# MAGICAR M870AS



Car alarm with two-way remote and remote - start system Installation guide EN



### **English**

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#### I. INTRODUCTION

**MAGICAR M870AS** is a safety device with the highest level of security. Thanks to the 2-way remote with pager you will be immediately informed about possible car intrusion, as well as the manner of the intrusion even though you are too far from the car to hear the siren.

**MAGICAR M870AS** enables you to remote start your vehicle. You can use it to pre-heat the car in the winter or cool it down in the summer just before your trip starts. The vehicle is secured even when the remote start is running and when intruded, the engine will stop and get blocked.

The biggest advance of the two-way remote control is a possibility to use without direct view of the car. All the commands you will send will be confirmed by remote.

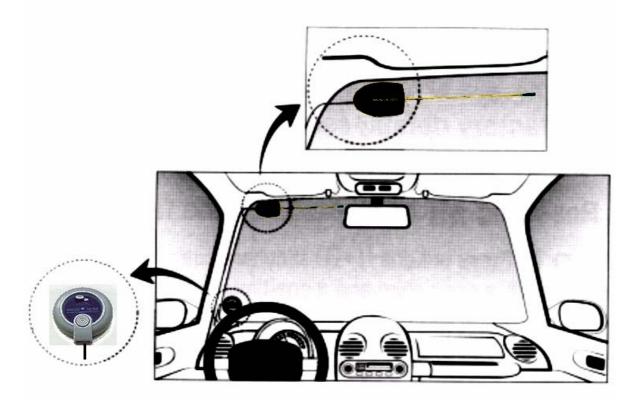
For even higher security level the car alarm is equipped with a two-digit PIN code for entering the valet mode.

#### **II. PLACING**

When fitting each component consider properly the right place for a **microwave interior sensor** (if fitted). Since this sensor is working on magnetic principle, it is very sensitive to a magnetic field developed in car solenoid relays, which may cause a false alarm. For example, when checking a car status by the remote controller, parking lights will flash. If the sensor is placed too close to the lights' relay, it may trigger the alarm. Check this possibility before final fitting of the sensor

Place the **antenna** on front or rear window the way that it is not in your view. As an alternative place you can use the shade on the driver's side. The antenna is designed for a horizontal use. Any other positioning may cause decrease of operation range

Glue the round sticker on the **RPS** sensor and, after taking the foil off, place the sensor on the front window on a visible place, not in the driver's view. As a part of the RPS there is a LED diode and a button. The RPS sensitivity level is adjustable on its back side by a three-position switch.



#### **WARNING!**

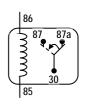
- ➤ When installing the alarm into a manual transmission car, you must not cut off the remote starting loop located in the alarm control unit.
- in case the remote starting loop is cut off, you must reconnect it or install the alarm into an automatic transmission car
- In case of an automatic transmission car, where an engine can be started without a gear stick in 'N' or 'P' positions, it is considered as manual transmission car. This applies that the remote starting loop must not be cut off.
- When installing a door contact, you must find an appropriate wire from the wire bundle of a car (it is important from the security point of view as well as that of remote starting)
- Wiring used for the alarm connection must not be broken nor its insulation damaged. This should prevent wiring from short-circuit.
- > Remote starting wiring must be connected to the wiring in the switchboard.
- ➤ In case of any damage of car's electronics, do not install the alarm.
- After the installation completed, you have to test the alarm according to the user's manual. If the alarm works correctly, a car with the installed alarm can be handed over to a customer.
- > The installation must be carried out in a safe place, in an appropriate distance from busy roads and on a flat surface.
- ➤ Before the installation get all necessary equipment ready (e.g. servos, diodes, relays, etc.)
- When receiving a car from a customer, check functionality of electronics of a car.
- Use secure equipment only.
- > When checking the wires, use a multimeter.
- ➤ When dealing with cars with airbags, you have to remove the airbag fuse or disconnect a respective connector before the installation. After the installation, put the fuse or the connector back to place.
- A key must be removed from the ignition when connecting wires to the switch board. With the key placed in the ignition, an airbag or AMS pilot light could be lit.

#### **III. ADDITIONAL RELAY 12V CONNECTION**

Inappropriate connection of the additional relay may cause various problems when connecting alarm, therefore make sure you read carefully the following examples of connecting the relay 12V.

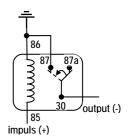
#### Basic relay description:

Contacts 85 and 86 for coil terminals for an electromagnet. If there is no current on this coil, contact 30 is connected to contact 87A. If there is current on this coil, electromagnet attracts terminal 30 to connect it to contact 87.



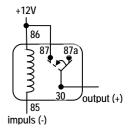
#### If you want to change the signal polarity from (+) to (-)

E.g. the (+) signal of a blinker is changed to a (-) signal and connected to emergency lights.



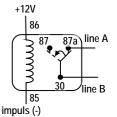
#### If you want to change the signal polarity (-) to (+)

E.g.: When AUX is installed, a relevant device is operating on (+).



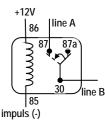
#### If you want to disconnect two wires by a (-) signal

E.g.: With a (-) signal, lines A and B are cut off. Use this when a starter-blocker is installed.



#### If you want to connect shortly two wires by (-) signal.

E.g.: Mostly used for installing alarm gas relays.



#### IV. WIRING ARRANGEMENT

#### **CONNECTOR 1 – CN1**

#### 1 – white – Accessory Output

- connect to the switchboard (to the +12V wire) with the key in the ACC position. If the engine is on, there is no voltage in this wire. It is possible to use the wire to supply A/C or heating system.

#### 2 - yellow- Starter Output

- connect to the switchboard (to the +12V wire during starting) Mustn't be connected to the starter-blocking wire.

#### 3 – green- Ignition Output

- connect to the switchboard (to the +12V wire when ignition on). Supplies power to the starter wiring.

#### 4 - black - Chassis Grounding

- grounding (-). It must be firmly fixed to the car body.

#### 5 - red - +12V Power supply

- power supply, connect to +12V.

#### 6 -red/white - Lights

- This is a line for lights output, connect on +12V or earth depending on the type of lights power supply.

#### **CONNECTOR 2 – CN2**

#### 1 - purple

- Signal lights output. It switches voltage in red/white wire CN1.

#### 2 – purple

- Signal lights output. It switches voltage in red/white wire CN1.

#### 3 - white

- siren output. When activated provides +12V.

#### 4 – grev

- common wire for supply of the trunk opening mechanism. Can be connected to the +12V wire or earth.

#### 5 – grey/white

- relay output for trunk opening mechanism (if supplied with a servo or an electromagnet) can be used to open the trunk. It switches voltage in the grey CN2.

#### **CONNECTOR 3 – CN3**

On this connector the complete relay outputs for control of central locking are located.

#### 1 - yellow/black

- door unlocking relay output (NC)

#### 2 - yellow

- common wire (COM) of unlocking relay

#### 3 - yellow/white

- switch wire (NO) of door unlock relay

#### 4 - green/black

door locking output relay(NC)

#### 5 – green

- common wire (COM) of locking relay

#### 6 - green/white

- switch wire (NO) of door locking relay

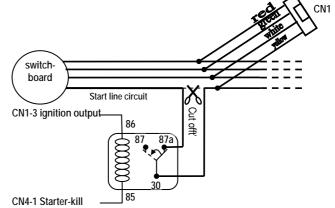
#### **CONNECTOR 4 - CN4**

#### 1 - blue

- wire grounded when alarm on. It controls starter-blocking relay and can also be used for activation of additional modules (interface of el. windows). Rating capacity 250mA. Second relay wire of starter-blocking is connected to ignition. (via the green wire).

#### Starter-blocking connection:

When untying the starter wires you must connect each wire (yellow from relay socket and yellow from connector CN1) separately! CN4-1 Starter-kill



After cutting car starter lines, you have to connect lines to the relay outputs used to block the starter.

#### 2 - yellow/black

- alternator or engine rpm scanning.

Alternator scanning – connect to alternator wire. There should appear voltage of at least 5V when ignition on and engine off, and voltage between 7-14V immediately after the engine is started.

engine rpm scanning – connect to the point where impulses are in proportion to the revs when engine is running (e.g. crankshaft scanner, gear box scanner – flywheel, distributor, etc.)

#### 3 - red/black

- Negative door switch input ( - )

#### 4 – red

- Positive door switch input (+12V)

#### 5 - white/black

- Negative glow plug input (-). Connects only to diesel engines. If there is signal on this wire when remotely started – heating is on, system will automatically switch into a diesel mode, and starting will begin after heating is completed. You may connect the input to e.g.. heating control light.

#### 6 - white

- Positive glow plug input (+).

#### 7 – orange/black

- Negative parking lights input (-). When switching on Magicar M870AS this will indicate the lights are on.

#### 8 – orange

- Positive parking lights input (+). When switching on Magicar M870AS this will indicate the lights are on.

#### 9 - grey/black

- Negative trunk switch input (-)

#### 10 - brown/black

- Negative hood switch input (-)

#### 11 -black/white

- Foot brake input reacting on (+)

#### 12 – light blue/black

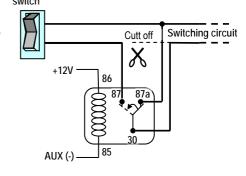
- Emergency Brake input reacting on (-)

#### **CONNECTOR 5 - red**

#### - additional outputs

Additional outputs controlled by the remote control. For switch settings see programming menu 2-08, 2-09, 2-10.

- When connecting AUX, always check the power supply, so it will not damage any equipment in the car.
- When connecting AUX to electric windows you must use an additional 12V relay.
- For instruments (in the car), which are activated in ACC or IG1 positions, connect the diode on the alarm wiring via IG2.







For example: If AUX is connected via IG1 (instead of +12V) in a manual transmission car, check if the reservation mode of remote start setting is active or not. If AUX is connected via the additional relay, use a 30A fuse when connecting to the relay

#### 1 - yellow

- AUX1 output, rating capacity - 250mA.

#### 2 - yellow/white

- AUX2 output, rating capacity - 250mA.

#### or

- the Transponder by-pass control. The output is grounded when the remote starting. Can be used to control the gas valve in cars with carburetor. Output rating capacity is 250 mA. (See Programming menu 2-08, 2-09, 2-10)



#### **Transponder by-pass installation:**

Open the by-pass box and place inside the wiring chip or the key with immobilizer. We recommend to place there only the chip or the key with an unmilled metal part!

#### By-pass wires:

Red	Connect to a green alarm line CN1
Black	Connect to yellow/white alarm line CN5

Place the loop, which is connected to the second by-pass wire, where the immobilizer code reader is placed.

In some cases it is needed to adapt the by-pass loop, so the reader can read the chip code correctly. In this case contact the technical support of your distributor.

**CONNECTOR 6 - black** 

- UART

**CONNECTOR 7 - blue** 

- Antenna

**CONNECTION 8 - blue** 

- Temperature sensor

**CONNECTOR 9 - white** 

- LED indication

**CONNECTOR 10 - white** 

- RPS sensor

**CONNECTOR 11 - red** 

- Shock sensor

1 - black

- grounding

2 – white

3 – red

- power supply of +12 V

4 – yellow

- shock sensor input – second level (-)

- shock sensor input – first level (-)

**CONNECTOR 12 - green** 

- Additional sensor

#### 1 - black

- grounding - In case of turning the alarm or the additional sensors off, the grounding is disconnected which means the sensor is mains operated.

#### 2 – white

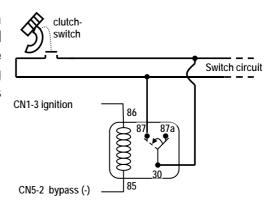
- input of additional sensor reacting on (-)

#### 3 - red

- power supply of +12 V

#### V. CONNECTING OF CLUTCH SENSOR

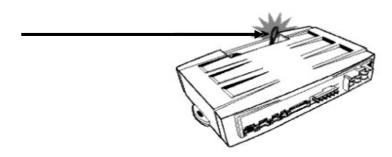
This connecting is needed in case the car, when starting, requires the clutch pedal to be pushed down. The relay is connected to the ignition wire and the by-pass wire. The wire – during starting – is grounded. In this case, the option AUX2 as bypass in Programming menu 2-10 must be ON.



#### VI. REMOTE START LOOP

The remote start loop is located under the cover of the main unit of the car alarm:

# Cut off: Automatic transmission Not cut off: manual transmission



#### Attention!

When the loop is cut off, you can start remotely at anytime. Therefore, the loop can only be disconnected in cars that can be started only in parking or neutral position. In any other cases the loop MUST NOT be cut off!

#### VII. Programming of optional functions

The system allows the programmed activation/settings of the following (mostly system) functions. Because some of them may affect correct functioning of the device, it's important for these changes to be carried out by professional maintenance service only.

Alarm includes a set of two programming menus. You can enter Programming menu number 1 or 2 as follows:

- 1. Turn the ignition on and open the door.
- 2. For programming menu No.1 keep buttons **I+II** pressed for 2 seconds. For programming menu No.2 keep buttons **I+IV** pressed for 2 seconds. Siren will beep once to confirm the access of the Programming mode.
- 3. Within 2 seconds of the step 1 press button **IV** as many times as is the order number of the function you want to set. After each pressing of button **IV** the lights will flash and the siren will beep.
- 4. Wait for a few seconds. Siren will beep and the lights will flash as many times as is the function order number. If the number of flashes is wrong, start the process over.
- 5. Within 5 seconds after flashing/lightning ends, make your choice: Press button I to choose option 1. Siren beeps once, lights will flash once. Press button II to choose option 2. Siren beeps twice, lights will flash twice. Press button III to choose option 3. Siren beeps 3 times, lights will flash 3 times. Press button IV to choose option 4. Siren beeps 4 times, lights will flash 4 times
- 6. The alarm will exit the Programming menu mode.

#### Note:

- If you want to carry out any other changes, start the whole process over again.
- If you hear a long beep, you are out of programming menu area. Start again by the step 1.

#### Failure notice:

If the remote happened to be out of the range when programming changes, it will display "FAIL" notice and the programming will be cancelled.

#### Programming menu No. 1

When the door is open and ignition is on keep buttons I and II pressed simultaneously for 2 sec.

No.	Function	Options			
		Button I	Button II	Button III	Button IV
1-01	TURBO mode	Off	2 min	1 min	-
1-02	Regular starting	Off	On	1	-
1-03	Engine running time	10 min	25 min	3 min	5 min
1-04	Emergency code RPS	Off	On	-	-
1-05	Reservation mode set-up	By closing the door	By closing the door and pressing button I	By closing the door+turning alarm on	-
1-06	Flashing when the doors are open	Off	On	-	-
1-07	Heating time	3 sec	5 sec	8 sec	12 sec
1-08	Flashing when the hood is open	Off	On	-	-
1-09	Engine sensing	Alternator	Revs	-	-
1-10	PIN code	Off	On	-	-
1-11	Start kill/IG kill	IG kill	Start kill	-	-
1-12	Dome light delay	Off	5 sec	15 sec	50 sec
1-13	Ultrasonic input off during remote start	Off	On		
1-14	CAN mode	Read	Read/Write	Read/Write/ Wiindow roll up	

#### Functions description:

- **1-01** When on, the engine remains running after the hand brake has been pulled, ignition is off and the doors are closed. While the engine running, lights are flashing, remote is displaying the remaining time of engine running. You can set 1 or 2 minutes of engine running.
- **1-02** When on, the alarm will try to start the car up at the pre-set time. The function requires activating the function on the remote, setting the time of the start up and setting the reservation mode.
- **1-03** Setting the engine running time when remotely started.
- **1-04** When on, you can enter a 4-digit emergency code to cancel the alarm and open the car.
- **1-05** By choosing this option, you can set up the conditions for a reservation mode set-up. For reservation mode setting to carried out, transmission must be in a neutral position, emergency brake pulled up with the engine running. By turning ignition off the engine remains running and reservation mode will be set after choosing the option in programming menu 1-05. When choosing option No.3, the alarm will arm.
- **1-06** When on, alarm will warn of the door opened by flashing the lights.
- **1-07** You can set the time for heating in diesel cars. It is also possible to set the time during which the alarm will keep the ignition and accessories on when remotely started.
- **1-08** When on, alarm will warn that the hood is open by flashing the lights.
- **1-09** you can choose the type of engine sensing.
- alternator input 12V required immediately after the engine is started and less than 5V when turned off.
- revs you can use the sensor's impulses based on the revs.
- **1-10** It allows you to enter the valet mode in two ways:
- simple access by turning ignition on/off 3 times in row
- secure access by turning ignition on/off 3 times in row and entering a 2-digit PIN code by the button on the back side of RPS.
- **1-11** In case of using the *IG kill* function, the blocking output is active (on -250mA) when armed, inactive during a remote starting and disarmed; in case of using the PANIC function when disarmed, the output will be activated after 30 sec. In case of using the S*tart kill* function, blocking output is active when armed and remotely started, inactive when disarmed; in case of using the PANIC function when disarmed, the output will be activated immediately.
- **1-12** It is possible to set up a delayed reaction to opened door contacts when turning on the alarm. The function is supposed to be used with indirect closed doors scanning (from the roof light, etc.)

- **1-13** It allows you to deactivate the ultrasonic sensor port by using remote start function. After cancel remote start the input is activated again.
- **1-14** This function is available with CAN Bus module. In case you are using read only mode > Magicar will only read data from CAN (trunk, door, hood). In read/write mode > data will read and write to CAN (trunk, door, hood, lock and unlock, indicators, lock and unlock except closing windows.). In mode 3 it iwill read/write and close windows > in this mode Magicar can close windows when arming. This function is depending on car type.

#### Programming menu No.2

When the doors are opened and ignition is on, keep the buttons I and IV pressed for 2 sec.

No.	Function	Options				
		Button I	Button II	Button III	<b>Button IV</b>	
2-01	Trunk output time	0.5 sec	2 sec	3 sec	4 sec	
2-02	Door lock impulse	0.8 sec	4 sec	2 x 0.8 sec	15 sec	
2-03	Door unlock impulse	0.8 sec	4 sec	2 x 0.8 sec	-	
2-04	Door lock/unlock impulse during remote start	Off	Lock impulse after remote start	Unlock impulse before remote start &lock impulse after remote start	-	
2-05	Door lock impulse after remotely started engine will go Off	Off	On	-	-	
2-06	Parking lights	Normal mode	Continuous mode	Pulse mode	-	
2-07	Start output (TACH)	ST-1	ST-2	ST-3	-	
2-08	AUX 1	0.5 sec	5 sec	40 sec	Latch	
2-09	AUX 2	0.5 sec	5 sec	40 sec	Latch	
2-10	AUX 2 BYPASS function	On	Off	-	-	
2-11	Shock sensor on/off during AUX output	On	Off	-	-	
2-12	Cold start	Off	0 ℃	-5 °C	-10 °C	
2-13	Arm/disarm by OEM remote control	Enabled	Disabled			

#### Function explanation:

- **2-01** Impulse time set-up for trunk output.
- **2-02** Impulse time set-up for door lock.
- **2-03** Impulse time set-up for door unlock.
- **2-04** You can set the central door lock outputs reactions when remote starting activated. Advisable if you need the door open at remote starting.
- **2-05** Option to lock the vehicle after remote starting.
- **2-06** Using this function, you can set the lights control by the alarm mode.
- normal mainly for direct control of hazard lights by (-) or (+).
- 1-2 mode designed to control hazard lights by the button (see page 13).
- **2-07** Duration of engine starting sequence.
- **2-08** Duration of negative impulse for AUX output No.1 (grounded when activated)
- **2-09** Duration of negative impulse for AUX output No.2 (grounded when activated)
- **2-10** It is possible to set the AUX output No 2 as a bypass output. In this case the output will be activated when remotely started, and can be used e.g. for the transponder bypass module. When remote starting is finished, the output will be deactivated.
- **2-11** It allows you to deactivate a shock sensor by using additional outputs in case connected device is causing sensor reaction.
- **2-12** It allows you to set the temperature at which, if the regular starting function on, remote starting will be carried out. But in case the temperature is higher than the pre-set one, starting will not be carried out!
- **2-13** When function is enabled then is possible to arm and disarm system by Magicar and factory remote controls. Function is only available when system is connected with CAN Bus module.

#### **Programming menu RESET**

In case you wish to set all the function back to the pre-set, you can do so by the following way. All the functions will be set to option 1.

#### Procedure:

- 1. Turn the ignition on and open the door.
- For resetting the programming menu No.1, keep buttons I+II pressed for 2 seconds.
   For resetting the programming menu No.2, keep buttons I+IV pressed for 2 seconds.
- 3. Lights will flash and siren will beep once.
- 4. Within 2 sec. press the button **III**. Lights will flash and siren will beep once. Press button **III** again. Lights will flash and siren will beep once. Press button **III** again. Lights will flash and siren will beep once.
- 5. After few seconds siren will beep 3 times and the lights will flash 3 times to confirm the reset of the programming menu.

#### **VIII. CALIBRATION OF THE FUNCTION – HAZARD LIGHT MODE**

In case it is not possible to control hazard lights directly for the alarm needs, you can use the hazard light button mode. In this case the alarm, using the lights output, replaces a hazard light switch (Fig.1). In the programming menu 2-06 you can set the continuous mode (Mode1) and the pulse mode (Mode 2).

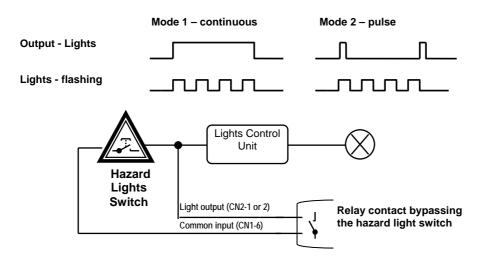


Fig.1 Parking Lights output connected to the Hazard switch

#### Calibration

In case of using the mode 1 or 2 it is required to set the time of output closure.

In this case alarm will set exact durations, which are necessary for number of flashes used when indicating the alarm status.

Before calibration the correct mode (1 or 2) in the Programming menu 2 must be set.

#### **Procedure:**

- 1. Switch the hazard light button on car lights are flashing.
- 2. Open the door, turn ignition on and press the brake pedal.
- 3. Long press button III siren beeps once.
- 4. Push the button on RPS sensor and hold it at duration of 10 lights flashes.
- 5. After loosing the button, siren will beep twice.

- 6. Calibration is successfully completed. Turn the hazard light button off, turn the ignition off and release the brake pedal.
- 7. Connect the light output wire (CN2-1) to the hazard light switch wire (Figure No.1). Check the polarity of common wire CN1-6. After this connection the alarm will control flashing of the lights.

If the calibration has been done incorrectly, siren will beep 3 times. In this case repeat the whole procedure.

#### IX. VALET MODE

You can access the valet mode of the alarm system even without the remote control (in case of a lost or damaged remote). You can enter valet mode without using a PIN code or with a PIN code (Programming menu 1-10).

#### Entering valet mode without a pin code.

Armed. Open the door. The alarm will be triggered. Wait for 30 second until siren will mute. Within 3 seconds repeat the following 3 steps:

- Turn the key to the "Ignition On" position. When the ignition is on, the lights on the dashboard will be turned on. In most vehicles, this position is located two "clicks" forward from the "Off" position.
- 2. Turn the ignition off. The lights on the dashboard should be turned off.
- 3. Steps 1 and 2 must be repeated for a total of three times within three seconds. Once this has been done, the alarm will be turned off and valet mode will be activated.

#### Entering valet mode with PIN code.

1. Armed.

"SLEEP".

- 2. By opening the door, the alarm will be triggered. Siren will chirp.
- 3. Within 3 seconds turn the ignition on/off three times.
- 4. Lights will flash once.
- 5. Push the button on RPS as many times, as your first number is. Intervals inbetween the pushes must not be longer than 1.5 sec.
- 6. Lights will flash once.
- 7. Push the button on RPS as many times, as your second number is.
- 8. Lights will flash twice. Siren is off.

Valet mode is activated.

#### Valet mode available functions:

- ❖ Button I (0,5s) door lock/unlock
- ❖ Buttons I+III (0,5s) Valet mode
- ❖ Button IV (0,5s) Car status check (only armed/disarmed)
- ❖ Button III (2x short push) 10 sec. the remote display backlight.

❖ Buttons II + III (2s) – Programming the remote menu. If you try to set any other function, the remote will beep 3 times and will be displaying



#### Valet mode deactivation.

You can deactivate valet mode only by using the remote control:

- Push together shortly buttons I and III.
- Siren will beep once and lights will flash twice.

#### X. REMOTE CONTROLS PROGRAMMING

#### Remote control programming

- 1. Disarmed.
- 2. Within 3 seconds turn the ignition on/off three times. The lights will flash once. Now you are in valet/programming mode
- 3. Within 6 seconds press shortly button I on your remote control. Lights will flash once to confirm programming.
- 4. The same way as in step 3, program remaining remote controls. Lights will flash once to confirm each remote. System will automatically exit the programming mode after acceptation of the third remote or within 6 seconds, which will be signaled by two flashes of the lights.

#### Note !!!

When programming new remote controls, the old ones will be automatically erased. If you have only one remote, it is not necessary to program it 3 times.

#### Security code setup

Conditions for primary setup of security code! Function in Programming menu 1-04 must be set.







Disarmed

ignition on / engine off

Doors opened

Programming of security code (1111-9999):

- 1. Ignition is on.
- 2. Open the door.
- 3. Push the button on RPS sensor 10 times. At every single click, LED will flash red once. Intervals between the click/pushes must not be longer than 1.5 sec.
- 4. Blue LED will start flashing rapidly. If it does not happen, go back to step 1.
- 5. Push the button on RPS as many times as your first number between 1-9 is. After each push red LED will flash.
- 6. After entering the digits, wait until LED will confirm the number by a correspondent number of blue LED flashes.
- 7. Blue LED will start flashing rapidly. Push the button on RPS as many times as your second number between 1-9 is. At each push of the button red LED will flash once.
- 8. After entering the digits, wait until LED will confirm the number by a correspondent number of blue LED flashes.
- 9. Continue by repeating steps 7, 8 for entering the third and fourth number of your code.
- 10. After entering the fourth number, lights will flash to confirm that the program code has been accepted.

#### **Changing PIN code**

PIN code is set as the factory default code (11). PIN code must be inserted to enter Valet mode after turning key on/off 3 times if you have already selected "PIN code ON" from optional table.

Procedures of change PIN code from the factory default code 11 to owner's own code

- 1. System is disarmed.
- 2. Maintain the conditions of the trunk and the door being opened.
- 3. Turn the key on/off 3 times. Lights will flash once. Siren makes a long beep.
- 4. Push the button on RPS as many times, as your first number (1-9) is. Intervals between the click/pushes must not be longer than 1.5 sec.
- 5. Siren beeps once. Lights will flash once.
- 6. Push the button on RPS as many times, as your second number (1-9) is.
- 7. Siren beeps twice. Lights will flash twice.
- 8. Press button **IV** on remote for authentication. Siren beeps three times and lights will flash three times.

#### XI. WIRING DIAGRAM FOR DOOR LOCKING SYSTEM

Fig.1 Original built-in central power lock with a switch inside the doors. A motor at the control level are required.

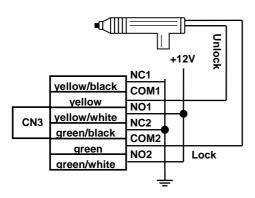


Fig.2 Original central power lock & electric power lock switch inside the front doors..

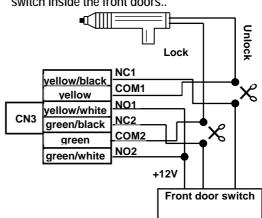


Fig.3 Original built-in central power lock & using compressor to control the switch. Note: Active time 4 sec.

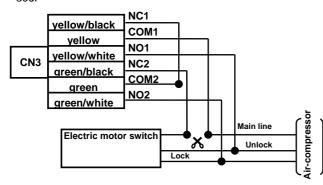
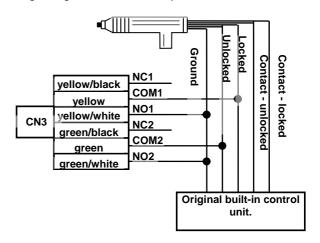
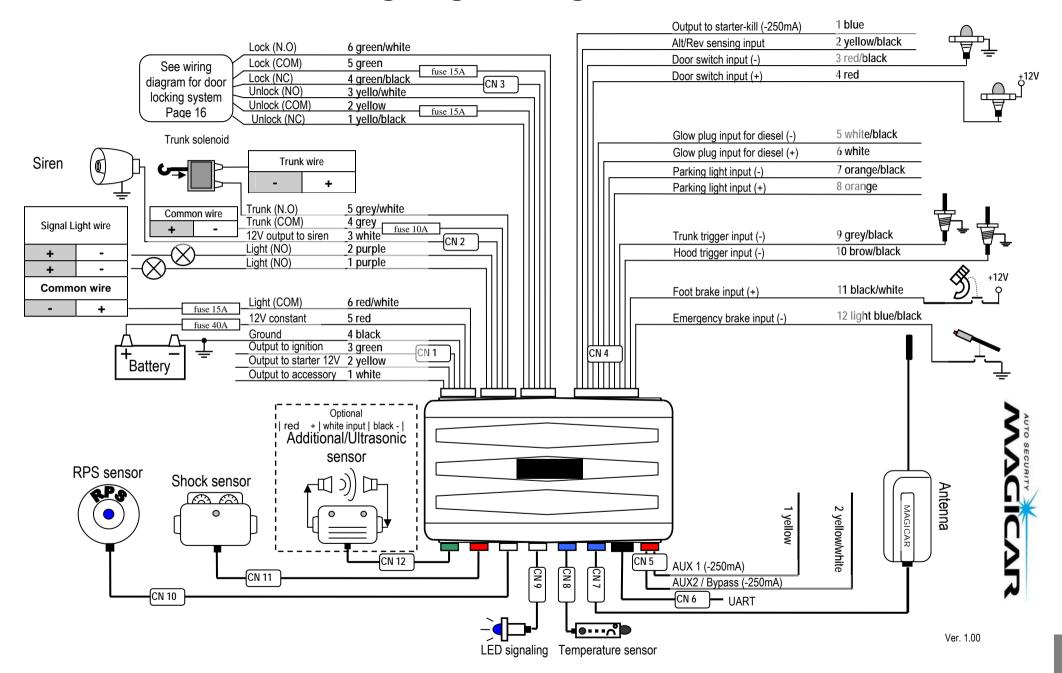


Fig.4 Original built-in central power lock



## Wiring diagram Magicar M870AS



- The car alarm system is designed for fitting into all kinds of cars with petrol and diesel engines with +12V volatge finished by a negative pole.
- Car alarm must be fitted following manufacturer's recommendation.
- The alarm installation to be carried out only by authorised service centre.
- Consult the choice of the service sentre with a manufacturer.
- International approval marks and/or international certificates of conformity are attached onto the cover of system main parts as well as onto the box.
- Warning: Any alternations or additions to the system will automatically invalidate the installation certificate.

#### **INSTALLATION CERTIFICATE**

I, the undersigned, as a professional installer, hereby certify that the installation of the vehicle alarm system described below has been carried out by myself pursuant to the mounting instructions supplied by the manufacturer of the system.

Description of the vehicle:

Make:

Type:

Serial number:

Registration number:

Description of the vehicle alarm system/immobilizer 1/:

Make:

Type:

Approval number:

Issued by:

Installer's full address and stamp:

Signature: (please specify position)

1/ Cross out if does not apply.

