

FX TYPE: Boost

Based on the Paul Cochrane Fat Bastard

Enclosure Size: 1590A "Softie" compatibility: none © 2019 <u>madbeanpedals</u>



Overview

ObiWon-Armon: "Have you ever heard the tragedy of Dark Foltune the Guy?"

Padawan Kokrain: "No."

ObiWon-Armon: "I thought not. It's not a story the pedalmakers would tell you. It's a DIY legend. Dark Foltune was a Dark Lord of Boutique, so powerful and so wise he could use the Fuzz to influence electrons to create tone... He had such a knowledge of cloning, he could even keep the pedals he copied from being exposed."

Padawan Kokrain: "He could actually save pedals from cloning?"

ObiWon-Armon: "The dark side of the Fuzz is a pathway to many abilities some consider to be... unnatural."

Padawan Kokrain: "What happened to him?"

ObiWon-Armon: "He became so powerful... the only thing he was afraid of was losing his power, which eventually, of course, he did. Unfortunately, he taught his apprentice everything he knew, then his apprentice exposed his dark cloning. Ironic. He could save pedals from being copied, but not himself."

Padawan Kokrain: "Is it possible to learn this power?"

ObiWon-Armon: "Not from DIY."

Controls

GAIN: Up to 20+dB of clean gain.

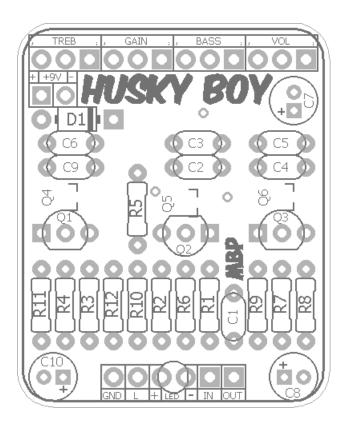
BASS and TREB: The controls roll-off bass and treble, resp.

VOL: Total output.

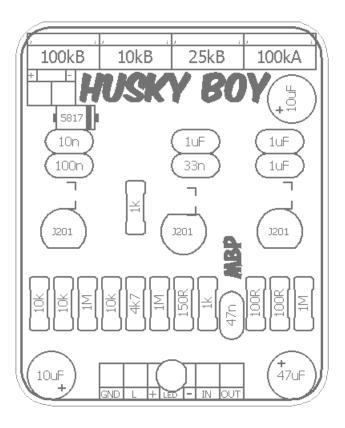
Terms of Use: You are free to use purchased **HuskyBoy** circuit boards for both DIY and small commercial operations. You may not offer **HuskyBoy** PCBs for resale or as part of a "kit" in a commercial fashion. Peer to peer re-sale is fine, though.

Technical assistance for your build(s) is available via the <u>madbeanpedals forum</u>. Please go there rather than emailing me for assistance on <u>builds</u>. This is because (1) I'm not always available to respond via email in a timely and continuous manner, and (2) posting technical problems and solutions in the forum creates a record from which other members may benefit.

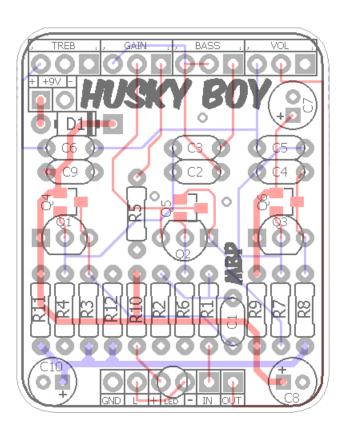
Parts HuskyBoy



 Q4-Q6 are SMD subs for the throughhole J201. Values HuskyBoy



Traces HuskyBoy



B.O.M. HuskyBoy

| Resistors | | Caps | | Diodes | |
|-----------|------|------|------|---------|-------|
| R1 | 1k | C1 | 47n | D1 | 5817 |
| R2 | 1M | C2 | 33n | Transi | stors |
| R3 | 1M | C3 | 1uF | Q1 - Q3 | J201 |
| R4 | 10k | C4 | 1uF | Pots | |
| R5 | 1k | C5 | 1uF | GAIN | 10kB |
| R6 | 150R | C6 | 10n | BASS | 25kB |
| R7 | 100R | C7 | 10uF | VOL | 100kA |
| R8 | 1M | C8 | 47uF | TREB | 100kB |
| R9 | 100R | C9 | 100n | | |
| R10 | 4k7 | C10 | 10uF | | |
| R11 | 10k | | | | |
| R12 | 10k | | | | |
| | | | | | |

Shopping List HuskyBoy

| Value | QTY | Туре | Rating |
|-------|-----|--------------------------|----------|
| 100R | 2 | Metal / Carbon Film | 1/4W |
| 150R | 1 | Metal / Carbon Film | 1/4W |
| 1k | 2 | Metal / Carbon Film | 1/4W |
| 4k7 | 1 | Metal / Carbon Film | 1/4W |
| 10k | 3 | Metal / Carbon Film | 1/4W |
| 1M | 3 | Metal / Carbon Film | 1/4W |
| 10n | 1 | Film | 16v min. |
| 33n | 1 | Film | 16v min. |
| 47n | 1 | Film | 16v min. |
| 100n | 1 | Film | 16v min. |
| 1uF | 3 | *included w/PCB | |
| 10uF | 2 | Low-profile Electrolytic | 16v min. |
| 47uF | 1 | Low-profile Electrolytic | 16v min. |
| 5817 | 1 | | |
| J201 | 3 | | |
| 10kB | 1 | PC Mount | 9mm |
| 25kB | 1 | PC Mount | 9mm |
| 100kA | 1 | PC Mount | 9mm |
| 100kB | 1 | PC Mount | 9mm |

 The HuskyBoy requires three 1uF MLCC caps which are not available at smallbear. They are included with the PCB purchase. Parts Guide HuskyBoy

Low profile Electrolytic caps:

http://smallbear-electronics.mybigcommerce.com/electrolytic-radial-low-profile-16v-1-f-100-f/

J201:

http://smallbear-electronics.mybigcommerce.com/transistor-fet-j201-generic/

MMBFJ201:

http://smallbear-electronics.mybigcommerce.com/fairchild-on-semi-jfet-mmbfj201/

9mm PC Mount pots:

http://smallbear-electronics.mybigcommerce.com/alpha-single-gang-9mm-pc-mount/

Thinline DC Jack:

http://smallbear-electronics.mybigcommerce.com/dc-power-jack-all-plastic-unswitched-2-1-mm/

Enclosed Mono:

http://smallbear-electronics.mybigcommerce.com/1-4-in-mono-enclosed-jack/http://smallbear-electronics.mybigcommerce.com/1-4-in-mono-enclosed-switchcraft-111x/

Lumberg Mono:

http://smallbear-electronics.mybigcommerce.com/lumberg-1-4-compact-shrouded-mono-jack/

Notes HuskyBoy

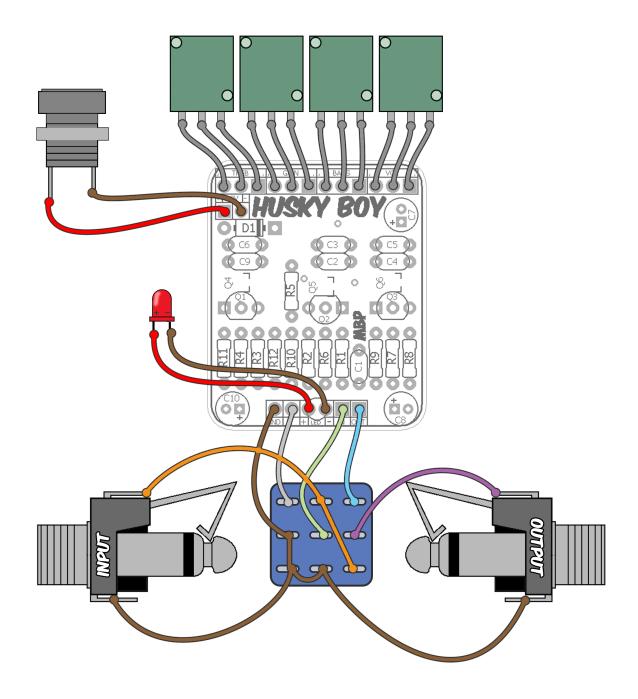
Q4-Q6 are for the surface mount version of the J201 (the MMBFJ201 in SOT-23 format). You can
use either one, or even mix and match depending on the devices you have. Just don't use both for
the same transistor!

• It may be possible to use 12mm pots in place of the 9mm but most likely it would require some adjustment to the drill template provided. The 12mm pots have solder tabs which make wiring a bit easier.

http://smallbear-electronics.mybigcommerce.com/alpha-single-gang-12mm-solder-terms/

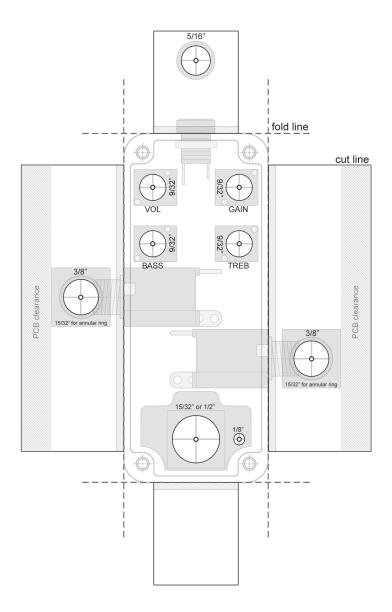
- For 9mm pots, using some perf cut down to two rows of three pads will make wiring much easier, or you can use the 9mm "breadbuddy" boards for sale in the mbp store.
- If you don't know the history of the Jack Orman Mini-Booster, the Fulltone® Fat Boost™ and Paul Cochrane's "Fat Bastard" look it up! It's quite a story.

Wiring Diagram HuskyBoy



1590A Drill Guide HuskyBoy

Note: Drill Guides are approximate and may require tweaking depending on the types of jacks, switches and pots you use.



- This template will work for either mono enclosed jacks or the "Lumberg" style.
- It uses the "Thinline" style DC Jack but you should be able to fit other styles in there (different drill size req'd).
- It also shows the 3PDT02 bypass PCB but this is not required. If you are wiring straight to a 3PDT you can use the same LED location on the right side or choose a different spot.

Voltages HuskyBoy

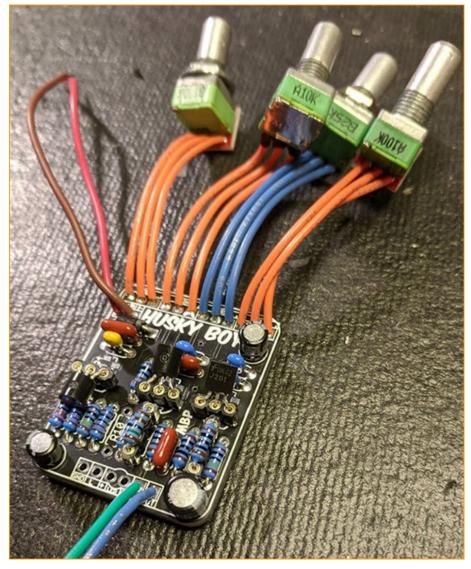
| Q1 | DC | |
|----|------|--|
| G | 4.18 | |
| S | 4.84 | |
| D | 9.19 | |

| Q2 | DC | |
|----|------|--|
| G | ~0 | |
| S | 0.4 | |
| D | 4.84 | |

| Q3 | DC | |
|----|------|--|
| G | 4.17 | |
| S | 4.87 | |
| D | 9.16 | |

- 9.42vDC One Spot
- Current Draw: ~ 2mA

Build Pic HuskyBoy



Ran out of 10kB so I had to improvise with a different 10kA!

