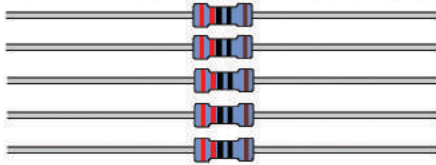


Motomouth Visual Bill of Materials

page 1

Resistors 1/4W 1%:

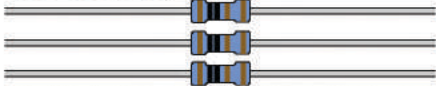
220Ω - R6, R11, R12, R18, R19



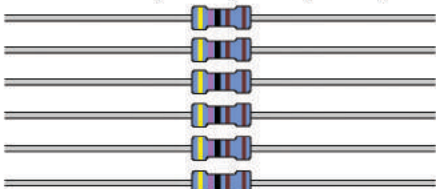
330Ω- R5, RTR1



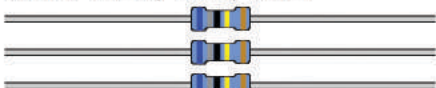
1K- R8, R9, R10



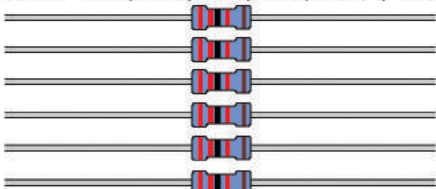
4.7K- R15, R16, R17, R20, R21, R29



6.8K- R27, R28, R32



22K- R1, R2, R3, R4, R26, R31



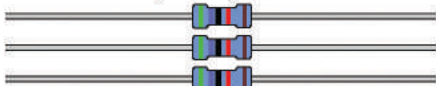
33K - R14



47K - R24



56K - R13, R23, R25



68K - R22



150K - R30



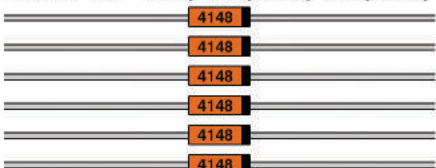
Total=32

Diodes:

1N4001 - D5



1N4148 - D1, D2, D3, D4, D6, D7



BAT 85 - SD1



BZX79C4V7 - ZD1



3mm Bi-Color LED - LED5



3mm Blue LED -
LED1, LED2, LED3, LED4



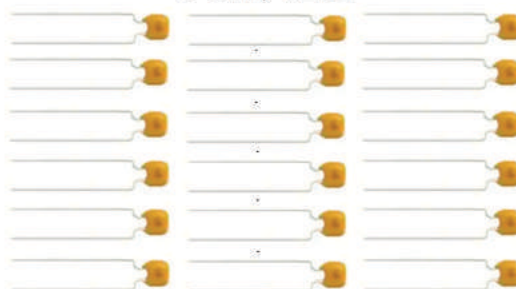
Total=14

Capacitors:

18pF Multi-Ceramic -
XC1, XC2, XC3, XC4



100nF Ceramic
DC1, DC2, DC3, DC4,
DC5, DC6, DC7, DC8,
DC9, DC10, DC11, DC12,
DC13, DC14, DC15, DC16,
DC17, VEC1



10nF Film - FC5, FC6



33nF Film - FC3, FC4



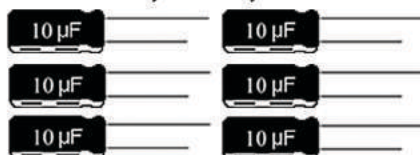
100nF Film - FC1, FC2



2.2μF Electrolytic - MC1, MC2



10μF Electrolytic - PC1, PC2, PC3,
PC5, PC7a, PC7b



100μF Electrolytic - PC4



10μF Tantalum - PC6T



Total=38

Integrated Circuits:

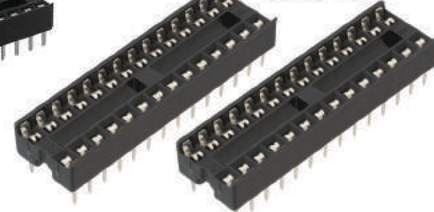
8 Pin Socket - IC3, IC4,
IC8, IC9, IC10, IC11,
IC16, IC6, IC2, IC12,
IC13, IC14, IC15



14 Pin Socket - IC1



28 Pin Socket
IC5, IC7



ATMega328P-PU - IC5, IC7



MCP41010-I/P - IC3, IC4, IC8,
IC9, IC10, IC11



MCP6002 I/P - IC6, IC2



MCP6292-E/P - IC12, IC13,
IC14, IC15



RC4558P - IC16



SN74HC4066N
IC1



Total=32

Motomouth Visual Bill of Materials

page 2

Potentiometers:

100K Dual D-Shaft Pot - VR2



10K 9mm D-Shaft Pot - VR1



1K Right Angle Multi Turn Trimmer - TR1



10K Right Angle Single Turn Trimmer - TR2



10K Right Angle Multi Turn Trimmer - TR3



Total: 5

Switches/Voltage Regulators:

SPDT Mini Toggle ON-ON, PCB Pin - SW1, SW2, SW3, SW4



LM7805 - REG1



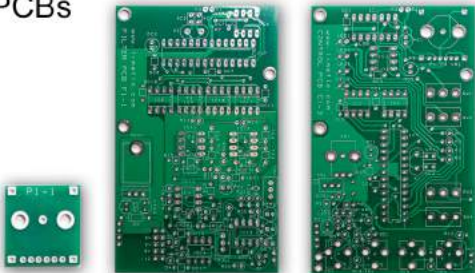
Total: 5

Jacks/Connectors:

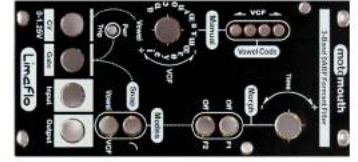
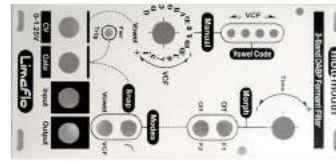
3.5mm Cliff Jack - JK1, JK2, JK3, JK4



Other:
PCBs



Black or Metal Panel



D-shaft Soft Touch Knob



Rack Rash Washers



20Mhz Crystal- X1, X2



4x1 Long Header - 16mm total pin length - PC2



4x1 Socket - PC2



2x1 Long Header - 16mm total pin length - F1/F2, in/out



10 Pin Shrouded Power Header



2x1 Socket - F1/F2, in/out



1 Pin Header - VR2



M2.5 15mm Female-Female Metal Standoff - Bottom Standoffs



M2.5 13mm Male-Female Metal Standoff - Top Standoffs



3mm Slide Nut



2.5mm Screws



3mm Screws



2.5mm Black Hex Screw



10 to 16 Pin Power Cable



Total:45

THE CONTROLS (QUICK START GUIDE)

Blue LED Vowel code for vowels 1-16, is coded in Binary (*LSB at the top*). In VCF mode, it simply sweeps, in dot mode, up and down through the frequencies (*low at the bottom, high at the top*).

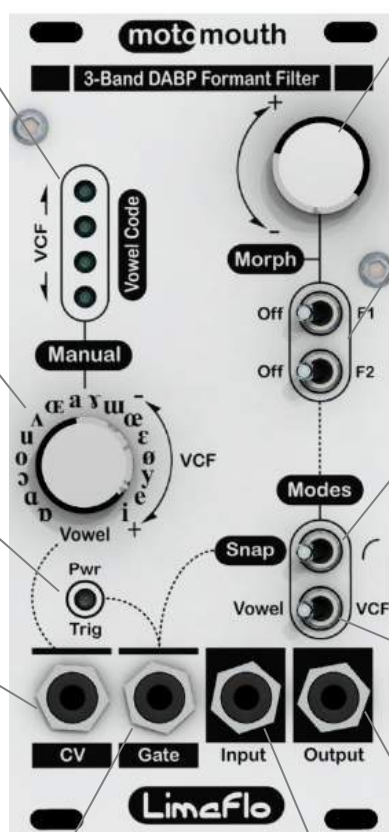
Manual adjustment of the Vowel selection or the filter sweep. This is inactivated with a CV control Jack inserted.

Red = powered.

Yellow flash = gate trigger.

0-1.25V CV input (preferred) or Biased and attenuated LFO input. This deactivates the manual control when a Jack is inserted. See also page 11.

0-5/12V Gate or Trigger input.



Increase or decreases the 'slew' between each vowel, or the rate of the filter sweep.

Turns on (or off) the
‘slew’ for F1 and/or F2.

Constant glide (right-select) between vowels, or it may glide and snap (left-select) to that given vowel whenever a gate is activated. *Analogy: Gated Mono Keyboard.*

Selects either vowel or band-pass filter (VCF) operating modes.

Filter F1, F2 and F3 Mixed audio output (mono). See *block diagram*.

Source audio input. Up to 10 Vp-p.