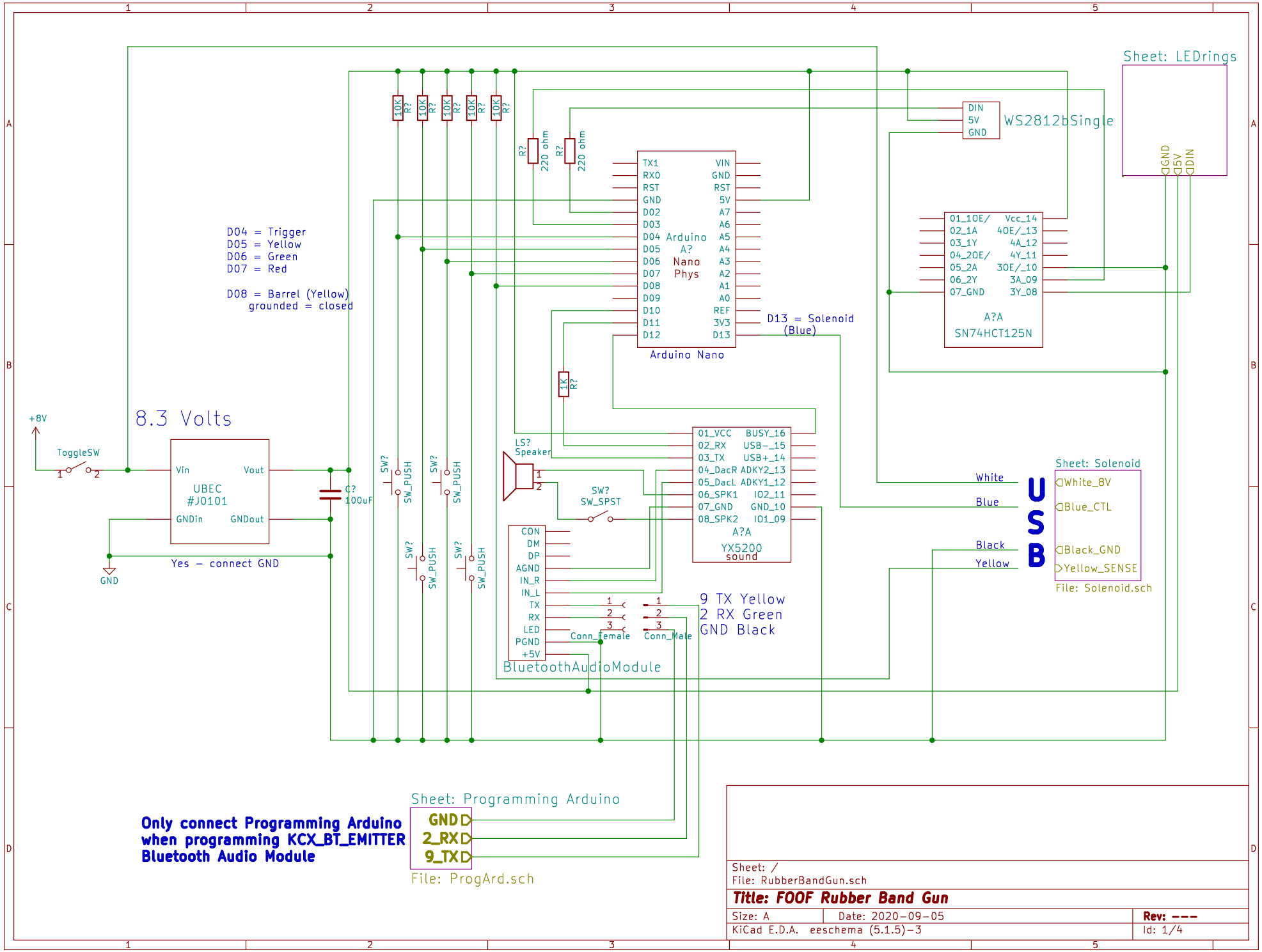
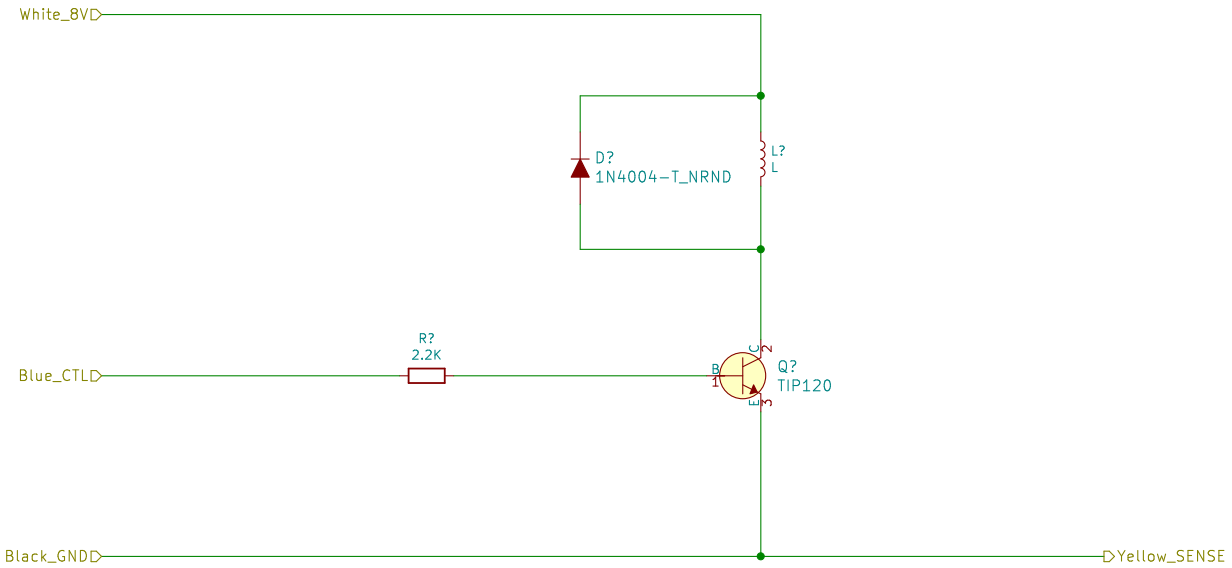
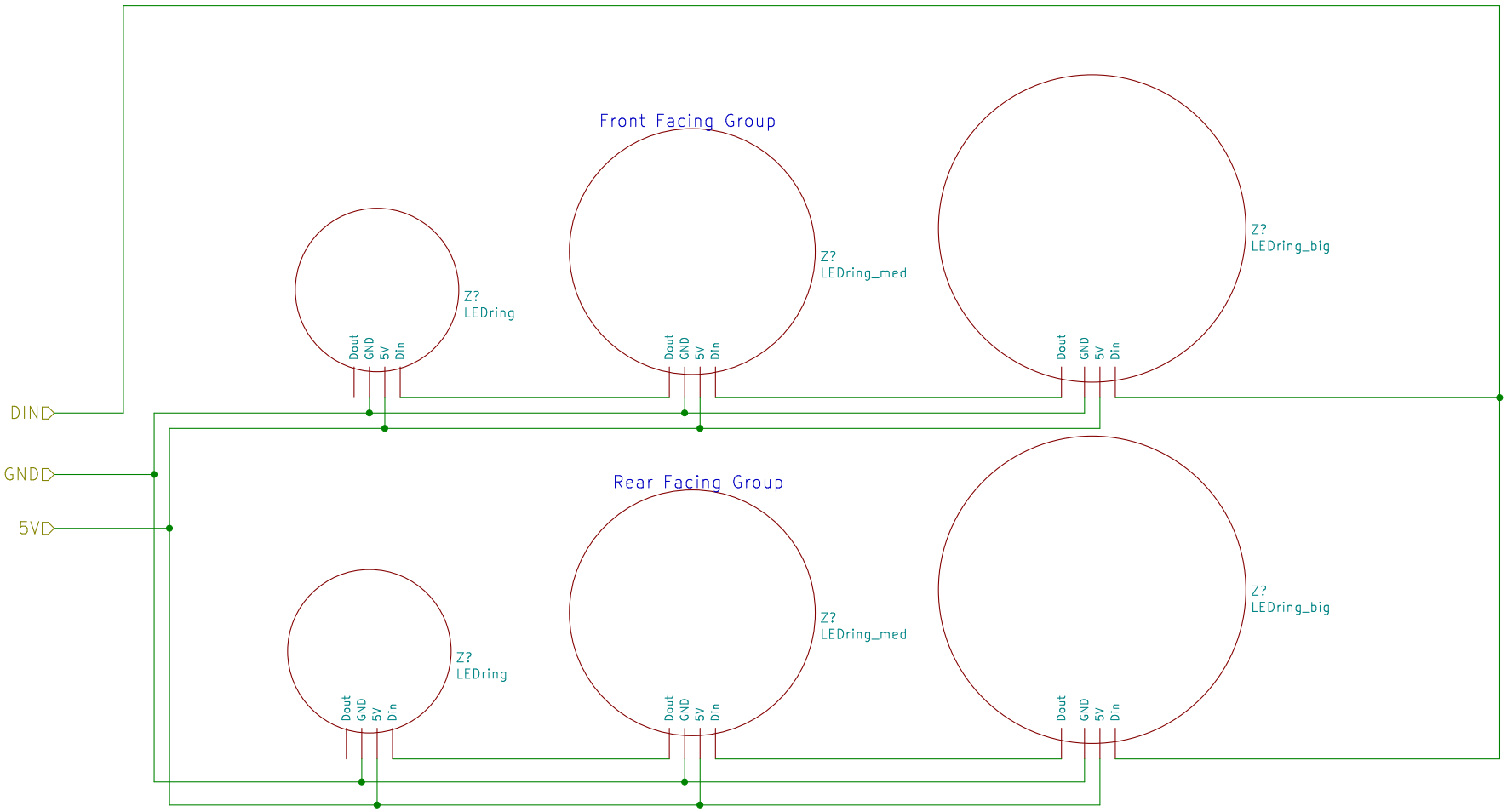

Sheet: LEDrings
DIN
5V
GND
WS2812bSingle
GND
5V
DIN
D04 = Trigger
D05 = Yellow
D06 = Green
D07 = Red
D08 = Barrel (Yellow)
grounded = closed
10K
R?
220 ohm
TX1
RX0
RST
GND
D02
D03
D04
D05
D06
D07
D08
D09
D10
D11
D12
VIN
GND
RST
5V
A7
A6
A5
A4
A3
A2
A1
A0
REF
3V3
D13
Arduino
A?
Nano
Phys
Arduino Nano
D13 = Solenoid
(Blue)
1K
R?
01_1OE/
02_1A
03_1Y
04_2OE/
05_2A
06_2Y
07_GND
Vcc_14
4OE/_13
4A_12
4Y_11
3OE/_10
3A_09
3Y_08
A?A
SN74HCT125N
+8V
8.3 Volts
ToggleSW
Vin
Vout
UBEC
#J0101
GNDin
GNDout
GND
Yes – connect GND
C?
100uF
SW?
SW_PUSH
LS?
Speaker
SW?
SW_SPST
01_VCC
02_RX
03_TX
04_DacR
05_DacL
06_SPK1
07_GND
08_SPK2
BUSY_16
USB-_15
USB+_14
ADKY2_13
ADKY1_12
IO2_11
GND_10
IO1_09
A?A
YX5200
sound
CON
DM
DP
AGND
IN_R
IN_L
TX
RX
LED
PGND
+5V
BluetoothAudioModule
Conn_Female
Conn_Male
9 TX Yellow
2 RX Green
GND Black
White
Blue
Black
Yellow
USB
Sheet: Solenoid
White_8V
Blue_CTL
Black_GND
Yellow_SENSE
File: Solenoid.sch
Only connect Programming Arduino
when programming KCX_BT_EMITTER
Bluetooth Audio Module
Sheet: Programming Arduino
GND
2_RX
9_TX
File: ProgArd.sch
Sheet: /
File: RubberBandGun.sch
Title: FOOF Rubber Band Gun
Size: A
Date: 2020-09-05
Rev: ---
KiCad E.D.A. eeschema (5.1.5)-3
Id: 1/4

Derived from https://cdn-shop-adafruit.com/product-files/412/solenoid_driver.pdf



Solenoid circuit connects when ready to fire, disconnects when pulled out for loading.

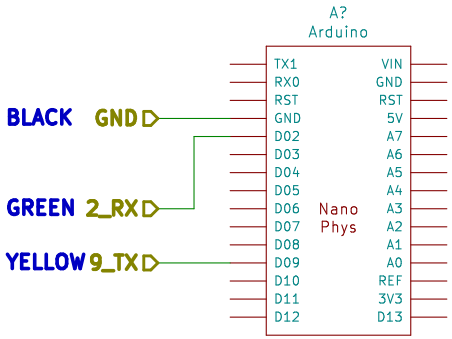
Sheet: /Solenoid/		
File: Solenoid.sch		
Title: Detail: Solenoid Driver		
Size: A4	Date: 2020-09-07	**Rev:**
KiCad E.D.A. eeschema (5.1.5)-3		Id: 2/4



Sheet: /LEDrings/		
File: LEDrings.sch		
Title: Detail: LED Ring Wiring		
Size: A4	Date: 2020-09-07	**Rev:**
KiCad E.D.A. eeschema (5.1.5)-3		Id: 3/4

Only connect Programming Arduino
when programming KCX_BT_EMITTER
Bluetooth Audio Module

Programming Arduino does not need to be a Nano.
It must be an Arduino with 5V interfaces
Power via USB and use Serial Monitor to control



These 3 connectors should be male jumper wires.
Use the color code suggested to avoid connection errors.
Matching labels to female jumpers suggested:
GND
2 RX
9 TX

Programs the KCX_BT_EMITTER Bluetooth Module

Sheet: /Programming Arduino/
File: ProgArd.sch

Title: Programming Arduino

Size: A4	Date: 2020-09-07	**Rev:**
KiCad E.D.A. eeschema (5.1.5)-3		Id: 4/4