Accuracy of repetition counting - The device should be tested to report as many repetitions as are being performed. We need to know the degree of error of our data.

Goal: The device should count repetitions performed with 100% accuracy ideally.

External factors: The device should be properly calibrated to recognize when a full range of motion repetition has occurred.

Equipment: Hand device with external bank, Power Source, Separate device connected to the internet and connected to the device.

1. Plug the device into a 120V AC outlet.
2. Turn the device on and begin basic squeeze exercises, where fingertips must touch, for 10 seconds.
3. While the device records repetitions, manually count how many repetitions occur until the time is over.
4. Compare the number of repetitions the device reports to the number of repetitions observed.

Individual controllability - Each finger should be able to operate independently of any other finger.

Goal: Verify that each finger is independently programmable and movable.

External factors: Individual anatomy and flexibility of those being tested.

Equipment: Hand device with external bank, Power Source, Separate device connected to the internet and connected to the device.

1. Plug the device into a 120V AC outlet.
2. Turn the device on and verify each finger individually can be pulled in individually.
3. Verify each finger individually can be extended back out.

Resting state - The device should return to a resting state after the completion of each exercise.

Goal: The device should be verified to return to a neutral state after each exercise is completed.

External factors: Someone’s anatomy or flexibility may prevent a typical “neutral” resting state.

Equipment: Hand device with external bank, Power Source, Separate device connected to the internet and connected to the device.

1. Plug the device into a 120V AC outlet.
2. Turn the device on and begin an exercise.
3. After completion of the exercise, verify that the device has returned to its neutral resting state.