

## General Description

The Audio Transformer board is designed to fill two needs:

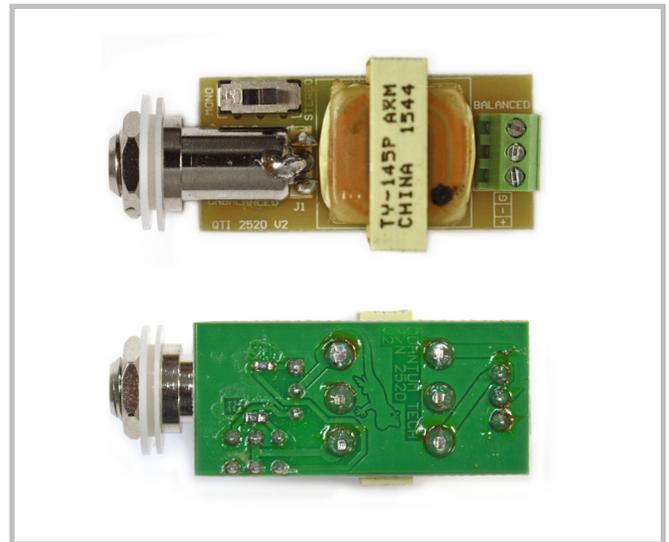
1. **Conversion and isolation from an unbalanced mono or stereo input signal to a balanced output signal.** The PCB is configured for stereo summing/drive by virtue of R1 and R2, which are 50 ohm 1% metal film resistors. The Audio Transformer board solves the problem with directly connecting a headphone output on a computer or media player (which is typically expecting a 50 ohm load) into a line-level input (typically 10k ohms). If you do this without a Transformer Board, it will usually result in distortion and limited audio bandwidth. The Audio Transformer board solves this problem while maintaining low distortion and proper frequency response.

The stereo signal is connected to the 1/8" TRS connector as follows Tip = Left, Ring = Right and Sleeve = Shield/Ground. The Phoenix connector is for the mono signal. The Phoenix connector is labeled: + (Red) and - (Black) and G (Ground).

2. **Conversion and isolation from a balanced mono input signal to an unbalanced mono or stereo output signal.** A 0dBu balanced signal may be inserted into the Phoenix connector to provide 0dBu stereo outputs to VCRs, CODECs, and tape machines, or any gear requiring a stereo signal that is summed and transformer isolated.

A switched labeled "MONO/STEREO" turns summation on and off for the 1/8" TRS connector. When the switch is selected to "MONO," summation is turned off and the tip and sleeve of the TRS connector are directly connected to the transformer without any added resistance. When the switch is selected to "STEREO," summation is turned on and the tip is routed to a 50 ohm resistor (R1) and the ring is routed to a 50 ohm resistor (R2) in order to sum the two signals together.

The J1 pins behind the TRS connector are parallel connections to the TRS connector and may be used to connect other style of connector.



## Specifications

Frequency Response:	+/- 0.5dB from 20Hz to 20,000Hz
IMD:	< 0.08% at 0dBu
THD:	< 0.03% at 0dBu
PHASE Response:	< 6 degrees from 20 to 20K
Insertion Loss:	
TRS Input:	0dBu (source impedance: 50 ohms)
Phoenix Output:	-1.5dBu (sink impedance 150 ohms)
Phoenix Input:	0dBu (source impedance: 150 ohms)
TRS Output:	-0.1dBu (sink impedance 10,000 ohms)
MSRP:	\$54.00

