



MP 566-II Test guide

Follow the testing procedure in the shown order. If one test fails, find out the problem, correct it then resume.

Always remove power between steps because it is very easy to create a short circuits when moving a DMM probe. And most of the time, short circuits are fatal to the circuits.

Step	Description
	<p>Warning</p> <p>The MP566-II generates a 225 Volts voltage to power the tube. This voltage is potentially lethal. Never touch the PCB or any component when it is powered.</p> <p>After powering off, wait 10 seconds before touching the circuits in order to give time to the capacitors to discharge.</p>
1.	<p>Test setup</p> <p>If you own an XT500 connector extender, plug the MP566-II into your XT500 or...</p> <p>If you own a SK501 500 series module host, remove the case and plug the MP566-II into your SK501 or...</p> <p>Remove all other modules from your 500 rack or Lunchbox and insert the MP566-II into the leftmost slot.</p>
2.	<p>Supply voltages check</p> <p>Set your DMM to DC Volts on a 20 V scale.</p> <p>Connect the black probe to test point 0V and power up.</p> <p>Connect the red probe to test point V+. Check that you get a value between 15 and 16 Volts.</p> <p>Connect the red probe to test point V-. Check that you get a value between -15 and -16 Volts.</p>
3.	<p>High voltage check</p> <p>Set your DMM to DC Volts on a minimum 300 V scale.</p> <p>Connect the black probe to to the V- pin on U5.</p> <p>Connect the red probe to the B+ pin on U5 and power up.</p> <p>The voltage should be around 30V and after 10 seconds it should rise to around +225V.</p>
4.	<p>Heater voltage check</p> <p>Set your DMM to DC Volts on a 20 V scale.</p> <p>Connect the black probe to to the H- pin on U5.</p> <p>Connect the red probe to the H+ pin on U5 and power up.</p> <p>The voltage should go from 7V to 12V after a few seconds.</p>
5.	<p>DC voltage check</p> <p>Set your DMM to DC Volts on a 200 V scale.</p> <p>Connect the black probe to test point 0V and power up.</p> <p>With the red probe measure the DC voltages on:</p> <p>TP2: 124V, TP3: 148V.</p> <p>Set your DMM to DC Volts on a 20 V scale.</p> <p>With the red probe measure the DC voltages on:</p> <p>TP1, TP4, TP5, TP6: 0V.</p>
6.	<p>Signal check</p> <p>Set the OUT potentiometer to maximum, PAD on, Polarity off, 48V off, HPF off.</p> <p>Connect a 50mVAC, 1KHz sine source to the input.</p> <p>You can use your multitrack software loop playing a sine tone like the one that is downloadable from the "Downloads & Useful links" section on our website. Route the signal to a DAC and connect the DAC output to the MP566-II input.</p> <p>Set your DMM to AC Volts and adjust the software output level to obtain 50 mVAC between pins 2 and 3 of the preamp's XLR input.</p> <p>Connect your DMM black probe to 0V and power up.</p>



Step		Description
		<p>With the red probe measure the AC voltages on:</p> <p>TP1 : 36mV, TP2: 36mV to 3.6V depending on the GAIN pot position, TP3: 5mV to 270mV depending on the GAIN pot position, TP4: 36mV to 3.6V depending on the GAIN pot position, TP5 = TP6: 70mV to 7.2V depending on the GAIN pot position,</p>
7.	Sound check	<p>Plug in a dynamic microphone to the input XLR. Connect the output to your monitoring system. It can be a headphone amplifier or it can go through one of your ADC inputs if you run a software studio. Power on. Gradually increase the GAIN and OUT knobs and verify that all controls work as expected. Make the same test with a static microphone, with the 48V switch set to On.</p>
8.	DI check	<p>Insert an instrument jack into the front panel jack socket. Plug in power. You should hear your instrument when playing.</p>
9.	Congratulations	<p>You're done !</p>