

Wireless Microphones Must Cease Operating in the 700 MHz Band

FCC Frequently Asked Questions

Under a new FCC rule, anyone who uses a wireless microphone (or similar device) that operates in the 700 MHz Band must stop operating their wireless microphone (or similar device) no later than June 12, 2010.

All users of 700 MHz Band wireless microphones (and similar devices) - including theaters, churches, schools, conference centers, theme parks, and musicians - will need to retune or replace, if necessary, their equipment no later than June 12, 2010. Wireless Microphones that operate outside of the 700 MHz Band are not affected.

The following are the most frequently asked questions about the prohibition of using wireless microphones (and similar devices) that operate in the 700 MHz Band after June 12, 2010.

Why is the FCC prohibiting the use of wireless microphones in the 700 MHz Band beginning June 12, 2010?

Certain wireless microphones (and similar devices) have operated in frequencies that are needed for public safety. When this equipment was first designed, the frequencies they used were in between the frequencies that television stations used to broadcast television programs. With the completion of the digital television (DTV) transition on June 12, 2009, television stations no longer use the frequencies between 698 and 806 MHz (the 700 MHz Band) for broadcast. These frequencies are now being used by public safety entities (such as police, fire and emergency services) and by commercial providers of wireless services (such as wireless broadband services).

The wireless microphones (and similar devices) that had been operating in the old TV broadcast channels can cause harmful interference to these public safety and wireless consumer services. Therefore, all users of wireless microphones (and similar devices) that operate on any of the frequencies in the 700 MHz band – including both licensed users (under Part 74) and unlicensed users – now have to stop operating in this band.

The FCC is only prohibiting the use of wireless microphones (and similar devices) that operate in the 700 MHz Band. You may continue to use wireless microphones (and similar devices) that operate on other broadcast frequencies. Microphones and similar devices with cords are not affected by the FCC's decision.

These rules apply to wireless microphones and similar devices. What equipment are "similar devices" to wireless microphones?

Similar devices to wireless microphones include wireless intercoms, wireless in-ear monitors ("IEM"), wireless audio instrument links, and wireless cueing equipment (aka "IFB".) Typically these devices can transmit distances of 100 meters. This rule only applies to similar devices that operate in the 700 MHz Band. This rule does not apply to devices that operate in other bands or to equipment that has cords.



Is the FCC prohibiting the use of ALL wireless microphones?

No, this does not affect all wireless microphones (and similar devices). The FCC is *only* prohibiting the use (after June 12, 2010) of wireless microphones that operate on frequencies between 698 and 806 MHz, which is also known as the 700 MHz Band. You may continue to use wireless microphones that operate on other frequencies. Microphones with cords are not affected by the FCC's decision.

How can I find out if my wireless microphone uses frequencies in the 700 MHz Band?

Some wireless microphones (and similar devices) are marked with the frequency the device uses. If information on the device indicates that it operates on frequencies between 698 and 806 MHz, then the device uses 700 MHz spectrum and may not be used after June 12, 2010.

In addition, the FCC's website provides information about which wireless microphones currently operate in the 700 MHz band at www.fcc.gov/cgb/wirelessmicrophones/. Consumers may use this site to look up their equipment by manufacturer and determine if their particular equipment operates in the 700 MHz band. The website also includes information about how to contact manufacturers about wireless microphone equipment at www.fcc.gov/cgb/wirelessmicrophones/manufacturers.html. In addition, you may call the FCC at 1-888-CALL-FCC (1-888-225-5322) where staff will be able to help you determine if your equipment is affected.

When do I need to stop using my 700 MHz Band wireless microphone?

If your wireless microphone (or similar device) operates in frequencies between 698 and 806 MHz (the 700 MHz Band), you must stop using it *no later than June 12, 2010*. Furthermore, if your wireless microphone currently causes interference or will cause interference with a public safety or commercial wireless licensee, you may be required to stop using your wireless microphone *earlier than June 12, 2010*.

How will I know if I need to stop using my wireless microphone before June 12, 2010?

The FCC's website has a list of markets where people must stop using their wireless microphones (and similar devices) before June 12, 2010. The list includes information about whether you must stop using your wireless microphone immediately or if there is a specific date by which you must stop using your wireless microphone.

In addition, you may receive notice directly from a public safety organization or commercial wireless provider that it is going to begin using the 700 MHz Band frequencies in your area. If you receive this notice, you will need to stop using your wireless microphone. You will have up to 60 days from that notification to stop using your 700 MHz Band wireless microphone or June 12, 2010, whichever is sooner. (con'd)



Notwithstanding the notification process described, if you are notified that your wireless microphone (or similar device) is currently causing interference with a public safety or commercial wireless licensee, you must stop using your wireless microphone immediately.

If my wireless microphone is licensed under Part 74 rules, can I continue using my 700 MHz Band wireless microphone after June 12, 2010?

No. Wireless microphones (and similar devices) – licensed or unlicensed – may NOT operate in the 700 MHz Band after June 12, 2010. The prohibition against the use of wireless microphones in the 700 MHz band could take effect sooner if harmful interference is caused by its use or if notice is given sooner than the deadline by the FCC for users to cease operations in the 700 MHz Band as requested by public safety officials.

Are fixed UHF Broadcast Auxiliary Stations (“BAS”) – such as TV Studio to Transmitter Links (“TV STL”), TV Relays, and TV translator relay stations – affected?

The Commission’s rules for the operation of fixed BAS links within the 700 MHz band were previously addressed in a separate proceeding (ET Docket 01-75). Beginning in 2003, the Commission stopped issuing any new licenses for TV STL and TV Relay stations for operation in the 700 MHz band, while it permitted any existing stations that had already been licensed to continue operations until the end of the DTV transition (i.e., June 12, 2009) or until public safety entities or commercial operators licensed in the 700 MHz band need use of the spectrum. The Commission similarly permitted TV translator relay stations to continue operating in the 700 MHz band until the end of the DTV transition or until the public safety entities or commercial operators need use of the spectrum.

What happens if I don’t stop using my 700 MHz Band wireless microphone?

Using the 700 MHz Band for a wireless microphone (or similar device) after June 12, 2010 could be extremely dangerous and could even be life threatening. Police and fire departments, and other public safety groups, use frequencies in the 700 MHz Band. Interference from wireless microphones can affect the ability of public safety groups to receive information over the air and respond to emergencies. Harmful interference to these communications could put you or public safety personnel in grave danger. In addition, use of your microphone can cause unlawful interference to consumer services provided using the 700 MHz Band.

Operation of wireless microphones in violation of these rules may subject the user to substantial monetary forfeitures, in rem arrest action against the offending radio equipment and criminal sanctions, including imprisonment. Because any operation in violation of these rules creates a danger of interference to important radio communications services and may subject the operator to severe penalties, this advisory emphasizes the importance of complying strictly with these legal requirements.



How do I make sure I buy the right kind of wireless microphone?

Starting January 15, 2010, the FCC banned the sale, manufacture or import of any wireless microphones (and similar devices) that are intended for use in the United States in the 700 MHz Band. Therefore, the wireless microphones that are available for sale after this date should be devices that legally operate in other frequency bands (such as the core TV bands i.e. channels 2-51, excluding channel 37) where wireless microphone use is permitted.

All users of wireless microphones may operate the equipment on an unlicensed basis, subject to certain restrictions: the device (1) must not be operated at a power level in excess of 50 milliwatts, (2) may not cause harmful interference, and (3) must be operated in a way that accepts any interference that may be received. For most users – such as theaters, churches, schools, conference centers, theme parks, and musicians – the use of this device is unlicensed.

Most wireless microphones are designed to operate with 50 milliwatts or less. Users are advised to consult their owner's manual, or other materials provided by the manufacturer or distributor, to determine the output power of their wireless microphone.

Some users are eligible to obtain a license to operate these devices. These include specified entities – such as licensees of AM, FM, or TV stations, broadcast networks, and cable television system operators – set forth in the FCC's rules (pursuant to Part 74). These entities must first obtain a license before operating under the rules permitted for licensed use.

Can I become a FCC Part 74 licensee and get a more powerful wireless microphone?

Part 74 licenses are limited to AM, FM, TV stations, broadcast networks, and cable television systems operators, motion picture and television program producers, and certain Broadband Radio Service and Educational Broadcast Service Stations. (See 47 CFR § 74.832.) To obtain a license, you must be qualified under these limitations, file an application with the FCC, and pay the necessary fees.

My wireless microphone used to work fine. Now I am getting static or interference. What happened?

If you have recently started to receive large amounts of interference, you are most likely causing interference to a public safety entity or wireless broadband provider. **Any wireless microphone (or similar device) causing interference in the 700 MHz Band must cease operations immediately.** Additional information about stopping the use of your wireless microphone prior to June 12, 2010 can be found at www.fcc.gov/cgb/wirelessmicrophones/.



How do I report interference to my device which is operating on licensed 700 MHz spectrum?

If you are a **Public Safety Licensee** you may report interference to your 700 MHz device by contacting the FCC Operations Center 24 hours a day, seven days a week, at (202) 418-1122, or FCCOPCenter@fcc.gov.

If you are a **consumer** that is using a device that operates on **licensed 700 MHz spectrum**, you may report interference to the FCC at <http://esupport.fcc.gov/complaints.htm>.

- Click on “Wireless Telephone” for the type of complaint, then click “next” at the bottom of the page.
- Click on “Interference to Non-Emergency Devices” for the complaint category, then click “Next” at the bottom of the page
- Click on “Continue to Online Form”
- Complete the information on the Form.

You may also call the FCC at 888-CALL-FCC, or mail your complaint to the FCC at Federal Communications Commission, Consumer & Governmental Affairs Bureau, Consumer Complaints, 445 12th Street, SW, Washington, D.C. 20554.

Only wireless devices that operate on licensed 700 MHz spectrum are permitted after June 12, 2010. Wireless microphones and similar devices are prohibited on the 700 MHz band after June 12, 2010.

What do I do with my old equipment?

Remember to recycle any electronic equipment you are discarding. Recycling electronic equipment recovers valuable materials from the circuit boards, metal wiring, leaded glass, and plastics. Call your local household hazardous waste collection and recycling program to find out whether they will be sponsoring an upcoming event to recycle electronics.

You can also check out the following Web sites to find a recycling program near you: Identifying resources and locations for electronics recycling does not constitute the FCC’s endorsement of the services.

Earth 911 www.earth911.com/electronics Earth 911’s zip-code based search engine enables you to find recycling and reuse options in your community for a variety of products.

National Recycling Coalition www.nrc-recycle.org/localresources.aspx This page provides links to state recycling resources. Many communities have special collection and recycling days that are highlighted on their Web sites.

My Green Electronics www.mygreenelectronics.org/ On this Consumer Electronics Association site, you can learn you can learn more about purchasing “green” electronic products and search for recycling opportunities.



For more information about the use of Wireless Microphones you may contact the FCC at:

Federal Communications Commission
Consumer & Governmental Affairs Bureau
Consumer Inquiries and Complaints Division
445 12th Street, SW
Washington, D.C. 20554

Phone: 1-888-CALL-FCC (1-888-225-5322)

TTY: 1-888-TELL-FCC (1-888-835-5322)

Fax: (202) 418-0232

E-mail: fccinfo@fcc.gov

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For this or any other consumer publication in an accessible format (electronic ASCII text, Braille, large print, or audio), please write or call us at the address or phone number below, or send an e-mail to FCC504@fcc.gov.

To receive information on this and other FCC consumer topics through the Commission's electronic subscriber service, visit www.fcc.gov/cgb/contacts.

This document is for consumer education purposes only and is not intended to affect any proceedings or cases involving this subject matter or related issues.

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Federal Communications Commission ■ Consumer & Governmental Affairs Bureau ■ 445 12th St., SW ■ Washington, DC 20554
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