

# SCUTTLE Tools Guide

For Educators, Makers, and Students
Revision 2021.04.06

### **Shared Tools:**

(Large images to print and label bins)



#### PowerPole Crimpers



#### **DuPont Crimpers**



#### Spade Terminal



### **Shared Tools:**

(Large images to print and label bins)



#### Flush Cutters



#### Scissors



#### Wire strippers





- We recommend that you outfit your lab with 1 set of "shared tools" for every 4 robots in your lab.
- Also, 5S your labs by printing the previous slides out, laminating, and lining your shelves.





## Main Hand Tools

- ► Easy to use
- ▶ Wide availability
- Instructional videos online

Throughout the design of the SCUTTLE robot, we co-selected tools and connectors to achieve a repeatable fabrication setup in a classroom environment. Achieve industrial quality without industrial tools.



### Tools for the Maker

#### Recommended for all Roboticists!

- TS100 programmable soldering iron
- Safety Glasses (for all soldering work)
- ► Hot Glue Gun with temp control
- DC Power supply
  - (capable of 10A output at 30v)
- Rosin flux pen
- Solder
  - Leaded
  - ▶ 0.8mm diameter





### Kits (to offer with each robot):

- Allen Key
  - ▶ 6mm for M8 bolt
  - ► 4mm for M6 screws
  - ▶ 2mm for M3 screws
- SCUTTLE wrench (13mm hex wrench built in)
- Phillips #1 hex-shank bit (for M2 course screws)

These tools make teardown and rebuild of the SCUTTLE robot quick and easy. We recommend that a lab is outfitted with 1 set for each robot.

