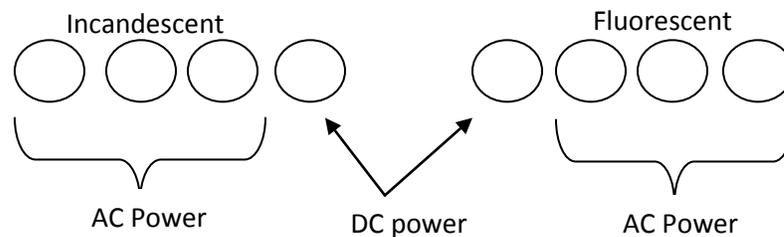


Energy Bike

Setting up the bike:

1. Place the back axle of the bike in the opening. Hold the bike in place and tighten around the other side of the axle so the bike is sturdy.
2. Tighten the portion of the grey generator to the bike wheel so that the generator spins when the back wheel spins.
3. Plug the inverter's banana plug wires into the jacks on the bottom left of the light board. Plug the light board power cord into the inverter and make sure the inverter is on.
4. The gears are preset, so only the seat needs to be adjusted for the rider.

How it works:



You can switch between the incandescent and fluorescent sides by flipping the “Frankenstein switch,” located in the middle of the board. We found that using 1 60-Watt bulb and 2 100-Watt bulbs seems to provide the best results. You may wish to plug items into the light board socket as well. Currently the inverter cuts out at low voltages. So if the voltage drops too low the inverter will begin to squeak and will shut off shortly. This typically happens while trying to power three incandescent bulbs at the same time. We also think the inverter cuts out at high voltages as well, but we have not explored that. **WARNING:** When the inverter cuts out there will be a large drop in resistance for the person riding the bike.

CAUTION: The bulbs *should* stay in place, but if you are moving it upside-down just be aware.

To make the board consistent regarding the amount of light each side produces, compare lumens rather than wattage. For instance,

13 W Fluorescent = 60 W Incandescent (825 lumens vs. 850 lumens)

23 W Fluorescent = 100 W Incandescent (1640 lumens vs. 1690 lumens)

Troubleshooting:

- If the capacitor is not charging or reading zero the connections may have come loose. Check to see if the bike is still producing DC voltage with a voltmeter. If the bike generator is still generating DC power then the connections to the capacitor are loose.