

Document revision I.I - Last modification: 26/03/13

MP 5.99 Test guide

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

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

Step		Description
1.	Test setup	Remove the Jumper on JMP2. Remove the DOA. Remove the DiOI board if present and make a connection on CNI between the last 2 pins, near the board edge, with a small piece of wire (a cut resistor leg will do nicely).
2.	Short circuit check	Do a basic short circuit check with your digital multimeter (DMM) set to Ohms: • Between Test points GND and V+. • Between Test points GND and V In both cases you should get several kilo-Ohms. If it is not the case, find out and fix the short before applying power.
3.	Board installation	Plug the MP599 into your 500 connector Extender , if you own one or Remove all other modules from you 500 rack or Lunchbox and insert the MP599 in the leftmost slot.
4.	General power check	Plug in power and check that the LEDs on the power supply unit are lighting normally. If one or more LED is staying off or is lighting too low or too bright, immediately plug off power and start checking your board.
5.	Positive rail check	Set your DMM to DC Volts on a 30 V scale and connect it between GND and V+. Use test hooks and be careful not to create shortcuts. Check that you get a positive voltage around + I 6V.
6.	Negative rail check	Connect your DMM between GND and V Check that you get a negative voltage around -I GV.
7.	Voltage setup with charge	Plug off power. Insert the DOA and UI. Plug in power. Check both voltages again.
8.	DOA output voltage check	Set your DMM to DC volts and connect it between GND and TP2 (A I output). Check that the DC voltage is near O volt. It may take a few minutes to warm up and stabilize at less than I mV from O. Insert the JMP2 jumper.





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Step		Description
9.	Sound check	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.
		Set gain switch to Mid, gain knob to minimum, output pad potentiometer to maximum, 48V to Off.
		Plug in power.
		Slowly turning up the gain knob, check that your micpre is working. Check the 3 switch gain positions, the phase switch, the pad knob.
		Make the same test with a static microphone, with the 48V switch set to On.
		Plug off power.
		Set the 48V switch to Off.
10.	DI check	Remove the wire jumper we made in step 1 and install the DiO1 board.
		Insert an instrument jack into the front panel jack socket.
		Plug in power.
		You should hear your instrument when playing.
11.	Clip LED check	Check that the LED flashes in green when a signal is present and turns red when the gain gets too high.
12.	Congratulations	You're done!