Thank you for purchasing a Pi Zero MMDVM Hotspot. Setting up Pi-Star is a fairly simple process but it can also get confusing. It will require some computer savviness as there are a few steps and some may cause complications if not done correctly. BUT, if all else fails you can reformat the card and start over with the Pi-Star install.

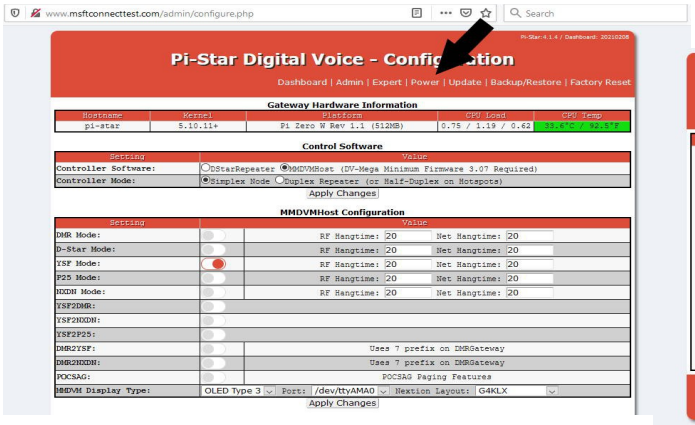
Pi-Star and this Hotspot will work on many modes. These instructions are for YSF (Yaesu System Fusion). I have not set up any other mode yet so I am not able to offer any assistance. But there is a lot of info on the web about setting up different modes. A quick Google search should easily find what is needed.

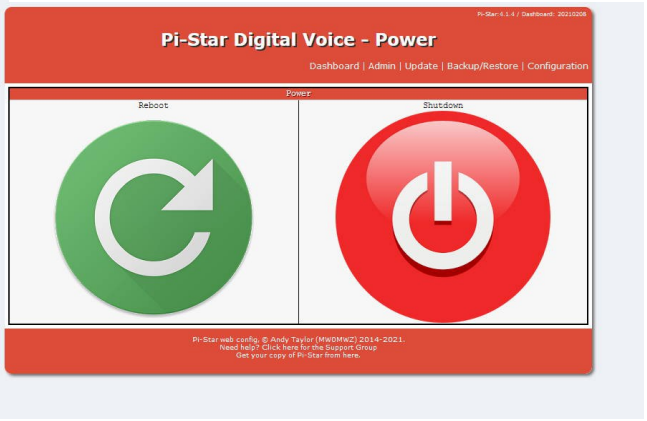
Please see the following steps for detailed instructions on setting up your hotspot for YSF. Once you have completed the setup and all is working as it should, please create a backup of your setup and save on your PC. That way if you encounter issues at a later date, you will be able to restore your setup. The backup/restore option is found in the menu tabs on the configuration page.

There is also a lot of info to be found on Google if problems do arise.

The following instructions and file downloads are designed to work with Windows. Other operating systems will require different file downloads and the setup procedure may be slightly different. All files, links and instructions can be found at www.n1stn.com

PLEASE NOTE: When rebooting is required, it is not advised to just remove power. There is a Power menu tab when on the configuration page. Click on it and then you will have the option to power off or reboot. This allows the Hotspot to safely power down and/or reboot



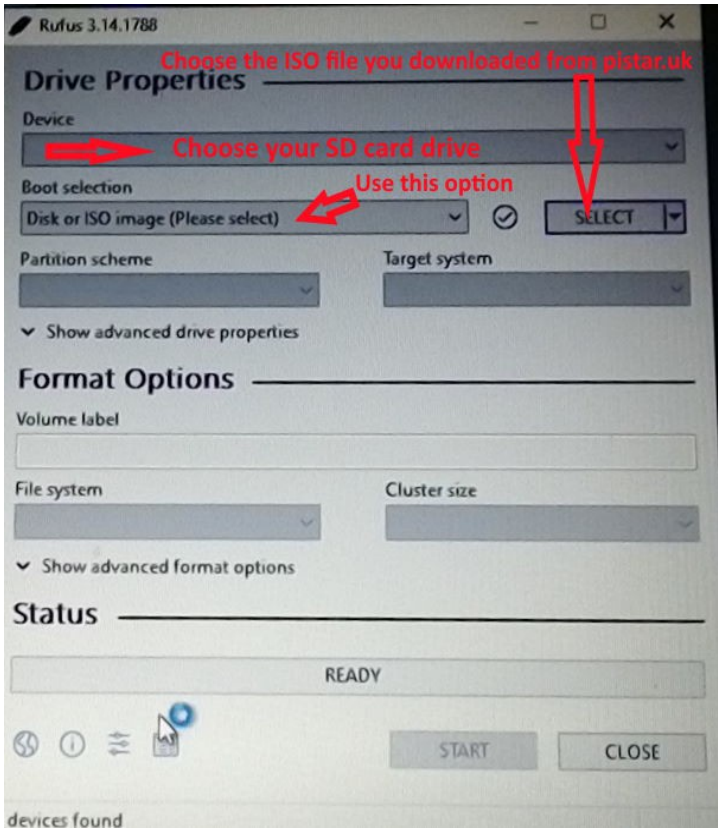


Pi-Star setup

- Download the Pi-Star software from pistar.uk. Link and instruction can be found at www.n1stn.com/downloads
- Download SD Card Formatter (www.n1stn.com/downloads) and install on your PC. Insert micro SD card into a connected card reader and open the Sd Card Formatter program. Choose the drive for your SD card and click format. Quick format is sufficient.

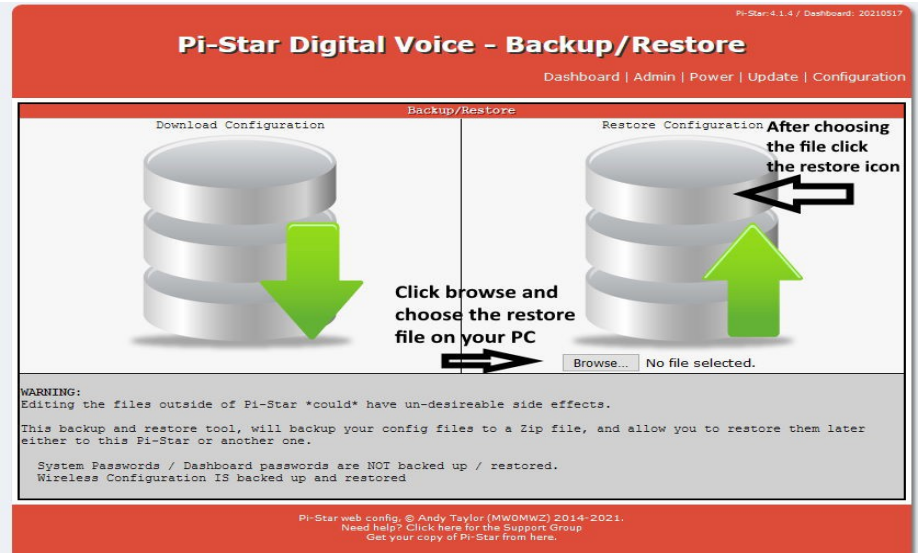
- Download Rufus Etcher. (www.n1stn.com/downloads) Open Rufus Etcher (doesn't require install) and wait a few moments as it checks for updates. If an update is available a box will indicate so and will ask if you want to download. Download the latest file and when completed close out of Rufus. Open the new file and it will start the Etcher program. The old file can be deleted if desired.

- Follow instructions to create a bootable Pi-Star OS on the SD card.



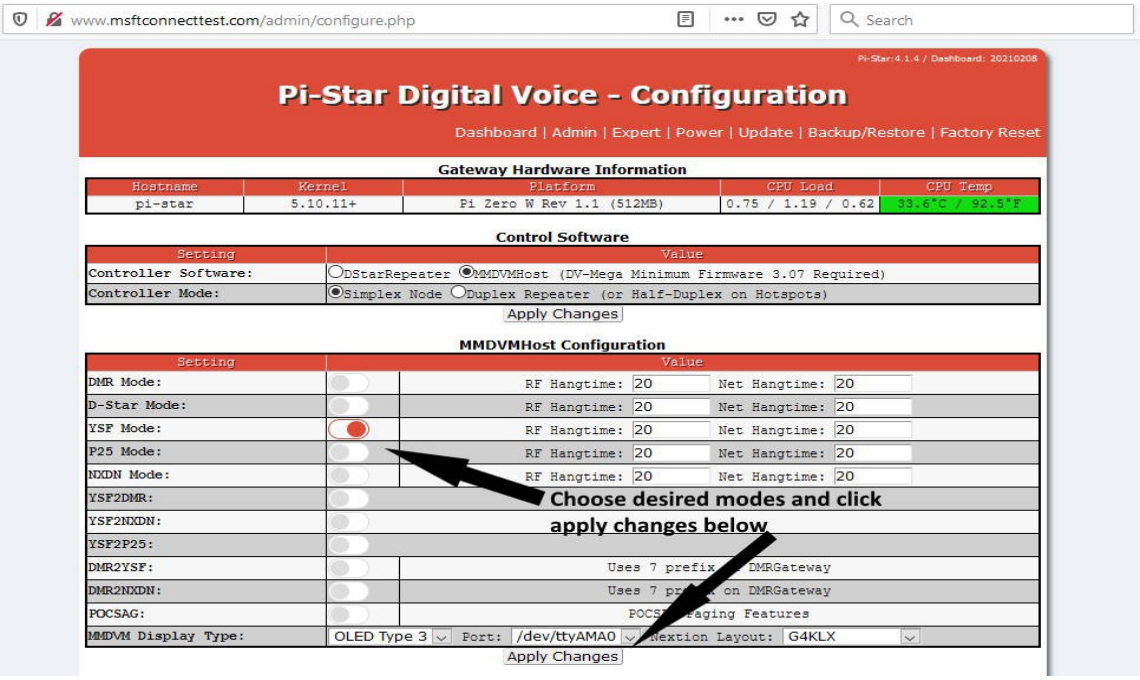
Refer to the above picture and make the adjustments marked with red arrows and text. The other boxes will then prefill. Click START to begin creating the Pi-Star bootable OS on the SD card. Once completed, eject SD card from your PC.

- Install SD Card into the Pi-Zero MMDVM Hotspot
- Power up the Hotspot by using a micro USB cord and plugging into the exposed micro USB connector. **Do not remove the "pwr" decal as there is another micro USB connector underneath it that is not designed to have power applied.** If the power cord is connected to it, the Hotspot may be damaged. If the decal is removed please be aware the power connector is the outermost micro USB connector. It is advised to re-cover the port if the decal is missing. **ALSO, the Hotspot requires a 2 amp power supply and a good quality micro USB cord.** Low power to the Hotspot will cause adverse effects and may cause damage.
- On the first startup, please allow 3-5 minutes for the Hotspot to boot. On a PC, keep checking your wifi networks until you see one labeled Pi-Star-Setup. Once connected to this network, you should automatically be redirected to the Pi-Star dashboard.
- Click on configuration in the menu tabs
- Here you will be required to login using the default Pi-Star credentials
  Username: pi-star Password:raspberry
- On the configuration page you can restore the basic configuration by downloading the restore file from www.n1stn.com/downloads. Then click on the backup/restore menu tab. Click browse and choose the file you downloaded and the click the restore icon. (See below pic)



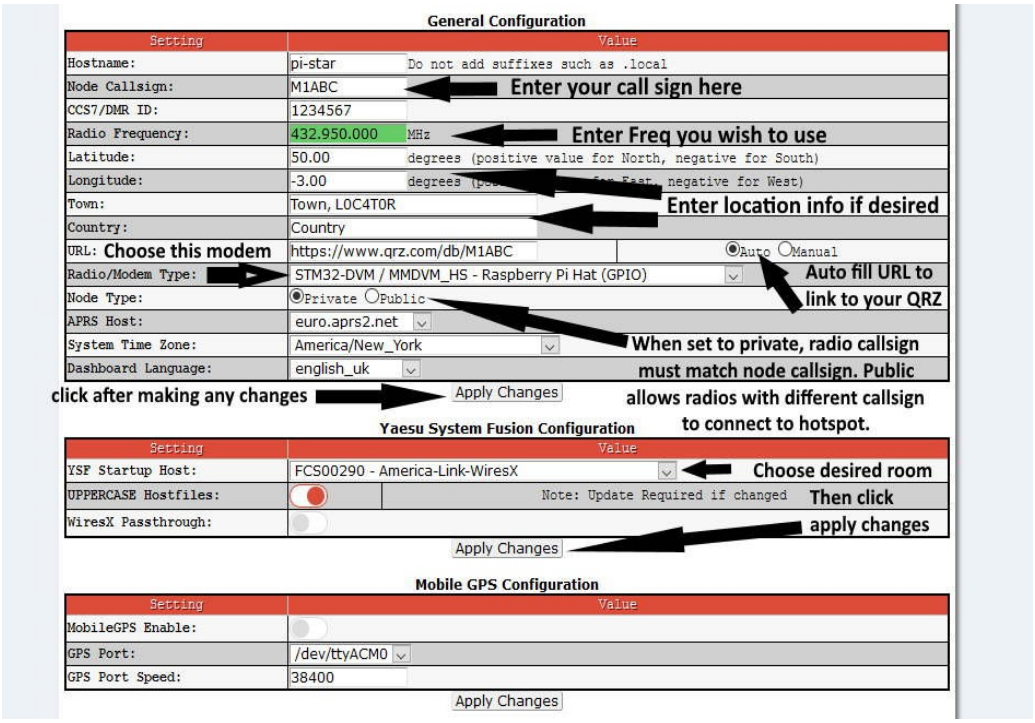
You will still need to enter your callsign, location info and wifi settings. The above step is just for the initial setup.

- **OR** you can manual setup your Hotspot by follow the pictures below. The pictures also include the rest of the setup.



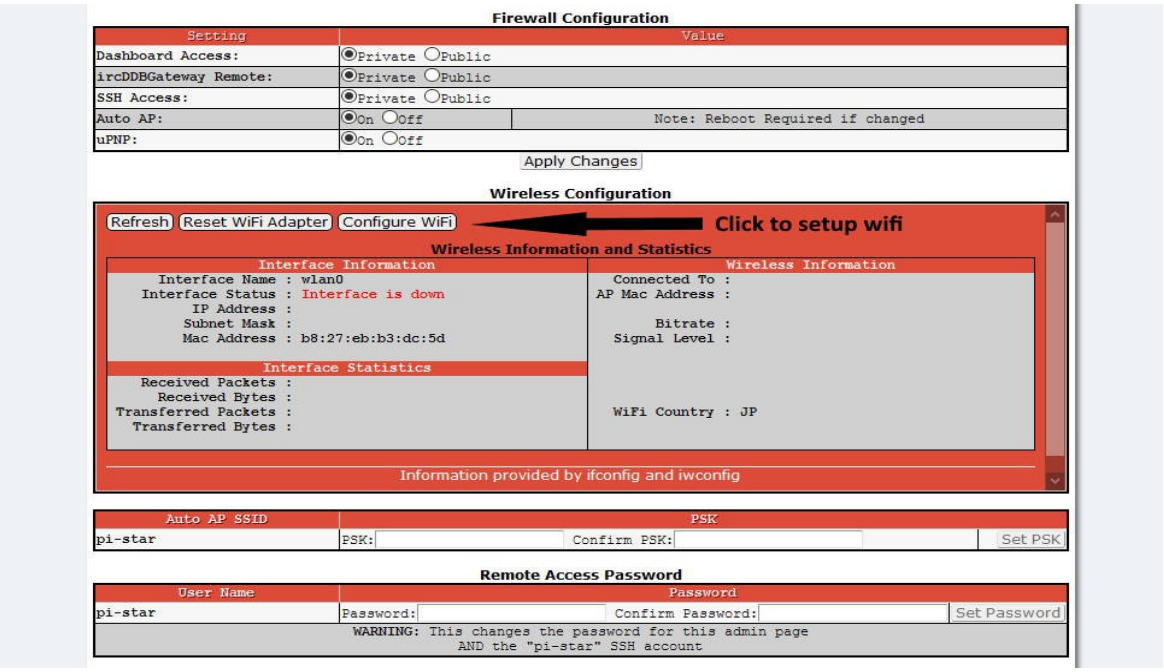
Make sure MMDVM Display Type is set as shown

After clicking Apply Changes and waiting for the service to restart you will most likely get a modem selection warning. Click OK and continue with the setup below.

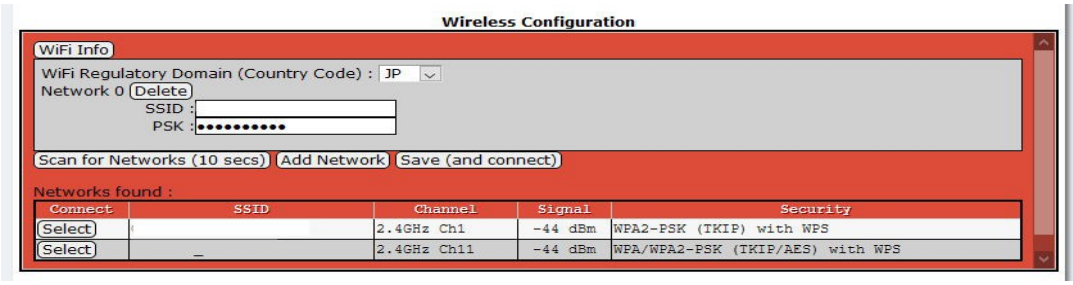


Again, click Apply Changes to save settings.

Now its time to setup up the wifi connection. **MAKE SURE YOU HAVE YOUR CORRECT PASSWORD FOR YOUR WIFI NETWORK.** If you enter the incorrect password it will complicate the procedure. Do yourself a huge favor and be sure you enter the correct password correctly. If you do enter it incorrectly, you will need to turn off your wifi network and then reboot the Hotspot and wait 3-5 minutes for the Pi-Star-Setup network to appear. Go to the configuration page and in the wifi section you will need to remove the wifi network you entered. Then reboot the hotspot and again, wait 3-5 minutes and then connect to the Pi-Star-Setup network again. Turn your wifi router back on and wait for it to boot and then continue with the wifi setup.



Click configure wifi as shown in above pic.



Now click Scan for Networks and wait up to 10 seconds. A list of found networks will appear. Click Select on the network you wish to use. Select US for country code. Enter the PSK (this is your wifi network password)

AGAIN, make sure to have the correct password for your wifi network. As explained earlier, it will save you a lot of hassle.

Click Save (and connect) and wait for the screen to change.

- Reboot Hotspot

- This time when the Hotspot reboots it will automatically connect to the wifi network you selected. Connect your PC to the same network and open your Internet Browser
- In the address bar type http://pi-star/
  This should take you to the dashboard. When you click on configuration, you will most likely need to re-enter the default username and password as directed earlier.
- Username: pi-star Password: raspberry

Using the Hotspot

Before using the hotspot it is advised to update Pi-Star by clicking on the update tab in the configuration page menu. It will automatically update the program and state when it is finished. Reboot the hotspot again.

Tune your radio to the frequency you selected when setting up the Hotspot. On the configuration page you can choose your desired room from the drop down list. Once you have picked a room, click Apply Changes to save it. The Hotspot service will restart and it should now be on the room you selected.

Your Hotspot should now be configured and operational. At this time, I would suggest doing a backup of your setup.

If you run into issues you should be able to find troubleshooting online. There is a lot of information online as well as advanced settings and changes.

More info will be continually added to www.n1stn.com as the site continues to be built and expanded.