

INSTRUCTION MANUAL

PRECISION RESISTOR

ASSEMBLY

MODEL PR-X

INSTRUCTION MANUAL

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PRECISION RESISTOR ASSEMBLY

ELECTRO-METRICS

MODEL PR-X

SERIAL NO: N/A

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WARRANTY

This Model PR-X Precision Resistor Assembly 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.

DESCRIPTION AND USE ELECTRO-METRICS PR-X PRECISION RESISTOR ASSEMBLY

1.0 Description

The PR-X is a specially mounted and sealed precision resistor assembly that is used in conjunction with the AIT-SUS (Audio Isolation Transformer) for performing Conducted Emission Test CE01 of MIL-STD-461/462.

The AIT-SUS transformer is used as a pickup device in lieu of a standard current probe. The PR-X selected is connected to the "MONITOR" terminals on the AIT-SUS and with its non-inductive resistor flattens the frequency response up to 150 kHz. An EMI meter (e.g. EMC-11, EMC-30), connected to the BNC connector, indicates the conducted EMI current levels.

Each assembly is a ventilated metal box which contains one precision non-inductive resistor rated to 50 Watts. The assemblies are available in several different values. Fitted for convenience with 5 way binding posts on one end and a BNC connector on the other. The BNC connector "FLOATS" above chassis ground. The assembly can be bench top mounted for permanent test setups.

CAUTION

For proper heat sinking at maximum power rating of 50 Watts, the assembly should be securely bonded to a metal plate with a minimum area of 929 cm² (144 sq in) and a minimum thickness of 1.5 mm (0.06").

2.0 Specifications

2.1 Electrical

Precision Resistor Assembly Nomenclature:

 PR-0.5:
 0.5Ω

 PR-1:
 1.0Ω

 PR-2:
 2.0Ω

 PR-5:
 5.0Ω

 PR-10:
 10.0Ω

Wattage Rating (all assemblies): 50 W.

Tolerance: $\pm 1\%$.

Type: Non-Inductive.

Frequency Range: DC to 150 kHz.

2.2 Mechanical

Length: 124 mm (4.9").

Width: 105 mm (4.1").

Height: 51 mm (2").

Weight: 228 g (0.5 lbs).