



### K9000 SERIES

# MICROPHONE COMPARISON CALIBRATOR KITS

- Includes all the components needed to perform calibrations per IEC 61094-5 from 20 Hz to 10 kHz
- Versions available with both ½" and ¼" reference microphones
- Compatible with both condenser and array microphones
- Portable, battery-powered unit is self-contained solution
- Kits Include
  - Microphone Comparison Calibrator Model 9917C
  - SmartSine<sup>™</sup> Calibration Driver Model 9000A
  - Reference microphone and cabling

## **TYPICAL APPLICATIONS**

- Noise source identification
- Automotive NVH
- Flight test acoustics
- Vibro-acoustic testing
- Consumer and white goods product development
- Accredited metrology labs

### SIMPLIFIED MICROPHONE CALIBRATION

Microphone Comparison Calibrator Kits, K9000 Series, include the essential components for calibrating the most popular condenser and array microphones used in Test & Measurement applications. While the Microphone Comparison Calibrator Model 9917C is an established, reliable IEC 61094-5 microphone calibrator, the K9000 Series adds the convenience of SmartSine<sup>™</sup> Calibration Driver Model 9000A as a data acquisition system with automation and reporting capabilities. K9000 Kits also include a reference microphone and cabling – just bring your ICP<sup>®</sup> (IEPE) measurement microphone as a Unit Under Test (UUT).

The K9000 Series is available in two configurations, offering a choice between a  $\frac{1}{2}$ " and  $\frac{1}{4}$ " reference microphone, Models K9000-917-1/2 and K9000-917-1/4 respectively. In either case, the reference microphone and UUT are inserted into the acoustic ports of the 9917C. The UUT may be either  $\frac{1}{2}$ " or  $\frac{1}{4}$ " – as mounting adaptors are included. The microphones and the 9917C input connector are connected to the 9000A (see block diagram on reverse).

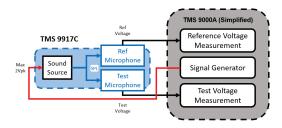
The 9000A maintains a record of the reference microphone calibration values and applies them to calculate the UUT sensitivity during the calibration. Both channels feature ICP® (IEPE) inputs for common microphone signal conditioning. In addition, users can save up to 500 calibration records directly to the unit's internal memory. Records are transferable via the unit's USB port to a flash drive and imported as an Excel® spreadsheet, allowing the creation of ISO 17025-compliant customizable calibration certificates on a computer.

#### SPECIFICATIONS

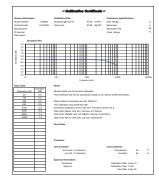
K9000-917-1/2 Components	
9000A	SmartSine <sup>™</sup> Calibration Driver
9917C	Microphone Comparison Calibrator
1/2" Microphone [1]	ICP <sup>®</sup> Pressure Microphone
003C03 + 070A02	UUT Connection Cable for Both BNC and 10-32 Microphones
003D03	Reference Microphone Connection Cable and Acoustics Source Connection Cable. QTY 2
K9000-917-1/4 Components	
9000A	SmartSine™ Calibration Driver
9917C	Microphone Comparison Calibrator
1/4" Microphone [1]	ICP <sup>®</sup> Pressure Microphone
003C03 + 070A02	UUT Connection Cable for Both BNC and 10-32 Microphones
003C03	Reference Microphone Connection Cable
003D03	Acoustics Source Connection Cable

[1] While continuous improvement in microphone technology (and microphone models) may drive change in microphone models, TMS will always select a ½" or ¼" microphone that offers the best fit for the K9000.

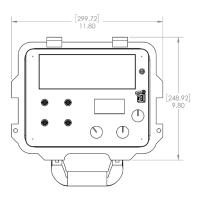
See detailed product specifications of components on the web: Model 9000A are available at <u>www.modalshop.com/9000A</u> and Model 9917C are available at <u>www.modalshop.com/9917C</u>.



### **System Block Diagram**

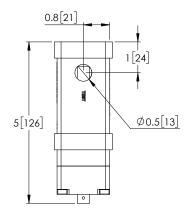


**Calibration Certificate** 

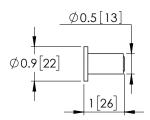


Model 9000A

Top View (Lid Removed) Dimensions in inches [mm]



Model 9917C Side view Dimensions in inches [mm]



1/4" Microphone Adaptor (QTY. 2 Included with 9917C) Dimensions in inches [mm]



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