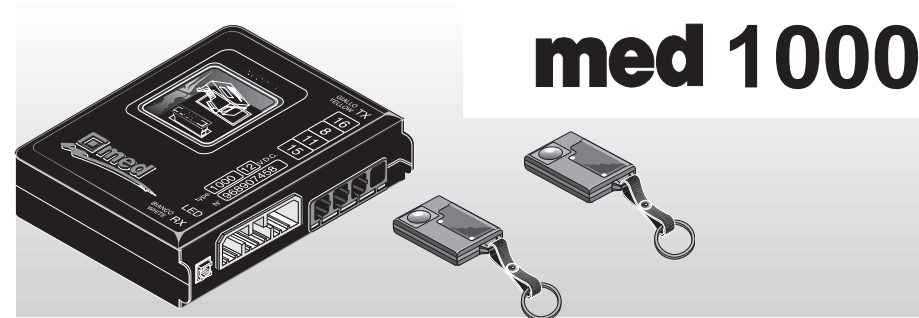




INSTALLER INSTRUCTION MANUAL



med 1000

REMOTE CONTROLLED CENTRAL UNIT WITH ALARM FUNCTIONS, UNIVERSAL CENTRAL LOCK AND PROGRAMMABLE WINDOW WINDING COMMAND FOR VEHICLES EQUIPPED WITH THE ORIGINAL COMFORT* SYSTEM

CAN BE INSTALLED WITH ALL med VEHICLE LINE IMMOBILIZERS

* MODULE AZC 130 (OPTIONAL) FOR VEHICLES WITHOUT COMFORT SYSTEM

LIST OF PARTS IN THE PACK

- | | |
|---|---|
| 1 | med 1000 Central Unit |
| 2 | Coded remote control |
| 1 | Sealed PIN - CARD with personal code |
| 1 | LED / ANTENNA harness |
| 1 | Customised 18 wire harness |
| 1 | Packet containing instructions and assembly accessories |



med s.p.a.
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Cod. 081.316.252

WARRANTY

CENTRAL UNIT

The technical warranty lasts for 12 months from the date of installation, ex works, and covers parts judged by **med**, at its final decision, to be defective. Outside labour and any other costs are excluded from this warranty coverage. Warranty, covering exclusively those systems for which an installation registration card has been received, is automatically null and void if the damage was due to incorrect installation, tampering or liquid infiltration.

NOTE: the warranty only becomes valid following dispatch of the card with the declaration signed by the user attesting to receipt of the PIN-CARD in its sealed packet and the 2 remote controls.

REMOTE CONTROLS

The technical warranty lasts for 36 months from the fabrication date, ex works and covers parts judged by **med**, at its final decision, to be defective. The warranty is null and void if the external casing is broken or if an attempt has been made to open the unit.

MAIN SPECIFICATIONS:

- Remote control with European frequency and customised code, ROLLING - CODE (the code varies on each transmission) and ANTI - SCANNER protection.
- Equipped with PIN-CARD in a sealed packet with PERSONAL CODE for emergency disarming.
ATTENTION: MUST BE CONSIGNED TO THE USER IN ITS SEALED PACKET.
- With alarm functions through the HORN of the vehicle, the DIRECTION INDICATORS and the LED following attempts to start [+15] or intrusion via the door, bonnet and luggage compartment buttons (NO).
- Can be programmed by the USER to cut out the WINDOW winding function.
- Can be programmed by the INSTALLER for automatic activation of the IMMOBILIZER and COMFORT activation times.
- Preset to pilot all **med** - 12 V vehicle line IMMOBILIZER systems.
- Multi-functional indicator LED with built-in antenna.
- Basic harness with customised connector in the pack.
- Extremely limited power draw to safeguard the battery of the vehicle to the utmost.

TECHNICAL FEATURES:

CENTRAL UNITS

Power source voltage rating	:	12 V
Power draw	:	inoperative 6 mA - immobilising phase 7 mA
Temperature range	:	from - 40° C to + 85° C
Positioning	:	in passenger compartment

TRANSMITTERS

Temperature range	:	from - 20° C to + 85° C
Battery life	:	(approx. 5 years)

CONTENTS

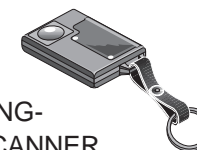


Page.	Contents	
2	Overall layout of the med 1000 Central Unit	CONNECTIONS
3	Preliminary recommendations	
4	Led / antenna assembly	
5 / 6	Directional indicator command	
7 / 8 / 9 / 10	Central lock remote control	
11 / 12	Command for window winding COMFORT system	
13	Universal window winder connection with AZC 130	
14 / 15	Button connections	
16	Alarm relay connection	
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19	Power supply	
20	Arming the system	OPERATION
21	Disarming the system	
22 / 23	Emergency disarming	
24	Programming by the user - Window winder inhibition	
25	Programming by the installer	
26	How to access installer programming mode	
27	Installer programming functions	
28	Automatic immobilizer activation	
29	Alarm functions	
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	Warranty	

References to vehicles and to the colours of the wires in depicted original systems are purely indicative. **med s.p.a.** reserves the right to make technical modifications or variations to the product at any moment.

REMOTE CONTROLS

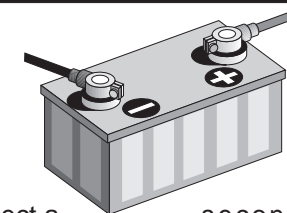
The **med 1000** can handle up to 8 remote control units at the same time. Two are standard supply with the unit and the other six can be ordered through the installer. Follow the same confidentiality procedures described previously.



Each transmitter has its own special coding with ROLLING-CODE (the code transmitted changes each time) and ANTI-SCANNER protection to make it impossible to disarm the system by sending a sequence of codes or by copying those sent previously.

DISCHARGED BATTERY

If vehicle battery is discharged because the headlights or other equipment has been left on, the immobilizer will remain armed (providing it was armed before) but the alarm system and the remote controls may be disarmed.



To start the engine, first charge the battery or connect a second one as indicated in the use and maintenance instructions of the vehicle. Disarm the system by means of the remote control or the emergency procedure after which the engine can be started.

ALARM FUNCTION

The med 1000 Central Unit, if armed with the remote control unit, can signal **ALARM** situations with the vehicle's HORN, LEDs and DIRECTION INDICATORS IF.

OPENING of doors, bonnet or boot (by means of the buttons Normally Open towards ground connected to the LIGHT BLUE wire marked NO in the 18-pin connector, wiring diagram on pages 14/15) with a single 25 second intermittent cycle disactivated by means of the remote control or emergency procedure.

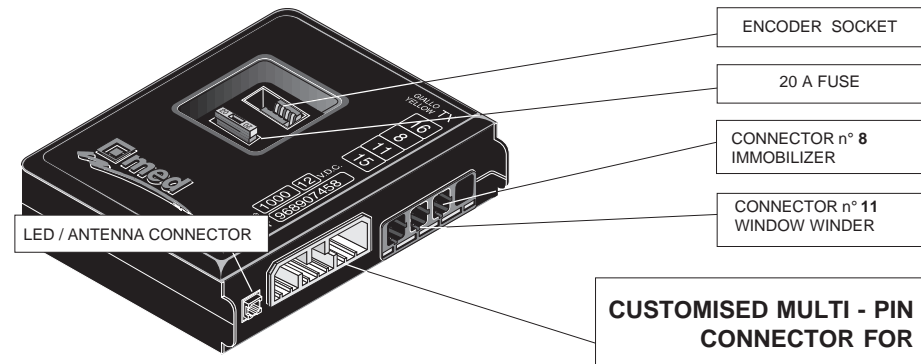
NOTE: The alarm cycle is NOT repeated if the door stays open. The alarm cycles is repeated only if the door is closed and then reopened after the end of the current alarm cycle.

IGNITION KEY ON for at least 2 seconds by connecting a permanent **[+15]** on starting to the ORANGE wire marked **[+15]** in the 18-pin connector (page 19) with a single intermittent cycle of 25 seconds at most, disactivated by turning the ignition key off.

NOTE: the alarm cycle is NOT repeated if the ignition key stays on ON. The alarm cycle is REPEATED only of the ignition key is turned to OFF and then back to ON.

WARNING: If an alarm become active while another alarm cycle is current , the latter cycle will be ignored.

If the IMMOBILIZER is automatically armed (page 7), there will be no any alarm cycles but, if the ignition key is turned to ON, the immobilizer will be operative and the flashing light and horn signals will activate.



WIRE COLOUR	MARKED	FUNCTION	MAX. CURRENT
BLACK	GND	POWER SUPPLY - GROUND	20 A
RED	[+30]	POWER SUPPLY - POSITIVE	20 A
ORANGR	[+15]	[+15] PERMANENT DURING START-UP	-
LIGHT BLUE	NO	INSTANTANEOUS NO INPUT-DOOR BUTTONS	-
GREY	1	COMMON CONTACT FOR OPENING RELAY	10 A
GREY	2	NC OPENING RELAY CONTACT	10 A
GREY	3	NO OPENING RELAY CONTACT	10 A
GREY	4	COMMON LOCKING RELAY CONTACT	10 A
GREY	5	NC LOCKING RELAY CONTACT	10 A
GREY	6	NO LOCKING RELAY CONTACT	10 A
GREY	7	COMMON COMFORT RELAY CONTACT	1A
GREY	8	NO COMFORT RELAY CONTACT	1A
GREEN	9	POSITIVE OUTPUT FOR RH DIRECTION INDICATORS	10 A
GREEN	10	POSITIVE OUTPUT FOR LH DIRECTION INDICATORS	10 A
WHITE	11	COMMON ALARM RELAY CONTACT	10 A
WHITE	12	NO ALARM RELAY CONTACT	10 A

Connectors n° 15, 16, RX, TX and the LIGHT BLUE (NOD) and DARK BLUE (MUX) wires ARE NOT USED

PRELIMINARY RECOMMENDATIONS

1. Consign the PIN - CARD to the user in its sealed packet - **DO NOT OPEN.**
2. Position the Central Unit in the passenger compartment, NEVER IN THE ENGINE COMPARTMENT. Make sure that the harness is routed from below to prevent water or condensation from infiltrating and fix it in place with the Velcro supplied in the pack.
3. Position all the other parts of the system in the vehicle, then route the supplied basic harness in compliance with the main and specific layouts.
4. Detach the battery negative before making the electrical connections.
5. Do not use "power tapping" devices for the connections, particularly to power the Central Unit.
6. Only power the system when the electrical connections have been made.
7. COMPLY WITH THE INDICATED MAXIMUM LOADS for the service outputs and fuse rating (see page. 2).
8. The following instructions refer to the COMPLETELY INSTALLED and CONNECTED system.
Functionality will be REDUCED if some of the parts have not been connected.

AUTOMATIC IMMOBILIZER ACTIVATION

This optional is recommended if you are worried about forgetting to arm the system. It can be activated by the installer using the appropriate programming.

Once the set time has elapsed (20 seconds or 10 minutes) after the ignition key has been turned to OFF or from when the system was disarmed without having armed it again with the remote control unit, the immobilizer will automatically be armed and prevent the vehicle from being started. In this status, if you turn the ignition key to ON and try to start the vehicle, THE ENGINE WILL NOT START and both the DIRECTION INDICATORS and the LEDs will stay lit until the ignition key has been turned back to OFF.

If the key is turned to ON for at least 2 seconds without having disarmed the system, the horn will also sound until the key is turned back to OFF.

To start the engine, disarm the system using the remote control unit with the ignition key in the OFF position or use the emergency procedure (page 22).

ATTENTION:

The automatic immobilizer arming function will re-activate once the selected time has elapsed again without having been started.

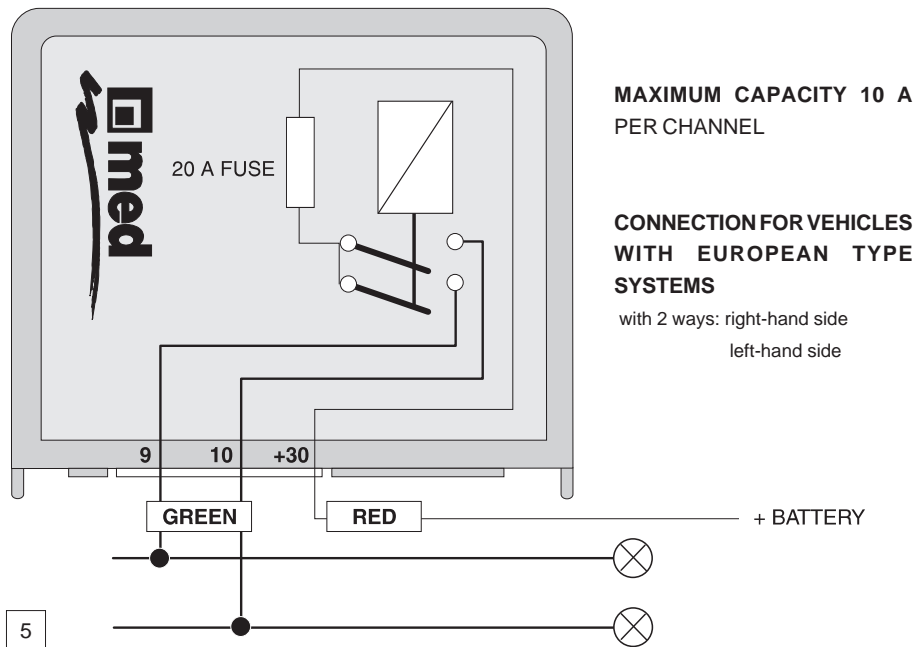
With the EMERGENCY DISARMING procedure is used (page 22) automatic immobilizer arming will in any case activate after 10 minutes regardless of the previously set function, until the remote control is used in the habitual way once more.

DIRECTION INDICATOR COMMAND

The GREEN wires marked n° 9 and 10 directly transmit a **POSITIVE** command (MAX. 10 A per channel) to pilot the DIRECTION INDICATORS.

The RED wire [+30] is the same as that used to power the Central Unit.

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INSTALLER PROGRAMMING ACCESS PROCEDURE

With the system OFF and the ignition key in the OFF position (dashboard off):

- Set the ignition key to the ON position (dashboard ON). As soon as the LED comes on, turn it OFF 6 times (ON-OFF, ON-OFF, ON-OFF, ON-OFF, ON-OFF, ON-OFF) terminating with the key in the OFF position.
 - CHECK the status of the LED at the end of the process:
 - If it is OFF, wait at least 10 sec. then repeat point 1;
 - If it initially BLINKS and then remains PERMANENTLY ON the Central Unit will have accessed the PROGRAMMING phase.
- With the LED PERMANENTLY ON, proceed by programming as desired using the pulses of the remote control (following each valid pulse, the LED will go out for about ½ second) page 27.
- Having terminated the first programming phase, the LED will make a series of blinks after a few seconds, to indicate:
 - SLOW blinks**, that programming has been accepted and memorised;
 - FAST blinks**, that programming has not been accepted and must be repeated.
- A new programming operation may be carried out at the end of the signal.
- Turn the dashboard key to the ON position and then OFF again to terminate the procedure and activate the entered program or the interrupt the procedure.

ATTENTION:

- The programming phase can only be accessed when the system is off.
- Successfully completed programs will remain memorised even if the power supply to the Central Unit interrupted.

PROGRAMMING BY THE INSTALLER

The following functions can be selected (optional):

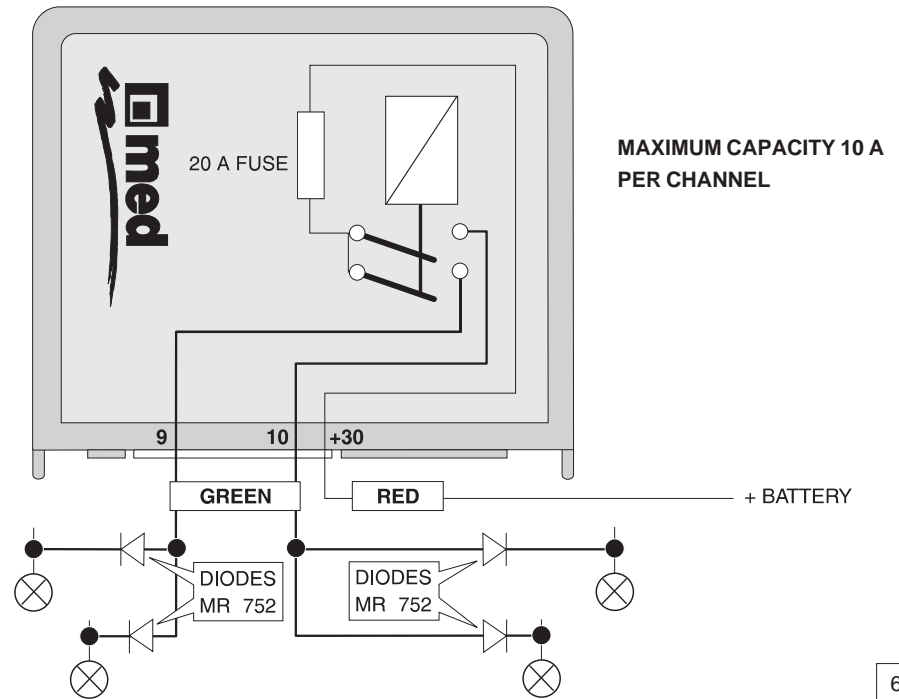
- **DOOR RELAY CLOSING TIME** at 1,25 - 10 - 20 - 30 seconds (for vehicles with COMFORT system piloted with the door locking wire).
- **COMFORT RELAY CLOSING TIME** at 10 - 20 - 30 seconds (for vehicles with COMFORT system piloted by a specific wire, different from the door locking one).
- **AUTOMATIC ACTIVATION OF THE IMMOBILIZER** after 20 seconds or 10 minutes.
- **INHIBITION OF AUTOMATIC IMMOBILIZER ACTIVATION**
- **INITIAL VALUE RESET, TO RETURN TO THE ORIGINAL VALUES-i.e.:**
 - **DOOR LOCKING** time 1,25 sec.
 - **COMFORT** output **COMMAND** time 10 sec.
 - **DEACTIVATING OF AUTOMATIC IMMOBILIZER ACTIVATION.**

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CONNECTION FOR VEHICLES WITH AMERICAN TYPE SYSTEMS with DIODES

with 4 ways: front right - rear right
front left - rear left

B

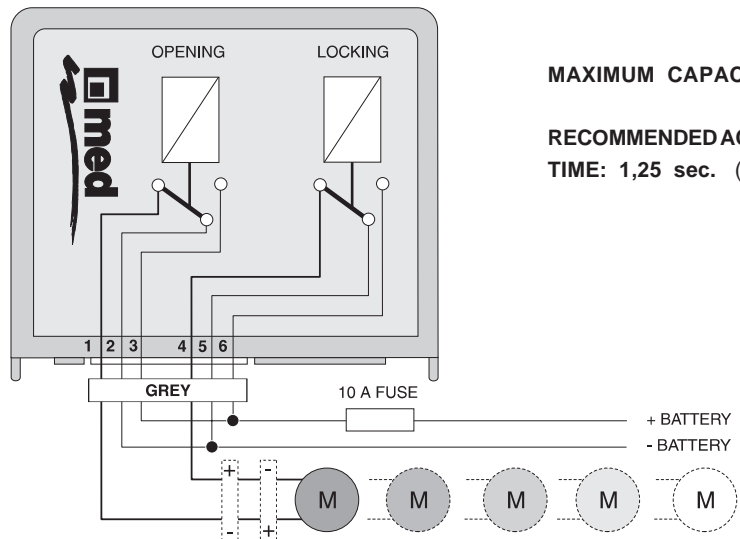


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CENTRAL LOCK REMOTE CONTROL

CONNECTIONS TO PILOT ONE OR MORE SUPPLEMENTARY ACTUATORS:

- For vehicles WITHOUT CENTRAL LOCK SYSTEM for the doors.
The Central Unit can pilot up to 5 additional actuators (max permitted current: 10 A).
- For vehicles WITHOUT ACTUATOR IN THE DRIVER'S DOOR.
Use the lock on the passenger's side or the button inside the passenger compartment to find out if the lock on the driver's side is piloted.



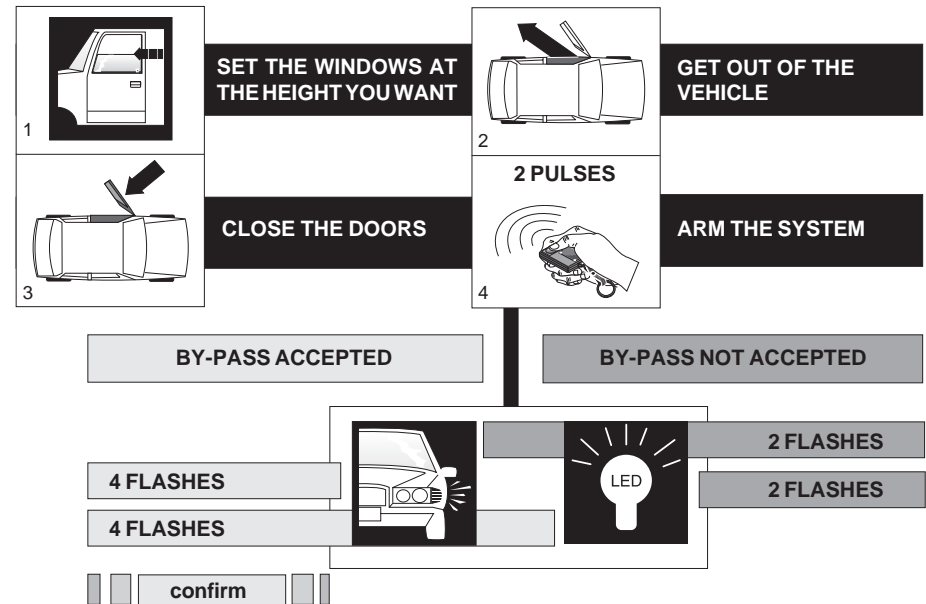
MAXIMUM CAPACITY 10 A

RECOMMENDED ACTUATION
TIME: 1,25 sec. (page. 25)

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BY-PASS WINDOW WINDING

To be used if you want to leave the vehicle windows open.



NOTE: press the remote control unit the second time before the second turn signal flash (within 2 seconds after the first pulse).

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8. **IF THE ENGINE STOPS, THE SYSTEM WILL REMAIN DISARMED FOR 10 MINUTES.** REPEAT THE SEQUENCE FROM POINT 2 IF THE ENGINE REMAINS AT A STANDSTILL FOR A LONGER PERIOD.

IF THE OPERATION IS INCORRECT (SERIES OF SHORT BLINKS) REPEAT IT FROM POINT 3 AS SOON AS THE SLOW BLINKS RETURN.

IF THE OPERATION IS INTERRUPTED, REPEAT THE SEQUENCE FROM POINT 3 AS SOON AS THE SLOW BLINKS RETURN.

NOTE: there is no limit to the number of times the described procedure can be repeated. The PERSONAL CODE is also used to AUTOMATICALLY select AUTOMATIC ARMING of the IMMOBILIZER after 10 minutes (page 7). When the remote control is used again, AUTOMATIC IMMOBILIZER ARMING returns to the original program.



NEVER LEAVE YOUR PIN-CARD IN THE VEHICLE

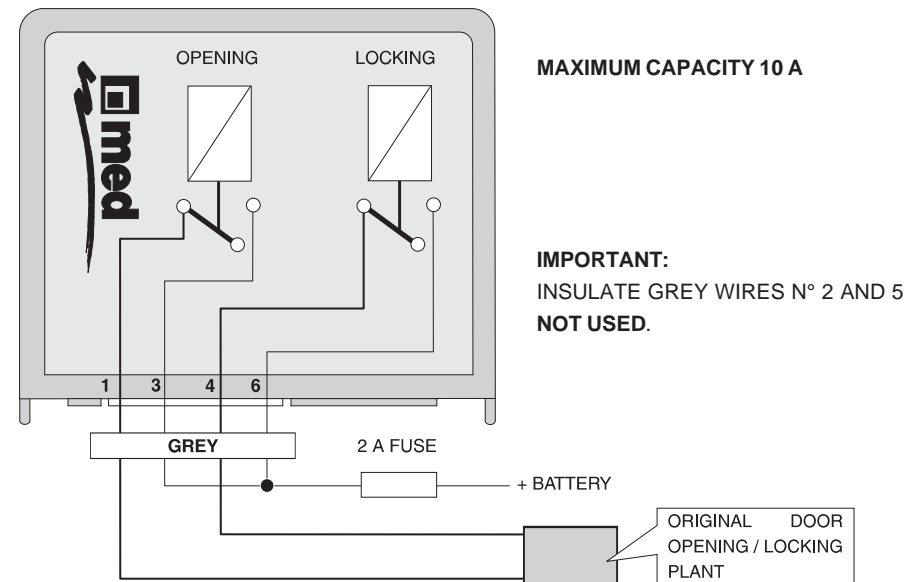
KEEP IT IN A SAFE PLACE

DO NOT SHOW YOUR 6-FIGURE PERSONAL CODE TO ANYONE

CENTRAL LOCK REMOTE CONTROL

CONNECTIONS WITH POSITIVE CONTROLS:

- For vehicles already equipped with CENTRAL LOCK SYSTEM for the doors, piloted by **POSITIVE** commands.

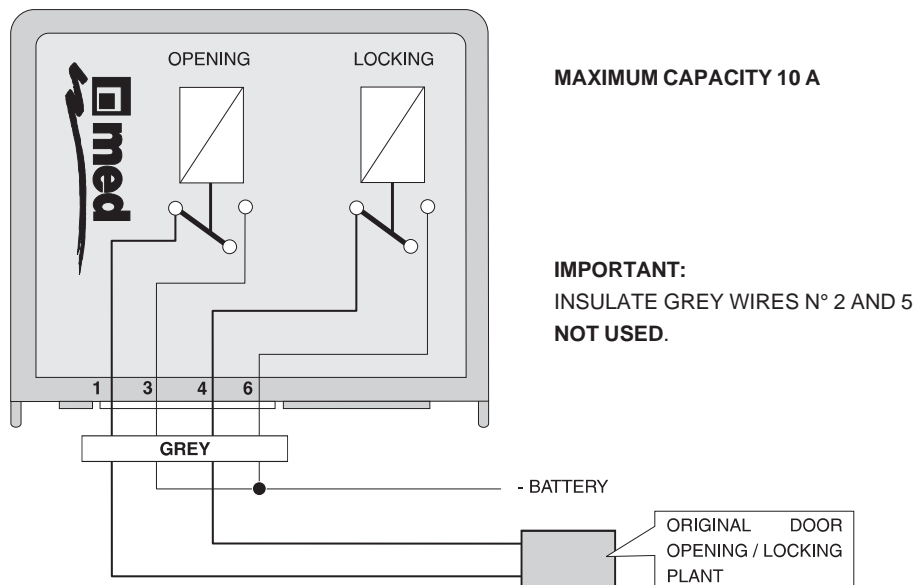


NOTE: If the vehicle has a COMFORT system actuated by the same wire as the central lock, consult page 25 in order to enter an adequate actuation time.

CENTRAL LOCK REMOTE CONTROL

CONNECTIONS WITH NEGATIVE COMMANDS:

- For vehicles already equipped with CENTRAL LOCK SYSTEM for the doors, piloted by **NEGATIVE** commands.



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NOTE: If the vehicle has a COMFORT system actuated by the same wire as the central lock, consult page 25 in order to enter an adequate actuation time.

EMERGENCY DISARMING

In the **ABSENCE** of the remote control, the system can still be **DISARMED** and the engine started by using the **IGNITION KEY** to form a specific **ON - OFF SEQUENCE** as indicated by the **PERSONAL CODE** in the **PIN - CARD** under the sticker with the serial number.

The required operations also given on the back of the **PIN - CARD**, are the following:

1. DETACH THE LABEL FROM THE **PIN - CARD**: YOU WILL SEE THE 6-FIGURE PERSONAL CODE UNDERNEATH.
2. WAIT UNTIL ANY ACOUSTIC ALARM SIGNALS HAVE TERMINATED.
3. INSERT THE IGNITION KEY INTO THE PANEL IN THE **OFF** POSITION.
4. TURN IT: ON (DASHBOARD ON) AND OFF WITHOUT ACTIVATING THE STARTER MOTOR, FOR THE NUMBER OF TIMES INDICATED BY THE 1st. FIGURE IN YOUR PERSONAL CODE (e.g: number 3 means turn the key ON-OFF, ON-OFF, ON OFF three times in quick succession).
5. WAIT UNTIL THE LED (red warning light) BLINKS SHORTLY BY WAY OF CONFIRMATION.
6. REPEAT OPERATIONS 4 - 5 FOR THE REMAINING 5 FIGURES.
7. AT THE END OF THIS OPERATION, A LONG BLINK FROM THE LED AND DIRECTION INDICATORS WILL INDICATE THAT THE SYSTEM IS DISARMED. YOU HAVE 10 MINUTES WITHIN WHICH TO START THE ENGINE.

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DISARMING THE SYSTEM

Press the button on the remote control to disarm the system.

1 PULSE



1 LONG SIGNAL



DIRECTION INDICATORS
LED (red warning light)

LOCKS
RELEASED



DISARMING

IMMOBILIZER

LED OFF



ATTENTION

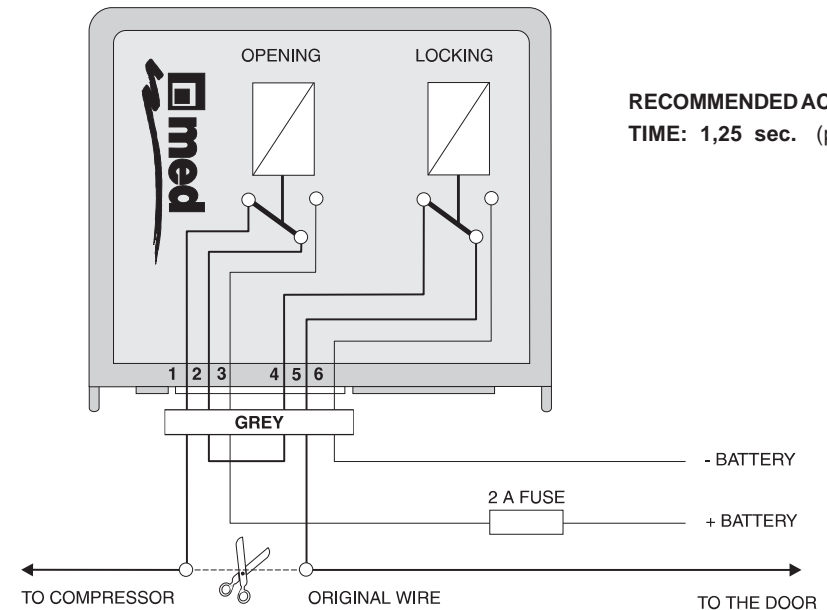
1. The remote control is **IGNORED** when the ignition key is in the **ON** position (dashboard ON).
2. When the automatic immobilizer is armed (page 28), disarming must be **REPEATED** in order to start the vehicle once the set time from disarming has elapsed.

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CENTRAL LOCK REMOTE CONTROL

CONNECTIONS FOR VEHICLES WITH COMPRESSOR (type AUDI A4, AUDI 80 and MERCEDES series W 124):

- For vehicles equipped with **CENTRAL LOCK SYSTEM** for the doors, with electro-air operated plant piloted by **POSITIVE** pulses on **OPENING** and **NEGATIVE** during the **LOCKING** phase.

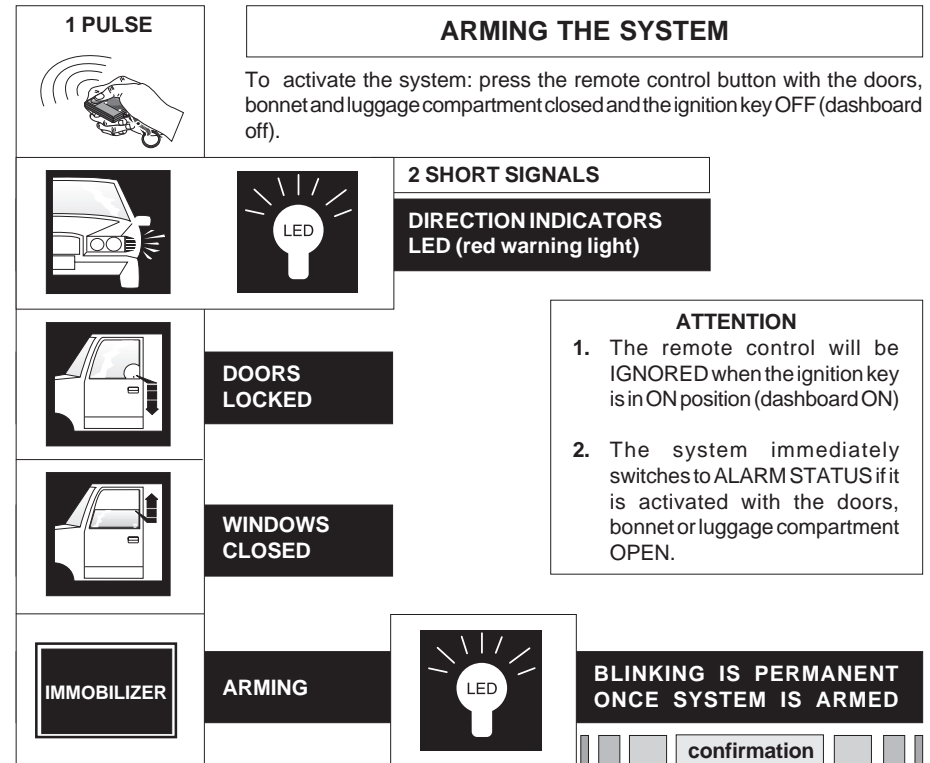


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COMMAND FOR WINDOWS WINDING COMFORT SYSTEM

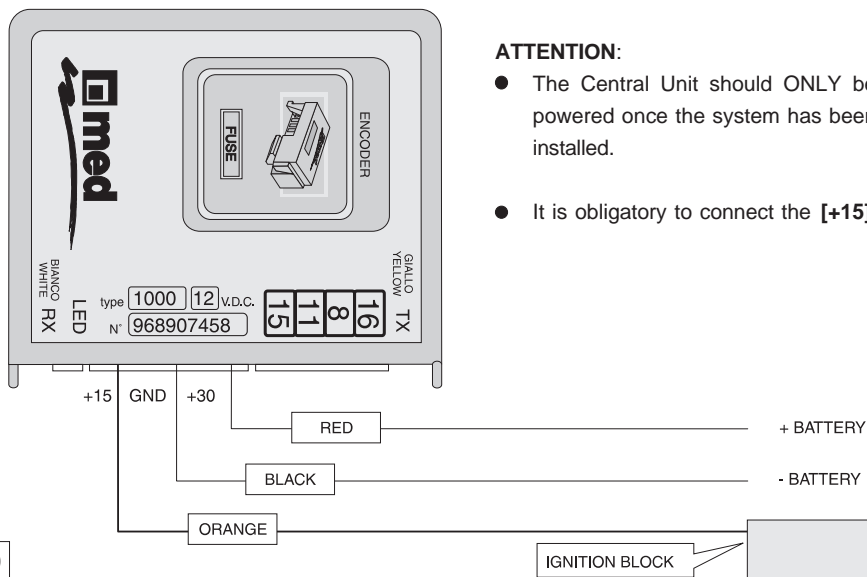
The COMFORT system is a FUNCTION of the ORIGINAL SYSTEM installed in numerous vehicle. It SIMULTANEOUSLY CLOSES in the ELECTRIC WINDOWS and ROOF from the door LOCKS.

- For vehicles with extended **POSITIVE** or **NEGATIVE** commands via the CENTRAL LOCK piloting wire, just connect the door OPENING and LOCKING commands (pages. 8 / 9) selecting the most suitable locking time from 10, 20 or 30 sec. (page 25).
- For vehicles with extended **POSITIVE** or **NEGATIVE** commands to transmit via a **COMFORT** control wire separate from the one that pilots the CENTRAL LOCK, use one of the following layouts, selecting the most suitable COMFORT actuation time from 10, 20 or 30 sec. (page 25).
- For vehicles with SPECIAL system, comply with the instructions in the enclosed ADDITIONAL INSTRUCTIONS, selecting the most suitable COMFORT actuation time from 10, 20 or 30 sec. (page 25).

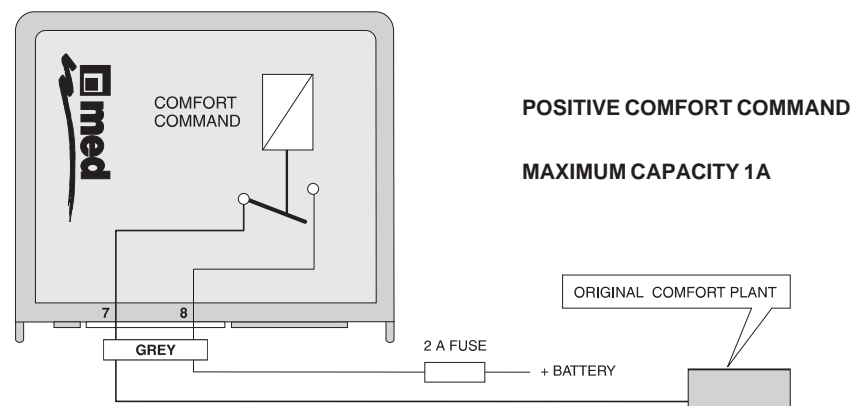


POWER SUPPLY

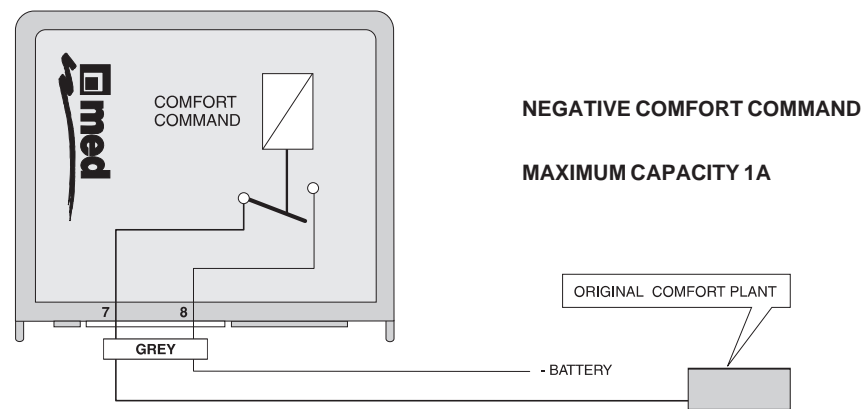
- POSITIVE power supply: RED wire marked **[+30]**, to connect to the most suitable 20 A source point (e.g. fuse box or battery). This type of powering is also used for the direction indicators (pages 5 / 6).
- NEGATIVE power supply: BLACK wire marked **GND**, to connect to the negative battery terminal or to a ground point of the chassis provided by the vehicle manufacturer.
- POSITIVE under the ignition key: ORANGE wire marked **[+15]** permanently activated during the ignition phase.



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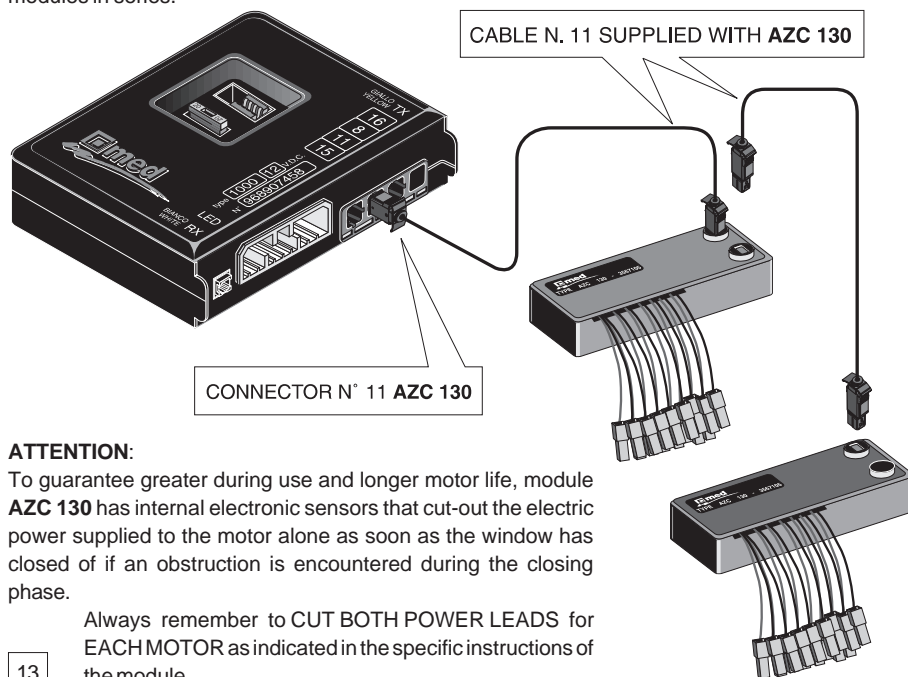


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UNIVERSAL WINDOW WINDER CONNECTION

Connector n°11 for WINDOW WINDERS is available on the Central Unit for vehicles with electric windows but without the COMFORT system. This can connect up to 2 universal **med AZC 130** modules in series.



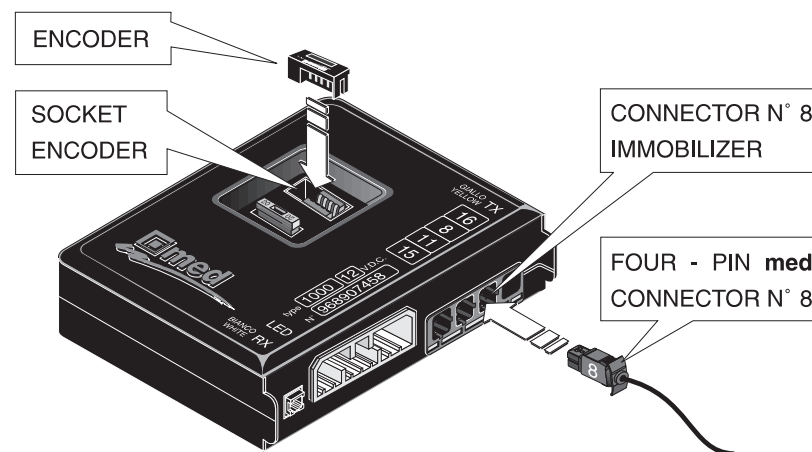
ATTENTION:

To guarantee greater during use and longer motor life, module **AZC 130** has internal electronic sensors that cut-out the electric power supplied to the motor alone as soon as the window has closed if an obstruction is encountered during the closing phase.

Always remember to CUT BOTH POWER LEADS for EACH MOTOR as indicated in the specific instructions of the module.

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1. Fit the immobilizer encoder into the socket in the top part of the Central Unit, protecting it with the adhesive label.
2. Fit the four-pin connector n° 8 of the immobilizer into the socket marked n° 8 on the front of the Central Unit.
3. Connect the power harness of the immobilizer and the GREEN wire in compliance with the specific instructions of the anti-theft system.



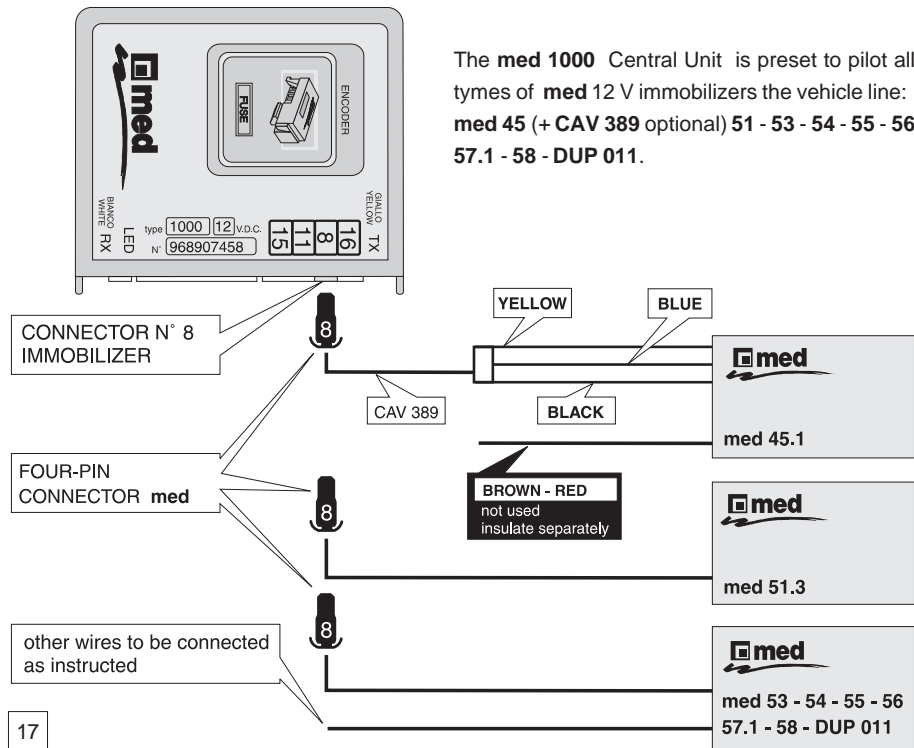
IMPORTANT:

The electronic keys and keyway supplied with the immobilizer will not be used.

NOTE: **med** immobilizers from the vehicle line also available in the "R" version WITHOUT ELECTRONIC KEYS FOR specific use with the **med 1000** Central Unit.

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IMMOBILIZER PRIMARY PROTECTION



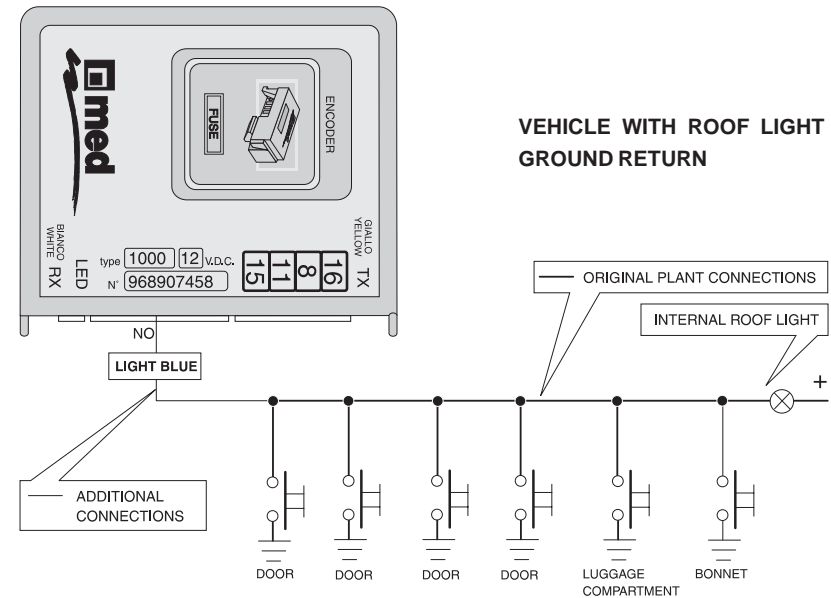
17

BUTTON CONNECTIONS

To connect the NO BUTTONS (Normally Open) towards the GROUND of the vehicle, use the LIGHT BLUE wire marked NO and apply the following layout.

ATTENTION:

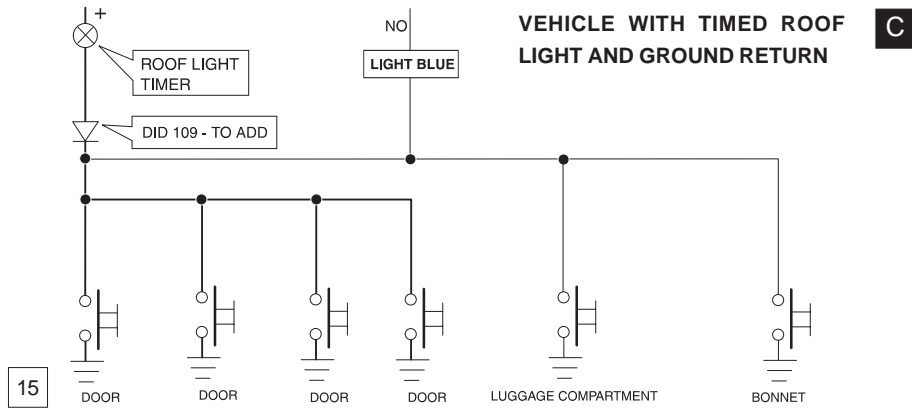
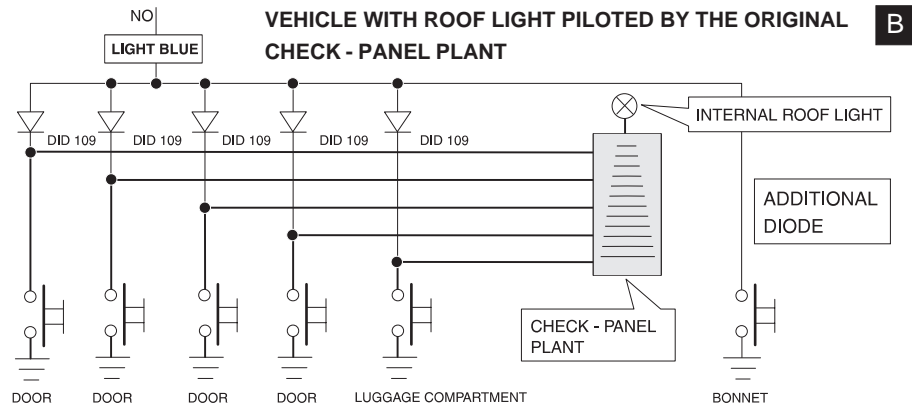
- The input is INSTANTANEOUS.
- The ALARM STATUS immediately activates if the system is ARMED with the DOORS OPEN.



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VEHICLE WITH ROOF LIGHT AND NO GROUND RETURN

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ALARM RELAY CONNECTIONS

Activated by alarms through the instantaneous input marked NO (LIGHT BLUE wire) for the buttons or through [+15] (ORANGE wire) lasting for at least 2 sec. Allows the HORN of the vehicle to be directly piloted by means of WHITE wires n° 11 and n° 12.

