

AFFORDABLE ANALOG TESTING IN A RUGGED, HAND-HELD PACKAGE.

ATS 2 Enhanced Audio Test Set

The ATS 2 is a full feature audio test set in a portable, hand-held package. The set facilitates the installation and maintenance of leased or dial-up circuits and equipment connected to the public switched networks. Designed to comply with IEEE and Bell specifications, the ATS 2 is capable of performing all basic analog transmission measurements plus Impulse Noise, Signal-to-Noise and P/AR tests. The ATS 2 can also function as a telephone handset on 2- and 4-wire circuits, with dial, hold, talk and listen capabilities.

- Menu driven
- Impulse Noise and Signal-to-Noise tests
- DTMF or pulse dialing
- MF dialing optional
- Tests to IEEE and Bell specifications



ATS 2 Enhanced Audio Test Set

SEND MODES

QUIET TERMINATION

Signal generator disconnected from output

Output Noise < -80 dBm

SEND FREQUENCY

Range: 50 Hz to 5 kHz

Resolution: 1 Hz

Accuracy: $\pm 0.03\%$

Direct Entry: Numeric keypad

Stepping: ± 1 , 10 and 100 Hz

Fixed frequencies: 1004 Hz, 2713 Hz and programmable auxiliary tone

Slope tones: 404 Hz, 1004 Hz, and 2804 Hz
10 seconds per tone

Auto step: Programmable start, stop, step size and step duration

P/AR signal: 16 phase related frequencies

Distortion: 50 Hz to 200 Hz < -45 dB

200 Hz to 5 kHz < -50dB

SF skip: 2450 Hz to 2750 Hz

SEND LEVEL

Range: ± 10 dBm to -50 dBm
(0 dBm maximum for P/AR)

Resolution: 0.1 dB

ACCURACY

50 Hz TO 200 Hz: ± 0.5 dB

200 Hz TO 5 KHz: ± 0.2 dB

1004 Hz: ± 0.1 dB from 0 to -19 dBm

Direct entry: Numeric keypad

Stepping: ± 0.1 and 1 dB

FLATNESS

50 Hz to 200 Hz: ± 0.5 dB

200 Hz to 5 kHz: ± 0.2 dB

MEASURE MODES

LEVEL/FREQUENCY

Level range: +10 dBm to -65 dBm

Resolution: 0.1 dB

ACCURACY

50 Hz to 200 Hz: ± 0.5 dB

200 Hz to 5 kHz: ± 0.2 dB

1004 Hz: ± 0.1 dB from 0 to -19 dBm

Detector: Averaging

Display modes: Absolute or relative with respect to input level

Frequency range: 20 Hz to 10 kHz

Resolution: 1 Hz

Accuracy: ± 1 Hz

BACKGROUND NOISE

Range: 10 to 99 dBm

Resolution: 1 dB

ACCURACY

20 to 99 dBm: ± 1 dB

10 to 20 dBm: ± 2 dB

Filters: C-Message, 3 kHz flat, C-Notch

Detector: True RMS

Display modes: Absolute or relative with respect to input level

Notch filter: 995 to 1025 Hz > 50 dB rejection

Loss of tone: < -40 dBm

SIGNAL TO NOISE

Signal range: +10 dBm to -40 dBm

Noise range: 10 dBm to 90 dBm

Ratio range: 10 to 50 dB

Resolution: 1 dB

Accuracy: ± 1 dB

Detector: Average for level and true RMS for noise

Display modes: Absolute or relative with respect to current measurement

Notch filter: 995 to 1025 Hz > 50 dB rejection

Loss of tone: < -40 dBm

IMPULSE NOISE

Threshold range: 30 to 100 dBm

Resolution: 1 dB

Accuracy: ± 1 dB

Count rate: 7 per second

Count timer: 1 to 99 minutes or continuous

Count range: 0 to 9999

Filters: C-Message, 3 kHz flat, C-Notch

Notch filter: 995 to 1025 Hz > 50 dB rejection

Loss of tone: < -40 dBm

Loss of tone counter: 0 to 9999

P/AR RATING

Range: 0 to 120 P/AR

Resolution: ± 1 PAR unit

ACCURACY

30 to 110: ± 2 P/AR units

0 to 120: ± 4 P/AR units

Input level range: 0 to -40 dBm

Detector: Average

DIAL MODES

MANUAL DIAL

Dial method: DTMF or pulse with optional MF

DTMF signals: Full supervisory tone set, including A,B,C, and D

Redial: Up tp last 16 digits

AUTODIAL

Memory: 10 locations, each capable of holding up to 16 digits

Dial method: DTMF or pulse with optional MF

DTMF signals: Full supervisory tone set, including A,B,C, and D

GENERAL

INPUT/OUTPUT

Line: 2-wire or 4-wire

Connectors: RJ11C modular jack and dual miniature phone jack (0.173" diameter on 0.312" centers, mates with ADC PJ777 or Switchcraft TT253) 150 volts

DC blocking Reverse send and receive

Normal/Reverse switch: Electronic, 24 ma.

Hold circuit: 600 or 900 ohms

Impedance: Bridge or terminate

Termination: < 0.2 dB

Bridging loss: > 30 dB

Return loss: > 80 dB at 60 Hz

Longitudinal balance: > 70 dB at 540 Hz

> 60 dB at 4 kHz

POWER

Batteries: Rechargeable

nickel-cadmium

Battery life: 6 hours minimum per charge, one-half hour minimum after battery low indication

Recharge time: 4 hours maximum with unit turned off

AC operation: 115/230 vac, 50/60 Hz

Auto shut-off: 15 minutes after last key depression

PHYSICAL

Push-to-talk: Built-in condenser microphone

Monitor: Adjustable volume, switchable between send and receive

Display: 2 line by 16 character LCD

DISPLAY UPDATE

Normal: 5 times per second

Damped: 2 times per second

Size: 10" L x 4" W x 2 1/8" H

Weight: 2 1/4 lbs (1 Kg)

Operating temperature: 0° C to 50° C

Storage temperature: -20° C to 90° C

Humidity: 10% to 90% relative humidity noncondensing

