

	Basics	Industrial	Auditorium	Combined	Comments
<b>Supported Standards</b>					
ISO 3382-1			●	●	For performance places.
ISO 3382-2	●	●	●	●	For ordinary rooms.
ISO 3382-3	●	●	●	●	For open plan offices.
ISO 14257	●	●	●	●	For workplaces .
IEC 60268-16	●	●	●	●	Speech Transmission Index.
<b>Sound Sources</b>					
Point sources	●	●	●	●	
Line sources		●		●	Used mainly in industrial applications.
Surface sources		●		●	
Array sources			●	●	Used mainly for PA systems.
<b>Tools</b>					
Multi-point response	●	●	●	●	Shows calculated parameters for all receivers, with comparison curves and statistics.
Noise control tools	●	●	●	●	Available in the multi-point response.
Transmission	●	●	●	●	For airborne sound insulation studies.
Color grid response (horizontal & vertical), instant 3D direct map		●	●	●	Coloured distribution of room acoustic parameters/ direct sound. Interpolation and contours.
3D Billard visualization		●	●	●	Visualising and detecting obvious acoustic problems.
Auralisation			●	●	Available for simulations and measurements. Useful to demonstrate how the room “sounds”.
Audio Effects			●	●	A number of effects to help making impressive multi-source auralisations.
Headphone filter design tool			●	●	Compensate for the frequency response of a head-phone during auralisation.
Single-point response			●	●	
Decay curves, Roses & Hedgehogs			●	●	
Reflectrogram			●	●	
Reflection path analysis			●	●	
Reflector coverage			●	●	
Material Calculator			●	●	Estimate absorption coefficient for various structures.
3D Matrix Calculations		●		●	Performs all combinations of calculations between a set of sources (eg. in open-plan offices).
Source Power Estimation		●		●	Estimates the sound power of sources using measured SPL at a number of receiver positions.

	Basics	Industrial	Auditorium	Combined	Comments
<b>Room Acoustic Parameters</b>					
Sound Pressure Level (SPL)	●	●	●	●	
SPL(A), SPL(C), SPL(Lin)	●	●	●	●	
Spatial Decay $DL_2$	●	●	●	●	
Reverberation Time $T_{20}$ , $T_{30}$	●	●	●	●	
Early Decay Time EDT	●	●	●	●	
Speech Transmission Index (STI)	●	●	●	●	
Sound Strength ( $G$ , $G_{early}$ , $G_{late}$ )			●	●	Calculated for source of 0 dB SPL on axis at 10 m distance.
Centre Time ( $T_s$ ), Clarity ( $C_{80}$ ), Definition ( $D_{50}$ )			●	●	Mainly used in auditorium and concert hall acoustics.
Early Late Energy Fraction $LF_{80}$			●	●	
Lj parameters, IACC			●	●	
Early/Late total Support (ST)			●	●	
Speech Transmission Index for PA systems (STIPA)	●	●	●	●	
Modulation Transfer Index (MTI)	●	●	●	●	
Editing room acoustic parameters			●	●	Modify existing parameters or add new ones.
<b>Global parameters</b>					
Quick estimate	●	●	●	●	Simplified calculation of RT.
Global Reverberation time $T_{20}$ , $T_{30}$		●	●	●	Accurate calculation of RT, using ray tracing.
<b>Measuring System</b>					
Recording/processing impulse responses	●	●	●	●	
Statistical tool for a group of impulse responses	●	●	●	●	Compares selected impulse response files and produces statistics.
Importing measured data to multipoint response	●	●	●	●	
Frequency response	●	●	●	●	
Calibration procedures for G, STI and Early Lateral Energy parameters	●	●	●	●	
Auralisation			●	●	
Ambisonic microphone support			●	●	
Hedgehog visualisation			●	●	
Genetic material optimizer			●	●	Optimize materials to match simulations with measurements and target curves in multi-point responses.
Evaluation of simulations			●	●	Investigate no. of rays and transition order for best agreement between simulations and measurements.