Work Completed

This week we received the 7 inch LCD screen, the battery pack, the male and female Tamiya clips, the battery pack charger and the Specs Switch. We started to arrange the parts in the circuit that was described earlier and test them in that configuration. We placed orders for the joystick casing and the rocker switch that will be used to change from the battery power for the monitor to the battery charger.

The rocker switch was ordered from MCS Incorporated, electrical supply company. It is an on-off-on, double pole double throw switch. This switch has a third switching position in the center that is off. This is also a maintained switch meaning that once placed in one of the on positions, then it will stay in that position until it is turned off. The two on positions will be (one) for the charging position, and the second for the monitor on position. Figure 1 displays the schematic of the rocker switch we ordered. The rocker switch is rated for full size appliances and will cost $6.31 without shipping and handling.

Figure 1: Double Pole, Double Throw Switch Schematic

This week we also finalized the parts order for the mounting of the joystick and the LCS screen combo case. This parts order cannot be
ordered until we have prices available to us for an estimated charge for our budget. The prices are not available because we will be ordering our parts from the 80/20 Incorporated company through the distributor Air Incorporated found at www.airinc.net. The joystick will be mounted with three Drop In T-Nut with Set Screws, a Double Flange Linear Bearing, a Ratcheting L-Handle, and a Black End-Cap. The 6 inch piece of 10 Series 80/20 that we will be mounting the joystick with will be taken from the scrap pile in the BME stock room. The LCD monitor will be mounted with a Quick Cross Clamp, a Single Horizontal Base, a Bolt Kit \( \frac{1}{4}\)-20 x \( \frac{3}{4} \) SHCS Econ T-Nut with out Washers, a 12 inch Clear Ionized Aluminum Tube, and a 12 inch piece of Clear Ionized 1050. Figures 2 and 3 show the End-Cap and the Drop In T-Nuts that we will be ordering.

![Figure 2: 80/20 End-Cap](image)

![Figure 3: 80/20 T-Nuts](image)

**Future Work**

We will continue to complete the electrical connections for the LCD screen, battery pack, and charger, so that we can begin to test the system and construct an encasement for the screen. We will make the final selections for the plastic we will use, and order those materials. We are leaning towards ABS plastic sheeting. We will order a 24” x 48” sheet. This size sheet should be large enough with extra left over for our project and provide sufficient strength for the application. We will also be finalizing our order for the mounting systems and then begin to test everything as a whole system.
Project Review

Currently, as our parts are arriving, we are slowly making all the proper connections and testing all of the components. This next week should be a milestone in construction and testing as sufficient parts are here to work with. Our timeline is now on schedule and everything should be completed by mid November.

**Hours worked:** 9