4PAK - D

4 CHANNEL DIMMER/CONTROLLER

DESCRIPTION

The Jands 4PAK-D integrates an enhanced four channel multi-scene/chaser control desk, dimmer and interconnecting cables into a single, easy to use economical unit. Additionally a DMX-512 input allows the 4Pak-D to be used as a slave dimmer from an external DMX control source.

The 4PAK-D is suitable for use in a variety of situations including stage lighting for schools, bands and theatre groups, effects switching for mobile applications and the control of shop window, foyer, or trade show displays. A built-in microphone enables the chaser to be triggered from ambient audio with no external connections.

The 4PAK-D comes with a captive supply cable and overcurrent circuit breaker. Each channel is rated for the full breaker current.

FEATURES

- Four (4) identical control channels may be controlled via the front panel or remotely by DMX
- A fader and flash button per channel for manual control
- A mimic LED per channel provides visual indication of each channel's output at all times
- High brightness LED display
- Easy to use menu-based setup
- Predefined and user programmable chases
- User programmable scenes
- ANSI E1.11-2004 DMX-512-A digital control input
- ANSI E1.20-2006 RDM compliant
- "Signal" LED for DMX signal indication
- Link capability for expanded operation
- Four (4) output circuits set for linear relationship between the control input and output power
- Opto-fired high current Triac output devices
- Master over-current thermal-magnetic circuit breaker
- Supplied complete with captive 1.7m lead and plug
- Connections to the lights are made via four (4) standard outlets on the back panel
- Durable polyester front panel decal
- Integral carry handle

OVERALL SPECIFICATIONS

Mains input lead	:	Captive 1.7m lead and plug
Power supply	:	230V +/-10%
Output Current	:	10A max total
Over current protection	:	One 10A Thermal-magnetic circuit breaker
Output connectors	:	1 x outlet per channel
Channels	:	4
Output rise-time	:	85µs (10-90%)
Ambient operating temperature	:	0°C min - 40°C max
Over temperature protection	:	Internal 105°C cut-out
Display	:	3 digit 7 segment LED
Faders	:	6
Buttons	:	13
User Chases	:	9
Scenes	:	20
Dimensions (mm)	:	344 x 265 x 105 (WxDxH)
Net/shipping weight	:	4.5/6 kg

ORDERING INFORMATION

MODEL/PART	PART NUMBER
Single Inlet Australian 10A output sockets	JND-4PAKD-AZ100

Contact the factory regarding other models.

SUPPLIED ACCESSORIES

- User Manual

Jands Pty Ltd 40 Kent Road Mascot NSW 2020 Australia
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ARCHITECT & ENGINEER'S SPECIFICATION

General

The dimmer controller shall be designed to be simple to operate and completely safe in the hands of untrained operators.

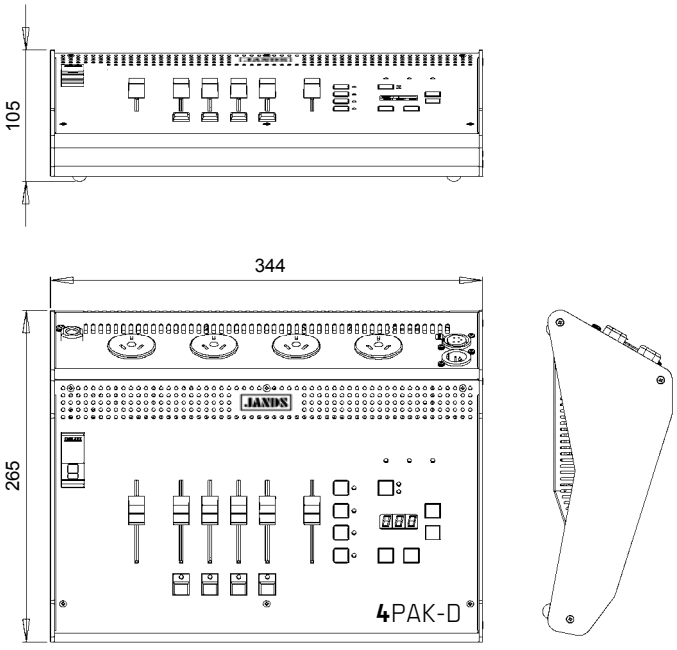
Electronics

The dimmer/controller shall have a fader per channel to control the output level of that channel. A master fader shall control the output of all 4 channels together. The dimmer/controller shall have a Flash button for each channel to instantaneously flash that channel to full output., and a LED to mimic that channel output level.

The dimmer/controller shall have an enhanced inbuilt chaser for sequentially turning channels on and off, with the rate controlled by a fader. The unit shall have nine predefined chases and nine chases that can be defined by the operator. The dimmer/controller shall have an inbuilt microphone such that when enabled, the chaser will be triggered by any ambient low-frequency audio peaks. The dimmer/controller shall be able to store and playback scenes.

The dimmer/controller shall receive and decode four (4) channels of signals complying with the industry standard ANSI E1.11 DMX512-A protocol. A digital display and switches shall be used to select any valid DMX start channel. If the DMX signal is interrupted, the DMX levels shall default to the last received DMX packet. If control is not restored within 10 minutes the DMX levels shall be driven off. The DMX control levels shall be mixed with the internally generated levels on a highest takes precedence basis.

Up to four of the dimmer/controllers shall be able to be linked together to operate as a single unit. Link facilities shall be provided by RDM data conforming to ANSI E1.20.



The dimmer/controller shall feature toroidal RF-interference suppression chokes in each output channel, with a minimum rise-time of 85 µs. The dimmer/controller shall incorporate design techniques and interference suppression to comply with Australian directives on electrical safety and electromagnetic compatibility (EMC).

The internal electronics shall use convection cooling to ensure the electronics stay within their specified parameters provided the ambient temperature does not exceed 40°C. Additionally the dimmer shall feature temperature monitoring electronics that will reduce the output as the temperature approaches the thermal limit. The unit shall fully shut-down when the heat-sink temperature exceeds 105°C. Adequate ventilation must be provided.

Electrical

The dimmer/controller shall feature four (4) identical dimmer channels, each capable of dimming loads of up to 10A. The dimmer/controller shall match a control input to power output in a linear relationship. Each of the four (4) dimmer channels shall smoothly control loads from 25 watts to the rated maximum.

The dimmer rack shall have a control response time of not more than fifty (50) milliseconds, input to output. The dimmer/controller shall operate from single-phase plus earth supplies, and shall be supplied with one 1.7 metre power cable fitted with a three-pin mains plug. The dimmer shall operate from single-phase supplies of 230 VAC +/-10% 50-60Hz.

The dimmer/controller shall have a thermal-magnetic circuit breaker per mains input cable that limits the consumed current to the rated maximum. Software algorithms shall minimise the likelihood of the circuit breaker tripping due to in-rush currents when the connected lamps are cold.

Mechanical

The dimmer/controller shall be designed to be free standing. The dimmer/controller shall be 344mm (wide) x 265mm (deep) x 105mm (high).

The dimmer/controller shall be constructed of 1.0 mm steel and 3.0mm aluminium, and shall be provided with a removable front panel. All external metal surfaces shall be properly treated and finished in powder coat or anodising.

The control surface shall be scratch-resistant 0.25 mm polyester. All operator controls and displays shall be provided on the top operating surface of the controller.

The dimmer construction shall include a built-in handle for easy transport, and sides designed to provide a degree of protection for the controls. The chassis shall be designed such that the heat-sink is not accessible to touch from the outside.

The dimmer shall be the JANDS 4PAK-D.

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