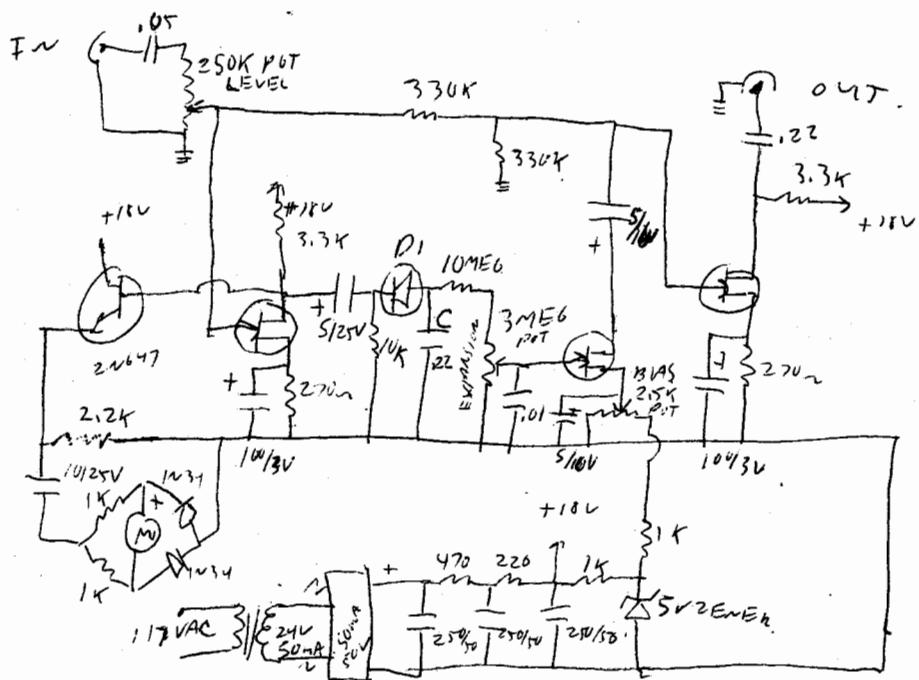


Volume Expander



FETS - MF102's or equiv. 40468A MOSFET'S WERE ORIGINALLY USED.
 D1 - Any germanium diode with at least 50M back resistance,
 M1-1MA meter
 R is shortened if a lower back resistance is present.

Alignment

- ① Set input at max & expansion control at minimum.
- ② Apply 100mV at 1KHz
- ③ Observe output → this should be our maximum.
- ④ Set Bias control for maximum output before step ③
- ⑤ a) Set Bias control for to the output in ③ for 20db expansion
 b) " " " " .03 of " " " " " 30db "
- ⑥ The bias should be $\approx 3V$
- ⑦ Set expansion control at maximum.
- ⑧ This should restore our output to its original level.

If setting to 30 db expansion, be cautious on this

$T_{decay} \approx 3\text{sec}$ with $.22\mu\text{F}$ for C
 $\approx 1.3\text{sec}$ with $.1\mu\text{F}$ for C.
 $T_{attack} \approx 2\text{ms}$.