

## ASUS Tinker board Software Installation

**Note: this is based on installing TinkerOS\_Debian V1.8**

### 1. Install Tinker OS (Debian)

Download latest Debian image from [https://www.asus.com/uk/Single-Board-Computer/Tinker-Board/HelpDesk\\_Download/](https://www.asus.com/uk/Single-Board-Computer/Tinker-Board/HelpDesk_Download/)

On the web page under **Drivers & Tools** select **Others** for the OS.

This will then change to show the number of files and the link to **Others** which you should click on.

Scroll down the page until you get to the section for **TinkerOS\_Debian V1.8** and click on the link to download the OS.

Unzip image

Copy image to memory card using **dd** on Linux or **Win32DiskImager** on Windows.

Boot the Tinker board with it attached to your network. It will use DHCP to get an IP address.

Note that the display will work but may not be the correct size and the touch screen may not be working.

Connect to the Tinker board using ssh from another system. You can do all this on the Tinker board with a keyboard and mouse attached, but I find it is easier to ssh. (ssh linaro@<IP address>).

Update the system (warning this may take some time to complete and respond with **y** to any questions):

```
sudo apt-get update && sudo apt-get dist-upgrade && sudo apt-get install -f
```

Reboot the system.

### 2. Install piHPSDR

Either connect to the Raspberry Pi using ssh from another system or open a terminal window on the RPi.

In the home directory (/home/pi) download the binary package. This will overwrite any existing file with the same name. If you want to keep the previous version then you should rename the existing pihpsdr.tar file before performing the wget command:

```
wget -N https://github.com/g0orx/pihpsdr/raw/master/release/pihpsdr.tar
```

The /home/pi directory should now contain the pihpsdr.tar file.

Extract the files (will create directory pihpsdr):

```
tar xvf pihpsdr.tar
```

Setup the system for piHPSDR:

```
cd pihpsdr  
./install.sh
```

The first time you run install.sh it will install fftw3 and the screensave. You will be asked several questions to which you should simply hit the return key to accept the default answer.

The system is now ready to run piHPSDR.

You are now ready to run the application by double tapping (clicking) on the desktop icon.

Using a touch screen it is sometimes hard to do a double click so you can also start piHPSDR by tapping on **Menu** and then tapping on **Other** and then tapping on **pihpsdr**.