

# SEED TECHNOLOGY INC (SEEDUINO)

## Adjustable Breadboard Power Supply

### Model: TOL123D3P

#### Introduction

Another breadboard power supply designed by Seed Studio. it can directly takes power from DC wall wart and outputs a selectable 5V or 3.3V regulated voltage.

Compare to other breadboard power supply designs, this one provided mini-USB port like the seeeduino , you can toggle the switch and select your power source. (USB or dc jack).

With this board, you can send power to both power lane of the breadboard, and each side has a on/off switch.

#### Features

- 5V/3.3V regulated voltage
- Dual lane output
- Separate power selection for each lane
- Dual power port input
- Special designed for Breadboard usage

#### Application Ideas

- Application1
- Application2
- Application3

#### Cautions

The warnings and wrong operations possible cause dangerous.

#### Schematic

It is the schematic, the circuit about Eagle resource like .pdf should linked here in order to avoid memory exhausted.

#### Specification

##### Key Specification

Specification	Conditions	Min	Typ	max	Unit
Input voltage		5.0	6.5	12.0	V
	Channel 3.3V	3.235	3.3	3.365	V
Output Voltage	Channel 5V: $10\text{mA} \leq \text{IOUT} \leq 1\text{A}$ , $6.5\text{V} \leq \text{VIN} \leq 12\text{V}$	4.9000	5.0	5.100	V
Current Limit	$\text{VIN}-\text{VOUT}=2\text{V}$	1.2	1.35	A	
Ripple Rejection	$f=120\text{Hz}$ , $\text{COUT}=22\mu\text{F}$ Tantalum, $\text{VIN}-\text{VOUT}=3\text{V}$ , $\text{IOUT}=1\text{A}$	50	70		dB
Temperature Stability			0.5		%

## Usage

### Hardware Installation

1. Align the polarity of pin header to breadboard. (Usually Red for +, Blue for -)
2. Plug the supply board to breadboard completely.

Now you may de-activate power by the two jumpers, or adjust the vertical switches to select different voltage. The horizontal switch is used to select JST 2 pin or mini USB cable as input.

### Programming

Includes important code snippet. Demo code like :

Demo code

```
<span class="br0">{</span>
```

```
<span class="br0">}</span>
```

### Example

The projects and application examples.

### ***Bill of Materials (BOM) /parts list***

All the components used to produce the product.

### FAQ

Please list your question here:

### Support

If you have questions or other better design ideas, you can go to our [forum](#) or [wish](#) to discuss.

### Version Tracker

Revision	Descriptions	Release
v1.0b	Initial public release	Nov 16, 2009
v1.1	Initial public release	Oct 10, 2011

### Bug Tracker

Bug Tracker is the place you can publish any bugs you think you might have found during use. Please write down what you have to say, your answers will help us improve our products.

### Additional Idea

The Additional Idea is the place to write your project ideas about this product, or other usages you've found. Or you can write them on Projects page.

### Resources

- [BreadboardPower.zip](#)

## **See Also**

Other related products and resources.

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