C4D-4G4EUAB_V7+ - INSTALLATION GUIDE

V 1.0

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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 wrong battery type. Please discard empty battery according to local regulations.

Hereby, Mobile Devices Ingénierie declares that the radio equipment type C4D-4G4EUAB_V7+ 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 X.Xcm 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 X.XXX 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 Xmm 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	1 Gbytes
	NAND Flash	2 Gbytes
Power supply	External power supply range	8-18V
	External voltage measurement	•
	Li-pol battery	270mAh
Communication	Modem	4G Cat.4 module (LE910C4-EU)
	Modem antenna	Internal
	SIM	Micro SIM clot
WLAN	Wifi	WiFi 802.11 a/b/g/n/ac 2.4GHz,5 GHz
	Bluetooth	BT 5.0 /BT 2.0
Positioning	GNSS receiver	U-blox M8 (GPS, GLONASS)
	GNSS antenna	Internal
Interface & Telematics features	IMU	Accelerometer ±2/4/8/16G Gyroscope ±125/245/500/1000/2000 dps
	OBD protocols	CAN, KWP2000, VPW, PWM
	CAN interface	Single CAN coprocessor
	Buttons	1 reset button
	Leds	2 bicolor LED
Environmental	Connectors	OBD connector
	Operating temperature	-20°C/+50°C with Battery -20°C/+60°C without battery
	Dimensions	With OBD connector: 27x69x51 mm Without OBD connector: 27x56x51 mm

2. Hardware description

2.1. External view

1 : OBD connector
2 : Reset button
3 : Power led
4 : Signal led

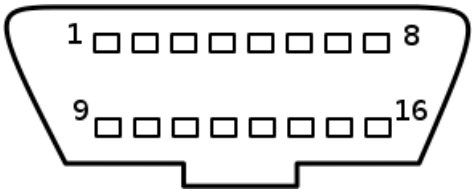
2.2. Internal view

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

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

2.3 OBD connector pin out

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



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

Those operations may need the use of specific tools like :

- TORX pattern TX5 screwdriver for the screw.
- Small slotted screwdriver to remove the cover.
- Thin tweezers to insert/remove the SIM card.

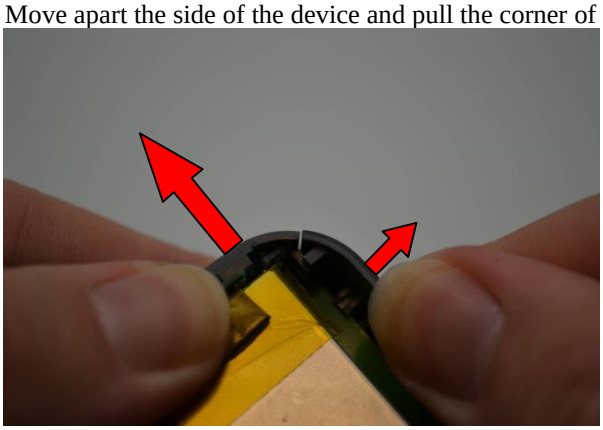
3.1. Open the device

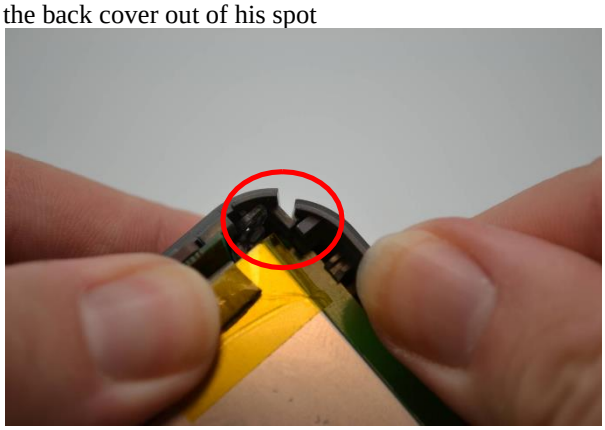
Remove the two screw using TX5 screwdriver


Use slotted screwdriver to pop-out the top cover on both side.

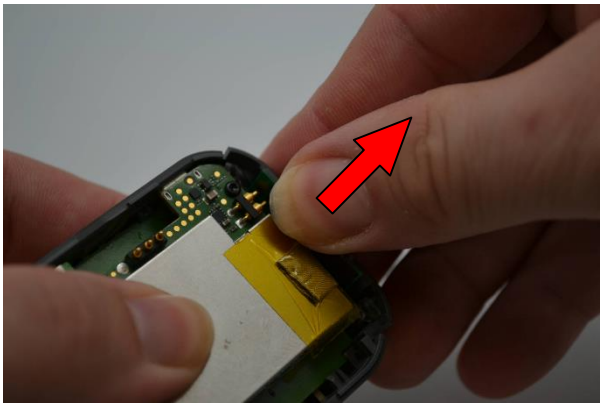

Slide the top cover heading back to remove it.

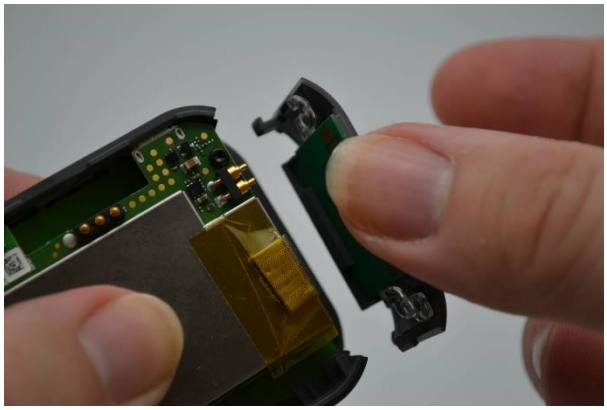

Move apart the side of the device and pull the corner of the back cover out of his spot





Pull the back cover on the rear and remove the back cover.

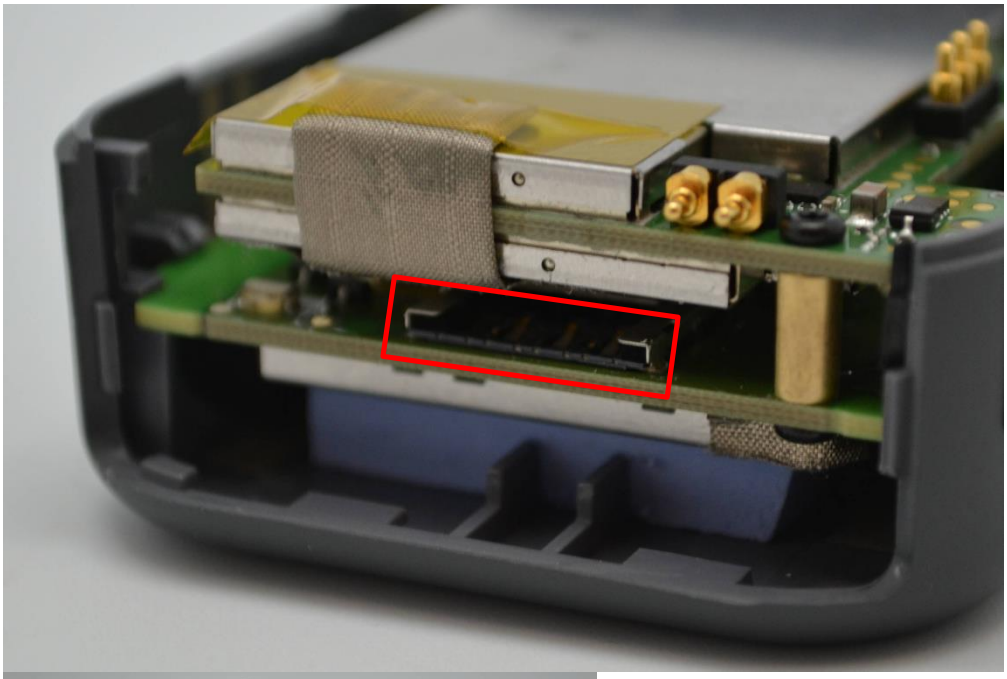


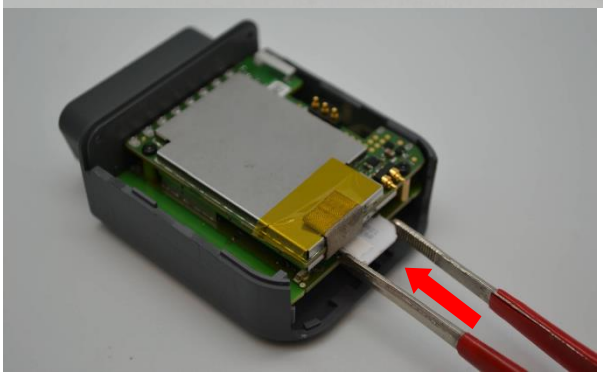


Device is now open

3.2. Insert the SIM card

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



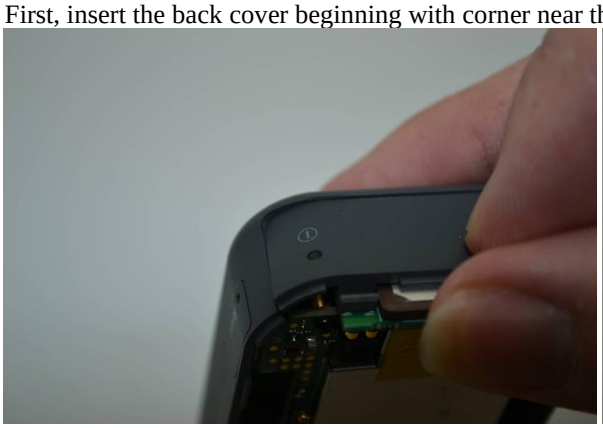


Insert the card with contact on bottom into the slot and push it as far as it will go.

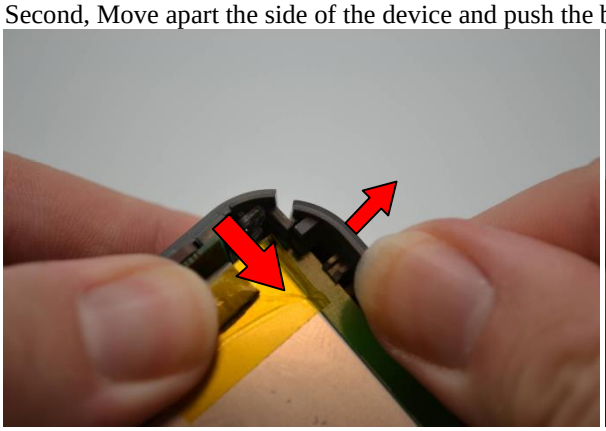
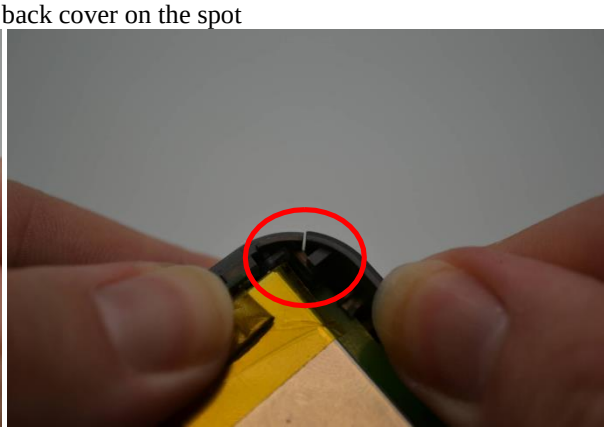
Once inserted the SIM card looks like this:

3.3. Properly close the device

First, insert the back cover beginning with corner near the power led.




Second, Move apart the side of the device and push the back cover on the spot

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


Finally, place the screw.


3.4. 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	3times(50msON/100msOFF) 3550ms OFF	Ext. Power/Run	ON
No Modem /Fix GNSS	2times(50msON/100msOFF) 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