



Tune-up Time

No matter how you feel about calibration, it's something every TV needs

You can count on certain issues to polarize *Sound & Vision* readers, and TV calibration might be at the top of the list. Calibration, of course, is meant to bring your TV as close as possible to the reference monitors that were used to master the movies you watch at home, producing the images the filmmakers intended you to see.

But this *doesn't* mean making video look like what you saw in the movie theater. Because film captures more colors than our TV can display, you can't make video look exactly like film. So when movies are transferred to video, the filmmakers have to decide how the colors should look based on video's limitations. And they make these decisions using studio monitors that have been properly set up and calibrated.

Despite what many people think, TVs don't leave the factories already calibrated. Given the razor-thin price margins for most TVs, calibrating each set would be too expensive. More importantly, selling TVs has little to do with presenting accurate images and a lot to do with selling more TVs. So sets are shipped adjusted to produce super-bright pictures that will stand out on the sales floor. Sometimes you get products like Runco and Pioneer Elite TVs that use accuracy as their hook, but these are a very small exception to the rule.

Marketing types and consumers love big numbers — like “100,000:1 contrast!” — that leap off the box and the ad pages. And since our eyes perceive blue-white as brighter — like those irritating headlights on some cars — manufacturers engineer their sets to be “bluer” to stand out from the crowd. But skewing things blue creates a problem. We tend to use skin tones to judge an image, and hypothermic-looking people don't sell TVs. So engineers compensate for this by adding extra red to give



people a nice, healthy glow. But as your mother always said, two wrongs don't make a right, and what we end up with is just a poorly adjusted TV.

Overdriving the image can also shorten your display's lifespan and drive up your energy bill. A recent study showed that some sets use much less power once properly calibrated, meaning that the display will not only look better, but the calibration might eventually pay for itself *and* help save the planet. (Hey, it needs all the help it can get.)

When someone is considering having his set professionally calibrated, three questions arise: “Will I see a difference?” “Will I like what a calibrated image looks like?” “Is it *worth* it?”

It's impossible to answer the first question without first seeing your TV and then being able to look at the world through your eyes. While nearly every TV will benefit from calibration, some need it a lot more than others.

As snarky as it sounds, the answer to Question 2 is that it doesn't matter if you like it. A calibrated image is the *correct* image. A good analogy would be, “What shade of glasses do you want to wear when you're looking at the Mona Lisa? Do you want it to have a greenish *Matrix* look or a goldish *300* tint? Or do you want to see it how it *really* is?”

Since everyone places a different value on things, worth is the toughest to address. If you love to watch movies and want to know that your set is performing at its best, then it's worth it. If you bought the cheapest TV you could find and still cling to your VHS collection, then it's probably not.

So why is calibration such a heated topic? One reason is that it's not something you can do yourself, because it's often necessary to enter hidden service menus to access the controls needed to make the adjustments. Also, beyond the training required to know what you're doing, the required tools are very expensive, making calibrations cost upward of \$300. Finally, since calibration has been a mostly unregulated field, there are many calibrators who do a great job and others who, um, don't.

THX aims to address that last part with its new Professional Video Calibrator Training program. Since THX is about recreating the filmmakers' vision and the theatrical experience, this training seems a natural extension of its goal of ensuring the ultimate experience at home. The company invited me to attend one of its classes this past September, and I'll give a detailed account of what transpired there in next month's column. **S&V**