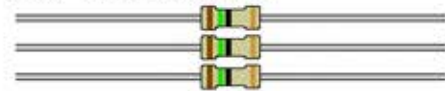


Synthrotek Roboto Visual Bill of Materials / Parts List

Resistors

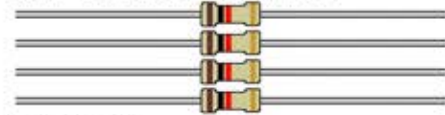
15Ω - R25, R26, R29



330Ω - R2



1kΩ - R1*, R10, R11, R21



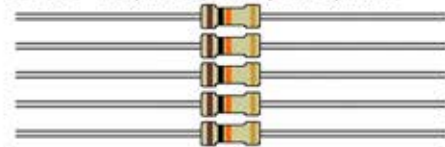
4.7kΩ - R6



5.1kΩ - R22, R24



10kΩ - R3, R18, R19, R20, R23



20kΩ - R5



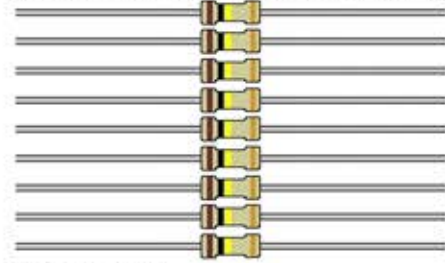
33kΩ - R1



47kΩ - R14



100kΩ - R4, R7, R8, R9, R13, R15, R17, R27, R28



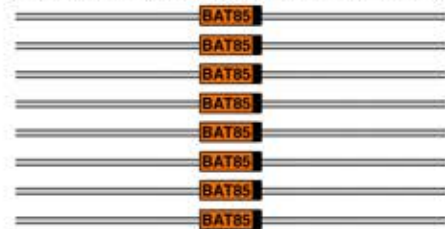
200kΩ - R16



Total: 29

Diodes

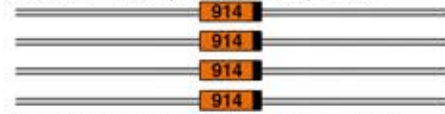
BAT85 - D1, D2, D3, D4, D5, D6, D9, D10



5.1v Zener - D7, D8



1N914 - D11, D12, D13, D14



3mm Red LED - D1*, D2*, D3*



5mm Red LED - D4*



Total: 18

* Indicates Component is on control board.

Capacitors

47pF Ceramic - C6, C7



100nF Ceramic - C1, C2, C8, C11, C12, C14



4.7uF Electrolytic - C5



10uF Electrolytic - C3, C4, C9, C10, C13



Total: 14

Integrated Circuits

TL074 - U2



PIC16F1823_P - U3



HT8950 - U1



14 Pin DIP Socket - U2, U3



18 Pin DIP Socket - U1



Total: 6

Potentiometers

10k Trimmer - R12



B100k 9mm Vertical Plastic Shaft - R2*, R3*, R4*, R5*



Total: 5

Jacks and Headers

10x2 Header - P1



10x2 Socket - J1*



5x2 Shrouded Header - P3



3.5mm Mono Vertical Jacks - J2*, J3*, J4*, J5*, J6*, J7*



Total: 9

P2 is a no pop.

Synthrotek Roboto Visual Bill of Materials / Parts List

Switches and Voltage Regulator

LM78133 - VR1



SPST Pushbutton - S1*, S2*



Total: 3

Other

Tested Vactrol - V1



2.5mm Screws



3.0mm Screws



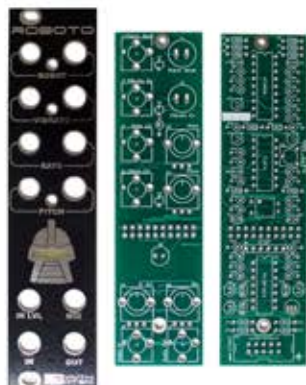
11mm Hex Standoffs



10 to 16 Pin Eurorack Power Cable



PCB and Panel Set



Total: 14

* Indicates Component is on control board.

ROBOTO QUICK START GUIDE

RED LEDs INDICATE ACTIVE MODES / EFFECTS

ROBOTO VOX MODE -

Gate or manual button toggles between "ROBOT" OR "PITCH" modes (cannot be in PITCH and ROBOT simultaneously).

VIBRATO EFFECT -

Gate or manual button turns VIBRATO effect on/off (can be used in either ROBOT or PITCH mode).

RATE CONTROL -

CV & manual pot sets the IC clock speed. 0-5V mimics the full range of the pot, but +/- voltages push the clock speed outside this range. Voltage is additive or subtractive to pot position.

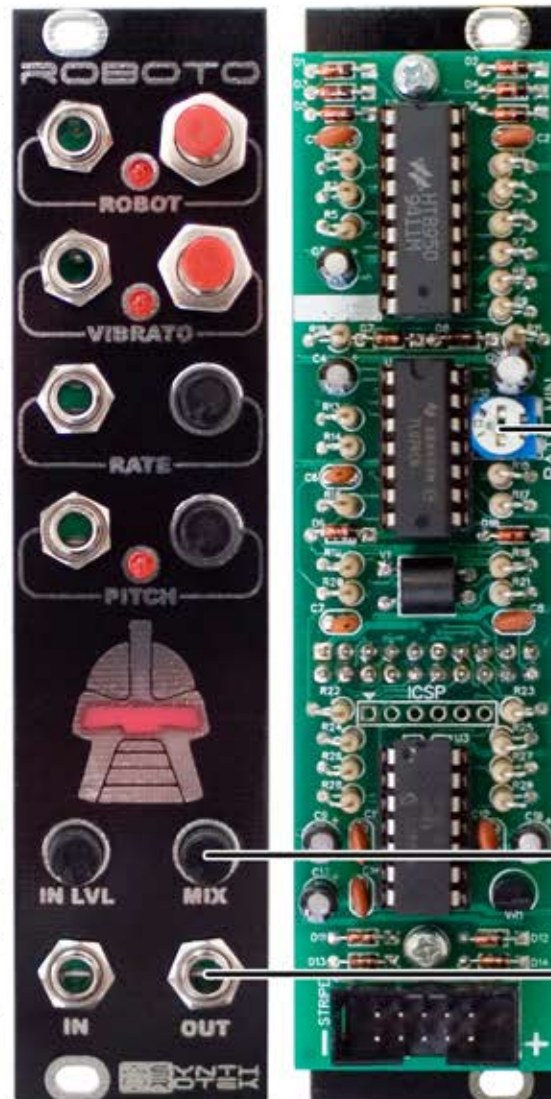
PITCH CONTROL -

CV or manual pot moves the audio pitch up or down. 7 zones/pitches. Pot at 12:00 is normal incoming pitch then 3 steps up and 3 steps down. 0-5V mimics full range of pot (0V=low, ~2.5V=normal, 5V=high). Voltages outside 0-5V have no extra functionality. Pitch pot is disabled when plug is inserted into CV input jack.

INPUT LEVEL CONTROL -

The Roboto IN LVL control allows you to use various input signals. Use iPhones, tablets, tape decks, modules, samplers, microphones, etc. - adjust to taste. Red light on robot will blink in sync w/ audio.

AUDIO INPUT JACK -



- CLOCK RATE TRIMMER

Sets minimum IC clock speed. CCW = slowest - adjust to taste.

- MIX CONTROL

FULL CCW = input signal only
FULL CW = processed signal only
You can guess what happens between.

- AUDIO OUTPUT JACK



classic noise.