

# *Light'm Up L.E.D.'S*

## **Waterproof LED wiring 101:**

Most LED's from Light'm UP are for a 12v system. I recommend using 24 gage wire, with a 30w fine tip soldering iron. DO NOT connect power source until you have finished your setup.

It is recommended to use Silicon or Silicon glue to waterproof your connections

All LED strips have cut marks. Cut marks will be a section of copper pads with a black line thru them, or a set of copper dots with a cut mark between them. Also at the cut marks make note of the +,-. Not all strips are marked with + or -. You may want to mark your strips with a + before cutting them.

The best results are achieved with the 3M tape on the LED's, if they are applied to a clean surface. Clean all surfaces, removing any dust or oil from your plane. You can run jumpers from a set of pads in the middle of a strip to a new strip of LED's.

Cut LED's and lay them out and pre fit before removing the protective tape. Remember that at each cut you will need to solder jumpers between the strips.

## **Exposing Copper Pads**

In order to solder wire you must first cut back the TPU (clear) coating to expose the copper connection pads on your LED Strip Light. Use a sharp blade to cut back the TPU coating, be very careful not to cut through the PC Board on the LED Strip light.

If you are happy with your layout, remove the protective backing and apply all LED strips to your plane.

## **Tips on connecting LED's:**

Use the shortest jumper from one strip to the next as you can.

Strip about 1/16 of the wire and pre- tin the wires and the copper connection points.

With your LED's on the plane, start connecting them with wire jumpers. You may have to use some strips of clear packing tape over long lengths of jumpers. When connecting the jumpers you MUST match the pad to pad. + to +, - to -. You cannot cross the pads or they will not light up.

To connect the power supply use the mating adaptor that you used above and connect your + and- from LED's, but DO NOT connect the power yet.

## **Spot check every solder joint:**

Take a very close look at every joint. Even a very small amount of solder between the pads or a stray wire could short out your system, damaging the LED's and your LIPO. Double check the joints again. We all get in a hurry to go out and do a test flight. When you are happy with everything, connect the power and see the LIGHT. If you have strips not lit, go to the first strip and check that you have matched the pads on the strips.

After you have tested your strips to see that they work, use some silicon and place it over the connections.

If a strip comes up, just press it back down. CA or most airplane safe glues can be used to glue strips back down. Light'm Up LEDs, are to be used at your own risk. We cannot be held responsible for any damage to a plane, or property from using the LED's.

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