

FERRANTI

TELEVISION TUBE

Cathode Ray Tube type T12/72U is a Triode Tube, designed for series operation in AC/DC Television Receivers.

Focus	...	...	...	Magnetic.
Deflection	...	...	...	Magnetic.
Fluorescence	...	...	...	White.

This tube has an external conductive coating which may be used to provide smoothing of the E.H.T. supply.

PHYSICAL DETAILS.

Base	...	...	...	International Octal.
Anode Cap	...	...	...	9.7 mm. dia.
Max. Overall Length	...	...	...	466 mm.
Max. Diameter	...	...	...	307 mm.
Neck Diameter	...	...	...	$35 \pm \frac{1}{2}$ mm.

BASE CONNECTIONS.

Pin 1—No Connection.	Pin 5—Modulator.
Pin 2—Heater.	Pin 6—No Pin.
Pin 3—No Pin.	Pin 7—Heater.
Pin 4—No Pin.	Pin 8—Cathode.
Side Cap—Anode.	

HEATER.

Heater Current	...	...	...	0.3 amp.
†Heater Voltage	...	...	...	6.3 volts.

RATINGS.

*Max. Anode Voltage	...	...	...	10 kV.
Max. V_h-k	...	...	...	200 volts.
**Max. Negative Modulator Voltage for cut-off	...	...	...	$V_a/100$

TYPICAL OPERATION.

Anode Voltage	...	...	...	9.0 kV.
V_g for visual cut off	...	...	...	-60 volts.
Av. Mod. Drive for 150 μ A Beam Current	...	...	...	32 volts.
†Focus Coil	...	...	...	800 ampere turns (approx.).

DEFLECTION SENSITIVITY.

With an Anode Voltage of 9.0 kV. the Deflection Sensitivity is $0.09l$ cms/gauss where l is the effective length of the magnetic field of a scan coil situated with its centre 285 mm. from the screen.

CAPACITANCES.

C _k -all	...	...	...	6.2 pF.
C _g -all	...	...	...	5.0 pF.
C _a -external coating	...	...	...	1500 pF. approx.

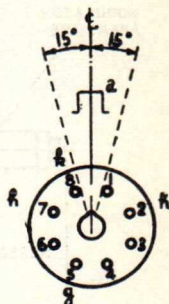
†When used for series operation the surge heater voltage should not exceed 9.5 volts r.m.s. and a current limiting device should be incorporated in the circuit to limit switching surges.

*The product of Anode Voltage and Beam Current should not exceed 7 watts.

**The modulator should never be positive with respect to cathode.

†With $V_a=9.0$ kV. and the focus coil positioned so that its gap is approximately 2.5 cm. in front of the modulator.

T12/72U

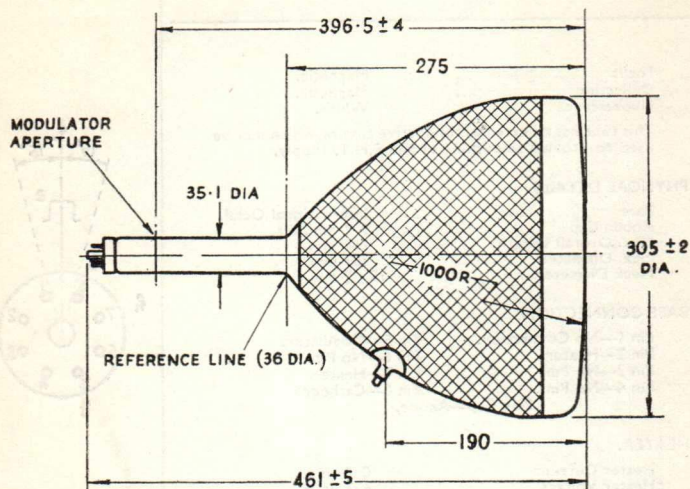


Base
Connections
Underside View
of Base

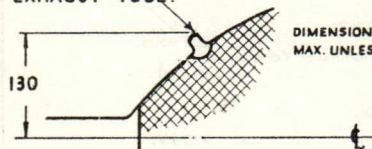
The anode cap can lie within 15° either side of the centre line as indicated in the diagram.



T12/72U



EXHAUST TUBE.



DIMENSIONS IN MILLIMETRES.
MAX. UNLESS OTHERWISE STATED.

