

THE MEASURABLE DIFFERENCE.



DEWETRON

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# OXYGEN TRAINING > DEWETRON EXPLORER



# WHERE TO FIND?



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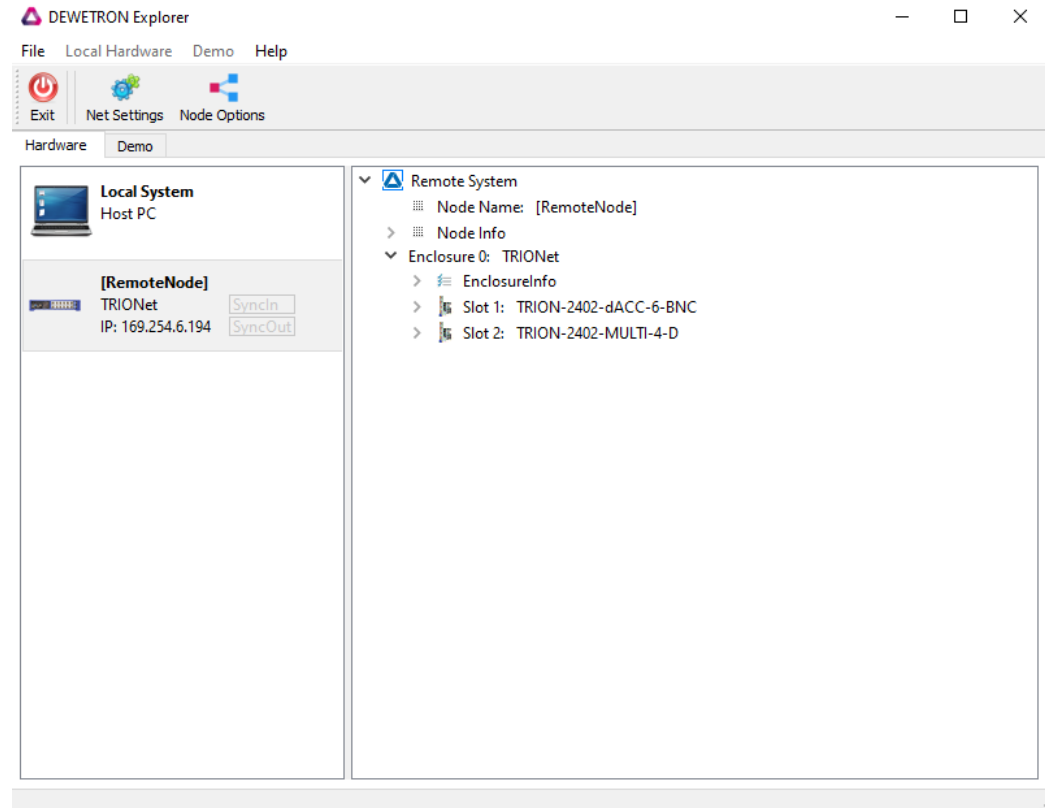
DEWETRON Explorer (formerly DEWE2 Explorer) is installed automatically when installing TRION hardware drivers  
*DEWETRON-TRION-Applications.exe*

DEWETRON Explorer can be found here:  
*Start → DEWETRON → DEWETRON Explorer*

The DEWETRON Explorer has three functionalities:

- > Hardware functionality check
- > TRION board firmware update
- > Simulating DEWEx- and TRION hardware

Close the DEWETRON Explorer before starting OXYGEN as only one software can access the TRION boards





# SELF TEST

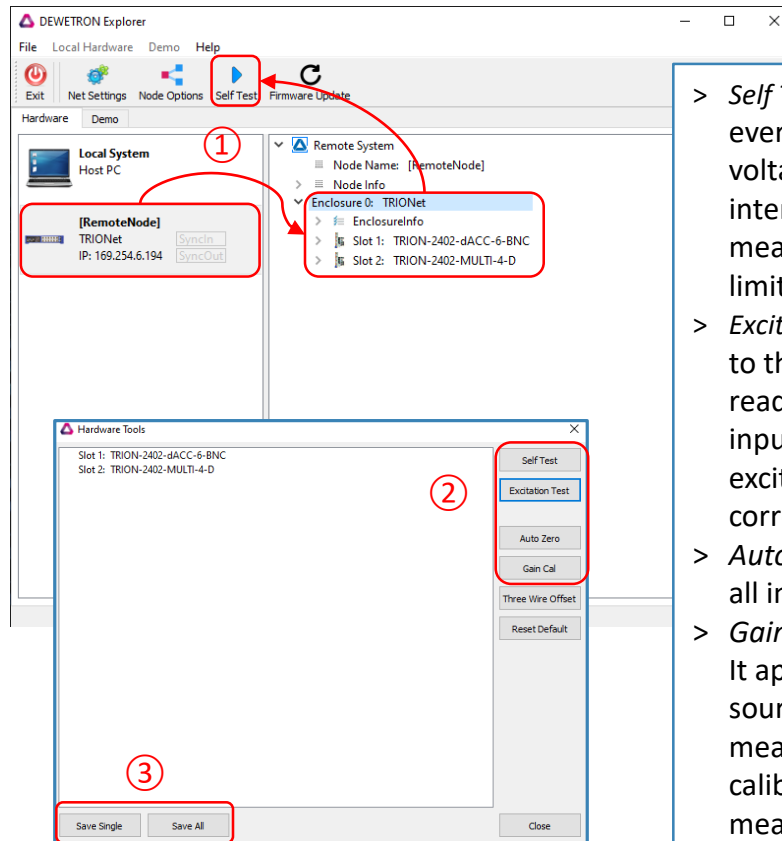
① Select the measurement system and Click either on enclosure for testing the entire hardware or only a single slot; Press *Self Test* afterwards

② The Hardware Tools menu pops up and different tests can be done (availability depending on TRION board)

③ Test results can be exported as xml-file

For critical tests, the self test can be done before and after the measurement to ensure that the hardware was working properly during the test.

Additional TRION board dependent functionalities can be found in the TRION series module manual



- > *Self Test*: For every channel and every range, an appropriate test voltage is applied by using the internal calibration source. If the measured voltage is within certain limits, this test passes.
- > *Excitation Test*: 1 V and 5 V is applied to the excitation terminals. By reading back the excitation with the input amplifier, it is checked if the excitation circuit is working correctly
- > *Auto Zero*: Eliminates automatically all internal amplifier offsets
- > *Gain Cal*: Is an adjustment function. It applies the internal calibration source to all channels. The measured error is used as a calibration factor for correcting the measurements



# FIRMWARE UPDATE

The firmware for the TRION boards is included in the TRION hardware driver. If a newer firmware is available, the DEWETRON Explorer will recognize that and display a hint next to the affected module.

① To update the firmware, select the respective board and press the *Firmware Update* button.

② A popup menu opens displaying the installed firmware and the latest firmware version. Press the *Update* button.

After completing the update, the system needs to be shut down and the power plug needs to be detached for ~5 sec. Restarting the system will complete the firmware update process.

DEWETRON Explorer

File Local Hardware Demo Help

Exit Net Settings Node Options Self Test Firmware Update

Hardware Demo

Local System  
Host PC

[RemoteNode]  
TRIONet  
IP: 169.254.6.194

Remote System

Node Name: [RemoteNode]

Node Info

Enclosure 0: TRIONet

EnclosureInfo

Slot 1: TRION-2402-dACC-6-BNC

Slot 2: TRION-2402-MULTI-4-D

Firmware Update

Board	Component	Installed	Latest	Status	Result	Info
TRION-2402-MULTI-4-D	Base	0B18	0B18	Current		

Please do not switch the boards off during the update process!  
Power cycle the system after the Firmware update!

Update Retry Failed Close

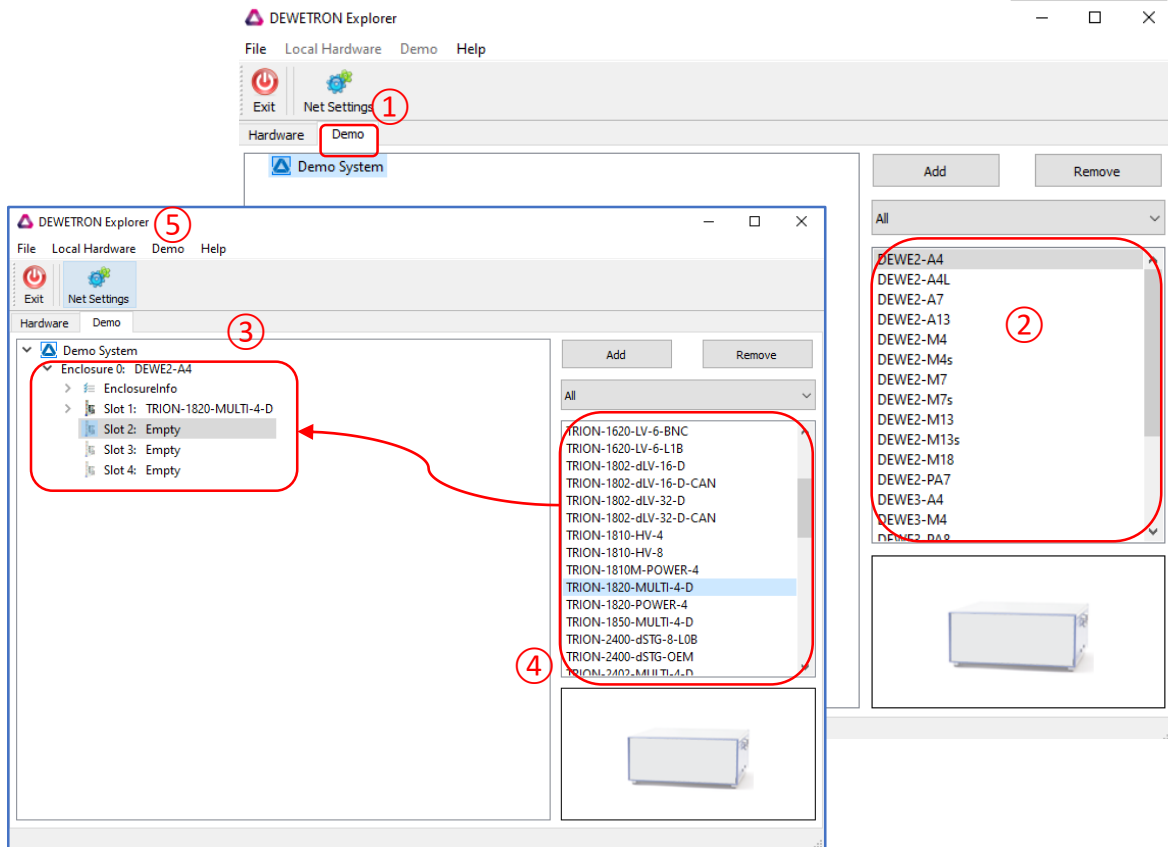


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# SIMULATING HARDWARE

The DEWETRON Explorer can be used to simulate measurement hardware. The intention is to not block the measurement device for setup generation but to create setups on the office PC. Therefore, the DEWETRON Explorer can be used to simulate the measurement device

- 1 Go to the Demo tab
- 2 Select the measurement chassis to be simulated with a double click or the Add button
- 3 Go to the Slots of the simulated measurement chassis
- 4 Fill it with the respective TRION boards from the right list
- 5 Demo systems can be saved to and loaded from a file in the Demo menu





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# EXERCISE: SIMULATE THE FOLLOWING SYSTEM

- > DEWE2-PA7 incl.
- > TRION-BASE
- > TRION-1603-LV-6-BNC
- > TRION-2402-dACC-6-BNC
- > TRION-2402-V-8-B
- > TRION-1820-POWER-4

TRION-1820-POWER  
TRION3-1810M-POWER

Can SUB-CUR modules and SUB-dLV modules be simulated as well?

