Level 2

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| *Module* | LEDs |
| *Inputs* | -3.0 V needed for each  -three input pins, one for each color  -one ground pin  -data from the MCU that  determines the status of input pins  - input current below 20mA |
| *Outputs* | - 12000-14000 mcd intensity light  -blue, red, or green light or a combination in a concise image |
| *Functionality* | Creates visible images for the display |

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| *Module* | Rotating arm, wand |
| *Inputs* | Torque from motor |
| *Outputs* | -an approximately 45 by 80 cm  area for the LEDs to use (45cm  wand, 40cm rotating arm)  -force upon the LEDs |
| *Functionality* | Holding the LEDs and revolving  the wand carrying them around  the center axis |

This portion rotates at high speeds and holds the LEDs, a sensor, a microcontroller, possibly a battery, and wires that connect them. It is important that the rotating arm and wand are made of a strong material that will not easily break like from falling from a car or from merely spinning. The microcontroller and battery will serve as a counterweight to the wand to maintain balance.

LEDs:

The LEDs are probably along with the power, the most important part of the product. Without any light the product cannot fulfill its primary function as a display. The LEDs that will be used for this product are high brightness RGBs. Between 30-100 will be used for this product. The LEDs will be directed by the other modules to produce the desired display.

Product information gained from: <http://www.amazon.com/gp/product/B005VMDROS/ref=olp_product_details?ie=UTF8&me=&seller=> (50 Pcs 5mm Round Head Common Cathode RGB Light LED Emitting Diodes)

Rotating arm/wand: