



# Large Inductive Wireless LEDs – 10 Pack – Blue

Product ID: 5576



## Description

Adding LEDs to anything makes it 5x better -- it's a scientific fact! But when you have LEDs, you've got wires and power supplies and all that stuff is kinda annoying. What if you could have LEDs that light up without any wires or soldering or battery packs? Sounds magical! That's what makes this 10 Large Wireless LED Kit so nifty. When paired with the Large Inductive Coil Kit, they use electromagnetic fields and inductive coupling to pass power through the air to light up LEDs soldered onto coils.

Each order comes with ten blue large LED inductors. Compared to the smaller blue wireless LEDs, the large kind will work farther away, particularly when used with the large coil.

**Note:** This product only includes the 10-packs of large wireless LED inductors. Large Inductive Coil Kit sold separately.

Inductive charging is a way of powering a device without a direct wire connection. Most people have seen inductive charging in a rechargeable electric toothbrush: you may have noticed that you recharge it by placing it into the holder, but there's no direct plug. These chargers work by taking a power transformer and splitting it in half, an AC waveform is generated into one, and couples into the second coil.

In this product, we have one coil that forms the 'primary' of the power charger. Then, each individual LED has a smaller coil on the back. When the two couple, power is transferred from the coil to LED and it lights up. You can have a large number of LEDs, all in different 3D space above or below the coil. You can also have them in different orientations, although you will get the best efficiency/power transfer when the two coils line up. You can also have the LEDs slightly outside the main ring, but, again, they'll not light up as bright as if they're right in the center.

YouTube link:

[https://www.youtube.com/watch?t=315&v=fg33TGD43U&embeds\\_euri=https%3A%2F%2Fwww.adafruit.com%2F&feature=emb\\_imp\\_woyt](https://www.youtube.com/watch?t=315&v=fg33TGD43U&embeds_euri=https%3A%2F%2Fwww.adafruit.com%2F&feature=emb_imp_woyt)

## Technical Details

- Single LED inductor: 6.1 mm (height), 5 mm (diameter)
- Approximate working distance when used with large ring, LED in the center, aligned co-axially: 10 cm
- Approximate working distance when used with small ring, LED in the center, aligned co-axially: 6 cm



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