WIRELESS MICROPHONES
RULE UPDATE
(KDB 206256)

Nov. 1, 2017
600 MHz Service Band

Incentive Auction Closing and Channel Reassignment Public Notice, April 13, 2017

- April 13, 2017 marks start of the 39-month post auction transition period
- Technical rules for devices operating in the 600 MHz service band are effective now under Part 27
- 600 MHz Service Band comprised of uplink (663-698 MHz) and downlink (617-652 MHz), 3GPP Band 71

![Figure 1: 600 MHz Band Plan](image-url)
§15.236 Wireless microphones

- Applications for certification filed beginning October 3, 2017 must comply with requirements of §15.236. No operation in 600 MHz wireless service band.
- Compliance with 15.204 (amps and antenna mods) required, but not 15.203 (antenna reqs).
- Operation permitted in repacked TV bands (54-72 MHz, 76-88 MHz, 174-216 MHz and 470-608 MHz bands)
- Operation on frequencies above 608 MHz are limited to:
  - Upper 6 MHz of the 600 MHz duplex gap 657-663 MHz
  - 600 MHz guard band between TV band and 600 MHz downlink, excluding upper 1 MHz 614-616 MHz
Unlicensed Wireless Microphones

- Power limited to 20mW EIRP in the 600 MHz guard band and duplex gap. 50mW EIRP in other bands.

- Need to meet EN 300 422-1 v1.4.2 emission mask and spurious emission requirements.
Unlicensed Wireless Microphones

- Equipment class DWM
- Specify specific frequencies on grant. Extended frequencies not allowed.
- For devices intended to operate in the 600 MHz guard band and 600 MHz duplex gap, the user needs to register with and check a white-space database to determine available channels. Instructions should be in user manual.
Licensed Wireless Microphones

§ 74H Low power auxiliary stations (LPAS) under new rules
- Devices allowed to operate in the re-packed TV bands, 600 MHz duplex gap (653-657 MHz), 941.5-944 MHz, 944-952 MHz, 952.850-956.250 MHz, 956.450-959.85 MHz, 1435-1525 MHz, 6875-6900 MHz, 7100-7125 MHz
Licensed Wireless Microphones

- Need to meet EN 300 422-1 emission mask and spurious emission requirements
- Need to meet general population/uncontrolled RF exposure limits.
- Extended frequency listings or the use of EF grant note is not allowed.
- Equipment class TLD.
Licensed Wireless Microphones - (600MHz Duplex Gap & 600 MHz Wireless Service band)

- Effective **January 13, 2018**, applications for certification shall no longer be accepted for LPAS devices capable of operating in the 600 MHz wireless service band

- 600 MHz duplex gap operations limited to the 4 MHz segment from 1-5 MHz above the lower edge (**653-657 MHz**), and limited to 20 mW EIRP.
Licensed Wireless Microphones – (600MHz Duplex Gap & 600 MHz Wireless Service band)

- Need to meet EN 300 422-1 emission mask and spurious emission requirements
- Permissible changes to previously authorized devices
  - Only software/firmware modifications allowed, filing needs to include details on how this is controlled and managed.
  - Equipment class updated.
- Devices approved under previous Part 74 certification (Legacy systems) capable of operating in the 600 MHz wireless service band may no longer be sold after **October 13, 2018**.

- These devices may be operated on a licensed or unlicensed basis in the 600 MHz wireless service band during the post-incentive auction transition period under certain conditions.

- Operation in the 600 MHz wireless service must cease by **July 13, 2020**.
Disclosure Requirement of Rule Part 74.851(l) for devices that operate in the 600MHz wireless service band.

CONSUMER ALERT
This particular wireless microphone device operates in portions of the 617-652 MHz or 663-698 MHz frequencies. Beginning in 2017, these frequencies are being transitioned by the Federal Communications Commission (FCC) to the 600 MHz service to meet increasing demand for wireless broadband services. Users of this device must cease operating on these frequencies no later than July 13, 2020. In addition, users of this device may be required to cease operations earlier than that date if their operations could cause harmful interference to a 600 MHz service licensee’s wireless operations on these frequencies. For more information, visit the FCC’s wireless microphone website at www.fcc.gov/wireless-microphones-guide or call the FCC at 1-888-CALL-FCC (TTY: 1-888-TELL-FCC).”
## Wireless Microphones

### Summary of affected bands

<table>
<thead>
<tr>
<th>Frequency Band</th>
<th>Unlicensed</th>
<th>Licensed</th>
</tr>
</thead>
<tbody>
<tr>
<td>54-72 MHz (VHF)(TV Band Ch 2-4), 76-88 MHz (VHF)(TV Band Ch 5-8)</td>
<td>15.236, 50 mW EIRP</td>
<td>74H, 50 mW EIRP</td>
</tr>
<tr>
<td>161.625 - 161.775 MHz (VHF)</td>
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<td>74H, 1 Watt</td>
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<tr>
<td>169-172 MHz (VHF)</td>
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<td>90.265, 50 mW</td>
</tr>
<tr>
<td>174-216 MHz (VHF)(TV Band Ch 7-13)</td>
<td>15.236, 50 mW EIRP</td>
<td>74H, 50 mW EIRP</td>
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<tr>
<td>450-451 MHz (UHF), 455-456 MHz</td>
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<td>74H, 1 Watt</td>
</tr>
<tr>
<td>470-608 MHz (UHF)(TV Band Ch 14-36)</td>
<td>15.236, 50 mW EIRP</td>
<td>74H, 250 mW</td>
</tr>
<tr>
<td>614-616 MHz (guard band)</td>
<td>15.236, 20 mw EIRP</td>
<td>74H, 20 mw EIRP</td>
</tr>
<tr>
<td>653-657 MHz (duplex gap)</td>
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