Sequential mounting method "LPT cable, NOX + saving or NOX + pump testing mode:

Needed device equipment:

1. Device main PCB:

2. Add-on PCB:

3. PLT cable:

4. Resistance (required for pump testing only)

5. Contact, bolts for channel's block
**Installation procedure:**

ATTENTION!!! Before installing the device in Full mode, it is necessary to activate Cotel (FMS) interface using the diagnostic tool, otherwise possible device malfunctions. The device receives FMS data or not can be judged by LED2 indicator. Read User’s Manual Table 7.

**All installation work carried out with the ignition switched off.**

1 step. Open the main PCB housing and install an add-on PCB

The main PCB with an open housing

Add-on PCB should be mounted on the main PCB

The sequential connection circuit-illustrating diagram for the Full mode:

![Circuit Diagram](image-url)
B129 – AdBlue pressure sensor
PLD – an engine control unit
Z3 – CAN bifurcation point (STAR point)
3 in 1 – Gudraks 3 in 1 device
SCR – SCR control unit
NOX – NOX sensor

Table 1

<table>
<thead>
<tr>
<th>Gudraks 3 in1</th>
<th>Connection place</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brown</td>
<td>OBD connector, brown cable</td>
<td>31 kl., frame</td>
</tr>
<tr>
<td>Red</td>
<td>OBD connector, red/blue cable</td>
<td>30 kl., constant &quot;plus&quot;</td>
</tr>
<tr>
<td>Yellow</td>
<td>Z3, 3 contact, connector side</td>
<td>CAN1_L, PLD side</td>
</tr>
<tr>
<td>Blue</td>
<td>Z3, 1 contact, connector side</td>
<td>CAN1_H, PLD side</td>
</tr>
<tr>
<td>White</td>
<td>Z3, 3 contact, vehicle side</td>
<td>CAN2_L, SCR side</td>
</tr>
<tr>
<td>Black</td>
<td>Z3, 1 contact, vehicle side</td>
<td>CAN2_H, SCR side</td>
</tr>
<tr>
<td>Green</td>
<td>PLD unit, yellow/purple, 31 contact, big connector</td>
<td>Adblue pressure sensor out</td>
</tr>
</tbody>
</table>

2 step. The blue wire is connected to the end of trimmed grey / white wire that runs to the connector Z3 (1 contact in connector):
3 step. Yellow wire is connected to the trimmed grey / green wire end, which goes into the connector Z3 (3 contact in connector):

4 step. The white cable connected to the trimmed grey / green wire end, which goes into the SCR:

5 step. The black cable connected to the trimmed grey / white wire end, which goes into the SCR:
6 step. Gudraks 3in1 red with red / blue and brown Gudraks 3in1 with brown cables could be connected next to the OBD connector:
7 step. Installing the appliance NOx sensor test + save mode finished, if necessary pump testing mode read bellow, otherwise check the device performance and installation work is complete:

- LED1 – must flash in blue with 1000 ms interval;
- LED2 – must flash in blue;
- LED3, LED4 – must flash in green.

It is advisable to check the SCR system functions using a diagnostic device.

If you notice other LED flashing / lighting options, read the main instruction.

8 step. Install the cable (need cable 4 meters length) from the pressure sensor to Gudraks 3-in-1 device and connect to the green Gudraks 3-in-1 cable. In the photo installed a two-wire cable, but enough only one-wire cable:
Pressure sensor cable can be found under the cab on the engine near the start / stop switch:

9 step. In this cable of wires we find a yellow wire with a purple ribbon, cut it and connect the cable which coming from the engine control unit (PLD) side. An advice. You can lead two wires and other wire
connect to a pressure sensor side. Then, when you need to unplug, it will be enough just a short-circuit the two ends of the wires which is next to the Gudraks 3in1 device (there is no need to raise the cab or go under the vehicle)

Pressure sensor wire can be connected next to the engine control unit (PLD): yellow with purple cable, 31 contact in major connector:

10 step. Block Adblue pump channels so that will stop Adblue liquid:
Block this channel (supply to the pump):

For a channel block is used this type screws:
11 step. After that block the exit channel of the pump:

In the photo below are nozzles in which are built-in bolts, which blocks the channels:

12 step. Remove the pump cover and disconnect the pump by trimming wires:
13 step. Mount the pump load (resistance):

14 step. Insert the resistance of the pump inside the cap, so that it will protect against mechanical damage:
Tie resistance with straps.

15 step. Put a cap and connect hoses.
16 step. After installing, check the device work:
LED1 – must flash in blue with 1000 ms interval;
LED2 – must flash in blue;
LED3, LED4 – must flash in green.
It is advisable to check the SCR system functions using a diagnostic device.

If you notice other LED flashing / lighting options, read the main instruction.