

**Exhibit J: Users Manual  
Evermore Systems  
Smart Swing USB Link Box**

## CAUTION

Modifications to this device not expressly approved by SmartSwing, Inc. could void user's authority to operate it.

This device complies with Part 15 of the FCC Rules.

Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

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**NOTE:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.



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For questions regarding your SmartSwing product,  
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SMARTSWING MANUAL

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## PACKING LIST

**Standard Contents** - Included with all configurations.

ITEM	MEDIA
Step Down Golf Tees	Bag of golf tees
Software CD	CD-ROM
Power Charger	Hardware
SmartLink USB adapter	Hardware
SmartSwing Golf Club	Hardware
SmartSwing Head Cover	Hardware
Tape Measure	Hardware
USB Cable	Hardware
At the Range Note pad	Printed documentation
Quick Reference Guide	Printed documentation
User Manual	Printed documentation
Wallet Reference Card	Printed documentation

**Optional Accessories** - These items may be included in some configurations.

ITEM	MEDIA
Car Charger	Hardware
Teaching Pro Manual	Printed documentation

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## SMARTSWING ONE (1) YEAR LIMITED WARRANTY

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## SMARTSWING BASICS

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Three key parts of the swing cause a solid impact with the ball:

1. **The Backswing**, where the body is cocked or loaded to provide power for subsequent parts of the swing.
2. **The Transition**, where momentum is transferred from the right side of the body to the left side and where the club is 'dropped into the slot', key to swinging on-plane.
3. **The Downswing**, where the body and the club rotate powerfully through the ball and the transition to the left side is completed.

The SmartSwing Learning System will enable you to break the swing down into its component parts so that you can perfect each component. Having gained a comfort level with the component movements of the club, you can then integrate them into a complete, smooth, powerful, *repeatable* on-plane golf swing.

The SmartSwing Learning System consists of 2 primary components, an intelligent club and PC software. The club has a circuit board in the grip that tracks the club's movement through space and records this information for later analysis. In addition, the club provides real-time audible feedback when you swing to let you know how well your swing is on plane when compared to a reference swing. After a day at the range or on the course, you can take your club home and download your swing data into PC software. You can use the software on your own or share your data with a SmartSwing Affiliated Teaching Professional to assist you in using the SmartSwing Learning System to improve your swing.

### System requirements

Using the SmartSwing Learning System software requires a Windows PC to download and analyze your swings. Your computer must meet these minimum requirements to operate the SmartSwing PC software:

- Windows 2000 or Windows XP (Windows 95, 98, and ME are not supported)
- 128 MB RAM (256MB or more is recommended)
- 100 MB free disk space

**Note:** *We strongly recommend that you have all the current patches and updates installed for your version of Windows. Visit Microsoft's web site at [www.windowsupdate.com](http://www.windowsupdate.com) for more information.*

### Installing the software and initial setup

**Note:** *If you have already followed the Quick Start Guide, you can skip this section. The Quick Start Guide will have additional pictures and instructions to assist you with the initial setup and use of your new SmartSwing club.*

Before you can begin using your SmartSwing club, you will need to take some physical measurements and download them to your club using the SmartSwing PC software.

## SMARTSWING BASICS

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### Installing the software and initial setup — *continued*

To install the SmartSwing PC software and perform the initial set up with your club, locate the SmartSwing PC software CD and insert it into your computer. Make sure your computer meets the minimum requirements stated in the previous section. When you insert the CD in your computer, the installer should automatically open. Just follow the directions on the screen to install the software. When you are done, you will no longer need the CD but should store it in a safe place in case you need to reinstall the software in the future.

After you install the software, follow the steps below:

1. Connect the SmartLink USB wireless adapter to one of the USB ports of your computer.
2. Connect your SmartSwing club to the AC adapter and make sure it is plugged into a power source.
3. Place your SmartSwing club within 3 feet of the SmartLink USB wireless adapter.
4. Locate the measuring tape provided in the box with your club.
5. Get your spouse or a friend to help you take two measurements.
6. Assume your address position. If you are not sure if your address position is correct, please consult with a Teaching Professional.
7. Have your spouse or friend measure the distance from your right elbow to the ground and write down this data. Repeat the process from your right shoulder to the ground. Both measurements are made directly to the ground, not at an angle.
8. Open the SmartSwing PC software that you earlier installed on your computer.
9. The first time you run the software it will ask you to enter the measurements that you just took. Enter the measurements in the indicated fields and click continue.
10. Click download. Your measurements will now be downloaded into the club.
11. When the message appears that the download is complete, you should quit the SmartSwing application.
12. Disconnect the AC adapter cable from your club.
13. You are now ready to start using your SmartSwing club.

## SMARTSWING ONE (1) YEAR LIMITED WARRANTY

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Note: Before you deliver your product for warranty service it is your responsibility to keep a separate backup copy of the application software and data. You will be responsible for reinstalling all such software and data. Data recovery is not included in the warranty service and SmartSwing is not responsible for data that may be lost or damaged during transit or a repair.

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## ADDITIONAL DETAILS

### Transitions States of the SmartSwing Club — *continued*

<i>State: On</i>		
EVENT	TRANSACTION	ACTION
Swing breaks Upper Plane	Change swing sub-state to Swing Broken High	Begin playing the Upper Swing Plane Broken Tone
Swing breaks Lower Plane	Change swing sub-state to Swing Broken Low	Begin playing the Lower Swing Plane Broken Tone
Swing returns to between Upper and Lower Planes	Change swing state to Swing OK	Turn off Plane Broken Tone
Swing recording completes	Change to Doze State	End recording of the swing. If the swing remained within the two planes, then play the Happy Tone.

<i>State: RF Download</i>		
EVENT	TRANSACTION	ACTION
RF Data Transfer completes	Change to Doze State	LED cadence change to Dose State flash.

<i>State: Charging</i>		
EVENT	TRANSACTION	ACTION
Charger is unplugged	Change to Dose State or Charging State	LED cadence change to new State cadence.
Data transfer begins	Change to RF Download State	LED cadence changes to RF Download cadence

## SMARTSWING BASICS

### The SmartSwing Learning System

The SmartSwing Learning System is a combination of hardware, software, and a specific learning process.

#### *The Club (the hardware)*

Your SmartSwing club is a high quality golf club that looks, feels, sounds, and plays like any other club you may have used. The electronic modifications made inside the grip should not be noticeable other than the interface on the end of the shaft. The club serves 2 primary functions: first, to provide you with audible feedback while you are swinging to help you improve in real time; and second, the club records each of your swings. This information can be downloaded to your computer for further analysis using the SmartSwing PC software.

#### *PC software*

There are two versions of the SmartSwing PC software depending upon which version of the SmartSwing Learning System you purchased.

- **SmartSwing Visualizer** allows you to visually inspect how well your swing stays on plane and how your swing compares to your reference or known good swing.
- **SmartSwing Analyzer** includes everything in SmartSwing Visualizer and adds several different statistical views that enable you to analyze various metrics for each of your swings.

Each version of the software maintains a database of all the swings you have downloaded from your club and allows you to easily manage this data. You can create sets or groups of swings, delete swings, and specify good swings as reference swings.

#### *What is a Reference Swing?*

To accurately provide audible feedback and the 3D displays in the Visualizer software, SmartSwing has defined a set of virtual swing planes. With a correct, square address stance these virtual planes will be perpendicular to the target line when viewed from directly behind the golfer (facing the direction of the golf shot).

- **Lower or “Hands” plane** - defined by a plane that is parallel to the target line, begins at the hosel of the club, passes through the right hand of the golfer and extends into space.
- **Perfect or “Elbow” plane** - defined by a plane that is parallel to the target line, begins at the hosel of the club, passes through the right elbow and extends into space.
- **Upper or “Shoulder” plane** - defined by a plane that is parallel to the target line, begins at the toe of club, passes through the right shoulder, and extends into space.



## SMARTSWING BASICS

### What is a Reference Swing? — continued

While using the SmartSwing PC software you can select one of your own particularly effective swings from a practice session to replace the customized, mathematically-defined ideal reference swing. Your “Personal Best” reference swing allows you to document your finest performance and use it to identify and eradicate bad habits as they creep back into your swing over time. As you compare practice swings against your “Personal Best” reference swing, you’ll build consistency and have more fun.

**Note:** *Although the PC software allows you to compare your swing to various reference swings, the SmartSwing club always uses a mathematically defined set of upper and lower planes based on your physical measurements to provide audible feedback.*

### The Learning Process

The real-time feedback feature of the SmartSwing club is the enabling factor and makes this regimen possible. The objective of this process is to avoid the ‘negative feedback’ tones that the SmartSwing club provides to notify the golfer that they have ‘broken’ one of their virtual swing planes and rather receive the ‘positive feedback’ tone at the end of the swing. In addition to the steps outlined below, check your progress every few swings using the SmartSwing PC software and compare your results to the results of the Reference Pro. Determine how your swing varies from your ideal swing and make the necessary changes to more closely match the two.

### Perfecting your swing

**Set-up & Ball Position:** In order for the steps that follow to be most useful, you should be in a good, athletic address position. The ball must be positioned just on the inside heel of the left foot for a right-handed golfer, when your body is addressing the ball. In addition when using the SmartSwing club, you should always be “square” to the target line and use the same type of “step down” golf tees included with your club. These tees are required for the SmartSwing Learning System to accurately calculate ball position.

1. Take ‘baby’ backswings from the address position up to the position where the club is parallel to the ground. The club should stay on the ‘hands’ plane for this entire exercise. Keep practicing until you can repeatedly make this movement without breaking the ‘hands’ plane. Do not avoid the tone by picking the club up, as this will result in breaking the ‘shoulder’ plane. When you can repeat this movement with ease, move to the next step.
2. Take ‘slow & easy’ backswings (30-50% of normal speed) from address to the top of your backswing, or position #5 above. The club should move up the ‘hands’ plane, as in step #1, and then transition upward until both the hands and the entire club are just underneath the ‘shoulder’ plane. To some golfers this position may feel as if the club is very ‘flat’. This is OK, as you have, in all likelihood, ‘flattened out’ your swing. When you can get to this position with repeated success, move on to the next step.

## ADDITIONAL DETAILS

### Transitions States of the SmartSwing Club — continued

<i>State: Club is in Doze</i>		
EVENT	TRANSACTION	ACTION
User presses Power Button	Change audio sub - state	Toggle the audio sub-state (off if on, or on if off) Play the Audio On or Audio Off tone sequence.
User presses and holds Power Button for 4 seconds	Change to Off state	Power off the device, turn off the LED
User presses the Flag Swing button	None	Last recorded swing is flagged. Audio confirmation tone sequence is played.
User swings the club	Change to On state	Begin recording of the swing
Timeout of 5 minutes since swing or power up	Change to Off State	Power off the device, turn off the LED
Battery is low	None	Play battery low warning every 30 minute. Low Power warning sounded regardless of Audio On/Audio Off sub-state.
Memory full	None	Change LED cadence to Memory Full. Additional swings are not recorded.
Club Failure	Change to Off state	Power down the device, turn off the LED
RF in range	Change RF connectivity sub-state	RF base Amber LED changes to on
RF out of range	Change RF connectivity sub-state	RF base Amber LED changes to off
RF Data transfer begins	Change to RF Download State	LED cadence changes to RF Download cadence

## ADDITIONAL DETAILS

### Audio Feedback Technical Specifications

1. **Audio On** - 1396.91 (F) - 1760.00 (A) - 2093.00 (C) at a 200 ms cadence one time
2. **Audio Off** - 2093.00 (C) - 1760.00 (A) - 1396.91 (F) at a 200 ms cadence one time
3. **Low Battery** - 1567.98 (G) - 1567.98 (G) - 1567.98 (G) at a 200 ms on, 200ms off cadence recurring every 30 seconds.
4. **Swing Flag Confirmation** - 1567.98 (G) - 2093 (C) at a 200 ms cadence one time.
5. **Upper Swing Plane Broken** - 4698.64 (D) - 4186.01 (C) at a 50 ms cadence for the entire duration that the club is in violation of the upper swing plane.
6. **Lower Swing Plane Broken** - 1567.98 (G) - 1760.00 (A) at a 100 ms cadence for the entire duration that the club is in violation of the lower swing plane.
7. **On Plane Swing** - 1396.91 (F) - 1760.00 (A) - 2093.00 (C) - 1760.00 (A) - 1396.91 (F) at a 200 ms cadence one time.

### Visual (LED) Feedback

The LED has 2 different flashing patterns

1. **On** - Flashes for 100ms on every 1000ms.
2. **Memory Full** - Flashes for 100ms on every 200ms.

### Transitions States of the SmartSwing Club

<i>State: Club is Off</i>		
EVENT	TRANSACTION	ACTION
Power Button press while the club is upright.	Change to Doze State	LED begins "on" cadence
Power Button press while the club is upside down (in the bag).	Remain in Off state	No action
Charger is connected	Change to Charging State	LED cadence changed to on

## SMARTSWING BASICS

### *The Learning Process - Perfecting your swing — continued*

3. Add the transition. Make a full, slow, easy backswing from address to completion of the backswing. From this point focus on 'dropping into the slot'. During this transition movement the hips will 'bump' forward and the hands will 'drop' almost straight downward so that the hands and the club are all aligned on the 'elbow' plane.
4. Take it very easy (roughly 30% of normal speed) down the 'elbow' plane and through the ball. Repeat until you can make full, slow swings without setting off the tones.
5. Slowly increase the swing speed. When you begin to have trouble keeping the 'tones off' slow down a bit until you are able to do so. Remember, touring pros say that they swing at around 75-80% of their 'full out' swing throughout most rounds. You should be no different! You'll be pleasantly surprised at how far the ball goes when you make a smooth, seemingly slow, on-plane swing.
6. Work on making full swings, both with and without a ball. Check both swings with the Reference Pro and see if you are unconsciously swinging differently when a ball is to be struck. Work on swinging the club vs. hitting the ball.

### *Practice Regimen*

To improve your game as quickly as possible with the SmartSwing club, it is important to define a solid practice regimen. The steps below will explain a step-by-step process whereby each step will build on the previous step enabling you to build a strong, smooth, repeatable, on-plane golf swing.

1. Begin with a lesson from a SmartSwing Affiliated Teaching Pro or other well-known and reputable teaching professional. The focus of the lesson should be on the fundamentals of grip, stance, and basic swing.
2. Practice by hitting balls on the driving range. Work on the basics, with close attention to the audible feedback received from the SmartSwing Driver.
3. Review your results in the SmartSwing PC software, paying close attention to the differences between the your swing and the reference swing.
4. Using the SmartSwing club, make several practice swings, working to change your swing to more closely match the reference swing seen in the SmartSwing PC software. Repeat steps 3 and 4 several times until you begin to see improvement.
5. Return to the driving range and practice hitting balls, working on making the swing changes that you practiced at home.

### *The Learning Process - Practice Regimen — continued*

6. Return to your teaching professional to get a swing assessment and learn what your pro thinks they can do to most improve your swing and ball striking ability.
7. Continue to repeat this process for each lesson with your teaching professional. For each lesson you should have three sessions on the driving range with your SmartSwing club. For each session on the practice range you should have three 'at home' practice sessions to work on making your swing more closely match the reference swing.
8. Faithfully following the practice regimen will result in rapid improvement of your swing, resulting in rapid improvement of your ball striking capability

### **How does it work?**

The brains of the SmartSwing Learning System is a circuit board imbedded in the grip of the club. This circuit board has a series of nano-scale gyroscopes and accelerometers that allow it to track it's position in 3 dimensional space. Using a series of complex equations, factory calibration, and your own physical measurements, we can tell where the club is in space and how it is interacting with your golf ball. All this information is calculated several times a second and stored in the onboard memory. Our SmartSwing PC Software can take this information and perform complex analysis on your golf swing.

### **Glossary**

**Batch** - A group of swings, either downloaded together from the club or saved manually by the user

**Lower plane** - plane roughly defined by the heel of club and a line through the hands and parallel to the target line.

**Perfect plane** - plane roughly defined by the golf ball and a line through the elbows. In a proper stance, the line through the elbows should be roughly parallel to the target line.

**Upper plane** - plane roughly defined by the toe of club and a line through the shoulders. In a proper stance, the line through the shoulders should be roughly parallel to the target line.

### **Service and Support**

#### *30 day no-questions-asked refund*

If you are not completely satisfied with your SmartSwing club, simply contact us within 30 days after receiving your club and request an RMA number. Package all the original materials in the box that it came in and return it to us. We will provide your return shipping and offer you a full refund when we receive your club.

#### *90-day exchange*

If anything goes wrong with your SmartSwing club within the first 90 days, we will exchange it for a new club at no cost to you. Simply contact us for an RMA number.

#### *1-Year Warranty*

Your SmartSwing club comes with a full one year warranty. Contact us for an RMA number before returning your club.

#### *Technical Support*

You may contact us by phone, Monday through Friday, 8AM-6PM central time at 1-888-SWING-18 (1-888-794-6418) option 3. In addition, you may email us at [service@smartswinggolf.com](mailto:service@smartswinggolf.com).

## THE SMARTSWING CLUB

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### Using your SmartSwing club - Recording and Flagging Swings — *continued*

To flag a swing, press and release the flag swing button after making your swing. Immediately after pressing and releasing the flag swing button you will hear a specific tone to assure you that the swing has been flagged.

When viewing a swing batch in the SmartSwing PC software, simply look for the flag icon to help you identify the swing. The swing time stamp as well as your notes in the supplied 'At the Range' note pad can help you discern between multiple flagged swings.

#### Conserving battery life

When the battery has 10% power left, you will hear an audible tone come from the club. When you hear this tone you should only take 2-3 more swings and turn off the club until you can recharge it and download your swings. To maximize your battery life we recommend waiting until you hear the low battery tone before recharging. This is not required but will help extend the overall life of the battery.

#### Caring for your club

When not in use, be sure to store your club in a safe protected place. We recommend using the supplied head cover to protect the club head. In addition you should take care with the grip as this is where the SmartSwing electronics reside. While the SmartSwing club is designed and tested to withstand the rigors of normal use, you should still exercise care to protect your investment in the state of the art electronic device.

## Visualizing & Analyzing your Swing

### Downloading data

Follow these steps to download swing data from your club.

1. Turn on your computer, and open the SmartSwing PC software.
2. Make sure the SmartLink USB adapter has a green LED to indicate power is on.
3. Turn on your SmartSwing club.
4. The SmartLink USB adapter should now have a Amber LED turn on to indicate a wireless connection is established.
5. Click on the import button in the SmartSwing PC software
6. The Amber LED on the SmartLink USB adapter should begin to flash indicating a data transfer has begun
7. The transfer should take less than 2 minutes.
8. When the transfer is complete a message will come on your screen.
9. You can turn off your SmartSwing club and begin analyzing your swing data.

### Creating Data sets

Using the SmartSwing software you can group your swings together for analysis.

### Comparing your Swing

The SmartSwing PC software allows you to compare your swing to a reference swing. This can either be a mathematically defined perfect swing or one of your own swings.

## THE SMARTSWING CLUB

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Before you can begin using your club, you will need to take some physical measurements of your body, enter them in the SmartSwing PC software and then download this information into your club. If you have not already done so, please follow the Quick Start Guide for setting up your SmartSwing Learning System for the very first time.

### Initial calibration

The initial calibration uses your physical measurements to calculate a mathematically defined "perfect" swing and corresponding virtual swing planes. These calculated upper and lower swing planes are used by the audio feedback built into the club to quickly identify the strengths and weaknesses of your current swing in comparison to that of a "professional" swing.

### The SmartSwing Club interface

The interface on your SmartSwing club has several components:

- **Power Button** - The button will allow you to turn your club on and off as well as turn the audible alerts on and off. Press and hold the button for 4 seconds to turn the power on/off. Press and release to toggle the audio feedback on/off.
- **Flag Button** - You will press this button after a swing if you would like to flag your prior swing for further investigation in the SmartSwing PC software.
- **Power Connector** - This is where you will connect the AC adapter or optional car charger to provide power for your club and to recharge the batteries.
- **LED** - The LED provides several visual indications about the operation of the club. We'll describe these in detail below.
- **Audio Alerts** - Your club is capable of providing several different tones to provide you feedback on your swing as well as the operation of the club. We'll describe these in detail below.
- **Wireless transceiver** - Your club will connect wirelessly to the SmartLink USB adapter attached to your computer.

### Audio Feedback

Your SmartSwing club provides 7 different audio feedback tones using different frequency and cadence patterns.

- **Audio On** - This sound confirms that you have turned the club ON.
- **Audio Off** - This sound confirms that you have turned the club OFF.
- **Low Battery** - This sound alerts the user to a low battery
- **Swing Flag Confirmation** - This sound confirms that you have flagged a swing for additional investigation in the SmartSwing PC software.
- **Upper Swing Plane Broken** - This sound alerts you that you have broken the upper plane of the reference swing.

### The SmartSwing Club interface - *Audio Feedback* — *continued*

- **Lower Swing Plane Broken** - This sound alerts you that you have broken the lower plane of the reference swing.
- **On Plane Swing** - This sound confirms that your swing was on plane.

### *Visual (LED) Feedback*

The LED has 2 different flashing patterns.

1. **On** - Slow pulsing alerts you that the club is on.
2. **Memory Full** - Rapid pulsing alerts you that memory is full and no more swings can be recorded.

### SmartLink USB adapter

The SmartSwing Learning System includes the SmartLink USB adapter. This adapter plugs into the USB port on you Windows 2000 or Windows XP computer and allows the SmartSwing PC software to wirelessly communicate with the SmartSwing club. This can include uploading your physical dimensions, software upgrades, and downloading swing data from your practice sessions. The SmartLink USB adapter has two LEDs, one green and the other amber. The green LED is the power indicator and the amber LED is the data transfer indicator.

#### *Green LED*

There are 2 modes or indicators used.

1. Green LED is ON indicates that power is being supplied by your USB port.
2. Green LED is OFF indicates that no power is being received.

**Please Note:** *Power should always be ON if the SmartLink USB adapter is plugged into the USB port and the computer is turned on. Your computer must provide power through the USB port for the SmartLink USB adapter to function. Some laptop computers do not provide power through the USB port and cannot be used with the SmartLink USB adapter. You should check with your computer manual or contact the manufacturer to make sure your computer provides USB power.*

#### *Amber LED*

There are 3 modes or indicators used.

1. Amber LED is OFF, this indicates there is no wireless connection established.
2. Amber Led is ON indicates there is a wireless connection established but no data transfer is taking place..
3. Amber LED is FLASHING indicates a connection is established and data transfer is occurring.

**Please Note:** *Your club must be within 10 feet (5 feet or less is recommended) of the SmartLink USB adapter for a wireless connection to be established. The wireless connection can pass through most objects but if you are having trouble establishing a connection, remove all objects between the club and the SmartLink USB adapter so there is a clear line of sight between the 2 devices.*

### Using your SmartSwing club

**IMPORTANT:** Before you begin using your SmartSwing club for the first time, you must complete the initial calibration described in the Quick Start Guide. *Failure to perform the initial calibration will cause the SmartSwing club to operate with incorrect audio feedback and will not allow it to properly calculate your swings.*

#### **Make Sure It's Charged**

The night before heading to the range or golf course, be sure to connect your club to the included AC adapter in order to fully charge the battery. If you forget to do this, you can also use the optional car charger to charge the battery while driving to the practice range or course.

#### **Use the “Step Down” Tees**

In order for the SmartSwing club to accurately calculate the position of the ball, you must use the supplied or other 2.75” “step down” tees.

#### **Be Sure to Download Previous Swings**

In order to record as many swings as possible, you should download your swings to your computer after each practice session. The SmartSwing PC software will automatically (verify this will be automatic) erase the memory in the club after downloading your swings. If you have a laptop computer, you can take it to the range to further extend the number of swings you can record in a practice session.

Note: SmartSwing offers a laptop stand to make it easier to work with your SmartSwing club and computer while on the course or practice range.

#### **Turning the Club On and Off**

To turn the club on, press and release the power button. Immediately (1-2 seconds) after pressing and releasing the power button you will see a flashing green light to assure you that the club is on.

To turn the club off, press and hold the power button until the green light turns off (will take approximately 4 seconds). The absence of a green light is your assurance that the club is off.

#### **Tuning Audio Feedback On and Off**

To turn audio feedback off, press and release the power button while the club is on. Immediately after pressing/releasing the power button you will hear the “audio feedback off” tone to assure you that audio feedback is off.

To turn audio feedback on, press and release the power button while the club is on. Immediately (1 second) after pressing/releasing the power button you will hear the “audio feedback on” tone to assure you that audio feedback is on.

#### **Recording and Flagging Swings**

Flagging a swing will mark the swing so that it is easy to identify when downloaded to the SmartSwing PC software. Since swing batches may contain up to 100 swings, a flagged swing will be easy to pick out when scrolling through the swing data in the SmartSwing PC software.

## CAUTION

Modifications to this device not expressly approved by SmartSwing, Inc. could void user's authority to operate it.

This device complies with Part 15 of the FCC Rules.

Operation is subject to the following two conditions:

(1) this device may not cause harmful interference and

(2) this device must accept any interference received, including interference that may cause undesired operation.



For questions regarding your SmartSwing product, please contact Customer Service at:

[service@smartswinggolf.com](mailto:service@smartswinggolf.com)

888-SWING18

[www.smartswinggolf.com](http://www.smartswinggolf.com)



# ***SmartSwing***<sup>™</sup>

## SMARTSWING MANUAL

**CHANGING GOLF...FOREVER**  
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## PACKING LIST

**Standard Contents** - Included with all configurations.

ITEM	MEDIA
Step Down Golf Tees	Bag of golf tees
Software CD	CD-ROM
Power Charger	Hardware
SmartLink USB adapter	Hardware
SmartSwing Golf Club	Hardware
SmartSwing Head Cover	Hardware
Tape Measure	Hardware
USB Cable	Hardware
At the Range Note pad	Printed documentation
Quick Reference Guide	Printed documentation
User Manual	Printed documentation
Wallet Reference Card	Printed documentation

**Optional Accessories** - These items may be included in some configurations.

ITEM	MEDIA
Car Charger	Hardware
Teaching Pro Manual	Printed documentation

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## SMARTSWING BASICS

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Three key parts of the swing cause a solid impact with the ball:

1. **The Backswing**, where the body is cocked or loaded to provide power for subsequent parts of the swing.
2. **The Transition**, where momentum is transferred from the right side of the body to the left side and where the club is 'dropped into the slot', key to swinging on-plane.
3. **The Downswing**, where the body and the club rotate powerfully through the ball and the transition to the left side is completed.

The SmartSwing Learning System will enable you to break the swing down into its component parts so that you can perfect each component. Having gained a comfort level with the component movements of the club, you can then integrate them into a complete, smooth, powerful, *repeatable* on-plane golf swing.

The SmartSwing Learning System consists of 2 primary components, an intelligent club and PC software. The club has a circuit board in the grip that tracks the club's movement through space and records this information for later analysis. In addition, the club provides real-time audible feedback when you swing to let you know how well your swing is on plane when compared to a reference swing. After a day at the range or on the course, you can take your club home and download your swing data into PC software. You can use the software on your own or share your data with a SmartSwing Affiliated Teaching Professional to assist you in using the SmartSwing Learning System to improve your swing.

### System requirements

Using the SmartSwing Learning System software requires a Windows PC to download and analyze your swings. Your computer must meet these minimum requirements to operate the SmartSwing PC software:

- Windows 2000 or Windows XP (Windows 95, 98, and ME are not supported)
- 128 MB RAM (256MB or more is recommended)
- 100 MB free disk space

**Note:** *We strongly recommend that you have all the current patches and updates installed for your version of Windows. Visit Microsoft's web site at [www.windowsupdate.com](http://www.windowsupdate.com) for more information.*

### Installing the software and initial setup

**Note:** *If you have already followed the Quick Start Guide, you can skip this section. The Quick Start Guide will have additional pictures and instructions to assist you with the initial setup and use of your new SmartSwing club.*

Before you can begin using your SmartSwing club, you will need to take some physical measurements and download them to your club using the SmartSwing PC software.

## SMARTSWING BASICS

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### Installing the software and initial setup — *continued*

To install the SmartSwing PC software and perform the initial set up with your club, locate the SmartSwing PC software CD and insert it into your computer. Make sure your computer meets the minimum requirements stated in the previous section. When you insert the CD in your computer, the installer should automatically open. Just follow the directions on the screen to install the software. When you are done, you will no longer need the CD but should store it in a safe place in case you need to reinstall the software in the future.

After you install the software, follow the steps below:

1. Connect the SmartLink USB wireless adapter to one of the USB ports of your computer.
2. Connect your SmartSwing club to the AC adapter and make sure it is plugged into a power source.
3. Place your SmartSwing club within 3 feet of the SmartLink USB wireless adapter.
4. Locate the measuring tape provided in the box with your club.
5. Get your spouse or a friend to help you take two measurements.
6. Assume your address position. If you are not sure if your address position is correct, please consult with a Teaching Professional.
7. Have your spouse or friend measure the distance from your right elbow to the ground and write down this data. Repeat the process from your right shoulder to the ground. Both measurements are made directly to the ground, not at an angle.
8. Open the SmartSwing PC software that you earlier installed on your computer.
9. The first time you run the software it will ask you to enter the measurements that you just took. Enter the measurements in the indicated fields and click continue.
10. Click download. Your measurements will now be downloaded into the club.
11. When the message appears that the download is complete, you should quit the SmartSwing application.
12. Disconnect the AC adapter cable from your club.
13. You are now ready to start using your SmartSwing club.

## SMARTSWING ONE (1) YEAR LIMITED WARRANTY

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### WARRANTY COVERAGE

SmartSwing's warranty obligations are limited to the terms set forth below: SmartSwing Inc. ("SmartSwing") warrants this hardware product against defects in materials and workmanship for a period of One (1) YEAR from the date of original retail purchase. If a defect exists, at its option SmartSwing will (1) repair the product at no charge, using new or refurbished replacement parts, (2) exchange the product with a product that is new or which has been manufactured from new or serviceable used parts and is at least functionally equivalent to the original product, or (3) refund the purchase price of the product. A replacement product/part assumes the remaining warranty of the original product or ninety (90) days from the date of replacement or repair, whichever provides longer coverage for you. When a product or part is exchanged, any replacement item becomes your property and the replaced item becomes SmartSwing's property. When a refund is given, your product becomes SmartSwing's property.

### OBTAINING WARRANTY SERVICE

Warranty service for any SmartSwing product is available exclusively through the SmartSwing Express Mail/Courier Service. Express Mail/Courier Service involves mailing the product directly to SmartSwing. To determine if the product is eligible for service, call SmartSwing directly at the telephone numbers set out in the service and support reference material accompanying the product or visit our web site at <http://www.SmartSwing.com/>. If the product qualifies for this service, the telephone representative will provide further information and instructions. When you contact the SmartSwing representative, you will be asked to furnish your name, address, telephone number, and proof of the original purchase (receipt) containing a description of the product(s), purchase date, and the appropriate SmartSwing serial number(s).

Note: Before you deliver your product for warranty service it is your responsibility to keep a separate backup copy of the application software and data. You will be responsible for reinstalling all such software and data. Data recovery is not included in the warranty service and SmartSwing is not responsible for data that may be lost or damaged during transit or a repair.

### EXCLUSIONS AND LIMITATIONS

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## ADDITIONAL DETAILS

### Transitions States of the SmartSwing Club — *continued*

<i>State: On</i>		
EVENT	TRANSACTION	ACTION
Swing breaks Upper Plane	Change swing sub-state to Swing Broken High	Begin playing the Upper Swing Plane Broken Tone
Swing breaks Lower Plane	Change swing sub-state to Swing Broken Low	Begin playing the Lower Swing Plane Broken Tone
Swing returns to between Upper and Lower Planes	Change swing state to Swing OK	Turn off Plane Broken Tone
Swing recording completes	Change to Doze State	End recording of the swing. If the swing remained within the two planes, then play the Happy Tone.

<i>State: RF Download</i>		
EVENT	TRANSACTION	ACTION
RF Data Transfer completes	Change to Doze State	LED cadence change to Dose State flash.

<i>State: Charging</i>		
EVENT	TRANSACTION	ACTION
Charger is unplugged	Change to Dose State or Charging State	LED cadence change to new State cadence.
Data transfer begins	Change to RF Download State	LED cadence changes to RF Download cadence

## SMARTSWING BASICS

### The SmartSwing Learning System

The SmartSwing Learning System is a combination of hardware, software, and a specific learning process.

#### *The Club (the hardware)*

Your SmartSwing club is a high quality golf club that looks, feels, sounds, and plays like any other club you may have used. The electronic modifications made inside the grip should not be noticeable other than the interface on the end of the shaft. The club serves 2 primary functions: first, to provide you with audible feedback while you are swinging to help you improve in real time; and second, the club records each of your swings. This information can be downloaded to your computer for further analysis using the SmartSwing PC software.

#### *PC software*

There are two versions of the SmartSwing PC software depending upon which version of the SmartSwing Learning System you purchased.

- **SmartSwing Visualizer** allows you to visually inspect how well your swing stays on plane and how your swing compares to your reference or known good swing.
- **SmartSwing Analyzer** includes everything in SmartSwing Visualizer and adds several different statistical views that enable you to analyze various metrics for each of your swings.

Each version of the software maintains a database of all the swings you have downloaded from your club and allows you to easily manage this data. You can create sets or groups of swings, delete swings, and specify good swings as reference swings.

#### *What is a Reference Swing?*

To accurately provide audible feedback and the 3D displays in the Visualizer software, SmartSwing has defined a set of virtual swing planes. With a correct, square address stance these virtual planes will be perpendicular to the target line when viewed from directly behind the golfer (facing the direction of the golf shot).

- **Lower or “Hands” plane** - defined by a plane that is parallel to the target line, begins at the hosel of the club, passes through the right hand of the golfer and extends into space.
- **Perfect or “Elbow” plane** - defined by a plane that is parallel to the target line, begins at the hosel of the club, passes through the right elbow and extends into space.
- **Upper or “Shoulder” plane** - defined by a plane that is parallel to the target line, begins at the toe of club, passes through the right shoulder, and extends into space.



## SMARTSWING BASICS

### What is a Reference Swing? — continued

While using the SmartSwing PC software you can select one of your own particularly effective swings from a practice session to replace the customized, mathematically-defined ideal reference swing. Your “Personal Best” reference swing allows you to document your finest performance and use it to identify and eradicate bad habits as they creep back into your swing over time. As you compare practice swings against your “Personal Best” reference swing, you’ll build consistency and have more fun.

**Note:** *Although the PC software allows you to compare your swing to various reference swings, the SmartSwing club always uses a mathematically defined set of upper and lower planes based on your physical measurements to provide audible feedback.*

### The Learning Process

The real-time feedback feature of the SmartSwing club is the enabling factor and makes this regimen possible. The objective of this process is to avoid the ‘negative feedback’ tones that the SmartSwing club provides to notify the golfer that they have ‘broken’ one of their virtual swing planes and rather receive the ‘positive feedback’ tone at the end of the swing. In addition to the steps outlined below, check your progress every few swings using the SmartSwing PC software and compare your results to the results of the Reference Pro. Determine how your swing varies from your ideal swing and make the necessary changes to more closely match the two.

### Perfecting your swing

**Set-up & Ball Position:** In order for the steps that follow to be most useful, you should be in a good, athletic address position. The ball must be positioned just on the inside heel of the left foot for a right-handed golfer, when your body is addressing the ball. In addition when using the SmartSwing club, you should always be “square” to the target line and use the same type of “step down” golf tees included with your club. These tees are required for the SmartSwing Learning System to accurately calculate ball position.

1. Take ‘baby’ backswings from the address position up to the position where the club is parallel to the ground. The club should stay on the ‘hands’ plane for this entire exercise. Keep practicing until you can repeatedly make this movement without breaking the ‘hands’ plane. Do not avoid the tone by picking the club up, as this will result in breaking the ‘shoulder’ plane. When you can repeat this movement with ease, move to the next step.
2. Take ‘slow & easy’ backswings (30-50% of normal speed) from address to the top of your backswing, or position #5 above. The club should move up the ‘hands’ plane, as in step #1, and then transition upward until both the hands and the entire club are just underneath the ‘shoulder’ plane. To some golfers this position may feel as if the club is very ‘flat’. This is OK, as you have, in all likelihood, ‘flattened out’ your swing. When you can get to this position with repeated success, move on to the next step.

## ADDITIONAL DETAILS

### Transitions States of the SmartSwing Club — continued

<i>State: Club is in Doze</i>		
EVENT	TRANSACTION	ACTION
User presses Power Button	Change audio sub - state	Toggle the audio sub-state (off if on, or on if off) Play the Audio On or Audio Off tone sequence.
User presses and holds Power Button for 4 seconds	Change to Off state	Power off the device, turn off the LED
User presses the Flag Swing button	None	Last recorded swing is flagged. Audio confirmation tone sequence is played.
User swings the club	Change to On state	Begin recording of the swing
Timeout of 5 minutes since swing or power up	Change to Off State	Power off the device, turn off the LED
Battery is low	None	Play battery low warning every 30 minute. Low Power warning sounded regardless of Audio On/Audio Off sub-state.
Memory full	None	Change LED cadence to Memory Full. Additional swings are not recorded.
Club Failure	Change to Off state	Power down the device, turn off the LED
RF in range	Change RF connectivity sub-state	RF base Amber LED changes to on
RF out of range	Change RF connectivity sub-state	RF base Amber LED changes to off
RF Data transfer begins	Change to RF Download State	LED cadence changes to RF Download cadence

## ADDITIONAL DETAILS

### Audio Feedback Technical Specifications

1. **Audio On** - 1396.91 (F) - 1760.00 (A) - 2093.00 (C) at a 200 ms cadence one time
2. **Audio Off** - 2093.00 (C) - 1760.00 (A) - 1396.91 (F) at a 200 ms cadence one time
3. **Low Battery** - 1567.98 (G) - 1567.98 (G) - 1567.98 (G) at a 200 ms on, 200ms off cadence recurring every 30 seconds.
4. **Swing Flag Confirmation** - 1567.98 (G) - 2093 (C) at a 200 ms cadence one time.
5. **Upper Swing Plane Broken** - 4698.64 (D) - 4186.01 (C) at a 50 ms cadence for the entire duration that the club is in violation of the upper swing plane.
6. **Lower Swing Plane Broken** - 1567.98 (G) - 1760.00 (A) at a 100 ms cadence for the entire duration that the club is in violation of the lower swing plane.
7. **On Plane Swing** - 1396.91 (F) - 1760.00 (A) - 2093.00 (C) - 1760.00 (A) - 1396.91 (F) at a 200 ms cadence one time.

### Visual (LED) Feedback

The LED has 2 different flashing patterns

1. **On** - Flashes for 100ms on every 1000ms.
2. **Memory Full** - Flashes for 100ms on every 200ms.

### Transitions States of the SmartSwing Club

<i>State: Club is Off</i>		
EVENT	TRANSACTION	ACTION
Power Button press while the club is upright.	Change to Doze State	LED begins "on" cadence
Power Button press while the club is upside down (in the bag).	Remain in Off state	No action
Charger is connected	Change to Charging State	LED cadence changed to on

## SMARTSWING BASICS

### *The Learning Process - Perfecting your swing — continued*

3. Add the transition. Make a full, slow, easy backswing from address to completion of the backswing. From this point focus on 'dropping into the slot'. During this transition movement the hips will 'bump' forward and the hands will 'drop' almost straight downward so that the hands and the club are all aligned on the 'elbow' plane.
4. Take it very easy (roughly 30% of normal speed) down the 'elbow' plane and through the ball. Repeat until you can make full, slow swings without setting off the tones.
5. Slowly increase the swing speed. When you begin to have trouble keeping the 'tones off' slow down a bit until you are able to do so. Remember, touring pros say that they swing at around 75-80% of their 'full out' swing throughout most rounds. You should be no different! You'll be pleasantly surprised at how far the ball goes when you make a smooth, seemingly slow, on-plane swing.
6. Work on making full swings, both with and without a ball. Check both swings with the Reference Pro and see if you are unconsciously swinging differently when a ball is to be struck. Work on swinging the club vs. hitting the ball.

### *Practice Regimen*

To improve your game as quickly as possible with the SmartSwing club, it is important to define a solid practice regimen. The steps below will explain a step-by-step process whereby each step will build on the previous step enabling you to build a strong, smooth, repeatable, on-plane golf swing.

1. Begin with a lesson from a SmartSwing Affiliated Teaching Pro or other well-known and reputable teaching professional. The focus of the lesson should be on the fundamentals of grip, stance, and basic swing.
2. Practice by hitting balls on the driving range. Work on the basics, with close attention to the audible feedback received from the SmartSwing Driver.
3. Review your results in the SmartSwing PC software, paying close attention to the differences between the your swing and the reference swing.
4. Using the SmartSwing club, make several practice swings, working to change your swing to more closely match the reference swing seen in the SmartSwing PC software. Repeat steps 3 and 4 several times until you begin to see improvement.
5. Return to the driving range and practice hitting balls, working on making the swing changes that you practiced at home.



### *The Learning Process - Practice Regimen — continued*

6. Return to your teaching professional to get a swing assessment and learn what your pro thinks they can do to most improve your swing and ball striking ability.
7. Continue to repeat this process for each lesson with your teaching professional. For each lesson you should have three sessions on the driving range with your SmartSwing club. For each session on the practice range you should have three 'at home' practice sessions to work on making your swing more closely match the reference swing.
8. Faithfully following the practice regimen will result in rapid improvement of your swing, resulting in rapid improvement of your ball striking capability

### **How does it work?**

The brains of the SmartSwing Learning System is a circuit board imbedded in the grip of the club. This circuit board has a series of nano-scale gyroscopes and accelerometers that allow it to track it's position in 3 dimensional space. Using a series of complex equations, factory calibration, and your own physical measurements, we can tell where the club is in space and how it is interacting with your golf ball. All this information is calculated several times a second and stored in the onboard memory. Our SmartSwing PC Software can take this information and perform complex analysis on your golf swing.

### **Glossary**

**Batch** - A group of swings, either downloaded together from the club or saved manually by the user

**Lower plane** - plane roughly defined by the heel of club and a line through the hands and parallel to the target line.

**Perfect plane** - plane roughly defined by the golf ball and a line through the elbows. In a proper stance, the line through the elbows should be roughly parallel to the target line.

**Upper plane** - plane roughly defined by the toe of club and a line through the shoulders. In a proper stance, the line through the shoulders should be roughly parallel to the target line.

### **Service and Support**

#### *30 day no-questions-asked refund*

If you are not completely satisfied with your SmartSwing club, simply contact us within 30 days after receiving your club and request an RMA number. Package all the original materials in the box that it came in and return it to us. We will provide your return shipping and offer you a full refund when we receive your club.

#### *90-day exchange*

If anything goes wrong with your SmartSwing club within the first 90 days, we will exchange it for a new club at no cost to you. Simply contact us for an RMA number.

#### *1-Year Warranty*

Your SmartSwing club comes with a full one year warranty. Contact us for an RMA number before returning your club.

#### *Technical Support*

You may contact us by phone, Monday through Friday, 8AM-6PM central time at 1-888-SWING-18 (1-888-794-6418) option 3. In addition, you may email us at [service@smartswinggolf.com](mailto:service@smartswinggolf.com).

## THE SMARTSWING CLUB

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### Using your SmartSwing club - Recording and Flagging Swings — *continued*

To flag a swing, press and release the flag swing button after making your swing. Immediately after pressing and releasing the flag swing button you will hear a specific tone to assure you that the swing has been flagged.

When viewing a swing batch in the SmartSwing PC software, simply look for the flag icon to help you identify the swing. The swing time stamp as well as your notes in the supplied 'At the Range' note pad can help you discern between multiple flagged swings.

#### Conserving battery life

When the battery has 10% power left, you will hear an audible tone come from the club. When you hear this tone you should only take 2-3 more swings and turn off the club until you can recharge it and download your swings. To maximize your battery life we recommend waiting until you hear the low battery tone before recharging. This is not required but will help extend the overall life of the battery.

#### Caring for your club

When not in use, be sure to store your club in a safe protected place. We recommend using the supplied head cover to protect the club head. In addition you should take care with the grip as this is where the SmartSwing electronics reside. While the SmartSwing club is designed and tested to withstand the rigors of normal use, you should still exercise care to protect your investment in the state of the art electronic device.

### Visualizing & Analyzing your Swing

#### Downloading data

Follow these steps to download swing data from your club.

1. Turn on your computer, and open the SmartSwing PC software.
2. Make sure the SmartLink USB adapter has a green LED to indicate power is on.
3. Turn on your SmartSwing club.
4. The SmartLink USB adapter should now have a Amber LED turn on to indicate a wireless connection is established.
5. Click on the import button in the SmartSwing PC software
6. The Amber LED on the SmartLink USB adapter should begin to flash indicating a data transfer has begun
7. The transfer should take less than 2 minutes.
8. When the transfer is complete a message will come on your screen.
9. You can turn off your SmartSwing club and begin analyzing your swing data.

#### Creating Data sets

Using the SmartSwing software you can group your swings together for analysis.

#### Comparing your Swing

The SmartSwing PC software allows you to compare your swing to a reference swing. This can either be a mathematically defined perfect swing or one of your own swings.

## THE SMARTSWING CLUB

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Before you can begin using your club, you will need to take some physical measurements of your body, enter them in the SmartSwing PC software and then download this information into your club. If you have not already done so, please follow the Quick Start Guide for setting up your SmartSwing Learning System for the very first time.

### Initial calibration

The initial calibration uses your physical measurements to calculate a mathematically defined "perfect" swing and corresponding virtual swing planes. These calculated upper and lower swing planes are used by the audio feedback built into the club to quickly identify the strengths and weaknesses of your current swing in comparison to that of a "professional" swing.

### The SmartSwing Club interface

The interface on your SmartSwing club has several components:

- **Power Button** - The button will allow you to turn your club on and off as well as turn the audible alerts on and off. Press and hold the button for 4 seconds to turn the power on/off. Press and release to toggle the audio feedback on/off.
- **Flag Button** - You will press this button after a swing if you would like to flag your prior swing for further investigation in the SmartSwing PC software.
- **Power Connector** - This is where you will connect the AC adapter or optional car charger to provide power for your club and to recharge the batteries.
- **LED** - The LED provides several visual indications about the operation of the club. We'll describe these in detail below.
- **Audio Alerts** - Your club is capable of providing several different tones to provide you feedback on your swing as well as the operation of the club. We'll describe these in detail below.
- **Wireless transceiver** - Your club will connect wirelessly to the SmartLink USB adapter attached to your computer.

### Audio Feedback

Your SmartSwing club provides 7 different audio feedback tones using different frequency and cadence patterns.

- **Audio On** - This sound confirms that you have turned the club ON.
- **Audio Off** - This sound confirms that you have turned the club OFF.
- **Low Battery** - This sound alerts the user to a low battery
- **Swing Flag Confirmation** - This sound confirms that you have flagged a swing for additional investigation in the SmartSwing PC software.
- **Upper Swing Plane Broken** - This sound alerts you that you have broken the upper plane of the reference swing.

### The SmartSwing Club interface - *Audio Feedback* — *continued*

- **Lower Swing Plane Broken** - This sound alerts you that you have broken the lower plane of the reference swing.
- **On Plane Swing** - This sound confirms that your swing was on plane.

### *Visual (LED) Feedback*

The LED has 2 different flashing patterns.

1. **On** - Slow pulsing alerts you that the club is on.
2. **Memory Full** - Rapid pulsing alerts you that memory is full and no more swings can be recorded.

### SmartLink USB adapter

The SmartSwing Learning System includes the SmartLink USB adapter. This adapter plugs into the USB port on you Windows 2000 or Windows XP computer and allows the SmartSwing PC software to wirelessly communicate with the SmartSwing club. This can include uploading your physical dimensions, software upgrades, and downloading swing data from your practice sessions. The SmartLink USB adapter has two LEDs, one green and the other amber. The green LED is the power indicator and the amber LED is the data transfer indicator.

#### *Green LED*

There are 2 modes or indicators used.

1. Green LED is ON indicates that power is being supplied by your USB port.
2. Green LED is OFF indicates that no power is being received.

**Please Note:** *Power should always be ON if the SmartLink USB adapter is plugged into the USB port and the computer is turned on. Your computer must provide power through the USB port for the SmartLink USB adapter to function. Some laptop computers do not provide power through the USB port and cannot be used with the SmartLink USB adapter. You should check with your computer manual or contact the manufacturer to make sure your computer provides USB power.*

#### *Amber LED*

There are 3 modes or indicators used.

1. Amber LED is OFF, this indicates there is no wireless connection established.
2. Amber Led is ON indicates there is a wireless connection established but no data transfer is taking place..
3. Amber LED is FLASHING indicates a connection is established and data transfer is occurring.

**Please Note:** *Your club must be within 10 feet (5 feet or less is recommended) of the SmartLink USB adapter for a wireless connection to be established. The wireless connection can pass through most objects but if you are having trouble establishing a connection, remove all objects between the club and the SmartLink USB adapter so there is a clear line of sight between the 2 devices.*

### Using your SmartSwing club

**IMPORTANT:** Before you begin using your SmartSwing club for the first time, you must complete the initial calibration described in the Quick Start Guide. *Failure to perform the initial calibration will cause the SmartSwing club to operate with incorrect audio feedback and will not allow it to properly calculate your swings.*

#### **Make Sure It's Charged**

The night before heading to the range or golf course, be sure to connect your club to the included AC adapter in order to fully charge the battery. If you forget to do this, you can also use the optional car charger to charge the battery while driving to the practice range or course.

#### **Use the “Step Down” Tees**

In order for the SmartSwing club to accurately calculate the position of the ball, you must use the supplied or other 2.75” “step down” tees.

#### **Be Sure to Download Previous Swings**

In order to record as many swings as possible, you should download your swings to your computer after each practice session. The SmartSwing PC software will automatically (verify this will be automatic) erase the memory in the club after downloading your swings. If you have a laptop computer, you can take it to the range to further extend the number of swings you can record in a practice session.

Note: SmartSwing offers a laptop stand to make it easier to work with your SmartSwing club and computer while on the course or practice range.

#### **Turning the Club On and Off**

To turn the club on, press and release the power button. Immediately (1-2 seconds) after pressing and releasing the power button you will see a flashing green light to assure you that the club is on.

To turn the club off, press and hold the power button until the green light turns off (will take approximately 4 seconds). The absence of a green light is your assurance that the club is off.

#### **Tuning Audio Feedback On and Off**

To turn audio feedback off, press and release the power button while the club is on. Immediately after pressing/releasing the power button you will hear the “audio feedback off” tone to assure you that audio feedback is off.

To turn audio feedback on, press and release the power button while the club is on. Immediately (1 second) after pressing/releasing the power button you will hear the “audio feedback on” tone to assure you that audio feedback is on.

#### **Recording and Flagging Swings**

Flagging a swing will mark the swing so that it is easy to identify when downloaded to the SmartSwing PC software. Since swing batches may contain up to 100 swings, a flagged swing will be easy to pick out when scrolling through the swing data in the SmartSwing PC software.