## **THX® Video Calibration Training & Certification**

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The first THX® Video Calibration Training program was presented at the Stewart Filmscreen® training facility in Torrance, California at the end of January 2008. This three-day program is a new venture for THX and is an outgrowth of their equipment-certification programs and audio-calibration training programs. You have to be living under a rock not to know about THX-certified home theatre audio products, and a similar program was launched in 2007 to certify video displays. Runco and Vidikron were involved early and have recently been joined by Panasonic, LG, and Sharp in bringing THX-certified video displays to the marketplace. With those major players coming onboard, it is inevitable that THX will be as successful with the video display-certification programs as they have been with their audio product-certification program.

A natural outgrowth of the video display-certification program is a training and certification program for video calibrators. The three-day course was developed by THX with the Lion Audio/Video Consultants organization. The instructors for the training class were Michael Chen (Lion A/V), Gregg Loewen (Lion A/V), and John Dahl (THX Senior Fellow and Director of Education). All three shared the lecture portions of the training program and assisted with the hands-on lab sessions. Michael and Gregg have calibrated thousands of video displays over the years and are very experienced with each display technology. To provide as much hands-on time as possible, and as much personal time as possible with instructors, class size was limited to 12 students.

The first day lays the foundation with a breezy introduction to the THX organization and the video calibration and certification program. A history of television hits the milestones that have led to where we are today with displays and calibration. The next section touches on why calibration is needed and covers some of the key concepts like color space, myths, and human factors. Discussion then turns to matters of resolution and perception. Connection options, signal types, and video formats are next. If you're wondering how the course could be about two-thirds hands-on with all this introductory information...well, at this point it's not even lunchtime of Day One. Calibration concepts and techniques are next and the first hands-on time begins after lunch on Day One. Additional lab sessions follow lectures about additional calibration concepts and techniques. Lab time is focused on very specific tasks that have just been discussed, as well as previous topics. When all of the lecture portions of the class are complete, the final calibration labs provide an opportunity for each student to calibrate three video displays.

The course ends with a review of the remaining tasks that have to be completed to achieve THX Video Calibration Certification. Students who wish to achieve this must complete a detailed, online 100-plus question exam, and submit ten video calibration summary reports from at least three different types of video display technologies. THX offers a THX Certified Video Display Calibration program for home theatre owners who wish to have that recognition for their home theatre. For an additional fee, plus reports submitted by the THX Certified calibrator, THX

will provide the home theatre owner with a THX Certified Video Display wall plaque and a certificate indicating when the video display will need to be recalibrated to maintain THX certification.

The training course is tightly focused on the knowledge and skills needed to calibrate video displays. Fourteen video displays were provided for the training: LCD and plasma panels, DLP RPTV and projectors, and LCD projectors. Initially most of the displays were connected to a video-distribution system that put the same images on every video display, so you could look around the room quickly to see what different displays looked like with the same test pattern displayed on them. This also served to keep everybody together during the first few labs, where you needed specific patterns to complete various adjustments. As skills improved, displays were connected to independently controlled video signal generators or disc players with test/setup discs.

The first class was well supported by "the industry." There were representatives present from Portrait Displays, Dolby® Labs, The Academy of Motion Picture Arts & Sciences (The Oscar® people), Epson projectors, Photo Research, and Progressive Laboratories. Test equipment was available to use during the class from Konica-Minolta, Sencore, GretagMacbeth, AccuPel, and others. You could use calibration software from Datacolor, Sencore, and Progressive Laboratories. Those wishing to bring their own test gear and/or software were free to do so. Continental breakfast and a full lunch were provided every day, but student transportation, lodging, and dinners are not included in course tuition. Course description and available classes can be found by going to the THX Web site at www.thx.com, then clicking on the "Training" link and selecting the "Video Systems & Calibrations" link.

I've been a stereo and home theatre journalist for well over ten years now, and I decided to add home theatre video calibration to my bag of tricks to expand my equipment-review qualifications to include video displays and to start a calibration business. I attended a different video-calibration-training program in the fall of 2007. When I heard about the THX Video Calibration Training program in December of 2007, I wondered if all the engineering and technical experience during my 34 years at Kodak and the previous video calibration training meant the THX Video Calibration/Certification program would be simply a review or whether there would be worthwhile content that would be of value. I also questioned whether THX Video Calibration Certification would help my video calibration business grow. After taking the course, I can say, without a doubt, that there was plenty of "learning" taking place on my part, and there's no longer any question about whether the THX Video Calibration/ Certification will have value to me. Seeing the support THX is getting from display manufacturers, the industry in general, and from calibrators running their own businesses, it is clear that THX Video Calibration and Certification will be valuable to me as a journalist and as a video calibrator working with individual calibration customers, installers, and dealers. One thing is certain, with THX being involved in the certification of video displays and offering calibrator training, as well as offering THX video certification for home theatre displays, the profile of video calibration within the enthusiast ranks, as well as for the general public, will only be raised. WSR