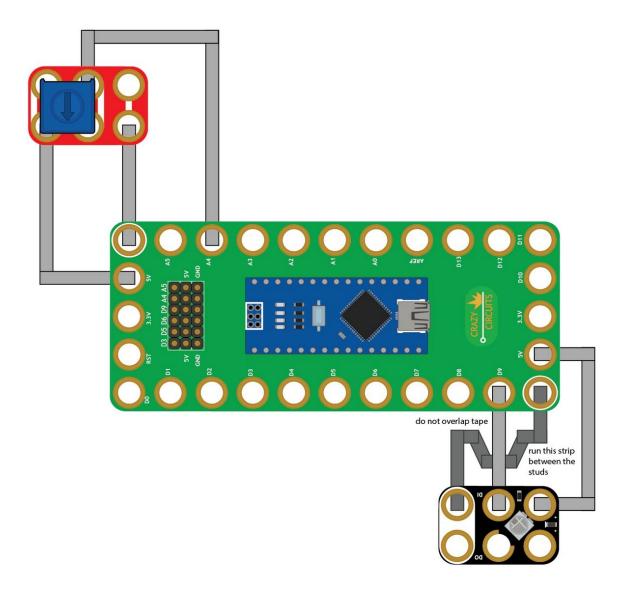


# **17 - Potentiometer with NeoPixel**

Use our Programming 101 kit to control a NeoPixel with a potentiometer.

Written By: Pete Prodoehl

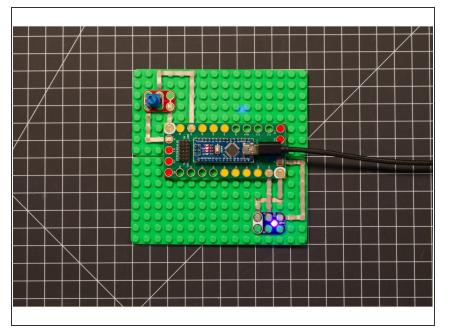


### INTRODUCTION

Use our Robotics Board to control a NeoPixel with a potentiometer.

TOOLS:	DARTS:								
<ul> <li>Scissors (1)</li> </ul>	<ul> <li>Crazy Circuits Robotics Board (1)</li> </ul>								
<ul> <li>Computer (1)</li> </ul>	<ul> <li>Crazy Circuits Potentiometer Chip (1)</li> <li>NeoPixel Chip (1)</li> <li>Maker Tape 1/8th inch (1)</li> </ul>								

## Step 1 — Build the Circuit



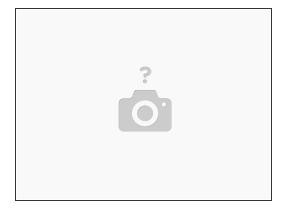
 Build the circuit as shown in the diagram using the components specified.

#### Step 2 — Install NeoPixel library

Arduno File Edit Statch Tools Help      VerftyComple XR Manage Libraries_ 021      Updad up Program 20      Add ZP Libray      Torone 2.0 Add ZP Libray			nrus - MT, nama ta hald tha iar	ระ+ เหริกด	summeer cor - wr, 1012 over to hold the freet units 1000 © Library Manager										
Upload XU			Type All	🔁 Topic 🛛 Al	dl	loopixel		Type All		opic All		o neopix	el		
1-THSensor_1-7-Segment-Doc L = Export Compiled Binary X-XMS 2 ↑ 1-THSensor_1-7-Segment 3 ↑ HTTDS:rLower, browndogg Add File Add File	And the Construction And And Distances Bridge EERPROM Espiora Espiora	iomet many M_LED iable DfPix	by Adafruit Adafruit_GFX-compa More info		xel grids Adafruit_G	"X-compatible library for NeoPixel grids	ione M_LE iabl	by Adafruit Adafruit_GFX- More_info		for NeoPixel grids	s Adafruit_GF	FX-compatible library	for NecPixel grids		1
6 * titus://github.com/arishorp/THI637 7 * 8 */ 9 10 11 12 #include <ards no.ho<br="">13 #include <ards no.ho<="" td=""><td>Firmata GSM HiD Keyboard LiquidCrystal MIDUIS8 MIDUIS8</td><td>the N coPix up ru O {</td><td>strip. <u>More info</u></td><td>ntrolling single-wire-b</td><td>based LED pixels a</td><td>d strip. Arduno library for controlling single-wire-based LED pixels and Version 1.5.0 😨 Install</td><td>the coPi up r O {</td><td>Adafruit Neo</td><td>ion 1.5.0 INSTALL for controlling sin</td><td></td><td>ED pixels and</td><td>nd strip. Arduino libr</td><td>ary for controlling single</td><td>wire-based LED pixels</td><td>and</td></ards></ards>	Firmata GSM HiD Keyboard LiquidCrystal MIDUIS8 MIDUIS8	the N coPix up ru O {	strip. <u>More info</u>	ntrolling single-wire-b	based LED pixels a	d strip. Arduno library for controlling single-wire-based LED pixels and Version 1.5.0 😨 Install	the coPi up r O {	Adafruit Neo	ion 1.5.0 INSTALL for controlling sin		ED pixels and	nd strip. Arduino libr	ary for controlling single	wire-based LED pixels	and
<pre>Signification Configuration Configurati</pre>	Mouse Robot Control Robot IR Remote Robot Notor SD SPI SPI Servo	fault don' re th ginO he Ne pwO:	Adafruit NeoPXL8 by Adafruit Arduine Bibrary for co strips using DMA on ATI More info	ntrolling 8 NeoPixel LE SAMD21, ATSAMD51	ED strips using DMJ	on ATSAMD21, ATSAMD51 Actuino library for controlling II Repliced LED	faul don re t gin( he N	strips using DMA			is using DMA	A on ATSAMD21, AT	SAMDS1 Arduino library	for controlling & NeoPi	
23) 24// set up a sensor object 25 Duf dht(OHTPUN, DHTTYG); 26	SoftwareSrial Spechtrwn/un Stepper		P		-	Close						-	-	-	Close

- Install and launch the Arduino software.
- Click on the Sketch menu, select Include Library, and then Manage Libraries...
- On the top right side type NeoPixel and it will show the results in the bottom of the window. We want the Adafruit NeoPixel library by Adafruit. Click the Install button.
- The library will be downloaded and **installed**, and then show the word Installed along with the version number.
- If you are done installing libraries click the **Close** button in the lower right corner.
- (These instructions can also be found in the PDF file Installing-NeoPixel-Arduino-Library.pdf)

#### Step 3 — Upload the Code



- Upload the Arduino sketch to the Robotics Board.
- You can find the code here: <u>https://github.com/BrownDogGadgets/Crazy...</u>