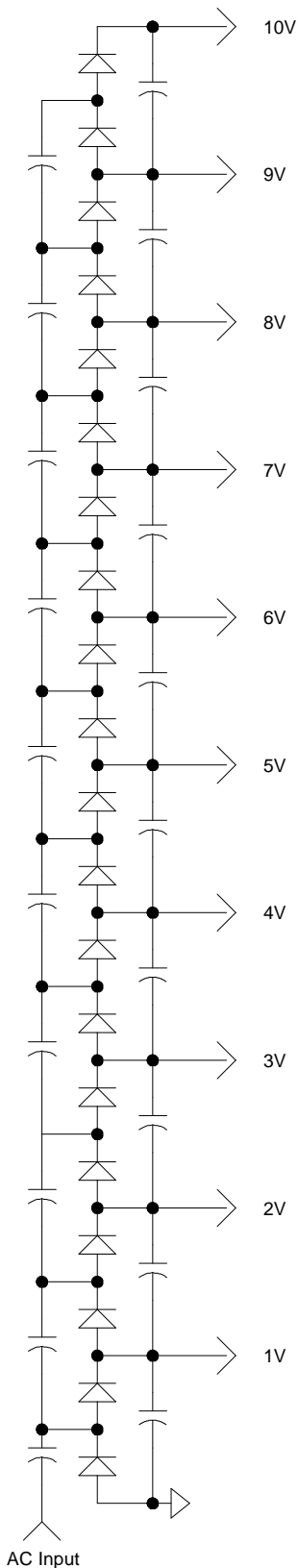
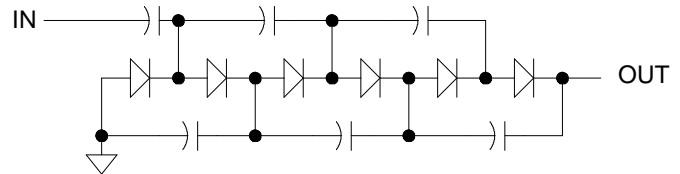


Cockcroft-Walton voltage multipliers.

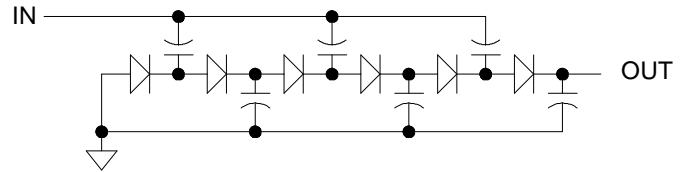
Here are some applications of the Cockcroft-Walton voltage doubler circuit for generating high voltages from a low voltage AC source. The circuit is quite practical for generating thousands of volts (or more) or just a few volts at high current. Since the circuit is AC-coupled it may be connected to a power supply's secondary transformer winding to generate an additional or opposite polarity voltage.



Typical photomultiplier chain. The capacitors may decrease in value at the higher voltages since they do not carry the current for the lower dynodes.

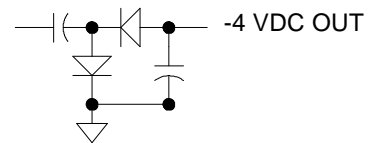


Capacitors are in series so larger values are needed but a lower breakdown voltage rating is allowed. This connection is recommended when generating high voltages at low currents.



Capacitors share a common connection but must have a higher voltage rating. This connection is recommended when generating lower voltages at higher currents.

TTL Squarewave Input (HCMOS)



TTL Input

