Digital Light Curtain Specification

The DHA Digital Light Curtain is a self-contained light curtain with built-in tilt mechanism and colour scroller. All functions are computer controlled. It is available in 6-lamp or 8-lamp versions.

Lamps

The Digital Light Curtain uses 12 volt 240 watt PAR 56 lamps wired in series. These lamps are available with very narrow, medium and wide flood beam angles. Neon indicators beside each lamp signal filament failure.

Each lamp locates positively into position for perfect alignment of lamp filaments and may easily be replaced using only a flat-bladed screwdriver. A safety interlock cuts lamp power when the unit is opened for servicing.

Tilt System

The Digital Light Curtain is capable of rotating through 320° along its centre axis to $1/10°$ resolution, with virtually zero backlash. Tilt moves are programmed by time – up to an hour for any given change and with a maximum speed of 60° per second (10 rpm).

Colour Scroller

The built-in scroller unit holds up to 20 colours. The colour scroll is mounted on a detachable roller, to enable a complete scroll change to be made very rapidly by the replacement of a single roller. Spare scrolls may be stored on rollers ready for fitting; extra rollers are inexpensive and readily available from stock.

Fractional positions can be programmed to $1/10$ of a colour band allowing the use of split colours for special effects. Colour changes are specified by time – up to an hour for any given change and with a maximum speed of around two colours per second.

Mechanical Installation

The Digital Light Curtain has been designed to hang in lines with a minimum of disruption to the spacing of lamp centres between adjoining units.

Each Digital Light Curtain is suspended from two hook clamps (supplied).

Control

The Digital Light Curtain's on-board microprocessor facilitates a high degree of control via the Light-Talk protocol. There are no thumb-wheel switches to set – units are remotely patched and re-patched.

Individual Digital Light Curtains can be cued either independently or in user-defined groupings.

Colour and tilt movement are independently timed and, even at very low speeds, both are exceptionally smooth.

Digital Light Curtains hung end to end can be aligned with each other electronically, dispensing with the need for precise mechanical adjustment.

The Light-Talk control network allows straightforward daisy-chaining of control cables to unlimited numbers of units.

Apple Macintosh Software

A sophisticated control package has been written for any Apple Macintosh computer. It manages up to 99 Digital Light Curtains, enabling versatile plotting, editing and execution of cues, on or off line, as well as a wide range of housekeeping and diagnostic functions. The Macintosh may itself be driven from certain lighting desks or remotely triggered from any analogue signal.

Voltage option	6-Lamp Digital Light Curtain			8-Lamp Digital Light Curtain		
	Lamp power	Control power	Weight	Lamp power	Control power	Weight
100 V	23 A	1 A	36 kg			
115 V	15 A	1 A	Refer to DHA	20 A	1 A	39 kg
230 V	8 A	0.5 A	43 kg	10 A	0.5 A	48 kg

Dimensions in millimetres
(figures for 6-Lamp unit shown in brackets)