

BODITRAK GOLF SYSTEM – Shift V.7 User Handbook

I. INTRODUCTION

The BodiTrak Golf System is an integrated analysis system for capturing real-time center of pressure ("C.O.P.") and weight transfer data during a golfer's swing. The Boditrak Golf System uses BodiTrak's proprietary smart fabric technology, embedded in the mat, to calculate and analyze differences in pressure distribution across the surface.

The BodiTrak Golf System can be used as a swing improvement tool in a variety of ways. If you have specific questions about the data presented or how to use it for swing improvement, please call our experts at 1-855-878-4653.

II. INSTALLATION

a. System requirements:

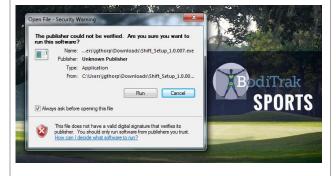
- **b.** System Components included:
 - i. Black sensor mat, attached USB cable & extension cable
 ii. Turf cover Software

SOFTWARE INSTALLATION INSTRUCTIONS

1. Download latest software

2. Run Shift Setup 1.0.007.exe

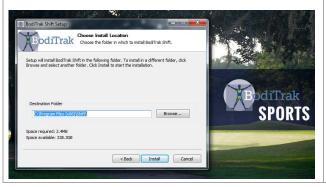
3. Click 'Run'



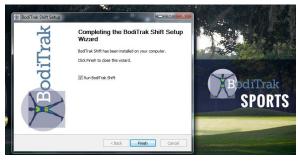




5. Select location for installation. Click 'Install'.



6. Click 'Finish'.





- c. Restart PC.
- **d.** Affix BodiTrak turf cover to black sensor mat using attached Velcro strips.
- **e.** Plug USB cable connected to mat into PC's USB port.
- **f.** To use a separate camera, disable webcam and enable additional device.
- g. Launch Shift Software using icon on desktop.
- **h.** Place mat in desired hitting location (see **Figure 1** for proper orientation¹).

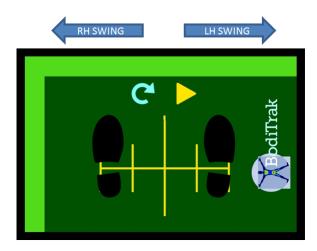


Figure 1: BodiTrak Golf System Mat Orientation

- **i. Step on blue Reset arrow** on mat to confirm connection. You will hear a beep and 'LIVE' will appear at the top right corner of the screen.
- **j.** If you are experiencing difficulties with the software or physical set up, contact technical support at 800-847-3157.

III. USE - BODITRAK GOLF SYSTEM

1. Key Items:

- a. Mat orientation and foot placement see Figure 1.
- **b.** System uses a microphone to determine club/ball impact (ensure microphone on connected PC is enabled.
- c. System has three modes, LIVE, RECORD and REVIEW.

¹ Note extensive user feedback has indicated that left handed golfers have varying preferences for mat set up. See the hotkeys in **Section III. 2. c.** and orientation buttons in Figure 2.



- 1. **LIVE** mode (with the microphone set to OFF position) gives ongoing feedback of pressure patterns.
- 2. **RECORD** mode will record 2 seconds before and after a swing.
- 3. **REVIEW** mode allows the replay of a swing captured in **RECORD** mode.

You can toggle between the modes either by using the two buttons on the mat, by clicking the microphone button on the output screen or by using the hotkeys described in **Section III. 2. c.**

- d. Type Golfer Name in dialogue box (shown Figure 2) to facilitate swing data saving.
- e. Output Screen



Figure 2: BodiTrak C.O.P & SWING SCORING Screen

2. Launch BodiTrak SHIFT program

- a. Program will load to LIVE mode (or its last active screen).
- **b.** Microphone button controls the display mode (toggling between **LIVE** and **RECORD**). You can also use the hotkeys listed below.

LIVE mode indicated by 'mic off':



RECORD mode indicated by 'mic on':





c. Commands

Click on the BodiTrak logo in the top left corner of the screen and scroll to **Commands** to adjust the following using hotkeys.

Live	Backspace	Change to LIVE mode
Record	Enter	Change to RECORD mode
Play	Spacebar	Begin playing recorded swing.
Next Frame	Right	Review recorded swing by advancing frame-by-frame.
Previous Frame	Left	Review recorded swing by rewinding frame-by-frame.
Save	Ctrl+S	Save swing information as an MOV file.
Сору	Ctrl+C	Copy swing data from Shift for use in Microsoft Excel.

d. Settings

Click on the BodiTrak logo in the top left corner of the screen and scroll to **Settings** to adjust the following using hotkeys.

Mirror Video	Ctrl+V	Flip video presentation.
Left Handed	Ctrl+H	Change golfer handedness.
Toes Up	Ctrl+T	Flip COP Graph orientation.
Microphone	Ctrl+M	Adjust between 3 microphone levels / microphone off.
Change Name	Ctrl+N	Change the name of the person swinging. File will automatically save using this information.
More Red	Ctrl+Up Arrow	Adjust to ensure COP Graph shows White-Red colour scale when golfer is standing static.
Less Red	Ctrl+Down Arrow	Adjust to ensure COP Graph shows White-Red colour scale when golfer is standing static.
Adjust Center	Ctrl+Enter	Use when golfer's swing stance is further to the front or back of the mat (e.g. putting).



3. Modes

- a. LIVE Mode (with microphone in OFF position)
 - Gives real-time analysis of weight transfer information while standing on the mat.
 - This allows an instructor to monitor analytics during a golfer's swing.
 - Does not record video or swing analysis for future review.
 - Use this to familiarize yourself with how visuals and analytics change with different swing adjustments. Particularly useful for the analysis of a golfer's Address and Set Up information.

b. RECORD Mode

- **Click microphone button** in the bottom left section of your screen <u>or</u> tap the blue **Refresh Arrow** on your mat to switch to **RECORD** mode (and enable recording of swing data).
 - Additional clicks increase the sensitivity of the microphone (required on some PCs/set up situations). The microphone has three levels of sensitivity - represented by green bars.
 - If the device goes straight into REVIEW mode (top right of your screen), the
 environment may be noisy and the microphone setting is too sensitive. Click
 through the microphone button to reduce sensitivity, and press the blue Refresh
 button to return to RECORD mode.
- System is now ready to record and analyze swing data. Position yourself as described in
 Figure 1 with your desired club and ball set up. Golf ball should be placed off of the
 BodiTrak Mat where most comfortable.
- Swing through and connect with the ball. The moment of impact is captured by the microphone, you will be taken to **'REVIEW'** mode to review your swing.

c. REVIEW Mode

- **REVIEW** mode allows you to view analytics from either screen of analytics, depending on which was in use during your swing.
- To replay your swing (2s before impact and 2s after impact), **press the 'Play' button** on the mat or on the screen.
- Use the 'Play' button on the mat to start and pause playback. Use the scroll bar on your screen to review any particular moment during the swing.
- Use your keyboard's arrow keys to scroll through by frame.
- To save your swing, press the save button next to the microphone. It will automatically save to the /Shift folder in your documents.
- To record a new swing, click the 'Refresh' Button on your mat or screen to return to RECORD mode.



IV. USER INTERFACE & METRICS

<u>IMPORTANT:</u> All information in WHITE refers to lateral motion, all information in ORANGE to heel \rightarrow toe motion.

C.O.P & SWING SCORING SCREEN

Scoring (all of 100):

Speed Score: A rating on transfer velocity (how quickly a golfer transitions over the course of a swing)

Balance Score: How evenly weight is transferred from heel \rightarrow toe during the swing.

Smoothness Score: How evenly weight is transferred laterally during the swing.

Timing Score: The closeness of Peak Velocity (defined below) of weight transfer is to club/ball impact. A high score denotes that weight transfer is at its fastest close to impact. Lower scores are either much before or much after impact. Look to the velocity graph for more detailed velocity information.

Golf Number: A proprietary composite overall swing rating, calculated using weighted averages to give an accurate overall rating related to a golfer's swing.

Velocity Chart:

Peak Velocity (cm/s) represents the fastest rate of lateral weight transfer during the swing. This is the moment where maximum power could be transferred to the ball upon impact.

Release Factor represents the time between Peak Velocity to impact (measured in milliseconds). A lower value denotes more power at the time of impact. Release Factor is shown on the Velocity Graph by the peak of the white line (lateral motion). As a note, many PGA pros have a Release Factor in the 80ms range.



V. DATA STORAGE, REVIEW, SHARING

- **a.** When in REVIEW mode, click on the 'Save' button as depicted below to save the panel of analytics from your swing. This will save as a .mov file from the live screen during your swing that can be played on any media player and shared with others.
- **b.** Files are automatically saved to /Shift in 'Documents'.
- **c.** For additional information on swing analytics and Center of Pressure patterns, please call NRG sports at 1-855-878-4653

