

HIGH SEAS SOUND

A TREASURE TROVE OF ADVANCED AUDIO AT PIRATE THEME PARK

Sweden's Daftöland amusement park invites visitors to live, eat and play like pirates, with outdoor activities for the whole family. Based on the DME7 digital mixing engine, a Yamaha audio system plays a vital role in the experience. It showcases how even small to medium-sized entertainment resorts can include complex, flexible sound installations on a modest budget.

Daftöland is located within the Daftö resort near Strömstad, close to the Norwegian border. Described as 'a must' for visitors to the area, it packs a lot of activities into a relatively small area, with a log flume, an outdoor theatre, fairytale castle, radio controlled boats, treasure hunts, arcades, dodgems, food outlets and more. Every day is promised to be an adventure!



THE CHALLENGE

The resort's previous audio installation featured three separate processors. It was planning to expand and enhance the system, but this proved impractical because the age of the existing equipment meant maintenance was becoming too difficult.

Robert Axelsson of local event partner LiveLab was contacted to help design a new system. This was made more urgent by a major thunderstorm, which hit the site during the planning process.

Fortunately, that day Robert was sitting in for the house tech at the theatre. "As the storm approached, I ran to the control room and disconnected all the amplifiers and other devices to save the system minutes before the storm hit," he says.

With water, steel and hundreds of metres of analogue cabling, which acted like a giant lightning conductor, nearly every electrical device in the park was knocked out. As it was the middle of the high season, it was vital to get the system up and running again as soon as possible.

Fortunately DSP programming specialist Anders Wernersson of AW Projektpartner was on vacation not far from Strömstad and came to the rescue. Within 36 hours, the sound equipment was the first to be got working again.

THE SOLUTION

Both LiveLab and AW Projektpartner are Yamaha partners, so Robert and Anders worked with Yamaha Scandinavia's Tomas Carlson to design a new system, with the DME7 at its heart.

"One of the deciding factors in going for a Yamaha solution was the guarantee of pre-/post programming support," says Anders. "I have known Tomas Carlson for many years and his support and reassurance gave us the confidence we needed."

Alongside the DME7, the system features Tio-1608D2 i/o racks, DCP series control panels and, for new attractions, VXS series surface mount speakers. The system was configured with Yamaha's ProVisionaire Design software to operate 62 Dante inputs distributed to 48 outputs, across eight zones.

The DCP series control panels are used by local operators to enable the respective zone's paging mic, pre-recorded ride instructions and commercial announcements, as well as adjusting the overall audio volume for the ride. ProVisionaire Design allowed the DME7 to be programmed with priority ducking for each of these

audio options. This means that, for example, safety announcements are automatically prioritised over less important content.

"A Mac Mini in the main control room has a QLab system running 500 audio cues over the

fibre network. Every custom block in ProVisionaire Design has a matrix and ducker to prioritise audio across the park. Planning and programming was complex, but it was made much easier thanks to the way the ProVisionaire Control application allowed us to separate logic programming from the audio matrix in the DME7. To be able program the logic functions separately is great," says Anders.

In the main control room, a master Crestron panel can override the local zones for park-wide announcements,

Some of these are scheduled, while others depend on activities such as restaurant announcements or upcoming scheduled performances.

"Snapshots are used for triggering the paging zones. They have built in status from the DME which users can see on the Crestron panel and

“ Planning and programming was complex, but it was made much easier thanks to the way the ProVisionaire Control application allowed us to separate logic programming from the audio matrix in the DME7. ”



report issues to the park's technical staff," says Anders. "The system has been programmed with varying levels of priority, depending on whether it is a ride announcement, a commercial message or a safety announcement. For example, the DME7 can interrupt the theatre show and open an emergency microphone or pre-recorded announcement."



The matrix is also used in the popular House of Horrors, which contains various animatronics. As visitors approach each display, a photo cell is triggered which starts the animatronic and sends a message to QLab. This is relayed via Dante back to speakers in the animatronic display by the DME7. The combination of sudden visual stimulus with synchronised audio really enhances the effects.

"We often get groups of people coming to celebrate things like birthdays, so we have local audio inputs for some of the rides. This means they can play their favourite tunes and make it a more personal experience," says Robert. "As the local operators in each zone are getting more experienced with the system, they are suggesting new functions. Thanks to the DME's flexibility, these can be added."



Another advantage of the Yamaha solution is that the system is future-proofed, meaning Daftöland can expand and change its facilities, with no need for significant investment in the system for years to come.