



Microtronix ANSI/TIA-470-C Test Systems

Microtronix Systems Ltd. announces a new test application for testing to the requirements of ANSI/TIA-470-C.



Applications

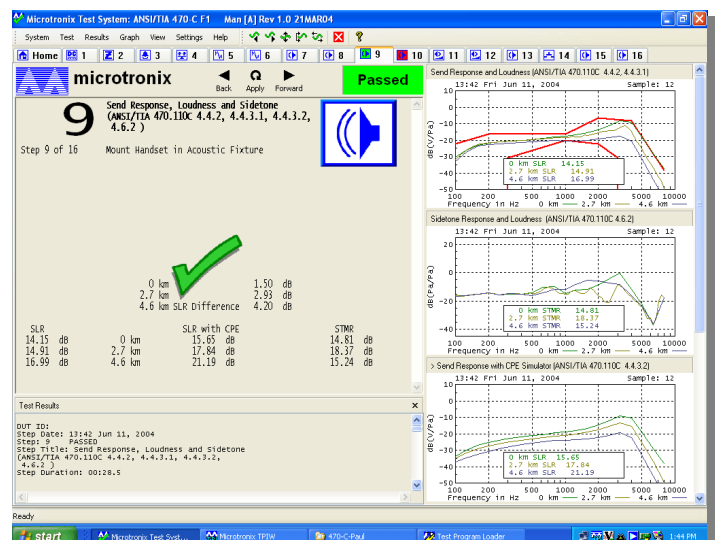
- Quality Assurance
- Research and Development
- Incoming Inspection

Benefits

- Fully tests acoustical properties of corded and cordless telephones
- Easily interfaces to existing Head and Torso Simulator (HATS)
- Directly correlates with laboratory equipment
- Simple and easy to use
- Existing customers can upgrade their equipment

Features

- High Speed, Repeatable and Accurate Measurements
- User Friendly and easy to use
- Turnkey Test Solution
- Software controlled using Window XP Pro®
- Use of Multitone Frequency Response
- Audio File Play and Record capability
- Mouth response equalized from 100Hz -10 kHz
- DSP based Architecture



ANSI/TIA 470-C Send Response

Microtronix ANSI/TIA-470-C

Test System Configurations

Microtronix offers two test systems for the ANSI/TIA-470-C specification - the Telephone Acoustic Tester and the Wireline Phone Test System.

Telephone Acoustic Tester

The Telephone Acoustic Tester is for those customers who only need to perform acoustic measurements on a telephone to the ANSI/TIA-470-C specification. The tests provided by the Telephone Acoustic Tester are:

- Off Hook Resistance (TIA-470.210-C 4.6.1)
- Off-Hook Metallic Impedance (Return Loss) (TIA-470.210-C 4.8)
- Send Off Hook Noise & Single Frequency Interference (TIA-470.110-C 4.4.6.1, 4.4.6.3)
- Receive Off Hook 0 km Noise & Single Frequency Interference (TIA-470.110-C 4.5.6.1, 4.5.6.2)
- Receive Off Hook 2.7 km Noise & Single Frequency Interference (TIA-470.110-C 4.5.6.1, 4.5.6.2)
- Receive Off Hook 4.6 km Noise & Single Frequency Interference (TIA-470.110-C 4.5.6.1, 4.5.6.2)
- Receive Distortion (TIA-470.110-C 4.5.5)
- Send Distortion (TIA-470.110-C 4.4.5)
- Peak Acoustic Pressure Test
- Receive Acoustic Shock Test
- Send Muting (TIA-470.110-C 4.4.7)
- Send Linearity (TIA-470.110-C 4.4.4)
- Receive Linearity (TIA-470.110-C 4.5.4)
- Send Response, SLR, STMR (TIA-470.110-C 4.4.2, 4.4.3.1, 4.4.3.2, 4.6.2)
- Receive Response, RLR - High Leak (TIA-470.110-C 4.5.2, 4.5.3.1, 4.5.3.2)
- Receiver Volume Control Test (TIA-470.110-C 4.5.7)
- Receive Response, RLR - Low Leak (TIA-470.110-C 4.5.2, 4.5.3.1, 4.5.3.2)
- *In-Band On-Hook Metallic Impedance (200 - 3200 Hz) (TIA-470.210-C 4.7.6)*
- *On-Hook Resistance (TIA-470.210-C 4.5)*
- *On-Hook Send Noise (TIA-470.110-C 4.4.6.2)*
- *Flash Test*

Italic items are TAT capabilities for TIA-470-C which can be added to the standard 470-C TAT test application.

Wireline Phone Test System

The Wireline Phone Test System provides customers with both acoustical and electrical measurements on a telephone to the ANSI/TIA-470-C specification. The following tests are provided by the Wireline Phone Test System. These are in addition to the tests listed under the Telephone Acoustic Tester.

- In-Band On-Hook Metallic Impedance (200 - 3200 Hz) (TIA-470.210-C 4.7.6)
- On-Hook Resistance (TIA-470.210-C 4.5)
- Ringing and Metallic Impedance During Ringing (TIA-470.210-C 4.7.2, 4.7.3.1)
- On-Hook Metallic Impedance (TIA-470.210-C 4.7.5)
- Non-Response to Other Signals (TIA-470.220-C 4.3.3.1 2d)
- Non-Response to Other Signals (TIA-470.220-C 4.3.3.1 2a, 2b, 2c)
- Non-Response to Other Signals (TIA-470.220-C 4.3.3.1 1b, 1c)
- On-Hook Send Noise (TIA-470.110-C 4.4.6.2)
- Pulse Signaling Test (4.6.2)
- DTMF Signaling Test (Signaling Tone Frequencies/Power 4.7)
- Transmit Muting on DTMF Test (Acoustic Suppression 4.7.7)
- DTMF Distortion Test (Spurious Frequency components 4.7.4)
- DTMF Signal Sidetone (4.7.10)
- Send Off Hook Noise & Single Frequency Interference (TIA-470.110-C 4.4.6.1, 4.4.6.3)

Quality Assurance Testing

- Repeatability and accuracy of all measurements meet the needs of Quality Assurance testing.
- Test results are comparable to conformance and laboratory grade test equipment
- Specifically designed test applications and template test programs for Quality Assurance environments.
- Detailed test results provide confidence that products meet required limits.

Incoming Inspection

- Assures design specifications are being met by OEMs and ODMs.
- Assures manufacturer's target country's specifications are being met.

Research & Development Testing

- Used by telephone designers to ensure their design meets the requirements of the target market.
- High speed testing allows cost effective testing through all the design stages.
- Simple operation

Existing Microtronix Test System Upgrades

Microtronix customers can upgrade their existing test systems to meet the requirements of the ANSI/TIA-470-C specification. Contact Microtronix or your local representative for details on upgrades.

Head and Torso Simulator Interface

Microtronix provides an interface to a HATS for testing to requirements such as ANSI/TIA 470-C. Country Kit applications for the Telephone Acoustic Tester and the Wireline Phone Test Systems provide turnkey solutions for specifications such as ANSI/TIA-470-C. Software included with the Microtronix HATS Interface provides the Drum Reference Point (DRP) to Ear Reference Point (ERP) corrections. Note that customers can continue to use their Microtronix Acoustic Fixture to test for compliance to 47CFR Part 68 - Receiver Volume Control Requirement.