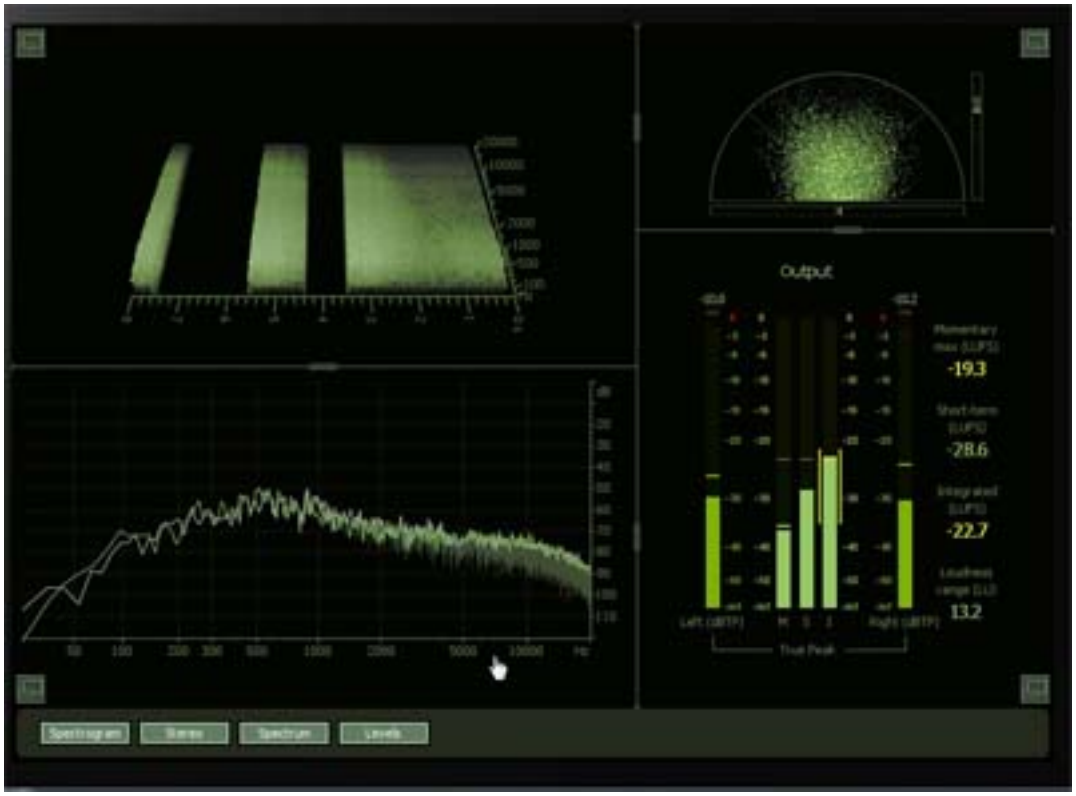

With new broadcast audio regulations like the CALM Act, we all need to be able to deliver content that's in compliance with recently passed loudness standards. The key to doing this in a stress-free manner is finding a way to easily monitor and control your audio content. Thankfully, the Insight software from **iZotope** delivers the tools to easily do just that. Insight is fully compliant with current loudness standards, and has a number of forward-thinking tools to help ensure that your audio adheres to these regulations — and it's fully compliant with BS.1770-1/2/3.

For the ability to monitor something, you really need a meter so you can visually see what's going on in real-time. Insight has the analysis tools and real-time monitoring capabilities to visually guide you throughout the mixing process. There are two ways to view your audio. First, there are the tried and tested analog-style meters with innovative digital twists, and the other cutting-edge

displays that give you a crazy amount of access to your audio waveforms. The second way to view your audio is to design your own ideal metering plug-in. To get all of the tools that you'll need on one screen, you can resize the plug-in to optimize your studio-screen space, and choose the meters appropriate to your workflow. You can then adjust each partition's size to best suit your preferences. To get started, just add in the customizable views, settings and presets that work best with your workflow from the five interface metering modules. Here's a bit

of info about each module.

The Spectrogram view is a detailed topographical map of your audio stream in 2D or 3D. You can feed in any individual tracks or buses via Meter Taps. The Spectrogram view lets you visualize your audio in 3D, like you were flying over a mountain range, with height representing amplitude and width placement displaying frequency. By watching this view, you can actually see “Amplitude peaks” in your audio content represented by a tall mountain that rises above the others — and it’s so cool to see these spikes, rather than to just hear them.

The Spectrum Analyzer lets you see the frequency balance of your mix in real-time with display options like Linear, Octave, Critical Band and more. Want to match up a soundtrack? You can compare the loudness of multiple tracks or compare your track with a reference track to see how your master matches up. For Sound Design work, Insight helps you to choose the sound effect or atmosphere with the right spectral properties for your mix, by letting you analyze how it will fit into your project using the Spectrogram or the Spectrum Analyzer. The Sound Field is the meter you see in TV stations and remote TV trucks. It lets you examine the behavior and balance of stereo and surround mixes; visualize spatial activity in real time; and quickly diagnose phase issues with the Stereo Vectorscope and Surround Scope.

Here’s an idea: If you monitor audio loudness through all stages of video production (from offline to online), you won’t need to remix the soundtrack for broadcast later. Insight shows meters for up to six channels of surround data, so you can easily visualize both the stereo and surround sound field of your mix to ensure a successful downmix. You can also ensure that your audio won’t clip in the analog domain with Insight’s True Peak meters, which are fully compliant with the recently released BS.1770-3 technical specification. By monitoring the stereo width of your song throughout mixing, you can ensure a successful mono play-out and assure compatibility with mono televisions using the Stereo Vectorscope.

The Levels module lets you monitor both True Peak and Loudness meters for immediate feedback on your project’s levels, while the Loudness History shows loudness over time (in real time or retrospectively), with the option to capture loudness data in an exportable log or graph. You can use the Loudness History Graph feature to plot the history of the loudness of your audio mix. You can then use this History Graph for retrospective examination of your mix's loudness, or for real-time monitoring of loudness trends as they occur over time.

It’s now easy to prove adherence to loudness standards by exporting a log or graph of your

loudness data to clients, networks, broadcasters and other legislation enforcers that require documentation. You can use one of the built-in presets to quickly load settings relevant to the loudness standards in your part of the world. Just load one of Insight's 30+ presets (each designed for a different common workflow) or save your own most-used meter settings for easy recall. To easily see where your content is too loud, just set your loudness targets and mark when any levels exceed them with Loudness Overflow Tracking, which writes automation to your DAW to capture loudness overflow alerts. For a DAW, I used Avid Pro Tools 10 loaded on my new Titanus Computers audio workstation for this review, and everything worked great.

Insight has several great features. Since each meter provides numerous display options, you can take total control over how your audio is visualized. You can perform deep analysis with easy freezing, zooming and hovering within relevant meters for closer inspection. With Insight, you can now inspect, understand and interact with your audio content — all for only $499. It's a great time-saver for broadcast video production as well as mastering audio CDs.

For more information, visit www.izotope.com .