SETTING THE SOFTWARE

The generator has a standard communication interface ModBus RTU over RS 485. To connect to a PC you should use MPI adapter USB or RS 232 to RS 485 optically isolated.



Before starting the software for the generator, you need to follow and execute the following steps

Download the generator software here (and later install it):

Directory of / documents/ mmm_basics/ mmm_power_supplies/ SONORODgenerators:

Mastersonic - wideband sonic and ultrasonic technology for cleaning, welding, liquid processing and sonochemistry (mastersonics.com)

.....

CDM+v2.12.36.1+WHQL+Certified.zip 1.4 Mb 29 May 2021

SONORODE_sonicator.zip 182.8 Mb 10 Jun 2021

Download Manual here:

SONOROD_GENERATOR user manual_18072019.pdf 1.4 Mb 20 Jul 2019

Software installation for older Sonorod generators produced until 2019 Download to your PC and install all software that is here: http://www.mastersonics.com/documents/mmm_basics/mmm_power_supplies/AMMM/NI%20Runtime%202012/

Install the software in the sequence as follows:

1. LVRTE2012f3std - this is the Runtime Engine of National Instruments LabView2012

2. niser360f3 - drivers for serial communication ports of National Instruments LabView 2012

<u>3. CDM v2.12.00 WHQL Certified</u> - driver for USB to RS485 adapter using FTDI chip FT232RL - you can use she attached here file (for Windows), or download the latest version, updated for your OS from here: https://www.ftdichip.com/Drivers/VCP.htm

Now download all generyator software files and place them on your PC desktop. Mentioned software is here:

http://www.mastersonics.com/documents/mmm basics/mmm power supplies/SONOROD-generators/

SONORODE_AM_AMMM_04182019.ZIP 576.8 Kb 18 Jul 2019

Now you are ready to start the executable file, "sono_clean_sweep.exe", of the software of your generator.

- A) First action (regarding all generators and all software we are offering), after activating specific generator software, is to connect your PC with ultrasonic generator using our RS485-USB adapter.
- B) Then you need to select and activate proper operating COM port from the generator software tabs. This will open communication between your PC and your ultrasonic generator.
- C) Then you need to select initial setting conditions regarding expected frequency range.
- D) Then you need to make Scanning to see where ultrasonic load is able to operate.

ADJUSTING THE GENERATOR USING THE PC SOFTWARE

COM Tab

1. Start with COMM tab, and select proper COM port.

NOTE: Every new generator has 6 modbus address by default.

- To connect the generator to the labview software we need to cover the following three conditions:
- 1. To know the Modbus address of the generator. Every new generator has 6 modbus address by default.
- 2. To know the exact COM port where the USB to RS485 driver is installed. Go to the Device Manager of your PC and find the USB Serial Port(The USB adapter must be plugged to one of the USB ports of your PC).



3. To set the correct communication baud rate.

At this moment you will have NO connection (initialized in red on top of the window)(2).

After validating the com port you will have connection (initialized in lime green on top of the window). 4. Select the ModBus address of the generator you want to connect to. Every new generator has default ModBus address 6.