PLACID INSTRUMENTS

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# PRECISION SOUND AND VIBRATION INSTRUMENTS AND SENSORS

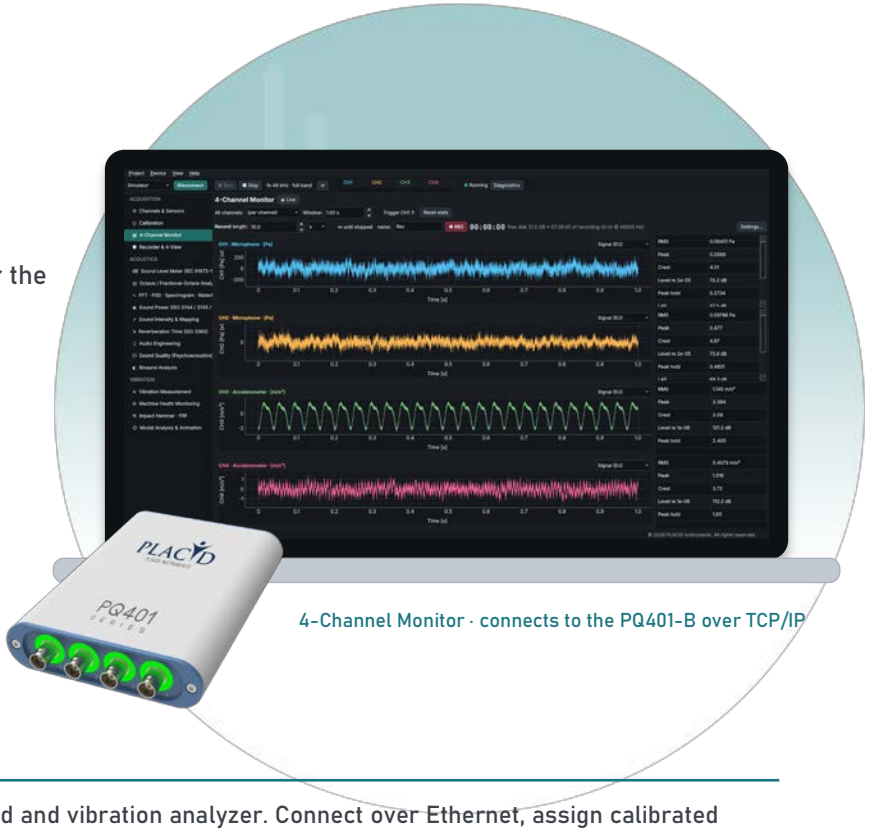
## PLACID SOUND & VIBRATION ANALYSIS SOFTWARE

# PLACID Studio

Measurement, analysis and reporting software for the PQ401-B four-channel data acquisition unit

4 channels · up to 192 kS/s per channel

Live & post-processing | Windows 10/11




4-Channel Monitor · connects to the PQ401-B over TCP/IP

## INTRODUCTION

PLACID Studio turns the PQ401-B into a complete sound and vibration analyzer. Connect over Ethernet, assign calibrated sensors to the four BNC inputs and measure in real time: sound level, octave bands, FFT, sound power, intensity, room acoustics, machine condition, human vibration and modal analysis. Every recording is kept in the project, so each measurement can be analyzed again later and exported.

## KEY FEATURES

### ACQUISITION & DATA

- 4-channel monitor: waveform, SPL, FFT, PSD, octave, a/v/d per channel
- Sensor database (mV/Pa, mV/g, mV/N), IEPE/voltage, calibration log
- Calibrator check 94/114 dB, 10 m/s², impact hammer (reference mass)
- Long-duration recording to disk, subject to available storage; RAW, WAV, CSV import/export
- Project results CSV, Excel reports

### ACOUSTICS

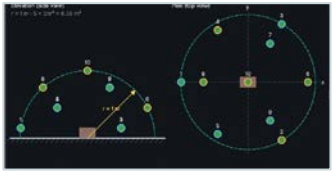
- Sound level meter A/C/Z · F/S/I, Leq, SEL, Lpeak, LN, logging
- 1/1 – 1/12 octave, FFT, spectrogram, waterfall
- Sound power (hemisphere / box) and sound intensity mapping on a photo or camera
- Reverberation time T20/T30/EDT, C50/C80, D50
- **Audio tools**, STIPA, psychoacoustics, binaural

### VIBRATION

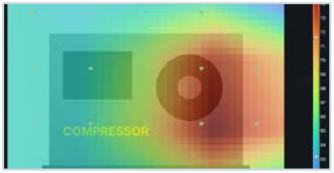
- Acceleration, velocity, displacement, severity zones
- Human vibration: hand-arm A(8), whole-body VDV, shocks
- Machine health: orders, envelope, bearing frequencies, trend & alarm
- Impact hammer FRF H1/H2, coherence
- Modal analysis with mode-shape animation



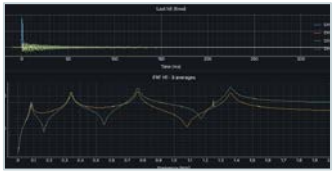
Sound level meter · 1/3 octave



Sound power · hemisphere (ISO 374x)




Sound intensity map



Impact hammer · FRF

### SUPPORTED STANDARDS

IEC 61672-1 | IEC 61260-1 | ISO 3744 | ISO 3745 | ISO 3746 | ISO 9614-1 | IEC 61043 | ISO 3382-1 | ISO 3382-2 | IEC 60268-16 | ANSI S3.5 | ISO 532-1 | DIN 45692 | ISO 5349-1 | ISO 5349-2 | ISO 8041-1 | ISO 2631-1 | ISO 2631-2 | ISO 2631-4 | ISO 2631-5 | ISO 20816-1 | ISO 20816-3:2026

Supplied with the **Sound Level Meter** and **Basic Vibration** modules as standard. Additional analysis modules are available as options.



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