

CHARLIE PATON ON THE EVOLUTION OF PALS — AND BEYOND

Moving Lights

BY BOB ANDERSON

Today, to think of motor drives for pan, tilt, and focus is to think of the multitude of moving lights used in ever increasing numbers at disco and rock concert venues. But the scene in the late 70s was very different. PARcans were in use and in large numbers, and pulsed and flashed in response to the new memory control desks. But lights did not move unless physically pushed and shoved by a human operator. Inevitably, someone would change this.

At the time, Charlie Paton was a young lighting designer in his mid-20s working in London. Also somewhat of a mad inventor of the old school, Paton had been a theatre design student at the Central School of Art and Design, where his masterpiece was a full-sized replica of a hang glider, vintage 1900. Bamboo, canvas and string were the main ingredients, muscle power launched it, and it flew briefly. Charlie survived unhurt to look for new challenges, and it is no surprise to find that he turned his hand to the moving lantern challenge and solved it with another contraption of wire and strings.

In 1976, Paton was designing the lighting for a standard rock 'n' roll tour. "It seemed so much effort climbing on the trusses everyday," recalls Paton, "and after we had a near-accident, I came up with the Light Scan idea, to be able to re-focus from the ground." With Light Scan was born Paton's company, Light Works.

His invention consisted of two motors, linked by Bowden cable to 15 PARcans clamped to a bar in such a way that all tilted together in response to one motor. The second motor was used to converge or spread the beams of light. Control provided proportional speed, analogue presetting for position and on-board eight-bit digital processing at the motor drive units. The effect had immediate appeal.

"In 1976, I built one prototype, and one production version," says Paton, who then patented his idea. "I got half of the money, or £11,000 (US \$18,700), from the National Research and Development Corporation (now part of British Technology Group). The other half I scraped together myself." The result was launched at the British Design Center in 1980, where it was on display for three months. "Perhaps it was a combination of bad judgement and bad luck, but there were no orders," Paton notes, "and I was naive about marketing."

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CLIVE BARDA

Strand's PALS automated lighting system made its West End debut in *Aspects of Love* (left) in April 89. LD Andrew Bridge was confronted with 60 different scenes, each with its own lighting needs, and no space for a massive lighting rig. His answer was 26 PALS units — 13 Cantata PC's and 13 Cadenza PC spots. The rig has 65 PALS colour changers on the front-of-house Cantata profiles.

PALS, le système d'éclairage automatisé de haute précision, de Strand, a fait ses débuts au West End dans Aspects of Love (à gauche) en avril 89. L'éclairagiste Andrew Bridge a été confronté à soixante scènes différentes dont chacune avait ses exigences, mais il n'avait pas de place pour une importante installation. Sa solution au problème fut d'utiliser 26 projecteurs PALS, 13 Cantata PC's et 13 Cadenza PC spots. La rampe d'éclairage comportait 65 changeurs de couleurs automatiques sur les Cantata découpes.

Strands automatisches Beleuchtungssystem PALS hatte seine Premiere im West End in *Aspects of Love* (links) im April 89. Lichtdesigner Andrew Bridge war mit 60 verschiedenen Szenen konfrontiert, die jede ihre eigenen Beleuchtungsansprüche stellte ohne genügend Platz für eine massive Beleuchtungsinstallation zu haben. Seine Lösung war 26 PALS Einheiten — 13 Cantata PC's und 13 Cadenza PC Scheinwerfer.