App Guide

Running 1

(Step Rate)

SageMotion
Wearable Biofeedback System

sagemotion

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Components

Hub

Nodes *(8x)*

Battery

Node Straps: *Medium (8x), Short (4x), Long (2x)*

Cable A *(10x)*
-Connect Hub to Battery
-Charge Nodes & Battery

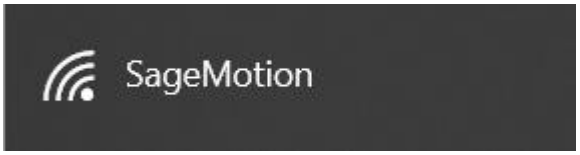
Cable B *(optional use)*
-Connect Hub to Computer

Node Charging Station

Wirelessly Connect to Computer or Cellphone

1) Connect Cable A to Battery and to Hub

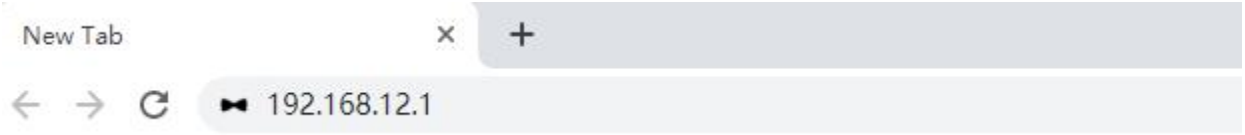
2) On Computer/Cellphone, Connect to Wi-Fi: “SageMotion”



Note 1: Need to wait for up to 1 minute for “SageMotion” to appear in Wi-Fi list. If it doesn’t appear, try turning the Wi-Fi off and then on again on the computer/cellphone.

Note 2: Hub is connected after clicking “Connect” even if in Windows it shows “Connecting” or “No internet, open”.

3) On Computer/Cellphone, in Chrome Address Bar, Go To http://192.168.12.1



[Note] If Computer Doesn’t Have Wi-Fi: *plug in Cable B to the Hub and to the ethernet port of your computer, then in chrome address bar, go to* ***http://192.168.137.1***

Running 1 App

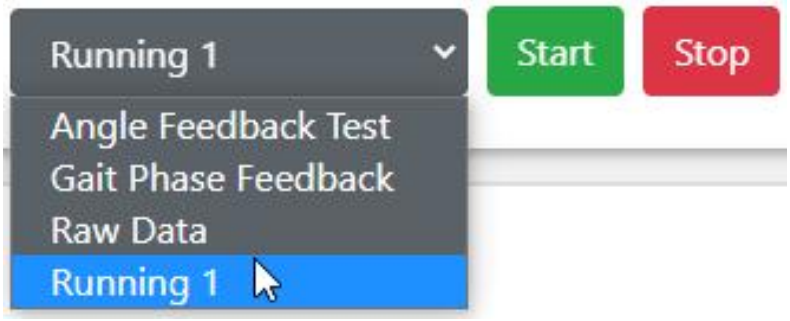
The purpose of the Running 1 App is to record, analyze, and provide feedback for Step Rate while subjects perform running activities.

1) Turn on 3 Nodes

Slide switch toward middle to turn node on

Green light will blink after the node is on and running

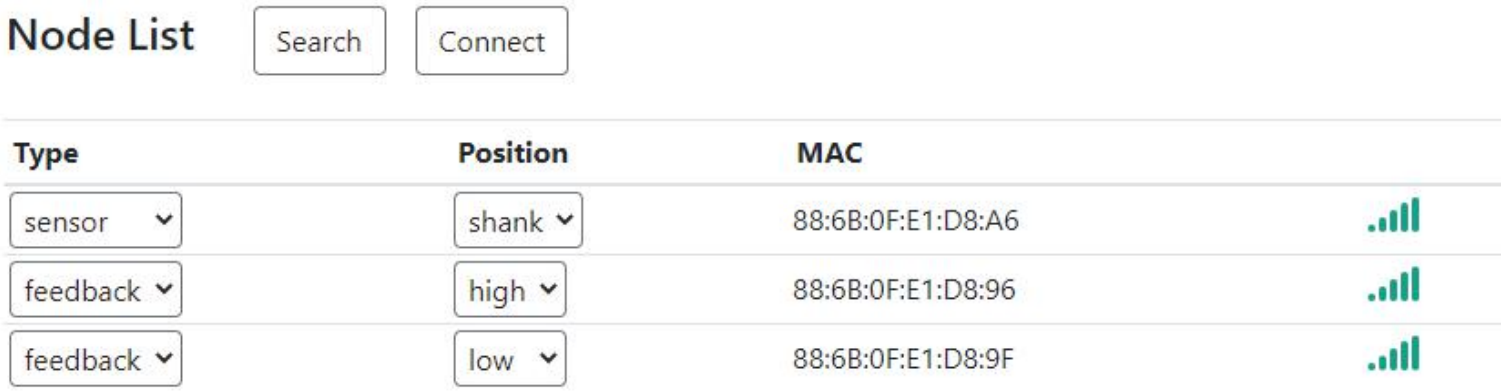
2) Select “Running 1” App



3) Click “Search”

Running 1 App *(cont.)*

4) Configure 1 Sensor Nodes and 2 Feedback Nodes as Shown Below:



5) Click “Connect”

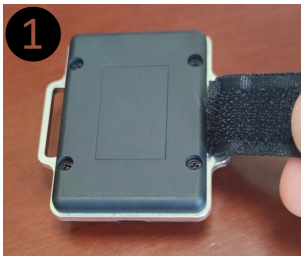
6) “Ready to collect data” Will Appear after Node Connection is Complete

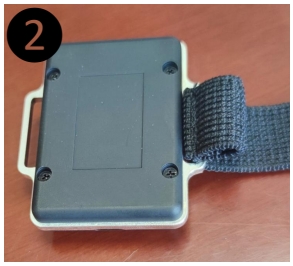
Running 1 App *(cont.)*

7) Thread Straps through Nodes and Attach at Locations Shown Below:

shank_sensor

How to Thread Straps





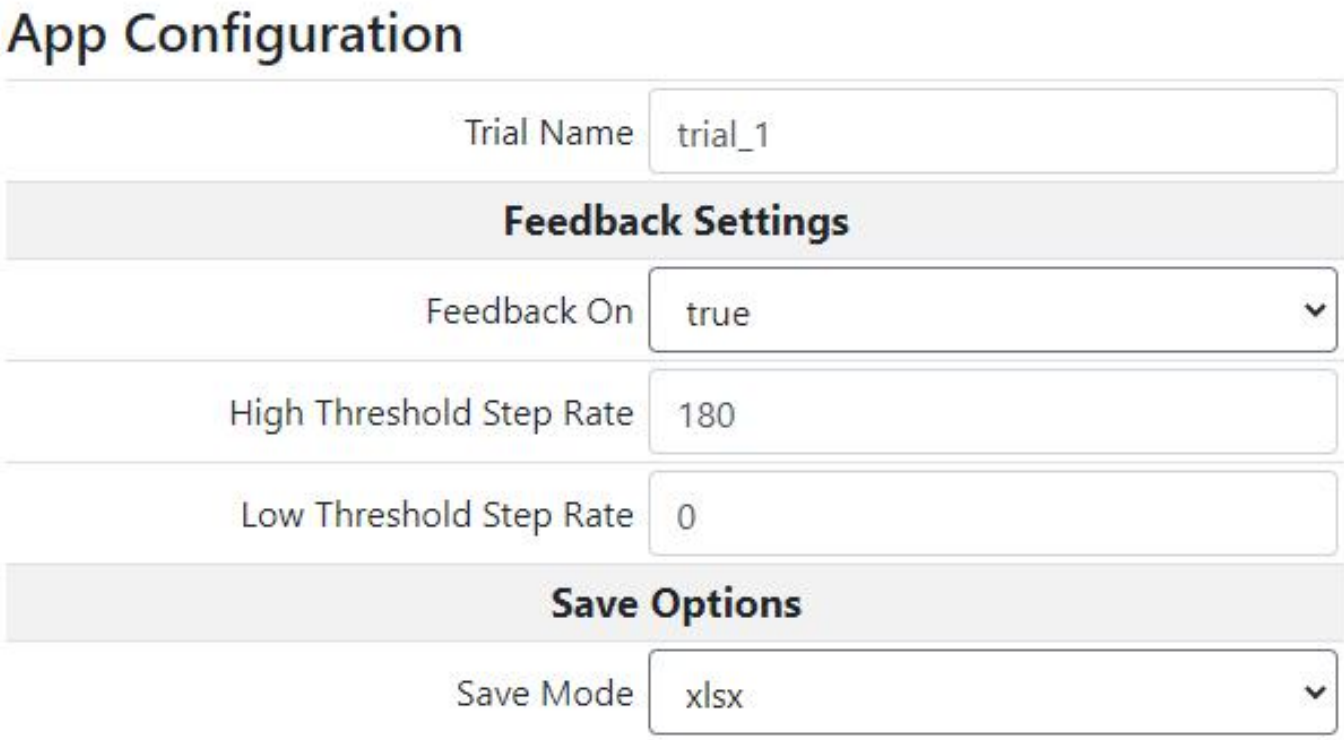
[Note] feedback_high and feedback_low nodes can be placed at any location

8) Click “Blink” for each Node to Confirm Correct Locations (red LED for given node blinks 3 times on click)

Type	Position	MAC			
sensor	shank	88:6B:0F:E1:D8:A6			Blink
feedback	high	88:6B:0F:E1:D8:96			Blink
feedback	low	88:6B:0F:E1:D8:9F			Blink

Running 1 App *(cont.)*

9) In App Configuration, Enter Settings (Example Below)

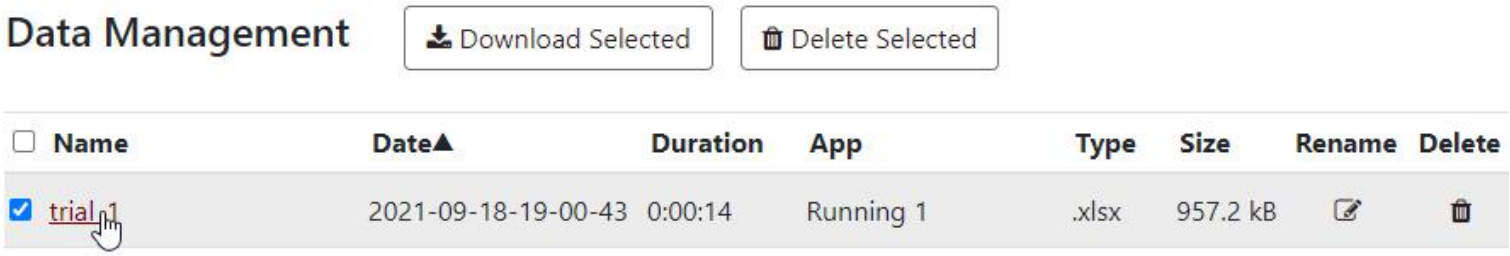


Running 1 App *(cont.)*

10) Click “Start” to Start Running the App

11) After the Trial is Finished, Click “Stop”

12) After Clicking “Stop”, a File from that Trial will Appear under Download Data. Click the File (e.g. trial_1) to Download it to the Computer or Phone.



Running 1 App *(cont.)*

Description of Data in Downloaded File

time (sec): time since trial start

StepRate: step during runing

Feedback_high: feedback status for Feedback_high node. 0 is “feedback off”; 1 is “feedback on”

Feedback_low: feedback status for Feedback_low node. 0 is “feedback off”; 1 is “feedback on”

SensorIndex_1: index of raw sensor data

AccelX/Y/Z_1 (m/s^2): raw acceleration data

GyroX/Y/Z_1 (deg/s): raw gyroscope data

MagX/Y/Z_1 (μT): raw magnetometer data

Quat1/2/3/4_1: quaternion data

Sampletime_1: timestamp of the sensor

Package_1: package number of the sensor