

Q-PEDAL

Features of the Q-pedal

- Foot operated lighting controller
- Robust extruded aluminium case
- Four Channel Sound Chaser
- FLOOD and BLACKOUT.
- Individual Channel Indication
- Two F321 Output Sockets
- Interference free switching

IMPORTANT

Installer and Users please note:

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

Installation

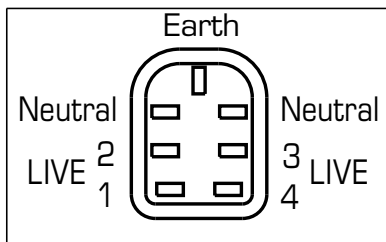
The Q-pedal is not fitted with a mains plug. This is because:

- a) it is capable of controlling more than 13 Amps
- b) it is an appliance for professional use.

Connect the Q-pedal to the mains supply with the built in mains lead, Connect the wires as follows:

- **Brown = live**
- **Blue = neutral**
- **Green/yellow = earth**
- **The Q-pedal must be earthed**

Connect the output loads to the F321 sockets on the rear panel using type F321BA plugs. Both sockets are connected the same. Connections are shown below. Each channel of each socket has its own 5 Amp fuse, so loads of more than 1150W per channel should be distributed over the two sockets.



(It is good practice to distribute any load so that both sockets are supplying approximately equal amounts of power).

If connecting any other load than filament lamps, it should first be ascertained that the load is suitable for switching on and off rapidly.

If used with a 16A or 20A supply then the internal Maximum Current switch must be set accordingly.

Disconnect from the mains supply. Remove the left-hand end cover (the opposite end to the mains cable) by removing the four Torx screws using a Torx T20 Screwdriver. Slide out the fascia panel. Move the 13A/20A switch (located adjacent to the "output

mimic" LEDs) to the 20A position. Replace the fascia panel, and the end cover.

- **For a 20A supply**, the maximum total load is 4600W which can be made up of:

- **either:** 1150W watts on each of the four channels

- **or:** different loads on each channel so that the total does not exceed 4600W (but not more than 2300W on any one channel)

- **or:** loads of up to 2300W 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 4600W.

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 16A supply**, the maximum total load is 3680W which can be made up of:

- **either:** 920W watts on each of the four channels

- **or:** different loads on each channel so that the total does not exceed 3680W (but not more than 2300W on any one channel)

- **or:** loads of up to 2300W 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.

- **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 2300W on any one channel)

- **or:** loads of up to 2300W may be connected to all six channels provided that the unit is operated so that the total load that is switched on at any one time does not exceed 2990W.

Inductive loads:

If connecting inductive loads such as motors or discharge lighting (metal halide, fluorescent or neon) to the Q-pedal, 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 1500W per channel.

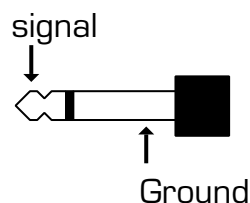
Intelligent Lighting Effects.

It is not recommended to switch intelligent effects (such as NJD Predator, Datamoon, etc) from the Q-pedal. 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.

Sound input

The Q-pedal has an internal microphone, so no connection to the audio source is required. However, when mounted on the floor it is likely to pick up sounds from the stage or the sound of the push-buttons being used. For this reason, it is possible to disable the internal microphone and connect an external sound signal. To disable the internal microphone, disconnect from the mains supply. Remove the left-hand end cover (the opposite end to the mains cable) by removing the four Torx screws using a Torx T20 Screwdriver. Slide out the fascia panel. Move the Microphone switch (located adjacent to the jack socket) to the OFF position. Replace the fascia panel, and the end cover.

Connect an audio signal from the speaker output of a power amplifier to the 1/4" jack on the right hand end panel labelled 'sound'. The sound input has an impedance of 3300Ω so that it does not affect the loudspeaker/amplifier loading. **Voltages greater than 50V rms may NOT be connected to a jack plug**, so the largest amplifier that may be connected would be a stereo amplifier that gives 1000W into 4Ω



(500W per channel), or 600W into 8Ω (300W per channel).

The sound input requires a signal of at least 1.5V rms before it will start to operate (about $\frac{1}{2}W$ into 4Ω). This means that the sound-chase may not operate at low levels. ($\frac{1}{2}W$ is about 96dB(A) on an average pair of PA speakers)

OPERATION

When first switched on, the Q-Pedal will be in blackout mode, with the Blue LED lit. The chaser will be running (as shown on the green LEDs to the right of the panel) but will not be connected to the outputs.

FLOOD.

Pressing the Flood switch will switch all four channels on to give a floodlight effect. The yellow LED illuminates to show that FLOOD has been selected. The Q-Pedal has internal mains current monitoring, so that if the mains current exceeds 13A (or 20A depending on the setting of the internal Max. Current switch) the fourth channel will be switched off to keep the current within operating limits.

BLACKOUT.

Pressing the blackout switch turns all four channels off. The blue LED illuminates to show that BLACKOUT has been selected. The chaser continues to run although not connected to the output, so that a new pattern can be selected whilst the outputs are off.

CHASE.

Press the chase button twice to select chase. The chase speed will be determined by the time between the two switch presses. (Press twice in quick succession for a fast chase). The CHASE LED illuminates green whilst it is waiting for the second switch press, then red when in chase mode. The slowest chase speed is 2.5 seconds between changes.

PATTERN.

The pattern switch selects the next chase pattern from a choice of 12. The pattern may be changed at any time. The four pattern LEDs show the selected pattern, so that patterns can be

changed whilst in flood or blackout.

SOUND.

The SOUND switch selects sound chase. The chaser will advance on step in the pattern on each beat of the music. The SOUND LED illuminates continuously whilst in sound chase. and flashes whenever a beat is detected when in any other mode.

Mimic

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

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 left-hand end panel (the opposite end to the mains cable) by removing the four Torx screws using a Torx T20 Screwdriver, and slide out the fascia panel. There are separate fuses for each output socket. Replace fuse with a 5Amp fast blow high breaking capacity 5x20mm fuse. Replace the fascia panel and end panel.

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, then remove the right-hand end panel (the opposite end to the mains cable) by removing the four Torx screws using a Torx T20 Screwdriver and the jack socket nut, and slide out the fascia panel. Remove the earth screws and two screws that fix the heatsink to the extrusion and remove the circuit board. Replace the triac 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. Replace the circuit board, the heatsink screws and earth screws. Replace the fascia panel and the end plate.

No LEDs lit

- No mains supply

Check the fuse in the supply to the Q-pedal.

Check the mains supply.

TECHNICAL SPECIFICATION.

Size: 405mm × 201mm × 58mm

Weight: 3.1kg

Maximum load: 10 Amps per channel
2.3kVA @ 230V AC

2.3kVA corresponds to a resistive load of 2300 Watts or an inductive load of approximately 1500 Watts depending on power factor.

Maximum total load: 20 Amps
4.6kVA @ 230V AC

4.6kVA corresponds to a resistive load of 4600 Watts or an inductive load of approximately 3200 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 5VA

Mains input: 2.5mm² cable to BS6500
Harmonised code HO5VV-F

Outputs: F321BA 7-pin sockets

Fuses: F5A High breaking capacity to IEC127

A "high breaking capacity fuse has a ceramic case.

Triacs: 16 Amp 600Volt isolated tab.

Type: BTA62-600B

Safety Standards

The Q-pedal 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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