

Muse feeling good, and on top of the world with STM

Radical design with Nexo STM Series modular line array for Austrian concert

Fourteen thousand fans packed the Silvretta Arena in Ischgl for a very special edition of the world-famous Top of the Mountain concert series, with British rock heroes Muse and a never-seen-before configuration of Nexo's STM Series modular line array.

Fantasy Veranstaltungstechnik, the Austrian sound rental provider that has serviced more than 20 TOTM concerts for the Tyrolean ski resort, has been deploying Nexo STM Series systems for the last five years. The company has just made a major investment in the





An radical approach to setting up the Nexo STM system

STM M28 'Omni' modules, and this was the first appearance of the new cabinets in a starring role on the mountaintop.

Hannes Knapp, technical director of Fantasy, has some history with the French brand: "I remember using the old TS2400 touring rigs, then spent about seven years working with big Alpha systems, before moving onto GEO T.

"STM brings me fully up-to-date, and as the TOTM concerts grow every year, we need to be current with the best possible loudspeaker systems.

His new STM M28 compact modules can be used as a downfill with the M46 modules, or as the main cabinet in the arrays with B112 bass cabinets, he reports. "It has a huge amount of headroom, unbelievable really; the clarity and precision of every single instrument is phenomenal, even at 70-plus metres."

With the input of STM specialist Norbert Bund, and Val Gilbert from Nexo's Engineering Support Team, an innovative system configuration was designed for Muse, maximising the modular versatility of the STM Series to meet the band's LF requirements. A single line of 18x M28 cabinets was bracketed by nine B112 bass cabinets, creating a 3-wide array.

"When Nexo first released STM, we offered the rigging options to present the system 3-wide," explains Gilbert. "However, few customers have deployed that design with the large M46 main cabinet, and Fantasy is the first to do it with the new M28. Our original design for Ischgl was a line of M28 and a line of B112, but rigging restrictions meant that we had to spread the weight of the arrays. Rigging limitations vary, depending on the density of the snow, and they are very strict. The modular nature of STM enabled us to break the system into three lines, which could be done without

compromising acoustical performance. The atmospheric conditions are the hardest anywhere, and the M28 performed with distinction."

With another nine M28 boxes per side acting as delays for the system (at 60m), and 48x STM S118 subs flown and groundstacked, this compact line array system comfortably catered for the audience of 14,000, spread over a considerable listening field, and the expectations of one of the biggest rock bands in the world. Marc Carolan was the man at FOH, mixing on a Midas PRO X.

"[The M28 is a magical little box," reports Hannes Knapp. "It has the light weight and flexibility for our smaller shows, yet, using the same components, we can assemble a system for a Muse concert. It is easy to handle, totally versatile, and can deliver for more than 20,000 people. You can do everything with this tiny little system."

For the past four years, Fantasy has used Nexo's



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**HANNES KNAPP,
FANTASY**



STM M46 as the main module in the STM PA system, coupling 1:1 with the B112 bass cabinet. Chief system designer Norbert Bund (seconded from German rental company acoustic Network) was impressed with the way the smaller STM M28 worked in place of the M46. "The configuration of the main arrays gave us good coverage



Being able to rig the system quickly and easily was very important in the snowy climes



to about 60m, where the delays started. But with the smaller M28 boxes, we can use shorter inter-cabinet angles, so the coverage is really focussed and accurate. Using them in this way with the B112s meant that we didn't have to depend on the LF energy of the M28s, and could exploit the headroom in other frequency ranges."

Knapp brings up the critical question of location: Ischgl is in the Austrian Tyrol at 1,500 metres above sea level, while the Silvretta Arena is 800 metres above that! Getting the audience there is easy: they just ski there. "At this altitude, there are fewer air molecules than in the valley. We don't need to throw more than 80 metres, even though we can, but in this place, it's a good idea not to throw to the next mountain..."

"Most of the time, the humidity is nearly 100%, and the temperature can change from -15°C in the morning to +10°C at noon, so having the M28 delays is a much better solution than driving the main PA too hard."

Logistical complexities abound. "We're well within the snowfields and there is no flat surface at all so it is difficult to transport heavy equipment there," explains Knapp. "We need simple and easy-handling dollies and covers so we can load-in or strike quickly. All stage construction is directly on 3 to 5 metres, built on snow with no concrete beneath, so we need lightweight cabinets – another reason for choosing Nexo's M28."

Norbert Bund joins in. "Rigging is all-important. We have to move very fast because we may not always have good weather, and there are obvious difficulties of access for the vehicles. But the STM rigging is extremely flexible, allowing us to change the configuration as we did for Muse from a standard 2-line array to the 3-wide system that was compatible with the rigging point load factor. No other system would have given us such possibilities." ■

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