

The splendid Liberty-style Kursaal can accommodate up to 1,000 people



Clay Paky Alpha Wash Halo units are installed in the main hall and in the Pavillon des Fleurs

# Historic concert hall enters the digital world

A venue that has been offering entertainment since the days of gaslight has recently had a digital upgrade. **Mike Clark** reports on how it mixes 19th-century grandeur with modern technology

The Italian town of Merano is located in an area so far north that the road signs are all in Italian and German, and many of the inhabitants are more at home speaking the latter. The idyllic setting, where the Venosta and Pusteria valleys meet, surrounded by vineyards and orchards (the area is famous for its apples), and its climate led to it becoming a spa location more than 170 years ago, with the first guests being offered milk and whey, grape and mountain air cures, depending on the time of year.

One of the town's best-known venues recently entered the digital domain, while maintaining the impeccably preserved style of its past. Merano's Kurhaus is one of the most striking buildings in the town centre and is a perfect example of the buildings typical of Mitteleuropa spa towns, originally hosting tourists for treatment and leisure.

For its inauguration in 1873, it was lit with 120 gas lamps – replaced in 1897, with the advent of electricity. Following an overall rebuild, the impressive white building was able to host concerts, banquets, conferences, dances and other events and, after the addition of the large Kursaal hall and a rotunda, the Kurhaus was inaugurated once again in 1914. From this time it has been able to host a variety of events in rooms that vary in capacity from a dozen or so up to the splendid Liberty-style Kursaal, which can hold 1,000 people.

## Low visual impact

The system integrator responsible for installing the new sound reinforcement system in the main room was Matteo Coppe

of Audiotek – an audio, video and lighting consultant and installation firm from nearby Pineta di Laives – who explains the brief he received from the management: “Over and above what the new system had to achieve from an acoustic point of view, the most important factor was that it had to be as unobtrusive as possible as far as visual impact was concerned. This meant using the cable ducts already in place for the majority of the new Cat-5 cable runs we put in, which consequently conditioned, at least in part, the positioning of some of the enclosures.”

Speech is involved in 90% of the events hosted by the Kursaal (presentations, fashion

**‘The most important factor was that it had to be as unobtrusive as possible’**

Matteo Coppe, Audiotek

parades, contests and so on), so this was the priority; however, recorded music also has to be amplified, and Coppe also took into consideration the possibility of concerts held by small classical music and jazz groups.

From an acoustic point of view, there were considerable reverb problems to be overcome with the system, due to a large amount of

glazing; numerous reflecting surfaces, including a high curved ceiling; and two large balconies that run almost across the entire length of the room.

Following a careful study of all these factors, Coppe opted for a point-source system. In close collaboration with the venue's works manager on the project, Fabrizio Dall'Oca, he installed and calibrated several models from Yamaha's Installation Series of loudspeaker systems, positioning precisely aimed, fine-tuned delay enclosures on the main floor level and the two balconies.

The floor-level of the room features a main system comprising two IF2208 speakers mounted on the columns immediately alongside the stage, and two wheel-mounted IF1118 subwoofers moved into place when required.

“The delay setup [is made up of] three pairs of IF2108 enclosures mounted on the other columns running from the stage towards the entrance,” says Coppe. “The wide main balconies also have a main system (two IF2108), whereas the delay speakers are two pairs of bracket-mounted IF2205, pointing outwards and tilted slightly downwards to ensure the best possible coverage.”

Two more IF2205 (the smallest model in the Installation Series) can also be installed when necessary on either side of a small balcony below the control room, which is located above the entrance to the hall. On stage, there are four IF2108 monitors and two IF2205 on the edge of the stage for infill chores.

## Console control

Coppe installed a Yamaha M7CL digital mixing console in the control room. There are connection points in the floor at the centre of

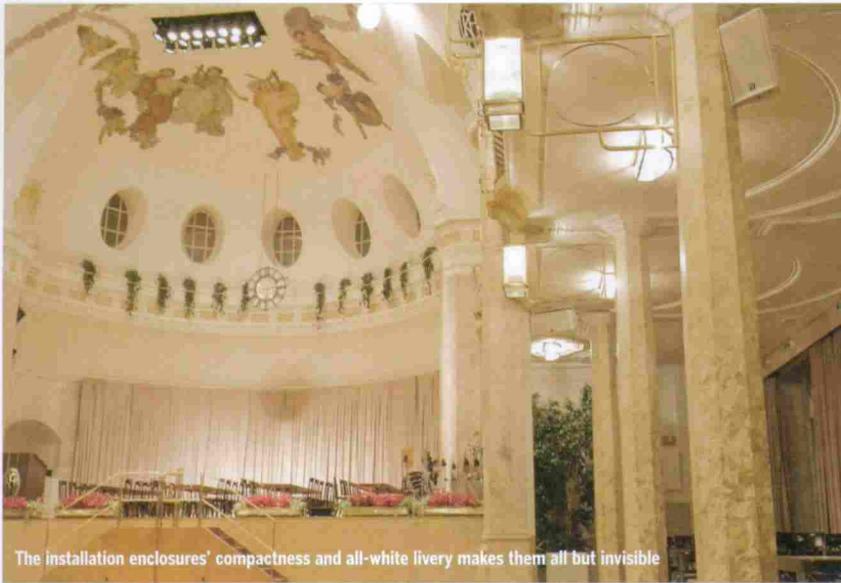
the room and on the balcony below the control room, enabling the desk to be moved if necessary; in addition, a wireless access point allows the M7CL to be controlled from anywhere in the room via a tablet PC.

Signals are fed from the console via EtherSound to a Yamaha DME64N, on which 24 outputs ensure optimum control flexibility (the DSP is programmed with a speaker processor, delay and 32-band graphic EQ on the system's main L-R).

“On stage, we installed a rack in the wings with three Yamaha AD8HR remotely controllable mic preamps, which have the sonic quality of the PM5000 console, and allow gain and phantom power to be controlled directly from the console,” Coppe enthuses. “Thanks to a NAI48-ES network audio interface, up to 48 channels of audio can be routed via AuviTran EtherSound to and from the control room with a single Cat-5 cable.”

The Yamaha amp rack features three models from the PC series: a 3301N for the front IF2208; a 6501N for the subs; six 2001N, which power the delay enclosures and monitors; and two four-channel XM 4180, used with the IF2205 on the balcony. Alongside the Yamaha amps, the original amps for speakers located throughout the venue are used to play the gong signals warning the public that an event is about to begin, or that the interval is almost over. This too has gone digital, with Coppe adding an MP3 player, loaded with a series of recorded gongs.

As well as stressing the fact that, thanks to their compactness and all-white livery, the installation enclosures are almost invisible, Coppe explains that, before confirming them, he put them through their paces at a



The installation enclosures' compactness and all-white livery makes them all but invisible



Large amounts of Yamaha kit in the control room

## Installed

### AUDIO

Yamaha M7CL 32 digital mixing console  
Yamaha NA148ES network audio interface  
Yamaha DME 64 digital mixing engine  
Yamaha AD8HR preamps  
Yamaha amps: PC3301N, PC 6501N, PC 2001N, XM 4180  
Yamaha Installation Series speakers: IF 2208, IF 2108, IF 2205  
Yamaha Installation Series IF 1118 subwoofers

### VIDEO

Clay Paky Alpha Wash Halo 1200  
ETC Congo jr  
ETC Playback Master Wing  
ETC Smart Fade ML

few small live events – he's also a well known live sound engineer on some of Italy's most prestigious jazz festivals. "They sound really good, particularly the IF2208, but they've all got punch, clean sound and plenty of dynamics," he adds.

### Lighting upgrade

The venue also upgraded its lighting system as Oskar Stricker, of local lighting contractor Oskar Light KG, explains: "In the main room, we installed four Clay Paky Alpha Wash Halo 1200 along either side of the hall and put five more into a smaller room, the Pavillon des Fleurs."

As far as control is concerned, an ETC Congo jr and Master Playback Wing were installed in the Kursaal control room. As well as the new motorised fixtures, these also handle the Neithammer conventionals

already installed in the room: 18 2kW profiles, two 1kW fresnels, two 1kW PCs, two 1kW profiles and 20 PAR 1kW, plus a pair of 2kW halogen followspots.

Stricker programmed several scenes for the Clay Paky units to cater for the most frequently used stage configurations, which vary according to the type of show being held, as he did with the SmartFade ML used to control the moving head units in the smaller room.

The Clay Paky fixtures were chosen after talks with the client, who wanted to be able to control the positioning directly from the console and wanted units with dimmable halogen lamps that were also able to ensure quiet movement during events.

"ETC control hardware was chosen, because both the Kursaal and the local Civic Theatre had used a series of AVAB light desks – the theatre has had AVAB 211, Mini Export

and Presto units in the past and at present has an AVAB Pronto, whereas the Kursaal had an AVAB 202," says Stricker. "Fifteen years of positive experience with these left the client with no doubts as to the brand."

Coppe and Stricker both explain that, since none of the Kurhaus staff are expert sound engineers or lighting console operators, the Yamaha and ETC desks were both chosen for the intuitive nature of their control surfaces and interfaces, as well as for the ability to program presets during installation and start-up work. **IE**

- [www.audiotek.org](http://www.audiotek.org)
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**'Up to 48 channels of audio can be routed to and from the control room with a single Cat-5 cable'**

Matteo Coppe, Audiotek

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