Teltonika FMX125 Dashcam Testing User Manual

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Teltonika FMX125 Dashcam Testing

Product Information

- **Specifications:**
  - **Model:** FMX125 DashCam
  - **Firmware Version:** 03.27.13.Rev.661
  - **Configurator Version:** Teltonika.Configurator_1.7.54_E.DualCamSupport_R.18

Product Usage Instructions

- **Wiring Connection:**
  - **Follow the steps below to test the DashCam:**
    - Connect the FMX125 device and DashCam on a table with a power supply as shown in Figure 1.
    - Turn on the power supply. The DashCam should make a ticking noise to indicate it is online and receiving power.
    - Connect the micro-USB cable from FMX125 to the PC and open the DashCam configurator.
- **Configuration:**
  - **Configure the DashCam settings as follows:**
    - Turn on codec 8E at the start of the configuration under the System tab in the Teltonika Configurator.
    - Ensure FMX125 has firmware version 03.27.13.Rev.661 and Teltonika Configurator version for DualCam support.
    - Set periodic image-sending and image-triggering options as needed.
- **Server Connection:**
  - **Set up server connection for sending videos/photos:**
    - Enter the server IP address and port number in the designated fields.
    - Activate a trigger or set up periodic image sending to test the server connection.
- **SMS/GPRS Commands:**
  - Specific commands can be sent to the camera to test its functionality.

FAQs

- **Q: What should I do if I cannot see the DashCam settings in the Teltonika Configurator?**
  - **A:** Check if you have the correct firmware version and configurator for your device. Contact your sales representative for assistance.
- **Q: How can I initiate video recording with the DashCam?**
  - **A:** Use triggers like DIN1, DIN2, or features like Crash to start video recording. Set up video sending triggers in the configurator.

Wiring connection

- Connection of the Teltonika DashCam to the FMX125 should be done with 4 wires that are attached to the DashCam.
- These wires include Power & Ground wires which are connected directly to the power supply and Tx and Rx wires which should be connected to FMX125 PIN 3-Rx and 4-Tx.
- Important to note DashCam's RX wire should be connected with the Tx cable of the FMX125 device and the Tx cable should be connected to the Rx input.
- When testing the devices on the table, please connect power and ground cables directly to the power supply.
- The difference in the connection between the tests on the table and the connection to the vehicle is explained further below.

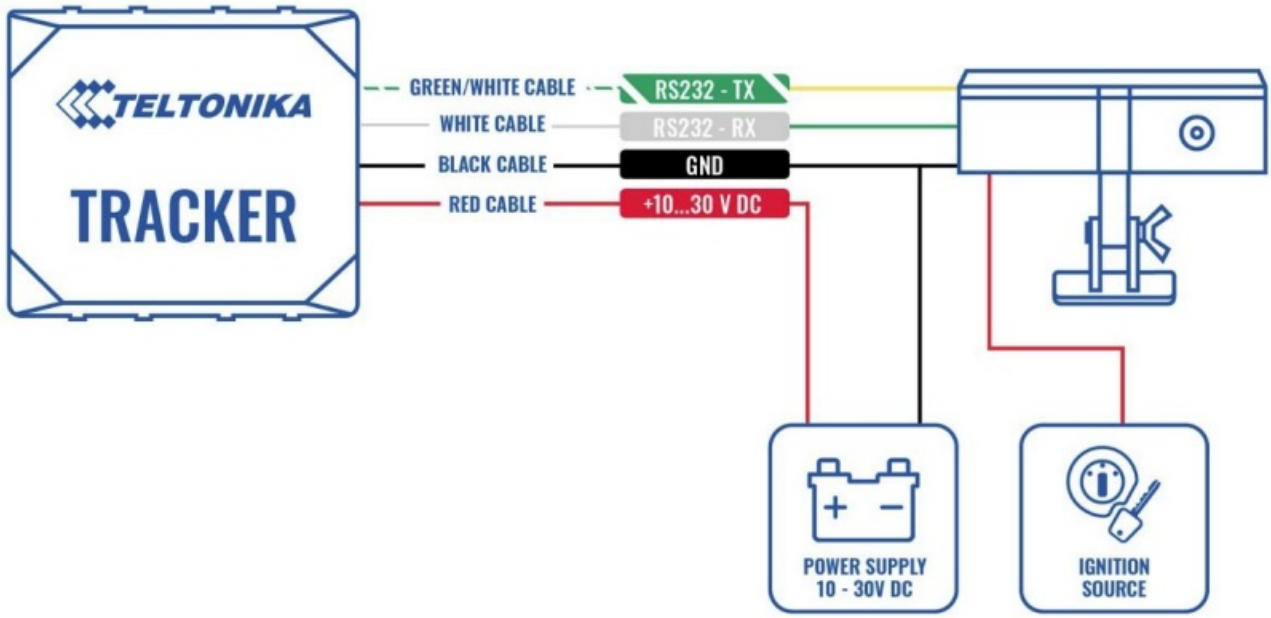


Figure 1 Performing tests on table with power supply

- When connecting DashCam to the vehicle, the user has to ensure that DashCam is not directly connected to the battery of the vehicle as it will get direct power input which will result in the camera staying on all the time and will not shut down until the battery is empty.
- In some cases, vehicle batteries could be empty within a day of connection and therefore, it is important to understand that the DashCam should be connected to the ignition wire or relay which will either provide power or cut it off the DashCam upon vehicle ignition state.

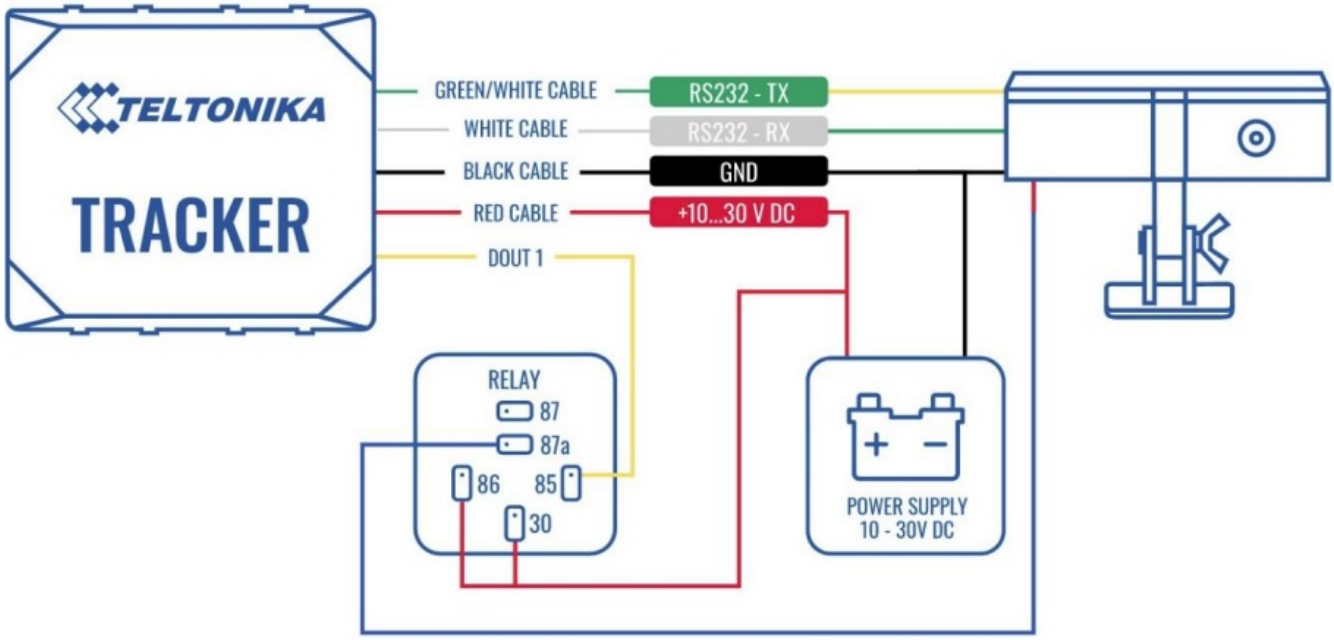
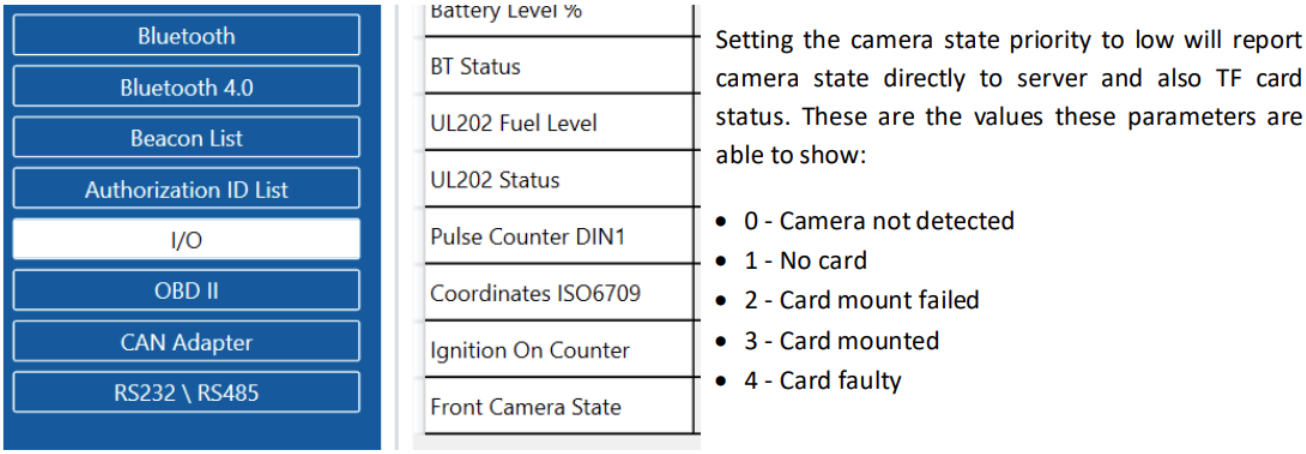


Figure 2 Performing connection directly on the vehicle

- Once the FMX125 device and DashCam is connected to the table, turn on the powersupply and the DashCam should make a ticking noise 1 time, this will indicate that the camera went online and is receiving power from the supply.
- Once this is done, connect the micro-USB cable to the FMX125 and the other end to the PC and open the designated configurator for DashCam configuration.
- Once the setup is finished, navigating to IO settings (picture below), you will be able to see the state of the camera here:



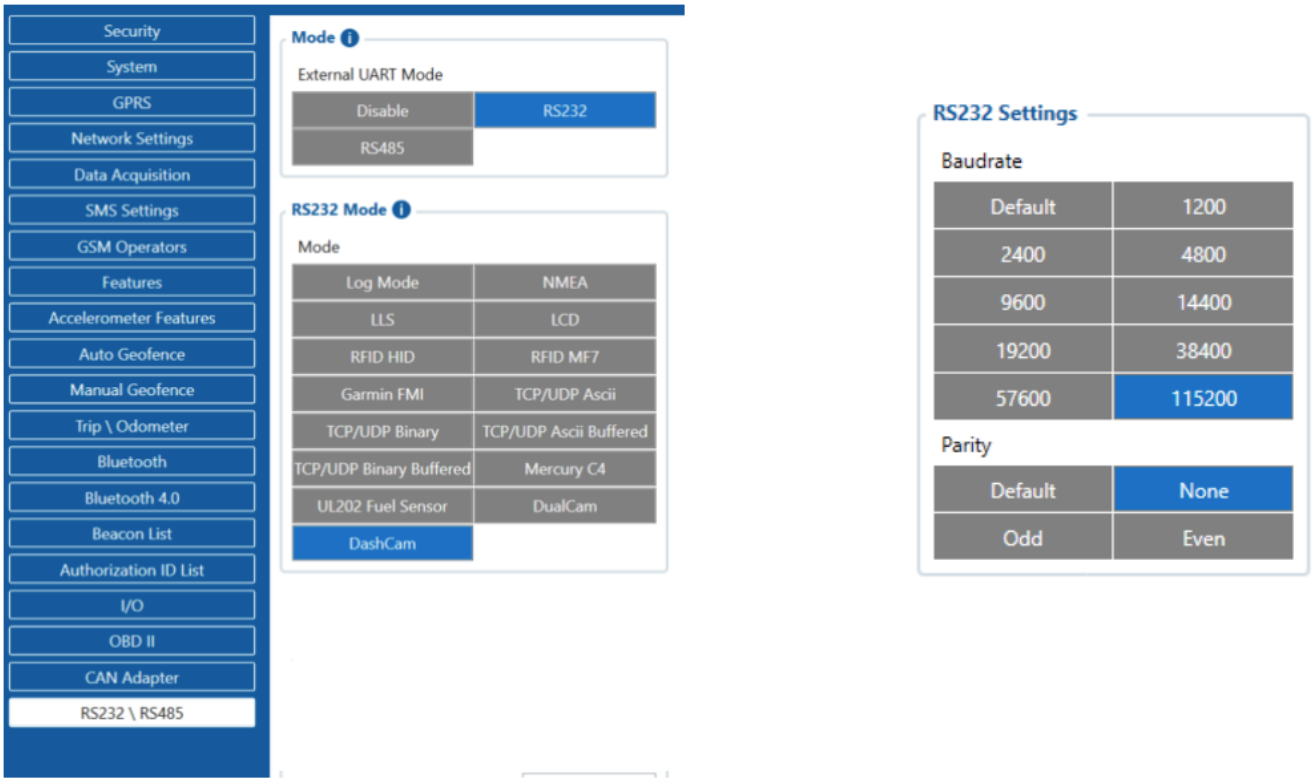
Configuration

- It is important to turn on codec 8E at the start of the configuration as it is required for the extra information of AVL ID's that are being transferred by the device.
- This setting can be found under System tab in the Teltonika Configurator.

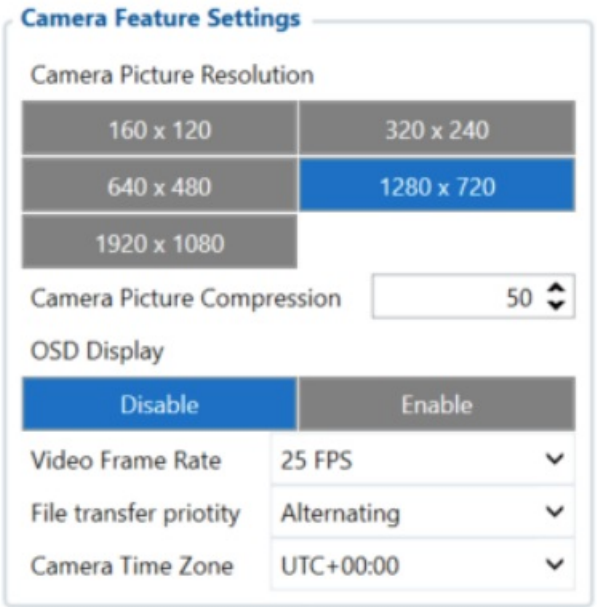
- Please ensure the FMX125 device has the latest FW to support DashCam which is currently 03.27.13.Rev.661 and configurator version:
- Teltonika.Configurator_1.7.54_E.DualCamSupport_R.18 which will allow access tothe DashCam settings in

the RS232 tab.

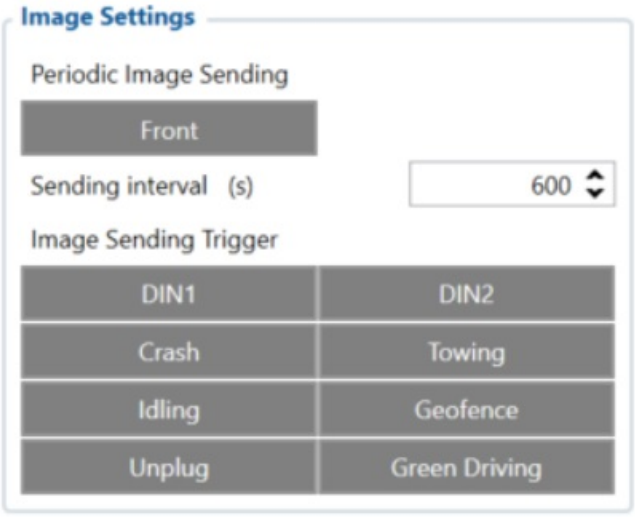
- If you have a different FW version for your device, please contact your sales representative in order to receive the newest firmware and configurator for your device.



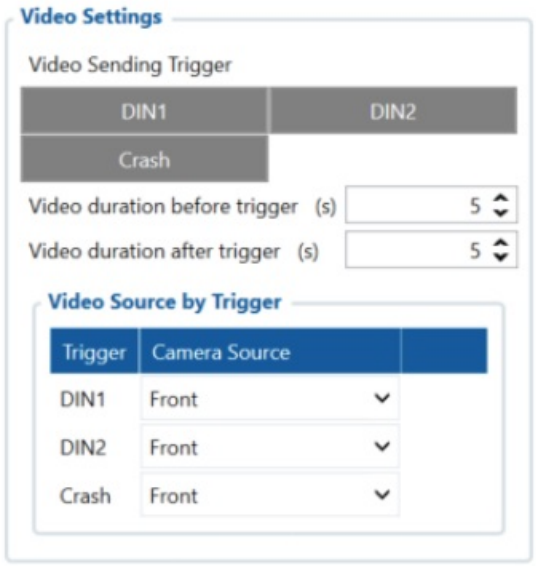
- f you are unable to see this selection in your configurator, please check the configurator version and the FW of the device.
- Once the DashCam is selected, possible options will appear for selection which will allow to set the configuration of the device.
- Different resolutions and compression can be selected for the picture quality, in some cases, when the picture quality is low, it is beneficial to play around with image resolution and compression to see which settings would suit the user themost.
- Another important factor is OSD Display which shows the date and time when the video/photo was taken.
- In some cases, if users from different regions are facing time issues and the hours differ from the actual hours the video or photo was taken, they would need to check the Camera Time Zone parameter and set it to their applicable time zone.



- About picture resolution, Teltonika Telematics cannot advise on the most suitable resolution as it is heavily dependent on the user's use case scenario and their requirements therefore, please proceed to this wiki page (**here**) where image resolution, sizes and transfer speeds are described.
- eriodic image sending and image triggering are also selectable
- parameters that can be set to automatically send images to the designated server or a trigger can be used to send photos taken at the time the trigger was initiated.
- Testing triggers can be done by selecting any of the applicable triggers, either DINs or features and manually activating them by either adding DIN to a power output on the power supply or activating some of the features like Crash. Where the user lightly hits the device onto a table or a hand to activate the gyroscope which in turn activates the Crash feature and the image will be taken. Some of the other features can be tested inside of the vehicle, like Green Driving. Please make sure that these features are turned on in the "Features" tab and configured.

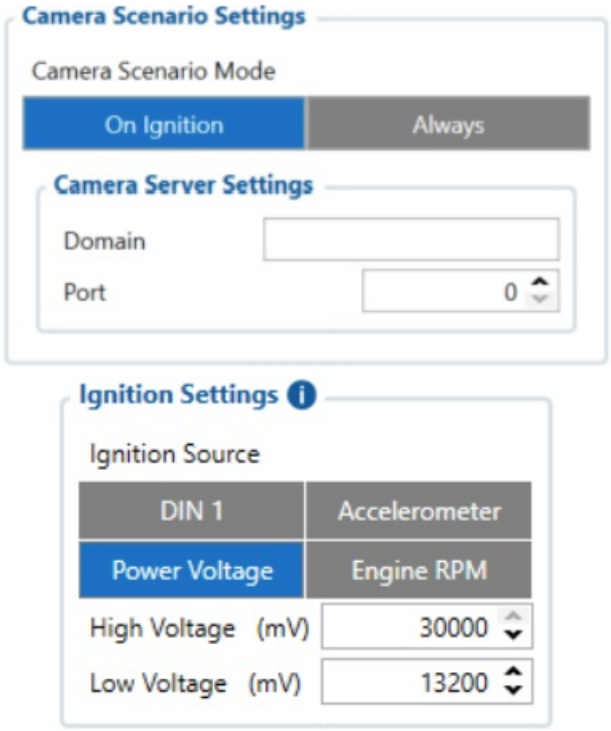


- Video settings do not have periodic sending, however, Video sending triggers can be used to initiate video record and send the footage to the designated server. Same as Photo settings, DIN1 and DIN2 can be used to initiate the trigger and start the camera recording.
- Features like Crash can again be initiated by gently hitting the device with a hand or on a table. It is also possible to test different cameras with different triggers, just select the applicable source for the desired trigger.



Server connection

- Once the FMX125 device is set up with the required settings, a server has to be entered which will allow the user to send the videos/photos to their desired server.
- This can be tested by entering the server IP address and port number into the requested fields and activating a trigger or setting up periodic image sending.
- Camera scenario mode has 2 selectable parameters which are “On Ignition and Always”. On Ignition parameter sets the camera to send data only when there is ignition in the vehicle or whether it is set up in the Systems tab as power source and power supply connected when testing on the table.
- This can be tested by setting the device ignition to low voltage’ a bit lower than the actual voltage currently being supplied to the device.
- This means that when there is enough power, the ignition will turn on and the camera will keep on recording sending data records to the server once the ignition turns off, the camera will start saving records in itself.
- Always parameter means that as long as there is power no matter whether the ignition status is ON or OFF to the FMX125 device, IF periodic image sending is set up OR SMS command is issued requesting video/photo the camera will keep on sending records to the server.
- Please note, that this is not the parameter to set the camera working status, it is meant for data sending only so if the camera is directly connected to the battery in the vehicle, it will drain its power constantly and will drain the vehicle’s battery.



SMS/GPRS commands

Specific commands can be issued to the camera to test whether it is correctly working: camgetver – is a command that can be issued to the camera to find out the versions of both cameras. Also, because there is one camera, one version is returned. The complete response would look like this: Front camera V2.2.3. A failed response from the camera would be: The front camera catheter failed. In this case, the camera will require flashing, it is broken or the wiring is not connected appropriately. camera: is a command that sends video/photo requests to the FMX125 device and the device will start taking either the video or photo and send it to the designated server. Testing here can be performed by requesting either video or photo and by selecting the most suitable source which is either front, back or both directions. A secondary server can also be tested by entering different Domain and Port numbers in the message. If requesting a photo, the duration has to be left is 0. The general structure of this command is as follows:

- **<FILE-TYPE>**
  - 0 – Video
  - 1 – Photo
- **<file_source>**
  - 1 – Front camera
- **<timestamp>**
  - Unix timestamps in decimal (not required for photo download)
- **<duration>**
  - Video duration in seconds from provided timestamps (not required for photo download), (max 30 sec)
- **Structure examples:**
  - camreq:‹file type>, ‹file source› (if video, add", ‹timestamp>, <duration>)
  - However, if there is a need to send to the specific server without configuring, you can add two extra parameters.
- **The complete structure:**
  - camera:<file type>, ‹file source>(if video, add", ‹timestamp>,<duration>), <domain>,port
  - For example camreq:0,1,1624960616,5,212.59.13.226,7160

Credits

If you have any further questions/issues with the connection of the DashCam and FMX125 device, please contact your direct sales representative OR create a VIP Helpdesk query where a technical support member will be assigned to you. After completion of the testing, please provide feedback to your direct sales representative, we would appreciate your contribution to improving our services and the quality of the provided information.

CONTACT

- TELTONIKA TELEMATICS UAB
- Saltoniskiu st. 9B-1, LT-08105
- Vilnius, Lithuania
- Registration code 305578349
- VAT number LT100013240611
- Swedbank AB
- LT71 7300 0101 6274 0043
- S.W.I.F.T. HABALT22

Documents / Resources

Teltonika Dashcam testing instructions	**Teltonika FMX125 Dashcam Testing** [pdf] User Manual FMX125 Dashcam Testing, FMX125, Dashcam Testing, Testing

References

- **User Manual**