



Fuzz Circuit Topology

Mad Scientist Guitar Lab

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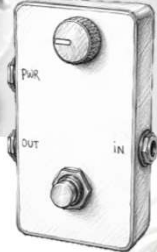
timeline

Lee Hazlewood



1960

Orville 'Red' Rhodes



1961

Glen Snoddy & Revis V. Hobbs



1962

1963

Dick Denney



1964

Ed Sanner



1965

Roger Mayer



1966

1967

Mike Matthews & Bob Myer



1968

1969



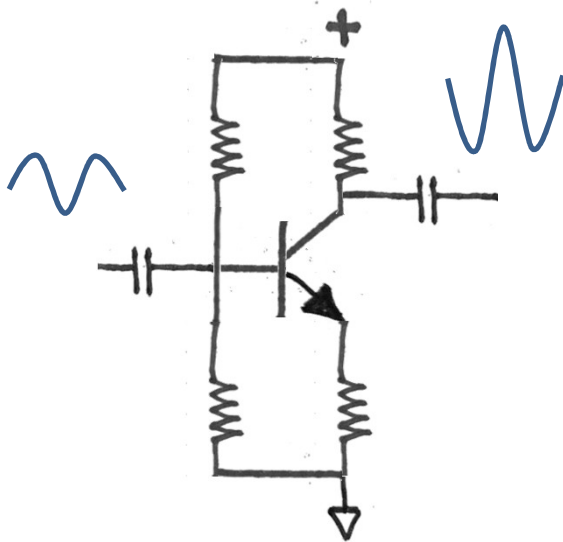
1960s Fuzz Circuit **Topologies**

- 1) 3-Transistor Saturation Cascade (Maestro Fuzz Tone FZ-1 Topology)
- 2) 2-Transistor English Fuzz (Dallas Arbiter Fuzz Face Topology)
- 3) The 3-Transistor Modified Darlington (Sola Sound Tonebender Topology)
- 4) Differential Pair / Frequency Doubler (Roger Mayer Octavia Topology)
- 5) Parallel Phase-Blending (Mosrite Fuzzrite Topology)
- 6) Cascaded Boost-Clip-Buffer (Sam Ash Fuzz Box Topology)
- 7) Capacitive-Coupled Dual-NPN Cascade (Jordan Boss Tone "California" Topology)
- 8) Multi-Stage Shunt-Feedback Diode Clipper (The Big Muff Pi Topology)

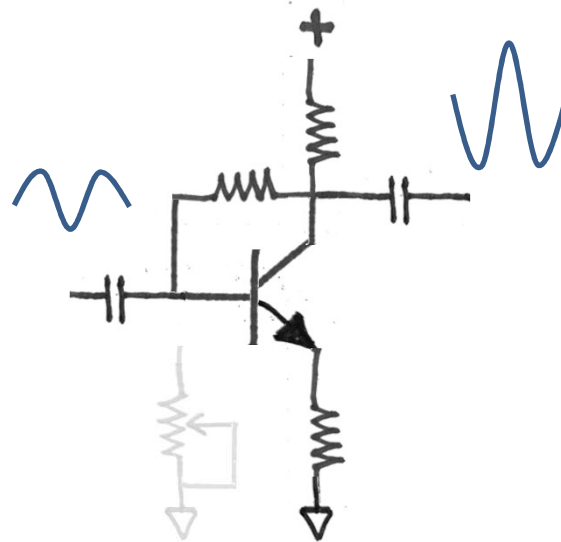


From inspecting 52 different available fuzz circuits available between 1961 and 1969
More than 60 are in the list now...

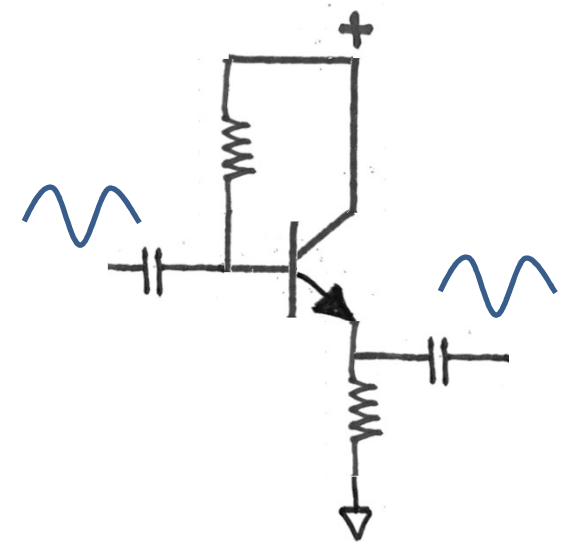
basic circuit blocks



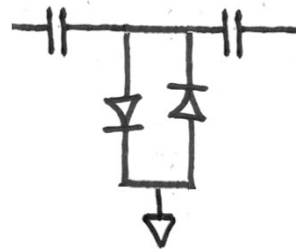
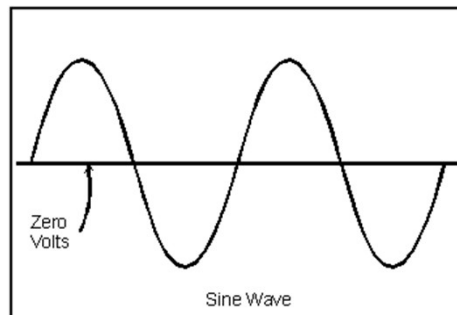
Textbook NPN
Inverting Amplifier /
Gain Stage



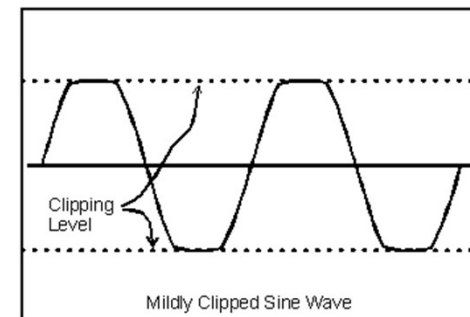
Simplified Inverting
Amplifier / Gain Stage



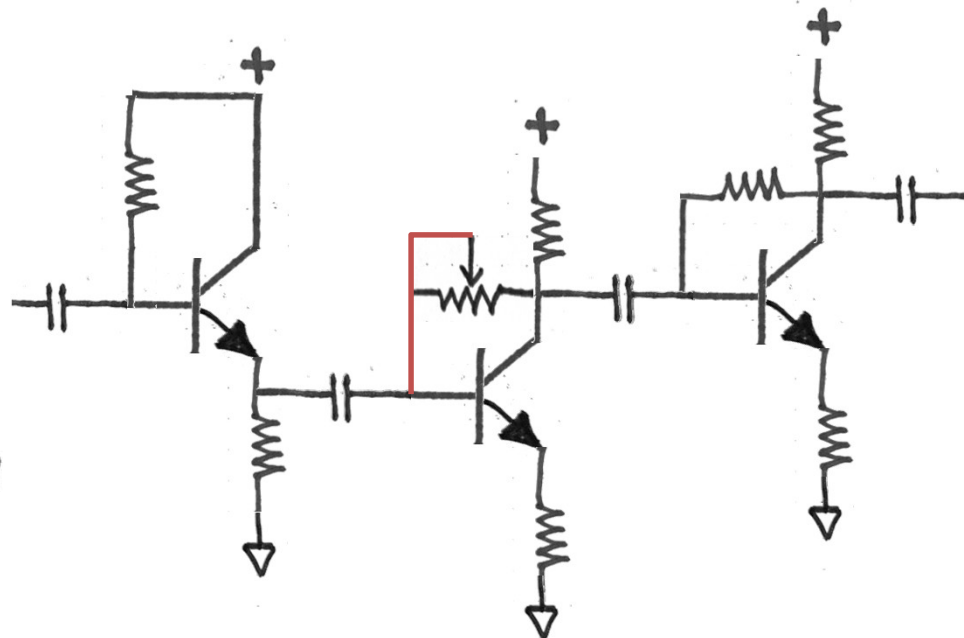
Buffer / Emitter
Follower



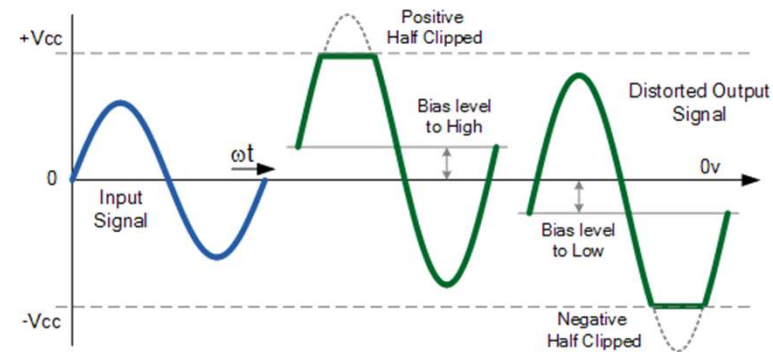
Diode Clipping Stage



3-Transistor Saturation Cascade (Maestro Fuzz Tone FZ-1 Topology)



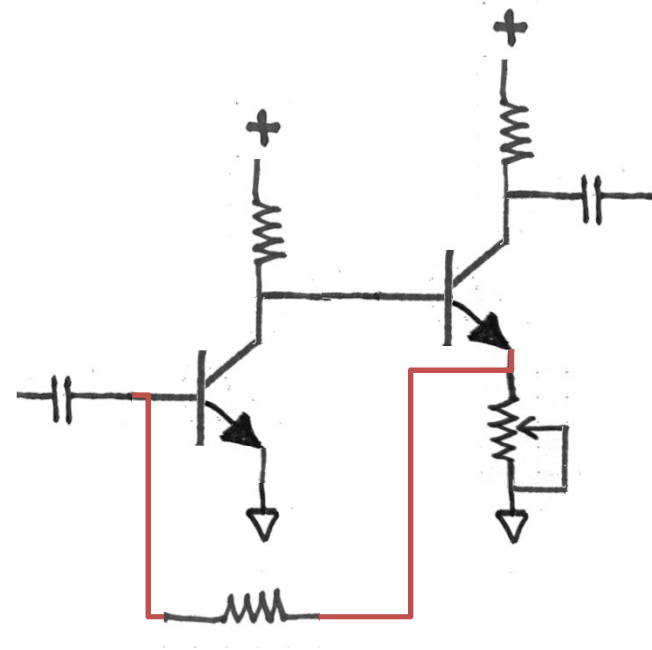
Ace tone fuzz master FM 1
 Claybridge Fuzzmaster
 JHS Zonk Machine
 Maestro Fuzz Tone FZ 1
 Maestro Fuzz Tone FZ 1A
 Maestro Fuzz Tone FZ 1B
 Pepbox WEM Rush
 Selmer Buzztone
 Sola Sound Tone Bender MK 1
 Tone Bender MK 1
 WEM Rush Pep Box



2-Transistor English Fuzz (Dallas Arbiter Fuzz Face Topology)



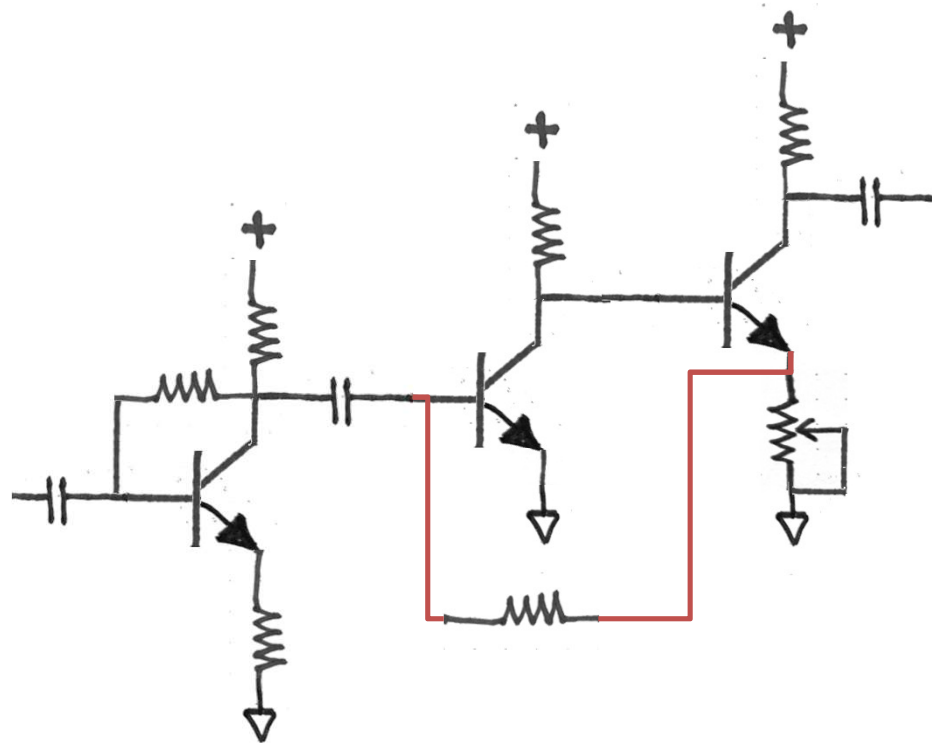
Arbiter Fuzz Face
Colorsound Fuzz Box
Dallas Aribiter Fuzz Face
EHX Muff Fuzz / Little Muff Pi
EHX Muff Fuzz EH2008 and 2009
Goya Fury
Goya Panther
Jennings Fuzz
Marshall Supa Fuzz
Park Fuzz Sound
Rangemaster Fuzzbug
Roger Mayer Axis Fuzz
Rotosound Fuzz Box
Sola Sound Tone Bender MK 1.5 (1.V)
Tone Bender MK1.5
Vox V816 Distortion Booster
Vox V8161
Vox V8162
Vox V8163
Vox V828



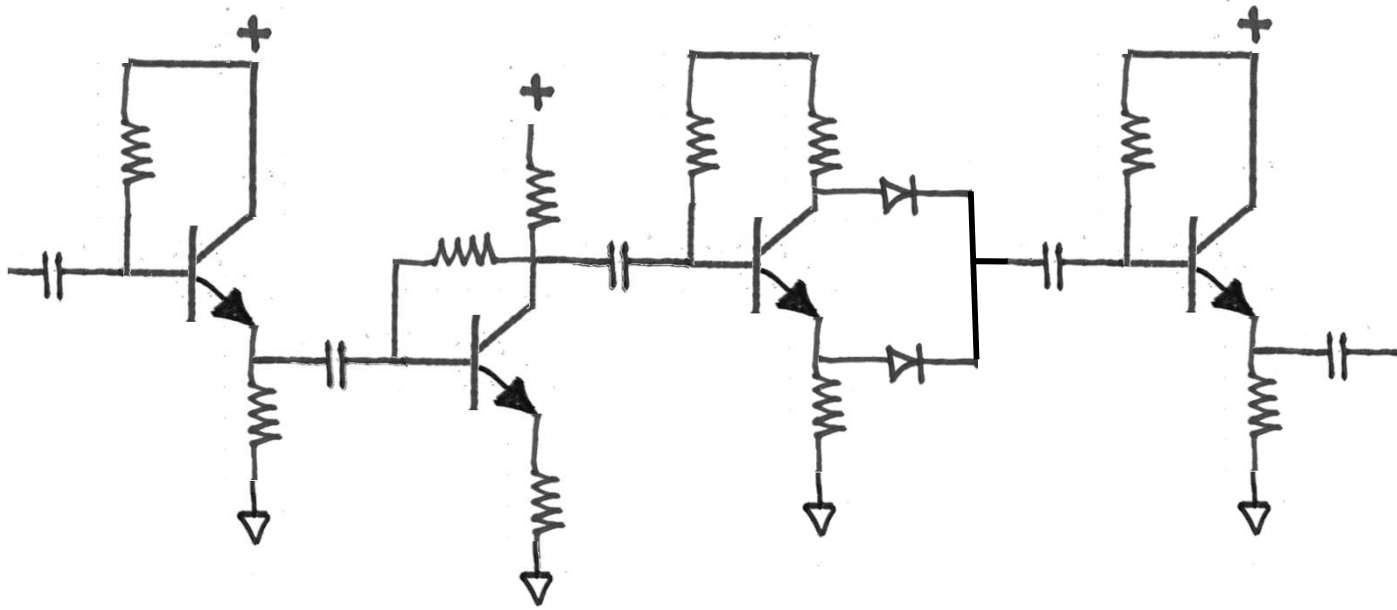
The 3-Transistor Modified Darlington (Sola Sound Tonebender Topology)



Tone Bender MkII
Burns Buzz Around
Burns Buzzaround
Colorsound Overdriver
Colorsound Tone bender Mk2
Sola Sound Tone Bender MK II
Sola Sound Tone Bender MK III
Sola Sound Tone Bender MK IV
Sola Sound Tone Bender Professional MKII
Tone Bender MKIII
Tone Bender MKIV
Tone Bender Professional MkII
Vox Tone Bender Mk III



Differential Pair / Frequency Doubler (Roger Mayer Octavia Topology)



Ace Tone fuzz master FM 2

Fender Blender

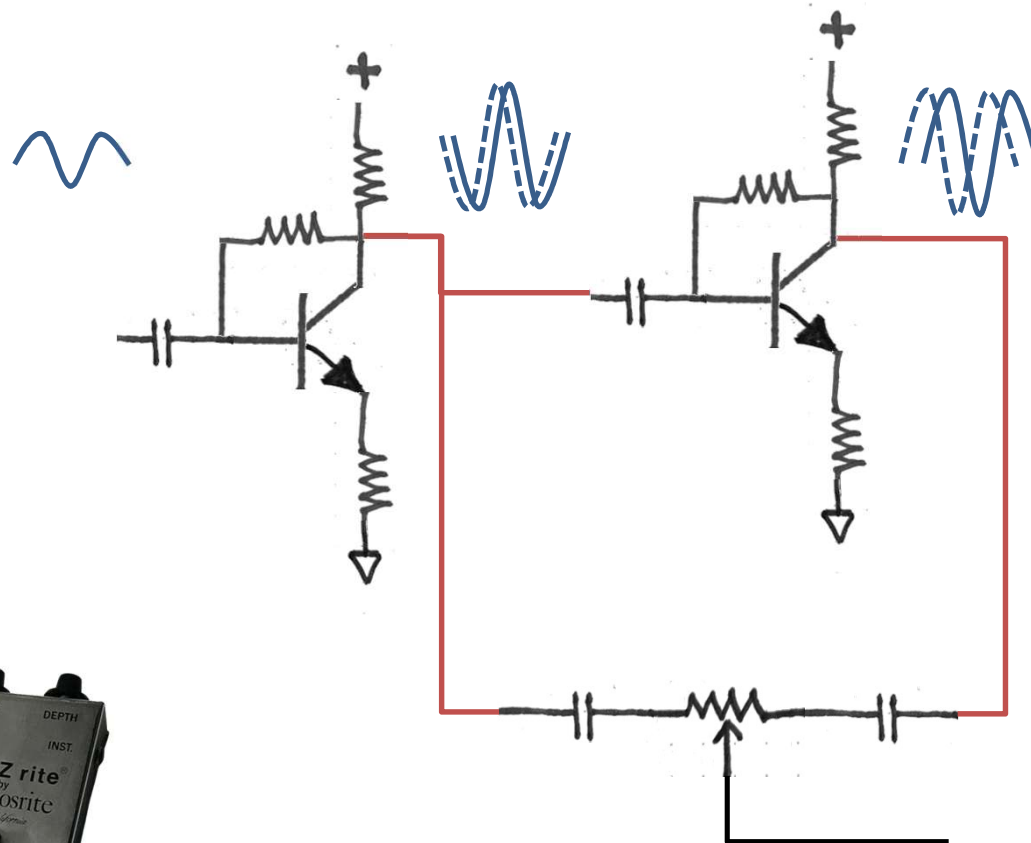
Octavia Evo 1

Unicord Super Fuzz

Univox Super Fuzz

Shin-Ei Fy-6 Super Fuzz

Parallel Phase-Blending (Mosrite Fuzzrite Topology)



Claybridge Fuzzmaster MKIV

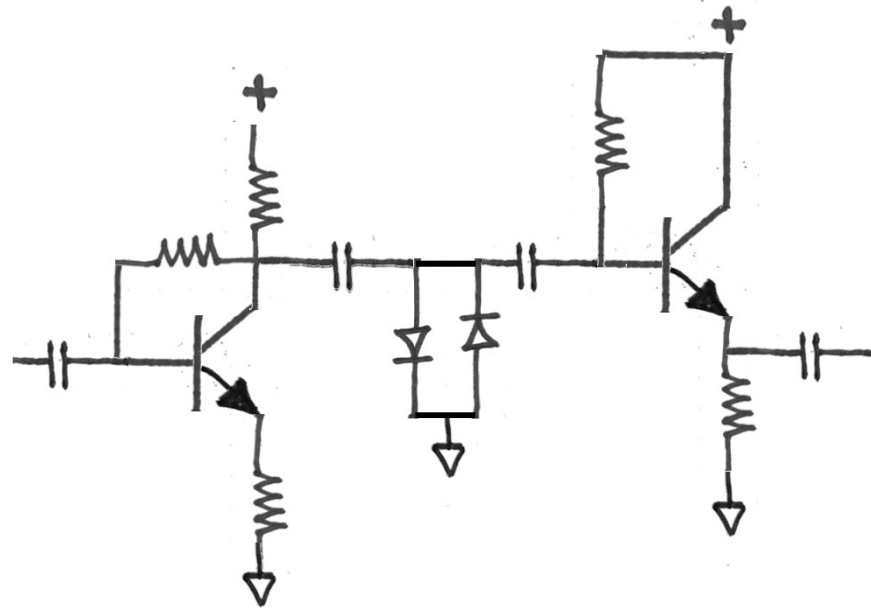
Guild Foxy Lady V1

Guild Foxy Lady V2

Mosrite Fuzzrite

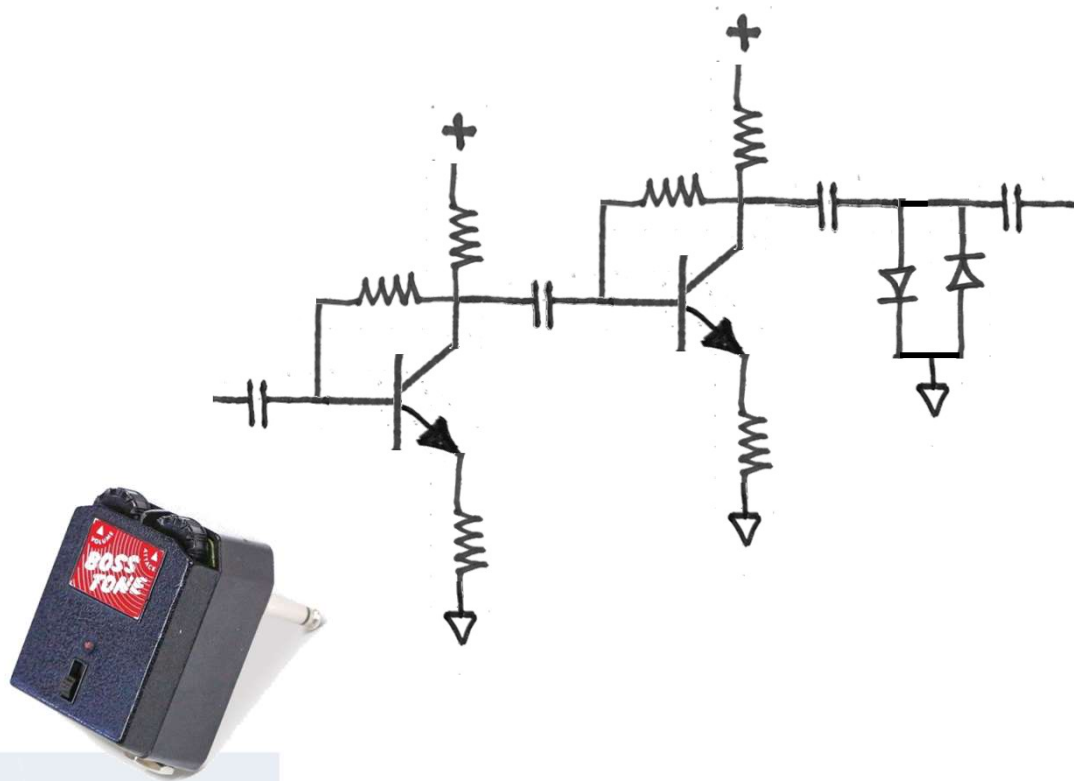
Shin-Ei Companion Fuzz FY-2

Cascaded Boost-Clip-Buffer (Sam Ash Fuzz Box Topology)



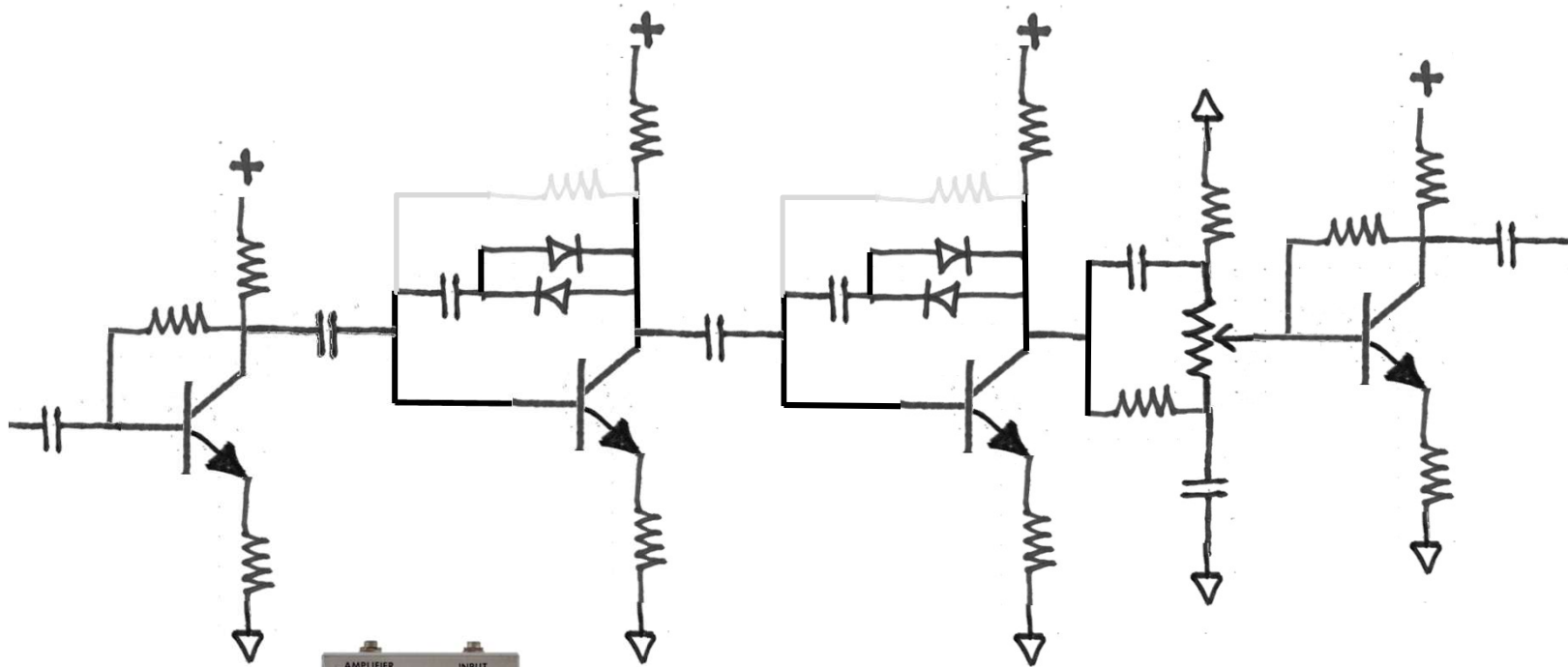
Astrotone Sam Ash Fuzz Box

Capacitive-Coupled Dual-NPN Cascade (Jordan Boss Tone "California" Topology)



Jordan Boss Tone

Multi-Stage Shunt-Feedback Diode Clipper (The Big Muff Pi Topology)



Ace tone fuzz master FM 3

EHX Axis Fuzz

EHX Big Muff Pi V1 EH-3003

Guild Foxey Lady V3

Jen Jumbo Fuzz

Montarbo Sinphoton

* I added the bias resistors back in the middle two stages because some folks could not stand them being omitted.