

Energy Conversion Worksheet

Energy Converter (eg "small stepper"):	
Measured Open Circuit Voltage (V) - use the oscilloscope	
Measured Short Circuit Current (mA) - use a meter	
Target Capacitor Capacitance (Farads)	
Target Capacitor Charged Voltage (Volts)	
Target Capacitor Total Energy (Joules) - $E = 1/2 C * V^2$	
Time to Charge (seconds)	
Observed Power (Watts) - Energy / Time	