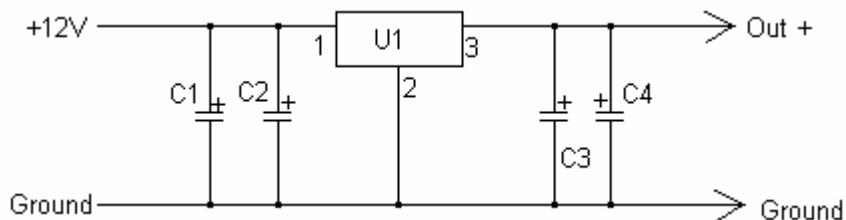


# Portable CD Player Adapter For Car

Whenever I'm in the car listening to my favourite CD, it always happens-my batteries go dead. To solve that problem, I built this extremely simple regulator circuit. It steps down the 12V from the lighter socket to 9V which is used by the CD player. Different CD players (I have a Sony Discman) may require different voltages, so just use the correct regulator. All the 78xx series regulators have the same pin out, so the circuit is universal.

## Schematic



## Parts

Part	Total Qty.	Description	Substitutions
C1	1	1000uF 25V Electrolytic Capacitor	
C2	1	10uF 25V Electrolytic Capacitor	
C3	1	1uF 15V Eelectrolytic Capacitor	
C4	1	0.1uF 15V Electrolytic Capacitor	
U1	1	7809 Or Other Regulator (See "Notes")	See Notes
MISC	1	Cigarette Lighter Plug, Plug For CD Player (See "Notes"), Heat Sink For U1, Wire, Case.	

## Notes

1. The voltage your CD player needs will determine which regulator you use. For 9V, use the 7809. For 6V, use the 7806. For the unlikely 5V use the 7805. Remember that whatever regulator you use, you will need to heat sink it. The metal case or metal cover on the case makes a great heat sink.
2. I built the circuit in a small case with the long wire to the cigarette lighter plug coming out one end, then another, slightly shorter wire going out the other end to the CD player.
3. Triple check your wiring. You would hate to ruin an expensive CD player because you reversed one of the connections or hooked the regulator up backwards.....