



# SoftStep GameWorx Manual

## Overview

Welcome!

GameWorx is a training game for the SoftStep foot controller. Just like learning to type on a keyboard, learning to quickly, accurately, and efficiently hit the SoftStep's keys with your feet requires some practice. It takes time and effort to build up the necessary muscle memory to become a SoftStep virtuoso, and that's where GameWorx comes in! Through a series of exercises/lessons, GameWorx will have you using your feet in no time.

## User Interface

Upon loading GameWorx, you will be presented with a screen that looks similar to this:



If your SoftStep is connected and you'd like to get started right away, you can just hit the START button to begin playing. If you'd like to delve deeper there are also a number of options and settings for you to modify that change how the game behaves.

## Keys

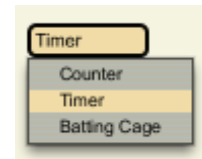
Not everybody is going to want to practice with all keys, all the time. Sometimes it helps to practice specific movements between just two or three keys. That is why we included the ability to turn on/off specific keys.



Each circle represents the on/off state of the key — when it is black it's off, when it's lit up it's on. Only the keys that are turned on will appear in the exercises each time you start the game. The example above is focusing on the Nav Pad and keys 4, 5, 9, and 0. You would not ever be asked to press keys 1, 2, 3, 6, 7, or 8 if a game were to be started with these settings.

## Modes

GameWorx has three different game modes it can be operating in: Timer, Counter, and Batting Cage. Each one is a little different and can be selected by using this menu directly to the right of the Sensor Response section:



### Timer

The Timer mode counts how many actions you are able to perform over a specified amount of time. Game length can be 30 seconds, 1 minute, 2 minutes, or 5 minutes.

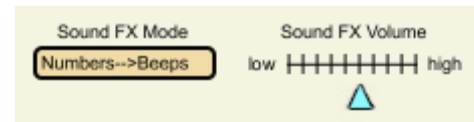
### Counter

The Counter game mode counts how much time it takes you to perform a certain amount of actions. After selecting Counter mode, use the “Maximum” setting to specify how many actions you would like to perform for this exercise. This number can be set anywhere from 5 to 300 actions.

### Batting Cage

Batting Cage mode will constantly stream actions for you to perform at a steady rate over a specified amount of time, much like a batting cage throwing baseballs. Both the game length and the rate at which the actions come at you are adjustable. Use the “Game Length” setting to choose from 30 seconds, 1 minute, 2 minutes, or 5 minutes and use the “Pitch Speed” setting to set the rate of actions.

## Sound FX



### Numbers → Beeps

When this is selected, the key number you are supposed to press will be read aloud. Upon pressing this key, a “beep” sound will be played.

### Beeps → Numbers

This is the opposite of Number → Beeps. A beep will play when you are supposed to press a key, and the number of the key will be read aloud once you press it.

### Beeps Only

This setting will only play the beep sound when you press on a key.

### Numbers Only

This setting will only play the key number of the key being pressed.

### Sound FX Volume

This slider adjusts the volume of the sound effects. Setting it to the lowest setting will turn them off entirely.

## Setup Section

The lower right corner of the GameWorx window is home to a number of general setup settings. Here is where you can adjust the volume of the sound effects, set what audio device you’re using, reload the KeyWorx scene, open a SoftStep monitor view, and see whether or not your SoftStep is connected.



### Audio Setup

Clicking the “audio setup” button will open up a new window where you can set the sampling rate and choose what audio device the sound will be output over. It is generally best to leave these at the default settings, but you may need to change them if you would like to use an external audio device.

### Monitor

The “monitor” button will bring up a window with a small display of the SoftStep. By default the keys are all white, but while you press one (or multiple if “multiple key” is on) they will light up blue. This is solely for having some sort of visual feedback to check that your SoftStep is responding to key presses.

### Load keyWorx Scene

The “load keyworx scene” button will load a scene to your SoftStep so it can communicate properly with GameWorx. This should happen automatically and you shouldn’t ever have to

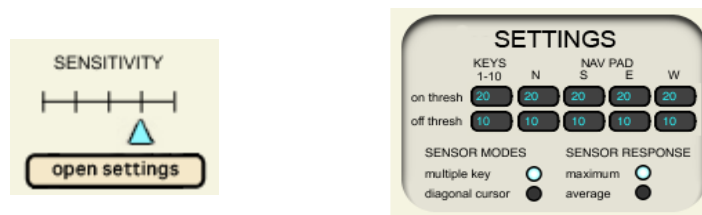
use this button (with some exceptions). Occasionally the scene may not load properly and it will appear that GameWorx is not responding to the SoftStep — in these instances re-loading the scene with this button will alleviate these issues.

### SoftStep Connected Light

This light will let you know if GameWorx sees and is connected to a SoftStep.

## Sensor Response Settings

The lower-left portion of the GameWorx window is where you make adjustments to the SoftStep’s sensitivity to better suit your style. You will see a section that looks like this:



### Sensitivity

The slider labelled “sensitivity” is a global multiplier for the output value of each SoftStep sensor. It amplifies all incoming data from each key. Adjust this first before adjusting the on/off thresholds. This scales all of the sensor data from the SoftStep keys — the higher this slider is (to the right), the more responsive the keys will be.

### Multiple Key Mode

Enabling this switch allows you to trigger more than one key at a time. Disabling this switch will lock out all other keys when one is activated — this helps to prevent unintentional triggers while in use.

### On/Off Thresholds

When a key’s pressure value exceeds the value of its “On Thresh”, the key’s function is triggered. When the pressure on that key then falls below its “Off Thresh”, the key’s action is stopped. The lower the On Threshold is, the easier it is to trigger a key. The greater the difference between the On and Off thresholds, the easier it is to hold a key on.

It should be noted that if the On Threshold is too low, there is some chance of getting accidental key triggers.

The threshold settings are in two rows of number boxes in the lower-left corner of the GameWorx editing window. The top row is for On Thresholds and the bottom row is for Off Thresholds. Adjusting the first column on the left labelled KEYS 1-10 will change the thresholds for all 10 keys on the SoftStep. The next four columns are for the diamond-shaped Navigation Pad so that you can individually set the thresholds for each direction — they are labelled N, S, E, W for North, South, East, and West.

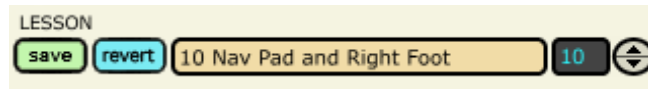
## Maximum/Average

You may select one of two modes here for “cooking” the SoftStep’s raw sensor data. There are four sensors in each SoftStep key — one in each corner. Average mode takes the pressure values from all four and averages them. This number is then multiplied by the Sensitivity setting and compared to the On/Off Thresholds. In Maximum mode, each key just sends pressure values taken from the sensors and uses the largest of the four, so only one of the four sensors is transmitting at a time. This number then goes through the same process of being multiplied by the Sensitivity setting and then compared to the On/Off Thresholds.

It is usually recommended to adjust this parameter last, then try each of the response modes and decide which one feels most natural while in use.

## Lessons

GameWorx comes pre-loaded with 10 lessons to practice with (and you can make your own). Each one focuses on training different aspects of SoftStep use, such as: the bottom row of keys, the top row, left foot, right foot, Nav Pad, Nav Pad and left foot, Nav Pad and right foot.



To save your own custom lessons, simply set everything up the way you like (mode, length, keys) and hit the SAVE button. Choose which slot number you would like this lesson to be written to (you can even overwrite the default lessons in slots 1 through 10) in the window that pops up and hit SAVE. Now you will be able to recall this lesson by selecting it from the LESSON menu.

### Actions in 1 Minute

This lesson has all 10 keys enabled and sees how many actions you can go through over the course of one minute by making use of the “Timer” mode. Game length can be set to 30 seconds, 1 minute, 2 minutes, or 5 minutes.

### How long for 25 actions?

This lesson times you to see how long it takes you to rack up 25 actions on the SoftStep. This makes use of the “Counter” mode. The number of actions can be adjusted anywhere from 5 to 300.

### Try to keep up for 30 seconds

This lesson makes use of the “Batting Cage” mode to see how well you can keep up over the course of 30 seconds. This is similar to the classic Whac-A-Mole game. A key will light up and you have a certain amount of time to press that key before GameWorx highlights a new one. The speed at which the keys change can be adjusted by changing the “Pitch Speed” parameter.

## **Bottom Row**

The “Bottom Row” lesson is a timed, 1 minute exercise with only the bottom row of keys activated.

## **Top Row**

A 2 minute timed lesson (by default) focusing solely on the top row of the SoftStep’s keys.

## **Right Foot**

This lesson is targeted at improving your right foot’s coordination. The rightmost four keys (4, 5, 9, and 0) are the only ones activated. Try to only use your right foot for this lesson. By default this lesson is set to time how long it takes you to perform 50 actions, though this can be changed if desired.

## **Left Foot**

The Left Foot lesson is targeted at the left foot. Keys 1, 2, 3 and 6, 7, 8 are activated. Try to only use your left foot for this lesson. By default this lesson is set to time how long it takes you to perform 50 actions, though this can be changed if desired.

## **Nav Pad Only**

This lesson focuses on the Navigation Pad, the four diamond shaped buttons on the far right of the SoftStep. This is the only thing active in this scene to help get you used to using the Nav Pad.

## **Nav Pad and Left Foot**

Using the Batting Cage mode, this 30-second lesson is a combination of the Left Foot and Nav Pad Only lessons.

## **Nav Pad and Right Foot**

This lesson is a right foot workout, a combination of the Right Foot and Nav Pad Only keys. It is best to do this one entirely with your right foot to get the most out of it.

# **Troubleshooting**

**My SoftStep is plugged in and the SOFTSTEP CONNECTED light is on, but GameWorx isn’t responding. What do I do?**

This is likely because the KeyWorx scene didn’t properly download to your board, and can be remedied by pushing the “load KeyWorx scene” button in the lower right-hand corner.

Sometimes unplugging and re-plugging in your SoftStep can solve this problem as well.