

Euro 4e

By utilizing computer-aided-design with the latest microprocessor technology the EURO 4e provides an outstanding range of facilities in a one-unit-high package. 24 pre-programmed chase patterns, 3 auto-run programs, sound chase and sound to light, manual override on all channels and a choice of 3 or 4 channel operation are just some of the features of this superb controller. The Euro 4e typifies the trend towards more compact lighting control.

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 Euro 4e is not fitted with a mains plug. This is because:

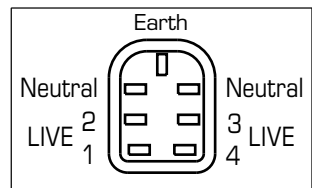
- a) it is capable of controlling more than 13 Amps
- b) it may be installed permanently
- c) it is an appliance for professional use.

The Euro 4e must be installed by a competent electrician in accordance with the current IEE Wiring Regulations.

Mains input

Connect the 3-core lead to the mains supply of the appropriate voltage. (If connecting by a 13 Amp plug and socket to BS1363 then the maximum load must be reduced, see Technical Specifications.)

- **Brown = live**
- **Blue = neutral**
- **Green/Yellow = earth.**
- **The Euro 4E must be earthed.**



Output

Mains output is via an 8-pin socket. Connections are as shown. Connect the load using a F321BA plug.

A maximum of load of 920W per channel may be

connected if the unit is permanently installed or connected via a 16Amp plug and socket.

If connected to the supply via a 13A plug and socket, the maximum total load must not exceed 2990W, otherwise the fuse will fail in the mains plug.

2990W total load 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 920W on any one channel)

or: 920W load on all channels, in three-channel mode.

or: 920W load may be connected to all four channels provided that the unit is operated so that all four channels are not switched on together. (If this happens briefly, as in an all-flash pattern, it is unlikely to blow the 13A fuse)

Sound input

Connect an audio signal from the speaker output of any amplifier up to 450W rms to the ¼" jack on the rear panel labelled 'sound'. The sound input has an impedance of 680Ω so that it does not affect the loudspeaker/amplifier loading.

The sound input requires a signal of at least 1.5V rms before it will start to operate (about ½W into 4Ω). This means that the sound-chase may not operate at low levels. (½W is about 96dB(A) on an average pair of PA speakers)

3/4 Channel Selection.

Your Euro 4E is supplied operating as a four-channel controller; if you require it to operate in the three-channel mode, proceed as follows:

DISCONNECT from the mains, remove the five lid-fixing screws located at the sides and top of the case, remove the upper two fascia screws, and remove the lid. The 3/4

channel switch is located on the printed circuit board approximately between the two rotary controls. Move to the left for 3-channel operation. Replace the lid, and the lid- and fascia-fixing screws.

Replacing Fuses.

The Euro 4e is fitted with a 5A fuse on each channel, to protect the unit from overload. If the fuse fails, check that the output is not being overloaded (no more than 1150W is connected to each output), before replacing the fuse. In the case of lighting which takes a high surge current (halogen lamps) it may be necessary to reduce the output loading.

To replace the fuse, proceed as follows: DISCONNECT from the mains, remove the five lid-fixing screws located at the sides and top of the case, remove the upper two fascia screws, and remove the lid. The fuses are located on the printed circuit board to the left when viewed from the front. The fuse for channel 1 is at the extreme left of the board, the fuse for channel 4 is towards the centre of the product.

Replace the fuse with a F5A HBC fuse (5A fast blow, high breaking capacity). A HBC fuse has a ceramic case. Do not use any other type or value of fuse (this will invalidate the warranty).

Replace the lid, and the lid- and fascia-fixing screws.

If the channel remains permanently on after replacing the fuse, then the triac has been damaged (This may happen in the case of an extreme overload or short circuit on the output). If this happens the product should be taken to a dealer for repair. Triacs are not covered by the warranty, because they only fail if the product has been misused or overloaded.

OPERATION.

Light chase

With sound chase switched off (Sound chase LED not lit), turning the speed control clockwise will cause the display to progress faster.

Sound chase

With the sound chase switched on (sound chase LED lit) the Euro 4E will chase to the bass beat of the music. A connection is required to the sound source (see part 3) but no adjustment is necessary as the Euro 4E has an automatic level circuit.

Program selection

The sixteen position program switch selects either:

Manual control (no chase pattern) (position O),

one of the twelve programs (positions 1-12),

Full Auto-Run (runs through all 12 programs)(position A),

Short Auto-Run (singles, pairs, triples) (position B) or

Random (position C).

To disable the Euro 4E and turn all the outputs off, move the program switch to zero.

Do not enable and disable by repeatedly switching the mains power to the unit.

Each program consists of a forward and a reverse pattern; pressing the hold rev. switch inhibits the reverse pattern, forcing the unit to run forwards all the time. The LED lights green for normal operation, and red for single direction operation.

Sound light

With the program switch set to O, pressing the sound light switch will flash any channel selected on the override

switches in time to the bass beat of the music. With the program switch in any other position, the Euro 4E will flash any channel selected on the override switches over the selected pattern.

The best sound-light effect is achieved with all four override switches on, and pattern "C" (random) selected.

Floodlight

With sound light switched off (Sound light LED not lit) the override switches can be used to override the outputs at any time. Move the program switch to O and the override switches give full manual control over the lighting.

In the 3-channel mode the fourth output can be for static switching using either the override switch. For example, if the Euro 4E was controlling a three-lamp motorised effect, channel 4 could be used to switch the motor on or off.

Alternatively, on a small mobile discothèque, the Euro 4E could be used to control 3-channel light screens, with channel 4 used to switch an additional effect such as a strobe.

Random pattern

Selecting 'C' on the program switch will produce a random pattern.

Mimic

The four red LEDs allow the user an instant visual indication of the unit's performing mode.

Standards

The Euro 4e complies with EN60065 (European Standard for Electrical Safety) and EN55103 (European Standard for Electromagnetic Compatibility)

Technical Specification

Size:	483×44×95mm 19"×1¾" (1U)×3¾"
Minimum mounting depth:	90mm (3.5")
Weight:	1.7kg
Audio impedance:	680Ω
Audio input range:	2V rms - 60V rms
Power Supply:	230V AC 50Hz 15VA
Maximum load:	4 Amps per channel: 920VA @ 230V AC

(920VA corresponds to 920 Watts resistive load, approximately 750 Watts inductive load)

500VA @ 120V AC

(500VA corresponds to 500 Watts resistive load, approximately 375 Watts inductive load)

Maximum total load:	15 Amps 3.45kVA @ 230V AC 1.8kVA @ 120V AC
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Reduce to 13 Amps (2.99kVA @ 230V AC) if connecting via a standard 13 Amp (BS1363) mains plug/socket.

Fuses: F5A HBC (to IEC127)

HBC means "high breaking capacity" - a HBC fuse has a ceramic case.

Connections:

Audio:	¼" jack.
Mains in:	1.5mm ² cable (to BS6500)
Output:	F321CAD 7-pin socket.
Triacs:	8 Amp 600V isolated tab sensitive gate
Type:	BTA08-600TW or equivalent

Guarantee

This product is guaranteed for a period of 12 months against faulty components or manufacture 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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