Smarticle Hardware Notes

* Smarticles are always on unless battery is unplugged
  + Always leave charging when not using or unplug battery (but this is annoying)
* Reset button on front of smarticle is software E-stop. It will put the smarticles back into inactive mode where they do nothing, and the servos are not engaged.
  + Press this if one starts going crazy
  + Also use before charging them just to put them back into their lowers power mode
* Servo switch controls power to servos and is hardware E-stop
  + Left position: servos unpowered
  + Right position: servos powered
  + Switch to left position when not using them to conserve battery
* To Remove battery, use something blunt to push battery out the right side of the smarticle.
* Connecting/disconnecting battery:
  + I usually leave the battery connected as much as possible and then just let them charge through the day, but it’s not a great idea to let them charge overnight as there is a (slight) risk of LiPo batteries catching fire
  + I use a pencil/screwdriver to get the wire out and then just pull on it to disconnect the battery
  + When you connect it again, just push in the wire into the cable so it doesn’t stick out

Software Notes

* I have a commented example that should show you how to do most things but here is an overview.
* There are 3 modes for the smarticles:
  + 0- inactive,
  + 1- stream servo (still in development; won’t really do anything)
  + 2- gait interpolate
* Mode 0 does nothing; servos are not engaged; no data is read or transmitted, but will receive commands
* Mode 2: smarticles will go to flat position with arms rigid
  + Can send gait interpolation points in this mode
* After sending gait interpolation points, smarticle will remain in current position
* Must use swarm.set\_servos(1) to start the gaits