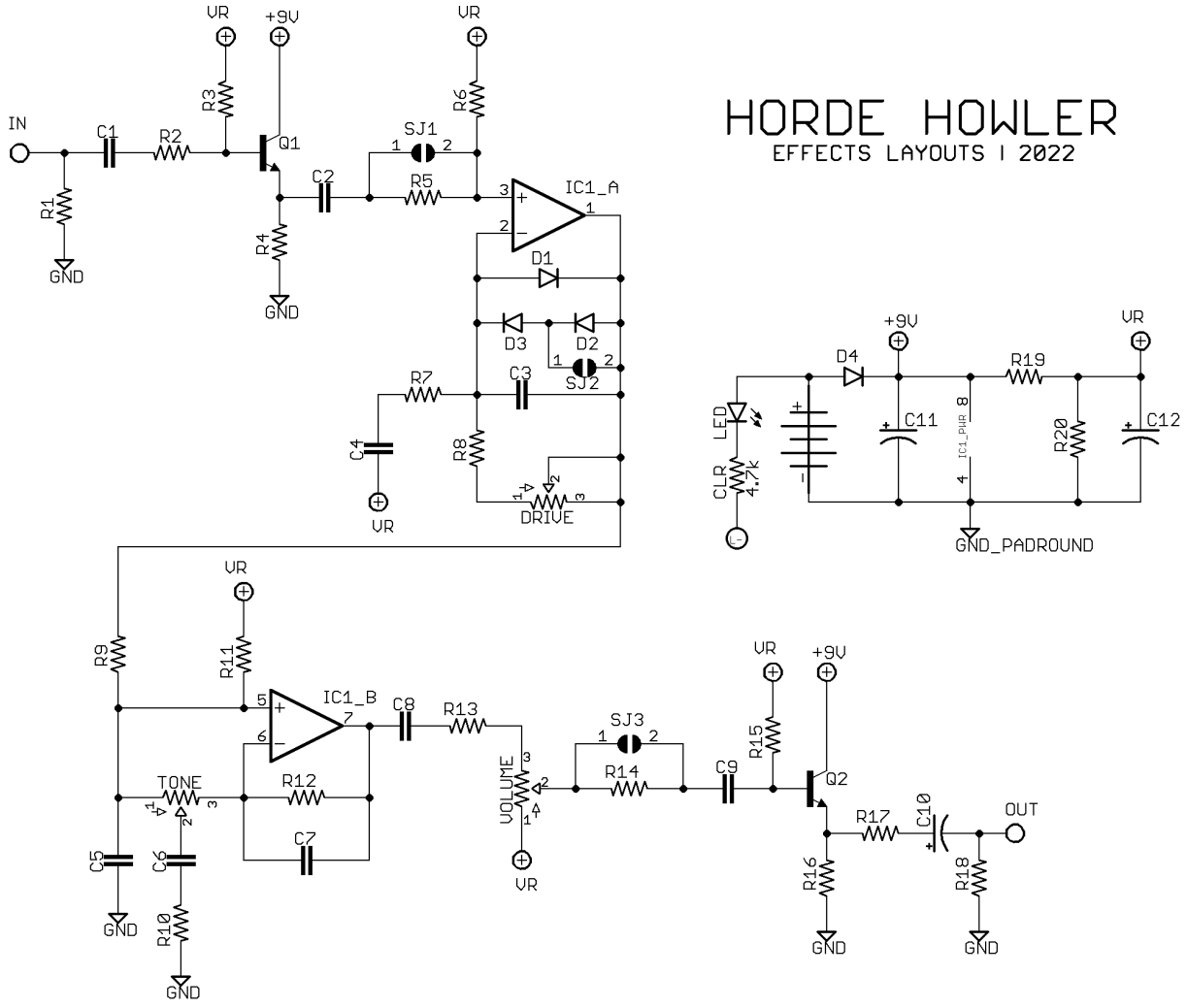
HORDE HOWLER

DESCRIPTION

There are few circuits with more variations (without being all that different than the original) than the classic Ibanez Tube Screamer. With this board you can build a litany of different Screamers with a few value changes and the occasional jumper, including the Ibanez TS808, TS9, or TS10, the Boss SD-1, as well as four versions based on various well-known and lesser-known clones. Get your sockets ready; this one's ripe for experimentation.

SCHEMATIC



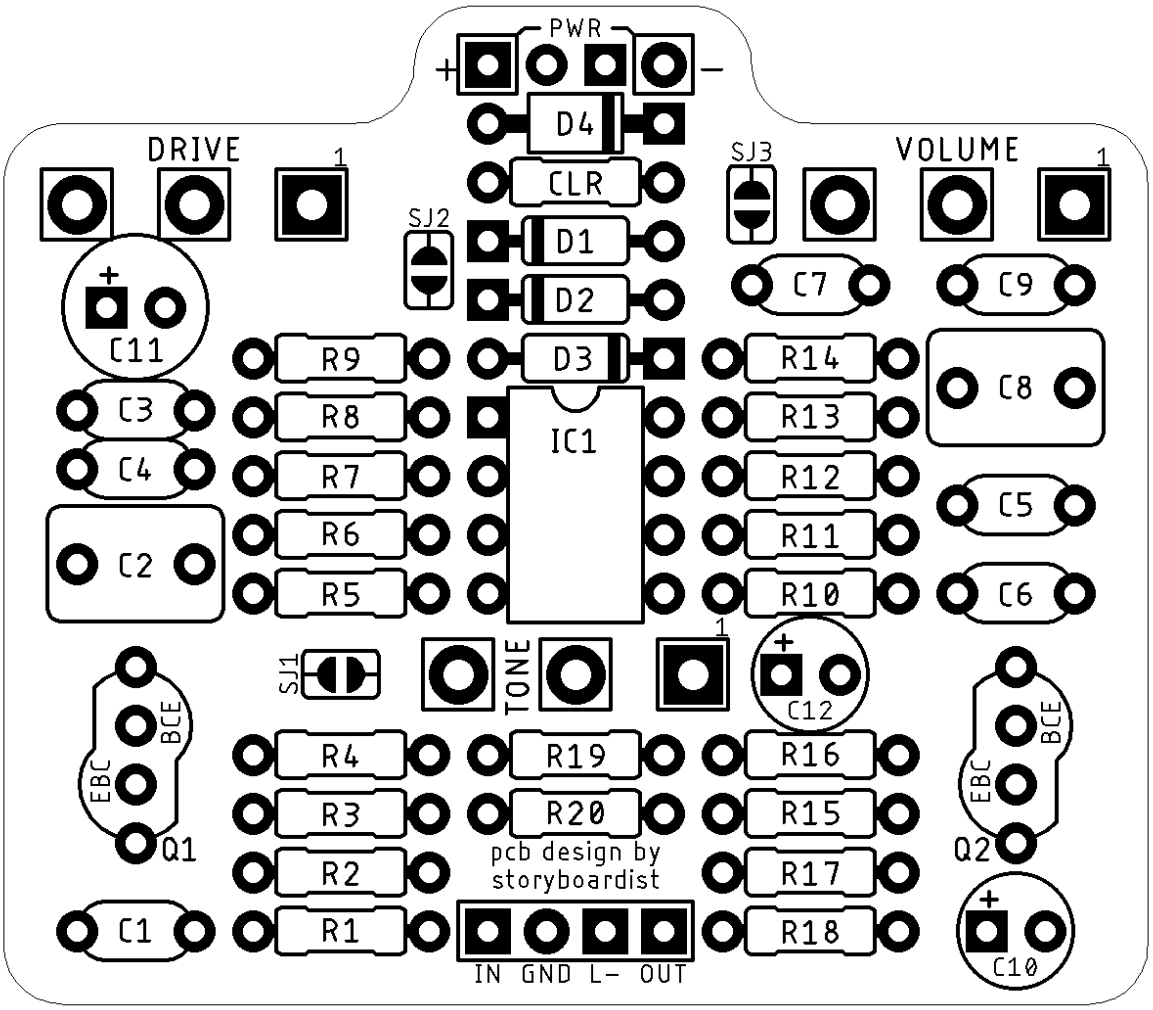
BOM

Part	TS808	TS9	TS10	SD-1	“Sandy”	“Dyna”	“Icon”	“Mass”
R1	1M	1M	1M	1M	1M	2.2M	2.2M	2.2M
R2	1k	1k	1k	10k	1k	1k	1k	1k
R3	510k	510k	510k	470k	560k	510k	620k	510k
R4	10k	10k	10k	10k	10k	10k	10k	10k
R5	omit	omit	220Ω	omit	omit	omit	omit	omit
R6	10k	10k	10k	100k	22k	10k	10k	10k
R7	4.7k	4.7k	4.7k	4.7k	1k	1k	1k	4.7k
R8	51k	51k	51k	33k	22k	10k	10k	22k
R9	1k	1k	1k	10k	1k	1k	1k	1k
R10	220Ω	220Ω	220Ω	470Ω	330Ω	220Ω	220Ω	220Ω
R11	10k	10k	10k	omit	10k	10k	10k	10k
R12	1k	1k	1k	10k	1k	1k	1k	1k
R13	1k	1k	1k	4.7k	1k	1k	1k	1k
R14	omit	omit	omit	22k	omit	omit	omit	omit
R15	510k	510k	510k	1M	560k	510k	620k	510k
R16	10k	10k	10k	10k	10k	10k	10k	10k
R17	100Ω	470Ω	470Ω	1k	100Ω	100Ω	100Ω	100Ω
R18	10k	100k	100k	100k	1M	10k	10k	82k
R19	10k	10k	10k	33k	10k	10k	10k	10k
R20	10k	10k	10k	33k	10k	10k	10k	10k
CLR	4.7k	4.7k	4.7k	4.7k	4.7k	4.7k	4.7k	4.7k
C1	27n	27n	20n	47n	100n	22n	100n	22n
C2	1µ	1µ	1µ	18n	1µ	1µ	1µ	1µ
C3	51p	51p	51p	omit	47p	51p	51p	100p
C4	47n	47n	47n	47n	220n	220n	100n	330n
C5	220n	220n	220n	18n	68n	220n	220n	68n
C6	220n	220n	220n	27n	330n	220n	220n	220n
C7	omit	omit	omit	10n	omit	omit	omit	omit
C8	1µ	1µ	1µ	1µ	1µ	1µ	1µ	1µ
C9	100n	100n	100n	47n	100n	100n	100n	100n
C10	10µ	10µ	10µ	1µ	10µ	10µ	10µ	10µ
C11	100µ	100µ	100µ	100µ	100µ	100µ	100µ	100µ
C12	10µ	10µ	10µ	10µ	10µ	10µ	10µ	10µ
D1	1N4148	1N4148	1N4148	1N916	1N4148	1N4148	1N4148	1N4148
D2	omit	omit	omit	1N916	1N4148	1N4148	omit	omit
D3	1N4148	1N4148	1N4148	1N916	1N4148	1N4148	1N4148	1N4001
D4	1N5817	1N5817	1N5817	1N5817	1N5817	1N5817	1N5817	1N5817
IC1	JRC4558	JRC4558	JRC4558	JRC4558	LM833	OPA2134	JRC4558	JRC4558
Q1	2SC1815	2SC1815	2SC1815	2SC732	MPSA18	BC546B	2N3904	2N5088
Q2	2SC1815	2SC1815	2SC1815	2SC732	MPSA18	BC546B	2N3904	2N5088
Drive	A500k	A500k	A500k	B1M	A500k	B1M	B500k	A500k
Tone	W20k	W20k	W20k	W20k	B5k	B25k	B2k	B25k
Volume	B100k	B100k	B100k	B10k	B100k	B100k	B100k	A100k

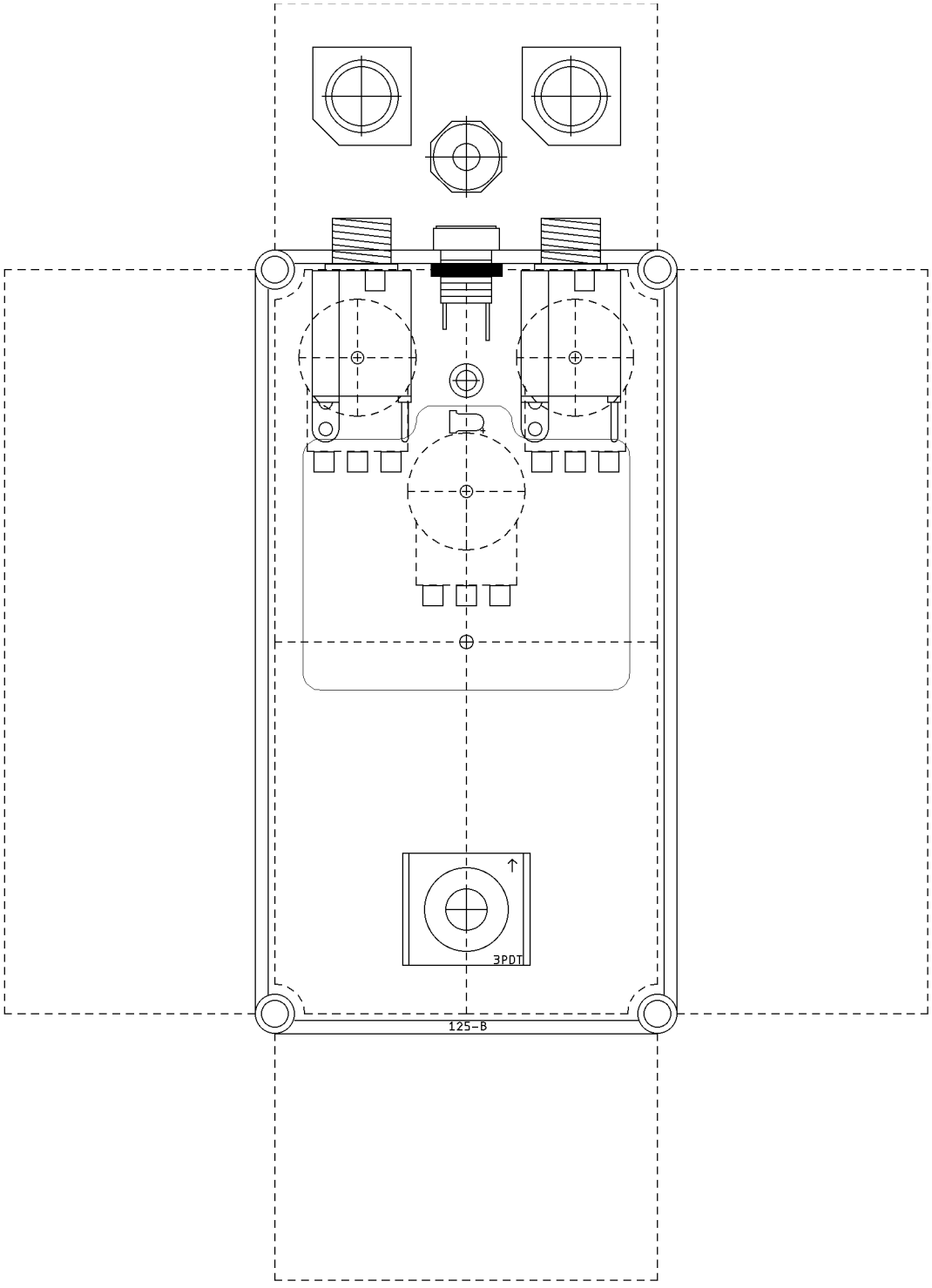
SJ1	bridge	bridge	ignore	bridge	bridge	bridge	bridge	bridge
SJ2	bridge	bridge	bridge	ignore	ignore	Ignore	bridge	bridge
SJ3	bridge	bridge	bridge	ignore	bridge	bridge	bridge	bridge

Note
The transistors for Q1-2 are just being used as buffers, so just about any NPN transistor will work just fine without coloring the tone significantly. An extra emitter pad is provided so that both BCE and CBE type transistors can be used. Go to subs are 2N3904, 2N5088, etc.
The SJ surface pads should easily be bridged with a blob of solder. These jump various components to make various versions outlined above. I recommend bridging the appropriate pads before populating any other components to avoid inadvertently damaging other components.
“Sandy” - inspired by the EQD Dunes (just without the toggles)
“Dyna” - inspired by the Landgraff Dynamic Drive and Clay Jones Overdrive
“Icon” - inspired by the CMATMods Signa Drive
“Mass” - inspired by the Fulltone Bass Drive

LAYOUT



DRILL TEMPLATE (125B)



DRILL TEMPLATE (1590B)