## Ref-a-Dub-Delure

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\text { Project Gy } 1776 \text { Effects/JRM (C) } 2016
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The Rub-a-Dub Deluxe utilizes the new Accutronics BTDR-3H. The BTDR-3H allows the reverb decay to be adjustable. In addition, the Rub-a-Dub Deluxe also adds a tone control (based on Culturejam's Box of Hall) and a trim pot to allow for a volume boost or cut.

| Resistors |  |  |  | Capacitors |  | Diode |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| R1 | 1M | R10 | 33R | C1 | 22 n | D1 | 1N4001 |
| R2 | 100k | R11 | 10k | C2 | 47pF | 2e |  |
| R3 | 200k | R12 | 10k | C3 | 1 uF | IC1 | TL072 |
| R4 | 22k | Potentiometers |  | C4 | 100pF | Requlator |  |
| R5 | 10k | MIX | 50kB | C5 | 1 uF | REG | 78L05 |
| R6 | 1k | TONE | 5kB | C6 | 47uF | mise |  |
| R7 | 1M | DECAY | 100kB* | C7 | 100uF | BTDR-3H |  |
| R8 | 20k | 7 rimmer |  | C8 | 47uF |  |  |
| R9 | 4k7 | VOL | 10k | C9 | 220n |  |  |

*DUAL GANG POTENTIOMETER
Notes:
The 100 kB dual gang potentiometer gives you the max possible decay length. If you would like more control with shorter decay lengths and do not want the extended decay, you can use a dual gang 10 kB as called for in the BTDR-3H data sheet.
http://www.smallbearelec.com/servlet/Detail?no=1031
The 10k volume trimpot can be adjusted so the circuit is below or above unity gain. Set halfway is essentially unity.

The BTDR-3H should be soldered in last (right before the pots) as it will cover the underside of the PCB. Please be extra careful to make sure you have double checked all component values and solder joints before soldering in the BTDR-3H.

The silkscreen for D1 is missing the cathode line. The cathode goes to the square pad as shown on the PCB layout at the top of the build document.



Print drill template at 100\% scale.

This document and board layout is designed for personal use only but boards can be purchased and used commercially with written authorization from the owner.

