

## Gearhouse helps close World Cup in style

16 July 2010



*Courtesy Louise Stickland* Gearhouse South Africa was contracted by ceremonies producers VWV Group to deliver all technical aspects of the amazing Closing Ceremony of the 2010 FIFA Soccer World Cup – including rigging, power, sound, lighting and large format projection (which was contracted out to French-based ETC) – utilising the dynamics, skills and services of most companies in the Gearhouse Group.

The 30 minute show at Soccer City Stadium in Soweto happened just ahead of the Final match, which saw Spain win their first World Cup, beating Holland 1-0. It reflected the vibrancy, energy and colour that characterised one of the most successful World Cup tournaments ever. It featured a cast of 740 including 40 “elephant operators” plus 35 headline artists.

Mark Ransom was technical production manager. Technical director Mik Auckland and David Proctor, David Zolkwer and Adrian Bourke from Jack Morton Worldwide acted as consultants, bringing their vast experience in producing world class events to the equation.



A spectacular lightshow was designed by Gearhouse's Hugh Turner and Tim Dunn. Dramatic large format video pitch projections – for the first time in South Africa – helped make the visuals even more memorable.

There were many challenges in staging the first major entertainment event in a brand new venue.

Gearhouse engaged in some serious statistics and logistics, starting the get-in for the Closing Ceremony as soon as the opening match had been played, a month previously. All site/technical logistics and crew co-ordination were handled by project managers, Eyal Yehezkely and Bonni Meyer respectively, while Bill Lawford organised the arrival of 8 containers of equipment by sea freight and a further 50 tonnes by air freight, representing a massive investment by Gearhouse for the show.

Meyer took care of the logistics, crewing and administration, which included the management of up to 140 crew on site at peak times including locals, while Yehezkely looked after the technical operation, including brain teasers like where to position two projection and four follow spot platforms – built by Gearhouse Structures and In2Structures – which were flown in the roof well of the venue's upper concourse. These had to be custom designed by Tim Dunn and approved by the several sets of authorities and structural engineers involved with the stadium. The spot platforms were flown on 16 2-tonne motors and the projection ones on 10.





## Lighting

The lighting scheme was designed and specified by Hugh Turner and Tim Dunn, with Dunn also programming and operating the show. As with all stadium shows, it was a case of creating lots of big, bold, epic looks and statements – Think big, light big – and with 468 of the most powerful moving lights available, they had plenty of opportunity to impress.

Simultaneously, illumination had to be a careful balance so it fulfilled the creative criteria of looking dynamic on camera as well as for the 94,000 capacity audience at Soccer City..... whilst also not interfering with the pitch projections.

The lights were positioned around the stadium on 4 rings – Ring 4 being the highest, flown on trusses at 50 metres high just below roof level, with rings 3, 2 and 1 descending down the stadium to another ring around the perimeter of the field of play. Hanging lights on the lower rings involved the fabrication of special bracketry to be attached to stadium structural elements. Ring 4 lights were rigged on 12 trussing sections flown on 36 x1-tonne CM chain hoists with long chains. Gearhouse Rigging undertook all the rigging involved in the show, which was co-ordinated by Kendall Dixon.

Gearhouse invested heavily in Panther 2K and 5K searchlights and Vari\*Lite for this gig. The 120 Vari\*Lite were bought via South African distributor DWR and is the biggest sale of Vari\*Lite in South Africa to date. Vari-Lite 3000s, 3500s and VLXs were used on this show, along with Robe ColorSpot and ColorWash 2500E ATs and Robe REDWash 3?192 LED wash lights.

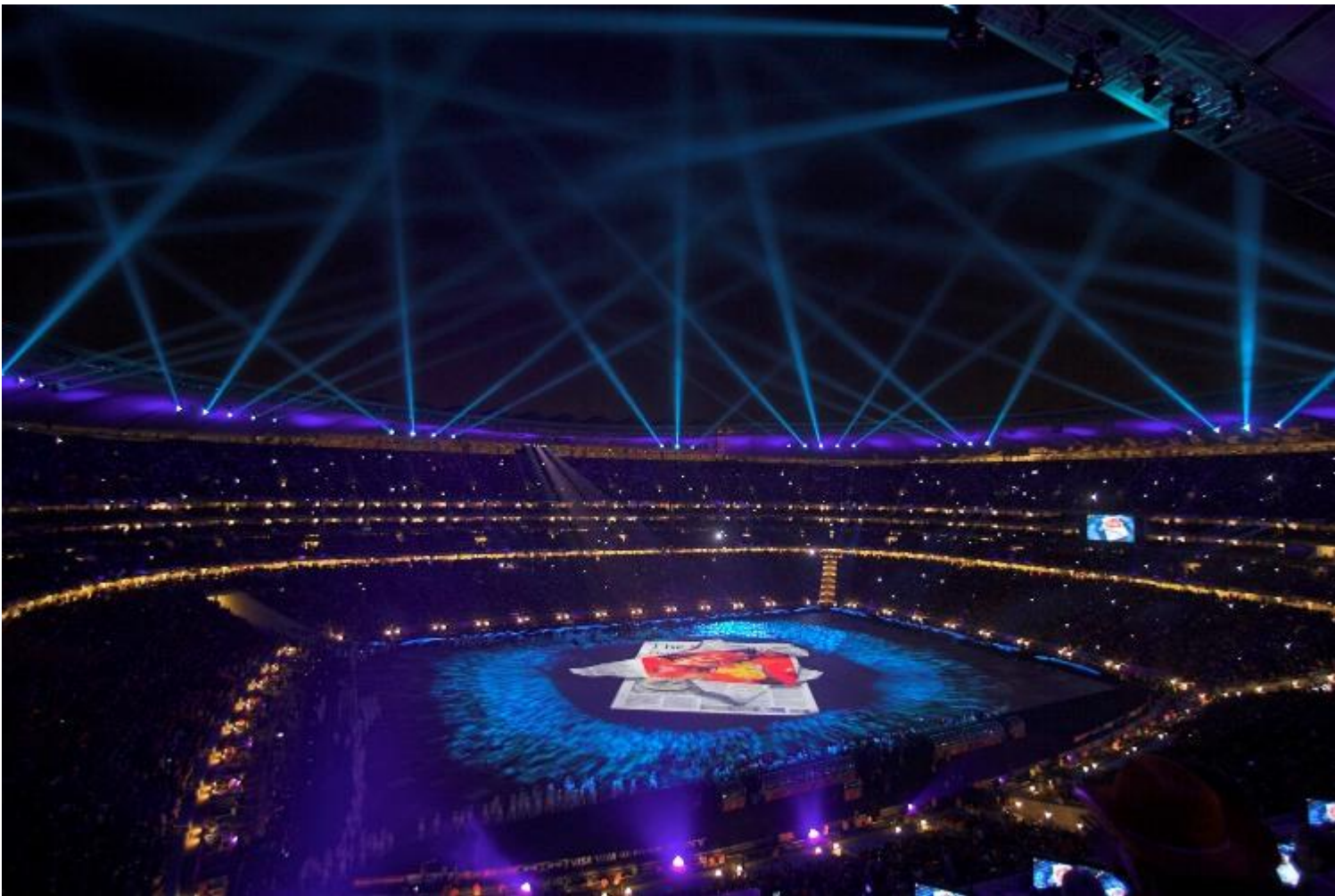
Eight follow spots – Gladiators and Super-troupers – were deployed around the stadium on the aforementioned

4 flown platforms.

Dunn chose an MA Lighting grandMA system for control, consisting of 3 active grandMA consoles utilised for programming, with a fourth used as a technical desk on the field during programming.

The lighting fixtures consumed a total of 30 DMX universes plus 10 spares. The lighting data control network was designed by Chris Grandin from Gearhouse Media. It used 4 Km of fibre optic cable which was looped back on itself all the way around the stadium to provide live backup.

A massive amount of work went into programming the show. Dunn & Turner spent a week before the get in pre-programming the show's basic building blocks on the MA Visualiser, after importing a detailed re-drawn schematic of the stadium architecture and structures into the system. They then spent 7 overnight sessions in the stadium building the show and recording it on the grandMA, which contained hundreds of complex cues.



### Projection

UK based large format projection specialist, Ross Ashton, was appointed to help co-ordinate the stunning pitch projections, and he worked closely with E/T/C Paris who are the best known global exponents of the genre, and were brought in by Gearhouse SA to supply all the hardware and control solutions.

The E/T/C Paris team was led by Patrice Bouqueniaux, and this is the first time that monumental projection has been used in South Africa.

The dramatic 55 metre square projections in the middle of the field-of-play were delivered by 18 x Christie 18K

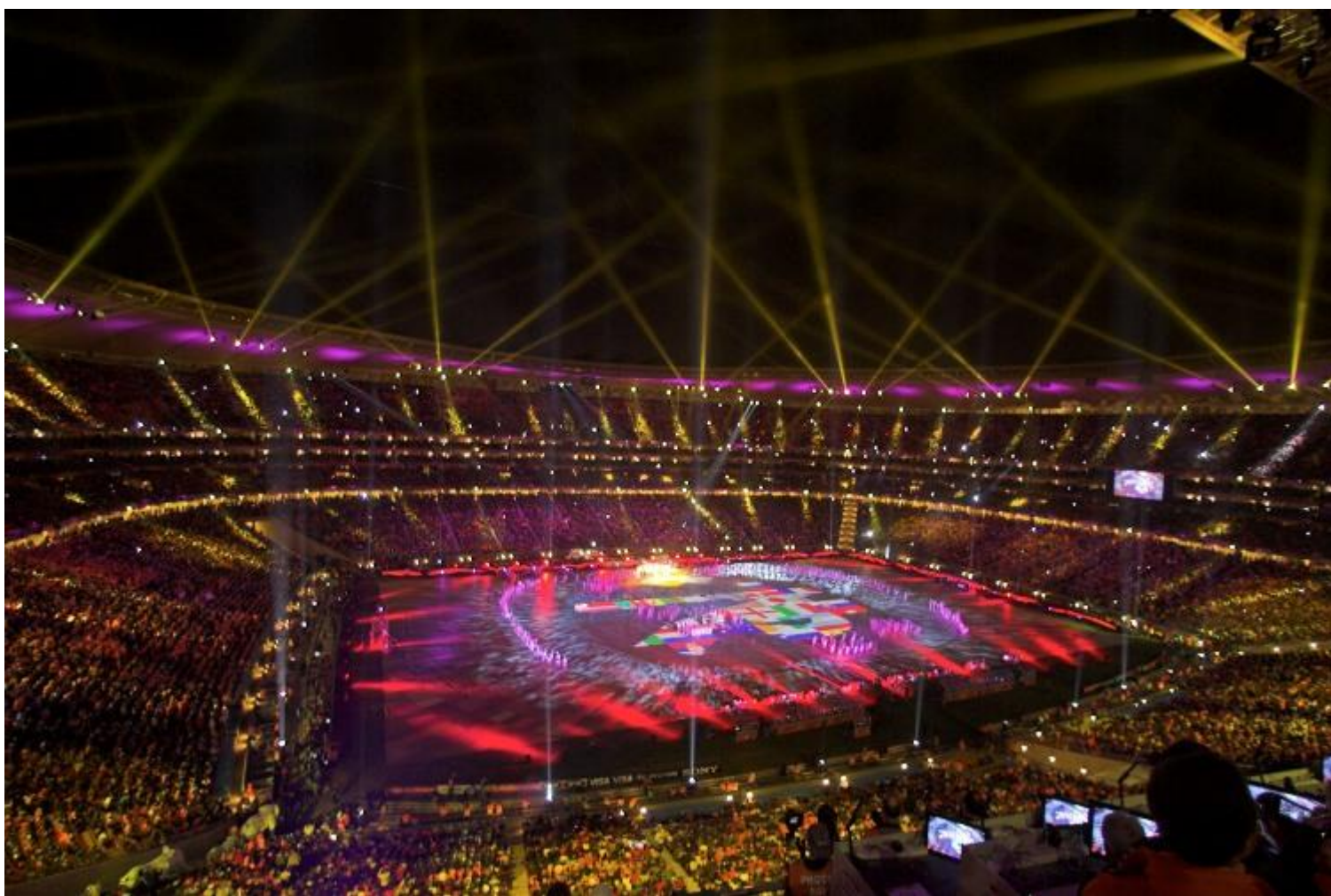


Roadster projectors, mounted on the 2 platforms flown along the east and west (long) sides of Soccer City. The projectors were configured in 16:9 format and rigged in 6 stacks of 3, covering the pitch that was divided into 6 areas.

The show's video content was produced by VVV, who engaged Johannesburg based Ministry of Illusion for the graphic scenes. Each projector received its own video feed and keystone correction to eliminate discrepancies between their optical centres.

E/T/C's powerful proprietary OnlyView PC-based system was used for control, programmed and operated by Yan Kaimakis. This used 18 active OnlyView servers, one per machine with another 18 as hot backups, and data was distributed via a doubled up network system devised by Gearhouse's Chris Grandin and Dave Black.

Footage for the stadium LED screens was also output via the OnlyView system, with a pitch projection feed sent to the host broadcaster.



### Audio

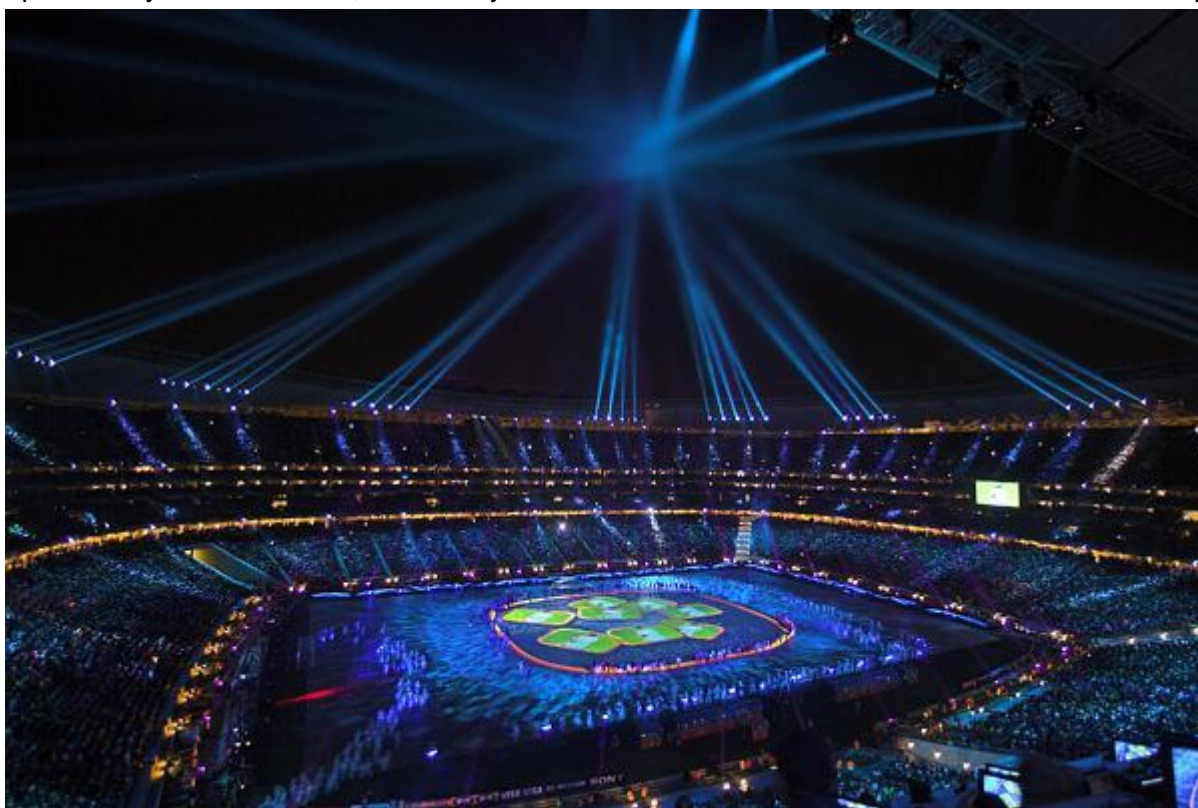
The sound system combined a dV-DOSC installation by Gearhouse Audio consisting of 4 stacks of 6 cabinets covering the VIP area, complete with 8 dV-SUBS in cardioid arrays – and the stadium's installed EV system, which was used to cover the upper areas, and this was zoned and controlled independently.

Sixteen 21? Turbo subs were added, two stacks on the east stand and one stack each on the north and south stands to boost the low frequencies of the house PA.

Nearfield monitors were added to compensate for the stadium delay along with 2 in the pitch for the before and after match speeches.

LA8 amps drove the L-Acoustics kit, and the system was processed, time aligned and EQ'd via a rack XTA DP 224 and 226s.

Two Yamaha PM5D consoles (configured as master and slave) were used as active and backup desks, both fed from a 48-way active split and running Yamaha Studio Manager to update both in real time. The console was operated by Marius Marais, and the systems tech was Pierre Slabbert. The show track was played from an



performers, and PA  
the cast.

**Power**

All production elements of the Closing ceremony were run off generated power, supplied and distributed around the stadium by Gearhouse Power. Some 12 kilometres of mains cable weighing about 55 tonnes was shipped to South Africa by The Power Shop from Belgium in 2 x 40 ft containers.

Gearhouse Power's Anthony Sackstein and his assistant Fodo Mathe spent 5 days walking the venue and calculating how to get sufficient power to all the places it was needed ... and then applied some serious lateral thinking to deal with balancing the voltage over some very long cable runs.

The venue was divided into 3 sections Roof East, Roof West and Field of Play, and then a further 4 quadrants. At each of the 4 roof and lighting ring positions they delivered a 400A supply broken into a 400A and 125 Amp distro. Behind each screen (north and south) were 250 Amp to each point, A further 2 x 125A feeds were installed to feed projector and follow spot platforms.

4 x 400A feeds were run to the Field of Play for all the 5K Panthers, with 4 x 48 way hot power distros feeding all

the single phase moving lights (Robes and Vari\*Lite).

Eight generators were supplied to Gearhouse Power by Barloworld Power Systems in Johannesburg. The project was managed by Corrie Du Plooy with John Stander and Louie Pieterse on 24 hour standby. The generators were located outside the stadium in the technical compound making the shortest bulk power run of 1500A 220m and the longest secondary run of 400A a mere 500m from the source.

2 sets of 3 x 1000 KVA sets were synchronised to supply a backed up feed of 1500 Amps per phase. The first of these 2 sets fed the lighting rings in the roof, the second set fed lighting and audio on the Field of Play. The last set of 2 synchronised gennies fed the west side, with one of the longest cable runs of the installation at 500 metres.

There were 2 Gearhouse Power crew chiefs, Ian Holmes and Ronnie Malaatjie, both are very experienced, and Holmes commented "When Antony calls me and says he has 'a challenge' ..... I always know that something interesting is brewing!"

The show – conceptualised and produced entirely by the VWV Group – was a fast-paced, lively and accessible mix of contemporary African music, dance and theatre, including a family of thirteen elephants (life-sized puppets) and a sensational performance by Shakira of her Waka Waka 2010 World Cup theme song. It has been internationally acclaimed as the most exciting World Cup Closing Ceremony to date, right up – in terms of quality and entertainment value – in the league of high profile sporting event ceremonies, and together with the whole tournament, a real achievement of which South Africa can be proud.