



Problem

- The microphone calibration is done manually. It takes a long time to finish the calibration due to multiple test data
- There are at least 15 data points for each calibration. If one data point cost 2-3 minutes to stable and save data manually, the total time cost is 30-45 min.
- If the microphone calibration can be done without supervision, it can save a great deal of time

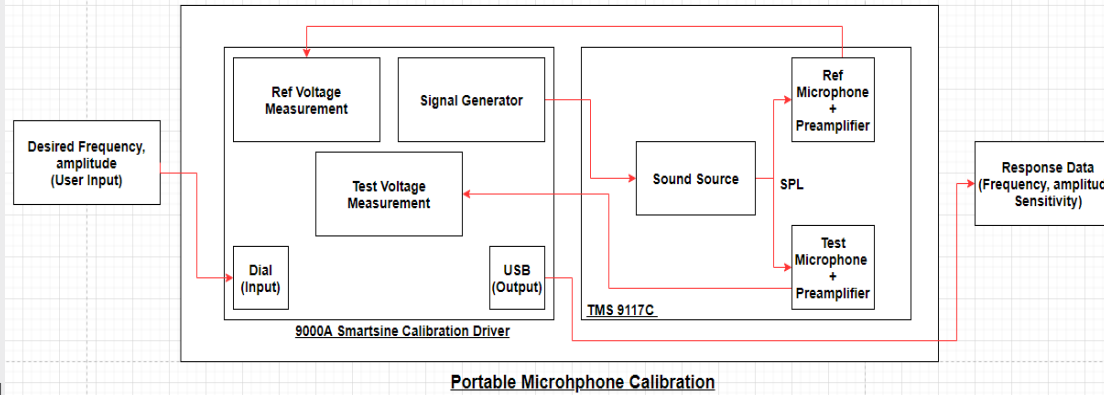
Solution

- 1st Portable Microphone Calibration (PMC)
- The microphone calibration can be done just by "1 click"
- The user can use Excel to review data, add correction curve, and create calibration certificates.

Methods

- PMC targets the user who would like to calibrate lab microphones over a frequency range
- PMC allows user to set the test frequency range between 20Hz to 20000Hz.
- 1 Pa, 1/12 Octave Sweep, 20 cycles per frequency point
- ICP or Voltage test microphone Power

Translucent Box



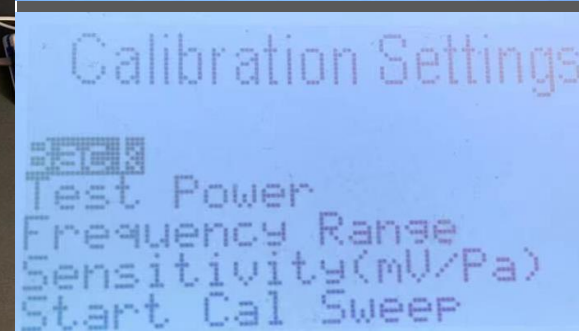
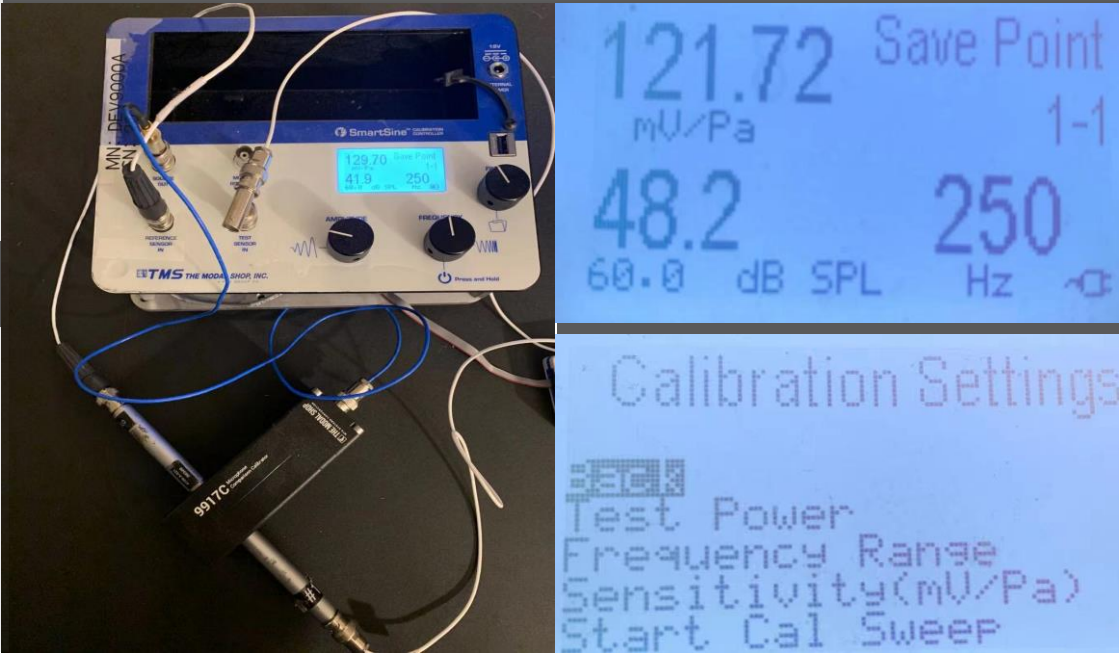
Cost

Equipment	Cost (≈)
9000A Smartsine Calibrator	\$5,000
9917C Microphone Comparison	\$2,000
Microphone M/N 426A13	\$560
Microphone M/N 4189A012 (*2)	\$1,200
Others(BNC, Atmel-ICE, etc)	\$100
Total	\$8,860

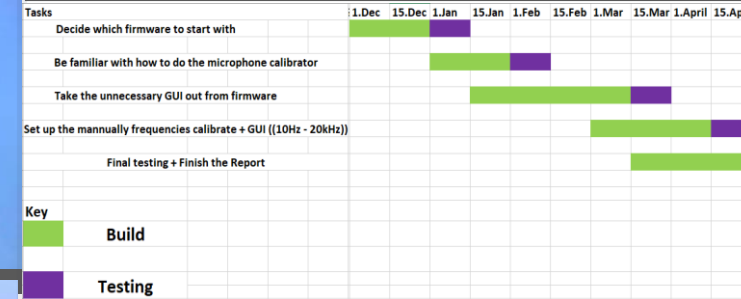
All the equipments are provided by The Modal Shop



Demonstration



Gantt Chart



Future Opportunities

- PMC generates specific data points by the serial number of microphone
- Connected with Cross-Platform Application, PMC can be control by PC, Smart Phone, or Tablet.