

Sensor Administration

The 'Sensor Administration' (in short SA) menu is found by clicking on the Norsonic logo in the upper left corner. The SA is a small database that contains all sensors that the users have available including calibration and verification data. These sensors are available in the Input menu for each measurement channel by selecting the given name for each sensor.



On the left hand side of the SA menu, the user will find a list of all sensors currently entered into the system. This list is sorted according to the type of sensor which divides the sensors into the following groups:

- Microphone
- Line
- Nor1214
- IEPE
- Calibrator
- RSS

Calibrators and RSS (Reference Sound Sources) are of course not sensors, but from a practical point-of-view it is very handsome to put these into the same database.

Each sensor type has its dedicated menu containing the most important properties for this kind of sensor. For all kinds the top of the menu contains the user-defined name and an additional text string which may be used for a more detailed description. The rest of the menu is dependent on the type of sensor, and the user may quickly view the current data by clicking on the different existing sensor in the list along the left hand side.

New sensors are entered by selecting the desired type and then clicking on the green + sign on the left hand side. This will open an 'empty' sensor menu in which the operator can key-in all relevant data. When all data are entered, simply click the 'OK' key in the lower right corner, and the new sensor is added to the list of sensors along the left side.

All data entry fields are normally locked from modification. However, existing sensors may be modified, deleted or partly copied by using the right mouse-click onto any of the existing sensor names along the left hand side. When copying data for an existing sensor, a new name is always required. This feature is nice when entering a new microphone/preamplifier combination using an existing preamplifier with another microphone capsule, or, entering another response characteristic for an existing combination.

Microphone sensor

The microphone sensor menu contains the following data fields in addition to the calibration history. All calibration and verification data are valid for the combination of the entered microphone cartridge and preamplifier:

Calibration:

- 'Laboratory' is used for the verification laboratory used at the latest periodic verification
- 'Date' is used for the date of the latest periodic verification
- 'Verified sensitivity' is used for the measured sensitivity of the latest periodic verification
- '0 dB ref' is the setting of the reference for the given sensitivity
- 'Interval' is the selection for how many months the current verification is valid. After this period, the system will give a warning if the selected sensor is out of date.

Microphone:

- 'Type' is the producer and model of the microphone cartridge
- 'Serial number' is the given serial number on the microphone cartridge
- 'Nominal sensitivity' is used for the nominal sensitivity given by the producer
- 'Polarization voltage' is used to indicate whether this microphone is depending on 200V polarization voltage or not (i.e. pre-polarized microphones). If selected 'On' the polarization voltage in the Nor140 unit or Nor850-1 Module will be turned on automatically upon selecting this sensor in the Input menu.
- 'Response' is containing a correction or linearity information about this microphone. This response is NOT added to the measurement result unless selected in the appropriate measurement mode (such as 'diffuse field correction' in the Building Acoustic mode). To enter the given response, click on the down arrow on the right hand side of the graph and enter the correct value for each frequency band.

Preamplifier:

- 'Type' is the producer and model of the preamplifier
- 'Serial number' is the given serial number on the preamplifier

- 'Gain' is the actual internal gain for the preamplifier (typically 0,1 – 0,2 dB). This value is added in the calculation of sensitivity for each performed calibration.

Calibration history:

- 'Graph range' is the selected +/- range with reference to the given nominal sensitivity
- The mouse may be used to click on any part of the displayed graph along the x-axis in order to view the date, time and sensitivity for any previous calibration in the upper right part of the graph