

## How Spectrum Changes Affect Wireless Systems

The Federal Communications Commission (FCC) has reorganized the UHF television spectrum, which is also used by wireless microphones, wireless in-ear monitors, and other professional wireless equipment. These changes affect the amount and location of spectrum that is available for use by wireless systems. **In some cases, changes in spectrum availability mean that a wireless system that is otherwise in good working order will no longer be useable and must be replaced to comply with new FCC regulations or to avoid interference.**

### DTV Stations Are Still Moving

- The occupied TV channels in most cities—and the frequencies that are available for use by wireless systems—have changed and may continue to change. A wireless system that is set to a frequency that was clear but is now occupied by a TV station may experience dropouts or reduced range.
- Users should monitor the TV channel assignments in their area and be prepared to adjust their wireless systems when necessary. Frequency-agile systems can be reset by the user; fixed-frequency systems must be retired from service and replaced.
- All current Shure wireless systems can be adjusted to multiple frequencies and TV channels.

### 700 MHz Band Closing June 12, 2010

- The portion of the UHF spectrum vacated by TV stations (698–806 MHz, known as the “700 MHz band”) has been reserved for exclusive use by Public Safety agencies (police, fire, and other emergency responders) and licensed wireless service providers (either local, regional, or national).
- The FCC has ordered that wireless systems that operate in the 700 MHz band must be retired from service before June 12, 2010 and replaced with systems that operate outside of this band. For a list of Shure wireless components affected by this FCC rule change, visit [www.shure.com/700](http://www.shure.com/700).
- All current Shure wireless systems (including PG, PGX, SLX, ULX, UHF-R, and PSM product lines) operate outside of the 700 MHz band and may continue to be used. Shure stopped selling products in the 700 MHz band in 2007.

### Expanded Use Of White Spaces Still In Planning Stages

- The FCC plans to allow new “TV Band Devices” to access the internet using the “white spaces” between assigned TV channels in the remaining VHF and UHF TV bands. The FCC is developing methods of preventing these new devices from interfering with TV stations, wireless systems, and other existing users in these bands.
- The FCC is reviewing proposals from prospective administrators of a database of protected TV channels, in which wireless mic users could register the date, time, and location of an event. TV Band Devices would avoid transmitting on those channels during that time near that location. Representative Bobby Rush (D-IL) has introduced a bill (HR 4353) that would require that wireless system users in 13 categories would be guaranteed access to the database.

Questions? Contact Shure at [support@shure.com](mailto:support@shure.com) or 800-516-2525.