

D-Star Operations

Common Questions, Answers &
Helpful Resources

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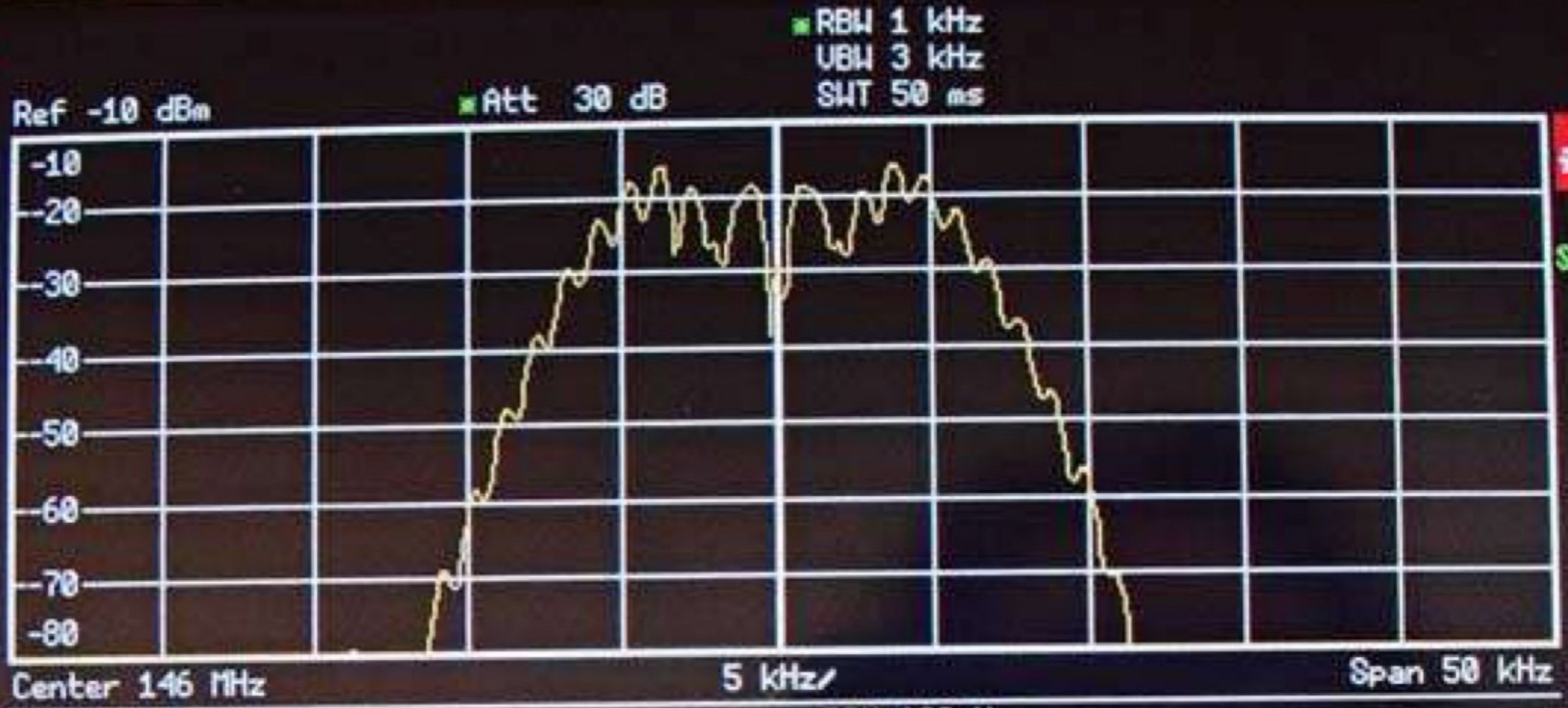
Overview

- D-Star - A Brief History
- Etiquette
- Registration
- Equipment Setup
- Operating
- Resources

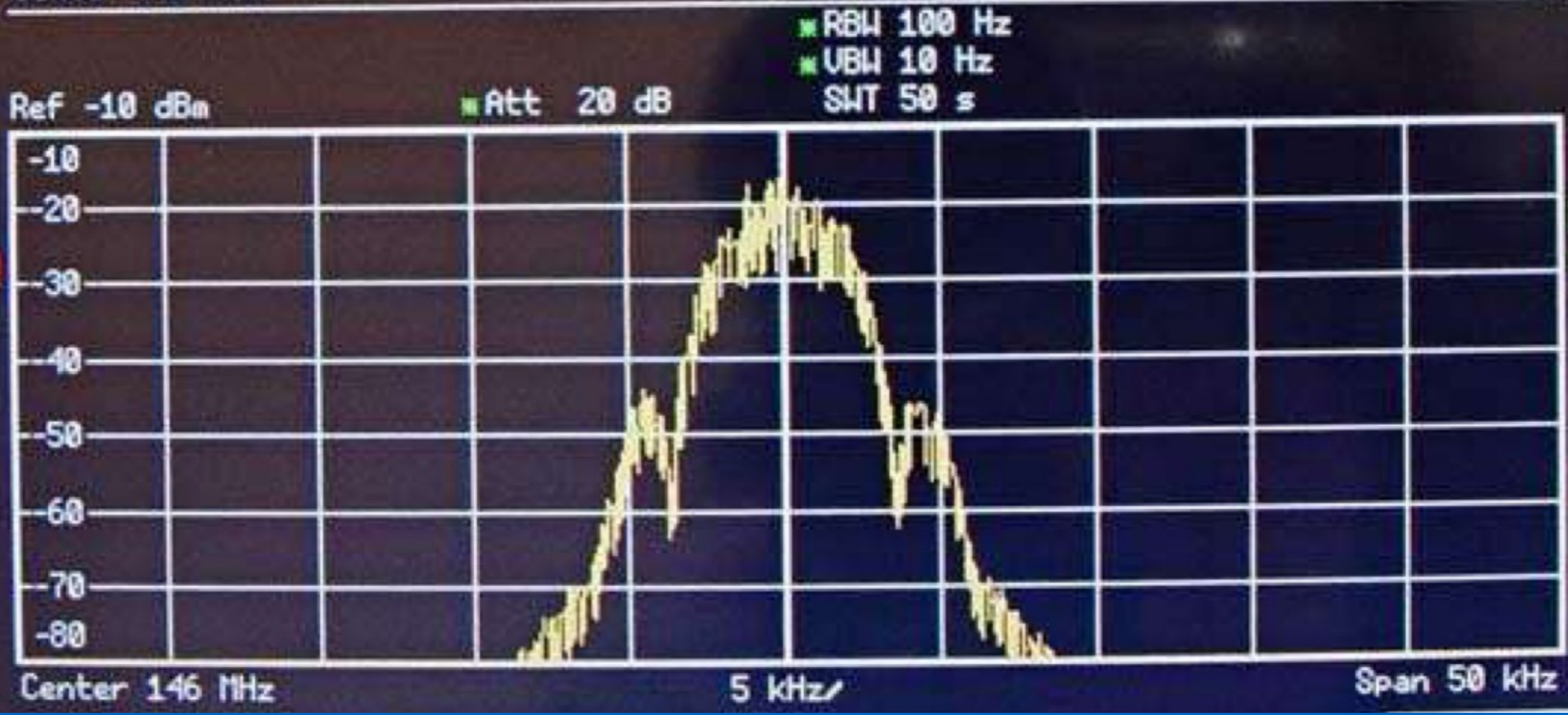
D-Star Overview

- Digital Smart Technologies for Amateur Radio
- JARL Open Standard
- Simultaneous Voice and Data
 - Digital "At the Source"
- DV - Other Benefits

Bandwidth Overview



IF BWL
1 AP VIEW



D-Star Protocol Overview

- 4800 bits simultaneous for voice and data
- 2400 bits for voice
- 1200 bits for FEC
- 1200 bits for data

D-Star's Envelope

Etiquette

- Similar to VHF to UHF
- Call sign optional
- Linked Repeater?
- Intentions
- GPS auto-transmission

Registration

- How to register
 - Your closest repeater/club
 - <http://www.tmrahamradio.org>
 - <https://w8hhf.dstargateway.org/Dstar.do>
- Register each radio?

Equipment Setup

- UR - CQCQCQ
- RPT1 - W8HHF--B
- RPT2 - W8HHF--G
- MY - N8ZAK
- Frequency - 442.750+ Mhz
- Offset - 5.00 Mhz

Operating

- Local vs Gateway operation
- Common gateway issues
- Linking and unlinking to repeaters and reflectors
- Call sign routing
- DSQL (Callsign) vs CSQL (Coded)

Operating Features

- Digital callsign squelch (DSQL) & Digital code squelch (CSQL)
 - The DSQL opens the squelch, only when your callsign is received. When you share a single callsign with a club or group members, the CSQL function allows you to set a CSQL code from 00 to 99 and provides quiet stand-by while other members are talking.
- EMR mode operation
 - When you require the attention of all stations in the area, the Enhanced Monitor Request (EMR) mode operation allows the caller to bypass the CSQL and DSQL setting of the receivers station. During EMR mode operation, all receiving stations will hear your audio, even though they may be muted.

Query Repeater

- UR - W8HHF--I or more simply -----I
- RPT1 - W8HHF--B
- RPT2 - W8HHF--G
- MY - N8ZAK
- Frequency - 442.750+ Mhz
- Offset - 5.00 Mhz

Echo Test Repeater

- UR - W8HHF--E or more simply -----E
- RPT1 - W8HHF--B
- RPT2 - W8HHF--G
- MY - N8ZAK
- Frequency - 442.750+ Mhz
- Offset - 5.00 Mhz

Local Operation

- UR - CQCQCQ
- RPT1 - W8HHF--B
- RPT2 - leave blank
- MY - N8ZAK
- Frequency - 442.750+ Mhz
- Offset - 5.00 Mhz

Gateway Operation

- UR - CQCQCQ
- RPT1 - W8HHF--B
- RPT2 - W8HHF--G
- MY - N8ZAK
- Frequency - 442.750+ Mhz
- Offset - 5.00 Mhz

Link to Another Repeater

- UR - KD8QOFBL
- RPT1 - W8HHF--B
- RPT2 - W8HHF--G
- MY - N8ZAK
- Frequency - 442.750+ Mhz
- Offset - 5.00 Mhz

Link to a Reflector

- UR - REF038AL
- RPT1 - W8HHF--B
- RPT2 - W8HHF--G
- MY - N8ZAK
- Frequency - 442.750+ Mhz
- Offset - 5.00 Mhz

Unlink the Repeater

- UR - -----U
- RPT1 - W8HHF--B
- RPT2 - W8HHF--G
- MY - N8ZAK
- Frequency - 442.750+ Mhz
- Offset - 5.00 Mhz

Contacting A Specific User

- UR - K8XG /W8HHF-B
 - RPT1 - W8HHF--B KD8QOF-B
 - RPT2 - W8HHF--G KD8QOF-G
 - MY - N8ZAK K8XG
 - Frequency - 442.750+ Mhz
 - Offset - 5.00 Mhz
- ↓
- RX->CS Key

Internet Resources

- TMRA Website - D-Star Section
 - <http://www.tmrahamradio.org>
- D-Star Info - Repeater/Reflector/Net Listings
 - <http://www.dstarinfo.com/>
- D-Star Traffic - Current/Last Heard
 - <http://www.dstarusers.org/>

Internet Resources

- D-Star Network Status
 - <http://dsync.dstarusers.org/>
- D-Star Web Calculator
 - <http://www.dstarinfo.com/dstar-web-calculator.aspx>

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