

**FX TYPE: Boost** Based on the Paul Cochrane Fat Bastard Enclosure Size: 1590B "Softie" compatibility: Softie3 © 2023 <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."

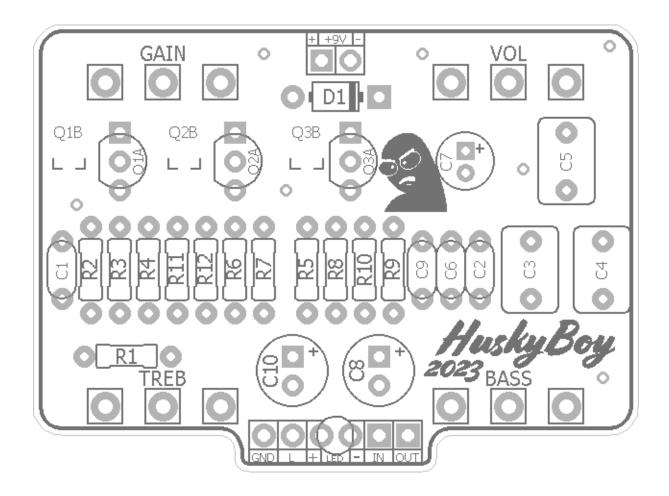
# Controls

- GAIN: Up to 20+dB of clean gain.
- BASS and TREB: The controls *roll-off* bass and treble, resp.
- VOL: Total output.

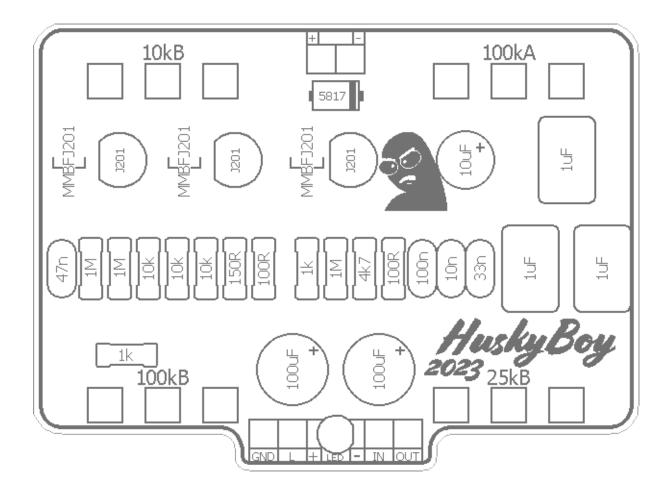
The 2023 version of the HuskyBoy changes from a 1590A to 1590B format. There are no circuit changes.

**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.

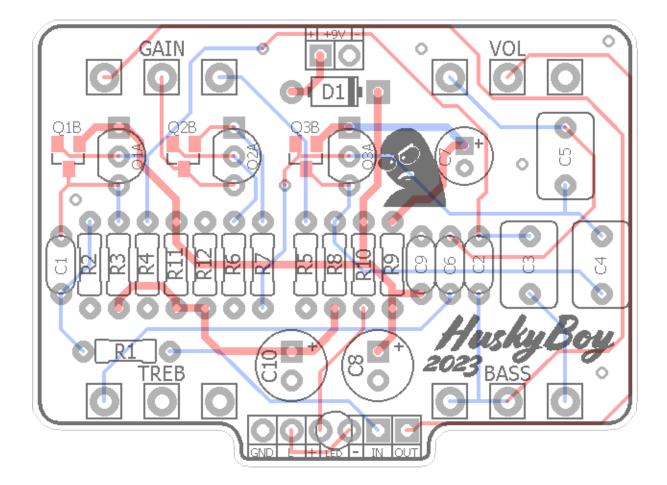
**Technical assistance** for your build(s) is available via the <u>madbeanpedals forum</u>. Please go there rather than emailing me for assistance on <u>builds</u>. This is because (1) I'm not always available to respond via email in a timely and continuous manner, and (2) posting technical problems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











Resistors		Caps		Diodes	
R1	1k	C1	47n	D1	1n5817
R2	1M	C2	33n	Transistors	
R3	1M	C3	1uF	Q1	J201
R4	10k	C4	1uF	Q2	J201
R5	1k	C5	1uF	Q3	J201
R6	150R	C6	10n	Pots	
R7	100R	C7	10uF	GAIN	10kB
R8	1M	C8	100uF	BASS	25kB
R9	100R	C9	100n	TREB	100kB
R10	4k7	C10	100uF	VOL	100kA
R11	10k				
R12	10k				

Values	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	25v min.
33n	1	Film	25v min.
47n	1	Film	25v min.
100n	1	Film	25v min.
1uF	3	Film	25v min.
10uF	1	Electrolytic	25v min.
100uF	2	Electrolytic	25v min.
1n5817	1		
J201	3	through-hole or surface mount	
10kB	1	PCB Right Angle	16mm
25kB	1	PCB Right Angle	16mm
100kB	1	PCB Right Angle	16mm
100kA	1	PCB Right Angle	16mm

## **J201**:

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

### MMBFJ201:

- 1. http://smallbear-electronics.mybigcommerce.com/fairchild-on-semi-jfet-mmbfj201/
- 2. https://www.mouser.com/ProductDetail/512-MMBFJ201

## 2n5457 (sub for J201 but with less gain):

1. <u>https://stompboxparts.com/semiconductors/2n5457-jfet/</u>

# 16mm Right Angle Pots:

- 1. <u>http://smallbear-electronics.mybigcommerce.com/alpha-single-gang-16mm-right-angle-pc-mount/</u>
- 2. https://stompboxparts.com/pots/16mm-potentiometer-short-pcb-leg/

### DC Jacks:

- 1. https://smallbear-electronics.mybigcommerce.com/2-1-mm-all-plastic-round/
- 2. <u>https://stompboxparts.com/power-connections/dc-power-jack-2-1mm-low-profile/</u>
- 3. https://lovemyswitches.com/thinline-lumberg-dc-power-jack-2-1mm/

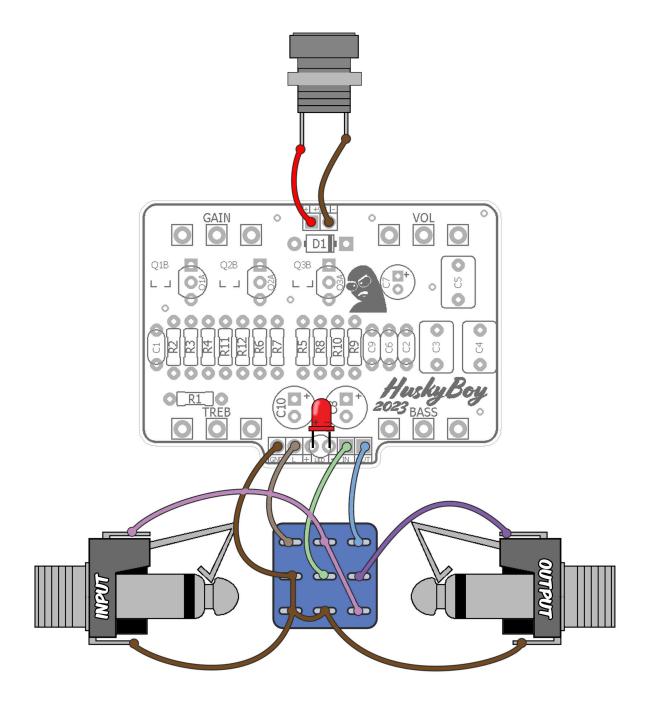
### 1/4" jacks:

- 1. https://smallbear-electronics.mybigcommerce.com/1-4-in-mono-nys229/
- 2. <u>https://smallbear-electronics.mybigcommerce.com/1-4-in-mono-switchcraft-11/</u>
- 3. <u>https://lovemyswitches.com/1-4-mono-jack-lumberg-klbm-3/</u>
- 4. <u>https://lovemyswitches.com/1-4-mono-jack-neutrik-rean-nys229/</u>

# My preferred 3PDT switch:

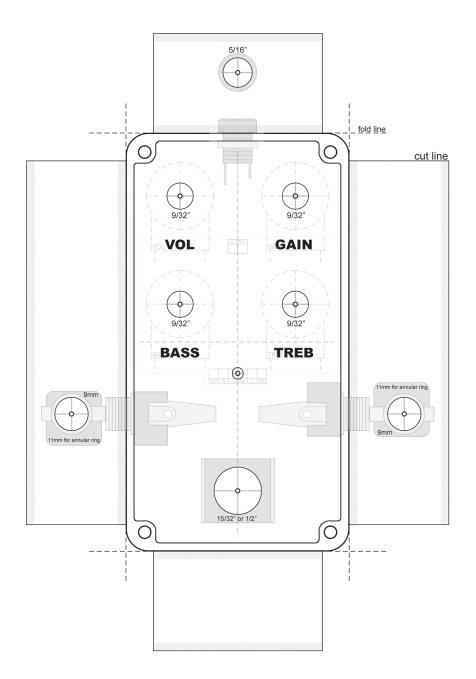
1. https://lovemyswitches.com/pro-3pdt-latched-foot-switch-solder-lugs-feather-soft-click/

- Q1A, Q2A and Q3A are for through-hole FETs. Q1B, Q2B and Q3B 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! Since the through-hole and surface mount J201 are in short supply you may need to sub a different one. The MPF102 or 2n5457 should be fine here. Others may work, as well.
- The GAIN and VOL controls are a little redundant. Usually I like the VOL full up then use the GAIN control for the output. But, occasionally, the VOL control is handy. For example, if you want to use the Husky Boy as a tone and dynamic enhancer but without a big volume boost. In that case, maxing the GAIN then dialing in the output level so it's about unity is useful.
- I've never felt the need, but you should be able to run the HuskyBoy at 12v or even 18v. Just make sure to use 25v min. rated capacitors if you do.
- 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.



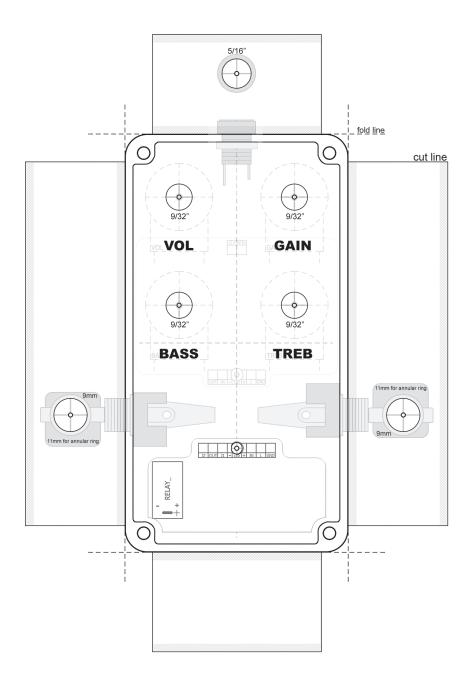
The bypass LED is soldered directly to the PCB.

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



Use this template for regular 3PDT bypass.

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



Use this template for "Softie3" relay bypass. Note the different bypass LED location.

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	

- 9.5vDC One Spot
- Current Draw: ~2mA



