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Photo: Clive Barda

Flickers at the Phantom (see story this issue)



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Phantom Flickers

Re-creating the gas-lit atmosphere of the 1870's at 'Phantom of the Opera'

John Offord talks to David Morgan of Action Lighting

Within the reviews of London's latest Lloyd-Webber musical 'Phantom of the Opera' at Her Majesty's Theatre was talk of spectacular stage effects - a thousand candles arising from a subterranean lake and a 'gas lit' recreation of the Paris Opera House in 1870's.

An investigation as to how the effects were created took us via lighting designer Andrew Bridge and his office at Imagination to the workshops and warehouse of Action Lighting in West London. Here, tucked away behind the enormous stocks of electric lamps, we found an Aladdin's cave of lighting effects. Most of these have been developed from an original idea by Robert Clutterham when he was designer at the old Marlowe Theatre in Canterbury. About five years ago he created a flickering candle effect using a PP3 battery and an electronic timer, switching power between two small bulbs moulded in resin to the shape of a candle flame.

Soon afterwards, Robert Clutterham was introduced to David Morgan who had formed Action Lighting with the object of using his long experience in R and D and photographic lamp marketing at Osram GEC to sell tailor-made packages of lighting effects, starcloths and any other needs of lighting or scenic designers that could be created by using electric lamps.

When Clutterham left the UK to work overseas for three years, a deal was struck for Action Lighting to manufacture and market the concept of the electronic flicker candle.

"After some simple development and production tooling the product was launched at the 1981 ABTT Trade Show at the Round House where it was commended by the committee," explained David Morgan, "The first major order was from English National Opera who took a substantial number for their production of 'Tosca' at the London Coliseum. After this success the Royal Opera House Covent Garden placed orders for a programme to convert existing practicals in chandeliers, flambards, and various walk-on effects. Over the intervening years thousands of components and fully made practicals have been supplied to theatre companies around the world."

The story now moves to the summer of this year when the lighting design team for Phantom called a meeting at Imagination's offices. This was to discuss the need to create the effect of 1860-1890 gas lighting and an effect for candles to arise through stage traps and emerge on stage as though from the depth of a mist-covered subterranean lake. "It is this latter scene which has drawn a spontaneous ovation from audiences as the Phantom pilots Christine, his chosen protégé, across the lake through 'a thousand' flickering candles to the ethereal sound of Lloyd-Webber's music," said David Morgan.

Within a week of the first meeting a prototype candle flame, more powerful than previous models, and incorporating a small permanent light source, was created by



David Morgan (left) discusses final stages of development of the Phantom of the Opera's gas flame effect with Christopher Clark.



The flickering candle in a hurricane lamp is one of many standard products available from Action Lighting that incorporates the company's electronic flicker candle effect.

Action Lighting's technician, Christopher Clark and was successfully demonstrated to production electricians Howard Eaton and Mike Odam. "With the easy part over, the next requirement from Andrew Bridge was for a gas flame effect to stand in silhouette from scenic creations of theatre boxes at the Paris Opera House in the period concerned. Many hours later a casual visitor was asked the question, 'What is it that you see in the far corner? He pondered carefully, and replied: 'a bunsen burner'. An hour later a delivery van driver replied to the same question with the answer 'a gas flame'. Then, and only then, was 'gas flame Mark IV' considered fit to submit to Andrew Bridge for inspection. Without further modification, approval was given, and the units, together with attendant power supplies, were made into practical effects."

Action Lighting's involvement with Phantom did not end here, however, for whilst the main lighting rig was supplied by Robert Luff Theatrical Hire, a daily and sometimes hourly delivery service of all the associated equipment such as lamps, plugs, connectors, cables, fuses, and terminals were being supplied by the sales side of the organisation. Robust, low voltage lighting was suggested and supplied for the crashing chandelier, and small dichroic reflector lamps for other onstage effects.

As a tailpiece, during the week of previews, producer Cameron Mackintosh asked Newman Advertising to make the flambards and lanterns mounted outside the building pulse with light in the manner of a gas flame. Take a walk down London's Haymarket and you'll see the result: Action Lighting's gas flames flickering - whatever the wind and weather.

The future? "Well how about a 10,000 bulb finale for 'High Society' - in three colours, and with a 27 circuit control?"