

Noisy music festivals: the Coachella case

Coachella is an annual music festival held every year since 1999 in Indio, California on the two central weekends in April.

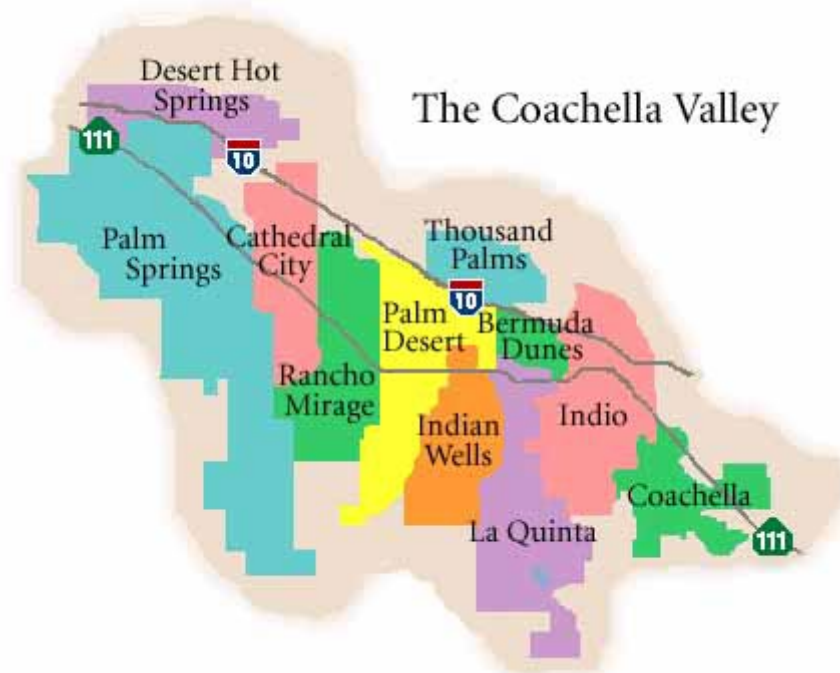
In the Colorado Desert, about 127 miles from Los Angeles, the show is staged in the desert fields of the Empire Polo Club and lasts an entire weekend. The festival offers performances on 5 different stages with as many amplifier and loudspeaker systems.



1 CHALLENGE:

With the music and festivities continuing for 2 weekends, 3 days each, late into the night, the Coachella valley music and arts festival needs a noise level monitoring system that is equipped for a wide temperature range environment and is capable of handling the high standards required for an event of this magnitude.

The communities surrounding the site (particularly Indio and La Quinta) are plagued by significant traffic and noise issues; due to their proximity (and position as the crow flies) they are exposed for a long time to high volumes which can exceed 100 decibels. However, not only the population, but also the fauna can be affected by these excessive noise levels.



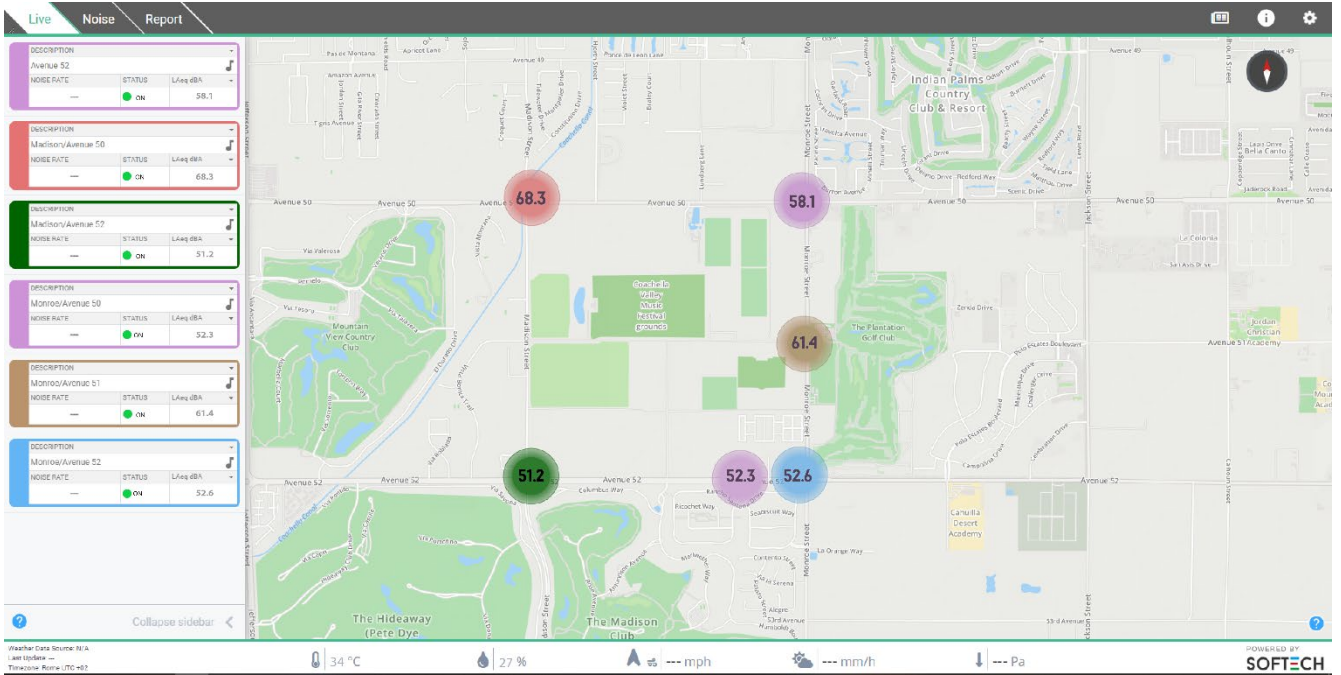
Guaranteeing the music enthusiasts a few hours of fun and the population tranquility during the day and sleep at night is essential, for this reason the organizers of the festival have agreed to submit to specific standards on noise emissions and to respect an acoustic curfew which provides for the end of the activities at 1 am on Friday and Saturday and midnight on Sunday. Curfew violations result in the payment of a large fine (this year we are talking about \$117,000 in total fines)

Noise monitoring is therefore essential to ensure compliance with permissible noise standards.

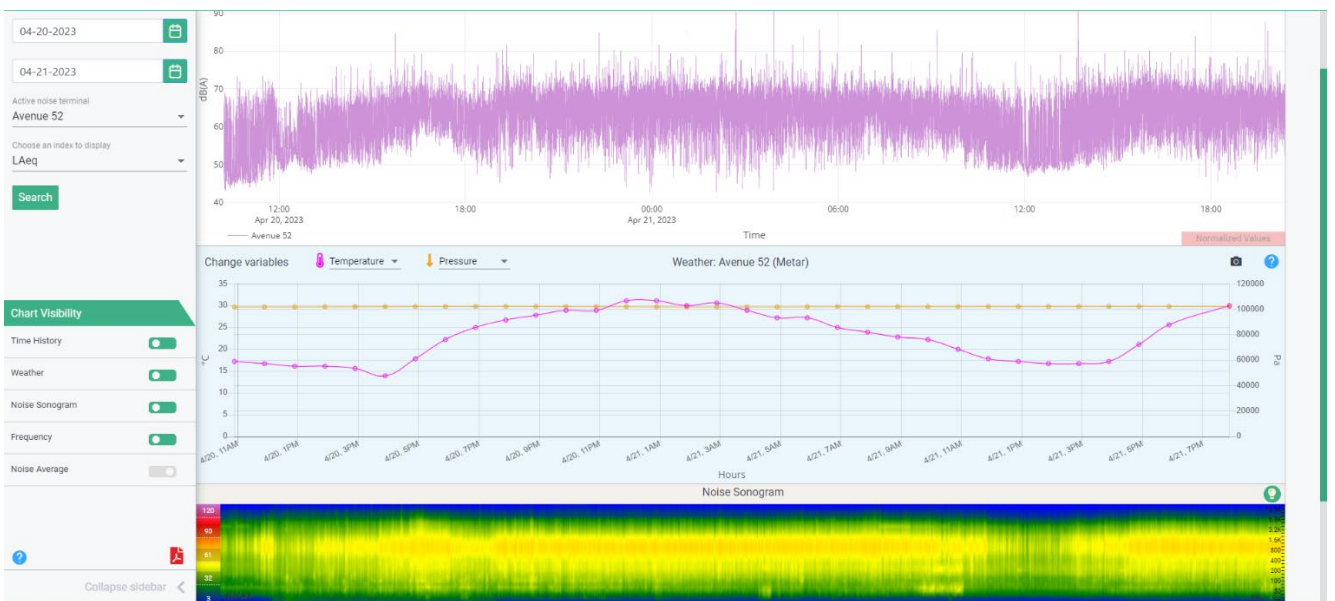
2 SOLUTION

For concerts and music festivals, the solution we propose is [DATA SERVICE](#) (from now on DS), an environmental monitoring service that is supplied complete with monitoring instruments and cloud software, ideal for keeping noise levels under control in different contexts, especially temporary ones: DS is intended to be provided as a SAAS for short or long-term monitoring campaigns.

For Coachella we have installed 6 monitoring terminals around the festival grounds covering more than 600 acres of land; each of the terminals is equipped with class 1 PCB-Larson Davis sound level meters, the best choice to meet the performance criteria required by the situation. Noise data was collected and analyzed 24/7 throughout the month of April and the information collected was displayed in real time on online cartography to the responsible technicians, who were able to take immediate action where necessary alerted by automatic system warnings; the reports (standard and customized) that the DS system generates automatically, ensured compliance with the allowed noise standards and were used as needed by the festival organizers.



1 - Live view



2 - NAT: Noise Analyzer Tool

3 CONCLUSION

Noise monitoring is being conducted to comply with a condition of the Special Events Permit issued by the City of Indio to conduct these festivals; it is essential given the scope of the event, that the system is performing, reliable and prepared to work in this context. Our solution has been recognized as reliable and suitable and we are happy to have taken part in the realization of the *festival par excellence*.

For more information on our noise & environmental monitoring solutions and services, visit our [website](#).