



BODITRAK GOLF - User Manual

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:

i. PC with Windows 7 or 8	ii. Webcam or connected camera	iii. PC Microphone	iv. USB Port
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b. System Components included:

i. Sensor mat with USB cable & extension cable	ii. Turf cover	iii. User Manual in PDF	iv. BodiTrak SHIFT software
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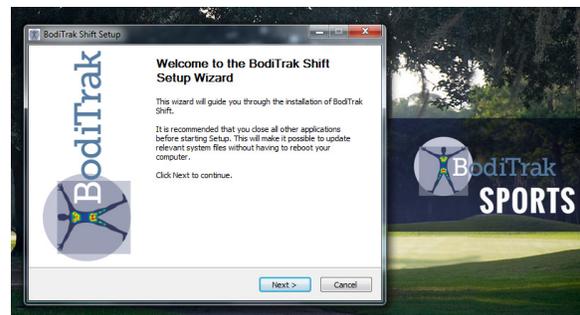
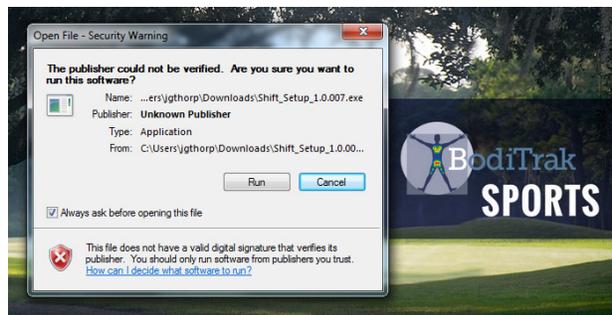
SOFTWARE INSTALLATION INSTRUCTIONS

1. [Download latest software](http://www.boditraksports.com/support/) at <http://www.boditraksports.com/support/>

2. Run: Shift_Setup_1.0.xxx.exe

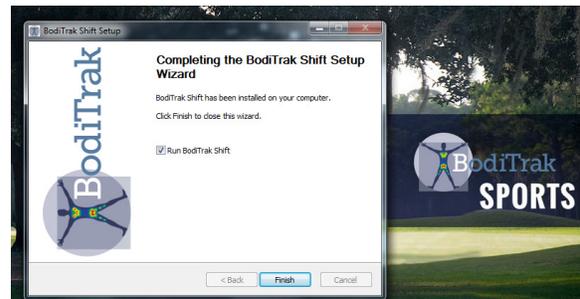
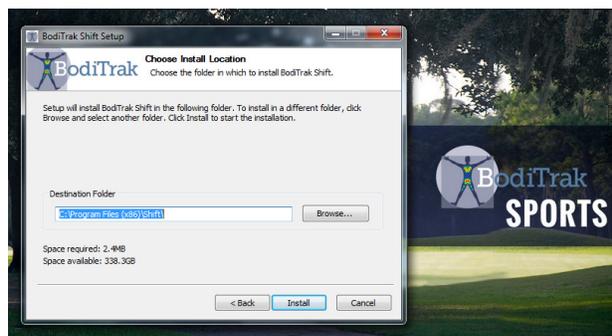
3. Click 'Run'

4. Click 'Next'



5. Select location for install. 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).

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.d** and left/right hand icons on lower left of display.

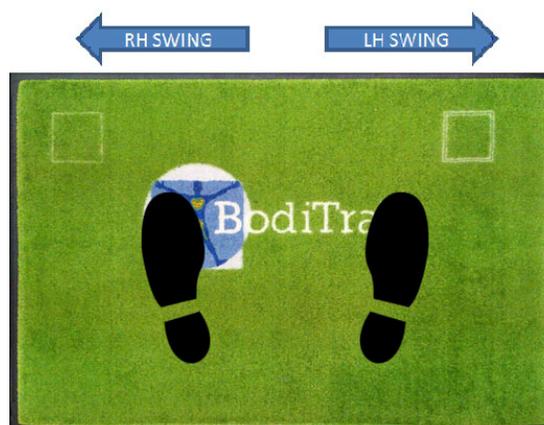


Figure 1: BodiTrak Golf System Mat Orientation

- i. Step on single outline square 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](tel:800-847-3157).

III. USE of BODITRAK GOLF SYSTEM

1. Key Items:

- a. Foot placement - **see Figure 1.**
- b. Mat orientation can be switched by using the foot icon for heel to toe, and the hand icon for left to right. The camera display can be switched using the triangles icon.
- c. System uses a microphone to determine club/ball impact (ensure microphone on connected PC is enabled).
- d. System has three modes, **LIVE**, **RECORD** and **REVIEW**.
 1. **LIVE** mode (with the microphone set to OFF position) gives ongoing feedback of pressure patterns.
 2. **RECORD** mode (with microphone set to ON) will record a set length of time before and after ball contact. See page 5 for how to set length of recording.
 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.**

- e. The Output Screen is shown in figure 2.

- f. Type golfer name in dialogue box (shown **Figure 2**) to facilitate swing data saving. The data will not be saved without a golfer's name. Data will be saved in the Documents folder under the Shift folder.



Figure 2: Swing Metrics & Center of Pressure 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':



Figure 3: microphone and save buttons

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.
Copy	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+U	Flip COP Graph orientation.
Enable Mat Buttons	Ctrl+B	Disable or enable mat buttons

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.
Auto Range	Ctrl+A	Automatically adjusts Pressure Map display for consistency between golfers.
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.
Longer Recording	Ctrl+PgUp	Extends length of recording time
Shorter Recording	Ctrl+PgDn	Shortens length of recording time
Mat Type	<ul style="list-style-type: none"> •Autodetect •Side Buttons •Centered Buttons •Corner Buttons, Front cable •Corner Buttons, Back Cable 	If autodetect does not work for your mat you can select one of these other options

3. Modes

a. **LIVE Mode** (with microphone in OFF position)

- Gives real-time analysis of pressure and balance information while a golfer stands 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 or type Ctrl+M to enable **RECORD** mode.



- 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 single outline square 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 and you will be taken to '**REVIEW**' mode to review your swing.
- c. **REVIEW Mode**
- **REVIEW** mode allows you to view analytics from the display.
 - To replay your swing **press the 'Play' button** on the screen or the double square on the mat.
 - **Use the double square 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, **step on the single square Button** on your mat to return to Record mode, or click the backspace key.

IV. BODITRAK USER INTERFACE - EXPLANATIONS

IMPORTANT: All information in WHITE refers to lateral motion, all information in ORANGE refers to heel → toe motion.

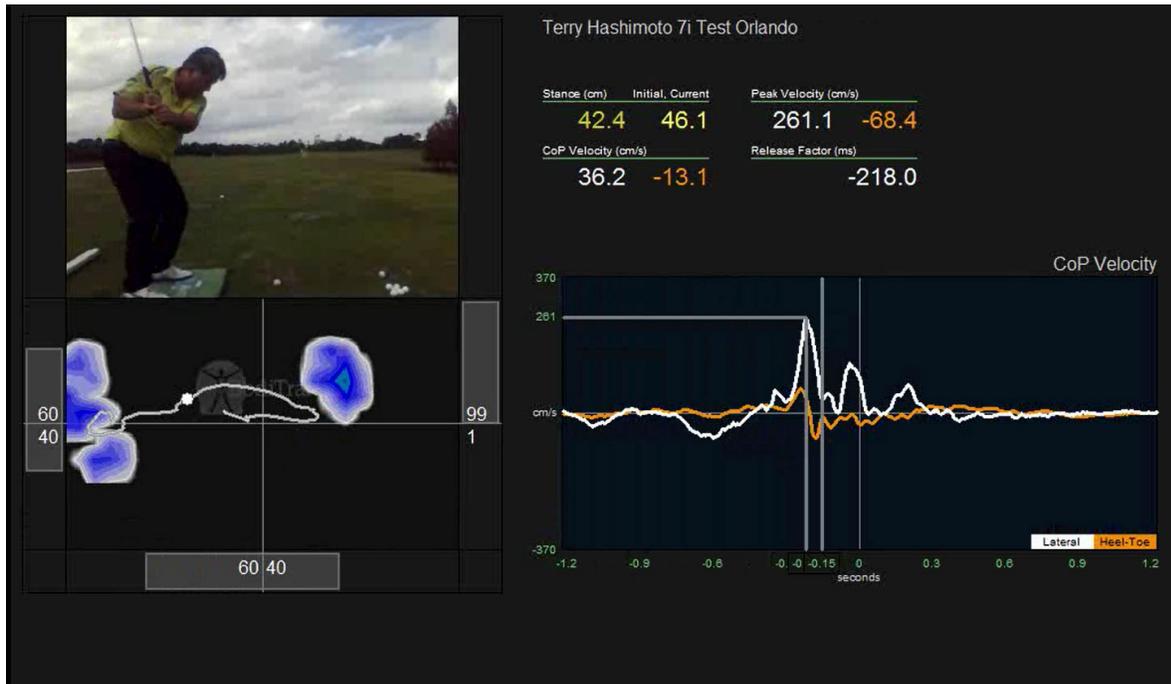


Figure 4: display screen

Analytics Chart:

Stance (cm) The golfer's stance width. Initial is while at address, and Current is at any point during the swing.

CoP Velocity (cm/s) represents center of pressure velocity.

Peak Velocity (cm/s) represents the fastest rate of lateral weight transfer during the swing.

Release Factor (ms) represents the time between Peak Velocity to impact in milliseconds. 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 in figure 3 to save the panel of analytics from your swing. This will save as a “.wmv” 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](tel:1-855-878-4653)

VI. TROUBLESHOOTING

- a. If the golfer's stance appears to be unbalanced from left to right when trying to stand with equal force on each foot, the software is able to compensate for this. However, this could negatively affect the mat's performance if not done correctly. Please call technical support at 800-847-3157 for assistance with this function.
- b. If you are experiencing difficulties with the software or physical set up, contact technical support at 800-847-3157.

