

DashCam Configuration

[Teltonika DashCam](#) > **DashCam Configuration**



Contents

- [1 FMX125/225 configuration](#)
- [2 FMC650 DashCam Configuration](#)
 - [2.1 Connecting two cameras simultaneously for FMx650](#)
- [3 Camera Scenario Mode](#)
- [4 Periodic image sending scenario](#)
- [5 File Transfer priority](#)
- [6 Camera RTC synchronization](#)
- [7 Camera control using DOUT1](#)
- [8 Other camera related functionality](#)

FMX125/225 configuration

- It is necessary to change **Data Protocol** to [Codec 8 Extended](#)

Data Protocol



- In **RS232\RS485** settings change **Mode** to *RS232* and in **RS232 Mode** select *DashCam*

Security

System

GPRS

Data Acquisition

SMS \ Call Settings

GSM Operators

Features

Accelerometer Features

Auto Geofence

Manual Geofence

Trip \ Odometer

Bluetooth

Bluetooth 4.0

Beacon List

Authorization ID List

I/O

OBD II

CAN Adapter

RS232 \ RS485

Mode ⓘ

External UART Mode

Disable	RS232
RS485	

Facebook

Twitter

LinkedIn

WhatsApp

Telegram

Print

Share

- Make sure to change **I/O Camera state Priorities** to *Low*

Input Name	Units	Priority	Low Level	High Level	Event Only	Operand	Avg Const
BLE Fuel Level #2	Events	None	Low	High	Period	0	0
BLE Fuel Level #3	Events	None	Low	High	Period	0	0
BLE Fuel Level #4	Events	None	Low	High	Period	0	0
BLE Luminosity #1	%	None	Low	High	Period	0	0
BLE Luminosity #2	%	None	Low	High	Period	0	0
BLE Luminosity #3	%	None	Low	High	Period	0	0
BLE Luminosity #4	%	None	Low	High	Period	0	0
BLE Fuel Frequency #1		None	Low	High	Period	0	0
BLE Fuel Frequency #2		None	Low	High	Period	0	0
BLE Fuel Frequency #3		None	Low	High	Period	0	0
BLE Fuel Frequency #4		None	Low	High	Period	0	0
Battery Level %	%	None	Low	High	Period	0	0
BT Status		None	Low	High	Period	0	0
U232 Fuel Level		None	Low	High	Period	0	0
U232 Status		None	Low	High	Period	0	0
Pulse Counter DIR1		None	Low	High	Period	0	0
Coordinates ISO709		None	Low	High	Period	0	0
Ignition On Counter		None	Low	High	Period	0	0
Front Camera State		None	Low	High	Period	0	0

- **Do not forget** to configure *DashCam* server information. In **RS232\RS485** fill in **DashCam Server Settings** with *Domain* and *Port* entries.



FMC650 DashCam Configuration

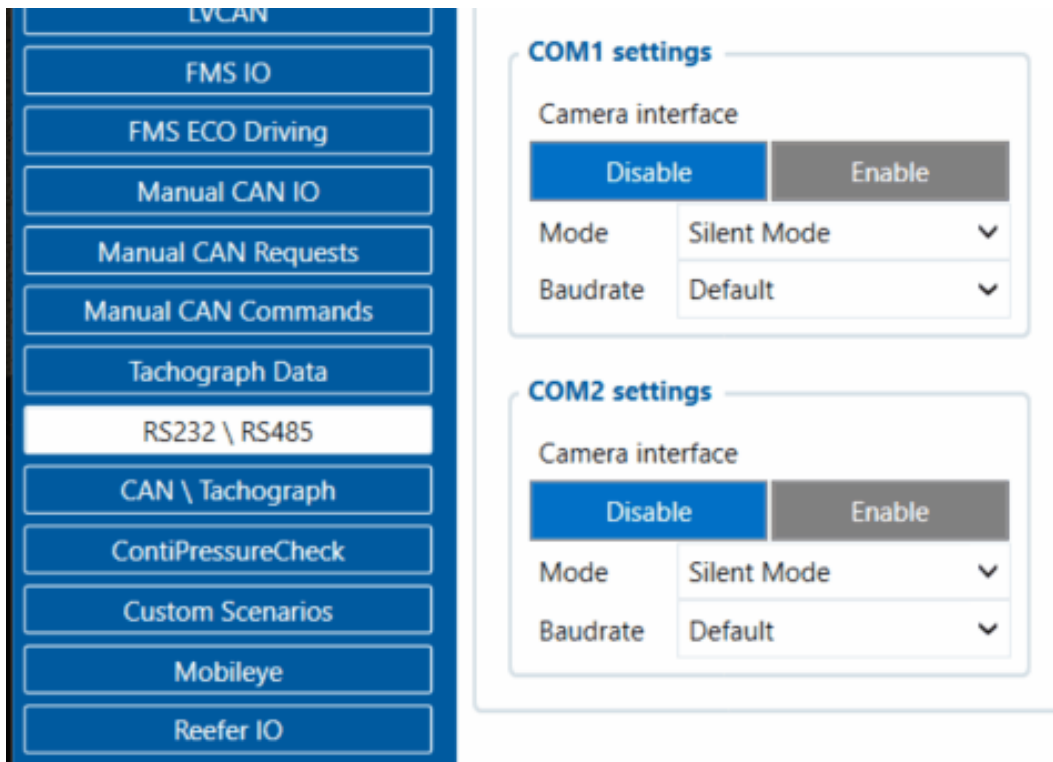
(!) Required firmware version - 03.00.14.Rev.114. [Firmware errata.](#)

- Make sure **Data Protocol** is set to [Codec 8 Extended](#)

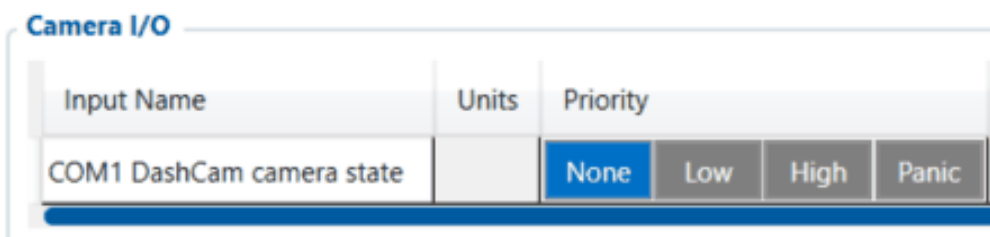
Data Protocol



- In *RS232 \ RS485 settings tab*, make sure to enable **Camera interface** by "Enable", and select **DashCam** in the Mode drop-down menu, afterwards **DashCam COM1** and **Camera I/O** should appear in the tab list.



- Make sure to change **Camera I/O** camera state **Priorities** to *Low*



- In appeared *DashCam COM1* tab, make sure to **configure everything by your needs**, and do not forget to complete the "**Domain**" and "**Port**" settings in "*DashCam*" *Scenario Settings*



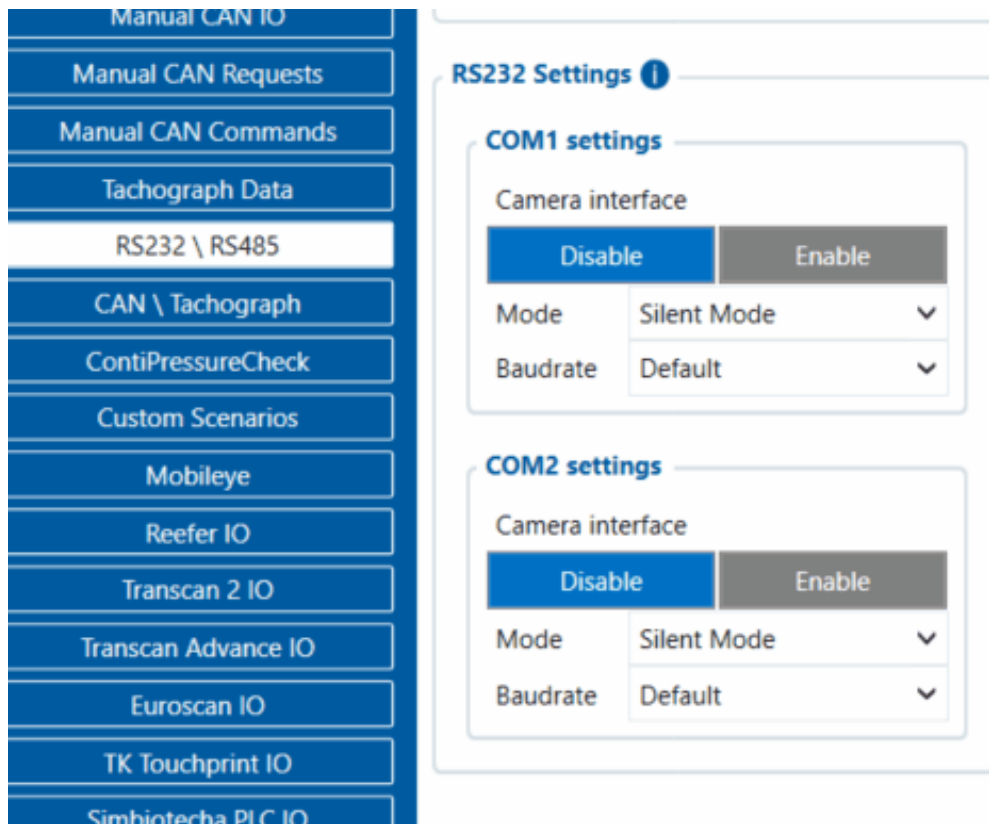
- **NOTE:** *This is a base setup for the device to work properly. Other device configuration is made according to your needs.*
- **NOTE:** *There are different settings for picture quality and compression, these settings will affect picture/video sizes and upload speeds. For more information about transfer sizes and timings, please visit our [DashCam Data Transfer Timing](#) section*

Connecting two cameras simultaneously for FMx650

The new feature for FMx650 DashCam configuration, which is available from **03.00.14.Rev.114 iCamera** allows you to connect two of your cameras at once. Method for connection and configuration stays the same, for this you are only required to choose **two** cameras in "**RS232 **

RS485" tab from the configurator.

In the new functionality, you are able to connect any combo of the cameras by your wish, as an example: you are able to connect *DashCam/Dualcam*, *DashCam/DSM*, *DSM/DSM*, *DualCam/DualCam* and etc.



Camera Scenario Mode

The options On Ignition and Always determine the working mode.

On Ignition means the camera scenarios will operate the way it was up to **03.27.13.Rev.662**, that is it will work only when the ignition is detected.

Always mode means the camera scenarios will work all the time, including whenever the device is in sleep mode (except Ultra sleep mode during which the scenario is disabled). During sleep footage requests (if the network is available), periodic image sending and triggers work as well.

Warning: using Always mode, depending on the configuration, the device might wake up from sleep very frequently. That has to be taken into consideration when configuring the scenarios.

Periodic image sending scenario

Periodic image sending triggers photo capture from a front camera, whenever the timeout is reached (sending interval parameter).

Update: Since 03.27.13.Rev.662 firmware, Periodic Image Sending Enable/Disable switch was replaced by a camera selection:

- Front cameras deselected – periodic image sending is disabled (value 0)
- Front camera selected – front camera's pictures will be sent periodically (value 1)

If the camera has not finished uploading pictures to the server, then the photo capture is skipped.

File Transfer priority

File transfer priority allows changing the priority of the specific type (photo or video) when both types are ready at once. The file transfer priority can be the following:

- Picture — the photo type of files will be prioritized.
- Video — the video type of files will be prioritized.
- Alternating — the priority will be changing from picture to video and vice versa after each file transmission.

The image shows two sections of a camera's settings interface. The top section, titled "Camera Feature Settings", includes a resolution selection table with "1280 x 720" selected, a "Camera Picture Compression" slider set to 50, an "OSD Display" toggle set to "Disable", and dropdown menus for "Video Frame Rate" (25 FPS), "File transfer priority" (Picture), and "Camera Time Zone" (UTC+00:00). The bottom section, titled "Camera Scenario Settings", shows a "Camera Scenario Mode" dropdown menu.

Camera Picture Resolution	
160 x 120	320 x 240
640 x 480	1280 x 720
1920 x 1080	

Camera Picture Compression: 50

OSD Display: **Disable** / Enable

Video Frame Rate: 25 FPS

File transfer priority: Picture

Camera Time Zone: UTC+00:00

Camera Scenario Mode

Camera RTC synchronization

Camera RTC synchronization is done anytime the device itself is synchronized (via NTP, NITZ or GNSS).

After 03.27.13.Rev:662 firmware for FMX125 we added a feature to set camera time, same as device selecting time.

This screenshot shows a portion of the camera settings interface. The "OSD Display" toggle is set to "Disable". The "File transfer priority" dropdown menu is set to "Alternating". Other visible settings include "Video Frame Rate" at 25 FPS and "Camera Time Zone" at UTC+00:00.

OSD Display: **Disable** / Enable

Video Frame Rate: 25 FPS

File transfer priority: Alternating

Camera Time Zone: UTC+00:00

NOTE:

That after changes of the time it can be that you can receive files which the old-time or just do not have any video/photo on this periodical time then you change time, but then it will be back to normal

work.

Time zone changes the inside clock of the camera, not only the OSD displayed time but all recordings will be done according to that.

For example, if you request a video from, say, 9:00 AM GMT+0, and the camera time is GMT+0 (matches our device's time), it is all fine. But if you were to configure time zone later to, for instance, GMT+10, the camera time will be set according to that time zone (time forwarded by 10 hours in this case). Which means that time gets forwarded with no real continuation as the camera does not understand the concept of time zones, it just uses time that we set. For continuation reasons in our device, we continue using GMT+0 in the camreq and then compensate with time zone if needed. The result of that, if we send the same request command as before (when requesting 9:00 AM video) with time zone GMT+10 set, the camera will receive video request for 7 PM (19:00) and the videos were not recorded at that time which will result in "file doesn't exist".

Camera control using DOUT1

It is possible to control the camera ON/OFF state using DOUT1 control in the "Features" selections. In order to achieve

this functionality, please see the connection diagram located in the [First start](#) page.

DOUT 1 Output Type

Initial DOUT1 state

Normal Inverted

DOUT Control Via Ignition ⓘ

DOUT Control

None DOUT 1

DOUT Deactivation Via DIN

None DIN 1

Ignition Off Timeout (s) 5

DOUT 1 Output Type has selections of either normal or inverted. Selecting inverted will make the DashCam turn on when the DOUT1 state will be 0 and turn off the the state changes to 1 and vice versa. This is recommended as inverted selection will turn on the camera upon turning on you FMx device. When 'Normal' is selected, you will need to send an SMS message to the device requesting to turn on DOUT1 every time **IF DOUT control via ignition** is not turned on.

Dout control via ignition stands for controlling DOUT when the ignition turns on, this setting can be chosen instead of Inverted dout. Please make sure ignition settings in the 'System' tab is correctly set and the device will turn on when the ignition of the vehicle is on. **Ignition Off Timeout** is a specified amount of seconds which the device will wait after ignition turns off before turning the device off. If the ignition comes back within the specified timeframe, timeout will turn off and the camera will not be turned off.

DOUT deactivation via DIN turns of DashCam when the state of DIN1 changes. This can be set with a button which when pressed will disable DOUT1 thus ensuring camera has no power.

DOUT control can also be set using sms command such as **setdigout**.

"setdigout # Y1 Z1" The complete setdigout command structure, listed below is explanation:

- 0; 1 or ? (0 - OFF, 1 - ON, ? - Ignore) for DOUT1.

Y1 - timeout value for DOUT1 if needed (in seconds).

Z1 - maximum speed value for DOUT1 if needed.

Other camera related functionality

Camera is configured if all of these conditions are met:

1. **RS232 mode is selected (DashCam)**
2. **Camera was not configured since startup or one of the related parameters were changed (compression, framerate or OSD)**
3. **Camera file transfer is not active**

Active camera reconfiguration is accompanied by two consecutive camera shutter clicks. If camera is disconnected and later reconnected, a device will detect it by periodic camera ping packet. Once camera is detected, the device will reissue the reconfiguration procedure.