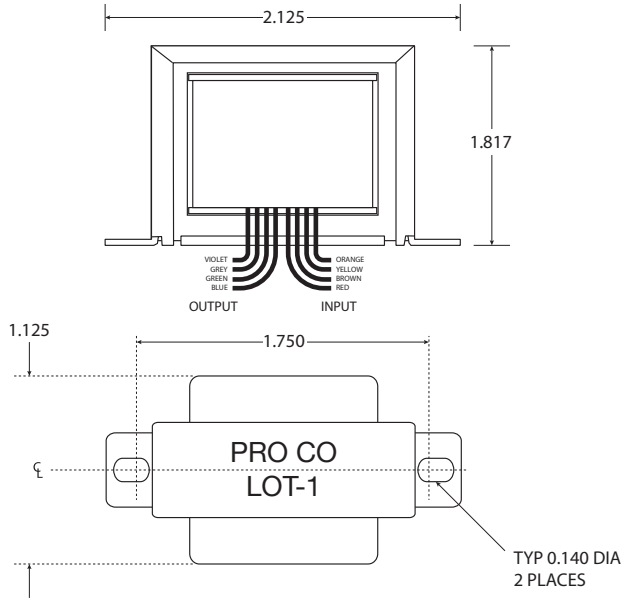
LOT-1

LINE OUTPUT TRANSFORMER

DESCRIPTION:

The LOT-1 is a carefully designed, custom-built line output transformer which is very useful in a variety of applications requiring truly floating transformer isolation of unbalanced or electronically balanced line-level outputs. The LOT-1 consists of four windings, with the primaries connected in series for 1:1 operation or in parallel to provide 1:2 (step-up) operation into 600 ohm loads. Its 48% nickel core lamination optimizes it for use with zero-ohm sources such as op-amp-based outputs. The LOT-1 provides a broad-band, low-distortion floating output with excellent transient response and minimal insertion loss.



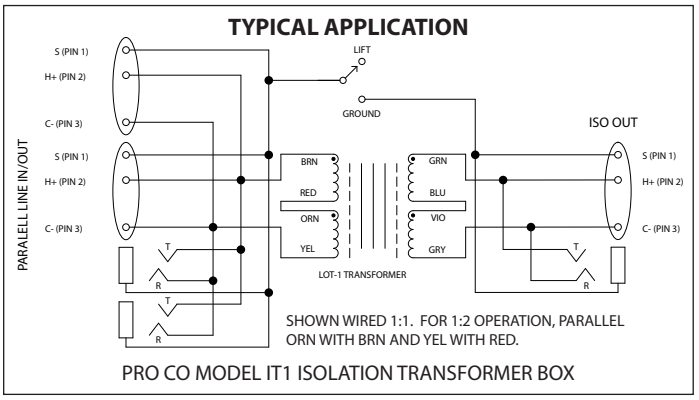
PHYSICAL CHARACTERISTICS

PACKAGE:	Open channel frame
TERMINATION:	8" (200mm) 28 AWG tinned copper, color-coded leads
DIMENSIONS:	2.125" L x 1.125" W x 1.187" H (54.0mm L x 28.6mm W x 30.1mm H)
MOUNTING:	2 holes, 0.187" (4.7mm) dia, 1.75" (44.5mm) centers

TYPICAL PERFORMANCE:

All measurements made with 0 (zero) ohm source and 600 ohm load to simulate typical "real world" source and load.
0 dBv ref. = .775 volt.

	1:1 (600:600 ohm) CONNECTION	1:2 (150:600 ohm) CONNECTION
VOLTAGE LOSS:	< -2.0 dB	<+4 dB @ 1.0 kHz.
INPUT IMPEDANCE:	> 680 ohm	>170 ohm @ 1.0 kHz.
	> 680 ohm	>170 ohm @ 10 kHz.
SECONDARY SOURCE IMPEDANCE:	< 120 ohm	<120 ohm @ 1.0 kHz.
	< 120 ohm	<120 ohm @ 10 kHz.
TOTAL HARMONIC DISTORTION:	< .25% 20 Hz-20 kHz @ 0 dBv output.	
	< .5% 30 Hz-20 kHz @ +18 dBv output.	
	< 1.0% 20 Hz-20 kHz @ +18 dBv output.	
MAX INPUT LEVEL FOR 1% THD:	+20 dBv @ 20 Hz.	
	+24 dBv @ 30 Hz.	
	+30 dBv @ 50 Hz.	
FREQUENCY RESPONSE (Re. 1.0 kHz):	-0.5 dB @ 20 Hz	
	-0.5 dB @ 20 kHz	
	-3.0 dB @ 80 kHz	
PHASE RESPONSE:	< -3 degrees @ 20 kHz (ref. 1.0 kHz).	
RISE TIME:	< 4.5 µ Sec. (2.0 kHz square wave, 10%-90%).	
OVERSHOOT:	< 1%	
COMMON-MODE VOLTAGE (MAXIMUM):	> 1500V RMS	
COMMON MODE REJECTION RATIO:	> 80 dB @ 1.0 kHz	



GENERAL CHARACTERISTICS

TURNS RATIO:	1:1 or 1:2 (4 windings)
IMPEDANCE RATIO:	600:600 ohm or 150:600 ohm
PRIMARY SOURCE IMPEDANCE:	0 (zero)ohm (typical op-amp)
SECONDARY LOAD IMPEDANCE:	600 ohm (typical microphone preamp)
FARADAY SHIELD:	2 shields with separate leads
CORE MATERIAL:	48% nickel alloy
MAXIMUM INPUT LEVEL AT 20 HZ:	+20 dBv (ref. = 0.775 v)

Pro Co Sound
225 Parsons Street | Kalamazoo, MI 49007
800-253-7360

» **www.procosound.com**