

**Welcome
to
DMR 101**

CREDITS

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Code Plugs

- A code plug is simply a radio's configuration file.
- Building a code plug can take many hours, especially if you want to program hundreds of channels.

And the Code Plug can also
include data that
'translates' DMR ID #s into
Call Signs and Names

All that info resides
inside your HT.

Now you know why it's
much easier to have
others write the Code
Plug that makes the HT
work than to try to do it
yourself!

So...assuming you
can get a Code
Plug, how do you
install it in your HT?

The Easy Way...

Have someone
do it for you!

Second easiest way:

Do it yourself!

Here's how...

First Step for DMR

Get a DMR ID Number

Where can I get a DMR ID?

It's easy to register with **Radioid.net** and get your own Radio ID. Just click the button below, read the entire page to understand what you are about to do, then click the **USER REGISTRATION** button at the bottom of the Radioid.net page.

NEXT - Get a Code
Plug Program (CPS)
for your radio that
runs on a Windows
PC

Note: The same
Program can also
be used to write or
modify a Code Plug!

Get the latest Code
Plug from the
FMARC web site...

<https://fmarc.net/>

Or an Elmer

IMPORTANT !!!

Any connecting between
the radio and the
computer should be done
with the radio turned OFF

IMPORTANT !!!

Before plugging the USB cable into your computer you must first download the correct USB driver (usually FTDI).

Turn your HT
“On”

FIRST THING TO DO

DOWNLOAD THE RADIO'S BASE PROGRAM AND SAVE FOR SAFE KEEPING. NAME IT <your callsign>-DMR-ORIGINAL.rdt

DMR CODE PLUGS SEQUENCE...

Add your DMR ID

Contact List of Talkgroups (TG)

Channels

Zones

DMR CONTACT/Talkgroup LIST

Check with the DMR repeater to determine their talkgroups which can include:

DMR-MARC: <https://www.dmr-marc.net/>

Brandmeister: <https://brandmeister.network/>

Example: KF5IW - <https://kf5iw.com/>

DMR CONTACT/Talkgroup LIST

HOTSPOT ADVANTAGE

Talkgroups using a hotspot can access all talkgroup origins at the same time. Many folks still keep them separate and create a Zone for DMR-MARC and a Zone for Brandmeister.

After the Talkgroups have been selected, then create CHANNELS. Creating channels is repetitive and time consuming. The best shortcut is to use copy and paste. Pay attention to **color code** and **time slot** for DMR. If using a hotspot you can usually use the lowest power setting, When using a repeater use the highest power setting.

After the CHANNELS have been created then create your ZONES. Zones is like creating a file cabinet. Put into that zone the pertinent channels. For example:

FM Analog ZONE (repeaters, etc)

NOAA Weather Radio ZONE

Brandmeister ZONE

DMR-MARC ZONE

Hotspot ZONE

FINAL PROGRAMMING STEP

Before sending your code plug to the radio, download the latest contact list and import it into your code plug.

Where to find? The best place is:

<https://kf5iw.com/>

PROGRAMMING THE RADIO

UPLOAD (WRITE TO RADIO) THE PROGRAM

Remember, if all else fails, you can always reload your ORIGINAL BASE program.

TIP: Save each of you code plugs as follows:

<your callsign> - YearMonthDate

That way you can always go back to an earlier working edition should a code plug not work.

HE DREADED BAND ERROR ON ANYTONE RADIOS

My best recommendation is to watch the
videos on the Bridgecom Website:

<https://support.bridgecomsystems.com/resolving-a-band-error-on-the-anytone>

The error is from a mismatch of older and
newer CPS programs

CODE PLUG WRITING HELPERS:

RTSystems

NOGSG DMR Contact Manager

BridgeCom “University”

OK, time to write a
code plug