

Aplab

TRSIG-1

TRACK-SIGNAL TEST METER



- Selective Measurement Incorporating Digital Signal Processing
- Multi-Mode Supports Measurement & Inspection Mode / Multimeter Mode
- AC/DC Voltage Measurement
- Frequency Measurement
- Auto Ranging
- Battery Operated, Most Suitable for Field Operations
- Built-in Overload Protection
- Low Power Display with Backlit & Auto-OFF Facility

Aplab Track-Signal Test Meter incorporates Digital Signal Processing based design to provide high accuracy and stability. It is designed for level measurement of selected frequencies. It also provides functionality of AC and DC voltage measurements.

The purpose of Track-Signal Test Meter is to make adjustments, control measurements and inspections on both audio frequency track circuits of types FTGS 46, FTGS 917 and also for TI21M type track circuits (now known as BI track 300) for the measurement of eight frequencies from 5700Hz to 8500Hz for metro applications. Its compactness and battery operation render the unit particularly suitable for portable applications in maintenance and for level measurement in communication systems.

Technical Specifications

A. MEASUREMENT & INSPECTION MODE

Voltage Measuring Range	: 1mV - 250V.												
Range Selection	: Automatic with range hold facility (within <1 sec). OR Manual selector switch for following ranges												
	<table> <thead> <tr> <th>Ranges</th> <th>Valid Data Input Level</th> </tr> </thead> <tbody> <tr> <td>0-20mV</td> <td>1mV-20mV</td> </tr> <tr> <td>0-200mV</td> <td>10mV-200mV</td> </tr> <tr> <td>0-2V</td> <td>100mV-2V</td> </tr> <tr> <td>0-20V</td> <td>1V-20V</td> </tr> <tr> <td>0-250V</td> <td>1V-250V</td> </tr> </tbody> </table>	Ranges	Valid Data Input Level	0-20mV	1mV-20mV	0-200mV	10mV-200mV	0-2V	100mV-2V	0-20V	1V-20V	0-250V	1V-250V
Ranges	Valid Data Input Level												
0-20mV	1mV-20mV												
0-200mV	10mV-200mV												
0-2V	100mV-2V												
0-20V	1V-20V												
0-250V	1V-250V												
Accuracy	: $\leq 3\%$ (for full scale).												
Adjacent Channel Rejection	: >36dB (Each related to channel mean frequency).												
Rejection with 2-Channel Spacing	: >46dB.												
Measurable Frequencies	: Auto-ranging or Manual Selector ($\uparrow\downarrow$ arrow keys)												
Measurement Mode Frequencies	:												
Option 1	: (3dB BW - 140Hz) 1549 / 1699 / 1848 / 1996 / 2146 / 2296 / 2445 / 2593 / 5300 / 5700 / 6100 / 6500 / 6900 / 7300 / 7700 / 8100 / 8500 Hz.												
Option 2	: Band I (3dB BW - 240Hz) 3750 / 4250 / 4750 / 5250 / 5750 / 6250 / 6750 / 7250Hz. : Band II (3dB BW - 480Hz) 9500 / 10500 / 11500 / 12500 / 13500 / 14500 / 15500 / 16500 Hz.												
Option 3	: Band I (3dB BW - 240Hz) 2100 / 2500 / 2900 / 3300 / 3700 / 4100 / 4500 / 4900 Hz. : Band II (3dB BW - 480Hz) 9500 / 11100 / 12700 / 14300 / 15900 / 17500 / 19100 / 20700 Hz.												
Input Protection	: 300Vrms AC max. / 300V DC max. (dc+ac peak should be less than 450V).												

B. MULTIMETER MODE

DC Voltage Measuring Range	: 10mV - 250V.
Range Selection	: Automatic with range hold facility (within <1 sec).
Accuracy	: $\leq 1\%$ (For $F_{meas} \geq 100mV$).
Mains voltage Measuring Range (Wide Band - 5Hz to 10KHz)	: 1mV rms to 250V rms.
Accuracy	: $\leq 2\%$ (at 50...60 Hz mains frequency).
Frequency Measuring Range	: 00.10KHz to 99.99KHz.
Accuracy	: $\leq 0.5\%$ (For frequency above 3KHz, $U_{meas} \geq 30mV$).

C. GENERAL

Input Resistance	: <200K ohms.
Display	: Low power display with backlit. Active area 29 mm x 66.5 mm. Screen 2.9 inch.
Power	: Internal Rechargeable (Li-Ion) Battery.
Backup	: >8 hours.
Input	: 230V AC $\pm 10\%$.
Operating Temperature	: 0°C to 50°C.
Storage Temperature	: -20°C to 60°C.
Connections	: 4mm Terminal suitable for shrouded plug.

D. ACCESSORIES

5mm to 2mm Pin Test Leads	: 1 Pair
Charger	: 1 No.
Instruction Manual	: 1 No.
Carrying Case	: 1 No.