circuit test sets

T136B S B Z W T136BGMZW

Features

- Measures Circuit Loss, Circuit Noise, Power Influence and Loop Current
- Weighting

Loss Measurement: Flat

Noise Measurements: C-Message

- Dial-through Provisions and Hold Circuit
- Colored Scales for Acceptance Limits
- Carrying Strap
- Small, Convenient-to-use and Rugged
- Sealed and Weather-resistant

Description

The **Model T136 Circuit Test Set** is designed for use by the installlers and repairmen in conducting circuit transmission and noise measurements without using elaborate or expensive equipment. It allows for simple, easily read loop parameter measurements.

The T136 provides a 600 Ω AC impedance and a 430 Ω DC impedance across Tip and Ring, insuring a precise termination for performance testing. These impedances are in compliance with EIA specification RS470.

All operating functions are selected via single six position rotary switch. DIAL position allows for the external connection of a remote telephone handset directly to the line, by connecting to the square Dial Posts. The dialing and holding arrangement provides switching from DIAL to other functions without disconnecting the line. BATT-TEST enables the T136 to test and verify the conditions of the unit batteries. GND mA (on T136BGMZW only) connects the mA circuitry to Ring and Sleeve of the line under test, without the necessity of manually disconnecting the set from the line and connecting directly across these two points. LOOP mA provides DC line current



measurements. A diode bridge permits measurements to be made with the red and green leads connected in either polarity. On the T136BSBZW version, the scale is divided into two colored sections, red from 0 mA to 23 mA and green from 23 mA to 100 mA. On the T136BGMZW version, a yellow section is included from 20 mA to 23 mA. CKT LOSS allows terminated tone level measurements as received from a 1 mW reference source. Level may be measured from -15 dBm to +1 dBm. The scale is divided into four segments: Yellow — from +1 dBm to 0; Green — from 0 dBm to -8 dBm; Yellow — from -8 dBm to -10 dBm; and red for -10 dBm or less. CKT NOISE provides a sensitive metallic noise measurement function weighted on the standard C-Message Filtering curve. The meter scale extends from 33 dBrnC to 15 dBrnC.



Description Cont...

Meter sectionalization is red for 33 dBrnC to 30 dBrnC, yellow from 30 dBrnC to 20 dBrnC and green for measurements below 20 dBrnC. PWR INFL supplies a means of measuring noise voltages between the circuit and ground on a C-Message basis. The scale is divided as follows: Red between 93 dBrnC and 90 dBrnC, yellow between 90 dBrnC and 80 dBrnC and green below 80 dBrnC. CKT NOISE (noise metallic) and PWR INFL (noise-to-ground) readings are both in dBrnC, allowing for simple circuit balance calculations. Subtracting the CKT NOISE from PWR INFL reading results in a direct balance measurement.

Nonlocking pushbutton switches are provided to add or subtract 10 dB attenuation (± 10 dB) of the input signal if the signal level is of such magnitude as to read off scale. In most cases operation of one switch or the other will bring the meter pointer on scale.

Three four-foot long leads equipped with clips and colored green for Tip, red for Ring and yellow for Ground are permanently attatched to the set.

A nonlocking pushbutton switch is used to supply power to the measuring circuits from two small 9 volt batteries. No current is supplied by the batteries until the switch is pressed to take a reading. Consequently, the useful life of the batteries can approach shelf life because the ON period is usually very short.

Z Modification

Modification of the older T136 Series of Circuit Test Sets to comply with EIA Specifications RS-470 can be implemented upon request. This modification, briefly, provides a DC resistance of 430Ω in the Loop Current measuring mode and an AC impedance of 600 Ω in the CKT LOSS and CKT NOISE measuring modes.

Model T136BSBZW and T136BGMZW

The "W" version of the T136 is a weather resistant unit. It features moisture resistant seals between the internal circuitry and the external environment. A convenient battery access cover is incorporated, making battery replacement quick and simple. Existing T136's may be upgraded, at factory request, to include all of these features.

Specifications

Measuring Ranges:

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	Meter Scale	Level Range
LOOP mA		
	Red	0 mA to 23 mA
	Green	23 mA to 100 mA
CKT LOSS		
	Red	< -15 dBm to -10 dBm
	Yellow	-10 dBm to -8 dBm
	Green	-8 dBm to 0 dBm
	Yellow	0 dBm to +1 dBm
CKT NOISE		
	Green	< 15 dBrnC to 20 dBrnC
	Yellow	20 dBrnC to 30 dBrnC
	Red	30 dBrnC to 33 dBrnC
PWR INFL		
(N-G)	Green	< 75 dBrnC to 80 dBrnC
` /	Yellow	80 dBrnC to 90 dBrnC
	Red	90 dBrnC to 93 dBrnC

Frequency Response:

Flat from 300 Hz to 15 kHz for CKT LOSS Measurements

60 Hz attenuated more than 30 dB C-Message Weighting for Noise Measurement

Input Impedance:

 $600 \Omega AC$ $430 \Omega DC$

Connecting Leads:

Three 4 ft. leads with clips and colored Green Tip, Red for Ring and Yellow for Ground.

Batteries:

Two 9 volt batteries. Eveready No. 216 or Equivalent (NEDA 1604)

4 3/8" W x 6 3/8" L x 5 7/8" H

Weight:

3 lbs. 4 oz.

Ordering Information:

Model	Part No.
T136BGMZW	30136478
T136BSBZW	30136443



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