en

SUMMARY

INSTALLATION MANUAL OF THE TMD MK3 EDR ACCESSORIES

REVIEW OF THE MANUAL

This document is **revision 08** of the **TMD MK3 EDR accessories technical manual**.

Issue date: 30/03/2018

Introduction

Dear Installer,

Please read the instructions in this manual carefully and keep it for future reference.

Reading and understanding the following manual will help you avoid damages to things or personal injury caused by improper use of the product.

TEXA S.p.A reserves the right to make any changes deemed necessary to improve the manual for any technical or marketing requirement; the company may do so at any time without prior notice.

This manual is to be considered an essential part of the product it refers to. If it is resold, the original buyer is therefore required to forward the manual to the new owner.

1 OPERATION OF THE TOOL'S RADIO DEVICES

Wireless connection with Bluetooth, WiFi and HSUPA technology

Wireless connectivity through Bluetooth, WiFi and HSUPA is a technology that supplies a standard, reliable method for exchanging information between different devices using radio waves. Many other products besides those built by TEXA use this technology, such as mobile phones, portable devices, Computers, printers, cameras, Pocket PCs etc.

The Bluetooth, WiFi and HSUPA interfaces search for compatible electronic devices based on the radio signals they emit and establish a connection. TEXA tools only select and prompt compatible TEXA devices. This does not exclude the presence of other sources of communication or disturbance.

THE EFFICIENCY AND QUALITY OF BLUETOOTH, WiFi AND HSUPA COMMUNICATION MAY BE AFFECTED BY THE PRESENCE OF RADIO DISTURBANCE. THE COMMUNICATION PROTOCOL IS DESIGNED TO MANAGE THESE TYPES OF ERRORS; HOWEVER, IN SUCH CASES COMMUNICATION MAY BE DIFFICULT AND CONNECTION MAY REQUIRE SEVERAL ATTEMPTS.

SHOULD THE WIRELESS CONNECTION ENCOUNTER SERIOUS PROBLEMS AND COMPROMISE REGULAR COMMUNICATION, THE SOURCE OF THE ENVIRONMENTAL ELECTROMAGNETIC DISTURBANCE MUST BE IDENTIFIED AND ITS INTENSITY REDUCED.

Position the tool so that the radio devices it is equipped with can work properly. In particular, do not cover it with any shielding or metallic materials in general.

2 SAFETY RULES

Follow the indications in the **TMD MK3 EDR** installation manual regarding safety.

3 ACCESSORIES FOR TMD MK3 EDR

This manual illustrates the installation of the accessories available for **TMD MK3 EDR**.

4 TMD MK3 SOS

The **TMD MK3 SOS** button is a device through which you can use **TMD MK3 EDR** to send an assistance request to the Operations Centre.

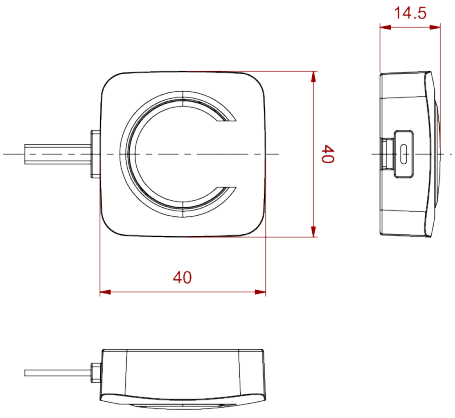
The device can be used in case of an emergency, a panic attack, a sudden illness of the driver.

TMD MK3 SOS is equipped with:

- *a built-in red LED,*
- *a warning buzzer,*
- *a connection cable.*

Do not use aggressive cleansers, especially alcohol, to clean the device.

4.1 Technical Features

Model:	TMD MK3 SOS
Manufacturer:	TEXA S.p.A.
CPU:	ARM Cortex M0 with LIN BUS type interface
Visible warnings:	Adjustable intensity red LED
Audible warnings:	Built-in electronic buzzer
Power supply:	12 Vdc
Length of connection cable:	2.5 m
Consumptions:	0.75 mAdc in standby mode (no LED) Maximum consumption 20 mAdc
Storage and operation humidity:	10% ÷ 80 % without condensation.
Operating temperature:	- 30 ÷ 70 °C
Storage temperature:	- 40 ÷ 85 °C
Safety:	EN 60950-1:2006 + A11:2009 + A1:2010 + A12:2011 + AC:2011 + A2:2013
Electromagnetic compatibility:	EN 55022 EN 55024 ISO 7637-1 ISO 7637-2
Regulations / Directives:	UN ECE R10 R&TTE 1999/05/EC (complete system analysis) ROHS 2011/65 EU
Dimensions:	
Weight:	12 g

4.2 Regulatory Information

Declaration of conformity

CE	Texa S.p.A. hereby declares that this **TMD MK3 SOS** device complies with the essential requirements and with all further provisions defined by the R&TTE 1999/5/EC (complete system analysis) and RoHS 2011/65/EU directives.

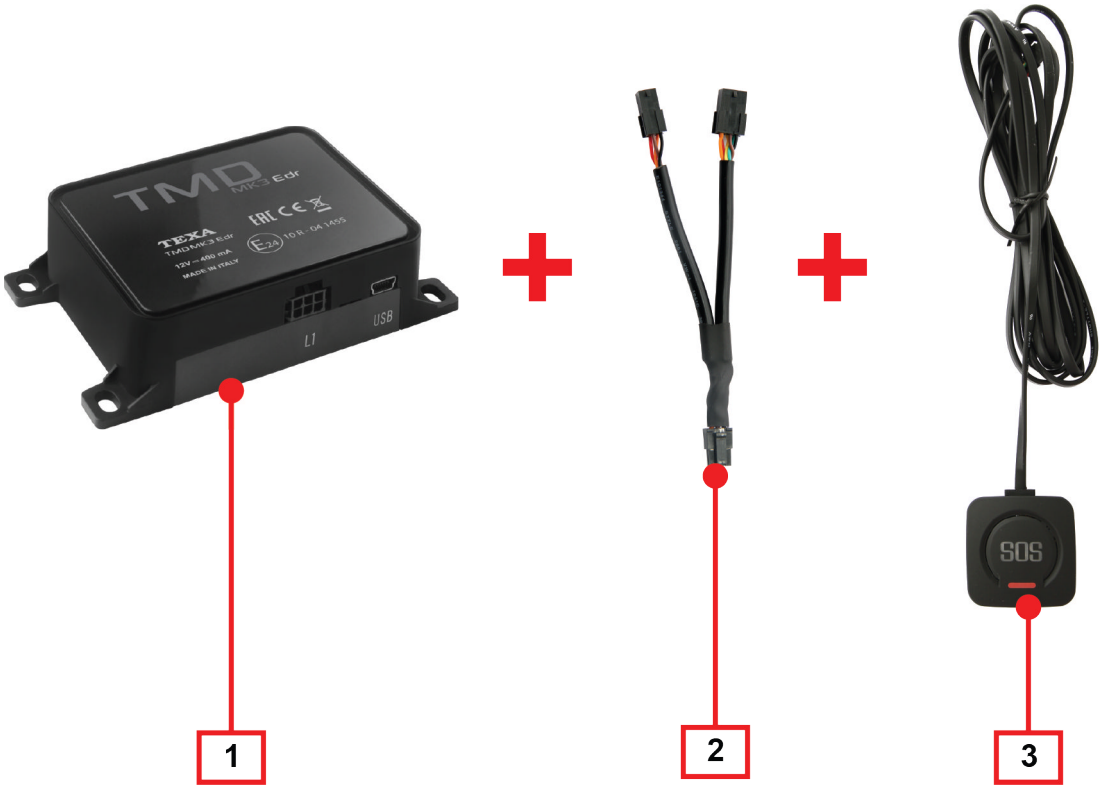
A complete copy of the Declaration of Conformity can be found at

TEXA S.p.A., Via 1 Maggio 9, 31050 Monastier di Treviso (TV), Italy

4.3 Installation

The additional Y-shaped cable (code 3904674) is needed for the installation.

Position the device in a way it does not compromise or interfere with driving, but also easy to reach in case of an emergency.



1. *TMD MK3 EDR*
2. *Y-shaped cable*
3. *TMD MK3 SOS*

Proceed as follows:

1. *Secure* **TMD MK3 SOS** *in the most appropriate position*.*
2. *Connect the TMD MK3 SOS cable to the Y-shaped cable.*
3. *Insert the connector of the* **Y-shaped cable** *into the* **L1** *input of* **TMD MK3 EDR.**

(*) See the specific installation sheet for the vehicle you are working on.

4.4 Use

The transmission of an assistance request through TMD MK3 SOS is subject to the following **limitations**:

- *only 1 time between the vehicle's ignition (instrument panel on) and shutdown (instrument panel off),*
- *at the most 99 times within a day (24 h).*

PROCEDURE WITH THE VEHICLE ON

Proceed as follows:

1. *Press the SOS button for more than two seconds.*

PROCEDURE WITH THE VEHICLE OFF

Proceed as follows:

1. *Press the SOS button for approximately 2 seconds.*
2. *Release the button.*
3. *Make sure the backlighting of the button turned on (weak backlighting).*
4. *Press the SOS button for more than two seconds.*

In both cases, once the button is pressed, the following occurs:

- *intermittent activation of the backlighting,*
- *a single tone audible warning.*

At this point **TMD MK3 EDR** sends the request for assistance to the operations centre.

The confirmation that the assistance request was sent is indicated by:

- *fixed activation of the button's backlighting (strong backlighting),*
- *a single tone audible warning.*

5 TMD MK3 PRIVACY

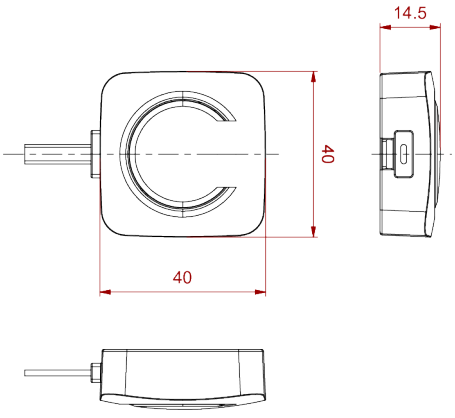
The **TMD MK3 PRIVACY** button is a device through which you can disable the geolocation using **TMD MK3 EDR**.

TMD MK3 PRIVACY is equipped with:

- *built-in green LED,*
- *a warning buzzer,*
- *a connection cable.*

Do not use aggressive cleansers, especially alcohol, to clean the device.

5.1 *Technical Features*

Model:	TMD MK3 PRIVACY
Manufacturer:	TEXA S.p.A.
CPU:	ARM Cortex M0 with LIN BUS type interface
Visible warnings:	Adjustable intensity green LED
Audible warnings:	Built-in electronic buzzer
Power supply:	12 Vdc
Length of connection cable:	2.5 m
Consumptions:	0.75 mAdc in standby mode (no LED) Maximum consumption 20 mAdc
Storage and operation humidity:	10% ÷ 80 % without condensation.
Operating temperature:	- 30 ÷ 70 °C
Storage temperature:	- 40 ÷ 85 °C
Safety:	EN 60950-1:2006 + A11:2009 + A1:2010 + A12:2011 + AC:2011 + A2:2013
Electromagnetic compatibility:	EN 55022 EN 55024 ISO 7637-1 ISO 7637-2
Regulations / Directives:	UN ECE R10 R&TTE 1999/05/EC (complete system analysis) ROHS 2011/65 EU
Dimensions:	
Weight:	12 g

5.2 *Regulatory Information*

Declaration of conformity

CE	Texa S.p.A. hereby declares that this **TMD MK3 PRIVACY** device complies with the essential requirements and with all further provisions defined by the R&TTE 1999/5/EC (complete system analysis) and RoHS 2011/65/EU directives.

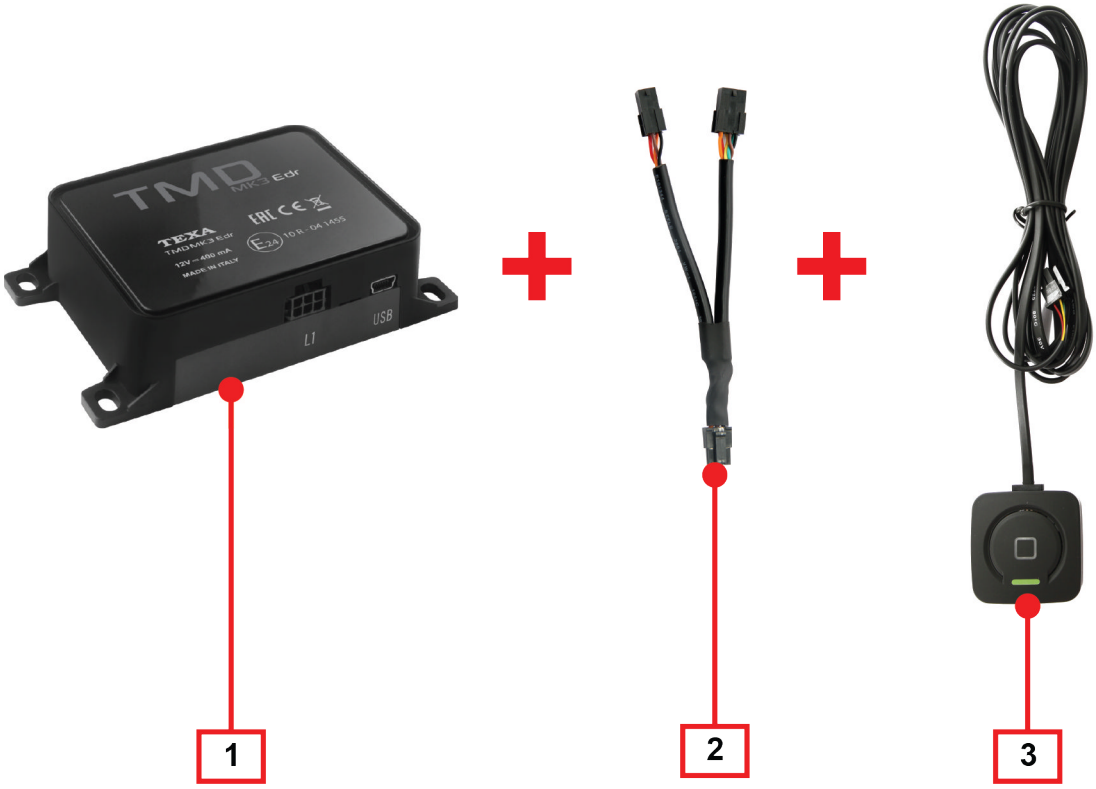
A complete copy of the Declaration of Conformity can be found at

TEXA S.p.A., Via 1 Maggio 9, 31050 Monastier di Treviso (TV), Italy

5.3 Installation

The additional Y-shaped cable (code 3904674) is needed for the installation.

Position the device in a way it does not compromise or interfere with driving, but also easy to reach in case of an emergency.



1. *TMD MK3 EDR*
2. *Y-shaped cable*
3. *TMD MK3 PRIVACY*

Proceed as follows:

1. *Secure TMD MK3 PRIVACY in the most appropriate position*.*
2. *Connect the TMD MK3 PRIVACY cable to the Y-shaped cable.*
3. *Insert the connector of the Y-shaped cable into the L1 input of TMD MK3 EDR.*

(*) See the specific installation sheet for the vehicle you are working on.

5.4 *Use*

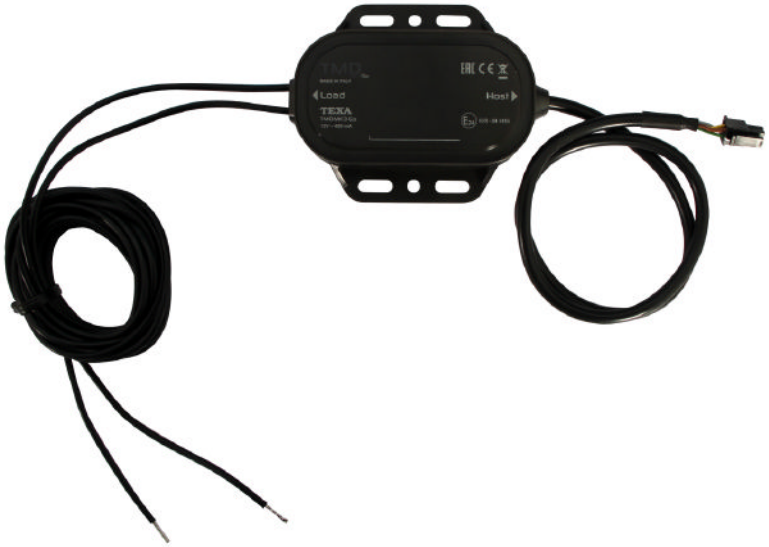
Simply press the button to activate / deactivate the geolocation.

When pressing the button, you will see visible warnings through the LED and hear audible warnings through the built-in electronic buzzer.

The device's functionality and the way it is used can be customised based on specific needs.

6 TMD MK3 ACTUATOR LOCK

TMD MK3 ACTUATOR LOCK is a device that, if active, inhibits the actuator it is connected to.



For example, the device can be connected in order to inhibit the vehicle's ignition.

In this case, the device is activated automatically by **TMD MK3** through the interaction with the **Driver Recognition Kit**.

The recognition process can be take place through a badge or smartphone.

If the recognition is successful, the device allows vehicle ignition.

Otherwise, the engine cannot be started.

SHORT STOPS

Short stop means that the vehicle is restarted within 5 minutes from the last shutdown.

In these circumstances, it is not necessary that the recognition be carried out again.

This function can be configured.

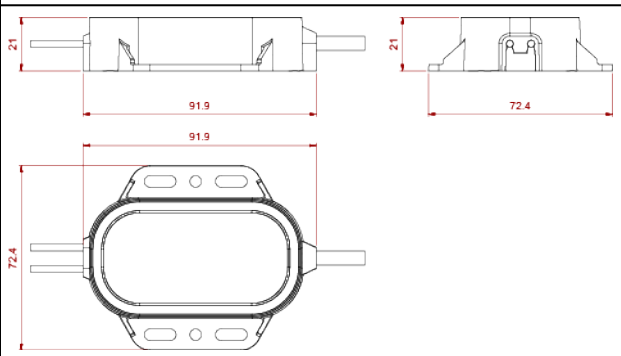
UNLOCK BY AN OPERATOR

If the badge is lost, the vehicle can be unlocked remotely by an operations centre.

TAMPERING

In case of a tampering attempt, the device activates automatically inhibiting vehicle ignition.

6.1 Technical Features

Model:	TMD MK3 ACTUATOR LOCK
Manufacturer:	TEXA S.p.A.
CPU:	ARM Cortex M0 with LIN BUS type interface
Inhibitory control:*	Bistable relay. Relay output: 10 Adc maximum with inductive load Coil voltage: 5 ÷ 12 Vdc
Power supply:	12 Vdc
Consumptions:	20 mAdc
Storage and operation humidity:	10% ÷ 80 % without condensation.
Operating temperature:	- 30 ÷ 70 °C (TEXA S.p.A. proprietary device)
Storage temperature:	- 40 ÷ 85 °C
Safety:	EN 60950-1:2006 + A11:2009 + A1:2010 + A12:2011 + AC:2011 + A2:2013
Electromagnetic compatibility:	EN 55022 EN 55024 ISO 7637-1 ISO 7637-2
Regulations / Directives:	UN ECE R10 R&TTE 1999/05/EC (complete system analysis) RoHS 2011/65/EU
Dimensions:	
Weight:	112 g (including cables)

(*) The output protection (inhibitory control) is transferred to the fuses installed in the vehicle's electrical circuit.

6.2 Regulatory Information

Declaration of conformity

CE	Texa S.p.A. hereby declares that this **TMD MK3 ACTUATOR LOCK** device complies with the essential requirements and with all further provisions defined by the R&TTE 1999/5/EC (complete system analysis) and RoHS 2011/65/EU directives.

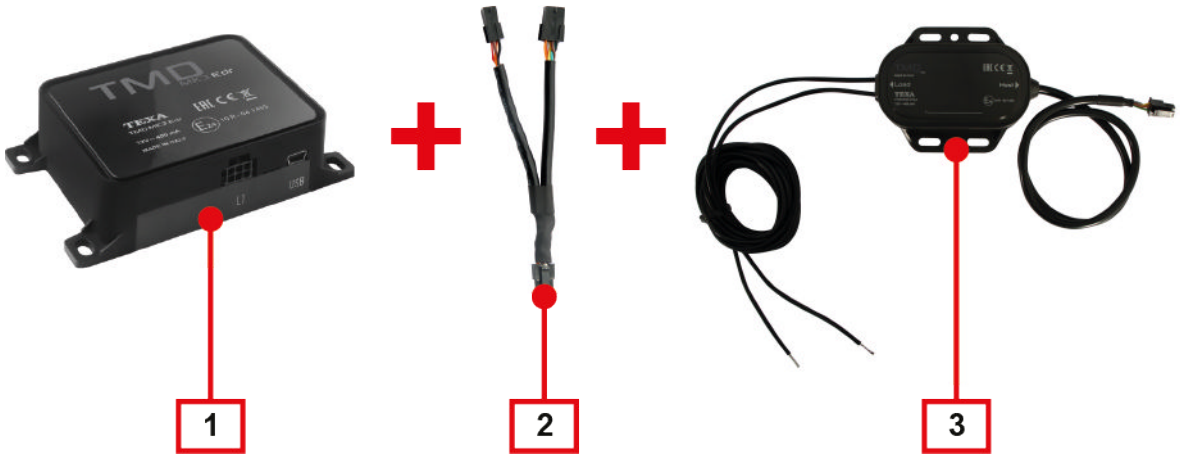
A complete copy of the Declaration of Conformity can be found at

TEXA S.p.A., Via 1 Maggio 9, 31050 Monastier di Treviso (TV), Italy

6.3 Installation

The additional Y-shaped cable (code 3904674) is needed for the installation.

	Install the TMD MK3 ACTUATOR LOCK inside the engine compartment and away from heat sources. **The TMD MK3 ACTUATOR LOCK central unit must be easy to reach in case of an emergency deactivation.** **The system relay has a maximum range of 10 A.**



1. *TMD MK3 EDR*
2. *Y-shaped cable*
3. *TMD MK3 ACTUATOR LOCK*

Proceed as follows:

1. *Secure TMD MK3 ACTUATOR LOCK in the most appropriate position*.*
2. *Connect the two TMD MK3 ACTUATOR LOCK cables to the device that must be inhibited.*
3. *Connect the cable with the TMD MK3 ACTUATOR LOCK connector to the Y-shaped cable.*
4. *Insert the connector of the Y-shaped cable into the L1 input of TMD MK3 EDR.*

(*) See the specific installation sheet for the vehicle you are working on.

7 TMD MK3 HANDS-FREE SOS

The **TMD MK3 HANDS-FREE SOS** button is a device through which you can use **TMD MK3 EDR** to send a request for assistance to the Operations Centre.

The device can be used in case of an emergency, a panic attack, a sudden illness of the driver.

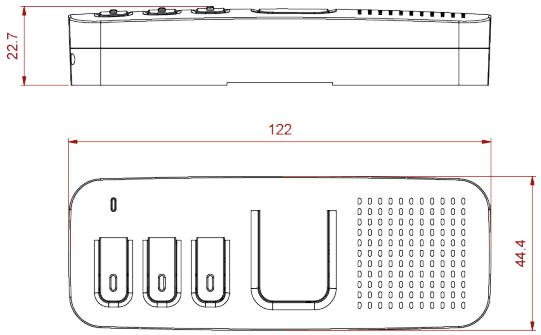
TMD MK3 SOS is equipped with:

- *a built-in red LED,*
- *a warning buzzer,*
- *a connection cable.*

Do not use aggressive cleansers, especially alcohol, to clean the device.

7.1 *Technical Features*

Model:	TMD MK3 HANDS-FREE SOS
Manufacturer:	TEXA S.p.A.
CPU:	80 MHz RISC MCU + DSP
Visible warnings:	RGB LED
Audible warnings:	Speaker 8 Ohm 1 W
Power supply:	12 Vdc
Length of connection cable:	2.5 m
Consumptions:	< 1.5 mAdc in standby mode (no LED) Maximum consumption 150 mAdc
Storage and operation humidity:	10% ÷ 80 % without condensation.
Operating temperature:	- 30 ÷ 50 °C
Storage temperature:	- 40 ÷ 85 °C
Internal battery:	Model: 3.7 V Lithium-Ion 602248+PCM Capacity: 600 mAh
Internal battery charging management:	Charging temperature: 0 ÷ 30 °C The battery's charging process is cut off if there is an incoming call.
Regulations / Directives:	UN ECE R10 R&TTE 1999/05/EC (complete system analysis) ROHS 2011/65 EU
Electromagnetic compatibility:	ETSI EN 301 489-1 ETSI EN 489-17 ETSI EN 300 328-2 EN 62479:2010 ISO 7637-1 ISO 7637-2
Safety:	EN 60950-1:2006 + A11:2009 + A1:2010 + A12:2011 + AC:2011 + A2:2013

Dimensions:	
Weight:	90 g (with cable)

7.2 Regulatory Information

Declaration of conformity

CE	Texa S.p.A. hereby declares that this **TMD MK3 HANDS-FREE SOS** device complies with the essential requirements and with all further provisions defined by the R&TTE 1999/5/EC (complete system analysis) and RoHS 2011/65/EU directives.

A complete copy of the Declaration of Conformity can be found at

TEXA S.p.A., Via 1 Maggio 9, 31050 Monastier di Treviso (TV), Italy

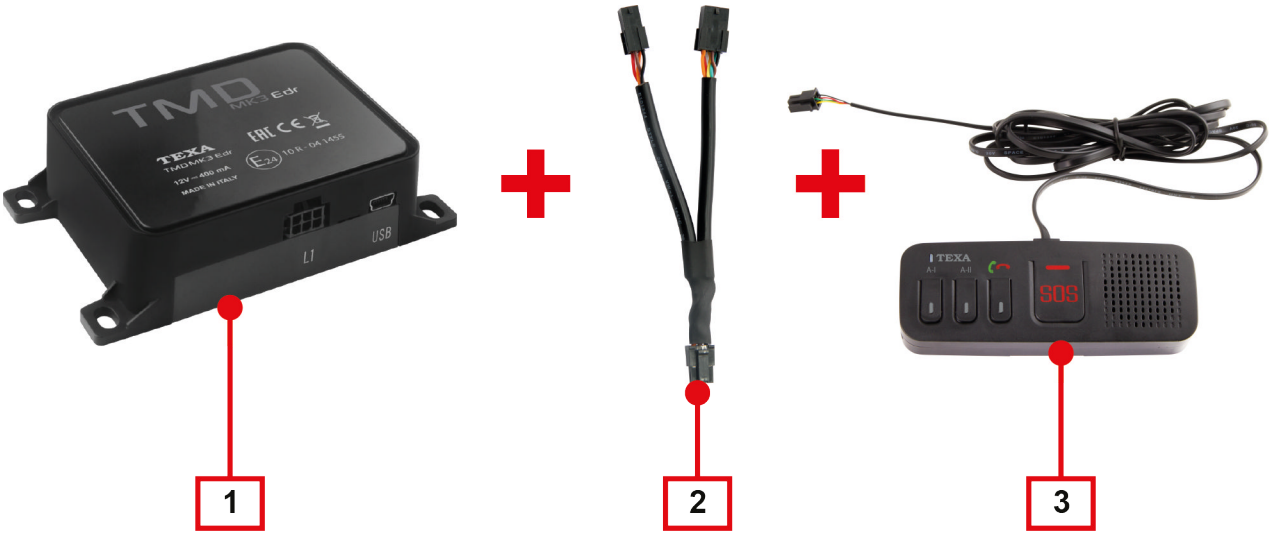
7.3 Description

1. *Connector*
2. *RGB LED*
3. *Button* **A-I**
4. *Button* **A-II**
5. **Call** *button*
6. **SOS** *button*
7. *Speaker / Microphone*

7.4 Installation

The additional Y-shaped cable (code 3904674) is needed for the installation.
Other specific interconnection cables can be provided upon request.

Position the device in a way it does not compromise or interfere with driving, but also easy to reach in case of an emergency.



1. *TMD MK3 EDR*
2. *Y-shaped cable*
3. *TMD MK3 HANDS-FREE SOS*

Proceed as follows:

1. *Secure* **TMD MK3 HANDS-FREE SOS** *in the most appropriate position*.*
2. *Connect the* **TMD MK3 HANDS-FREE SOS** *cable to the* **Y-shaped cable***.*
3. *Insert the connector of the* **Y-shaped cable** *into the* **L1** *input of* **TMD MK3 EDR.**

(*) See the specific installation sheet for the vehicle you are working on.

7.5 *Use*

The device is highly configurable via firmware.

A specific function can be assigned to each button.

An example of configuration is the following:

- *keeping the* **SOS** *button pressed for an extended amount of time allows the transmission of a request for assistance to the Operations Centre;*
- *pressing the* **CALL** *button allows you to "hang up", ending the conversation with the Operations Centre;*
- *the buttons* **A-I** *and* **A-II** *allow you to, respectively, lower and raise the volume of the speaker.*

Both the RGB LED and the speaker can be used to give visual and audible indications.

8 TMD MK3 MULTIREADER

TMD MK3 MULTIREADER is a device through which you can use different technologies for the recognition of a badge.

For example, through the personal badge, the device allows you to identify who is driving the vehicle in which the device is installed.

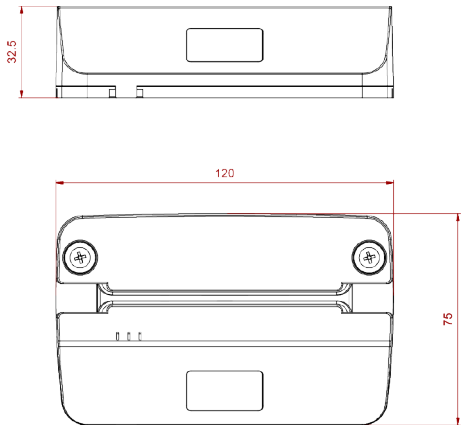
TMD MK3 MULTIREADER is equipped with:

- *3 integrated LEDs,*
- *a reader for NFC technology,*
- *a track reader for Magnetic Stripe technology,*
- *a reader with optical sensor for Barcode technology,*
- *a connection cable.*

Do not use aggressive cleansers, especially alcohol, to clean the device.

8.1 *Technical Features*

Model:	TMD MK3 MULTIREADER
Manufacturer:	TEXA S.p.A.
CPU:	Cortex M7
RF-ID reader:	Multistandard RF-ID Reader
Optical sensor:	CMOS camera 5 MP
Magnetic sensor:	Strip-reader (ISO7811)
Visible warnings:	1 blue LED, 1 green LED, 1 red LED
Audible warnings:	Buzzer
Power supply:	12 Vdc
Length of connection cable:	2.5 m
Consumptions:	< 2 mAdc in standby 200 mAdc maximum
Storage and operation humidity:	10% ÷ 80 % without condensation.
Operating temperature:	- 30 ÷ 50 °C
Storage temperature:	- 40 ÷ 85 °C
Regulations / Directives:	UN ECE R10 R&TTE 1999/05/EC (complete system analysis) ROHS 2011/65 EU
Electromagnetic compatibility:	ETSI EN 301 489-1 ETSI EN 489-3 ETSI EN 301 330 EN 62479:2010 ISO 7637-1 ISO 7637-2
Safety:	EN 60950-1:2006 + A11:2009 + A1:2010 + A12:2011 + AC:2011 + A2:2013

Dimensions:	
Weight:	170 g

8.2 Regulatory Information

Declaration of conformity

CE	Texa S.p.A. hereby declares that this **TMD MK3 MULTIREADER** device complies with the essential requirements and with all further provisions defined by the R&TTE 1999/5/EC (complete system analysis) and RoHS 2011/65/EU directives.

A complete copy of the Declaration of Conformity can be found at

TEXA S.p.A., Via 1 Maggio 9, 31050 Monastier di Treviso (TV), Italy

8.3 Description

1. *Reader for NFC technology*
2. *Track reader for Magnetic Stripe technology*
3. *LED unit:*
   - *Blue LED*
   - *Green LED*
   - *Red LED*
4. *Video camera for Barcode technology reading and proximity sensor*
5. *Connector*

8.4 Installation

The additional Y-shaped cable (code 3904674) is needed for the installation.
Other specific interconnection cables can be provided upon request.

Position the device in a way it does not compromise or interfere with driving, but also easy to reach in case of an emergency.

1. *TMD MK3 EDR*
2. *Y-shaped cable*
3. *TMD MK3 MULTIREADER*

Proceed as follows:

1. *Secure* **TMD MK3 MULTIREADER** *in the most appropriate position*.*
2. *Connect the* **TMD MK3 MULTIREADER** *cable to the* **Y-shaped cable***.*
3. *Insert the connector of the* **Y-shaped cable** *into the* **L1** *input of* **TMD MK3 EDR.**

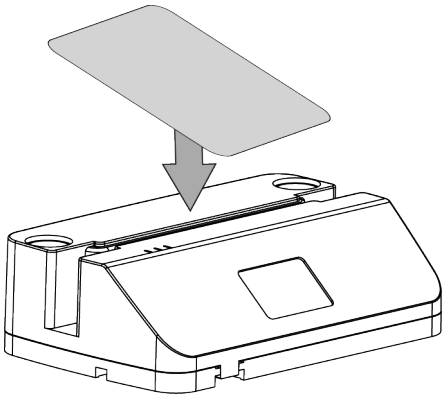
(*) See the specific installation sheet for the vehicle you are working on.

8.5 *Use*

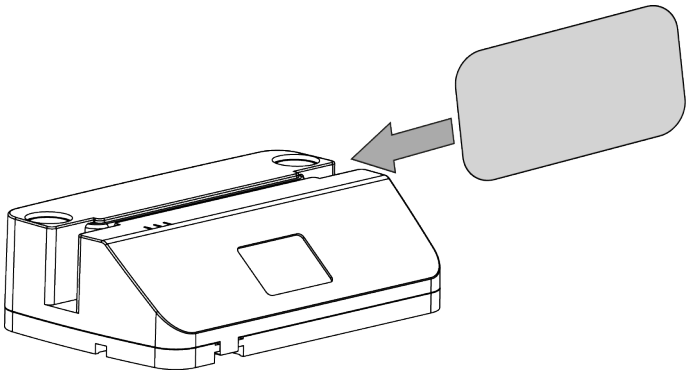
The device is highly configurable via firmware.

The technologies the device is equipped with allow you to recognise the badge:

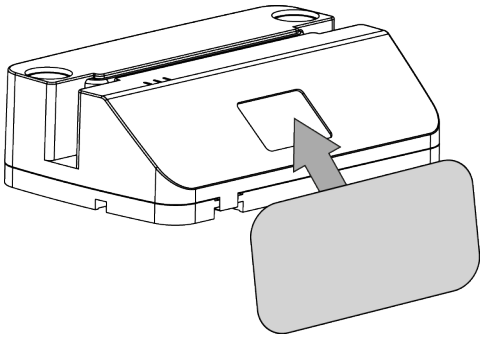
- *by putting it close to the presence sensor,*



- *by swiping its magnetic stripe through the specific slot,*



- *by putting it close to the optical sensor on its barcode side.*



Both the LEDs and the electronic buzzer can be used to give visual and audible indications.

9 TMD MK3 KEYLESS

The **TMD MK3 KEYLESS** key fob is a device that, combined with **TMD MK3 EDR**, allows you to verify the presence of the keys inside the vehicle once it is returned.

TMD MK3 KEYLESS is made up of two parts:

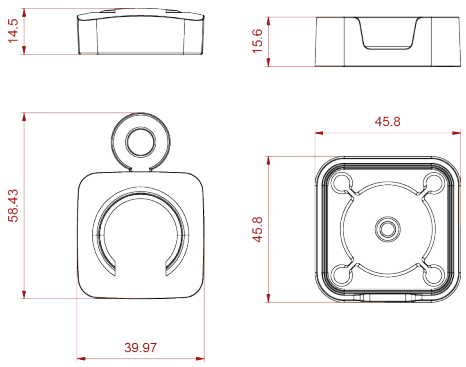
- *support,*
- *key fob with built-in Bluetooth module.*

TMD MK3 KEYLESS is equipped with:

- *red LED,*
- *a warning buzzer.*

Do not use aggressive cleansers, especially alcohol, to clean the device.

9.1 Technical Features

Model:	TMD MK3 KEYLESS
Manufacturer:	TEXA S.p.A.
CPU:	Cypress PSOC
Communication:	Bluetooth Low Energy
Visible warnings:	Red LED
Audible warnings:	Built-in electronic buzzer
Internal Cell:	CR2032 cell
Consumptions:	26 µA in standby
Storage and operating humidity:	10% ÷ 80 % without condensation.
Operating temperature:	- 20 ÷ 58 °C
Storage temperature with battery cell disconnected:	- 30 ÷ 70 °C
Directives:	RED 2014/53/EU RoHS 2011/65/EU
Electromagnetic compatibility:	ETSI EN 301 489-1 ETSI EN 301 489-17 ETSI EN 300 328-2 EN 62479:2010
Safety:	EN 60950-1:2006 + A11:2009 + A1:2010 + A12:2011 + AC:2011 + A2:2013
Dimensions:	
Weight:	12 g

9.2 Regulatory Information

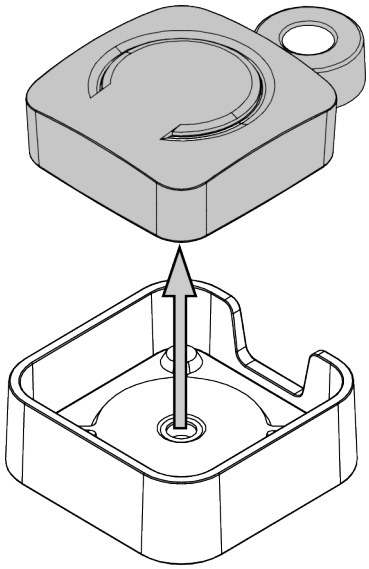
Simplified EU Declaration of Conformity

CE	The manufacturer, TEXA S.p.A, declares that the type of radio equipment **TMD MK3 KEYLESS** is compliant with the RED 2014/53/EU and RoHS 2011/65/EU directives. The complete text of the EU declaration of conformity is available at the following Internet address: http://www.texa.it/download

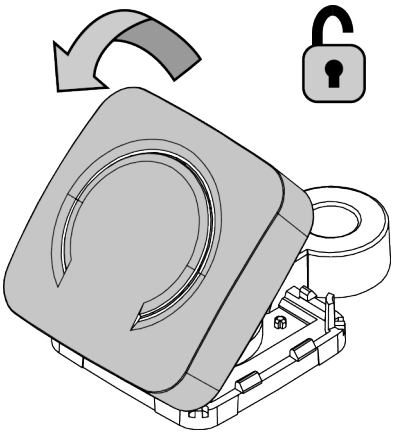
9.3 Inserting the Battery

Before using the device, you must insert its battery.

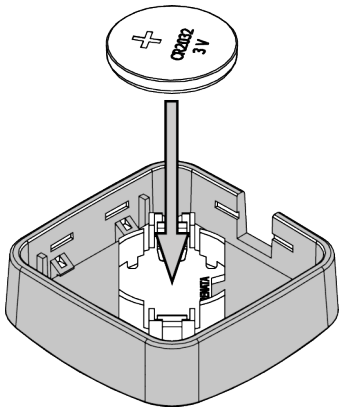
Proceed as follows:



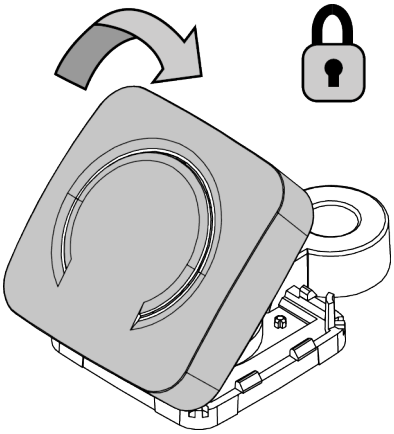
1. Remove the key fob from the support.



2. Separate the key fob's top casing from the bottom one.



3. Flip over the top casing and insert the battery into its slot with the positive pole facing upwards.



4. Reposition the top casing onto the bottom one.

ATTENTION: Risk of explosion if the battery is replaced with another one of the wrong type.

Dispose of the batteries following the instructions.

9.4 Installation

1. *TMD MK3 EDR*
2. *TMD MK3 KEYLESS*

The communication between the **TMD MK3 EDR** and the **TMD MK3 KEYLESS** takes place via Bluetooth.

The pairing among the two devices may be automatic or follow a procedure that can be customised based on specific needs.

If the TMD MK3 KEYLESS must be fastened inside the passenger compartment, it must be positioned where it does not compromise safe driving or the proper operation of the safety devices.

We recommend fastening it to smooth, clean and sufficiently flat surfaces.

The support can be secured using a screw that passes through the hole in its centre, other than with Velcro or tape strips.

9.5 *Use*

Park the vehicle and turn off the engine, then fit the key fob with the keys attached onto the support.

Once this operation is complete, the device communicates, via Bluetooth, to the TMD MK3 EDR that the keys have been positioned inside the vehicle correctly.

At this point, based on the accessories installed and on the customisation of their firmware, you may, for example, automatically lock the doors once you get out of the vehicle and then use an identification badge to access the vehicle again.

10 TMD MK3 TEXA SHARE

TMD MK3 TEXA SHARE is a device through which you can manage the use of a car that is part of a company fleet.

Using the company badge, the device allows you, for example, to indicate if the vehicle you intend to use can be reserved and if so to activate the door unlock function.

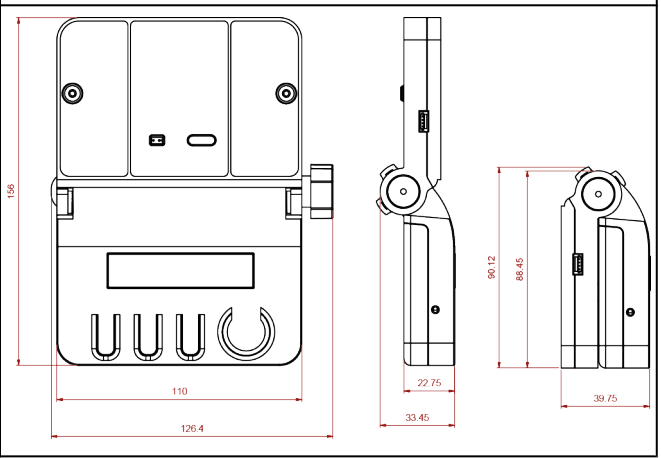
The device has a particular "book" shape thanks to which, after installing it on the windscreen, you can adjust the inclination of the front part so to optimise the view of the display and the accessibility of the buttons.

TMD MK3 TEXA SHARE is equipped with:

- *3 configurable buttons,*
- *SOS button,*
- *reader for NFC technology,*
- *buzzer,*
- *RGB LED,*
- *LCD,*
- *connection cable.*

Do not use aggressive cleansers, especially alcohol, to clean the device.

10.1 Technical Features

Model:	TMD MK3 TEXA SHARE
Manufacturer:	TEXA S.p.A.
CPU:	ARM Cortex M0
RF-ID reader:	Multistandard RF-ID Reader
Visible warnings:	1 RGB LED; LCD
Audible warnings:	Buzzer
Power supply:	12 Vdc
Length of connection cable:	2.5 m
Consumptions:	100 mAdc
Storage and operation humidity:	10% ÷ 80 % without condensation.
Operating temperature:	- 20 ÷ 65 °C
Storage temperature:	- 40 ÷ 85 °C
Regulations / Directives:	UN ECE R10 RED 2014/53/EU (complete system analysis) RoHS 2011/65/EU
Electromagnetic compatibility:	ETSI EN 301 489-1 ETSI EN 489-3 ETSI EN 301 330 EN 62479:2010 ISO 7637-1 ISO 7637-2
Safety:	EN 60950-1:2006 + A11:2009 + A1:2010 + A12:2011 + AC:2011 + A2:2013
Dimensions:	

Weight:	250 g

10.2 *Regulatory Information*

Simplified EU Declaration of Conformity

CE	The manufacturer, TEXA S.p.A, declares that the type of radio equipment **TMD MK3 TEXA SHARE** is compliant with the RED 2014/53/EU (complete system analysis) and RoHS: 2011/65/EU directives. The complete text of the EU declaration of conformity is available at the following Internet address: http://www.texa.it/download

10.3 Description

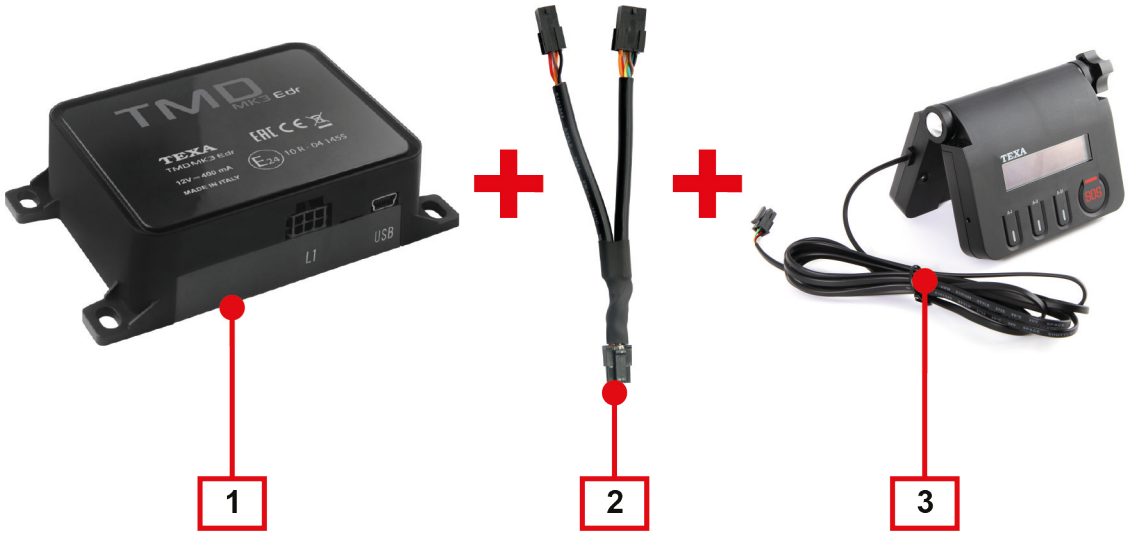
1. *RGB LED (back side of the device)*
   - *Green: available*
   - *Yellow: not available*
   - *RED: busy*
   - *Blue: maintenance*
2. *NFC technology reader (back side of the device)*
3. *Connector*
4. *Function-buttons*
   - *A-I*
   - *A-II*
   - *A-III*
5. *SOS button*
6. *LCD*
7. *Locking screw*

10.4 Installation

The additional Y-shaped cable (code 3904674) is needed for the installation.

Other specific interconnection cables can be provided upon request.

Position the device in a way it does not compromise or interfere with driving, but also easy to reach in case of an emergency.



1. *TMD MK3 EDR*
2. *Y-shaped cable*
3. *TMD MK3 TEXA SHARE*

Proceed as follows:

1. *Secure* **TMD MK3 TEXA SHARE** *in the most appropriate position*.*
2. *Connect the* **TMD MK3 TEXA SHARE** *cable to the* **Y-shaped cable***.*
3. *Insert the connector of the* **Y-shaped cable** *into the* **L1** *input of* **TMD MK3 EDR.**

(*) See the specific installation sheet for the vehicle you are working on.

Attach the device to the windscreen using the specific adhesive / Velcro strips.

After securing the device, you can use the locking screw to adjust the inclination of the front part so to optimise the view of the display and the accessibility of the buttons.

10.5 *Use*

The device is highly configurable via firmware.

An example of a possible use is the following:

1. *Place the badge close to the vehicle's windscreen in correspondence of the NFC technology reader.*
2. *Wait for the LED indication:*
   - *Green: the vehicle is available to be used*
   - *Yellow: the vehicle is not available because it has already been reserved*
   - *Red: the vehicle cannot be reserved (for example due to a fault)*
   - *Blue: the vehicle is being maintenanced*
3. *If the vehicle is available, the doors are unlocked and you may access the passenger compartment.*

The SOS button allows you to use TMD MK3 EDR to send a request for assistance to the Operations Centre.

The function of the function-buttons A-I, A-II, A-III can be configured via firmware.

The display allows you to view short messages that can be customised based on the case and needs.

11 TMD MK3 PRIVACY BTLE

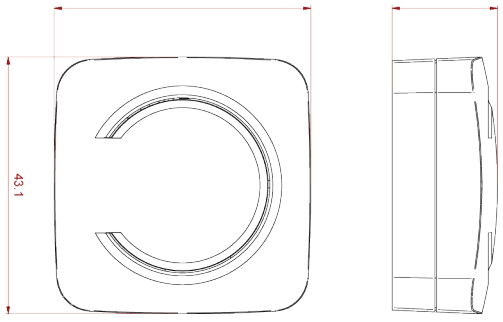
The **TMD MK3 PRIVACY BTLE** button is a device through which you can disable the geolocation using **TMD MK3 EDR**.

TMD MK3 PRIVACY BTLE is equipped with:

- *a built-in green / red LED,*
- *a warning buzzer.*

Do not use aggressive cleansers, especially alcohol, to clean the device.

11.1 Technical Features

Model:	TMD MK3 PRIVACY BTLE
Manufacturer:	TEXA S.p.A.
CPU:	Cypress PSOC
Communication:	Bluetooth Low Energy
Visible warnings:	green / red LED
Audible warnings:	Built-in electronic buzzer
Internal Cell:	CR2450 cell
Consumptions:	26 µA in standby
Storage and operation humidity:	10% ÷ 80 % without condensation.
Operating temperature:	- 20 ÷ 58 °C
Storage temperature with battery cell disconnected:	- 30 ÷ 70 °C
Directives:	RED 2014/53/EU RoHS 2011/65/EU
Electromagnetic compatibility:	ETSI EN 301 489-1 ETSI EN 301 489-17 ETSI EN 300 328-2 EN 62479:2010
Safety:	EN 60950-1:2006 + A11:2009 + A1:2010 + A12:2011 + AC:2011 + A2:2013
Dimensions:	
Weight:	12 g

11.2 Regulatory Information

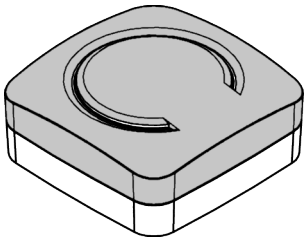
Declaration of conformity

CE	The manufacturer, TEXA S.p.A, declares that the type of radio equipment **TMD MK3 PRIVACY BTLE** is compliant with the RED 2014/53/EU and RoHS: 2011/65/EU directives. The complete text of the EU declaration of conformity is available at the following Internet address: **http://www.texa.it/download**

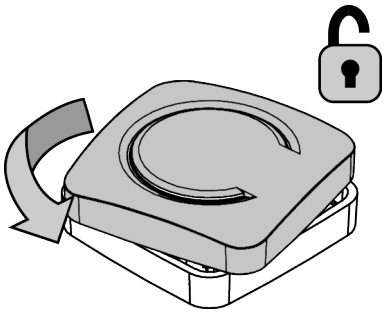
11.3 *Inserting the Battery*

Before using the device, you must insert its battery.

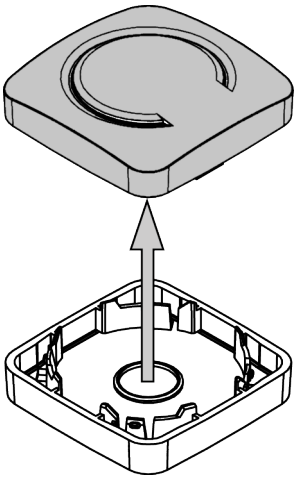
Proceed as follows:



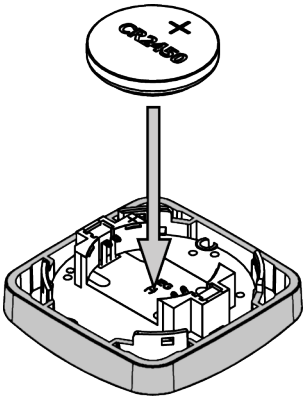
1. Position the device with the button facing upwards.



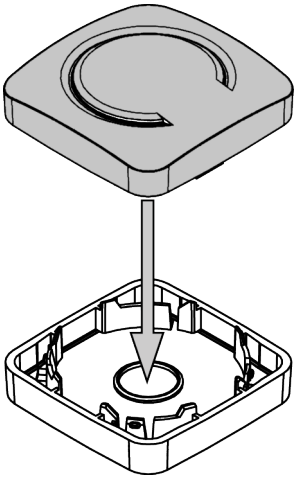
2. Unlock the upper case by delicately turning it counter clockwise.



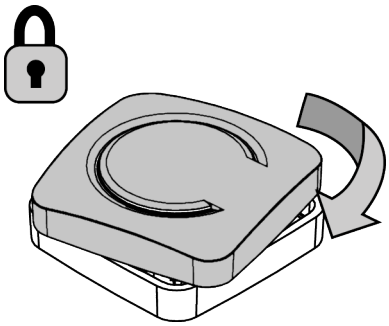
3. Lift the upper case.



4. Flip over the upper case and insert the battery into its slot with the positive pole facing upwards.



5. Reposition the upper case onto the lower case.



6. Lock the upper case by delicately turning it clockwise.

ATTENTION: Risk of explosion if the battery is replaced with another one of the wrong type.

Dispose of the batteries following the instructions.

11.4 Installation

1. *TMD MK3 EDR*
2. *TMD MK3 PRIVACY BTLE*

The communication between the **TMD MK3 EDR** and the **TMD MK3 PRIVACY BTLE** takes place via Bluetooth.

The pairing among the two devices may be automatic or follow a procedure that can be customised based on specific needs.

If the TMD MK3 PRIVACY BTLE must be fastened inside the passenger compartment using specific supports it is provided with, it must be positioned where it does not compromise safe driving or the proper operation of the safety devices.

We recommend fastening it to smooth, clean and sufficiently flat surfaces (ex: windscreen).

11.5 *Use*

Simply press the button to activate / deactivate the geolocation.

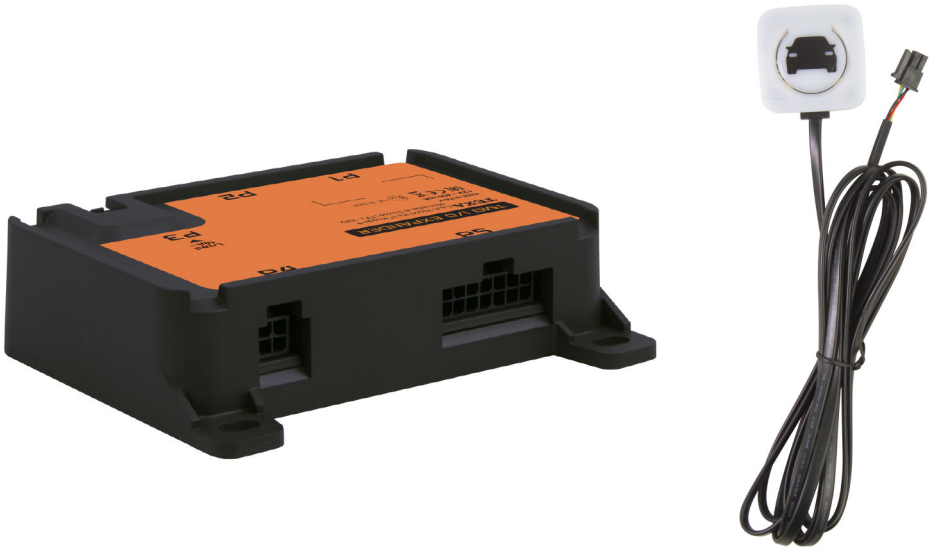
When pressing the button, you will see visible warnings through the LED and hear audible warnings through the built-in electronic buzzer.

The device's functionality and the way it is used can be customised based on specific needs.

12 TMD I/O EXPANDER

TMD I/O EXPANDER is a **TMD MK3** accessory device which expands its functions by increasing the number of power ports.

The device is designed to meet the needs of the Car Sharing market and it is can be easily recognised among the other TMD devices thanks to its **orange label**.



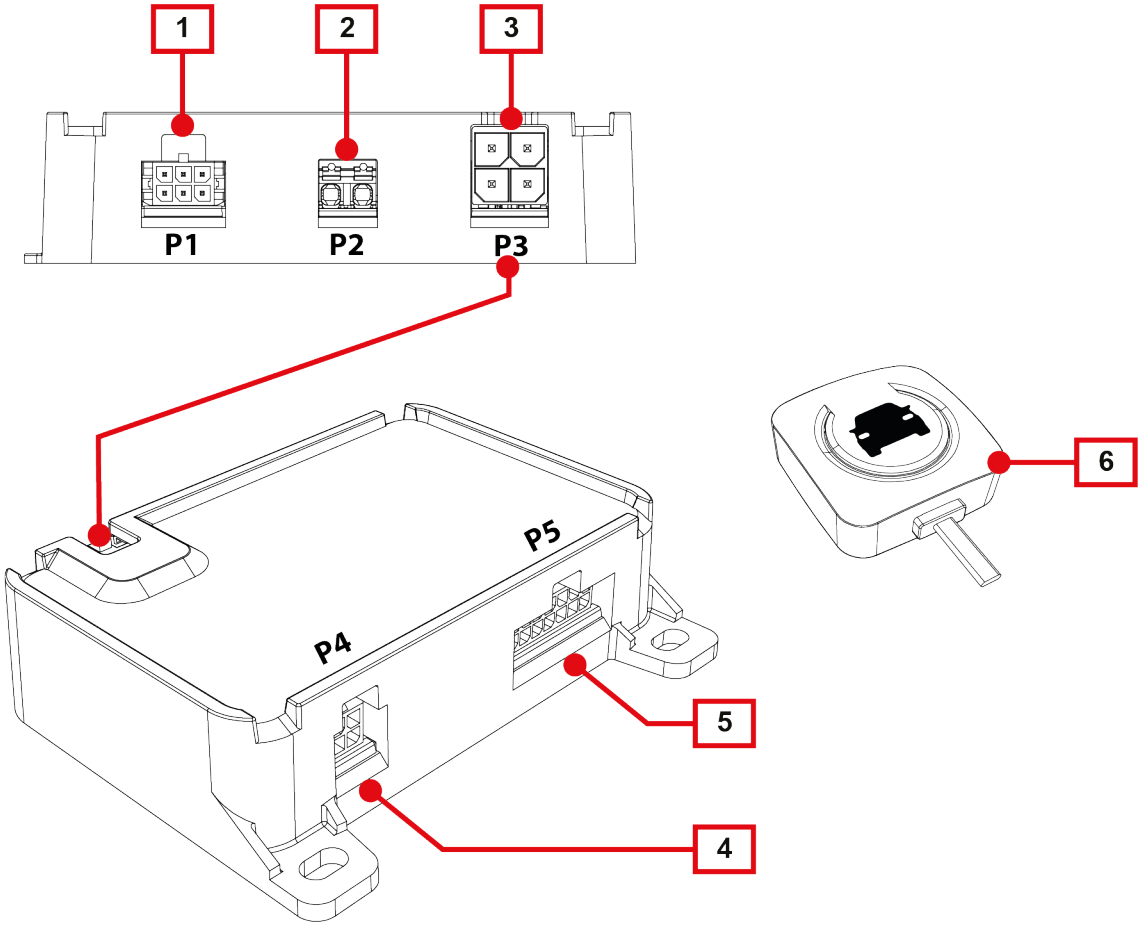
The connection to **TMD MK3** takes place via LIN BUS (TBus).

Through **TMD I/O EXPANDER** it is possible, for example:

- *to control the opening / closing of the doors;*
- *to control visual warnings through LEDs;*
- *to awaken* **TMD MK3** *from the energy saving mode.*

TMD I/O EXPANDER is powered via LIN wiring.

12.1 Description

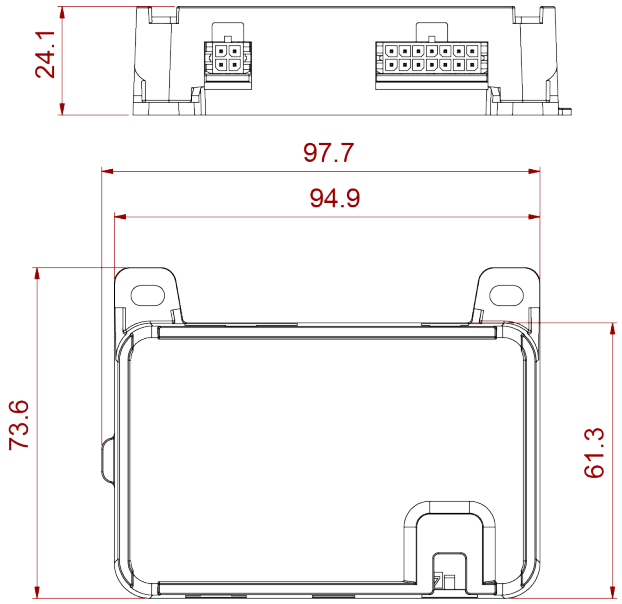
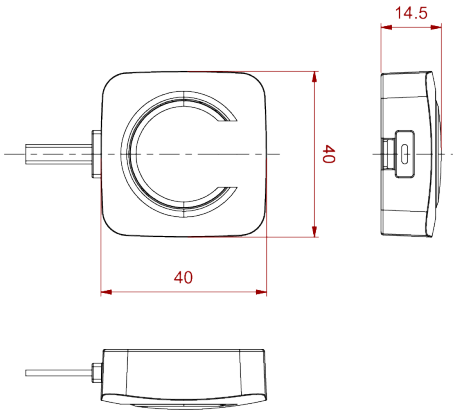


1. **P1:** *6-way connector to connect the door opening / closing control and* **TMD BLINKER** *cable (code 3908243).*
2. **P2:** *connector not used and not connected to the rest of the device.*
3. **P3:** *4-way connector to connect the actuator lock control (code 3908244).*
4. **P4:** *4-way connector for the* **TMD MK3 EDR** *connection wiring (code 3908285).*
5. **P5:** *14-way connector to connect the wiring for assistance operations.*
6. **TMD BLINKER**.

12.2 *Technical Features*

Model:	TMD I/O EXPANDER
Manufacturer:	TEXA S.p.A.
CPU:	ARM Cortex M0 with LIN BUS type interface
Inhibitory control*:	Bistable relay. Relay output: 10 Adc maximum with inductive load Coil nominal voltage: 12 Vdc
Auxiliary outputs:	Two 750 mAdc, 12 Vdc outputs
Wireless peripheral devices	Bluetooth
Operating frequency band:	2400 ÷ 2483,5 MHz
Maximum radio frequency power transmitted:	+3 dBm
Power supply:	12 Vdc through LIN wiring
Consumptions:	• *Normal: max 280 mAdc at 12 Vdc* • *Standby: < 3 mAdc at 12 Vdc*
Storage and operation humidity:	10% ÷ 80 % without condensation.
Operating temperature:	• *TMD I/O EXPANDER: - 30 ÷ 60 °C* • *TMD BLINKER: - 30 ÷ 70 °C*
Storage temperature:	• *TMD I/O EXPANDER: - 40 ÷ 85 °C* • *TMD BLINKER: - 40 ÷ 85 °C*
Safety:	EN 60950-1:2006 + A11:2009 + A1:2010 + A12:2011 + AC:2011 + A2:2013 EN 62311:2008
Electromagnetic compatibility:	ISO 7637-1 ISO 7637-2 ETSI EN301 489-1 ETSI EN301 489-17 ETSI EN300 328
Regulations / Directives:	UN ECE R10 RED 2014/53/EU RoHS 2011/65/EU

(*) The output protection (inhibitory control) is transferred to the fuses installed in the vehicle's electrical circuit.

<table>
<tr><td rowspan="2">Dimensions [mm]:</td><td><u>TMD I/O EXPANDER</u>
 
</td></tr>
<tr><td><u>TMD BLINKER</u>
 
</td></tr>
<tr><td>Weight:</td><td>• TMD I/O EXPANDER : 92 g
• TMD BLINKER: 52 g (including cable)</td></tr>
</table>

12.3 Regulatory Information

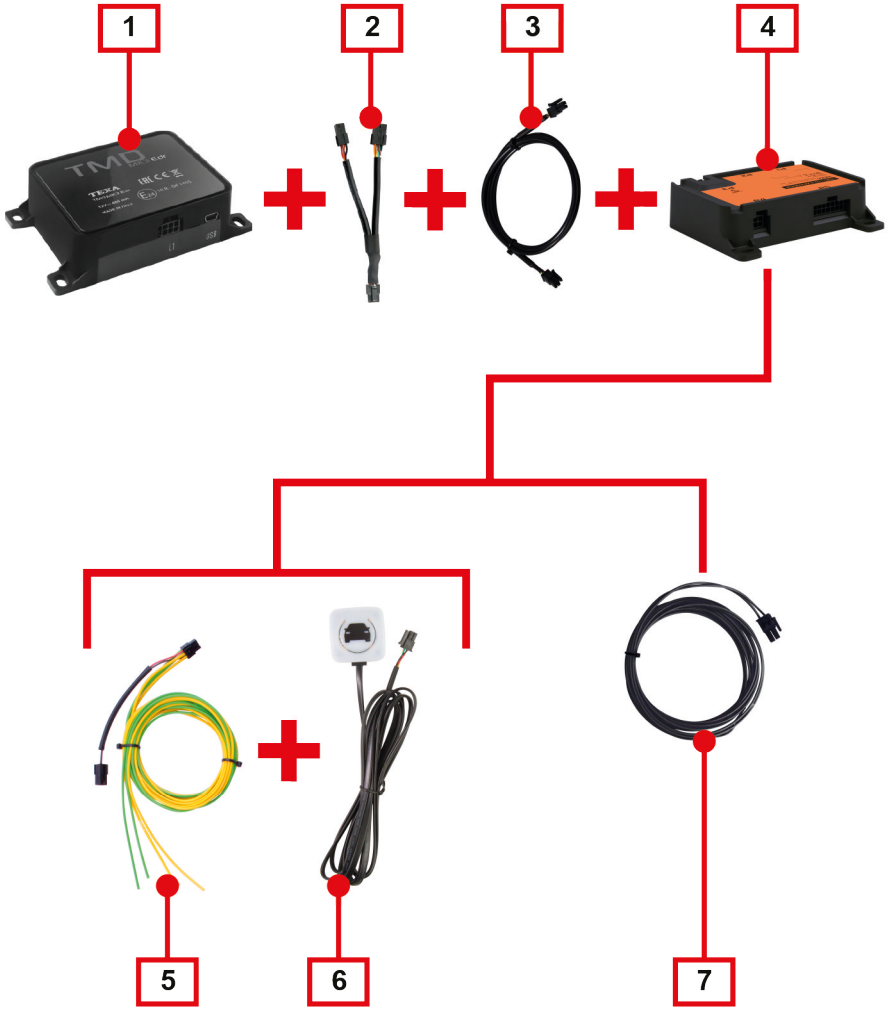
Simplified EU Declaration of Conformity

CE	The manufacturer, TEXA S.p.A, declares that the type of radio equipment **TMD I/O EXPANDER** is compliant with the RED 2014/53/EU directive. The complete text of the EU declaration of conformity is available at the following Internet address **http://www.texa.it/download**.

12.4 Installation

The installation requires the use of some additional cables for the connection to **TMD MK3 EDR**.

⚠	**Assemble the TMD I/O EXPANDER inside the engine compartment and away from heat sources.** **The TMD I/O EXPANDER must be easy to reach in case of an emergency deactivation.** **The system relay has a maximum range of 10 A.**



1. *TMD MK3 EDR*
2. *Y-shaped cable (code 3904674)*
3. *TMD I/O EXPANDER cable (code 3908285)*
4. *TMD I/O EXPANDER*
5. *Door opening / closing control and TMD BLINKER cable (cod. 3908443)*
6. *TMD BLINKER*
7. *Actuator lock cable (code 3908244)*

	**Below only the connections between TMD MK3 EDR, TMD I/O EXPANDER and the related cables are indicated** **See the specific installation sheet for the vehicle you are working on for a complete and correct installation.**

Proceed as follows:

1. *Secure* **TMD I/O EXPANDER** *in the most appropriate position.*
2. *Insert the connector of the Y-shaped cable (code 3904674) into the* **L1** *input of* **TMD MK3 EDR**.
3. *Insert the connector of the TMD I/O EXPANDER (code 3908285) into the connector of the Y-shaped cable (code 3904674).*
4. *Insert the connector of the TMD I/O EXPANDER (code 3908285) into the* **P4** *input of* **TMD I/O EXPANDER**.
5. *Insert the connector of the actuator lock cable (code 3908244) into the* **P1** *input of* **TMD I/O EXPANDER**.
6. *Insert the connector of the door opening / closing and* **TMD BLINKER** *cable (code 3908243) into the* **P3** *input of* **TMD I/O EXPANDER**.
7. *Insert the connector of the* **TMD BLINKER** *cable (code 3908243) into the connector of the door opening / closing and* **TMD BLINKER** *cable (code 3908243).*

13 ENVIRONMENTAL INFORMATION

 **For information regarding the disposal of this product please see the pamphlet supplied.**

14 LEGAL NOTICES

TEXA S.p.A.

Via 1 Maggio, 9 - 31050 Monastier di Treviso - ITALY

Tax Code - Company Register of Treviso ID No. - VAT No.: 02413550266

Single-shareholder company subject to the direction and coordination activities of Opera Holding S.r.l.

Paid-up share capital 1,000,000 € - R.E.A. (Economic Administrative Index) No. 208102

Legal Representative Bruno Vianello

Phone +39 0422.791.311

Fax +39 0422.791.300

www.texa.com

For information regarding the legal notices, please refer to the **International Warranty Booklet** provided with the product.