

Test Report - VxMarkScan T-Coil Adapter Compatibility [2024-07]

Summary

This document serves to attest that the VotingWorks ballot-marking device VxMarkScan has been tested and verified to be compatible with T-coil hearing aids when paired with a separate T-coil adapter. This testing helps give evidence that VxMarkScan meets the following VVSG requirements, including for T-coil hearing aid users.

Applicable VVSG Requirements

- 6.1-D – Audio privacy
- 7.1-K – Audio settings
- 8.1-C – Personal Assistive Technology (PAT)
- 8.1-G – Telephone Style Handset
- 8.1-J – Hearing Aids

Devices Under Test

- VxMarkScan

Testing and Verification Process

1. Test Environment & Tools:

- Testing was conducted in a controlled environment designed to simulate typical voting conditions.
- [Telecoil \(t-coil\)-compatible hearing amplifiers \(from Hlisoundly / Amazon\)](#) were tested with two different telecoil 3.5mm audio adapters ([Williams Sound NKL 001](#), and [Bellman and Symfon Neckloop](#)). Both quiet and noisy settings were used to assess performance.

2. Testing Procedure:

- Each T-coil adapter was tested separately.
- When a T-coil was plugged into the headphone jack of the device under test, a magnetic field signal was produced from the T-coil compatible with T-coil-equipped hearing aids/amplifiers. The signal was confirmed to produce accurate sound through the hearing aids/amplifiers.

3. **User Experience:**

- T-coil hearing aids/amplifiers successfully interacted with the device under test without interference or loss of signal clarity.
- Audio was confirmed. The audio output was clear and comprehensible.