D-Star Call Signs Explained

There are four call signs used in D-STAR. Although the different radios have different acronyms for them, everything consistently applies these four values:

MYCALL - This is the call of the person transmitting. Normally, this is programmed statically to the owner of the radio.

URCALL - This is the call of the target of the transmission. (With whom do you want to talk?)

RPT1 - This is the repeater you're using, along with the port (band) specifier in position #8 of the call. The general convention for port assignments that has been agreed on is: Port A 1.2Ghz (23cm), Port B UHF (70cm), Port A VHF (2m)

RPT2 - This is one of three possible values, depending on what you're doing:

1. 'Not Used' - for local calls.

2. The gateway for your local system, if you're making a call to someone not on your local repeater.The call sign of your local repeater, with a port designator of G in the 8th position, if your making a call to another station that is not on your local system. This assumes that your repeater has a gateway connection

3. The call of your local repeater, with a different port (band) than you're using, if you're trying to cross-band locally. This would be the case if you want to talk to a user on the local VHF repeater, and you're on UHF.

Now, let's look at some typical examples. For all of the following examples, Let's use this scenario:

N5MIJ - me. I'm in Dallas, on UHF.
K5TIT - the Texas Interconnect Team repeater system in Dallas.

- Port A - 23cm (voice & data)
- Port B - 70cm voice
- Port C - 2m voice

W5SHV - the Shreveport Digital Team repeater system in Shreveport.
WB5LJQ - a sharp user in Shreveport, La.

Example 1 - Local call on same band
This is the most common usage. It's pretty simple, and works as you would expect.

MYCALL - N5MIJ
URCALL - CQCQCQ
RPT1 - K5TIT B (Note that the 'B' is in position #8!)
RPT2 - Not Used

Example 2 - Local call on different bands

This is less common, because BOTH parties have to program their radios appropriately to use this feature. But it's still useful. In this example, I'm going to call from the local UHF repeater to the local VHF repeater.

MYCALL - N5MIJ
URCALL - CQCQCQ, or a user's call
RPT1 - K5TIT B (Note that the 'B' is in position #8!)
RPT2 - K5TIT C (Note that the 'C' is in position #8!)

Example 3 - Gateway User-Specific Call

This is the one I use most often, to talk to a friend somewhere else. The advantage is that D-STAR will (with some interesting brief exceptions) route the call to my friend, no matter where they are!

MYCALL - N5MIJ
URCALL - WB5LJQ
RPT1 - K5TIT B (Note that the 'B' is in position #8!)
RPT2 - K5TIT G (Note that the 'G' is in position #8!)

Example 4 - Gateway Location-Specific Call

This is the one I use less often, when I want to talk to a repeater somewhere else, without necessarily looking for a specific person there. This routes the call to the distant repeater and Port based on the 8th character designator), but doesn't care about any specific users.

MYCALL - N5MIJ
URCALL - /W5SHV B

Some important notes on this one:

- As always, the port designator MUST be in position #8
- If omitted, the port designator will default to 'A'
- There's no way to call all ports on a distant repeater.

RPT1 - K5TIT B (Note that the 'B' is in position #8!)
RPT2 - K5TIT G (Note that the 'G' is in position #8!)

In all cases, please also remember these little details:

- There are no private conversations in D-STAR. Everyone on both repeaters hears everything you say.
- To be able to respond to a call from somewhere else, you **must** be a registered gateway user. If you're registered anywhere in the network, you're registered everywhere. Unregistered users can use the system locally, but can't use the gateway at all.
- You have to program your radio to respond to someone calling from somewhere else. Many radios have a one-button option to do this, but not all. All of the new radios have lots of memories to facilitate storing the various call signs. This is why!