



As we speak, the **YCATS Touring Solutions Seminars** cover the technology of Ethernet based audio networks - CobraNet, EtherSound -, system integration - including video, DMX and other manufacturer's protocols - and the real life application of these technologies in the touring industry. Check the seminar schedule on www.yamahaproaudio.com/training.



Yamaha keeps presenting its products and technologies on **audio exhibitions** worldwide. Recent exhibitions include Music Media in Krakow (Poland), Muzyka in Prague (Tsjech republic), ACF in Brussels (Belgium). Coming up: Vakbeurs Theatertechniek in Rotterdam (Netherlands), ISE in Amsterdam (Netherlands) and Pro Light & Sound (Frankfurt). Besides excellent products and clever product specialists we also have fine coffee, we are looking forward to meet you!



Checking specifications of Yamaha products just got a lot easier with the launch of the **datasheet page** on www.yamahaproaudio.com. This page offers quick and to the point datasheets of all Yamaha products- including front and rear panel layouts, i/o specifications, weight and dimensions and much more. Definitely a page to bookmark for quick reference: www.yamahaproaudio.com/support/datasheets



Yamaha AV group is one of the world's leading manufacturers of AV equipment such as DVD players, AV-receivers, plasma screens, surround amplifiers and speaker systems, digital sound projectors, CD and tape players, project phone solutions. Selected components in the AV line-up feature IR and RS232 media control by AMX and Crestron, complementary to the media control features of the DME Digital Mixing Engine series. Contact our Commercial Audio sales engineers for more information on Yamaha AV components for system integration, or visit our stand at ISE Amsterdam in January 2008.

Traditional music festivals - having to provide mixing facilities to many different engineers in back to back performance schedules - often use multiple analogue mixing consoles. But in the last years the digital domain has come through step by step, turning music festival mixing from analogue to digital. This also goes for the **W.O.A. Wacken Open Air** - well known from the award winning motion picture 'Full Metal Village' directed by Sung-Hyung Cho. In 2006, the German broadcaster WDR aired a 2 hour documentary on this festival in their 'RockPalast' series. The festival was organised for the first time in 1990, entertaining 800 heavy metal fans. Since 2004 this number has increased to 50.000, covering a venue area of 20 hectare, with additional 140 hectare of camping space.

The W.O.A. festival is the highlight of the metal scene. Many leading metal bands such as Saxon, Grave Digger and Helloween recorded their live DVD's here. In 2004 the main German metal band 'Bohsen Onkelz' chose Wacken for their last farewell performance. Amongst the 50.000 visitors are many leading metal band members visiting Wacken Open Air as VIP - not playing but listening, indicating the importance of this festival in the metal scene. Since 2002 a special train - called the 'Metal Train' - transports fans from all over Germany to the city of Wacken. Bus tours are arranged for fans even from the Scandinavian countries.

All in all a heavy job for Crystal Sound, the rental company responsible for the audio system at the festival. For the engineers preferring an analogue audio console a PM4000 was kept aside, but most bands used the combination of an M7CL for monitor and PM5D for FOH on both main stages nicknamed 'True Metal' and 'Black Metal'. Some visiting bands such as 'Subway to Sally' took their own PM5D console. The metal band 'Rage' collaborated with the symphonic orchestra "Ligua Mortis Ensemble" featuring full blown Brass, Woodwind, percussion and strings sections using a PM5D for the orchestra submix. Here digital consoles really pushes the festival's performance forward, not only in audio quality but also in flexibility and creativity. More information on Crystal sound on www.crystal-sound.de. More information on Wacken Open Air on www.wacken.com



Yamaha offers a complete line-up of **professional power amplifiers** for the touring industry, concert hall/theater installations and the commercial installed sound market. Using Yamaha's own EEEngine technology an ultra-high power efficiency equal to class D is achieved without any compromise to the audio quality. Control and monitor interfacing is provided through GPI, RS485 or Ethernet - using DME engines, ACU16C or ACD1 amplifier controllers. The line-up offers any power range, from 200W distribution (100V) power output up to 2x3000W power output with built in DSP and digital/networked audio i/o. Last, but not least, the price to power ratio is unprecedented. Contact one of our sales engineers to find out. More about EEEngine technology on www.yamahaproaudio.com



	ACD1	ACU16C
Control Soft	Amp Manager II	Amp Manager I
Protocol	TCP/IP	USB
Controls	Tn, PC, XP, XM, XH	Tn, PC
Max # amps	40	32



	TXn series	Tn series	PC series	XP series	XM series	XH series
Models (Outputpower)	TX4n (2x2000W@4Ω) TX5n (2x2300W@4Ω) TX6n (2x3000W@4Ω)	T3n (2x1400W@4Ω) T4n (2x1950W@4Ω) T5n (2x2200W@4Ω)	PC2001N (2x400W@4Ω) PC3301N (2x600W@4Ω) PC4801N (2x850W@4Ω) PC6501N (2x1100W@4Ω) PC9501N (2x1600W@4Ω)	XP1000 (2x165W@4Ω) XP2500 (2x390W@4Ω) XP3500 (2x590W@4Ω) XP5000 (2x750W@4Ω) XP7000 (2x1100W@4Ω)	XM4080 (4x120W@4Ω) XM4180 (4x250W@4Ω)	XH200 (2x100W/100V)
THD + N	0,2%	0,1%	0,1%	0,1%	0,1%	0,1%
S/N	>106~108dB	>105~108dB	>100~106dB	>96~104dB	103dB	103dB
Damping Factor	800	800	-	300	100	
Control	Direct through TCP/IP	ACU16C, ACD1	ACU16C, ACD1	GPI, ACD1	GPI, ACD1	GPI, ACD1
Weight		14,0kg	12,5~13,0kg	12,0~14,0kg	10,0kg	9,8kg



Engineer:
Alan Richardson

Project:
Elton John



Engineer:
Fabien Chanier

Project:
I autre



Engineer:
Gareth Fox-Williams

Project:
Barbara Dickson



Engineer:
Rochard Rowley

Project:
The Tweeneys



Engineer:
Artro Pellegrini

Project:
Amici



To join the Yamaha Digital Live Mixing engineers reference list, email your picture to proaudio@yamaha.nl