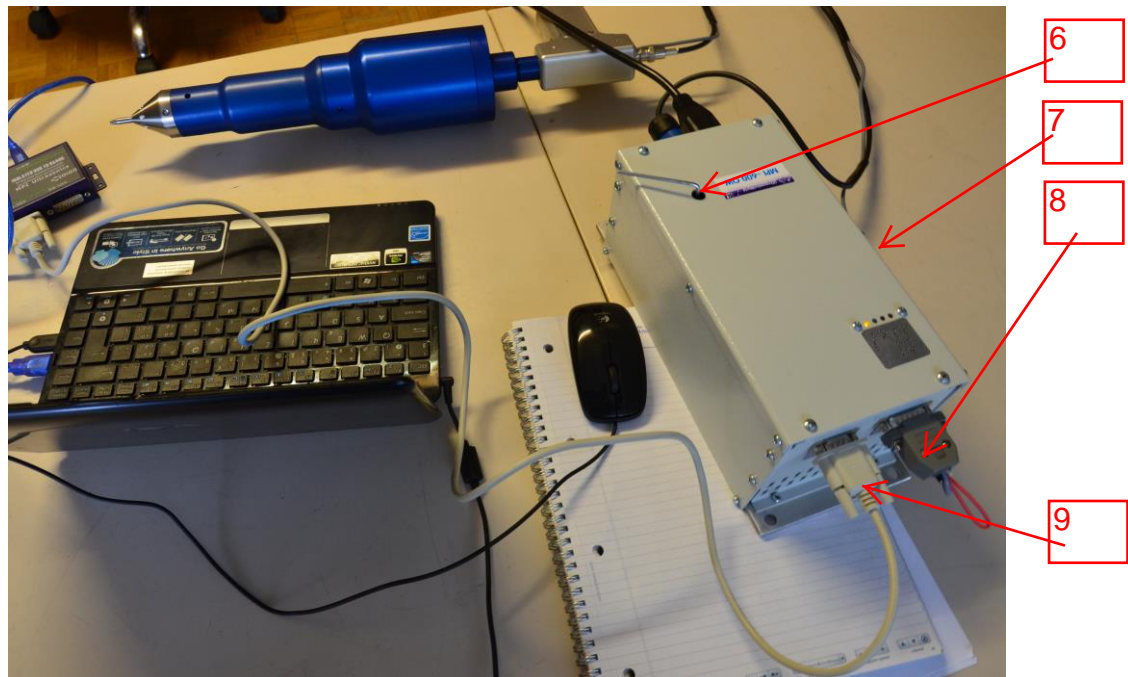
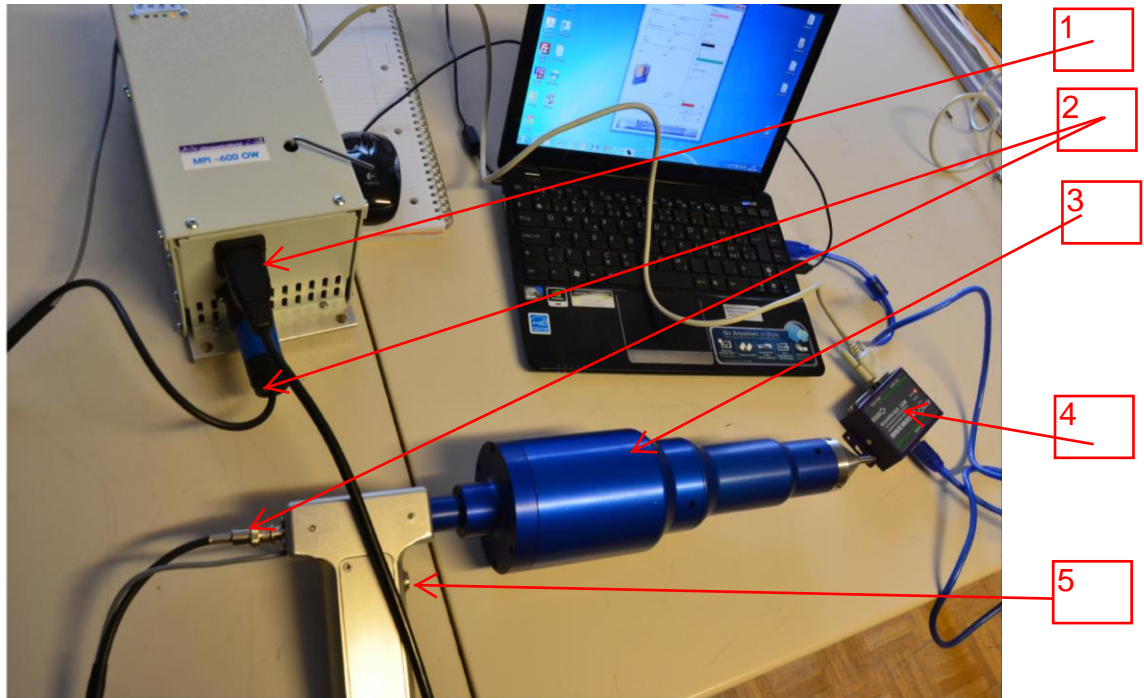
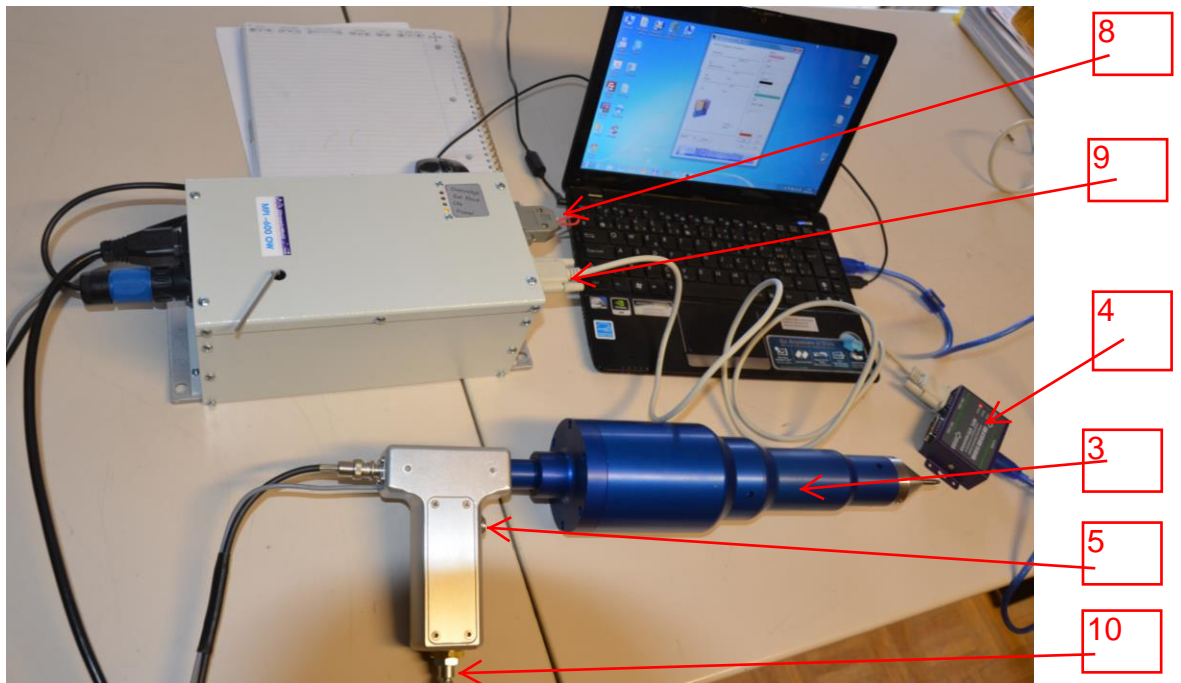
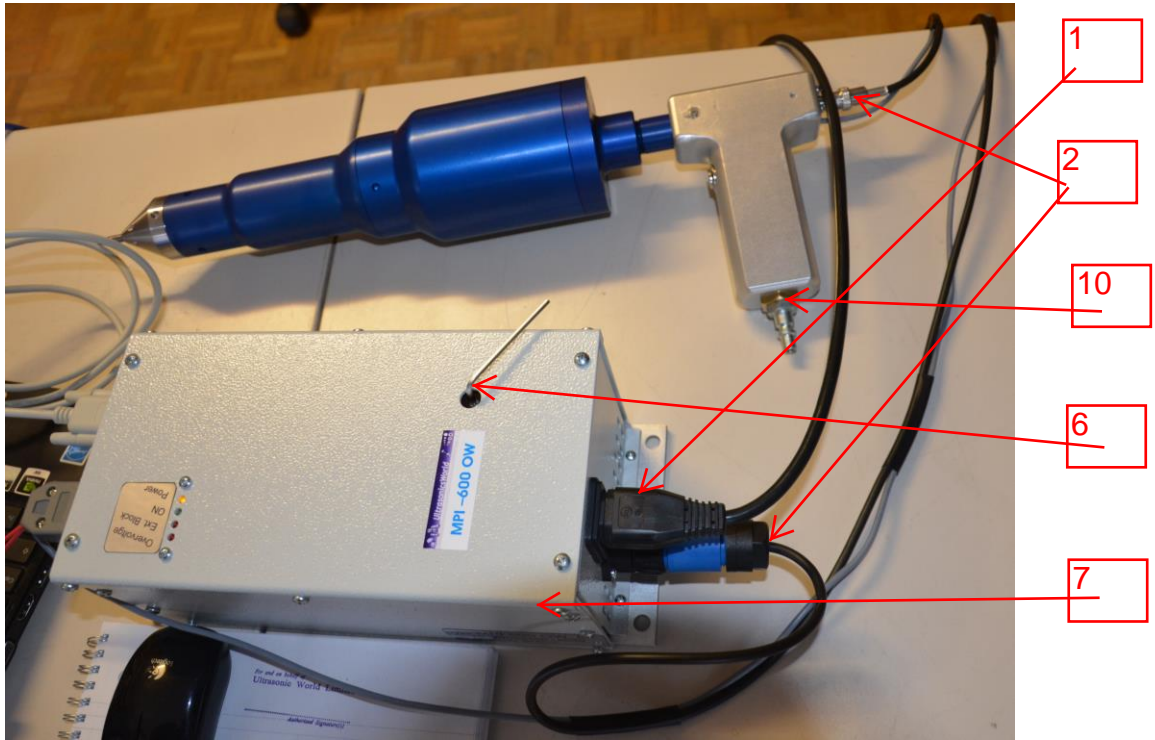


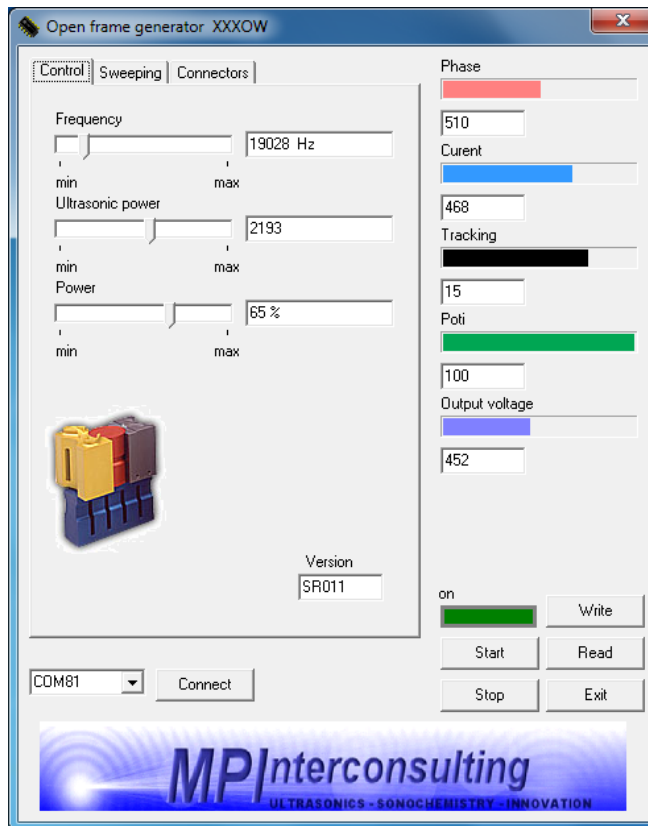
PEENING TOOL CONNECTIONS AND SETTINGS



- 1 (=) Main supply input 230 Vac, 50/60 Hz and main ON-OFF switch.
- 2 (=) High frequency, high voltage ultrasonic signal output
- 3 (=) Ultrasonic peening tool
- 4 (=) RS485-USB interface
- 5 (=) Manual switch for ultrasonic output, ON - OFF control
- 6 (=) Inductive compensation (mechanical regulation)

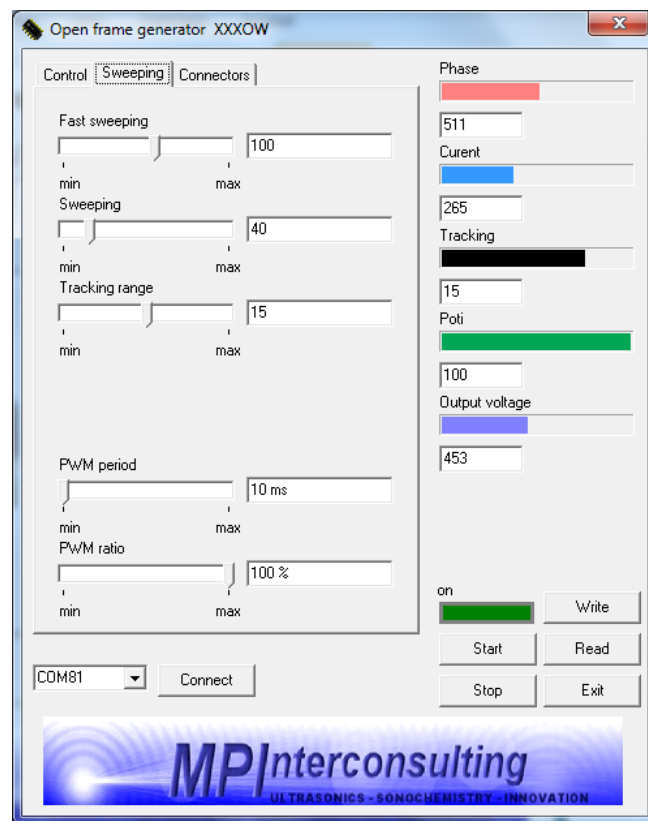


- 7 (=) Ultrasonic generator
 8 (=) Connector for external analog controls (read manual)
 9 (=) Serial Input-Output for RS485 communications
 10 (=) Air flow inlet for cooling (only for long operating regimes)



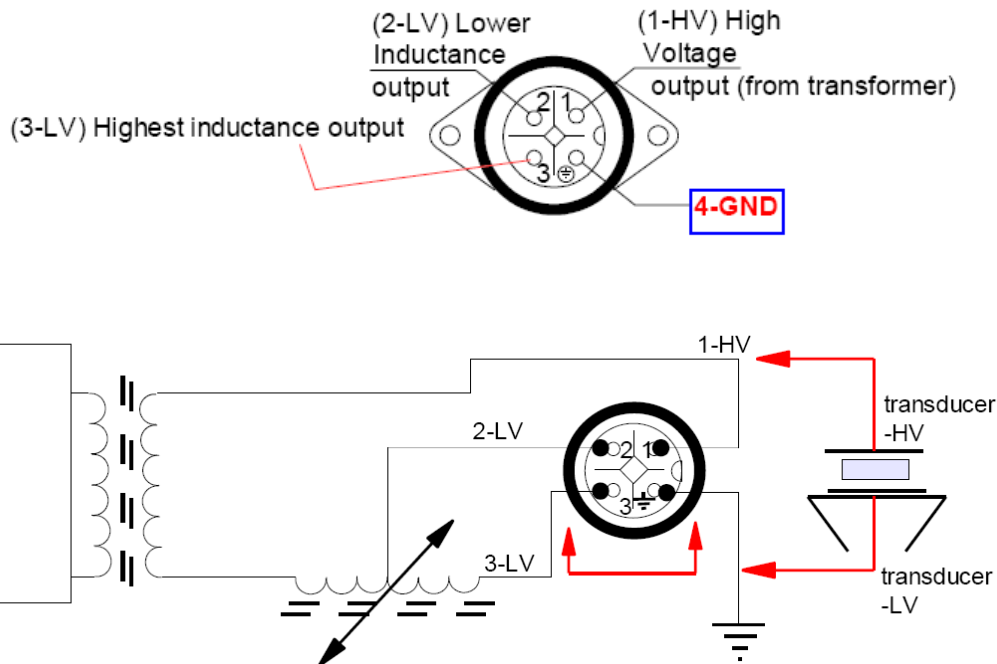
KEEP SOFTWARE SETTINGS SIMILAR AS ON THE PICTURES ON THIS PAGE

In this case best operating frequency is closer to 19 kHz. Do not increase power to maximum. Not necessary (acceptable between 50% and 70%).



Keep fast sweeping low or in the middle position. Keep Sweeping between 10 and 50 Hz. Keep PWM period always on minimum. Keep PWM ratio always on 100%. First, select proper COM port. Read the manual

MPI.600.OW: Output HF connector



Connector Terminal 1-HV is the high voltage ultrasonic signal output from the power ferrite transformer of the generator and must be connected to the Isolated (high voltage) terminal of the transducer (central wire of the coaxial cable).

Connector Terminal 2-LV is the lowest regulating range of inductive compensating coil (first output of inductive compensation).

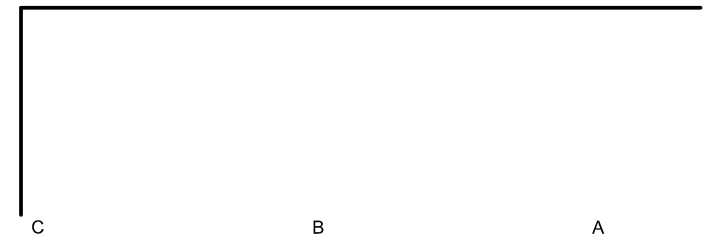
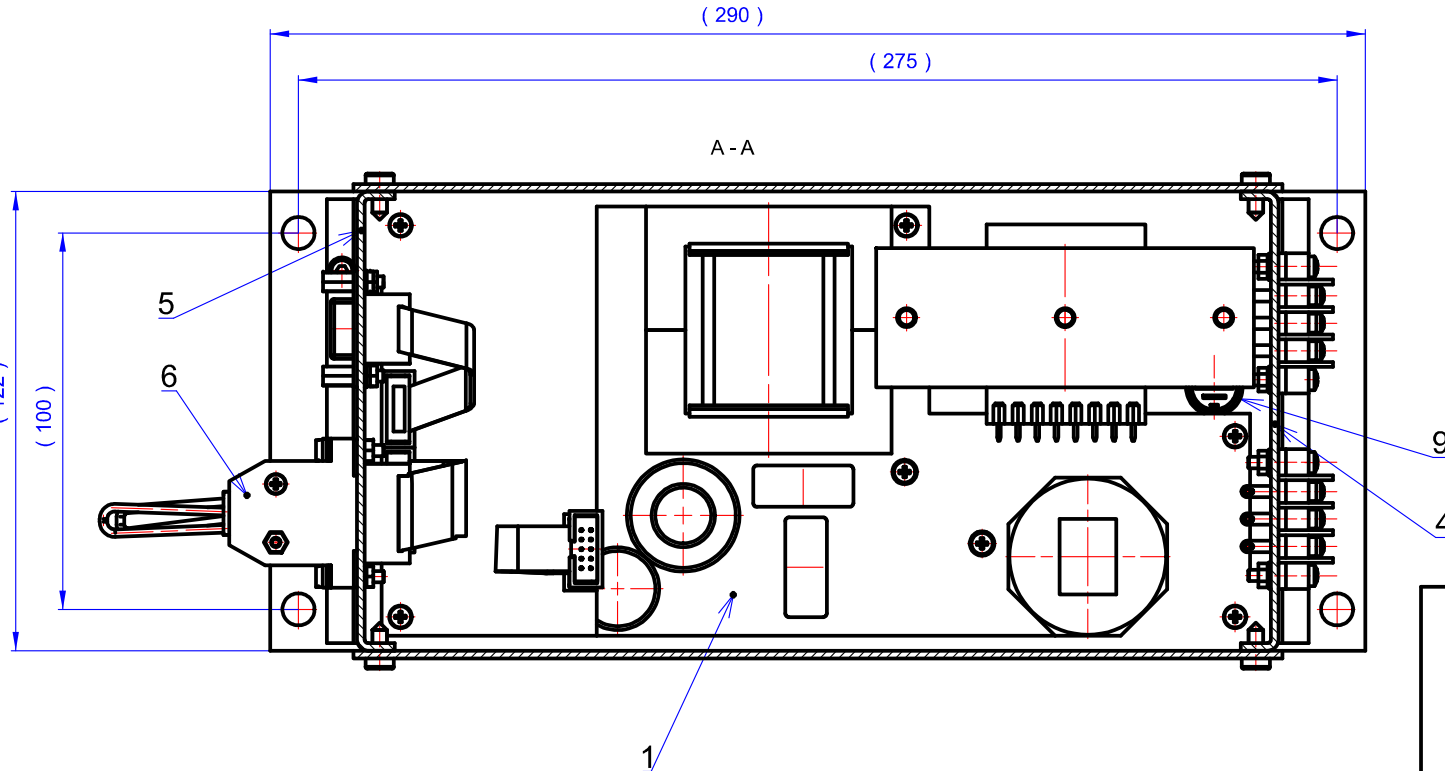
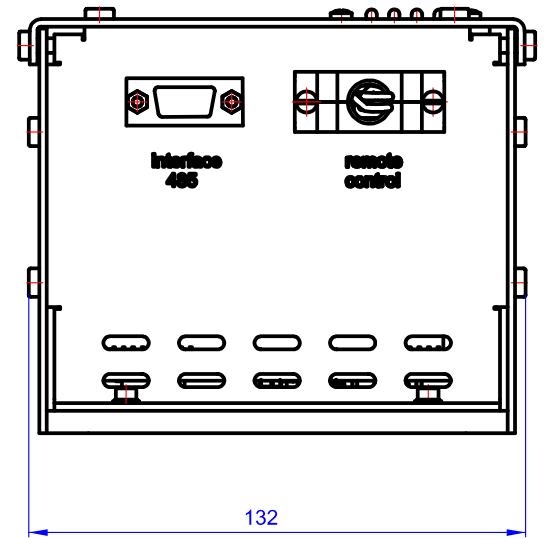
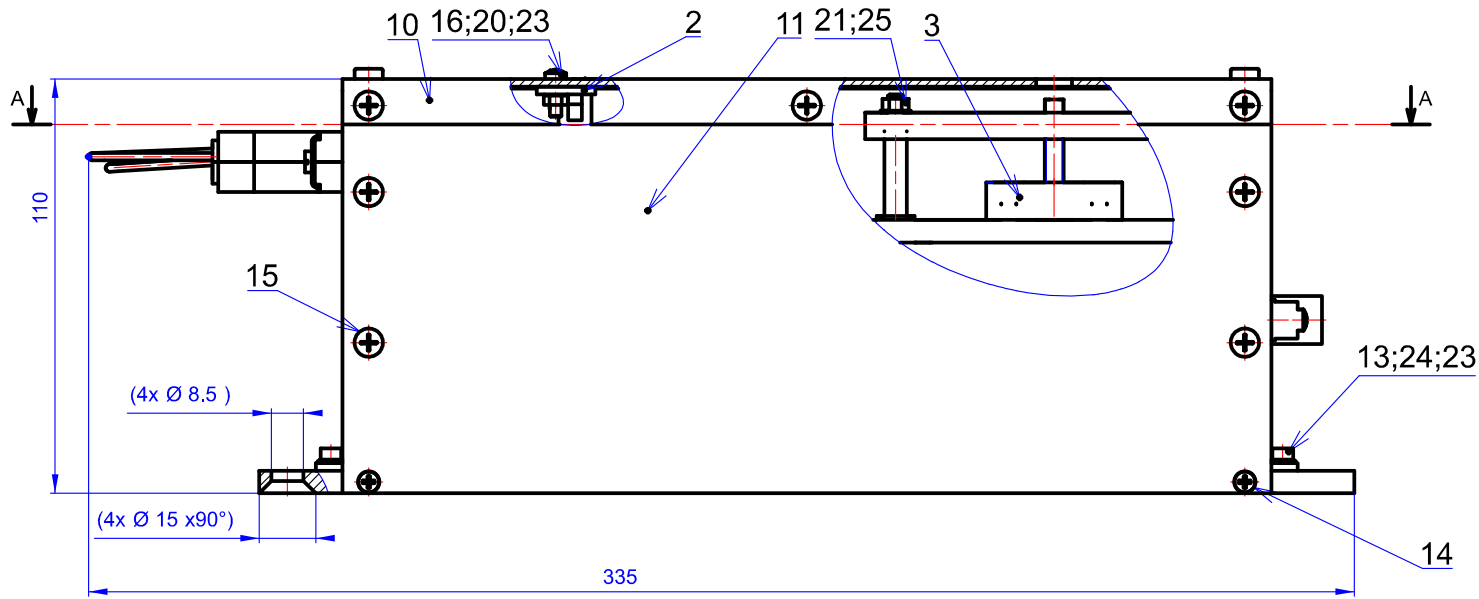
Connector Terminal 3-LV is the highest (maximal) inductance of inductive compensating coil.

Either Connector Terminal 2-LV or Terminal 3-LV (depending how high compensating inductance is necessary to compensate capacitance of applied ultrasonic transducer) must be connected to the grounding pin of the output connector (pin number 4 = GND), which is in the same time the acoustic system ground (equal to the low voltage potential of the transducer mass and housing). Converter mass/ground, generator box, acoustic load mass, and external shielding wire of the coaxial cable are all connected to the system ground pin 4-GND.

Do not connect terminal 2 and terminal 3 to each other. One of them will, in any loading situation, stay open/hanging, and only one of them (2 or 3) will be connected to pin 4-GND and to system mass or system ground. Connection between 2-LV and 4-GND or between 3-LV and 4-GND must be made internally (inside of the generator box).

Ultrasonic converter (coaxial cable) will always be connected to pins 1 (1-HV) and 4 (GND). Pin 1 is always the highest voltage, connected to the isolated input of the converter.

Terminal 4-GND must be always connected to EARTH/Ground/Mass of the transducer.



MMM Generator Installation Note

Installation Power Control for MSG.X00.OW models:

See section 2.2 (Page 12) of the MSG.X00.OW System Operation Manual (See also pages 24 - 28).

2.2. Factory Settings and Initial Generator Start Up.

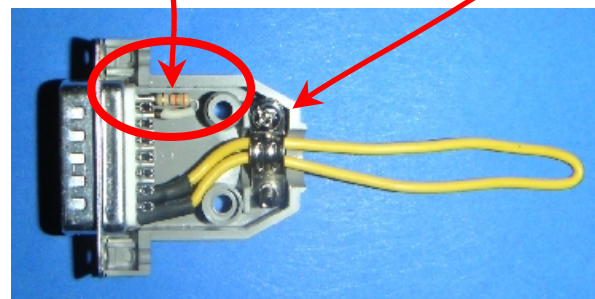
The MasterSonic MSG.X00.OW generator includes an optional external power on safety circuit control that may be implemented through relay control of terminals 1 and 2. These terminals may be connected to a temperature control circuit, door panel switches, operator proximity safety switches, etc. To operate the generator module these terminals must be normally closed. An open circuit will stop all generator operations. If the installation does not require such external control these terminals 1 and 2 should be short circuited with a hard wire connection.

The MSG.X00.OW is delivered from the factory with a short circuit wire between terminals 1 and 2 to allow immediate operation.

For initial start up and testing safety the MSG.X00.OW is also delivered from the factory with a 330 Ohm resistor connected between terminals 7 and 8 to limit the generator power output to 30%. Upon initial connection of the generator to the acoustic load start the generator with this resistor in place to check operation in a low power mode.

If the system operates properly turn the generator off, disconnect the mains power supply, and remove this resistor from terminals 7 and 8. Use diagonal cutters to clip the resistor leads.

After removal of this resistor the MSG.X00.OW power output may be controlled from 0% to 100% via the Remote Control Panel.



Generator manual and instructions are here:
http://www.mastersonics.com/documents/mmm_basics/mmm_power_supplies/msg-ow-generators/latest/

