



INSTRUCTION MANUAL

AUDIO ISOLATION

TRANSFORMER

MODEL AIT-SUS

INSTRUCTION MANUAL

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AUDIO ISOLATION TRANSFORMER

ELECTRO-METRICS

MODEL AIT-SUS

SERIAL NO: N/A

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WARRANTY

This Model AIT-SUS Audio Isolation Transformer is warranted for a period of 12 months (USA only) from date of shipment against defective materials and workmanship. This warranty is limited to the repair of or replacement of defective parts and is void if unauthorized repair or modification is attempted. Repairs for damage due to misuse or abnormal operating conditions will be performed at the factory and will be billed at our commercial hourly rates. Our estimate will be provided before the work is started.

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MODEL AIT-SUS

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DESCRIPTION AND USE ELECTRO-METRICS AIT-SUS AUDIO ISOLATION TRANSFORMER

1.0 Description

The AIT-SUS Audio Isolation Transformer is designed for making conducted audio frequency susceptibility testing to MIL-STD-461/462 within a screen room environment.

The transformer can also be used to measure EMI currents at lower levels than conventional current probes. Using the primary as the output introduces a 2:1 step up in signal level from the secondary. With an EMI instrument (e.g. EMC-11) connected to the primary terminals and properly terminated, the signal can be measured.

The transformer contains two secondary windings; one high current (marked SECONDARY), the other low current (marked MONITOR). The high current secondary can be used as a choke for isolating power lines when performing susceptibility testing. The low current secondary is useful in isolating an AC voltmeter from the power ground. No windings are connected either to the bell ends or case.

The transformer is bench top mountable for use in permanent test setups. The PRIMARY and MONITOR connections are made via 3/4-inch spaced 5~way binding posts. Secondary terminals are 1/4-20 brass studs.

2.0 Specifications

2.1 Electrical

Turns Ratio:	2:1
Impedance Ratio:	4:1
Frequency Response:	30 Hz to 50 kHz (-3 dB, 0.5Ω secondary).
Primary Capability:	100 W audio.
Secondary Capability:	50A DC or AC before saturation.
Insulation Breakdown Voltage:	600 VDC to windings and housing.
Secondary Inductance:	Approximately 1 mH.

2.2 Mechanical

Length:	178 mm (7").
Height:	137 mm (5.4").
Width:	111 mm (4.4").
Weight:	8.4 kg (18.5 lbs).