C4D-4G4EUAA_V6+ - INSTALLATION GUIDE

V 2.0

30/12/2020

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Preface

The information contained in this installation guide is subject to changes in order to improve the reliability, design or features without prior notice. Mobile Devices Ingénierie reserves the right to make changes in the content without obligation to notify any person or organisation of such changes or improvements. Mobile Devices Ingénierie can in no event be held liable for technical or editorial errors or omissions herein, nor for incidental, special or consequential damages from the furnishing, performance or use of this installation guide.

Please contact our technical support for current updates and supplemental information concerning the use and operation of this or other Mobile Devices Ingénierie products.

Warnings and notices

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

Please read the installation guidelines, as well as the safety and operating instructions before operating your device. Follow all instructions and heed all warnings in the installation guide.

There is a risk of explosion if the battery is replaced by a battery with an incorrect type that can defeat a safeguard (for example, in the case of some lithium battery types). There is also a risk if the battery is disposed into fire or a hot oven, or mechanically crushing or cutting.
Please discard empty battery according to local regulations.
There is a risk of explosion or the leakage of flammable liquid or gas if the battery is left in a high temperature surrounding environment or subjected to extremely low air pressure.
There is a risk with a battery subjected to extremely low air pressure that may result in an explosion or the leakage of flammable liquid or gas

Hereby, Mobile Devices Ingénierie declares that the radio equipment type C4D-4G4EUAA_V6+ is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: http://www.mobile-devices.com/

The device could be used with a separation distance of 0.5cm to the human body. Users have to adopt a holster/sleeve/cover without any metal components to maintain this distance.

Dispose of used batteries according to the instructions.

RF Exposure Information (SAR)

For this device, the highest reported SAR value for usage near the body is 1.670 W/kg.

According to REDCA Technical Guidance on the publication with a restriction in the Official Journal of Europe of the reference of standard EN 50566:2017, ensuring the safe a separation distance of 5mm or less is applied for handled device and body-mounted wireless communication device used by the general public, the 5mm distance is used for SAR testing and this device is compliance with Specific Absorption Rate (SAR) for general population/ uncontrolled exposure (Localized 10-gram SAR for head and trunk, limit : 2.0W/kg) specified in Council Recommendation 1999/519/EC, and ICNIRP Guidelines, and RED (Directive 2014/53/EU), and had been tested in accordance with the measurement methods and procedures specified in EN50566:2017, EN62311:2008 and EN62209-2:2010

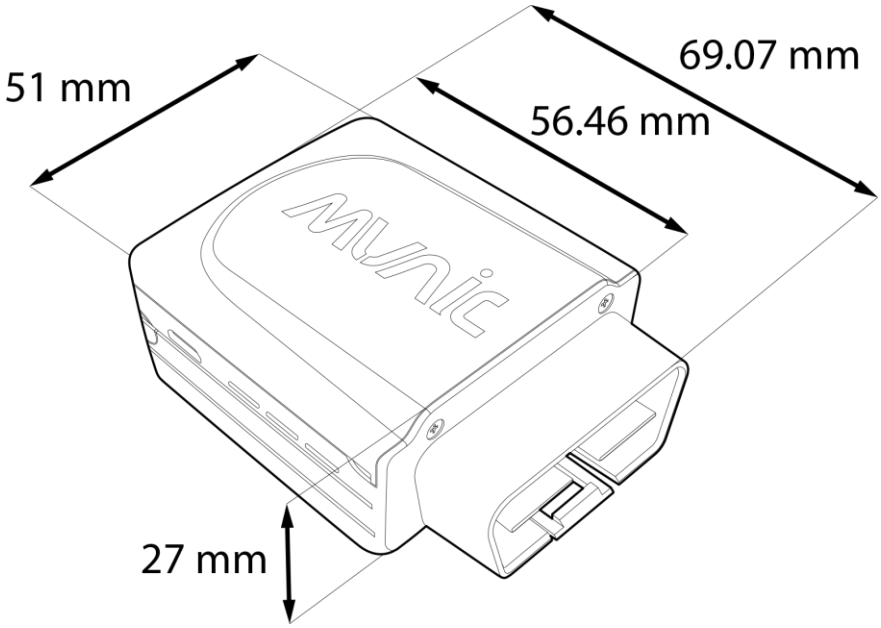
1. Hardware features

OBD Dongle		
Performance	Processor	Cortex A5 - 500MHz
	RAM	128 Mbytes
	NAND Flash	256 Mbytes
Power supply	External power supply range	8-18V
	External voltage measurement	-
	Li-pol battery	270mA.h
Communication	Modem	4G Cat.4 Europe module (LE910-EU V2)
	Modem antenna	Internal
WLAN	Wifi	WiFi 802.11 b/g/n 2.4G
	Bluetooth	BT 4.1 LE
Positioning	GNSS receiver	U-blox M8 (GPS, GLONASS)
	GNSS antenna	Internal
Interface & Telematics features	USB (2.0 Host)	powered (100mA on 5V minimum) when connected to external power
	3D Accelerometer	±2g, ±4g, ±6g, ±8g, ±16g
	3 axis Gyroscope	Optional, ±250°/s, ±500°/s, ±1000°/s, ±2000°/s
	OBD protocols	SAE J1850 PWM, SAE J1850 VPW, ISO 9141, ISO 14230 KWP2000, ISO 15765-4 11 bits, ISO 15765-4 29 bits, CAN
	CAN interface	Simultaneous dual CAN coprocessor
	Advanced vehicle protocol supports	J2819, ISO14229, J2411, ISO15765 ,J1939 ...
Environmental	Connectors	OBD connector
		Mini USB
	Operating temperature	-20°C/+55°C with Battery -20°C/+60°C without battery
	Dimensions	With OBD connector: 27x69,5x51 mm Without OBD connector: 27x56.5x51 mm
	SIM card	slot

Below value is the real value tested on conductive power, we kept sample at Lab. for trace.

Mobile (UE) – GSM		
Band	Power Class	Power (dBm)
E-GSM 900	4	32.70
DCS 1800	1	28.67
Mobile (UE) - UMTS		
Band I	3	22.14
Band VIII	3	23.1
Mobile (UE) - LTE		
FDD 1: Japan, Korea, Europe		21.85
FDD 3: Europe, Asia, Taiwan		22.28
FDD 7: Europe, Taiwan		22.7
FDD 8: Europe, Taiwan		22.67
FDD 20: Europe		22.69
WLAN		
Bluetooth		9.5
WIFI 802.11b WIFI 802.11g WIFI 802.11n HT20		14.5 13 13.2

2. Hardware description



2.1. External view

1 : OBD connector
2 : USB connector
3 : Status led

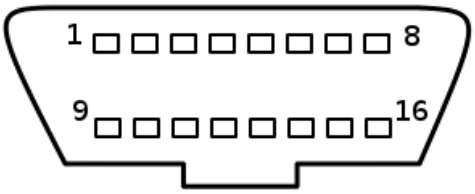
2.2. Internal view

4 : GNSS antenna
5 : SIM holder
6 : Internal battery*

* Please read warnings section at the beginning of the installation guide

2.3 OBD connector pin out

Pin #	Comment
2	J1850+ (PWM/VPW)
4	Chassis ground
5	Signal ground
6	CAN High
7	K line
10	J1850- (PWM)
14	CAN low
15	L line
16	Battery voltage

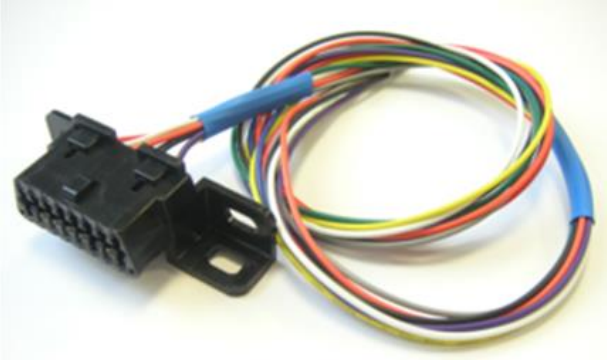


* Please read warnings section at the beginning of the installation guide

2.4 OBD adapter wires

This adapter is only used to connect the OBD to a computer (laptop/desktop).

Pin #	Wire color
2	Yellow
4	Black
5	Grey
6	Green
7	Blue
10	Violet
14	Orange
15	White
16	Red

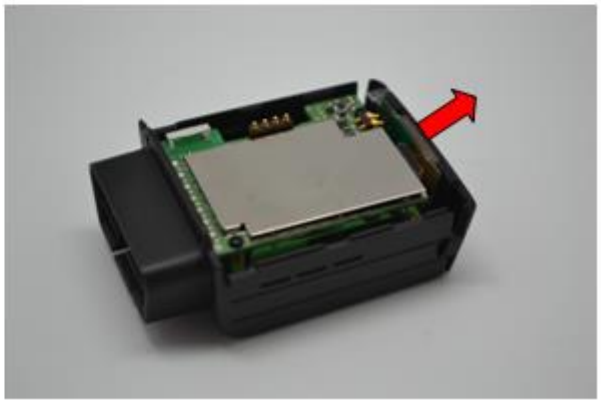


3. Preparing/installing the device

3.1. Open the device

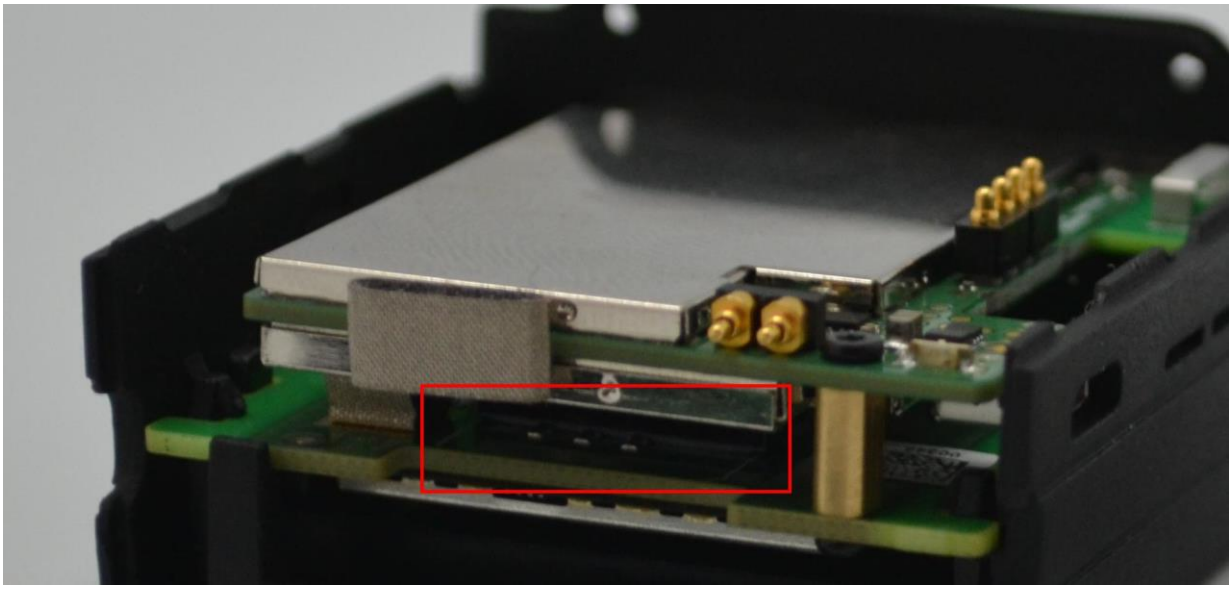


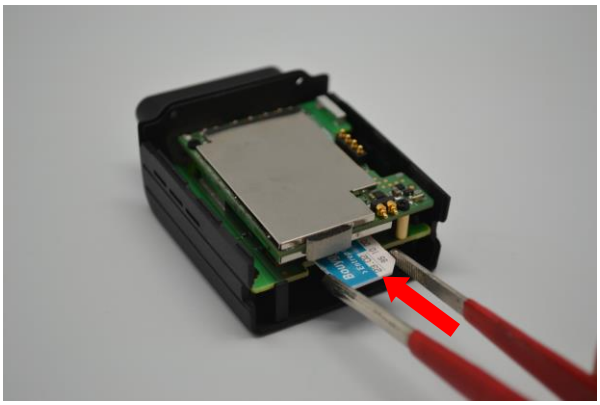


3.2. Insert/remove the SIM card

The SIM card slot is located between the two electronic cards.



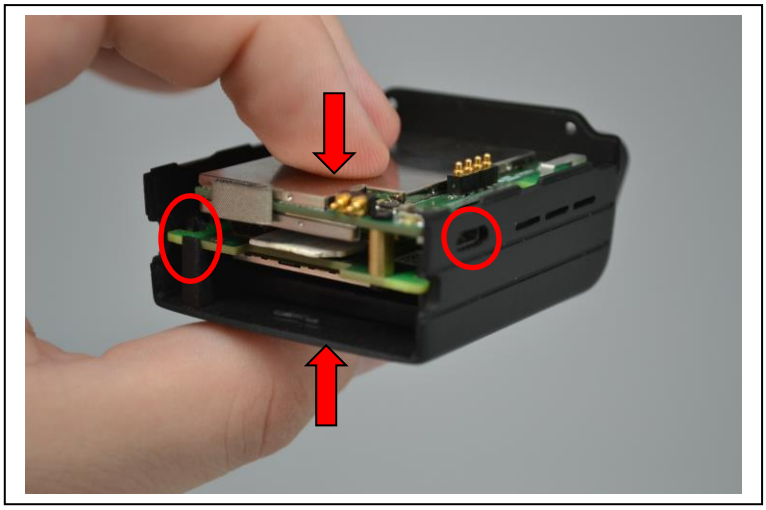


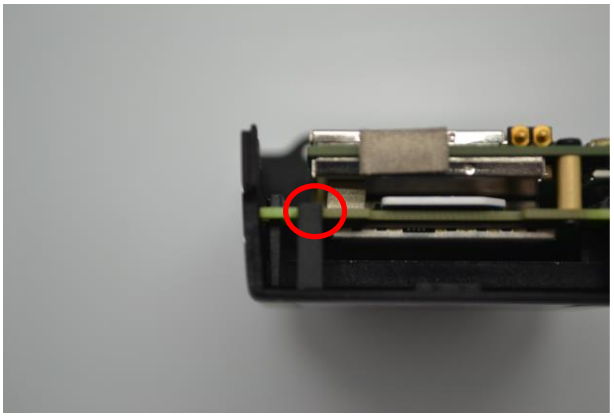
Insert the card with contact on bottom into the slot and push it as far as it will go.

Once inserted the SIM card looks like this:

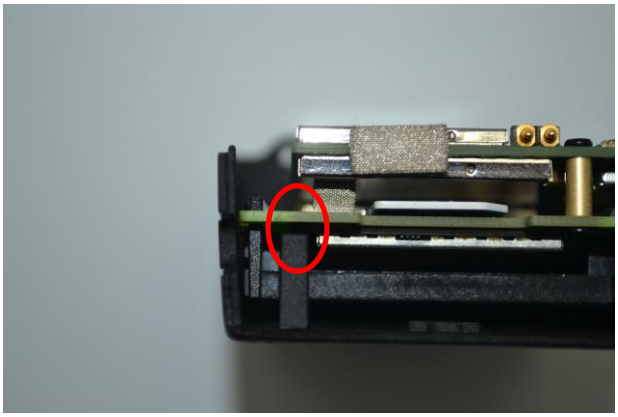
3.3. Properly close the device

First, check that the electronic card is correctly inserted in the plastic part and that usb port is correctly positioned into the casing.
If it's not inserted proceed as shown below.





GOOD

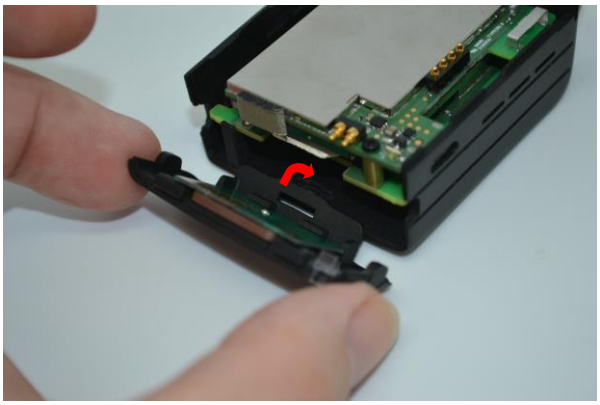


NOT GOOD

GOOD

NOT GOOD

Second, insert the back cover beginning with the bottom.



Third, insert the top cover beginning with the back and push on top to clip-on the top cover

Finally, place the screw.

3.3. Install the OBD Dongle

Connect the OBD Dongle on your vehicle OBD connector.

4. LED sequences

The Dongle has a two-coloured LED, green and red.
When both colours are brightened, you can see an orange light.

Green LED		Red LED	
Sequence	Meaning	Sequence	Meaning
		Dongle OFF	OFF
No Modem /No GNSS	3 times (50ms ON/100ms OFF) 3550ms OFF	Ext. Power/Run	ON
No Modem /Fix GNSS	2 times (50ms ON/100ms OFF) 3700ms OFF		
Modem OK /No GNSS	1 time (50ms ON/100ms OFF) 3850ms OFF		
Modem OK /Fix GNSS	2000ms ON 2000ms OFF		
		Shutdown/Hibernate	30ms ON / 1 s OFF
		Idle/Sleep	30ms ON / 1 s OFF

5. Support

For all questions not related in this installation guide, please contact the support team by email at support@mobile-devices.fr