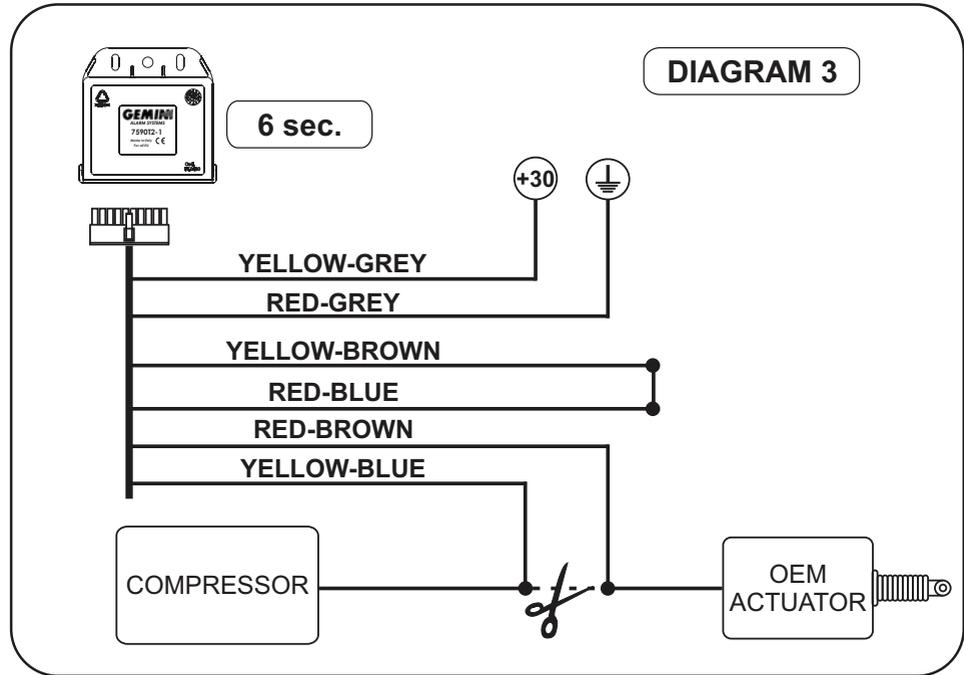
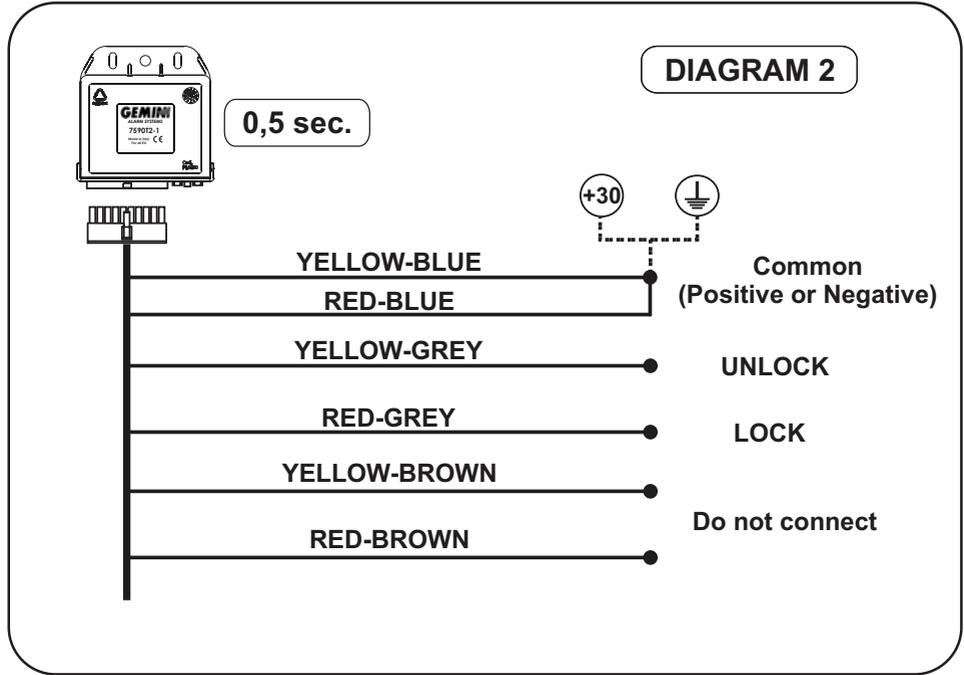
1. With the system disarmed, open the driver door and the bonnet and leave them open.
2. Turn ignition key "ON".
3. Press a button on a previously learned remote control or touch an already coded electronic key to its receptacle.
4. Two slow flashes of the turn indicators confirm that the system has entered in learn mode and is ready to receive the device codes.
5. According to the device to be learned: press remote control button 1 OR touch the electronic key to its receptacle OR make the magnetic contact transmit (bring contact and magnet together and then pull apart) OR make the infrared sensor transmit (see sensor instructions).
6. The status LED will flash once to confirm the new device has been learned.
7. Repeat the procedure from step 5 to program any other device.
8. Turn ignition key "OFF".
9. The turn indicators flash once to confirm the end of the procedure.

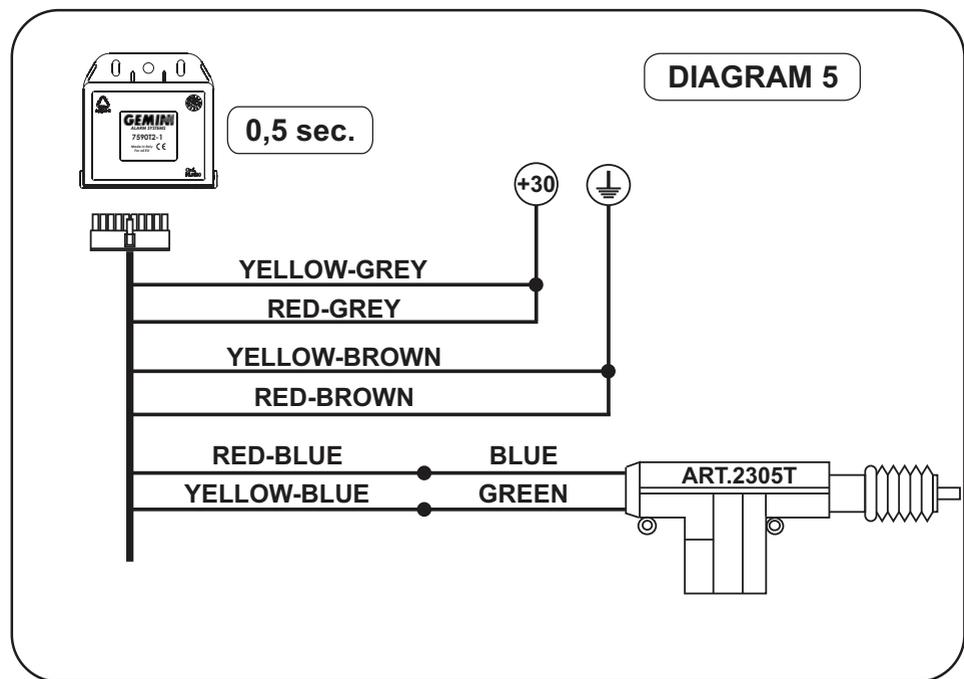
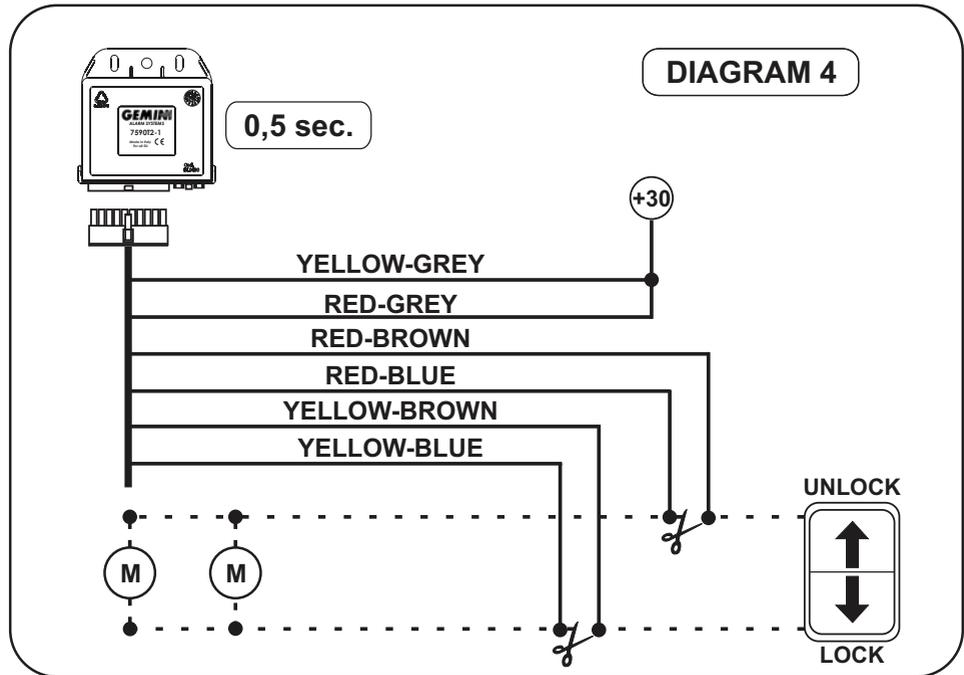
## 11.0 - TECHNICAL SPECIFICATIONS

<b>Power supply</b>	<b>12 Vdc</b>
<b>Current absorption @ 12Vdc with system armed and LED flashing</b>	<b>About 15mA</b>
<b>Turn indicators contact rating</b>	<b>8 A at 20°C</b>
<b>Alarm cycle duration</b>	<b>30 sec.</b>
<b>Maximum positive current output when armed (+A)</b>	<b>700 mA</b>
<b>Maximum load of siren output</b>	<b>3 A</b>

## 12.0 - WASTE ELECTRICAL AND ELECTRONIC EQUIPMENT (WEEE) DIRECTIVE

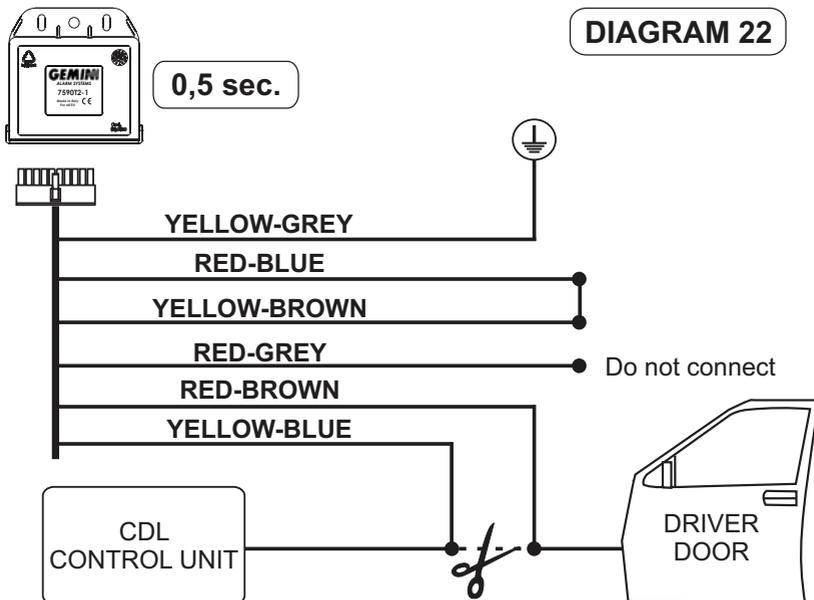
The present device does not fall within the scope of Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE) as specified in art. 2.1 of L.D. no. 151 of 25/07/2005.





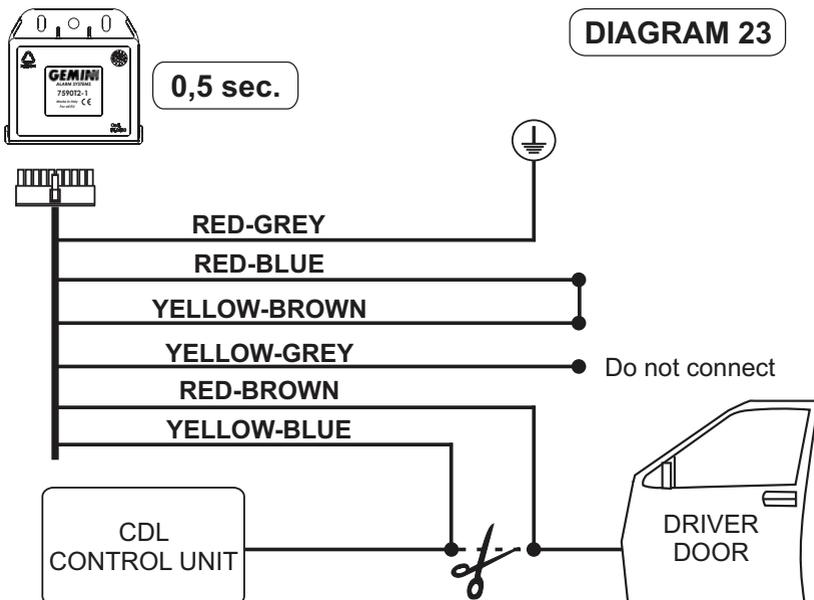
**DIAGRAM 22**

0,5 sec.



**DIAGRAM 23**

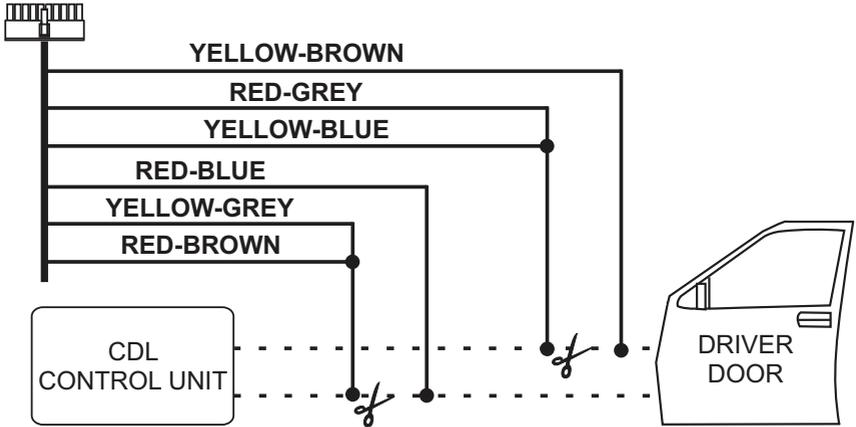
0,5 sec.



**DIAGRAM 32**



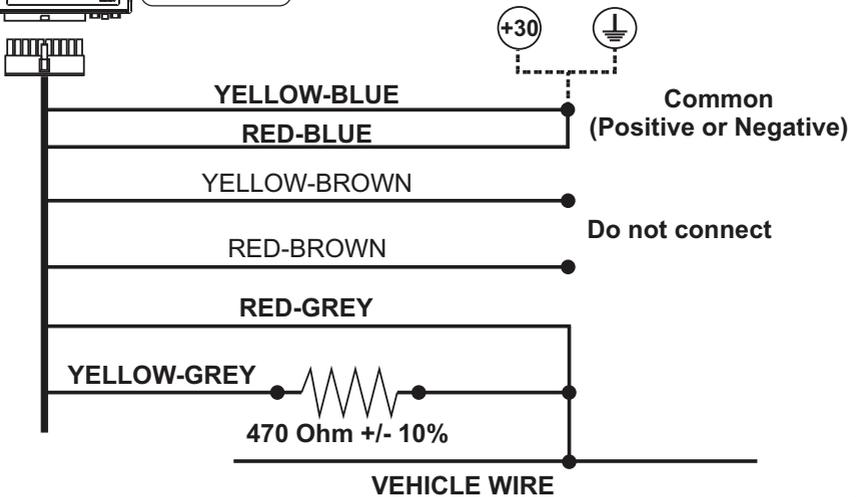
0,5 sec.



**DIAGRAM 34**



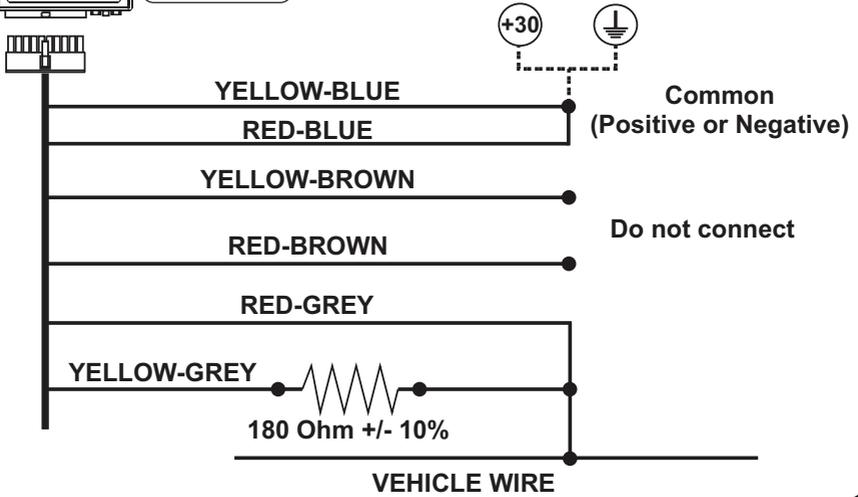
0,5 sec. +  
comfort



**DIAGRAM 37**



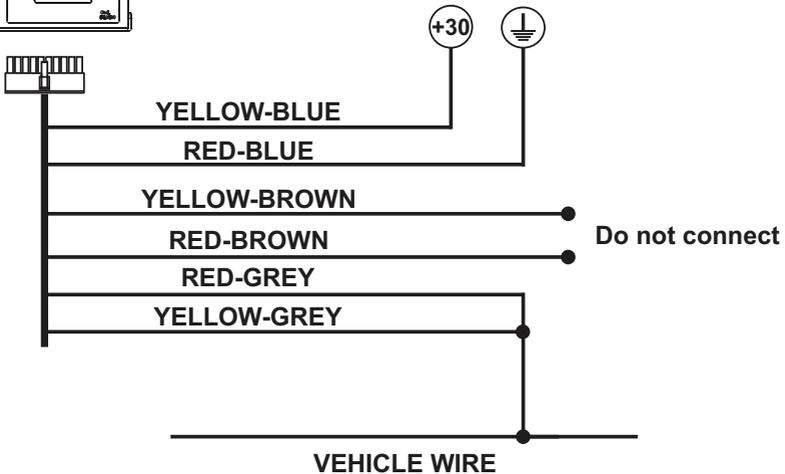
**0,5 sec. +  
comfort**



**DIAGRAM 39**



**0,5 sec.**





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