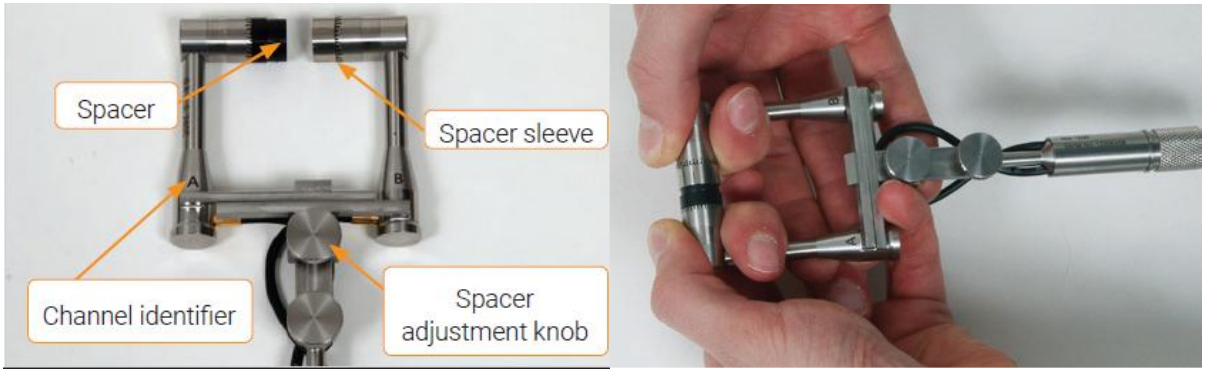
Sound Intensity Calibration

Probe dismantling

1. To do probe calibration and verification, it is necessary to partly dismantle the probe. Open the spacer adjustment knob and pull the microphones apart as shown in *Figure 23.6*. Please make sure to pull the microphones, such that friction between spacer and sleeve is minimized. Remove the spacer and sleeve by rotating them counter-clockwise off the microphone grid.



Hardware Connection

1. Connect the probe directly to the Nor150



Configure the Nor150:

1. Enter intensity mode (SETUP -> Applications -> Sound Intensity)

Pressure Calibration

1. Press the CAL Button
2. Tap Calibration -> Pressure Calibration
3. Select Channel 1 (Left Microphone A) and on the intensity probe, gently rotate Channel A microphone by 90 degrees.
4. Turn on the Nor1256 calibrator and set-it to 250Hz, 114 dB. Insert the calibrator onto the microphone and wait 30 seconds before adjustment is accepted to stabilize mic.
5. Tap Auto, make sure the calibration frequency and level match the Nor1256 calibrator.
6. Tap Calibrate! Sensitivity of the microphone will be adjusted automatically.
7. Tap the Checkmark icon to complete the calibration for Channel 1
8. Repeat Steps 3 though 7 for Channel 2.

Phase Correction

1. The Nor1294 is a device used for phase correction of the microphones.
   Make sure the Nor1294 is turned to the OPEN condition, and insert both microphones to either end of the Nor1294.

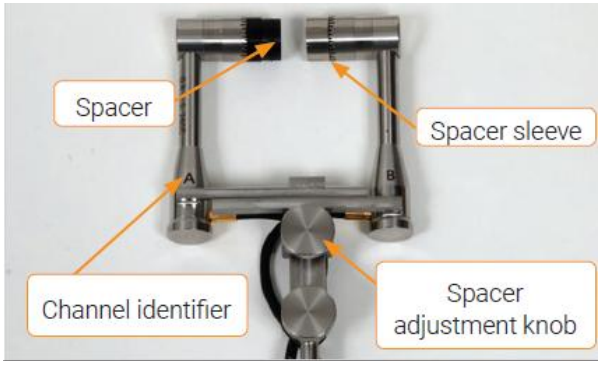




Figure 23.11 - Dismantle the probe, spacer and sleeve.

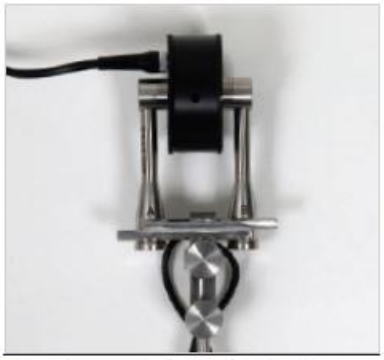


Figure 23.12 - Make sure Nor1294 is in open position and insert microphones carefully. Press the back of the microphones to ensure that the microphones align perfectly.



Figure 23.13 - Tighten the spacer and knob, and close the Nor1294.

2. Tighten the spacer adjustment knob, turn the Nor1294 to CLOSE position, and connect the 3.5mm jack of the Nor1294 into the headset input jack of the Nor150
3. Press the CAL button and tap Phase Correction.
4. Tap Start to begin the calibration procedure.
5. When the correction process is done, the instrument will show the pressure-intensity residual spectrum measured with corrections applied. The minimum requirement defined in IEC 61043:1993 will be shown as step-lines (FpI(Min)), and also the maximum valid pressure-intensity residual spectrum (FpI(Max)). If the obtained spectrum looks good, accept the correction with the check-mark soft button.
6. Turn the Nor1294 to the OPEN position and remove the microphones.
7. Assemble probe with the 12 mm (smallest) black, plastic spacer.
    - Attached the black spacer on Microphone A
    - Attached the steel spacer sleeve on Microphone B.
    - Connect the two together
8. Assemble probe with rod and mic cable for check.

Refer to the Nor150 manual for more information.