

## Attaching and Fastening Battery Holders

Though there are many ways to securely attach a battery holder to a device, there are three main ways which MPD would recommend: soldering, bonding, and fastening. All of these can be reliable methods when done correctly, however any of them can also fail or damage your battery holder when not done properly. Depending on the device which the battery holder is being used for, one method will likely be the most obvious choice to use in most applications.

Soldering is the most common choice, namely due to the growing popularity of coin cell batteries and automated assembly processes. The two main automated methods of soldering are [wave](#) and [reflow](#) soldering. Though with the lead-free movement sweeping the globe, soldering has become more difficult and generally requires higher temperatures, so many of our newest battery holders have been made to resist much higher temperatures in order to ensure a high strength soldering can be done with lead-free solders, and our battery holders which are compatible with lead-free solder are marked so on our website. It is also worth noting here that typical coin cells should never be put through a reflow solder process, as the high temperatures damage the cells and can even cause them to explode in extreme cases. Hand soldering is also possible, but care must be taken to not bring the soldering iron too close to the plastic of the battery holder as this can damage the plastic.

Bonding includes the use of both adhesives and double-sided tapes (typically, automotive tapes are used). Although fasteners used to be preferred to bonding for more secure attachments that were also more resistant to environmental conditions, the recent, rapid advances in adhesives make them a strong competitor. Modern bonding technologies can provide an extremely strong attachment, as well as the necessary resistance to environmental conditions necessary for most applications. Even though fasteners still provide a more reliable attachment, many prefer the cost effectiveness of bonding with either industrial-grade adhesives or double-sided tape.

Fastening battery holders typically means using machine screws to create a very strong attachment. Many of our battery holders come with recesses or eyelets for use with machine screws, the sizes of which can be found on the datasheets of the appropriate parts. However, due to the labor-intensive process of fastening, most find it better to solder or bond battery holders instead. However, in cases where reliability is of the highest importance it is possible to use both bonding and fastening to create extremely strong attachments.

