

EZ-VOTE Keypad Family Security

Wireless Assurance and Security Protocol (WASP)



At Meridia, we take security and privacy of voting very seriously. We have updated our wireless communications protocol to include a randomized **Dynamic Session ID** in the EZ-VOTE 5S keypads and EXT-S base receivers.

1. The communication between the base receiver and the keypad is dynamically changing based on a new property called Dynamic Session ID, which changes every 30 milliseconds and ensures that even if the communication is intercepted, it cannot be reproduced.
2. Meridia wireless communication protocol uses analog Signal Layer Modulation (SLM) mode with alternating frequency offset parameters. SLM ensures that even if someone is in possession of the same radio chips, the signal cannot be reproduced and acknowledged if the parameters are incorrect.
3. Each chip uses unique parameters, such as the length of synchronization header, the length of address code, whether to add FEC error correction mode, or add validation bytes, or whether to add Manchester code.
4. Communication parameters are set during the manufacturing process and cannot be modified afterwards.
5. One of many parameters we use – the Length of Address Code - has 65,536 variations, which is multiplied by the number of combinations of the remaining signal modulation variables.
6. Each of the parameter changes reduces the possibility of the intercepted signal being interpreted and maliciously modified.
7. This complex proprietary protocol and signal integrity check (CRC) in all our keypads and receivers increases the difficulty of interpreting and forging signals.
8. Finally, the short distance wireless communication also reduces the probability of signal capture, as the hacker would have to be in the vicinity of the room where the receiver is located.

For additional information, or questions regarding the security of Meridia audience response systems feel free to contact support@meridiaars.com, or call us at (610) 260-6800.



5 Great Valley Parkway, Suite 218, Malvern, PA 19355

Phone: 610-260-6800, Fax: 610-260-6810, Email: rsvp@meridiaars.com

