

Setting DMR on your MMDVM Hotspot

Below are the steps to setup your radio and Hotspot for use on DMR. The steps listed are for the Brandmeister DMR system.

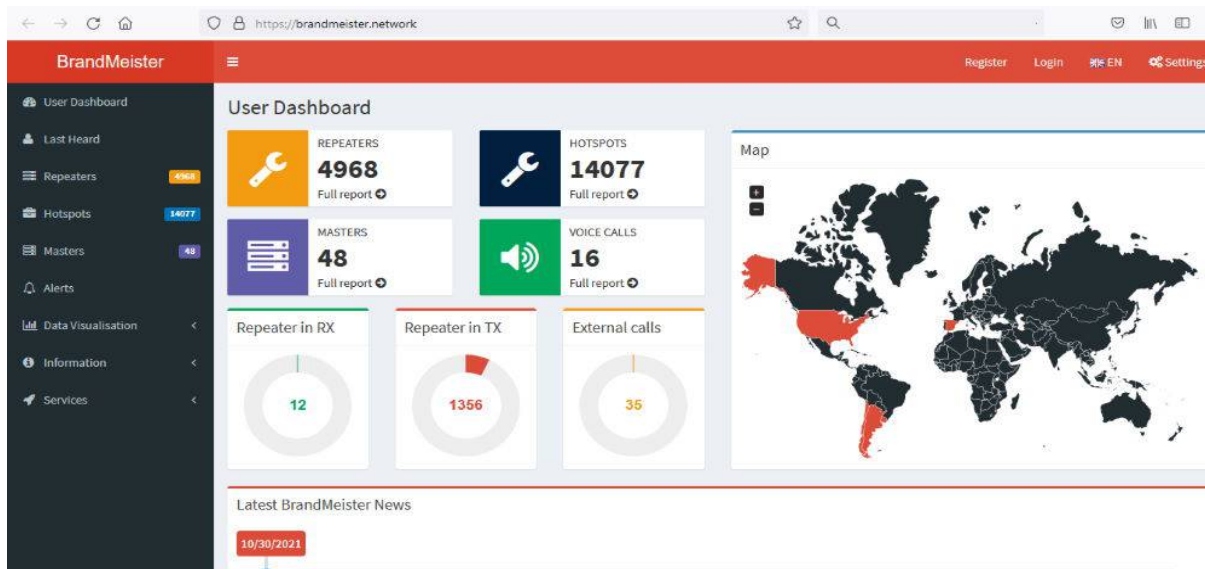
You will need knowledge of DMR Codeplug programming in order to get your radio to communicate with the Hotspot and DMR network. I used a MD-380 UHF radio so your steps could be slightly different depending on radio make/model.

I am describing the setup to the best of my knowledge. There are many options and setting changes that I may not list here. If you choose to try options not listed below, more information can be found with a Google search.

If you just purchased your hotspot and have not set it up yet, you should download and read the Pi-Star Software Setup Instructions before continuing. Download at: www.n1stn.com/manuals-documents

Setup Steps

You will need a Brandmeister Hotspot Security password to get started. Visit <https://brandmeister.network/> to create an account. It may take up to 48 hours for your new account to be approved, although mine only took about an hour. Once your account is approved, click on your callsign in the top right and then click on SelfCare. At the bottom enter in your desired password and click save.



Now open up the Pi-Star dashboard and click on the Configuration tab. You may have to enter in your user name and password. Unless you have changed it the default username is pi-star. Password is raspberry.

Under MMDVMHost Configuration, verify the DMR slider is turned on. If not, click it to enable. Then click apply changes at the bottom of the section.

Under General Configuration verify your DMR radio ID is entered correctly. Enter your information if you haven't done so yet. Click apply changes at the bottom of the section when done.

Under DMR Configuration Choose your DMR Master. Choose the one that is located closest to your location. There are 3 US locations.

- BM_3102
- BM_3103
- BM_3104

There are many options listed. More information about the list can be found with a Google search.

Enter the password you created on your Brandmeister account in the Hotspot Security box.

Set DMR Color code to #1

Disable **DMR EmbeddedLCOnly** and enable **DMR DumpTAData**

Click apply changes at the bottom of that section

The screenshot shows the pi-star configuration interface with three main sections: MMDVMHost Configuration, General Configuration, and DMR Configuration. Annotations on the left side point to specific settings:

- enable DMR:** Points to the 'DMR Mode' toggle in the MMDVMHost Configuration section.
- Enter your callsign:** Points to the 'Node Callsign' field in the General Configuration section.
- Your DMR radio ID:** Points to the 'CCS7/DMR ID' field in the General Configuration section.
- Enter your location info:** Points to the 'Radio Frequency', 'Latitude', and 'Longitude' fields in the General Configuration section.
- Choose your DMR Master:** Points to the 'DMR Master' dropdown in the DMR Configuration section.
- Enter the hotspot password you created on the BrandMeister web site:** Points to the 'Hotspot Security' field in the DMR Configuration section.
- Set color code to #1:** Points to the 'DMR Color Code' dropdown in the DMR Configuration section.

The MMDVMHost Configuration section includes settings for DMR Mode, D-Star Mode, YSF Mode, P25 Mode, NXDN Mode, YSF2DMR, YSF2NXDN, YSF2P25, DMR2YSF, DMR2NXDN, and POCSAG. The General Configuration section includes settings for Hostname, Node Callsign, CCS7/DMR ID, Radio Frequency, Latitude, Longitude, Country, URL, Radio/Modem Type, Mode Type, APRS Host Enable, APRS Host, System Time Zone, and Dashboard Language. The DMR Configuration section includes settings for DMR Master, Hotspot Security, BrandMeister Network, DMR ESSID, DMR Color Code, DMR EmbeddedLCOnly, and DMR DumpTAData.

This should enable your hotspot to work on DMR. You will need to program your radio for each talk group you would like to use. Programming code plugs in a DMR radio can be tricky. A basic code plug for the TYT MD-380 can be downloaded at www.n1stn.com/downloads. Every radio programs differently so I am not able to assist with other makes/models. If you own a radio other than the TYT you may be able to use a free program called Contact Manager to import the MD-380 file and then export as a file your radio will accept. It can be downloaded at: <http://n0gsg.com/contact-manager/>

Be sure to set all your Talk Groups to Time Slot #2

With Talk Groups programmed into your radio, changing groups is as easy as keying up your radio. For example, if you are listening to Worldwide and would like to switch to North America, all you do is dial your radio to the memory channel with North America and then key your radio for a second or two. This will change the Talk Group on the hotspot to North America. **This can only be done when the current talk group is inactive. If there is a QSO going on you will not be able to change groups until the QSO is over or there is a long enough break in between stations.**

This is why it's so important to leave extended breaks when having a digital QSO with another station.

The above instruction worked for me. But as with all software, there is a possibility of something being different. This can make it tricky. Usually info can be found on Google that will aid with any problems. If needed, you can reach out to me and I will do my best to assist. I'm good on QRZ.