

DVMEGA RPI Radio

Installation manual

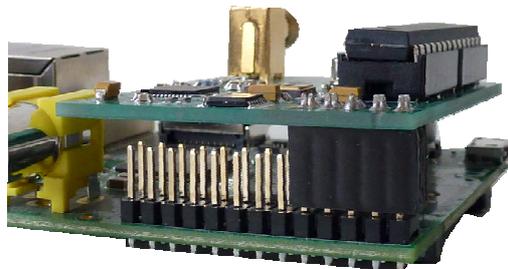
The DVMEGA RPI radio is a modem that fits direct onto the Raspberry PI GPIO connector. The combination RPI en DVMEGA RPI radio is a complete stand-alone D-Star compatible hotspot with an output power of 10 mW. The DVMEGA RPI radio is pre-loaded with the latest firmware and is ready for use. The module is equipped with a single band UHF radio.

A. Mounting the DVMEGA RPI radio onto the Raspberry PI.

Step 1.



Step 2.



Step 3.



B. Enable serial port.

To enable the serial port for your own use you need to disable login on the port. There are two files that need to be edited.

- First, disable the boot up and diagnostic output to the serial port.

```
sudo nano /boot/cmdline.txt
```

- and remove the two options referring to the serial port.

So, this:

```
dwc_otg.lpm_enable=0 console=ttyAMA0,115200 kgdboc=ttyAMA0,115200 console=tty1  
root=/dev/mmcblk0p2 rootfstype=ext4 elevator=deadline rootwait
```

becomes this:

```
dwc_otg.lpm_enable=0 console=tty1 root=/dev/mmcblk0p2 rootfstype=ext4  
elevator=deadline rootwait
```

- Press CTRL "X"

- Press "Y"

- Press enter

- Second, disable the login prompt.

```
sudo nano /etc/inittab
```

- find the line near the end.

```
T0:23:respawn:/sbin/getty -L ttyAMA0 115200 vt100
```

- and delete it or comment it out by putting a # at the start of the line.

```
#T0:23:respawn:/sbin/getty -L ttyAMA0 115200 vt100
```

- Press CTRL "X"

- Press "Y"

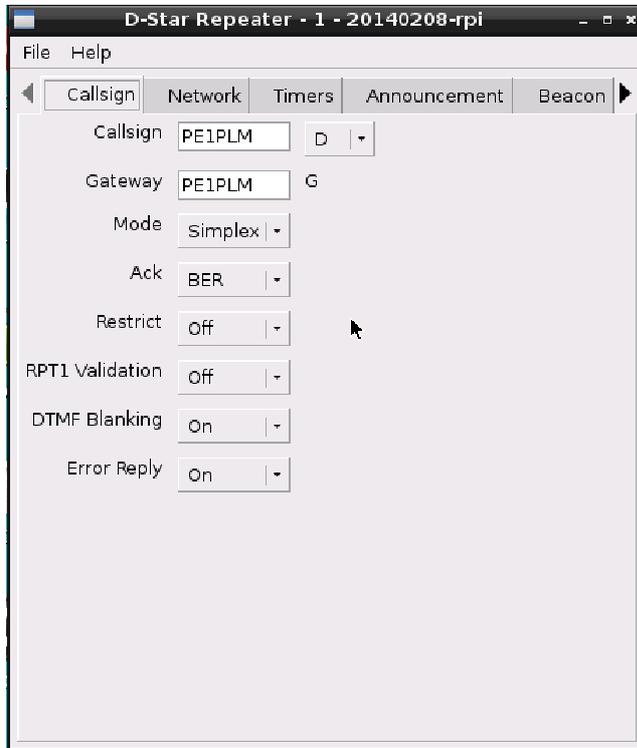
- Press enter

- Reboot and the serial port will now be free for your exclusive use.

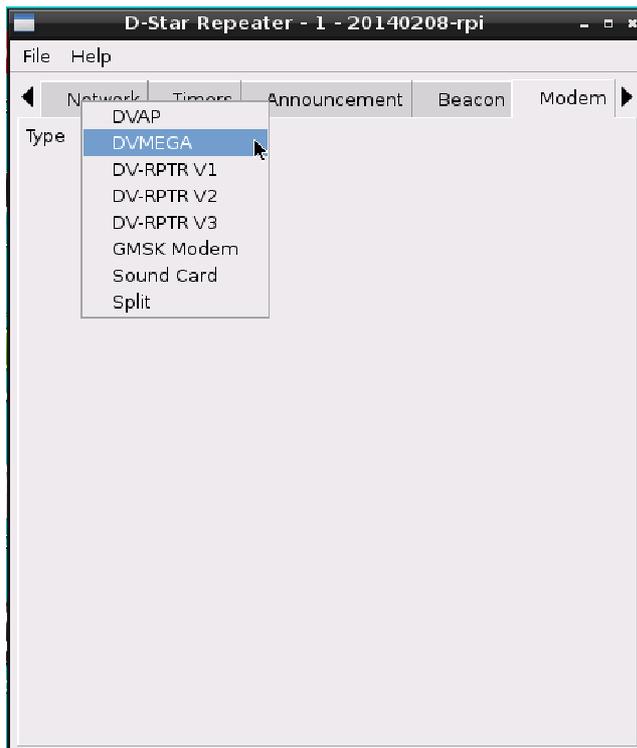
C. Setting D-Star repeater software..

It is recommended to use D-Star repeater version 20140208 or higher.

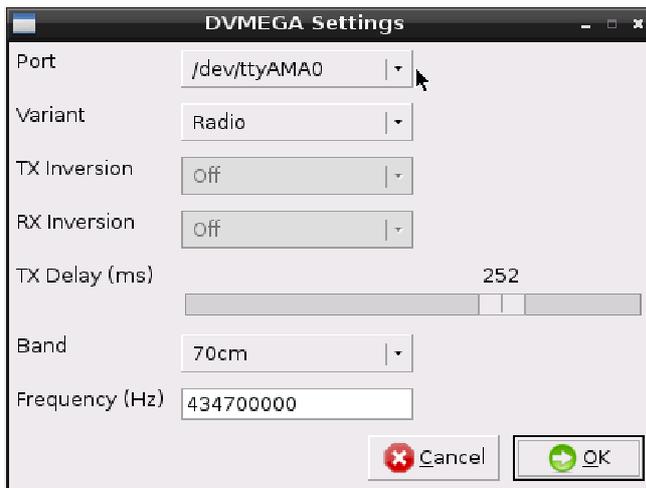
- Take care that Callsign extension is similar to the extension set in the Gateway software. Further settings can be turned on or off to preferences.



- Choose DVMEGA at modem settings.



- Be aware that only the 70 cm band (UHF) works with the DVMEGA RPI radio. 2 M band is selectable but won't work.



- Make sure that you save the changes before you close the configuration window.
- Reboot the Raspberry.
- The hotspot is now ready to use.