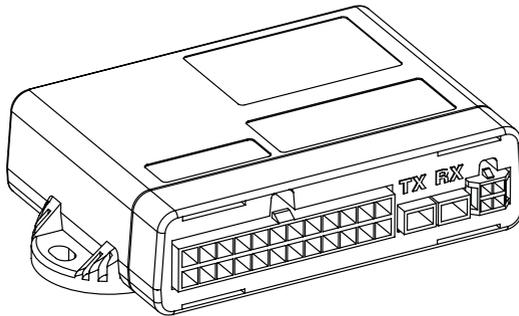


# META EVOCAN

## Installation instructions



Software Version 1.49 >

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**SECURITY**

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## APPLICATION RULES ON THE VEHICLE

The instructions included in this manual don't refer to specific vehicle models but are applicable in general to all motor vehicles. The installation activities, product positioning, fixing and electrical connections, have to be performed in a workmanlike manner. The specialized technicians that have in charge the activity have to carefully check the car model which is installing under his own responsibility.

Failure to comply with the above may lead to the loss of the device warranty.

## TECHNICAL SPECIFICATIONS

### GENERAL SPECIFICATIONS

Power supply:	12Vdc (10V-15V)
Alarm control unit consumption:	Deactivated < 1,5mA - Activated < 5mA
Working temperature:	-40°C +85°C
Immunity time:	25 seconds
Alarm arrows blinking:	0.4 sec. ON; 0.4 sec. OFF
Alarm cycle duration:	25 sec.
Alarm cycles for the different stimulations:	95/56/EC (European standards)

### PROTECTIONS

Volumetric Protection:	Eco/Doppler ultrasound system with 8 levels of sensitivity,
Alarm input from auxiliary modules:	Positive input,
Perimeter Protections:	3 separate inputs to protect doors, boot and bonnet
Tilt sensor protection:	3 Axes sensor embedded in the central unit
Ignition Lock Relay:	Electronic command with negative polarity
Protection against ignition attempt:	Checks of ignition signal +15/54 during arming status
Anti-Carjack:	Protection that can be activated pairing ID-TAG only

### SERVICES AND COMMANDS CAPACITY

Engine starter immobilizer relay output (pos. 23):	Electronic negative command Max 1A.
Turning indicators output commands (pos. 20-21):	Electronic positive commands Max 5A+5A (see note at Fig.21).
Blinker push button control output (pos. 21):	Electronic command with negative polarity Max 1A.
Horn/Pager relay alarm output (pos. 12):	Electronic negative command Max 1A.
Power window module output command (pos. 4):	Electronic positive command Max 100mA.
Optional modules output command (pos. 8):	Electronic positive command Max 100mA.
Central door locking output commands (pos. 5-24):	Electronic negative commands Max 1A.

### MANAGEMENT FUNCTIONS

Alarm ON/OFF management configuration:	Four command ON/OFF modes (Stand Alone ID-Tag – TX – CAN BUS – LIN BUS).
Emergency disarming:	Override code from button/led, electronic keys, ID-Tag.
LED optical signals:	Signals to display the alarm status and alarm memories.
Vehicle optical signaling:	When the unit trigger an alarm it can drive flashing of turning indicators.
Door open warning when arming:	Signals if a door, boot or bonnet are open when arming the alarm.
Service Mode (Garage function):	Deactivates the alarm system and avoid any enabled selfarming
Partial disarming:	Perform the complete alarm disarming after recognition of its ID-Tag only.
Optional modules command:	This positive input command enable the optional protection modules activation.
Central door locking commands:	During alarm arming and disarming by ID-TAG remote control gives a possibility to drive the central door locking system.
Ignition lock control:	By a dedicated command, it is possible to lock the vehicle starting when the system is armed.
Sirens control:	Depending of kind of paired siren the alarm has the possibility to drive them with different command types, Bluetooth wireless connection (M07), cable connection by LINBUS coded messages (M06-T78) or with analog signal (M03).

### COMBINABLE SIRENS

Analogic Piezo siren:	M03 - Sound level 114 dB
LINBUS coded backup battery siren:	M06A - Sound level 115 dB
Wireless Bluetooth backup battery siren:	M07A - Sound level 115 dB

## SELECTING THE MOST SUITABLE ALARM FUNCTIONALITY CONSIDERING VEHICLE OR CUSTOMER'S NEEDS

The system gives the possibility, through a specific programming and combining accessories, to adapt to the customer's safety needs or the specific technical features of the vehicle to be protected.

**REMOTE CONTROL:** (see dedicated chapter on page 5) This selection have to be used in vehicles without original remote controls that needs the central door locking commands during arming and disarming. For this kind of system its mandatory to combine the **META EVOCAN** with at least one **ID-Tag B9.5** remote control and one of the available sirens

**WITH CAN BUS CONNECTION:** (see dedicated chapter on page 9) This selection have to be used in vehicles where a digital network for managing services is present and the relative canbus protocol is available in the MetaSystem archive. This kind of system requires only the combination of one the available sirens. It is possible to add one **ID-Tag B9.5** remote control if needs to have an additional remote control to the original one or if the user wishes to take advantage of the additional protection provided by partial deactivation. In this case, if technically possible, it is recommended to connect the central door locking commands also.

**WITH LIN BUS CONNECTION:** (see dedicated chapter on page 13) This selection have to be used in vehicles with the PSA platform where is available the dedicated LIN digital network for the alarm systems. This kind of system requires only the combination of one the available sirens. NOTE: This alarm pairing with vehicle requires programming the vehicle's BODY control unit (see dedicated technical sheet).

**STAND ALONE ID-TAG:** (see dedicated chapter on page 17) This selection is recommended for installation in the vehicles where, for technical reasons or restrictive regulations of the car manufacturer, is not possible to connect to the vehicle digital networks. This type of system requires only the power supply connections and, if possible, to the turning indicators. The vehicle protection will be ensured by the volumetric, tilt sensor, protection against starting attempts and eventually auxiliary protections by the optional modules. For this kind of system it is mandatory to combine the **META EVOCAN** with at least one **ID-Tag B9.5** remote control and one of the available sirens.

## PRODUCT SET-UP

To define the most suitable operation, select the correct type of activation/deactivation commands dedicated to the specific vehicle and to customize the alarm control unit we recommend to **consulting the vehicle technical data sheets available on the website [www.metasystemcorporation.com](http://www.metasystemcorporation.com)** where you can find all the indications to perform a quickly and correct installation.

To do an easier programming according to the installation selected we invite you to carefully read the warnings described in the chapter dedicated for any kind of installation selected.

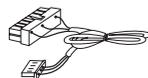
To customize the central unit operating modes, uses the **PRG007 PROGRAMMER** where all the functions will be selectable.

The programmer software update and the information about the programmable functions are available ON LINE on the website [www.metasystemcorporation.com](http://www.metasystemcorporation.com) in the **CAR-ALARM Technical Area**.

### PRG007 PROGRAMMER Meta System code: ABS15090



### WIRING FOR META EVOCAN Meta System code: 2010343800



The **CANBUS protocols** for updating the **META EVOCAN** central unit are available in the **PRG007 PROGRAMMER** software application and to have the updated ones it is necessary to download the latest available **PRG007 PROGRAMMER** software update from the technical area of the MetaSystem web site.

## WARNINGS FOR CORRECT INSTALLATION



### DISCONNECT BATTERY!

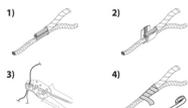
Before any operation in the vehicle, be sure that the body system is disconnected from the service battery. This will avoid damages to the original vehicle system and error memorisations.



Depending of the vehicle type and its technical specifications, take an agreement with the customer what kind of application, explaining the activable functions.



Before start the installation, check if you have all the technical information to performing the selected system, by consulting the installation manual, the vehicle application technical sheets available on the Metasystem website.



Carry out the electrical connections in an appropriate manner, avoiding connections like the fast splices systems and if possible avoid to cut the original cables. Insulate the connections taking care to use suitable materials and tools for each activity. Fixs by fasteners the alarm cables to the original vehicle harness to prevent movements, noise or damage while driving.



Before handing over the vehicle, carry out a check to ensure that all on-board devices are functioning properly, check if the alarm device works fine and make sure that the vehicle has not stored any anomalies due to installation activities. In this case it is necessary to carry out a diagnosis and reset all the errors in the vehicle memory.

# GENERAL DIAGRAM (complete schematic)

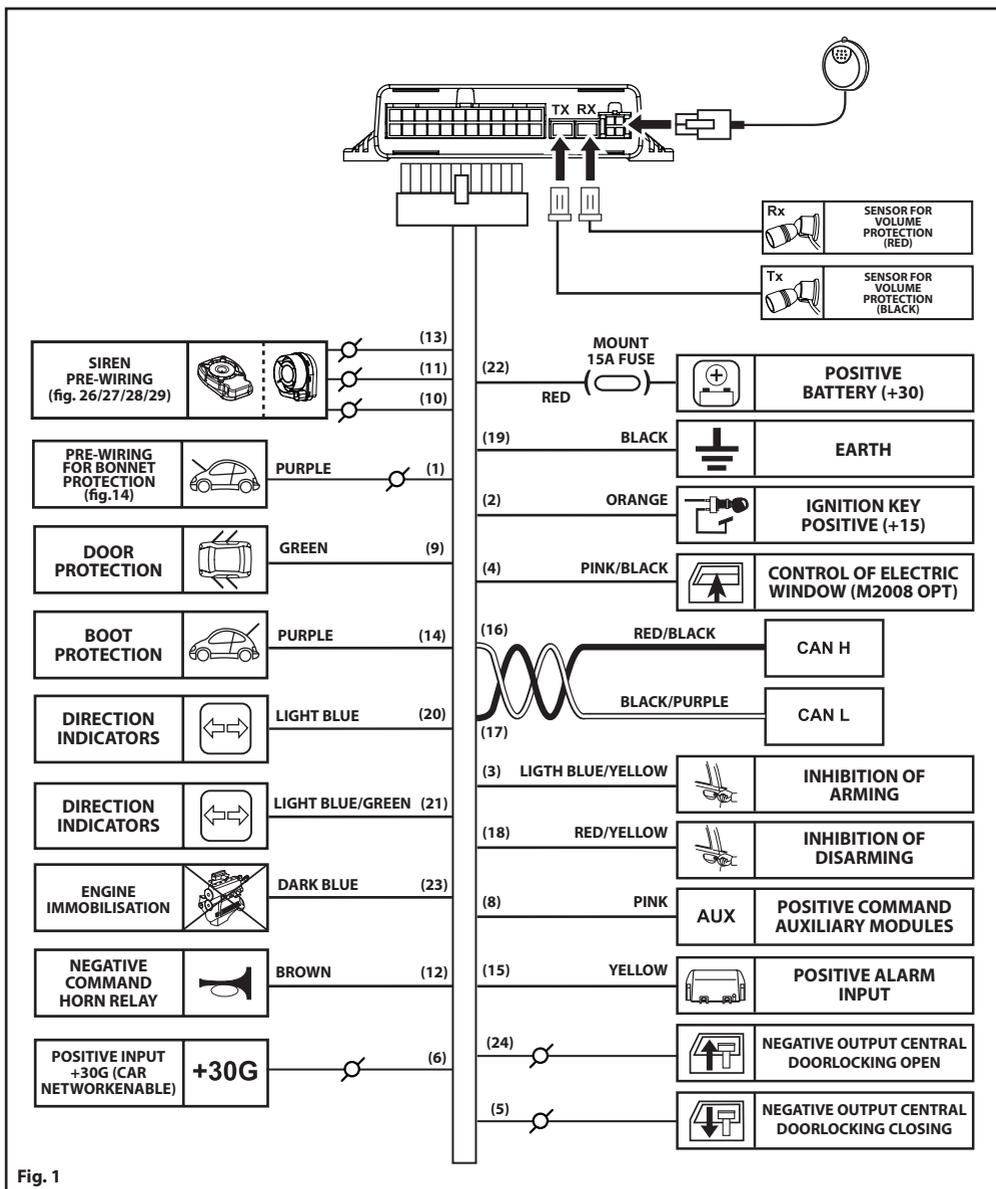


Fig. 1

## INCLUDED ACCESSORY WIRES INTO THE KIT



**WHITE/BLACK**

**WHITE/BLACK wire** with contact for car BSI connection.



**BLACK**

**N°2 BLACK wires** with contact to connect the **AUX ALARM**.



**PURPLE**

**PURPLE wire** with contact for **BONNET SWITCH** connection. Not used with M07 wireless siren.

## OPERATION BY REMOTE CONTROL: Installation

Configuration used in vehicles without original remote control.

### OPERATION

**The alarm is activated by pressing the ID-Tag B9.5 radio control button**, the arming can be signaled by flashes of the turning indicators, an acoustic signal and the LED flashing that through an initial speed flashing warns of the state of immunity.

During the first 25 seconds of the immunity time any alarm stimulate will be signaled by a short beep.

The alarm system it will be fully operational after 25 sec. since the last alarm stimulate detection, if during the immunity time no stimulate will be detected after 25 seconds the alarm system will be fully operative.

The fully operative status will be signaled by the slow flashing of the LED.

If you want to exclude the ultrasonic volumetric protection, before arming the alarm system it is necessary to switch on twice the instrument panel and then arming the alarm system. The exclusion will be active only for the next operating cycle and will be signaled by three quick buzzer sounds.

If you want to exclude the ultrasonic volumetric protection and also the tilt sensor, before arming the alarm system it is necessary to switch on three times the instrument panel and then arming the alarm system. The exclusion will be active only for the next operating cycle and will be signaled by four quick buzzer sounds.

The same exclusion can be obtained by activating the instrument panel and pressing the **ID-Tag B9.5** button for at least 1 second, the LED will stay on, then turn off the instrument panel and activate the alarm system within the next 20 seconds. This exclusion will be active for any auxiliary modules also.

The alarm is deactivated by pressing the **ID-Tag B9.5** radio control button, deactivation can be signaled by flashing of turning indicators and by the switching off the LED.

If the radio control is not available when the door is opened, the alarm system produces an optical/acoustic alarm cycle which can be interrupted by entering the Override security code or using the TAG B9.5 programmed as a radio control and stored hidden inside the vehicle as described in the **"Emergency deactivation"** chapter.

If the LED flashing after disarming informs that during the last protection period the system has performed one or more alarm cycles. Reading the number of flashes it is possible to trace the type of alarm that has occurred.

The alarm memory will reset when the instrument panel is switched on for the first time or after the next alarm arming.

### MANDATORY ADDITIONAL ACCESSORIES

<b>TAG B9.5</b>	(it is recommended to pair at least 2 programmed as REMOTE CONTROL)
<b>SIREN</b>	To be selected among the 3 available devices (M03 – M06A – M07A)

### OPTIONAL ADDITIONAL ACCESSORIES

<b>EMERGENCY B9.5 TAG</b>	The <b>B9.5 TAG</b> programmed as a radio control and stored hidden inside the vehicle simplify any emergency operations.
<b>AUXILIARY PROTECTION MODULES</b>	To improve the vehicle protection
<b>TELEMATIC SYSTEM</b>	Allows georeferenced vehicle monitoring (the connection between <b>META EVOCAN</b> and the T.342 telematics unit is via Bluetooth and through it is possible to send information the alarm triggering and the activation of the vehicle's instrument panel, simplifying the installation of the telematics control unit which can be connected with just 2 wires)

## OPERATION BY REMOTE CONTROL: product set-up

### PROGRAMMING (advice for correct product set-up)

Before proceeding with the electrical installation it is necessary to configure the alarm for operation taking in care the specific vehicle technical requirements and the customer requests.

**NOTE:** following are highlighted the essential programming steps for this specific operation.

### NOTE TO SET-UP THE ID-TAG AS REMOTE CONTROL

After paired the **ID-TAG B9.5** using the **PRG007 PROGRAMMER** execute the follow instructions to change the **ID-TAG** behavior from Automatic to Remote control:

Leave **META EVOCAN** unit connected to the **PRG007 PROGRAMMER** and select "remote control" at step 37, keep the TAG button pressed for about 30 seconds until the LED starts a speed flashing then confirm the choice on the **PRG007 PROGRAMMER**.

The LED switching off will confirm the change of functional mode.

NR°	FUNCTION	FUNCTION DESCRIPTION	SUGGESTED SET-UP	NOTES
1	Buzzer	Acoustic signals during ON/OFF	Disabled	Evaluate with the customer whether or not he wants On/Off signals
2	Stimule check	Acoustic signal with present stimule	Enable	Don't modify it
3	Perimetrical alarm test	Check during the immunity time	Enable	Don't modify it
4	<b>CENTRAL DOOR LOCKING TIMING</b>	<b>Tempi di comando chiusure</b>	<b>0,5 Sec</b>	<b>Select the command timing depending of the vehicle (see technical sheet)</b>
5	<b>BLINKER COMMAND</b>	<b>Blinker command type (power or Hazard button)</b>	<b>Single pulse on Hazard button</b>	<b>Select the command depending of the vehicle (see technical sheet)</b>
6	Horn/siren command	Pin12 brown wire command type	Alternate	If used to drive the clason/horn the alternate type is suggested.
7	US sensitivity	Ultrasound protection sensitivity	Sens. 4	Change only if necessary
8	Tilt enabling	Tilt sensor function enabling	Tilt Off	If tilt is enable fix the alarm unit firmly to the vehicle to avoid false alarms
9	Door protection	Continuous - repeats the door alarm cycle if left open	Continuous alarm	Don't modify it
10	<b>COMFORT DOOR LOCKING</b>	<b>Door locking command timing</b>	<b>Comfort Off</b>	<b>Select the command timing depending of the vehicle (see technical sheet)</b>
11	<b>DEAD LOCK</b>	<b>Double closing command input</b>	Disabled	<b>Select it by depending of the vehicle (see technical sheet)</b>
12	Override Code	Emergency code	XXXXX	Shows the override code and allow its modification
13	3 digits override code	Code simplification	Disabled	Reducing the override code from 5 to 3 digits
14	Anti Carjacking	See detailed manual for this feature	Disabled	Use it only if strongly request by the customer
	CAN Protocol	Vehicle communication protocol	XXXXXXXXXX	Don't modify it
	Trasponder	Emergency by reading the original trasponder	On	Don't modify it
15	Long flashing Blinker	The Blinker flashing for a period after finish the acoustic alarm cycle	Off	Define it with customer
16	Immunity time	Timing between the arming and full protections	Standard 26 Sec.	Don't modify it
17	Delay on doors alarm trigger	Timing between trigger and start alarm	Short time 0,3 Sec.	Don't modify it
18	Set-up blinker	Adjusts the activation pulse time to drive the hazard button	Standard 0,2 Sec.	Select it by depending of the vehicle (see technical sheet)
19	Time before monitor the blinker feedback	Adjusts the delay before monitor the blinker feedback	Standard 0,5 Sec.	Select it by depending of the vehicle (see technical sheet)
20	Monitoring the blinker feedback	Adjusts the monitoring length on the blinker feedback	Standard 1,2 Sec.	Select it by depending of the vehicle (see technical sheet)

NR°	FUNCTION	FUNCTION DESCRIPTION	SUGGESTED SET-UP	NOTES
21	Electronic Keys cancel	Allow to cancel all the Electronic Keys if lose one of them		Cancel all the memorized Electronic Keys
22	Enable self learning for Electronic Keys	Function to memorize new Electronic Keys		Enable the self learning to memorize new Electronic Keys
23	Self arming	Function to enable the automatic arming	Disabled	Use it only if request by the customer
24	Self arming type	Type of self arming definition	Only engine immobilizer	Use it only if request by the customer
<b>25</b>	<b>ENABLE BLINKER FLASHING</b>	<b>Blinker flashing during ON/OFF</b>	<b>Enabled</b>	<b>To be defined with customer</b>
26	Number of blinking during ON	Number of blinking during ON	2	Don't modify it
27	Number of blinking during OFF	Number of blinking during OFF	1	Don't modify it
28	Pre-disarm	Complete disarming only if ID-TAG is present	Off	Only with paired TAG (to be defined with customer)
29	Enable BLE features	Function to enable the bluetooth connections	On	Mandatory to pair the wireless Siren and TAGs
30	Emulated PSA LIN Bus	Enabling the alarm unit LIN bus line to be connected to the vehicle	Off	Don't modify it
31	Instanting starter immobilizer	Timing to start the starter immobilizer during the Anti Carjacking procedure	Off	Don't change it if the Anti Carjacking function is disable
32	External starter immobilizer type	Modality of the external starter immobilizer	GML (C-NC) modality	Don't change it if the external starter relay was not installed
33	Anti Carjacking setting	Anti Carjacking type	All the doors monitored	Don't change it if the Anti Carjacking function is disable
34	Enable feature +30G	Enabling the +30G signal monitoring	Disabled	Don't modify it
35	Minimum RSSI to disarming by TAG	Fine tuning of TAG recognition range	5 (0-10)	Don't modify it
<b>36</b>	<b>ENABLE MAC N°1</b>	<b>Memory position for TAG B9.5 remote control</b>	Enable	<b>Mandatory to pair the TAG</b>
<b>37</b>	<b>MODALITY OF MAC N°1</b>	<b>Model of BLE module to be paired</b>	<b>ID-TAG</b>	<b>Select ID-TAG (to change the TAG behaviour to remote control see the note at page 6)</b>
<b>38</b>	<b>MAC address of device N°1</b>	<b>Module Mac address</b>	xxxxxxxxxx	<b>Insert the device ID code to be memorized</b>
<b>39</b>	<b>ENABLE MAC N°2</b>	<b>Memory position for TAG B9.5 remote control</b>	Enable	<b>Mandatory to pair the TAG</b>
<b>40</b>	<b>MODALITY OF MAC N°2</b>	<b>Model of BLE module to be paired</b>	<b>ID-TAG</b>	<b>Select ID-TAG (to change the TAG behaviour to remote control see the note at page 6)</b>
<b>41</b>	<b>MAC address of device N°2</b>	<b>Module Mac address</b>	xxxxxxxxxx	<b>Insert the device ID code to be memorized</b>
42	Enable MAC n°3		Disabled / Enable	
43	Modality of MAC n°3		ID-Tag / Remote control	
44	MAC address of device n°3		xxxxxxxxxx	
45	Enable MAC n°4		Disabled / Enable	
46	Modality of MAC n°4		ID-Tag / Remote control	
47	MAC address of device n°4		xxxxxxxxxx	
48	Enable MAC n°5		Disabled / Enable	
49	Modality of MAC n°5		ID-Tag / Remote control	
50	MAC address of device n°5		xxxxxxxxxx	

NR°	FUNZIONE	DESCRIZIONE FUNZIONE	SET-UP SUGGERITO	NOTE
51	M07 Siren pairing	Memory position for M07 siren	Disabled / Enable	Enable if the wireless M07 Siren have to be paired
52	M07 Siren Mac Address	Siren Mac Address	xxxxxxxxxx	Insert the M07 siren ID code to be memorized
53	B3.3 Module pairing	Memory position for B3.3 module	Disabled / Enable	Enable if the B3.3 Module have to be paired
54	B3.3 Immobilizer Mac Address	B3.3 Mac Address	xxxxxxxxxx	Insert the B3.3 module ID code to be memorized
55	Arming time from missing TAG signal	Sets the arming time from the detection of an RSSI with a value lower than the value set in step 35	Standard 32 sec	
56	Enabling input for heater monitoring	Enables the Trunk input (pin 14) to detect the heater on/off signal	Disabled	
57	Override without ACC	Allows you to activate the Override code entry procedure via Button/ Led	Disabled	
58	Enabling outputs for coded relay	Enable outputs to pilot the coded relays	Disabled	
59	Erase the coded relay PIN CODES	Allows you to reset the PIN CODE of the external module for a new self-learning		
60	Read and modify coded relay pin code	View and allow to change the PIN CODE of the external module "coded relay"		
61	Arm/Disarm by the CS094 module also	Allows pairing with the Phonocar CS094 Camper module	Disabled	

# OPERATION BY REMOTE CONTROL: Electrical connection suggestions

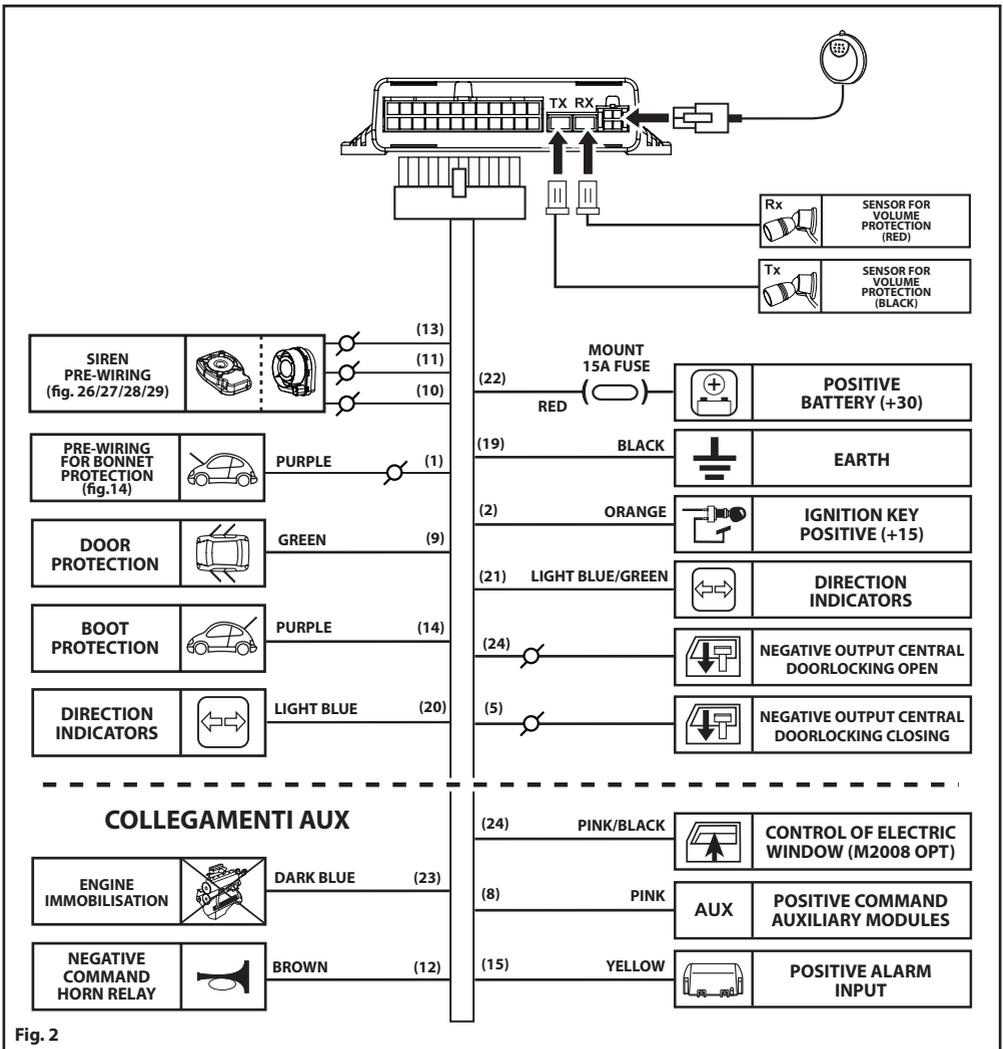


Fig. 2

## OPERATION BY CAN BUS CONNECTION: Installation

This configuration is used in vehicles where a digital network for managing services is present and the relative canbus protocol is available in the MetaSystem archive.

### OPERATION

The alarm is automatically activated locking the vehicle by the original remote control or the keyless system, the arming can be signaled by an acoustic signal and the LED flashing that through an initial speed flashing warns of the state of immunity.

It is possible, by programming the Evocan control unit, to add the flashing signals of the turning indicators if the vehicle does not provide them during locking/unlocking of the doors.

It is also possible to combine an additional **ID-Tag B9.5** remote control for those cars that have second keys without the original remote control.

During the first 25 *seconds* of the immunity time any alarm stimuli will be signaled by a short beep. The alarm system it will be fully operational after 25 *sec.* since the last alarm stimuli detection, if during the immunity time no stimuli will be detected after 25 seconds the alarm system will be fully operative. The fully operative status will be signaled by the slow flashing of the LED.

If you want to exclude the ultrasonic volumetric protection, before arming the alarm system it is necessary to switch on twice the instrument panel and then arming the alarm system. The exclusion will be active only for the next operating cycle and will be signaled by three quick buzzer sounds.

If you want to exclude the ultrasonic volumetric protection and also the tilt sensor, before arming the alarm system it is necessary to switch ON three times the instrument panel and then arming the alarm system. The exclusion will be active only for the next operating cycle and will be signaled by four quick buzzer sounds.

The same exclusion can be obtained by activating the instrument panel and pressing the **ID-Tag B9.5** button for at least 1 second, the LED will stay on, then turn OFF the instrument panel and activate the alarm system within the next 20 *seconds*. This exclusion will be active for any auxiliary modules also.

The alarm is disarmed unlocking the doors by pressing the original remote control or by the keyless system, deactivation can be signaled by flashing of turning indicators and by the switching OFF the LED.

If the radio control is not available when the door is opened, the alarm system produces an optical/acoustic alarm cycle which can be interrupted by entering the Override security code or using the TAG B9.5 programmed as a radio control and stored hidden inside the vehicle as described in the **"Emergency deactivation"** chapter.

If the LED flashing after disarming informs that during the last protection period the system has performed one or more alarm cycles. Reading the number of flashes it is possible to trace the type of alarm that has occurred.

The alarm memory will reset when the instrument panel is switched on for the first time or after the next alarm arming.

In the operating mode with CAN BUS configuration it is possible, by a dedicate setup (*step 28*), enable the partial disarming (PRE DISARM). See the relevant chapter for details on operation.

This feature needs to pair at least one automatic **ID-TAG 9.5** to the **META EVOCAN** central unit, this setup can be performed by **PRG007 PROGRAMMER** (*steps from 36 to 48*).

### MANDATORY ADDITIONAL ACCESSORIES

<b>SIREN</b>	To be chosen from the 3 available in the range (M03 – M06A – M07A)
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### OPTIONAL ADDITIONAL ACCESSORIES

<b>EMERGENCY B9.5 TAG</b>	The <b>B9.5 TAG</b> programmed as a radio control and stored hidden inside the vehicle simplify any emergency operations.
<b>AUXILIARY PROTECTION MODULES</b>	To improve the vehicle protection
<b>TAG B9.5</b>	Used for the partial disarmig
<b>TELEMATIC SYSTEM</b>	Allows georeferenced vehicle monitoring (the connection between <b>META EVOCAN</b> and the T.342 telematics unit is via Bluetooth and through it is possible to send information the alarm triggering and the activation of the vehicle's instrument panel, simplifying the installation of the telematics control unit which can be connected with just 2 wires)

## OPERATION BY CAN BUS CONNECTION CONTROL: product setup

### PROGRAMMING (advice for correct product set-up)

Before proceeding with the electrical installation it is necessary to configure the alarm for operation taking in care the specific vehicle technical requirements and the customer requests.

**NOTE:** following are highlighted the essential programming steps for this specific operation.

NR°	FUNCTION	FUNCTION DESCRIPTION	SUGGESTED SET-UP	NOTES
1	Buzzer	Acoustic signals during ON/OFF	Disabled	Evaluate with the customer whether or not he wants On/Off signals
2	Stimule check	Acoustic signal with present stimule	Enable	Don't modify it
3	Perimetrical alarm test	Check during the immunity time	Enable	Don't modify it
4	CENTRAL DOOR LOCKING TIMING	Tempi di comando chiusura	0,5 sec	Only if the ID-TAG is combined and the central door locking need to be drive (see the vehicle data sheet)
5	BLINKER COMMAND	Blinker command type (power or Hazard button)	Single pulse on Hazard button	Select the command depending of the vehicle (see technical sheet)
6	Horn/siren command	Pin12 brown wire command type	Alternate	If used to drive the clason/horn the alternate type is suggested.
7	US sensitivity	Ultrasound protection sensitivity	Sens. 4	Change only if necessary
8	Tilt enabling	Tilt sensor function enabling	Tilt Off	If tilt is enable fix the alarm unit firmly to the vehicle to avoid false alarms
9	Door protection	Continuous - repeats the door alarm cycle if left open	Continuous alarm	Don't modify it
10	COMFORT DOOR LOCKING	Door locking command timing	Comfort Off	Select it by depending of the vehicle (see technical sheet)
11	DEAD LOCK	Double closing command input	Disabled	Evaluate with the customer whether or not he wants disarming by transponder
12	Override Code	Emergency code	XXXXX	Shows the override code and allow its modification
13	3 digits override code	Code simplification	Disabled	Reducing the override code from 5 to 3 digits
14	Anti Carjacking	See detailed manual for this feature	Disabled	Use it only if strongly request by the customer
	CAN Protocol	Vehicle communication protocol	XXXXXXXXXX	Select it by depending of the vehicle (see technical sheet)
	Trasponder	Emergency by reading the original transponder	On	Evaluate with the customer whether or not he wants disarming by transponder
15	Long flashing Blinker	The Blinker flashing for a period after finish the acoustic alarm cycle	Off	Define it with customer
16	Immunity time	Timing between the arming and full protections	Standard 26 Sec.	Don't modify it
17	Delay on doors alarm trigger	Timing between trigger and start alarm	Short time 0,3 sec.	Don't modify it
18	Set-up blinker	Adjusts the activation pulse time to drive the hazard button	Standard 0,2 Sec.	Select it by depending of the vehicle (see technical sheet)
19	Time before monitor the blinker feedback	Adjusts the delay before monitor the blinker feedback	Standard 0,5 Sec.	Select it by depending of the vehicle (see technical sheet)
20	Monitoring the blinker feedback	Adjusts the monitoring length on the blinker feedback	Standard 1,2 Sec.	Select it by depending of the vehicle (see technical sheet)

NR°	FUNCTION	FUNCTION DESCRIPTION	SUGGESTED SET-UP	NOTES
21	Electronic Keys cancel	Allow to cancel all the Electronic Keys if lose one of them		Cancel all the memorized Electronic Keys
22	Enable self learning for Electronic Keys	Function to memorize new Electronic Keys		Enable the self learning to memorize new Electronic Keys
23	Self arming	Function to enable the automatic arming	Disabled	Use it only if request by the customer
24	Self arming type	Type of self arming definition	Only engine immobilizer	Use it only if request by the customer
25	ENABLE BLINKER FLASHING	Blinker flashing during ON/OFF	Enabled	To be defined with customer
26	Number of blinking during ON	Number of blinking during ON	2	Don't modify it
27	Number of blinking during OFF	Number of blinking during OFF	1	Don't modify it
28	Pre-disarm	Complete disarming only if ID-TAG is present	Off	Only with paired TAG (to be defined with customer)
<b>29</b>	<b>Enable BLE features</b>	<b>Function to enable the bluetooth connections</b>	<b>On</b>	<b>Mandatory to pair the wireless Siren and TAGs</b>
30	Emulated PSA LIN Bus	Enabling the alarm unit LIN bus line to be connected to the vehicle	Off	Don't modify it
31	Instanting starter immobilizer	Timing to start the starter immobilizer during the Anti Carjacking procedure	Off	Don't change it if the Anti Carjacking function is disable
32	External starter immobilizer type	Modality of the external starter immobilizer	GML (C-NC) modality	Don't change it if the external starter relay was not installed
33	Anti Carjacking setting	Anti Carjacking type	All the doors monitored	Don't change it if the Anti Carjacking function is disable
34	Enable feature +30G	Enabling the +30G signal monitoring	Disabled	Don't modify it
35	Minimum RSSI to disarming by TAG	Fine tuning of TAG recognition range	5 (0-10)	Don't modify it
<b>36</b>	<b>ENABLE MAC N°1</b>	<b>Memory position for TAG B9.5 remote control</b>	Enable	<b>Enable if the pairing of a ID-TAG is required</b>
<b>37</b>	<b>MODALITY OF MAC N°1</b>	<b>Model of BLE module to be paired</b>	<b>ID-TAG</b>	<b>Select ID-TAG</b>
<b>38</b>	<b>MAC address of device N°1</b>	<b>Module Mac address</b>	xxxxxxxxxx	<b>Insert the device ID code to be memorized</b>
39	ENABLE MAC N°2		Disabled / Enable	
40	MODALITY OF MAC N°2		ID-TAG / Remote Control	
41	MAC address of device N°2		xxxxxxxxxx	
42	Enable MAC n°3		Disabled / Enable	
43	Modality of MAC n°3		ID-Tag / Remote control	
44	MAC address of device n°3		xxxxxxxxxx	
45	Enable MAC n°4		Disabled / Enable	
46	Modality of MAC n°4		ID-Tag / Remote control	
47	MAC address of device n°4		xxxxxxxxxx	
48	Enable MAC n°5		Disabled / Enable	
49	Modality of MAC n°5		ID-Tag / Remote control	
50	MAC address of device n°5		xxxxxxxxxx	
51	M07 Siren pairing	Memory position for M07 siren	Disabled / Enable	Enable if the wireless M07 Siren have to be paired

NR°	FUNCTION	FUNCTION DESCRIPTION	SUGGESTED SET-UP	NOTES
52	M07 Siren Mac Address	Siren Mac Address	xxxxxxxxxx	Insert the M07 siren ID code to be memorized
53	B3.3 Module pairing	Memory position for B3.3 module	Disabled / Enable	Enable if the B3.3 Module have to be paired
54	B3.3 Immobilizer Mac Address	B3.3 Mac Address	xxxxxxxxxx	Insert the B3.3 module ID code to be memorized
55	Arming time from missing TAG signal	Sets the arming time from the detection of an RSSI with a value lower than the value set in step 35	Standard 32 sec	
56	Enabling input for heater monitoring	Enables the Trunk input (pin 14) to detect the heater on/off signal	Disabled	
57	Override without ACC	Allows you to activate the Override code entry procedure via Button/ Led	Disabled	
58	Enabling outputs for coded relay	Enable outputs to pilot the coded relays	Disabled	
59	Erase the coded relay PIN CODES	Allows you to reset the PIN CODE of the external module for a new self-learning		
60	Read and modify coded relay pin code	View and allow to change the PIN CODE of the external module "coded relay"		
61	Arm/Disarm by the CS094 module also	Allows pairing with the Phonocar CS094 Camper module	Disabled	

# OPERATION BY CAN BUS CONNECTION: Electrical connection suggestions

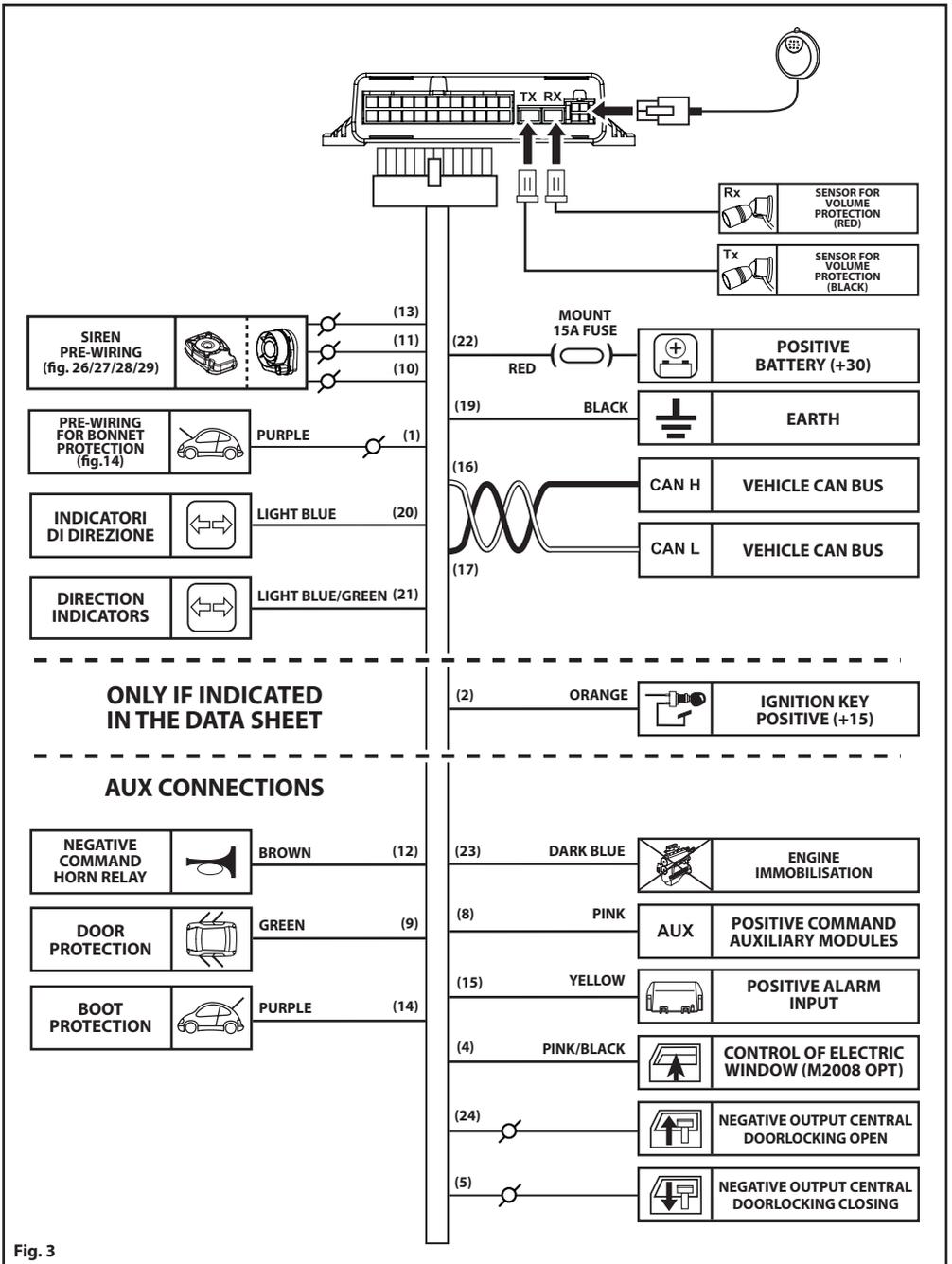


Fig. 3

## OPERATION BY LIN BUS CONNECTION: Installation

This configuration is used in the **PSA platform** vehicles where a **LIN digital network** for alarm connection is present.

This kind of configuration needs pairing only the siren choosing it in the available sirens range.

**NOTE:** This combination requires programming of the vehicle's BODY control unit (see dedicated technical datasheet).

### OPERATION

The alarm is automatically activated locking the vehicle by the original remote control or the *Keyless system*, the arming can be signaled by flashes of the turning indicators, an acoustic signal and the LED flashing that through an initial speed flashing warns of the state of immunity.

During the first *26 seconds* of the immunity time any alarm stimuli will be signaled by a short beep. The alarm system it will be fully operational after *26 sec.* since the last alarm stimuli detection, if during the immunity time no stimuli will be detected after *26 seconds* the alarm system will be fully operative. The fully operative status will be signaled by the slow flashing of the LED.

If you want to exclude the ultrasonic volumetric protection, before arming the alarm system it is necessary to switch on twice the instrument panel and then arming the alarm system. The exclusion will be active only for the next operating cycle and will be signaled by three quick buzzer sounds.

If you want to exclude the ultrasonic volumetric protection and also the tilt sensor, before arming the alarm system it is necessary to switch ON three times the instrument panel and then arming the alarm system. The exclusion will be active only for the next operating cycle and will be signaled by four quick buzzer sounds.

The same exclusion can be obtained by activating the instrument panel and pressing the **ID-Tag B9.5** button for at least 1 second, the LED will stay on, then turn OFF the instrument panel and activate the alarm system within the next *20 seconds*. This exclusion will be active for any auxiliary modules also.

The alarm is disarmed unlocking the doors by pressing the original remote control or by the *Keyless system*, deactivation can be signaled by flashing of turning indicators and by the switching OFF the LED.

If the remote control is not available when the door is opened, the alarm system produces an optical/acoustic alarm cycle which can be interrupted turning ON the vehicle key with transponder or entering the Override security code.

If the LED flashing after disarming informs that during the last protection period the system has performed one or more alarm cycles. Reading the number of flashes it is possible to trace the type of alarm that has occurred.

The alarm memory will reset when the instrument panel is switched on for the first time or after the next alarm arming.

### MANDATORY ADDITIONAL ACCESSORIES

<b>SIREN</b>	To be chosen from the 3 available in the range (M03 – M06A – M07A)
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### OPTIONAL ADDITIONAL ACCESSORIES

<b>AUXILIARY PROTECTION MODULES</b>	To improve the vehicle protection
<b>TELEMATIC SYSTEM</b>	Allows georeferenced vehicle monitoring (the connection between <b>META EVOCAN</b> and the T.342 telematics unit is via Bluetooth and through it is possible to send information the alarm triggering and the activation of the vehicle's instrument panel, simplifying the installation of the telematics control unit which can be connected with just 2 wires)

## OPERATION BY LIN BUS CONNECTION: product setup

### PROGRAMMING (advice for correct product set-up)

Before proceeding with the electrical installation it is necessary to configure the alarm for operation taking in care the specific vehicle technical requirements and the customer requests.

**NOTE:** following are highlighted the essential programming steps for this specific operation.

NR°	FUNCTION	FUNCTION DESCRIPTION	SUGGESTED SET-UP	NOTES
1	Buzzer	Acoustic signals during ON/OFF	Disabled	Evaluate with the customer whether or not he wants On/Off signals
2	Stimule check	Acoustic signal with present stimule	Enable	Don't modify it
3	Perimetrical alarm test	Check during the immunity time	Enable	Don't modify it
4	CENTRAL DOOR LOCKING TIMING	Tempi di comando chiusura	0,5 sec	Don't modify it
5	BLINKER COMMAND	Blinker command type (power or Hazard button)	Single pulse on Hazard button	Don't modify it
6	Horn/siren command	Pin12 brown wire command type	Alternate	If used to drive the clason/horn the alternate type is suggested.
7	US sensitivity	Ultrasound protection sensitivity	Sens. 4	Change only if necessary
8	Tilt enabling	Tilt sensor function enabling	Tilt Off	If tilt is enable fix the alarm unit firmly to the vehicle to avoid false alarms
9	Door protection	Continuous - repeats the door alarm cycle if left open	Continuous alarm	Don't modify it
10	COMFORT DOOR LOCKING	Door locking command timing	Comfort Off	Don't modify it
11	DEAD LOCK	Double closing command input	Disabled	Don't modify it
12	Override Code	Emergency code	XXXXX	Shows the override code and allow its modification
13	3 digits override code	Code simplification	Disabled	Reducing the override code from 5 to 3 digits
14	Anti Carjacking	See detailed manual for this feature	Disabled	Don't modify it
	CAN Protocol	Vehicle communication protocol	XXXXXXXXXX	Don't modify it
	Trasponder	Emergency by reading the original transponder	On	Don't modify it
15	Long flashing Blinker	The Blinker flashing for a period after finish the acoustic alarm cycle	Off	Define it with customer
16	Immunity time	Timing between the arming and full protections	Standard 26 Sec.	Don't modify it
17	Delay on doors alarm trigger	Timing between trigger and start alarm	Short time 0,3 sec.	Don't modify it
18	Set-up blinker	Adjusts the activation pulse time to drive the hazard button	Standard 0,2 Sec.	Select it by depending of the vehicle (see technical sheet)
19	Time before monitor the blinker feedback	Adjusts the delay before monitor the blinker feedback	Standard 0,5 Sec.	Select it by depending of the vehicle (see technical sheet)
20	Monitoring the blinker feedback	Adjusts the monitoring length on the blinker feedback	Standard 1,2 Sec.	Select it by depending of the vehicle (see technical sheet)
21	Electronic Keys cancel	Allow to cancel all the Electronic Keys if lose one of them		Cancel all the memorized Electronic Keys
22	Enable self learning for Electronic Keys	Function to memorize new Electronic Keys		Enable the self learning to memorize new Electronic Keys
23	Self arming	Function to enable the automatic arming	Disabled	Use it only if request by the customer

NR°	FUNCTION	FUNCTION DESCRIPTION	SUGGESTED SET-UP	NOTES
24	Self arming type	Type of self arming definition	Only engine immobilizer	Don't modify it
25	ENABLE BLINKER FLASHING	Blinker flashing during ON/OFF	Enabled	Don't modify it
26	Number of blinking during ON	Number of blinking during ON	2	Don't modify it
27	Number of blinking during OFF	Number of blinking during OFF	1	Don't modify it
28	Pre-disarm	Complete disarming only if ID-TAG is present	Off	Don't modify it
<b>29</b>	<b>Enable BLE features</b>	<b>Function to enable the bluetooth connections</b>	<b>On</b>	<b>Mandatory to pair the wireless Siren</b>
<b>30</b>	<b>Emulated PSA LIN Bus</b>	<b>Enabling the alarm unit LIN bus line to be connected to the vehicle</b>	<b>Off</b>	<b>Select ON the LIN line of the product</b>
31	Instanting starter immobilizer	Timing to start the starter immobilizer during the Anti Carjacking procedure	Off	Don't modify it
32	External starter immobilizer type	Modality of the external starter immobilizer	GML (C-NC) modality	Don't change it if the external starter relay was not installed
33	Anti Carjacking setting	Anti Carjacking type	All the doors monitored	Don't modify it
34	Enable feature +30G	Enabling the +30G signal monitoring	Disabled	Don't modify it
35	Minimum RSSI to disarming by TAG	Fine tuning of TAG recognition range	5 (0-10)	Don't modify it
36	ENABLE MAC N°1		Disabled / Enable	
37	MODALITY OF MAC N°1		ID-TAG / Remote control	
38	MAC address of device N°1		xxxxxxxxxx	
39	ENABLE MAC N°2		Disabled / Enable	
40	MODALITY OF MAC N°2		ID-TAG / Remote control	
41	MAC address of device N°2		xxxxxxxxxx	
42	Enable MAC n°3		Disabled / Enable	
43	Modality of MAC n°3		ID-Tag / Remote control	
44	MAC address of device n°3		xxxxxxxxxx	
45	Enable MAC n°4		Disabled / Enable	
46	Modality of MAC n°4		ID-Tag / Remote control	
47	MAC address of device n°4		xxxxxxxxxx	
48	Enable MAC n°5		Disabled / Enable	
49	Modality of MAC n°5		ID-Tag / Remote control	
50	MAC address of device n°5		xxxxxxxxxx	
51	M07 Siren pairing	Memory position for M07 siren	Disabled / Enable	Enable if the wireless M07 Siren have to be paired
52	M07 Siren Mac Address	Siren Mac Address	xxxxxxxxxx	Insert the M07 siren ID code to be memorized
53	B3.3 Module pairing	Memory position for B3.3 module	Disabled / Enable	Enable if the B3.3 Module have to be paired
54	B3.3 Immobilizer Mac Address	B3.3 Mac Address	xxxxxxxxxx	Insert the B3.3 module ID code to be memorized

NR°	FUNCTION	FUNCTION DESCRIPTION	SUGGESTED SET-UP	NOTES
55	Arming time from missing TAG signal	Sets the arming time from the detection of an RSSI with a value lower than the value set in step 35	Standard 32 sec	
56	Enabling input for heater monitoring	Enables the Trunk input (pin 14) to detect the heater on/off signal	Disabled	
57	Override without ACC	Allows you to activate the Override code entry procedure via Button/Led	Disabled	
58	Enabling outputs for coded relay	Enable outputs to pilot the coded relays	Disabled	
59	Erase the coded relay PIN CODES	Allows you to reset the PIN CODE of the external module for a new self-learning		
60	Read and modify coded relay pin code	View and allow to change the PIN CODE of the external module "coded relay"		
61	Arm/Disarm by the CS094 module also	Allows pairing with the Phonocar CS094 Camper module	Disabled	

# OPERATION BY LIN BUS CONNECTION: Electrical connection suggestions



**NOTE:** for the White/Black wire LIN connection insert its contact in the Led/button connector.

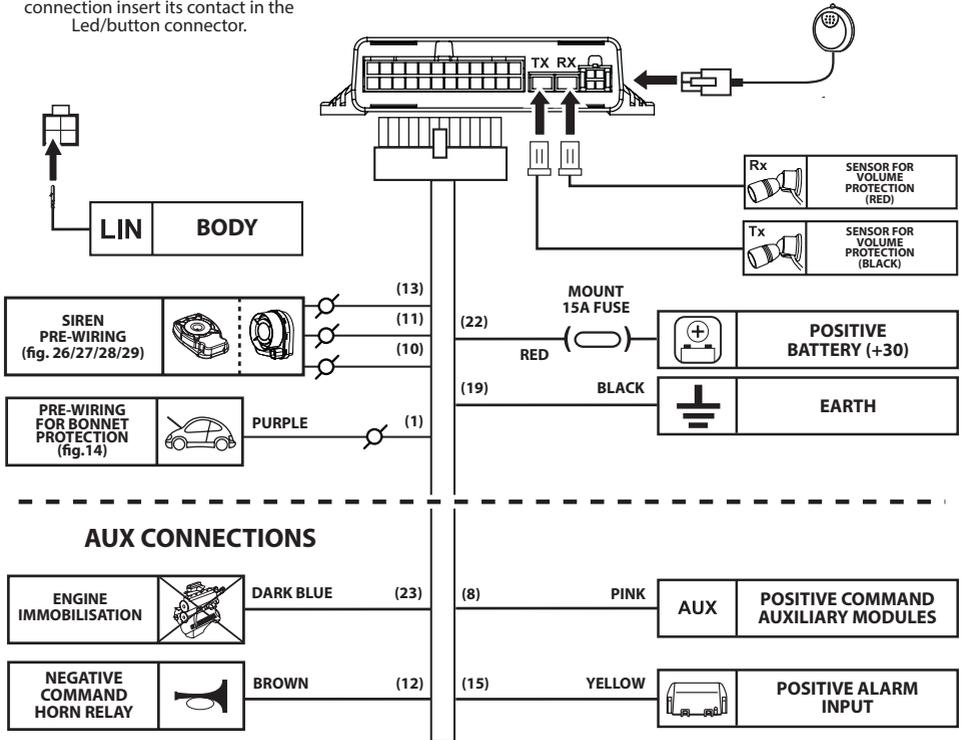


Fig. 4

## OPERATION BY STAND ALONE ID-TAG CONNECTION: Installation

Recommended configuration for installation in vehicles where for technical reasons or strictly linked to restrictive regulations of the automotive manufacturer it is not possible to connect to the digital networks present in the vehicle.

This kind of installation only requires power connections. (+30, +15, +30G, GND).

Connecting the turning indicators remains a valid option on vehicles where it is technically possible.

The anti-theft protection will be ensured by the volumetric, anti-lifting, against starting attempts protections and any further auxiliary protections. For this type of system it is necessary to combine the **META EVOCAN** central unit with at least 1 **TAG B9.5** and one of the available sirens.

**NOTE: The 30G signal** (12V signal present when the vehicle network is in operation and not present during the sleep mode state) is easily findable in almost all FUSE BOXES of current vehicles on the market. To test it, you need to locking the vehicle doors and wait a few minutes for all the internal accessories to turn off (panel, ceiling lights, etc.) and check the +30G signal pass from 12V to GND. If the vehicle does not have this +30G signal (old vehicles) it is possible to recreate it by combining a 1C module following the diagram on the website [www.metasytemcorporation.com](http://www.metasytemcorporation.com) > *Technical Area/Utility Module/1C Module/Converter +15.* - Connect the GREEN/WHITE wire of the **Utility Module 1C** module to PIN no. 6 of the **META EVOCAN** central unit.

**NOTE:** The central door locking remains independent of the arming of the alarm and follows the original vehicle logic.

### OPERATION

The arming of the alarm occurs automatically after the vehicle's network enters in sleep mode (GND on the **+30G** connection) and the **B9.5 ID-Tag** presence near the vehicle is no longer recognized for 20 sec.; (with factory RSSI settings the distance is approximately 20m in free air). If necessary, it is possible manually arming the system by pressing the ID-TAG button once. This will happen regardless of the **+30G** signal status and in this case the subsequent disarming must take place by pressing the TAG; the arming is signaled by two short buzzer sounds (if the function is activated) and by the switching ON of the LED, which through a rapid sequence of flashes show the arming status.

In the first seconds after activation, any break-in will be signaled by a short acoustic sound. The alarm system will be fully operational after 26 sec since the last alarm detection or arming. The complete arming will be signaled by a slow flashing of the LED. The alarm is disarmed automatically after the vehicle network start running (12V signal on the **+30G** connection) and the ID-Tag near the vehicle is recognized. Normally the vehicle network starts running unlocking the doors by remote control: (with factory RSSI settings the distance is approximately 10m in free air).

If for any reason the **ID-Tag** is not recognized before entering the vehicle, the anti-theft system will produce a PRE\_ALARM cycle signaled by repeated short buzzer sounds. Once the pre-alarm time has expired, if the presence of the **ID-Tag** has not yet been recognized, the system will produce an optical/acoustic alarm cycle which can be interrupted by entering the Override security code or using an electronic key as described in the emergency deactivation chapter" or by pressing the TAG button regardless of the **+30G** signal. If the LED flashing after disarming informs that during the last protection period the system has performed one or more alarm cycles. Reading the number of flashes it is possible to trace the type of alarm that has occurred. The alarm memory will reset when the instrument panel is switched on for the first time or after the next alarm arming. It is necessary to inform the customer that, in this specific configuration, any opening of the vehicle at a distance greater than the RSSI setting will not produce the automatic protection disarming. If it is necessary to enter the car, the TAG must necessarily be near the car. The manually disarming the alarm while keeping the TAG at a distance greater than the set recognition (RSSI setting) involves an inevitable automatic re-arming if the vehicle network will pass in sleep mode.

**NOTE:** If for vehicle maintenance reasons it is necessary to temporarily block the automatic activation of the system, it is possible to place it in **GARAGE MODE** by pressing the TAG for a long time with the ignition ON; the function activation will be signaled by a rapid continuous flashing of the LED with ignition ON; The **GARAGE MODE** will be only deactivated by pressing the TAG for a long time with the ignition ON.

**NOTE:** It is possible to carry out the system without connecting the **+30G** signal. In this case, the system, in the functional range of Bluetooth, will not be able to recognize the real need to arm and/or disarm, causing even repeated arming/disarming in the vicinity of the vehicle. In this case, it is recommended to disable the 1 BUZZER and 25 FLASHES programming steps.

### MANDATORY ADDITIONAL ACCESSORIES

<b>TAG B9.5</b>	(it is recommended to pair at least 2 programmed as ID-TAG automatic transmission).
<b>SIREN</b>	To be chosen from the 3 available in the range (M03 – M06A – M07A)

### OPTIONAL ADDITIONAL ACCESSORIES

<b>AUXILIARY PROTECTION MODULES</b>	To improve the vehicle protection
<b>TELEMATIC SYSTEM</b>	Allows georeferenced vehicle monitoring (the connection between <b>META EVOCAN</b> and the T.342 telematics unit is via Bluetooth and through it is possible to send information the alarm triggering and the activation of the vehicle's instrument panel, simplifying the installation of the telematics control unit which can be connected with just 2 wires)

## OPERATION BY STAND ALONE ID-TAG CONNECTION: product setup

### PROGRAMMING (advice for correct product set-up)

Before proceeding with the electrical installation it is necessary to configure the alarm for operation taking in care the specific vehicle technical requirements and the customer requests.

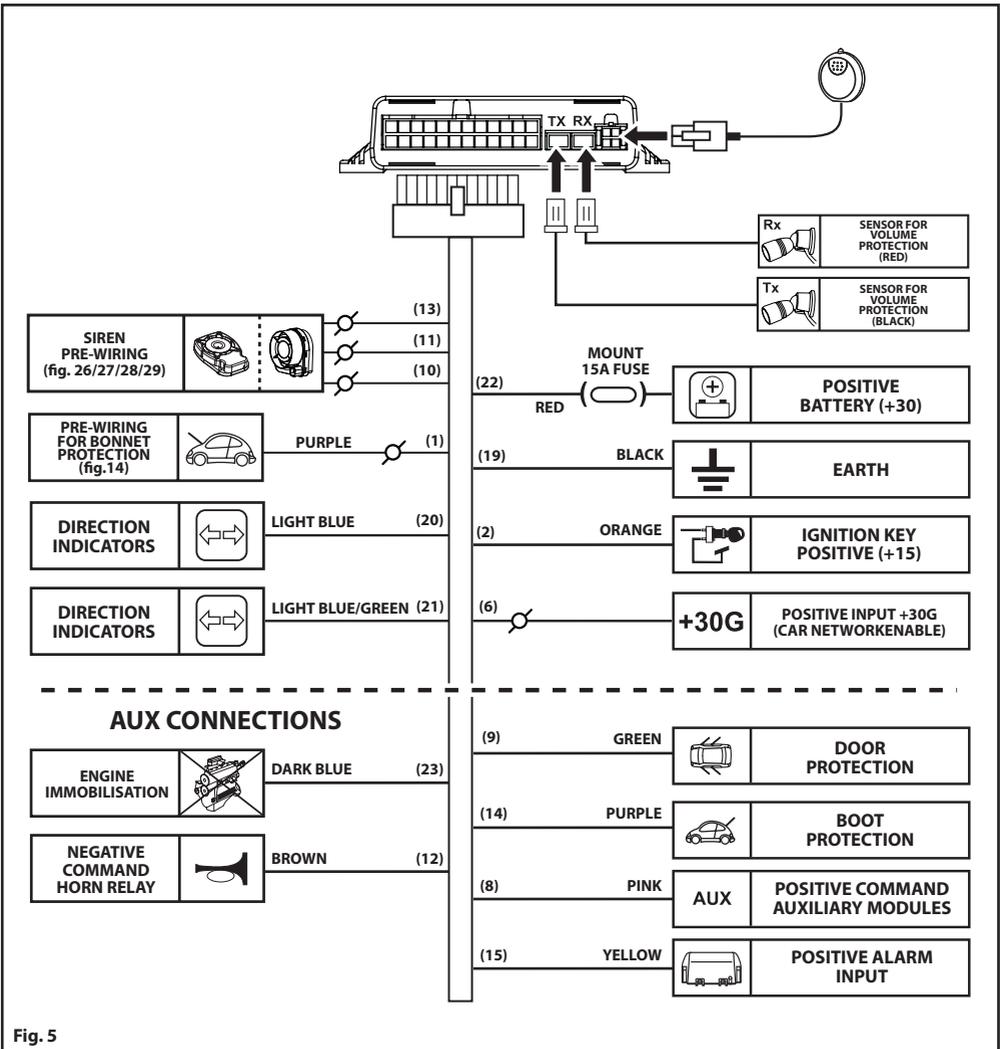
**NOTE:** following are highlighted the essential programming steps for this specific operation.

NR°	FUNCTION	FUNCTION DESCRIPTION	SUGGESTED SET-UP	NOTES
<b>1</b>	<b>Buzzer</b>	<b>Acoustic signals during ON/OFF</b>	<b>Disabled</b>	<b>Evaluate with the customer whether or not he wants On/Off signals</b>
2	Stimule check	Acoustic signal with present stimule	Enable	Don't modify it
3	Perimetrical alarm test	Check during the immunity time	Enable	Don't modify it
4	CENTRAL DOOR LOCKING TIMING	Tempi di comando chiusure	0,5 sec	Don't modify it
<b>5</b>	<b>BLINKER COMMAND</b>	<b>Blinker command type (power or Hazard button)</b>	<b>Single pulse on Hazard button</b>	<b>Select the command depending of the vehicle (see technical sheet)</b>
6	Horn/siren command	Pin12 brown wire command type	Alternate	If used to drive the clason/horn the alternate type is suggested.
7	US sensitivity	Ultrasound protection sensitivity	Sens. 4	Change only if necessary
8	Tilt enabling	Tilt sensor function enabling	Tilt Off	If tilt is enable fix the alarm unit firmly to the vehicle to avoid false alarms
9	Door protection	Continuous - repeats the door alarm cycle if left open	Continuous alarm	Don't modify it
10	COMFORT DOOR LOCKING	Door locking command timing	Comfort Off	Don't modify it
11	DEAD LOCK	Double closing command input	Disabled	Don't modify it
12	Override Code	Emergency code	XXXXX	Shows the override code and allow its modification
13	3 digits override code	Code simplification	Disabled	Reducing the override code from 5 to 3 digits
14	Anti Carjacking	See detailed manual for this feature	Disabled	Use it only if strongly request by the customer
	CAN Protocol	Vehicle communication protocol	XXXXXXXXXX	Don't modify it
	Trasponder	Emergency by reading the original trasponder	On	Don't modify it
15	Long flashing Blinker	The Blinker flashing for a period after finish the acoustic alarm cycle	Off	Define it with customer
16	Immunity time	Timing between the arming and full protections	Standard 26 Sec.	Don't modify it
17	Delay on doors alarm trigger	Timing between trigger and start alarm	Short time 0,3 sec.	Don't modify it
18	Set-up blinker	Adjusts the activation pulse time to drive the hazard button	Standard 0,2 Sec.	Select it by depending of the vehicle (see technical sheet)
19	Time before monitor the blinker feedback	Adjusts the delay before monitor the blinker feedback	Standard 0,5 Sec.	Select it by depending of the vehicle (see technical sheet)
20	Monitoring the blinker feedback	Adjusts the monitoring length on the blinker feedback	Standard 1,2 Sec.	Select it by depending of the vehicle (see technical sheet)
21	Electronic Keys cancel	Allow to cancel all the Electronic Keys if lose one of them		Cancel all the memorized Electronic Keys
22	Enable self learning for Electronic Keys	Function to memorize new Electronic Keys		Enable the self learning to memorize new Electronic Keys
<b>23</b>	<b>Self arming</b>	<b>Function to enable the automatic arming</b>	<b>Enabled</b>	<b>Mandatory to set for this functioning</b>

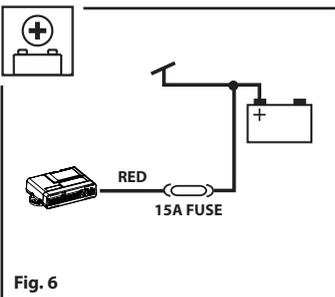
NR°	FUNCTION	FUNCTION DESCRIPTION	SUGGESTED SET-UP	NOTES
24	<b>Self arming type</b>	<b>Type of self arming definition</b>	<b>Engine immobilizer + alarm protection</b>	<b>Mandatory to set for this functioning</b>
25	ENABLE BLINKER FLASHING	Blinker flashing during ON/OFF	Enabled	Don't modify it
26	Number of blinking during ON	Number of blinking during ON	2	Don't modify it
27	Number of blinking during OFF	Number of blinking during OFF	1	Don't modify it
28	Pre-disarm	Complete disarming only if ID-TAG is present	Off	Don't modify it
29	<b>Enable BLE features</b>	<b>Function to enable the bluetooth connections</b>	<b>On</b>	<b>Mandatory to set for this functioning</b>
30	Emulated PSA LIN Bus	Enabling the alarm unit LIN bus line to be connected to the vehicle	Off	Don't modify it
31	Instanting starter immobilizer	Timing to start the starter immobilizer during the Anti Carjacking procedure	Off	Don't modify it
32	External starter immobilizer type	Modality of the external starter immobilizer	GML (C-NC) modality	Don't change it if the external starter relay was not installed
33	Anti Carjacking setting	Anti Carjacking type	All the doors monitored	Don't modify it
34	<b>Enable feature +30G</b>	<b>Enabling the +30G signal monitoring</b>	<b>Enabled</b>	<b>Mandatory to set for this functioning</b>
35	Minimum RSSI to disarming by TAG	Fine tuning of TAG recognition range	5 (0-10)	Don't modify it
36	<b>ENABLE MAC N°1</b>	<b>Memory position for TAG B9.5 remote control</b>	<b>Enable</b>	<b>Mandatory to pair the TAG</b>
37	<b>MODALITY OF MAC N°1</b>	<b>Model of BLE module to be paired</b>	<b>ID-TAG</b>	<b>Select ID-TAG</b>
38	<b>MAC address of device N°1</b>	<b>Module Mac address</b>	xxxxxxxxxx	<b>Insert the device ID code to be memorized</b>
39	ENABLE MAC N°2		Disabled / Enable	
40	MODALITY OF MAC N°2		ID-Tag / Remote control	
41	MAC address of device N°2		xxxxxxxxxx	
42	Enable MAC n°3		Disabled / Enable	
43	Modality of MAC n°3		ID-Tag / Remote control	
44	MAC address of device n°3		xxxxxxxxxx	
45	Enable MAC n°4		Disabled / Enable	
46	Modality of MAC n°4		ID-Tag / Remote control	
47	MAC address of device n°4		xxxxxxxxxx	
48	Enable MAC n°5		Disabled / Enable	
49	Modality of MAC n°5		ID-Tag / Remote control	
50	MAC address of device n°5		xxxxxxxxxx	
51	M07 Siren pairing	Memory position for M07 siren	Disabled / Enable	Enable if the wireless M07 Siren have to be paired
52	M07 Siren Mac Address	Siren Mac Address	xxxxxxxxxx	Insert the M07 siren ID code to be memorized
53	B3.3 Module pairing	Memory position for B3.3 module	Disabled / Enable	Enable if the B3.3 Module have to be paired
54	B3.3 Immobilizer Mac Address	B3.3 Mac Address	xxxxxxxxxx	Insert the B3.3 module ID code to be memorized

NR°	FUNCTION	FUNCTION DESCRIPTION	SUGGESTED SET-UP	NOTES
55	Arming time from missing TAG signal	Sets the arming time from the detection of an RSSI with a value lower than the value set in step 35	Standard 32 sec	
56	Enabling input for heater monitoring	Enables the Trunk input (pin 14) to detect the heater on/off signal	Disabled	
57	Override without ACC	Allows you to activate the Override code entry procedure via Button/Led	Disabled	
58	Enabling outputs for coded relay	Enable outputs to pilot the coded relays	Disabled	
59	Erase the coded relay PIN CODES	Allows you to reset the PIN CODE of the external module for a new self-learning		
60	Read and modify coded relay pin code	View and allow to change the PIN CODE of the external module "coded relay"		
61	Arm/Disarm by the CS094 module also	Allows pairing with the Phonocar CS094 Camper module	Disabled	

## OPERATION BY STAND ALONE ID-TAG CONNECTION: Electrical connection suggestions



## ELECTRICAL CONNECTIONS



Connect the **POSITIVE SUPPLY +30** by placing a 15A fuse or if possible connecting on a protected line of the car.

Pay attention that in the chosen powering point the supply is present even with the vehicle's ignition panel is OFF for some time.

In the latest generation cars many power supplies points are below control of an energy management system that "TURNING OFF" some powering sources after the ignition panel is OFF for some time; The energy management times and methods depending on the vehicle Brand and we recommend following what is described in the Meta System application technical data sheets.

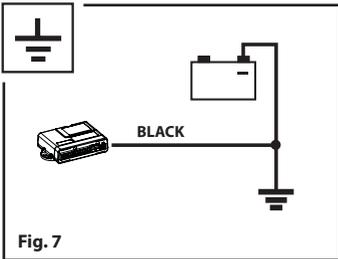


Fig. 7

Connect the **GND NEGATIVE** to an original branch of the car. Avoid connecting to unidentified cables which could be negative return signals. Avoid connecting to bolts or screws dedicated to anything else. We recommend following what is described in the Meta System application technical sheets.

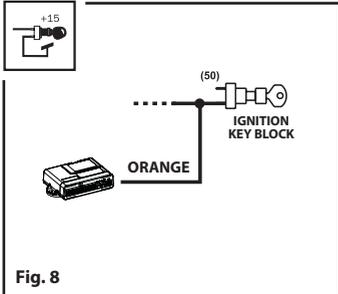


Fig. 8

If necessary for the alarm to function defined and operational on the vehicle, connect the **POSITIVE +15** directly to the fuse box so as to be sure that it is a real power supply depending from the ignition key or button. Avoid testing cables or making connections that are not direct to the fuse box as this could cause damage or store defects on the car memory. By turning all the vehicle functions on and off, check that the positive signal remains present with the ignition ON. Make sure that in any condition the positive is not present with the ignition OFF. We recommend following what is described in the Meta System application technical sheets.

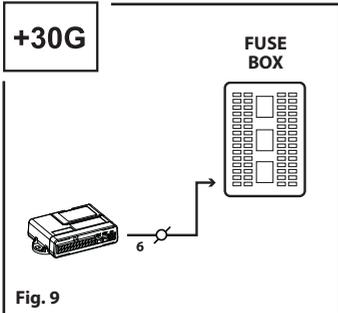


Fig. 9

Connection usable only in the Stand Alone **ID-TAG** system configuration. The **POSITIVE +30G** behavior that there is positive signal +12V when the vehicle network is in operation, while it will be GND a few time after doors locking or with different times even after prolonged inactivity (timing is dependent of the car brand). If available, we recommend following what is described in the Meta System application technical sheets.

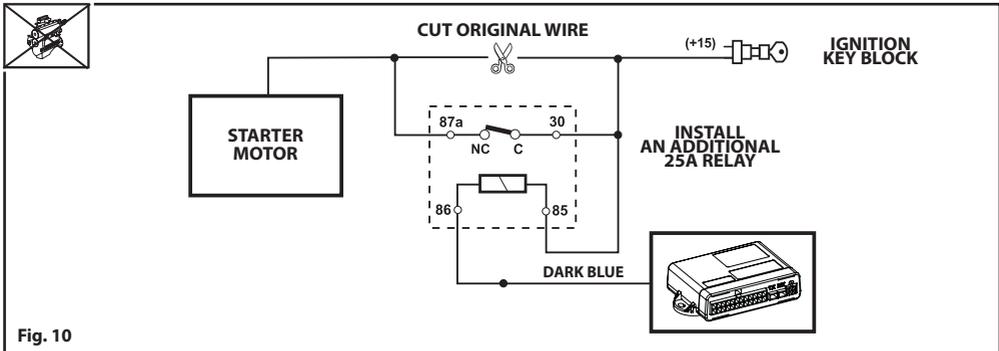
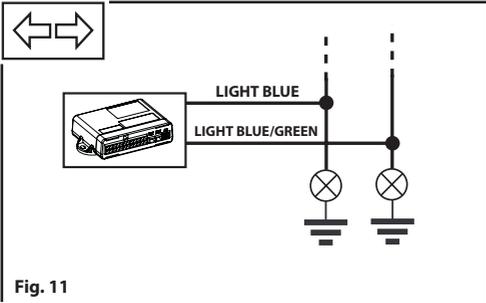


Fig. 10

When **META EVOCAN** is armed an attempt to start the engine activates the negative signal on the BLUE wire. It is possible, through the external relay, execute the vehicle **ENGINE IMMOBILIZER** circuit opening. By the setting at step 32 of the PRG007 programming is possible select the command type:  
 GML (C - NC) = Negative command on BLUE wire with +15 ignition key ON signal when system is armed.  
 CAN (C- NC) = Negative command on BLUE wire when the vehicle CANBUS network is on running and the system is armed.  
 For the exact point where to cut the original wire we recommend following what is described in the Meta System application technical sheets (if available the info for a specific vehicle)..



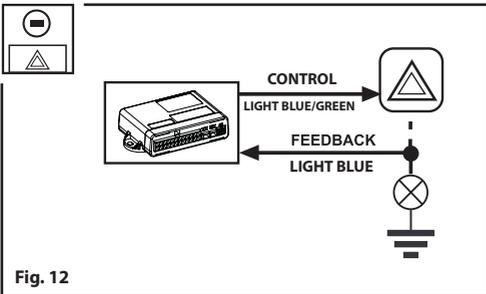
If necessary for alarm operation modality decided and in function of the vehicle type, make the connections for driving the direction indicators during the alarm phase and signals.

This product drives the direction indicators with positive signals connected directly to the **lamps** (Fig.11) or with negative signals directly to the **Hazard Warning Light** button on the vehicle (Fig.12).

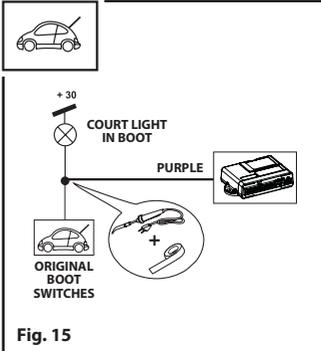
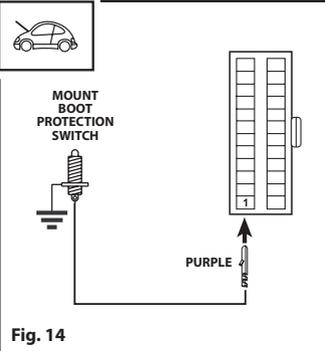
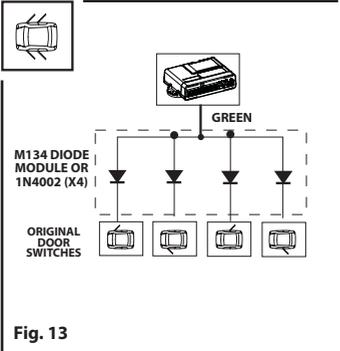
**META EVOCAN** has the extension flashing function active for which the direction indicators flash even for 25 seconds after the end of the sounding alarm; if you want to deactivate it, you must select OFF using the **PRG007 PROGRAMMER**.

**NOTE:** the driving function with positive signals to the lamps is NOT available for **EVOCAN NO PWR** products.

We recommend following what is described in the Meta System application technical sheets.



If necessary for alarm operation modality decided and in function of the vehicle type, it is possible to monitor the bonnet, doors, boot by three dedicated analogic inputs lines. For each line is available a specific alarm memory feedback, for this reason we suggest to pay attention for the correct connections avoiding to reverse them. When the **M07 Wireless Siren** is used the monitor of the bonnet opening is transmitted to the **META EVOCAN** control unit directly via Bluetooth (see sirens chapter). We recommend following what is described in the Meta System application technical sheets.



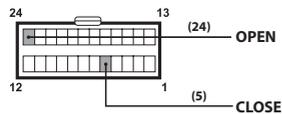


Fig. 16

If necessary for alarm operation modality decided and in function of the vehicle type, it is possible to drive the central door locking system by two negative commands 0,5 sec long.

It is also possible to change the command times by the **PRG007 Programmer - step 4**.

Through **steps 10 and 11** it is possible to activate the **WINDOW LIFTER** and **DEAD LOCK** functions, used in obsolete vehicle platforms.

We recommend following what is described in the Meta System application technical sheets.



Fig. 17

If the vehicle technically allows it, via the **PINK/BLACK** wire, it is possible to drive an auxiliary window module.

The **EVOCAN** unit can drive it by a positive output command of 12 sec long. It is possible to inhibit the output by pressing the **LED BUTTON** before arming the alarm.

We suggest to carefully check technically the possibility of this auxiliary module pairing.

## AUX



Fig. 18

If it is necessary to combine an auxiliary protection module, it is possible to drive it via the **PINK** wire which provides a positive signal for the entire alarm time armed.

A positive signal on the **YELLOW** wire will trigger the alarm coming from the auxiliary protection module.

## CAN

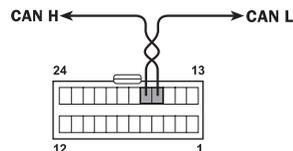


Fig. 19

Connection usable only in the **CANBUS** system configuration.

The **CANBUS** connection allows **META EVOCAN** to have all the digital information necessary to manage the safety control of the vehicle.

To permit the correct behavior the **META EVOCAN** unit must be correctly programmed by the **PRG007 Programmer**.

It is strongly recommended to strictly follow what is described in the Meta System application technical data sheets.

## LIN

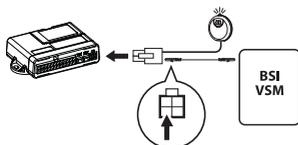


Fig. 20

Connection usable only in the **LINBUS** system configuration.

The **LINBUS** connection permit **META EVOCAN** to have all the information necessary to manage the vehicle protection and possibly to control some functions, e.g. turning indicators.

To allow all this, **META EVOCAN** must be correctly programmed using the **PRG007 Programmer**.

It is strongly recommended to strictly follow what is described in the Meta System application technical data sheets..

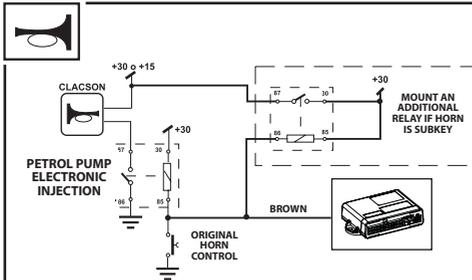


Fig. 21a

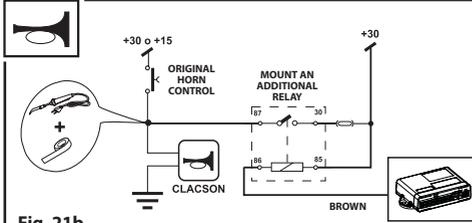


Fig. 21b

If you need to sound the vehicle horns during the alarm, you can use the BROWN cable, on which there is a negative command for the entire alarm cycle. The output signal can be programmed as continuous or alternating with the **PRG007 Programmer** at step 3. If connected to the horn, it is recommended to keep it alternated. Follow the application diagram represented in Fig.21a if the vehicle has a horn **Negative Control** with the ignition on. Follow the application diagram represented in Fig.21b if the vehicle has a horn **Positive Control**.

## CENTRAL DOOR LOCKING

### DIAGRAM FOR NEGATIVE CLOSING

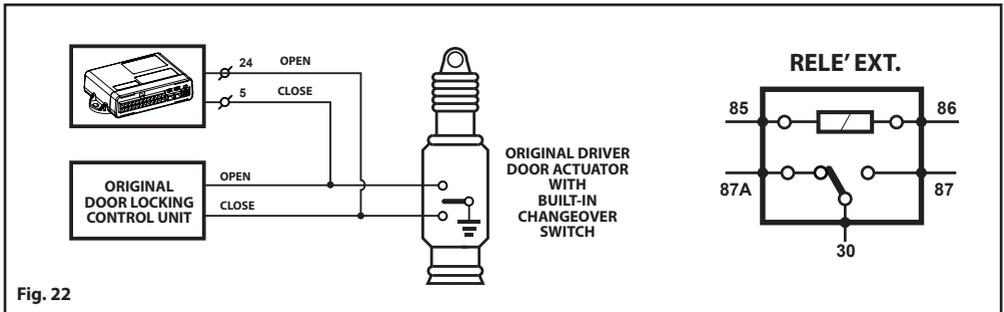


Fig. 22

### DIRECT CONTROLS DIAGRAM

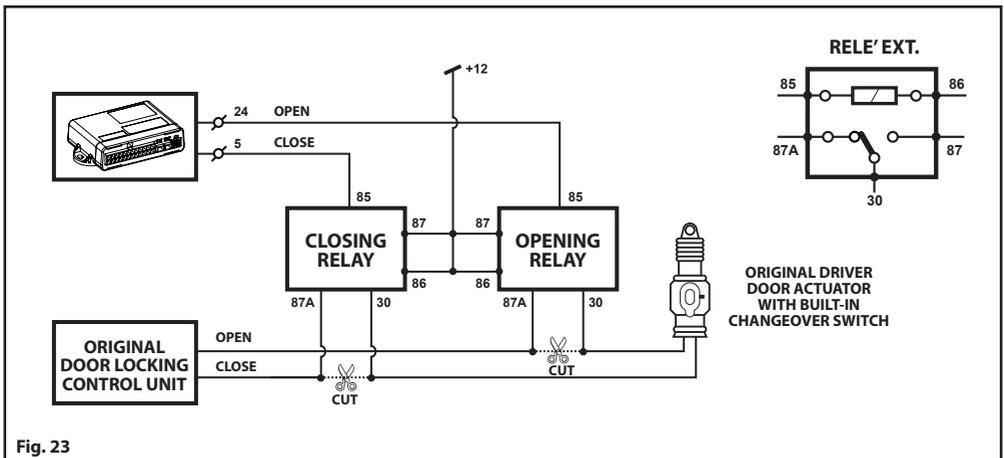


Fig. 23

## DIAGRAM FOR POSITIVE CLOSING

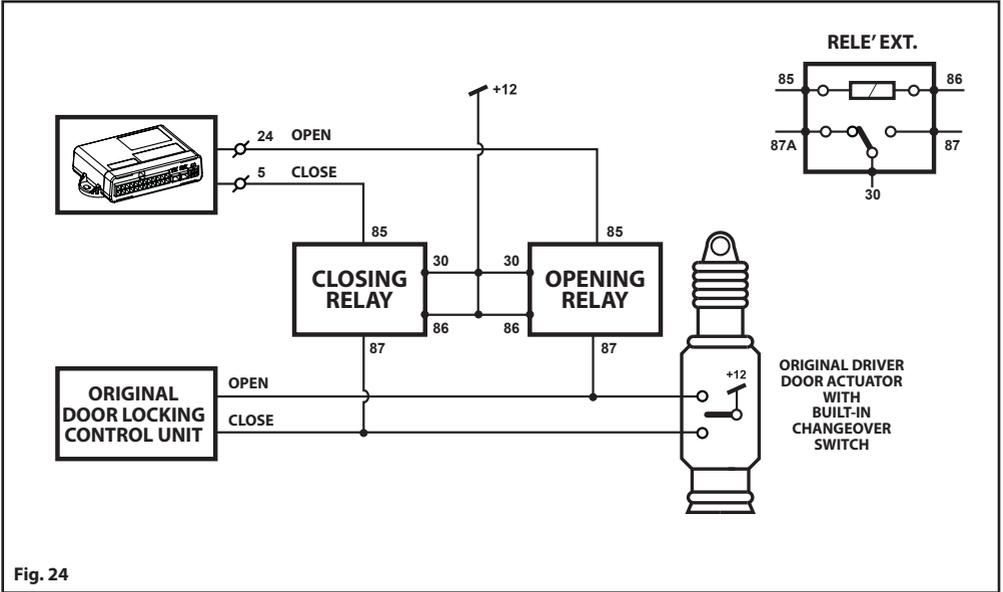


Fig. 24

## ADDITIONAL ACTUATOR CONTROLS DIAGRAM

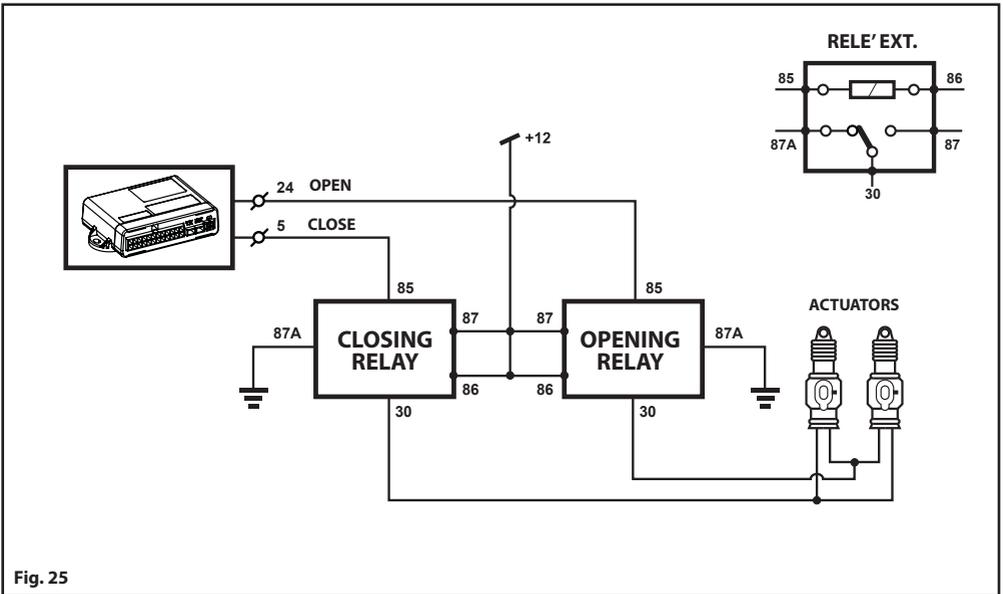
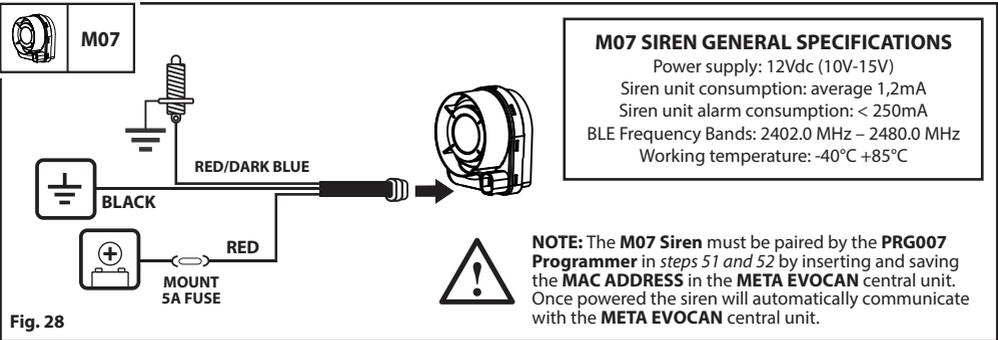
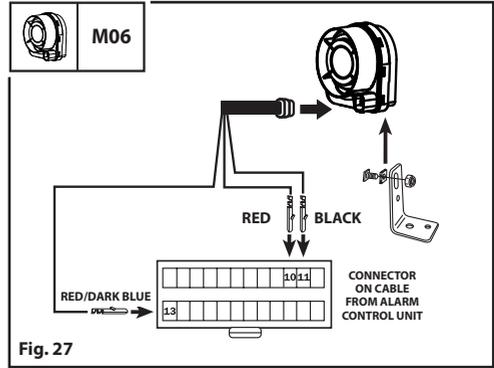
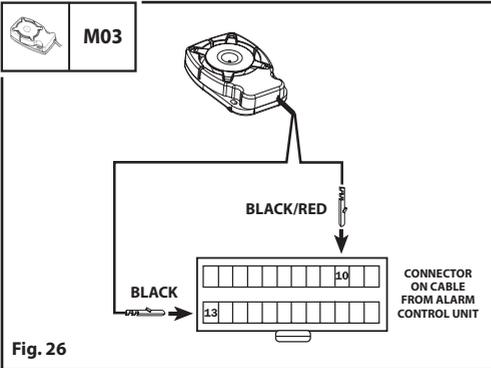


Fig. 25

## COMBINING THE SIREN



The **META EVO CAN** control unit automatically recognises the siren model (M06 or M03) and adapts to it. Automatic recognition is achieved by the acoustic emission of a BOOP at the instant the alarm system is switched on with the instrument panel OFF and to ensure the siren responds make sure the installer connects it before powering the alarm system.



### CAUTION!

**RISK OF EXPLOSION IF THE BATTERY IS REPLACED WITH THE INCORRECT TYPE. ONLY USE THE CORRECT BATTERIES INDICATED IN THE INSTRUCTIONS.**



## ULTRASOUND PROTECTION TEMPORARY EXCLUSION DURING THE HEATER ACTIVATION

If in the vehicle there is a passenger compartment heater is possible, to avoid false alarm due the hot air movement in the compartment, set up the product to automatically exclude the ultrasound volumetric protection during the heater activation. To enable this feature you must select ON it using the **PRG007 PROGRAMMER** and in this way you can connect the purple wire (Connector Pin 14) to an analogic signal coming from the heater, this signal have to be negative GND during the heater activation and free or positive when heater is deactivated; with the alarm system armed when it receive the negative signal on the Pin 14 the volumetric protection will be excluded for all the time of the GND presence and it will be reactivate 2 minutes after the heater deactivation.

## PRE DISARMING BY THE ID TAG FEATURE

The alarm system has possibility to pair the **ID TAG** (B9.5 or B9.6) to assure the complete disarming if the **ID TAG Card** is present near the vehicle only, this permit to avoid the complete alarm system disarming cloning the original vehicle codes by scanner or connecting the laptop to the EOBD vehicle plug and acceding to the CANBUS network.

To enable this feature you must select ON it using the **PRG007 PROGRAMMER**, with the enabled feature in case of opening the doors unlocked by the original remote control (without presence of the paired **ID TAG**) the central unit will search the **ID-TAG** for the first 5 sec. and after the siren will emit acoustic signals (beep) and completing this warning signals the alarm system will trigger a complete alarm with siren sounding and blinker flashing.

## ULTRASOUND SENSORS

Ultrasound Eco/Doppler is the technology used by **META EVOCAN** for volumetric protection (passenger compartment). The sensors (TX transmitter and RX receiver) are of the adjustable type so as to allow excellent performances, immunity to false alarms and adaptability to the various types of passenger compartment.

The sensitivity in factory set up allows for adequate protection of almost all conventional vehicles thanks to an automatic system that adapts the transmission to the volume to be protected.

In the case of particular volumes or reflective/absorbent materials placed inside the passenger compartment, it is possible to change the sensitivity using the **PRG007 PROGRAMMER** step 7.

The mechanical application of the capsules is designed to be on glass by fixing them using special double-sided adhesives on the front window of the vehicle.

For instructions, refer to the instructions in the accessory bag *Cod. A3100202*.

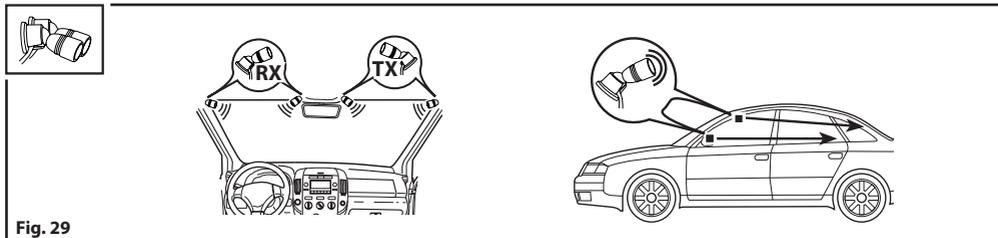


Fig. 29



**NOTE:** When installing the ultrasound capsules, pay particular attention that they or the connection cables do not hinder the possible opening of an AirBag, also considering that in a possible impact they cannot in any way contribute to injuries to passengers.

## STATUS LEDS AND RELATIVE INDICATIONS

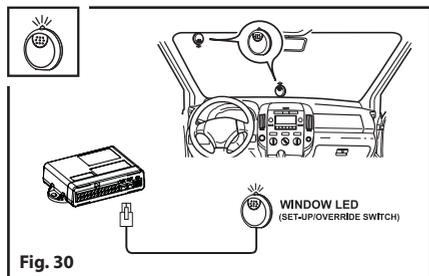


Fig. 30

Install the status LED on the edge of the car's windshield.

It must be convenient for entering a possible emergency **VERRIDE CODE** using the button on its front, and at the same time visible both from inside the vehicle and outside.

The LED informs you about the status of the alarm system (see the following table).

### SIGNALLING OF THE CONTROL UNIT VIA LED STATUS

LED SIGNALLING		CENTRAL UNIT STATUS
Off	 _____	Central unit disconnected or disarmed
Slow Flashing	 	Central unit armed in surveillance mode
Fast Flashing	 	Central unit armed in immunity time
Very Fast Flashing	 	Central unit armed in immunity time with volumetric protection excluded

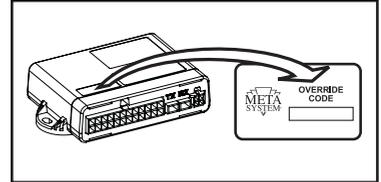
**ALARM MEMORY:** If the LED flashes after the alarm has been deactivated it means one or more acoustic alarms were triggered in your absence. To find the cause refer to the table **ALARM MEMORY** present in the user manual.

## EMERGENCY DEACTIVATION

Emergency deactivation is also possible with the alarm system by entering the **VERRIDE CODE** using the Push button/ LED or alternatively using the **ID-TAG B9.5** programmed as a radio control and stored hidden inside the vehicle. For some vehicles emergency deactivation is available using the original car key with transponder. To know on which car models the **EMERGENCY DEACTIVATION** with original transponder is available, refer to the product/ car list on the [HYPERLINK www.metasystemcorporation.com](http://www.metasystemcorporation.com).

### VERRIDE CODE

The control unit is supplied with a customized **VERRIDE CODE** and you can find it on the **"Factory code" sticker** affixed on the control unit itself. This means you do not have to customize it yourself. AFFIX the **"Factory code" sticker** on the **VERRIDE CARD** which is in the pack; for its use please follow the instructions given in the user handbook. If you want to change the **VERRIDE CODE**, do so using the **PRG007 PROGRAMMER**.



### EMERGENCY DEACTIVATION USING THE TRANSPONDER OF THE ORIGINAL REMOTE CONTROL

In some of the **CAN-BUS** and **LINBUS** protocols available for the **META EVOCAN** product, the emergency function with transponder is available. This function makes it possible to avoid the use of additional electronic keys by exploiting the recognition of the transponder chip included in the original remote control. To deactivate the alarm in emergency condition, simply activate the instrument panel using the original key and wait a few moments until the transponder chip is recognized.



***The deactivation function by transponder is present in many product CAN-BUS protocols META EVOCAN and the information for fitting on individual vehicles are available ONLINE on website [www.metasystemcorporation.com](http://www.metasystemcorporation.com) in the CAR-ALARM technical area.***

***If the function is enabled, to verify the engine immobilizer protection by simulating an attempt to start with the product inserted, it is necessary to shield or remove the transponder from the car key to prevent the product disarming and consequently the engine immobilizer protection exclusion.***

The manufacturer guarantees proper functioning of the system in compliance with the applicable requirements. The information contained in this manual is purely informative and, with the aim of improving the product, may be subject to changes without notice.

## SIMPLIFIED EU DECLARATION OF CONFORMITY

Hereby, Meta System S.p.A. declares that Car Alarm types META EVOCAN, ID-TAG type B9.5 are in compliance with Radio Equipment Directive 2014/53/EU.

**Frequency Bands in which the radio equipment operates:**

2402.0 MHz – 2480.0 MHz <10mW e.i.r.p.

**Certificate Holder's Address:**

Meta System S.p.A. - Via Galimberti 5, 42124 Reggio Emilia (Italy)

The full text of the EU Declaration of Conformity is available at the following internet address: <https://docs.metasystem.it/>



[www.metasystemcorporation.com](http://www.metasystemcorporation.com)

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