

EXHIBIT J – Transmitter Functional Breakdown

FCC ID O77-WTX-SERIES

TRANSMITTER FUNCTIONAL BREAKDOWN

The battery provides 9 volts to U4 (5 volt power regulator). When any of the three switches are pressed, 5 volts is sent from U4 to the rest of the circuits and U3 provides the ground for the rest of the circuits. When the ground is sent out D1 lights up, to signal the user that the transmitter is transmitting. R2 reduces the current through D1. U3 also sends a ground to U2(encoder), which tells the encoder which function switch is pressed. U2 sends data or digital code to the transmitter. R3, R4, R4, R5, R6, R7, R8, R9, R10, S1, S2 and S3 provide the code to U2. R1 set the data rate of the encoder. The code can be varied by installing or uninstalling R3 through R10. U1 receives the data from U2 and modulates it and sends the modulated signal to Q1 which amplifies the signal. R11, R12, C2 and C3 set up the amplifier gain and couple the output to L1. L1(antenna) is an 18awg wire, 2 inches in length. R13 is used to set the antenna's impedance to 50 ohms. C1 and C4 are decoupling capacitors.