BTECH recently released version 2.0 firmware for the DMR-6X2 handheld, and the most exciting new feature is analog APRS support. Previously, the DMR-6X2 could send APRS packets via DMR, but now it can also do analog APRS, making it more versatile than ever. Here's how to set up analog APRS on your DMR-6X2.

First, you'll have to upgrade the firmware. Go to the DMR-6X2 Software and Firmware Repository and download CPS & Firmware 2.01. This package contains new firmware for the radio, new icons, and new customer programming software (CPS). Once you've unzipped the download file, open README FIRST.pdf for instructions on how to install everything. Don't forget to update the icons and do a full MCU reset before proceeding.

Now, you're ready to set up the analog APRS. Open up the CPS programming software and click "APRS." This will take you to the setup screen shown below.

Let me explain some of these parameters:

APRS Auto TX Intervals (s): This is the interval in seconds between APRS packet transmissions. When set to 180, the DMR-6X2 will transmit a pack every three minutes.

Destination Call Sign: This defines the type of device sending the package. APBT62 is the "to-call" for the DMR-6X2.

SSIDs. These numbers define typical ways that you might be using APRS. For example, "-9" designates that you're a mobile station. See the APRS SSID Guide for more info.

APRS Symbol Table, APRS Map Icon: The combination of these two characters define the icon that appears on the aprs.fi maps (and, presumably, other sites). For more information on the icons available, see the APRS Symbol Look-Up Table. Since I walk around town frequently, I've set my icon to a walking man.

APRS Signal Path: This setting describes the signal path an APRS packet transmitted by your DMR-6X2 will take. A setting of "WIDE1-1WIDE2-1" is suggested for this setting. For more information on APRS signal paths, see APRS: SSIDs, Paths, and Beacons.

Transmission Frequency: 144.390 MHz is the most common APRS frequency in the U.S.

Transmit Delay (ms)m Prewave Time (ms): Set both of these to 600.

Transmit Power: Always set this to Turbo. Make sure that the transmit power in the channel setup is also set to Turbo. If set to another value, the DMR-6X2 will not send APRS packets.

Once you've set this up, you have to set up an APRS channel. See the setup screen below to see how I have mine set up.

- Receive Frequency, Transmit Frequency: 144.39000 MHz is the most common APRS frequency in the U.S.
- Channel Type: Since this is for analog APRS, set this to "A-Analog."
- Transmit Power: Transmit power must be set to Turbo. Setting it to another value will prevent the DMR-6X2 from transmitting APRS packets.
- APRS Report Type: Analog (obviously).
- Analog APRS PTT Mode: You can set this to "Beginning of Transmission" or "End of Transmission." End of Transmission gives the digipeater a little time to hear your signal before you send the APRS packet.

That should do it. To start sending APRS packets, select the APRS channel and press the push-to-talk switch. That will get the DMR-6X2 started sending out APRS packets at regular intervals. When it does send a packet, you'll see the message, "Sending Ana Aprs Data" on the radio's screen.