

DMR Basics

DMR = Digital Mobile Radio

What is DMR?

DMR is a more efficient digital mode. The 1st digital mode developed by Motorola was P25 (Project 25) in 1989, and still mainly used by emergency services because of its security and stability. DMR itself was developed in 2010, with the main difference being timeslots.

There are 2 time slots, TS1, TS2. The signal alternates between transmit and receive every 30 milliseconds. This allows you to have 2 conversations simultaneously on the same repeater.

Why use DMR?

DMR is cheaper, more efficient.

What do you need to get started?

First you need a DMR ID. You can register at Radioid.net for free! It's an easy registration but requires photo verification of your HAM Radio License.

Local repeaters include the WIN Repeater on 442.0625 with a +5 mhz offset and DMR Repeaters in Amherstburg, Leamington, Chatham, and Sarnia which are part of the tri county system. VE3RRR 444.300 is a stand-alone repeater. Repeaterbook.com lists all repeaters.

To program the DMR radio, you need a Codeplug file. This file contains all the necessary information to access all the repeaters in your area. A Codeplug can be obtained by asking a local Ham to send you theirs through email. Before loading it on your radio, you MUST edit the Codeplug and replace the other HAM's ID with your own DMR ID and Callsign. Then you can flash it onto the radio. There are YouTube videos that can help you with that.

There are currently around 279,000 registered DMR users worldwide.

Available DMR options that work on both DMR and Analog:

Cheapest DMR Radios:

- Baofeng 1701: \$118 USD. This is a 5-Watt Dual Band Radio
- Tytera MD380: UHF only, \$105 USD on Amazon
- Dual Band Tytera UV380: \$126 USD
- Retevis: These have been rebranded as TYT, and are a bit cheaper

Best DMR Radios:

- Anytone ATD-878: This is a dual band DMR on Amazon for \$335 USD, or available on eBay for \$269 + \$8 shipping. Shop around!
- Motorola, Hytera, Vertex Standard are other options, however they are more expensive with a limited database for callsign storage (128 vs up to 300,000 on the Anytones)

DMR Networks:

- DMR Marc (mostly used for repeaters)
- Brandmeister (mostly used for hotspots)
- TGIF (mostly used for hotspots.)

Summary:

Buy a DMR radio, register for DMR ID at Radioid.net, obtain a Codeplug file and program the radio.

Local 9 Net on DMR is every Sunday at 8pm

Bob's your uncle!