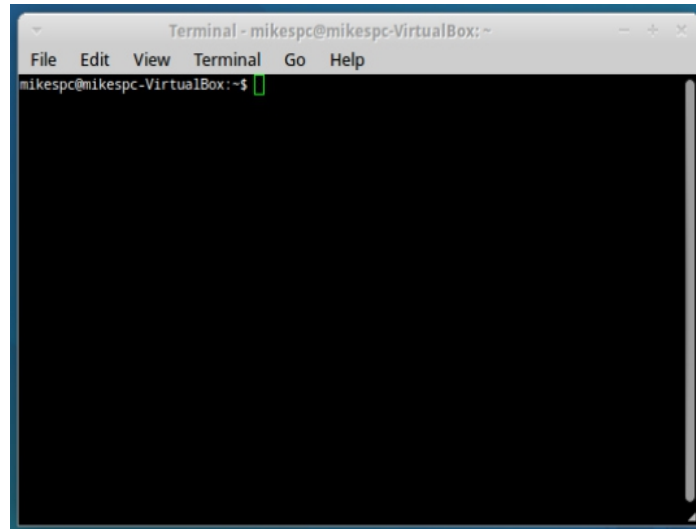# Installing AM43 Drivers on Linux

Connecting AM43 to Linux Operating System:

1. Open up Linux Terminal window and type in the following "`sudo apt-get install build-essential linux-headers-$(uname -r)` ". This sets up your kernel for mounting the AM43.

2. After completed. Type in "dmesg | tail". Look for the highlighted item (below). Make note of the port name. "ttyACM0".

3. Type in "lsusb". This lists the usb devices assigned, that Linux recognizes. Look for the highlighted item (below). This is the chip manufacturer, vendor id, and product id. Make note of the vendor id and product id. These will be needed for the setup. In this case the Vendor id is 04d8. The product id is fef6.

4. From the information gathered from above, the AM43 is recognized as "/dev/ttyACM0".

5. Now, the AM43 will need to be mounted, or linked to the Linux kernel to be used. Type in "lsusb -v -d 04d8:fef6". The two numbers seperated by the colon are the vendor id and product id from step 3. Your AM43, if no error occurred, is now ready to be assigned to a serial port.

Linking AM43 to COM Port:

1. With the Linux Terminal window still opened, type in "ls -l /dev/ttyS*" to see the available COMports. In most generic setups, there will only be 4 available COMports (/dev/ttyS0,/dev/ttyS1,/dev/ttyS2,/dev/ttyS3). "/dev/ttyS3", in most cases, is the least used port, so we will link to this one.

2. We will be creating a "hard link" and replacing default settings to "/dev/ttyS3".
   1. First, we need to remove the old settings for this device. Type in "sudo rm /dev/ttyS3".
   2. Next, type in "sudo ln /dev/ttyACM0 /dev/ttyS3" to link the AM43 to the serial comport "/dev/ttyS3".
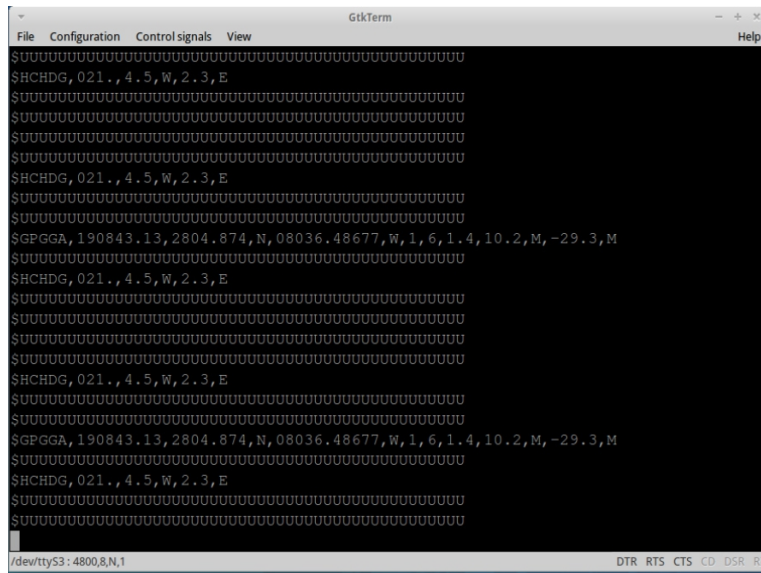

3. To check if AM43 is connected correctly, open up a Serial Terminal window. For this example, I used GtkTerm. Click "Configuration > Ports". For the "Port:" setting, enter the serial comport you linked the AM43 to, "/dev/ttyS3". Change the "Speed:" to 4800. Click OK.
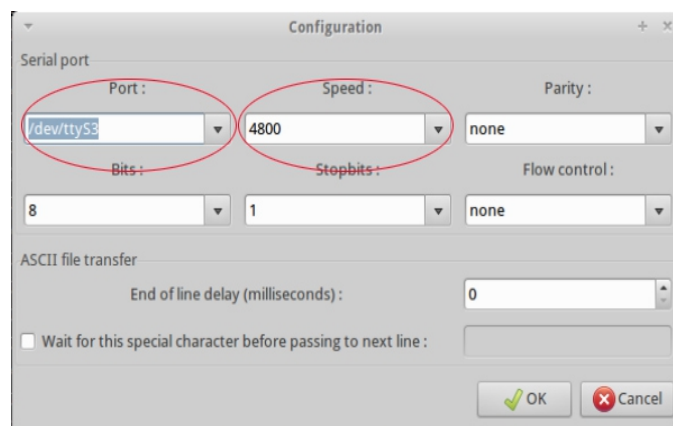
4. If you have data turned on, you should immediately see the data displaying in GtkTerm window.

5. CONGRATULATIONS!!! You have set up the AM43 to work with a Linux system.

Notes of concern:

1. If your AM43 gets disconnected or your Linux computer resets, you will have to redo these steps to setup your AM43 to work again.