

Hearing Aid Compatibility with Wireless Handset Devices

A hearing aid operates by using a microphone to pick up sound waves in the air and convert the sound waves to electrical signals. The signals are then amplified as needed and converted back to audible sounds for the user to hear. The hearing aid's microphone, however, does not always work well in conjunction with audio devices like headsets and telephone handsets. The acoustic connection made between the audio device and the hearing aid is poor and creates distortions in the sound. In addition, the surrounding noise in the area of the user is often picked up by the hearing aid and interferes with the desired audio.

ANSI Standards

Uniform methods of measurement are set forth using the American National Standards of Measurement Compatibility between Wireless Communications Devices and Hearing Aids Standards, ANSI C63-2007.

Microphone Standard

NCC Wireless offers wireless handsets that meet or exceed the ANSI (American National Standards Institute) hearing aid compatibility standard. Handsets that receive a hearing aid compatibility rating of M3 or M4 have met or surpassed the ANSI hearing aid compatibility standard as adopted by the Federal Communications Commission.

- M3-rating indicates the handset has satisfied the ANSI standard
- M4-rating indicates the handset has exceeded the ANSI standard

M3/M4 Rating Description - The higher the M-rating the handset has the lower the Radio Frequency emissions level and higher signal quality the handset will have. If there is no M-rating then the handset does not meet the ANSI standard. The handset's M-rating along with a hearing aid's M-rating will assist customers in finding a handset that will work best for them. The hearing aid must be in microphone mode in order to replicate the mode that was used with the handset when the rating was achieved.

The M-rating, and a brief description of what the M-rating means, will be on the outside of the handset box. ANSI rating descriptions will also be included in the welcome packet received at the time of service activation.

Telecoil Standard:

NCC Wireless offers handsets that meet the ANSI (American National Standards Institute) Telecoil standard. Handsets that receive a telecoil rating of a T3 or T4 have met or surpassed the required standard as adopted by the Federal Communications Commission.

- T3-rating indicates the handset has satisfied the ANSI standard
- T4-rating indicates the handset has exceeded the ANSI standard

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Telecoil Standard, cont'd...

T3/T4 Rating Description - The telecoil rating is in reference to telecoils in some hearing aids, the telecoil is a small device that is built into some hearing aids for use with the telephone as well as assistive listening devices. Not all hearing aids have telecoils. To use the telecoil, generally, either the hearing aid is switched to the "T" position or a button on the hearing aid is pushed to select the telecoil setting.

The telecoil picks up magnetic fields generated by telephones and converts these fields into sound. Telecoils are particularly useful for telephone communication because they permit the volume control of a hearing aid to be turned up without creating feedback or "whistling," and background noise can be reduced, especially when using cell phones in noisy places.

The handsets that are both compliant for the microphone rating and the telecoil ratings will have both ratings on the handset box. ANSI rating descriptions will also be included in the welcome packet received at the time of service activation. If compliant to both standards it will appear as M3/T3 or M4/T4.

Currently offered phones from NCC:

Phones currently being offered from NCC Wireless, and the phones' M / T and functionality ratings can be found on the NCC website at www.nccray.com/Internet.

Three Functionality Categories:

Basic: Handsets have basic functions, such as calendar, alarm clock, call logs, voice dialing and speakerphone. They are the least expensive.

Feature: Handsets have additional features such as a camera and an mp3 player. Pricing is mid to above average.

Smart phone: Handsets offer advanced capabilities, often with PC like functionality. Pricing is above average.