

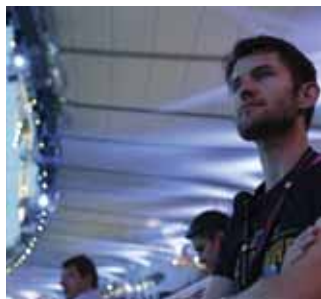
 On using rechargeables, Willsallen says: "We would have used around 26,000 AA batteries otherwise"

Olympics boosted by sustainable mics

By David Stewart

SHURE'S NEW Axient wireless microphones were widely used by headline stars at the opening and closing ceremonies during London's 2012 Olympics. Working together with UK-based company Delta Sound, audio systems supply specialist Norwest favoured Shure from early on in the systems design process for the event. The games this summer marked Axient's debut at an Olympic ceremony.

Norwest's Chief RF Specialist Steve Caldwell heard about the new product line directly from connections at Shure's engineering team in the US, early in the product development process. The Axient systems were then written into the final draft of the London plan by Scott Willsallen, audio systems designer London 2012 Ceremonies and Bobby Aitken, sound designer London 2012 Ceremonies.



Scott Willsallen: "We used Shure KSM9s as the default standard mics on these systems, swapping to Beta 58s if the artists involved were a bit more... noisy!"

Willsallen had to ensure that the Axient systems, which only became commercially available in the spring, would be suitable for use during summer 2012, given the intense media focus on the Games. "I wasn't going to take any chances," he explains. "You don't get a second chance at an event like this one."

Caldwell's case for Axient centred on several features of the new systems, including audio quality, Frequency Diversity, and the unique rechargeable battery technology developed for Axient (also used in Shure's ULX-D digital wireless systems and PSM900/1000). "We used Shure KSM9s as the default standard mics on these systems, swapping to Beta 58s if the artists involved were a little bit more... shall we say... noisy! An Axient transmitter with a KSM9 sounds like you're using a wired

KSM9; it just sounds great. That's how it should be, of course, but it's quite a step!" comments Willsallen.

"With the Axient handhelds," explains Caldwell, "we can transmit on two frequencies at the same time, should we need" →



Axient wireless microphones were widely used by headline stars at the opening ceremony during the London 2012 Olympics

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The Workflow

 The studios are to build a 45,000sq ft stage next year

Pinewood boost for TV

Pinewood has delivered a multi-million pound investment into its television facilities. **Jake Young** paid a visit to its new gallery and increased lighting infrastructure

PINEWOOD'S DEDICATED TV Studios, the 9,000sq ft TV One and TV Two, now boast a new full HD 5.1 gallery, increased studio lighting infrastructure, increased production accommodation and new studio floors.

One of the big factors behind this investment is more demand from clients. "There seems to be a lot more content being produced, broadcasters are committing a lot more investment into production and we're seeing that change," says Simon Honey, head of TV Operations at Pinewood. "The studio market is growing and there is a demand and a need for it."

When it came to building the facilities — an in-house installation and design completed mid-September — Pinewood ensured that the equipment bought was what clients needed. "People wanted the capability of being able to walk in, plug-and-play and leave with their product," says Honey. "It's paramount to us that the client coming in here has got a tool that they know how to use, so every piece of kit was consulted with people who use the studio."

The three-room (lighting, production and sound) gallery can operate either studio, or both studios at the same time. In the lighting environment, Pinewood chose eight fully source selectable multi-viewers on Panasonic 42-inch HD displays and five Sony 25-inch HD OLED monitors. Next door in production is a Sony MVS 7000X 3ME vision mixer and 12 Panasonic 42-inch HD displays.



Simon Honey (in front of Sony vision mixer): "The studio market is growing"



Main mixing environment with Calrec Artemis Beam mixing console

For sound, Pinewood chose ATC 5.1 surround sound loudspeaker monitoring and a Calrec Artemis Beam mixing console. RTS/Telex talkback facilities enable communication across the three rooms.

For each studio, Pinewood has installed 250 lighting monopoles. "The old equipment we had was quite slow and laboured, so we designed a bespoke monopole that actually works for us," says

Honey. "It's not an off-the-shelf design. Every single one of them can hold 75kg." Pinewood has also upgraded the specification of its dimmers and hard power. "We have 360 3kw and 5kw dimmer control channels in each studio and 200 hard power outlets," he says.

Tapeless workflow

The studios' Digital Content Services department has also created a digital solution to

ingest, digest, transfer, edit, store and deliver content in any format or language. "Expanding TV not only meant being able to give the client their content on a tape, but to help them with their cost efficiency by delving into the world of tapeless workflow," says Honey. "We have a master transfer centre, video and audio post production and a data centre where we can archive and store."

Pinewood has invested in two DVS Venice 4200 4-channel

video servers for ingest/playback and a DVS SpycerBox Ultra storage server with 48TB media storage. Between them, the Venice servers offer eight channels of record, playback or transcoding for formats including MXF Op-Atom, OP-1a, QuickTime and GXF files as well as native support for DNxHD, XDCAM, DVCPRO, AVC-Ultra and Apple ProRes 422. Pinewood's fibre linked DVS SpycerBox Ultra has a capacity of 72TB with RAID 6 protection.

Pinewood has just completed its first production in the new facilities for CBBC (children's channel) comedy sketch show *The Ministry of Curious Stuff*. For larger productions, the studios offer the new 30,000sq ft Richard Attenborough Stage — with a 50ft grid height, designed for both film and television production. In addition, the studios are to build a 45,000sq ft stage next year.

TVBE



The new 30,000sqft Richard Attenborough Stage at Pinewood Studios

Studio floor

- Up to 20x Sony HDC-1000 studio cameras and HDC-1500 portable cameras with choice of Canon Box, wide, standard lenses on request
- Full range of camera grip equipment; Fulmer, Quattro, Quattro S, Hawk, Teal, Dolphin Peds, and tripods with choice of Vector heads
- 360° black and white cyc drapes set at 28ft
- Cyc track system has interchangeable section for ease of additional drape rigging
- Elgood TV Studio Floor system Remote Strand Galaxy lighting console for rigging finelight control

to. We receive on two or maybe three receiver locations for each performer, for redundancy purposes. That has added so much confidence to the business of using handheld wireless mics. The technology that's gone into the rechargeables is also amazing. At any time, I can see over the network down to five-minute increments how much battery life is left in each of those transmitters; I've never been able to do that before. And the time readout on the rechargeable is so reliable. That saves money and time;

we're not constantly throwing away AA batteries that are only half-used."

"At any time, I can see over the network down to five-minute increments how much battery life is left in each of those transmitters; I've never been able to do that before"

"It's sustainable too," adds Willsallen. "This was flagged as the most sustainable Olympics yet, and to have something

rechargeable that was that good was amazing. We would have used around 26,000 AA

batteries otherwise, and they would have been no use to anybody afterwards, and gone straight into landfill."

Axient's efficient use of the available RF spectrum was also a key factor. Axient can operate

Steve Caldwell, Norwest

over 20 wireless channels in a standard UK 8MHz TV channel. Caldwell's Shure contacts extend to key members of the US-based

Axient engineering and design team — but all on-site support for Axient in London was handled by Shure Distribution UK (SDUK).

"The Olympic Games on your doorstep is a once-in-a-lifetime opportunity," comments Tuomo Tolonen, Applications & Product manager, SDUK. "Everyone involved with the production put on four amazing memorable shows and I am pleased we've been able to be a part of it and see Axient deliver on the largest show imaginable."

www.axient.net
www.shuredistribution.co.uk

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