

# FP12

## 12 CHANNEL 2.4 kW DIMMER



### DESCRIPTION

The Jands FP12 is a fully featured 12 channel dimmer rack designed for lighting control applications where cost efficiency and ease of use are a priority.

The FP12's design is based on tried and tested circuitry, ensuring complete reliability of operation.

### FEATURES

- \* 12 x 2.4 kW dimming channels
- \* DMX-512 digital control protocol
- \* DMX-512 terminating switch
- \* Soft turn on characteristic
- \* Opto-fired triac output devices
- \* Three mains phase indicator LEDs
- \* "DMX-IN" LED for DMX-512 signal indication
- \* "STATUS" LED for dimmer status indication
- \* Two DMX-bank select switches
- \* Built-in test facilities
- \* Dimmer curve set for linear relationship between the control input and output power
- \* Compensates for fluctuations in the mains supply voltage and minimises the effect of superimposed control tones, ensuring a constant light output and increased lamp life
- \* Microprocessor control
- \* Single internal quiet DC speed-controlled fan (temperature sensitive)
- \* Single or three phase operation
- \* Over-temperature cutouts
- \* Pre-heat facility
- \* Dimmer will hold last DMX value should control data be interrupted
- \* Rear panel DMX port provisions



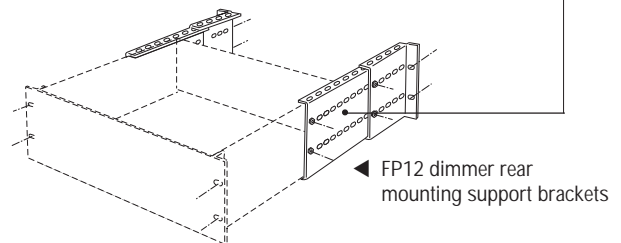
### OVERALL SPECIFICATIONS

Channels: 12  
 Power rating: 2.4 kW (10A/240V) per channel  
 Power supply type: 3-phase, 240V phase-to-neutral (415V phase-to-phase) with earth  
 Power requirements: 3-phase 240 VAC, 50 / 60 Hz, 40 A/phase max, full size (40 A) neutral required plus earth  
 Mains Input Connector Rating: 40A as standard\*, 50A available on request

Dissipation: <1% of output load (288W max.)  
 Dimmer curve: Linear power  
 Max. ambient operating temp: 40°C  
 Current: 40 Amps per phase (max.)  
 Control input: USITT DMX-512/1990 protocol  
 Input connector: 5-pin AXR with loop-through socket and termination switch  
 Output connectors: 1 x 3-pin Australian 10 Amp outlet per channel (Others available, see ordering information below)  
 Output risetime: > 130 μs (10% - 90%)  
 Output current risetime 100mA/μs  
 Output protection: 12 x 10A thermal/magnetic circuit breakers  
 Test facility: 12-way channel selection using DMX select switches  
 Dimensions: 483mm(19")(W) x 350mm(D) x 132mm (3RU)(H)  
 Net/shipping weight: 19 / 23 kg

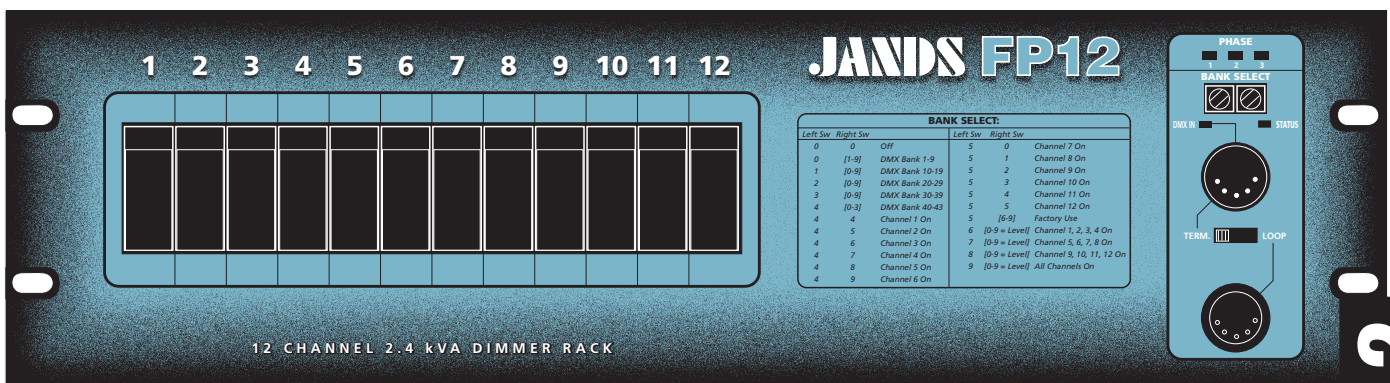
### SUPPLIED ACCESSORIES

- Operating manual
- 2m 3-phase lead and plug (Clipsal 56 P540 40 Amp) (export models may vary)
- 2 x heavy duty rear mounting adjustable support brackets



### ORDERING INFORMATION

MODEL/PART	PART No.
• FP12 with 12 x 3-pin/10A GPO outlets	JND-FP12-A
• FP12 with hard wired output back panel	JND-FP12-H
• Roobar II (3RU) stackable equipment rollcage	JND-ROOBAR-3RU



▲ FP12 front panel

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### ARCHITECTS & ENGINEERS SPECIFICATION

#### Electronics

The dimmer rack shall receive and decode banks of twelve (12) control signals complying with the industry standard USITT DMX-512/1990 protocol.

If the DMX signal is interrupted, the dimmer outputs shall default to the last received DMX packet.

The DMX circuitry shall incorporate a DMX Terminate switch to minimise signal reflections on long signal lines.

The dimmer rack shall have a control response time of not more than ten (10) milliseconds, input to output.

The dimmer rack shall utilise two miniature BCD rotary switches to select the DMX bank allocated to that dimmer.

The dimmer rack shall match a control input to power output in a linear relationship. Each of the twelve (12) dimmer channels shall smoothly control loads from 25 watts to 2400 watts.

The dimmer rack shall utilise Toroidal chokes which are acoustically quiet and provide a risetime in excess of 130 microseconds.

For heatsink temperatures above 60°C the temperature controlled fan shall run at full speed. The dimmer shall feature temperature monitoring electronics that will trigger a thermal shut-down mode when the heatsink temperature exceeds 85°C. A hard-wired thermal switch shall disable the dimmer should the heatsink temperature exceed 100°C.

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

#### Electrical

The dimmer rack shall operate from a three-phase plus neutral and earth supply of 415 volts AC phase-to-phase, and with a nominal supply frequency of 50 Hz.

The dimmer rack shall feature twelve (12) identical channels capable of driving 2.4 kW loads. All channel outputs shall be protected by 10 amp thermal/magnetic circuit breakers.

The dimmer rack shall draw a maximum of 40 Amps per phase when all output channels are fully loaded and driven to full.

The dimmer rack shall be supplied with a two (2) metre power cable fitted with a 40 amp three-phase connector (Australia only).

A range of optional output connectors to suit different termination requirements shall be available including hard-wired, Australian 10A and British 15A sockets.

#### Mechanical

The dimmer shall be designed to mount in a standard 19-inch equipment rack, and be 483mm wide x 350mm deep x 132mm (3RU) high.

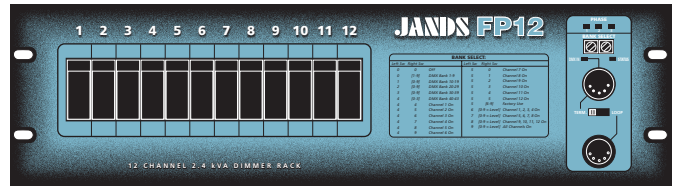
The dimmer shall be constructed of 1.2 mm steel, and shall be provided with a removable lid for access to internal electronics. All metal surfaces shall be properly treated and finished in powdercoat, zinc or nickel plating.

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

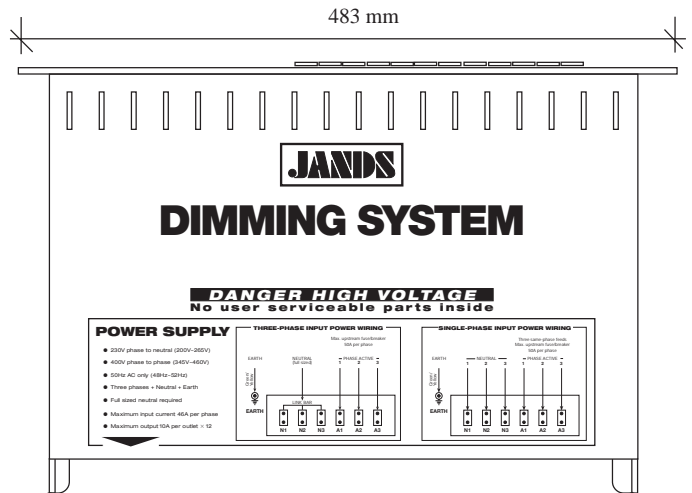
Standard accessories shall include rear support brackets.

The dimmer rack chassis shall be designed to allow for fan cooling, provided the ambient temperature does not exceed 40°C. Adequate ventilation must be provided.

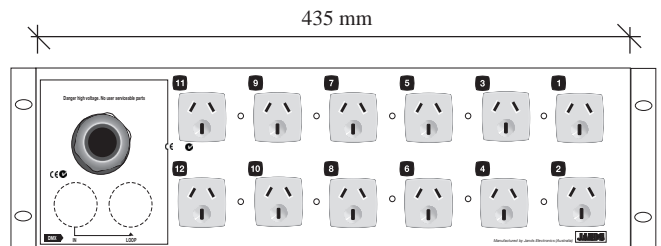
The dimmer shall be the JANDS FP12.



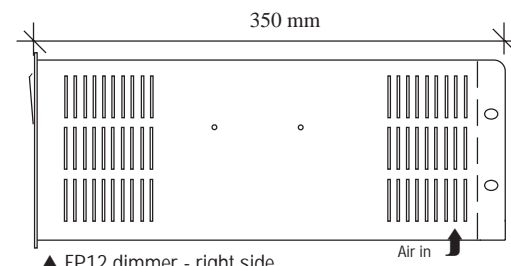
▲ FP12 dimmer - front panel



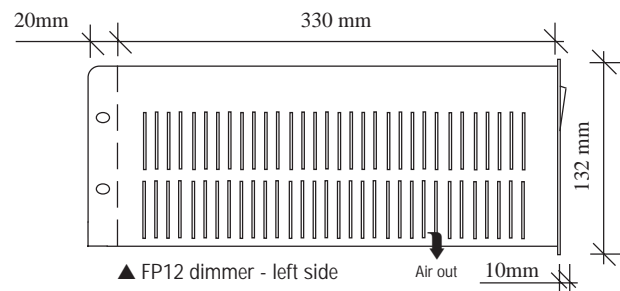
▲ FP12 dimmer - top view



▲ Standard FP12 dimmer - back panel



▲ FP12 dimmer - right side



▲ FP12 dimmer - left side

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