

Eco-Drive event indication on buzzer

Introduction

In some cases it can be useful to let the driver know when he has exceeded the speed limit, braked harshly, etc. For this purpose, Eco-Drive events can be used. When Eco-Drive events are triggered, a buzzer connected to a digital output (DOOUT) of the FM device can be used to indicate that such an event has happened.

Document application

The description of this feature applies to the following FM devices with the newest firmware version:

- FM-Tco4 HCV;
- FM-Tco4 LCV;
- FM-Pro4;
- FM-Eco4/4+;
- FM-Eco4 light/light+ and FM-Eco4 light 3G/light+ 3G.

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

Legal information

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Document change log

Date	Version	Change details
2018-04-17	1.0	Initial draft.

Available parameters

Currently you can indicate the following Eco-Drive parameters using a buzzer:

- ECO Cornering;
- ECO Cruise control;
- ECO Extreme braking;
- ECO Harsh acceleration;
- ECO Harsh braking;
- ECO Idling;
- ECO Overspeeding;
- ECO RPM in red.

Indication patterns

Different Eco-Drive parameters have different buzzer patterns when triggered:

- ECO Idling and ECO Cruise control – 0.5 s beeps every 5 seconds;
- ECO RPM in red and ECO Overspeeding – 0.5 s beeps every second;
- ECO Harsh braking and ECO Harsh acceleration – a single 1 s beep;
- ECO Extreme braking – a single 3 s beep;
- ECO Cornering – 0.5 s beeps every 0.5 seconds, repeated three times.

Indication priority

In some cases several Eco-Drive events can be triggered the same time. When this happens, only one event is indicated according to the following priority list (the higher the event is on the list, the higher its priority is):

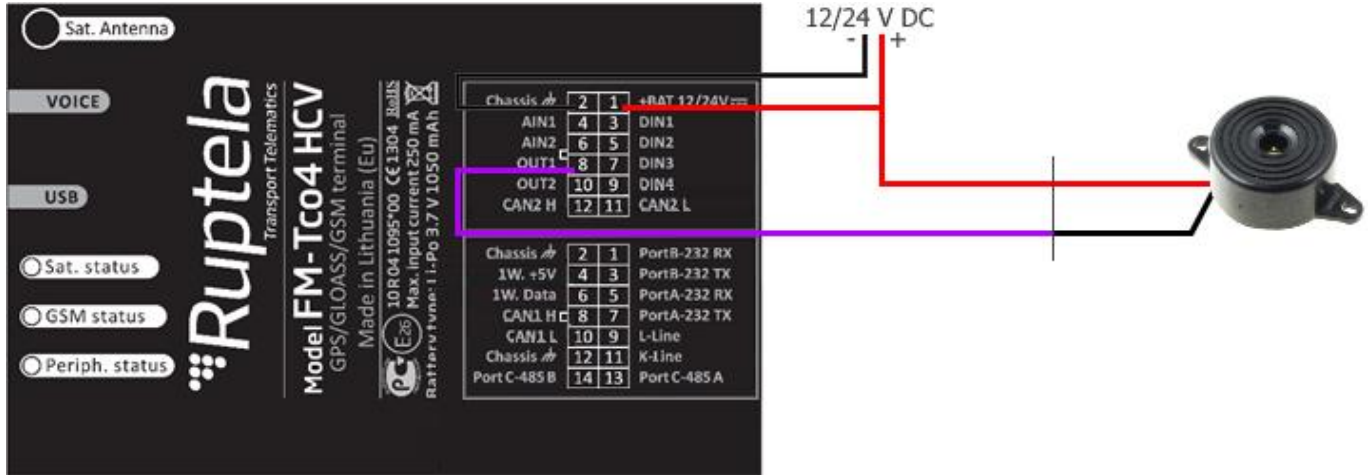
1. ECO Extreme braking;
2. ECO Harsh braking;
3. ECO Harsh acceleration;
4. ECO RPM in red;
5. ECO Overspeeding;
6. ECO Cornering;
7. ECO Cruise control;
8. ECO Idling.

Note

The buzzer will not indicate any Eco-Drive events if any type of driver registration is used.

Connection

Connect your FM device to the buzzer as follows:

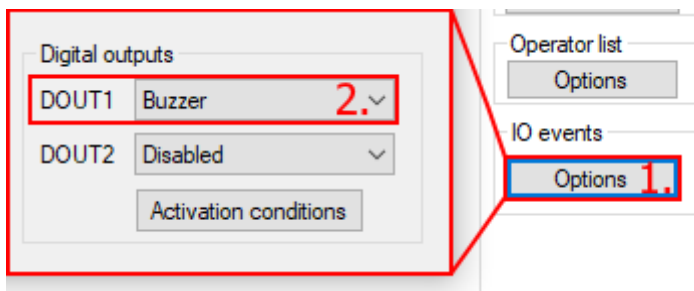


FM device	Buzzer
Red – 12/24 V DC power supply	Red
Purple – DOUT1	Black

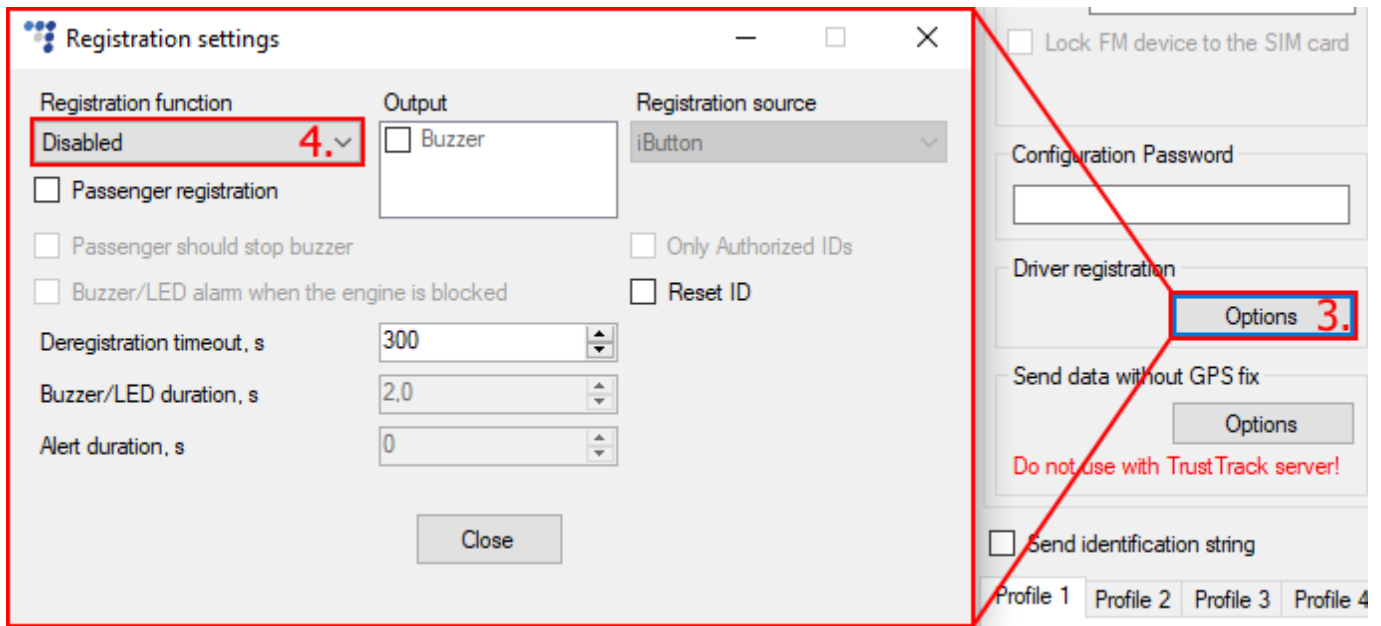
Configuration

Configure your FM device as follows:

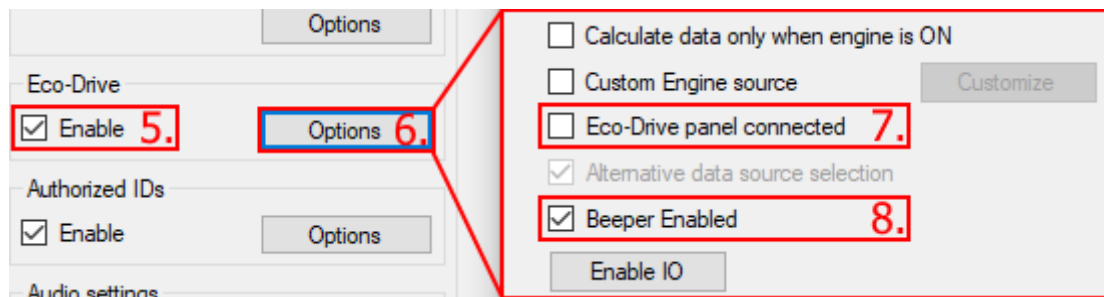
1. Click the "Options" button in the **IO Events** section. A new **IO settings** window will open. Locate the **Digital Outputs** section at the bottom right of the window.
2. Select *Buzzer* in the drop-down list for the same DOUT that you used for the connection. Other selections will have no effect.



3. Click the "Options" button in the **Driver registration** section. A new **Registration settings** window will open.
4. Select *Disabled* in the **Registration function** drop-down list. Driver registration has to be disabled for buzzer indication to work.



5. Make sure that the **Enable** checkbox in the **Eco-Drive** section is ticked. This is necessary for the Eco-Drive functionality to work.
6. Click the "Options" button in the Eco-Drive section. A new **Eco-Drive** window will open. Locate a group of checkboxes at the bottom left of the window.
7. Untick the **Eco-Drive panel connected** checkbox.
8. Tick the **Beeper Enabled** checkbox.



After completing the configuration, close the **Eco-Drive** window and send the configuration to the device.