



the song remains the same

A tribute to Ahmet Ertegun is the occasion for the historic reunion of Led Zeppelin

In a year that saw some big events in the English concert world—including Live Earth and the Concert for Diana—few created as much excitement as the return of Led Zeppelin for a concert in memory of Ahmet Ertegun, the late founder of Atlantic Records.

The event, a fundraiser for Ertegun's education fund held at the O2 Arena on December 10, was

realized by team of top industry professionals. The process began during the summer, when the event was not fully confirmed. "Once we got the go-ahead," says production manager Jim Baggott, "we spoke to some key people—such as lighting designer Dave Hill; live image and video director Dick Carruthers; Mark Norton from Thinkfarm, who provided the show's projection imagery; Peter Bingham,

who was involved in the initial design for the show; and Zeppelin's production manager, Steve Iredale, who came onboard fairly early on."

Video

All involved envisioned a big, open stage with plenty of imagery. "The band was involved, right from the start, with how their part of the show was going to look," says Baggott.

“We knew we wanted to steer away from the traditional left /right screen arrangement and use one big screen to back them.”

It became apparent that a traditional LED screen, creating a solid wall upstage stage, wouldn't work for the band, so Creative Technology brought in a 280-sq-m. Element Labs Stealth LED screen, recommended by Mike Walker from Live & Direct, the event's video consultant.

“It gave us a lot more flexibility,” says Baggott. “We wanted a clean stage and the band didn't want lots of lights around them. This way, we could keep the lighting quite high, but could also create some unusual effects by shining lights straight through from the back of the screen, as it has 55% transparency.”

In addition to the Stealth, CT supplied two standard 6 x 6-panel Barco OLite612 LED screens, positioned stage left and right, which were used during the support bands' sets and to show the video story of Ertegun and his foundation. This was edited by Carruthers' firm, Cheese Film & Video, and shown before the concert. At the beginning of Led Zeppelin's set, the two side screens disappeared and a set of curtains opened to reveal the Stealth.

Technical rehearsals started at Elstree Studios two weeks prior to the show, moving to Shepperton Studios for the final week. “The original idea was to do everything at Elstree,” says CT's production manager, Alex Leinster. “But, because the date of the show had to be moved when Jimmy Page broke his finger, Elstree wasn't available for the entire period.

“In some ways, it worked to our advantage by giving us another chance to run through a load-in and out. Although it comes in a collapsed fan shape and cantilevers out of the flight cases, making it really quick to rig, with only two hours allowed to get the Stealth screen floating off the deck, it was not a bad thing to be

able to have a bit more practice.”

“We arrived at the O2 at 8am on the 9th December,” adds CT's business development manager, Adrian Offord. “Complete set-up for all the screens, including cabling and fault-finding, had to be done by 4:30, for a band walk-through at 5. This was one of the main reasons the Stealth screen was used.”

The content was a combination of Thinkfarm's animated footage, integrated with Carruthers' live camera feeds. “We inhabit a world at Thinkfarm that is not always rock 'n roll and entertainment,” says Mark Norton. “But I've worked in and out of the music and entertainment world for a long time and was brought in to integrate the video element into the set and lighting design, working very closely with Dave [Hill] and Dick [Carruthers].”

Richard Turner programmed the video with a Vista Systems Spyder video processor. The multi-layered Spyder utilized 16 channels to address various areas of the screen individually, the mixes being taken from Carruthers' desk and turned into two separate blocks of information that the screen processors could understand.

As more programming was completed, the team worked out different methods of doing things. “There would be one, two, or even three layers of playback material,” says Carruthers. “In a song like 'Kashmir,' Richard would take that directly from the two six-channel hi-def LSM processors; other times, I would be mixing this in with live shots upstream.”

The entire system was kept in uncompressed HD, using two six-channel EVS devices, as well as mixing on a Snell & Wilcox Kahuna HD/SD production switcher that ran in parallel to the Calypso situated in the OB truck. As it became obvious that there would be a large number of HD cameras, it made sense to get an HD OB unit in, so Carruthers requested Mary Jefferson as video production manager

and Jim Parsons as producer.

The end result was a combination of abstract images and soft-edged video, creating a mood and pace appropriate for each song. “The pace, the colorization, and use of imagery speak volumes,” says Carruthers. “‘Stairway to Heaven' had only a certain amount of impact because it was a slow, gentle mix. Something like 'Black Dog' had a much smaller image size, but because of the way it was 'mashed up' and negative, with black silhouettes and fast cuts, it really hit you in the face.

“I think we got the overall balance right,” adds Carruthers. “The screen was never intrusive; it always felt like a backdrop and had a good combination of animation and live content and a variation of shapes and mixes.”

“This is the biggest screen that has been put into the O2,” says Offord. “From CT's point of view, it was great to be back there after we had been there with Elton John's 200-sq.-m. screen just a month prior. It was an honor to be involved in such a high-profile project.”

Lighting

Having spent a quarter of a century with the Rolling Stones, Hill knows a thing or two about lighting major artists. As show director and lighting designer, it was his responsibility to ensure that the visual elements worked seamlessly, without stealing focus from the band.

“It was decided, at the beginning of the planning process, that the show would feature the large screen,” Hill says. “So the lighting and video had to be an integrated design. The band didn't want any structures or set onstage, so I was limited to floor lighting, and everything else being hung 35' above the band. My first priority was to specify lights with lot of punch.”

Hill chose a selection of Vari*Lite VL3500 washes and VL3000 Spot fixtures for the main overhead rig,

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with Martin MAC 2000 Washes on the front, back, and sides of the truss. (Lighting gear was supplied by PRG Europe.) “To really give me the punch that I needed, I also had 26 Syncrolites: Ten B52 5kWs, seven B53 5kWs, four of the new SX3000 3Ks, and five of the new SX10Ks,” he says. “I put the B53s and SX3000s onto the overhead rig and the rest were on two horizontal trusses, which I flew on a Kinesys system behind the video wall.”

Hill also used Martin Atomic 3000 strobes, plus a 40,000W Lightning Strikes unit beneath Jason Bonham’s drum riser. Given the clear Perspex top on the riser and the fact that the strobe shone through Bonham’s amber Ludwig Vistalite kit, the visual effect was remarkable. “I thought it might be a problem and blind Jason—I’ve done it before,” says Hill. “When we fired it, he said, ‘There is no problem seeing anything—but it is a little warm!’ With 40,000W of power bouncing around, it’s like having four electric fires beneath you, although it’s only for a split-second.”

Hill used the semi-transparent qualities of the Stealth LED screen to good effect, adding another visual dimension via the moving trusses behind it. “At different times, the trusses moved to different heights—and once they were split on two levels mid-screen to frame the video on that piece; a couple of times, I took them up as far as I could, which was nearly 65’ above the stage,” he says.

Not everything was designed to make a big look, however. “The band wanted an intimate moment in the middle of the show when they were ‘bringing it down’ musically with ‘No Quarter’ and ‘Since I’ve Been Loving You,’” says Hill. “That was a tough order when the lights were flown so high, so I amended the design. The main overhead truss was configured as a circle, with four arms protruding from it in an X shape, flown on another Kinesys system to allow it to

descend over the band. I hinged the arms to make it hang over the band in a kind of domed roof effect. I think it worked well, especially as, at that point, the video was configured to only show an image within the structure of the truss. It made for a very nice, intimate moment in the middle of the show.”



The lighting rig gets loaded in.

Sound

“Led Zeppelin is world-renowned for being into their loud music,” says Baggott. “We realized that the band would have to make the final decision about who to use for the sound. When they had gone into rehearsals to see whether they were going to do this concert, they were using Britannia Row for their control, monitors, and desks, and it became apparent that they would definitely be part of the main show.”

“We have worked with Brit Row on a number of events over the years, so that was good for us. Dee Miller was appointed monitor engineer and ‘Big’ Mick Hughes came onboard as front of house. He was keen to use a Meyer Sound loudspeaker system, which he had used before with Metallica and other bands, so he suggested that [the sound gear supplier] Major Tom should be approached to provide those particular boxes, which Brit Row doesn’t stock. It was a joint effort

and we were very happy with the result.” The system comprised 72 Meyer MILO curvilinear loudspeakers, with a center hang of six MICA boxes, and eight flown 700-HP subs per side. Ground stacks included nine 700-HPs per side, and four MICAs per side for outfill. In addition, one MICA per side along with eight UPA-1Ps were strung

across the stage lip for front fills. Three Galileo loudspeaker management systems handled 36 outputs, and a SIM 3 audio analyzer was used to tune the system.

This was the first show in the O2 for Hughes and only his second using a Midas XL8 console. “It was quite bizarre at first,” he says. “I’ve been working with Metallica for over 20 years, and we have developed their live sound over that time. Nobody can tell me what Metallica should sound like live. But, when it came to the Zeppelin show, it seemed that everyone and their dog had an opinion of what the band should sound like!”

The big question was, should the FOH sound replicate Led Zeppelin as it sounded in the ‘70s, or should it take advantage of three decades of audio technology development? After discussions with the band, “I took the modern approach and backdated the sound a little bit,” says Hughes, “although I pulled it back a bit from



The X-shaped truss system designed by Dave Hill gets ready to be flown.

recreating the old sound too much. For example, I went for the ‘airy’ feel, but, to avoid the big, gated drum sound, I just had a loose gate on the bass drum, but the rest were ungated.”

Hughes had to choose his mics carefully; with so many specialized products now available, the inventive use of certain mics for their non-intended purpose is no longer necessary—an innovation that would inevitably change the band’s sound. “On the old footage, it’s incredible to see what mics were used on what jobs,” says Hughes. “I approached it using similar techniques, but using modern mics and the full bandwidth of the console and PA.”

To achieve optimum sound quality, Hughes used an array of Earthworks Audio high-definition microphones, complemented by Audio-Technica and Shure products. Jason Bonham’s drums featured a mix of Earthworks SR25s, SR30s, and TC30s, with Audio-Technica ATM350s on the toms, a Shure SM57, and a Beta 52.

“I really wanted to recreate that big, open Led Zeppelin drum sound,”

he says, “so, as well as the close mics, I used a pair of Earthworks SR25s arrayed as X-Y axis mics—something I’d never done before—complemented by a further pair of SR25s deployed as overheads.” Earthworks also manufactures the KickPad, a small inline unit that adds pre-emphasis to kick drum mics, adding presence and punch to a sound that often needs a little extra zip to make it stand out in a live mix.

A mixture of DIs and Beta 52s were used on John Paul Jones’s bass guitar, bass pedal, and keyboard rig, while Jimmy Page’s guitar cabinets and Theremin featured Audio-Technica AE 2500s and 4050s. Robert Plant’s lead vocals came courtesy of the Shure SM58.

The total was 32 inputs, including a couple of VT playback lines from the video production team. “Although I’m mainly an analog guy, and this was only my second outing in the digital world, I had used the XL8 on stadium dates with Metallica last year and loved it,” says Hughes.

“I did toy with using an XL4, but

the show was a bit of an unknown quantity before we got into rehearsals, and it would have been hard to plan ahead on an analog console. For example, planning every last bit of outboard we needed would have been a problem, especially if we’d had to hire in another effects unit at the last moment. With the XL8, we were able to dial in the onboard effects as required. As it was, we ended up with a total of 70 channels, including 30 effects returns, the video playback, house music, and so on. With an XL4, we’d have been into another console.”

Unusually, the FOH mix was split between Hughes mixing the instruments and Roy Williams, Robert Plant’s FOH engineer, who covered the lead vocal mix. Again, a digital console was useful. “I had known from before the start of rehearsals that two engineers would be doing the show,” says Williams. “Not the easiest thing to do: Two engineers, two pairs of ears, and two egos! Mick and I have known one another for over 30 years, so that helped a lot.

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The sound crew in rehearsal.

The XL8 let me have my own world to work in, with just the vocal mic and eight effects—leaving Mick to create his world without either of us getting in one another's way."

"We felt that using the XL8 gave us an unlimited amount of options," Hughes says. "It was a good thing we did, as the input list grew to over 70 channels, and, if we'd gone analog, we would have been into two desks. The operation of the console made it really easy for Roy and myself to divide the work surface. Being able to set the

last bay of the console to the B zone and then recall a POP [population] group containing Robert's vocal and effects into the B zone, meant that Roy had his own section. This allowed me the remaining two bays and the VCA section to mix the band. The 'a/b' headphone solo busses were invaluable, as I could use one while Roy used the other. And, as before, when I used the XL8 for Metallica, the pure sound and stereo image quality is undeniable."

Throughout the six weeks of pre-production rehearsals, Hughes also got to use a prototype of Klark Teknik's DN9696 high-resolution hard disk recorder. "The band was playing in an adjacent room while I was monitoring on a pair of Genelecs," he says. "The DN9696 gave me the opportunity to record the sessions and then, if the band weren't there, to work on the mix further. As it turned out, the band came in every day, but

they could come in, listen to the recordings and talk about the mix with me. It meant everything about the sound was open and upfront."

The recorder also allowed Hughes to examine the different times that sounds arrived at the various mics and adjust the system to suit. "We identified a phase problem between the microphones on the snare heads and the X-Y mics, because the snare sound was reaching them at different times," he says. "The recorder allowed us to precisely measure the

time difference; we used the delays on the input channels of the XL8 to delay the snare mics and make the sound effectively 'reach' the different mics at the same time."

Hughes had heard very different accounts of the O2's acoustics. "We got in on the day before for the show, and I was concerned about the low frequencies," he says. "I hoped it would clean up when people came in, but it didn't change dramatically between empty and full. With Metallica, I take venue acoustics to the limit and it was the same here—Led Zeppelin was a powerful show."

Hughes added to the XL8's onboard processing a range of outboard equipment, including a Roland SDE3000, TC Helicon VoiceWorks and VoiceDoubler for Plant's lead vocals, an Eventide H3000SE harmonizer, T.C. Electronic M6000 effects mainframe, and Leslie cabinet emulator. The onboard effects dominated on "No Quarter," with the XL8's phaser providing the distinctive effect on the lead vocal. Also, an isolated feed was provided to the Fleetwood Mobile, manned by Tim Summerhayes, where the show was recorded.

Although Dee Miller, the monitor engineer, has worked with Robert Plant for years, the Led Zeppelin gig was another experience altogether. For Plant, Jones, and general stage coverage he specified a system of 11 Turbosound TFM-350 wedges, which incorporated twin 15" LF drivers and a 2" HF compression driver in a 42° angle enclosure. A pair of TFM-450s, featuring a custom 15" neodymium LF driver and a 3" diaphragm neodymium HF compression driver on a 40° x 60° horn, was deployed for Page, another pair of TFM-350s plus subs for Bonham, and six Flashlight mid-highs per side for sidefills.

"I've never had a bad result with Turbosound wedges," says Miller. "The TFM-350s are amazing, I've done a lot of artists with them and the way Britannia Row integrates the

amplifiers and speakers as a complete system is excellent.”

When providing monitors for Plant’s solo gigs, Miller concentrates on the main man; here, he had four music legends to keep happy. “They are all very approachable, but they know what they like and it’s complicated by John Paul Jones playing bass, keyboards, and bass pedals,” he says. “There were quite a few cues, so I was diving all over the desk. I needed to be quick and

Chris Squire (Yes) performing “Fanfare Of The Common Man,” and Bill Wyman’s Rhythm Kings, who backed further performances by Maggie Bell, Alvin Lee (Ten Years After), Paul Rodgers (Free), and Mick Jones (Foreigner). The Rhythm Kings then moved to the adjacent, 2,200-capacity IndigO2 venue, where they entertained at the after-show party, with guests including Ben E. King, Solomon Burke, and Percy Sledge.

The front-of-house space in both

both venues; in the O2, we were using over 80 channels, because of the number of guests,” says Liam Halpin of Britannia Row, “whereas in IndigO2, with fewer guests, we used 56 inputs.”

The lack of space meant that any major outboard provision was out of the question, so only a single graphic EQ was used in each venue. However, “with the number and range of ins/outs, Joffrey was using all six effects engines in the consoles to their full capacity,” says Halpin. “Indeed, that was the biggest challenge of both shows: The sheer number of inputs which had to be dealt with in a very limited amount of time.”

“Another challenge,” adds Poynter, “was that we didn’t have all the guests together in the same place until the show day. Rehearsals took place over successive days, but we didn’t get a full run-through with everyone. However, the ability to save each line-up as a different scene made it far less of a problem than it might have been.”

Halpin also did some rapid coaching of the resident IndigO2 technical team on the D5. “Everything went smoothly,” he says. “The after-show was an excellent collaboration between Britannia Row, WE Audio, and the IndigO2 technical team.”

Everyone involved was aware of the event’s historic nature, and they felt the pressure. “With Metallica, I’ve done a show for a million people on an airfield in Moscow, but I was more nervous than at any show I’ve done in many years,” Hughes says. “Of course I wanted it to be fantastic—it’s been so long since they played live. It was so intense, I only remember the start and end of it. The feedback I’m getting is that it sounded great. But if people are talking about the performance and not really talking about the sound, then we did our jobs.”

Bryan Grant, of Britannia Row, adds, “This was a seminal event on many levels and we’re all very proud to have been a part of it.”



A view of the video system.

hands-on, which is why the H3000 was ideal. Robert likes things edgy; his mix is always a challenge. I have to keep a hand on the fader and my eye on him at all times. It was seat-of-your-pants stuff!”

Miller also used a range of outboard, including a T.C. 2290 delay, T.C Helicon VoiceDoubler, Eventide H3000SE harmonizer, Lexicon PCM70, and Yamaha SPX2000 multi-effects.

Additional acts and the after-party

The other artists on the bill played an important part in the show, as they all had a direct link to Ertegun and his work. The night kicked off with Keith Emerson (ELP, The Nice), Simon Kirke (Bad Company) with Alan White and

venues was minimal, so Britannia Row supplied a DiGiCo D5, chosen for small size, flexibility, number of inputs, and processing power. “Joffrey [Lane, the Rhythm Kings’ engineer, who was using the board for the first time] got to grips with it really well,” says Britannia Row’s Dave Poynter, who was on hand throughout the process. “He downloaded the manual, I showed him how to set a session up, and he just got on with it. It’s very quick to learn, because it looks like an analog desk; you don’t have to scroll through menus to find things.”

It was important that the audio team didn’t treat these high-profile artists as support acts to Led Zeppelin. “We had identical setups in