



# Ensi Genxyde's Hybrid Distortion

Build Document

## Bill of Materials

### Capacitors

I obtained all of my capacitors from Tayda. That's what the layout was setup for.

P/N	Value	Type	Notes
C1	1uF	Film Box	
C2	1uF	Film Box	
C3	1uF	Film Box	
C4	100uF	Aluminum Electrolytic	

### Diodes

I obtained all of my diodes from Tayda.

P/N	Value	Notes
D1	LED	
D2	LED	
D3	1N4148	
D4	1N4148	
D5	1N4148	
D6	1N4148	
D7	1N400x	Polarity protection.

### Transistors

P/N	Value	Notes
Q1	MPSA14	Obtained from smallbear.
Q2	Germanium PNP	Try to use a transistor with an hFE less or equal to 40. There is a silkscreen to use a silicon instead of a germanium. <b>Only use one or the other; do not use both.</b>

### Resistors

Ensi Genxyde used a 22M pulldown. That's what he thought sounded best to him. Try different resistors for R2 to decide what you prefer.

P/N	Value
R1	1k
R2	22M
R3	3M3
R4	3k3
R5	3M3

## Potentiometers

I obtained all of these from Tayda. That's what the layout was setup for. Some pots are onboard, some aren't.

P/N	Value	Notes
BIAS	10k	Trimpot.
GAIN1	B1k	16mm
GAIN2	B100k	16mm
VOL	A500k	16mm
SAG	B5k	9mm

## Switches

I obtained all of these from Tayda.

P/N	Value	Notes
SW1	SPDT	On-Off-On

## Modifications

### Diodes

Like most distortions, have fun here. Try different combinations; LEDs, silicon, germanium, etc. The original schematic did not use diodes for clipping; that's the reason for the on-**off**-on SPDT.

## Build Comments

1. Use the BIAS trimpot to set Q2 to what you think sounds best. (My board was approximately 7k resistance; every setup varies.)
2. The SAG pot is super fun. If you don't want to use SAG, turn the pot all the way to maximum (zero ohm).

Schematic

