

RoeTest – Computer Tube Tester / Tube Measuring System

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translation to english by Gerhard Oed (thank you very much to him)

Measuring the first time:

In order getting to know the RoeTest perform the first measurement using a simple standard tube (for example an EF80 or EL84)

- Switch on the hardware and start the measurement software (roetest.exe)
- Insert socket adapter and tube into the device
- Select appropriate tube data (Button <load tube data>) and check whether the correct data are loaded

The screenshot displays the RoeTest software interface. At the top, there are several measurement gauges for parameters: UH (0-120V), UA (0-300V), UG2 (0-300V), UG1 (0-100V), IH (0-600mA), IA (0-300mA), IG2 (0-60mA), and U (0-100V). The 'measured parameters' section shows all values at 0.00. On the right, the 'load tube data' button is highlighted with a red box. Below it, the 'tube data' section shows 'designation: EF80' also highlighted with a red box. A red arrow points from the 'load tube data' button to the 'EF80' designation. The 'tube data' section includes fields for heater voltage (6.3V), heater current (0.3A), heater type (intern DC), and base (Noval B9A). A pinout table is visible below the tube data section.

system	1	2	3
type of tube system	Pentode	-	-
pinout			
Pin 1	K		
Pin 2	G1		
Pin 3	K		
Pin 4	F1		
Pin 5	F2		
Pin 6	S		
Pin 7	A		
Pin 8	G2		

Press buttons for desired measuring methods (this are all full automatic modes)

The screenshot shows the main interface of the RoeTest software. At the top, there are several gauges for measured parameters: UH (0-120V), UA (0-300V), UG2 (0-300V), UG1 (0-100V), IH (0-6000mA), IA (0-300mA), IG2 (0-60mA), and U (0-100V). All digital readouts show 0.00. Below the gauges are status indicators for 'check for continuity', 'current watchdog', 'COM', 'Data in', and 'Data out'. The 'tube data' section shows a designation of EF80 and various heater settings. A central text area lists compatible tube types. On the right, a 'Testm' button is highlighted in red, along with other options like 'load tube data', 'data for current tube', 'Databases', 'filament test', 'testing for shorts', 'static test', 'curve trace', 'Quick test', 'print', 'evaluating curves', 'batch', 'manual', 'info', and 'end'. The version number 10.2.5.0 is displayed in the top right corner.

You get the results in the output area:

This screenshot shows the results of a tube test for a 4X250B tube. The 'measured parameters' section remains the same as in the previous image. The 'tube data' section now shows a designation of 4X250B and heater settings for 6V. The central text area displays the test results for the 4X250B tube, including a pinout diagram. The results are as follows:

system	1	2	3
type of tube system	Tetrode	-	-
nominal plate current [mA]	50		
measured plate current [mA]	49,9		
= percent of nominal	100		
Nominal screen grid current [mA]	0		
measured screen current [mA]	0		
= percent of nominal			
transconductance [mA/V]	6,97		
at grid voltage change (dUG1) [V]	1,2		
plate current [mA] at + 1/2 dUG1	54,27		
plate current [mA] at - 1/2 dUG1	45,9		
μ			
D of plate in % (D = 1 μ)			
measured plate current [mA]			
at plate voltage			
D G2 [%]	19,18		

The 'output area' on the right contains buttons for 'new, (delete data)', 'load measured data', 'save measured data', 'measured data->list', 'add to tubestock', 'neon stabilizer+lamp', 'nixie', 'zenerdiode', 'man. with resistor', and 'curves by time'. The version number 10.2.5.0 is also visible in the top right corner.

Now you already know the important automatical standard measurements. The RoeTest offers much more possibilities. Please read the guides on my website www.roehrentest.de/tipps or on CD-Rom.