CP4500 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
		The setup is done in 2 times. First we will setup the channel 1 of the compressor (PCB-A) then in the second time, we will setup the channel 2 (PCB-B).
		If you own an XT500 connector extension, you can use it for the channel 1 setup.
1.	Before setup	Remove CP4500 cover and the top PCB (B), leaving only PCB-C (front panel PCB) and PCB-A in place.
2.	Board installation (without XT500)	Remove all other modules from your 500 rack or Lunchbox and insert the CP4500 into the leftmost slot.
3.	Board installation (with XT500)	Connect the lower PCB (PCB-A) to your XT500.
4.	Initial settings	Set RATIO to 10, Set ATTACK to 0.1 mS, Set RELEASE to 1.2 S, Set THRESHOLD to +15, Set MAKEUP to 0, Set MIX to 100% Set all the push switches in the up position.
5.	Power voltages check	Set your DMM to DC Volts on a 20 V scale. Connect the black probe to test point 0V. Power up 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. Connect the red probe to test point +12V. Check that you get a value between +11.5 and +12.5 Volts. Connect the red probe to test point -12V. Check that you get a value between -11.5 and -12.5 Volts. Press the IN switch and check that the front panel LED and meter light up.

Step		Description
6.	Input signal	Connect a 1KHz sine source to the input.
		You can use your multitrack software (DAW) to play a sine tone like the one that is downloadable from the "Support/Downloads & Useful links" section on our website.
		Connect your DMM to the CP4500 output, between pin 2 and pin 3 of the XLR. The DMM is set to AC Voltage.
		Release the IN switch to turn off the CP4500.
		Adjust the signal amplitude from the DAW in order to read 3.0 VAC on the DMM.
		Depress the IN switch to turn the compressor on.
		Check that turning the THRESHOLD potentiometer counter clockwise reduces the output level.
		Check that turning the MAKEUP potentiometer clockwise increases the output level.
		Restore the initial potentiometers position (step 4).
7.	Gain trim	Adjust trimmer T1 in order to get absolutely no output level change when switching on and off with the IN switch.
8.	Meter adjust	Press the IN switch to power on.
		Turn the THRESHOLD potentiometer counter clockwise until the output level drops to 0.75VAC.
		Adjust trimmer T4 in order to read 12 dB attenuation on the meter.
9.	Channel 2 setup	Please refer to the assembly guide to install the second channel board.
		If you were previously using an XT500, you can't use it for this channel and you must install the CP4500 inside a lunchbox. Remove all other modules from your lunchbox and insert the compressor into the leftmost slots.
It is recommended to use a special trimmer tool with a recessed blade that won't slip from the trimmer pot head.
		Connect the 1KHz sine source to the channel 2 input XLR and DMM to the corresponding output.
		Restore the potentiometers to their initial position (step 4).
10.	Gain trim	Adjust trimmer T2 in order to get absolutely no output level change when switching the compressor on and off with the IN switch.
11.	Balance trim	Reconnect the 1KHz-3VAC sine source to the channel 1 input and DMM to the corresponding output.
		Press the IN switch to power on.
		Adjust the THRESHOLD potentiometer in order to get a 10 dB attenuation on the meter.
		Measure the output voltage of the channel 1 output and remember it.
		Reconnect the 1KHz-3VAC sine source to the channel 2 input and DMM to the corresponding output. Be careful not to touch any front panel potentiometer.
		Adjust trimmer T3 in order to get exactly the same voltage as you got on channel 1.
12.	General check	Send a musical program to the inputs and verify that all the front panel controls work as expected.
13.	Congratulations!	You're done!