

After fresh Rasbian install and copy files to Pi

**cd /home/pi/gps\_sensor\_app**

Run **make install**

Run **cgps -s**

No GPS

No webserver, waiting for GPS

Edit GPSD

**cd etc/default/  
nano gpsd**

change serial port to USB0 and save

now GPSD works

webserver works!

Restart or power off and on again

**sudo reboot**

after reboot

webserver does NOT work

check gpsd

```
dataplicity@raspberrypi:/$ su pi
Password:
pi@raspberrypi:/ $ sudo su
root@raspberrypi:/# cgps -s
cgps: no gpsd running or network error: -6, can't connect to host/port pair
root@raspberrypi:/#
```

Gpsd not running, restart gpsd

**sudo stty -F /dev/ttyUSB0 38400**

**sudo gpsd /dev/ttyUSB0 -F /var/run/gpsd.sock**

**cgps -s**

now GPSD works

Time:	n/a	PRN:	Elev:	Azim:	SNR:	Used:
Latitude:	27.55363302 S					
Longitude:	151.97132978 E					
Altitude:	645.072 m					
Speed:	n/a					
Heading:	n/a					
Climb:	n/a					
Status:	3D FIX (29 secs)					
Longitude Err:	n/a					
Latitude Err:	n/a					
Altitude Err:	n/a					
Course Err:	n/a					
Speed Err:	n/a					
Time offset:	n/a					
Grid Square:	QG52xk					

Now webserver works!

Raspberry PI GPS



DEVICE ID

MACADDR

pi321

b8:27:eb:d9:36:f8

Latitude	Longitude	GPSTime
-27.553651466	151.971261248	0.0
SysTime	Altitude	EPV
0.0	659.05	0.0
EPT	Speed	Climb
0.0	0.0	0.0

View History

Export to CSV

After reboot, webserver still works as there is data in the db

BUT it is old data and not the current lat and long (GPS drifts very slightly when uncorrected)

Check GPSD

```
dataplicity@raspberrypi:/$ su pi
Password:
pi@raspberrypi:/ $ sudo su
root@raspberrypi:/# cgps
cgps: no gpsd running or network error: -6, can't connect to host/port pair
root@raspberrypi:/#
```

Not running

Restart GPSD


```
sudo stty -F /dev/ttyUSB0 38400
```

```
sudo gpsd /dev/ttyUSB0 -F /var/run/gpsd.sock
```

```
cgps -s
```

Now we have live GPS but the webserver is still showing old lat and long

### Raspberry PI GPS



DEVICE ID  
**pi321**

MACADDR  
**b8:27:eb:d9:36:f8**

Latitude	Longitude	GPSTime
<b>-27.553624771</b>	<b>151.971335065</b>	<b>0.0</b>
SysTime	Altitude	EPV
<b>0.0</b>	<b>646.649</b>	<b>0.0</b>
EPT	Speed	Climb
<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

View HistoryExport to CSV

Time: n/a

Latitude: 27.55364202 S

Longitude: 151.97130154 E

Altitude: 648.928 m

Speed: n/a

Heading: n/a

Climb: n/a

Status: 3D FIX (8 secs)

Longitude Err: n/a

Latitude Err: n/a

Altitude Err: n/a

Course Err: n/a

Speed Err: n/a

Time offset: n/a

Grid Square: QG52xk

PRN: Elev: Azim: SNR: Used:

Note the different lat and long to the webserver. Webserver still showing previous lat and long (last record... which is what we want, but we may need a “time since last message”)

Looks like we have to restart the sensor app

```
cd /home/pi/gps_sensor_app
sudo python gps_sensor_service.py
```

now it is updating!

### Raspberry PI GPS



**BIG SKY**  
TECHNOLOGIES

DEVICE ID  
pi321

MACADDR  
b8:27:eb:d9:36:f8

Latitude -27.553624986	Longitude 151.971326371	GPSTime 0.0
SysTime 0.0	Altitude 648.975	EPV 0.0
EPT 0.0	Speed 0.0	Climb 0.0

View History

Export to CSV