

Profile Selection at Start-up

### XL2 Analyzer Functions

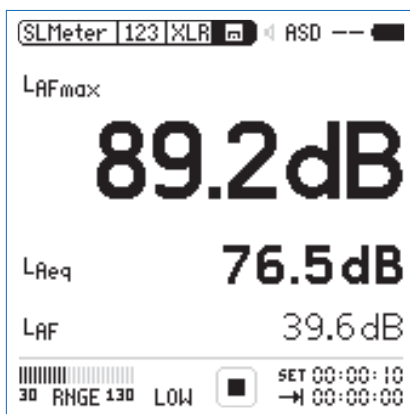
Sound pressure level SPL

LAFmax, maximum sound level with A-weighting

LAeq, averaged sound level for environmental noise verification

### How to measure

- The environmental noise LAeq shall be at least 10 dB below the measured A-weighted exhaust noise level.
- Position the measurement microphone directed towards the exhaust pipe at a distance of 0.5 m at a 45° angle in the same height; the height shall be minimum 0.2 m above ground.
- Connect the XL2 Analyzer with the 5 m ASD cable to the measurement microphone.
- Start the XL2 with the measurement profile ISO 5130
- Increase the engine speed gradually from idle to the measurement rpm according the table below:



ISO5130 Measurement Result

Rated engine speed	Measurement rpm	Application
< 5000 rpm	75% of rated rpm	road vehicles having at least four wheels
5000 - 7500 rpm	3750 rpm	any road vehicles
> 7500 rpm	50% of rated rpm	any road vehicles

- Start the measurement.
- Hold the measurement rpm for one second and release the throttle control rapidly, thus the engine speed returns to idle.
- Stop the measurement after the entire deceleration period.
- Repeat the measurement until LAFmax is within +/- 2 dB for three consecutive measurements.
- The final result is calculated as average of these 3 measurement results.



Exel Set for Vehicle Noise Inspection

### Order Information

	NTi Audio #
Vehicle Noise Inspection Set, including XL2 + M2210, Class 1 frequency response	special

For more information please visit [www.nti-audio.com/exel](http://www.nti-audio.com/exel).