

WAVELIGHT 2000

The WAVELIGHT 2000 is a dual function professional hard-fired dimmer, designed to give full dimming and wavelight control for resistive or inductive loads.

A dual function slider for dimming and wave-speed, selector and flash switches are mounted on an anodized aluminium fascia.

An led power indicator is provided.

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 Wavelight must be installed by a competent electrician in accordance with the current IEE wiring regulations.

- Connect the incoming mains (230V AC) to the terminals marked L, N and Earth.
- Connect the load neutral and Earth to the N and Earth terminals (the same as the incoming mains)
- Connect the load live to the LOAD terminal.

It is the responsibility of the installer to ensure that the live terminals and circuit boards cannot be accidentally touched by the user. A back-box is available which satisfies these requirements (part number: BB WL2000).

If operating neon, the wavelight connects in the 230V supply to the neon transformer. (The 230V side of the neon transformer connects to the LOAD and NEUTRAL terminals of the Wavelight)

If operating low voltage (halogen) lighting, the Wavelight connects in the 230V supply to the lighting transformer. (The 230V side of the lighting transformer connects to the LOAD and NEUTRAL terminals of the Wavelight)

Note: not all "electronic" transformers are suitable for dimming.

To dim fluorescent lighting, it is necessary to use a "dimming ballast" instead of the normal ballast built into the fluorescent light fitting. It is not possible to dim "low energy" fluorescent lamps with built-in electronic ballasts.

Electronic dimming ballasts generally require a 1-10V input to control the dimming, and should not be connected to the Wavelight. Use the NJD Fade-4 to produce the 1-10V control signal.

Although the Wavelight itself does not produce significant interference and complies with the Electromagnetic Compatibility regulations, if care is not taken with the wiring, this could cause interference.

To minimise interference, live and neutral wires should be run together, preferably as twisted pairs. The load and supply neutrals should be connected **ONLY** at the Wavelight terminal block. It is advisable to run

the wires to and from a dimming controller as far away as possible from audio signal leads. The cables on the load side of the Wavelight are the most likely to cause interference.

Setting up

No setting up is required unless preheat is required.

PREHEAT

The preheat control is located on the top printed circuit at the bottom of the board, approximately underneath the NJD badge. Rotate clockwise to increase preheat. The Wavelight is supplied with preheat disabled. Preheat allows a small current to be passed through the lamp filament to keep it hot, this reduces surge currents and prolongs lamps life.

Operation

DIMMING

With the selector switch 'out' the slider control acts as a dimmer, allowing smooth control of lighting without interference or flicker. When dimming neon, it is not possible to dim completely to zero, a point will be reached at which the lamp extinguishes.

WAVELIGHT

Press the selector switch and the slider control becomes a wave-speed control. The higher the setting, the faster the lamps will rise and fall in brilliance.

FLASH

The flash switch illuminates the lamps to full brightness regardless of the position of the slider or selector switch.

LED POWER INDICATOR.

The LED power indicator bar-graph gives instant visual indication of the lighting setting. This facility is particularly useful where the positioning of the control does not allow the operator to see the lighting connected.

Standards

The Wavelight 2000 complies with the Electromagnetic compatibility regulations, BS EN55015, and, mounted in the BB WL2000 (Wavelight backing box) complies with the EEC low voltage directive BS EN60439 Part 1.

Technical Specification.

Size:	178mm x 60mm x 80mm
Weight:	500g
Cutout size:	150mm x 55mm
Minimum mounting depth:	65mm
Maximum load:	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. The Wavelight should be de-rated for use with high inrush loads such as halogen lamps.

Fuses:	
Load:	F10A HBC 5x20mm to IEC127 (10 Amp quick blow, high breaking capacity)
Control:	F100mA HBC 5x20mm to IEC127 (100mA Quick blow, high breaking capacity)
Power requirements:	230V AC 50Hz 3VA <i>A high breaking capacity fuse has a ceramic case.</i>
Triac:	16 Amp 600 Volt
Type:	BTA16-600B

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