



## **Installation manual**

# **Mobeye Call-Key GSM Door Opener**



# Table of Content

<b>1.</b>	<b>Introduction</b>	<b>3</b>
<b>2.</b>	<b>To get ready in six steps</b>	<b>4</b>
2.1	Place the SIM Card	4
2.2	Connect a lock to the output	4
2.3	Connect the power supply	5
2.4	Program the administrator phone numbers	5
2.5	Authorising telephone numbers	5
2.5.1	Installation code	5
2.5.2	Program the authorised telephone numbers	6
2.5.3	Delete telephone numbers	6
2.6	Open the door lock	6
<b>3.</b>	<b>Additional programming</b>	<b>7</b>
3.1	Standard behaviour	7
3.2	How to program	7
<b>4.</b>	<b>Configuration settings</b>	<b>8</b>
4.1	Installation code	8
4.2	Interval test message	8
4.3	identification text	8
4.4	Alarm telephone numbers	8
4.5	Input type	8
4.6	Input delay time	8
4.7	Alarm suspension	8
4.8	Alarm repeat time	8
4.9	Inactive time	9
4.10	Power failure delay time	9
4.11	Authorisations and remote control	9
4.12	Unauthorised switching of output	9
4.13	Output behaviour: Switch or pulse times	9
4.14	Reset to factory settings	10
<b>5.</b>	<b>Action rules</b>	<b>11</b>
5.1	Pre-programmed action rules	11
5.2	Triggers and reactions	11
5.3	Programming action rules	12
5.4	Time-based action rules	12
5.5	List of programmed action rules	12
5.6	Delete action rules	13
<b>6.</b>	<b>Complete list of settings</b>	<b>14</b>
<b>7.</b>	<b>Reports and lists</b>	<b>15</b>
7.1	Status request	15
7.2	List of settings	15
7.3	Call list	15
7.4	Authorisation list	15
7.5	Test GSM network strength	15
<b>8.</b>	<b>Issue solving and technical data</b>	<b>16</b>

## **Attention! Very important**

This user manual contains important guidelines for the installation and usage of the Mobeye Call-Key. Please read these thoroughly before you start using the Mobeye Call-Key. In case of damage caused by disregarding the guidelines, the warranty becomes void. The user must regularly check the proper functioning of the Mobeye Call-Key. The manufacturer cannot be held liable for any damage or loss caused by any incorrect use or incorrect functioning of the Mobeye Call-Key.

### **Safety guidelines**

- The permitted ambient temperature during operation may not be exceeded (not lower than -10°C and not higher than 55°C).
- The device is intended for use in dry and clean places.
- Protect the device from moisture, heat and water splashing. Not intended for external use.
- The guidelines for the battery usage must be regarded.
- Do not expose the device to strong vibrations.
- Do not let it fall from height.
- Do not use in an environment where any inflammable gases, vapours or dust are present or could be present.
- Repair of the device may only be carried out by people, trained for Mobeye® repair.
- If the device must be repaired, only original replacement components may be used. The use of different parts may lead to damage of the Mobeye Call-Key.

### **Use in accordance with the regulations**

The purpose of this device in accordance with the regulations is to open the door after number recognition of incoming calls. Other uses are not permitted.

## 1. INTRODUCTION

The Mobeye Call-Key is a GSM door opener. The electronic door is connected to the relay output. Via an incoming call from an authorised number, the relay output will switch and the door or port is opened.

The Mobeye Call-Key has two inputs for additional sensors. If one of these is activated, the set contact persons will receive a notification.

The Mobeye Call-Key can work in two ways:

- ✓ Stand-alone: the telephone numbers are programmed via SMS in the stand-alone module. Phone numbers are authorized for 24/7 ("always").
- ✓ Registered in the Mobeye Internet Portal. This password protected and secured internet area offers additional functionality. For each person a time window (day, time or period) can be entered for limited access or a 24/7 authorisation can be granted. The Mobeye Internet Portal allows the administrator to manage the devices, program numbers and view historical data (who opened the door and at what moment).

### NOTE

This manual describes the installation and options for the stand-alone functionality. The manual for the **Internet portal** functionality can be found in the Mobeye Internet Portal. To do this you first log in as a user in the portal. Discover more information on the portal at the site [www.mobeye.eu/portal](http://www.mobeye.eu/portal).

Additional functions in the Mobeye Internet Portal:



Online authorisation management with time windows



List of historical events



Monitoring 'keep alive' reports



Forwarding (alarm) messages

## 2. TO GET READY IN SIX STEPS

To get started with the Mobeye Call-Key seven easy steps are needed.

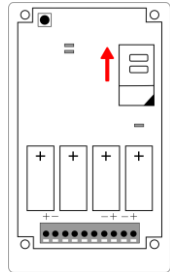
1. Place the SIM card
2. Connect an electronic lock to the output
3. Connect the power supply and, if desired, Insert the four batteries
4. Program a phone number as administrator
5. Program at least one phone number as authorised number
6. Open the lock

### 2.1 PLACE THE SIM CARD

To use the Mobeye Call-Key a SIM card from any network is needed. On this SIM card, the PIN code security needs to be disabled or '0000'. If your SIM card has a PIN code, you can disable or change this using any mobile phone and change the PIN code security. Please consult the manual of that mobile phone for the procedure.

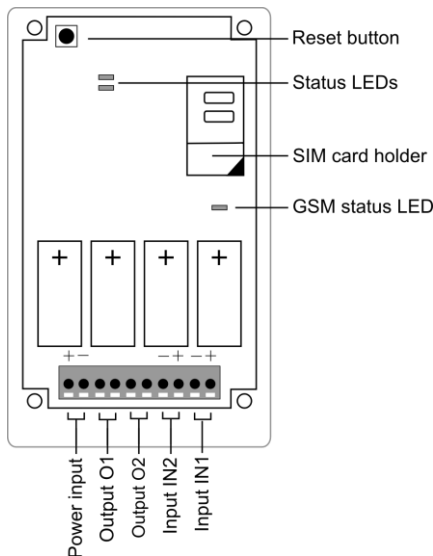
The SIM card needs to be inserted before the batteries. When using a prepaid SIM card, take note of the available credit. Additionally it is wise to set a recurrent test message in the menu so the card will be used at least once a month.

- Open the back cover and insert the SIM card in the holder. For opening/closing, slightly move the cover.



### 2.2 CONNECT A LOCK TO THE OUTPUT

Connect an electronic door lock to the output 1. This is a relay output. The maximum load is 2A/30V. Open the hole in the enclosure and insert the 2 wires of the lock through the hole of the enclosure to the inside part and next in the two connectors of output 1 (press on the orange pins for connecting the wires). It does not matter which wire is connected to which connector. If necessary the wires can be extended using appropriate wire material.



## **2.3 CONNECT THE POWER SUPPLY**

Connect the external power adapter to the power input of the Mobeye Call-Key (press the orange pins for connecting the wires):

- V+ to “+”
- Ground to “-“

When using Mobeye adapter 10027 (European type):

‘V+’ is black wire with white stripe, ‘Ground’ is black wire. Otherwise please look at the adapter for the ‘+’ and ‘-‘.

Optionally the 4 batteries (4 \* CR123) can be placed. If these are inserted, the Mobeye Call Key will send a message to the administrator in the event of a power failure. After sending the outage report the unit itself will go to the "Low Power" mode, which means that the GSM module will shut down to save the batteries. In this 'Low Power' mode, the unit will not be able to receive incoming phone calls. Internal triggers, such as (alarm) messages on the inputs and test reports may be sent.

Close the Mobeye Call-Key using the 4 screws.

## **2.4 PROGRAM THE ADMINISTRATOR PHONE NUMBERS**

You need to program at least one phone number, which will be set as ‘administrator number’. The administrator will receive system messages such as test messages, low battery messages or notifications about an activated input. Without administrator number, the unit will not work.

To program the administrator’s number, just call the Mobeye Call-Key after the start-up. The phone number of the first call that is received while the unit is not configured, will be stored as administrator. For this way of programming, the number recognition in the caller’s phone must be switched on.

The administrator will receive a confirmation by SMS text message.

The administrator’s number can also be programmed by SMS command. This method is described in the next chapter.

## **2.5 AUTHORISING TELEPHONE NUMBERS**

As prerequisite for opening a door, the ‘calling telephone numbers’ need to be authorised. In the stand-alone Mobeye Call-Key a maximum of fifty numbers can be authorised via SMS command. Each new number takes the first free position. To receive a list with the authorised numbers, please refer to 7.3.

### **2.5.1 Installation code**

For all programming actions the installation code must be used. The initial code is ‘1111’. The installation code is also included in the confirmation SMS which the administrator received after programming the administrator number. For more security, the code needs to be changed to a personal installation code, see 4.1.

In this manual this code is referred to as CODE.

## 2.5.2 Program the authorised telephone numbers

SMS command to authorise numbers:

### CODE ADDTELA:



**Example: to authorise number 0757 12345678:**

1111 ADDTELA:+75712345678

## 2.5.3 Delete telephone numbers

To delete a phone number, you need to know at what memory position it was stored . A list with authorised numbers can be retrieved by following SMS command:

### CODE ANL?



**Example:**

1111 ANL?

SMS command to delete the memory position of the authorised number:

### CODE DELA:



**Example: to delete the telephone number at position 2**

1111 DELA:2

## 2.6 OPENTHE DOOR LOCK

After the previous steps, the door can be opened by authorised numbers. This can be done by incoming call or SMS command. Please note, the number recognition of the authorised number must be switched on.

### 1 Open the lock by a call

By calling the number of the SIM card inside the Mobeye Call-Key, the output relay will switch during a pulse time of 10 seconds. The unit will recognize the calling telephone number and switch the output relay without taking the phone: no phone costs are involved.

### 2 Open the lock by SMS command

To open the lock connected to output 1, send following SMS command: O1ON



**Example:**

O1ON

Remarks:

- The command O1ON contains two letters 'O'.
- The command does not require the CODE.
- Since the output relay was opened using a pulse, the relay closes automatically after the pulse time.

The sending phone is charged for the regular costs of an SMS text message.



### 3. ADDITIONAL PROGRAMMING

#### 3.1 STANDARD BEHAVIOUR

The Mobeye Call-Key has following standard behaviour. Next chapters describe how to change this.

- If an authorised number calls the number of the SIM card inside the Mobeye Call-Key, the output 1 switches for 10 seconds (pulse time).
- If the Mobeye Call-Key receives an SMS text message containing 'O1ON' from an authorised number, the output 1 switches for 10 seconds (pulse time).
- If one of the inputs is activated by a sensor, the Mobeye Call-Key sends an alarm SMS text message and calls the set alarm phone numbers (others than authorised numbers!). The SMS message contains the text 'Mobeye alarm 1' or 'Mobeye alarm 2'.
- If the sensor and/or the input remain in the alarm status, the Mobeye Call-Key repeats sending the SMS alarm message every four hours.
- If batteries are placed and these need to be replaced, the Mobeye Call-Key sends a 'battery low' SMS text message to the administrator.
- If batteries are placed and an external power failure occurs, the Mobeye Call-Key sends a 'power failure' SMS text message and calls the set alarm phone numbers.

#### 3.2 HOW TO PROGRAM

The settings are to be programmed via SMS commands. Please follow next steps:

- Be sure the unit is connected to an external power supply
- Send an SMS message with following content:

**CODE COMMAND:OPTION**

- The CODE stands for the installation code. Factory setting is '1111'.
- Do not forget the space between CODE and COMMAND.
- The commands are case sensitive.
- Several commands may be combined in one SMS message (with a maximum of 160 characters) by placing a # between the commands.
- All settings are stored in the unit and will be kept when removing the power supply.
- The complete scheme with SMS commands is listed chapter 6.

**CODE COMMAND:OPTION#COMMAND:OPTION#COMMAND:OPTION**

A confirmation melody is played to indicate a correct command. In the event of an incorrect command, a beep is heard.



**Example: to set the pulse time of output 1 to 20 seconds:**

1111 TO11:20



**Example: two commands in one message:**

1111 TEL2:+4934578692#TO1:20

To request the settings:      **CODE SET?**  
To request the status:        **CODE STATUS?**

## **4. CONFIGURATION SETTINGS**

### **4.1 INSTALLATION CODE**

The installation code is the 4-digit code for programming the settings. The initial code is '1111'. Please change the code to make the unit more secure.

### **4.2 INTERVAL TEST MESSAGE**

The Mobeye Call-Key can send test messages. Through these 'keep alive' reports you will be informed about the status of your Mobeye Call-Key. You can set the interval between the test reports. This is adjustable between 0 (no test reported) and 30 (every 30 days a test message). Note: the interval of 1 day will result in a daily test message; the exact time between the messages will be about 24 hours.

The smaller the interval between the test reports, the shorter is the battery life. The test message only works if the system is on.

### **4.3 IDENTIFICATION TEXT**

It is possible to add a standard identification text (NAME) to all messages sent out by the Mobeye Call-Key. The alarm messages are a combination of the name and the alarm text. A user defined identification has a length of maximum 20 characters. The default identification text is 'Mobeye'.

### **4.4 ALARM TELEPHONE NUMBERS**

Up to five telephone numbers can be programmed in to the Mobeye Call-Key. In the event of an alarm on the inputs the Mobeye Call-Key first sends an SMS text message to all numbers, next they are called. It is possible to confirm the call, after which the other numbers will not be called anymore. Or to start a listen-in connection.

Note: the first telephone number is required, the others are optional.

### **4.5 INPUT TYPE**

The input type defines the character of the inputs IN1 and IN2. This can be Normally Open (NO) or Normally Closed (NC). If an input is set to NO, the alarm will be triggered as soon as the terminals of the input are closed. If the input is set to NC, the alarm is triggered if the connection between the input terminals is broken. The default input type is set to NO.

### **4.6 INPUT DELAY TIME**

The input delay time defines the time that the inputs are triggered before an alarm is initiated. If the input returns to the non-alarm status within the delay time, no alarm is sent. The delay time can be set between 0 and 999 seconds. As default, the input delay time is set to 1 second.

### **4.7 ALARM SUSPENSION**

The alarm suspension time defines the time in which the activation on an input will not lead to an alarm, after an output was opened by an authorised phone call (or unauthorised, see 4.12). This enables, for example, to secure a door with a magnet contact and to prevent that alarms are sent after the opening by a call or SMS text message. Take care: this is only useful if a lock can only be opened by SMS or call. The suspend time can be set between 0 and 999 seconds. As default, the suspend time is set to 0 second.

### **4.8 ALARM REPEAT TIME**

In order to emphasize the urgency of the alarm messages, all alarms can be repeated. As long as the input has not returned to the inactive status, the SMS alarm will be repeated after

the 'alarm repeat time'. The time can be set between 0 and 24 hours. As default the alarm repeat time is set to 4 hours.

#### **4.9 INACTIVE TIME**

The "inactive time" defines the time the movement sensor, input 1 or input 2 is not active after an activation. If the time is set to "0" (minutes), the input is active again immediately after returning to the non-alarm status. If the time is set to e.g. 30 minutes, the input remains inactive for the first 30 minutes. If the input is again (or still) activated after these 30 minutes, a new alarm message is sent. The inactive time can be set between 0 and 60 minutes. As default, the inactive time is set to "0" for all inputs.

#### **4.10 POWER FAILURE DELAY TIME**

The power failure delay time defines the time that the power fails before an alarm is initiated. If the power is restored within the delay time, no alarm is sent. The delay time can be set between 0 and 60 minutes. As default, the delay time is set to 1.

#### **4.11 AUTHORISATIONS AND REMOTE CONTROL**

When power externally, the GSM module is always 'on', able to receive SMS commands. This enables both programming and remote control. Remote control actions are: arming, disarming and switching the output. As prerequisite for remote control the 'controlling telephone number' needs to be authorised. A maximum of fifty numbers can be authorised. If it is not clear what memory positions are available, it is possible to add a new number by the SMS command 'ADDTELA'. The new number takes the first free position. To receive a list with the authorised numbers, please refer to 7.3.

SMS-commands for remote control (no code is necessary, numbers need to be authorised):

Arm:	ARM
Disarm:	DISARM
Switch on output 1:	O1ON
Switch off output 1:	O1OFF

#### **4.12 UNAUTHORISED SWITCHING OF OUTPUT**

Although the Mobeye Call-Key is designed to only switch the output by an incoming call or SMS from an authorized phone, there is also an option to let them be switched by any incoming call/SMS, without being authorised. To disable the need for authorised numbers, the 'authorization' option can be set to OFF. Default is ON.

#### **4.13 OUTPUT BEHAVIOUR: SWITCH OR PULSE TIMES**

If an output is used, the time this output is activated can be set between 1 and 999 seconds. If the setting is set to 0, the output does not return to its previous state automatically. An authorised number can switch it back by the SMS command O1OFF or O2OFF. In the factory settings the duration of the pulse time for the output is "10".

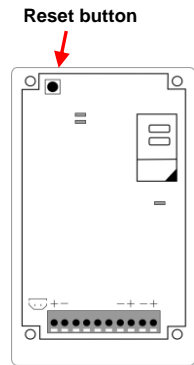
#### 4.14 RESET TO FACTORY SETTINGS

It is possible to reset the Mobeye Call-Key to factory settings.

To reset the Mobeye Call-Key to its factory settings, follow following steps:

- Remove the batteries and external power
- Press the reset button while replacing the batteries
- Keep the program button pressed during 15 seconds until first a short melody and next 3 short beeps are heard
- Release the program button
- Restore the external power

After several seconds a short confirmation tone is heard. The installation code is also reset to the factory settings.



## 5. ACTION RULES

The behaviour of the Mobeye Call-Key is programmed by action-reaction patterns. These so-called Action Rules are pre-programmed, according to the needs of many applications. However, it is possible to change these action rules (for advanced users only!).



The trigger + related reactions are called an “action rule”. Each action rule may contain 3 reactions. A maximum of 15 action rules can be programmed.

### 5.1 PRE-PROGRAMMED ACTION RULES

In the factory defaults following action rules are pre-programmed:

Action rule number	Trigger	Reaction Stand-alone Call-Key	Reaction Call-Key + Internet Portal
1	Receive SMS	Switch outputs	Switch outputs
2	Receive phone call	Switch output 1	Switch output 1
3	Input 1 triggered	Send SMS + call	Message to portal + call
4	Input 2 triggered	Send SMS + call	Message to portal + call
5	Power failure	Send SMS + call	Message to portal + call
6	Power restored	Send SMS	Message to portal + call

The SMS texts are stored with a text number referring to the number of the action rules (e.g. TEXT2 and TEXT3). Texts for new action rules are stored and can be changed too (e.g. TEXT8). Please refer to 6.

### 5.2 TRIGGERS AND REACTIONS

#### TRIGGERS

For defining your own action rules, you can use triggers and combine them with reactions. As trigger the following events can be used:

Trigger	Command
Input 1 triggered	IN1
Input 2 triggered	IN2
Input 1 restored	IN1RESET
Input 2 restored	IN2RESET
Power failure	POWERFAIL
Power restore	POWERRESET
Incoming call	CALL
Time	TIME:hhmm (e.g. TIME:1230)

## REACTION

Each trigger can initiate a maximum of 3 reactions out of the following list:

Reaction	Command	Remark
Message to portal	MONITOR	For follow-up action from portal (only in combination with portal)
Switch Output 1	O1ON, O1OFF, O1TGL	Toggle means the output switches each time the action is executed, regardless the current status
Switch Output 2	O2ON, O2OFF, O2TGL	
Send SMS	SEND:text	Max. 20 characters. An alarm SMS contains the identification text and the text as defined here. The text is also stored as TEXTy, where y stands for the action rule number.
Call	CALL	The unit calls the set alarm numbers. The receiver will hear a 2-tone signal and can confirm by pressing '1'.

### 5.3 PROGRAMMING ACTION RULES

Send following SMS commands in following format:

**CODE TRIGGER:REACTION1,REACTION2,REACTION3**



**Example:** Switch output 2, call and send SMS text 'Pump failure' after a triggered input2:

1111 IN2:O2ON,CALL,SEND:Pump failure



**Example:** Switch output 1 after a triggered input1:

1111 IN1:O1ON

- Do not forget the space between CODE and the TRIGGER.
- The Mobeye MS100E will play a short melody to indicate a successful configuration. In case of a wrong command, a long beep will sound.

### 5.4 TIME-BASED ACTION RULES

It is possible to let the action be daily performed at a certain time. The time is the trigger. To program a time-based action, include the time in the action rule, in following way.

**CODE TIME:hhmm:REACTION**



**Example:**

1111 TIME:1115:O1ON

### 5.5 LIST OF PROGRAMMED ACTION RULES

A list of programmed action rules, the Action Rules List (ARL), can be requested by sending following SMS to the unit.

Request programmed action rules:  
**CODE ARLREPORT?**



**Example:**

1111 ARLREPORT?

## 5.6 DELETE ACTION RULES

An action rule can be deleted by an SMS by the command below incl. index number. The index number is the sequence number of the action rule as displayed in the ARLREPORT.

**CODE DELARL:indexnumber**



**Example:**

1111 DELARL:1

Remark: a rule will keep its index number, even if a rule with a previous number is deleted. This will result in "gap" in the index list. If a new Action Rule is added, this rule will get the index number of the first empty position.

## 6. COMPLETE LIST OF SETTINGS

Setting	SMS command	Options	Factory default
Installation code	INSTCODE:	0000...9999	1111
Administrators phone numers, alarm number 1	TEL1:	e.g. +4472711223344	
Other alarm numbers	TEL2: TEL3: TEL4: TEL5:	e.g. +4472711223345	
Delete alarm number	DEL1 .. DEL5		
Authorise telephone number to open door	ADDTELA:		
Delete authorised number (number of memory position)	DELA:	e.g. DELA:1 Request position via CODE ANL? (see 7.3)	
Identification text	NAME:		Mobeye
Pulse time output 1	TO1:	1...999 (sec)	10
Pulse time output 2	TO2:	1...999 (sec)	10
Input type input 1	TYPEIN1:	NO, NC	NO
Input type input 1	TYPEIN2:	NO, NC	NO
Inactive time input 1	INACTIVEIN1:	0...60 (min)	0
Inactive time input 2	INACTIVEIN2:	0...60 (min)	0
Delay time input 1	DELAY1:	0...60 (sec)	1
Delay time input 2	DELAY2:	0...60 (sec)	1
Alarm suspension input 1	SUSPEND1:	0...999 (sec)	0
Alarm suspension input 2	SUSPEND2:	0...999 (sec)	0
Alarm repeat	REPEAT:	0...24 (uur)	0
Power failure delay time	DELAYPOW:	0...999 (min)	1
Interval test message	TEST:	0...30 (days)	0
Authorised switching/remote control	AUTH:	ON, OFF	ON
Alarm text input 1	TEXT3:	20 characters	Alarm 1
Alarm text input 2	TEXT4:	20 characters	Alarm 2
Alarm text power failurel	TEXT5:	20 characters	Power failure
Text power restoration	TEXT6:	20 characters	Power restored

Program method via SMS (in program mode):

**CODE COMMAND:OPTION**

Or several commands at once:

**CODE COMMAND:OPTION#COMMAND:OPTION#COMMAND:OPTION**



## **7. REPORTS AND LISTS**

The programmed settings and the Mobeye Call-Key status can be requested as SMS-text message (be sure the unit has external power).

### **7.1 STATUS REQUEST**

The status can be requested by sending an SMS with the content:

**CODE STATUS?** The originator of the request receives the armed/not armed status, the status of the inputs, power and batteries as SMS text message.

### **7.2 LIST OF SETTINGS**

The settings can be requested by sending an SMS with the content:

**CODE SET?** The originator of the request receives the list of basic settings.

### **7.3 CALL LIST**

The list of alarm phone numbers, which will receive alarm notifications can be requested by sending an SMS with the content:

**CODE CALL?** The originator of the request receives the list of the administrator and other alarm numbers.

### **7.4 AUTHORISATION LIST**

The list with authorised numbers for remote control can be requested by sending an SMS with the content:

**CODE ANL?** The originator of the request receives the authorised numbers as list.

### **7.5 TEST GSM NETWORK STRENGTH**

Before using the Mobeye Call-Key it is advised to test the GSM signal strength at the location.

**CODE NETWORK?** The originator of the request receives a list with the actual and other available networks and their strength. In the event of a weak signal, the Mobeye Call-Key can still be used, but there is a risk that the incoming call is not received properly. It is advised to try another available network with a stronger result.

## 8. ISSUE SOLVING AND TECHNICAL DATA

### Issues

Error	Possible reason	Solution
Mobeye Call-Key cannot be switched on. You hear an error tone, the red light is turned on shortly.	No valid Telephone number was entered.	Enter a valid number.
The light is flashing red during switching on.	No valid SIM card was entered or the SIM card was not made pin code free.	Check the SIM card.
It is impossible to change the settings. After entering your personal code, followed by menu, the error tone is played and the light turns red.	Mobeye is activated.	Switch off the Mobeye Call-Key.
No GSM signal during the GSM test	No network is available, belonging to the SIM cards provider.	Choose another network provider.
The light remains red.	You entered an incorrect installation or user code three times.	Wait 10 minutes and then re-enter the correct installation or user code.
You do not receive an SMS with the settings.	Telephone number is not correct.	Re-program the telephone number at position '01'
For other questions, please refer to the site <a href="http://www.mobeye.eu">www.mobeye.eu</a>		

### Technical data

- GSM: Quad Band EGSM 850/900/1800/1900 MHz compatible to the ETSI GSM Phase 2+ standard
- Temperature range: -10°C until +55°C
- Dimensions: 161 x 90 x 35 mm (LxWxH)
- Batteries: 4 x CR123 Lithium 3.0 V
- Only battery operated, no external power: 50 µA, short peaks of max. 2 A
- Externally powered 50 mA, short peaks of max. 2 A

For support on technical problems regarding Mobeye Call-Key please contact [info@mobeye.eu](mailto:info@mobeye.eu).



## Declaration of Conformity

Herewith we, Mobeye, declare that the product

**Mobeye XM2 telemetry module**

And the derived products

**MS100, MS200, MS300, Call-Key**

are in compliance with the essential requirements of the following European standards / EU Directives:

**Directive 73/23/EEC** (low voltage directive)

**Directive IEC/EN 50130** Electromagnetic compatibility

**Directive 2014/53/EU (RED)**

The conformity with the essential requirements set out in Art.3 of the 2014/53/EU has been demonstrated against the following harmonized standards:

**EN 60950-1: 2006 + A11 : 2009 + A1: 2010 + A12: 2011 + A2: 2013**

**EN 62311 :2008**

**EN 301 489-1 V2.1.1, Draft EN 301 489-52 V1.1.0**

**EN 301 511 V12.5.1**

Mobeye B.V.  
Poeldonkweg 5  
5216 JX 's-Hertogenbosch  
The Netherlands

Name: J.P.K. van de Vijver,

Position: General Manager

Signature:

Date: 12 July 2017

This manual is published by Mobeye.

All rights, the translation included are reserved. Any reproduction, either photocopy, microfilm or saved in an automated data dictionary, only after written approval of the Publisher. Reprinting, even in summary, is prohibited.

This user manual meets the technical requirements at the moment of printing. Changes in technology and equipment are reserved.

© Copyright 2018 by Mobeye, version MCK100EN180401

