

# Ferranti

## FLASH TUBE

Xenon filled flash tubes designed for use in Electronic Flash Equipment for Photographic or similar applications to operate from low voltages which can be supplied from a small power pack.

### PHYSICAL DETAILS.

#### CD10

Max. Length (excluding leads and pins) ... ..	60 mm. (2.36")
Max. Diameter of Glass ... ..	8 mm. (.325")
Max. Overall Width ... ..	24 mm. (.955")
Electrode Connections ... ..	Flexible Leads
Mounting Position ... ..	Any

#### CD11

Max. Seated Height ... ..	70 mm. (2.75")
Max. Diameter of Glass ... ..	8 mm. (0.32")
Max. Overall Width ... ..	35 mm. (1.38")
Electrode Connections ... ..	Octal Base
Mounting Position ... ..	Any

### ELECTRODE CONNECTIONS.

Type **CD10** has flexible leads. The twin twisted lead is the trigger lead. The device is non-polarised.

Type **CD11** is fitted on an Octal Base—see diagram in margin for connections.

The devices are non-polarised, the charging voltage and discharge capacitor may therefore be connected across the leads marked \* in the marginal diagrams without regard to polarity.

### RATINGS. (Both types)

Max. Discharge Energy ... ..	50 Joules
Max. Operating Voltage ... ..	500 Volts
Min. Operating Voltage ... ..	180 Volts
*Min. Interval between Flashes ... ..	10 Secs
Max. Discharge Capacitor ... ..	600 $\mu$ F

### TYPICAL OPERATION. (Both Types)

Operating Voltage ... ..	410 Volts
†Trigger Voltage ... ..	2 to 3 kV
Discharge Capacitor ... ..	600 $\mu$ F
Charging Resistor ... ..	3.3 k $\Omega$ (6 watt)
Flash Duration ... ..	.002 Sec Approx.

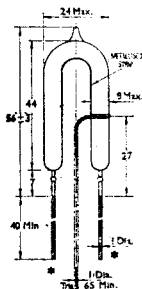
A typical circuit is shown overleaf

\*At maximum dissipation.

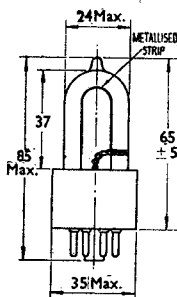
†Ferranti Miniature Pulse Transformer Type PT56 is recommended.

CD10

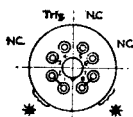
CD11



Type CD10



Type CD11



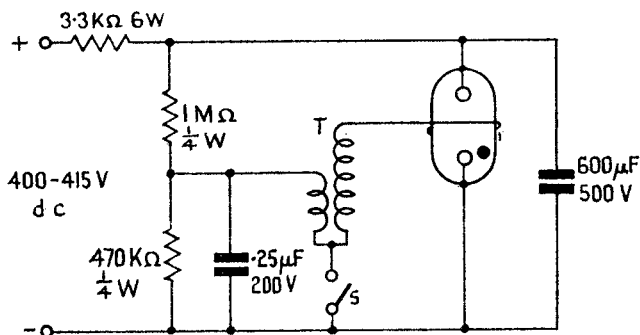
Dimensions in millimetres

Ferranti

CD10

CD11

CIRCUIT DIAGRAM



**Guide Nos. for Flash Photography**

For operation in a circuit similar to the above, i.e. with a discharge energy of 50 joules with the CD10 or CD11 mounted in a 3½" diameter satin finish parabolic reflector the following guide numbers may be used.

**Monochrome Film**

Film Speed	Guide No.
A.S.A.	
25— 32	50
40— 50	65
64— 80	85
110—125	105
160—200	125
250—320	150

**Reversal Colour Film**

Film Speed	Guide No.
A.S.A.	
25	30
50	40

The above figures are approximate and are intended to be used only as a guide for correct exposure.