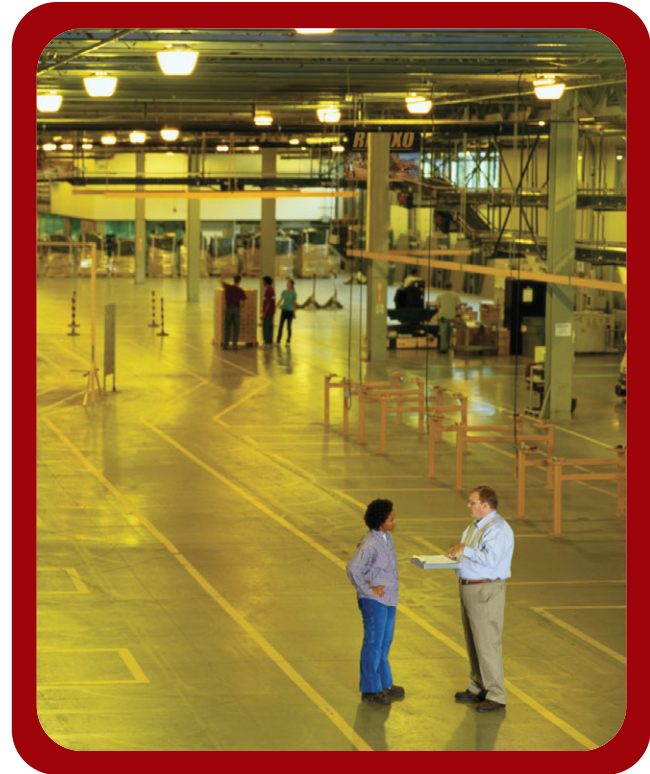# REVERBERATION TIME

The measurement of Reverberation Time (RT) is of interest to several applications. Examples include:

- Measurement of absorption coefficients in reverberation rooms (ISO 354)
- Calculation of airborne insulation of building elements (ISO 140-3/4)
- Calculation of the equivalent absorption area to determine sound power in reverberation rooms (ISO 3741)

How sound reverberates in a room is fundamental to room acceptance tests and assessment of acoustical comfort. In the case of noise in the workplace, reverberation has a significant effect on the noise levels people are exposed to.

Reverberation Time is measured by using either interrupted sound (a powerful sound source abruptly shut off) or impulsive sound (most often a shot with a starting pistol). It is usually averaged over several positions in the room and over several decays at each position.

PULSE can make fast, automated Reverberation Time measurements using both methods.

TYPE 3560 C-S7

Reverberation Time-Impulse Response (1 In)

3560 C
7533
7771-N2
UA 1365

- Cost-effective and flexible solution for measuring RT using the integrated impulse response method
- Simultaneous acquisition of decay curves for each band of interest
- Lightweight solution suited for on-site architectural acoustic measurements
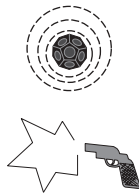- PULSE capabilities for editing, reporting and archiving

* One year SW maintenance

4188-A-021
Prepolarized Free- and Diffuse-field 1/2-inch Microphone with 2671, TEDS

4943-L-001 Diffuse-field 1/2-inch Microphone with 2669L, TEDS

UA 0588 Preamplifier Holder

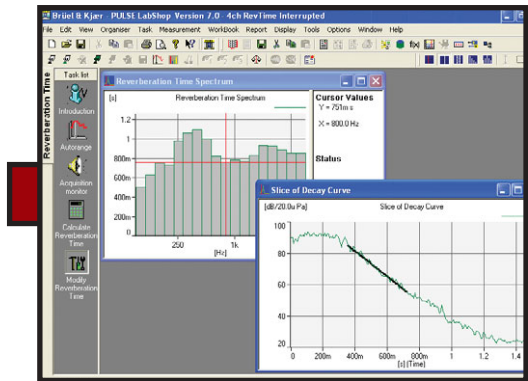UA 1317 Preamplifier Holder

UA 0801 Lightweight Tripod

4295 OmniSource

4296 OmniPower

4231 Sound Level Calibrator

Not supplied by Brüel & Kjær

KE 0358 Flight Case
2716 Power Amplifier

020227

TYPE 3560 C-S9

Reverberation Time-Impulse Response (4 In)

3560 C
7533
3109
7771-N4

- Both interrupted noise and integrated impulse response methods supported (according to ISO 354, ISO 140-3/-4, ISO 3382)
- Multichannel measurements to speed-up measurement time
- Arithmetic averaging of the reverberation times or ensemble averaging of the decay curves for critical applications
- PULSE noise generator

* One year SW maintenance

Automatic calculation of reverberation times consists of detection of the evaluation range and linear regression