



Arduino Wiring Diagrams

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Index

Diagram Key.....	3
Wiring Diagram (color).....	4
Part II: Wiring/soldering	
Tools and Materials.....	6
Component Layout.....	7
Connecting power switch, battery, voltage regulator.....	8
Connecting voltage regulator to the Flora.....	17
Connecting the Color Sensor to the Flora.....	19
Connecting the LED switch to Color Sensor and Flora....	21
Connecting the NeoPixel to the Flora.....	26
Part IV: Final Wiring	
Tools and Materials.....	32
Connecting the Codec board to the Flora.....	33
Connecting the Codec board to the audio jack.....	43

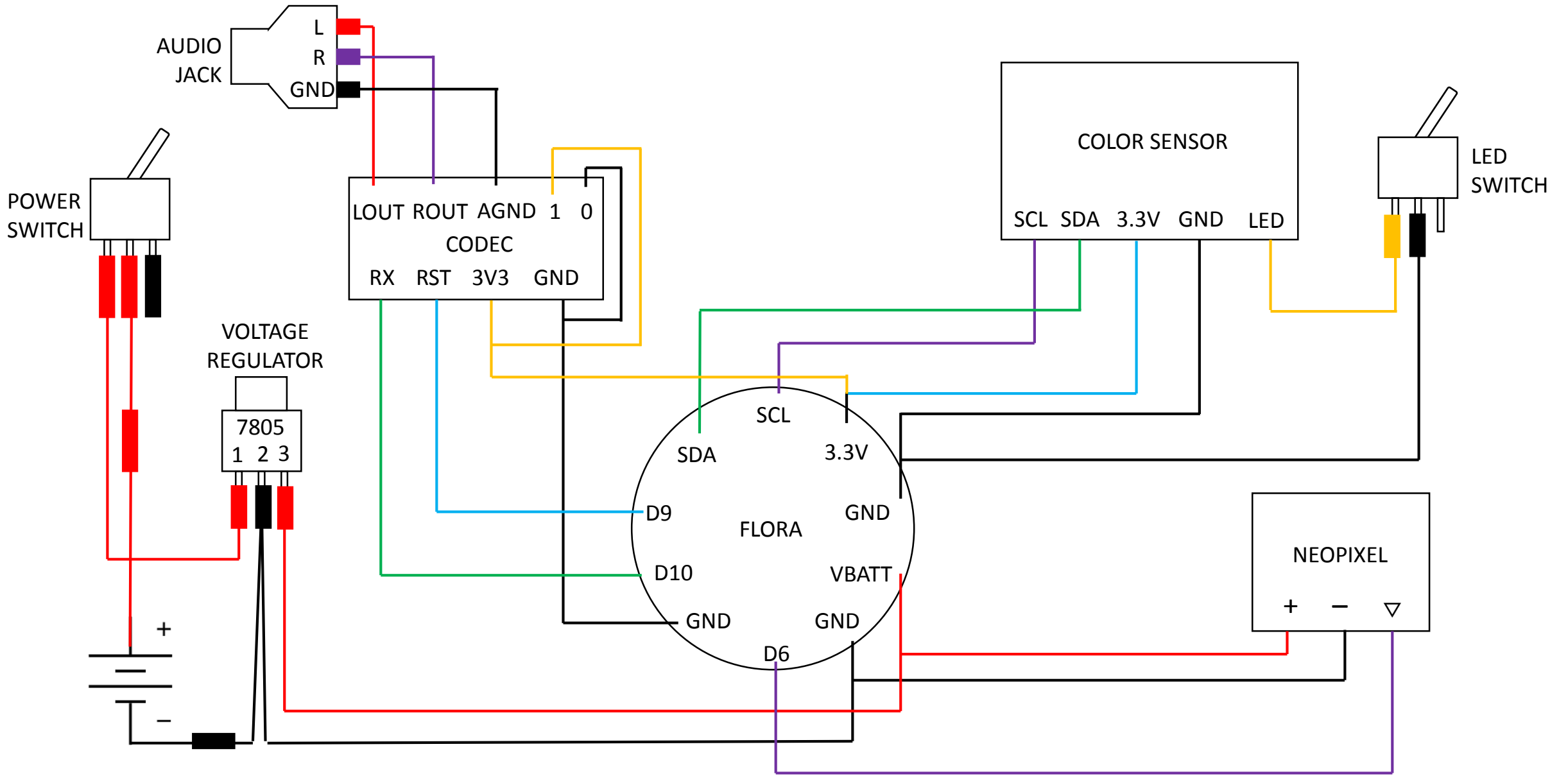
Diagram Key

- The following symbol code is used:
 -  indicate wires
 -  indicates heat shrink tubing

The following color code is used in the diagram:

-  indicates steps not yet completed
-  indicates completed steps
-  indicates wire measurement and preparation
- All other wire colors are used for clarity

Note: The placement of the connections on the diagrammed Adafruit boards does not necessarily reflect their physical positions.



Part II: Wiring/soldering

Tools and Materials

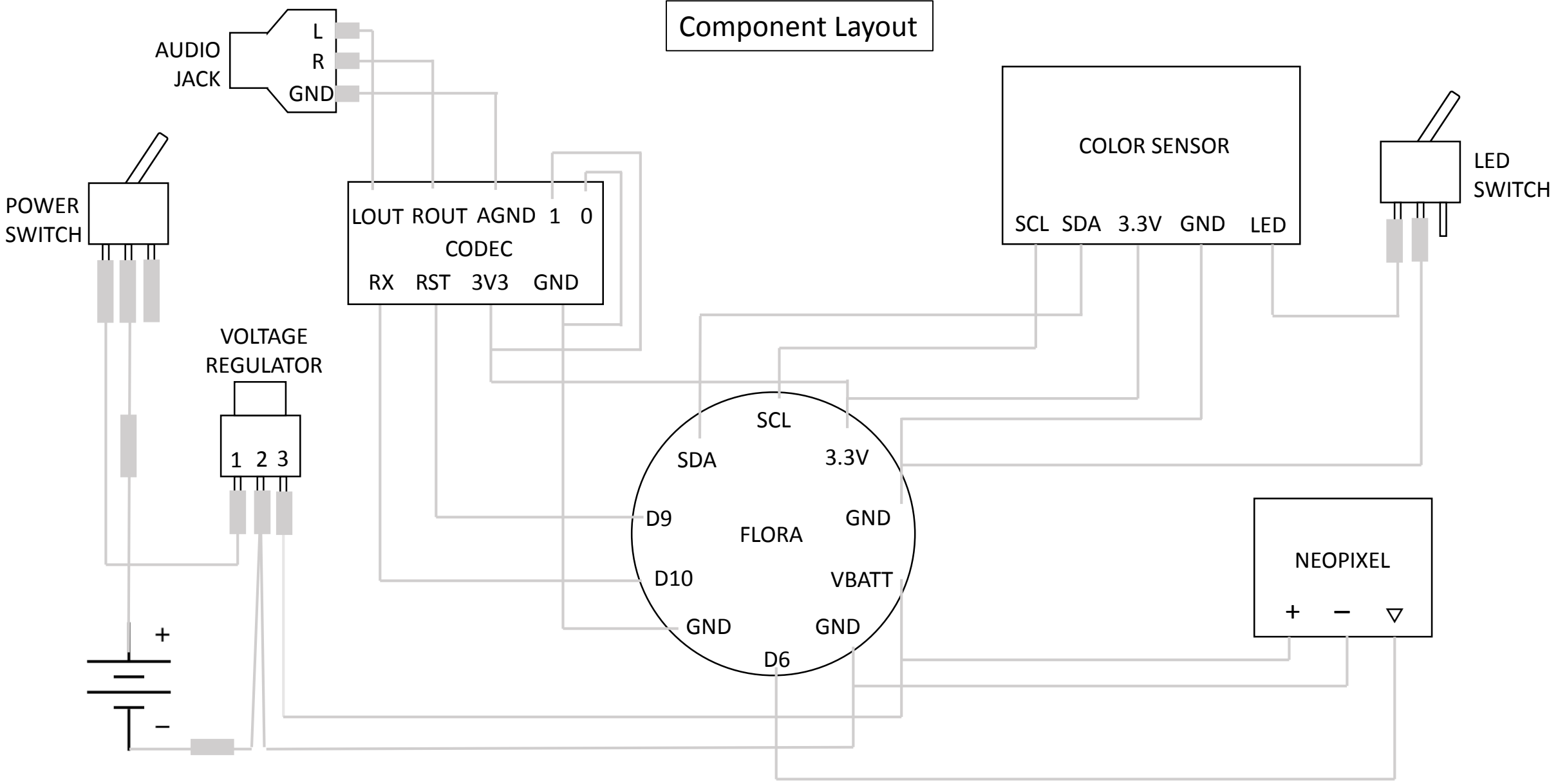
- Materials

- XXX chassis with switches/jack
- Battery snap-on
- Voltage regulator
- Flora board
- NeoPixel board
- Color Sensor board
- Insulated wire
 - 7 single wires
 - 4-wire, 3-wire, and 2-wire ribbon cables
- 8-10 lengths of heat shrink
 - One length slightly larger than others

- Tools

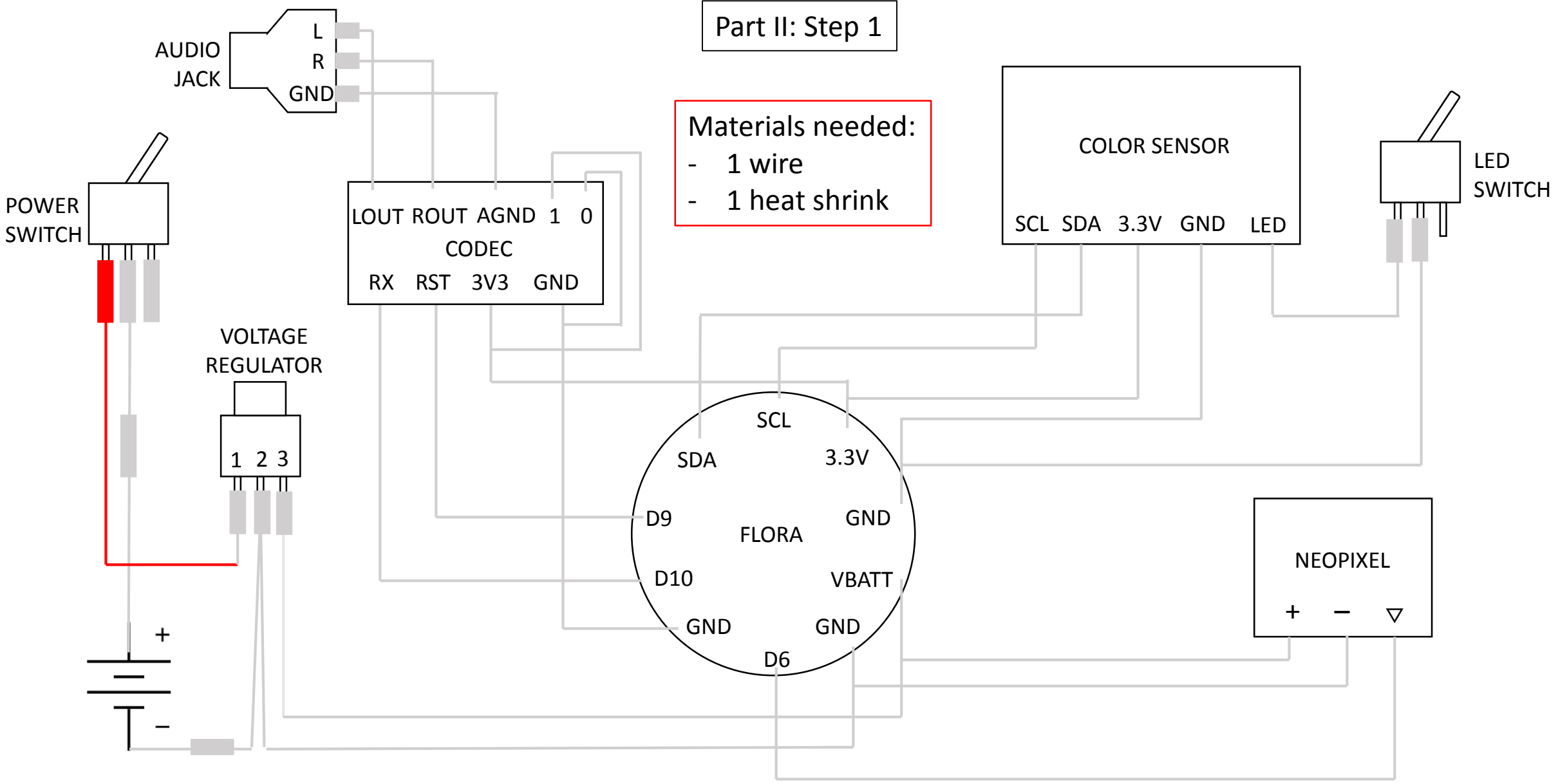
- Wire strippers/cutters
- Soldering iron and solder
- Heat gun or blow dryer

Component Layout



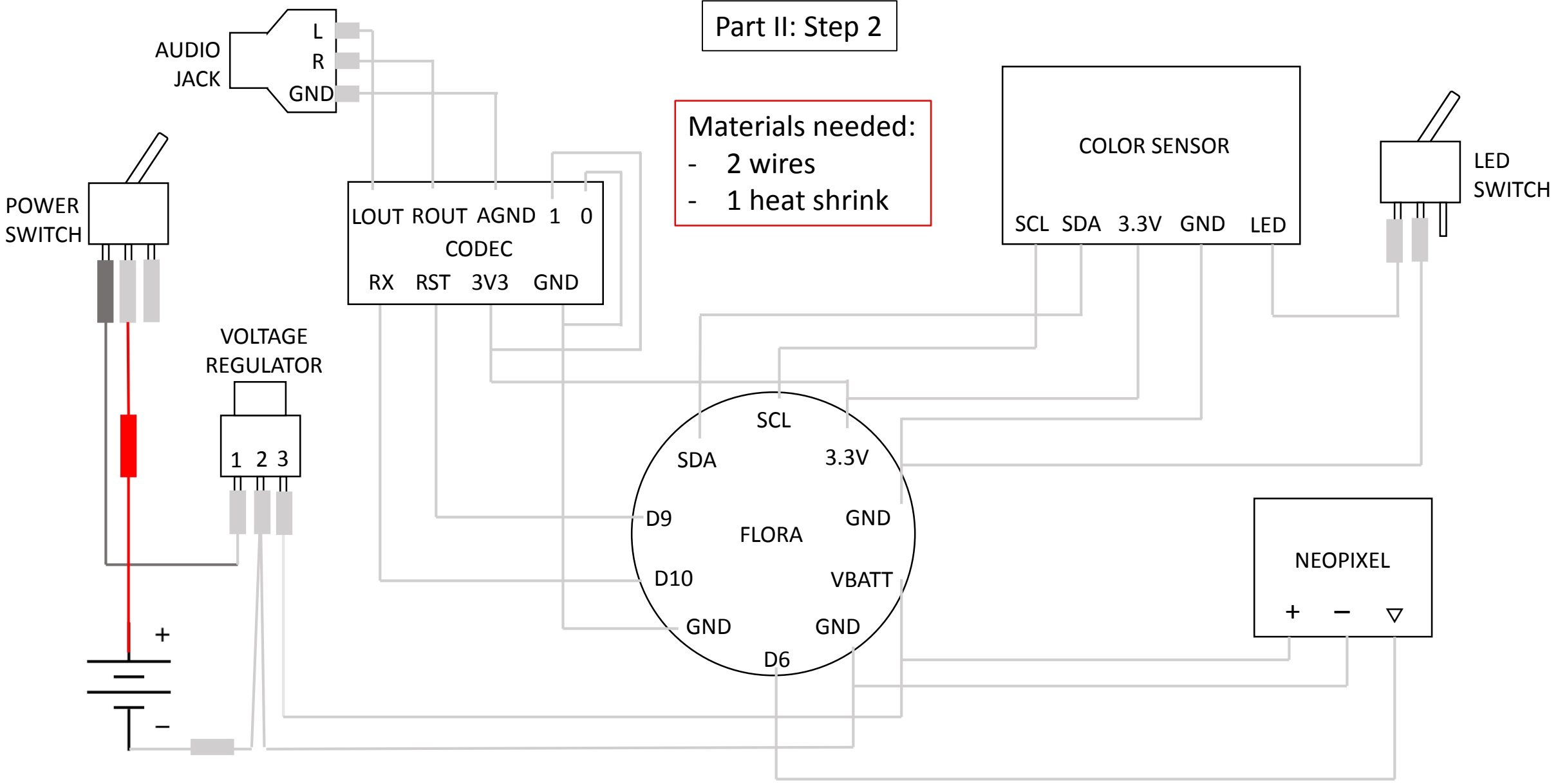
Part II: Step 1

- Materials needed:
- 1 wire
 - 1 heat shrink



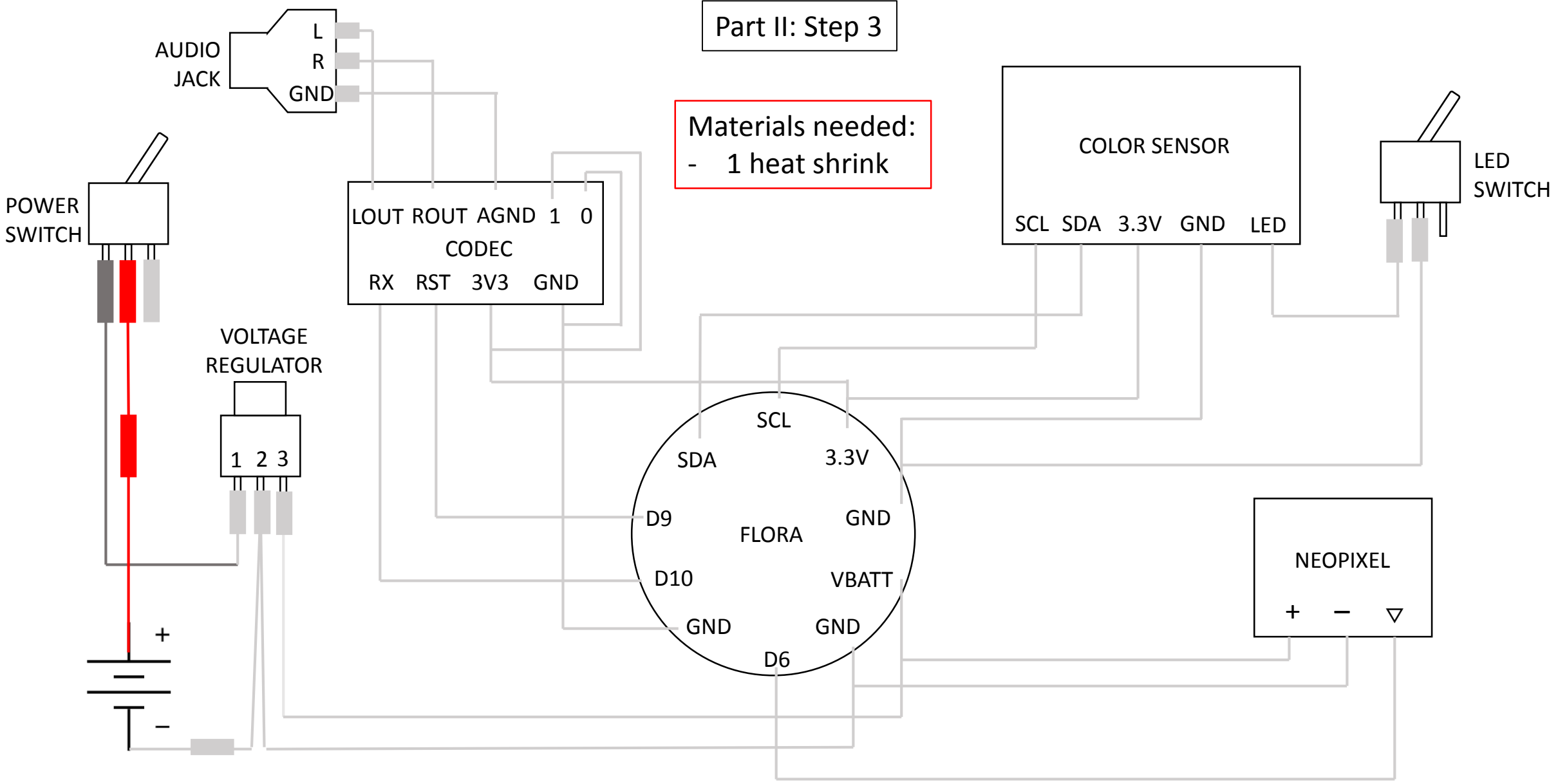
Part II: Step 2

- Materials needed:
- 2 wires
 - 1 heat shrink



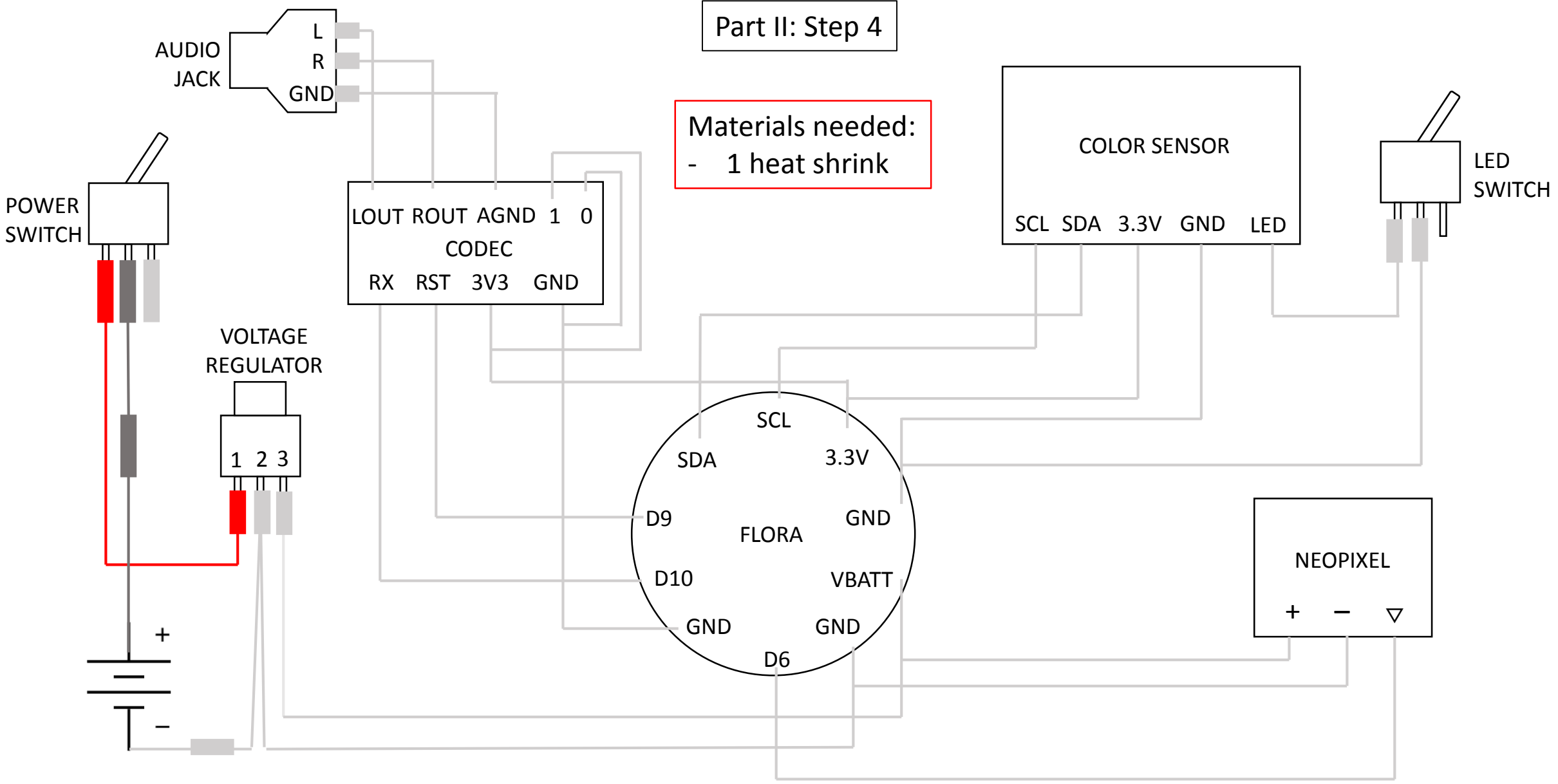
Part II: Step 3

Materials needed:
- 1 heat shrink



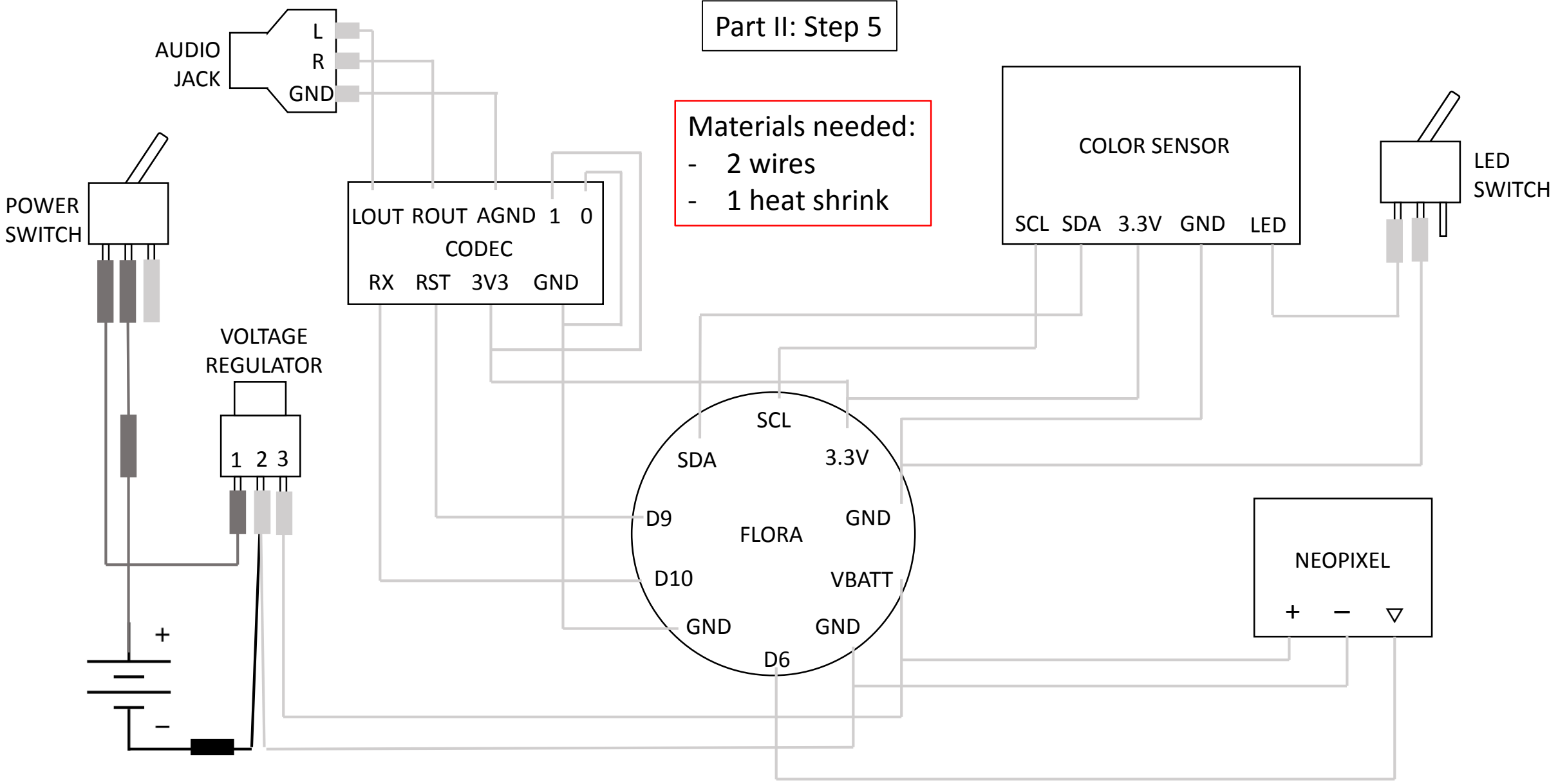
Part II: Step 4

Materials needed:
- 1 heat shrink



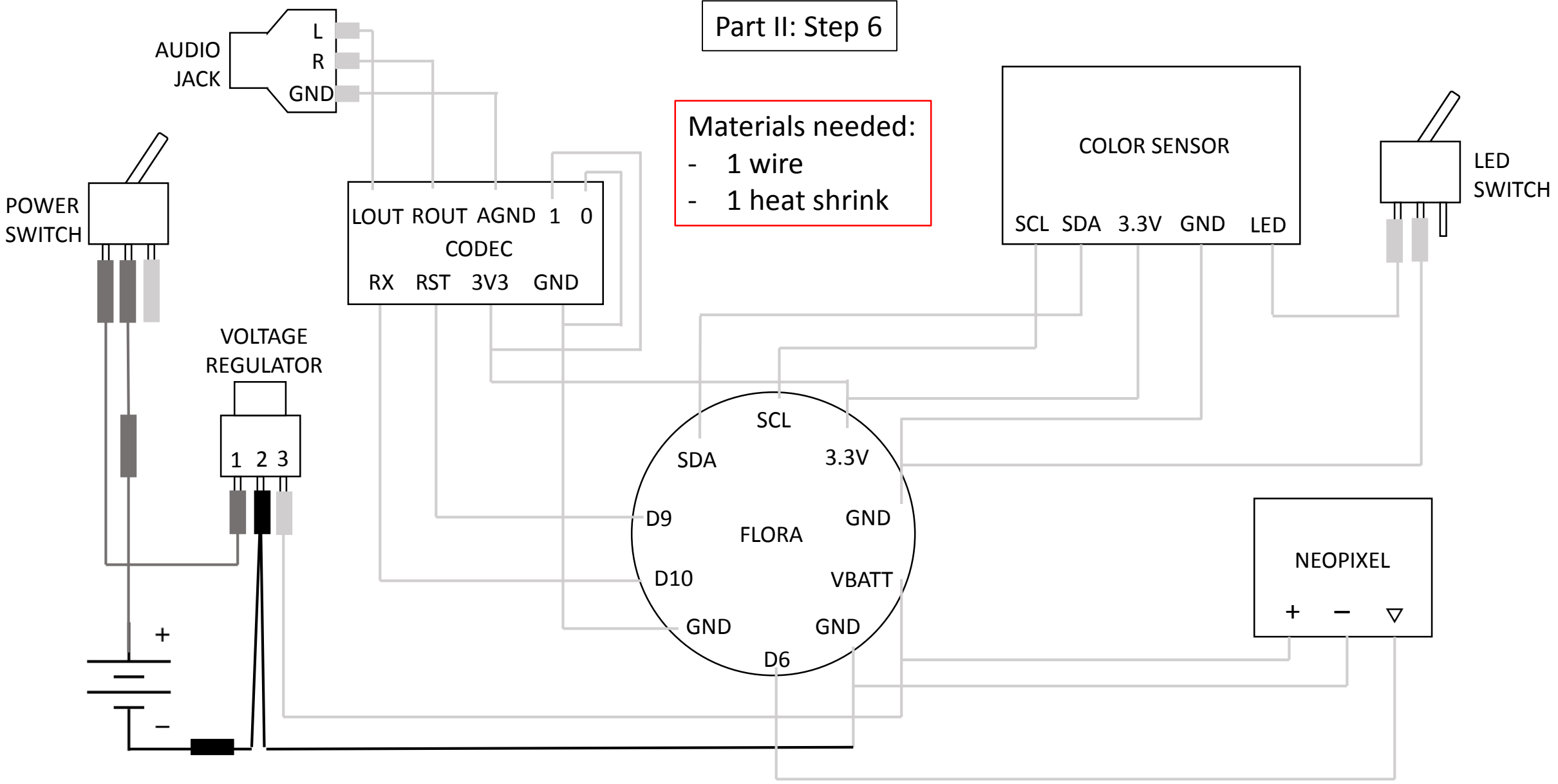
Part II: Step 5

- Materials needed:
- 2 wires
 - 1 heat shrink



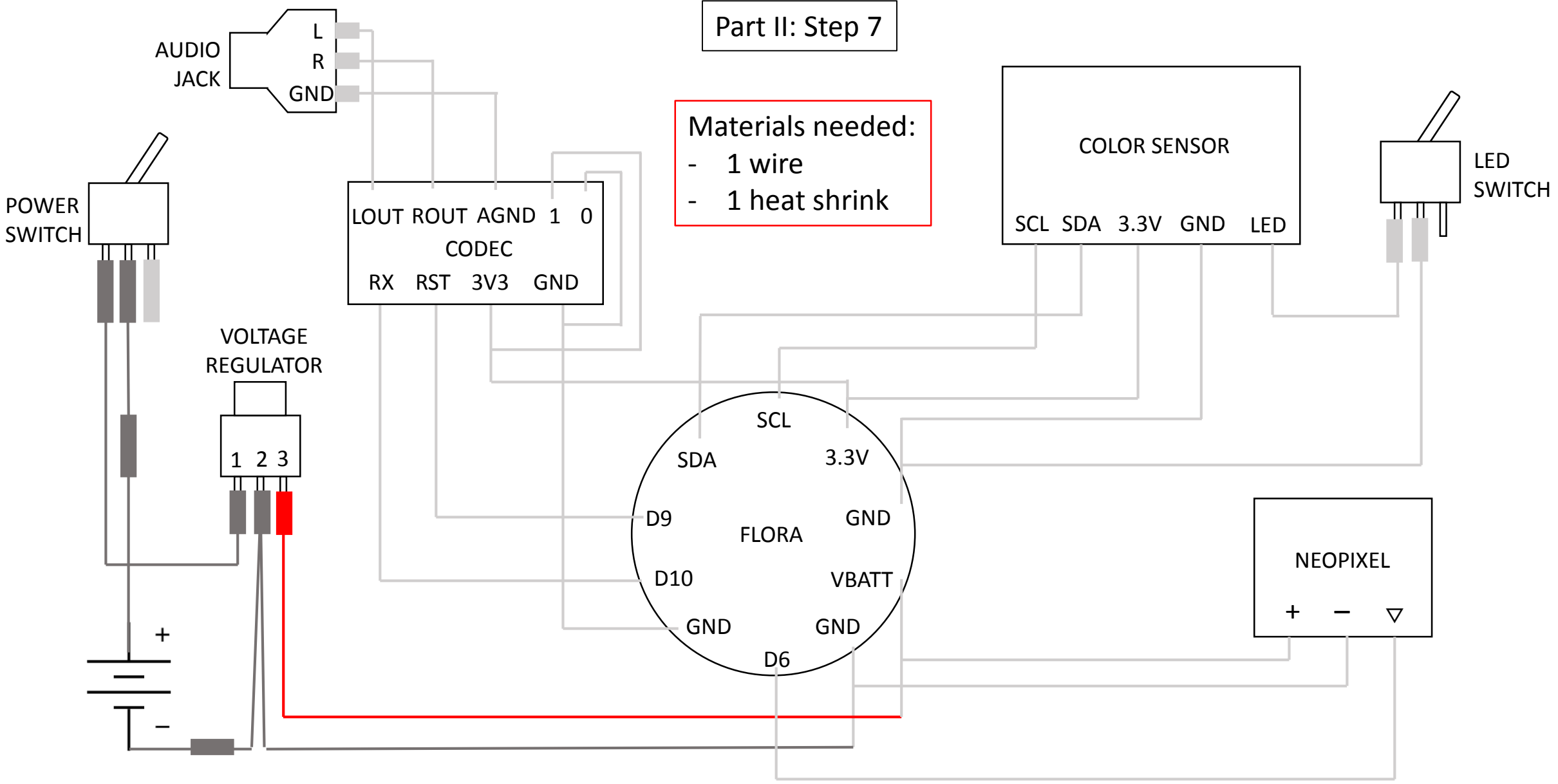
Part II: Step 6

- Materials needed:
- 1 wire
 - 1 heat shrink



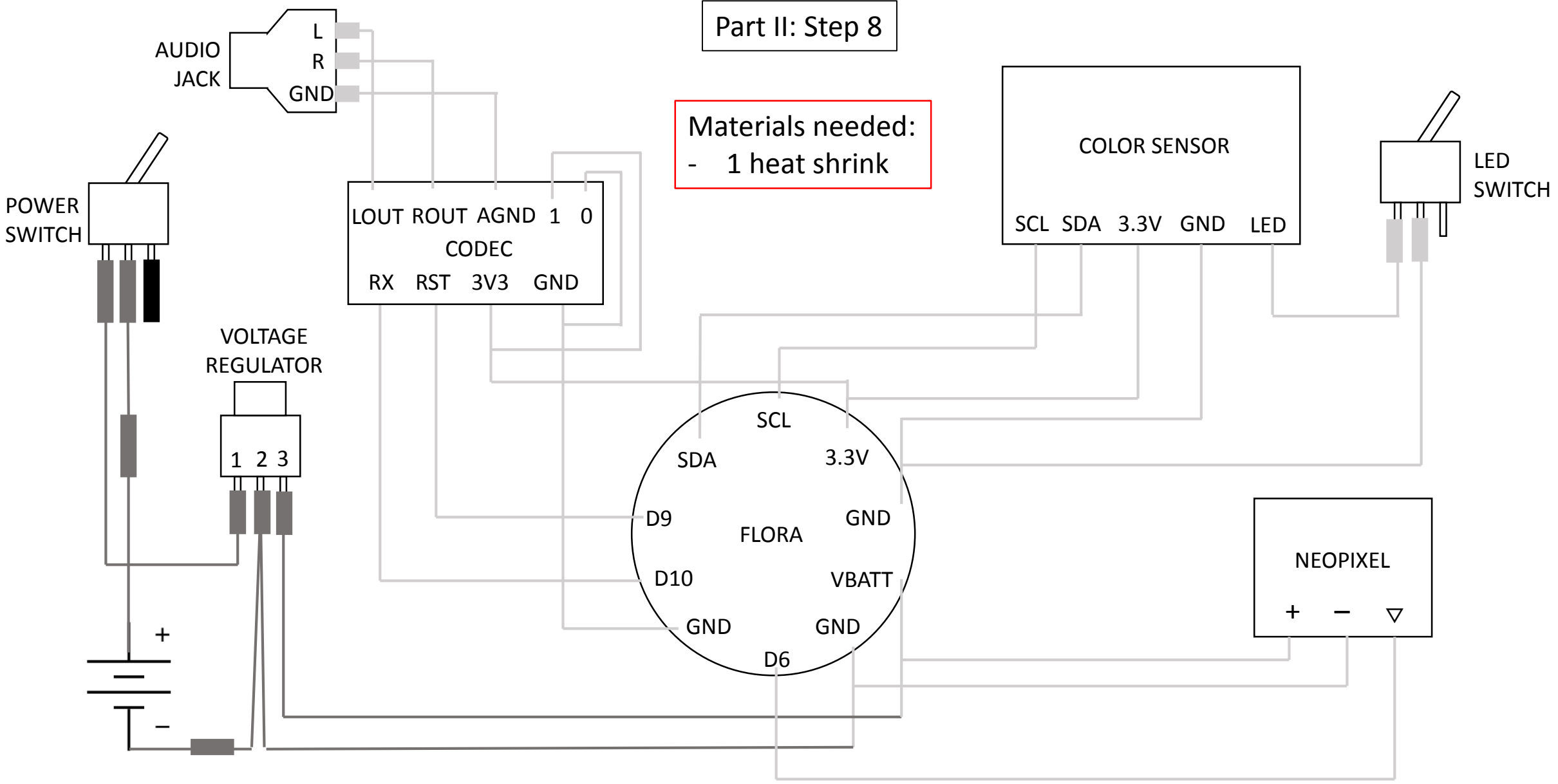
Part II: Step 7

- Materials needed:
- 1 wire
 - 1 heat shrink

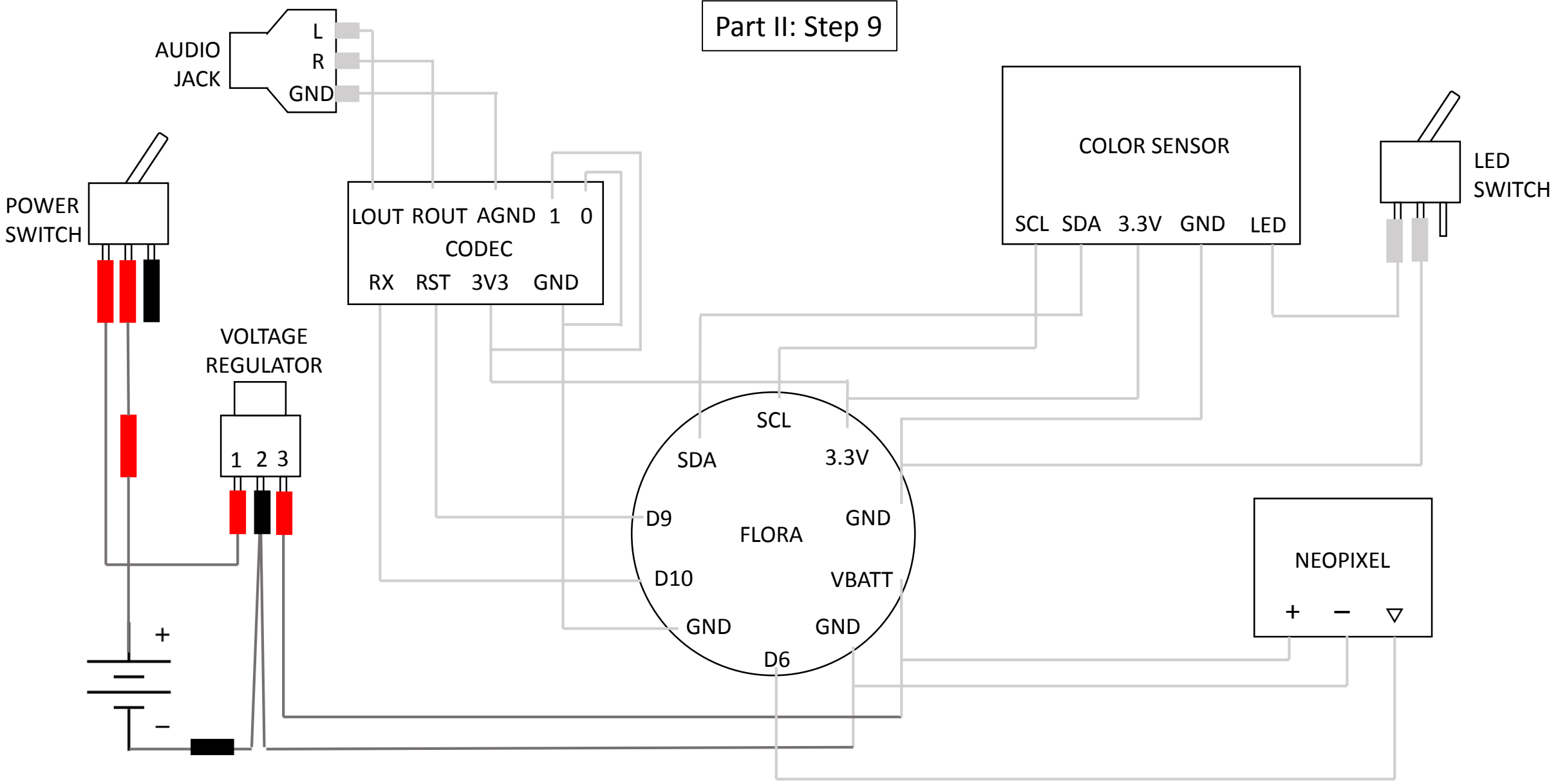


Part II: Step 8

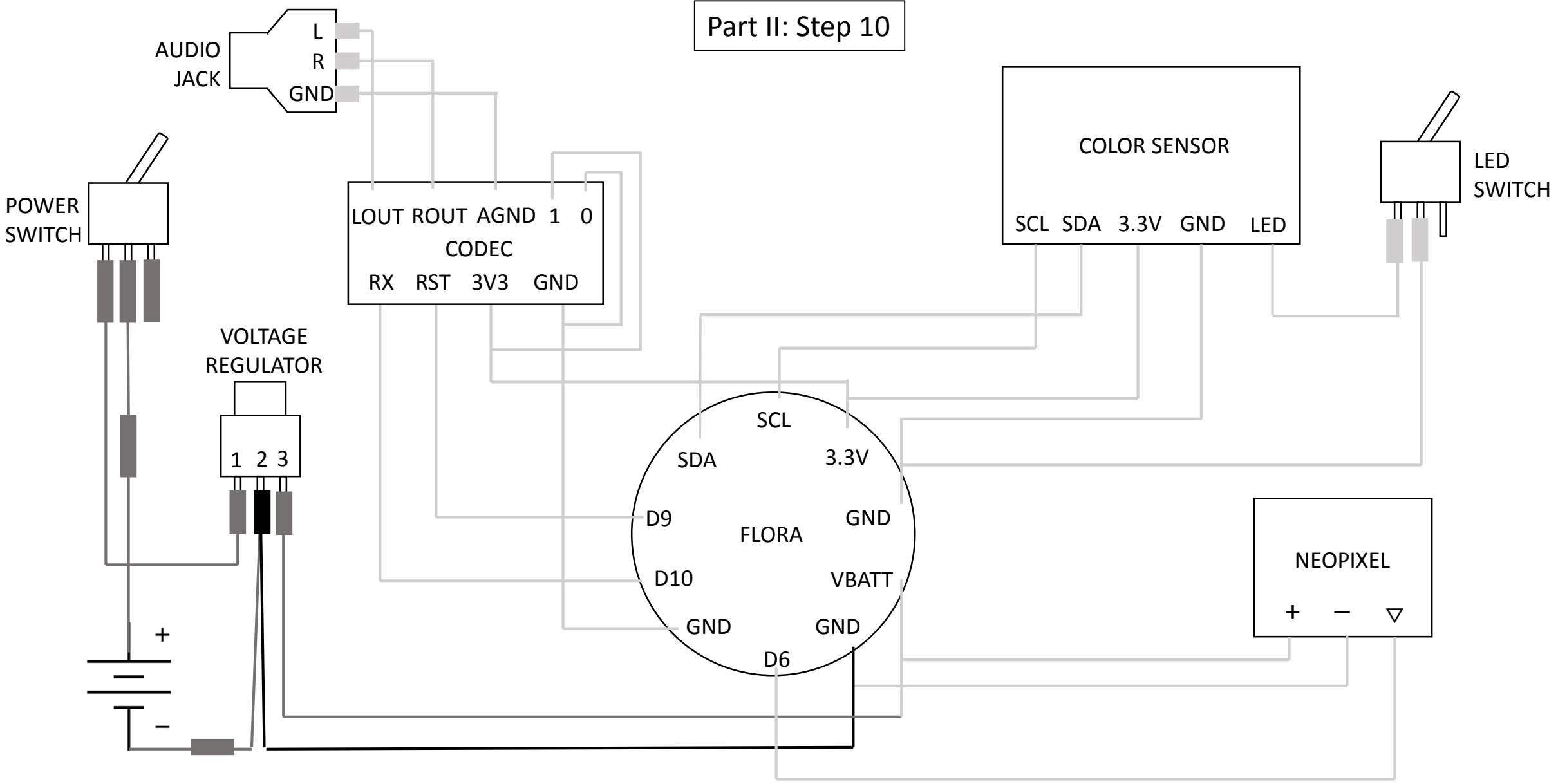
Materials needed:
- 1 heat shrink



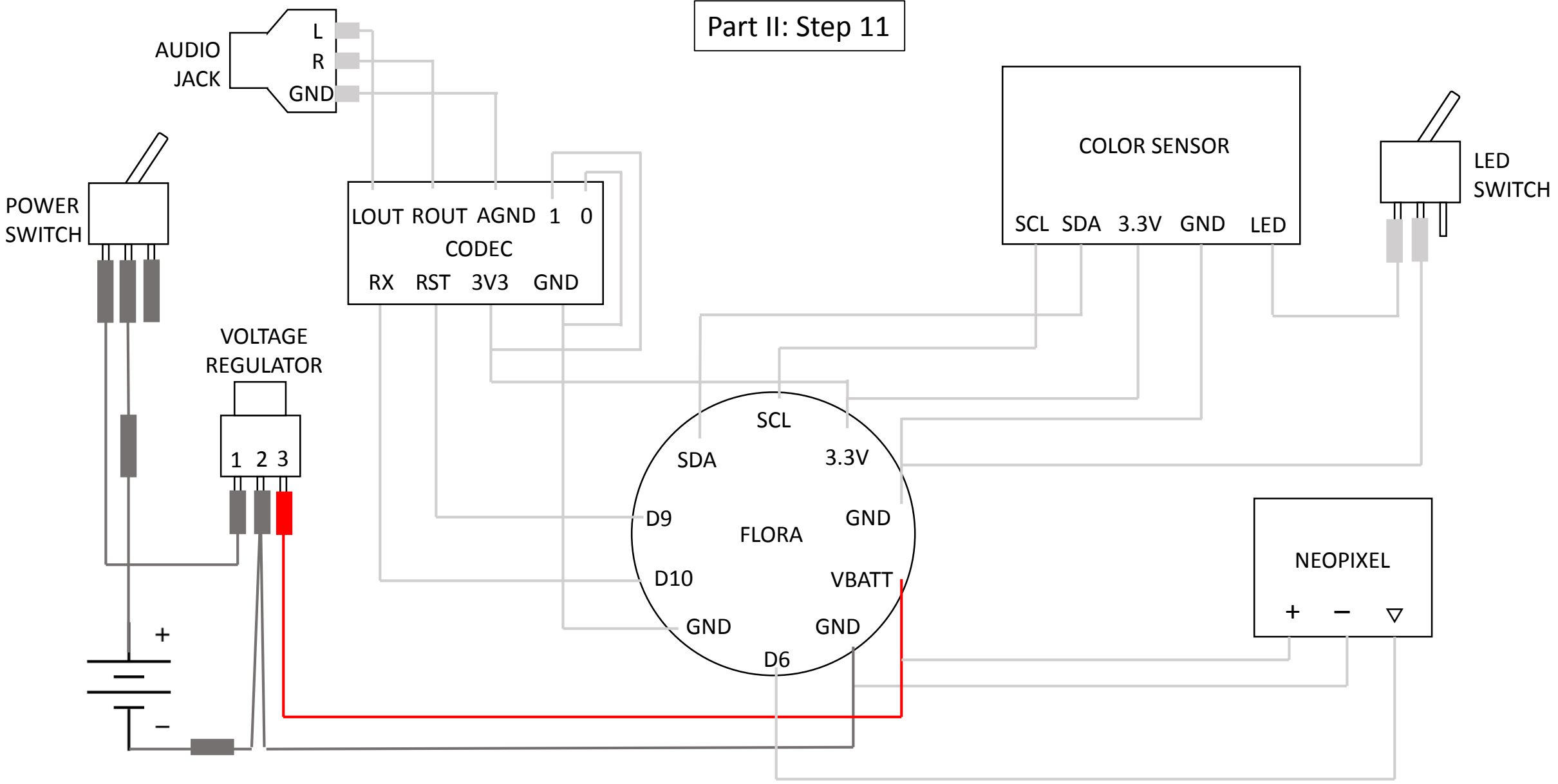
Part II: Step 9



Part II: Step 10

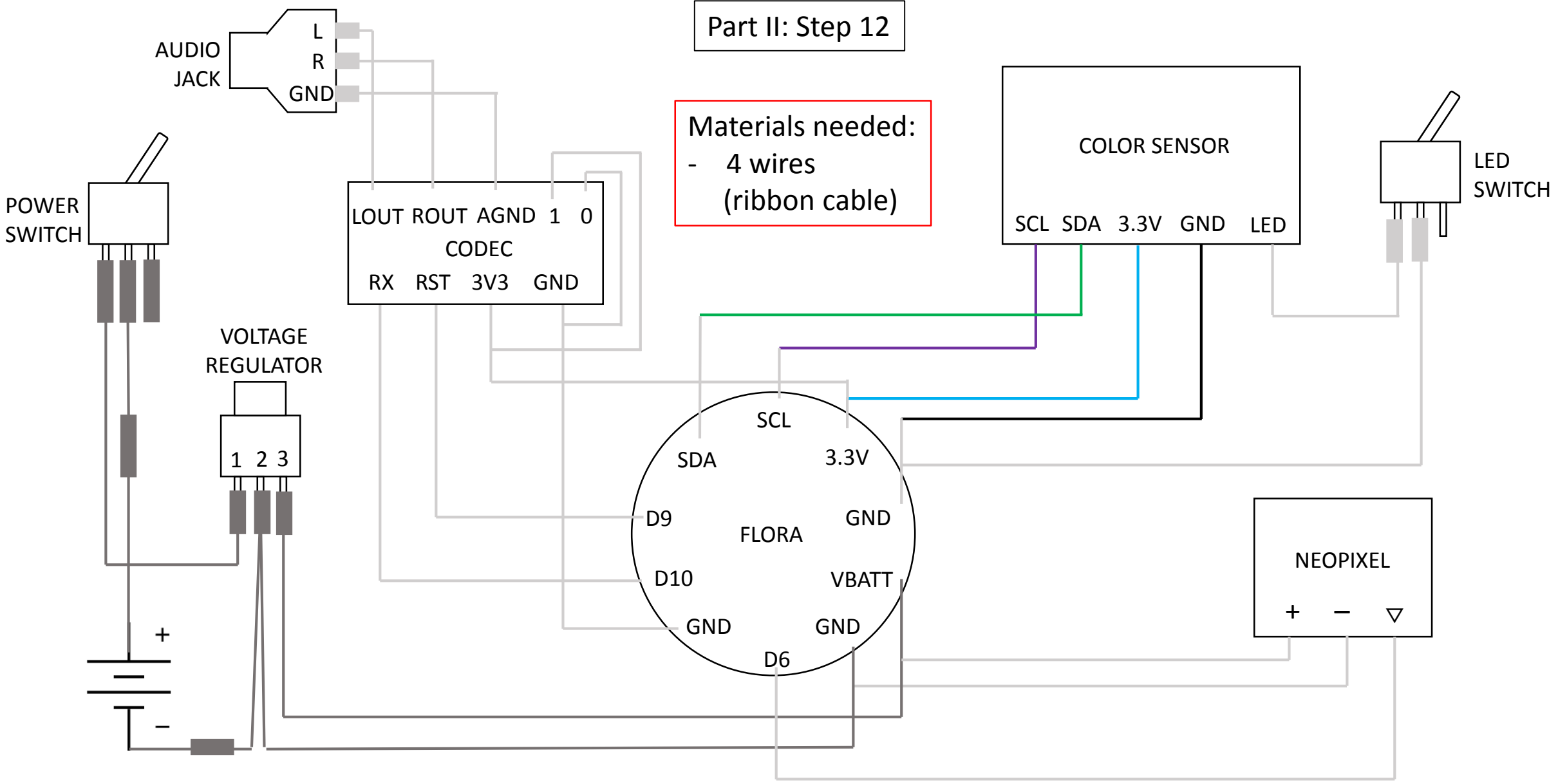


Part II: Step 11

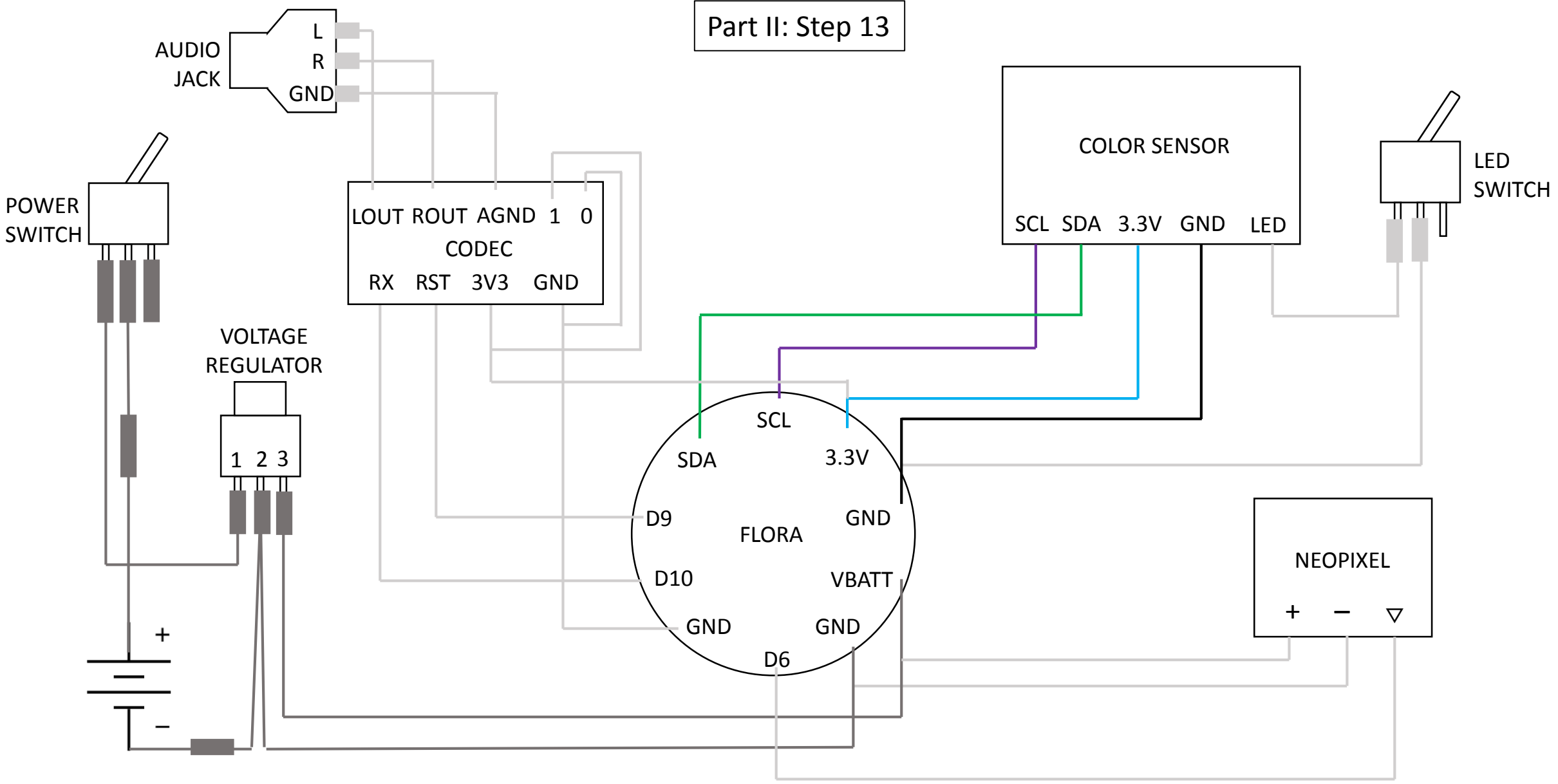


Part II: Step 12

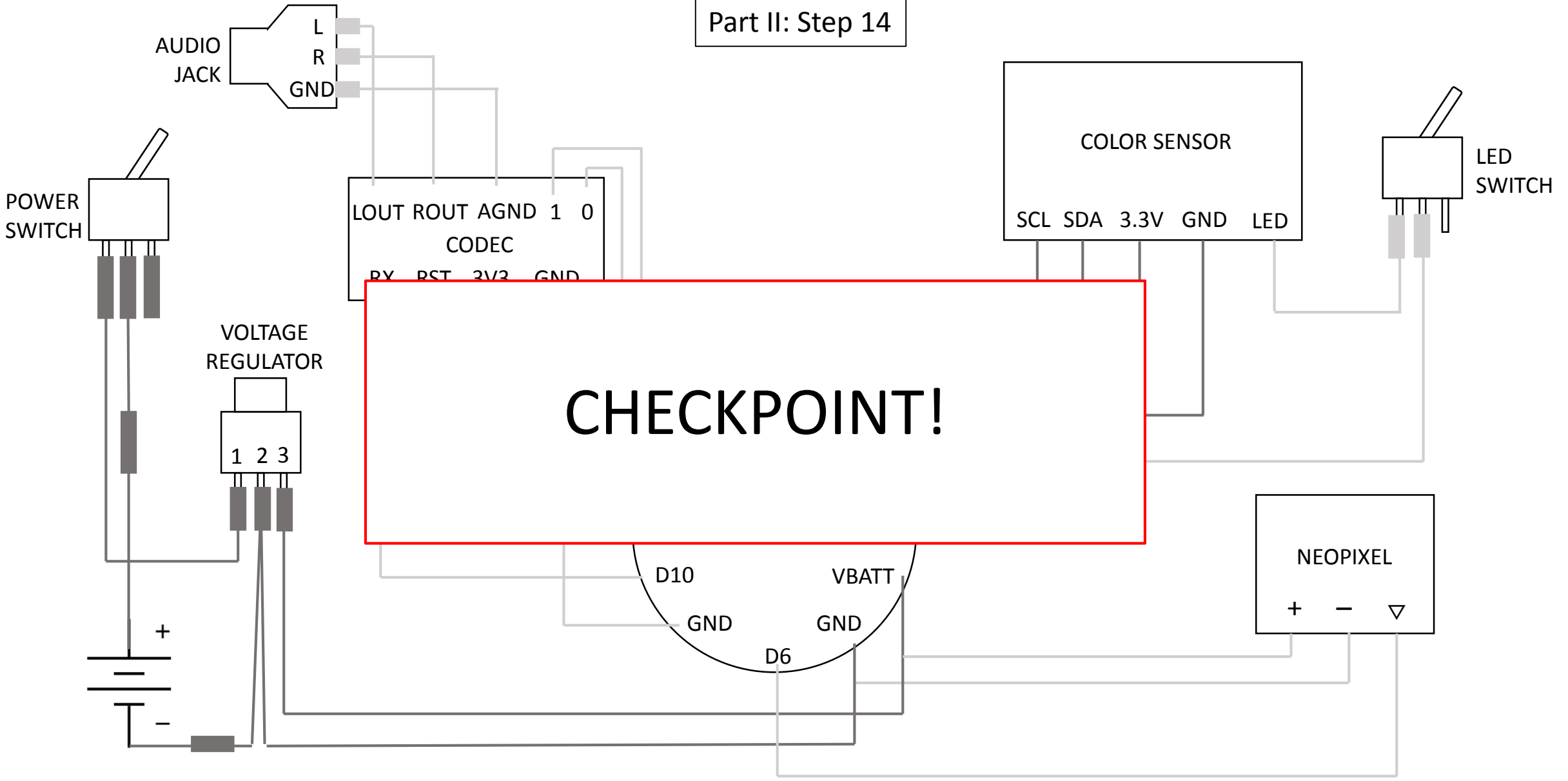
Materials needed:
- 4 wires
(ribbon cable)



Part II: Step 13

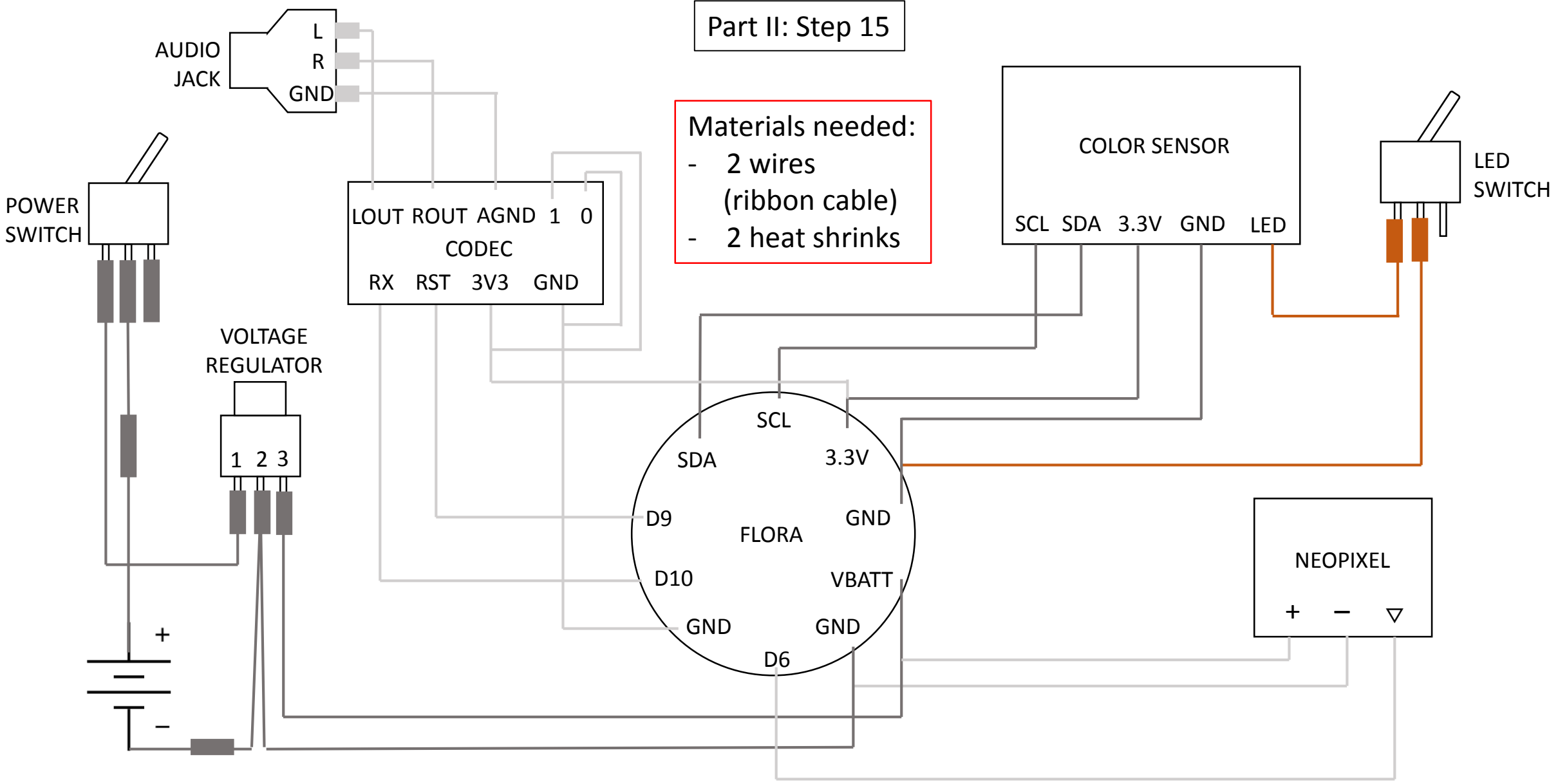


Part II: Step 14

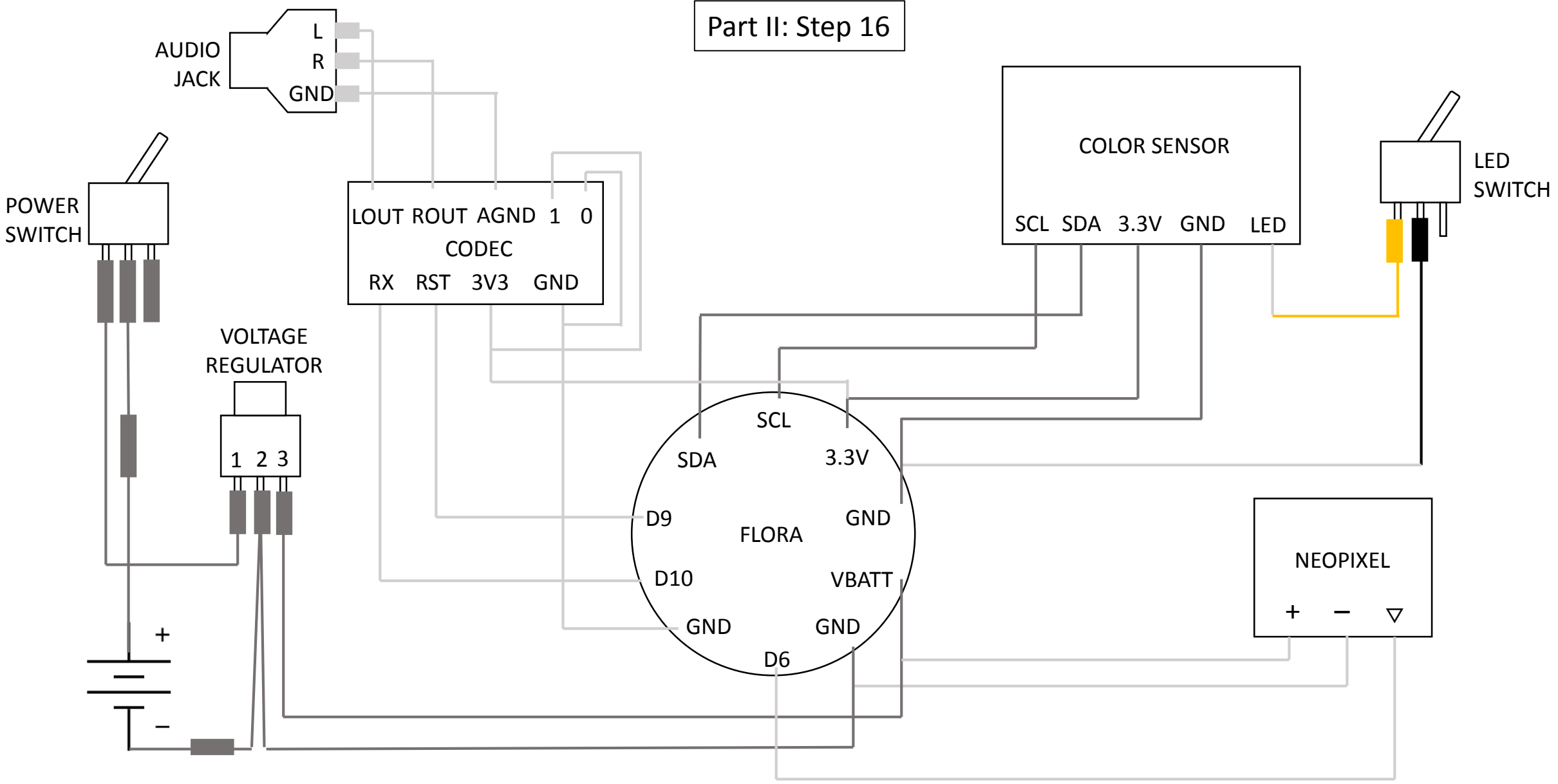


Part II: Step 15

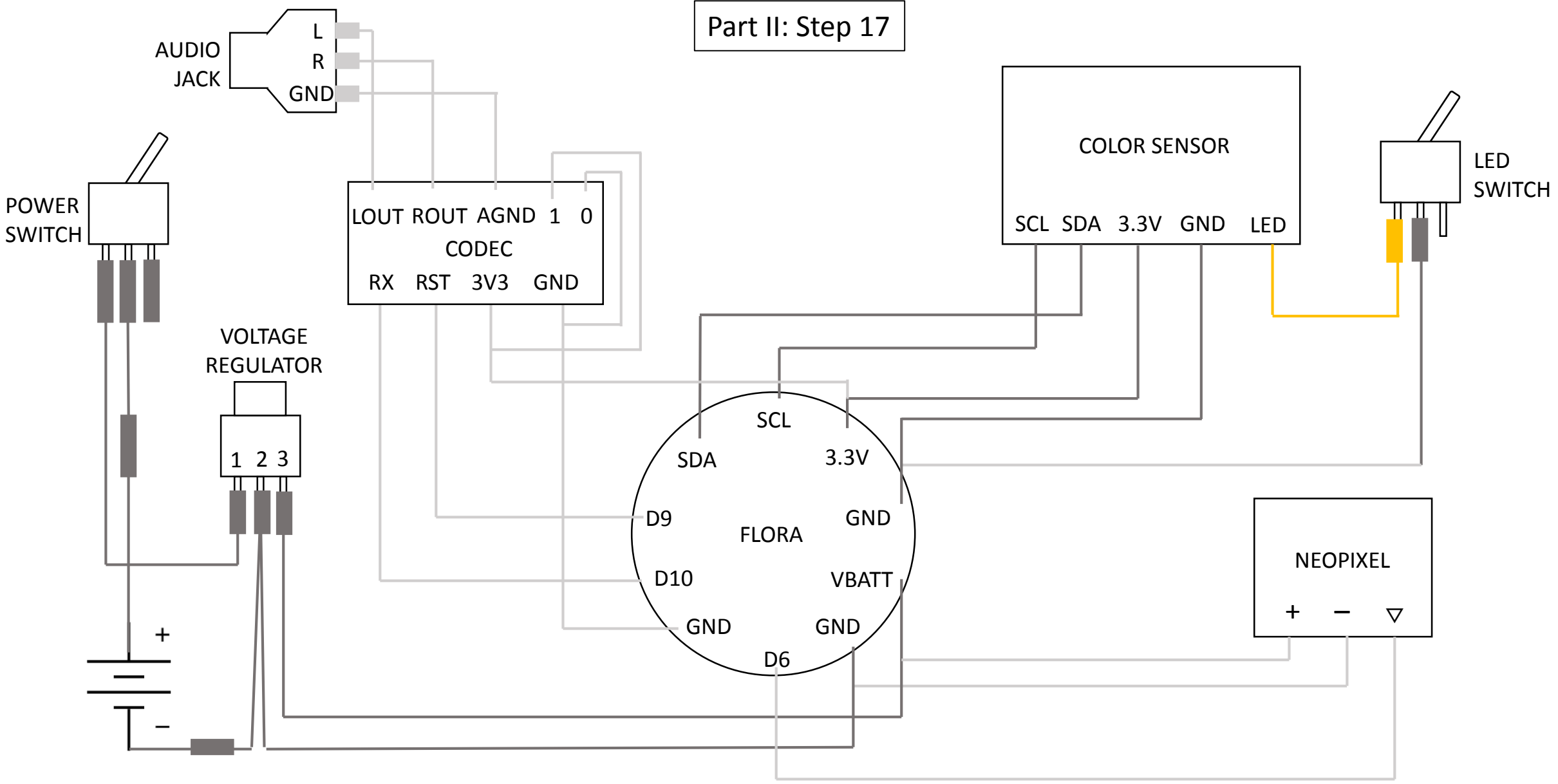
- 2 wires (ribbon cable)
- 2 heat shrinks



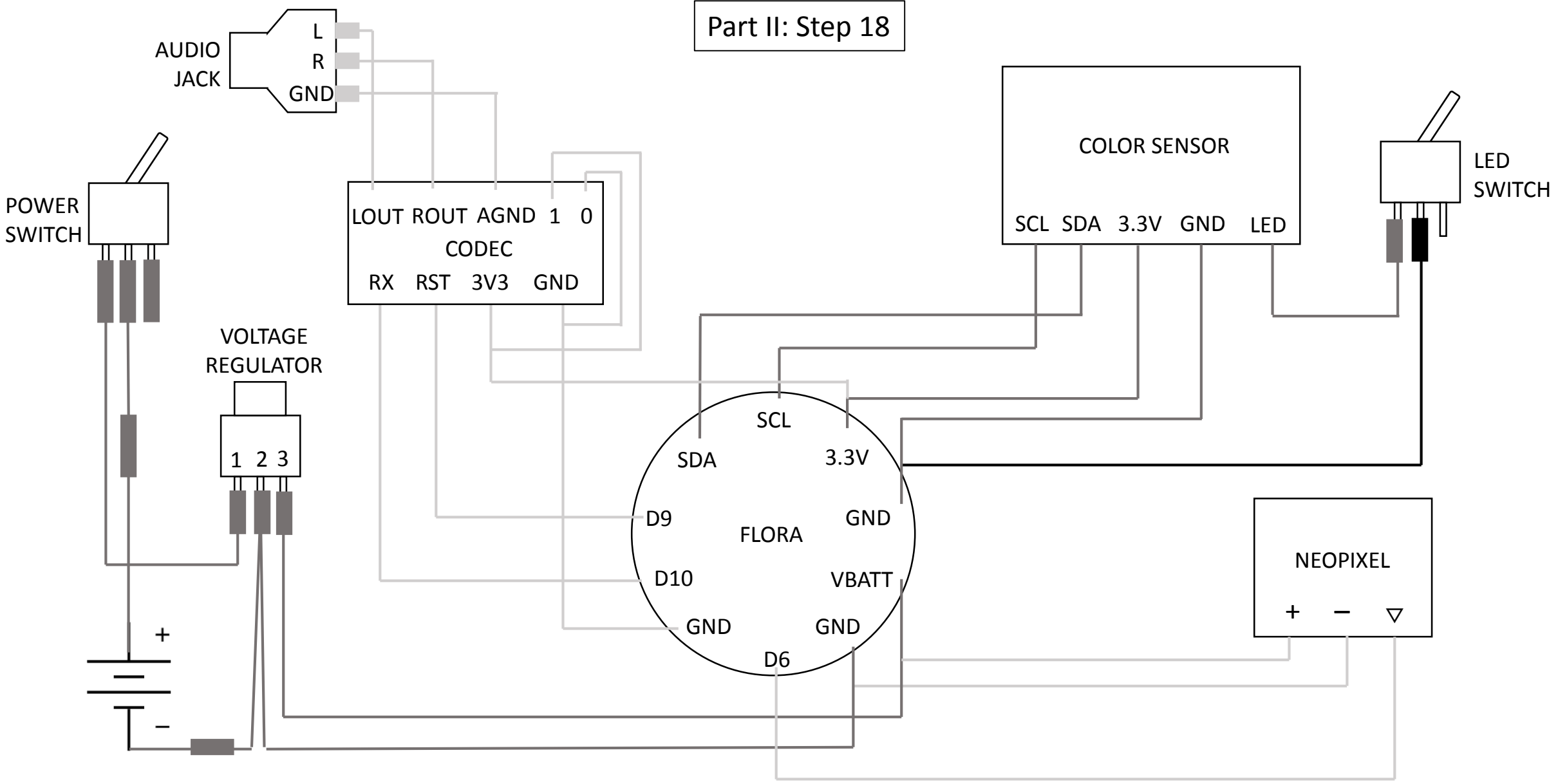
Part II: Step 16



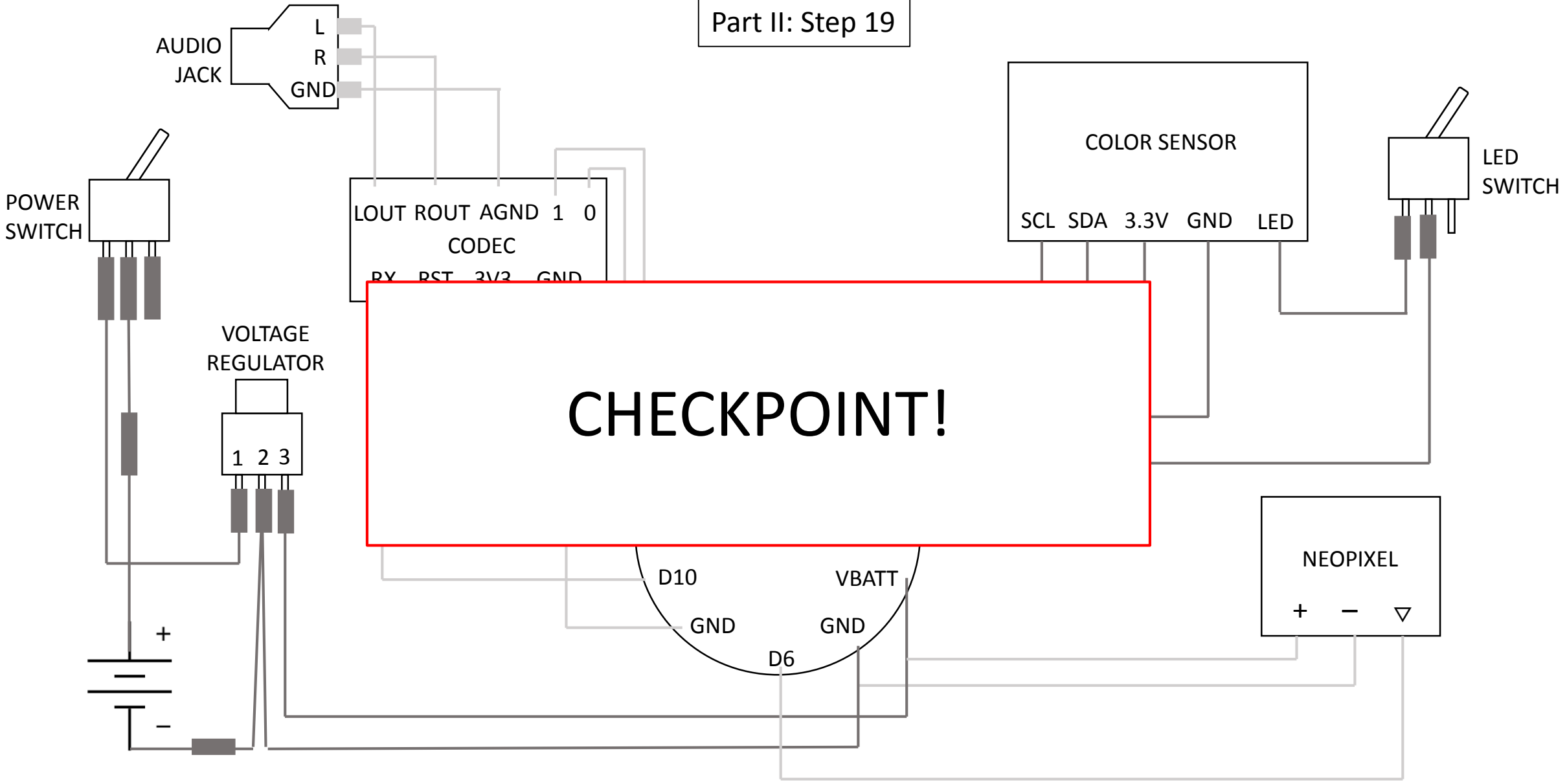
Part II: Step 17



Part II: Step 18

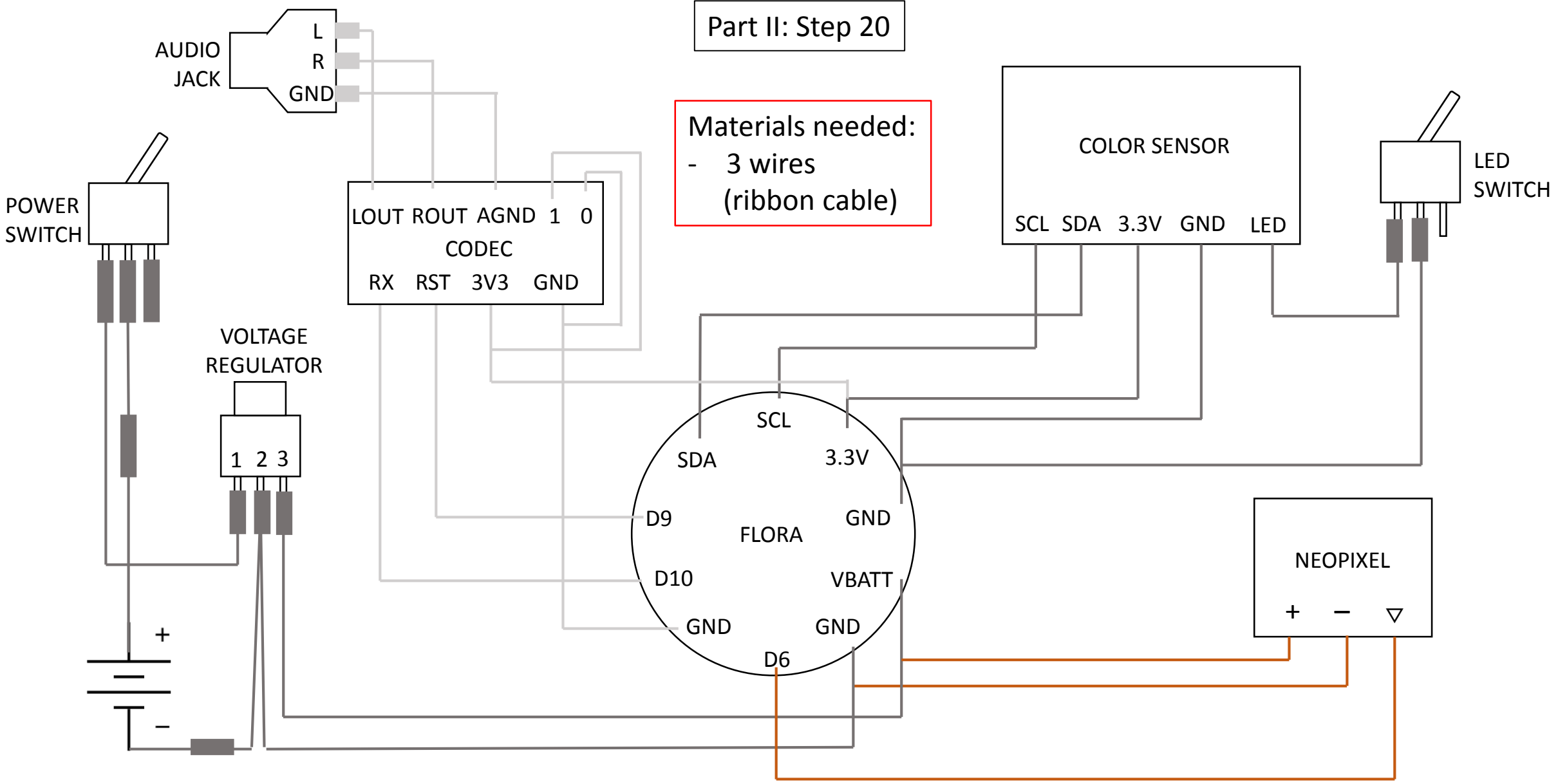


Part II: Step 19

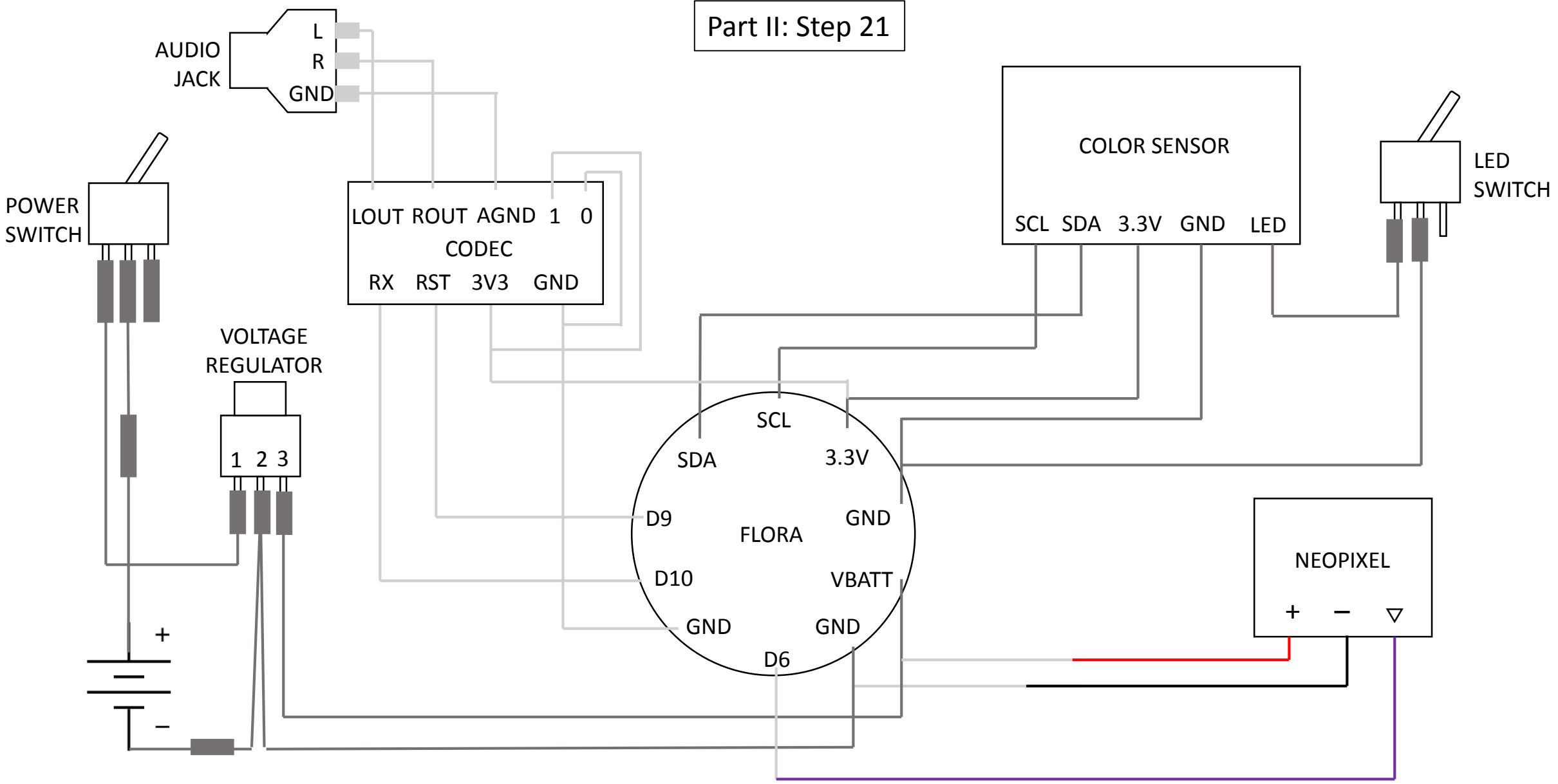


Part II: Step 20

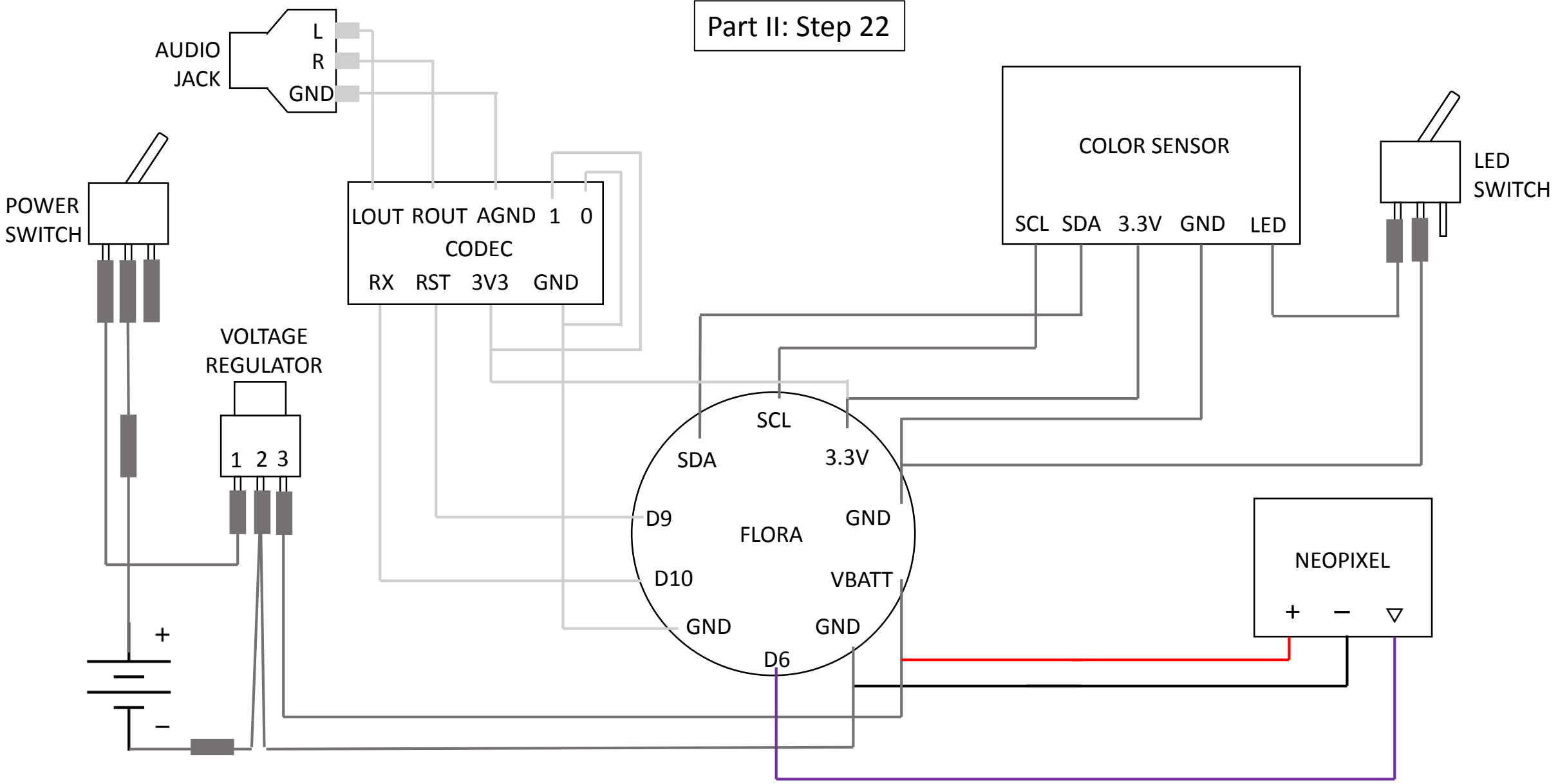
Materials needed:
- 3 wires
(ribbon cable)

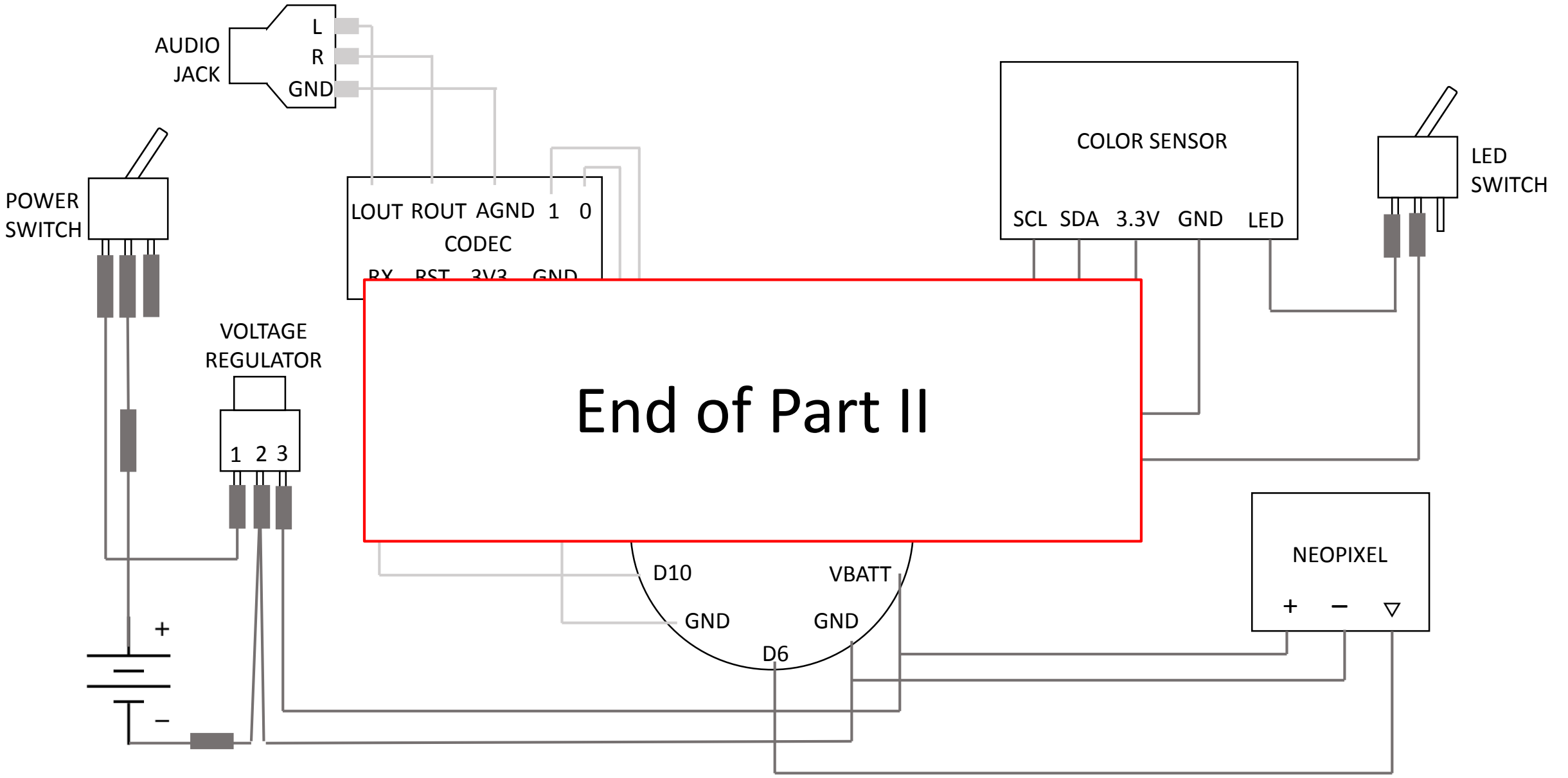


Part II: Step 21



Part II: Step 22





Part IV: Final wiring

Tools and Materials

- Materials

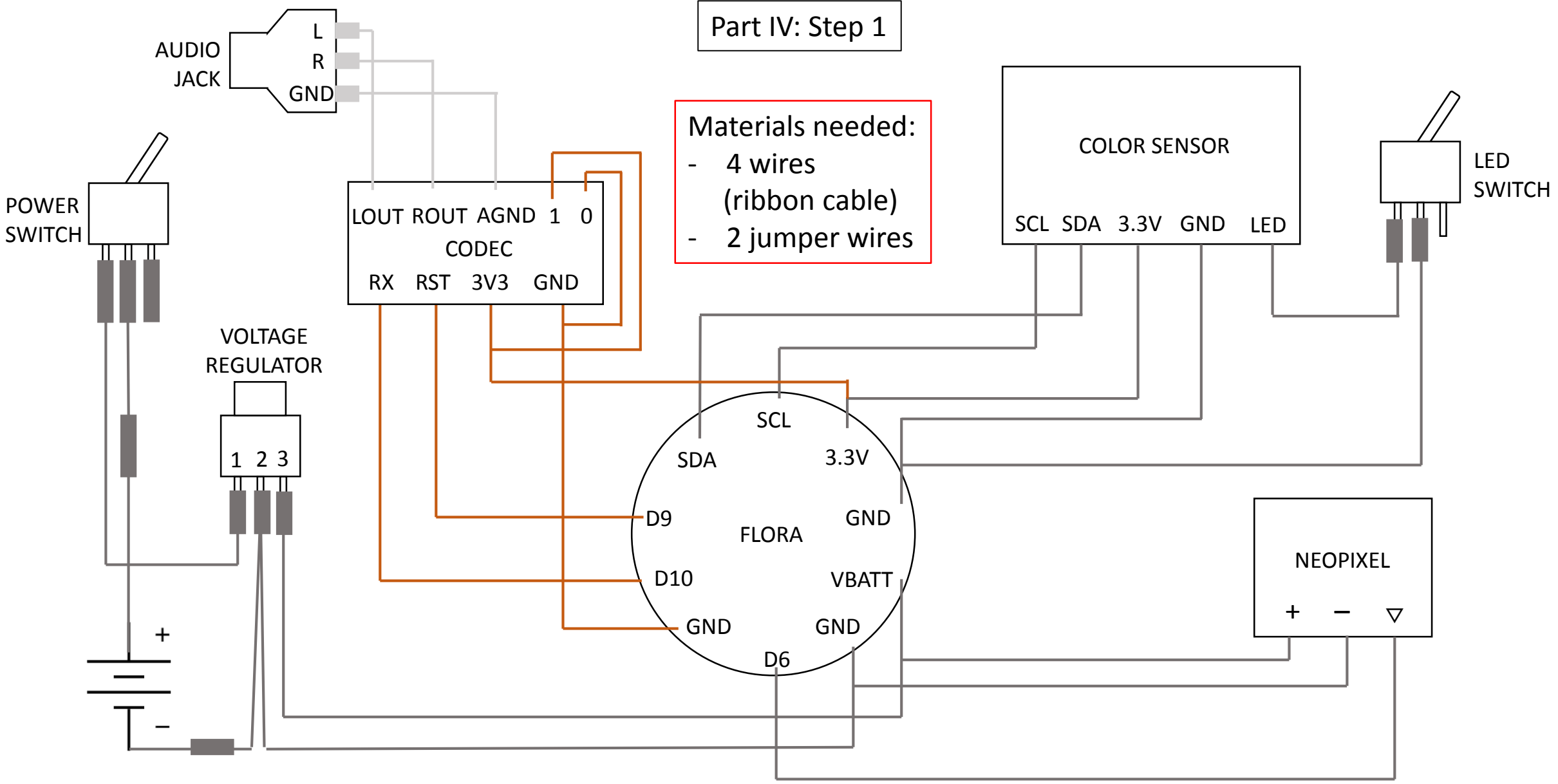
- XXX chassis with components
- Codec board
- Insulated wire
 - 4-wire ribbon cable
 - 3-wire ribbon cable
 - 2 jumper wires
- 3 lengths of heat shrink

- Tools

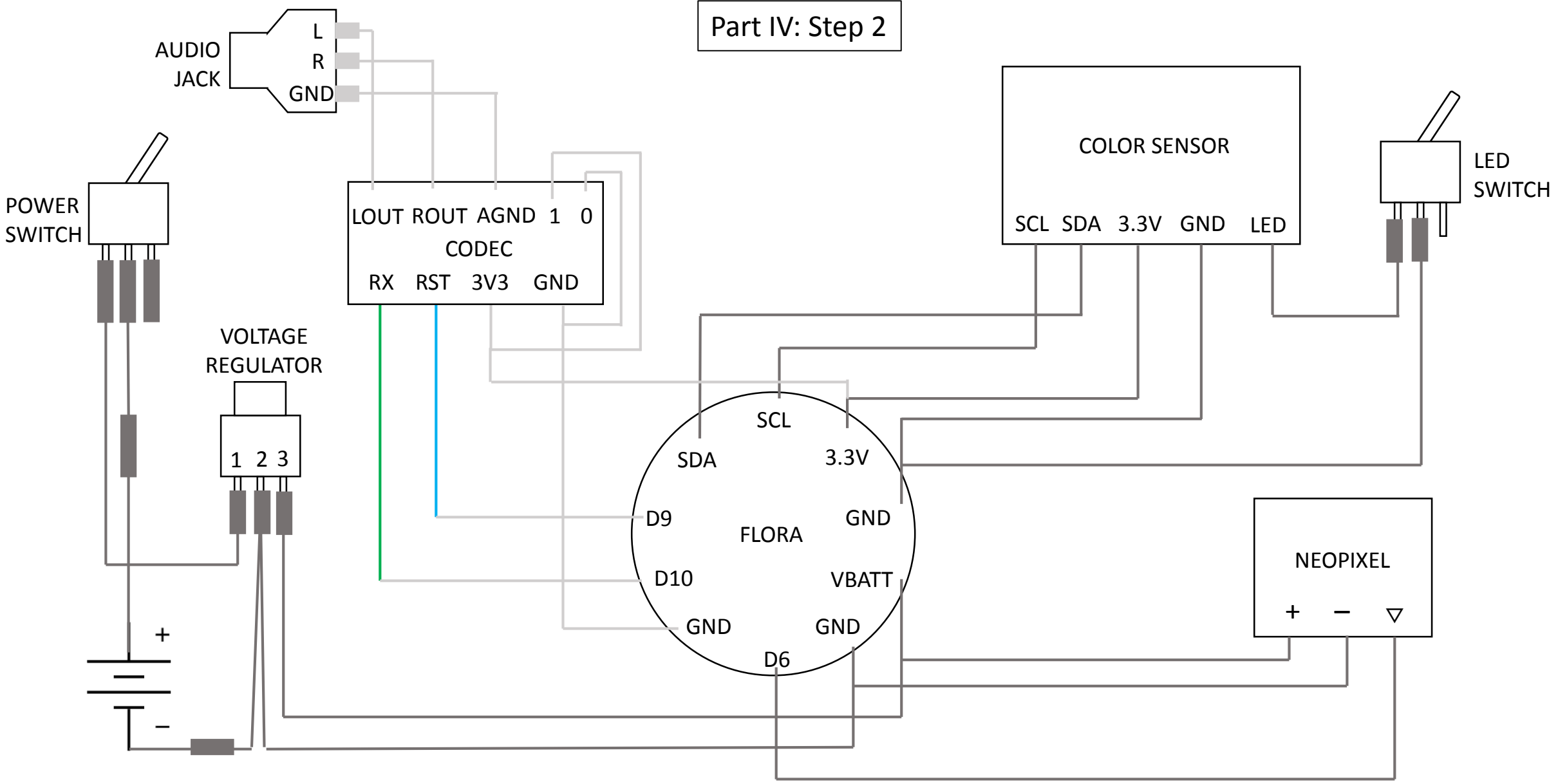
- Wire strippers/cutters
- Soldering iron and solder
- Heat gun or blow dryer
- Flush cutters

Part IV: Step 1

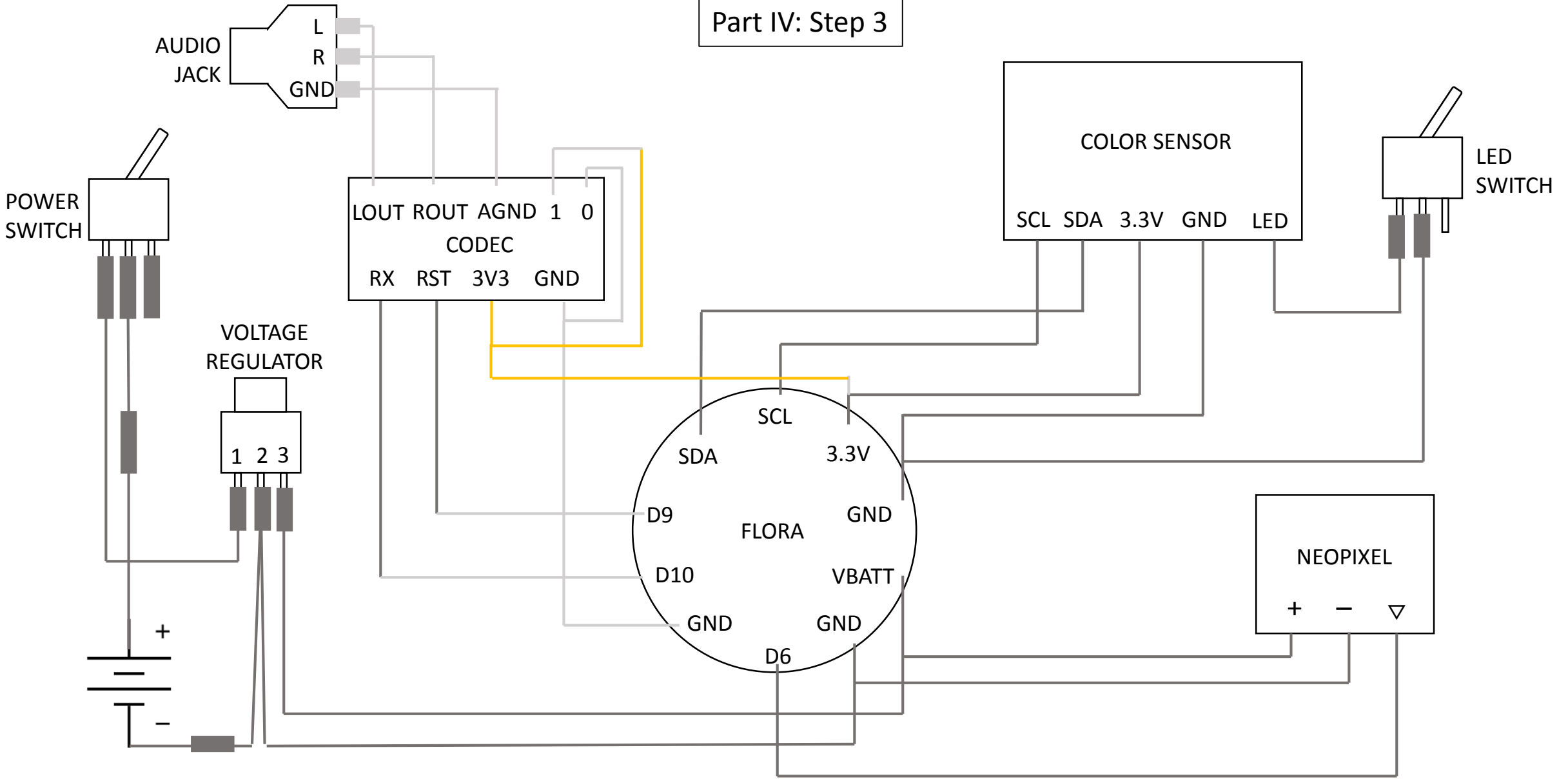
- Materials needed:
- 4 wires (ribbon cable)
 - 2 jumper wires



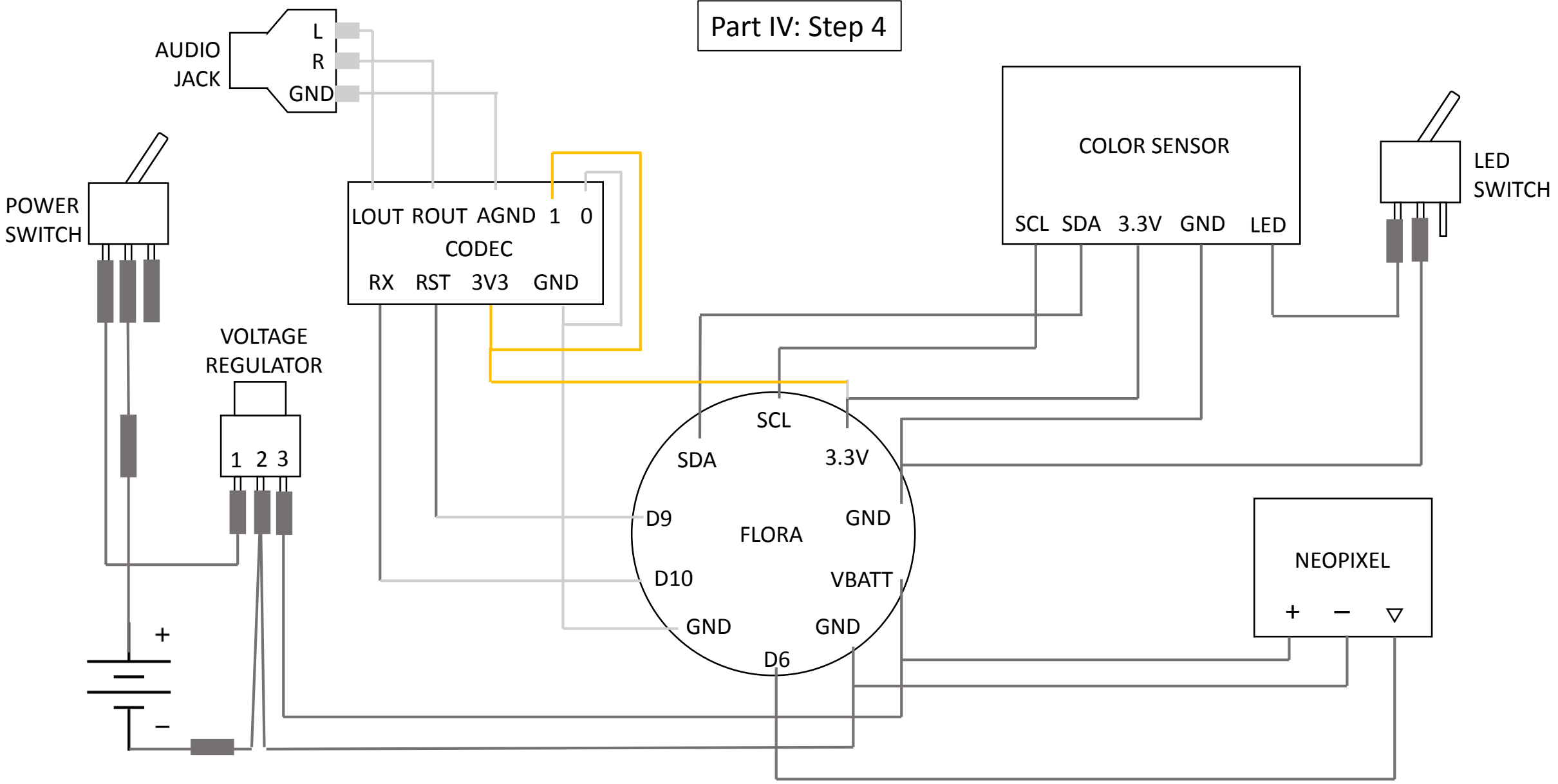
Part IV: Step 2



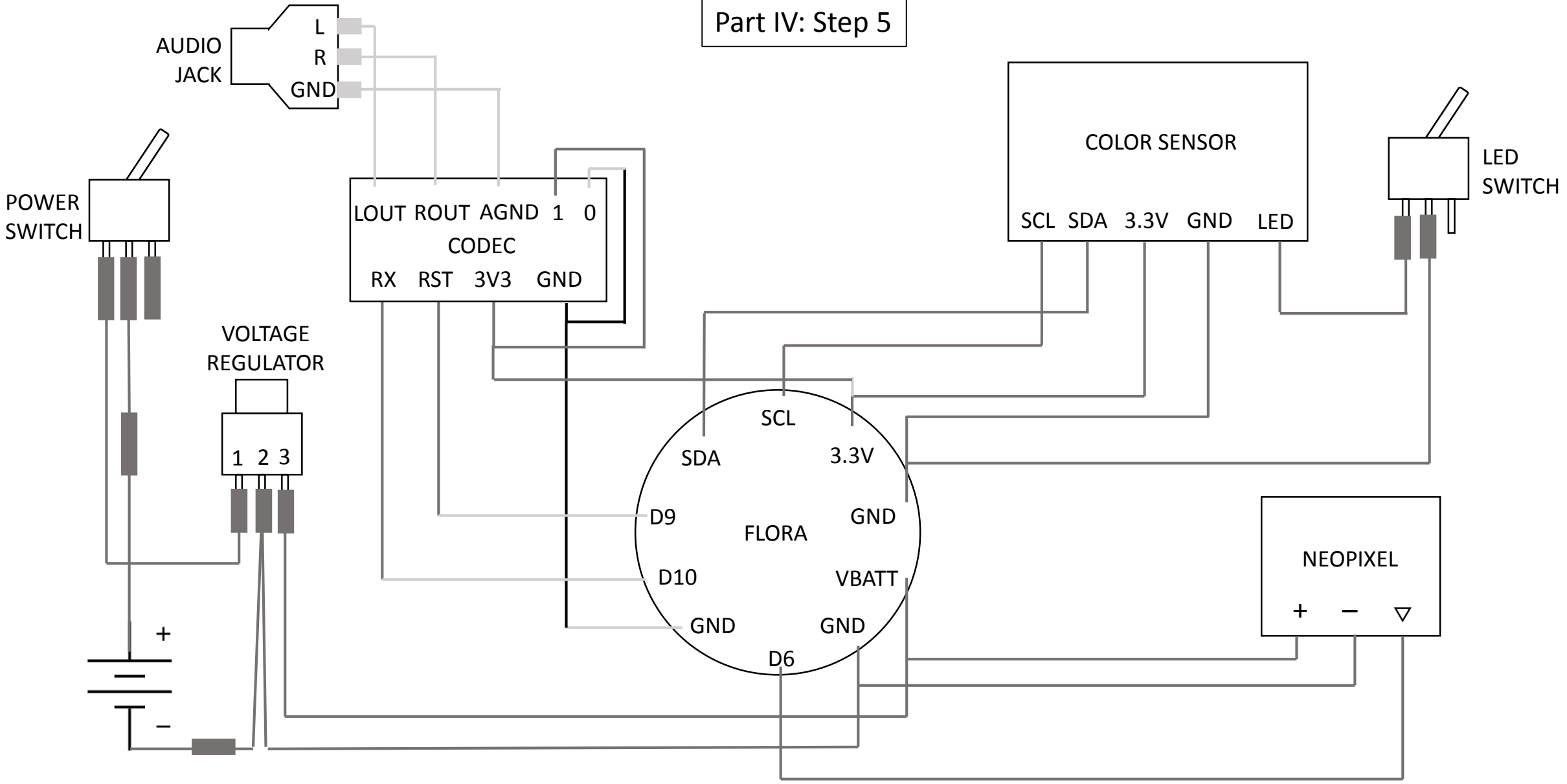
Part IV: Step 3



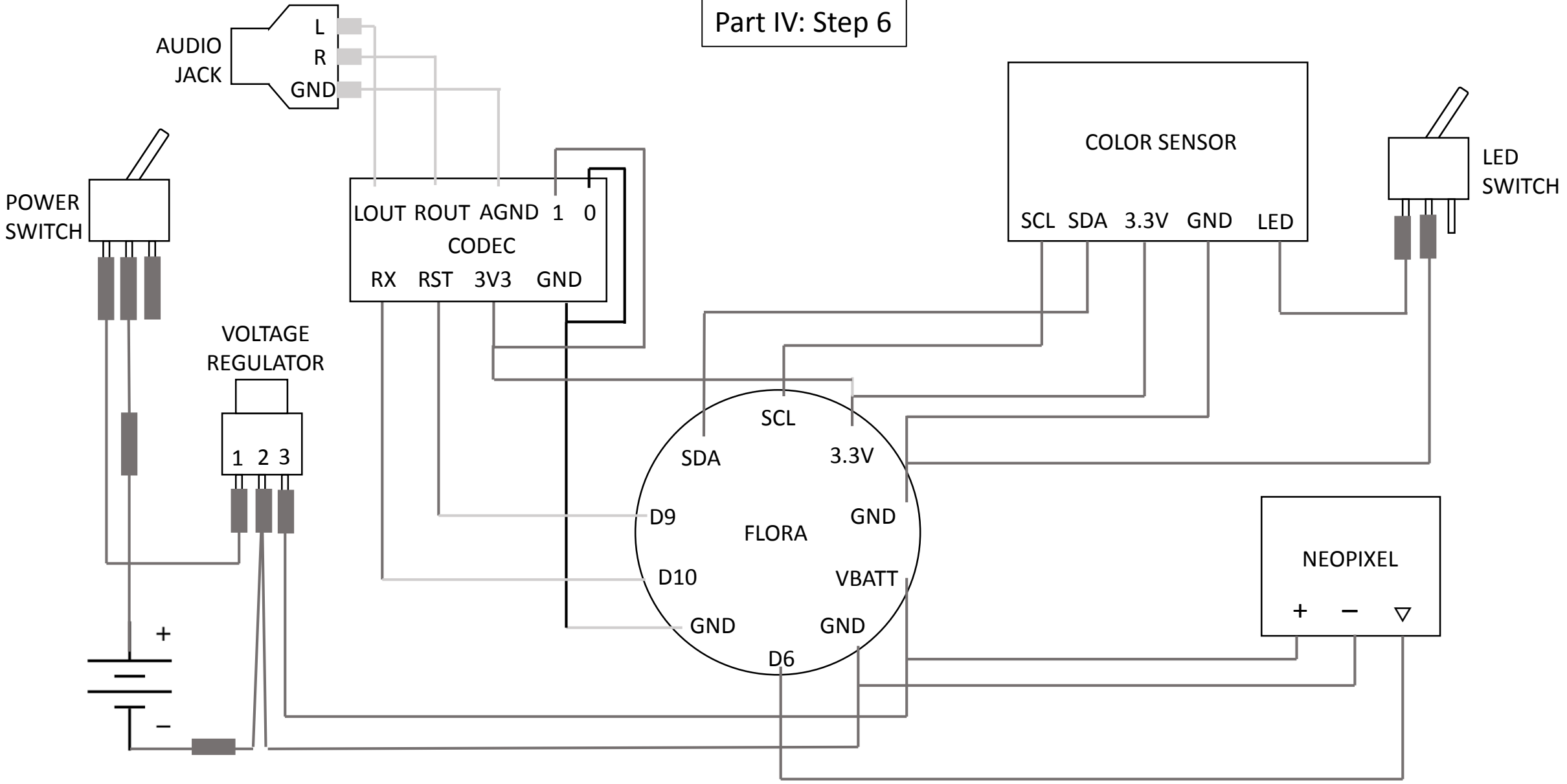
Part IV: Step 4



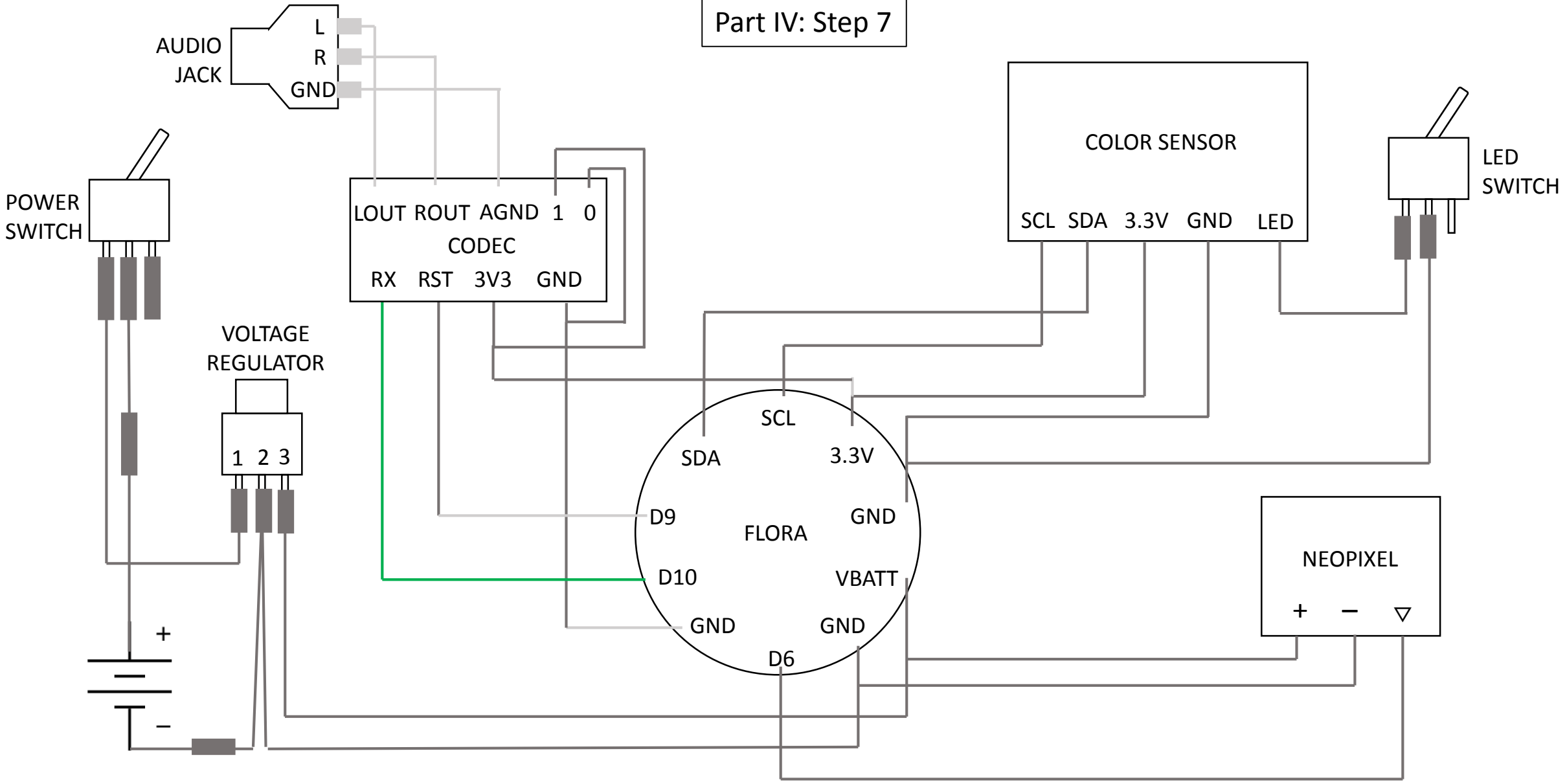
Part IV: Step 5



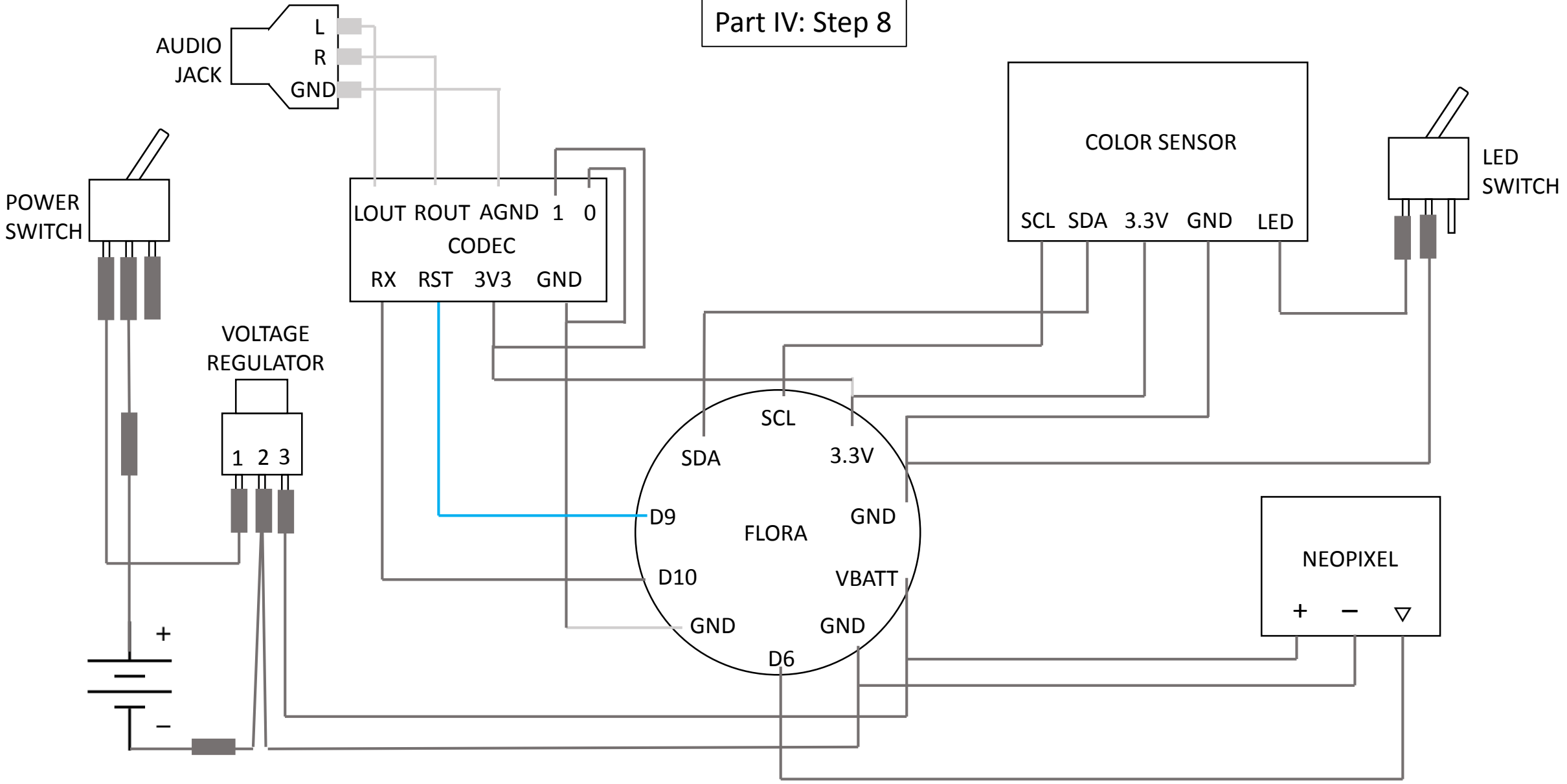
Part IV: Step 6



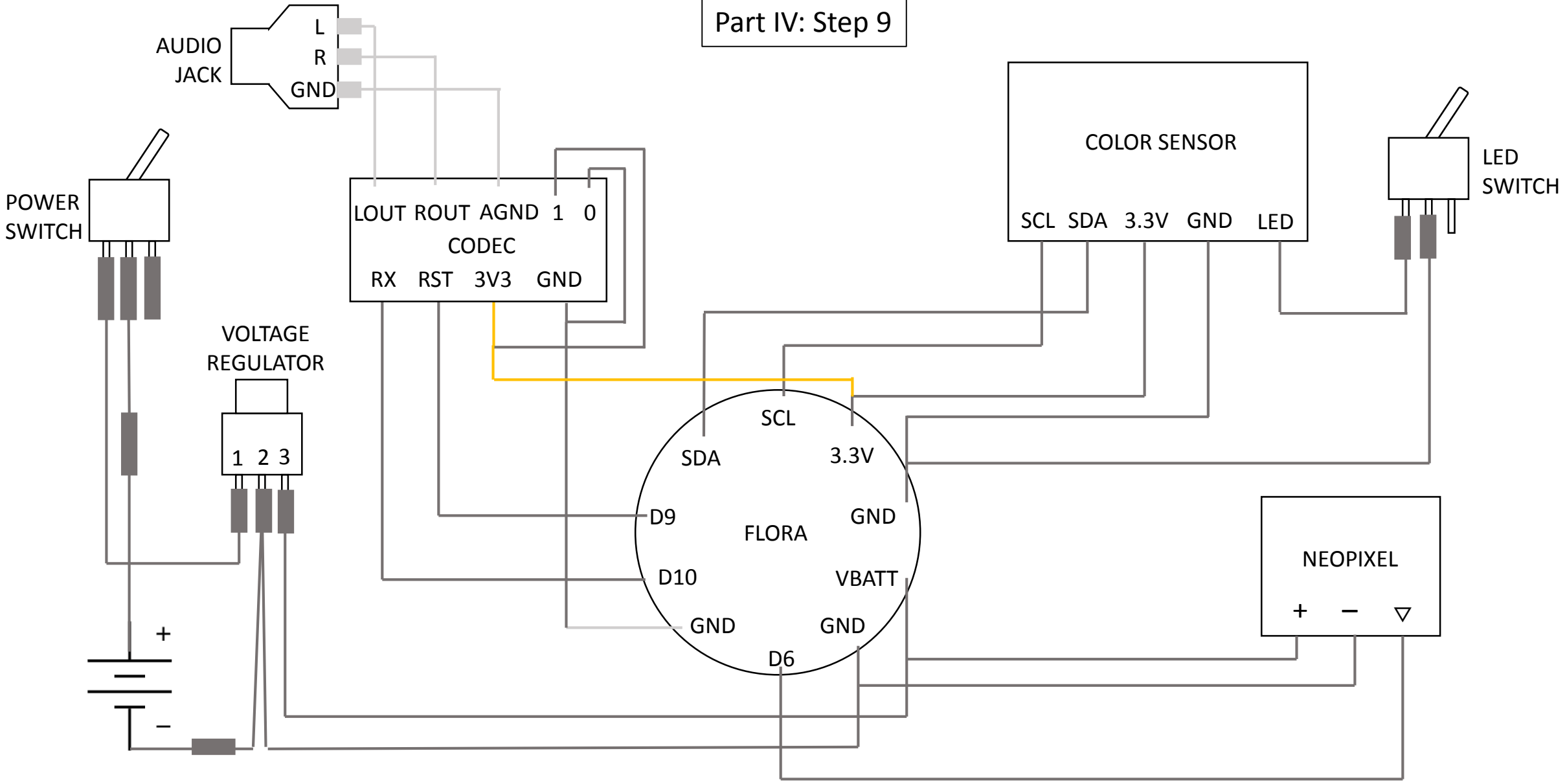
Part IV: Step 7



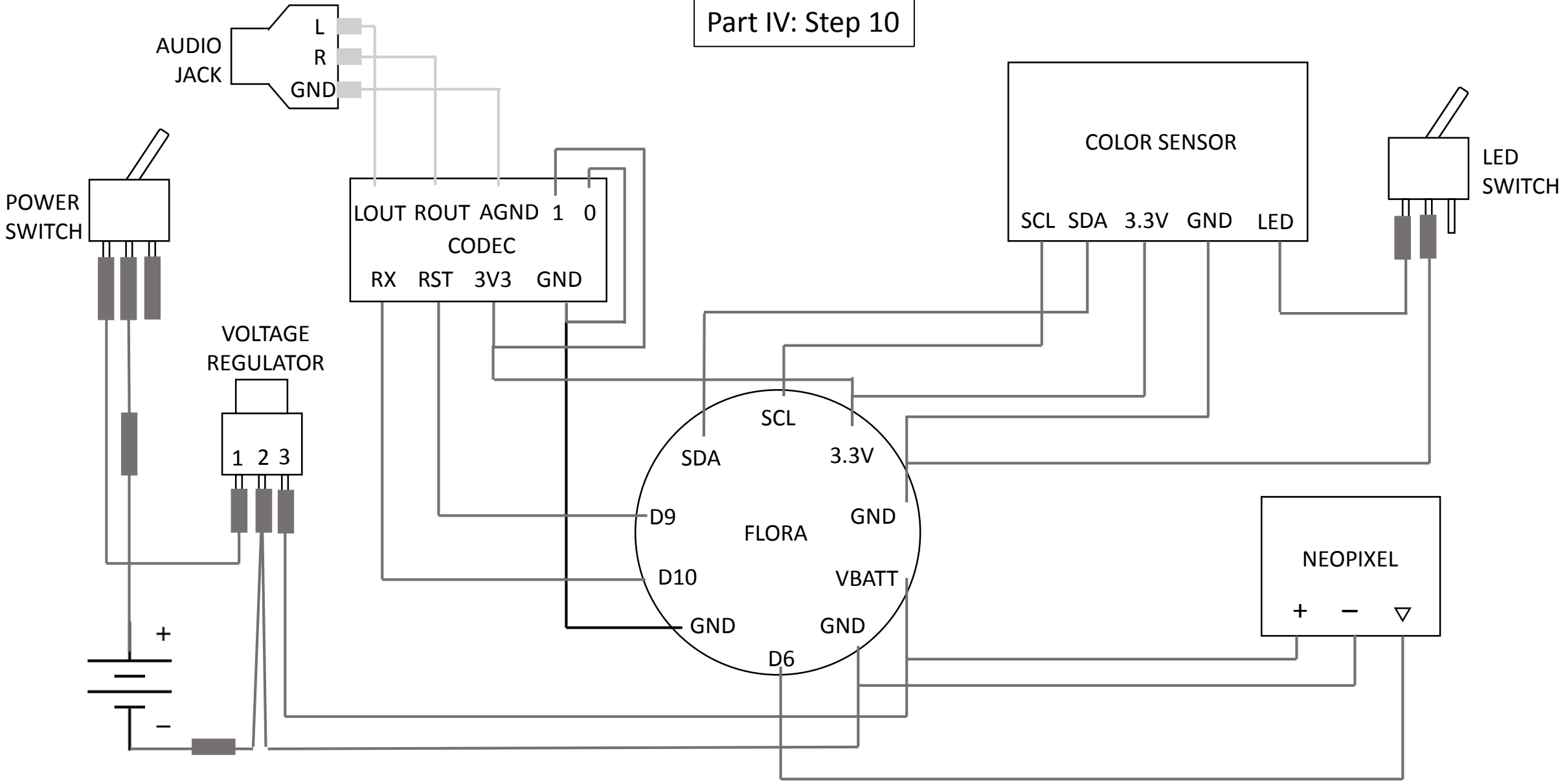
Part IV: Step 8



Part IV: Step 9

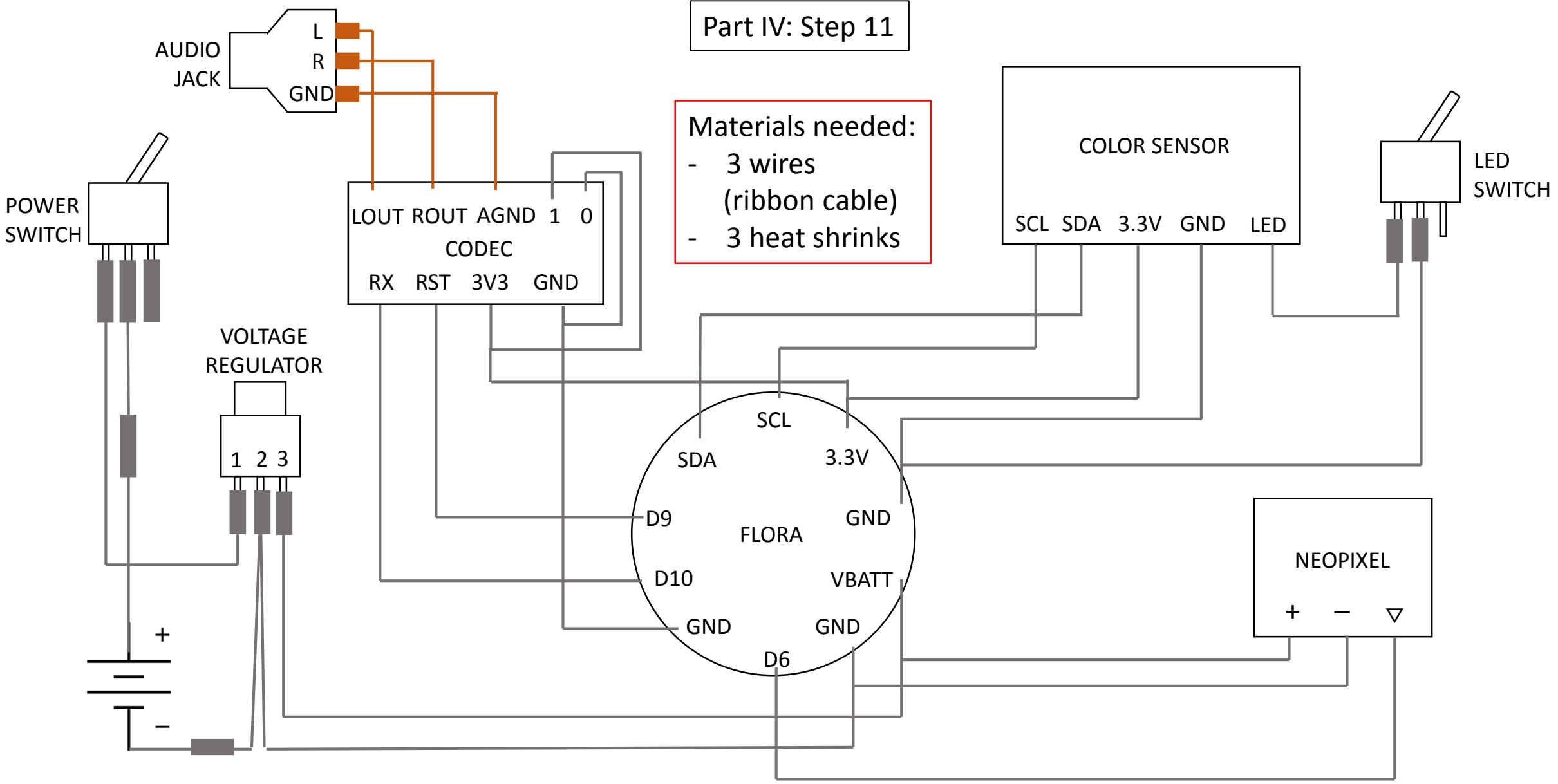


Part IV: Step 10

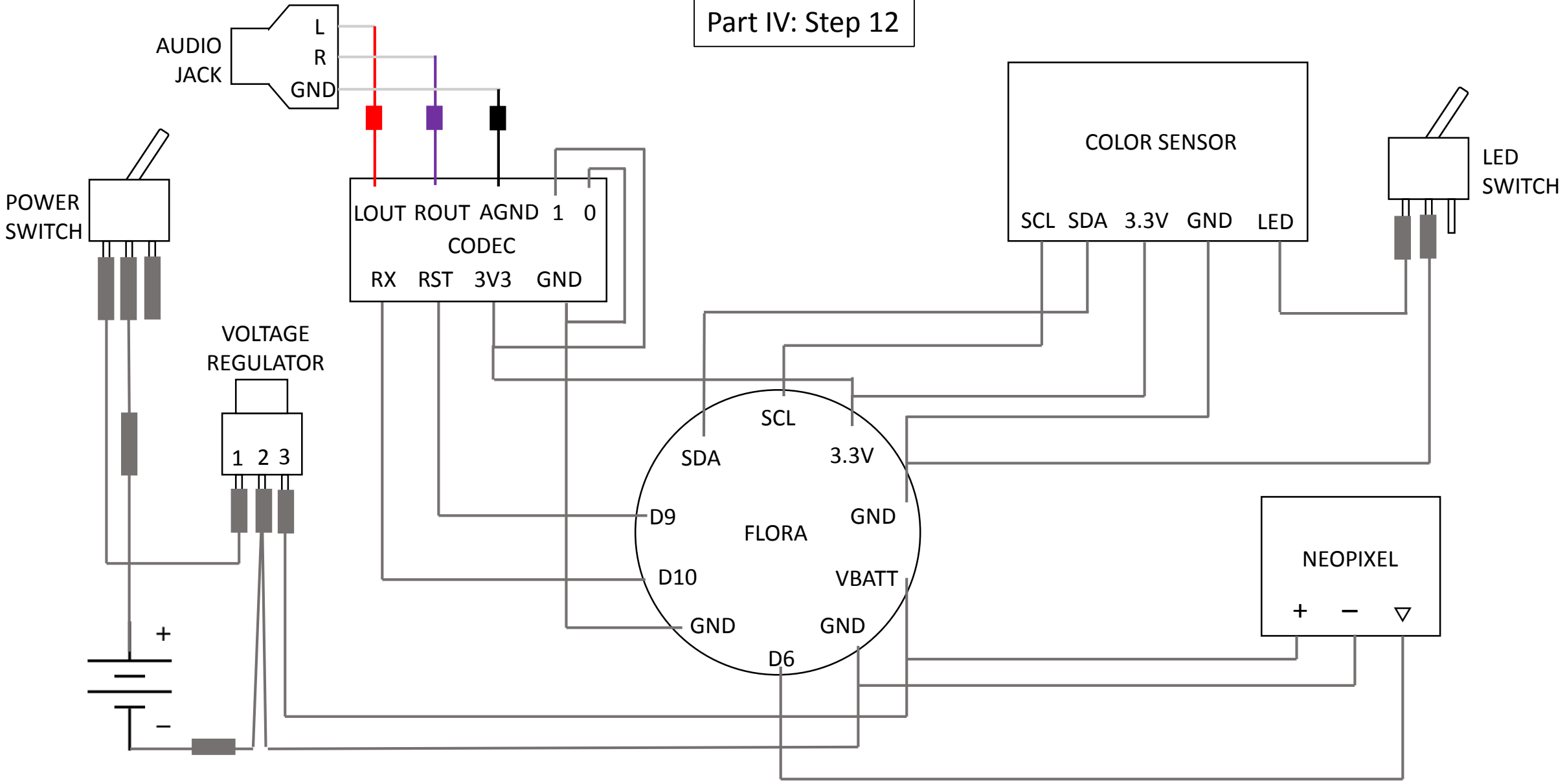


Part IV: Step 11

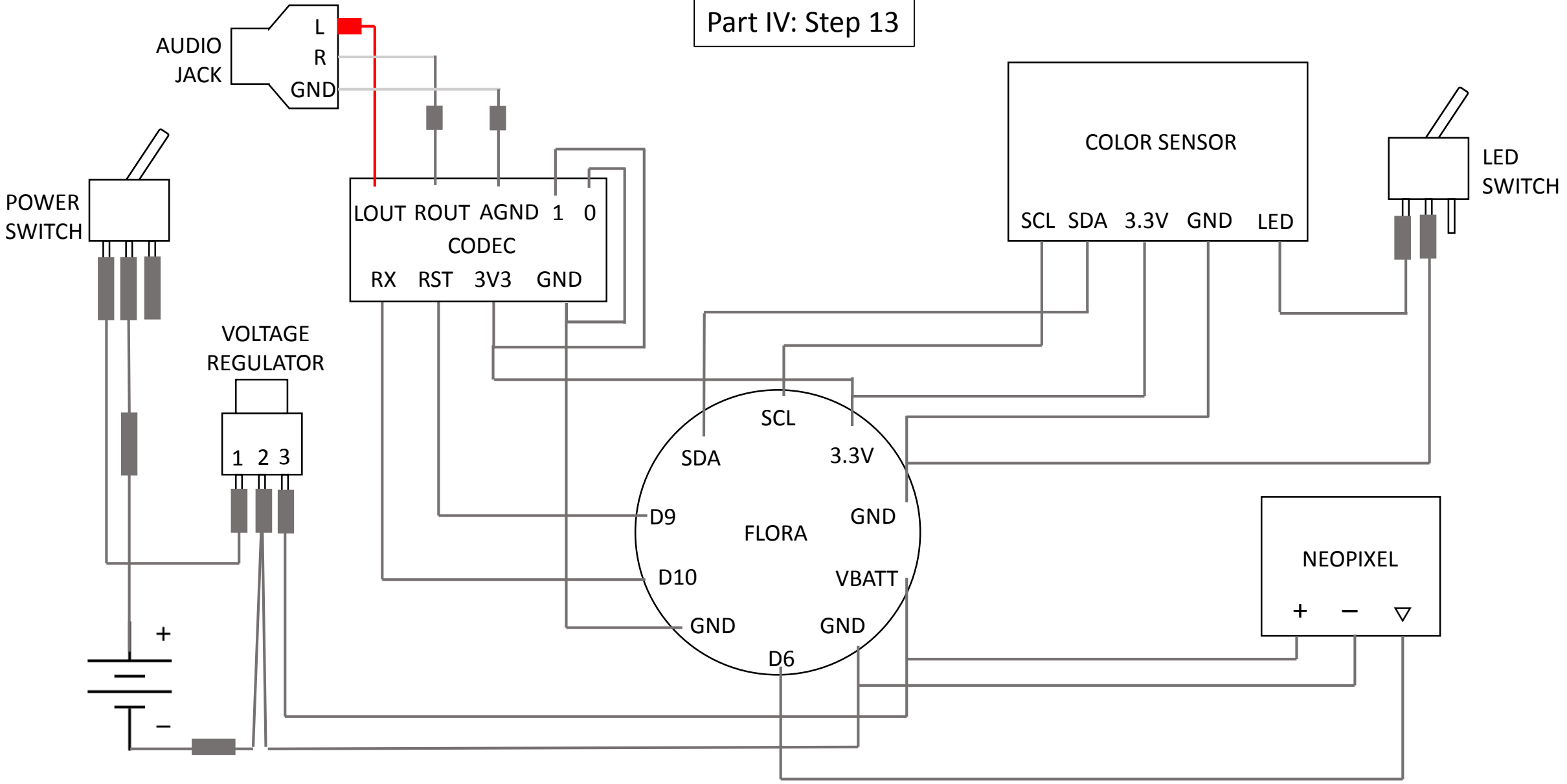
- 3 wires (ribbon cable)
- 3 heat shrinks



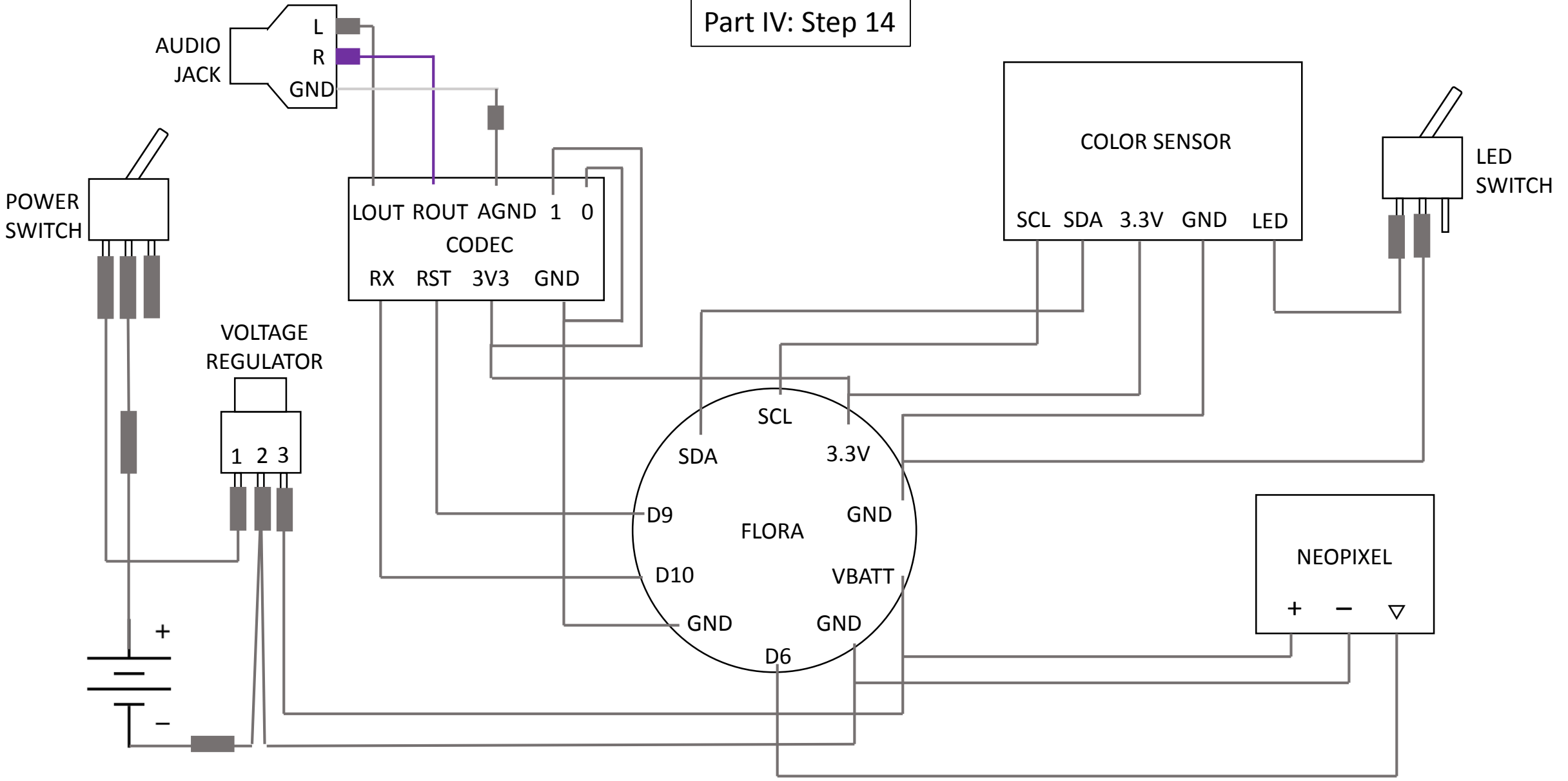
Part IV: Step 12



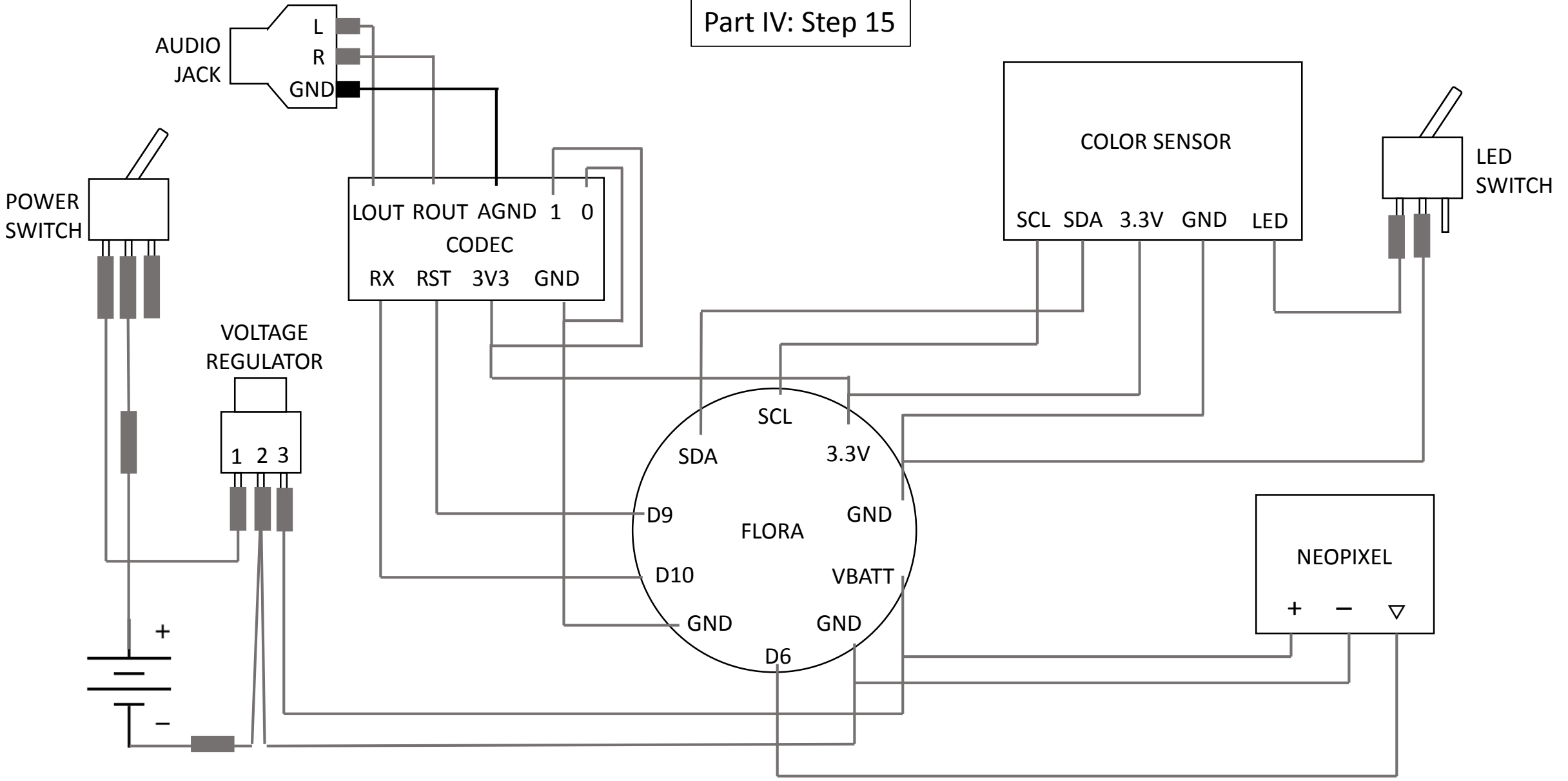
Part IV: Step 13



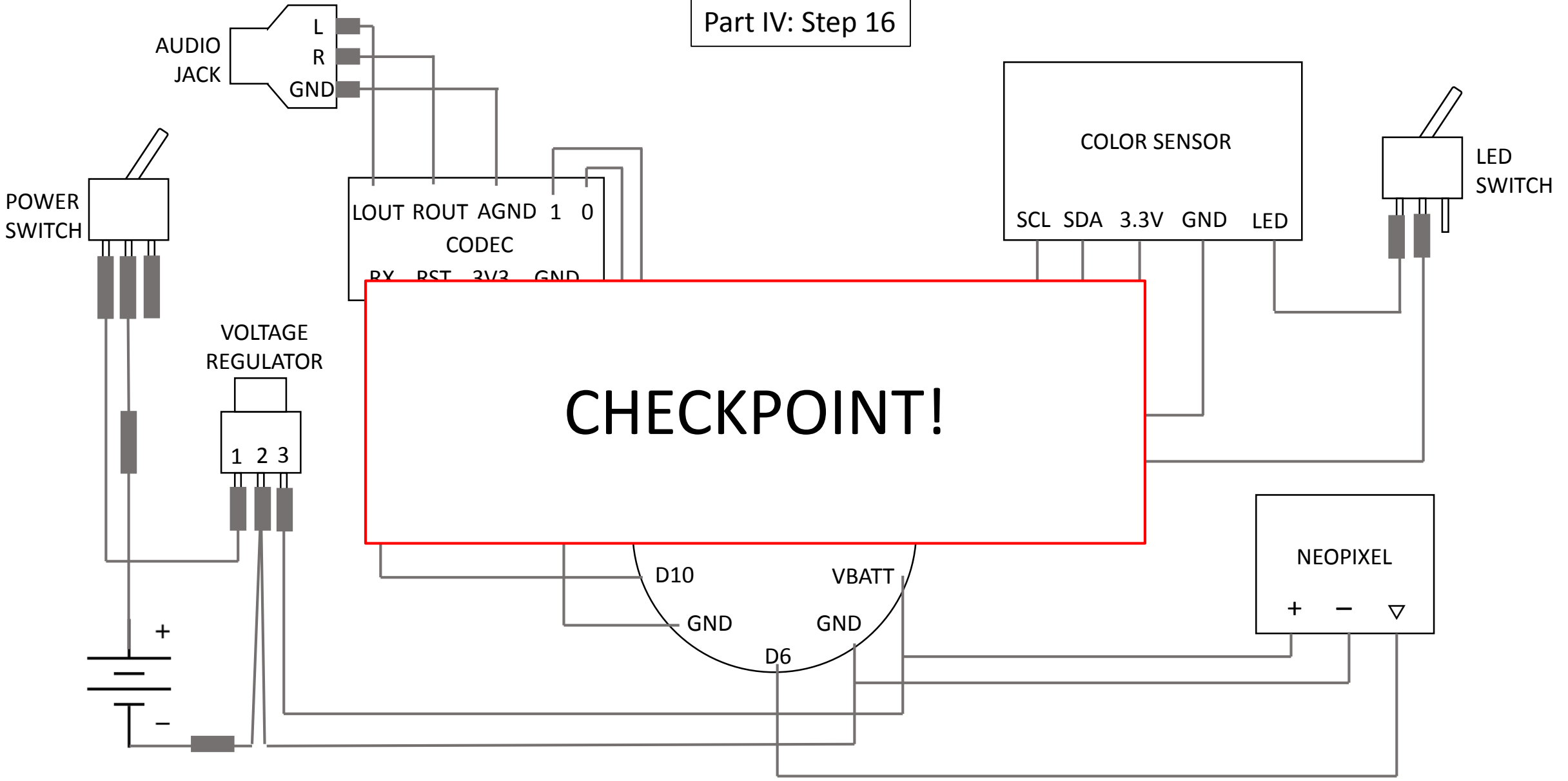
Part IV: Step 14



Part IV: Step 15



Part IV: Step 16



Part IV: Step 17

