
TZ DIRECT



SUTHERLAND



“ The **TZ DIRECT** advances our phono preamp range. It combines our most refined transimpedance input stage with a second gain stage derived from our legacy line stages. Each of those stages contributes to the musicality. Working together, the music flows effortlessly into your system.

— RON SUTHERLAND

- + Single Ended Transimpedance Input, as used in the highly acclaimed **little LOCO Mk2**.
- + Virtual Short Input Impedance, no concerns for finding the best cartridge loading value.
- + Truly DUAL Mono Implementation. Independent and Identical boards used for Left and Right Channels.
- + Dual Channels of Linear Power Supply in it's own chassis.
- + Second gain stage is derived from a previous Sutherland line stage design. Fully discrete in implementation.



Truly DUAL mono implementation. The left audio channel is contained in the left shielded compartment. A board of exactly the same design is located in it's own shielded compartment on the right.

Each side has it's own DC power interconnecting cable.

This is a meticulous and disciplined core value in providing an exactly equal signal path for the left and right signals. Without that equality, delicate spatial cues will be lost.





A well designed power supply is fundamental for this level of performance. It provides a solid, robust and isolated foundation for the signal amplification. The **TZ DIRECT** power supply is all linear in design. Following the toroidal transformer is a cascade of dual-pi R-C filtering. All passive, no active devices.

This simple and effective circuit provides an extreme level of isolation from any incoming power noise or disturbances on the AC power line. Each channel has it's own pair of constant current regulators. This offers another contribution to a solid and isolated power foundation.

— System Considerations —

The **TZ DIRECT** presents a virtual short as the cartridge load. Instead of voltage being the input parameter, it is the current generated by the cartridge that conveys musical content. The endless worry about finding the ‘best’ load value is obviated.

The cartridge must be the moving coil type. Those with low output will be embraced. Not compatible with moving magnet or moving iron or step-up-transformers.

The shell of the RCA input jack is at ground. There are no special TT cable requirements.



— LINKING INTO YOUR SYSTEM —



Place the **TZ DIRECT** audio chassis near the turntable. The turntable signal is applied to the two centrally located RCA jacks on the back panel. Often there is a ground wire coming from the turntable. Connect it to the grounding screw in the middle of the back panel. The Output of the **TZ DIRECT** goes to a line-level input on your preamp or integrated amplifier.

Plug each of the DC cables from the audio chassis into the power supply chassis. Left and Right are interchangeable. Push them in all the way until there is a decisive snap.

DO NOT plug any other devices into the power supply chassis.

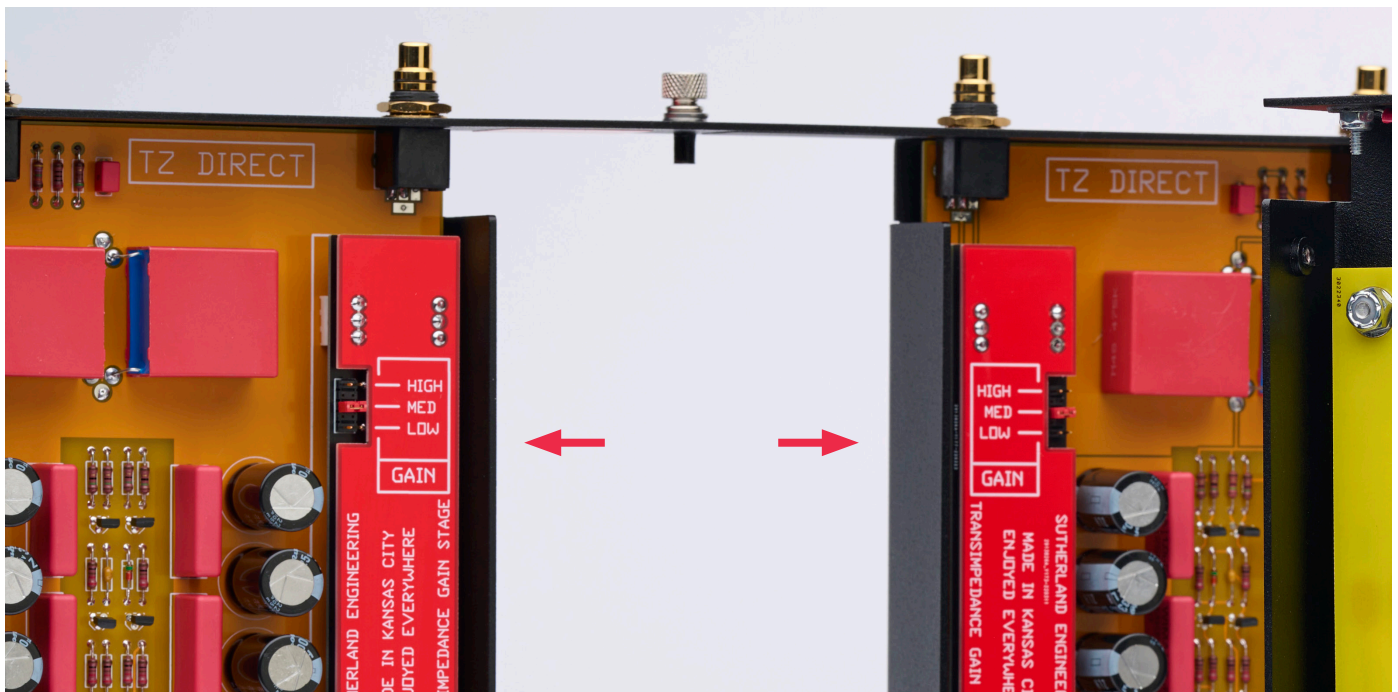
Stacking is not recommended. For minimal hum, some spacing is suggested.

Gain Settings

Your **TZ DIRECT** is factory-set to medium gain. That should work very well in most situations. The usual concerns about cartridge output voltage do not apply here. Cartridges of varied output voltage specs tend to supply about the same level of drive current into a short. i.e. higher output voltages usually have an associated higher internal resistance. Lower output voltages usually have an associated lower internal resistance.

If your particular situation would benefit from a gain adjustment, you can change it. Inside, on the red circuit board, you will see movable shunts for gain setting. From the factory, they are set to MED GAIN. You can boost the output voltage by 6dB when the shunts are moved to HIGH GAIN. You can reduce the output voltage by 6dB when the shunts are moved to LOW GAIN.

Be sure to MUTE your line stage preamp before making GAIN changes to **TZ DIRECT**.



Load Settings

There are no loading adjustments in the **TZ DIRECT**. Your cartridge will see a load of zero Ohms. The input signal will be the current your cartridge produces into that virtual short. No need to worry about or fuss around with loading choices.



Size (each chassis)

17" wide
13" deep
2" high

Shipping Box (each chassis)

22" wide
17" deep
9" high

Contact Info

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Weight (each chassis)

Unit Weight: 15lbs

Shipping Weight: 18lbs

Operating Voltage Requirements

105 – 125 VAC, 10 watts

210 – 250 VAC units are available on special order

Note: operating voltage is NOT universal and cannot be field modified.

Warranty

5 years parts and labor. Transferable. Only valid for units that have not been modified or abused.