

OUR WIRELESS TRADESHOW LANYARDS

We decided to make these LED lanyards as an example of how wireless costume lighting is being done today. Many designers are adding lighting to costumes and props. Since LEDs draw so little power, it's easy to hide a small battery and wireless DMX receiver and to make objects light up. Our lanyards are a simple example of how to light up a group of objects and to control that light via DMX from the show's lighting console.

[You can watch this video](#), then read the article below for more details.

Here's what the lanyards look like:



To start, we designed a badge holder. The badge holder also held a City Theatrical D4 Neo wireless dimmer, which is the size of a credit card and less than 1/2" thick.

Our Wireless Tradeshow Lanyards

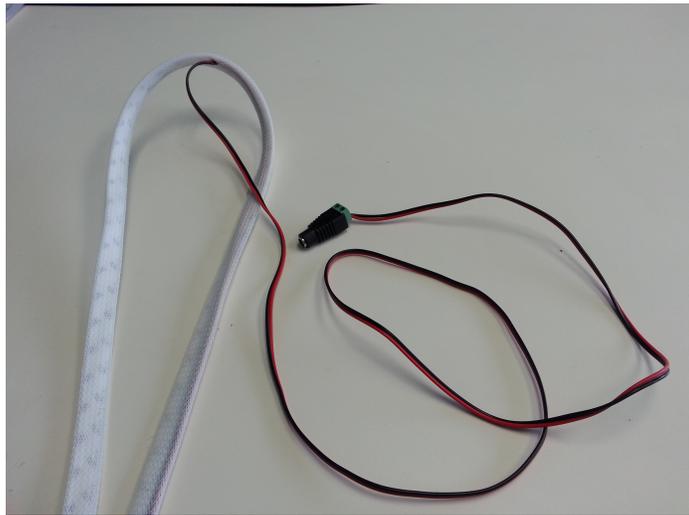


Then we mounted some of our City Theatrical QolorFlex RGBA LED tape inside of some diffusion sleeving, just to even out the hot spots a bit.



We ran the battery power connections and output connections to the LED tape through the sleeving too.

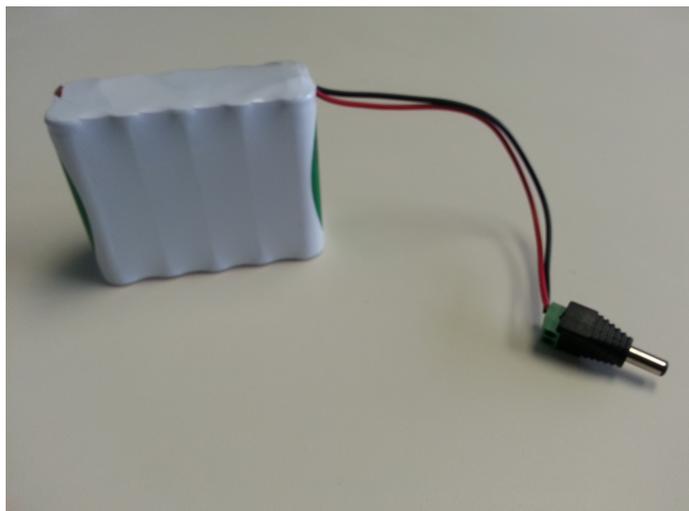
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And we ran the power wires about 3' long to the battery out the very top of the lanyard.

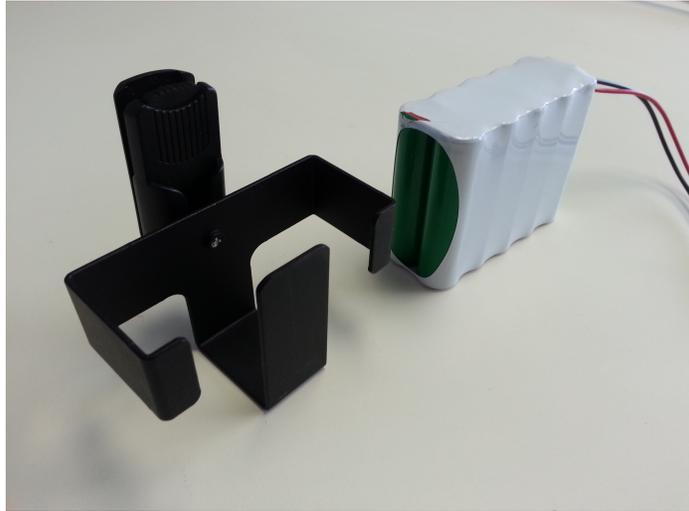


For the battery, we used a 12V 3.8 amp hour NiMH rechargeable with a barrel connector that mated with the connector on the lanyard. This gave us over 10 hours of battery life per day. If you were making an effect for a show that was only on for minutes, you could use a much smaller battery. We usually use two sets of batteries so while one is in use, we are recharging the other.



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We fabricated some battery holders in our metal shop, and screwed on a snazzy belt clip so they are easy to take on and off. To use these lanyards we ran the power cables under our shirts and wore the battery packs on our belts.



The D4 Neo dimmer is a SHoW DMX wireless DMX receiver, and four low voltage dimmers, all in one tiny pack. We set the SHoW IDs on the D4 to match our transmitter, and set our starting DMX address the same on all lanyards so they would all dim together. In fact, the lanyards all dimmed in unison with the rest of the LED effects in our booth, which also was running all wireless.

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These trade show lanyards were a real eye catcher at LDI and at other shows where we have used them. Everyone wants to know how they work, and it gives us a chance to give a good explanation about how wireless lighting is done in entertainment today.