

NTi XL2 Analyzer

Reviewed by Terry Nelson,
Studio Equipment

Visual limit indication of exceeding sound levels

Flexible user interface



The XL2 Analyzer combines a sound level meter, an acoustic analyser and an audio analyser. It is suitable for numerous applications including live sound, installed sound, PA hire and cinemas as well as education and training.

Studio Equipment provides conception, planning, installation and supervision services for acoustical design and audio systems for film, broadcast and recording studios, as well as sound reinforcement installations for theatres and concert halls.

What do you use the product for?

The short answer is everything! It's an integral part of my measurement and test process and I use it on every project. It always goes with me and it's my first call for test. I can't always take all test and measurement tools with me so it's easier to take a computer for control functions and the XL2 coupled with a MD-PRO Minirator for measurements. Sometimes I will also take a DR2 Digirator for set-up, measurement and troubleshooting functions.

The functions I use the most are the sound level meter, spectrum analyser, measurement for signal levels and STI. It's useful for live sound applications and with a whole selection of filters and standard weighting curves it's great for permanent installations where you have to comply with local regulations. I also have the Spectral Limits and Extended Acoustic Pack options installed to cover all eventualities and would strongly recommend these to users.

A lot of the work I do is within screening rooms, film mix stages and (sometimes) cinemas. In these environments I can dial in what is known as the X-Curve and walk around the auditorium with pink noise blasting away and it will provide a fast indication as to

what the response is all over the room.

There's also now an application, developed with Meyer Sound, specifically for cinema environments and is an extension of the integral X-Curve function and Spectral Limits pack. I very much look forward to using it.

What do you like about it?

The XL2 is a great step forward in terms of display and features. It is basically an excellent, all-round, troubleshooting test tool. There's a vast amount of power housed within just one handheld unit.

The user interfaces are intuitive and easy to use. Anyone who is used to a basic menu system on a computer will find their way around the XL2 in 30 seconds. The interface is also very flexible. It's fairly standard to have a customisable interface on this kind of tool but the XL2 takes those options much further.

I think the main advantage of having an XL2 in your toolbox is that you can walk around with it. This is especially useful when using the sound level meter for health and safety purposes. If you are limited to a maximum sound pressure level at the PA, you can take a measurement where the SPL is loudest for the audience and one at the FOH (KSET function). The XL2 calculates the offset and displays the sound pressure level at the loudest point. This is extremely handy if you are in a large field or festival area where the FOH could be 30m, 50m, or an even further distance away from the stage. Levels are logged to provide backup in the case of litigation.

NTi regularly releases new applications and firmware updates to upgrade and expand functionality. One example is the added ability to display the output of the XL2 on a video monitor, which is good for classroom situations where you are instructing students. You can easily display data on a video projector or monitor. It's

got a very good internal filing system for capturing measurements, which can then be transferred to a computer for further processing. A voice recorder is also included for making comments in the field at the time of measurement.

What would you change?

When the product first came out there were some functions, that had been available on the NTi's old Acoustilyzer, AL1, that could not be accessed on the XL2. But that quickly changed as the company added updates and upgrades.

There are features you need to be careful of. For example, if you are doing electrical measurements, like amplifier power or test measurements (Scope function), you need to be aware of what you are looking at. So, in terms of level compensation you might think you are looking at a millivolt when in fact you could be looking at a lot more.

About the only extra function that comes to mind would be measurement of digital signals (as with the Digilyzer) but you can only pack so much into a small space!

In use?

NTi have been supporting IBC, the annual broadcast and media convention held in Amsterdam, with test equipment for about five years now. This year we used the XL2 for setting up audio systems in all of the conference rooms as well as the auditorium for the IBC Big Screen digital cinema. ☺