



Trig-Tek™ 402PSI Microphone Calibrator

The Trig-Tek™ 402PSI Microphone Calibrator is designed to provide calibration of high intensity microphones and pressure transducers.

Key Features

- Sound pressure level 0.1 to 1.0 PSI (0.1 steps)
- Frequency steps from 20 to 1500 Hz (1 Hz steps)
- Reading of “Known,” “Unknown,” “Difference”
- Charge- or mV-type microphone

Product Information

The Trig-Tek™ 402PSI microphone calibrator is capable of delivering sound pressure levels from 0.1 to 1.0 PSI in 0.1 PSI increments and is accurate to $\pm 5\%$.

The test manifold, which interfaces both the “Unknown” and “Known” (REF) microphones to the sound transducer, is designed so that both microphones share a common cavity.

The output of the “Known” microphones is used in a closed-loop control to maintain

an accurate sound pressure level in the test manifold. The “Known” microphone is traceable to NIST. Frequencies are crystal controlled from 20 to 1500 Hz in 1 Hz steps.

The 402PSI is completely self-contained and comes with the sound transducer, reference pressure transducer (NIST traceable calibration certificate), test manifold, microphone adapter (of your choice), calibration plug, power cord, and a portable carrying case.

Specifications

Note: The Astronics Test Systems policy is one of continuous development and improvement. Consequently, the equipment may vary in detail from the description and specifications in this publication.

Frequency

Frequency Selection

- 20 Hz to 1500 Hz in 1 Hz step

Accuracy

- $\pm 0.5\%$ of setting

Level

Level Selector

- 0.1 to 1.0 PSI in 0.1 PSI increments

Accuracy

- $\pm 5\%$ of setting

Oscillator

Oscillator Int/Ext

- “Ext” position allows an external source to be used as the oscillator instead of the internal one

Oscillator On/Off Switch

- It shuts off the oscillator drive to the transducer

Interface

Sensitivity Selector Switch

- Allows accommodating “Unknown” microphones with sensitivities from 100 to 1100 mV-pC/PSI

X1-X10 Switch

- It works in conjunction with the “Sensitivity” switch to extend the sensitivity range from 1000 to 11000 mV-pC/PSI

pC-mV-mV Curr Switch

- It allows selection of three different microphone types

Unknown-Known Switch

- It selects which input microphone is being monitored

Percent-PSI Switch

- It selects the units for the meter

Power

- 115 to 230 VAC

Mechanical

Dimensions

- 12” D x 12” W x 7.5” H (30.5 cm x 30.5 cm x 19.0 cm)
- Sound Transducer: 4.5” D x 5.5” H

Weight

- 40 lbs

Ordering Information

408345-001 : Trig-Tek™ 402PSI

Microphone Calibrator



ASTRONICS
TEST SYSTEMS