

# OLCIRCUITS.COM

## DARTH FADER, ECLIPSE VALVE, AND TUBE CRICKET POWER SUPPLY RECOMMENDATIONS

A 12v power supply is required for all OLCircuits Tube Kits/Pedals. It is included only for US customers. We do not stock power supplies for international markets because wall sockets, mains voltages, and frequencies vary in other countries. International customers need a power supply that is compatible in their country. This document explains how to choose a power supply in those international markets.

### Requirements are as follows:

**Input:** Whatever matches up with your country's standard (this will read something like "220v 50Hz", just as an example)

**Output:** 12v DC, with a minimum of 250mA

### Polarity:

*For OLCircuits pre-built buyers, you should choose "Tip +", "Tip Positive", "Center Positive", these all mean the same thing. I've chosen to wire pre-built pedals like this because "Tip +" supplies are much more common. If you prefer to use a "Tip -" supply, let us know prior to completion of your order so that I can wire the pedal to accept it.*

*For OLCircuits kit buyers, it doesn't matter. You can wire the DC jack to make either polarity work.*

**Plug Dimensions (Output):** 2.1mm. This is commonly followed by another number, 5.5mm or 5.1mm (either is fine). You may recognize these dimensions because it is a common size and is the same size that many pedals use. But the power supplies are not interchangeable, so don't try it ☹.

**Regulated/Unregulated:** *Regulated* (a.k.a. "fixed") means that it puts out a steady 12v (unless you overload it), and is the *better choice for this*. This is because an *unregulated* output means that it puts out 12v only as the current output matches the load (current draw) of the circuit (pedal, in this case).

Example: If you have an *unregulated* supply rated at 12v and 800mA, it could be outputting up to 16v with little to no load (current draw) on it. OLCircuits Tube Kits/Pedals are light on current draw (the tube heaters being the biggest load on the supply). With 800mA output (in this example), your OLCircuits pedal will not draw enough current to pull the voltage down to the tube heaters operating range: 11.3v – 13.9v (calculated from typical specs, which state 12.6v +/- 10%).

**If you are in a market that Maplins services, this is easy.** I've recommended the following power supply to many international customers over the years. I have received positive feedback on this choice and there's never been a reported problem, thus I highly recommend it.

<http://www.maplin.co.uk/Module.aspx?ModuleNo=19160&doy=29m8&C=SO&U=strat15>

**Model Number: MG81C**