

App Guide
Gait Stance Ratio 1leg

SageMotion
Wearable Biofeedback System



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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



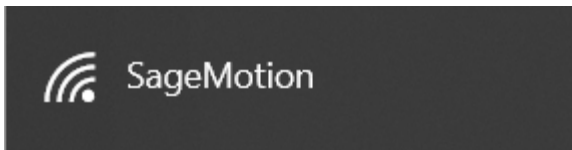
Node Charging Station

Wirelessly Connect to Computer or Cellphone

1) Connect Cable A to Battery and to Hub



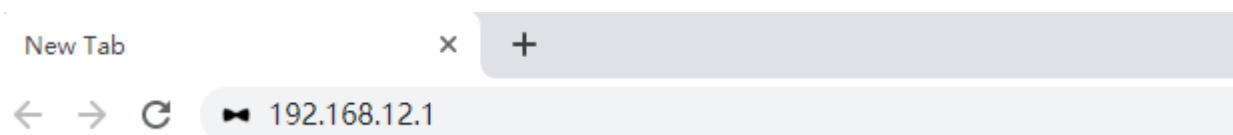
2) On Computer/Cellphone, Connect to Wi-Fi: "SageMotion"



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>**

Gait Stance Ratio 1leg App

The purpose of the Gait Stance Ratio 1leg App is to measure gait stance ratio of a foot during walking.

1) Turn on a Node

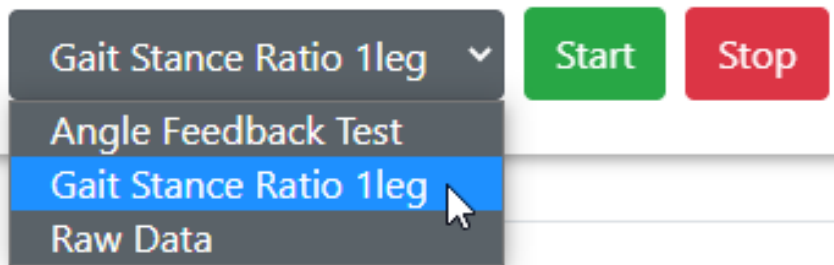


Slide switch toward middle to turn node on



Green light will blink after the node is on and running

2) Select “Gait Stance Ratio 1leg” App



3) Click “Search”

Node List



Gait Stance Ratio 1leg App (*cont.*)

4) Configure a Sensor Node as Shown Below:

Node List

Search

Connect

Type	Position	MAC	
sensor ▼	foot ▼	88:6B:0F:E1:D8:A1	

5) Click “Connect”

Node List

Search

Connect

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

Gait Stance Ratio 1leg ▼

Start

Stop

✓ *Ready to collect data*

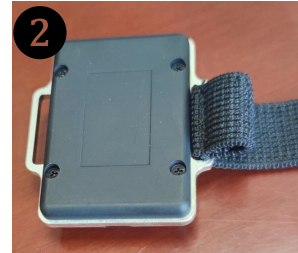
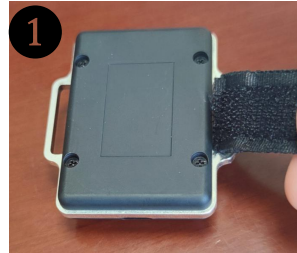
Gait Stance Ratio 1leg App (cont.)

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




How to Thread Straps



For the foot sensor node, the on/off switch points away from the body



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

Type	Position	MAC			
sensor	foot	88:6B:0F:E1:D8:A1			

Gait Stance Ratio 1leg App (*cont.*)

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

App Configuration

Trial Name	<input type="text" value="trial_3"/>
Calculation Options	
Strides for Average	<input type="text" value="5"/>
Inactive Period (s)	<input type="text" value="3"/>
Save Options	
Save Mode	<input type="text" value="xlsx"/>

[Note] “Strides for Average” is the strides used to calculate the average stance ratio.
“Inactive Period (s)” indicates that the stance ratio will be set to one when gait phase has no changes exceeding inactive period (s).

Gait Stance Ratio 1leg 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. trial1) to Download it to the Computer or Phone.

Data Management

<input type="checkbox"/>	Name	Date▲	Duration	App	Type	Size	Rename	Delete
<input type="checkbox"/>	<u>trial_1</u>	2022-02-18-23-16-16	0:00:02	Gait Stance Ratio 2legs	.xlsx	121.8 kB		

Gait Stance Ratio 1leg App (*cont.*)

Description of Data in Downloaded File

time (sec): time since trial start

Gait_Phase: gait phase of a foot. 0 is “Stance”; 1 is “Swing”

Stance_Ratio: stance-to-stride ratio of a foot.

SensorIndex_1: index of raw sensor data

AccelX/Y/Z_1 (m/s²): 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 each sensor

Package_1: package number of each sensor