**Transit Sensor Raspberry Pi Setup**

Last Revision by Christopher Lail on 4/25/2017

1. Install the Raspbian OS.

* Download [Raspbian Jessie Lite](https://downloads.raspberrypi.org/raspbian_lite_latest).
* Unzip the folder to access the .img file.
* Insert the SD card which you wish to install the OS onto.
* Download and install [Win32DiskImager](http://sourceforge.net/projects/win32diskimager/) onto your PC.
* Run Win32DiskImager.
* In Win32DiskImager select the 2017-01-11-raspbian-jessie-lite.img

(The date might have changed since this guide was written)

* Select the SD card from the device box.

(Be sure to choose the correct drive or you could destroy data on your PC)

* Click 'Write' and wait for the write to complete.
* Eject the SD card and put it into the Raspberry Pi.

2. Setup Transit Sensor data on Raspberry Pi.

- Plug monitor, power, Ethernet, and keyboard into the Raspberry Pi.

- You will see the screen fill with text as it installs the OS onto the Raspberry Pi.

- Once prompted for login input “pi” for the login, and “raspberry” for the password.

* Once logged in, type “clear” to clear the screen, then type “sudo apt-get install git” to install the GitHub.
* Type in “git clone git@github.com:jeffrey-johnson/transit-sensor.git”.
* This will copy all the files necessary for the transit sensor to work.

3. Setup remote access and the proper keyboard layout.

* Type “sudo raspi-config”.
* Choose the “5 Interfacing Options” selection.
* Choose the “2 SSH” selection
* Select “Yes”, then “Ok”.
* Select the “4 Localization Options” selection.
* Select the “I3 Change Keyboard Layout” selection.
* Choose “Generic 105-key (Intl) PC”.
* If the next screen does not have “English (US)” option, select “Other”
* Select “English (US)”, then select “English (US)” again.
* Select “The default for the keyboard layout”.
* Select “No compose key”.
* Select “Finish”
* Type “sudo reboot”.
* Once rebooted, login using the same login as above.

4. Install Python libraries.

* Once rebooted, login using the same login as above.
* Type “sudo apt-get install python-pip”
* Type “sudo pip install scapy”