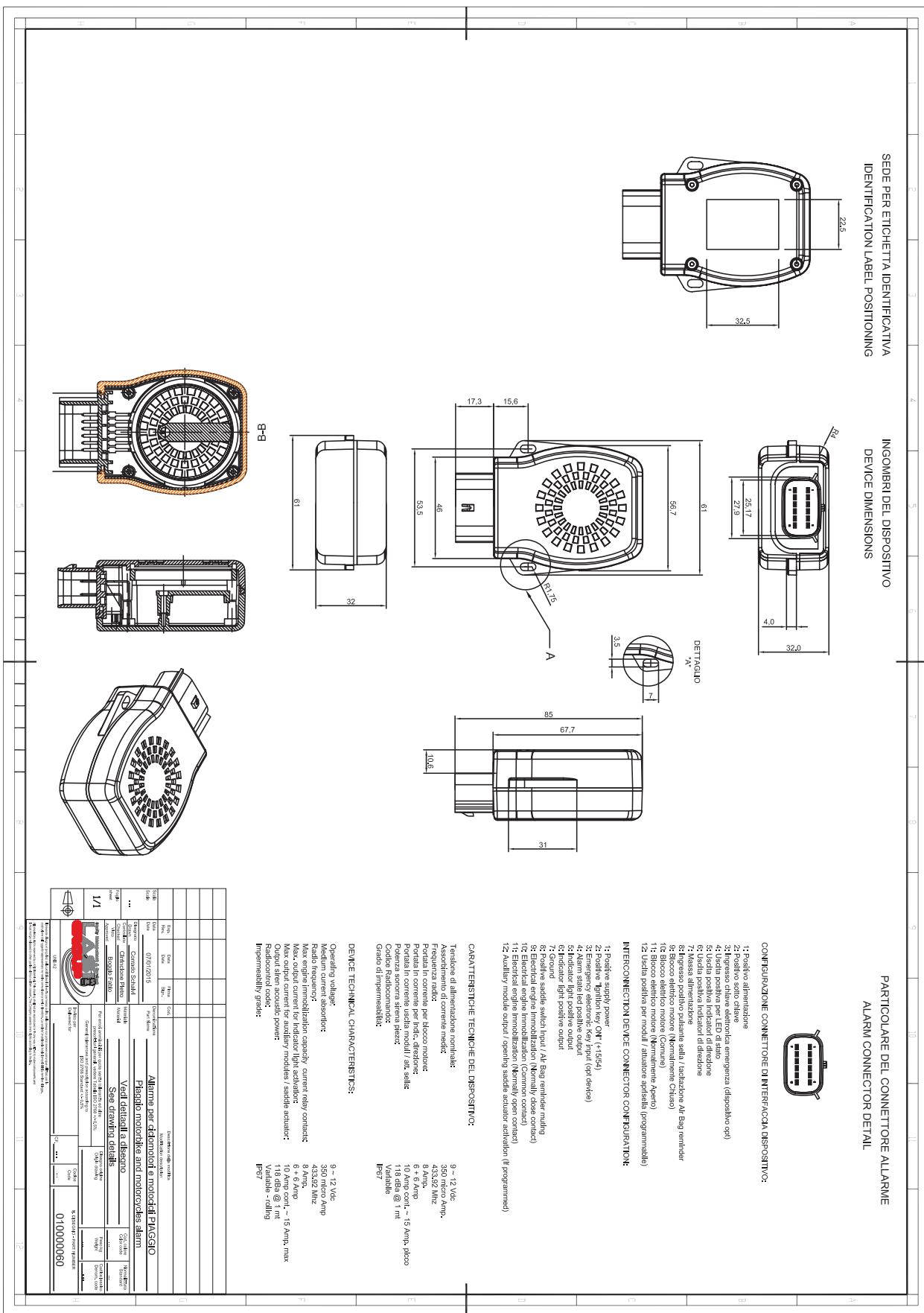
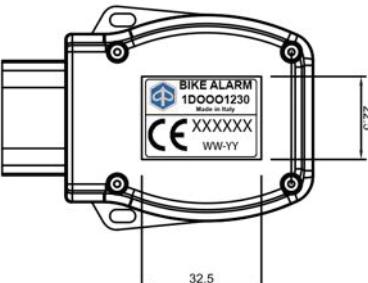
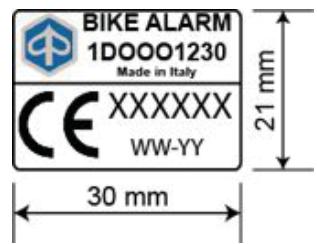


## MAX DIMENSIONAL OF DEVICE AND LABEL IDENTIFICATION POSITIONING



PARTICULAR OF IDENTIFICATION LABEL POSITIONING

	<p>PARTICULAR OF IDENTIFICATION LABEL</p> 
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ALARM SIMULATOR INTERFACE



REMOTE CONTROL INTERFACE



REMOTE CONTROL PUSH BUTTON MANAGEMENT

- A. ON / OFF System
- B. Panic alarm / siren management
- C. Alarm programming button
- D. Saddle actuator activation

SIMULATOR INTERFACE MANAGEMENT

1. Left indicator light simulator
2. Right indicator light simulator
3. Output indicator led simulator
4. Engine immobilization Normal closed contact relay indicator
5. Engine immobilization Normal opened contact relay indicator
6. Ignition Key activation indicator
7. Out put for adding modules or saddle actuator activation indicator
8. Reset electronic key reader
9. Cut off out put led switches (to use only for measuring current absorption)
10. Ignition key switch simulator
11. Under seat perimetral push button simulator

ALARM CONNECTOR



POWER SUPPLY CONNECTOR



INDICATION USE FOR ALARM WITH SIMULATOR  
ALARM SYSTEM WORKING DESCRIPTION

### CONTROL INTERFACE:

It will be possible to control alarm system with below hardware / software devices:

- LASI remote control with 4 push button (please refer to following details).
- Electronic key for emergency alarm disarming.
- Alarm emergency unlock by PIN CODE to generate with vehicle ignition key, (procedure not used on kit provided with electronic key).

LASI remote control management detail:

<b>"A" push button, main alarm management:</b>	<b>"B" push button, siren management:</b>
<ul style="list-style-type: none"> <li>• With +15 OFF: Alarm arming or disarming</li> <li>• With +15 ON after 5": anti Hijack activation (if programmed)</li> <li>• With +15 ON: within 5": Remote control learning</li> <li>• With +15 ON: PIN CODE value confirmation</li> <li>• With +15 OFF: exclusion of air bag reminder function (if programmed)</li> </ul>	<ul style="list-style-type: none"> <li>• With +15 OFF: Panic alarm (with disarmed system or in alert condition)</li> <li>• With +15 OFF and in alarm condition: Siren cut off</li> <li>• With +15 ON IN PROGRAMMING CONDITION: enabling / disabling programmable functions.</li> <li>• With +15 OFF in neutral time: siren cut off</li> <li>• With +15 ON: PIN CODE personalization</li> </ul>
<b>"D" pushbutton, adding modules output and saddle actuator activation management</b>	<b>"C" pushbutton, programmable functions management :</b>
<p>In order to delete an electronic key to the system, is necessary to turn on for three time the ignition key, at the third time to leave it in on position, and then to push "A" button of remote control, following press "A" and "B" push button of remote control. The system will give a long acoustic signal in order to confirm the deleting of electronic key.</p>	

LASI electronic key management:

	If electronic key is read from system: <ul style="list-style-type: none"> <li>• At system disarmed: arming of the system</li> <li>• At system armed: disarming of the system</li> <li>• With anti hijack running: anti hijack function immediately disarming.</li> </ul>
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### **BASICALLY FUNCTIONS**

#### ARMING:

Pushing "A" button of remote control or inserting the electronic key in its reader, the system will arm itself giving an flash trough indicator lights (led 1 and 2 on simulator), an acoustic signal and lighting led installed on vehicle with continuous light (led 3 on simulator). After this operation, is not possible to start engine vehicle (If interrupter 10 is activated, simulator will turn off led 4 and turn on led 5).

#### NOTE:

- If anti hijack function is not programmed, is not possible to arm the system with ignition key activated.
- If during arming, perimeter input is activated (e.g. opened saddle or side stand up), system will signal these conditions emitting, after 4 seconds below arming and in adding at canonical signalling, a long acoustic signal and a long flash of indicators lights (led 1 and 2 on simulator).

#### NEUTRAL TIME:

When arming signalling is finished, system is in neutral time condition, signalled by led on with continuous light (led 3 on simulator). During this period of time, the system doesn't give alarm signalling. Neutral time has 30" of duration. During neutral time is possible to check if all sensor work correctly, tilting vehicle, connecting to positive a perimeter input (if not configured as "air bag reminder") or activating ignition key, the alarm will emit an acoustic signal confirming the correct working of analysed sensor.

#### TILT SENSOR AND SIREN CUT OFF:

During neutral time, is possible to cut off siren pushing "B" button of remote control. Siren exclusion, will be signalled by emission of an acoustic signal, and by one flash of indicator light (led 1 and 2 of simulator). In this working condition, in case of alarm device will active only indicator lights (led 1 and 2 on simulator). At next arming of the alarm, it will restore normal working of the device. If tilt sensor exclusion is desired, it's possible to do it simply pushing "C" button of remote control. Exclusion of tilt sensor, will be confirmed by emission of two acoustic signals and two flashes of indicator lights (led 1 and 2 of simulator). In this configuration, theft attempt will be signalled only if ignition key will be activated or a perimeter input will be activated. Also in this working mode, at below arm of the system, normal working will be restored.

#### **ALERT CONDITION:**

Finished neutral time, system goes in alert condition, it is signalled by led flashing (number 3 in simulator).

From now, system is ready to signal theft attempt.

Led will flash in these mode:

- First 30", following end of neutral time: one flash every 2".
- Below: one flash every 10 seconds.

#### **ALARM:**

If during alert time a theft attempt is made, (not authorized activation of ignition key, vehicle tilt or perimeter sensor activation), the system will signal it immediately activating siren with high volume and with indicator lights blinking activation (led 1 and 2 on simulator) for about 30". If optional COMBI device will be electrical connected to alarm, the vehicle user will be contacted by phone. If cause of alarm will persist, alarm system will be signal emitting a new alarm cycle, with below limitation:

<b>ALARM CAUSE</b>	<b>ALARM DURATION</b>	<b>MAXIMAL CYCLE ALARM</b>
Ignition key activation	30"	Without limits
Tilt sensor	30"	5 cycles
Perimeter input	30"	5 cycles
Self power	30"	Without limits

#### **SIREN CUT OFF IN ALARM CONDITION:**

If during an alarm condition, siren cutting off is desired, it is possible to make it simply by pushing "B" button of remote control, until siren is sounding. It will stop to sound immediately putting system in alert condition.

#### **DISARMING WITHOUT ALARM MEMORY:**

Pushing "A" button of remote control or inserting electronic key in its reader with system in alert or alarm condition, system will disarm itself signalling disarming with two flash of indicator lights (led 1 and 2 on simulator), two acoustic signals and turning off indicator led (led 3 on simulator). From now is possible to start engine vehicle.

#### **DISARMING WITH ALARM MEMORY:**

If during alert condition, one or more alarm condition will occur, disarming the system they will be signalled with emission of indicator lights four flash (led 1 and 2 of simulator) and with emission of four acoustic signal.

User vehicle may verify sensor that cause alarm condition simply pushing "C" button of remote control.

Sensor will be signalled by the following modality:

<b>ALARM CAUSE</b>	<b>SIGNALLING EMISSION</b>	<b>USED INTERFACE</b>
DISARMING SYSTEM, FOUR FLASHES BY INDICATOR LIGHT (LED 1 AND 2 ON SIMULATOR) AND FOUR ACOUSTIC SIGNAL WILL BE EMITTED. PUSHING "C" BUTTON OF REMOTE CONTROL, BELOW SIGNALLING WILL BE GENERATED:		
Ignition key activation	Single flash	Led
Perimeter input (if programmed)	Two flash	Led
Tilt sensor	Four flashes	Led
Self power (if available)	Six flashes	Led

#### **VOLUNTARY SIREN ACTIVATION (PANIC ALARM):**

If vehicle user desire, he will may activate voluntarily alarm siren simply pushing "B" button of remote control. This option is available with disarmed or in alert condition system.

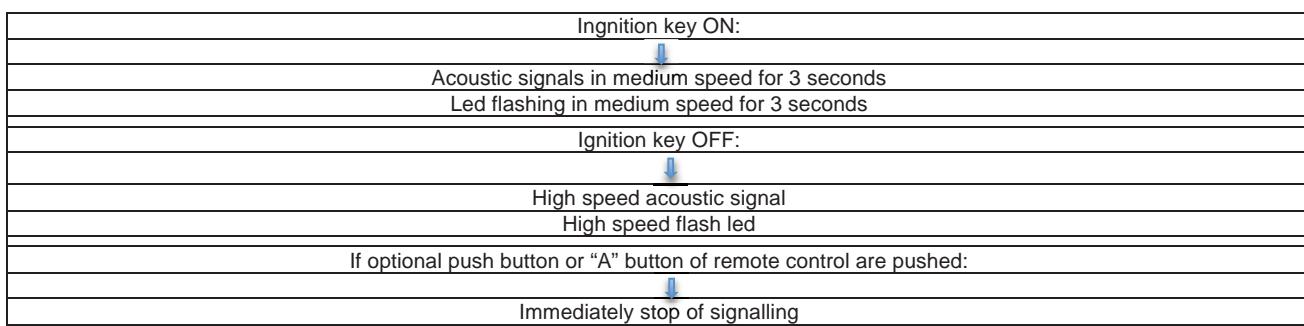
## OPZIONAL FUNCTIONS

### AIR BAG REMINDER:

With this function, is possible to support vehicle user in order to use correctly active security system implemented in technical bike clothing (air bag).

If programmed this function, at ignition key the alarm will emit a series of acoustic signal with high volume and medium speed, a series of led flashes with medium speed (led 3 on simulator), in order to remember at vehicle user the operation of hook air bag activator at vehicle. System will advise vehicle user for about three seconds. When ignition key will be deactivated, system will emit a series of acoustic signals at high volume with a speed flash of led (led 3 on simulator) in order to remember at vehicle user to uncouple air bag activator from vehicle. It will possible to stop the signalling in two ways: by pushing "A" button of remote control or by pushing an optional button to install in the vehicle. Air bag reminder function, is programmable (please refer to relative paragraph).

Below table resume working way of air bag reminder function:



### SADDLE OPENER BY REMOTE CONTROL:

This function increases vehicle comfort. If vehicle has an electric actuator on saddle lock, it will be possible, if electrical connection available and function programmed on system, unlock saddle by remote control.

With system disarmed, push "D" button of remote control, system will emit a series of speedy flash by led (led 3 on simulator) and at the same time it will active saddle actuator unlocking saddle lock (the activation of the saddle actuator, in the simulator will be signal by lighting of led number 7).

## **PROGRAMMABLE FUNCTIONS**

### **DESCRIPTION:**

The system may be programmable according vehicle user desires. Normally, system is supplied with a lot of these functions disabled. Installer, according vehicle user, will custom configuration of system. All these functions are listed below:

FUNCTION	DESCRIPTION	SUPPLIER SETTING	
Air bag reminder	Enable acoustic / optical signalling in order to support vehicle user for correct using of active security system implemented on technical bike clothing (Air Bag).		OFF
PIN 8 input main connector configuration	Allow to select working way of perimeter input (Terminal number 8 of main connector) Function ON: PIN 8 will works as perimeter input. Function OFF: PIN 8 will works as stop signalling air bag reminder function.	ON	
Acoustic signalling alarm ON/OFF	Enables acoustic signalling during arming / disarming system and during alarm memory.	ON	
Passive arming	After 30 seconds from ignition key deactivation, if system is not armed, engine immobilization will be automatically activated. The function activation will be signalled by acoustic signal emission. If someone will try to start the vehicle engine, the system will emit a series of acoustic signals. In order to de activate function, it will be enough to arm and disarm system pushing "A" button of remote control or with electronic key		OFF
Automatic rearming	After 30" from system disarming, if vehicle is not moved, or used or ignition key is not activated, the system will rearm itself automatically.		OFF
Pre alarm	If an alarm condition is caused, the siren will be activated for 5". If in below 30" another alarm cause will be occurred, siren will be activated for 30"		OFF
Anti hijack	Pushing "A" button of remote control with ignition key activated, system will be emit one speedy flash with indicator lights. After 30" the siren will start to sound, after other 30" engine immobilization will be activated. De activation of anti hijack procedure is possible only with electronic key or PIN CODE procedure. During anti hijack function, it will be not possible to start vehicle engine and siren will be activated continuously for 30" with pause of 10" from sounding cycle and following. NOTE: in order to activate anti hijack function, is necessary that ignition key is must be activated at least 5".		OFF
Module Output programming	Allow to select working mode of module output connected to PIN12: <ul style="list-style-type: none"> <li>• ON: positive output for adding modules (for COMBI connection)</li> <li>• OFF: positive control for saddle actuator</li> </ul>	ON (Adding module connection)	
Tilt sensor exclusion	Allow tilt sensor exclusion	Sensor ON	

### **PROGRAMMABLE FUNCTIONS ENABLE / DISABLE MODE:**

In order to program one of previously described functions, will be necessary to follow below indications:

1. Activate and de activate for three times vehicle ignition key, at third time it must be leave activated.
2. At third ignition key activation (leaving it activated) led vehicle (led 3 on simulator) will emit a series of blink, in order to signal starting of programming procedure.
3. Until 5" press "C" push button of remote control, system will emit three acoustic signals and three led blinking (led 3 on simulator).
4. Following, system will emit a speedy flash with indicator lights (led 1 and 2 on simulator), will emit an acoustic signal in low tonality and will turn off led (led 3 on simulator). In this way system will indicates that now is positioned in first function (one flash with indicator light and one acoustic signal) and that this function is disabled. From now, is possible to set first function, (air bag reminder signalling). Vehicle led (led 3 on simulator) turned off will indicate that this function is deactivated. If function activation is desired, it will be enough to push "B" button of remote control, led (led 3 on simulator) will be turned ON and system will emit a acoustic signal in order to confirm function activation. To program function 2 (perimeter input configuration), push "C" button of remote control, system will emit two acoustic signals and two flashes of indicator lights (led 1 and 2 of simulator). These signalling will confirm that system can set function number two (mode working of pin 8 input between perimeter input or air bag reminder management). Vehicle led (led 3 on simulator) on, will indicates that function is active. Is function deactivation is desired, it will be enough to push "B" button of remote control, led vehicle (led 3 on simulator) will be turned off and system will emit a acoustic signal in low tonality confirming deactivation of function.
5. This procedure is the same for all functions. Number of indicator light flashes (led 1 and 2 on simulator), number and tonality of acoustic signals will indicate which function is in programming.

For more details, please refer to below table:

Start of programming procedure:		Enable / disable function modality
Activate and deactivate vehicle ignition key, at third time leave it activated.		
Push "C" button of remote control until 5".		
System will emit three acoustic signal simultaneously at three flash of vehicle led. Following a flash of indicator lights and a low tonality acoustic signal is emitted, finally system turn off vehicle led. In this condition is possible to program first function		
1	Air bag reminder function	Push "B" button to enable (Led on, high tonality acoustic signal emission). Push "B" button to disable (Led off, low tonality acoustic signal emission).
		Push "C" button to shift at following function System will emit two acoustic signal and two flashes of indicator lights
2	PIN 8 configuration	Push "B" button to set PIN 8 as perimeter input (led on, high tonality acoustic signal emission). Push "B" button to set PIN 8 as muting of air bag reminder function (led off, low tonality acoustic signal emission).
		Push "C" button to shift at following function System will emit three acoustic signal and three flashes of indicator lights
3	Acoustic signals ON/OFF	Push "B" button to enable (Led on, high tonality acoustic signal emission). Push "B" button to disable (Led off low tonality acoustic signal emission).
		Push "C" button to shift at following function System will emit four acoustic signal and four flashes of indicator lights
4	Passive	Push "B" button to enable (Led on, high tonality acoustic signal emission). Push "B" button to disable (Led off low tonality acoustic signal emission).
		Push "C" button to shift at following function System will emit five acoustic signal and five flashes of indicator lights
5	Automatic rearming	Push "B" button to enable (Led on, high tonality acoustic signal emission). Push "B" button to disable (Led off low tonality acoustic signal emission).
		Push "C" button to shift at following function System will emit six acoustic signal and six flashes of indicator lights
6	Pre allarm	Push "B" button to enable (Led on, high tonality acoustic signal emission). Push "B" button to disable (Led off low tonality acoustic signal emission).
		Push "C" button to shift at following function System will emit seven acoustic signal and six flashes of indicator lights
7	Anti hijack	Push "B" button to enable (Led on, high tonality acoustic signal emission). Push "B" button to disable (Led off low tonality acoustic signal emission).
		Push "C" button to shift at following function System will emit eight acoustic signal and six flashes of indicator lights
8	Module out management	Push "B" button for module output activation after 5" from arming system (Led on, high tonality acoustic signal emission). Push "B" button for switch module output to saddle actuator activation. (Led off low tonality acoustic signal emission).
		Push "C" button to shift at following function System will emit nine acoustic signal and nine flashes of indicator lights
9	Tilt sensor enable / disable	Push "B" button to enable tilt sensor (Led on, high tonality acoustic signal emission). Push "B" button to disable tilt sensor (Led off low tonality acoustic signal emission).
<b>NOTE:</b> <ul style="list-style-type: none"> <li>If anti hijack function is enabled, in order to avoid vehicle security during its running, it is necessary, during system installation, to interrupt engine starting circuit, not a circuit that can cut off engine during vehicle running.</li> <li>In order to finish system programming, is enough to turn off vehicle ignition key in every point of programming procedure. All set parameters until switching off ignition key will be saved.</li> <li>If user desire to change some programmed parameters, it is necessary, from programming and following, to wait about 5" before restart procedure</li> </ul>		

## EMERGENCY FUNCTIONS

### DESCRIPTION:

If a remote control is lost with system armed, emergency function will allow disarming it. There are two kind of function: hardware and software.

### HARDWARE FUNCTION, ELECTRONIC KEY:

Electronic key is a reply of remote control but without radio device. With armed system, will be enough to put key in its reader, system will disarm itself instantaneously signalling operation as described in disarming chapter.

### SOFTWARE FUNCTION, PIN CODE:

PIN CODE is two digit code stored in alarm memory. It will require from system after an alarm cycle or during anti hijack function if electronic key is not available. If correct code is composed, the system will disarm itself immediately. The procedure to set PIN CODE is following:

1. With armed system, activate and deactivate vehicle ignition key.
2. An alarm condition will be occurred and siren start to sound, it will complete sounding cycle (30").
3. Until siren is sounding, activate again vehicle ignition key.
4. Led installed on vehicle, will start to emit a series of flash.
5. Count carefully number of led blink.
6. When number of led blink is the same as PIN CODE first digit, deactivate vehicle ignition key in order to confirm digit value.
7. Activate again vehicle ignition key.
  - ✓ Led installed in vehicle, will continue to emit flashes (but really it will re start counting from value 1) in order to allow second digit input.
  - ✓ System will restart counting from value 1, but led flash frequency will be unchanged in order to don't make visible memorized PIN CODE.
8. Count carefully number of led blink.
9. When number of led blink is the same as PIN CODE second digit, deactivate vehicle ignition key in order to confirm digit value.
  - ✓ If one of two digit will be results wrong, siren will sound until finish alarm cycle, it will not be possible to try again system disarming by PIN CODE until cycle end.
  - ✓ If second digit will be correct, system will disarm itself immediately signalling operation as described in chapter DISARMING adding alarm memory for not authorized vehicle ignition key activation.

### NOTE:

This procedure may be used to reset anti hijack function if electronic key is not available.

During anti hijack function, siren will be activated without limit with following sequence: 30" sounding with 10" pause until system disarming by electronic key or PIN CODE procedure.

**PIN CODE CUSTOMIZATION:**

PIN CODE is supplier from manufacturer with random values. Vehicle user will have to customize it in order to increase system security.

**NOTE:**

After changing PIN CODE, vehicle user will have to conserve this code in order to have it available in emergency case but not accessible for no authorized vehicle user.

Procedure to change PIN CODE is below:

1. Activate and deactivate for three times vehicle ignition key.
2. At third activation, (leaving vehicle ignition key activated), led on vehicle will emit a series of speedy flash.
3. Within 5", push "B" button of remote control, system will emit two acoustic signals.
4. Led will starts to emit a series of flashes, when number of flash reach first desired PIN CODE digit, push "A" button of remote control to confirm desired value, system will confirm it with acoustic signal emission.
5. After about 2", vehicle led will re start to emit a new series of flashes, when number of flashes reach value of second desired PIN CODE digit, push again "A" button of remote control in order to confirm desired value. System will confirm second digit and the end of PIN CODE personalization with acoustic signal emission.
6. Led will stop to blink confirming setting of PIN CODE.
7. Turn off vehicle ignition key.

PIN CODE may be changed every time is desired.

## RECOVERY FUNCTION

### NEW REMOTE CONTROL OR ELECTROINIC KEYS IMPLEMENTATION:

If is necessary to improve new remote control or electronic key in the system, is necessary to follow below procedures:

1. Activate and de activate vehicle ignition key for three times, and on third time leave it activated.
2. At third activation (leaving key activated), led will emit a series of quickly flashes in order to signal programming procedure starting.
3. Until 5", push "A" button of working remote control, system will emit five acoustic signals and at the same time 5 led flashes, following, led will start to blink quickly in order to signalling waiting for new remote control signal.
4. Push now, "A" button of remote control to adding, system will confirm learning emitting a acoustic high tonality signal and stopping temporary led flashing.
5. In order to add a new electronic key, follow this procedure until point 3, following, touch the key reader with the electronic key to add, system will confirm learning with emission of acoustic signal and stopping temporary led flashing.
6. At the end of procedure, deactivate vehicle ignition key.

System can learn 5 remote controls and 5 electronic keys.

### REMOTE CONTROL OR ELECTRONIC KEY DELETING FROM SYSTEM:

If the user of the vehicle would have lost an electronic key or a remote control, is possible to delete them from system in order to avoid vehicle utilization from no authorized people. In order to delete remote control or electronic key, follow below procedures:

1. Activate and de activate vehicle ignition key for three times, and on third time leave it activated.
2. At third activation (leaving key activated), led will emit a series of quickly flashes in order to signal programming procedure starting.
3. Until 5" push "A" button of working remote control, system will emit 5 acoustic signals and 5 led flashing to confirm learning function starting.
4. Push now, for 5 times, "A" button of remote control, in this way system will delete all remote control stored in system memory except that in use.
5. At the end of procedure, deactivate ignition key.

### LEARNING OF NEW DEVICES IN CASE OF TOTAL LOOS OF THEM:

If vehicle user loose all of remote controls and new total learn is necessary, it will may necessary make learning operation by intervening on hardware system as following described:

NOTE:

This is a reserved assistance service procedure.

1. Disconnect system from supply power.
2. Open system case removing screws under case.
3. Disconnect self power battery from system PCB (battery is cabled and connected to PCB with a connector).
4. Activate vehicle ignition key, and then reconnect system to electrical connection WITH VEHICLE IGNITION KEY ACTIVATED.
5. System will start learning procedure, as described in paragraph "adding new remote control or electronic key"

NOTE:

This option will be not signalled on instruction manual, it will be available only for service centre or manufacturer assistance organization.

## WORKING PARAMETER ADJUSTING

System improved a digital tilt sensor. It protect vehicle with constant monitoring of its inclination. Finished installation system, it will be necessary to adjust sensor sensitivity according kind of vehicle in which system is installed.

This parameter is adjustable with remote control following below procedure:

**WARNING:**

Tilt sensor sensitivity must be conducted with care, in order to obtain maximal sensitivity with minimal risk of true alarm.

### ADJUSTING OF TILT SENSOR SENSITIVITY:

In order to adjust tilt sensor sensitivity, follow below procedures:

1. Activate and de activate for three times vehicle ignition key, leaving an third time, to leave it activated.
2. At third activation, (leaving it activated), led will emit a series of quickly flashes in order to signal starting of procedure.
3. Until 5", push "A" and "B" buttons of remote control, system will signal start of adjusting procedure emitting a high tonality acoustic signal and emitting a series of 5 sequential led flashes. Every flash correspond at a different level of sensitivity as described below:

1 led flash:	Minimal tilt level alarm 2°
2 led flashes:	Minimal tilt level alarm 4°
3 led flashes:	Minimal tilt level alarm 5°
4 led flashes:	Minimal tilt level alarm 7°
5 led flashes:	Minimal tilt level alarm 9°

Count carefully number of emitted led flashes, when number of flash will reach desired sensitivity level, deactivate vehicle ignition key. System will confirm acquiring tilt sensor sensitivity level emitting a long high tonality acoustic signal .

### Regulatory Notes:

This device complies with Part 15 of the FCC Rules.

Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications made to this equipment not expressly approved by LAVORAZIONI SISTEMI – LASI SRL may void the FCC authorization to operate this equipment.

**NOTE:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

### **Radiofrequency radiation exposure Information:**

The radiated output power of the device is far below the FCC radio frequency exposure limits. Nevertheless, the device shall be used in such a manner that the potential for human contact during normal operation is minimized.