



With over 1000 systems sold in Europe, the PM5D has become the standard digital console for complex live productions. Now featuring the **PM5DEX** and **Touring Solutions** stageracks, the PM5D has grown in perfect sync with the ever increasing channel count and networking stagebox functionality requirements of today's markets.

More than 100 Touring Solutions and EX systems already have been delivered to European touring companies and theater installations - a number increasing by the day. Contact our sales engineers for more information - or visit us at PLASA2008 to see how easy - and affordable - it is to expand a PM5D system.

LIVE AT EARLS COURT taken literally - visit Yamaha on stand nr. H39 at the 2008 PLASA show and find out how Yamaha expands the product portfolio with easy to use networked audio solutions for the live markets. Not just for a single console - but for use with all Yamaha mixers and mixing engines on the market, offering true flexibility in networked live systems. Varying from single mixer configurations with 16 inputs and 8 returns to full blown multiple mixer systems with over 100 channels - Yamaha now offers an easy to use, affordable solution.

PLASA08
LIVE AT EARLS COURT : 7 - 10 SEPTEMBER 2008



CA Training Seminars

Today, **knowledge** is a strategic asset for any company in the modern world that we live in - and it's no different for companies in the audio markets. Yamaha provides just the thing: knowledge - not as a single product training, but as a series of training seminars on technology, system design, implementation and usage of today's digital and networked audio systems - covering everything from the microphone head amp to the loudspeakers on stage; and everything in between of course. Check out page 4 of this newsletter for an overview of the European leg of the YCATS tour.

Yamaha Music Central Europe welcomes it's new team member Kai Koennecke as the sales engineer for Southern Germany. Kai has an impressive history in Pro audio sales and rental - including experience with networked audio systems. With his excellent mix of professionalism, hands-on mentality and humour he'll feel right at home in the central Europe CA team.



To check out more career opportunities at the rapidly expanding Yamaha Commercial Audio division, go to www.yamahacommercialaudio.com and click 'job offers'.

This spring, the **Eurovision Song Contest** took place for the 53rd time. 43 countries took part and 25 made it to the final on May 24th in Belgrade. A huge technical and logistical effort was put into the grand finale of the Eurovision show, which has been run every year since 1956 by the European Broadcasting Union (EBU), making it the largest live production TV event in Europe. Just the rehearsals for the entire production took two weeks...

This year, Procon Event Engineering from Hamburg took care of the Eurovision Song Contest for the second time as general service provider. They supplied all the technical equipment from stage and riggings to sound and video, broadcasting van, camera technology and lighting. The project planner and head of sound was Kai Reiss, who has already been responsible for numerous well-known events such as Wacken Open Air, the Pope's visit to Bavaria, Melt Festival, Bravo Super Show and The Dome. Reiss used digital Yamaha technology for sound reproduction in virtually every important position. A total of six Yamaha digital mixing consoles from the PM1D, PM5D and DM2000 ranges were used for the FOH and monitor desk, plus two DME64N and various AD8HR and DA824 A/D and D/A converter systems, giving a total of around 128 channels. A DM1000 and a DME32 were also installed in the Green Room, the artists' lounge in the backstage area.

Bearing in mind the significance of this event, the real challenge was in providing fully redundant FOH and monitor desks - the three consoles required here were doubled up, including any DSP units, so that if one component stopped working, it could immediately be replaced by a second one.

On stage, the signal sources were distributed via analog splitters to the FOH and monitor mixers and to the broadcasting van used for the live broadcast. This concept, where all three channels have their own A/D converter, was chosen for this production because it is particularly reliable and also offered the advantage that each of the three crews could independently control the analog gains of their pre-amps.



PROCON Event Engineering



Glass fibre systems were used for the transmission to the FOH desk. Their signal channels were fed straight into a total of four digital consoles using appropriate interface cards— a PM5D-RH for artists' appearances and a DM2000 for verbal contributions such as presentations, playbacks or conference sessions. Both consoles were summed via the DME64N DSP system, which also generated a shifter for the presenters' headsets. The entire set-up, consisting of two consoles and the DME, was installed twice for redundancy purposes.

Horst Hartmann, monitor man for well-known acts and shows such as Die Toten Hosen, Scorpions, Peter Dinklage, Juli, Bravo Super Show and The Dome, was also responsible for monitor mixing at this year's Eurovision Song Contest. His workplace in Belgrade consisted of two PM1D consoles plus associated DSP units, where a particularly elegant solution has been found for redundancy switchover in the event of breakdown. If a DSP unit malfunctions, the second unit, cabled in parallel, is switched in via the A/B change-over switch. After just 4 seconds the second unit takes on the role of the old unit without changing the set-up. In the same way, the other console can also be activated if there is a defect in the user interface and, as a last resort, there was also a laptop in Belgrade that could have been used to control the DSP unit using "Studio Manager" software.



Horst Hartmann on the PM1D: "I think the console is still the first choice for major live productions, if only because there are 48 controls available in parallel on the interface. There are simply more operating elements for direct access here than anywhere else and you hardly need to change the layers during the show. That ensures a much clearer overview than is available on a console with just 24 faders, especially for complex tasks. What's more, the rest of the sector has yet to match the reliability of the PM1D, presumably because highly specialised hardware is used here, rather than a modified PC."

Conventional wedges, sidefills and in-ear wireless channels were available as monitor channels in Belgrade, so the artists could choose their preferred type of monitoring in advance. As the wedges on the stage are built in under gratings and the sidefills are winged, most artists naturally preferred in-ear monitoring, especially if their choreography involved lots of movement. Nevertheless, the wedges were always useful, because lots of artists had not brought any of their own, moulded IEM earpieces and universal earpieces can fall out really easily during fast movements.



A maximum of six artists were on stage at any one time, so Hartmann worked with six IEM channels, with three receivers available for each. This enabled the IEM systems for the next two acts to be prepared while an act was in progress. All IEM transmitters were controlled in pre-fader mode so that the artists could hear themselves immediately after the end of the previous act. The wedges and sidefills, on the other hand, were controlled as normal via the monitor console faders and only raised at the beginning of the song to avoid disturbing background noises. According to Hartmann, this process has become well established, so the artists can check that their monitoring is working very early on without disrupting the show.

YCATS European tour schedule September 2008 to February 2009

Sept. 24	Lainate	Italy	Digital Mixer and Audio Networking	Nov. 13	Prague	Czech republic	DME & Networking
Sept. 25	Lainate	Italy	Digital Mixer and Audio Networking	Nov. 18	Frankfurt	Germany	DME & Networking
Sept. 29	Milton keynes	UK	M7CL and LS9 console training	Nov. 20	Rellingen	Germany	DME & Networking
Sept. 30	Milton Keynes	UK	M7CL and LS9 console training	Nov. 21	London	UK	Digital Audio for Theatres
Oct. 1	Budapest	Hungary	PM5D, M7CL, LS9 console training	Nov. 22	London	UK	Digital Audio for Theatres
Oct. 7	Bratislava	Slovakia	DME & Networking	Nov. 24	Zurich	Switzerland	PM5D, M7CL and LS9 console training
Oct. 7	Vianen	Netherlands	Commercial Installed Sound design	Nov. 25	Zurich	Switzerland	DME & Networking
Oct. 9	Ljubljana	Slovenia	Overall product training	Nov. 26	Lausanne	Switzerland	Digital consoles & Networking at CFMS
Oct. 11	London	UK	Audio Networking	Nov. 27	Geneva	Switzerland	DME & Networking
Oct. 14	Graz	Austria	PM5D, M7CL, LS9 console training	Nov. 28	Geneva	Switzerland	PM5D, M7CL and LS9 console training
Oct. 16	Vienna	Austria	PM5D, M7CL, LS9 console training	Dec. 8	Paris	France	M7CL console training
Oct. 21	Wels	Austria	PM5D, M7CL, LS9 console training	Dec. 9	Paris	France	PM5D console training
Oct. 23	Prague	Czech republic	PM5D, M7CL, LS9 console training	Dec. 9	Aarschot	Belgium	PM5D, M7CL, LS9 console training
Oct. 28	Sofia	Bulgaria	PM5D, M7CL, LS9 console training	Dec. 10	Paris	France	Networking
Oct. 28	Paris	France	PM5D console training	Dec. 10	Aarschot	Belgium	Commercial Installed Sound design
Oct. 29	Sofia	Bulgaria	DME & Networking	Dec. 11	Paris	France	DME programming
Oct. 29	Paris	France	DME programming	Feb. 10	Vianen	Netherlands	Commercial Installed Sound design
Oct. 30	Paris	France	Networking	Feb. 13	Aarschot	Belgium	ES100 for touring applications
Oct. 31	Paris	France	M7CL console training	Feb. 17	Paris	France	PM5D console training
Nov. 4	Bucarest	Romania	PM5D, M7CL, LS9 console training	Feb. 18	Paris	France	DME programming
Nov. 5	Bucarest	Romania	DME & Networking	Feb. 19	Paris	France	networking
Nov. 11	Wels	Austria	DME & Networking	Feb. 20	Paris	France	M7CL console training



As audio applications and products become more and more complex with the introduction of digital consoles, signal processing and networking, Yamaha offers dedicated product and application trainings throughout the world. YCATS - short for '**Yamaha Commercial Audio Training Seminars**' - is held in all European countries, offering an efficient and effective tool for audio professionals to update knowledge and share experience. The 2008-2009 tour includes over 100 seminars, with 44 seminars now scheduled from September 2008 to February 2009. Application is free of charge. To apply for the central European seminars please send an email to ycats@yamaha.de.



CA Training Seminars