

Step	Qty	Reference(s)	Value	LibPart	Footprint	Note
1						check the Jacks take a cable and click nicely
2						figure the LED resistor value, maybe 100R, 330R, 470R, or 680R, test at 3V
3	1	Q2	USB_B_Micro	FCI_10118193-0001LF		careful with those tiny pins, Make sure there's no shorts between pins. Do solder the legs throughhole for strength
4	2	R1, R5	2K4	Resistor_THT:L6.3mm_D2		1/4W size; red yellow black brown
5	2	R2, R6	10K	Resistor_THT:L6.3mm_D2		1/4W size; brown black black red
6	8	R3, R4, R7, R9, R11, R13, R15, R17	1K	Resistor_THT:L6.3mm_D2		1/4W size; brown black black brown
7	6	R8, R10, R12, R14, R16, R18	470R	Resistor_THT:L6.3mm_D2		for the LEDs, about 100 ohms per volt. Your preference brightness
8	1	U1	LM358	Amplifier_Op	Package_DIP:DIP-8_W7.62mm_Socket	
9	3	U2, U3, U4	LM324	Amplifier_Op	Package_DIP:DIP-14_W7.62mm_Socket	
10	8	C1, C3, C8, C10, C14, C15, C18, C19	100nF	Device:C "104"	Capacitor_THT:C_Disc_D5.0mm_W2.5mm_P5.00mm	
11	8	C2, C4, C5, C7, C11, C13, C16, C17	1uF	Device:C "105"	Capacitor_THT	non-polarized ceramic, low pass filters, value not critical
12						fold the 10uF capacitors and check polarity
13	3	C6, C9, C12	10uF	Device:C_Po	Capacitor_THT:CP_Radial_D6.3mm_P2.50mm	
14						check the capacitors' polarity again
15	2	T1, T2	B1K	Potentiometer_Bourns_3		bend pins to lie flat
16						Install plastic frame to bottom PCB to help fit edge connectors
17	6	AudioJack	right angle CUI_MJ-3536N			fit wall before soldering, check all jacks are straight
18	1	Q1	Power Unit	XP IA0505-SIP		pre-bend pins down to lay flat
19						assemble the plastic feet onto the faders
20	6	B10K	Bournes	PTA6043-2015DPB103		make sure theyre flat and level, "DPB"
21						insert switches and LEDs without soldering, then assemble faceplate
22	12		Screws	m3 x 4mm		don't overtighten, the plastic is soft
23	6		Switches	SPDT_Tayda-A5111		press back uniform
24	6	D1, D2, D3, D4, D5, D6	LED	5mm 2pin	bipolar	ensure flat face, long leg is matched in all LEDs. Test one first to decide which way around you want the colors.
25	1		USB Power Cable 'micro' to 'A'			
26						test basic functionality and polarity switching
27	6		slider knobs			press on