Expanding Your DMR CodePlug using Excel Cliff Notes Version

Compiled by Dr. Greg Meador, AI5HV

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In this video we will discuss:

What is DMR?

What is a CodePlug?

What are the main components of a codeplug?

3 Questions that I am routinely asked by ham radio operators

Excel Commands

Tools Used

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What is DMR ? Digital Mobile Radio

According to Wikipedia, it is a digital radio standard for voice and data transmission in non-public radio networks.

What do I need to use DMR ?

1. You need an amateur radio license
2. Handheld or mobile radio
3. Power source
4. Programming cable
5. Programming\CPS software to program your radio
6. Hot Spot or Repeater to connect to
7. A DMR CodePlug

What is a CodePlug ?

A DMR Codeplug is a configuration file for a radio that contains all of the contacts, channels, zones, and other settings required to access DMR talk groups1. It is a fancy name for the software file that gets loaded into your radio to tell it what to do234. Code Plugs contain the programming information for both ANALOG and DIGITAL channels3. The term Codeplug has been popularized in recent years because of the rise of DMR, a commercial digital voice mode that has been adapter to Ham Radio.

Here are 3 questions that I am commonly asked by other ham radio operators interested in DMR.

Main Components of a CodePlug

Channel List: This is a list of your channels that you like to listen to and connect with other ham radio operators. This is like a list of the "tv shows on the tv stations"

Talkgroup List: Think of this as the catalog of all the "tv stations" for DMR

Zones: You have to add Channels to the Zones to be able to select them on your radio.

Contact List: This is a list of users. Without this you will see a long number that represents an ham radio operator instead of their name and call sign.

Question #1: I have a code plug that I got from a friend, but I want to add local repeaters to it and I am not sure how to add them.

Question #2: I have a code plug that has BrandMeister talk groups, but there are a bunch of new ones how do I add them to my current code plug ?

Question #3: I have a code plug that has BrandMeister talk groups, but I want to add TGIF talkgroups to it. How do I add them to my current code plug ?

If you are using a single hotspot for both BrandMeister and TGIF talkgroups and you are running WPSD, the TGIF talkgroups must have a prefix of 5.

Excel Commands

1. Use the Vlookup command to compare talkgroup names to existing talkgroup names.
2. Use Concatenate to create unique talkgroup names for BrandMeister and TGIF.
3. Use the Left command to shorten talkgroup names to 16 characters.
4. Manually review the talkgroup names looking for non-English characters or symbols in the Talkgroup name.
5. Using the =celladdress+1 to increment the channel # by one.

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For the purpose of this video, I will be using the following:

6. A Windows 11 computer running the AnyTone CPS software v3.03
7. An AnyTone 878UVIIPlus handheld radio from BridgeCom Systems.
8. Programming cable
9. CPS Software downloaded from BridgeCom Systems support page.
    a. https://support.bridgecomsystems.com/anytone-878-v2-model-cps-firmware-downloads
10. Existing codeplug that will be expanded during this video to include BrandMeister and TGIF talkgroups as well as a listing of local repeaters near me.
11. Export of analog repeaters near me from https://www.repeaterbook.com/repeaters/prox.php
12. Export of BrandMeister talkgroups from https://brandmeister.network/?
13. Export of TGIF talkgroups from https://tgif.network/talkgroups.php
14. Export of Channel and Talkgroups from the CPS software.
15. Microsoft Excel to combine the data together.
16. Lastly a Hotspot that has already configured with WPSD to connect to BrandMeister and TGIF talkgroups.
17. Be sure to make a backup of you existing CodePlug BEFORE making any changes to the CodePlug or writing a new CodePlug to the radio.

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