# 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 (DOUT) 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.

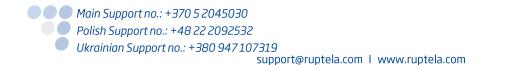
You can get the newest firmware and configurator from our documentation website: doc.ruptela.lt

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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.

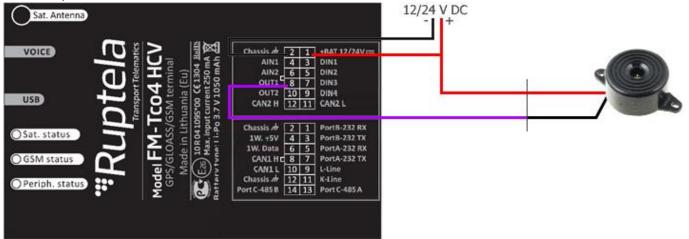
#### Note

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

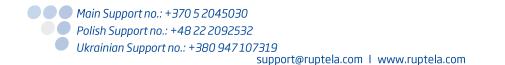
## Configuration

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.

DOUT1 Buzzer 2.~	
DOUTT Buzzer Z.~	Options
DOUT2 Disabled V	IO events Options
Activation conditions	

- 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.





🚏 Registration settings		—	× Lock FM device to the SIM card
Registration function     Disabled   4.~     Passenger registration	Output	Registration source iButton	Configuration Password
Passenger should stop buzze		Only Authorized IDs	Driver registration
Buzzer/LED alarm when the e	ngine is blocked	Reset ID	Options 3.
Deregistration timeout, s	300		
Buzzer/LED duration, s	2,0		Send data without GPS fix
Alert duration, s	0	* *	Options Do not use with Trust Track server!
	Close		Send identification string Profile 1 Profile 2 Profile 3 Profile 4

- 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 connecte**d checkbox.
- 8. Tick the **Beeper Enabled** checkbox.

	Options	Calculate data only when engine is ON	
Eco-Drive	/	Custom Engine source	
Enable 5.	Options 6.	Eco-Drive panel connected <b>7</b> .	
Authorized IDs		Alternative data source selection	
Enable	Options	Beeper Enabled 8.	
Audio settinos		Enable IO	

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

