

How do I...?

An occasional series

This week: DMR Adventures--Getting Started

The **How Do I...?** articles we publish on this website are intended to be brief. Some articles in this series will be longer. **Digital Mobile Radio**, or **DMR** seems to be an up-and-coming topic in the hobby. Many new hams seem to be very interested in DMR. This article is a starting point in what we hope will be a comprehensive, multiple author, series about DMR and how to get the most out of your DMR radio.

<https://www.radioclub-carc.com/wp-content/uploads/2020/08/How-Do-I-DMR-Radio.pdf>

How Do I DMR Radio is a part of the Fun with VHF series which explored the various FM digital protocols such as D-Star and System Fusion. It is a high altitude look at what separates DMR from its digital competitors. Despite its length, please click on the link and read the article. While we occasionally will quote from it, space does not permit attaching a glossary of terms to every article.

Digital Mobile Radio (DMR) has been around since 2005 and seems to have evolved into a major player in the Digital Voice VHF/UHF space. While analog FM is the primary voice mode, digital voice (D-Star, System Fusion and DMR) have become the three main players. See elsewhere in the series at <https://www.radioclub-carc.com/resources/> for articles on **FM Repeaters**, **D-Star**, **System Fusion**, and **NXDN**.

Exploring all the makes and models of DMR radios could consume its own series of articles. For today's purposes, it seems like the most frequently encountered brands are from Alinco, BridgeCom, BTECH, AnyTone and BaoFeng. Some of these appear to be the same radio sold under various brands or the same innards in a new skin. At the present time, you will not find a DMR radio from the Big-Three ham radio manufacturers - Icom, Kenwood and Yaesu. Radios supporting D-Star technology are sold by Icom and Kenwood. Yaesu sells C4FM and Fusion radios.

Alinco is probably the oldest and best known among the DMR manufacturers. Their radios cost a little more than some of the others, but none of the writers of this series have had issues with them.

BTECH and BaoFeng seem to be the same company - BaoFeng Tech. It is not clear from the website if BaoFeng is rebranding itself as BTECH, or if BTECH will be the "Lincoln": and BaoFeng will be the "Ford" with a clear differentiation in product and price.

Throughout these articles, we may feature a particular radio or product. This does not imply endorsement or recommendation, but sometimes it is most helpful to demonstrate a particular item instead of referring to a generic radio.

Don't worry if you do not understand everything. My story begins like this...

About 40 years ago, I began reading **Model Railroader** magazine. At that time, Digital Command Control (or DCC), a method for controlling multiple trains on the same track without a "block control system", was in its infancy. GE sold a similar system 20 years earlier that was not successful. A few commercial vendors were now trying to get their product established. Sound familiar?

Model Railroader published a series on how to build a DCC system from scratch using Mouser, Digi-Key and Radio Shack components. It also required a computer, back in the days when a computer with less power than your smart phone easily could cost \$2000 or more. There was no hope that a teenager, with no money, no computer, living 45 miles away from the nearest Radio Shack store could build something like this.

Nevertheless, I read every article. In hindsight I did not understand very much. But 30 years later, when studying for my amateur radio license exam, things like resistors, transistors and diodes made a lot more sense.

So even if you do not really understand the magic, please stick around.

If you have questions, please contact us using eMail sent to:

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Please provide: Subject: DMR Adventures – Getting Started
 Your Name
 Your eMail Address
 Your specific question(s)
 Tell us any steps you have already taken and their results.

Catch 'ya on the air!