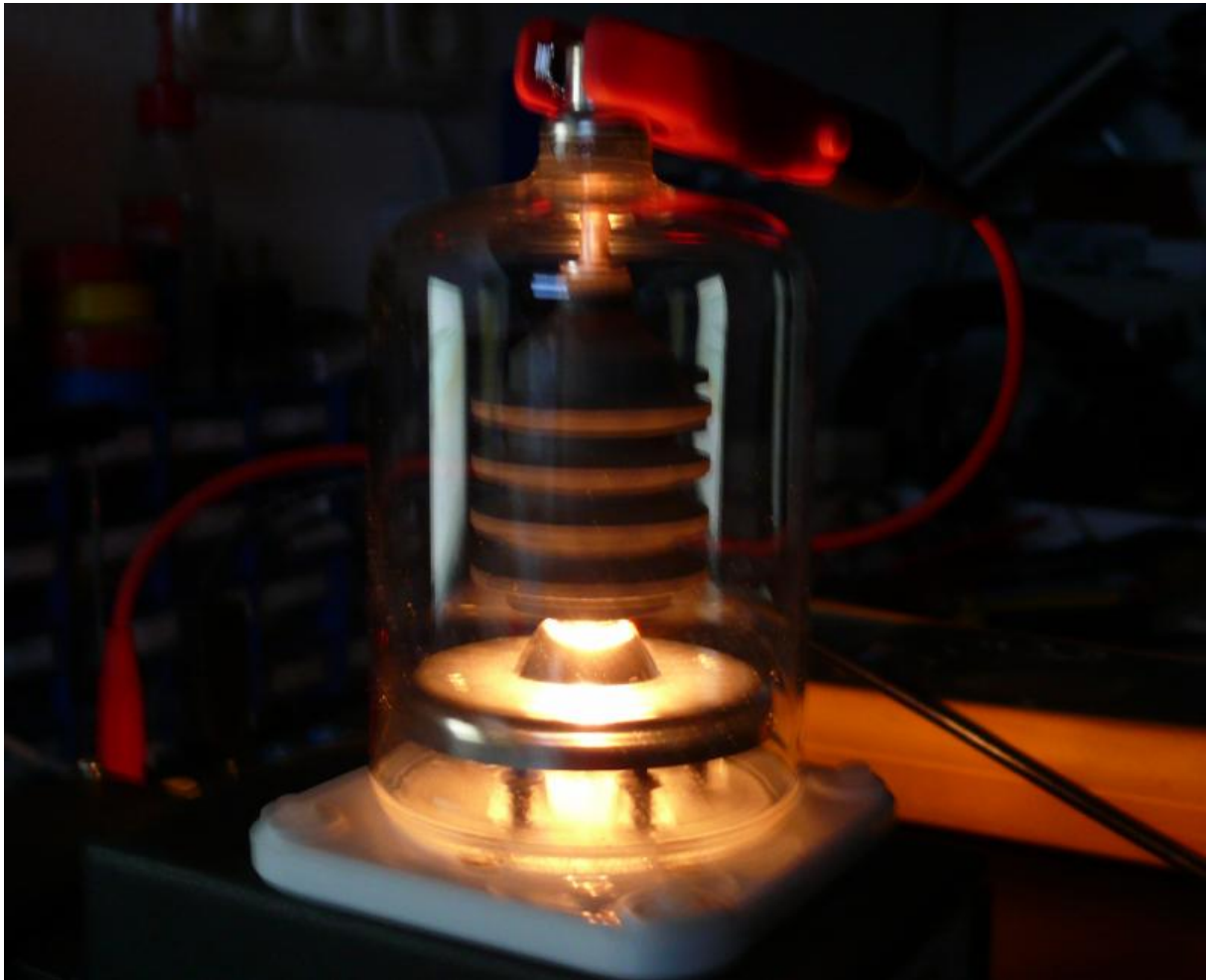


**RoeTest - Computer Tube Tester / Tube Measuring System**  
(c) - Helmut Weigl [www.roehrentest.de](http://www.roehrentest.de)

**SRS455 (6155)**



**1. Socket-Box**

This tube has a Giant-Base. Sockets for this tube are available from new production. We use a standard socket-box for the tube, but the heating connections (pins 1 and 5) are not connected to the 12-pin socket-box connector. Instead they are connected to two banana jacks mounted into the socket box.



## 2. Heating

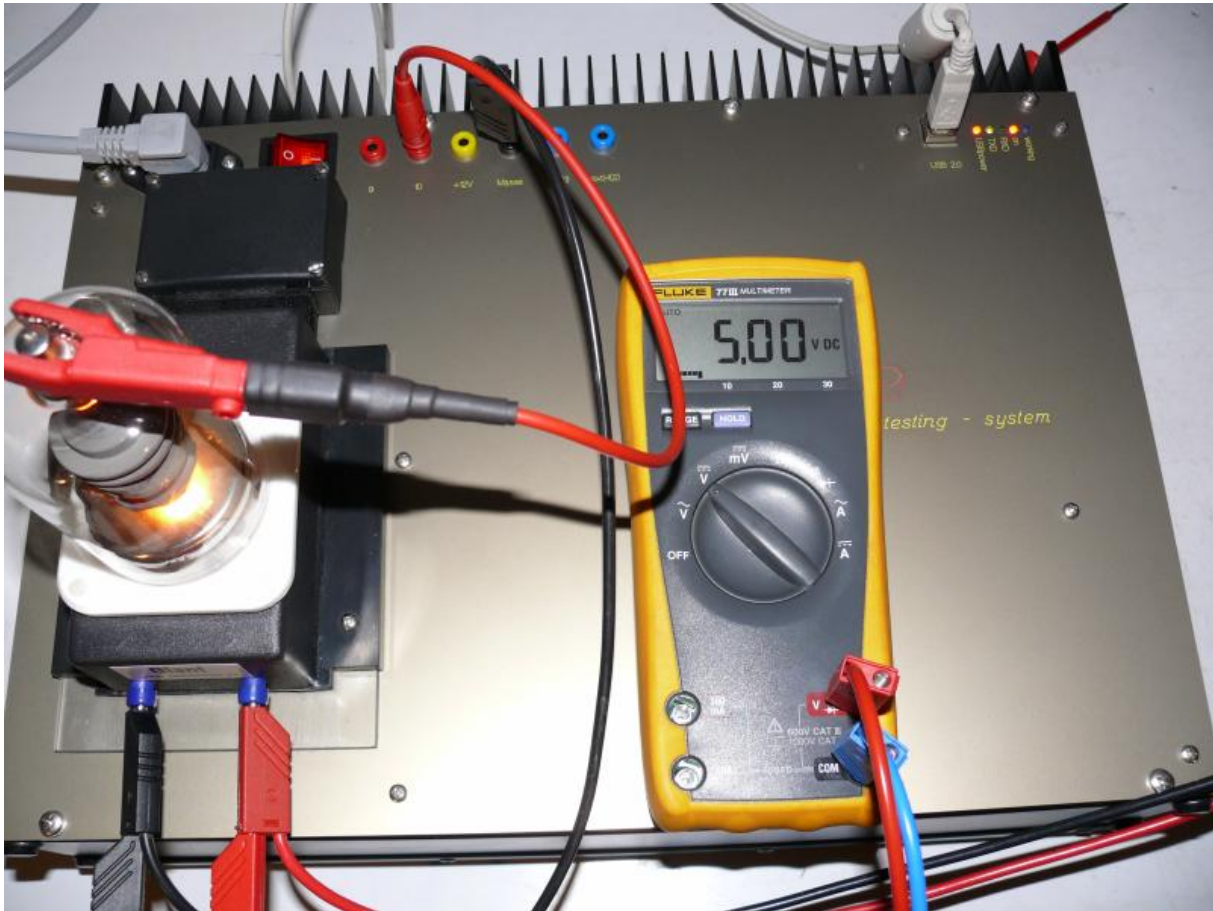
This tube has a heater with 5V and 6,5A. This current is beyond the limits of the RoeTest's internal heating supply. Therefore the heating supply must be connected externally. Due to the required high current the supply must not be fed to the RoeTest's banana jacks. Instead the heating supply is directly connected to the banana jacks in the socket-box.

I use a laboratory double power supply unit that allows parallel connection of the outputs thus supplying up to 10A.



The connections are made as follows:

- Plus and Minus terminals of the laboratory supply are connected directly to the banana jacks in the socket-box
- The Minus banana jack terminal from the socket-box is connected to the ground terminal of the RoeTest
- Connect a Multimeter to the banana jacks in the socket-box (thus the voltage at the tube can be adjusted exactly)
- Connect the top clip of the tube to terminal 10 at the RoeTest (use a wire with a combination of a RF-choke and a resistor in parallel to avoid oscillation)



## Tube Data

Define the dataset for the tube as follows:

RoeTest - Datenbank

Röhrenname:  K

Hersteller:

s. Vergleichsröhre:

Philips code:

Heizung:

Heizspannung [V]:  Regelung:

Heizstrom [A]:

Heizart:

Kaltwiderstand

Heizfaden (Ohm):

Allgem. Daten

Herstelljahr:

getestet:

Datenherkunft:

Daten erfasst durch:

Daten geändert (oder neu):  (hier markieren, falls Daten zur Zusammenführung übersandt werden)

Daten geändert durch:

Bemerkungen zu Änderungen:

Navigation Datensatz:

System 1 System 2 System 3

Röhren-(System)art: Tetrode externe H. - -

typische Werte:	System 1	System 2	System 3
S2 +1 UA/L [V *])	600,0	0,0	0,0
S3 -1 UG1 [M *])	-10,00	0,00	0,00
S4 +2 UG2/An/Stn [V *])	300,0	0,0	0,0
S5 -2 UG3/G40kt. [M *])	0,0	0,0	0,0
UG4/G5 [V *])	= Stifzuordnung gemäß Röhrenart		
I/L Soll [mA]	100,00	0,00	0,00
IG2/An Soll [mA]	3,80	0,00	0,00
S [mA/V]	3,50	0,00	0,00
μ:	0,0	0,0	0,0
D:	16,0	0,0	0,0
Ri [KOhm]	0,0	0,0	0,0

\* ) bei Hexoden, Heptoden, Oktoden, Nonoden können die Spannungsquellen auch mit anderen Elektroden verbunden sein (z.B. G3, G4, G5) - siehe Zuordnung in der Datenbank "Röhrenart"

Bemerkungen zur Röhre:  Hilfe zu Röhrenart:

= RS1007, QB3/300, QB3/300GA, AX4-125A, 4-125A, PL-4D21, CV2963, TT16, TT16D, Q160-1, RS685, Q3-125, C1108, E1870, QY3-125, E125A, GL4D21, PL4D21, RE125A, RK4D21, SRS455, WL4D21  
externe Heizspannung an Fassung einspeisen

drucke Datenblatt  abbrechen

- Röhrenart (tube type): "Tetrode externe H.". For this tube type the internal heating will not be connected to the tube
- Heizart (heating mode): "~direkt". This mode selects simulation of AC-heating
- typische Werte (typical values): There is no information available in the data sheets for lower level voltages for this transmitter tube. Therefore the values from an existing NOS-tube were used as the typical values. If you have more of that tubes you should use the average values of all of the tubes as typical values.

To optimize the recording of the tube's characteristic curves I also created a file named "[6155.KPA](http://www.roehrentest.de/6155.KPA)" (just copy that file from <http://www.roehrentest.de/6155.KPA> to the RoeTest directory).

## Measuring:

First switch on the laboratory power supply unit and adjust the heater voltage, wait until the current stabilizes. Then all measurements (static measurements, characteristic curves, manual mode) can be done as usual.

The screenshot shows the RoeTest software interface. At the top, there are eight measurement gauges for H-Spannung, A-Spannung, G2-Spannung, G1-Spannung, H-Strom, A-Strom, G2-Strom, and a general Spannung gauge. The main area contains tube data for a 6155 tube, including heater voltage (6.5V), heater current (6.5A), and heater mode (~direkt). A data table is displayed with columns for System, Rohrenart, Sollwert IA [mA], Messwert IA [mA], and % vom Sollwert. The table shows a measured IA of 101.81 mA, which is 102% of the 100 mA target. Other parameters like S [mA/V], bei Delta UG1 [V], and Messwert IA [mA] at different dUG1 values are also listed.

System	1	2	3
Röhrenart	Tetrode ex		
Sollwert IA [mA]	100		
Messwert IA [mA]	101,81		
= % vom Sollwert	102		
Sollwert IG2 [mA]	3,8		
Messwert IG2 [mA]	3,388		
= % vom Sollwert	89		
S [mA/V]	3,5		
bei Delta UG1 [V]	0,6		
Messwert IA [mA] bei +1/2 dUG1	102,71		
Messwert IA [mA] bei -1/2 dUG1	100,61		
D Anode [%]			
Messwert IA [mA]			
bei UA [V]			
D G2 [%]	16,11		
Messwert IA [mA]	95,61		

