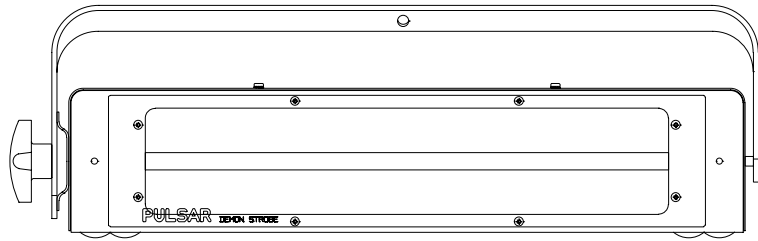


DEMON STROBE



SPECIFICATION

27800 Demon Strobe 200-240Volts

The most powerful of the Pulsar range of Strobes, the **Demon Strobe** provides high power strobe lighting from a 1.5kW linear tube and a linear parabolic reflector. It is fully dimmable and may be controlled by a DMX/PMX Digital signal, 0-10V Analogue signal or its own internal controls.

By using a Pulsar **Masterpiece** or **Rainbow Strobe/Chaser** to drive a number of **Demon Strobes**, each fitted with a different colour filter, it is possible to create the ultimate strobe display, where each frozen image is captured in a different colour.

INSTALLATION



INSTALLATION AND SERVICE must only be carried out by suitably skilled and competent persons.

The Demon Strobe must be securely mounted, using the M10 bolt, spring washer and wingnut provided, through the hole located in the handle.

A safety chain of suitable length and strength (e.g. Pulsar part no. 60030/1) **must** be securely fixed between the safety chain fixing point on the rear of the Strobe and the suspension point (mounting surface).

BACK PANEL CONNECTIONS



MAINS SUPPLY - 200-240 VAC, 50-60Hz, 10A nominal. We recommend the use of a Residual Current Circuit Breaker.

The mains cable should be fitted with a suitable approved and rated plug.

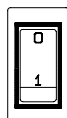
Note: in some countries it is a requirement that such a plug be fitted by a qualified electrician.

CABLE COLOURS

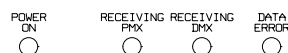
- Green/Yellow = \equiv Earth / Ground
- Brown = Live / Phase / Hot
- Blue = Neutral

WARNING - THIS APPLIANCE MUST BE EARTHED

POWER SAVING TECHNIQUE - We have arranged for units with **odd** and **even** serial numbers to take power from the mains at different points in time. So an even numbered unit plus an odd numbered unit together on the same supply, only have a peak power requirement 40% higher than one strobe - not double. Where a number of Demon Strobes are used together on the same supply we recommend you take advantage of this technique.



POWER SWITCH: A double pole circuit breaker controls the power to the unit and provides 2 pole overcurrent protection and isolation. 0 - OFF, 1 - ON.



STATUS INDICATORS:

Power On LED - When illuminated this indicates that the equipment is connected to the supply and switched on.

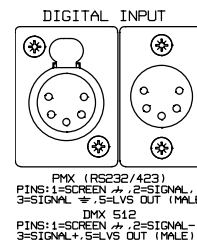
Receiving Data LEDs - Indicate a digital signal (PMX/DMX) has been received.

Data Error LED - indicates the last signal received was not recognised. Errors can often occur if the DMX line is not terminated. Unlike DMX, PMX may be branched and needs no termination.

CONTROL SIGNALS: Control of the Strobe may be from: a digital controller using the DMX512 or PMX protocols (e.g. **Masterpiece**); an analogue controller (e.g. **Desk, Rock Desk**) or a strobe controller (e.g. **Rainbow Strobe/Chaser**).

Note: if more than one control signal type is used, the highest level will take priority.

DIGITAL CONTROL SIGNALS: Two 5 pin XLR sockets (in/thru) are provided for the digital inputs.



PMX SIGNAL AND LV SUPPLY

- Pin 1 = \equiv Chassis Earth - Screen
- Pin 2 = Signal
- Pin 3 = Signal Earth
- Pin 4 = no connection
- Pin 5 = Low Voltage Supply Out male XLR only

DMX SIGNAL AND LV SUPPLY

- Pin 1 = \equiv Chassis Earth - Screen
- Pin 2 = Signal -
- Pin 3 = Signal +
- Pin 4 = no connection
- Pin 5 = Low Voltage Supply Out male XLR only

Notes:

Pins 4 and 5 are occasionally used by other manufacturers for data. We recommend the use of 2 core plus screen cable, leaving pins 4 and 5 open circuit, to connect to this type of equipment. However, the Low Voltage Supply on pin 5 of the male XLR is limited to cause no harm to such equipment.

The end of the DMX line **must always** be terminated with a 100 ohm resistor connected between Signal+ (pin3) and Signal- (pin2). This resistor can conveniently be mounted in a 5 pin XLR plug (Pulsar Part No. 21750.4) which should be inserted in the last device on the DMX line.



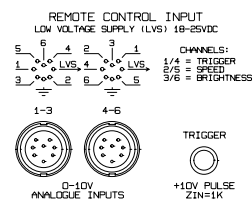
DIGITAL START ADDRESS

The digital start address is set with these switches, the valid range being from 001 to 510. The addressing is in blocks of 3, for example:

- 001 (510) - Trigger
- 002 (511) - Speed
- 003 (512) - Brightness

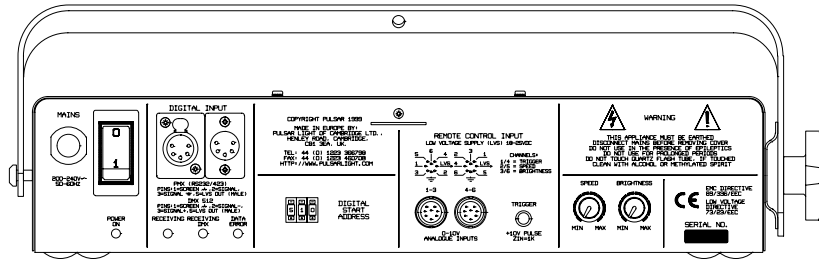
0-10V REMOTE CONTROL INPUTS:

Two 8 pin DIN sockets (in/thru) and a jack socket are provided.

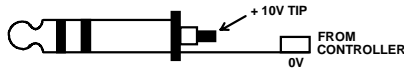


The 0-10V DIN Sockets are cross connected to allow a 6 channel desk to control two strobes using only one 8 channel DIN cable (see Accessories). Further Strobes may also be controlled in this manner with the odd Strobes being controlled by channels 1-3 and the even Strobes by channels 4-6.

I
N
S
T
R
U
C
T
I
O
N
S



Jack socket - when a +10V pulse is applied to the jack socket, the positive going edge of the pulse will fire the Strobe at the brightness set by the Digital or 0-10V brightness channel or the internal brightness control. This input may be used, for example, with a Strobe Remote Controller.



ROTARY CONTROLS:



Speed Control - varies the flash rate between approximately one flash every two seconds and 50 flashes per second (60 fps on 60Hz mains).



Brightness Control - varies the light output from the tube.

OTHER INFORMATION

PRECAUTIONS - Do **NOT** use in the presence of epileptics or for too long at any one time. • Do **NOT** connect to the mains with the glass protective shield removed.



The **GLASS PROTECTIVE SHIELD** is made of toughened glass. It must be changed if it has become damaged such that its effectiveness is impaired. Use Pulsar part number 5784.

REFLECTOR - The light output is also heavily dependent upon the quality of the reflector. For this reason we use the very best Super-Pure Aluminium to make our reflectors. This ensures the very highest reflectivity. We want your reflector to be as efficient as possible not just when new but throughout its life so immediately after polishing, the surface is then anodised to protect it.

FAN - The Demon Strobe has microprocessor controlled fan cooling. To prevent excessive dust and dirt entering the unit, the microprocessor only drives the fan when cooling is actually needed. Do not obstruct the cooling fan's air intake.

THERMAL PROTECTION - The Demon Strobe contains thermal protection circuitry. This smoothly reduces the power of the flash if necessary. For example, if run at full speed and full brightness for more than 30 seconds, the software gradually reduces the brightness over the next 30 seconds to about one third of maximum. At slower speeds and lower brightnesses the delay before cut back is longer and the reduction is less - if necessary at all.

Should the fan be obstructed or fail, there is an additional thermal sensor to limit the power and temperature rise of the strobe.

MAINTENANCE OF LIGHT OUTPUT - This cleaning operation should only be carried out by suitably skilled and competent persons. If the Reflector or Glass Protective Shield becomes dirty, disconnect the strobe from the mains supply, remove the glass shield and simply wipe the reflector and shield surfaces to restore the Strobe's original performance. **Do not touch the quartz flash tube.** Refit the glass shield before reconnecting the mains supply.

FLASH TUBES - Pulsar flash tubes have been carefully chosen for their long life and reliability.



FLASH TUBE REPLACEMENT - This should only be carried out by suitably skilled and competent persons. Disconnect from the mains. Remove the 8 screws and 8 shakeproof washers from the lid to gain access. Release the 3 wires connecting the tube and carefully lever the porcelain end caps from their clips. Insert the new tube by pressing both porcelain end caps into their clips simultaneously. Ensure that each of the 3 wires have two layers of sleeving - use the sleeving from the old tube if necessary. Cut the wires to length and connect them to the terminal

blocks on the circuit board. New tubes can be obtained from your dealer or directly from Pulsar. Take care not to handle the Quartz envelope of the tube - if touched it must be cleaned with alcohol.

MAINS CABLE REPLACEMENT - This modification should only be carried out by suitably skilled and competent persons.



IMPORTANT - The earth wire must be longer than the live and neutral wires so that the earth will always be the last wire to come off if the cable is pulled from the unit. Ensure the outer sheath covering the live and neutral wires is within 15mm of the live and neutral tags on the switch.

PORTABLE APPLIANCE TESTING - The Pulsar Demon Strobe may be safely Earth Bond and Insulation (500V) Tested.

STANDARDS - The Demon Strobe complies with the following International and National Standards:

Electrical Safety - IEC65, EN60065, BS415

EMC - EN50081-1, EN55022, EN50082-1

Index of Protection - IP20

Marking Directive 93/68/EEC - The Demon Strobe

meets both the EMC Directive 89/336/EEC and the Low Voltage Directive 73/23/EEC.



GUARANTEE - 12 months from the date of original purchase. The guarantee is limited to parts and labour. The guarantee is void if the unit is mis-used or repairs are performed by unauthorised persons. In the unlikely event of a fault occurring, do not use without repair. Return the unit, with a description of the fault, to your supplier or direct to Pulsar for immediate attention.

ACCESSORIES

The following products have been designed to work with and compliment the Pulsar Demon Strobe. Please contact us to receive further details of these superb products.

Controllers

Product No.	Controller
23000	48 Channel Masterpiece Control Desk.
24000	108 Channel Masterpiece Control Desk.
20216	216 Channel Masterpiece Control Desk.
26000.3	Programmable Touch Panel II.
21000	Single Channel Strobe Remote Controller.
20450	1/2/4/8 Channel Rainbow Strobe/Chaser.

Signal Processing

Product No.	Processor
27400	18 Channel Switching Interface.

Spare Parts

Part No.	Accessory
60030	18" Safety Chain
60031	18" Safety Wire
3181	Demon Strobe flash tube
5784	Demon Strobe safety glass
21750.4	DMX Line Terminator Plug

DIMENSIONS AND WEIGHTS

Code	Unit	Width	Height	Depth	Weight
		mm.	mm.	mm.	kgs.
27800	Demon Strobe (Less Bracket)	410.0	90.0	200.0	3.0
27800	Demon Strobe (With Bracket)	465.0	160.0	200.0	3.5