# Required Components

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| Labeled photo of the three components used to construct the Palm Ball Stylus | **BOM**   1. Palm\_Stylus 2. 22 AWG Breadboard Wire 3. Conductive Foam (The type ICs chips come shipped in, or a chunk of Scotch-Brite® Non-Scratch Scrub Sponge with the scrubby part cut off) |

# Required Tools

* Wire strippers
* Superglue
* Sandpaper

# Required Personal Protective Equipment (PPE)

* Safety glasses

# Assembly Instructions

## Step 1

After 3D printing the stylus, take a roughly eight-inch piece of solid (not stranded) 22 AWG breadboard wire and remove the insulation from the entire piece. Run one end of the wire up through the bottom of the stylus until it emerges in the cavity at the end of the stylus, but not far enough to stick out past the end. Use superglue to secure the wire at the bottom of the stylus. Do not use solder as a wire, it can contain lead and should not be used in constant contact with the skin. Following the groove along the ball, run the remainder of the wire across the base, up the side of the ball, and around the circumference of the ball. Secure it in place with superglue. If the glue is taking overly long to dry, baking soda can be used as an accelerant to instantly dry the glue.

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| Photo showing the device with the wire glued in place, but before the wire has been sanded down. The excess wire is hanging off the ball and has not been trimmed yet. |

## Step 2

After the glue dries, lightly sand the wire to expose the wire.

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| Angle one of the device with the wire sanded down Angle two of the device with the wire sanded down |

## Step 3

Finally, cut a length of the conductive foam, and stuff it in the cavity at the tip of the stylus. Trim any excess so that roughly a quarter of an inch sticks out, then remove the foam, add some superglue to the inside of the cavity, then put the foam back in. Ensure that the wire contacts the foam. After the glue dries, trim the foam to the desired tip shape.

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| Photo showing the finished, assembled device |