High Fidelity Engineering Co.

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Zen Triode Phono Stage models ZP-1,1.5,2.0

Operating Instructions

SETUP: The Zen phono stage comes in two parts; the phono stage and the remote power supply. This is so that you can optionally locate the power supply away from the phono stage and other equipment in your system.

INSTALLING TUBES: The tubes are shipped inside your phono stage in packing to keep them from getting damaged during shipping. Your phono stage chassis is a split design with two halves. Each side has a removable cover. One side contains the electronics, and one side contains the tubes. Your interconnects plug into the side with the electronics, so remove the cover on the other side to access and install the tubes. The three tubes are all identical so it doesn't matter which socket they go in. Since the front tube is not actually in the signal path it is non critical.

TUBE TYPES: The 12AX7CZ tubes shipped with your phono stage are select premium grade - some of the best we've heard. You may substitute any brand 12AX7 if you wish. No damage will result from trying 12AT7's or even 12AU7's either one of which will reduce the gain significantly.

CORDS: There should be a removable power cord AND a special cable to connect the phono stage to its remote power supply.

POWER SWITCH: There is a power switch on the remote power supply but none on the actual phono stage itself. The LED on the front of the power supply will indicate if it's on or off. However bear in mind that if you turn it on without the phono stage connected, or just turn it on and right back off, the LED will remain lit for several minutes. We have placed a white dot next to the switch to indicate which way is on.

TESTING: Once you have the units energized, hook the outputs up to your preamp or amplifier (with variable input level) and test for noise or hum. If you hear any hum try moving the phono stage around and see if it reduces it. It is recommended that you use high quality shielded cables on both the outputs and inputs to this phono stage. With you amplifier and phono connected you are now

ready to connect your turntable to the phono stage. Again high quality shielded interconnects are recommended. There is a black binding post on the rear of your phono stage that connects to ground. If your turntable has a separate ground wire, this is where it goes.

IMPEDANCE ADJUSTMENT: You will notice a knob located near the front tube on your phono stage. This is used to adjust the impedance of the phono stage for any given cartridge. It ranges from 3.5 ohms to 50K. It is recommended that you adjust this from left to right (clockwise) one step at a time while you listen. It is not important to exactly match this to the published impedance of the cartridge. Especially not with the PS1.5 and PS2.0 models. The correct setting will be determined with your ears and depend on the overall gain of your system. Using a preamp vs. not using a preamp, the efficiency of your speakers, the signature of your cartridge and so on will all be factors in finding the best sounding position.

To have an idea what input impedance you end up, simply count the number of steps from left to right (clockwise) and compare to the chart below:

STEPS	OHMS
1 2 3 4 5 6 7 8 9 10	3.5 393 1.09K 1.75K 2.38K 3.5K 5.5K 8K 19K 30K 33K
12 13 14 15 16 17	34.4K 42.6K 47.7K 48.6K 49.4K 49.5K 49.8K
19 20	50K 50K

MAINTENACE AND BURN IN: It should take about 100 hours for the unit to cycle through it's initial burn in. During that time it can shift from sounding clear to muddy. After it's broken in, it will bloom and forever stay that way. During the burn-in it should never sound un-listenable. During the burn in process it will

speed things along if you cycle the unit on and off. In other words, turn it off for an hour or two every day. After that we expect you to leave the unit ON 24hrs a day 365 days a year. Tube life in this unit should be very long, as the tubes are not being stressed. I would expect many years from a set of tubes. There are no parts in the power supply that should need maintenance or adjustment - ever.

FURTHER QUESTIONS: If you have additional questions please feel free to call us any time during the day between 10am 5pm CST USA at (309) 671 2428