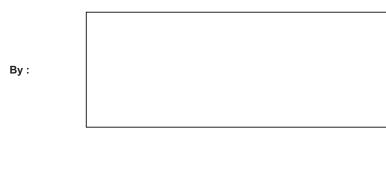
#### INSTALLATION CERTIFICATE

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







**GEMINI Technologies S.r.l.** Via Luigi Galvani 12 - 21020 Bodio Lomnago (VA) - Italia Tel. +39 0332 943211 - Fax +39 0332 948080 www.gemini-alarm.com ISO 9001Certified Company



ALARM KIT 932MHW & Siren 725W

# USER AND INSTALLER MANUAL





Rev.00 - 01/18

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## USER MANUAL

Dear customer, thank you for choosing this GEMINI product manufactured in Italy specifically for recreational vehicles.

Please read the present manual carefully to familiarize yourself fully with the operation of your alarm system and do keep it for future reference.

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

For the user. This sign highlights useful information.	   
For the installer. ndicates that the system will operate according to the selected connections and programming or it simply provides useful setup instructions.	

## **1.0 - OPERATING INSTRUCTIONS**

## **1.1 - COMPLETE SYSTEM ARMING**

Press the lock button on the vehicle remote control or button "1" on the Gemini 738W remote control; system arming is confirmed by a siren chirp and a flash of the turn indicators (if optical/acoustic signals are enabled). The system has a 30 sec. arming delay during which the LED is ON steady.

## **1.2 - SYSTEM ARMING WITH SENSORS EXCLUSION**

To arm the system without arming interior protection press button "3" on the Gemini remote control. System arming is confirmed by a siren chirp and a flash of the turn indicators (if signals are enabled).

Sensors can be excluded via the vehicle original remote control on the following vehicles:

	-,
FIAT DUCATO '11>	i
• FORD TRANSIT '14>	Т
• RENAULT MASTER '10>	-

To exclude the sensors via the vehicle original remote control, proceed as follows:

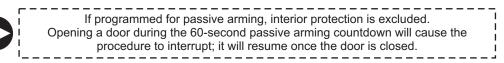
- Lock the vehicle via the vehicle original remote control.
- Wait at least 5 sec., but before the end of the arming delay, and press the lock button again.
- Exclusion is confirmed by 1 low-pitched chirp.

**NB:** THIS CONFIRMATION TONE CANNOT BE EXCLUDED.

pon next

## 1.3 - PASSIVE ARMING

If programmed for passive arming, the system will automatically arm approximately 60 sec. after ignition is switched OFF and the last door is opened and closed. Arming is confirmed by a siren chirp and a flash of the turn indicators (if signals are enabled).



#### 1.4 - ARMING DELAY

There is a 30 sec. delay from the time the system is armed to allow you to leave the vehicle without triggering an alarm: it will be signaled by the LED turned ON steady.

#### 1.5 - SYSTEM ARMED

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

#### 1.6 - ALARM, NEUTRAL TIME BETWEEN ALARMS AND ALARM CYCLES

Alarm events are signaled by optical/acoustic signals. Once the alarm ceases, there is a 5 sec. timeinterval before another alarm can be triggered. Each alarm event can generate up to 10 cycles for each input and for each arming cycle. One alarm cycle lasts for 30 sec.

#### **1.7 - SYSTEM DISARMING**

Press the unlock button on the vehicle original remote control or button "2" on the Gemini 738W remote; system disarming is confirmed by 2 siren chirps and 2 flashes of the turn indicators (if signals are enabled).

If an alarm event has occurred while you were away from your vehicle, it will be signaled, when you disarm the sytem, by 5 siren chirps and 5 flashes of the turn indicators. Alarm causes and relative LED signals are listed in the next paragraph.

#### 3.8 - ALARM MEMORY

The LED memory allows to identify the last alarm event signaled by 5 siren chirps and 5 turn indicator flashes when the system is disarmed.

Turn ignition key "ON" and count the number of flashes. The status LED will flash according to the last alarm detected prior to disarming (see table below).

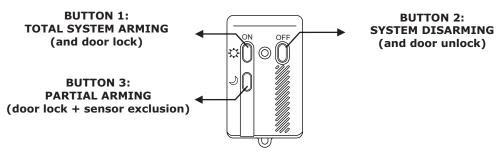
The flash sequence is repeated 3 times; to interrupt turn ignition key "OFF".

The table below lists the various alarm causes and relative number of LED flashes.

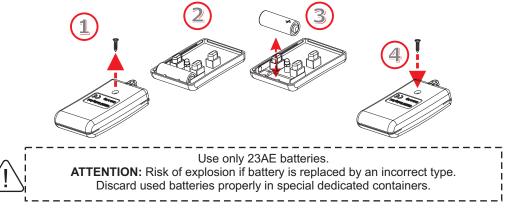
LED FLASHES	ALARM CAUSES	ALARM CYCLES
**●**	Ignition attempt (+15/54)	10
***●***	Door tamper	10
**** <b>●</b> ****	Bonnet tamper	10
<del>****</del> ●****	Boot tamper	10
***** <b>●</b> *****	Volumetric or external sensor	10
******	Wireless magnetic contacts or opening detectors	10
******	Wireless infrared sensors (PIR)	10
<del>**********</del> ●****************	Wire tampering	10
● LED OFF (2 seconds) 🛛 💥 LED ON (1 second)		

## 2.0 - GEMINI REMOTE CONTROL 738W AND BATTERY REPLACEMENT

If the right connections have been made, the vehicle doors will lock/unlock when pressing the arming/disarming buttons.



If the LED blinks 3 times at the press of a button, the battery is weak and must be replaced as follows:



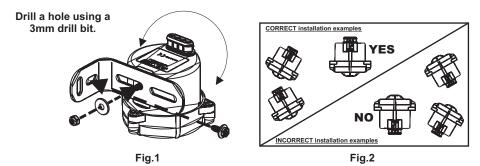
# **INSTALLER MANUAL**

#### 3.0 - WIRELESS SIREN 725W

The wireless waterproof digital siren with back-up battery has a transceiver which operates at a frequency of approx. 2.45 GHz. The 3-wire siren, which also manages the bonnet switch, connects directly to the vehicle battery with no wires to be routed from the engine compartment (siren and bonnet switch) to the control unit inside the cabin. Use the supplied metal bracket and screws to mount the siren to a suitable metal surface in the engine bay, away from heat sources and moving parts.

• The L-bracket can be attached on the long or short side (Fig. 1).

• Face the siren speaker downward so as to avoid water damage (Fig.2).



#### 4.0 - PINOUT TABLES

#### **20-PIN CONNECTOR**

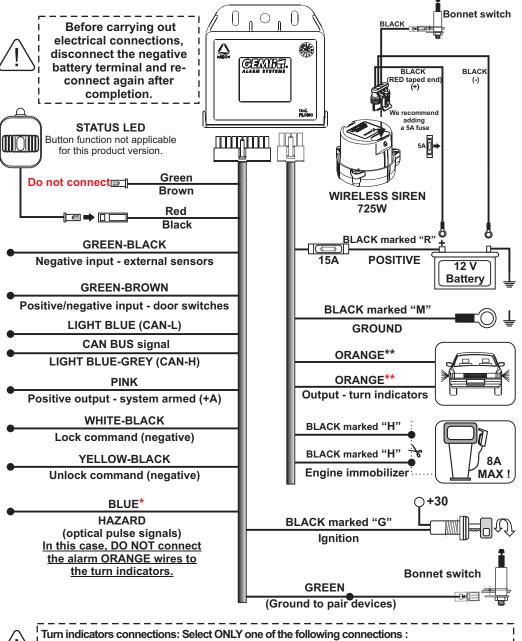
POSITION	WIRE FUNCTION	WIRE COLOUR
-1-		
- 2 -		
- 3 -		
- 4 -		
- 5 -	Positive/negative input - door switches	GREEN-BROWN
- 6 -	DO NOT CONNECT	GREEN
- 7 -	DO NOT CONNECT	BROWN
- 8 -	LED negative output	BLACK
-9-	LED positive output	RED
- 10 -	Ignition	BLACK marked "G"
- 11 -	CAN BUS (CAN-H) signal	LIGHT BLUE-GREY
- 12 -	CAN BUS (CAN-L) signal	LIGHT BLUE
- 13 -	Positive output - system armed (+A)	PINK
- 14 -	Negative input - external sensors	GREEN-BLACK
- 15 -	Negative input - bonnet switch (for pairing purposes)	GREEN
- 16 -	Optical pulse signals (Hazard)	BLUE
- 17 -	Lock command (1.5 sec.* negative pulse when pressing remote control button "1" or "3")	WHITE-BLACK
- 18 -	Unlock command (1.5 sec.* negative pulse when pressing remote control button "2")	YELLOW-BLACK
- 19 -		
- 20 -		

\* If "Double pulse unlock" feature is enabled (par. 8.0), lock/unlock pulse time will be 0.5 sec. instead of 1.5 sec.

#### **8-PIN CONNECTOR**

POSITION	WIRE FUNCTION	WIRE COLOUR
-1-	Ground	BLACK marked "M"
- 2 -	Siren output	
- 3 -	Positive supply	BLACK marked "R"
- 4 -	Positive output - turn indicators	ORANGE
- 5 -	Engine immobilization	BLACK marked "H"
- 6 -	Siren output	
- 7 -	Engine immobilization	BLACK marked "H"
- 8 -	Positive output - turn indicators	ORANGE

For complete information regarding connections, please refer to your vehicle wiring diagram. (See available diagrams in the restricted area of our website: <u>www.gemini-alam.com</u>).

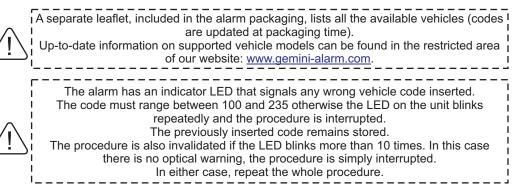


I \*BLUE wire: Optical signals activated by connection to the Hazard switch will ONLY turn ON during an alarm I I condition.

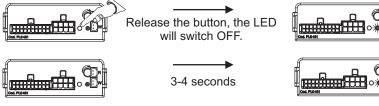
ORANGE wires: turn indicator flashes for all optical signaling functions (factory enabled).

## 6.0 - VEHICLE CODE PROGRAMMING

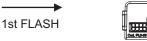
The system must be configured according to the specific vehicle model on which it is to be installed. To help you understand the coding procedure, here below is an example illustrating the configuration procedure. In this case the code to be entered is 1-0-3.



Connect the wiring harness connectors to the corresponding alarm connectors. Press and hold the button shown below until the LED lights up.



The LED will start flashing after 3 to 4 seconds; count the flashes. In this case press the button at the 1st flash which corresponds to number "1".





After 4 seconds, the LED will flash for the second time. Press the button at the 10th flash which corresponds to number "0".



10th FLASH



After 4 more seconds, the LED will flash for the third and last time. Press the button at the 3rd flash which corresponds to number "3".







When the last digit is entered, the alarm system "repeats" the entered code:

- 1 FLASH + A SHORT PAUSE
- 10 FLASHES + A SHORT PAUSE
- 3 FLASHES

Press the vehicle remote control lock/unlock buttons to make sure the alarm system works properly. If needed, disconnect the 8-pin connector and reconnect it after a few seconds.

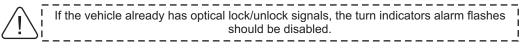
## 7.0 - SYSTEM PROGRAMMING

The table below applies to the system programmed in "standard configuration". Every time you enter in programming mode, the alarm system resets to the default settings. A lack of power during electrical system maintenance, will not affect the programming.

SELECTABLE FUNCTIONS	STATUS	LED FLASHES
Arming/disarming optical signals	Enabled	*
Arming/disarming acoustic signals	Enabled	**
System passive arming	Disabled	***
Door input - positive	Disabled	****
Double pulse unlock	Disabled	*****

## 7.1 - OPTICAL SIGNALS

This function activates the optical signals (turn indicator flashes) that confirm system arming/disarming.



## 7.2 - ACOUSTIC SIGNALS

This function activates the acoustic signals (siren chirps) that confirm system arming/disarming.

## 7.3 - PASSIVE ARMING

This function arms the system 60 sec. after ignition is switched OFF and the last door is opened and closed. Opening a door during the 60-second passive arming countdown will cause the procedure to interrupt; it will resume once the door is closed.

## 7.4 - DOOR SWITCH POLARITY SELECTION

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

## 7.5 - DOUBLE PULSE UNLOCK

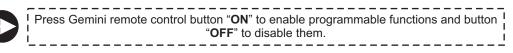
If this feature is enabled, 2 unlocking pulses will be supplied to unlock all doors at the same time. This is useful in case separate actions are required to open the driver door and then the other doors.

## DOUBLE PULSE UNLOCK QUICK ACTIVATION:

- Disconnect the alarm system power supply and ground the Green/Black wire.
- Connect the alarm power supply; 3 quick high-pitched chirps will confirm operation.
- Remove the Green/Black wire from ground.

NB: To reset the default setting, repeat the above steps; 1 low-pitched chirp will confirm the operation.

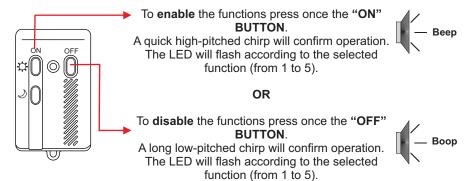
## 8.0 - SYSTEM PROGRAMMING EXAMPLE



To enter in programming mode proceed as follows:

- With the alarm system disarmed, turn ignition key "ON".
- Wait approx. 2 sec. for the LED to light up.
- While the LED is ON, press remote control button "ON".

A quick high-pitched chirp, a long low pitched chirp and 2 flashes of the turn indicators will confirm the system is in programming mode.



In both cases, the system will move on to the next function. Repeat the above steps to enable or disable the other functions. When the last function is programmed, in addition to the confirmation tone, to indicate the end of the programming procedure, the system gives 2 low-pitched chirps, 1 high-pitched chirp and the turn indicators flash twice.

## 9.0 - ULTRASONIC VOLUMETRIC PROTECTION

## 9.1 - CONNECTIONS AND POSITIONING

Insert the WHITE connector in the "W" marked socket.

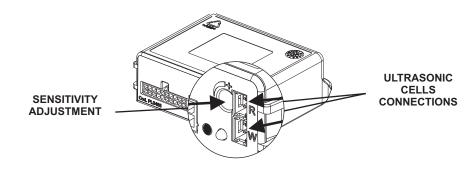
Insert the RED connector in the "R" marked socket.

Install the ultrasonic sensor cells on the top part of the windshield internal pillars, away from the air vents and point them towards the center of the rear window.

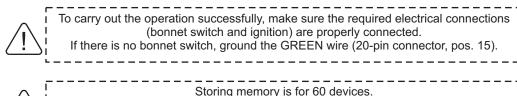
## **13.2 - SENSOR ADJUSTMENT**

To check the sensor sensitivity level proceed as follows:

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



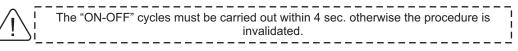
## **10.0 - LEARNING NEW DEVICES**



If an extra device is added, it automatically deletes the first device stored in memory.

To activate the code-learning mode proceed as follows:

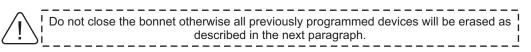
• With the system disarmed, open the vehicle bonnet and keep it opened or ground the GREEN wire.



- Cycle ignition key "<u>ON-OFF</u>"-"<u>ON-OFF</u>"-"<u>ON-OFF</u>"-"<u>ON</u>".
- At the 4th cycle leave ignition key "ON".
- A siren chirp and 2 flashes of the turn indicators will confirm the system is in learn mode. The LED will turn ON steady.

## ATTENTION:

- A siren chirp (only if the siren has already been programmed);
- •2 flashes of the turn indicators (only if the ORANGE wires have been connected).



The system is ready to receive the device codes.

- **1.** Depending on which device has to be paired:
- Remote control: Press twice one of the buttons;
- Magnetic contact: Make it transmit twice (bring contact and magnet together and then move apart);
- Opening detector: Press the button twice;
- Siren: Disconnect and reconnect the connector.
- 2. The LED will switch OFF for approx.1 sec. to confirm the device has been learned.
- 3. Repeat this same procedure to learn other devices.
- 4. Turn ignition key "OFF".
- 5. Two low-pitched chirps and a flash of the turn indicators will confirm the end of the procedure. The status LED will turn OFF.
- 6. Close the bonnet or remove the GREEN wire from ground (bonnet switch).

## **11.0 - DELETING PROGRAMMED DEVICES**

To carry out the operation successfully, make sure the required electrical connections (bonnet switch and ignition) are properly connected.         If there is no bonnet switch, ground the GREEN wire (20-pin connector, pos. 15).         All devices previously programmed can be deleted. To clear memory proceed as follows:         • With the system disarmed, open the vehicle bonnet and keep it opened or ground the GREEN wire.         Image: The "ON-OFF" cycles must be carried out within 4 sec. otherwise the procedure is invalidated.         • Cycle ignition key " <u>ON-OFF</u> "-" <u>ON-OFF</u> "-" <u>ON-OFF</u> "-" <u>ON</u> ".         • At the 4th cycle, leave ignition key "ON".         • Asiren chirp and 2 flashes of the turn indicators will confirm the system is in delete mode. The LED will turn ON steady.         • Close the bonnet closed for at least 8 seconds to clear the memory.         Image:	
<ul> <li>With the system disarmed, open the vehicle bonnet and keep it opened or ground the GREEN wire.</li> <li>The "ON-OFF" cycles must be carried out within 4 sec. otherwise the procedure is invalidated.</li> <li>Cycle ignition key "<u>ON-OFF</u>"-"<u>ON-OFF</u>"-"<u>ON-OFF</u>"-"<u>ON</u>".</li> <li>At the 4th cycle, leave ignition key "ON".</li> <li>As iren chirp and 2 flashes of the turn indicators will confirm the system is in delete mode. The LED will turn ON steady.</li> <li>Close the bonnet or remove the GREEN wire from ground (bonnet switch).</li> <li>Leave the bonnet closed for at least 8 seconds to clear the memory.</li> </ul>	(bonnet switch and ignition) are properly connected.
<ul> <li>invalidated.</li> <li>Cycle ignition key "<u>ON-OFF</u>"-"<u>ON-OFF</u>"-"<u>ON"</u>.</li> <li>At the 4th cycle, leave ignition key "ON".</li> <li>A siren chirp and 2 flashes of the turn indicators will confirm the system is in delete mode. The LED will turn ON steady.</li> <li>Close the bonnet or remove the GREEN wire from ground (bonnet switch).</li> <li>Leave the bonnet closed for at least 8 seconds to clear the memory.</li> </ul>	
<ul> <li>At the 4th cycle, leave ignition key "ON".</li> <li>A siren chirp and 2 flashes of the turn indicators will confirm the system is in delete mode. The LED will turn ON steady.</li> <li>Close the bonnet or remove the GREEN wire from ground (bonnet switch).</li> <li>Leave the bonnet closed for at least 8 seconds to clear the memory.</li> </ul>	
<ul> <li>will turn ON steady.</li> <li>Close the bonnet or remove the GREEN wire from ground (bonnet switch).</li> <li>Leave the bonnet closed for at least 8 seconds to clear the memory.</li> </ul>	• At the 4th cycle, leave ignition key "ON".
Leave the bonnet closed for at least 8 seconds to clear the memory.	
If the bonnet is opened before 8 seconds, the devices will not be	<ul> <li>Close the bonnet or remove the GREEN wire from ground (bonnet switch).</li> </ul>
	Leave the bonnet closed for at least 8 seconds to clear the memory.

- The LED will switch OFF when the devices have been deleted.
- Turn ignition key "OFF".
- A flash of the turn indicators will confirm the end of the clearing procedure.

## 12.0 - SYSTEM RESET

By activating the following procedure, the system returns to the factory default state. This procedure must therefore only be used in case of need, before programming the system or auto-learning the turn indicator flashes.

- To reset the system proceed as follows:
- Disconnect the system.
- $\bullet$  Short-circuit the RED and BLACK wires of the 2-pin LED connector.
- Connect the system; once the alarm system is powered, 4 acoustic signals will sound and the turn indicators will flash 4 times.
- $\bullet$  Remove the previously created short-circuit; the status LED will light up steady.
- Turn ignition key "ON"; reset is confirmed by the wailing of the siren for approx. 3 seconds.
- Turn ignition key "OFF". The LED turns OFF and there are no acoustic signals.

## **13.0 - TECHNICAL SPECIFICATIONS**

#### 932MHW UNIT :

Power supply	12Vdc
Current draw (system armed + LED flashing)	15mA @ 12Vdc
Operating temperature range	-30°C => +70°C
Turn indicators relay contact capacity	8A @ 20°C
Engine immobilizer relay contact capacity	8A @ 20°C
Alarm cycle duration	30 sec.
Maximum positive current output when armed (+A)	700mA

#### SIREN 725W:

Power supply	10 - 15 Vdc
Operating temperature range	-35°C => +80°C
Current draw (when triggered)	1.5A @12Vdc
Current draw (in standby)	2.5mA @12Vdc
Maximum siren output	108dB @ 1m

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

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