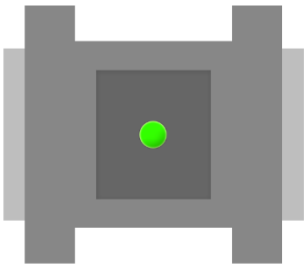


SCANMATIK J2534/RP1210/DPDU API Guidelines, version 1.0.0.175 (30 May 2026)

PLEASE READ THIS DOCUMENT CAREFULLY BEFORE USING SCANMATIK VCI WITH J2534/RP1210/DPDU SOFTWARE. THIS DOCUMENT ANSWERS TO MOST FREQUENTLY ASKED QUESTIONS AND EXPLAINS THE OPERATIONAL FEATURES OF POPULAR SOFTWARE.

Introduction

J2534/RP1210/DPDU Drivers (libraries) for SM 2/ SM 3 adapters provide the ability to work with a large number of third-party programs that support work through the relevant standards.

1. J2534, RP1210, DPDU Implementation Details

Implementation of the **RP1210C** without any restrictions. SM2/3 VCI fully replace DPA5/Nexiq/Inline -6 devices, supporting all protocols and offering a much faster and more convenient wireless connection.

SAE standards J2534-1/2 implementation has following features:

- For the ODIS, MB DAS, Consult 3+ capabilities have been implemented that go beyond the J2534 standard, such as a K -line multiplexer and ignition emulators.
- Adapters SM2/SM3 can operate with 24V on-board voltage vehicles.

ISO 22900-2 (**DPDU)** standard – all functions described in the standard are implemented. However, it should be noted that this standard has historically been used by adding "non-standard" protocols to meet the needs of a specific vehicle manufacturer (e.g., KW1281 and TP2.0 protocols for VAG). Therefore, library modifications to suit the specific software needs are typically required. We have implemented all non-standard functions for the tested software titles listed in this document.

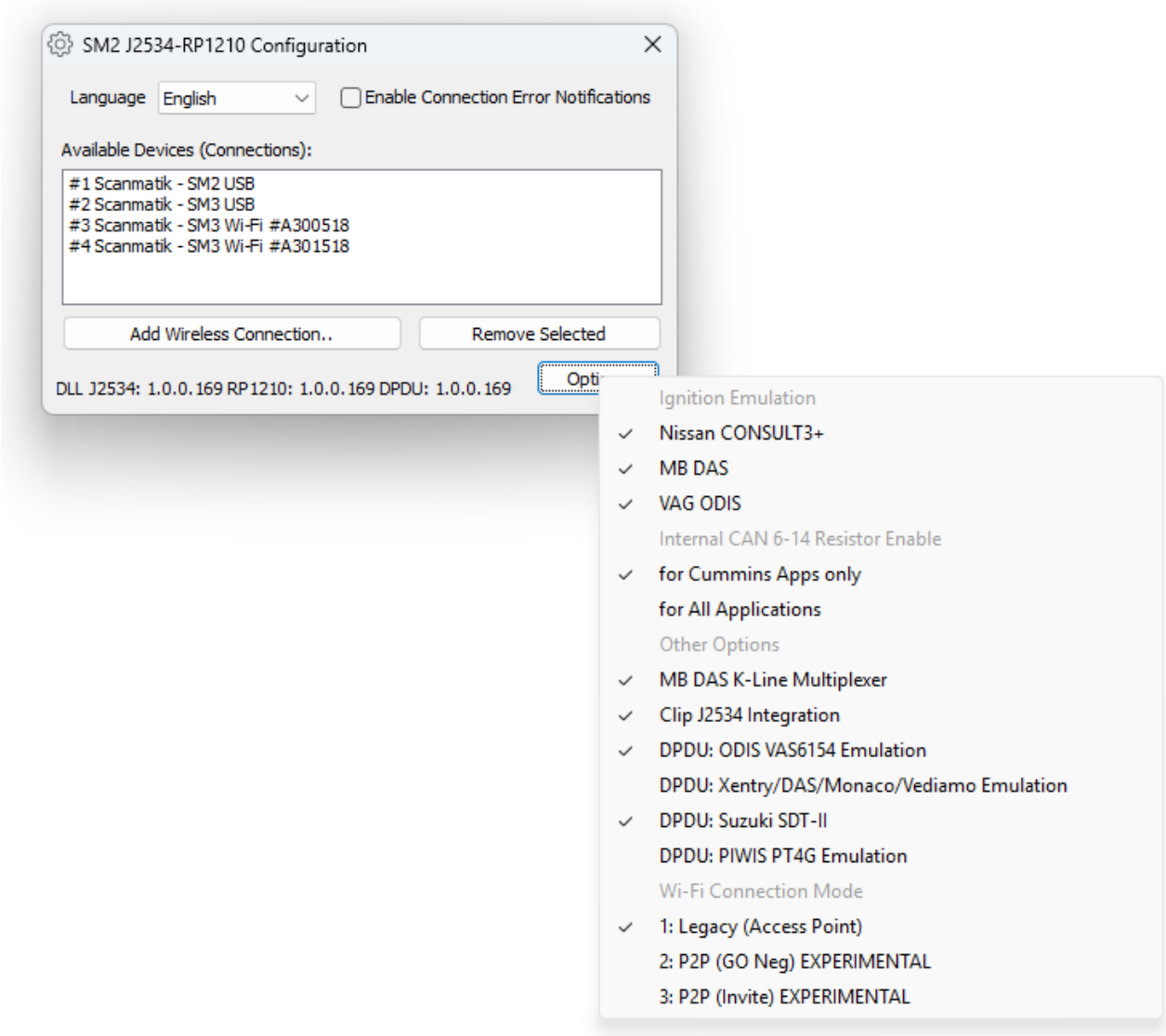
2. Setting up, Configuring Connections and Options

J2534/ RP1210/ DPDU drivers are installed together with the Scanmatik installer package.

Setting up a connection

By default, two connections will appear in the list of available VCI's in the J2534/RP1210/DPDU software: " **Scanmatik – SM2 USB** " and " **Scanmatik – SM3 USB.**" Additionally, you should create one (or more, if you have multiple adapters) wireless connections. **Connection settings in the Scanmatik diagnostic application and the J2534/RP1210/DPDU drivers are not linked.** When working with the J2534/ RP1210/ DPDU driver, you should close Scanmatik diagnostic application, and vice versa.

To configure wireless connections and other options run the “SM2 J2534-RP1210 Configurator” application found in the Windows start menu:



- Click “Add Wireless Connection…”.
- Supply power to the VCI(s) by connecting it to a USB port or to a vehicle.
- The program will find all SM VCIs and display a list.
- Add the required adapters from the list.
- In the options menu you can disable/enable emulation of the ignition switch state for the CONSULT 3+, DAS, ODIS, K-line multiplexer for MB DAS (all items enabled by default) and DPDU features.
- The changes take effect immediately.
- After all the necessary connections have been created, open the J2534/RP1210/DPDU software and select the newly added connection.

Thus, each program can use a different connection type. For example, you can configure bootloaders to work via " Scanmatik – SM2 USB," and diagnostic programs to work via wireless connections.

3. Ignition Emulator feature

Nissan CONSULT 3+, VAG ODIS, MB DAS (when operating via J2534) are unable to monitor the ignition switch state via J2534 API, as this standard has no such feature. This creates a problem with some procedures when switching ignition on/off is required to complete. Therefore, our J2534 driver implements ignition emulators for these applications: ignition state is set manually in the pop-up window.

When connecting via SM2/SM3, the ignition emulator window appears automatically if enabled in the configurator options (it's enabled by default). It looks like this:

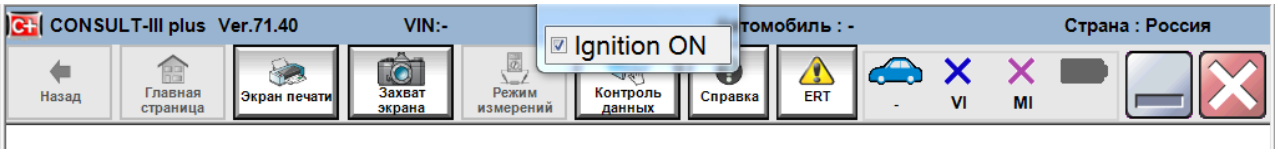


Figure 1. Ignition emulator for NISSAN CONSULT3+

Figure 2Ignition emulator for VAG ODIS

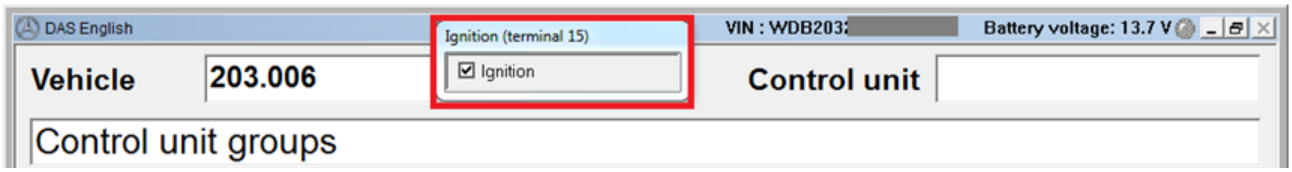


Figure 3Ignition emulator for MB DAS

Clicking anywhere in the emulator window toggles the Ignition state reported to the application.

NOTE: For ODIS and DAS applications Ignition Emulator will only appear when they are used with J2534 API. When used with DPDU API (described below) the feature is not needed: ignition state is determined by voltage level on specific OBD socket pin, same way as OEM tool does.

4. Features of operation and program settings

When launching most programs, you'll be prompted to select a PassThru adapter. Select "SM-2." Below are some program setup and operation features.

4.1. Allison DOC (RP1210)

SM2 adapter right away; you need to connect like this:

1) Click “F4 - Connection” in the main program window

2) Select transmission type.
3) Uncheck “SmartConnect” checkbox.
4) Click “Connect” button.
5) Click “Advanced” button.
6) In “Supplier” field, select “SM2RP32”.
7) Select the protocol (CAN Gen 5/ J 1939/ J 1708) in the “Protocol” field, depending on the transmission model.
8) In the device field, select the SM2/SM3 adapter (USB, Bluetooth or Wi-Fi).
9) In the “Channel” field, select “Auto”.
10) Click “OK” to will start connection.

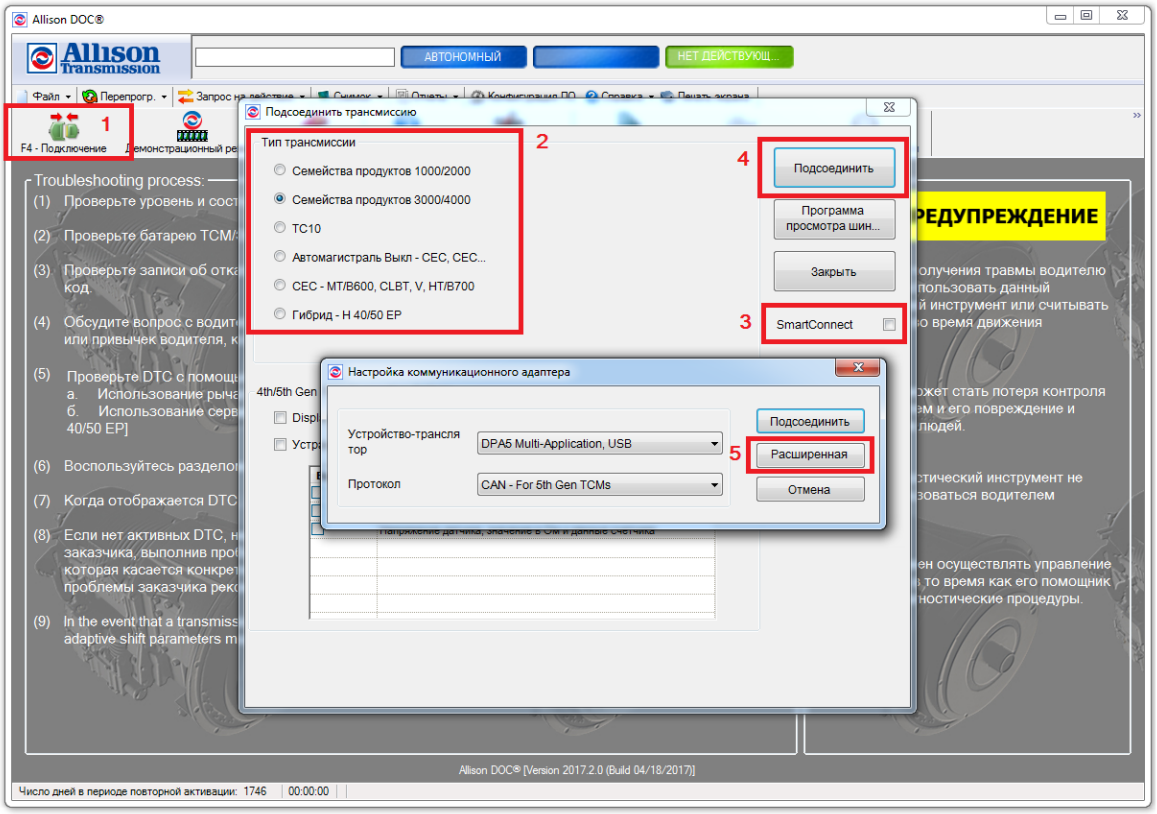


Figure 4. Setting up the Allison DOC (1)

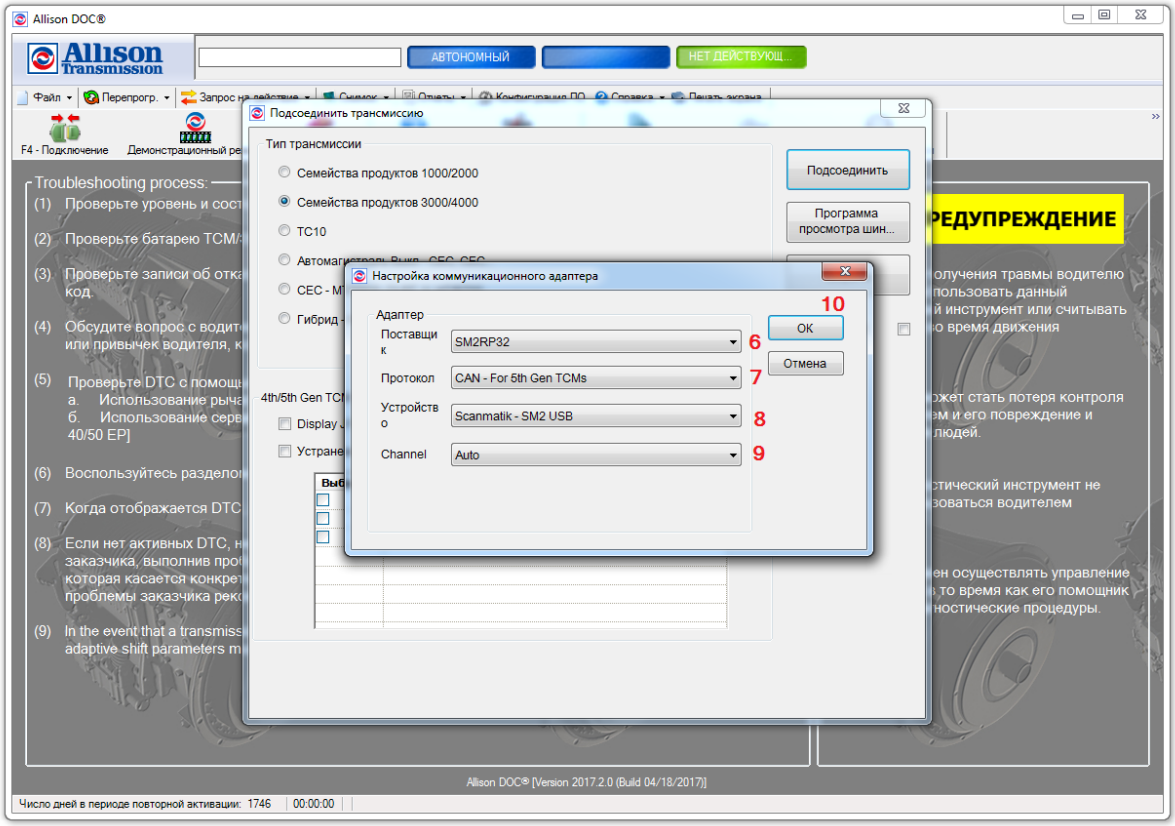


Figure 5. Setting up the Allison DOC (2)

4.2. Combiloader (J2534)

Combiloader modules marked with “J2534/+J2534” suffix are supported.

Notes:

- Some modules require a minimum delay between sending a request and receiving a response from the ECU. This can only be achieved by USB connection. Wireless connection may reduce read performance significantly.
- Modules with the "+J2534" suffix (not "J2534"!) can automatically connect via CAN or K-line, depending on the ECU type. However, the J2534 adapter in these modules is only used for CAN bus communication. For K-line connection the native "PAK bootloader" adapter must be connected to the ECU. The program doesn't indicate which adapter it was using when error occurs, making it difficult to identify the root of the problem.
- "BSL Mode TC17xx (J2534) Version 1.43" module: reading/writing the VAZ ME17.9.7 (TC1762) ECU sometimes requires several attempts to "power off/on/on” with processor pin 87 shorted to ground, then press read/write if "Synchronization Error" or "No ECU Response" message was shown.
- The "MIKAS-12/M74.5/M75/M86/M86I (+J2534) version 1.9" module – if the reading or writing operation was interrupted, the ECU remains in programming mode and no longer communicates. The "Additional/End Programming" button only functions after a complete ECU power cycle. Detected on the M74.5 CAN module.

4.3. DTS Monaco

Enable the "**DPDU: Xentry/DAS/Monaco/Vediamo**" option in the configurator. Three new connections will appear in DTS Monaco: "Scanmatik_SMR", "Scanmatik_DoIP_SMR" and "Scanmatik_CBF". Start Monaco, navigate to “Administration-> System Configurator” and configure the interfaces as shown in Figures 5 and 6:

NOTE. Real eCom (PartP) VCI will not be available for connection in CBF mode when interception option is enabled. Disable the option to use the eCom (PartP) VCI.

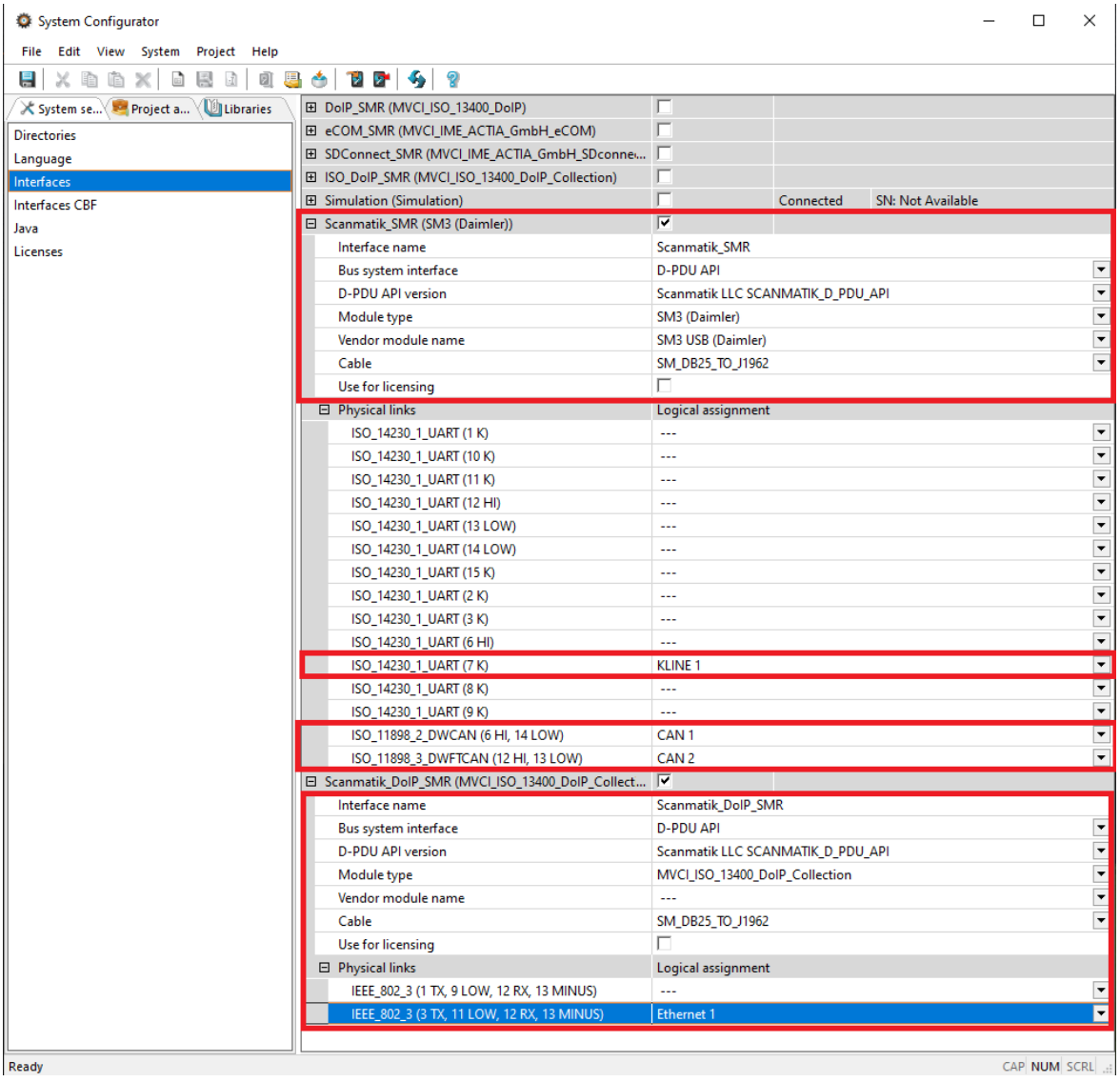


Figure 6. Setting SMR and DoIP SMR DTS Monaco interface

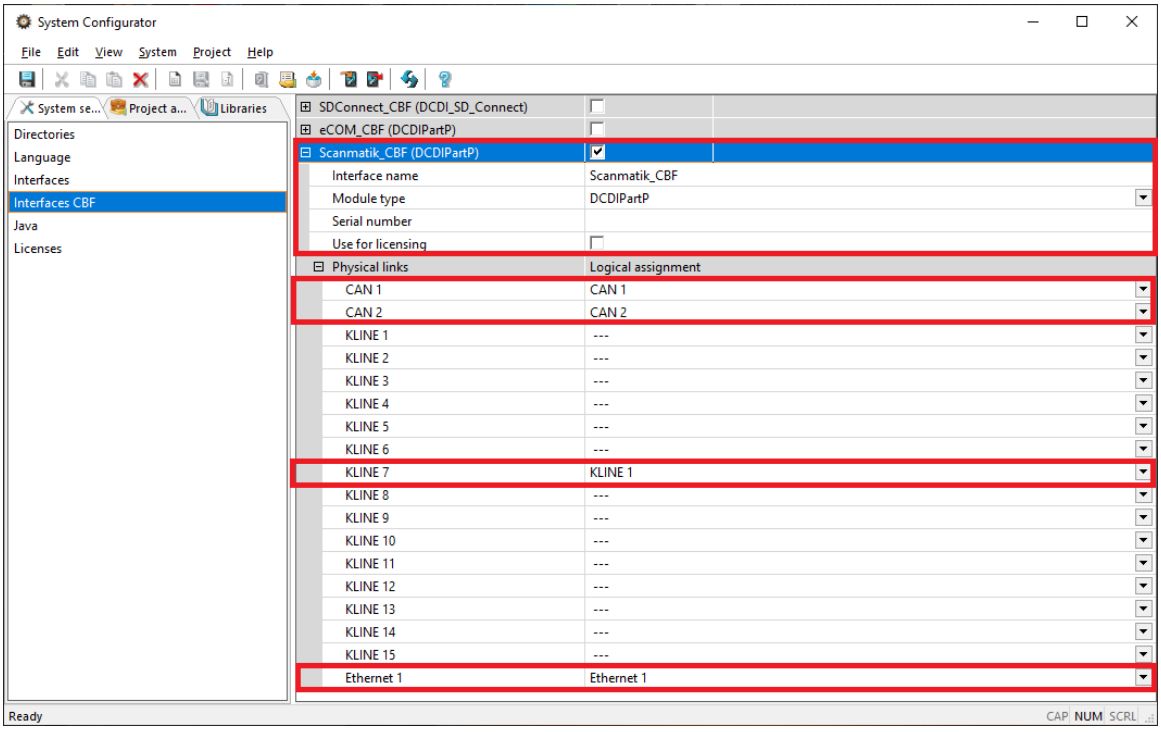


Figure 7. Setting CBF DTS Monaco interface

4.4. Forscan (J2534)

Full support for vehicles with CAN-6-14/CAN-3-11/J1850PWM/K-Line(ISO) buses.

Program settings:

- Select **“J2534”** in “Connection Type” field
- Select **“SM2/3 USB", "SM2 Bluetooth #Axxxxx"** or **“SM3 Wi-Fi #Axxxxx”** in “J2534 Adapter” field
- Select **“Shared HS CAN”** in “MS-CAN support” field
- Select **“Asynchronous”** In the “Send mode”**,** as shown in the figure:

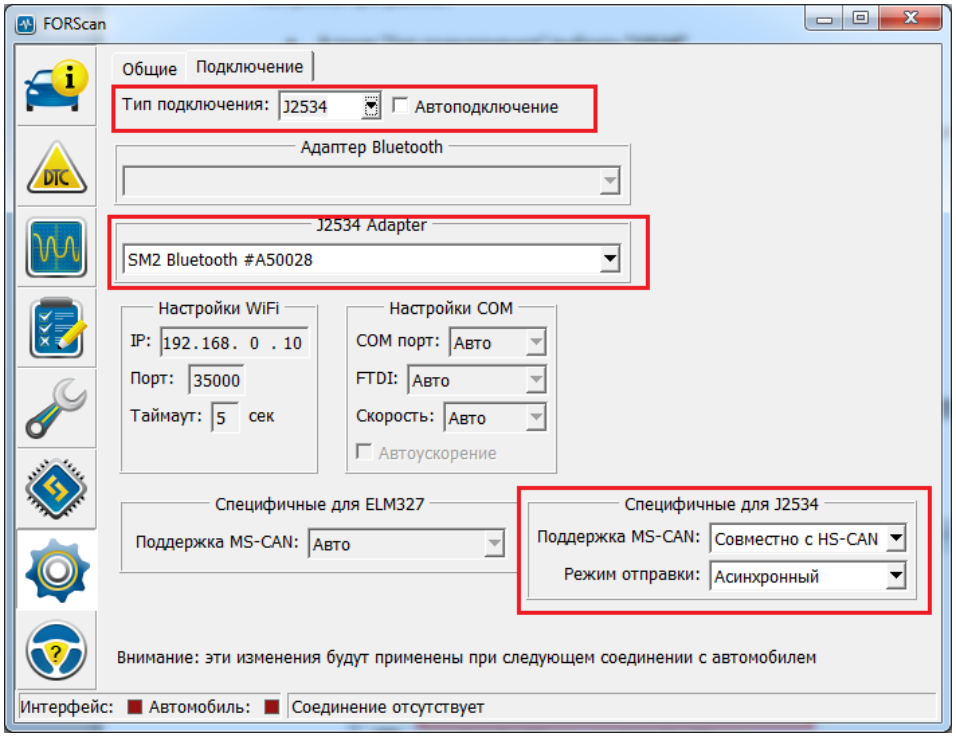


Figure 8. Setting up Forscan

4.5. GM GDS-2/SPS (J2534)

NOTE: DVD versions circa ~2011 available are not designed for J2534. GM offers an affordable subscription to dealer software for diagnostics and programming of Opel/Chevrolet vehicles (register at https://gme-infotech.com).

SM2 VCI supports all the capabilities of OEM “GM MDI” VCI: CAN buses: **1** (**Single Wire), 3-11** (**Medium Speed), 6-14** (**High Speed CAN**), **12-13**, **K-LINE on pins 1, 8, 9, 7, 12, 13.**

SM3 VCI capabilities are equivalent to OEM “GM MDI2” VCI, which adds support for CAN-FD and DoIP interfaces found on 2019+ models.

4.6. GM Tech2Win (DPDU)

Tech2Win application does not require any additional settings. Upon start a menu appears with a selection of available adapters that support DPDU API. Select the SM2/SM3 connection from the list and click OK.

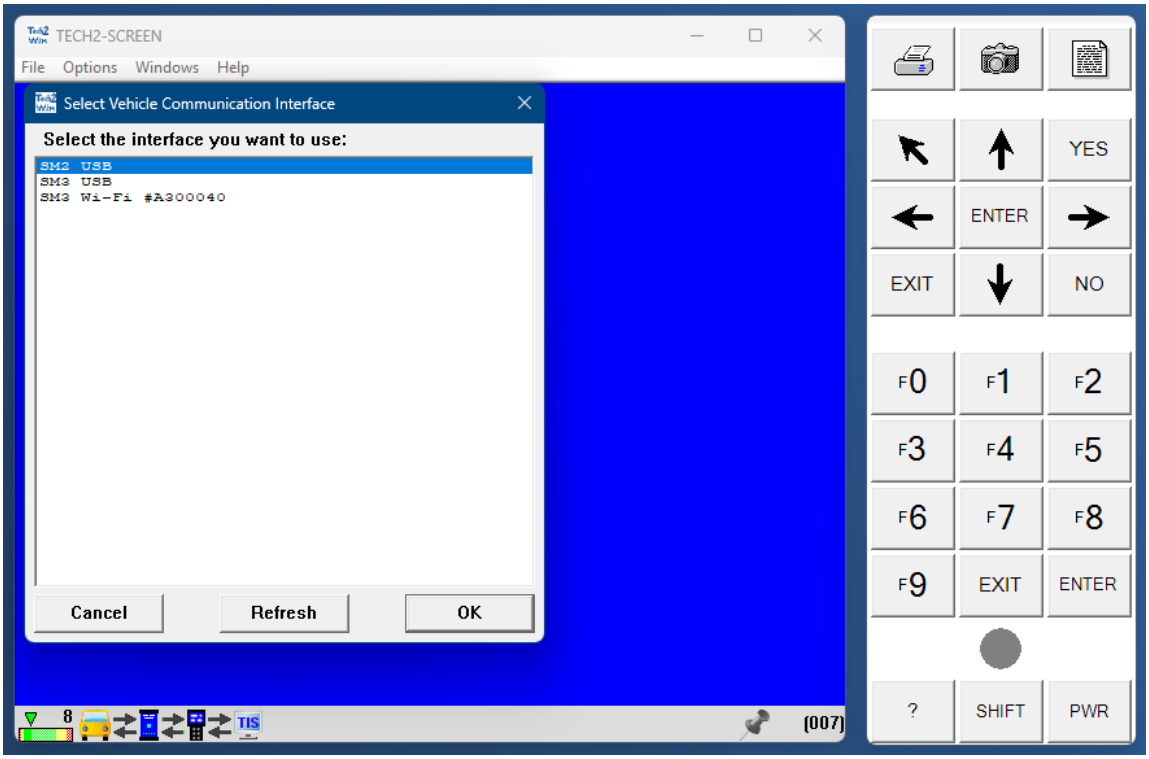


Figure 9. Tech2Win VCI selection

4.7. JLR Pathfinder (DPDU)

JLR Pathfinder does not require any additional configuration settings. Start application, go to "Settings" and select a “serial number” of connection. Due to the way the JLR Pathfinder displays the connection list, the numbers will be displayed in the following format:

"**2**0000000" – SM**2** VCI, USB connection
"**2**0**XXXXXX**" – SM**2** VCI, Bluetooth connection, serial number XXXXXX
"**3**0000000" – SM**3** VCI, USB connection
"**3**0XXXXXX" – SM**3** VCI, Bluetooth connection, serial number XXXXXX

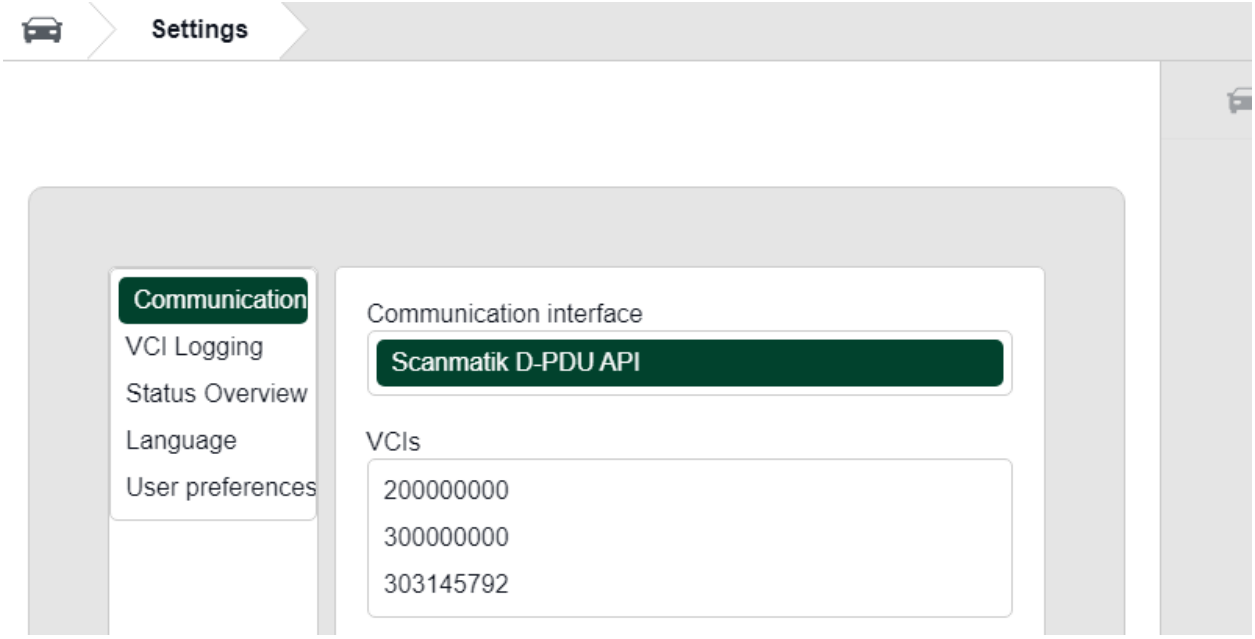


Figure 10. Selecting a connection in JLR Pathfinder

4.8. JLR Topix Cloud (DPDU)

Upon start a selection menu will appear with the SM2/SM3 connection selection. If you want to use other manufacturer's VCI, click "Cancel" - Topix will continue to iterate available VCIs. No additional steps required to link with SM2/3 VCI.

4.9. KAMAZ KSD (DPDU)

Start the application, go to the connection selection menu and select "SCANMATIK_D_PDU_API", then select SM2/SM3 connection as shown below. No additional steps required to link with SM2/3 VCI.

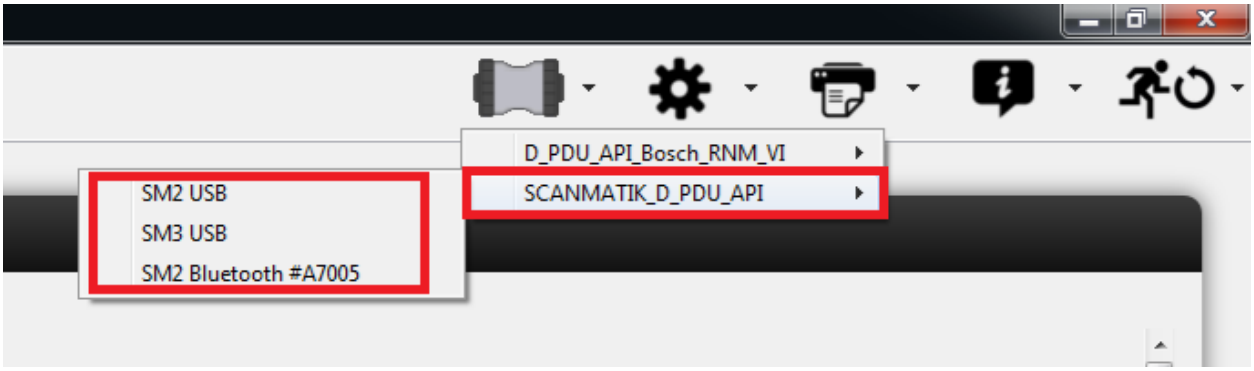


Figure 11. Selecting a connection in Code - X / KSD

4.10. Nissan Consult 3+ (J2534)

This software originally is not developed to link with generic J2534 adapters, despite this it is possible to run it with any J2534 VCI, but with significant limitations:

- A great deal of functionality (data stream reading, programming) is implemented in the original VI2 adapter firmware, far beyond the J2534. Trouble code reading, identification and testing of the

actuators (data reading is available in the IM), various adaptations, etc. Data stream function will not be available.

- Ignition pin state cannot be sampled due to limitation of J2534. The **SM2/3 J2534 library includes an ignition switch state emulator for this software.**
- When VCI connection to is lost, Consult will not attempt to reconnect and will just display an ECU communication error message or freeze. In this case, you should restart Consult.
- ECU detection and reading of VIN may have significant delays compared to the original device.
- The program is unstable and may freeze.

Configuring Consult 3+ to work via SM2/3:

Tested on versions 46.11, 64.11, 65.10:

1) There is no need to edit anything in the registry.
2) Open "C:\CONSULT-IIIplus\System\Application\ApplicationData\CommonSetting\DiagnosticTool.ini" and append two lines with the adapter name (see the figure below):

Connection via USB:

```
[device]
vi_device_name=SM2 USB
```

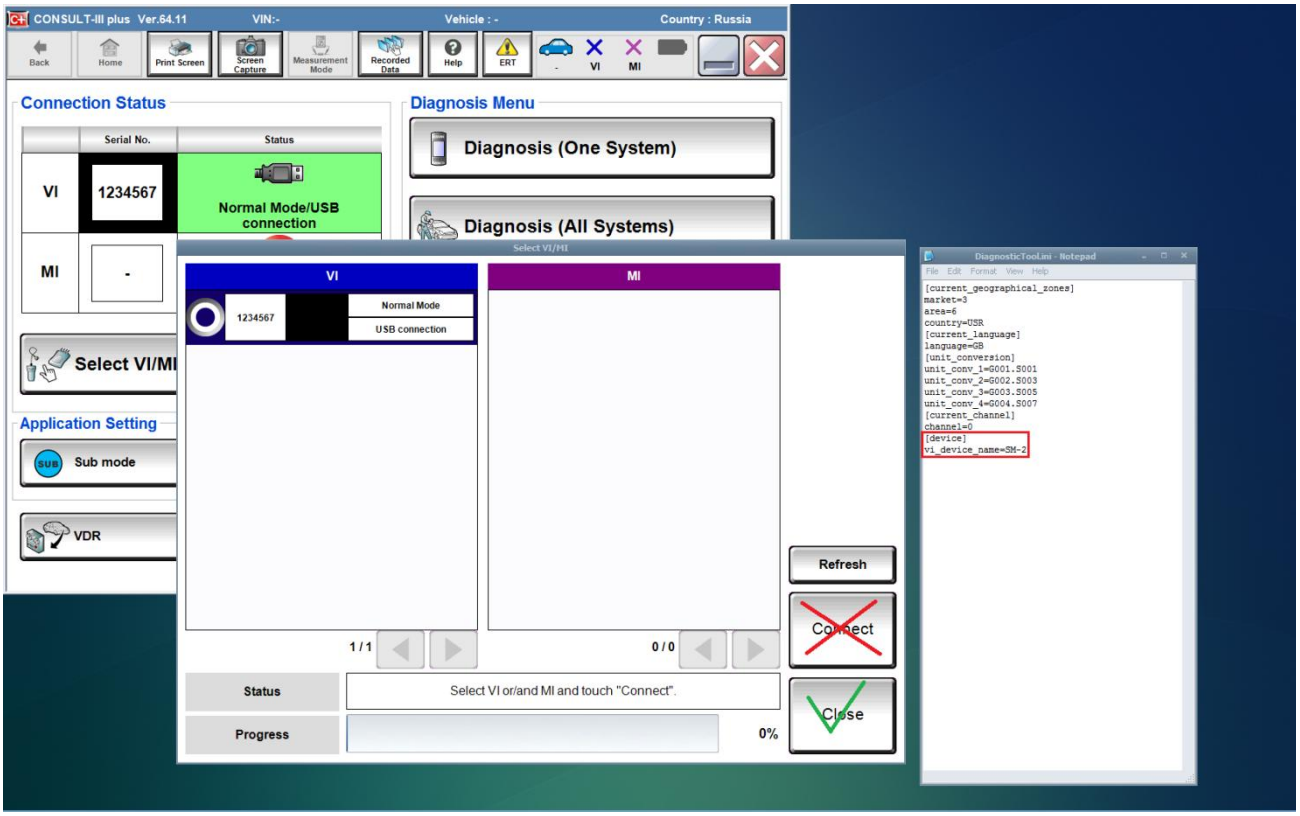
Connecting via Bluetooth (replace xxxxx with SM VCI serial number):

```
[device]
vi_device_name=SM2 Bluetooth #Axxxxx
```

Connection via Wi-Fi (replace xxxxx with SM VCI serial number):

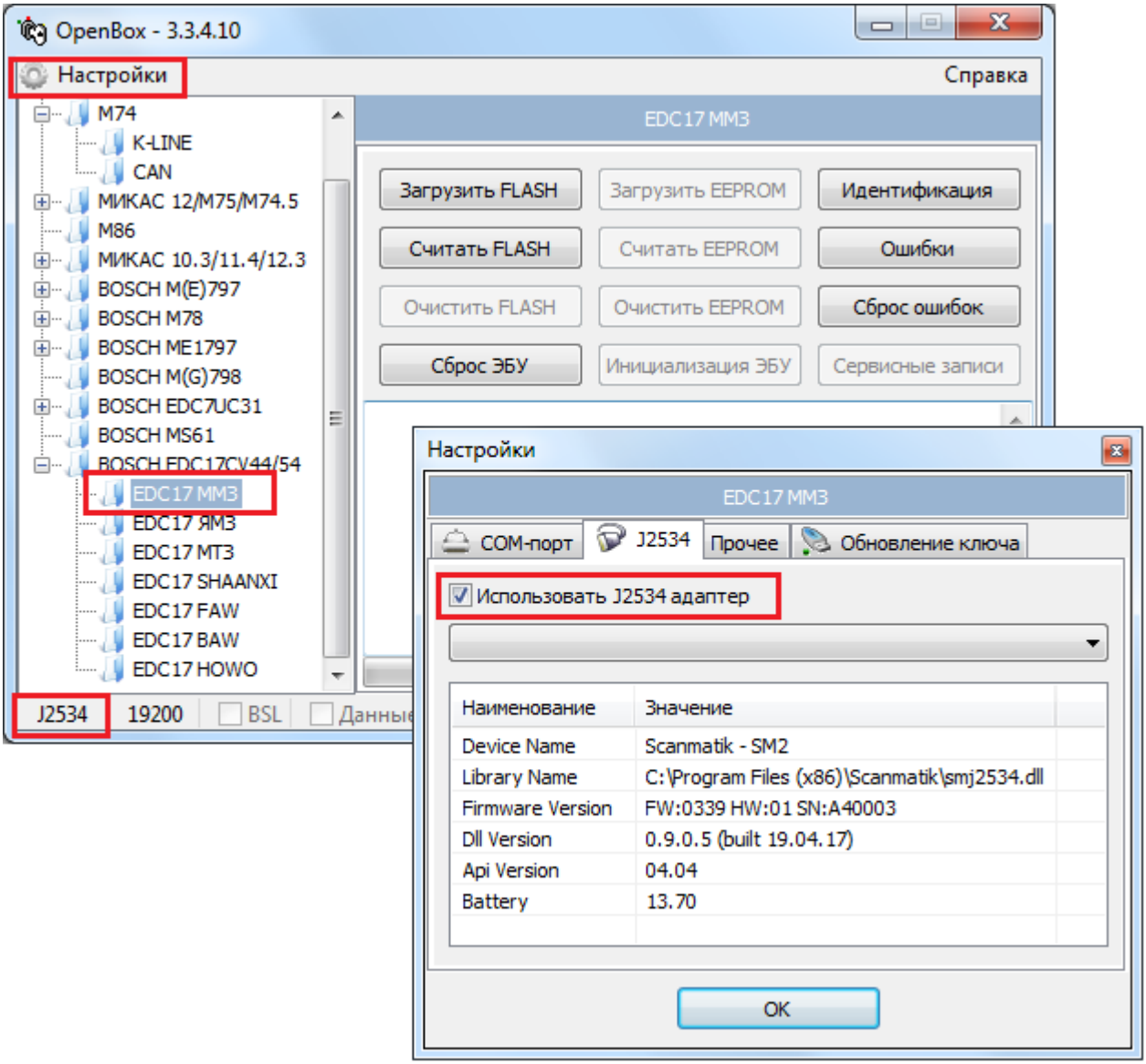
```
[device]
vi_device_name=SM2 Wi-Fi #Axxxxx
```

3) When **launched,** Consult attempts to communicate via the CAN bus. VCI must be connected to the vehicle or ECU (with a 120 Ohm resistor) with alive CAN bus (ignition must be ON). If the Consult doesn't detect a CAN bus, it won't display the VCI in the main window (see step 4).
4) If Consult doesn't immediately detect the VCI (shown in green in the image) after launching (without selecting it in the program settings!), then there's something wrong with the vehicle CAN bus connection. Go to the VCI selection screen. If SM VCI appears there, select it and click "Close" (don't click "Connect!"). If it doesn't appear, close Consult and start over from step 3.



4.11. OpenBox (J2534)

Some modules (for example, the M74 KLINE) operate over K-line only via a generic K-LINE-UART. Others (for example, the EDC17) allow to select the K-line connection (COMport or J2534). To do this, after selecting **each** module, go to "Settings" and check the "Use J2534 adapter" box in the "J2534" tab. If this option is unavailable, the module will not operate over K-line via the J2534 adapter. See the figure:



The lower left corner of the main program window displays the type of connection selected (COM port or J2534).

4.12. ODIS Service/Engineering (J2534)

NOTE: It is recommended to use this application via DPDU API - the native way how ODIS communicates with its VAS6154 OEM VCI. Support for J2534 VCIs in ODIS is implemented via the DPDU-J2534 translation layer from SoftingAG, with significant limitations:

- Older protocols such as KW1281 are software-implemented and suffer from timings tolerance introduced by Windows. USB connection is required for stable operation.
- **Ignition pin sampling is not implemented due to J2534 limitations.** The SM J2534 driver implements a ignition emulator .
- CAN-FD and DoIP vehicles (Golf 8, etc.) are not supported
- Operation speed is reduced due to the presence of a translator

4.13. ODIS Service/Engineering (DPDU)

ODIS-S/E is supposed to operate thru DPDU API with the VAS6154(A) devices only. Scanmatik DPDU API driver provides a VAS6154A emulation layer by intercepting calls to the DPDU API. **SM3** VCI supports all the features VAS6154A, while **SM2** VCI lacks support of CAN-FD and DoIP due its hardware limitation.

Enable the "**DPDU: VAS6154A Emulation**" option in the configurator. After that, start ODIS and select the SM2/SM3 adapter from the selection menu in the "Administrator->Diagnostic Interface" menu.

NOTE: Ignition Emulator is not required with the DPDU API.

NOTE: If the interception option is enabled, the VAS6154/A VCI will not be available for connection in ODIS. Disable the option to use VAS6154/A.

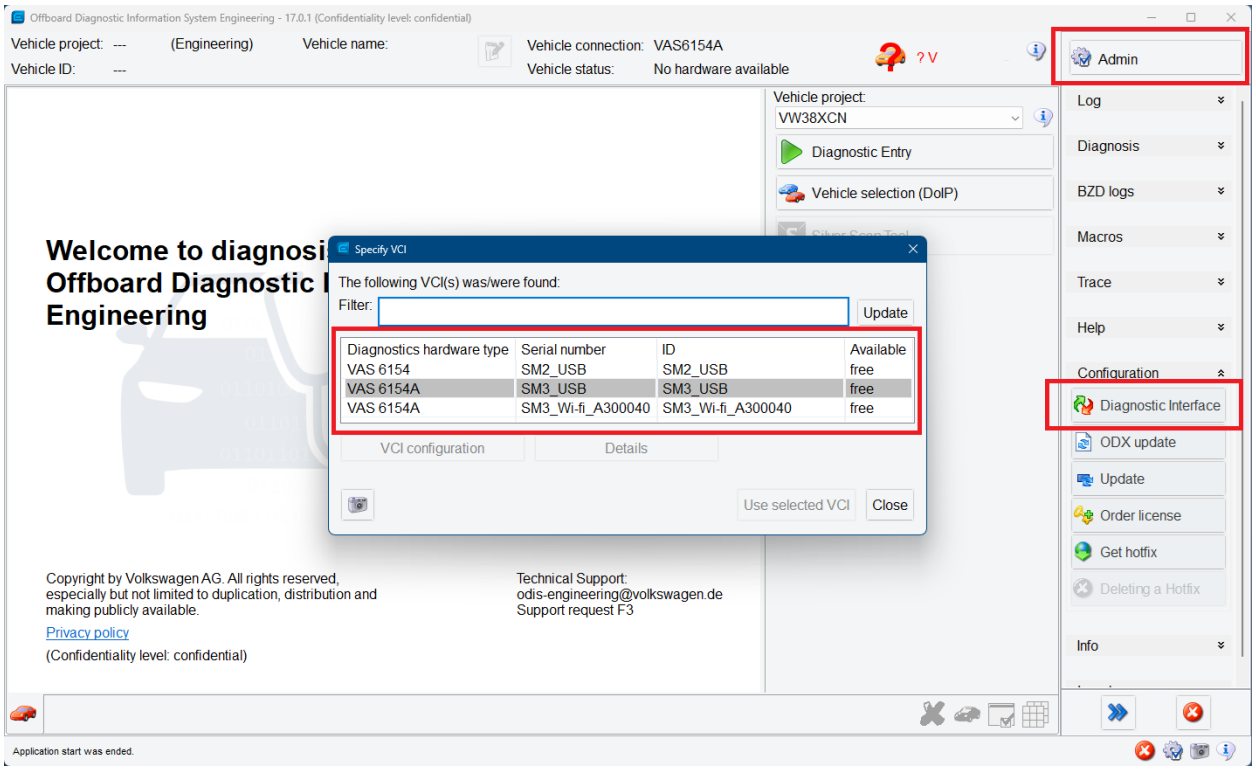


Figure 12Selecting ODIS connection

4.14. Renault Clip (J2534)

Support is implemented through special compatibility layer, since CLip is not designed to support generic J2534 VCIs.

Capabilities:

- CLip versions >=137 on Windows OS XP/Vista/7/10/11 (32 or 64 bit) are supported.
- All functions of RTL 2000/Alliance IV/RNM VCI were implemented to cover full range vehicle models.
- ASDE application (for older models) support under 64-bit systems was implemented thru Windows3.1 emulation layer.

Operating procedure:

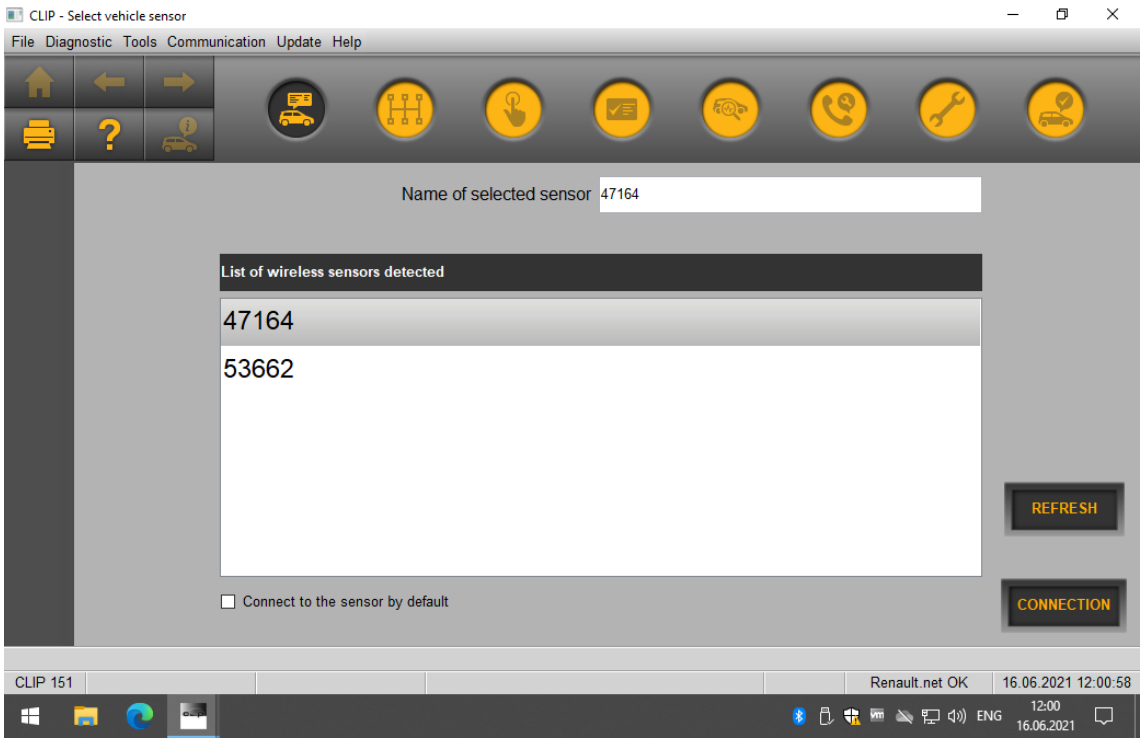
ATTENTION! Clip support is completely transparent. No special actions (registry editing, etc.) are required.

1. Make sure the "**Clip J2534 Integration**" option is checked in the configurator (enabled by default)
2. If you need a wireless connection, make sure that the required connections are added first in the configurator list .
3. Connect SM VCI to vehicle and PC (if USB connection used)
4. Launch the CLip.

CLip automatically searches for adapters after start. Preference is given to VCI connected via USB.

USB Connection
If CLip detects **SM2/SM3 VCI** via USB, it will display a list of VCIs with the only option "0" and immediately proceed to the vehicle VIN query screen.

Wireless Connection
If the CLip doesn't detect VCI via USB, then it will proceed to detect VCIs connected wirelessly (may take about 20 seconds). List of detected wireless VCIs serial numbers will be shown upon completion:



Select the VCI serial number and click "CONNECTION".

Known issues (will be fixed):

- Renault Traffic: ASDE freezes when polling the multiplex network (64-bit systems only). Solution: connect by selecting a single ECU from the list.

- Renault Scenic I: ASDE freezes when exiting from the ABS unit diagnostics (only on 64-bit systems).

4.15. PCM flash (J2534)

SM3 is the only VCI that provide complete support for PCMflash.

SM2 does not support newer modules where CAN-FD connection is required.

4.16. Porsche PIWIS (DPDU)

Enable the "**DPDU: PIWIS PT4G Emulation**" option in the configurator to intercept DPDU APU calls of PIWIS to the OEM PT4G DPDU library. This feature is compatible with all PIWIS versions, including those configured for VAS6154 or J2534. Versions 18.xxx, 32.xxx, 42.xxx, and 43.xxx were tested. **SM3** devices have equivalent capabilities latest-generation OEM VCI (PT4G). **SM2** has no support for DoIP and CAN-FD protocols.

4.17. PSA DiagBox (J2534)

DiagBox software requires support for CAN3-8 which is specific to PSA vehicles and is not standardized by J2534. SM2/SM3 VCIs have no hardware support for CAN3-8, instead CAN3-11 will be used for these purposes. Only two pins (8, 11) should be swapped to make SM2/SM3 compatible with full range of PSA vehicles. Make a crossover cable OBD16-to-OBD16 for DiagBox as shown:

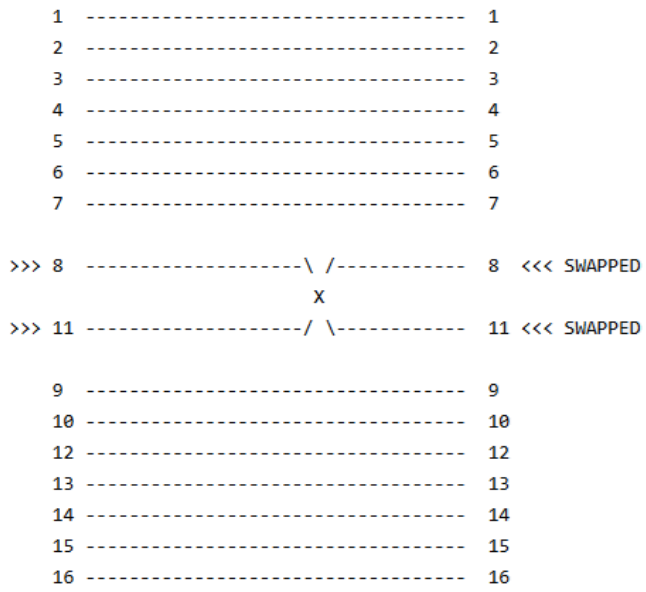


Figure 13. Crossover cable diagram for PSA vehicles

Upon start DiagBox scans all the J2534 VCIs defined in the Windows registry by probing for CAN 3-8 support. Most J2534 VCIs will be silently skipped because of lack of CAN 3-8 support. Make sure SM2/SM3 device is connected to USB and powered on (Wi-Fi).

4.18. Suzuki SDT-II (DPDU)

Enable the "**DPDU: Suzuki SDT-II"** option in the configurator. Start the program and select the connection type in the “VCI Selection” window as shown in the figure.

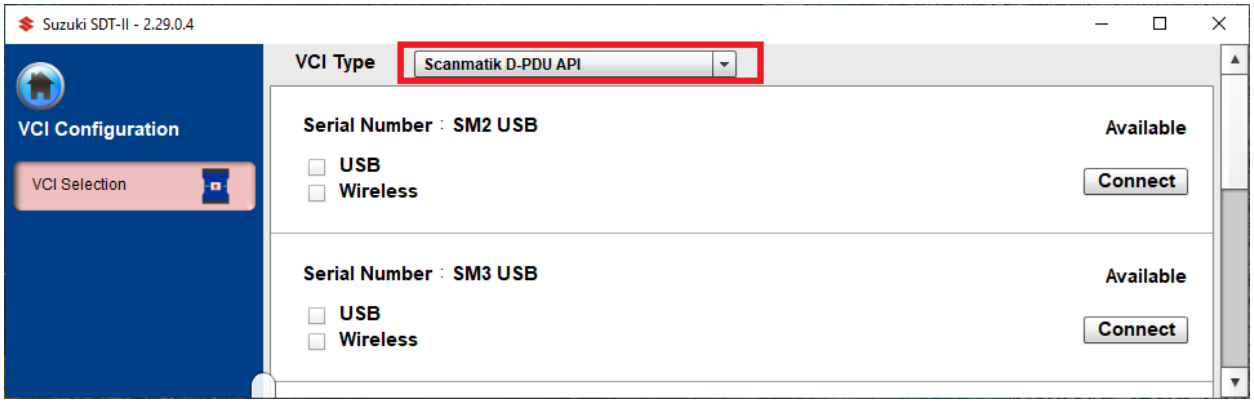


Figure 14. Selecting a Suzuki connection SDT-II

Note: Data Recorder feature is not supported with 3rd party VCIs;

4.19. Toyota Techstream (J2534)

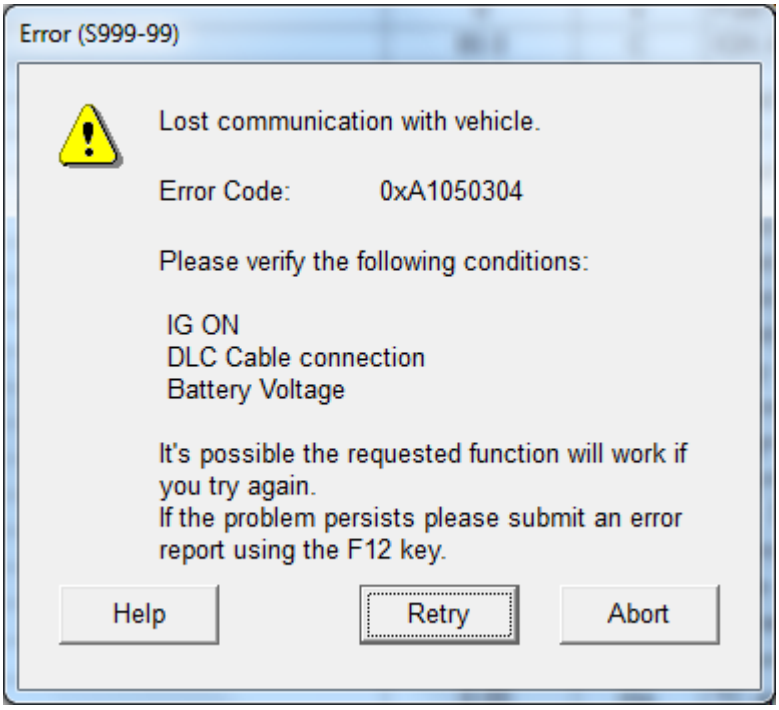
This software is fully supported, tested on a large number of vehicles, and numerous fixes were made during the J2534 driver testing phase to achieve maximum speed and correct operation and is known to be the most demanding when it comes to implementation accuracy of J2534 API.

Below are some of the Techstream software bugs discovered during testing. These issues **are not specific** to the SM2/3 VCIs and can be encountered with any J2534 adapter. It's also possible that these bugs have been addressed in later versions of the software.

IMPORTANT! Always select the correct sales market (USA, Europe, Japan, etc.), as the same model (e.g., LEXUS GS300 '99) may use different protocols depending on the market. When establishing a connection, the application should automatically recognize at least the engine type/model code. If this does not happen, the market selected was likely incorrect.

4.19.1. Loss of connection with the adapter or vehicle

If **VCI-to-car** or **VCI-to-computer** connection is lost, the application displays a misleading message indicating a connection loss "**with the car** " (code 0xA1050304 or 0xA1050308). If the **VCI-to-computer** connection is lost, the application will not restore the connection if the following message appears:



Therefore, if an error message with code 0xA1050304/0xA1040308 appears after communication ECU has already been successfully established, you should proceed as follows:

1) Check the connection of VCI to the diagnostic socket; the LED should light up green.
2) Check if the vehicle ignition is ON;
3) Click the **“Retry”** button;
4) If same message appears again, but steps 1 and 2 have been completed, this indicates that there has been a failure in the “**VCI-computer**” connection. In this case, you should:
5) Click the “**Abort** ” button and go to the **“System Selection Menu”** (system selection menu);
6) Select the desired system again - only in this case the program will try to re-establish communication with the VCI.

4.19.2. Slow data update in DataStream

If the connection with the control unit is lost in DataStream mode (error code 0xA1050304 or 0xA1050308) and is successfully re-established by pressing the "**Retry**" button, the application switches to "slow" polling mode (the update interval increases significantly to 4000...8000 ms). To return to "fast" polling mode again, exit to **the main menu** ("**Main Menu**") and re-establish the connection with the vehicle ("**Connect to vehicle** ").

NOTE: Techstream does not use the "fast" variable polling mode on all vehicles, it depends on the ECU firmware version. Therefore, on some vehicles, a full data list update interval of 4000-5000ms is considered normal (LEXUS GS300 '99, RX300 '04). In these cases, you should select fewer variables to view.

4.19.3. Hanging in “Utility - AF/O2 Sensor Operation”

Entering this mode after DataStream often causes the program to freeze (with a scrolling bar). This utility should be used immediately after establishing communication with the control unit (right from the DTC view mode).

4.19.4. DataStream freezes during communication with body electronics units

When attempting to view Data Stream on body electronics units, the application may freeze (with a constantly running progress bar) if the ECU should report data from slave systems and sensors (for example, a button module via the LIN bus), but there is no connection with them (circuit break, etc.).

4.20. Vediamo 4/5 (DPDU)

Enable the "**DPDU: Xentry/DAS/Monaco/Vediamo**" option in the configurator. Start Vediamo and select the connection type "Part P".

NOTE: *If the interception option is enabled, the eCom (PartP) VCI will not be available for connection in CBF mode. Disable the option to use the eCom (PartP) VCI.*

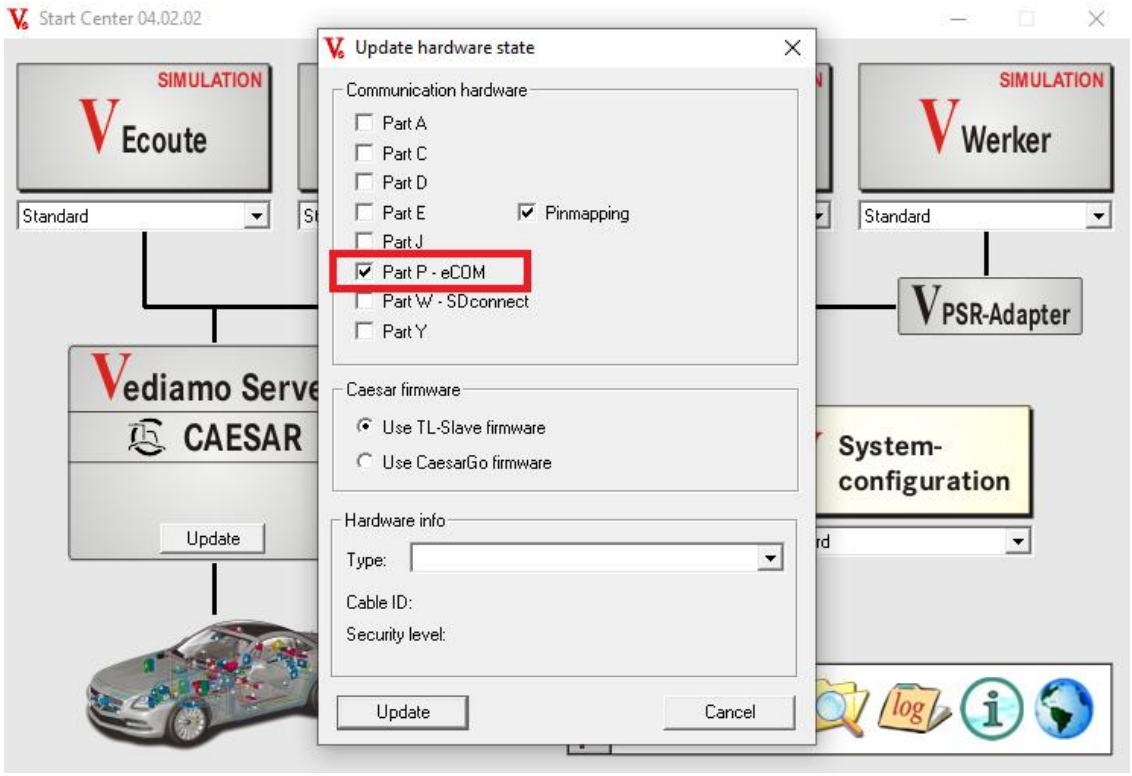


Figure 15Setting up Vediamo

4.21. Xentry/Daimler Truck PassThru (J2534)

Capabilities:

- Full support for vehicles with CAN bus and DoIP (Xentry, DAS) – all systems.
- Ignition key state emulator
- For older vehicles with the K-Line (DAS), a non-standard feature “K-LINE Multiplexer” was implemented, allowing diagnostics of most control units. This feature is enabled in the configuration. If this option is disabled, the MB DAS will only detect the engine ECU on pin 7 of OBD socket.
- Cars without an OBD-16 connector are not supported by DAS/Xentry Passhtru.

Limitations:

Although J2534 API is the only official way for independent operators to get Xentry working, it was not the native way that Xentry/DAS/Daimler Truck applications designed to operate. Internally, there is DPDU-J2534 translation layer is running, which is known to have a significant limitation:

- Older protocols such as KWFB, MBISO and others were not implemented at all, resulting in poor support for pre-W211 era cars and trucks before ~2018.
- CAN transport layers is software-implemented, resulting in reduced communication performance.
- Protocol and timing handling is basic, leading to failure of special operations (ABC level calibration, SBC unit calibrations etc).

IMPORTANT! On older models without a CAN bus on the diagnostic connector (or with a K-line engine), the unit may stall when performing coding functions, disabling injectors (CDI), etc. This is due to poor implementation of the KWP2000 protocol in the DAS application itself. Such procedures should not be performed without extreme caution. We have debugged several cars (W203, W210, W211) and corrected DAS behavior by adding workarounds to the J2534 driver, but this is far from a complete list of models where this issue may occur.

The ignition key state emulator window will be shown after polling the control units.

4.22. Xentry OpenShell/Daimler Truck (DPDU)

Xentry Openshell/DAS/Daimler Truck applications are only supposed to operate with Xentry VCI (MTS6532) or SDConnect devices via DPDU API. Scanmatik DPDU API feature was implemented to emulate Xentry VCI by intercepting calls to its DPDU library. This is the native (although unofficial) way to overcome limitations of its J2534 translation layer and get Xentry working as expected. All manufacturer-specific features and protocols of Xentry VCI DPDU API were carefully implemented.

Enable the "**DPDU: Xentry/DAS/Monaco/Vediamo**" option in the configurator. Start the application. SM2/SM3 selection window will automatically pop-up when connection to the vehicle is started.

NOTE: Ignition emulator is not required with DPDU API: the ignition status will be monitored by the voltage level at Pin 8 of diagnostic connector.

NOTE: If the interception option is enabled, the Xentry VCI/SDConnect will not be available in Xentry/DAS. Disable the option to use the original VCI.

NOTE: Few Xentry versions (03.2023 and others) were reported to hang during vehicle ECU communication establishment. It looked like a hang of VCI communication, but the real reason of hang discovered is the endless retries to connect to Daimler server. Please consider to change Xentry version to newer one if you face this problem.

5. Summary tables of tested programs

J2534 standard

Program	Version	Protocols	Restrictions
Chrysler Flash Application Dealer software, programming of Chrysler vehicles since 1996. https://www.techauthority.com	online	SCI, ISO9141, CAN	**SM2-PRO, SM3**: full support
Combiloader ECU programming of different brands http://almisoft.ru	2.16.6351	ISO9141, ISO14230, CAN	**SM2-PRO, SM3**: full support
Chiploader ECU programming of different brands http://chipsoft.com.ua	2.28.0	ISO9141, ISO14230, CAN	**SM2-PRO, SM3**: full support
ECU Flasher (auto-bk) ECU programming of different brands http://ecuflash.ru	2.3.0.b	ISO9141, ISO14230, CAN	**SM2-PRO, SM3**: full support
DAP4CS CarmanAcan Auto-I device emulator for Windows http://dap4cs.com	2360	ISO9141, ISO14230, CAN	full support
Ford Module Programming Tool dealer software, Ford vehicle programming https://www.motorcraftservice.com	98	ISO1941, J1850PWM, CAN	**SM2-PRO, SM3**: full support
Forscan Ford vehicle diagnostics http://forscan.org	2.3.9 beta	ISO1941, KWP2000, J1850PWM, CAN	Full support, see notes .
GM GDS-2/SPS Dealer software, diagnostics and programming of GM vehicles (Chevrolet, Opel, etc.) https://gme-infotech.com	v2017.05	GM_UART, ISO9141, CAN/ ISO15765 (1, 6-14, 3-11)	**SM2-PRO, SM3**: full support
Hino Diagnostic Explorer 150 (Hino DX2) Hino trucks . https://hino.nexiq.com	1.18	**J2534-API 2002** CAN, ISO9141, ISO14230, ISO15765	Full support except Retro cars

HONDA HDS Dealer software, diagnostics of Honda vehicles http://www.techinfo.honda-eu.com https://techinfo.honda.com	3.017	ISO1941, HONDA DIAG-H, CAN, short circuit on land 9th pin OBD-II	Full support (including peripheral systems on 14th or 1st pin and SCS mode).
Jaguar/Land Rover SDD dealer software, diagnostics, and programming for Jaguar and Land Rover vehicles https://topix.landrover.jlrext.com	145, 149	CAN/ISO15765 (6-14, 3-11)	**SM2-PRO, SM3**: full support
MDFLASHER IMMO OFF , SRS Crash Clear , mileage correction for different brands and everything related https://mdflasher.ru		CAN/ISO9141	Full compatibility
MMC Flasher (**Bruce-Willis)** ECU programming of different brands http://mmcflash.ru	10.0	ISO9141, KWP2000, CAN	**SM2-PRO, SM3**: full support
Nissan Consult 3+ Dealer software, diagnostics, and programming for Nissan vehicles https://www.nissan-techinfo.com	71.40, 65.10, 64.11, 46.11	ISO9141, KWP2000, CAN +ignition emulator	The software is not advertised to work with J2534 adapters, but by editing the configuration file it is possible to run it, but with significant limitations, see Nissan Consult 3+
ODIS Service/Engineering dealer software, diagnostics and programming of VAG vehicles https://erwin.volkswagen.de https://erwin.audi.com https://erwin.seat.com https://erwin.skoda-auto.cz	7.2.1 23, 24,25	ISO9141, CAN +ignition emulator	**SM2-PRO, SM3**: full support see notes .
OpenBox ECU programming of different brands http://diantel.ru	3.3.4.10	KWP2000, CAN	Full support. Some modules require a simple K-line adapter for the COM port to work with them via K-line. See notes.
PCMFlash ECU programming of different brands http://pcmflash.ru	1.2.1	ISO9141, CAN	**SM2-PRO:** full support except CAN-FD features **SM3:** full support

PSA DiagBox dealer software, diagnostics and programming of PSA vehicles	9.150	ISO9141, KWP2000, CAN	Full support Requires a crossover cable
Porsche Virtual Tester (VT4G) dealer software, diagnostics and programming of Porsche vehicles for independent auto repair shops https://pcss-tsi.porsche.com/landing/static/start	1.0.25	ISO9141, KWP2000, CAN , DoIP	**SM3:** Full support **SM2PRO:** DoIP vehicles with are not supported
Toyota Techstream Dealer software, diagnostics, and programming for Toyota vehicles https://techinfo.toyota.com https://www.toyota-tech.eu https://www.lexus-tech.eu	13.10.019 12. xx 10.xx	J1850VPW, ISO9141, KWP2000, CAN	Full support, there are some peculiarities in operation .
Volvo Vida dealer software, Volvo car diagnostics https://www.volvotechinfo.com	2015	ISO9141, KWP2000, CAN	Testing is in progress
Xentry/DAS Pass Thru Dealer software, diagnostics of Mercedes-Benz vehicles http://service-parts.mercedes-benz.com	June 0 , 2024	**J2534** : ISO9141, CAN, ETHERNET_NDIS + emulator ignition +K-line multiplexer	**SM2PRO:** Full support for vehicles with a CAN bus on the diagnostic connector and most vehicles with a K -line (multiplexer). See features ! **SM3:** +support for vehicles with a DoIP bus (W206, W223, etc.)

RP1210 standard

Program	Versions	Protocols	Restrictions
Allison DOC Allison transmission diagnostic software https://allisonstore.noregon.com	2017	**RP1210:** CAN, ISO9141, ISO15765, J1939	Full support, there are comments on the settings
Cummins INSITE dealer software for diagnostics and programming of Cummins systems https://insite.cummins.com	8.4 8.3 7.6.240 SP5	**RP1210**: CAN, ISO15765, J1939, J1708	Full support
Cummins Calterm III Dealer software for editing calibrations, recording and reading firmware for Cummins systems .	3.2.0 3.4 3.8.1	**RP1210**: CAN, ISO15765, J1939, J1708	Full support

~~**Case New Holland EST**~~ ~~dealer software for diagnostics and programming of CNH equipment~~ ~~https://www.balticdiag.com/truck-diagnostic-tool/item/cnh-electronic-service-tool-dpa5~~	8.6	~~**RP1210**~~ J1939, J1708	This software does not use the RP1210 standard and only works with a special version of the DPA 5 adapter.
CAT Electronic Technician (CAT ET) dealer software for diagnostics and programming of Caterpillar systems https :// www . michigancat . com / online - tools / cat - electronic - technician - et /	2011A 2019C 2023A 2024A	**RP1210** J1939, J1708, CDL	Full support (including CDL protocol)
Detroit DDDL Detroit dealer software for diagnostics and system programming Diesel https :// ddcsn - ddc . freightliner . com	6.45, 8	**RP1210** J1939, J1708	Full support
Eaton Service Ranger Dealer software for diagnostics of automatic transmission systems from Eaton http :// www . eaton . com / Eaton / ProductsServices / Vehicle / tools / serviceranger / index . htm	3, 4	**RP1210** J1939, J1708	Testing is in progress
JCB Service Master 4 Dealer diagnostic software for JCB equipment https :// business . jcb . com / irj / portal	1.77.1	**RP1210** J1939, J1708	Full support
Noregon JPRO A general diagnostic program for trucks in the North American market. It's not of particular interest to vehicles in the Russian market. https :// www . noregon . com / jpro	2018 20212025	**RP1210:** J1939, J1708	Full support
Volvo Premium Tech Tool Volvo trucks http://www.premiumtechtool.com	1. XX 2.6.70	**RP1210:** ISO15765, CAN, J1939, J1708	Full support
Wabco Toolbox A software package for diagnosing ABS systems from Wabco , installed on trucks in the North American market.	12	**RP1210:** J1939, CAN, J1708	Full support

DPDU standard

Program	Versions	Protocols	Restrictions
DTS Monaco Daimler vehicles AG	8	CAN, ISO9141, ISO15765, DoIP and other	Full support, DPDU interception must be enabled.
GM Tech2Win dealer software, diagnostics, and programming for GM vehicles (Chevrolet, Opel, etc.) https://gme-infotech.com	2.402	CAN, ALDL, J1850, KWP2000, ISO9141, ISO15765	Full support See notes .
JLR Pathfinder Dealer software for diagnostics and programming of JLR DoIP vehicles from 2016 to 2020 (discontinued, replaced by Topix) Cloud)	1569	CAN+DoIP	**SM2**: Not supported **SM3**: Full support See notes .
JLR Topix Cloud is a dealer software for diagnostics and programming of JLR vehicles. since 2016 https://topix.landrover.jlrext.com/	8eca20cc-GA	CAN+DoIP	**SM2**: Not supported **SM3**: Full support
Porsche PIWIS dealer software for diagnostics and programming of Porsche cars .	18.150 38.35042.4 0043.80044 .800	ISO9141, KW1281, KWP2000, TP2.0, ISO15765, DoIP	**SM3**: full support for the functionality of the PT4G device **SM2**: vehicles with DoIP are not supported. DPDU interception must be enabled.
ODIS Service/Engineering (DPDU) dealer software, diagnostics and programming of VAG vehicles https://erwin.volkswagen.de https://erwin.audi.com https://erwin.seat.com https://erwin.skoda-auto.cz	S5.0.1..S23 E17	ISO9141, KW1281, KWP2000, TP1.6, TP2.0, ISO15765, DoIP	**SM3**: equivalent to the functionality of VAS6154**A** (including CAN - FD and DoIP) **SM2**: equivalent to VAS6154 (without CAN - FD and DoIP) DPDU interception must be enabled.
KAMAZ KSD Dealer software, diagnostics and programming of KAMAZ vehicles		ISO9141, KWP2000, ISO15765	Full support, see notes .

Suzuki SDT-II dealer software, diagnostics and programming of Suzuki vehicles	2.15 2.292.392.42	ISO9141, SDL, KWP2000, ISO15765	Full support except Data Recorder feature. DPDU interception must be enabled.
Vediamo 4/5		ISO 9141, KWP 2000, ISO 15765 and others	Full support DPDU interception must be enabled.
Xentry/DAS OpenShell/Daimler Trucks	2014…2026	ISO 9141, KWP 2000, ISO 15765, DoIP and others	**SM 3:** Full support according to Xentry functionality VCI .SM **2:** DoIP **vehicles** are not supported. DPDU interception setting must be enabled . API

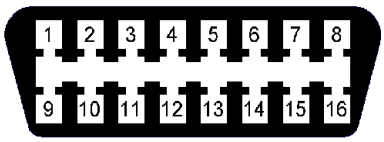
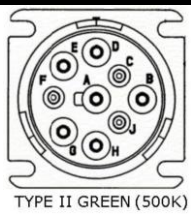
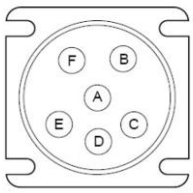
6. Technical Specifications

Below are the implemented functions of the SM2/SM3 adapters

Parameter	Scanmatik SM2-PRO	Scanmatik SM3
PC Connection type	USB/Bluetooth	USB/Wi-Fi
USB galvanic isolation	Yes	Yes
Supported standards	J2534, RP1210C, DPDU	J2534, RP1210C, DPDU
24V onboard voltage support	Yes	Yes
Programming voltage generator (FEPS), in OBD pins	6, 8, 9, 11, 12, 13, 14	6, 8, 9, 11, 12, 13, 14
Programming direction (AUX)	Yes	Yes
Shorting the pins to ground	Yes	Yes
J1708	Yes	Yes
CAN1 on pins 6-14 (OBD)	Yes	Yes
CAN2 on pins 3-11 (OBD)	Yes	Yes
CAN3 on pins 12-13 (OBD)	Yes	Yes
CAN 4 on pins 1-9 (OBD)	No	Yes
CAN 5 on pins 2-10 (OBD)	No	Yes
CAN-FD support	No	Yes
DoIP 10/100BASE-TX	No	Yes
SWCAN on pin 1	Yes	Yes
K/L LINE, on OBD pins	1..3, 6..15	1..3, 6..15
J1850 VPW/PWM	Yes	Yes
Chrysler SCI	Yes	Yes
Multiplexer for MB-DAS (J2534)	Yes	Yes
Emulation ignition ODIS, MB-DAS	Yes	Yes
RP1210C protocol support	CAN, J1939, J1708, KWP2000, ISO9141	CAN, J1939, J1708, KWP2000, ISO9141

7. Truck Diagnostic Connector Pinouts

Our OBD-16 to Deutch 9+6 is suitable for most trucks that use the RP1210 standard for diagnostics. Use this information to connect without an adapter.

OBD -16 (J 1962)	December -9	Deutsch -6	Purpose
			
4.5	A	E	GND
16	B	C	Power
6	C	D	CAN 1/ J1939 Hi
14	D	F	CAN1/J1939 Lo
7	E	-	CAN1 Shield/KLINE(CNH)
10	F	A	J1708 Hi
2	G	B	J1708 Lo
3	H	-	CAN2 Hi
11	J	-	CAN2 Lo/KLINE (PACCAR)

8. Version History

Version 1.0.0.175 (built 30.05.26)

- RP1210: fixed a bug that caused freezing (Insite, Calterm)
- RP1210: JCB ServiceMaster adapter selection popup implemented
- DPDU: fixed VW TP16, TP20 protocols error that caused PQ25 platform EPS unit programming failure
- DPDU: fixed VW KWP2000/KLINE protocol error that caused adaptation failure (reported on Audi A4 B7 instrument cluster)
- DPDU: DAS application (specific versions) was unable to read ignition status via CAN on certain models (W204, W211, etc.)
- DPDU: Xentry Trucks/Daimler Truck application was unable read ignition status via CAN on certain trucks (963, 964, etc.)

Version 1.0.0.170 (built 16.05.26)

- Some optimizations were applied to DPDU library

Version 1.0.0.169 (built 09.05.26)

- Added support for the DPDU standard and related programs

Version 1.0.0. 128 (built 14.03.25)

- Added support for the CAT protocol CDL

Version 1.0.0. 114 (built 03.12.24)

- Added support for SM 3 adapters and CAN-FD , ETHERNET_NDIS (DoIP) channels

Version 1.0.0. 113 (built 27.11.24)

- Renault support added Clip up to version V 236

Version 1.0.0. 87 (built 25.11.22)

- Renault support added Clip up to version V 222

Version 1.0.0. 83 (built 04.08.2 2)

- Renault support added Clip up to version V 219

Version 1.0.0.74/75 (built 12.03.2 2)

- Added support for SWCAN 125 kbps data rate.
- Added support for Renault Clip up to version V215
- The ODIS ignition emulator has been improved.

Version 1.0.0.69 (built 2 5 .11.21)

- Support for the Renault program has been implemented CLip
- K - Line exchange functions for the DAS multiplexer have been reworked (problems with versions after 2018 on W 211 SBC units and others)
- K -line blocks for ODIS

Version 1.0.0.31 (built 15.12.20)

- CAN 95200 3-11 speed for GM GDS releases of 2020 (found on Captiva / Antara)

Version 1.0.0.18 (built 04/10/19)

- RP1210 has very slow or no connection when connected via Bluetooth
- PCMFlash 71/53 modules did not work when selecting "alternative" GPT outputs (7-13)

Version 1.0.0.14 (built 25 .08 .18)

- Volvo program PTT made some changes to the RP1210 driver
- Other changes, optimization

Version 1.0.0.13 (built 25 .07.18)

- The organization of connections to devices via J2534 has been reworked.
- Full support for the RP1210 standard has been implemented
- A multiplexer for the MB program has been implemented DAS
- API support has been implemented J2534-0202 for the Hino program DX 2
- Other changes

Version 1 .0.0 .8 (built 06.03.18)

- Fixed a bug introduced in 1.0.0.7 that made it impossible to diagnose some units on the CAN bus in Toyota TechStream (identified during adaptation of the Auris manual transmission) E 150)
- The ignition emulator has been updated for the latest versions of ODIS. S 4.3.3/ E 8.1.3

Version 1.0.0.7 (built 14.01.18)

- Some optimization of the speed of work on ISO 15765 / SW_ISO 15765 channels

Version 1.0.0.6 (built 05.01.18)

- Added the ability to operate CAN buses at non-standard speeds (currently used in MDFlasher software)
- The ignition emulator for ODIS Service 4.2.3/Engineering 7.2.2 has been improved.

Version 1.0.0.5 (built 10.10.17)

- Added the ability to operate CAN buses 6-14 and 3-11 at a speed of 1 Mbit/s.

Version 1.0.0.4 (built 27.08. 17)

- Ignition switch state emulators have been implemented for NISSAN programs. CONSULT 3+, VAG ODIS , MB DAS .

Version 1.0.0.0 (built 06/25/17)

- Bluetooth fixes with Widcomm 5.6 driver
- Release after testing is complete

9. Disclaimer