

STROBOSCOPIC LIGHT SOURCE

A Xenon filled arc discharge lamp intended primarily for use as a Stroboscopic Light Source for low repetition frequencies up to 30 per second. The reflector is an integral part of the design and the trigger pulse transformer is incorporated in the base.

PHYSICAL DETAILS.

Base	...	UX6.
Max. Seated Height	...	86 mm. (3 $\frac{3}{8}$ in.).
Overall Length	...	102mm. (4 $\frac{1}{8}$ in.).
Diameter of Reflector	...	105mm. (4 $\frac{1}{4}$ in.).
Diameter of base	...	35mm. (1 $\frac{3}{8}$ in.).
*Mounting Position	...	Any.

PIN CONNECTIONS.

Pin 1—Cathode.	Pin 5—I.C.
Pin 2—Trigger earth.	Pin 6—I.C.
Pin 3—Trigger input.	
Pin 4—Anode.	

RATINGS.

Max. A.C. Supply Voltage	...	240 volts (r.m.s.).
Max. Anode Voltage (Static)	...	300 volts d.c.
Max. Anode Voltage (Working)	...	240 volts d.c.
Min. Anode Voltage (Working)	...	180 volts d.c.
Max. Dissipation	...	12 watts.
Max. Energy per Flash	...	1 joule.
Max. Discharge Capacitor	...	16 μ F.
Min. Value of Charging Resistor	...	500 ohms.

CHARACTERISTICS.

Max. Flashing Frequency	...	30 per second.
Trigger Voltage	...	see Note 1 overleaf.

TYPICAL OPERATION.

as Stroboscopic Light Source.

Anode Voltage	...	230 volts.
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Charging Resistor :

1—15 c/s.	...	500 ohms.
16—30 c/s.	...	1000 ohms.

Discharge Capacitor

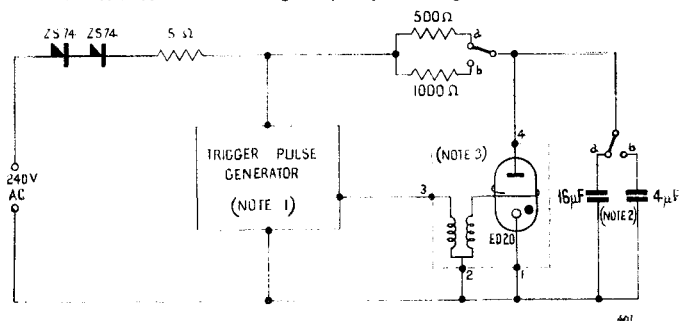
1—15 c/s.	...	16 μ F.
16—30 c/s.	...	4 μ F.

A simple circuit for operation from a.c. mains is shown overleaf.

*The recommended method of mounting is by support at the flange of the reflector.

TYPICAL OPERATION (Cont.).

Circuit diagram for operation as a Stroboscopic Light Source from A.C. supplies with silicon rectifiers and 2 range frequency switching.



Note 1.

The trigger pulse generator circuit may use either valve or semi-conductor devices. It can conveniently consist of a means of controlling the frequency of a discharge through the primary of the built in transformer. A suitable discharge may be obtained from a capacitor of approx. 0.1 μF charged to 150 volts.

Note 2.

The capacitors should be good quality paper type—electrolytic capacitors are unsuitable.

Note 3.

The figures refer to the valve pin connections.

