Robot Arm - Assembly

Motors

The project uses three Nema 17 Stepper Motors to control the rotation of the last two arm segments and the rotation of the hand. A Nema 23 Stepper Motor, paired with a lead screw, is used to control the height of the robot arm.

3D Printing

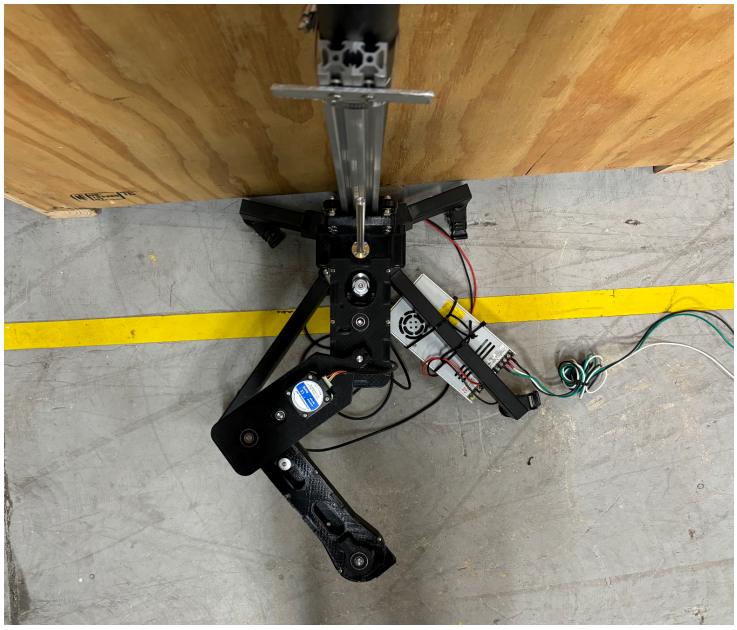
- Extrusion Attachment - attaches to the 20mm x 40mm extrusion via six T-Slot wheels
- Arm Segment One Bottom - base of the first arm segment
- Arm Segment One Top - cover of the first arm segment
- Arm Segment Two Bottom - base of the second arm segment
- Arm Segment Two Top - cover of the second arm segment
- Arm Segment Three Bottom - base of the third arm segment
- Arm Segment Three Top - cover of the third arm segment
- GT2 Extended Pulley - used in the first and second arm segment
- GT2 Compound Pulley - used in the first and second arm segment
- GT2 Base Pulley - used in the third arm segment
- Hand - uses adhesive rubber to pick up pamphlets

HexTech Board

The motors connect to the HexTech board on the underside of the portable base.

Pictures

Top



Front

Sides