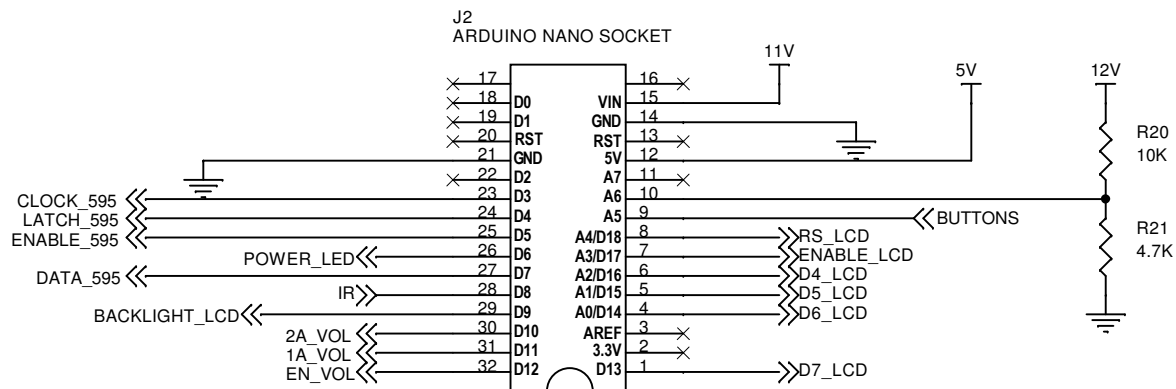
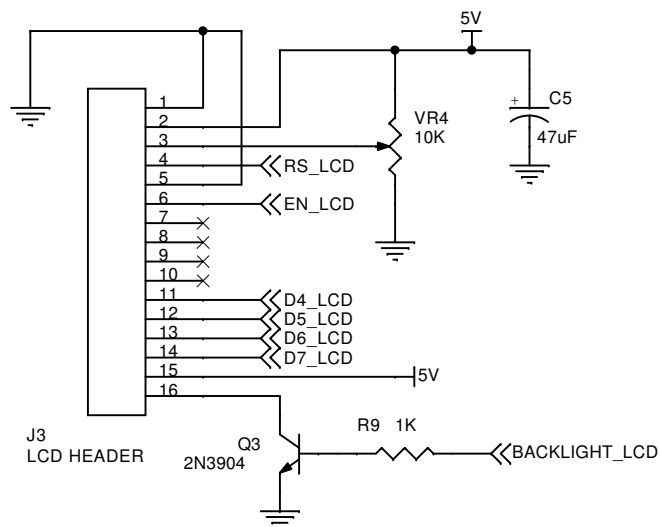


1602-type LCD Header (D9,D13,D14,D15,D16,D17,D18)

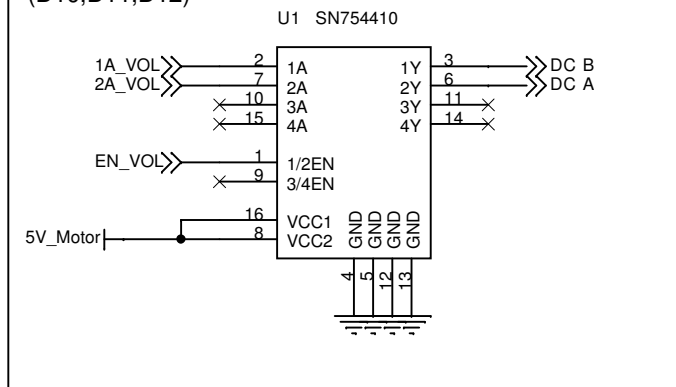


32-pin DIP socket for Arduino Nano

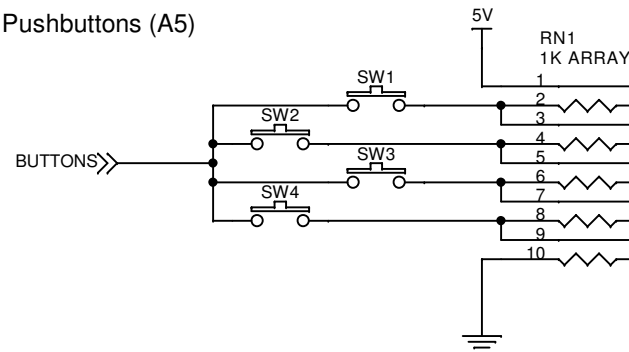
Notes:

- Pin 1 is D13
- Pins 16 & 17 are not used

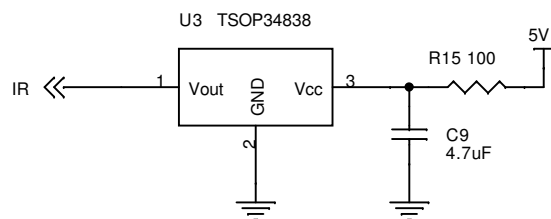
Motorized Volume Pot Driver (D10,D11,D12)



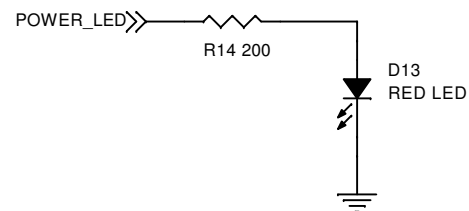
Pushbuttons (A5)



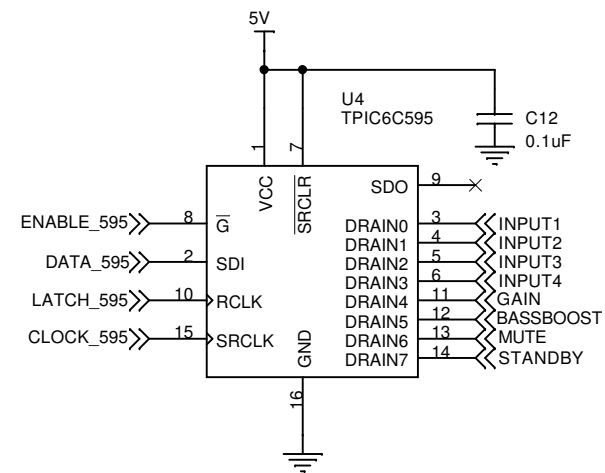
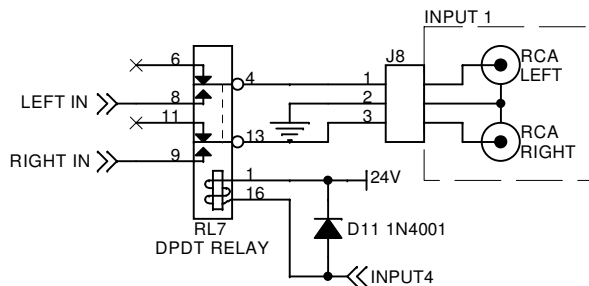
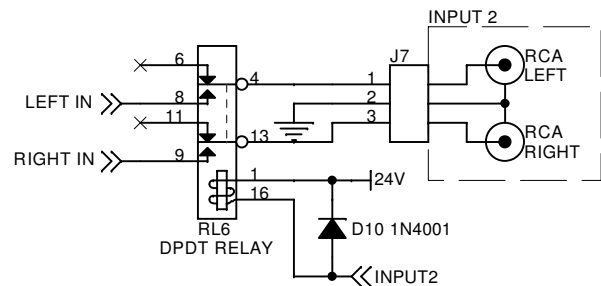
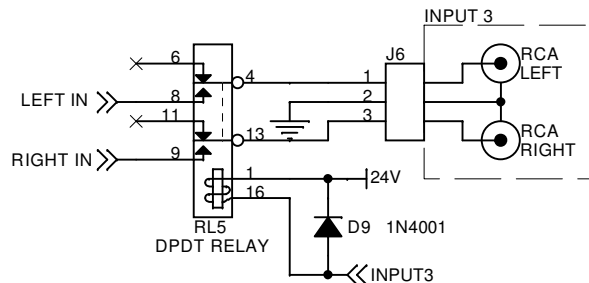
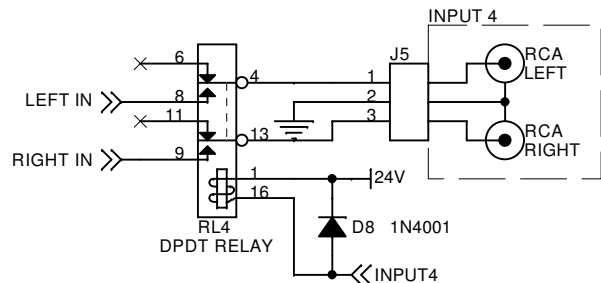
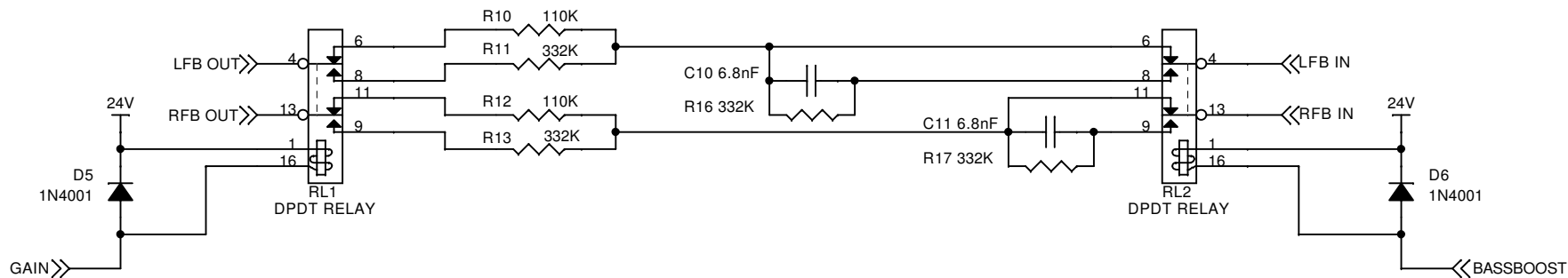
38 KHZ IR DETECTOR (D8)



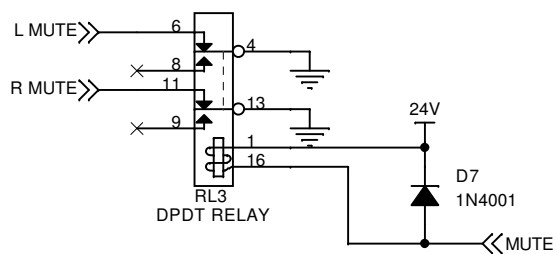
Power LED (1D PWM)



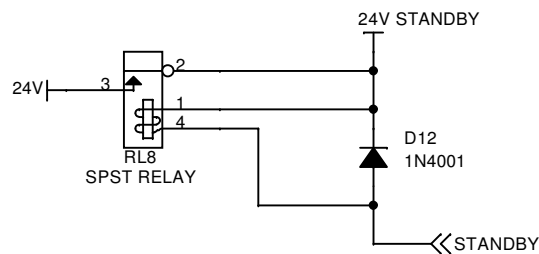
Gain: 0dB or +6dB



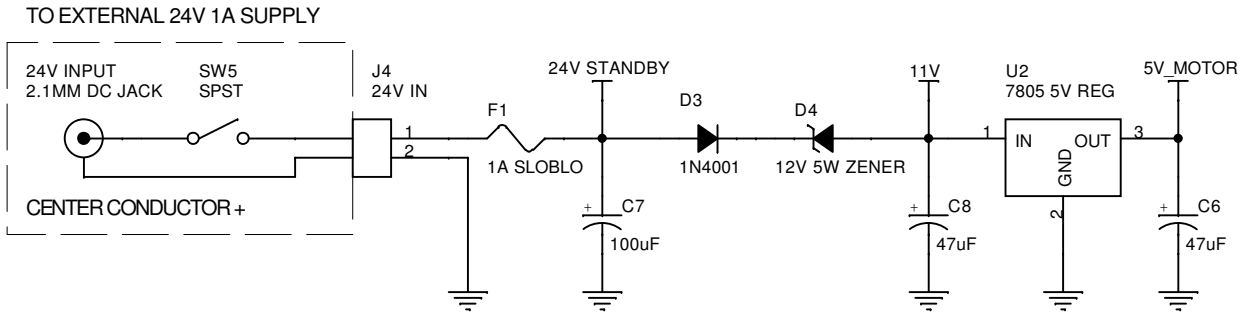
Muting Circuit



Standby Power Circuit
(turned OFF in standby)



Power Supply



Budgie PCBs are available from Shannon Parks:

<http://www.diytube.com/phpBB2/viewtopic.php?f=26&t=6207>

From Mouser Electronics (www.mouser.com):

U1	Half-H Motor Driver	595-SN754410NE
U2	5V Regulator 7805	595-UA7805CKCT
U3	IR detector 38kHz	782-TSOP34838
U4	Power Shift Register	595-TPIC6C595N
Qty 2	16-pin DIP socket	571-1-390261-4
C1,C2	2.2uF 250V, 18.8x12.6-15LS	667-ECW-F2225JA
C3,C4	470uF 10V, 6.3D 2.5LS	647-UVZ1A471MED
C5,C6,C8	47uF 35V, 5D 2LS	647-UVZ1V470MDD
C7	470uF 35V, 10D 5LS	647-UVZ1V471MPD
C9	4.7uF 50V, 5D 2LS	647-UVZ1H4R7MDD
C10,C11	6800pF 63V, 7.2x4.5-5LS	505-FKP26800/63/2.5
C12	.1uF 63V, 7.2x2.5-5LS	80-R82DC3100AA50K
C13,C14	0.33uF 100V, 7.2x2.5-5LS	505-MKS2.33/100/20
R1,R2	210, 1/4W	271-210-RC
R3,R4	47.5K, 1/4W	271-47.5K-RC
R5,R6	1M, 1/4W	271-1.0M-RC
R7,R8	100K, 1/4W	271-100K-RC
R9	1K, 1/4W	271-1K-RC
R10,R12	110K, 1/4W	271-110K-RC
R11,R13,R16,R17	332K, 1/4W	660-MF1/4DC3323F
R14	200, 1/4W	271-200-RC
R15,R18,R19	100, 1/4W	271-100-RC
R20	10K, 1/4W	271-10K-RC
R21	4.7K, 1/4W	271-4.7K-RC
RN1	1K, 10-pin array, isolated	269-1.0K-RC
VR1	100K dual log ALPS RK168	688-RK16812MG099
VR2,VR3	500 ohm Pot	72-T93YB-500
VR4	10K Pot	72-T93YB-10K
F1	1.5A Fuse, Slo-Blo	576-047301.5MRT1L
RL1-RL7	Omron G5V 24V DPDT	653-G5V-2-H1-DC24
RL8	Omron G5NB 24V SPST-NO	653-G5NB-1A-DC24
D1,D2	T-1 3/4 5mm red LED	859-LTL-4223
D3,D5-D12	1N4001 50V 1A diode	512-1N4001
D4	12V 5W zener	610-CZ5349B
D13	red power LED	645-551-0407F
D14	6.2V Zener	625-BZX85C6V2-TAP
Q1,Q2	2N3906 PNP	512-2N3906BU
Q3	2N3904 NPN	512-2N3904BU
J1,J5-J8	Terminal Blocks 3P	571-2828363
J2	32-pin DIP socket	517-4832-6000-CP
J3	16-pin SIP header	649-68001-416HLF
J4	Terminal Blocks 2P	571-2828372
SW1-SW4	Round pushbutton switch	10KB012
SW5	SPST On/Off Rocker	540-SRB22A2FBBNN
Qty 1	Arduino Nano V3.0	992-ARD-NANO30
Qty 5	RCA panel jacks white	568-NYS367-9
Qty 5	RCA panel jacks red	568-NYS367-2
Qty 1	2.1mm DC Connector	163-4021 (Budgie Plate)
Qty 1	2.1mm DC Connector	163-1060-EX (FPE Plate)
Qty 4	Rubber Feet	517-SJ-5023BK
Qty 6	Hex Standoff .187X.375	534-1892
Qty 1	Hammond 6x10x2 Black Chassis	546-1441-16BK3
Qty 2	Clear Window Plug	593-LPC020
Qty 2	Clear Window Plug Retainer	593-RTN150

From Hardware Store:

Qty 4	#6-32 x 1/2", sheet metal screw, Phillips pan head
Qty 12	#4-40 x 1/4", machine screw, Phillips pan head

From eBay (www.ebay.com):

Qty 1	ALPS RK168 100K motor pot stereo (2X) (alternate source)
Qty 1	Arduino Nano V3.0 w/ headers (alternate source)
Qty 1	Red LCD 1602 Display Module (HD44780 or compatible)
Qty 1	30x22 Aluminum Volume Knob
Qty 2	12B4/12B4A Triode
Qty 2	9 pin Ceramic Tube Socket PCB (0.750" top diameter)

From Jameco Electronics (www.jameco.com):

Qty 1	24V/1A DC Supply (3-prong)	1940635
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