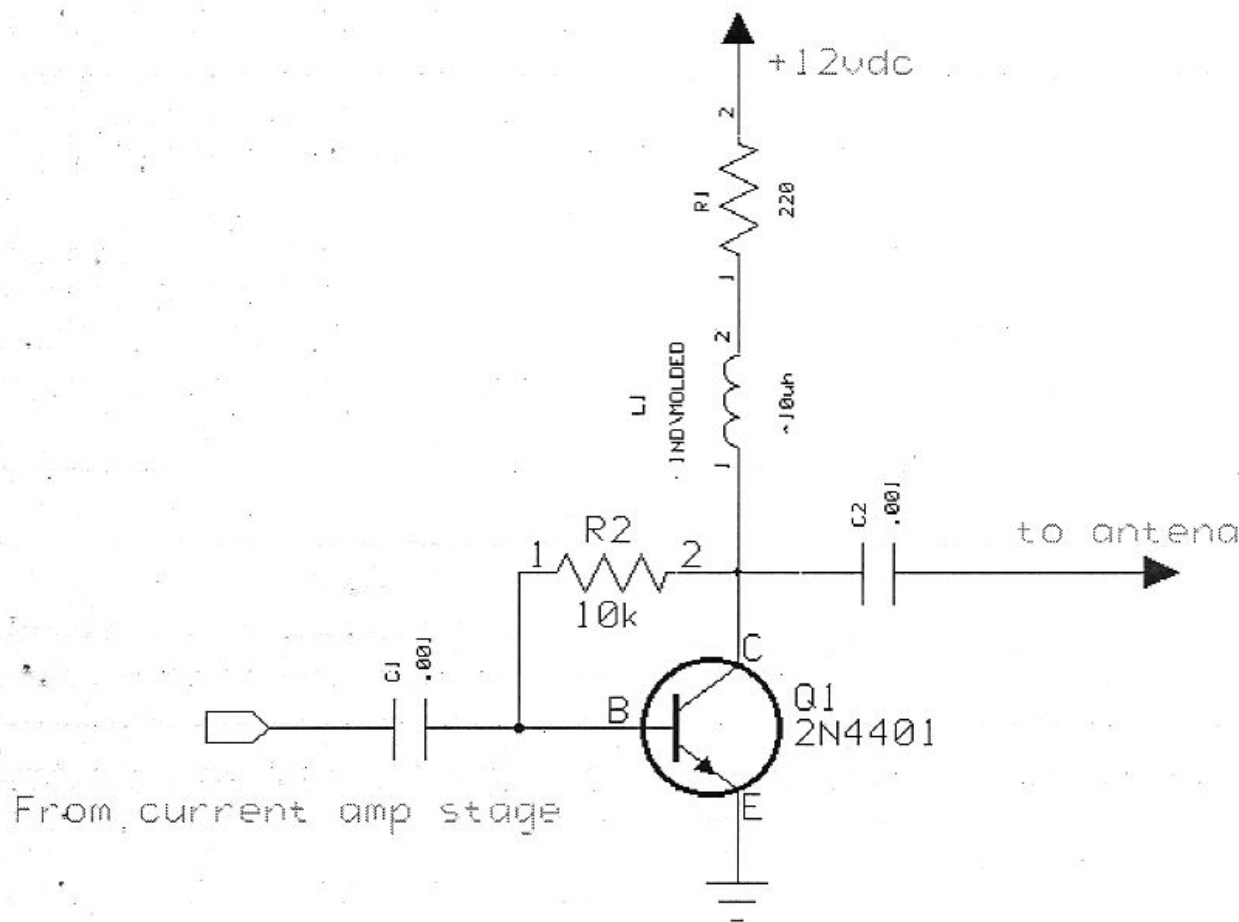


# Ramsey FM-10 70mw output amplifier

Provides almost 9db gain to bring the output power of the Ramsey FM-10 Stereo transmitter from 8mw to 70mw. Not the best design, but all parts can be found at Radio Shack! Much better designs are available at the archive site.



I built this thing right on the underside of the FM-10 kit, C1 is the cap that currently goes to the RCA ant jack, the 9k and the 220 ohm resistor have to be bought, note that if you cannot find 220 ohms you can make one by using 2 440 ohm resistors in parallel, and that a 10k will work in place of the 9k but yields poorer performance (-5%).

The 2N4401 can be found at Radio Shack too. Using the MPS918 instead of the 2N4401 can produce up to 150mw. C2 is of the same value of C1, I took the one that goes to the on board antenna pad.

Important! The value for R1 that seems to be optimal is 220 ohms, but it is very close to the sat point, If the amp. Seems noisy (interferes with the TV etc.) back this value off to 240 ohms. If you lower this value below 205 ohms the power meter may read higher power but this will not be true, the transistor will be spewing all kinds of junk and the power meter will mistake this for higher output (in reality the signal we want will drop considerably.) Well that's it; effective range with a good antenna should be almost triple.