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1  #!/usr/bin/python
2  # -*- coding: utf-8 -*-
3  import time
4  from gpiozero import OutputDevice as stepper
5
6  class StepMotor:
7      def __init__(self, mode=1, pins=[5,6,13,19]):
8          self.mode = mode
9          self.pins=pins
10         self.IN1 = stepper(pins[0])
11         self.IN2 = stepper(pins[1])
12         self.IN3 = stepper(pins[2])
13         self.IN4 = stepper(pins[3])
14         self.stepPins = [self.IN1,self.IN2,self.IN3,self.IN4]
15         if self.mode:                # Low Speed ==> High Power
16             self.seq = [[1,0,0,1], # Define step sequence as shown in manufacturers
datasheet
17                 [1,0,0,0],
18                 [1,1,0,0],
19                 [0,1,0,0],
20                 [0,1,1,0],
21                 [0,0,1,0],
22                 [0,0,1,1],
23                 [0,0,0,1]]
24         else:                        # High Speed ==> Low Power
25             self.seq = [[1,0,0,0], # Define step sequence as shown in manufacturers
datasheet
26                 [0,1,0,0],
27                 [0,0,1,0],
28                 [0,0,0,1]]
29
30         self.stepCount = len(self.seq)
31
32     def ileri(self, wait=0.01,stepSize=10):
33         stepCounter = 0
34         for dev in range(stepSize):
35             for pin in range(0,4):
36                 xPin=self.stepPins[pin]
37                 if self.seq[stepCounter][pin]!=0:
38                     xPin.on()
39             else:
40                 xPin.off()
41
42             stepCounter += 1
43             if (stepCounter >= self.stepCount):
44                 stepCounter = 0
45             time.sleep(wait)
46
47     def geri(self, wait=0.01, stepSize=10):
48         stepCounter = self.stepCount-1
49         for dev in range(stepSize):
50             for pin in range(0,4):
51                 xPin=self.stepPins[pin]

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52         if self.seq[stepCounter][pin]!=0:
53             xPin.on()
54         else:
55             xPin.off()
56
57         stepCounter -= 1
58         if (stepCounter == 0):
59             stepCounter = self.stepCount-1
60             time.sleep(wait)
61     def closepins(self):
62         for i in range(0,4):
63             self.stepPins[i].close()
64
65
66
67 print("moving started")
68 motor = StepMotor()
69 while True:
70     motor.ileri(stepSize=20)
71     time.sleep(0.1)
72     #motor.geri(stepSize=20)
73     #time.sleep(0.1)
74
75
```