Avoiding Interference with Mobile Phones, Tablets & Computers

**Background**

Wireless microphones are used across America in all kinds of venues: theaters, public schools and universities, churches and auditoriums, hotels and convention facilities, even for electronic news gathering by television broadcasters.

From handheld microphones with built-in transmitters, mics for musical instruments, headset mics or tie clip/lavalier microphones, most of the microphone systems – especially those of professional grade – use unlicensed spectrum.

**Impact on Wireless Mic Systems**

While these wireless microphone systems may operate in a variety of spectrum bands, there are important changes regarding the operation of 600 MHz spectrum that significantly impact wireless microphone systems. These changes are the result of the Federal Communications Commission’s (FCC) broadcast spectrum auction that was finalized in April 2017.

**Adding Coverage & Capacity for Mobile Customers**

T-Mobile – America’s Un-carrier – purchased close to $8 billion of 600 MHz spectrum that covers the entire continental United States, as well as Puerto Rico and the American Virgin Islands.

As T-Mobile transitions this spectrum to its national wireless network, audio visual professionals should be aware that this spectrum is being repurposed and will not continue to be available for wireless microphone use.
What This Means for Wireless Audio Video Users

Wireless microphones that operate in T-Mobile's new 600 MHz service band (the 617-652 MHz and 663-698 MHz frequencies) will be required to cease operation no later than July 13, 2020. In many places, this transition will occur well before 2020, and wireless microphone use in these locations will be required to cease operation sooner.

Of course, the FCC has made certain that spectrum will continue to be available for wireless microphone use on the other TV channels 2-36 (TV band frequencies that fall below 608 MHz), on portions of the 600 MHz guard band (the 614-616 MHz frequencies) and the 600 MHz duplex gap (the 653-663 MHz frequencies), and in various other spectrum bands outside of the TV bands.

Please check out the links below for more details.

Learn More

T-Mobile is partnering with broadcasters across the country to streamline the transition of 600 MHz spectrum to be used for wireless customers.

To avoid interference and provide information for all wireless mic users, T-Mobile maintains an updated list of locations – by county and state – where we are deploying wireless services for our 71+ million customers. We recommend wireless mic users bookmark the following webpage, and check back periodically:

https://howmobileworks.com/spectrum/

The Federal Communications Commission webpage also has in-depth information about wireless microphones:

https://www.fcc.gov/general/wireless-microphones

Contacts

T-Mobile’s team of spectrum experts is ready to help if you have any questions. Reach out to us by email – SpectrumTeam@T-Mobile.com – and we’ll get back to you.

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