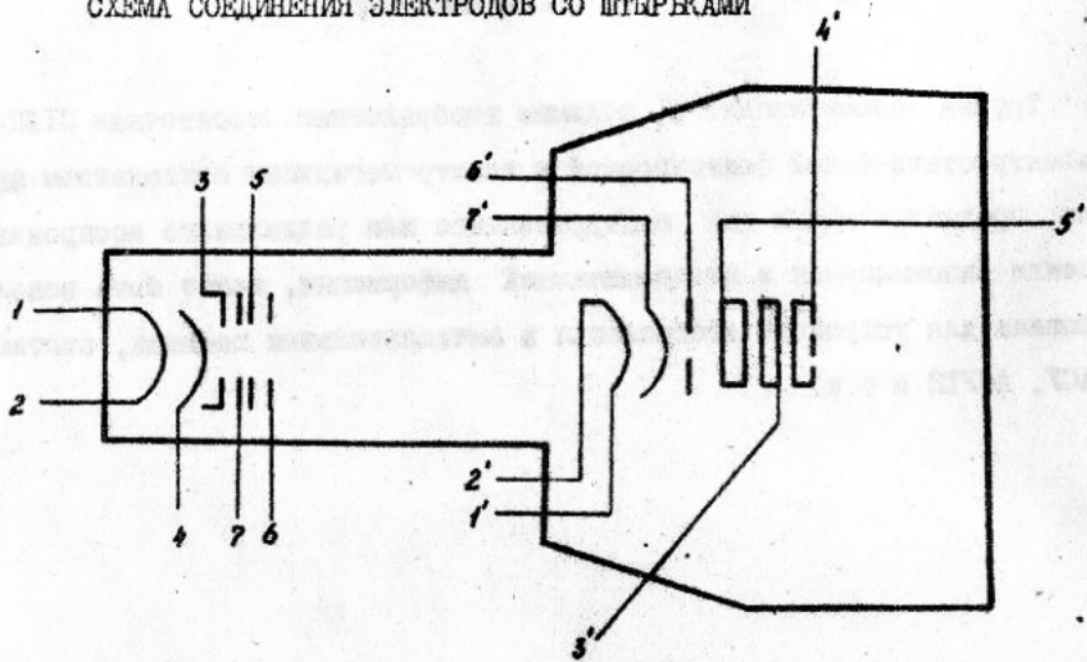


СХЕМА СОЕДИНЕНИЯ ЭЛЕКТРОДОВ СО ШТЫРЬКАМИ



Connection diagram of electrodes with pins

Pin Number | Electrodes names

1, 2 | heater of writing section

3 | modulator of writing

4 | cathode of writing

5 | focusing electrode of writing

6 | anode 2 of writing

7 | accelerating electrode

1',2'| heater of storage section

3' | collimating electrode II

4' | collector

5' | collimating electrode I

6' | anode of storage

7' | cathode of storage

2. The main Technical parameters

2.1 The main technical characteristics and parameters are shown in tables 1 and 2

Table #1

Parameter, unit of measure	Standard		Actual	Notes
	No less	No more		
1. Width of writing line, mm:				
in the center	-	0.4	0.4	2
in the corners	-	0.7	0.7	2
2.Storage time, min	15	-	15	2
3. Outside operating parameter of storage	-	-	Satisfy to requirements of specification	2
4. screen brightness, candela/m ²	20	-	42	2
5. Negative blocking voltage of writing modulator, V (absolute)	50	155	107	2
6. Negative blocking voltage of storage anode, V (absolute)	-	10	0	2
7. The fixed position of beam without voltage on collimating electrodes within rectangle, mm x mm	-	15x20	15x20	2
8. Contrast of image, relative units	7	-	14	2
9. Unevenness of screen brightness, relative units	-	2	1.2	2
10. Heater current of writing, A	0.27	0.33	meets specifications	2
11.Heater current of storage, A	-	0.45	meets specifications	

12. Leakage current of writing gun between cathode-heater, ua	-	100	meets specifications	
13. Leakage current of writing gun between cathode-modulator, ua	-	10	meets specifications	
14. Capacity of writing gun cathode and all other electrodes tied together, pf	-	10	meets specifications	
15. Capacity of writing gun modulator and all other electrodes connected together, pf	-	10	meets specifications	

Notes:

1. Voltage of the writing modulator is show in reference to cathode of writing section. All other voltages are shown in reference to the cathode of the storage section. Voltage of storage cathode is zero.
2. Writing speed for testing (measurements) is 200 meter/sec.

Table#2

Parameters, unit of measure	magnitude		Notes
	Standard	Actual value	
1. Writing gun heater voltage, V	6.3	6.3	
2.Storage gun heater voltage, V	38	38	
3.Netitive voltage of writing modulator, V absolute	10-130	42	
4.Negative voltage of writing gun cathode, KV absolute	3.8kv	3.8kv	
5.Voltage of writing gun accelerating electrode, V	150	150	
6.Votlage of writing gun anode 2, V	150	150	

7.Negative voltage of writing gun focusing electrode, V absolute	2100-2400	2300	
8.Voltage of storage anode, V	150	150	
9. Voltage of storage collimating electrode 1, V	30-150	50	
10.Voltage of storage collimating electrode 2, V	30-150	50	
11.Voltage of storage collector, V	100-240	185	

Annotation:

Voltage of writing modulator is shown in reference to writing cathode. All other are voltages a shown in reference to the storage cathode. Storage cathode =0, zero

2.2 Parameters which are changing during operation: (working time of the device)

The screen brightness (cd/m²) is no less then15

Writing speed (meter/sec) is no less.....100

Negative blocking voltage of writing modulator, V= 50-180

Line width in memory mode in the center, in mm, no more than ... 0.5

2.3 The allowable maximum, under operating conditions (operating modes) are in table#3

Parameter name, unit of measure	acceptable range		Annotation
	No less than	No more than	
1.Heater voltage of writing gun, V	5.7	6.9	
2.Heater voltage of flood, storage guns, V	34	42	
3.Cathode voltage of writing gun, KV	-	4.1	

Notes: All voltages are shown in reference to the storage cathode.

2.4 Probability failure rate in normal climate during 2000 hours no more than $1 \times 10^{-5}/\text{hr}$.

Shelf life for 90% of the devices = 4 years.

2.5 Size of device in mm:

The Length is 435 mm maximum

The Diameter is 263 mm maximum

The working part of the screen not less than 160x210 mm

The weight in kg is no more than 5.5

2.6 Precious metal content:

Silver in grams – 0.588

2.7 Wires which contain non-ferrous metals and their alloys in the table#4

Name of wire	Grade of wire	mass in grams
1.silver wire	1,35 - 0,02- 13-3	1.75
2.Copper-nickel wire	MnMz40-1.5	0.28
3.copper wire		1.05
4.brass wire		1.45
5.nickel wire, micron wire		3.46
6.semi-finished metal products		0.3

3.Certificate information

This device, 31LN4, meets specification on March 10 of 1988.

4.Directions for operation

4.1 Does not allow to use two or more maximum voltages shown in table 3 at the same time. Using maximum voltage of one of the parameters can not exceed 5 minutes.

4.2 Continuous use of two or more max voltages may degrade quality and reduce the working life of the device

4.3 For protecting device from screen burn does not allow:

Make heating voltage of storage more than 42 V and heating voltage of writing more than 6.9 V.

Working if scanning is turned off.

Use voltage of writing modulator less than allowed in specification.

Bend pins of device because it may break up tightness of device.

5. Shelf life requirements

Keep device by standard GOST 15150-69

Keep in original box

Keep in instrument

6. Warranties

Warranty in accordance to 0.335.251 Technical specifications.

4 years from March 10 of 1988 or 2000 hours use.

7. Return information

Ship to factory

Information

Hours

How many days working

Broken date

What kind of work is done

Hours working

Why you don't like

Date