

## Why Meet the IEC Standard for Hearing Loop System Installation?

Over the years, I've have heard many comments about loop systems such as, *"Our loop is good enough; Elsie loves it. Many others have tried it, but Elsie is the only one with really bad hearing."* A comment like this, regarding loop systems, is unfortunate because it implies that many have attempted to use the loop system but received very little benefit from it. As a result, individuals who do not benefit from a "great" loop system rely on their hearing device in a difficult listening environment and are lucky if they comprehend 25 percent of what is being said.

Another example of a problematic loop system is in a synagogue in Baltimore where a Rabbi had to give the following instructions to congregants regarding the loop system, *"For those who wear hearing aids you need to sit in the outside seat of each row and if you wish to use the loop receiver with headphones you can sit toward the middle of the room."* This is an unacceptable scenario where congregants could sit only in select areas to benefit from the loop system that was installed. Sadly, the Rabbi was told this system met all applicable standards.

**When loop systems do not meet the IEC standard, the users receive insufficient benefit and criticize the loop in the following ways:**

1. Those who have used the loop system say they can hear better with their hearing device.

**Cause:** Poor frequency response, low signal level or too much background noise.

2. Those who have tried the loop system say that the volume is too low.

**Cause:** The loop system's magnetic field is uneven resulting in low signal and/or varying strength throughout the seating area. In addition, the loop wires are placed too far apart.

3. My seating options are very limited.

**Cause:** The loop signal is adequate only in a couple of seats due to lack of uniformity or unevenness of the signal level and improper system design.

4. The loop system interferes with our video system or audio monitors.

**Cause: The hearing loop wires are too far apart and too much current is needed to create the magnetic field.**

5. The hum heard through the telecoil in my hearing device is too loud.

**Cause: The presence of background noise was not properly tested and resolved before the loop system was installed.**

6. The sound in the loop has an echo or is unclear.

**Cause: The audio feed to the loop system amplifier has too many open microphones or an ambient feed.**

7. When I lean forward to pray, the sound goes completely away.

**Cause: Prior to the loop system installation, little thought was given to the functions that take place within the seating area. The signal loss when leaning forward suggests a perimeter loop was installed when a phased array would have been the most appropriate loop system.**

In my travels, throughout the United States and Europe, the above are the most common complaints I hear from those who have tried to utilize a loop system that does not meet the IEC standard. It is my goal that we can all learn from each other's mistakes to install the best functioning loop systems.

The functionality of one loop system, in many cases, builds the reputation for all loops. If users have a bad experience at one location with a hearing loop, they could foresee all loop system performing the same way. Please reference the newly updated literature to ensure proper functioning of each loop system you install.

- IEC Standard 60118-4—LOOP FIELD CERTIFICATION,
- PRE-PROPOSAL—LOOP FIELD TEST, and
- ADJUSTING A PHASED ARRAY SYSTEM, SLS UNITS

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