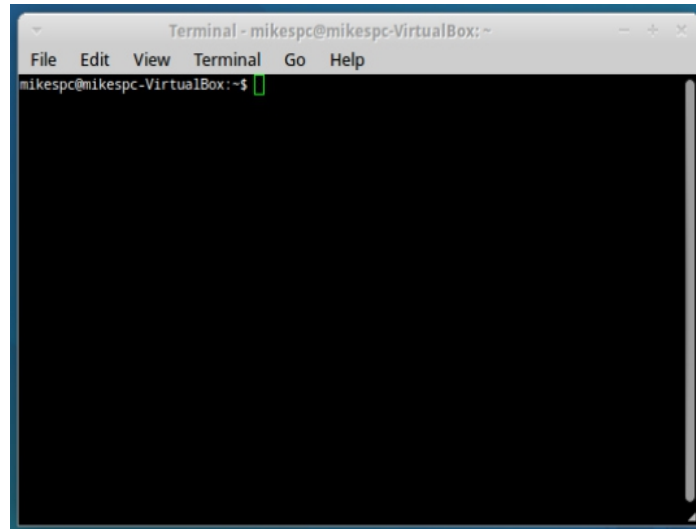


Installing AM43 Drivers on Linux

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`”.

```
mikespc@mikespc-VirtualBox:~$ dmesg | tail
[ 38.415277] [drm] No driver support for vblank timestamp query.
[ 38.415291] [drm] Initialized vboxvideo 1.0.0 20090303 for 0000:00:02.0 on minor
0
[ 41.052477] EXT4-fs (sda1): re-mounted. Opts: errors=remount-ro,commit=0
[ 41.958173] init: plymouth-stop pre-start process (1075) terminated with status 1
[ 46.184420] EXT4-fs (sda1): re-mounted. Opts: errors=remount-ro,commit=0
[ 773.062346] usb 2-2: new full speed USB device number 3 using ohci_hcd
[ 773.727047] cdc_acm 2-2:1.0: This device cannot do calls on its own. It is not a
modem.
[ 773.736537] cdc_acm 2-2:1.0: ttyACM0: USB ACM device
[ 773.767912] usbcore: registered new interface driver cdc_acm
[ 773.767928] cdc_acm: USB Abstract Control Model driver for USB modems and ISDN ad
apters
```

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.

```
mikespc@mikespc-VirtualBox:~$ lsusb
Bus 001 Device 001: ID 1d6b:0002 Linux Foundation 2.0 root hub
Bus 002 Device 001: ID 1d6b:0001 Linux Foundation 1.1 root hub
Bus 002 Device 002: ID 80ee:0021 VirtualBox USB Tablet
Bus 002 Device 003: ID 04d8:fef6 Microchip Technology, Inc.
```

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 separated 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.

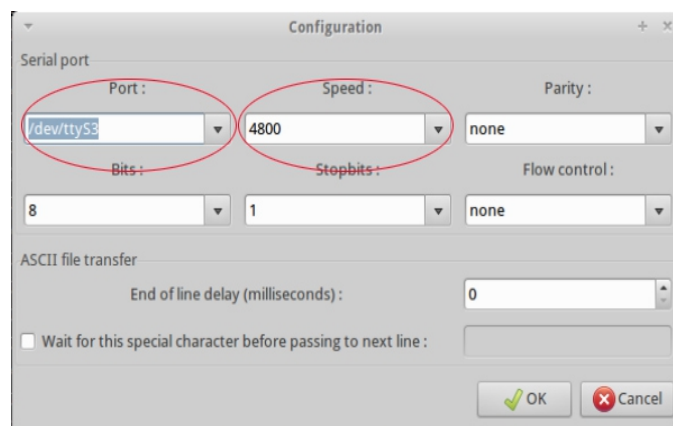
Linking AM43 to COM Port:

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”.

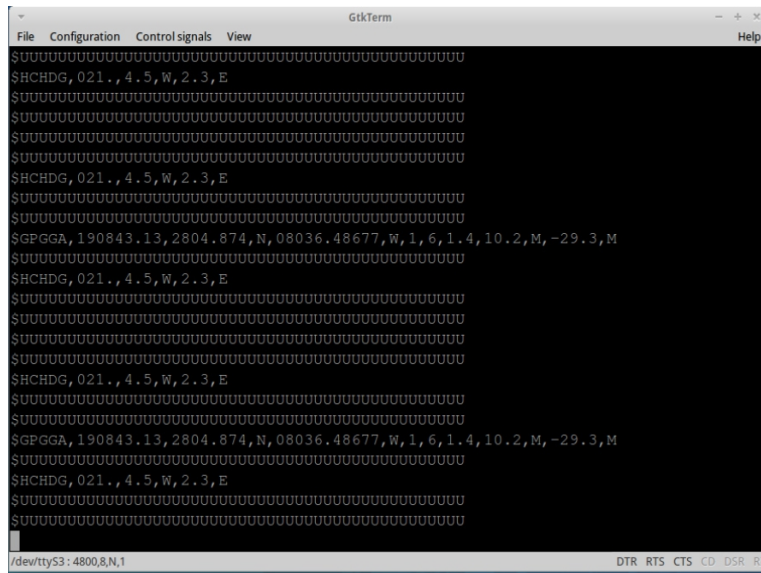
```
crw-rw---- 1 root dialout 4, 67 2012-04-27 10:10 /dev/ttyS3
crw-rw---- 1 root dialout 4, 94 2012-04-27 10:10 /dev/ttyS30
crw-rw---- 1 root dialout 4, 95 2012-04-27 10:10 /dev/ttyS31
crw-rw---- 1 root dialout 4, 68 2012-04-27 10:10 /dev/ttyS4
crw-rw---- 1 root dialout 4, 69 2012-04-27 10:10 /dev/ttyS5
crw-rw---- 1 root dialout 4, 70 2012-04-27 10:10 /dev/ttyS6
crw-rw---- 1 root dialout 4, 71 2012-04-27 10:10 /dev/ttyS7
crw-rw---- 1 root dialout 4, 72 2012-04-27 10:10 /dev/ttyS8
crw-rw---- 1 root dialout 4, 73 2012-04-27 10:10 /dev/ttyS9
mikespc@mikespc-VirtualBox:~$ sudo rm /dev/ttyS3
[sudo] password for mikespc:
mikespc@mikespc-VirtualBox:~$ sudo ln /dev/ttyACM0 /dev/ttyS3
mikespc@mikespc-VirtualBox:~$ ls -l /dev/ttyS3
crw-rw---- 2 root dialout 166, 0 2012-04-27 10:23 /dev/ttyS3
```

← old setting
← remove old
← link usb
← new setting

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.