

Dazatronyx TPAH3ИCTOP Bill of Materials

Parts	Qty	Value	Markings / notes
Diodes (polarity sensitive)			
D5	1	1N5819 schottky	Alternative: 1N5818. Band side goes into the square pad.
D1, D2, D3, D4	4	black glass	Alternative: 1N4148. Band side goes into the square pad. Triangle points to square pad.
D6	1	1N4732	4.7V zener. Clear glass. Band side goes into the square pad.
D7	1	LED	Short leg goes into the square pad. Insert underneath the board.

Resistors (firm bend) & Inductor			
R10, R21, R22	3	390Ω	ORG, WHT, BRN, GOLD
R23	1	1K	BRN, BLK, RED, GOLD
R4	1	2K7	RED, VIO, RED, GOLD
R6, R12, R19, R24	4	10K	BRN, BLK, ORG, GOLD
R11, R13, R18	3	12K	BRN, RED, ORG, GOLD
R8	1	20K	RED, BLK, ORG, GOLD
R5	1	22K	RED, RED, ORG, GOLD
R2	1	39K	ORG, WHT, ORG, GOLD
R3, R14, R16, R20	4	100K	BRN, BLK, YLW, GOLD
R7, R9, R15, R17	4	470K	YLW, VIO, YLW, GOLD
R1	1	2M2	RED, RED, GRN, GOLD
L1	1	6800μH	BLU, GRY, RED, SILVER Alternative: 22Ω / 33Ω resistor

Capacitors - Axial			
C10A, C10B, C11A, C11B, C12A, C12B	6	1n / 0.001μ	1000 polystyrene
C8	1	10n / 0.01μ	10000 polystyrene
C11	1	100n / 0.1μ	104 ceramic (yellow bead, firm bend)

Capacitors - Radial			
C9	1	3n9 / 0.0039μ	392
C6, C7	2	47n / 0.047μ	473
C1, C2, C3, C4, C5, C13	6	100n / 0.1μ	104
C15	1	220μ	Electrolytic (Polarity sensitive : short leg with band goes into the square pad)

Transistors			
Q1, Q2, Q3, Q4	4	BC547C	(flat side of the transistor aligns with the part label)

Potentiometers (do not solder to PCB until all potentiometers are tightly assembled in the enclosure)			
MIDS	1	50KB	16mm, linear
VOLUME	1	100KA	16mm, log
TONE, SUSTAIN	2	100KB	16mm, linear

Additional parts checklist			
	1	unpopulated PCB	
	1	1590BBS or 1590BB2 enclosure + screws	
	1	3PDT footswitch (latching)	
	1	2.1mm DC socket (must be plastic cased type, not metal)	
	1	mono open frame audio socket 1/4" + flat washer + nut	
	1	stereo open frame audio socket 1/4" + flat washer + nut	
	2	serrated star washers for audio sockets	
	4	knobs	
	2	potentiometer plastic caps (optional)	
	1	9V battery connector (optional)	
	1	battery connector cap (optional)	
	1	5mm LED clear plastic diffuser/mount	
		25mm wire (footswitch OUT)	
		60mm wire (negative)	
		solder (lead-free)	

- Further notes**
- Polarity sensitive devices must be installed oriented in the correct direction. See all notes on this. This includes all diodes, transistors, and the electrolytic capacitor.
 - Be careful to trim all wires near potentiometers close to the board, so as to avoid short circuits between the board and the pots. Check there is enough clearance before assembling.
 - 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.
 - The BC547 transistor uses a reversed pinout to the more-common 2N5088 style. If substituting the transistors, check if you need to flip the orientation.

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.

Licensing

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