# Early Andromeda Modifications

## Display PWM Output

On some TFT displays, there is a flicker if the “brightness” PWM output is directly driven by the Arduino. This can be corrected by adding a 2N7002 FET. This can be assembled using proto boards attached to J15, or it can be backwired onto the front of the PCB under the display near the Arduino.



# Microphone PTT Connection

Some microphones have no connection between GND (RJ45 pin 7) and MIC GND (RJ45 pin 4).

There are two potential fixes:

1. A ferrite bead connecting RJ45 pin 7 and AGND will allow the PTT input to work. (This could allow RF pickup – check)
2. A better fix is as follows:
   1. Remove the RJ45 connector
   2. Cut the 4 tiny traces joining pin 7 to ground
   3. Re-solder the RF45 connector
   4. Add a ferrite bead from RJ45 pin 7 to J2 pin 8
   5. Add a 10nF capacitor from RJ45 pin 7 to AGND