

DEMONSTRATION OF DIGITAL SYSTEMS

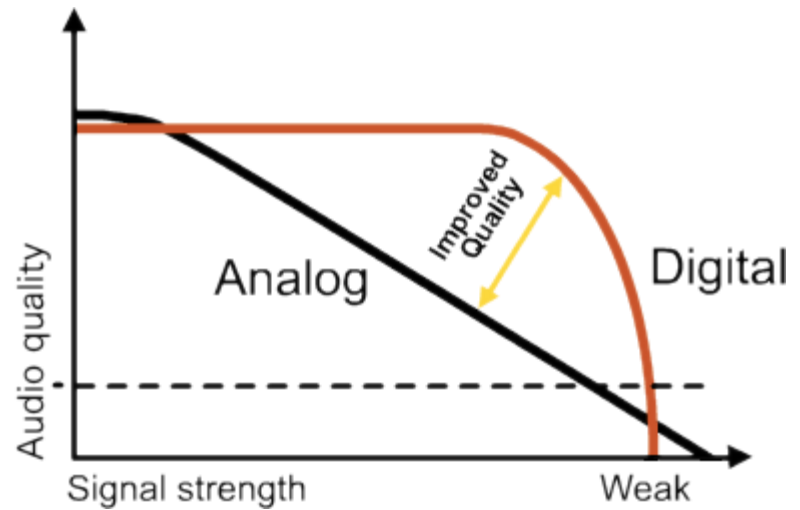
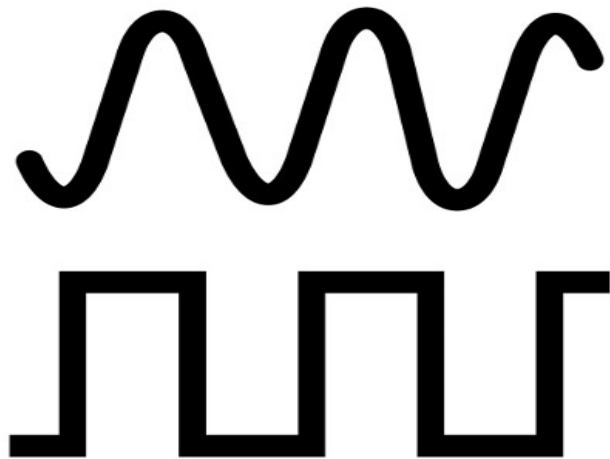
JOEY WEEDIN – KF7NQC

ADAM CRIPPEN – N7ISP



**PACIFIC NORTHWEST
AMATEUR RADIO NETWORK**

DIGITAL VOICE

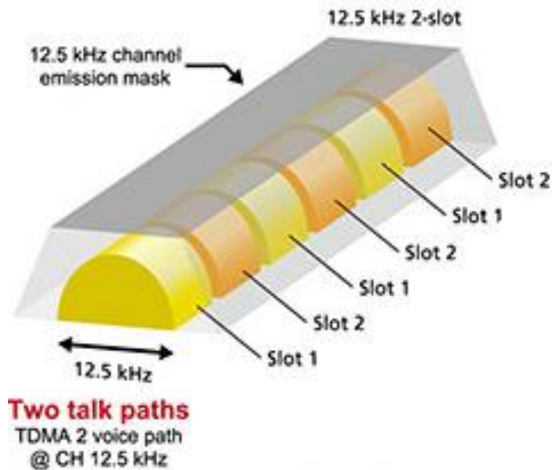


**PACIFIC NORTHWEST
AMATEUR RADIO NETWORK**

DMR

DIGITAL MOBILE RADIO

- Offers two channels in single 12.5 kHz bandwidth two communication paths simultaneously
- Voice or Data can occupy either of the channels Amateur Radio typically uses both slots for voice
- Each Time Slot is transmitted for 30ms at a time in an alternating pattern

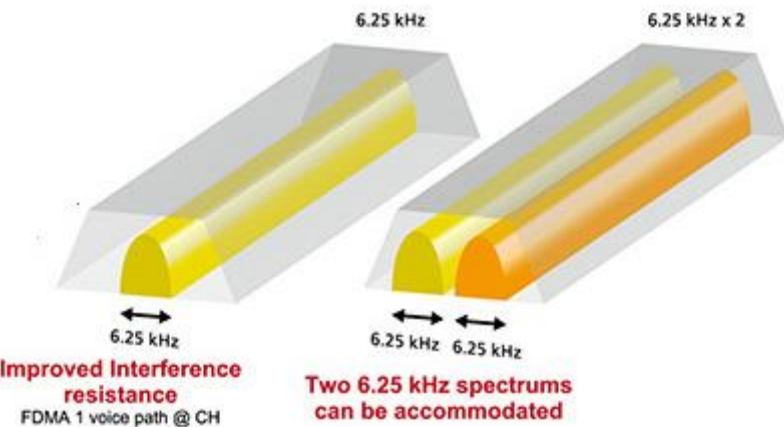


PACIFIC NORTHWEST AMATEUR RADIO NETWORK

NXDN

NEXT GENERATION DIGITAL NARROWBAND

- Offers single channel in either single 12.5 kHz bandwidth or two 6.25 kHz channels



- Voice or Data can occupy either of the channels
- Improved interference resistance at 6.25 kHz compared to 12.5 kHz bandwidth channels

SERVICE MONITOR

KNOW WHAT'S GOING ON UNDER THE HOOD



- Frequency Error
- Symbol Deviation
- FSK Error (Frequency Shift Key)



**PACIFIC NORTHWEST
AMATEUR RADIO NETWORK**



MOTOROLA



Vertex Standard

KENWOOD

Other manufacturers not listed



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