Dazatronyx THD lite Bill of Materials

Parts	Qty	Value	Markings / notes
		Diodes	
D6, D7	2	Germanium	Alternative: see notes
LED	1		Marking on back side of board. See notes.
		Capacitors	
C16	1	1n / 0.001µ	*102*, Polyester film greencap or box MKT, 3.5 or 5mm pitch
C26	1	4n7 / 0.0047µ	*472*, Polyester film greencap or box MKT, 3.5 or 5mm pitch
C27	1	6n8 / 0.0068µ	*682*, Polyester film greencap or box MKT, 3.5 or 5mm pitch
C1, C6, C9, C11, C22	5	47n / 0.047µ	*473*, Polyester film greencap or box MKT, 5mm pitch
C30	1	68n / 0.068µ	*683*, Polyester film greencap or box MKT, 5mm pitch
C28, C29	2	100n / 0.1µ	*104*, Polyester film greencap or box MKT, 5mm pitch
C12, C15, C34	3	1µ	*105*, CBB polypropylene or polyester film MKT, 5/5.08mm pitch
		Resistors	
LED CLR	1		LED current limiting resistor. Not required for kit. See notes below.
	***Potentiometers (do not solder to PCB** until all potentiometers are tightly assembled in the enclosure)*		
HIGH, LOW	2	5KB	16mm, linear
LEVEL	1	10KA	16mm, log
DIST	1	100KA	16mm, dual gang, log
		Additional parts checklist	
	1	partially populated PCB.	
	1	enclosure (1590BS or 1590N1 or 125B) + lid + screws	
	1	3PDT footswitch (latching) + metal washer	
	1	2.1mm DC socket (must be plastic type, not metal)	
	2	mono open frame audio socket 1/4" + flat washer + nut	
	2	serrated star washers for audio sockets	
	4	knobs	
	4	extra potentiometer nuts	
	1	pot dust cap insulating cover for dual pot	
	1	25mm wire (footswitch OUT)	
		solder (lead-free)	

Further notes

- This layout was designed for the small Hammond 1590BS enclosure, with two Switchcraft #11 (or similar) open frame mono sockets. The circuit board will fit snug, with barely any gap between the enclosure wall. A compatible drill layout is also available for 1590N1 / 125B enclosures, which have more space. Most home printers *do not* print accurately to scale. Test all printed drill layouts against a ruler, and adjust the scale as required.

- There is a 33K SMD current limiting resistor already installed for the LED. This is only sufficient for a *high intensity* clear LED. An additional parallel through-hole resistor should be included to increase the brightness for all other types of LEDs. This is found in the bottom-right of the board. As a rough guide, regular-intensity clear LEDs may use approximately 10K, and traditional coloured LEDs approximately 1K.

- Most germanium diodes will work (D6, D7). Extra space is given for larger old-stock devices. Germanium works best, but this can be substituted for a schottky diode such as a 1N5819, or a jumper wire.

- Be careful to trim all component legs very short near the dual pot, so that they don't short-circuit against the pot body. Lift the circuit board away from the pots a small amount before soldering, or install some insulating plastic to stop the dual pot touching the solder joints.

- Avoid soldering the potentiometers, LED, and footswitch, until all of the hardware is mounted tightly inside the enclosure in final locations. This will prevent stress on the hardware and the supporting pads.

- To make the knobs sit lower on the pot shafts, an additional nut is suggested to be fitted to the base of each potentiometer to space it further away from the enclosure.

Debugging

I will do my best to answer any technical questions about building the circuit, even small ones. Unfortunately, however, I may not always have the resources to *remotely* help you to debug any circuits which are not working correctly, as this will almost always be a soldering or assembly fault. General debugging support is best found online through DIY building groups. Unsuccessful builds may be posted back to me for debugging and fixing, for an additional fee.

Feedback

Any feedback or suggestions are always welcomed and may help contribute to future updates. My technical knowledge is limited, and I am happy to crowd-source as much free information as I can. Please consider that these documents may be revised at any time, so it is better to share a link, rather than the actual file.

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