10ADP4

National Video Corporation
4300 W. 47TH STREET CHICAGO 32, ILLINOIS
CLIFFSIDE 4-5600

The type 10ADP4 is an electrostatic focus and magnetic deflection direct view picture tube. It has an all glass, rectangular bulb designed for 90° deflection. The faceplate is of filter glass and has a spherical contour. The electron gun is designed to be used with an external ion-trap magnet. The low filament current reduces the amount of heat produced and lends itself to a compact TV design. It has an external conductive coating.

GENERAL CHARACTERISTICS

Focusing Method	Electrostatic	
Deflection Method	Magnetic	
Deflection Angle (Approx.) Horizontal	85	Degrees
Diagonal	90	Degrees
Face Plate Light Transmission (Neutral Density Filter)	81%	Approx.
Phosphor	No. 4	
Fluorescence	White	
Persistence	Short to Medium	
Direct Interelectrode Capacitances (Approx.)		
Cathode to all other electrodes	5	uuf
Grid No. 1 to all other electrodes	6	uuf
External conductive coating to anode	850	Max. uuf
	400	Min. uuf

MECHANICAL DATA

Overall Length	11 7/8	Inches
Greatest Dimensions of Bulb		
Diagonal	10 3/8 + 1/8 - 1/16	Inches
Width	9 3/4 + 1/8 - 1/16	Inches
Height	7 1/2 + 1/8 - 1/16	Inches
Minimum Useful Screen Dimensions (Max. Assured)		
Screen Area	55	Sq. Inches
Diagonal	9 9/16	Inches
Width	9 1/16	Inches
Height	6 5/8	Inches
Bulb Contact	J1-21	
Base	B6-63	
Basing	12L	
Bulb Contact Alignment		
J1-21 contact aligns with pin position #6	± 30	Degrees
Weight	3 1/4	Lbs.

from JETEC release #1725, Sept. 4, 1956

MAXIMUM RATINGS Design Center Values

Heater Voltage	8.4	Volts
Heater Current	.45 ± 10%	Amperes
Anode Voltage	12,000	Max. Volts D.C.
Grid No. 4 Voltage[1]	-500 to +1,000	Max. Volts D.C.
Grid No. 2 Voltage	500	Max. Volts D.C.
Grid No. 1 Voltage		
Negative peak value	200	Max. Volts D.C.
Negative bias value	140	Max. Volts D.C.
Positive bias value	0	Max. Volts D.C.
Positive peak value	2	Max. Volts
Peak Heater-Cathode Voltage		
Heater negative with respect to cathode during warm-up period not to exceed 15 seconds	410	Max. Volts D.C.
After equipment warm-up	180	Max. Volts D.C.
Heater positive with respect to cathode	180	Max. Volts D.C.

TYPICAL OPERATING CONDITIONS

Anode Voltage	7,500	Volts D.C.
Grid No. 4 Voltage[2]	0 to 500	Volts D.C.
Grid No. 2 Voltage	300	Volts D.C.
Grid No. 1 Voltage[3]	-38 to -72	Volts D.C.
Field strength of PM ion trap magnet[4]	32	Min. Gausses

MAXIMUM CIRCUIT VALUES

Grid No. 1 Circuit Resistance	1.5	Max. Meghoms

NOTES

[1]Grid number four in this tube is the focus control electrode.

[2]With the combined grid No. 1 bias voltage and video signal adjusted to produce an anode current of 100 ua on a 8 7/8 x 6 9/16 inch picture adjusted for best overall focus. For other anode voltages, the focus voltage will be from 0% to 5.5%.

[3]Visual extinction of focused raster.

[4]For the specimen PM ion trap magnet such as the Heppner Model No. E437 or equivalent, positioned to give maximum brightness for a given equipment application, the tolerance range for the strength of the PM ion magnet should be added to the minimum value. The maximum strength of the magnet should not exceed the specified minimum value.

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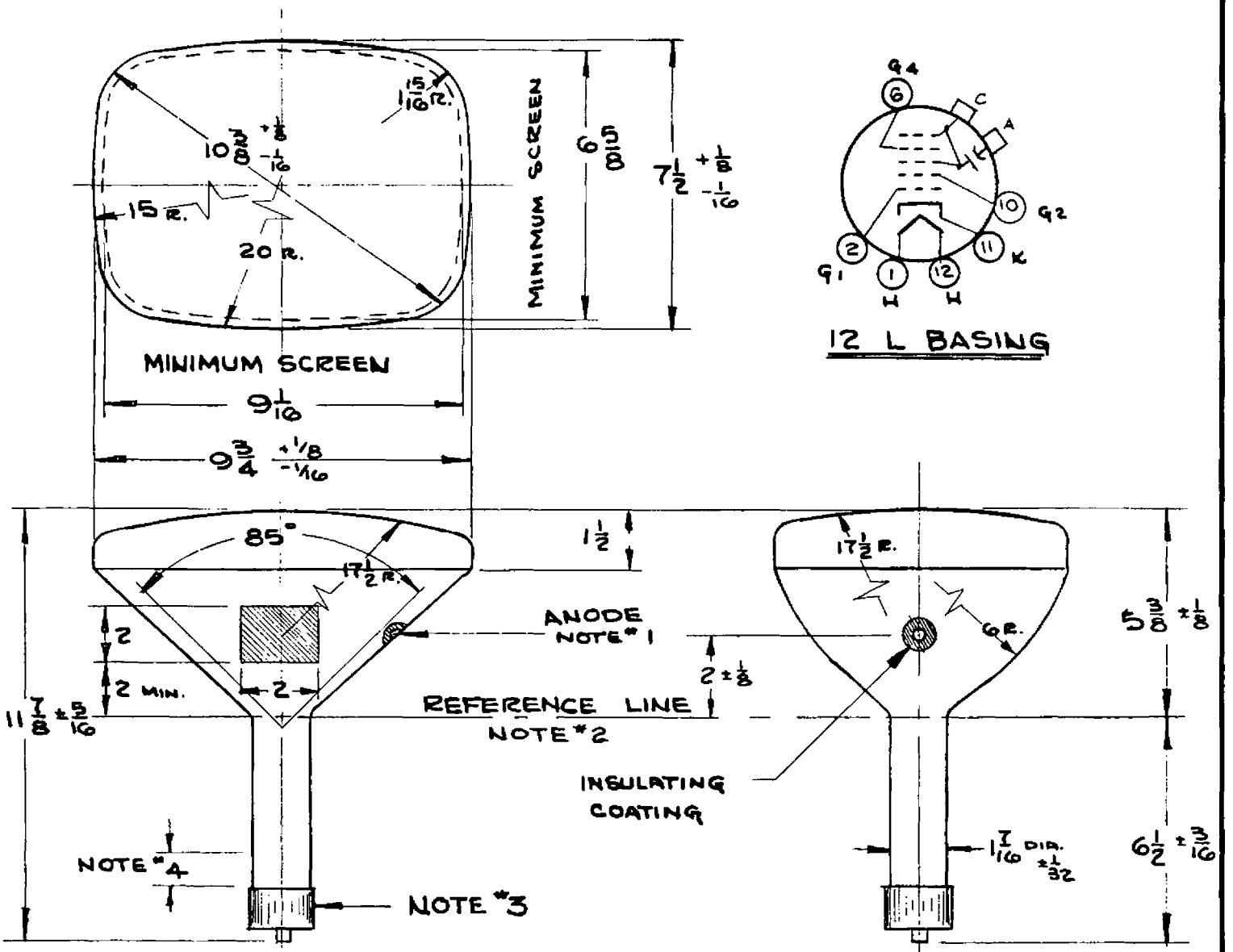

12 L BASING

NATIONAL VIDEO CORP.
CHICAGO 32, ILL.

SUPERSEDES	ORIGINAL	DRAWING Nº	10ADP4
DRAWN BY	SCALE	EFFECTIVE	DISTRIBUTION
J. FRUGOLI	1 = 4	6 AUG. 56	A,B,C,D,E,F,G,H.

NOTES

NOTE 1: The plane through the tube axis and pin position 6 aligns with the anode contact $\pm$ 30°.

NOTE 2: Reference line is determined by the plane where standard JETEC reference line gauge #116 will stop against the bulb.

NOTE 3: Socket for this base should not be rigidly mounted. It should have flexible leads and be free to move.

NOTE 4: Keep this space clear for ion-trap magnet.