

MP573 Setup 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.	Short circuit check	Do a basic short circuit check with your digital multimeter (DMM) set to Ohms between V- and OV and between OV and V+. You should get a value greater than one kilo-Ohm. If it is not the case, find out and fix the short before applying power.
2.	Test setup	Remove the DiOI board if present and make a connection on CN3 between [RL] and [V-] with a bit of wire (a cut resistor leg will do nicely). Unplug the output transformer connector. Remove all other modules from you 500 rack or lunchbox and insert the MP573 in the leftmost slot.
3.	General power check	Set your DMM to volts on a 30V scale. Connect the (-) lead to TP3 and the $(+)$ lead to V+ on CN3 (third socket up).
		Plug in power. You should read about 24.5 Volts.
		Plug off power.
		Insert the output transformer connector and make the same check. The voltage should be around 24.2 Volts.



Step		Description
4.	Bias adjust	With P2, we are going to adjust the bias of Q6 in order to flow about 65mA of direct current in the output transformer primary. To do this, we are going to measure the voltage across resistor R39, between TP2 and TP3.
		Set your DMM to DC volts.
		Place the (+) probe of your DMM on the test pin TP2. Place the (-) probe of your DMM on the test pin TP3.
		Adjust P2 until you read 3.0 Volts on the DMM. P2 is a multi-turn so it may take several turns to see a change.
		Warning : If you do not see any voltage change when turning P2, stop adjusting and check your board. You probably have a wiring error.
		Warning : Turning P2 clockwise increases the current in Q6. If you turn it too far, the current will reach a value that might smoke R39 !
5.	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 IOdB, "Trim" knob to center, 48V to Off.
		Plug in power.
		Turn the gain switch until you hear that your mic pre is working. Check all the positions of the gain switch, the "Trim" pot and the Phase switch.
		Verify that the green LED lights up when a sound is playing and that it turns red when it come near saturation.
		Make the same test with a condenser microphone, with the $48V$ switch set to On.
		Plug off power.
		Set the 48V switch to Off.
6.	DI check	Remove the wire jumper we made in step 2 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.
		Plug off power.
7.	Congratulations	Done !