

Battery Connector  
AURELIO TECH - 800Q165685

DC/DC Converter  
(36-72V to 5V @1000mA)

+VIN 2 15" RED 12 AWG  
-VIN 1 15" BLACK 12 AWG

VIN+ 2  
VIN- 1  
GND 1

MOTOR B POWER  
Conn\_01x02

18" Long  
5" Remove Sheath  
Cut BLACK wire to 2"

MOTOR A POWER  
Conn\_01x02

18" Long  
5" Remove Sheath  
Cut RED wire to 2"

Rotary Selector Switch  
<http://a.co/d/aNRq7J4>

Conn\_01x07  
GND 7  
+5V 6  
D0 5  
D1 4  
D2 3  
D3 2  
VT 1

RF Reciever  
315Mhz Momentary  
<https://www.sparkfun.com/products/2096>

PARTICLE\_PHOTON  
VIN 1  
GND 2  
TX 3  
RX 4  
WKP 5  
DAC 6  
A5 7  
A4 8  
A3 9  
A2 10  
A1 11  
A0 12  
3V3 24  
RST 23  
VBAT 22  
GND 21  
D7 20  
D6 19  
D5 18  
D4 17  
D3 16  
D2 15  
D1 14  
D0 13

Level Translator  
BOB-12009  
<https://www.sparkfun.com/products/12009>

LV4 1  
LV3 2  
GND 3  
LV+ 4  
LV2 5  
LV1 6  
HV4 1  
HV3 2  
GND 3  
HV+ 4  
HV2 5  
HV1 6

GREEN 1  
BLACK 2  
WHITE 3  
BLUE 4  
RED 5  
YELLOW 6  
BROWN 7  
ORANGE 8

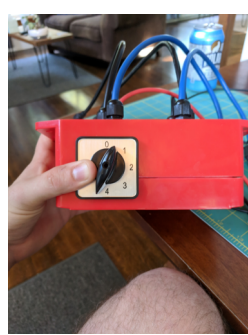
18" Long  
5" Remove Sheath

Level Translator  
BOB-12009  
<https://www.sparkfun.com/products/12009>

LV4 1  
LV3 2  
GND 3  
LV+ 4  
LV2 5  
LV1 6  
HV4 1  
HV3 2  
GND 3  
HV+ 4  
HV2 5  
HV1 6

GREEN 1  
BLACK 2  
WHITE 3  
BLUE 4  
RED 5  
YELLOW 6  
BROWN 7  
ORANGE 8

20" Long  
7" Remove Sheath



# NOTES:

Button uses 3.3V source while motors use 5V source  
Wire colors on motor side are best guess based on photos  
You may want to use a 9 or 10 pin connector for Motor B to prevent them from being plugged incorrectly  
JST SM connectors picked for panel mount, swap with any connector available  
All wire protrude 12" from box

See Release V0.0.6 for additional files  
<https://github.com/bveenema/MixController/releases>

Veenema Design Works

Sheet: /  
File: MixController.sch

Title: Mix Controller

Size: A4 Date: 2018-09-16

KiCad E.D.A. kicad (5.0.0)

Rev: V0.0.6

Id: 1/1