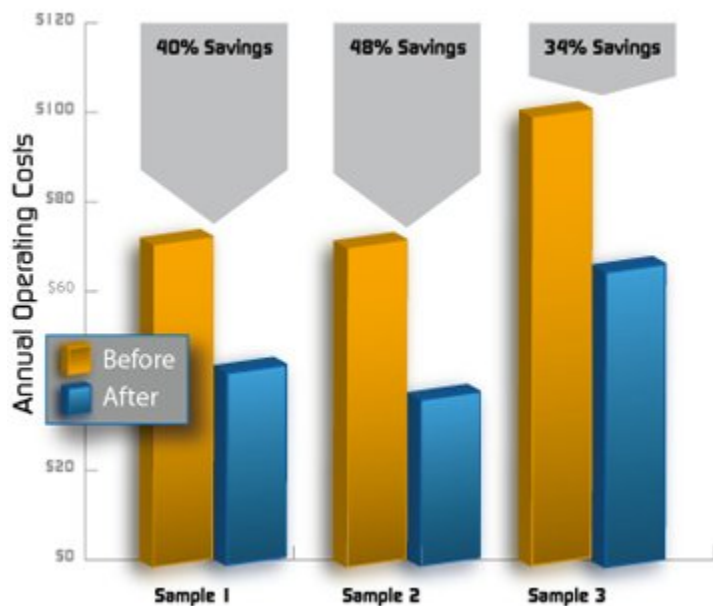


# THX Study: Video Calibration Improves Energy Efficiency

Will an environmentally friendly marketing message help calibrators see green?



## ***Professional Calibration "Returns Significant Power Savings"***

A THX study of plasma and LCD HDTV performance revealed video calibration improves energy efficiency up to 50 percent, depending on the display's technology platform, screen size and model year.

Consumers who use a professionally calibrated setting versus the default Vivid or Dynamic Modes can save up to \$40 - \$50 per year - equivalent to a tank of gas or two movies on Blu-ray disc.

## THX® STUDY REVEALS VIDEO CALIBRATION IMPROVES ENERGY EFFICIENCY OF HDTVS

*Professional Calibration Reduces HDTV Energy Consumption up to 50 Percent*

**SAN RAFAEL, Calif., August 31, 2009** – A research study conducted by THX Ltd. suggests that a secondary benefit to video calibration, beyond improving picture quality, is reducing an HDTV's on-mode energy consumption. The THX study, which evaluated plasma and LCD HDTV performance, revealed video calibration improves energy efficiency by up to 50 percent, depending on the display's technology platform, screen size and model year.

The THX research demonstrated in all cases that a calibrated viewing mode consumed less energy than Vivid and Dynamic modes. The approximate savings for consumers ranged from 15 – 50 percent. A properly calibrated HDTV, in some cases, can save consumers up to \$40 - \$50 per year—equivalent to a tank of gas or two movies on Blu-ray disc. The annual consumption and cost calculations are based on four hours of use per day and \$0.1136 per kilowatt hours (kWH), which is the average residential rate as defined by the United States Energy Information Administration. Savings will increase or decrease as user behavior shifts.

Plasma HDTVs manufactured prior to 2008 achieved the highest levels of energy savings after professional calibration, followed by LCDs. The research also confirmed that larger screens consume more power.

THX engineers evaluated more than 15 plasma and LCD models, comparing Vivid or Dynamic Modes versus professionally calibrated settings. Vivid and Dynamic modes are typically designed by display manufacturers to demonstrate the capabilities of an HDTV on the retail floor. Most of these modes boost contrast (light output) and color controls to compensate for the overpowering florescent lighting in the retail environment. However, these modes, which are often the default setting for users, can significantly increase energy consumption.

"Newer HDTV models are using less energy than ever before as a result of advances in panel manufacturing," said John Dahl, director of education at THX. "While the U.S. Department of Energy's ENERGY STAR standard is driving manufacturers to reduce on-mode energy consumption, both new and older plasma and LCD HDTVs can experience additional energy savings as a result of professional video calibration."

The primary benefit of professional video calibration is to improve the display's picture quality for the room in which it resides. While professional calibration is performed post-sale, THX Certified Displays from Panasonic, LG and JVC feature THX Movie Mode, a pre-calibrated setting that achieves studio color, deep black levels and energy efficiencies out-of-the box. This setting may also be tuned by a professional calibrator to further improve picture quality and energy consumption. For non-THX Certified Displays, the research demonstrates professional calibration can improve energy efficiency by optimizing the picture controls.

To learn more about the THX research, THX Certified Video Calibration Training Workshops and THX Certified Displays, visit the THX Learning Lounge at CEDIA Expo 2009. The THX Learning Lounge is located in The Omni Hotel's Pine Room, just across the street from the Expo show floor.

### **About THX Ltd.**

From the big screen to your screen, THX ignites your passion for exciting entertainment experiences. Recognized by audiences around the globe, THX is synonymous with the design and certification of world-class cinemas, premium audio systems, HDTVs, and blockbuster movies and games. Products featuring THX defy convention and define quality in their class, whether in the cinema, home or on the road.

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