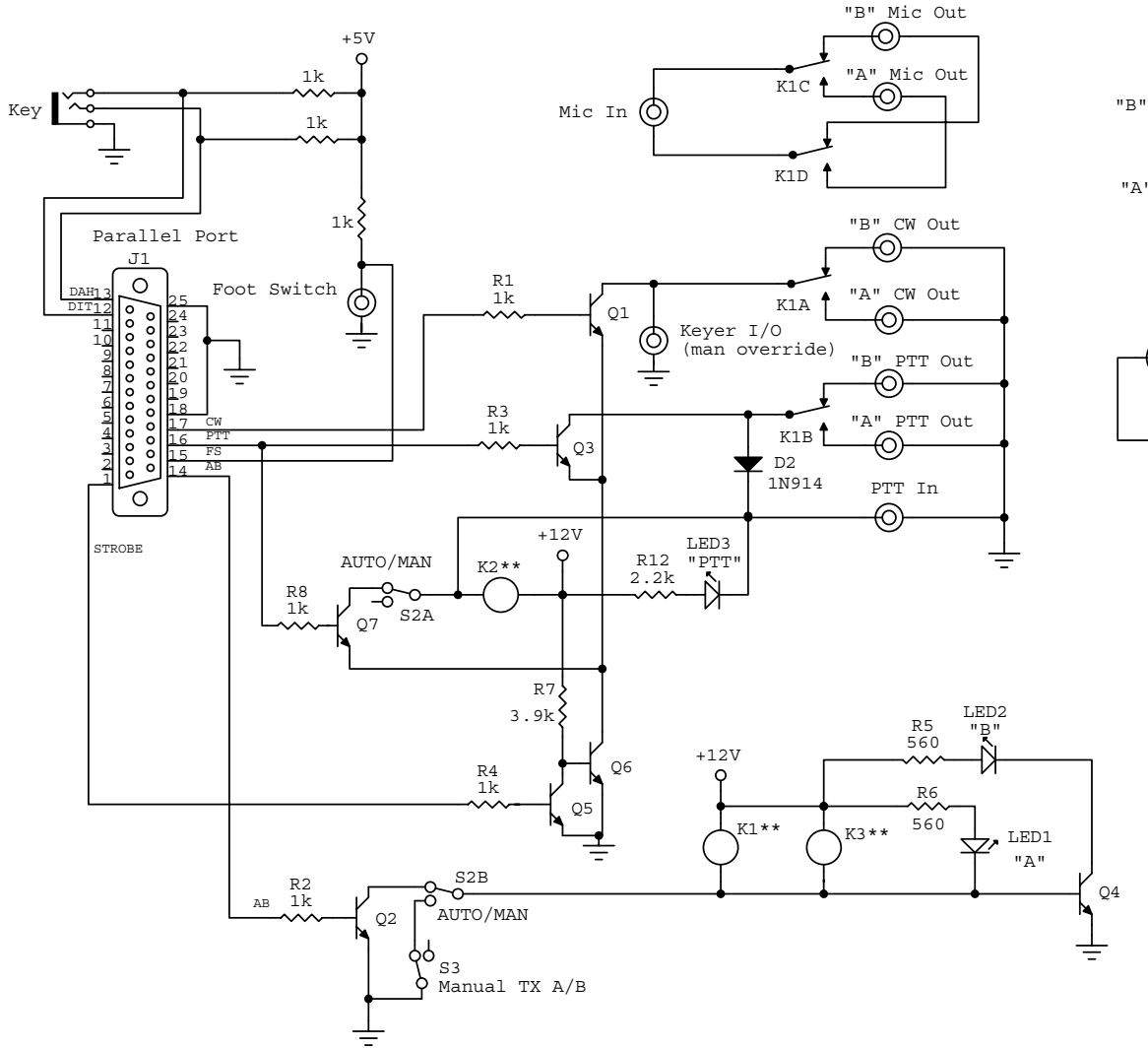
TX SWITCHING SECTION

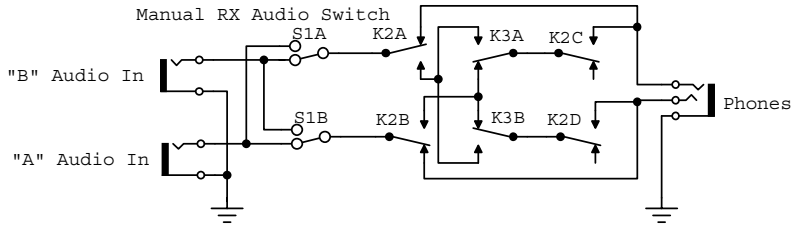


NOTES:
- All transistors are 2N2222, 2N3904, or equivalent.
- Diodes are 1N4001 unless noted.
- K1, K2 = 4PDT
- K3 = DPDT
- Mic wiring should be shielded and not connect to the controllers ground.
- Switches shown in "Auto" and "A" states.
- Relay contacts shown in inactive states.
- Relays with different contact configurations can be used with more in parallel if needed. The transistors have plenty of headroom.
- I used premade cables from Radio Shack. They make a 6'shielded 1/4" stereo plug to 1/8" mono plug cable. They also make a 6' shielded A/V dubbing cable with RCAs at both ends.

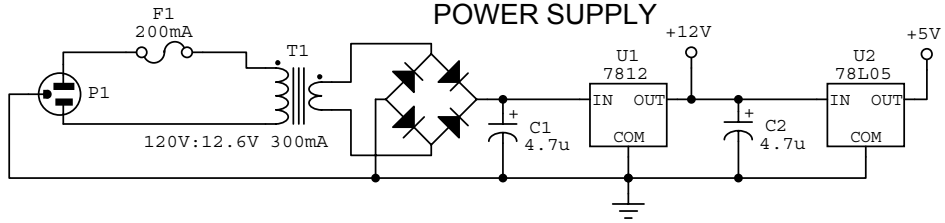
**** S1 is a special 3 position switch. Center is as shown. Left actuates A. Right actuates B. A rotary or other switch can be substituted.***

***** Relays should include a reverse diode and a 0.01F capacitor for inductive spike and EMI supression.***

RX AUDIO SWITCHING SECTION



POWER SUPPLY



General Description:
LPT port: Inputs are 13 (dah), 12 (dit), 15 (foot switch), 18 & 25 (GND). Outputs are 1 (strobe), 14 (A/B), 16 (PTT), 17 (CW).

When S2 is in the "Auto" position routing of the TX and RX signals is determined by the state of LPT pin 14. Its state is controlled by the logging program. The logging program also controls the state of pin 16 (PTT) and pin 17 (CW). TX data (mic, CW, PTT) are routed to the active radio. When pin 16 (PTT) is active RX audio from the inactive radio is automatically routed to both ears of the headphones. PTT In will also switch RX audio in this way. S1 (Manual RX Audio) can be used to override this if for some reason you need to listen only to the active (TX) radio. LEDs will tell you which radio is getting the TX signals and when pin 16 (PTT) or PTT In is active.

When S2 is in the "manual" position TX routing is controlled only by S3 (Manual TX A/B). The logging program still controls the LPT pins, so CW and PTT are still sent the the proper radio. RX audio is only controlled by PTT In and can still be overriden by S1.

For phone operation you would probably connect your foot switch to PTT In. This gives you the most flexibility for keying the radio. To use the foot switch input with phone operation you should set your logging programs foot switch command to PTT or "normal". For CW you might want your foot switch to execute a logging command rather than PTT. In this case connect the foot switch to the foot switch input and leave the PTT In disconnected (or attach a second PTT switch).

Note: NA might require a different LPT pin arrangement than shown here. Please read the documentation.

Also the audio input is assumed to be mono. A slightly different S1 arrangement would be needed to route stereo to the phone jack. You could route stereo through the relay

Designer: Ronald Rossi, KK1L	
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