

~Certificate of Calibration~

Manufacturer: The Modal Shop
Model Number: 9110D
Serial Number: 10318
Description: Portable Vibration Calibrator
Test Procedure: PRD-P278

Calibration Date: 19-May-16
Calibration Due: _____
Temperature: 75.2 °F
24.0 °C
Humidity: 25.0 %

Calibration Tech: BTH
Customer: U.S. Navy

As found: In Tolerance
As left: In Tolerance

Internal Reference
Sensitivity @ 100 Hz: 10.36 mV/g
 (Measured at Monitor Reference Out BNC)

Reference Equipment:

Manufacturer	Description	Model Number	Serial Number	Due Date
PCB	Standard Sensor	353B02	126967	12-Aug-16
Agilent	DMM	34401A	MY47055366	25-Jun-16

Frequency Hz	Standard Sensor		Unit Under Test		% difference	
	Measured Acceleration (g pk)	Reference Sensitivity (mV/g)	Displayed Acceleration (g pk)	Displayed Sensitivity (mV/g)	Acceleration (Displayed /Measured)	Sensitivity (Displayed /Reference)
7	0.51	20.53	0.50	20.66	1.95%	0.63%
8	0.65	20.67	0.65	20.64	0.72%	-0.14%
9	0.83	20.63	0.82	20.60	0.59%	-0.15%
10	1.01	20.64	1.00	20.57	0.63%	-0.35%
30	1.00	20.65	1.00	20.61	0.17%	-0.21%
50	1.00	20.66	1.00	20.62	-0.11%	-0.16%
100	1.00	20.64	1.00	20.57	-0.13%	-0.29%
300	1.00	20.66	1.00	20.58	-0.27%	-0.38%
500	1.00	20.68	1.00	20.66	-0.06%	-0.11%
1000	1.00	20.70	1.00	20.70	-0.01%	0.00%
2000	1.00	20.67	1.00	20.66	0.20%	-0.05%
3000	1.00	20.82	1.00	20.82	-0.09%	0.03%
4000	1.00	20.90	1.00	20.83	0.07%	-0.30%
5000	1.00	21.02	1.00	21.07	0.28%	0.22%
6000	1.00	21.18	1.00	21.15	0.26%	-0.11%
8000	1.00	21.67	1.00	21.71	0.44%	0.20%
9000	1.01	21.92	1.00	22.06	0.68%	0.65%
10000	1.01	22.32	1.00	22.41	0.77%	0.39%

Notes:

1. This document certifies that the above meets published specifications.
2. The equipment referenced above has been calibrated using standards traceable to NIST (Project Number 822/271196) and PTB (Project Number 5399). Evidence of traceability is on file at The Modal Shop.
3. The results documented in this certificate relate only to the items tested or calibrated.
4. This certificate may not be reproduced, except in full, without the written consent of The Modal Shop, Inc.
5. Measurement uncertainty (95% confidence level with coverage factor 2) for frequency ranges tested during calibration are as follows: 7<10 Hz; ±4.0%, 10<30 Hz; ± 3.0%, 30<100 Hz; ± 1.5%, 100 Hz; ± 1.5%, 100<2000 Hz; ± 1.5%, 2000-10,000 Hz; ± 4.0%.



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