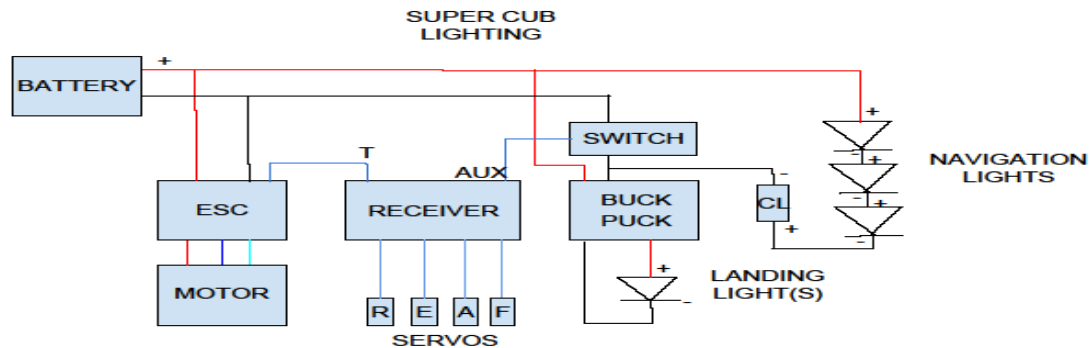


Super Cub LED Lighting System Diagram

By George Wilson



LED & Power Supply Source Links

Avago Moonstone LED (Avago:

http://www.avagotech.com/pages/en/leds/moonstone_high_power_leds/moonstone_led_module/)

Mouser Electronics <http://www.mouser.com/Search/Refine.aspx?Keyword=moonstone>

Or Digikey, Newark Electronics, Allied Electronics

LED Drivers

- 1) LED Dynamics Buck Puck <http://www.luxdrive.com/products/buckpuck-3021-3023-led-driver/> (High Power)
- 2) LED Dynamics Dyna-Ohm <http://www.luxdrive.com/products/dynaohm/> (For T 1-3/4 LEDs-Nav Lights)

Notes:

- 3) LEDs are current driven devices. You must provide regulated power or a current limiting resistor in series with the LED. Values must be calculated using Ohm's Law. (see Note 10)
- 4) LED Dynamics **Buck Puck** <http://www.luxdrive.com/products/buckpuck-3021-3023-led-driver/>
- 5) LED Dynamics **Dyna-Ohm** <http://www.luxdrive.com/products/dynaohm/>
- 6) Only string a maximum of three (3) LEDs in series. If you need more contact George Wilson to discuss.
- 7) High Power LEDs need a heat sink, especially if you are going to drive them very hard. See manufacturers application notes. (T 1 3/4 LEDs do not need a heat sink.)
- 8) You should use thermal epoxy or heat sink compound with some type of clamping to hold the LED to the heat sink.
- 9) When shopping for T-1 3/4 LEDs, look for the highest **mcd** rating.
- 10) When shopping for High Power LEDs look for the highest **Im** rating.
 - a. Ohms Law: $E=IR$ Where $E=$ Voltage, $I=$ Current and $R=$ Resistance. Also $I=E/R$ $R=E/I$
- 11) When buying Moonstones, buy the type where the base is isolated.



Moonstone
Landing Light 350 ma and up
Always buy the 750 ma rated.



T-13/4 (5mm) Low Power LED for Navigation Lights Red, Green, White
30 to 50 ma