How to inject PSI5 Sensor Data via CAN

-Seskion GmbH-

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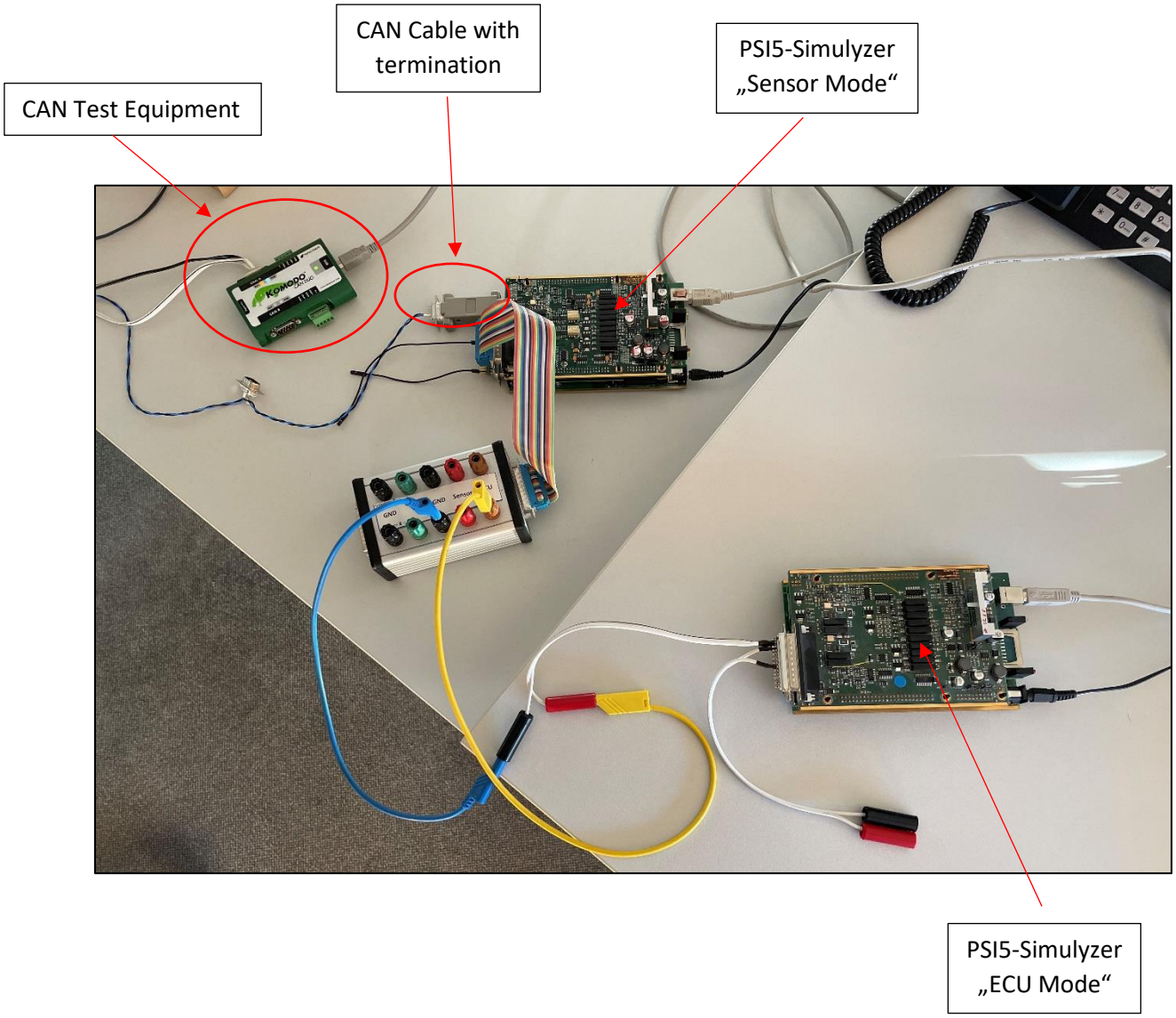
Test setup: CAN – Simulyzer Sensor-Mode – Simulyzer ECU-Mode



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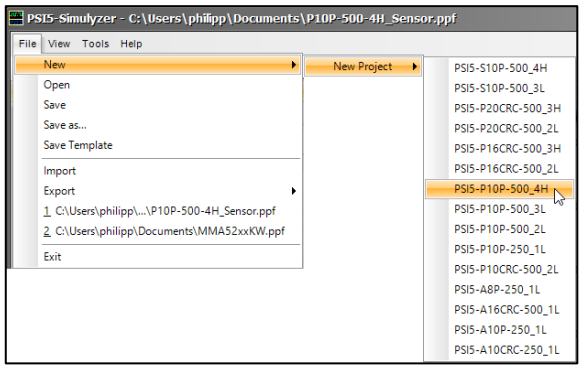
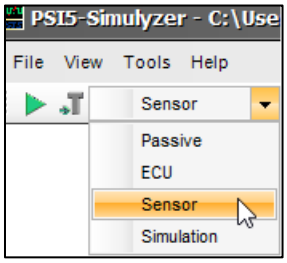
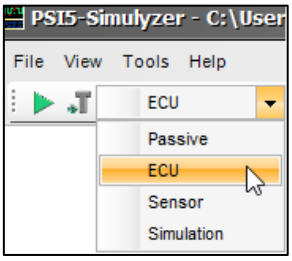
CAN – Simulyzer Sensor-Mode – Simulyzer ECU-Mode

First of all you have to connect the two simulyzers and start the GUI software twice. With both windows open, you must click on the menu group ***File*** and select the sub-items ***New*** and ***New Project***. Here you can set the compatibility. In our example we have created this with the PSI5-P10P-500_4H compatibility.

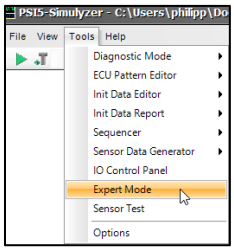


When you have opened the new projects in both open software applications, you have to set the connected Sensor simulyzer as ***Sensor*** and the other simulyzer as ***ECU***.

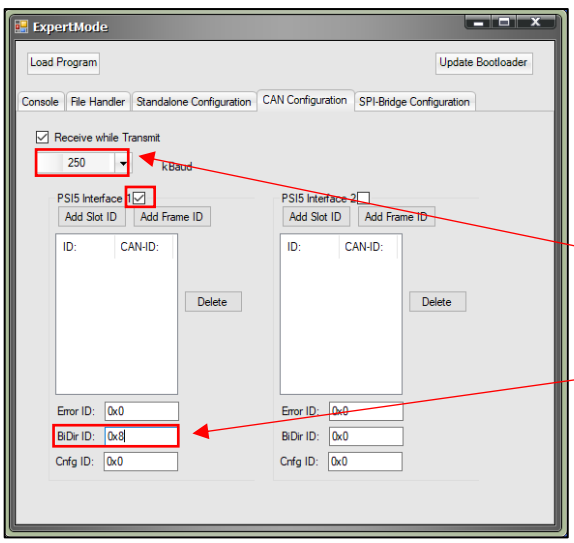


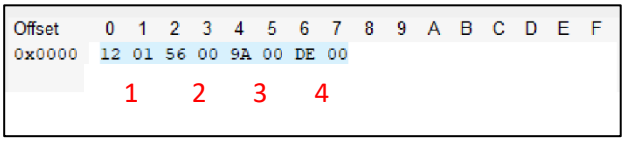


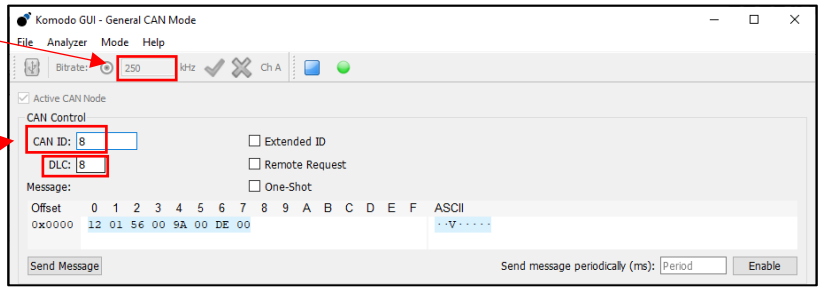
Next you have to select ***Tools*** in the sensor software and go to ***Expert Mode*** and then to ***CAN Configuration***.



Now you have to transfer the values in your CAN Test-Software GUI into the CAN Configuration so that they match. The ***kBaud/kHz*** and the ***CAN ID/BiDir ID*** must be the same in both configurations. In Expert mode you have to check the ***PSI5-Interface 1*** checkbox and enter "***8***" in the DLC field of the CAN Test-Software GUI. We support only 4 slots with a maximum bit length of 16 bit, coded in Little Endien. The slots are 16 bit aligned.







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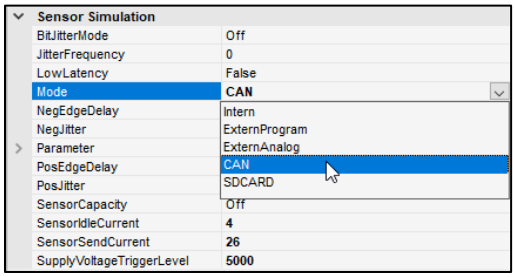
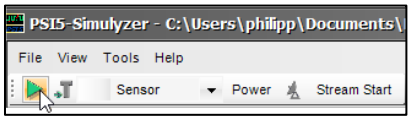
For the CAN communication to work, the mode must be changed from Internal to ***CAN*** in the left settings under Sensor Simulation.

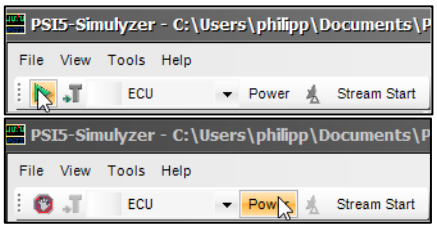


Now you can click on the ***green arrow*** in the sensor software and in the ECU software also on the ***green arrow*** and additionally on ***Power***.

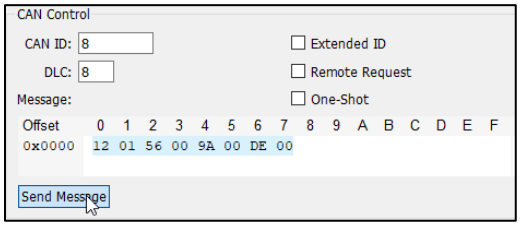
Sensor-Mode Software:



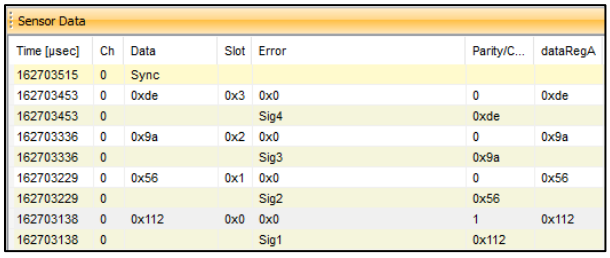
ECU-Mode Software



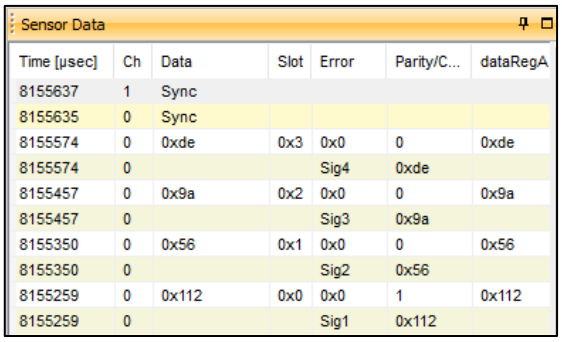
Now when you click on ***Send Message*** in CAN Test-Software GUI, you will see this message in both software windows.



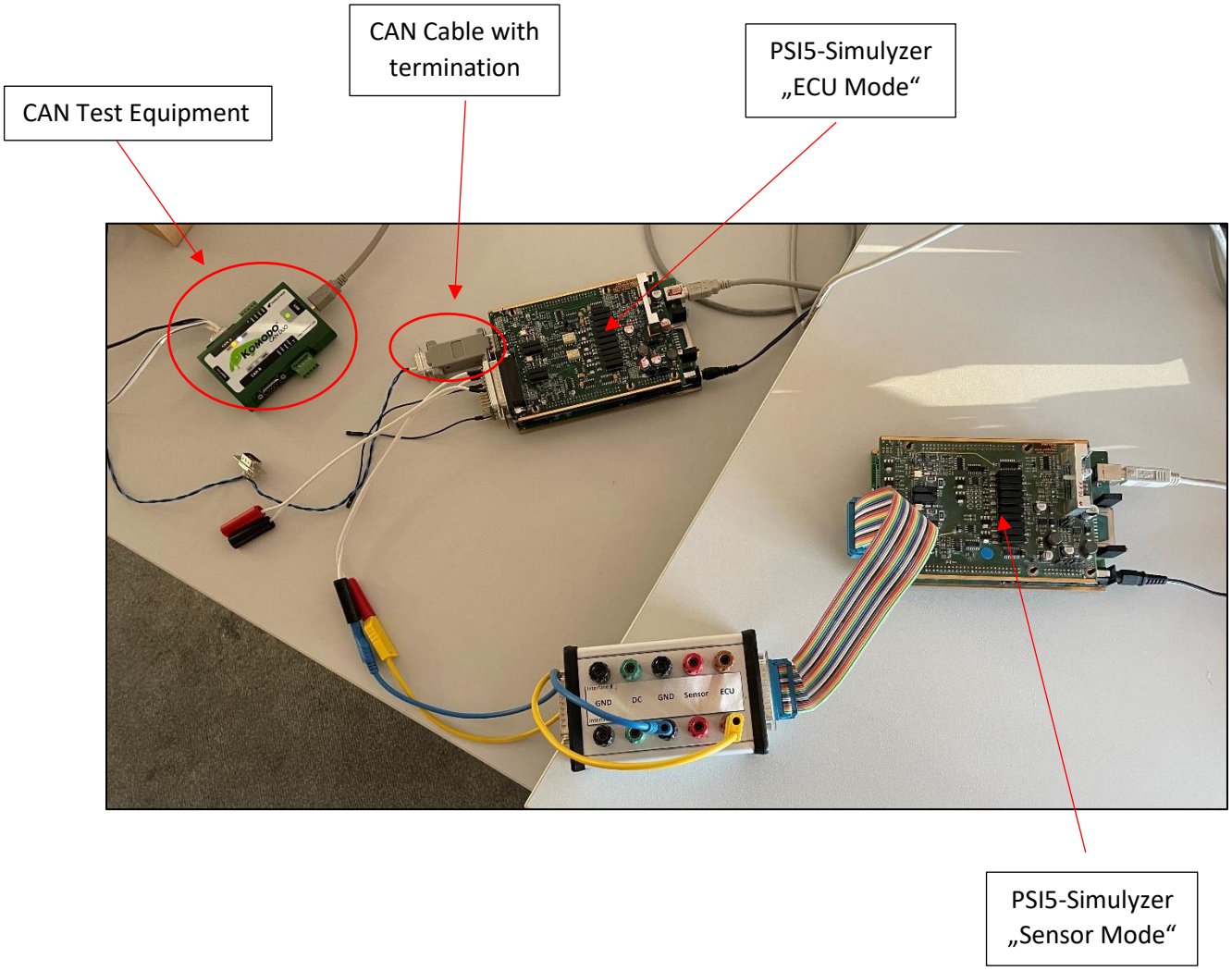
Sensor-Software Data:



ECU-Software Data:



Test setup: CAN – Simulyzer ECU-Mode – Simulyzer Sensor-Mode



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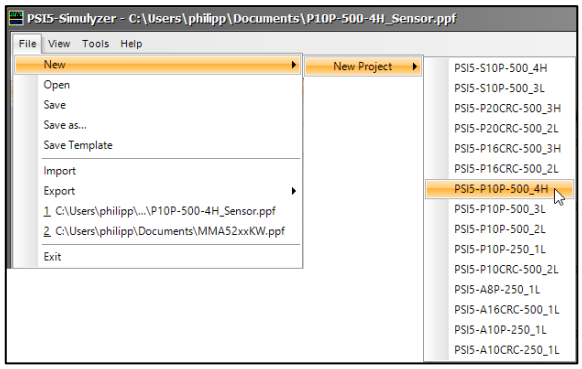

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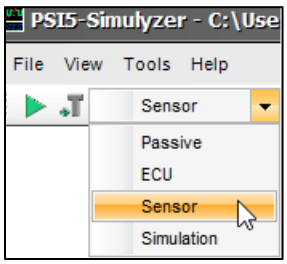

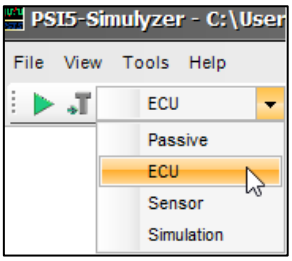

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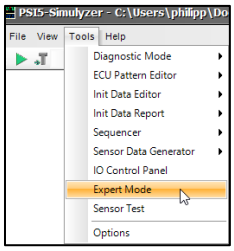
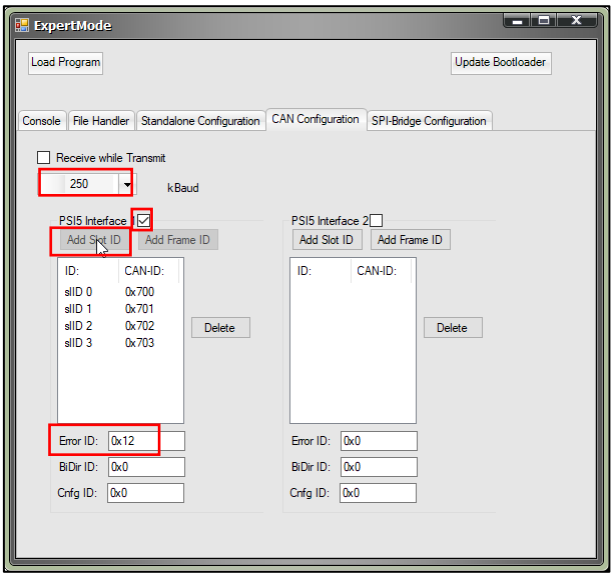


Here you can assign up to four Slot IDs by clicking on ***Add Slot ID***. The kBaud number must also match the kHz number in the CAN Test-Software GUI and the check mark for ***PSI Interface 1*** must also be set. As ***Error ID*** you can enter a desired number.



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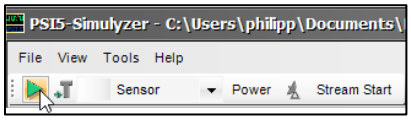
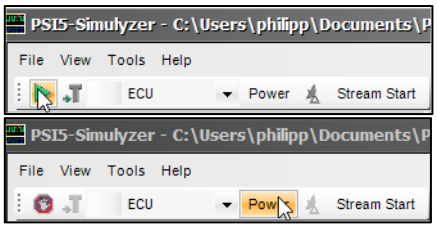


ECU-Mode Software:



In the CAN Test-Software GUI you will now see the following responses:

m:s.ms.us	ID	RTR	DLC	Data
137:46.058.650	0x702	0	4	46 04 00 00
137:46.058.994	0x703	0	4	47 00 00 00
137:46.059.330	0x700	0	4	48 00 00 00
137:46.059.674	0x701	0	4	49 04 00 00
137:46.060.010	0x702	0	4	4A 04 00 00
137:46.060.350	0x703	0	4	4B 00 00 00
137:46.060.694	0x700	0	4	4C 04 00 00
137:46.061.038	0x701	0	4	4D 00 00 00
137:46.061.378	0x702	0	4	4E 00 00 00
137:46.061.726	0x703	0	4	4F 04 00 00
137:46.062.066	0x700	0	4	50 00 00 00
137:46.062.410	0x701	0	4	51 04 00 00
137:46.062.746	0x702	0	4	52 04 00 00
137:46.063.090	0x703	0	4	53 00 00 00
137:46.063.426	0x700	0	4	54 04 00 00
137:46.063.770	0x701	0	4	55 00 00 00
137:46.064.109	0x702	0	4	56 00 00 00
137:46.064.453	0x703	0	4	57 04 00 00
137:46.064.789	0x700	0	4	58 04 00 00
137:46.065.137	0x701	0	4	59 00 00 00