

# Echelon-1k

## 1000 CHANNEL CONTROLLER FOR MOVING AND CONVENTIONAL LIGHTS



### ARCHITECTS AND ENGINEERS SPECIFICATIONS

#### Electronics

The lighting control console shall provide control of up to 1000 control channels via the industry standard USITT DMX-512/1990 protocol. The two DMX output sockets on the back panel shall be 5-pin AXR. The output voltages shall conform to standard RS-485 balanced serial data transmission.

The console shall have a VGA video output for connection to an external VDU. The connector shall be a high density 15-pin D connector.

The console shall have MIDI In, MIDI Thru, and MIDI Out connections, the sockets being standard MIDI 5-pin DIN connectors.

The console shall have a keyboard socket for connection to an external PC AT-type keyboard. The connector shall be a standard 5-pin DIN connector.

The console shall have four (4) menu banks to store all presets. Each menu bank shall have sixteen (16) LED-illuminated palette buttons to assist in programming. Each menu bank shall have ten(10) pages of palettes available.

The console shall have sixteen (16) playback master faders to individually play back cue lists.

The console shall have a programmer with numeric keypad and function buttons to create 'looks' on stage by selecting fixtures and parameters. Three (3) wheels shall be utilised to select and set various parameters.

The console shall utilise seven (7) liquid crystal displays (LCDs) to provide feedback to the operator.

The console shall have a floppy disk drive integral with the front bumper to store or transfer show information on standard high density DOS format 3.5 inch disks.

The console shall have a memory capacity of at least 2.0 Mbytes and shall be battery-backed to prevent memory loss when switched off. The battery shall have a life of at least four (4) years.

The console shall incorporate design techniques and electronic filters to comply with Australian and European Union directives on electrical safety and electromagnetic compatibility (EMC).

The console shall be factory tested and cyclically burned-in for a minimum of 24 hours.

#### Operation

The console operating software shall incorporate diagnostic test routines that exercise the different systems on the CPU card. These test routines shall indicate to the operator (using LEDs and/or displays) the result (pass/fail) of the tests.

The console shall display an error message to the operator should the software malfunction or be corrupted.

#### Electrical

The console shall operate from a single-phase supply of 100-240 VAC  $\pm 10\%$ , with a supply frequency of 47 Hz to 63 Hz.

The console shall not draw more than 50 watts of power from a normal GPO. The power inlet shall be a switched and filtered IEC mains socket with integral fuse, and shall be located on the back panel of the console.

The console power supply shall be a universal-type switched mode supply requiring no changing of internal links to accommodate different supply voltages within the specified range.

#### Mechanical

The lighting control console shall be designed to be free-standing. The console shall be 960mm wide x 530mm deep x 110mm high.

The chassis shall be constructed of 1.2mm steel, and shall be provided with a removable 1.0mm steel base for access to internal electronics. All metal surfaces shall be properly treated and finished in powdercoat or zinc or nickel plating.

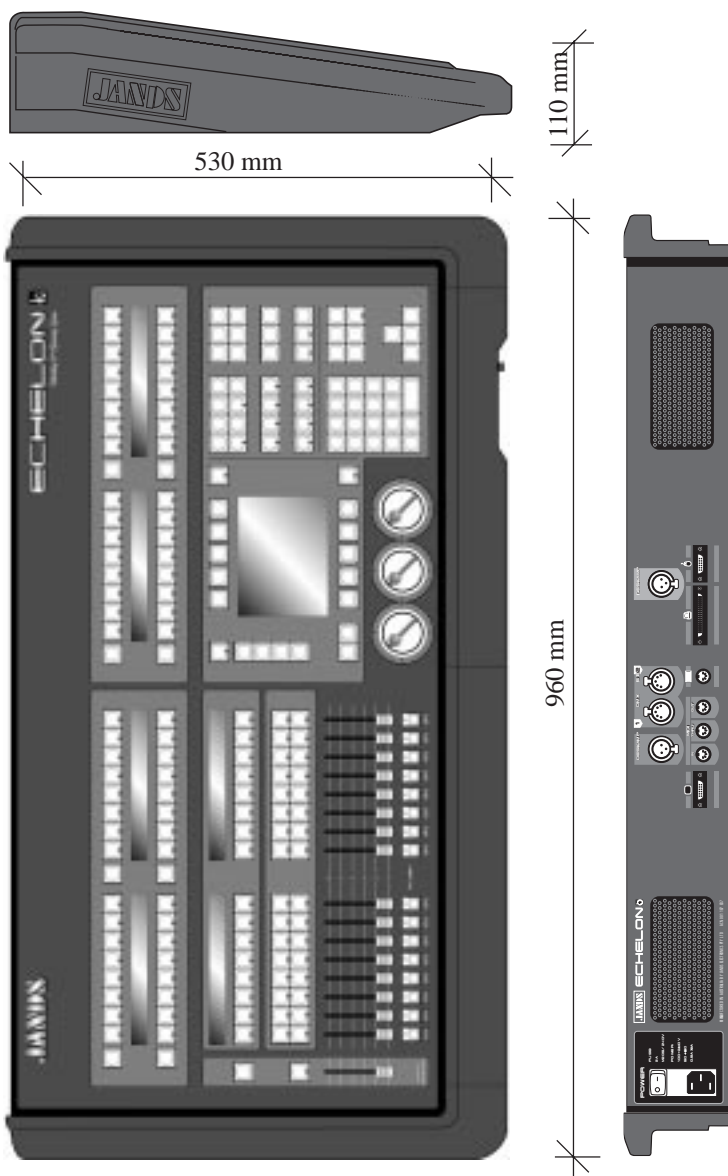
The control surfaces shall be scratch-resistant 0.25mm Lexan with legends reverse silk-screen printed from behind.

The sides and front arm rest of the console shall be constructed of steel-reinforced injection-moulded synthetic rubber.

All operator controls and displays shall be provided on the top operating surface of the console.

The chassis shall have sufficient ventilation holes to allow adequate convection cooling of the power supply, provided the ambient temperature does not exceed 40°C (104°F).

The lighting control console shall be the JANDS ECHELON-1K.



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