

Test 1:

Ability to be turned on/off - The device should have the ability to be turned off separately from being unplugged.

Goal: The Device should be able to be turned on and off while still connected to a direct power source.

External Factors: Make sure the power connection is stable and not underloaded.

Equipment: Hand device with external bank, Power Source.

Step 1: The device should not be connected to any person.

Step 2: The device should be plugged into an AC stable power supply of at least 120V. A common wall socket is preferred.

Step 3: Load any basic exercise and wait longer than 10 seconds.

Step 4: Turn off the device by pressing the power button on the box connected to the wall. Make sure to press the power button before the exercise has finished.

Step 5: Observe and measure the time it takes for the device to stop movement.

Step 6: Repeat steps 3-5 multiple times with differing exercises.

Goal: The device should stop within 2 seconds of the power button being deactivated. Visually observe the device stop moving and pay attention to servo movement.

External Factors: Make sure the power connection is stable and not underloaded.

Equipment: Hand device with external bank, Power Source.

Test 2:

Ability to download/save metrics - Data should be stored and sent remotely after each exercise is completed.

Goal: The Device should be able to remotely send data to an external device that can store data.

External Factors: Unstable power supply, unstable internet connection, and connectivity issues.

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

Step 1: Plug the device into a stable 120V AC power supply, preferably a wall outlet.

Step 2: Load the exercise onto the device and begin the workout. Preferably a short workout routine.

Step 3: Connect the therapist's device to a stable internet connection.

Step 4: Pair the device to a therapist's computer, allowing it to download and store the device's workout data.

Step 5: Start the workout and wait for it to finish.

Step 6: Observe the download of the device

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

Test 3:

Weight - Determine the weight of the device that is worn on the hand. Under two pounds.

Goal: The device should weigh under 2 lbs or 1kg. Write down and log the data in the table below.

External Factors: The scale should be accurate enough to detect under five pounds and should be zeroed before use.

Equipment: Hand device without external bank, small scale.

The device that is worn on the hand and arm should weigh less than two pounds.

Step 1: Unplug the device from the power bank and computer.

Step 2: Place the device on the scale. The glove should be dry and empty. Strings should be attached from servos to fingers.

Goal: The device should weigh under 2 lbs or 1kg. Write down and log the data in the table below.

External Factors: The scale should be accurate enough to detect under five pounds and should be zeroed before use.

Equipment: Hand device without external bank, small scale.

Name:		Date		Location	
Test 1: Did the power turn off? (Yes/No)		Test 2: Was data remotely sent? (Yes/No)		Test 3: Weight: (kg/lbs)	