DPA N-Series Duplex Gap & Guard Band Access

DPA Microphones N-Series Digital Wireless System users in North America can now take full advantage of the system’s exceptionally wide tuning range. Recognized for advanced features such as True Radio Diversity and a 400MHz super-wide tuning bandwidth, the new N-Series firmware provides customers in the U.S. and Canada with Duplex Gap and Guard Band access for a broader usable spectrum. DPA will unveil this update at NAB 2026 (Booth C4428).

With the new firmware, all N-Series users will gain access to the 2 MHz Guard Band as well as the 6 MHz unlicensed portion of the Duplex Gap. Owing to the highly linear RF design and extremely low intermodulation characteristics of the N-Series, this increased space can accommodate up to sixteen additional wireless channels. That margin is significant for houses of worship, regional theaters, corporate AV environments and other multi-channel applications.

“Reliable spectrum is one of the biggest pressures facing customers mixing a broadcast, managing a large event venue or supporting complex productions,” says Christopher Spahr, Vice President of Sales and Marketing, DPA Microphones, U.S. “This update will give engineers more confidence and room to work. By extending what N-Series can access, we offer higher channel counts with greater predictability and less risk of interference in some of the most challenging RF environments. It’s a powerful example of how DPA continues to support its customers with improved performance through innovation and thoughtful engineering. We’re especially excited to demonstrate what this means in real-world applications at NAB 2026.”

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Following the North American spectrum repack roughly eight years ago, two ‘safe’ operating areas were created within the 600 MHz range to protect new mobile broadband services. These areas are known as the Guard Band (614–616MHz) and the Duplex Gap (653–663MHz).

The Guard Band is a 2MHz segment between UHF Channel 37 and the start of mobile phone downlink spectrum. Any wireless system may operate here at up to 20mW EIRP without an FCC license. Additionally, the Duplex Gap is a 10MHz separation between mobile downlink and uplink frequencies, divided into two segments: 653–657MHz, where operation is permitted for licensed wireless systems up to 20mW EIRP, and 657–663MHz, where operation is permitted for licensed or unlicensed systems, also up to 20mW EIRP.

Users holding the appropriate FCC license can take advantage of the full 12MHz of available spectrum. Thanks to the RF efficiency of the DPA N-Series, this additional space will accommodate up to twenty-four additional microphones and, because very few wireless systems support these frequencies, the environment typically has very low interference. To download and install the latest firmware, visit the website below.

www.dpamicrophones.com

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