

Optimus Green helps to bale out Festival

Recently at the Ravenstonedale Festival in the heart of Cumbria, a rather unusual method of noise control was implemented when it seemed the local acoustics were conspiring against the organisers.

The UK is renowned for its rich heritage in hosting outdoor festivals, whether it be music or literary, through to farming, food or catering to even more niche audiences.

But every festival is unique and, no matter how large or small, they bring with them their own issues when it comes to health & safety and noise related challenges.

Noise consultant Chris Selkirk is no stranger to those challenges having worked on a large variety of festivals over the years, in both urban and rural locations.

Ravenstonedale is a 3 day family event all staged in the beautiful Eden Valley where an eclectic mix of Indie, Rock, Blues, Ska, and Acoustic is played on the main stage. This year's event also saw Ravenstonedale introduce some new elements of comedy, poetry, and acoustic sections, alongside the popular Dance Tent where around 1,000 festival goers enjoyed roof-rousing electronic music through the night.

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optimus[®]
sound level meters





But where there are festival goers there will be noise and despite its very rural location, Chris was acutely aware of a number of homes that fell within an 800m radius of the main site and would be affected by the noise.

“There were only a handful of cottages but they were causing us a real headache and we thought the only solution was going to be to turn the music down to meet the noise regulations,” explained Chris.

Chris used the Cirrus Research Optimus Green sound level meter to get his accurate readings from various parts of the site and particularly around the sound systems. The Optimus Green provides Class 1 performance and has the latest digital technology with a high resolution colour OLED display and back-lit keypad - essential for Chris in his outdoor environment and contending with low or no natural light as the festivals continued well into the night.

“The Optimus Green was the best sound level meter due to its complete ease of use for live readings.”

He used the Optimus Green data to map the exact noise hot spots of the festival site and then set about mitigating the noise through layout management and with a little help from a local farmer.

Chris bought 50 bales of densely-packed straw and built several 6m wide by 3m high walls around the worst offending sound systems. It proved to be an extremely cost effective move. Once they were in place and Chris re-took his measurements on the Optimus Green, he discovered a 42dBA reduction in the noise levels, only 12 meters from the dance-floor, behind the straw bales –taking the site to well within the legal limits of 45dBA from noise sensitive properties after 11pm.

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“The straw bale wall barriers were enabling 10-15dBA increase in volumes for the sound systems compared with the previous year, which was beyond our expectations,” explained Chris. “It was a great solution because the bales didn’t look out of place in this rural festival setting and at the end of the weekend we simply sold them back to the farmer so it was very cost effective and environmentally-friendly!”



Number one choice

“The Optimus Green was the best sound level meter for this kind of application due to its complete ease of use for live readings; quickly being able to change between information displays (graphical, numerical, frequency weightings, 1:1 and 1:3 octave filtering views) whilst taking statutory readings of 5 and 15 minute LAeqs, is essential to ensure a festivals compliance with noise regulations” said Chris. “It is a device I have used now on many

occasions and in many environments. For my type of work it is always my No 1 choice. The Optimus Green enables easy access to the weekends’ monitoring readings, which is extremely useful without having to download the data first”.

Noise legislation governing festivals:

Local Authorities’ Environmental Health departments generally adopt the example conditions set down by the *Noise Council’s Code on Environmental Noise Control at Concerts (1995)*.

These conditions are placed with the Premises License Conditions for the Festival/Music Event, which event organisers must fully adhere to. In order for an event to have live or recorded music performances, it must have a Premises License, or for smaller events (up to 500) a TEN License (Temporary Event Notice).

What is a noise consultant?

A noise consultant is someone who specialises in communicating and liaising with all parties - the sound system suppliers, stage managers, bands/DJs, the Local Authority, the Police and local communities. He or she supports them all in delivering a successful event and meeting any noise legislation.

They are instrumental in the creation of a reliable, effective and practical Noise Management Plan to enable the organisers to gain a Premises License achieved through reliable data predictions for noise propagation from the planned event. They do this through demonstrating how an event can minimise any nuisance and effectively manage its noise levels. They then must deliver and adapt the Noise Management Plan throughout the live event to ensure success and collate data evidence.

Cirrus Products used in this case study

- Optimus Green Sound Level Meter
- NoiseTools software

(Free with the Optimus Green Sound Level Meter)

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