

Computer power supply conversion for use in powering a 12 volt battery charger

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First you will open the supply up (unplugged of course) and locate where the long wires with the connectors on them originate. Then, except for the +5 volts (RED wires), the +12 volts (YELLOW wires), the Ground (BLACK wires) and the POWER-ON. (GREEN wire), cut off all of the remainder colored wires as close to the circuit board as possible.

Now that all the unused colored wires are trimmed as short as possible, trim away all but 5 black wires, 1 red, 3 yellow and the one green.

Now add a 10 ohm 10 watt resistor across the +5 volts to meet the minimum current requirement. Solder the resistor to the red and one black wire and fasten the resistor to the metal case using bare wire. Insulate the solder connection and bare resistor leads and make sure the resistor body doesn't touch insulated wires. It will get hot (normal).

Add banana jacks if desired and solder 3 each yellow wires and 3 black wires them. Or you can just solder the yellow wires together and attach them to a wooden board next to the charger. Do the same with the black wires. Some chargers come with alligator clips on the power leads. These alligator clips can be clipped directly to the yellow and black wires.

Next, there are two wires that must be shorted to fool the power supply to think there is a motherboard attached to it and thus commanding it to turn on.

The signal is called POWER-ON (GREEN Wire) and it must be shorted to one of the ground wires (Black). If your power supply has an on-off switch on the back (You don't need two power on switches) you can simply short and heat shrink the POWER-ON (GREEN) wire to Ground (Black). Keep it short and tucked away so it won't interfere with fan/connectors/board etc.

If you don't have a power switch on the back, you could attach these two wires to an extra switch. When they are shorted to each other the power supply will turn on.

Now it is a simple matter to neatly re-assemble the case and testing. The output should be between 11.7 and 12.5 volts DC