

Voltage Outputs

⚠ set_pv1 : Set Voltage on PV1

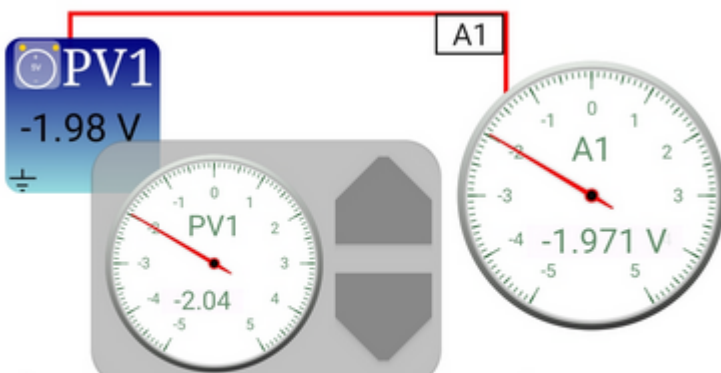
```
p.set_pv1(value)
```

set output voltage on PV1 (-5 to +5 V)

parameter	description
value	between -5 to 5V
return	Actual set voltage after accounting for resolution limitations(12-bit)

```
🔥 x = p.set_pv1(2)
```

```
import eyes17.eyes
p = eyes17.eyes.open()
p.set_pv1(2)
#Connect PV1 to A1
print ('Voltage at PV1 = ',p.get_voltage('A1'))
```



- 1) Connect PV1 to A1, and measure.
- 2) PV1 is like an adjustable battery.

⚠ set_pv2 : Set Voltage on PV2



```
p.set_pv2(value)
```

set output voltage on PV2 (-3.3 to +3.3 V)

parameter	description
value	between -3.3 to 3.3V
return	Actual set voltage after accounting for resolution limitations(12-bit)

 `x = p.set_pv2(1)`

```
import eyes17.eyes
p = eyes17.eyes.open()
p.set_pv2(1)
#Connect PV2 to A1
print ('Voltage at PV2 = ',p.get_voltage('A1'))
```

 **Diode Clipping Demonstration** 

```
import eyes17.eyes
p = eyes17.eyes.open()
from matplotlib import pyplot as plt

p.set_sine(200)
p.set_pv1(1.35)      # will clip at 1.35 + diode drop

t,v, tt,vv = p.capture2(500, 20)  # captures A1 and A2

plt.xlabel('Time(mS)')
plt.ylabel('Voltage(V)')
plt.plot([0,10], [0,0], 'black')
plt.ylim([-4,4])

plt.plot(t,v,linewidth = 2, color = 'blue')
plt.plot(tt, vv, linewidth = 2, color = 'red')

plt.show()
```