



Tech Specs: Moody Radio Satellite Settings & 5G Transition Update

Moody Radio programming channels are now on domestic satellite SES-2 (87-degrees West Longitude on Transponder 23 (horizontal polarity). The move from Transponder 7H was completed Aug. 5 to accommodate the FCC's re-allocation of spectrum originally devoted to C-band fixed satellite services to future 5G wireless services.

What's next?

The FCC will auction off the lower portion of the traditional C-Band's 3.7-3.95 GHz frequency range in the fall of 2020 for future wireless broadband usage.

The FCC and 5G Back-story

Essentially, all satellite earth stations used by radio and TV stations for downlinking programming via C-Band satellite frequencies from 3.7-4.2 GHz, will be shifting to the upper portion of the C-band. The FCC is re-allocating the 3.7-3.95 GHz portion of the band for mobile broadband (5G) use while existing satellite operations will be repacked into the upper 200 megahertz of the band (4.0-4.2 GHz). The 300 megahertz of spectrum between 3.7 and 3.95GHz must be cleared for flexible use as soon as December 2021 for some spectrum and markets, and no later than December 5, 2025, unless a sufficient number of satellite operators agree to clear on an accelerated timeframe. Under the accelerated timeframe, 120 MHz must be cleared by December 5, 2021 in 46 of the top 50 Partial Economic Areas, and all 300 MHz must be cleared in the contiguous United States by December 5, 2023. The 50MHz band between 3.95 GHz and 4.0 GHz will be reserved as a buffer zone with no assigned users to protect against interference between 5G users and the new modified C-band (4.0-4.2 GHz) which will continue to be used by radio, TV and cable operators.

The FCC has mandated that Intelsat, along with other satellite operators in the U.S., manage the transition of current services to clear the spectrum.

Radio stations that have registered their C-band satellite earth stations with the FCC will be assisted in this transition, with the satellite service providers coordinating the logistics and cost of modifications needed at radio and TV station downlinks.

Current Moody Radio Satellite Specs:

For Moody Radio affiliates, here are the **NEW technical specifications (eff. 08-05-2020)** that will apply to your satellite downlink(s) used for receiving Moody Radio satellite programming:

Satellite name: SES-2

Orbital Position: 87-degrees West Longitude

Transponder: 23H

Transponder Polarity: Horizontal

NEW C-Band Downlink Frequency: 4176.000 MHz

NEW L-Band Downlink Frequency: 974.000 MHz

Additional XDS receiver settings:

Symbol Rate: 2.894 Msym

Data Rate: 4.000 Mbps

FEC: 3/4

If you have any questions, please call Dave Woodworth at (312) 329-4435 or e-mail david.woodworth@moody.edu.

For additional assistance with your XDS-PROQ satellite receiver, contact xdssupport@moody.edu.

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