

# Getting Started with D-Star

## Registration

Before you can get started on D-Star, you should first register with your local repeater. Actually you can talk through the repeater without registering, but once registered your details are automatically propagated around the D-Star network allowing you to access all the gateways and repeaters worldwide. You should only register through one repeater and usually you register through the repeater closest to you.

The W8SHI registration page is [here](#).

## Setting up your Radio

D-Star radios work in a similar manner to conventional FM radios in that you have to set the operating frequency and any repeater shifts. However, Instead of using CTCSS or tone burst to access repeaters, D-Star radios use programmed call signs:

- **MYCALL** - this is normally set to your (or your club's) call sign.
- **URCALL** - this is the call sign of the person you wish to talk to (or CQCQCQ).
- **RPT1** - the call sign of the repeater system you are using (followed by the letter designating the band, C = 2m, B = 70cms, A = 23cms).
- **RPT2** - either the call sign of the repeater system you are using (followed by G designating the gateway), or a remote repeater you wish to talk through.

Understanding these call signs is the key to using D-Star successfully, as they determine the route your transmission will take through the D-Star system, and where it will eventually emerge.

## D-Star Calculator

The [D-Star Calculator](#) from Georgia D-Star simplifies this, letting you choose the D-Star repeaters you want to use from a drop down list, and automatically generating the call signs you need to enter into your radio, together with a schematic explaining the route and etiquette.

## Helpful Videos

Amateur Radio Video News (ARVN) has produced two "YouTube" videos showing you how to manually program a variety of D-Star radios, and demonstrations of D-Star in action - See [D-STAR Programming Part 1](#) and [D-STAR Programming Part 2](#).

## One Touch Reply

When someone calls you by placing your call in the URCALL field the person receiving the call also needs to program the reverse route into their radio for the reply to be heard! Thankfully, Icom has provided a facility to do just this: On the IC-91 hand held, press and hold the "One Touch Reply" button at the bottom right (Marked RX>CS) for one second, the call signs should then be automatically set.

On the IC-2820 this is more complex: press the  button on the remote panel twice, until the text **R>CS** appears above the Tone/DTMF hotkey and then press the key. As this operation is too

complex for a mobile station to do without taking their eyes off the road, it is recommended that users "Link to Repeaters" rather than using D-Star "Source Routing" (If you don't understand these terms take a look at the D-Star Calculator again).

## DV Dongle

The DV Dongle allows you to get onto the D-Star system using your computer - this is useful where there is no local coverage, or while you save up for a D-Star radio!



[DV Dongle Home Page](#)

The installation is straightforward; simply plug the DV Dongle into a USB 2.0 port, and Windows will automatically start the "Found New Hardware Wizard" and should detect an FTDI FT232R USB serial port. The driver should be automatically installed by Windows.

The normal installation installed the Java Runtime Environment and the DV-Tool application itself. We recommend that you install the latest [beta test version](#) which works better and has more features than the current release.

Once installed and running, the DV Dongle Tool software will automatically connect to the D-Star Server and download a list of gateways (repeaters and reflectors). Some local dongle users connect to reflector 24, the Michigan reflector to which W8SHI is usually linked, along with many other of the Michigan repeaters.

## DV Access Point

The DV Access Point Dongle, released in January 2010 by Internet Labs, provides another way to connect to the D-Star network using your computer.

A nice write-up on the DV Access Point Dongle is [here](#). See also the D-Star Info [newsletter](#).



## D-PRS Calculator

[This page](#) calculates the necessary GPS message (C1 message on most Icom radios) to use your Icom radio in GPS mode (not GPS-A mode) with D-PRS. Your browser must have JavaScript enabled to use this page.