

Getting Ubuntu 14.04, 64 bit OS to work with the Elecraft K3

Debian and Ubuntu have eliminated 32 bit libraries from their 64 bit distributions so the necessary “ia32-libs” is gone. Debian and Ubuntu must include the 32 libraries so existing 32 bit drivers etc., continue to work on their system. **In Terminal** Follow these steps to get 32 bit apps to run on the Ubuntu 14.04, 64 bit system:

```
$ sudo dpkg --add-architecture i386
    Make sure it is a double dash “--add” not “—add”
$ sudo apt-get update
$ sudo apt-get install libstdc++6:i386 libgtk2.0-0:i386 libgtkhtml3.14-19:i386
gtk2-engines-oxygen:i386
```

Make sure it is **ALL ONE LINE**; paste into gedit, adjust to 1 line and copy it for the terminal

This brings in all the needed packages for the Elecraft K3.

BTW: You can install any package with, “sudo apt-get install 'package-name:i386” if you know the package name

Install the **Synaptic** package manager from the [Ubuntu Package Center](#)

Close the [Ubuntu Package Center](#)

Run synaptic and click on [Settings](#) and on [Repositories](#)

Click on [Other Software](#) and the **Add** button

Copy and **paste** this into the “Apt Line” field box:

```
deb http://archive.ubuntu.com/ubuntu/ raring main restricted universe multiverse
```

click OK and OK on the “update repository” screen

Close synaptic

In Terminal enter:

```
sudo apt-get update
sudo apt-get install ia32-libs
sudo apt-get install curl
sudo adduser PUT-UR-USER-NAME-HERE dialout
    For a user name 'bob' enter, “sudo adduser bob dialout”
sudo dmesg | grep FTDI
    “FTDI” is in capital letters
```

For the digital mode app, **fldigi** enter **In Terminal**:

```
sudo apt-get install fldigi
```

For the digital *weak signal* mode app, **wsjtx** enter **In Terminal**:

```
sudo apt-get install wsjtx
```

Reboot the computer to make sure everything is read into the operating system.

fldigi for rig control:

Click on [Configure](#) :

Click on Rig Control

Check Hamlib box

Rig: Elecraft K3/KX3 (Beta)

Device: /dev/ttyUSB0

Or, the port to which the K3 cable is plugged

Baud Rate: 38400

Or, the rate you set in the K3

Hold **Menu**-->> **RS232**

Stop Bits: 1

UNCheck PTT via Hamlib command

Sideband: Rig Mode

Click Initialize button

wsjtx for rig control:

click on [Setup](#) and [Configuration](#)

PTT Method: VOX

Check: **Enable** CAT

Rig: 229 Elecraft K3/KX3

CAT Port: /dev/tty/USB

Or, the port into which the K3 cable is plugged

Serial Rate: 38400

Or, the rate you set in the K3
Hold Menu-->> RS232

Select **Mic**

Stop Bits: 1

Click on Test CAT Control button to see if it works

If successful, you will get a something like this:

Rig control appears to be working. Dial Frequency: 14.070000 MHz

If using **Signalink USB** and the sound is not working you must create a new virtual audio device and put it into **/home/UR-USER-DIRECTORY/.asoundrc** I.E, /home/bob/.asoundrc

```
pcm.p148k {  
  type plug  
  slave {  
    pcm "hw:1,0"  
    format S16_LE  
    channels 1  
    rate 48000  
  }  
}
```

This is for audio device **hw:1,0**. You can see a list of the audio devices on your computer by entering **In Terminal** alsamixer and pressing the F6 function key.

... **Continuing wsjtx** -->> Setup -->> Configuration:

Audio In: [Name column] p148k

Audio Out: [Name column] p148k

Now you have audio in and out for the wsjtx; this will is a work around that will be corrected on an Ubuntu update.