

Garmin connection

Introduction

Garmin models that support FMI cable can be connected to the Ruptela's FM devices. Ruptela is providing these Garmin models: DEZL 560LMT and DEZL 760LMT

Main features:

- Communication with driver (messaging)
- Send routes and destination points
- FMI 15 cable support

Compatibility with different FM devices:

- FM-Pro3 - Special firmware required (contact Tech. support)
- FM-Tco3 - Special firmware required (contact Tech. support)
- FM-Pro4 – Included into standard firmware
- FM-Tco4 HCV - Included into standard firmware
- FM-Tco4 LCV - Included into standard firmware

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

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Document change log

Date	Version	Change details
2014-12-17	1.0	Initial draft.
2015-04-08	1.1	Branding changes.
2017-03-23	1.2	Added Garmin commands supported by TrustTrack.

Garmin commands supported by TrustTrack

FM device acts as an intermediary between the Garmin device and the TrustTrack system. TrustTrack supports a subset of Garmin protocols. TrustTrack service, which communicates with Ruptela devices (DCS) supports these commands:

A602

- Server to Client Open Text Message Protocol (Deprecated)
- Server to Client Simple Okay Acknowledgement Text Message Protocol (Deprecated)
- Server to Client Yes/No Confirmation Text Message Protocol (Deprecated)
- Stop Protocol

A603

- Auto-Arrival at Stop Protocol
- Data Deletion Protocol
- Estimated Time of Arrival (ETA)
- Client to Server Open Text Message Protocol (Deprecated)
- Stop status protocols

A604

- Message status protocol
- Server to client open text message

A605

- Ping (communication link status) protocol
- Message Throttling Query Protocol

A607

- Client to Server Open Text Message

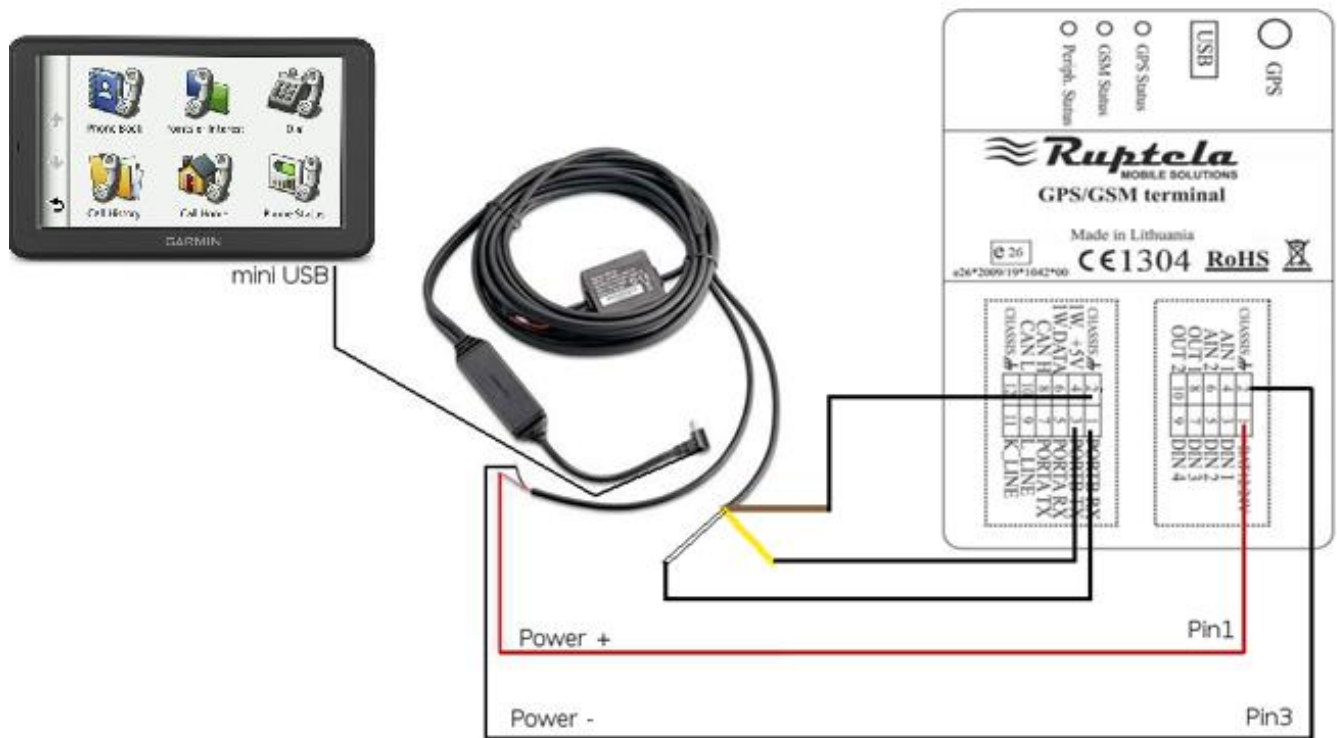
A611

- Server to client long text message protocol
- Other Features
- Product ID and Support

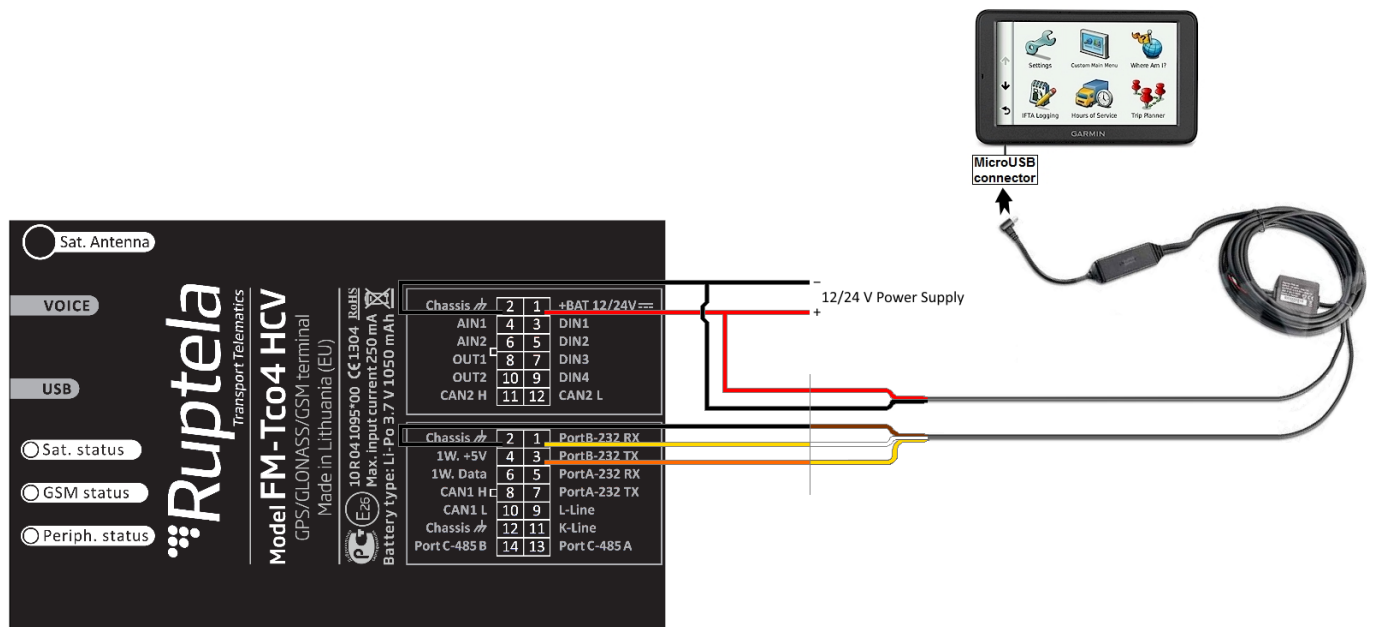
Features implemented in TrustTrack's frontend and available for end-users:

- Text message sending to Garmin;
- Okay Acknowledgement Text Message to Garmin;
- Yes/No Confirmation Text Message to Garmin;
- Text message from Garmin to Trust-Track;
- Message Status;
- Sending route to Garmin;
- Route activation/deactivation/marketing as "done"/deleting;
- Estimated Time of Arrival (ETA);
- Stop protocol (Mark destination as done when: vehicle is closer than "x" meters to destination / Stops there for minimum: "t" seconds);

Connection to FM3 device



Connection to FM4 device



FM Device side

- Red** – 1W. +5V
- Black** - Chassis
- Black** - Chassis
- Yellow** - PortB-232 RX
- Orange** - PortB-232 TX

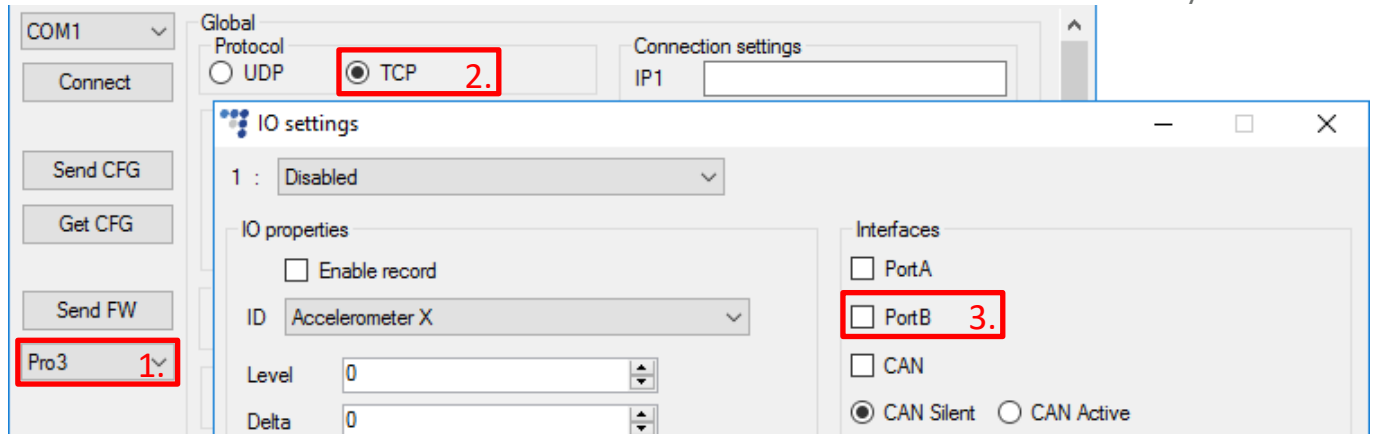
Garmin side

- Red** – Power supply +
- Black** – GND
- Brown** – GND
- White** - RS232 RX
- Yellow** - RS232 TX

FM3 device configuration

As mentioned earlier FM3 devices require special firmware versions to support Garmin connection. Install these firmwares first. After that follow these steps to configure your FM device:

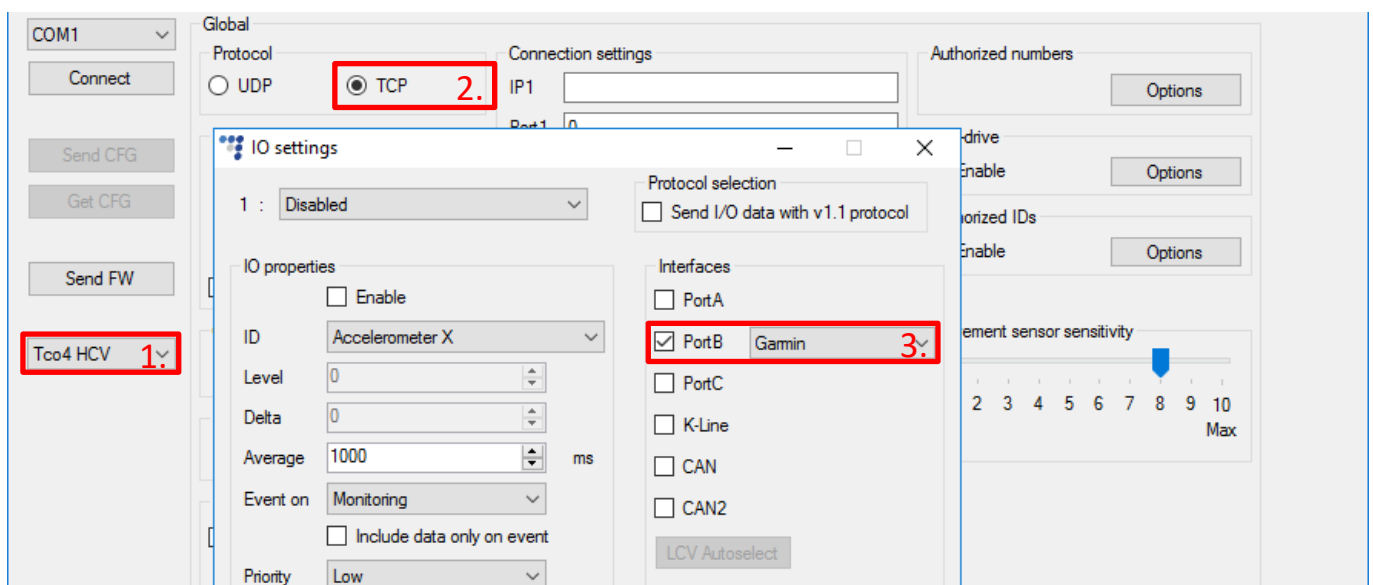
1. In the main configurator window choose your device (*FM-Tco3, FM-Pro3*).
2. In the **Protocol** section tick the **TCP** radial checkbox.
3. Do not enable **PortB** in the **Interfaces** section. It is not needed because it is active by default.



FM4 device configuration

Follow these steps to configure your FM device:

1. In the main configurator window choose your device (*FM-Tco4 HCV, FM-Tco4 LCV or FM-Pro4*).
2. In the **Protocol** section tick the **TCP** radial checkbox.
3. **IO events** "Options" button opens up a new "IO settings" window, here you can enable or disable IO parameters.
4. In the **Interfaces** section tick the **PortB** checkbox. In the dropdown menu on the right choose *Garmin*.



Connection status

Garmin connected correctly:



Garmin connected incorrectly (icons):

