

Compatible devices:

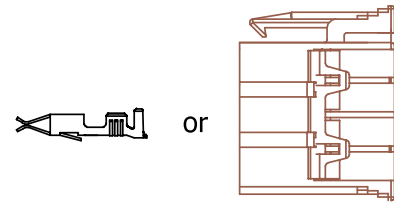
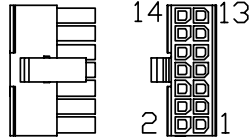
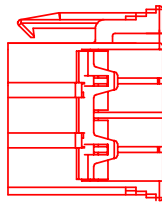
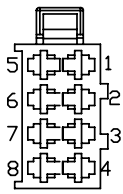
- FM-Tco4 HCV (and its modifications)

Make sure that you have:

- A vehicle with a supported digital tachograph
- A computer with Windows 7/8/10
- An internet connection (or a pre-downloaded configurator pack)
- A USB A to USB mini cable
- Basic tools (screwdriver, wrench, etc.)
- Cable ties (or double-sided tape)
- Wire connection tools



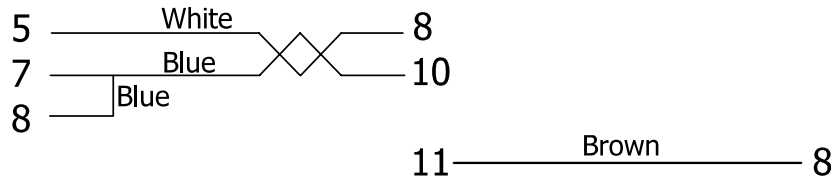
Wiring diagram



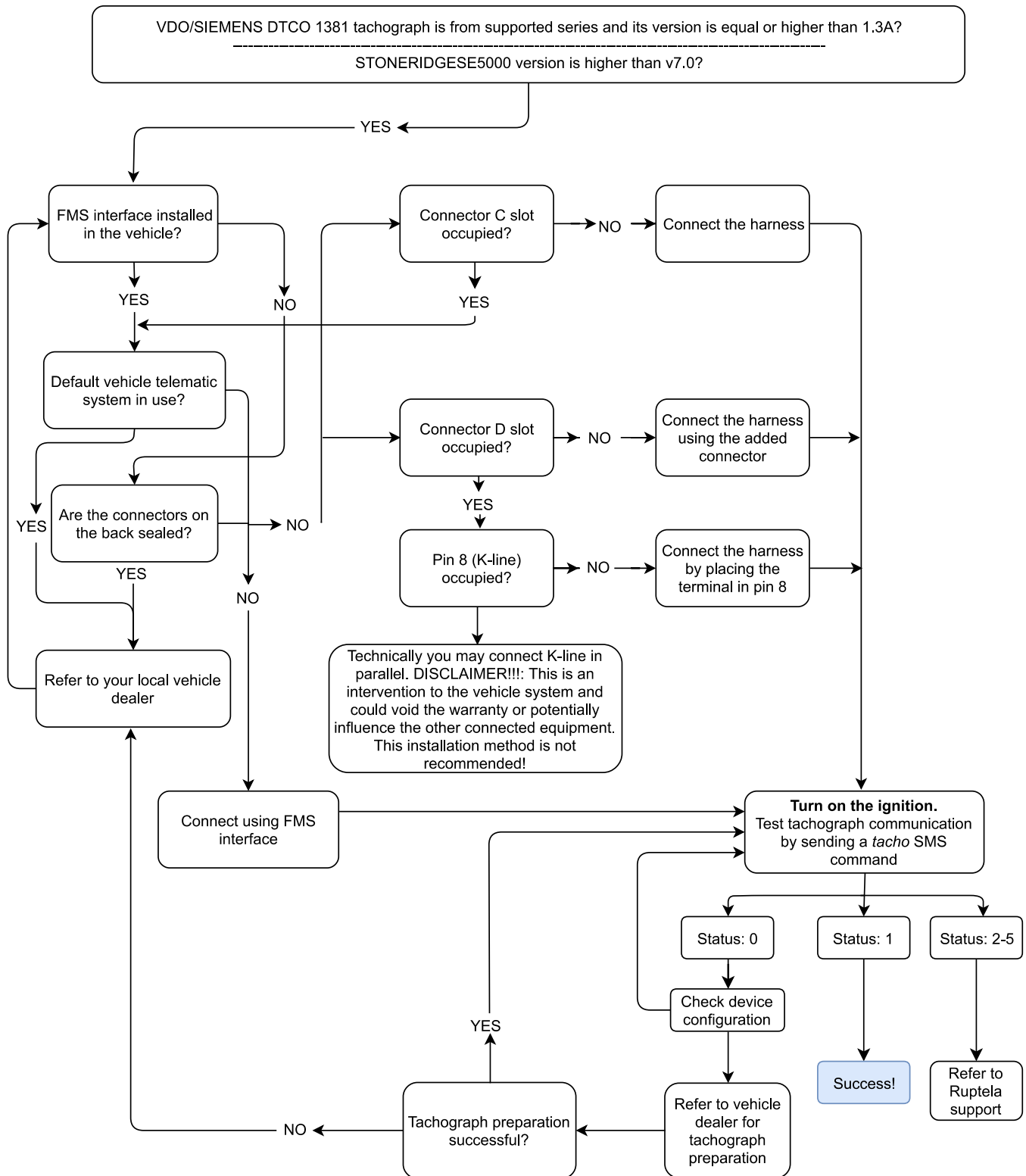
Tachograph connector C

14 pin connector

Tachograph connector D



Workflow flowchart



Configuration steps

- 1 Insert your SIM card into the device.



- 3 Connect the device to your computer using a USB cable. Start the configurator. Select the port you connected your device to. Click **Connect** in the configurator.

COM1	Global
Connect	Protocol
Send CFG	<input checked="" type="radio"/> UDP <input type="radio"/> TCP
Get CFG	APN settings
	Name
	User

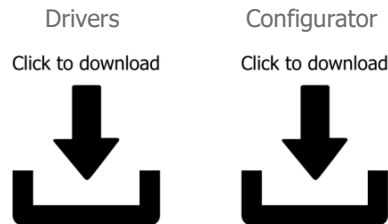
- 5 Configure GSM provider **APN** settings. Configure Fleet Management System **Connection** settings.

Global	Connection settings
Protocol	IP1
<input checked="" type="radio"/> UDP <input type="radio"/> TCP	Port1 0 <input type="checkbox"/> SSL 1
APN settings	IP2
Name	Port2 0 <input type="checkbox"/> SSL 2
User	<input type="checkbox"/> Two servers <input type="button" value="Periodical redirect"/>
Psw	<input type="checkbox"/> SSL client authentication <input type="button" value="SSL settings"/>
<input type="checkbox"/> Lock FM device to the SIM card	

- 7 In **Interfaces**, tick **K-Line**. Select **TCO** in the drop-down list.

<input checked="" type="checkbox"/> K-Line	TCO
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- 2 Download and install the latest [VCOM drivers](#). Download the device [configurator](#).



- 4 Click **File** -> **Open default CFG** to load the preconfigured file. Or use **New CFG wizard** to create a new config.

File	Tools
	New CFG
	New CFG wizard
	Open default CFG
	Save CFG
	Open CFG
	Save DIFF CFG
	Open DIFF CFG
	Generate SMS
	Exit

- 6 Click **Options** in **IO events**. In **Interfaces**, tick **CAN**. Select **Tacho read** in the drop-down list. Select the appropriate baud rate. Failure to select the correct baud rate can cause errors to appear on the dashboard.

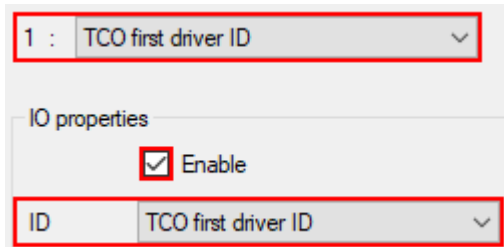
<input checked="" type="checkbox"/> CAN	Tacho read	250
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- 8 Enable the v1.1 protocol on the top right side of **IO settings**.

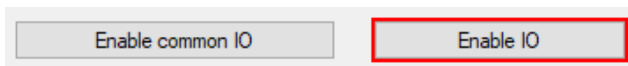
Protocol selection
<input checked="" type="checkbox"/> Send I/O data with v1.1 protocol

- 9 Select a parameter slot on the top left side of **IO settings**.

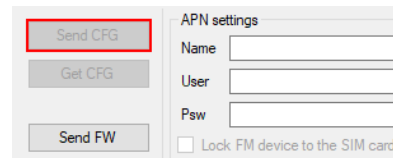
Select a parameter in **ID**.
Tick the **Enable** checkbox.
Repeat for all necessary parameters.



Alternatively, click the **Enable IO** button to enable a set of preselected parameters.



- 10 Click **Send CFG** to upload the config to the device.



Installation steps

- 1 Locate the tachograph.
Make sure that the ignition is off.
Check whether tachograph ports C and D are free.
If the ports are sealed, contact your dealer to unseal them.
- 2 Insert the red connector into tachograph port C.
If port D is already present, connect the brown cable to pin D8.
If there is no connector present in port D, insert the brown connector (packed in a separate plastic bag) into the port and connect the brown cable to pin D8.
Connect the 14 pin connector to the device.
- 3 Install the device with the GNSS antenna directed upwards.
Follow the recommendations:
 - Install behind the dashboard
 - Install as close to the window as possible
 - Avoid installing near metal surfaces
- 4 Fasten the device in the vehicle using zip-ties or double-sided tape.
Make sure it is secured tightly.
Turn on the ignition.
Send the *tacho* SMS command to check tachograph communication.
Check that the required data is received before finishing the installation, if not, ask your vehicle dealer to prepare the tachograph.

Further reading

- Documentation website: <https://doc.ruptela.lt/>
- Tacho harness datasheet: <https://doc.ruptela.lt/display/AB/Harnesses>
- Tachograph solution user manual: <https://doc.ruptela.lt/pages/viewpage.action?pageId=884778>
- Windows drivers: <https://doc.ruptela.lt/display/AB/FM4+drivers>
- Configurator tool: <https://doc.ruptela.lt/pages/viewpage.action?pageId=884805>

We highly recommend you to read the user manual before using the device.

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