

# Death by Reverb SMD

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**Based on:**

Death by Audio Reverberation Machine™

**Effect type:**

Super dreamy reverb

**Build difficult:**

Easy

**Amount of parts:**

Low, total 14 components

**Technology:**

BTDR-2H-L Belton brick

**Power consumption:**

9V

**Enclosure type:**

125b/1590bb

**Get your board at:**

[Death by Reverb SMD](#)

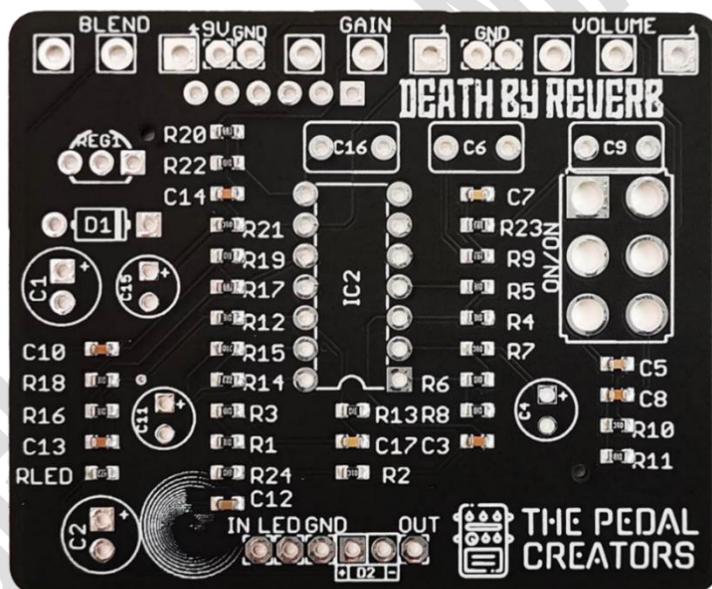
**Get your kit at:**

[Das Musikding \(Europe\)](#)

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**Project overview:**

This synthetic atmosphere and depth creator inspired by Death by Audio Reverberation Machine™ has everything: from simulations of vintage amp verb, playing in a cave, large concert halls, and spaceships being sucked into wormholes. Unleashed all the potential that this circuit offers!



# About The Pedal Creators

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**Everyone can build** excellent boutique guitar **pedals**.

Everything **we do** is to make that **experience** more accessible and **user-friendlier**.

The **Pedal Creators** series are the **best and easiest to build PCBs** ever. Including most **resistors** and **capacitors** already **soldered** on board as SMD components, leaving the key values for you to **experiment** and craft **your own tone**.

Now you can **build** a pedal you are **proud** of in **less than an hour** without any previous experience.

What are you waiting for to **become a Pedal Creator**?

## The Pedal creators - key features:

- **Easy to build**, no previous experience required. It's like Lego for musicians.
- **Fast assembly** finish a pedal in less than an hour. Play your favorite record and enjoy the ride along.
- **100% mistake-proof**. Even my grandma can build one while she cooks.
- **Build** your own boutique pedal. Experiment with different values and make the **pedal you always dreamed of**.
- Easy to scale. **Turn your passion into a money-making machine**.

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## Introduction

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The Death by Reverb just needs three simple, intuitive knobs to allow you to experiment and combine various settings to obtain the perfect ambiance for your sound. Also, pay special mention for the toggle that allows you to switch between two distinct reverb flavors: Bright Sunshine and Dark Star.

Although the controls are straightforward to use and intuitive, they allow you to dial up the craziest and dreamy wet soundscapes

quickly. If you are looking for something outstanding and unique without the hustle of using digital parts, you will love this one. Let your sound shimmer and breathe with a new dimension. Build your Death by Reverb now!

## Controls

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- Blend
- Gain
- Volume
- Bright/dark Toggle

# Bill of materials

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## Electrolytics Capacitors

Part	Value
C1	100u
C2	100u
C4	1u
C11	1u
C15	1u

## Potentiometers

Part	Value
BLEND	A10K
GAIN	C1M
VOLUME	A100K

## IC

Part	Value
IC2	TLC27M4AIN*
IC1	BTDR-2H-L
Reg1	LM7805

## Diodes

Part	Value
D1	1N5817
D2	LED (your choice)

## Switches

Part	Value
SW1	DPDT ON-ON

# Shopping list

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Electrolytics Capacitors		
Qty	Value	Parts
2	100u	C1, C2
3	1u	C4, C11, C15

Potentiometers		
Qty	Value	Parts
1	A100K	VOLUME
1	A10K	BLEND
1	C1M	GAIN

IC		
Qty	Value	Parts
1	TLC27M4AIN*	IC2
1	BTDR-2H-L	BTDR-2H-L
1	LM7805	REG1

Diodes		
Qty	Value	Parts
1	1N5817	D1
1	LED (your choice)	D2

Switches		
Qty	Value	Parts
1	DPDT ON-ON	SW1



# Components Recommendations

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As many people like to experiment with some pedals with higher voltage, always ensure your **electrolytic capacitors'** max tolerance is over 25v.

This board has been tested using Film box capacitors for most of the values over 1nf and ceramics discs for those under 1nf. However, high-quality components such as Wima's Capacitors and Panasonic's electrolytics can deliver a better performance.

All the resistors used for testing this project are 1/4W Metal Film.

The BOM and Shopping list are exclusive regarding this project. It doesn't include all the hardware like the 3PDT bypass switch, audio/dc jacks, enclosure, etc.

## TLC27M4AIN\*

This Quad Opamp might be hard to source on some parts of the globe. However, there are many other substitutes you can use to have this bad boy fully operating such as

- TLC274CN
- TL074 (RECOMENDED SUSBSTITUTE)
- TL084
- LM324

# Build Notes

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If this is one of your first projects, I recommend you to take a look at our [Pedal Building Guide](#).

For a successful and tidy build, it's recommended the following order:

1. Electrolytic capacitors (always check the polarity)
2. Transistors
3. Wires
4. Potentiometers and switches
5. Off-board wiring

# Wiring Diagram

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All our projects include a free 3PDT Board to make the wiring easier and tidier. Also, all of our PCBs feature the status LED on board.

The pad named “Ctrl” or “LED” is the one that controls the status of the led; wire it to the “LED” pad on the 3PDT board or in the control slug of your 3PDT.

This board has been designed to match our EZ 3PDT PCB; check it [here](#) to access our [Pedal Wiring Guide](#).

## Drill Template

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This Project has been planned to fit into a 125b enclosure type.

Check the Attached “Drilling templates” to drill the box properly. The files are on Scale 1:1, ready to print on an A4 page.

## Licensing and Usage

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We really appreciate your trust and support in buying this PCB, as well as your will to dive into the DIY electronics world. For us, that's why you can make this project work properly and enjoy not only the building process but also experiment and play with it on your rig.

We try to reply to every question we receive on our email or our social media. Still, we try to encourage all our customers to join our [PCB Guitar Mania – Builders Group](#) on Facebook to post all your doubts, issues, suggestions, or requests, share your builds, and have some feedback from other fellow builders and us!

We tested all our projects following this same guide on their standard configurations. Although, not all of the variations and mods have necessarily been checked. These are suggestions based on the schematic analysis and the experiences and opinions of others. Feel free to share with us your views and recommendations regarding the mods your personal experimentation.

These boards may be used for commercial endeavors in any quantity unless expressly noted. No attribution is necessary, though accreditation or a link back is always much appreciated.

If you are a builder planning to make your own run of pedals, we also offer the service of custom-made boards with your brand and logo, design according to your specifications.

The only usage restrictions are that, first, you cannot resell the PCB as part of a kit without prior arrangement with us, and second, you cannot scratch off the silkscreen or other way of trying to hide our logos and the source of the PCBs. Like it's written above, if you want to have your designs with your brand and logo, we could undoubtedly reach an agreement.

Follow us on [Instagram](#) and [Facebook](#) to stay in tune with the latest projects!