



MyoMotion Virtual FootSwitches

The Noraxon myoMOTION system is now equipped with virtual footswitches. These footswitches use the gyroscope and accelerometer data from the sensors assigned to the feet to determine when the foot is in stance and swing phase.

To use the virtual footswitches the user must:

1. Enter the hardware setup and assign sensors to the left and right foot

Left Foot	D262
Right Thigh	D279
Right Shank	D263
Right Foot	D258

***Note:** The foot sensors MUST be included in the configuration in order for the virtual footswitches to work.

2. Enable the Virtual Footswitches

Device Settings	
RF channel	E
Sample rate	<input checked="" type="radio"/> 100 <input type="radio"/> 200
Hardware sync	None
Accel. Data	<input checked="" type="radio"/> Disabled <input type="radio"/> Enabled
Low Latency Mode	<input checked="" type="radio"/> Disabled <input type="radio"/> Enabled
Enable Virtual Footswitches	<input type="radio"/> Disabled <input checked="" type="radio"/> Enabled
Firmware version	4.10
Serial#	68013095

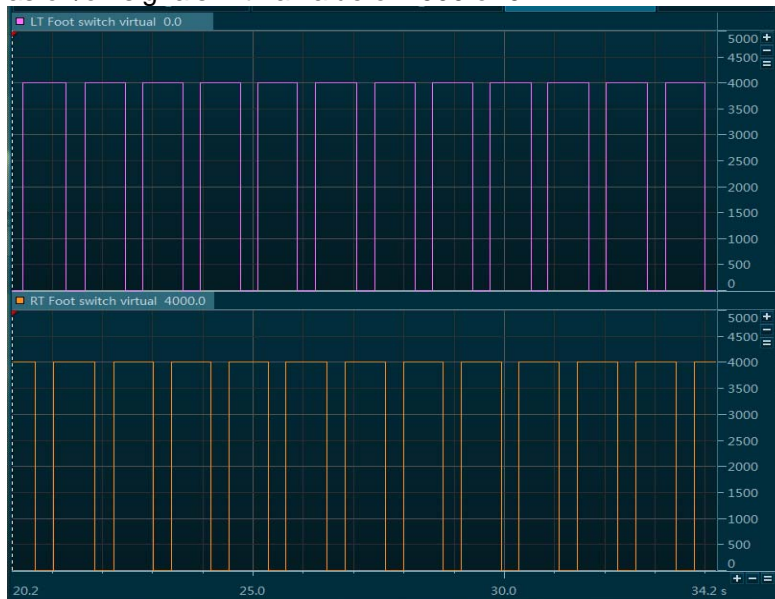
Shutdown Sensors Cancel Ok

3. In the software configuration, enable the foot and virtual footswitch channels.

Sensors			
Anatomical Angles			
Orientations			
Accelerations			
Select IMU sensors to be measured. If you do not see your sensors, please register them in the hardware setup of the device 'Noraxon MyoMotion'.			
On	Side	Name	
<input type="checkbox"/>		Pelvis	
<input type="checkbox"/>	LT	Thigh	
<input type="checkbox"/>	LT	Shank	
<input checked="" type="checkbox"/>	LT	Foot	
<input type="checkbox"/>	RT	Thigh	
<input type="checkbox"/>	RT	Shank	
<input checked="" type="checkbox"/>	RT	Foot	
<input checked="" type="checkbox"/>	LT	Foot switch virtual	
<input checked="" type="checkbox"/>	RT	Foot switch virtual	



4. Once the configuration is set up correctly, hit the record button. Footsteps will be displayed as on/off signals with a value of 4000 or 0.



A value of 4000 indicates stance phase while a value of 0 indicates swing phase.

***Note:** Currently the Virtual Footswitches are only good for normal walking. The Virtual Footswitches may not record activities such as running, walking up stairs, or abnormal walking accurately due to the nature of the foot movement.

The Virtual Footswitches allow users to visually see the steps of the subject, and have the added benefit of allowing the user to utilize the MyoMotion Gait Foot Switch Report. The MyoMotion Gait Foot Switch Report is based on the stance and swing phases to determine spatial gait parameters and display the averaged kinematic angle curves using the footswitch data to determine the time interval. Any additional information from the record, such as EMG signals, will be displayed in the same manner as the kinematic angles.

