



## Tutorial: Calibrating the RTA in dBu

The RTA normally is calibrated in dB SPL, for both the internal microphone and the external microphone (left line input). The external mic input may be calibrated in dBu to use the RTA to show levels in dBu on the left line input.

Note that this cal effects all acoustic analysis functions that use the line input.

### ***Create a known test signal***

Using an external generator, create a known test signal. We recommend 0dBu at 1000Hz, but any signal from 0dBu to +5dBu should work OK.

To use the Toolbox to generate this signal, see below.

Connect the external signal to the left line input.

### ***Check signal level***

Using the Level Meter in the Toolbox, verify the signal level.

If using the Toolbox to generate the signal, go to the Signal Generator function, select Sine Wave, and set the output level to exactly 0.00 dBu.

### ***Calibrate the SPL Low External Input***

Go to the Setup & Calibrate function on the Utility menu, and select the SPL Calib function.

Change the Range field to SPL ExtL L.

Click the Cal field underneath SPL Low (left side of screen) and turn the encoder counter-clockwise until the number matches the level of the signal being generated. Click the encoder to exit the field.

Turn the encoder to select the Set field beneath SPL Low (left side of screen), and click to calibrate. The In field should now match the Cal field value.

### ***Calibrate the SPL External High input.***

Repeat the process for the ExtH field:

Change the range to SPL ExtL H

Set the SPL High cal field (right side of screen) to the input signal level.

Click the Set field below SPL High (right side of screen) to set the value.

### ***Save the constants***

Click on the '<' to exit the function and save the constants. The calibration is now complete.