

Analog Pro Audio

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EQ53 IT 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 short circuit when moving a DMM probe. And most of the time, shortcuts are fatal to the circuits.

Step		Description
١.	Initial settings	Set all the frequency switches to Off.
		Set the HPF push switch to Off (released).
		Set the EQ IN push switch to Off (released).
2.	Board installation	Plug the EQ53 IT into your 500 connector Extender, if you own one or Remove all other modules from you 500 Lunchbox and insert the EQ53 IT into the leftmost slot.
3.	Power voltages check	Set your DMM to DC Volts on a 20 V scale.
		Connect the black probe to test point OV. Power the lunchbox.
		Connect the red probe to test point V+. Check that you get a value between 15 and 16 Volts. Connect the red probe to test point V Check that you get a value between -15 and -16 Volts.
4.	Heater check	Place the meter probes between the 2 side pins of the tube holder PCB. Power up and check that the voltage increases from GV to 12V in a few seconds.
5.	High voltage check	Set your DMM to DC Volts on a 200 V scale.
		Connect the black probe to test point OV.
		Connect the red probe to test point B+.
		Check that you get a value of 180-185 Volts, 10 to 15 seconds after powering up.
6.	EQ signal level	Connect a TKHz sine source to the input.
		You can use your multitrack software loop playing a sine tone like the one that is downloadable from the "Support/Downloads & Useful links" section on our website. Route the signal to an audio output connected to the EQ53 IT input.
		Connect your DMM to the EQ53 IT output, between pin 2 and pin 3 of the XLR. The DMM is set to AC Voltage.
		Check that you get your signal on the DMM.
		Adjust the sine source in order to get about IVAC.
		Switch on the EQ by pressing the EQ IN button and check that you get a signal.
		Wait for the circuit to warm up for a few minutes and adjust the trimmer pot TR1 until you get no output level difference between EQ IN and EQ bypassed.
7.	EQ check	Send an audio source to the input and check that all the front panel controls are working as expected.
8.	Congratulations!	You're done!