



Measuring Telephones to TIA and IEEE Standards

Off-the shelf SoundCheck® Test Sequences

TIA-470-C (part number 3104)

This test sequence implements all the electroacoustic tests required by TIA-470.110-C, outputting the results as a report or writing to a database. Future releases of this sequence are planned to cover headset and speakerphone testing, and will be developed when the relevant subsections of TIA-470 are approved. The test sequence contains all the major clauses of TIA470C, and also includes calibration sequences and subsequences. The test sequences can be used as they are to test to the standard, or modified by the user for custom in-house tests based on the standard.

TIA-810-B (part number 3108)

A comprehensive US standard for measuring narrowband digital phones. Handset, headset and speakerphone functions are all included. The standards apply to VoIP phones, as well as USB audio devices such as headsets, speakerphone attachments, and webcams. The module is a large structured set of sequences and subsequences which perform all the measurements. Curves and values are shown on the screen, tolerance checks are performed, and data is saved to Excel spreadsheet files. Completely prompted sequences for calibration of all the transducers are included. After a one-time setup with a Sound card and other user-specific interfaces, the sequences are automatic. They run by simply selecting, pressing start, and following prompts where user interaction with the device under test is required. The sequence works with approved sound cards for connection to the transducers. Windows audio devices such as USB headsets work directly with SoundCheck. VoIP softphones also work with SoundCheck, by means of a recommended third-party Windows audio application.

TIA-920 (part number 3109)

A comprehensive US standard for measuring wideband digital phones. Handset, headset and speakerphone functions are all included. The standards apply to VoIP phones, as well as USB audio devices such as headsets, speakerphone attachments, and webcams. The module is a large structured set of sequences and subsequences which perform all the measurements. Curves and values are shown on the screen, tolerance checks are performed, and data is saved to Excel spreadsheet files. Completely prompted sequences for calibration of all the transducers are included. After a one-time setup with a Sound card and other user-specific interfaces, the sequences are automatic. They run by simply selecting, pressing start, and following prompts where user interaction with the device under test is required. The sequence works with approved sound cards for connection to the transducers. Windows audio devices such as USB headsets work directly with SoundCheck. VoIP softphones also work with SoundCheck, by means of a recommended third-party Windows audio application.

IEEE 1329-1999 (part number 3103)

This set of application sequences measures various switching time parameters on speakerphones. With an appropriate interface between the phone and the sound card, the sequences can be used with either analog or digital telephones. The measurements generally follow IEEE 1329-1999, Clause 10 "Voice switching measurements." Since this is a measurement standard, not a performance specification, there are no limits or pass/fail criteria included. User-defined pass/fail limits can be added using standard SoundCheck tools. Completely prompted sequences for calibration of all the transducers are included. After a one-time setup with a Sound card and other user-specific interfaces, the sequences are automatic. They run by simply selecting, pressing start, and following prompts where user interaction with the device under test is required.

