In [49]:

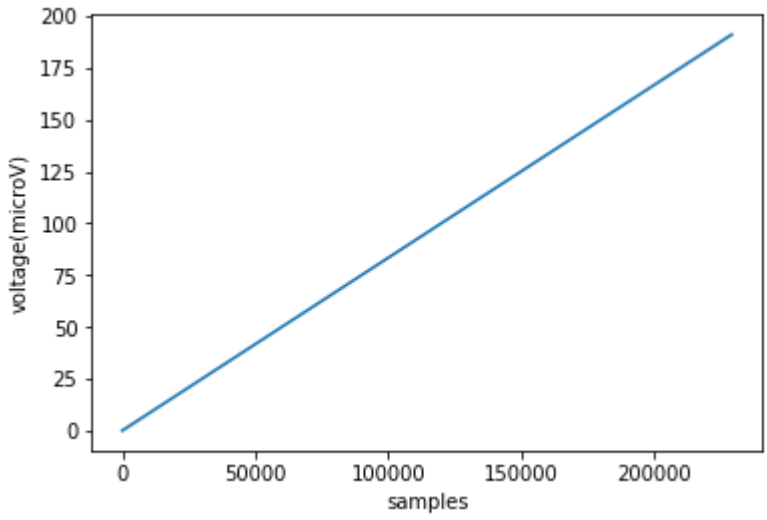
```
import os
import csv
import numpy as np
import scipy.io

from matplotlib import pyplot as plt
from collections import defaultdict
import matplotlib.pyplot as plt
from scipy import signal
from sklearn.decomposition import FastICA, PCA


emg_channel = defaultdict(list)
with open('PD_01_SS_30G.txt') as f:
    reader = csv.reader(f)
    #reader.next()
    for row in reader:
        for (i,v) in enumerate(row):
            emg_channel[i].append(float(v))
plt.figure()
plt.plot(emg_channel[0])
#plt.title(name)
plt.xlabel('samples')
plt.ylabel('voltage(microV)')
```

Out[49]:

```
Text(0, 0.5, 'voltage(microV)')
```

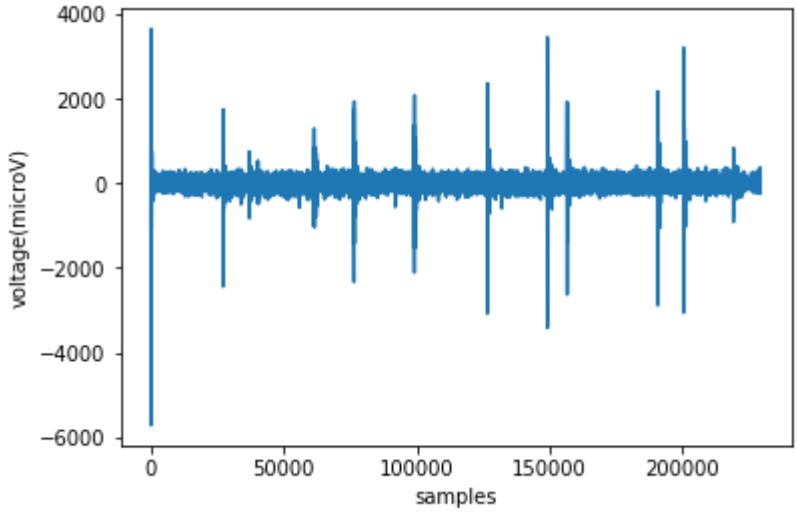


In [50]:

```
plt.xlabel('samples')
plt.ylabel('voltage(microV)')
plt.plot(emg_channel[1])
```

Out[50]:

```
[<matplotlib.lines.Line2D at 0x20d36ab98d0>]
```

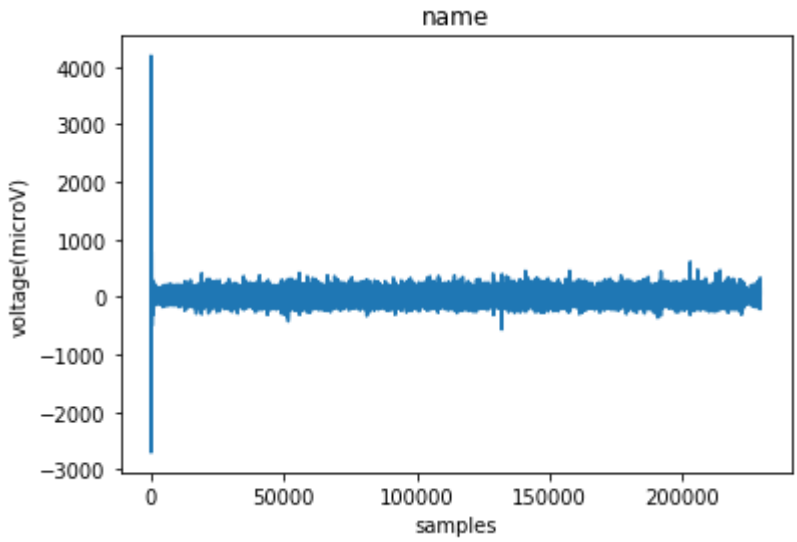


In [51]:

```
plt.plot(emg_channel[2])
plt.title('name')
plt.xlabel('samples')
plt.ylabel('voltage(microV)')
```

Out[51]:

```
Text(0, 0.5, 'voltage(microV)')
```

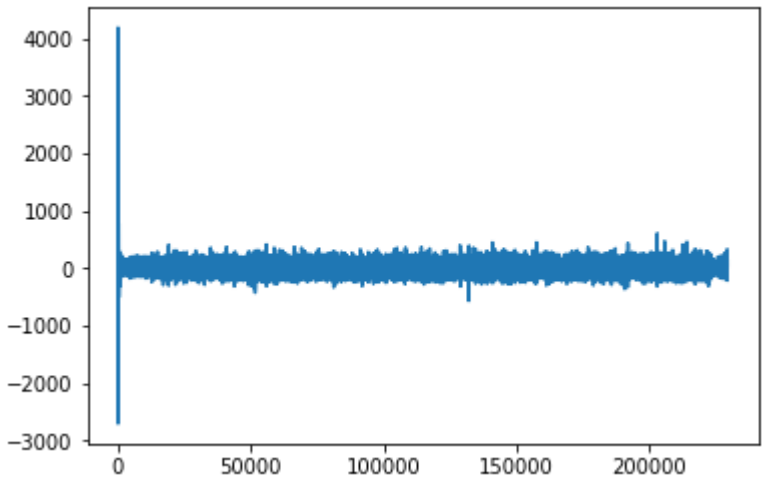


In [52]:

```
plt.plot(emg_channel[2])
```

Out[52]:

```
[<matplotlib.lines.Line2D at 0x20d36b38400>]
```

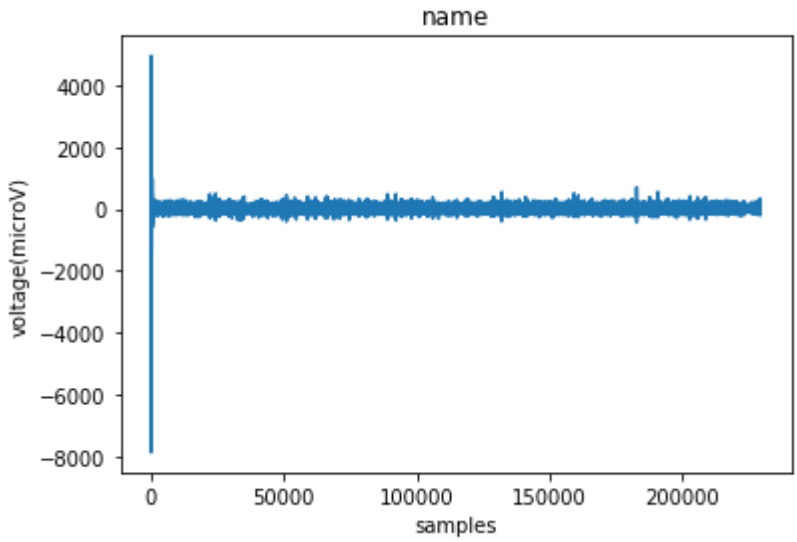


In [53]:

```
plt.plot(emg_channel[3])
plt.title('name')
plt.xlabel('samples')
plt.ylabel('voltage(microV)')
```

Out[53]:

```
Text(0, 0.5, 'voltage(microV)')
```

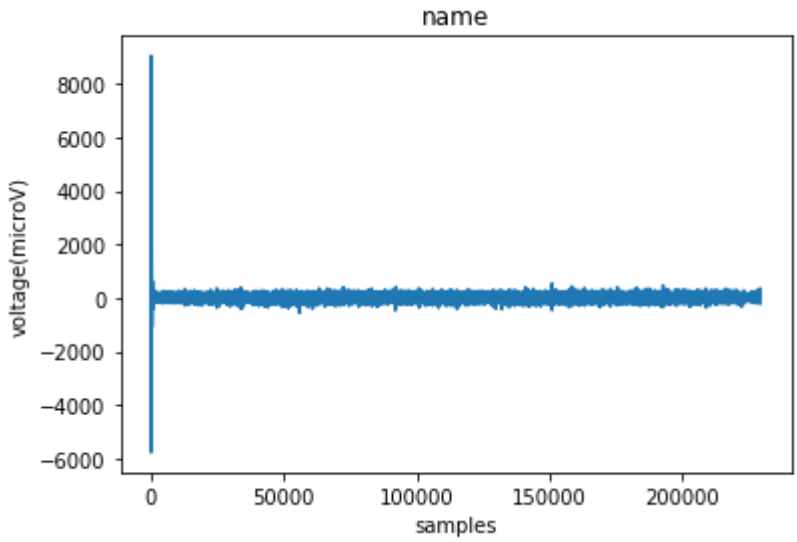


In [54]:

```
plt.plot(emg_channel[4])
plt.title('name')
plt.xlabel('samples')
plt.ylabel('voltage(microV)')
```

Out[54]:

```
Text(0, 0.5, 'voltage(microV)')
```

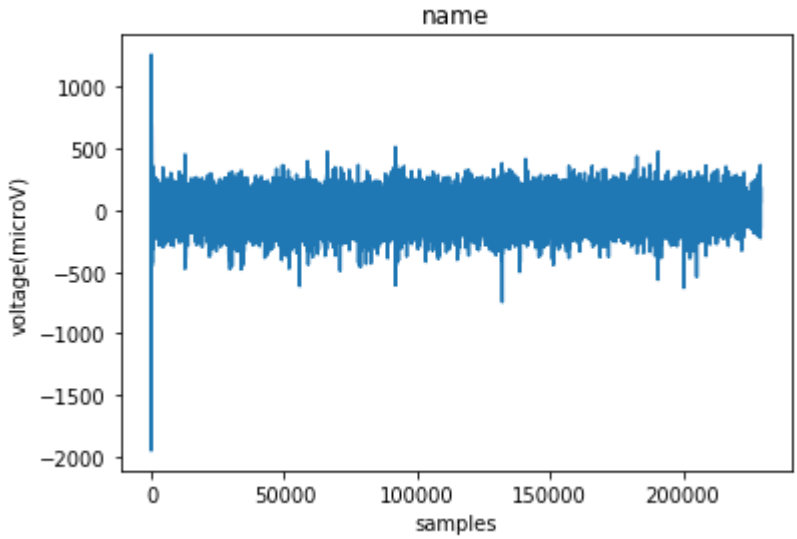


In [55]:

```
plt.plot(emg_channel[5])
plt.title('name')
plt.xlabel('samples')
plt.ylabel('voltage(microV)')
```

Out[55]:

```
Text(0, 0.5, 'voltage(microV)')
```

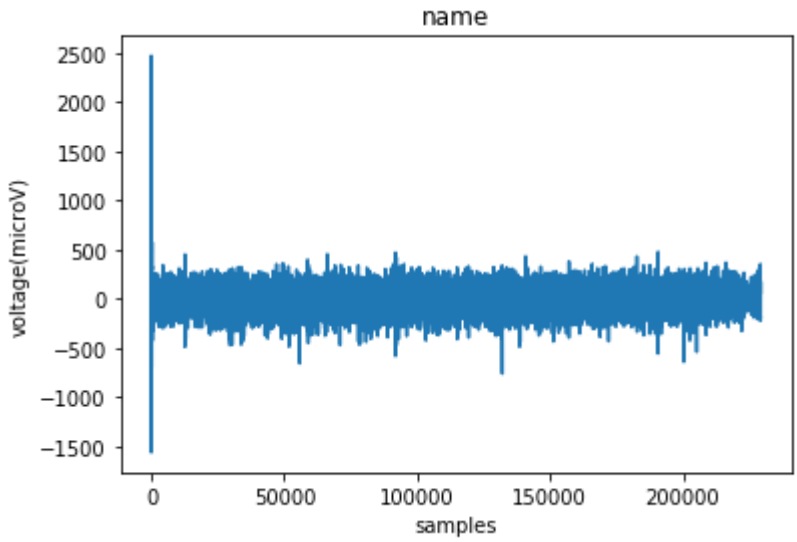


In [56]:

```
plt.plot(emg_channel[6])
plt.title('name')
plt.xlabel('samples')
plt.ylabel('voltage(microV)')
```

Out[56]:

```
Text(0, 0.5, 'voltage(microV)')
```

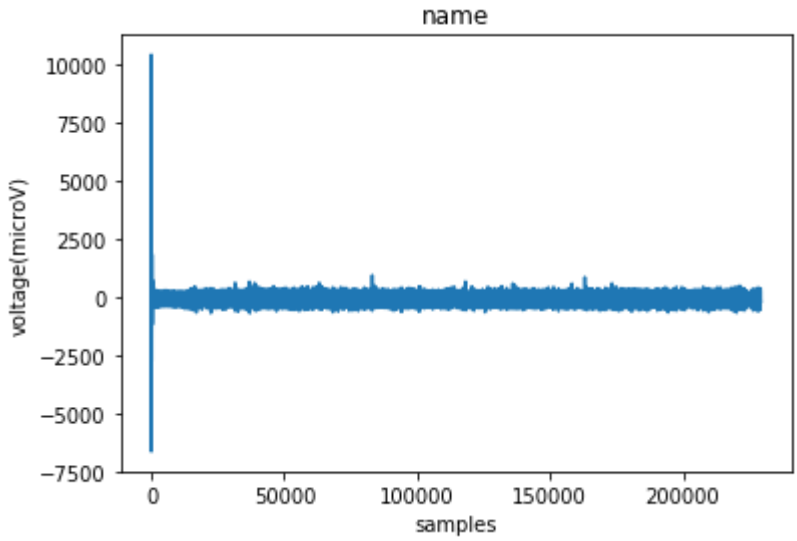


In [57]:

```
plt.plot(emg_channel[7])
plt.title('name')
plt.xlabel('samples')
plt.ylabel('voltage(microV)')
```

Out[57]:

```
Text(0, 0.5, 'voltage(microV)')
```

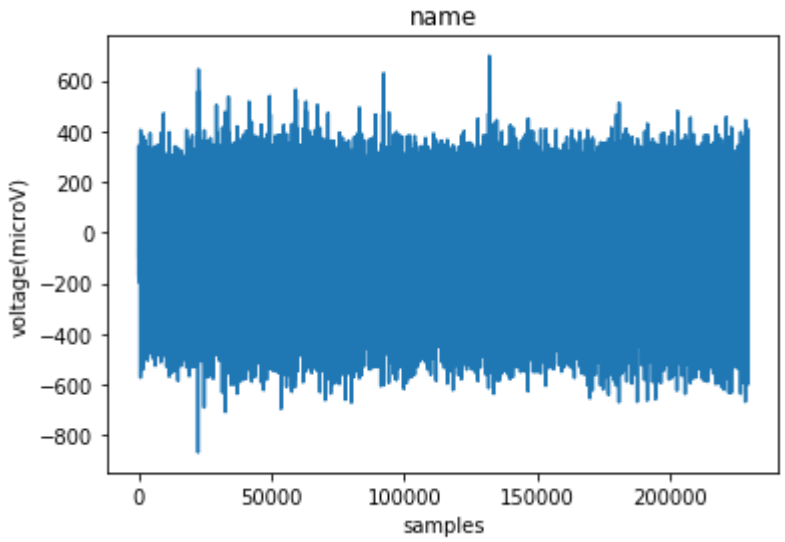


In [58]:

```
plt.plot(emg_channel[8])
plt.title('name')
plt.xlabel('samples')
plt.ylabel('voltage(microV)')
```

Out[58]:

```
Text(0, 0.5, 'voltage(microV)')
```

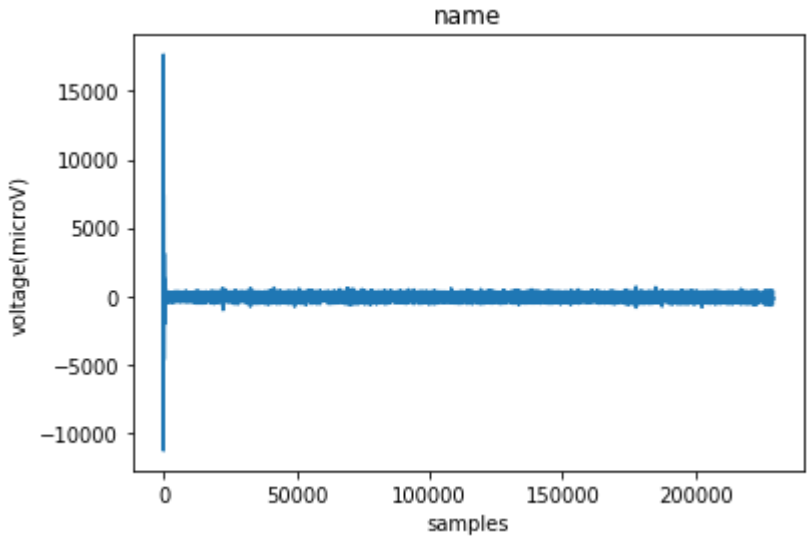


In [59]:

```
plt.plot(emg_channel[9])
plt.title('name')
plt.xlabel('samples')
plt.ylabel('voltage(microV)')
```

Out[59]:

```
Text(0, 0.5, 'voltage(microV)')
```

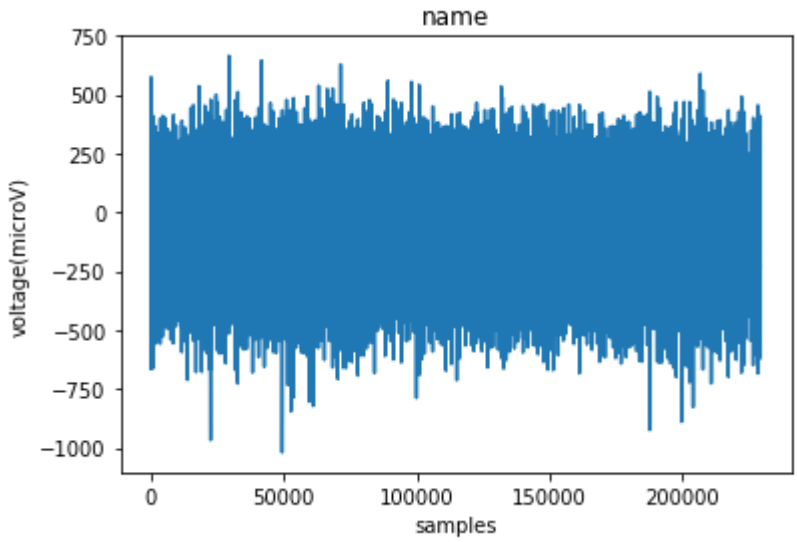


In [60]:

```
plt.plot(emg_channel[10])
plt.title('name')
plt.xlabel('samples')
plt.ylabel('voltage(microV)')
```

Out[60]:

```
Text(0, 0.5, 'voltage(microV)')
```

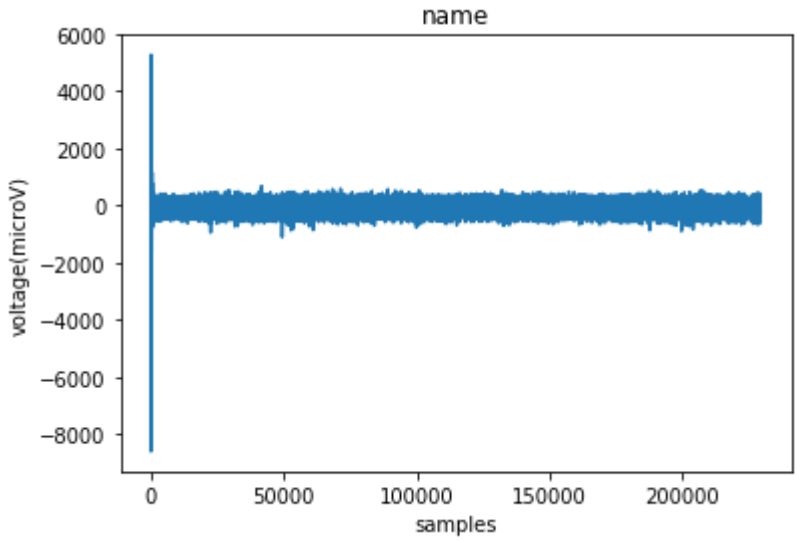


In [61]:

```
plt.plot(emg_channel[11])
plt.title('name')
plt.xlabel('samples')
plt.ylabel('voltage(microV)')
```

Out[61]:

```
Text(0, 0.5, 'voltage(microV)')
```

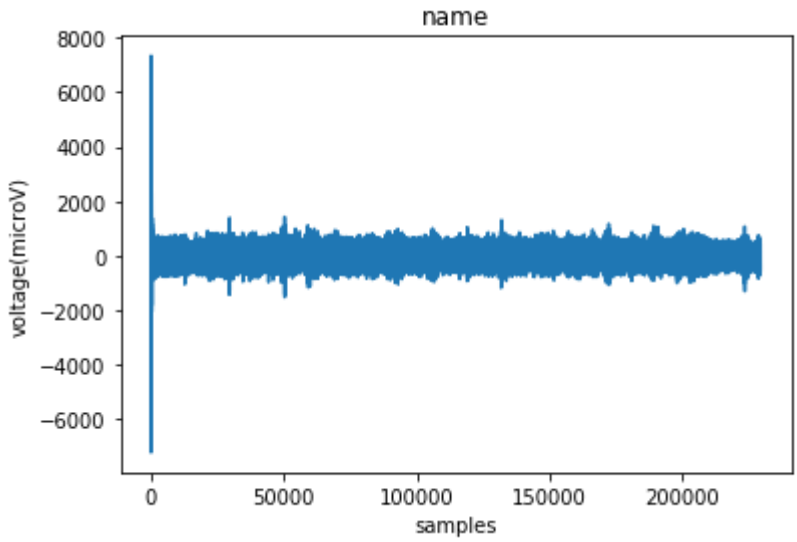


In [62]:

```
plt.plot(emg_channel[12])
plt.title('name')
plt.xlabel('samples')
plt.ylabel('voltage(microV)')
```

Out[62]:

```
Text(0, 0.5, 'voltage(microV)')
```

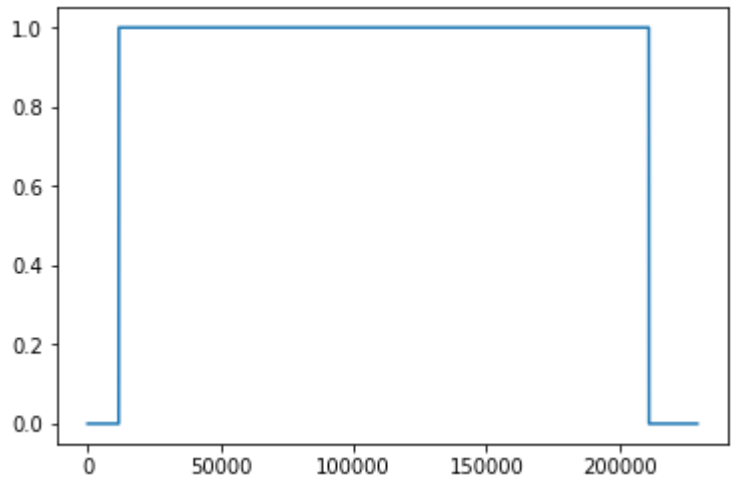


In [63]:

```
plt.plot(emg_channel[13])
```

Out[63]:

```
[<matplotlib.lines.Line2D at 0x20d56ff8e48>]
```



In [ ]: