

MobilEye support on Ruptela FM devices

Introduction

The MobilEye collision avoidance system helps drivers by constantly monitoring the road in front of the vehicle. It identifies potentially dangerous situations, and provides audio and visual alerts to assist the driver in preventing or mitigating a collision.

Integration of MobilEye C2-270 & ME5 (ME6 uses the same data output protocol as ME5) – Standard CAN Output Protocol and Traffic Sign Recognition Protocol with Ruptela FM devices allows users to combine both devices and use them simultaneously.

Compatible devices

The MobilEye collision avoidance system can be used with the following FM devices:

- FM-Tco4 HCV
- FM-Tco4 LCV
- FM-Pro4

This feature description applies to FM devices with the latest firmware version.

You can get the newest firmware and configurator from our documentation website: doc.ruptela.it

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Document change log

Date	Version	Change details
2014-11-19	1.0	Initial draft.
2016-09-08	1.1	Connection and configuration descriptions added.
2018-04-12	1.2	Information regarding series compatibility updated.
2019-10-03	1.3	Updated: Connection schematic.

MobilEye supported features

- Forward collision warning
- Headway monitoring and warning
- Lane departure warning and lane keeping
- Pedestrian detection
- Speed limit indicator
- Traffic sign recognition
- Intelligent headlight control
- Turn signal reminder

MobilEye and Ruptela FM devices

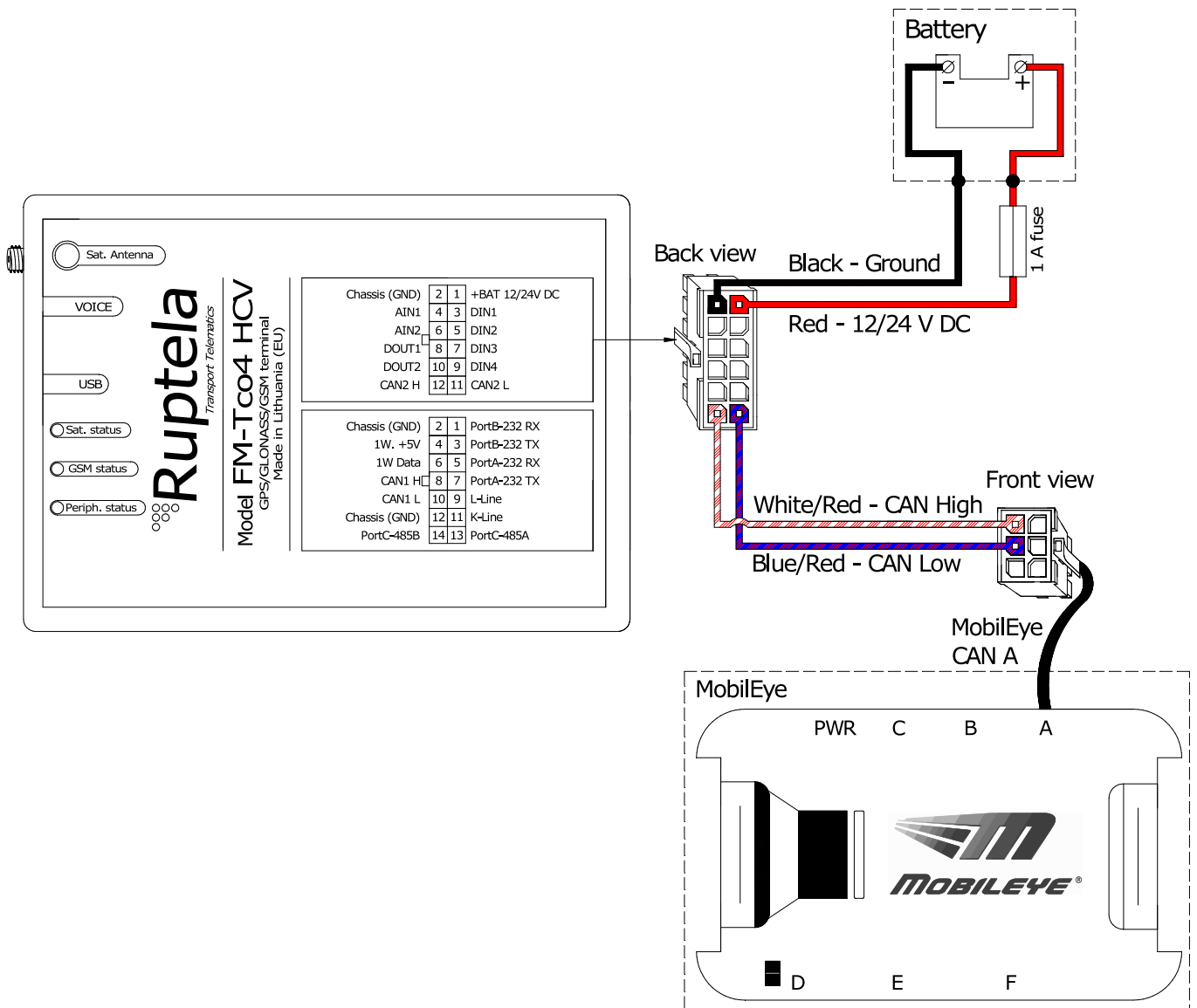
- Monitor all MobilEye parameters in TrustTrack tracking system
- Evaluate drivers using MobilEye and Ruptela's Eco-Drive system
- Enjoy useful functionalities offered by Ruptela's devices and TrustTrack system:
 - Fuel level and consumption monitoring
 - Real time data
 - Route planning
 - Garmin/PND support (communication with driver, SMS and route sending)
 - Events
 - Tachograph files reading and downloading
 - Various reports created especially for you!
 - And many, many other great features

Connection

The MobilEye device can be connected via one of the CAN interfaces on the Ruptela FM device. The MobilEye data line has to be configured beforehand for data transmission via the J1939 CAN line.

Note
 The current series is ME6. ME5 has been discontinued but has the same output protocol as ME6, this means that both generations work with Ruptela FM devices. Different MobilEye device generations are supported as long as they comply with MobilEye C2-270 & ME5 protocols. Instructions regarding MobilEye data line physical connection and its configuration can be obtained from the MobilEye Technical Support.

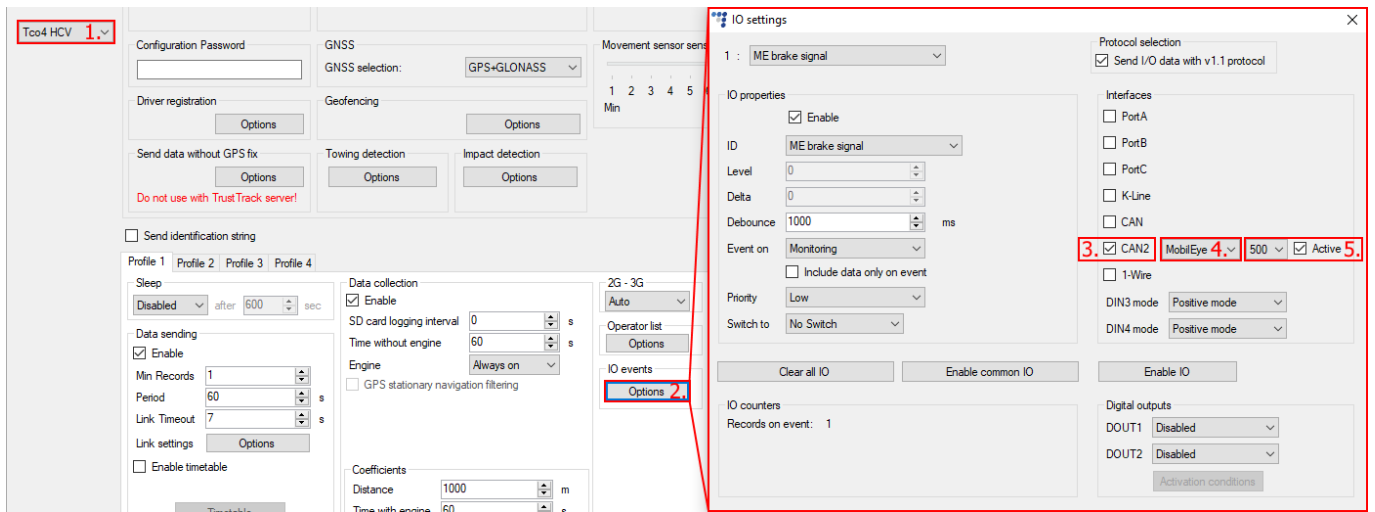
New MobilEyes have 2 CAN lines (CAN A and CAN B). Connect the FM device to the CAN A line in order to read data as follows:



FM device configuration

The FM device should be configured as follows:

1. In the main configurator window choose your device (*Tco4 HCV, Tco4 LCV or Pro4*).
2. In the **IO events** section click on the "Options" button. It opens up a new **IO settings** window, here you can enable or disable IO parameters.
3. In **Interfaces** section choose **CAN** or **CAN2**. It has to be the same interface that you have used to connect to the MobilEye device.
4. In the dropdown list on the right choose *MobilEye*.
5. Set the baud rate to *500* (default baud rate for MobilEye) and tick the **Active** checkbox (*see the picture below*).



6. Now let's move to the IO parameters configuration. In the **Protocol selection** section put a tick in **Send I/O data with v1.1 protocol** checkbox. After this step, MobilEye IO parameters will be displayed in the IO list.
7. Select a slot that you want to enable.
8. In the **IO properties** section tick the **Enable** check box, otherwise the slot will remain empty.
9. **ID** contains the parameters list. Choose a parameter you want to enable for the selected slot. MobilEye parameter names start with "ME" symbols i.e. "ME sound type". Enable as many parameters as you need.

Close the **IO settings** window and the send configuration to the device.

