sensor & calibration tips www.modalshop.com www.pcb.com Your one-stop sound & vibration shop

Greetings,

Welcome to issue #32-

Weather starting to change where you are? Whether you're eagerly awaiting Springtime or ushering in the more moderate temperatures of the Fall, we hope you are still taking a little time for learning each month. Please have a look (like thousands of your industry colleagues do each month!), and share it with a co-worker. I will also start a blog soon so that it will be easy to comment and share ideas. Friend our <u>Facebook</u> fan page now. Follow the archive links below to where you'll find all the back issues with their wealth of information.

Join Our Mailing List!

Tip of the Month

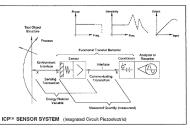
Participate in continuing education programs and seminars at least once a year. Technical organizations such as NCSL and SAE provide opportunities for both local chapter meetings and regional seminars on many sensor and calibration related topics. PCB Piezotronics is again hosting a very popular dynamic measurements seminar presented annually by Dr. Patrick Walter over the past several years. Dr. Walter is currently a professor and department chair at Texas Christian University, with over 30 years of dynamic test experience while working at Sandia National Laboratories.

Quick Links

NCSL IMEKO PTB NIST ISO TC 108 - Mechanical vibration, shock and condition monitoring ISO TC 108/SC 3 - Use and

Piezoelectric Transduction

Following last month's theme of back to basics, almost every month I get requests for educational material on piezoelectric sensing and I always start with this classic, written by PCB co-



founder Bob Lally. It does such a good job handling the basics of dynamic sensing in a single page that I'm still handing it out after more than 30 years! See how much of this classic you are able to explain to your young test engineering team members (or to your family for that matter...!). This is the one to read and recite when they ask that famous question, "What do you do at work?"...

> Click to read more about piezoelectric transduction http://www.modalshop.com/calibration.asp?ID=325

Do I really need to Calibrate?

The following Questions and Answers were taken from a magazine interview with The Modal Shop's Sr. Application Specialist Rick Bono.

The pervasiveness of vibration and shock sensors continues to grow at an exponential rate. You can find these sensors everywhere, from aerospace labs and automotive test bays, to smart structures providing condition monitoring systems and active control. While these sensors continue to improve the performance of people, products and processes, this



growing nation of test and automation is also a growing calibration liability. Considering the work involved with calibrating all these sensors, the question calibration of vibration and shock measuring instruments

ESTECH - Reno, NV (May 3-6) Sensors - Rosemont, IL (June 7-9) NCSLi - Providence, RI (July 25-29)

SAVIAC Vibration Institute

The Modal Shop website PCB Piezotronics website IMI website Larson Davis website

Newsletter Archive

listed alphabetically by topic

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sensor & cal tips #29 -Measurement uncertainty; PCB accelerometers on Mythbusters

sensor & cal tips #30 - Pyroshock Uncovered; Proficiency Testing

sensor & cal tips #31 - Back to Basics; Placebo Transducers typically follows, "Do we really *need* to calibrate all these sensors?"...

Click to read Rick's answers... http://www.modalshop.com/calibration.asp?ID=326

Last month, I shared that The Modal Shop is celebrating its 20th Anniversary in 2010. Become a fan of our Facebook page and see pictures of "Modal Shoppers" (and maybe some of your colleagues) from our past conferences, applications and celebrations. As you'll see in the pictures, we're here to serve you with all your dynamic sensor and calibration needs.

Sincerely,

Mike Lally signature

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Forward email