

# D-STAR

## DIGITAL

Digital Voice + Digital Data

**B**  **g** 535

### *D-Star System*

There has been a lot of discussion regarding changing the 535 repeater to D-Star digital. A final decision has not been made but there is a very good chance that one or more of the K8CLA repeaters will be changed to D-Star in the next 6 months. If you are not familiar with D-Star this would be a great time to learn about this new technology and start obtaining D-Star capable equipment.

D-Star is a technology developed by the JARL (the Japanese equivalent of the ARRL) along with the Japanese radio manufacturers in 2001. Icom provided the equipment used for development and testing.

D-Star uses AMBE Digital Modulation technology which allows for Digital Voice and Low-Speed data (1200bps) simultaneously. Also included is FEC (Forward Error Correction). This allows D-Star digital signals to be very tolerant of mobile flutter and maintains a usable signal well beyond the point of lost intelligibility in an analog system.

While Icom is currently the only manufacturer making D-Star radios, all of the manufacturers were involved in the development and the standard is open to anyone. The AMBE-2020 Vocoder chip is available to manufacturers and experimenters alike. Due to the popularity of D-Star it is very likely that other radio manufacturers will start making D-Star capable transceivers in the near future.

D-Star allows for versatile linking via IP linking. You can talk to local hams or hams around the world and they all sound like they are local – no poor audio or delays as with EchoLink or IRLP. Users can initiate links via callsign routing. If you travel to another town which has a D-Star repeater and key up once on that system you are then registered as being on that system. then if someone on your home repeater – or anywhere else for that matter – keys up with your callsign in the URCALL field it will look to see where you were last time you keyed up and the traffic will be sent over that system. This is great for anyone who travels a lot and would like to stay in touch.

For more information please see the web sites on the reverse of this page.



Icom IC-2820 w/UT-123 2M/440 55/50W



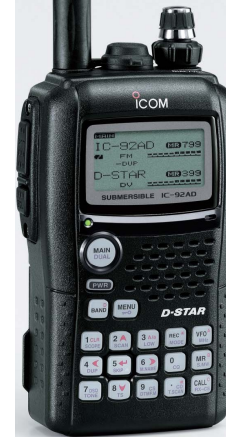
Icom ID-800H 2M/440 55/50W



Icom IC-2200H w/UT-118 – 2M – 65W w/UT-118



IC-91AD 2M/440



IC-92AD 2M/440



IC-V82/U82

Radios currently available for D-Star:

Brand	Model Number	R&L Electronics Price
Icom	IC-2820H w/UT-123 – 2M/440 55/50W Dual Band Dual Receive	\$929.90 (\$649.95+\$279.95)
Icom	ID-800H – 2M/440 - 55/50W - Dual Band Single Receive	\$589.95
Icom	IC-2200H w/UT-118 – 65W - 2M Mobile	\$369.90 (\$169.95+\$199.95)
Icom	IC-92AD – 2M/440 – 5/5W – Dual Band Dual Receive	\$579.95
Icom	IC-91AD – 2M/440 – 5/5W – Dual Band Dual Receive	\$434.95
Icom	IC-V82 w/UT-118 – 2M – 7W	\$339.90 (\$139.95+\$199.95)
Icom	IC-U82 w/UT-118 – 440 - 5W	\$339.90 (\$139.95+\$199.95)
DV Dongle	DV Dongle – Computer Interface – No radio required	\$199.95
Icom	ID-1 – 1.2 GHz – 12W	\$999.99

Web sites:

- <http://www.icomamerica.com>
- <http://www.dstarusers.org>
- <http://www.dstarinfo.com>
- <http://www.dvdongle.com>
- <http://www.k5tit.org>
- [http://www.arrl-al.org/Alabama\\_link.htm](http://www.arrl-al.org/Alabama_link.htm)