

NL-844, NL-845, NL-846 & NL-847 NUMERICAL READOUT TUBES

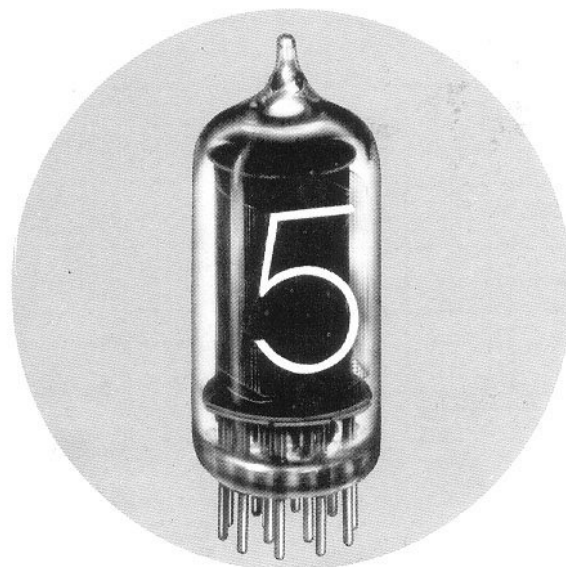
National Electronics Readout Tubes **NL-844, NL-845, NL-846, NL-847** are long-life, sideviewing, neon glow, numerical display tubes. They are similar in design and construction to the **NL-840** series. The **NL-844, NL-845, NL-846**, and **NL-847** have much narrower, more intense character lines for higher contrast, sharper characters, and greater readability.

NL-844 is a 10 character display tube, numerals 0 to 9.

NL-845 is a 10 character display tube, numerals 0 to 9, with an independent decimal point to the left of the numerals.

NL-846 is a 10 character display tube, numerals 0 to 9, with an independent decimal point to the right of the numerals.

NL-847 is a 2 character display tube, "+" and "-."



TECHNICAL INFORMATION

Ionization Voltage (Maximum)	170 Vdc
Supply Voltage (Minimum)	170 Vdc
Cathode Current	
Peak (Maximum)	4.5 mA
Average (Maximum)	4.0 mA
Average (Minimum)	2.0 mA
Decimal Point Current	
Average (Maximum)	0.7 mA
Average (Minimum)	0.3 mA
Prebias Limits	50V to 120V dc
Temperature Limits	-20°C to +55°C
(Reduced Life)	-65°C to +85°C
Life (Dynamic)	200,000 Hours
Weight	0.3 oz.
Mounting Position	Vertical with pins 1 & 10 in front

Recommended Operating Conditions:

NL-844 - 847

Supply Voltage (Ebb)	170V	250V	300V
Anode Resistor (RA)	7K	33K	50K

NL-845 - NL-846

(a) When the decimal point is to be operated only while another character is on:

Supply Voltage (Ebb)	170V	250V	300V
Anode Resistor (RA)	7K	30K	47K

(b) When the decimal point is to be operated with or without another character it is recommended individual cathode resistors be used with no resistor in the anode circuit:

Supply Voltage (Ebb)	170V	250V	300V
Numerals Resistor (RN)	7K	33K	50K
Decimal Point Resistor (RD)	52K	270K	390K

Note: Use of the highest voltage available with the appropriate resistor is recommended.

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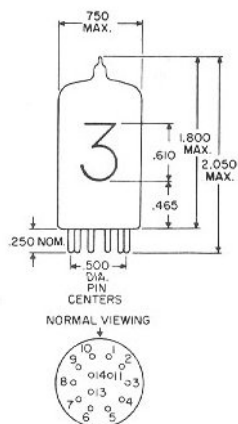
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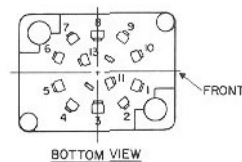
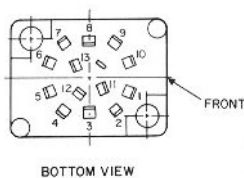
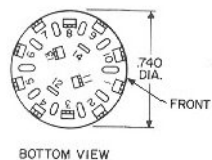
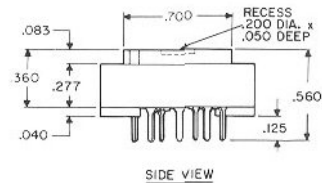
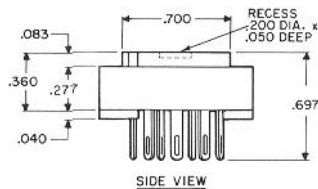
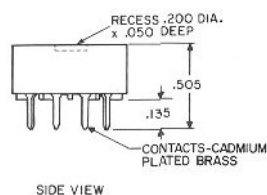
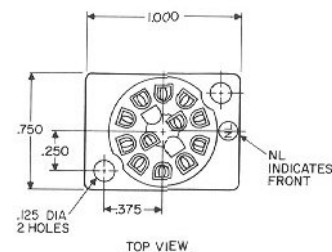
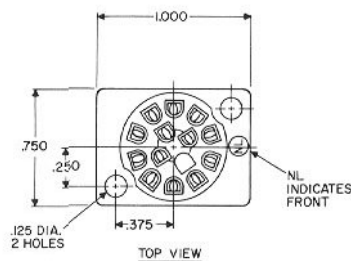
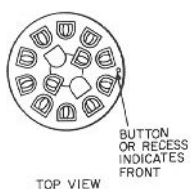
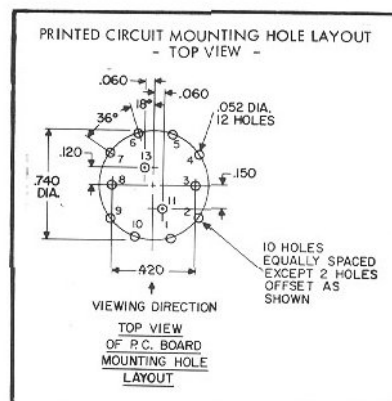
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TWX 910 237-1685

NL-844, NL-845, NL-846 & NL-847 NUMERICAL READOUT TUBES



Pin Number	Pin Connections		
	NL844	NL-845 NL-846	NL-847
1	7	7	
2	5	5	
3	8	8	
4	Anode	Anode	Anode
5	1	1	
6	4	4	+
7	2	2	-
8	6	6	
9	9	9	
10	3	3	
11	Int. Conn.	Decimal Pt.	No Conn.
12	No Pin	No Pin	No Pin
13	0	0	Int. Conn.
14	Int. Conn.	Int. Conn.	Int. Conn.



RTS-14

RTS-16 (MIL SPEC Material)
RTS-17 (Commercial Grade)

RTS-19 (MIL SPEC Material)
RTS-20 (Commercial Grade)

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