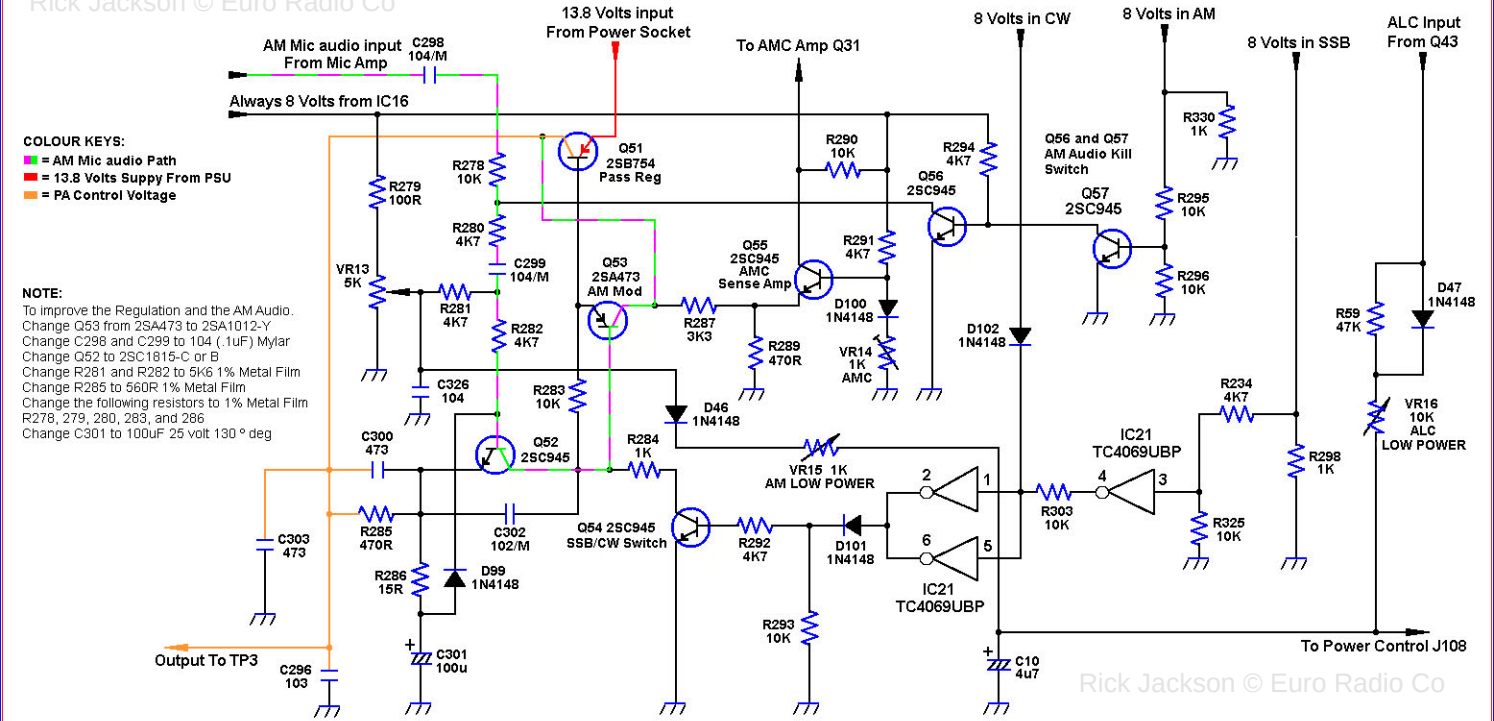
RANGER 2950 AM.FM/SSB POWER CONTROLLER AND REGULATION



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HOW IT ALL WORKS

Transistor Q51 is the main pass transistor, which is connected to the 13.8-volt supply and acts like a variable resistor, and supplies the DC voltage to the Collector of the Finals and Driver in the PA stage.

Transistor Q51 works like this, the more negative its Base, the harder it conducts and the more its Collector voltage drops.

AM MODE:
The conduction of Q51 is controlled by Q52 and Q53, in the AM mode the Base bias on Q52 is determined by VR13 and the mike audio.
The mike audio path goes from Q52 to Q53 and to the Collector of Q51; the audio is injected in to the Base of Q52, goes out of the Collector, is passes to the Base of Q53, goes out of the Collector, and is passes to the Collector of Q51. Since the DC supply is applied to the Collectors of the Finals and Driver, which will change at an audio rate the result, is amplitude modulation.

FM MODE:
TO BE COMPLETED WHEN I GET SOME SPARE TIME

SSB MODE:
TO BE COMPLETED WHEN I GET SOME SPARE TIME