# JINGLE AVAS
## Acoustic signal for electric / hybrid cars
### CODE: CF0061UNAV11 - CF0061UNAV21

**DESCRIPTION**

JINGLE AVAS 2.0 is an audible warning device that increases the road safety of hybrid or electric cars, which when they are powered, are so silent that they are not audible to pedestrians.
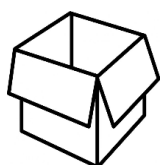This feature has generated numerous accidents, so much so that the European Union has issued a law that requires manufacturers and owners of Electric / Hybrid vehicles to compulsorily equip new and already circulating vehicles with an audible warning device to alert pedestrians.

To comply with the standard, the product must be sized according to the minimum requirements regarding noise emissions pursuant to UNECE regulation no. 138.

JINGLE AVAS 2.0 is perfectly compliant with the reference standard.

To make the product compatible with a large number of vehicles, Paser has introduced new types of system operation. In fact, this innovative version has the possibility of operating not only with the canbus line of the vehicle, but also by connecting the module to a vehicle cable that supplies the speed signal (square wave). In addition, the device can work by connecting it to a GPS antenna (supplied by Paser). Below we will see the different types of connection.
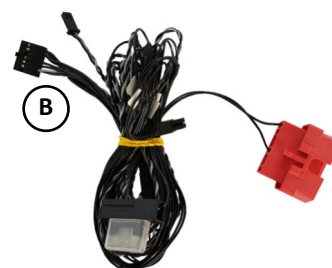
**KIT CONTENT**



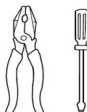The KIT is inclusive of all the components necessary to perform the installation.
Connections are simple and fast, however Paser recommends that installation be performed by professional technical personnel.

A.    Jingle AVAS module.
B.    Plug and Play wiring.
C.    Status button / LED.
D.    Waterproof speaker.

A GPS antenna (E) is available as an accessory that allows you to operate the system without the need for other connections other than power.

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### CODE: CF0061UNAV11 - CF0061UNAV21
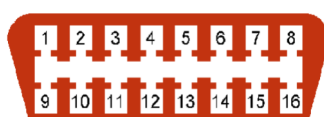
**45'**

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## DEFAULT WORKING MODE

Jingle AVAS 2.0 module can work in different ways.

By default, the module is set to work with the canbus protocols of compatible vehicles, if the vehicle is included in the compatibility when the module is connected, the protocol is automatically recognized and the system synchronizes, in this configuration there are no other settings to do.

All the other operating modes are to be SET MANUALLY.

Current compatibilities

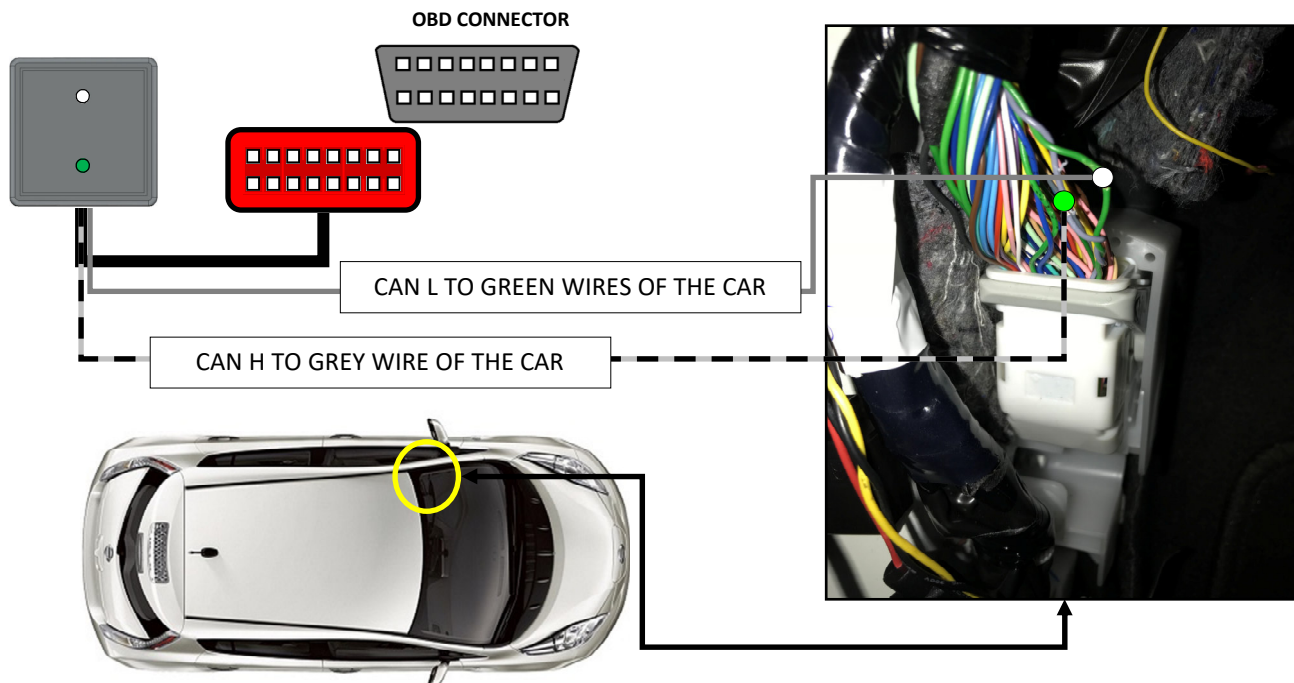| MODEL | YEAR | PROTOCOL | LOCATION | CANBUS CONNECTIONS |
|---|---|---|---|---|
| **AUDI** | | | | |
| E-TRON | 2019-> | CANBUS | SEE DIAGRAM | SEE DIAGRAM |
| **FIAT** | | | | |
| 500 | 2015 | CANBUS | OBD | CAN H 1 CAN L 9 |
| **MITSUBISHI** | | | | |
| MiEV | 2017 | CANBUS | OBD | CAN H 6 CAN L 14 |
| **NISSAN** | | | | |
| ENV200 | 2015 | CANBUS | OBD | CAN H 13 CAN L 12 |
| LEAF | 2018 | CANBUS | SEE DIAGRAM | SEE DIAGRAM |
| **PSA** | | | | |
| PEUGEOT iON   CITROËN C0 | 2017 | CANBUS | OBD | CAN H 6 CAN L 14 |
| **RENAULT** | | | | |
| KANGOO ZE | 2014 | CANBUS | OBD | CAN H 6 CAN L 14 |
| ZOE ZE | 2013 | CANBUS | OBD | CAN H 6 CAN L 14 |
| TWIZY | 2015 | CANBUS | OBD | CAN H 6 CAN L 14 |
| **TESLA** | | | | |
| S 85D | 2015 | CANBUS | OBD | CAN H 1 CAN L 9 |
| **TOYOTA** | | | | |
| Prius | 2006-2010 | CANBUS | OBD | CAN H 6 CAN L 14 |
| Prius | 2011-> | CANBUS | OBD | CAN H 6 CAN L 14 |
| Prius Plus | 2012-> | CANBUS | OBD | CAN H 6 CAN L 14 |
| Auris Hybrid | 2014-> | CANBUS | OBD | CAN H 6 CAN L 14 |
| Yaris Hybrid | 2016-> | CANBUS | OBD | CAN H 6 CAN L 14 |
| CH-R | 2018-> | CANBUS | OBD | CAN H 6 CAN L 14 |
| **VW** | | | | |
| UP | 2015 | CANBUS | OBD | CAN H 1 CAN L 9 |

WIRES OUTPUT VIEW

# JINGLE AVAS
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**45'**

## NISSAN LEAF

NISSAN LEAF model does not have the canbus communication required to manage the Jingle AVAS module on the OBD port, therefore to connect the module to the vehicle, follow the instructions below.
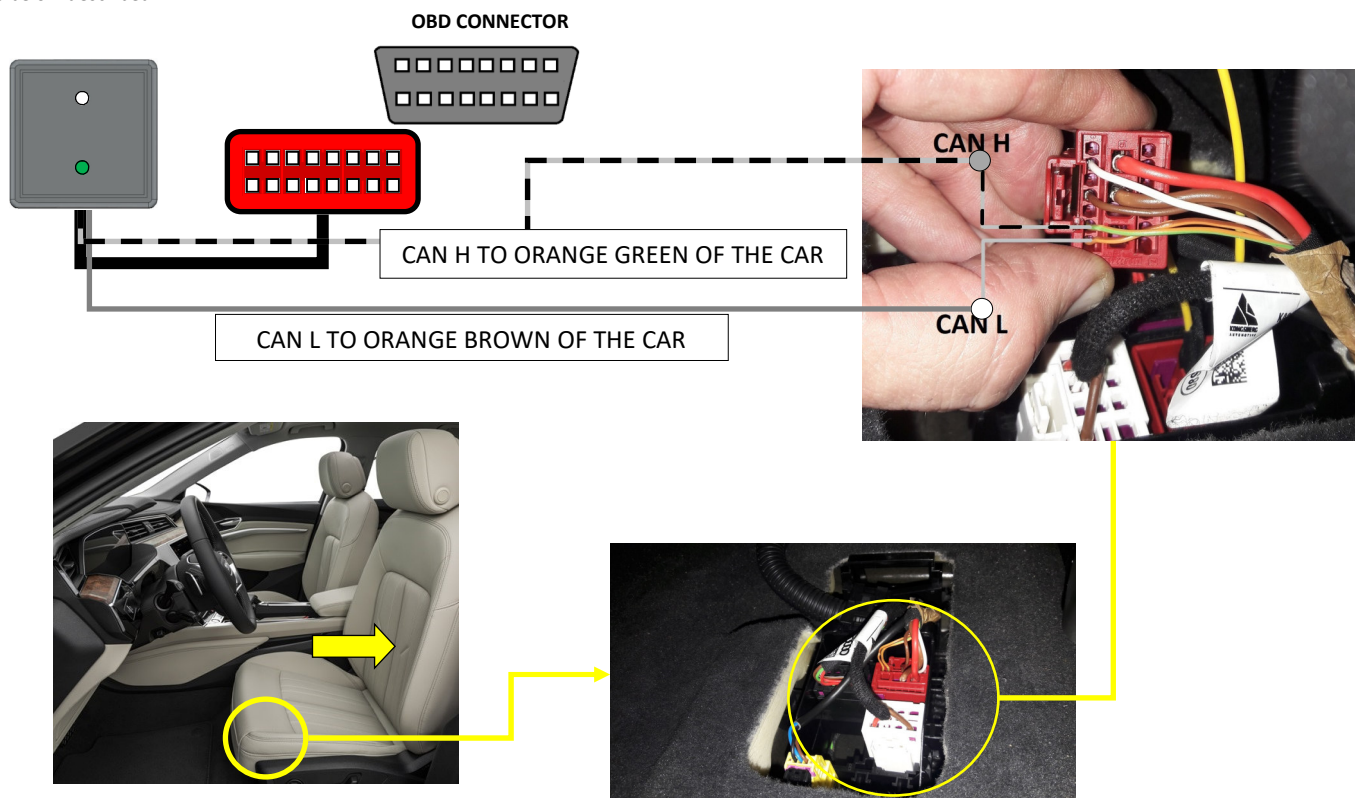
Connect the interface wiring to the car's OBD port, connect the module's canbus cables to the vehicle's canbus wires located in the driver's side sill as described below.

**OBD CONNECTOR**



CAN L TO GREEN WIRES OF THE CAR

CAN H TO GREY WIRE OF THE CAR

## AUDI E-TRON

AUDI E-TRON model does not have the canbus communication required to manage the Jingle AVAS module on the OBD port, therefore to connect the module to the vehicle, follow the instructions below.

Connect the interface wiring to the car's OBD port, connect the module's canbus cables to the vehicle's canbus wires located in the driver's side under the seat as below described.
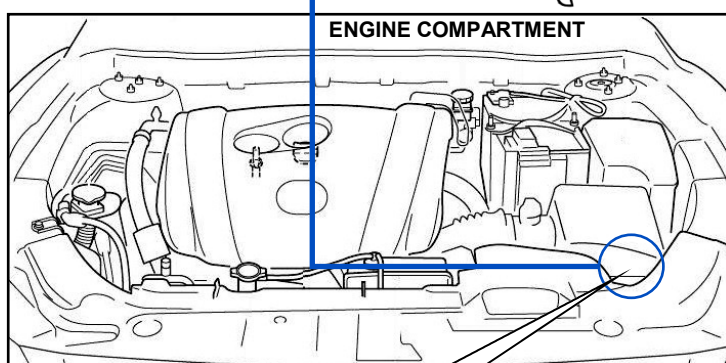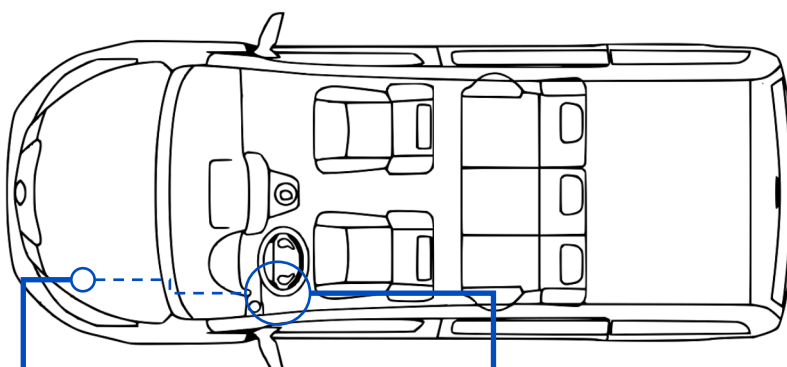
**OBD CONNECTOR**
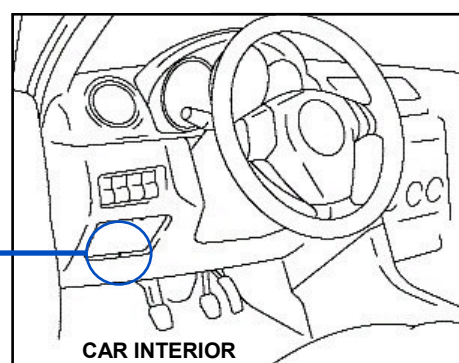


CAN H

CAN L

CAN H TO ORANGE GREEN OF THE CAR

CAN L TO ORANGE BROWN OF THE CAR

# JINGLE AVAS
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**CODE: CF0061UNAV11 - CF0061UNAV21**
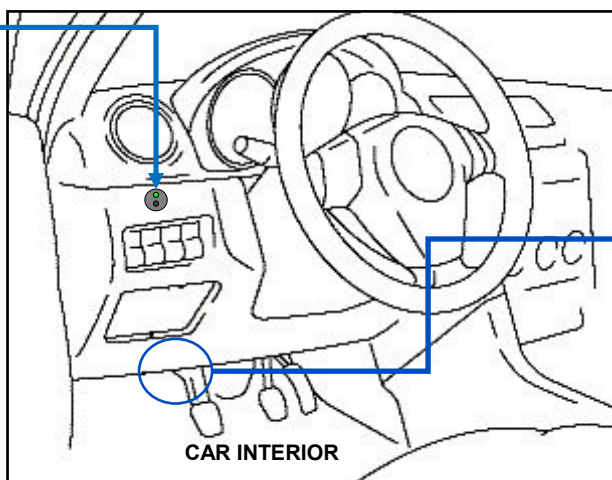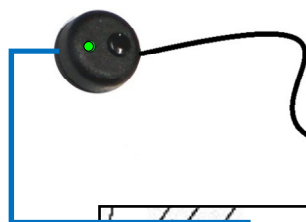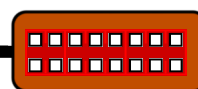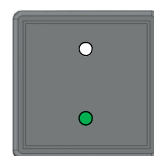
**45'**

## INSTALLATION ON CANBUS COMPATIBLE PROTOCOLS
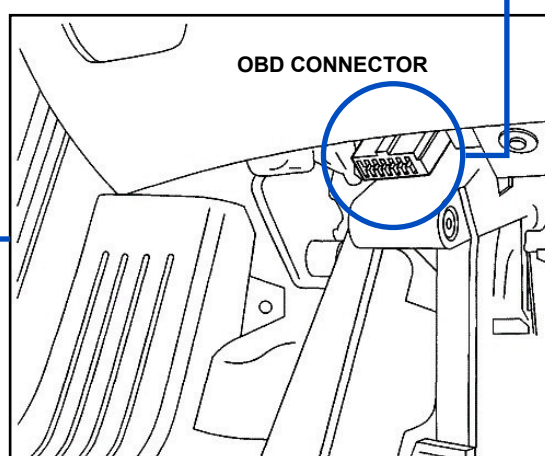
**ENGINE COMPARTMENT**

**CAR INTERIOR**

Insert CAN H Grey Black and CAN L Grey on the ODB socket as shown in the table on the next page.

**OBD CONNECTOR**

**CAR INTERIOR**

| | | |
|---|---|---|
| **PASER** | **JINGLE AVAS**<br>Acoustic signal for electric / hybrid cars<br>**CODE: CF0061UNAV11 - CF0061UNAV21** | **45'** |

## STANDARD OBD DIAGNOSTIC PROTOCOL WORKING MODE
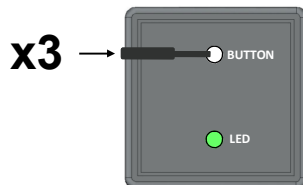
Jingle AVAS 2.0 module can work in different ways.

By default, the module is set to work with the canbus protocol of compatible vehicles, but if the vehicle is not listed, it is possible to make a setting to make it compatible with the standard OBD diagnosis protocols related to SAE-J2284 or ISO 15765.

To set the module with the diagnosis protocol, simply connect the module to the OBD canbus (pin 6 can H and pin 14 can L) and then set one between profiles 16 - 17.
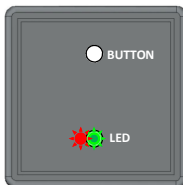
With this setting the module works with the diagnosis protocols.

## OBD DIAGNOSIS PROTOCOLS SETTING

Starting from the condition of steady green led, to enter the settings programming, it is necessary to press the reset button of the module 3 times quickly.
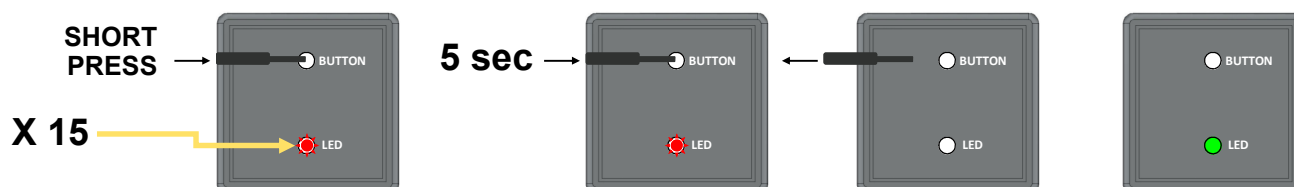


The Jingle LED will perform a number of RED / GREEN flashes such as to indicate the car profile recognized during the self-recognition phase. If the module has not recognized any profile, the LED will flash 1 RED which is the first profile that can be set (see table below).



| | WORKING MODE PROFILE | CAR VERIFIED | GREEN LED FLASHES | RED LED FLASHES |
|---|---|---|---|---|
| 1 | GPS ANTENNA | | 0 | 1 |
| 2 | SPEED PULSE INPUT | | 0 | 2 |
| 3 | RESERVED | | 0 | 3 |
| 4 | TOYOTA 2006 > 2010 | PRIUS 2006 | 0 | 4 |
| 5 | TOYOTA 2011 > 2015 | PRIUS 2011 | 0 | 5 |
| 6 | TESLA    2015 > 2017 | S 2015 | 0 | 6 |
| 7 | FIAT 500 | 500E | 0 | 7 |
| 8 | RENAULT KANGOO | KANGOO ZE | 0 | 8 |
| 9 | VW UP | UP EL 2015 | 0 | 9 |
| 10 | NISSAN EVN200 | EVN200 2015 | 0 | 0 |
| 11 | RENAULT ZOE | ZOE 2013 | 1 | 1 |
| 12 | RENAULT TWIZY | TWIZY 2015 | 1 | 2 |
| 13 | TOYOTA 2016 > 2017 | YARIS 2016 | 1 | 3 |
| 14 | CITROEN C0  PEUGEOT ION   MITSUBISHI MIEV | C0 | 1 | 4 |
| 15 | TOYOTA 2018 > | CHR 2018 | 1 | 5 |
| 16 | OBD STANDARD 1 | PID STD | 1 | 6 |
| 17 | OBD STANDARD 2 | PID XTD | 1 | 7 |
| 18 | NISSAN LEAF | LEAF 2018 | 1 | 8 |
| 19 | AUDI E-TRON | E-TRON 2019 | 1 | 9 |
| 20 | RESERVED | | 2 | 0 |

Each time the button is pressed SHORTLY, the number of flashes increases and consequently the operating profile changes.

To set the OBD STANDARD profile 1, press the button 15 times so that the LED flashes GREEN once and RED 6 times, to confirm the selection, press the module key for 5 seconds until the LED turns off. Then release the button, the LED will return to GREEN fixed.
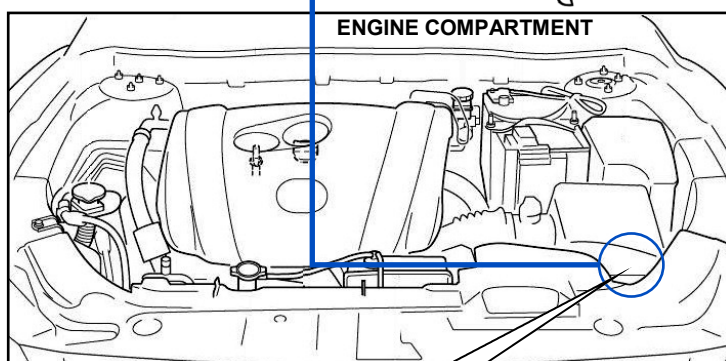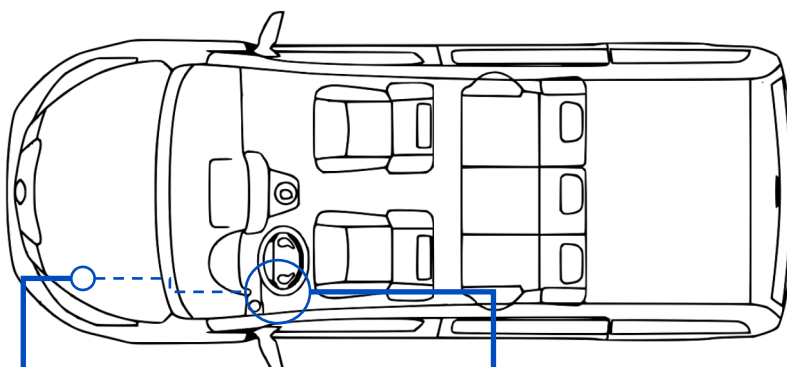
**PASER**

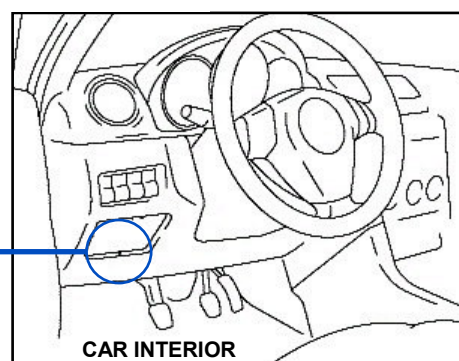# JINGLE AVAS
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## INSTALLATION ON DIAGNOSTIC PROTOCOLS

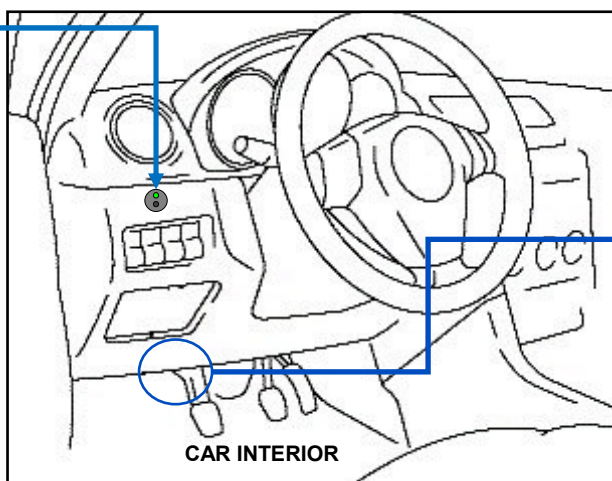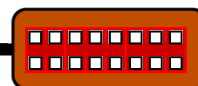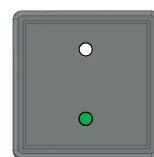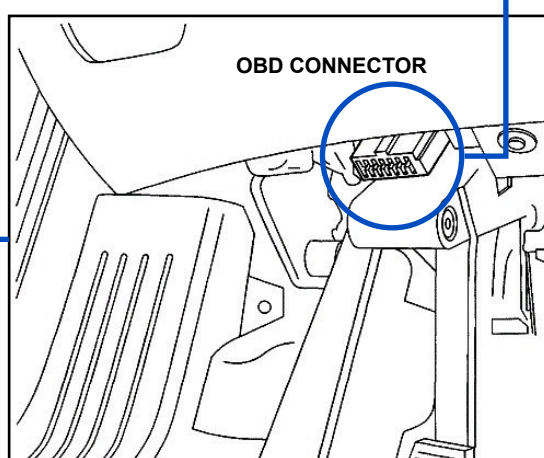**ENGINE COMPARTMENT**

**CAR INTERIOR**

Insert the canbus wires into the OBD socket:
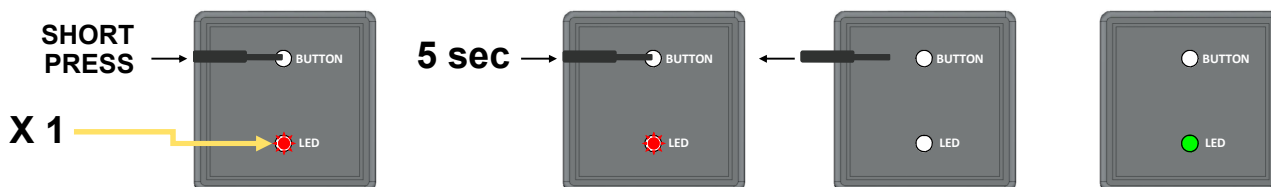CAN H position 6
CAN L position 14

**OBD CONNECTOR**

**CAR INTERIOR**

**PASER**

# JINGLE AVAS
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### SPEED PULSE WIRE SIGNAL WORKING MODE

If the vehicle does not have a diagnostic canbus protocol compliant and it is not even compatible according to the compatibility vehicles list, the module can be set to work with the vehicle's speedpulse (odometer) wire signal. T
o set the module working the speed pulse wire please set profile 2.

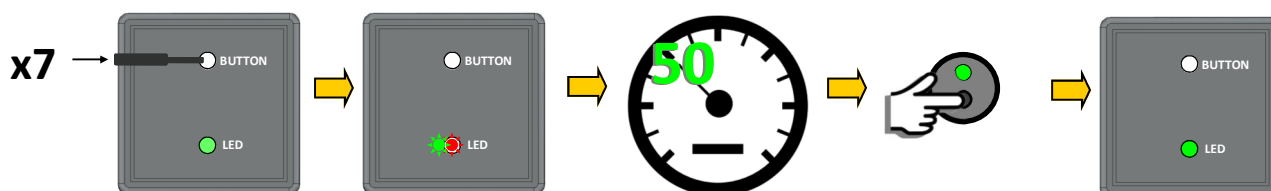|   | WORKING MODE PROFILE | CAR VERIFIED | GREEN LED FLASHES | RED LED FLASHES |
|---|---|---|---|---|
| 1 | GPS ANTENNA | | 0 | 1 |
| 2 | SPEED PULSE INPUT | | 0 | 2 |
| 3 | RESERVED | | 0 | 3 |
| 4 | TOYOTA 2006 > 2010 | PRIUS 2006 | 0 | 4 |
| 5 | TOYOTA 2011 > 2015 | PRIUS 2011 | 0 | 5 |
| 6 | TESLA   2015 > 2017 | S 2015 | 0 | 6 |
| 7 | FIAT 500 | 500E | 0 | 7 |
| 8 | RENAULT KANGOO | KANGOO ZE | 0 | 8 |
| 9 | VW UP | UP EL 2015 | 0 | 9 |
| 10 | NISSAN EVN200 | EVN200 2015 | 0 | 0 |
| 11 | RENAULT ZOE | ZOE 2013 | 1 | 1 |
| 12 | RENAULT TWIZY | TWIZY 2015 | 1 | 2 |
| 13 | TOYOTA 2016 > 2017 | YARIS 2016 | 1 | 3 |
| 14 | CITROEN C0  PEUGEOT ION   MITSUBISHI MIEV | C0 | 1 | 4 |
| 15 | TOYOTA 2018 > | CHR 2018 | 1 | 5 |
| 16 | OBD STANDARD 1 | PID STD | 1 | 6 |
| 17 | OBD STANDARD 2 | PID XTD | 1 | 7 |
| 18 | NISSAN LEAF | LEAF 2018 | 1 | 8 |
| 19 | AUDI E-TRON | E-TRON 2019 | 1 | 9 |
| 20 | RESERVED | | 2 | 0 |

Each time the button is pressed SHORTLY, the number of flashes increases and consequently the operating profile changes.
To set the ODOMETRIC INPUT profile, press the button 1 times so that the LED flashes RED 2 times, to confirm the selection, press the module key for 5 seconds until the LED turns off.
Then release the button, the LED will return to GREEN fixed.



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### CALIBRATION OF THE SPEED PULSE WIRE SIGNAL

Once profile 2 has been set, a module calibration is required.
To perform the calibration, press the module button 7 times, the LED will begin to flash alternately RED and GREEN. Now bring the vehicle to the speed of 50km / H, then with the speed kept constant, press the button / LED of the kit, the LED of the module will turn solid GREEN. Calibration has ended.
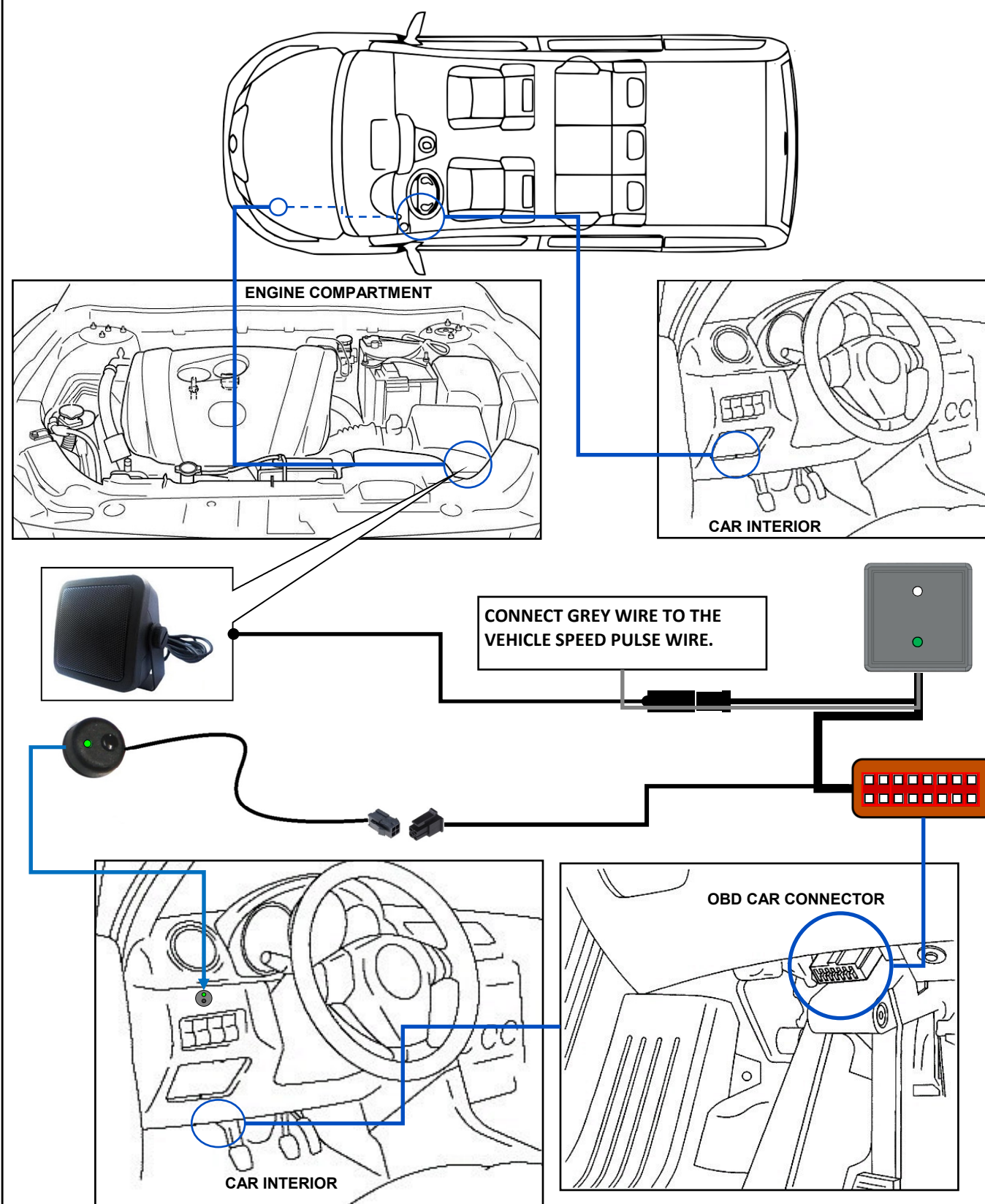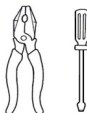
# JINGLE AVAS

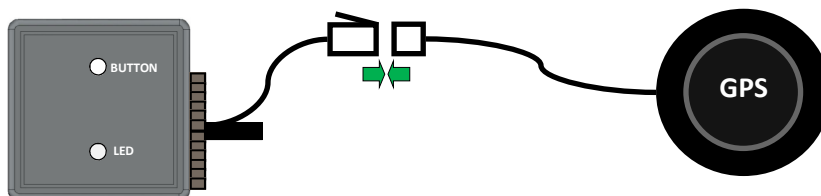Acoustic signal for electric / hybrid cars

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## INSTALLATION WITH SPEED PULSE WIRE SIGNAL

**ENGINE COMPARTMENT**

**CAR INTERIOR**

**CONNECT GREY WIRE TO THE VEHICLE SPEED PULSE WIRE.**

**OBD CAR CONNECTOR**

**CAR INTERIOR**

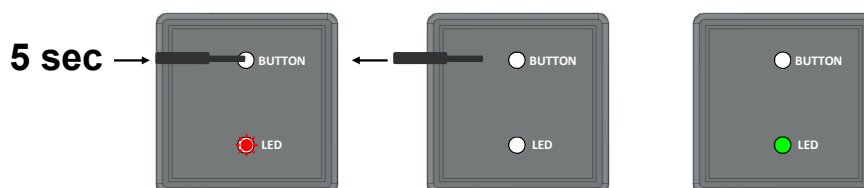| | |
|---|---|
| **PASER** | **JINGLE AVAS** <br> Acoustic signal for electric / hybrid cars <br> **CODE: CF0061UNAV11 - CF0061UNAV21** |

**45'**

## GPS WORKING MODE

Qualora il veicolo non fosse elencato nelle compatibilità ne compatibile col canbus di diagnosi e non sia predisposto di fili odometrico, è consigliato l'uso dell'antenna GPS Paser. Innanzitutto è necessario collegare l'antenna al modulo tramite la connessione del molex a 4 vie, quindi selezionare il profilo 1.



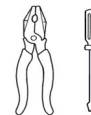| | WORKING MODE PROFILE | CAR VERIFIED | GREEN LED FLASHES | RED LED FLASHES |
|---|---|---|---|---|
| 1 | GPS ANTENNA | | 0 | 1 |
| 2 | SPEED PULSE INPUT | | 0 | 2 |
| 3 | RESERVED | | 0 | 3 |
| 4 | TOYOTA 2006 > 2010 | PRIUS 2006 | 0 | 4 |
| 5 | TOYOTA 2011 > 2015 | PRIUS 2011 | 0 | 5 |
| 6 | TESLA    2015 > 2017 | S 2015 | 0 | 6 |
| 7 | FIAT 500 | 500E | 0 | 7 |
| 8 | RENAULT KANGOO | KANGOO ZE | 0 | 8 |
| 9 | VW UP | UP EL 2015 | 0 | 9 |
| 10 | NISSAN EVN200 | EVN200 2015 | 0 | 0 |
| 11 | RENAULT ZOE | ZOE 2013 | 1 | 1 |
| 12 | RENAULT TWIZY | TWIZY 2015 | 1 | 2 |
| 13 | TOYOTA 2016 > 2017 | YARIS 2016 | 1 | 3 |
| 14 | CITROEN C0  PEUGEOT ION   MITSUBISHI MIEV | C0 | 1 | 4 |
| 15 | TOYOTA 2018 > | CHR 2018 | 1 | 5 |
| 16 | OBD STANDARD 1 | PID STD | 1 | 6 |
| 17 | OBD STANDARD 2 | PID XTD | 1 | 7 |
| 18 | NISSAN LEAF | LEAF 2018 | 1 | 8 |
| 19 | AUDI E-TRON | E-TRON 2019 | 1 | 9 |
| 20 | RESERVED | | 2 | 0 |

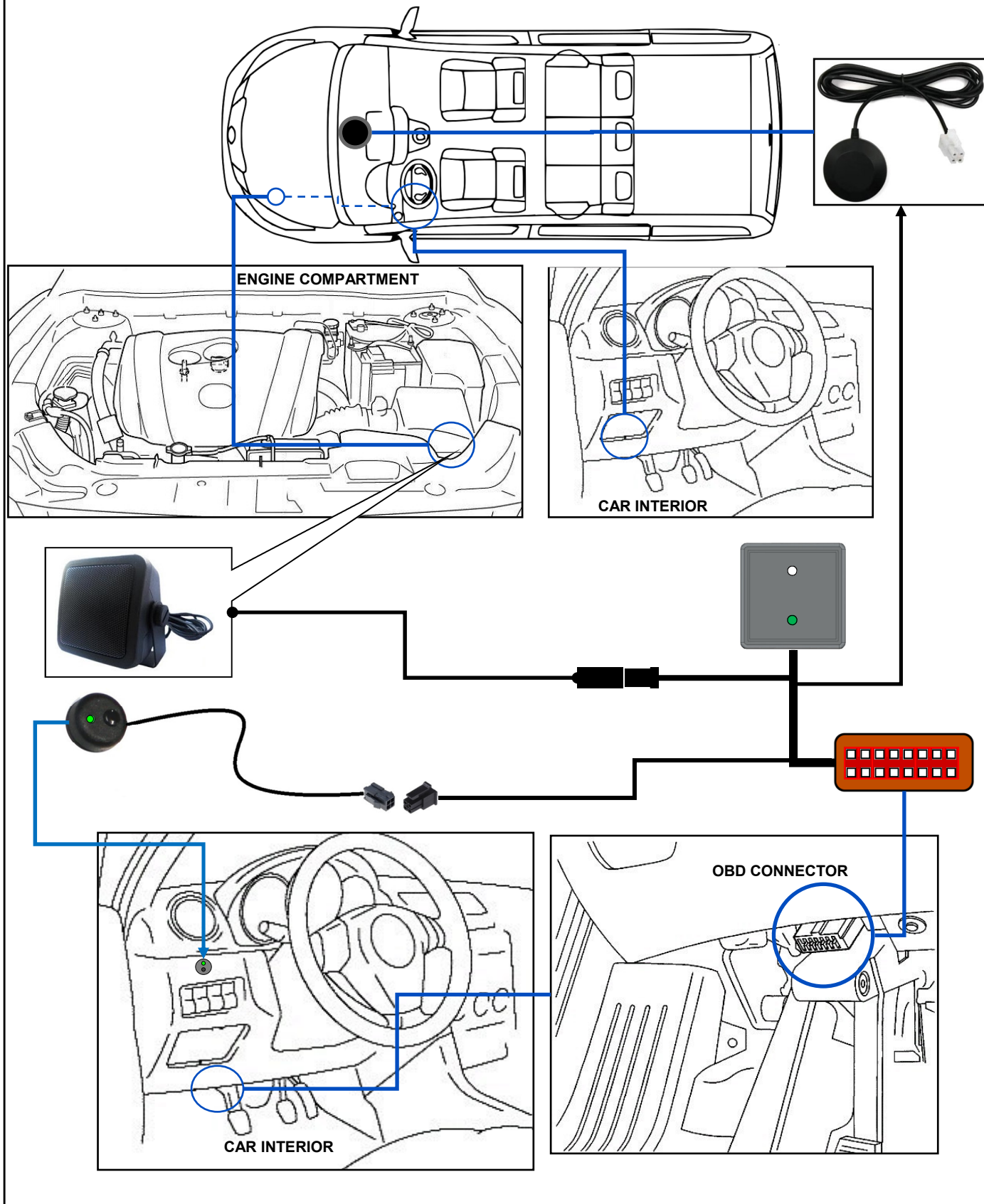Since it's the first profile available, it is sufficient to confirm the choice by pressing the module key for 5 seconds.

## JINGLE AVAS
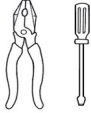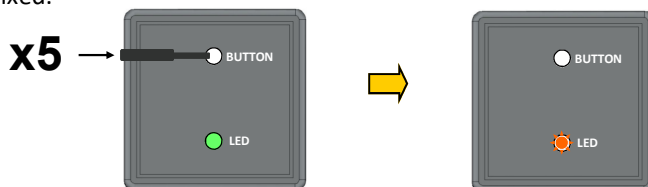Acoustic signal for electric / hybrid cars
**CODE: CF0061UNAV11 - CF0061UNAV21**

**45'**

**INSTALLATION WITH GPS ANTENNA**

**ENGINE COMPARTMENT**

**CAR INTERIOR**

**OBD CONNECTOR**

**CAR INTERIOR**

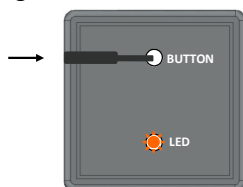| | JINGLE AVAS<br>Acoustic signal for electric / hybrid cars<br>**CODE: CF0061UNAV11 - CF0061UNAV21** | 45' |
|---|---|---|

## SETTINGS

JINGLE AVAS can be configured differently from the factory parameters (GREY highlighted in the tab below) and comply with European legislation. Paser declines all responsibility for any penalties for changes in the factory settings.

To enter the settings programming, it is necessary to press quickly the reset button of the module 5 times, starting from the condition of the LED green fixed.
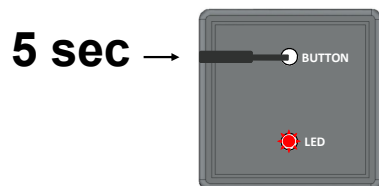
**x5** →

The Jingle LED will make 1 orange flash and 1 red flash, which will indicate the selection of the first setting (orange flash) and its relative value (red flash).
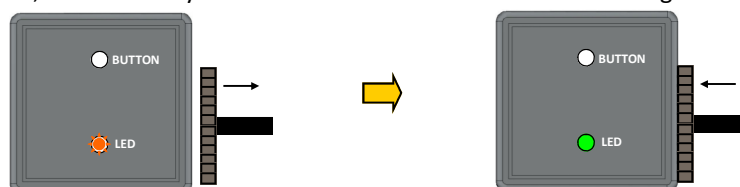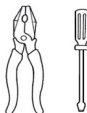To move on to the next option, simply press the Jingle reset button briefly.

To change the setting value, it is necessary to keep the reset button pressed for 5 seconds, thus increasing the number of red flashes, i.e. the setting value.

**5 sec** →

Once the changes have been made, it is necessary to disconnect the module and connect it again.

| OPTION | ORANGE LED FLASHES | VALUE | RED LED FLASHES |
|---|---|---|---|
| 1 SOUND | 1 | STANDARD | 1 |
| 2 VOLUME | 2 | 1. HIGH | 1 |
| | | 2. MEDIUM | 2 |
| | | 3. LOW | 3 |
| | | 4. BOOST 1 | 4 |
| | | 5. BOOST 2 | 5 |
| 3 SOUND WITH CAR NOT DRIVING | 3 | 1. NO | 1 |
| | | 2. YES | 2 |
| 4 SOUND BASED ON SPEED | 4 | 1. sound active till 20 Km/h | 1 |
| | | 2. sound active till 30 Km/h | 2 |
| | | 3. sound active till 50 Km/h | 3 |
| | | 4. continuous sound | 4 |
| 5 DIAGNOSTIC OPERATION | 5 | 1. CAN activity suspended in the presence of diagnosis | 1 |
| | | 2. CAN activity NOT suspended in the presence of diagnosis | 2 |

# JINGLE AVAS
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**45'**

## JINGLE WORKING MODE

Jingle AVAS 2.0 module is activated each time the vehicle panel is turned on.

The sound signal is available when the vehicle is driving up to 20 km / h.

Exceeding this speed, the sound emission stops.

The tone of Jingle's sound changes according to different speeds, so as to give the pedestrian a perception of the speed of travel.

User can suspend the Jingle audible signal by pressing the LED button provided in the KIT. The module will automatically reactivate the next time the vehicle is started.

When Jingle is active, LED is lit GREEN, when the button is pressed the LED flashes and the sound stops.

| ℹ | LED Status |
|---|---|
| 🟢 | LED GREEN: module active. |
| 🟢 | LED GREEN flashing, module paused (sound silenced). |
| ⚪ | LED OFF, module not active. |

| TECHNICAL CHARACTERISTIC | |
|---|---|
| POWER SUPPLY | 10/16 VDC |
| ABSORPTION AT REST | 2.5 mA |
| ABSORPTION WHEN WORKING WITHOUT GPS | 70  mA |
| ABSORPTION WHEN WORKING WITH GPS | 85  mA |
| ABSORPTION WHEN WORKING WITH SOUND ON | 400  mA |
| SPEAKER POWER IN FREE AIR | 75 / 80 (1 M)± 3 dB A |
| TEMPERATURE RANGE | -20 ° / + 75 ° |

**WARNING!**

**IF YOU NEED TO INSTAL THE SAME IN A NEW CAR (EVEN IF IN A SAME GROUP MODEL) IT IS NECESSARY TO RESET THE MODULE.**

**RESET:**
1. WITH THE UNIT POWERED, PRESS AND KEEP PRESSED THE SLIMKEY BUTTON TILL THE LED SWITCH OFF.
2. WITH THE LED SWITCHED OFF RELEASE THE BUTTON, THE RESET IS DONE.

**WARRANTY**
**THIS PRODUCT IS GUARANTEED FOR 2 YEARS FOR ANY MANUFACTURING DEFECTS. THE FISCAL DOCUMENT SERVES AS THE GUARANTEE VALIDITY**