

Digital Saturday

D-STAR Data

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D-STAR Modes

- DV – Digital Voice
 - AMBE Digital Voice with FEC
 - 960 bps Data Stream
- DD – Digital Data
 - 128 Kbps Data Stream
 - Implemented as Ethernet

DV – Digital Voice

- Entire channel is digital
- 4800 bps
 - 2400 bps Voice
 - 1200 bps FEC
 - 1200 bps Data

DV Digital Voice

- ▣ Data is sent continuously
 - ▣ Whether it is used or not
- ▣ Plain Serial Data Stream
 - ▣ No Routing
 - ▣ No Error Correction or Detection
- ▣ Implemented as Serial Port
 - ▣ Sub-miniature Phone Jack

DV - Digital Voice

- Data follows voice
 - Heard Locally
 - Heard Remotely
- Data is Broadcast
 - Everyone hears it

DV - DPRS

- ▣ D-STAR Implementation of APRS
- ▣ Supported by most repeaters
- ▣ Position sent as you talk
- ▣ Extra Radio not Required
- ▣ IC-2820 is GPS enabled
- ▣ IC-92AD has GPS Microphone

DD – Digital Data

- ▣ All Data
- ▣ No Voice
- ▣ Icom ID-1 Only
- ▣ Radio has RJ-45
- ▣ Looks like Ethernet Hub

DD – Digital Data

- Point-to-Point
 - 2 ID-1 Radios act as Ethernet Cable
 - Radios DO NOT have IP Addresses

DD – Digital Data

- Using Repeater
 - Statically Assigned IP Address
 - 10.x.x.x Subnet (/8 or 255.0.0.0)
 - Gateway 10.0.0.1
 - DNS on 10.0.0.1 ???
 - Internet Access
 - NAT
 - No Inbound
 - Local Hosts Possible

DD – Digital Data

- Using Repeater
 - Email
 - Web Access
 - Limitless Application
 - 128 Kbps

DD – Digital Data

- Connecting a Radio
- Demonstration - DD
 - Email
 - Web Browsing
 - D-STAR Calculator

DV – Digital Voice

- Connecting a Radio
- Demonstration – DV
 - Terminal to Terminal
 - D*Chat
 - SMS