

FADE 4P

Features of the Fade 4P

- Desktop Console case
- Four Channel Powered Dimmer
- Individual IEC Output Sockets

IMPORTANT

Installer and Users please note:

These instructions should be read carefully and left with the user of the product for future reference.

Installation

The Fade 4P must be installed by a competent electrician in accordance with the current IEE wiring regulations.

The Fade 4P is not fitted with a mains plug. This is because:

- a) it is capable of controlling more than 13 Amps
- b) it may be installed permanently
- c) it is an appliance for professional use.

Mains supply:

Connect the Fade 4P to the mains supply with the built in mains lead, Connect the wires as follows:

- **Brown = live**
- **Blue = neutral**
- **Green/yellow = earth**
- **The Fade 4P must be earthed**

• **For a 15A supply**, the maximum total load is 3450W which can be made up of:

either: 860W watts on each of the four channels

or: different loads on each channel so that the total does not exceed 3450W (but not more than 1150W on any one channel)

or: loads of up to 1150W may be connected to all four channels provided that the unit is operated so that the total load that is switched on at any one time does not exceed 3680W.

If connected to a lower capacity supply, or by a standard British 13Amp BS1363 plug and socket, the output must be reduced as follows:

- **For a 13A supply**, the maximum total load is 2990W which can be made up of:

- either:** 745W watts on each of the four channels

- or:** different loads on each channel so that the total does not exceed 2990W (but not more than 1150W on any one channel)

- or:** loads of up to 1150W may be connected to all four channels provided that the unit is operated so that the total load that is switched on at any one time does not exceed 2990W.

Outputs:

Connect the output loads to the IEC sockets on the rear panel using IEC plugs.

The following loads may be connected to the Fade 4P

- 230V filament lamps
- 230V halogen lamps
- Low voltage (halogen) lighting via standard transformers

Connect the output of the FADE 4P to the input of the transformer.

- Low voltage halogen lighting via "Electronic" Transformers.

*Low voltage halogen lighting powered by so-called "Electronic Transformers" may be connected to the FADE 4P provided that the transformers are suitable for **Leading-edge-modulated dimmers**. Flickering or failing to dim is a sign that the transformer is not of a suitable type. NJD recommends using standard laminated or toroidal transformers for low voltage halogen lighting.*

- Fluorescent lighting via a dimming ballast

Dimming ballasts are no longer readily available, a better solution would be to use an electronic ballast with a 0-10V or 1-10V input (which are easily obtained) and use a Fade 4 instead of the FADE 4P.

- Neon

*If using an electronic power supply, it must be suitable for connection to **Leading-edge-modulated** dimmers. Neon will only dim down to about 30% of full brightness, then it will extinguish.*

At around 30% brightness it may flicker. Connect the input of the neon transformer to the output of the FADE 4P.

- Universal motors

The FADE 4P will act as a speed control.

The following are NOT suitable for connection to the FADE 4P

- Low energy fluorescent lighting (*with built-in electronic ballast*)
 - Standard fluorescent lighting
 - Synchronous motors
 - Induction motors
 - Lighting effects (*such as NJD Chaos, Sword, Predator, Datamoon etc.*)
 - Strobe lighting
 - Discharge lighting
 - Audio amplification
 - Other lighting controllers
 - Smoke machines.

Use a switching panel such as the NJD Euro 8s for these applications.

Inductive loads:

If connecting inductive loads such as motors or discharge lighting (metal halide, fluorescent or neon) to the Fade 4P, make sure that the VA rating of the load does not exceed the figures above (1150VA per channel, 3450VA total). The VA rating should be labelled on the apparatus being connected. If the VA rating is not known, reduce the maximum handling capacity to 800W per channel, and 2400W total.

High-inrush loads.

If connecting high inrush loads, such as halogen lamps or apparatus incorporating a transformer, reduce the handling capacity to 800W per channel, and 2400W total.

Interference.

The FADE 4P is fully suppressed against interference to European Standards, but problems may be encountered if running the output cables too close to sensitive audio circuits.

Intelligent Lighting Effects.

It is not recommended to switch intelligent effects (such as NJD Predator, Datamoon, etc) from the Fade 4P. These units should be connected directly to the mains supply (via an isolating switch) and left running all the time that the installation is switched on. A controller (either a DMX controller such as Merlin or IQ-MX80, or a remote control such as AR1) should be used to switch the effects from operating to standby. This avoids the delay of up to half a minute caused by the internal electronics performing its setting up procedure, which happens with all intelligent motorized lighting effects.

OPERATION

Adjust each of the four sliders to obtain the desired brightness on each output channel. Moving the slider upwards (towards the Mimic LED) increases the brightness.

Mimic

The four red LEDs allow the user an instant visual indication of the unit's performing mode. It should be noted that LEDs do not dim in the same way as filament lamps. At low levels, lamps will appear less bright than the mimic LED may suggest.

FAULT FINDING.

Output permanently off (LED illuminates normally)

- Fuse failed. Firstly check the apparatus connected to the faulty channel for short circuits, and check to make sure that the output has not been overloaded. Disconnect the supply, then remove the top lid and replace fuse with a 5Amp fast blow high breaking capacity 5×20mm fuse.

Output permanently on (LED illuminates normally)

- Triac failed. Firstly check the apparatus connected to the faulty channel for short circuits, and check to make sure that the output has not been overloaded. Disconnect the supply and replace with type BTA16-600B or equivalent. This involves soldering. It may be advisable to take the unit to a dealer to have a triac replaced. A badly carried out repair will invalidate the warranty, and may make the unit unsafe. NJD accepts no responsibility for any injury or damage to equipment caused by a poor repair.

Output fails to dim, or flickers.

- Unsuitable load (electronically ballasted compact fluorescent lamps)
- Unsuitable electronic transformer (must be suitable for leading edge modulated dimmers)

Green Led not lit

- No mains supply to the unit.

Check the fuse in the supply to the Fade 4P.

Check the supply.

TECHNICAL SPECIFICATION.

Size:	240mm × 160mm × 75mm
Weight:	2.15kg
Maximum load:	5 Amps per channel 1.15kVA @ 230V AC

1.15kVA corresponds to a resistive load of 1150 Watts or an inductive load of approximately 800 Watts depending on power factor.

Maximum total load:	15 Amps 3.45kVA @ 230V AC
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3.45kVA corresponds to a resistive load of 3450 Watts or an inductive load of approximately 2400 Watts depending on power factor.

Reduce to 13 Amps (2.99kVA) if connected using a British BS1363 mains plug and socket.

Power requirements:	230V AC 3VA
Mains input:	1.5mm ² cable to BS6500 Harmonised code H05VV-F
Outputs:	IEC320 3-pin sockets
Fuses:	F5A High breaking capacity to IEC127 <i>A "high breaking capacity fuse has a ceramic case.</i>
Triacs:	16 Amp 600Volt isolated tab.
Type:	BTA16-600B

Safety Standards

The Fade 4P complies with:

EN60065 (European Electrical Safety Standard)

EN55103 (Electromagnetic Compatibility Standard)

Guarantee

This product is guaranteed for a period of 12 months against faulty components or manufacture (excluding fuses and triacs) from the date of purchase. Upon proof of purchase, NJD shall, at its own option, repair or replace the defective item at no cost to the purchaser.

This guarantee is contingent upon the proper use of the product in the application for which it is intended and does not cover products that have been modified, subjected to unusual physical conditions, or electrical conditions outside its specification, or damaged in any way.

This guarantee is limited to the product only and does not cover carriage costs, installation costs or travel expenses. Your statutory rights are not affected.

In the event of any problems with this product contact the retailer from which it was purchased for technical assistance, or e-mail technical@njd.co.uk

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