



Trig-Tek™ 402H

Microphone Calibrator

The Trig-Tek™ 402H Microphone Calibrator is a portable, self-contained, high-intensity acoustic microphone calibration source.

Key Features

- 25' extension cable with hand-held transducer
- 120 to 160 dB SPL ± 1.0 dB accuracy
- Five internal frequencies: 62.5, 125, 250, 500, and 1000 Hz
- Closed-loop control
- Rechargeable battery

Product Information

The Trig-Tek™ 402H provides a portable hand-held sound transducer that, when combined with a 25-ft. cable, allows access to permanently mounted or remotely located transducers. Its portable carrying case is modified to provide storage of all external components. An internally rechargeable, lead-acid battery offers four hours of continuous use. The 402H can also be operated using 115 V or 230 VAC power.

The 402H is capable of delivering sound pressure levels from 120 to 160 dB in 10 dB increments and is accurate to ± 1.0 dB. Internal frequencies include "62.5," "125," "250," "500," and "1000" Hz, selectable from the front panel.

An input BNC is provided to enable the use of an external frequency source if other frequencies are of interest.

A reference microphone of "Known" sensitivity and accuracy is mounted in the test manifold to provide feedback for the control circuit. The 402H utilizes closed loop control and true RMS detection to assure consistently accurate sound pressure levels in the test manifold. The microphone to be tested is adapted to the test manifold and shares the test cavity with the "Known" microphone.

NIST traceable calibration certificates for the reference microphone as well as for the complete unit are provided in the operation manual. Additional microphone adapters are available.

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.

Internal/External Frequency

Internal Frequency Selection

- 62.5 Hz, 125 Hz, 250 Hz, 500 Hz, and 1000 Hz

Accuracy

- $\pm 0.5\%$ of setting

Int-Ext Frequency

- "Ext" position allows different frequency than the internal available frequencies; external frequency range is from 60 to 1000 Hz

Sound Level

Sound Level selection:

- 120 dB, 130 dB, 140 dB, 150 dB, and 160 dB

Accuracy

- ± 1 dB

Interface

Power

- 110 to 130 VAC, or internal rechargeable DC battery

Percent Charge LED

- Four LEDs to indicate above "20," "40," "60," or "80%" charge for the battery

Mechanical

Case Dimensions

- 12" W x 7.5" H x 12" D
(30.5 cm x 19 cm x 30.5 cm)

Weight

- 23 lbs, with sound transducer

Ordering Information

408295-001 : Trig-Tek™ 402H
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