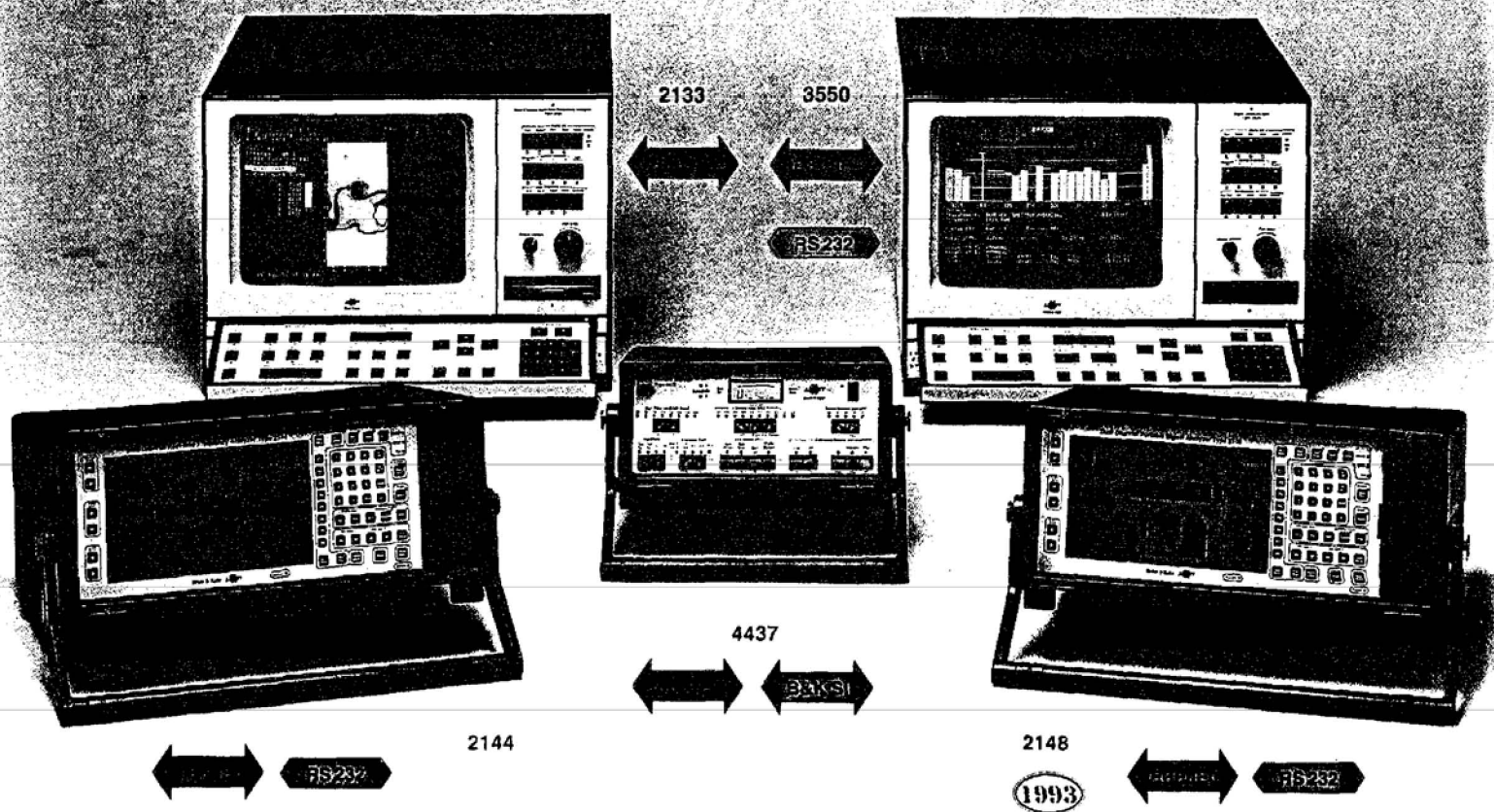


# Sound Intensity Equipment



**Type 4437 Sound Intensity Analyzer.** A portable, battery-powered serial-octave analyzer which answers the need for practical field investigations for sound intensity measurements.

- Simultaneously measures Sound Intensity, Particle Velocity and Sound Pressure
- A-weighted and linear analysis
- Linear and exponential averaging
- A complete spectrum stored for each mode
- Uses Type 3545 or 3547 Sound Intensity Probes
- Remote control from 3547 probe
- Direct display of sound power from user-entered area values
- Transfer of data to a PC for post-processing via RS-232 or IEEE interface with Graph and Export Program WT 9347
- Automatic temp. and barometric pressure corrections from user-entered values
- Automatic ranging, frequency scan, averaging time and digital output
- IEEE 488 and Brüel & Kjær Serial Interface
- 14 selectable digital output formats
- **Sound Intensity System Type 3554** available comprising a Sound Intensity Analyzer Type 4437 and a Sound Intensity Probe Type 3547

**Type 2133 Dual Channel Real-time Frequency Analyzer.** Digital frequency analyzer for measurement of acoustic and vibration signals in selectable fractional octaves from  $1/1$ -octave to  $1/24$ -octave, with extensive intensity, reactive intensity, particle velocity and pressure data (2123) measurement capabilities. See also p.33. Graphic display is on the screen of the analyzer. The data source is the analyzer's internal buffer memory or data stored on the analyzer's floppy disk.

- Measures Sound Intensity, Structural Intensity and Particle Velocity in  $1/1$ -,  $1/2$ -, and  $1/3$ -octaves
- Real-time intensity analysis to 11.2kHz ensuring accurate measurement of transient and non-stationary signals
- Measurement of Active (propagating) and Reactive (non-propagating) Intensity
- Contour, Landscape and Number maps of sound intensity distribution
- Map of vector intensity from the measured x, y, z components of the intensity vector
- Map of parameters calculated from user-definable functions
- Hard copy direct to Graphics Plotter Type 2319 or Graphics Recorder Type 2313

**BZ 7021 Mapping and Sound Power Analysis Software** for use with earlier models of Type 2133 which do not have the sound intensity mapping capabilities described above. Facilities include Contour, Landscape and Number maps of sound intensity distribution, maps of vector intensity and maps of parameters calculated from user-definable functions. Reactive intensity, particle velocity and pressure data (2123) can also be mapped.

**Type 2144 Dual Channel Real-time Frequency Analyzer and Type 2148 Dual Channel Portable Signal Analyzer.** Dual channel analyzers allowing measurement of sound intensity and cross spectrum measurements. See also pp.30 to 32.

- Simultaneous autocalibration of both channels and measurement of p-i-index for measurement validation and phase mismatch compensation

**WT 9378 Sound Intensity Program.** Mapping software for use with IBM XT/AT or PS/2 personal computers. Produces 3D, contour, numeric and sector-ranking plots using data from Brüel & Kjær analyzers Types 2032/34 (earlier types), 2133, 4437 2144 and 2148

**Type 5304 Sound Power Program** for the analysis of sound intensity and sound pressure data in accordance with ISO 9614-1 and NF S31-100 as specified by the EC Machine Directive.

- Controls a measurement system based on Type 2144 and Sound Intensity Probe Type 3548
- Sets up the 2144 for measurement and calibration using Sound Intensity Calibrator Type 3541
- Runs under Windows™ on a lap-top computer

**Type 3550 Multichannel Analysis System** is a modular, multichannel, FFT system for signal and system analysis. The system is designed for ease of use and maximum flexibility, and may be re-configured or expanded as applications expand. See also p.53.

- Sound intensity analysis (using Sound Intensity Probe Type 3545 or 3548) with selectable linear and A, B, C, and D weighting
- **WT 8080 Sound Intensity Program** configures the Type 3550 to a dedicated analyzer for making intensity and sound power measurements. See p.54

**Type 3541 Sound Intensity Calibrator** calibrates sound intensity measurement systems using  $1/2$ - or  $1/4$ -inch microphones. See also p.23.