**Safety first!** Wear eye protection and never touch a powered robot!

---

**Step 1.**
Attach the "L" shaped bracket to the base as shown, using three 4-40 x .250 screws.

![Figure 1.](image1)

- **4-40 x .250" (1/4") Steel Hex Socket Head Cap Screw**
- **3/32" drive**
- **0.250"**

3 x

---

**Step 2.**
Attach the Multi-Purpose bracket as shown. Use two 2-56 x .250 screws.

![Figure 2-2.](image2)

- **2-56 x .250" (1/4") Steel Phillips Head Machine Screw**
- **0.250"**

2 x

---
Step 3.
Attach the "C" bracket to a Multi-Purpose bracket as shown. See the diagram below for detailed information.

Step 4.
Attach a servo as shown. Use four 3x8mm screws, 3mm washers, and nuts.

Step 5.
Attach the two-servo bracket and the "C" bracket to the servo as shown. Use two 2-56 x 3/8" screws and 2-56 nuts.
**Step 6.**
Attach the four rubber feet to the bottom of the base as shown.

Note: The two left-most holes can be used for mounting the base to a piece of plywood. Use #4 x 3/4” tapping screws.

![Figure 6.](image)

**Step 7.**
Attach the 3/8" hex spacers as shown, using eight 4-40 x .250 screws. Eight additional screws are included to attach electronics.

![Figure 7.](image)

**Step 8.**
Install the arm and electronics as shown. Connect the servos to the appropriate channels, as indicated in the table below.

<table>
<thead>
<tr>
<th>SSC-32 Channel</th>
<th>Servo</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>Base Rotate</td>
</tr>
<tr>
<td>11</td>
<td>Shoulder (Y adapt.)</td>
</tr>
<tr>
<td>12</td>
<td>Elbow</td>
</tr>
<tr>
<td>13</td>
<td>Wrist</td>
</tr>
<tr>
<td>14</td>
<td>Gripper (Open/Close)</td>
</tr>
<tr>
<td>15</td>
<td>Gripper Rotate (optional)</td>
</tr>
</tbody>
</table>

Table 8-1

![Figure 8.](image)
**Step 9.**
Figure 9 illustrates how the power switch works, and which pins on the 5.5mm plug to use.

**Figure 9.**

**Step 10.**
It is convenient to be able to turn on the servos separately from the electronics so programs can be downloaded without the servos moving. By using a DPDT switch power can be applied to the Bot Board and SSC-32 electronics (VL) in one position, or power can be applied to VL and the SSC-32 servo power input (VS) in the other position. Figure 10 illustrates this.

**Figure 10.**