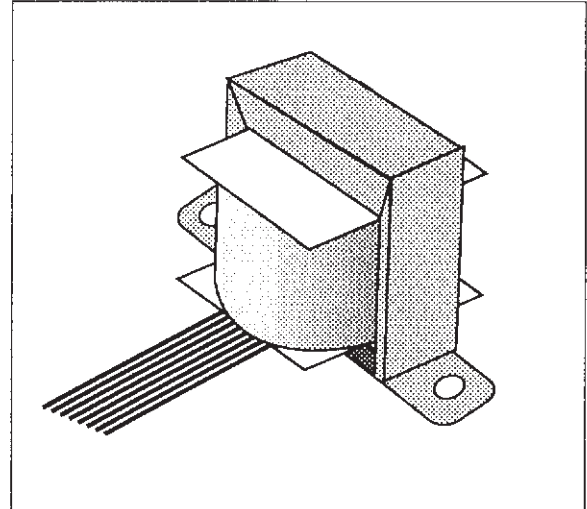




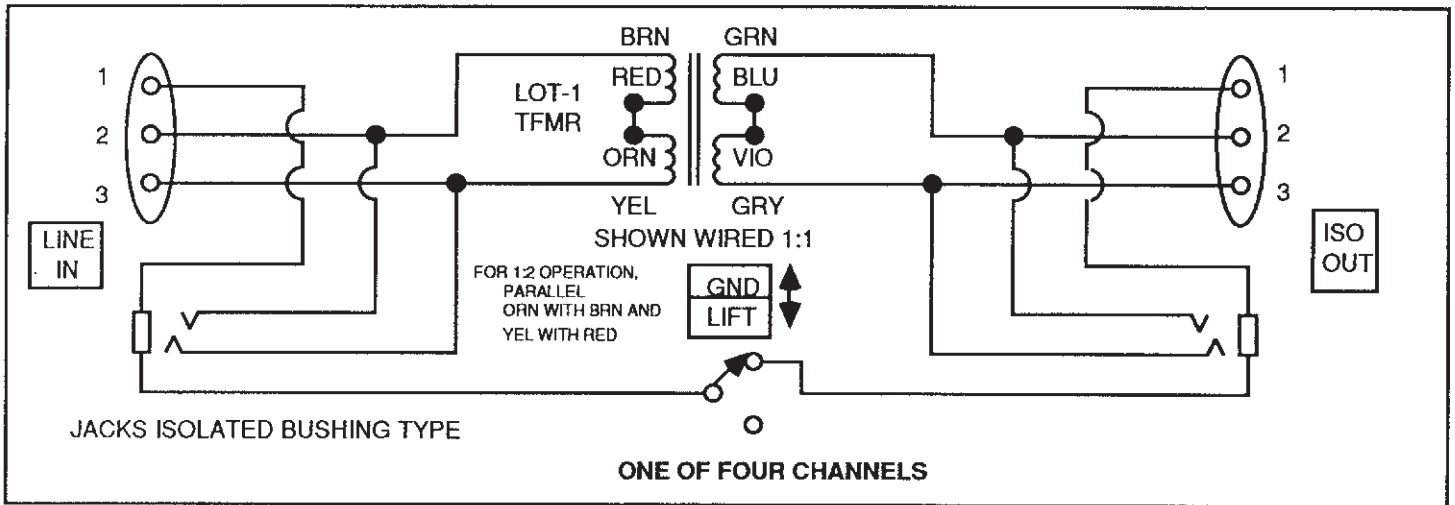
THE PRO CO MODEL LOT-1 TRANSFORMER

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.



TYPICAL APPLICATION



PRO CO MODEL IT-4 ISOLATION TRANSFORMER UNIT SCHEMATIC



LOT-1 GENERAL CHARACTERISTICS

URNS RATIO:

1:1 or 1:2 (4 windings)

IMPEDANCE RATIO:

600/600 or 150/600

PRIMARY SOURCE IMPEDANCE:

0 (zero) ohm (typical op-amp)

SECONDARY LOAD IMPEDANCES:

600 ohm

CORE MATERIAL:

48% nickel alloy

MAXIMUM INPUT LEVEL AT 20 HZ:

+20 dBv (re: 0.775v)

LOT-1 PHYSICAL CHARACTERISTICS

PACKAGE:

Open channel frame

TERMINATION:

8" (200 mm) #28 AWG color-coded wire leads

DIMENSIONS:

2.125" L X 1.125" W X 1.187" H

(54 mm L X 28.6 mm W X 30.1 mm H)

MOUNTING:

2 holes, .187" (4.7 mm) dia., 1.750" (44.5 mm) centers

LOT-1 TYPICAL PERFORMANCE

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

1:1 (600/600)	1:2 (150/600)
CONNECTION	CONNECTION

VOLTAGE GAIN (@ 1.0 kHz):

-2.0 dB +4.0 dB

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

INPUT LEVEL @ 1% SATURATION:

+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 dB @ 80 kHz

PHASE RESPONSE (@ 20 kHz):

-3 degrees

RISE TIME (2.0 kHz, 10%-90%):

4.5 uS

OVERSHOOT:

<1%

COMMON-MODE VOLTAGE (Maximum):

>1500V RMS

COMMON-MODE REJECTION RATIO:

>80 dB @ 1.0 kHz.

