PICO_USB2PED

Control Characters

	Char	Hex
Pulse Output	P	50
Pulse Off	p	70
Enable High	E	45
Enable Low	e	65
Direction High	D	44
Direction Low	d	64
Turn	T	54
LED High	L	4C
LED Low	l	6C

Set Pulses per Turn

Pulses/Turn	Char	Hex
200	0	0x30
400	1	0x31
800	2	0x32
1,600	3	0x33
3,200	4	0x34
6,400	5	0x35
12,800	6	0x36
25,600	7	0x37
51,200	8	0x38

Frequency Selection

Frequency (Khz)	Period (uSec)	Char	Hex
7.94	126	*	2A
7.04	142	&	26
6.02	166	^	5E
5.00	200	%	25
4.00	250	$	24
2.99	334	#	23
2.00	500	@	40

Serial Settings for Raspberry Pi

Python

```python
# Library
import serial

# Set serial for pico-transport
ser = serial.Serial()
ser.port = '/dev/ttyACM0'
ser.baudrate = 115200
ser.bytesize = 8
ser.stopbits = 1
ser.parity = 'N'
ser.timeout= 2
ser.rtscts = 0
ser.open()

# Read PICO Startup Line
received_startup = ser.readlines()

# Command Format Examples:
ser.write(b'4')    # Set Pulses per Turn to 3200
ser.write(b'L')    #Set LED pin to High
ser.write(b'l')    #Set LED pin to Low
```

PINOUT

Wiring PICO to Stepper Driver & LED

PICO						PICO	MODE	Function
GP0	1	1		40		VBUS		
GP1	2	2		39		VSYS		
GND	3			38		GND		GND
GP2	4			37		3V3_EN		
GP3	5			36		3V3 (OUT)		
GP4	6			35		ADC_VREF		
GP5	7			34		GP28		
GND	8			33		AGND		
GP6	9			32		GP27		
GP7	10			31		GP26		
GP8	11			30		RUN		
GP9	12			29		GP22		
GND	13			28		GND		GND
GP10	14			27		GP21		
GP11	15			26		GP20		
GP12	16			25		GP19	OUT	LED Control
GP13	17			24		GP18	OUT	ENABLE
GND	18			23		GND		GND
GP14	19			22		GP17	OUT	DIRECTION
GP15	20			21		GP16	OUT	PULSE