

Technical Specification...

Power requirements :	9 Volt battery (PP3)
Current consumption :	80mA max
Measuring frequency :	1khz
Measuring range :	1 Watt to 1000 Watts R.M.S.
Connections :	2mm sockets
Case material :	ABS
Case dimensions (mm):	145L x 80W x 38.5H
Weight:	22g (With battery fitted)

CIE-Group Ltd. reserves the right to alter the above specifications without prior notice.

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ELM-1

ELECTRONIC LOAD METER

User Instructions

User
Instructions...



Introduction...

The ELM-1 is specifically designed to assist P.A. installation and service engineers in determining the precise amount of speaker loading being presented to amplifiers in a 100 volt line P.A. system, quickly and easily. The use of this simple instrument can reduce the possibility of amplifier overload, thereby increasing system reliability and reducing amplifier repair costs.

The principal of operation of this instrument is very simple, it basically measures at 1Khz the dynamic resistance or impedance (Z) of the speaker system under test and converts this figure to an easy to understand wattage reading.

The ELM-1 employs full auto ranging enabling it to measure from 1 to 1000 watts at the push of a button, in addition to this the unit is equipped with an over load indicator which will be illuminated should the speaker system under test be a short circuit.

Operating procedure...

- 1 Switch off the mains supply and or the emergency backup supply to the amplifier or rack system connected to the loudspeaker system you wish to test.
- 2 Disconnect the wiring to the loudspeaker system you wish to test from the amplifier or rack system.
- 3 Connect the two crocodile clips of the ELM-1 to the loudspeaker cables.
- 4 Press the TEST button on the ELM-1 and leave depressed until the autoranging has taken place this may take 3 to 4 seconds, during the autoranging process the display will fluctuate momentarily and then stabilise. Once stable the loading presented by the speaker system can be read directly from the display.
(The wattage readings displayed are in Watts RMS.)
- 5 Having taken your speaker loading measurement it just remains to remake the connection between the speaker system and the amplifier or rack system.

Caution...

Under no circumstances connect the ELM-1 to a loudspeaker system while still connected to an amplifier or rack system as this will almost certainly result in damage to your ELM-1.