

# Power Supplies

Find Here some schematics for DIY Power Supplies. It could help to power your midibox !

**!/\ Be Aware of high voltages! - Stay Safe ! /\**

## +5V DC / +9V DC / +12V DC



5V-9V-12V DC Regulated Power Supply - Current output : 1A

### 5V Parts List

| Value      | Type      | Qty | Designation |
|------------|-----------|-----|-------------|
| LM7805     | VR        | 1   | U1          |
| 1N4007     | Diode     | 4   | D1,D2,D3,D4 |
| 220        | Resistor  | 1   | R1          |
| 22µF/25V   | Capa Elec | 1   | C2          |
| 2200µF/40V | Capa Elec | 1   | C1          |
| S05K400    | Varistor  | 1   | VR          |
| 9VDC 15VA  | Transfo   | 1   | TR          |

### 9V Option

Replace:

- U1 > LM7809
- TR out > 12VDC
- R1 > 390ohms

### 12V Option

Replace:

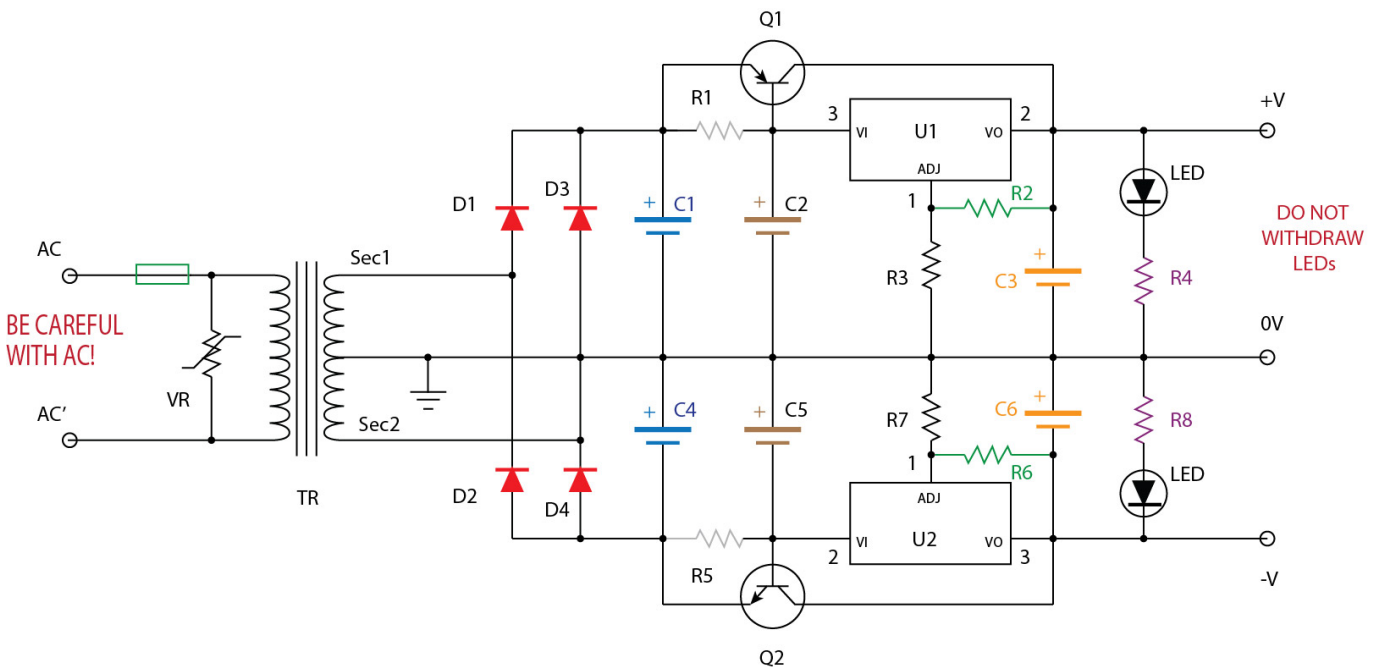
- U1 by LM7812
- TR out> 12VDC
- R1 > 510ohms

## -12V/+12V DC

A designed has been purposed there :

- [Bipolar 12V PSU](#)

## -15V/+15V DC



+15/-15V Bipolar Regulated Power Supply - Current output : 4A

### Parts List

| Value          | Type     | Qty | Designation |
|----------------|----------|-----|-------------|
| LM317T         | VR       | 1   | U1          |
| LM337T         | VR       | 1   | U2          |
| BDX54          | PNP      | 1   | Q1          |
| BDX53          | NPN      | 1   | Q2          |
| 10A04          | Diode    | 4   | D1,D2,D3,D4 |
| 10             | Resistor | 2   | R1,R5       |
| 120            | Resistor | 2   | R2,R6       |
| 820            | Resistor | 2   | R4,R8       |
| 1320(1,1k+220) | Resistor | 2   | R3,R7       |

| Value             | Type      | Qty | Designation |
|-------------------|-----------|-----|-------------|
| 1 $\mu$ F/25V     | Capa Elec | 2   | C2,C5       |
| 22 $\mu$ F/25V    | Capa Elec | 2   | C3,C6       |
| 10000 $\mu$ F/40V | Capa Elec | 2   | C1,C4       |
| S05K400           | Varistor  | 1   | VR          |
| 15VDCx2 90VA      | Transfo   | 1   | TR          |

For Fine Voltage Tuning replace R3/R7 by a 2K Multi turns Trimpot.

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