STRAND AND GLYNDEBOURNE

Glyndebourne has a long established history with Strand Lighting, with the first ever Thyristor Dimming installation in Europe in 1964.

The control system installed to compliment the dimmers, was a four preset manual system; specified by the lighting designer, Francis Reid. This system was subsequently replaced by the 200th MMS (Modular Memory System) and STM dimmers in 1977; this time specified by lighting designer Robert Bryant and Glyndebourne's chief technician Jim Thomas. This MMS had the novel features of having a colour VDU - a Barco, frequently "stolen" by the television companies, for a "shot" monitor when recording in the Opera House. Galaxy was first used at Glyndebourne in the 1987 season, when a Galaxy™ 3 system was installed. This system, together with touring Strand Act 6 dimmers packaged by Howard Eaton Lighting, today makes the core part of the Glyndebourne Touring system, seen in many major UK theatres during their tours.

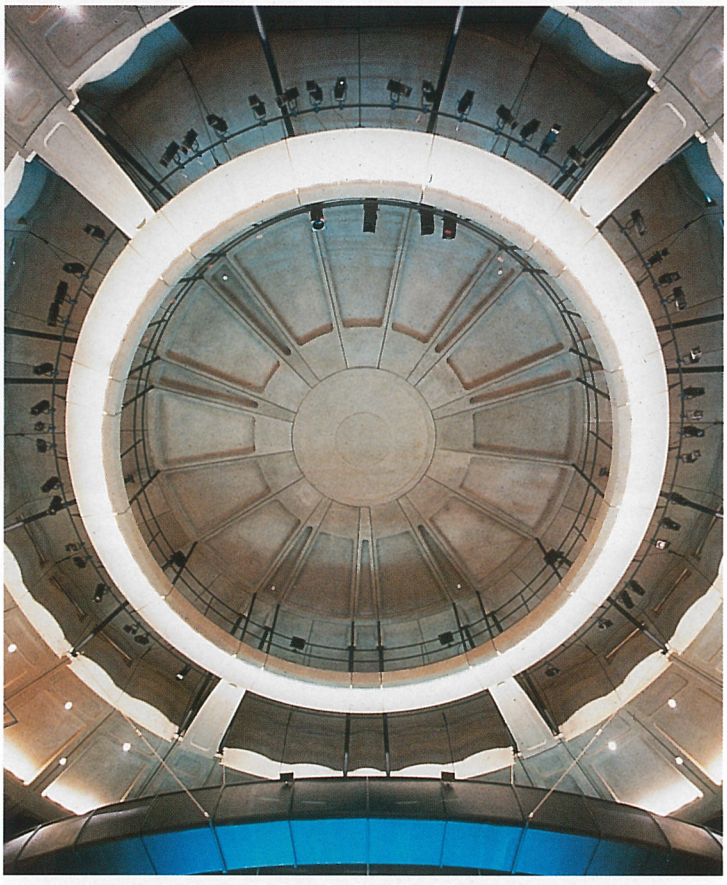
GALAXY NOVA AND EC90 DIGITAL DIMMERS REPORT BACK

It was no surprise that Strand Lighting was chosen for the supply of the stage, house and work lighting controls, production and house lighting dimming systems and luminaires. The two-year design, manufacture and supply project was won by Project Sales Manager Alan Luxford, and planned and managed at Strand by Bill Richards, whose tasks included liaison with consultants Alan Russell and Chris Watts of Theatre Projects, Glyndebourne's Lighting Manager, Keith Benson, and contract managers.

The contract was awarded to Strand as Production Lighting Contractors via Bovis Construction, with Matthew Hall Ltd responsible for amongst other things, the production lighting wiring, this aspect being sub-contracted to one of Strand's Main Distributors, Stage Electrics, managed by Jonathan Porter Goff.

The original Galaxy lighting desk was removed the day after the last performance in the old Opera House, and returned to Strand's Isleworth HQ for conversion to the latest version, the Galaxy Nova, with an additional set of electronics increasing the size to 768 channels. This not only added the new features of the top of the range console, but also included the interfaces for dimmer status reporting and sophisticated colour scroller control.

Six-hundred-and-sixteen dimmers are housed in eleven large EC90™ racks, located at different levels behind the cyclorama wall in 4 dimmer rooms. Modular design of the EC90 meant that the rack carcasses could be positioned in the dimmer rooms during the construction phase, with the modules (housing the digital electronics) being installed into a clean environment nearly two months afterwards, when wiring was near complete. The advanced EC90MD*plus* digital dimmers, which included a selection of 3.8kW, 7.6kW and 10kW modules, constantly monitor their own performance, and report back to the Galaxy Nova, where information can be selected, and warning messages displayed on the screen, should a lamp fail or a circuit breaker trip.



The 'doughnut' and advanced lighting bridge, Glyndebourne Opera House.

Control room with a Galaxy Nova.

SPECIAL CONTROL NEEDS

Specially developed for Glyndebourne was a 96 way contactor rack that uses the 'brains' of four Strand LD90™ digital processor units with custom software, to switch contactors on and off under the control of the Galaxy Nova DMX dimmer signals.

The house lighting system included Prelude™ 650W profile spotlights providing a gobo break-up wash over the wood panelling, low voltage down lights and coffer lighting, linked to EC90 dimmers, within the main complement of production dimmers. These dimmers are controlled from the Galaxy Nova, with an independent 'warming' level system ensuring a base minimum lighting level. A novel feature is that the house lights can be temporarily reduced to 'blackout' to support an important stage blackout by moving a sprung-loaded grand master fader. When pressure is released, the house lights automatically return to their previous base level.

The house lighting system may also be controlled locally without the Galaxy Nova, through internal EC90 preset memories that may be selected by push button outstations. Working lights are controlled by an additional Strand special contactor rack, and eight 'states' (which include day, night, show, rehearsal and interval states) are programmed into a PLC (programmable logic controller).

COLOURCALL SCROLLERS RING THE CHANGES

A second contract, this time directly with Glyndebourne Productions, included eighty-five Strand Colour Call™ 16 frame scrollers. These multi-protocol colour changers are controlled from Galaxy Nova's integrated colour system using MRL protocol (developed for PALS automated lighting) in preference to DMX, as it provides smoother control. The Galaxy Nova allows scrollers to be controlled using the same channel number as the host luminaire, with frames being selected directly from the keyboard. Additionally scrollers are controlled in isolation from dimmer levels, to avoid unintended resetting during a fade to blackout. Further lanterns were added to Glyndebourne's existing stock of Strand luminaires, with additional Cantata™ and Cantata Optique™ 1200W zoom profile spotlights, some with special yokes, Alto™ 8/16 long-throw 2.5kW profiles, and Castor Bambino™ 2kW Fresnels.