User Guide

READ ME FIRST!!
Setup and Operating Tips Inside
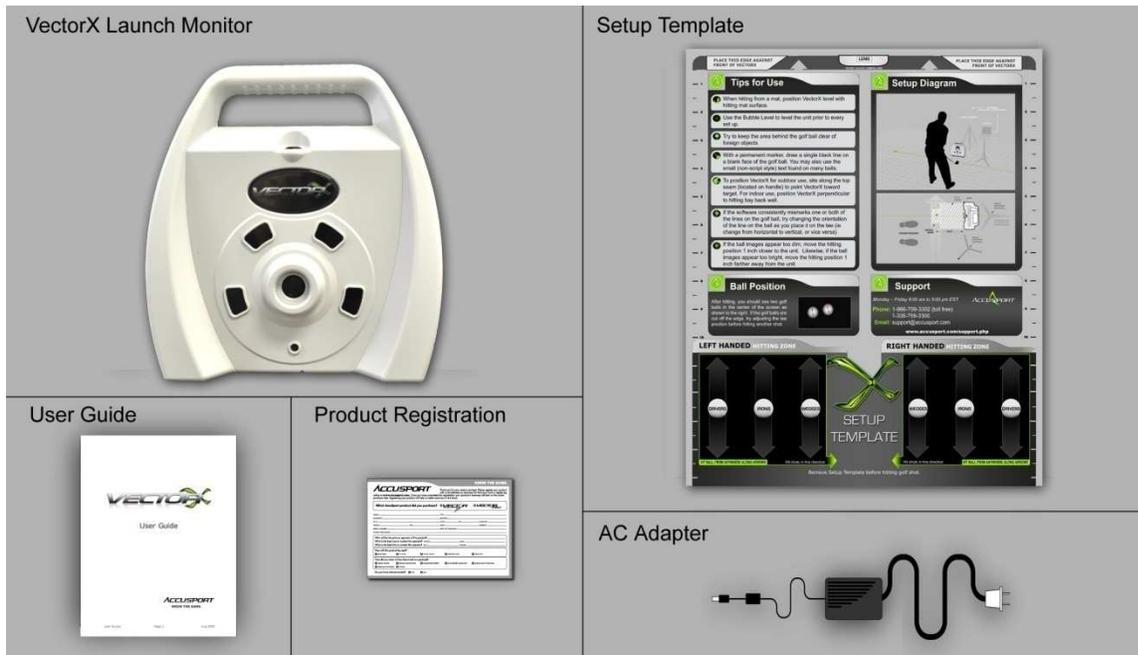
ACCUSPORT
KNOW THE GAME.

GETTING STARTED

Congratulations on your AccuSport VectorX Launch Monitor purchase. You have chosen to do business with the leader in launch monitor technology. To validate the AccuSport warranty, receive notification of software updates and gain access to technical support, please register your product by filling out the enclosed warranty card, or by going to www.accusport.com to complete the online registration.

To ensure trouble-free, reliable operation, read this user guide before setting up and using your VectorX. Failure to follow the information provided in this user guide can void your warranty.

Please visit the AccuSport web site at www.accusport.com for advanced topics and breaking news about AccuSport products.

VectorX Launch Monitor Components

*The VSeries software modules are an optional add-on to the VectorX monitor and require additional accessories. Contact Customer Support for purchase information.

Safety Instructions

- Follow all warnings and instructions marked on the product.

- Do not drop the VectorX or subject it to mechanical shocks.

- When taking a swing, do not hit the VectorX.

- Do not open the VectorX unit. It contains high voltages and delicate components. Opening the VectorX could result in personal injury or harm to the unit, and will void the warranty. Do not allow moisture to enter the VectorX. Use only approved accessories. To prevent harm to the VectorX or the computer system, use only the supplied cables and power adapters.

- Do not place items on the display screen when packing or storing the VectorX. This could cause extensive damage to the screen.

- VectorX contains an onboard computer that is susceptible to computer viruses. Use caution when connecting to another computer or plugging in a USB drive/key.
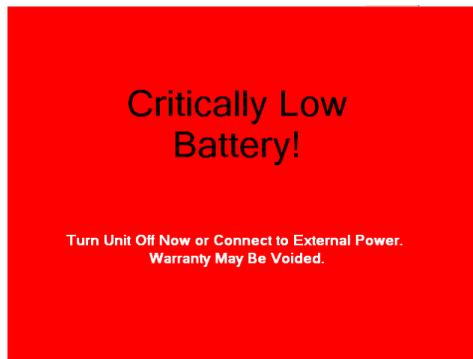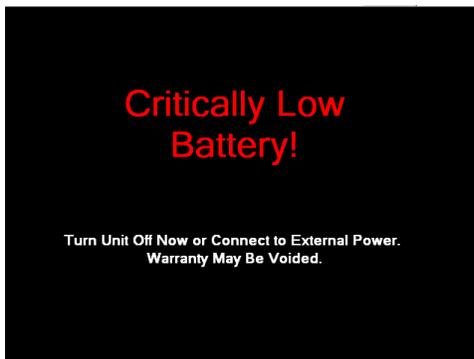
Care and Handling

- When necessary clean the VectorX lens using any photographic or eyeglass cleaning kit. Paper towels or tissue are not recommended.

- The outside of the VectorX case can be cleaned using a damp cloth. Turn off and disconnect the VectorX before cleaning. Do not allow liquid to enter the case.

- Clean the display screen using a standard LCD cleaning kit. Paper towels or tissue are not recommended.

Charging the Battery

If you are using a fully charged battery, no AC power source is needed. If the battery is not charged, or if you will be using the VectorX for an extended time period, you may use the optional external battery or use the AC adapter to plug into an electrical outlet.

To charge the battery, plug the VectorX into an outlet via the AC adapter. Make sure the VectorX unit is turned **ON**, and allow the unit to charge overnight or for at least six hours.

Charging the Battery correctly is extremely Important!! If the Critically Low Battery warning appears, connect the VectorX Immediately to external power. Failure to do so may cause significant loss of Battery Life, which can eventually lead to Battery Failure. If a VectorX is left unattended, and switches off due to a low battery. session data will be lost.

When the Battery Level is low the Black and Red Warning screens (pictured above) will display, alternately, on the VectorX LCD screen, and a beeping sound may be heard from the VectorX. In order to clear this warning the VectorX MUST be connected to external power.

When using the VectorX on Battery the following indicators will denote the battery level

 Indicates Full Battery   Indicates Partially Full Battery

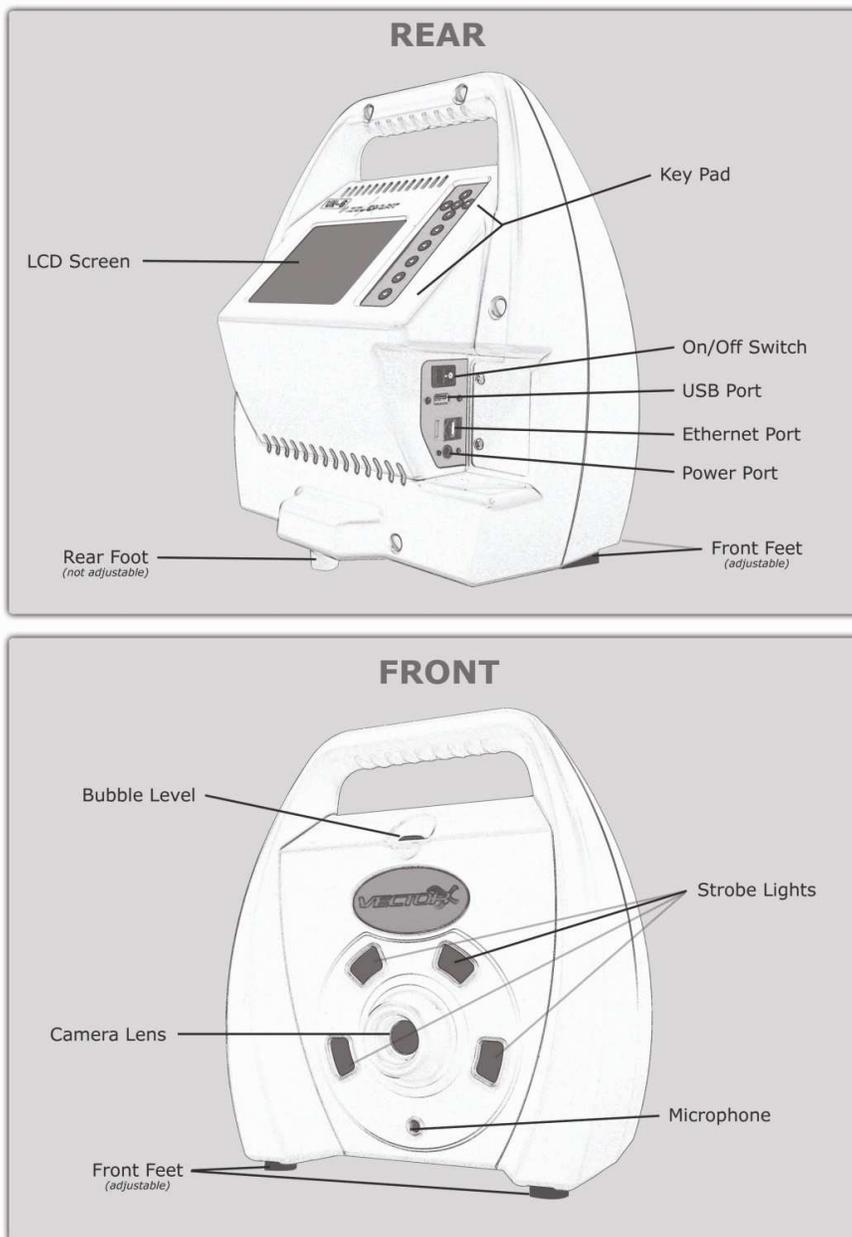 Indicates Low Battery   Indicates Critically Low Battery

Indicates that VectorX is plugged into external power

Starting the VectorX

To turn **ON** the VectorX, select the on/off switch located on the back of the system. A white screen with the AccuSport logo will appear while the system is initialized. Initialization will take approximately two minutes.
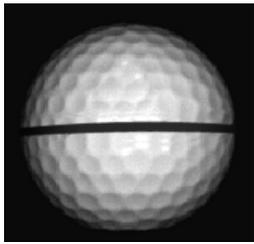
AccuSport VectorX Illustration

Marking the Ball

The VectorX Launch Monitor uses black marks on the golf ball to measure the ball flight parameters. The marks must face the VectorX unit when the ball is positioned for hitting. No other ball marks should be visible to the camera. If making your own marks, they should be made using a black Sharpie® on a blank face of a white ball.
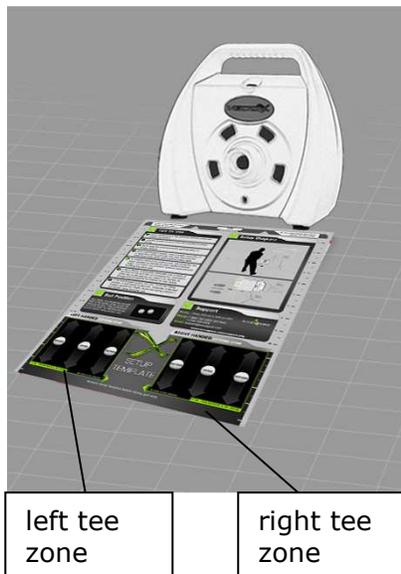

Logo Method - Most golf balls on the market today provide a marking with a straight line type orientation as pictured, or you may also use the stripe method below.

Line method - Draw a black line at least one inch long on the blank face of the ball. The mark must be clearly visible when it is facing the VectorX and must be drawn perfectly straight. There are a number of golf ball marking devices commonly used in the industry that will work for placing the line on the ball for use with the VectorX.

Positioning the Ball

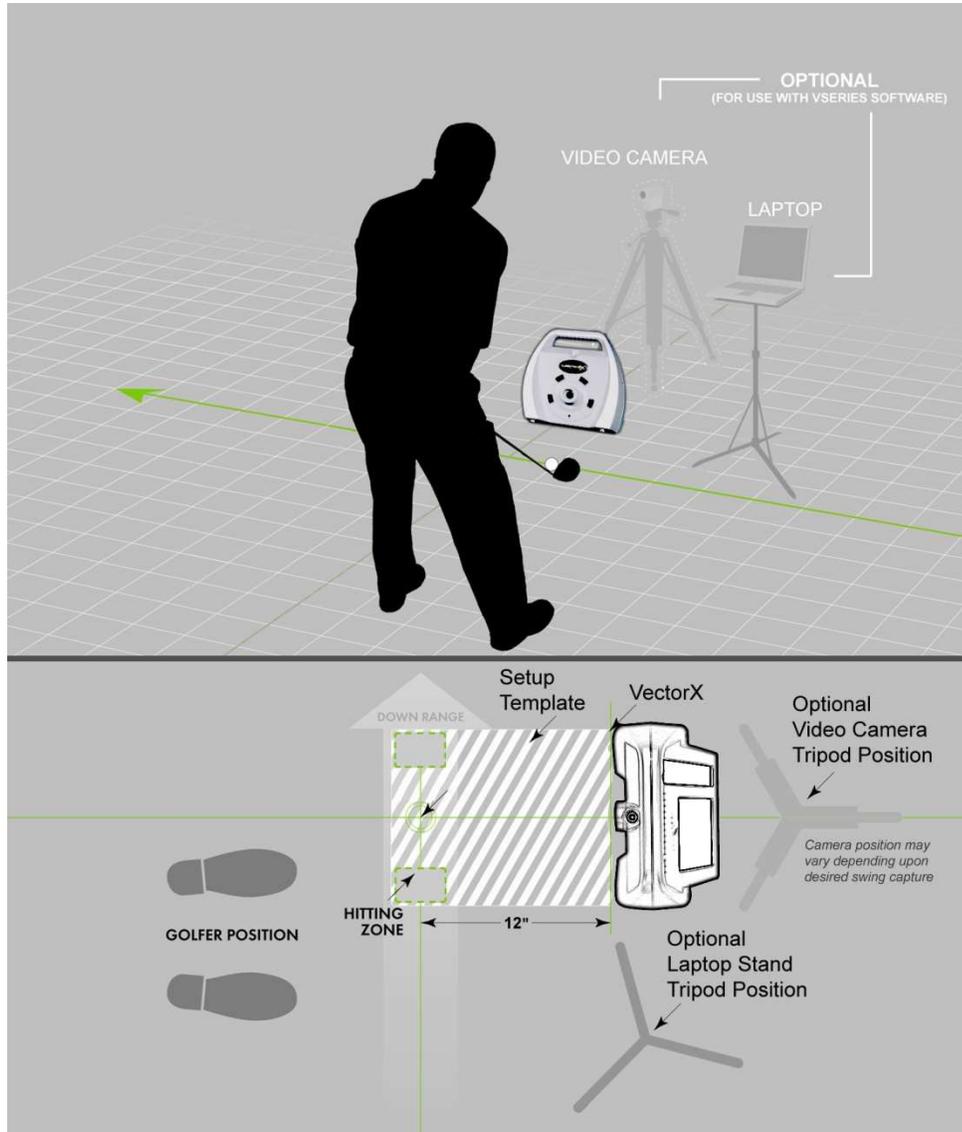left tee zone

right tee zone

Use the Setup Template to tee up the ball in the correct position. If you are not using the Setup Template, review the setup illustration on page 6, to understand the golfer position and hitting zones. The VectorX must be level to the hitting surface. Tee the ball up in the **Right Tee Zone** for a **right-handed golfer**.

For a left-handed golfer, position the VectorX facing the hitter and tee the ball up in the **Left Tee Zone**.

Note: Do NOT leave Setup Template in place when hitting shots.

Positioning the VectorX

Diagram shows positioning for right handed golfers.

Note: A computer is required to link VectorX to the optional add-on VSeries software. VSeries software is sold separately.

Welcome Screen

The Welcome screen appears after startup. Select the arrow on the keypad for the option you wish to choose: (Restore and Language are not used in normal operation)

'**About**' – This option gives detailed information about the VectorX software and hardware.

'**Next**' – This option advances you to the '**Select Activity**' screen.

Select Activity

Select the arrow on the keypad for the option you wish to use:

'**Set Conditions**' – This option allows you to '**Switch to Meters**', '**Set Altitude**', '**Set Temperature**', or go '**Back**' to the last screen.

'**Practice**' – This option navigates to the '**Data**' screen without entering student or club information. The data screen is discussed under the fitting section.

'**Fitting**' – This option allows users to enter information such as '**Name**', '**User#**,' or '**Notes**' before beginning the session. This is helpful if saving to a USB key or to identify club changes, members or customers.

'**Run VSeries**' – Connects the VectorX to the optional VSeries software modules if purchased.

Set Local Conditions

Select the arrow on the keypad for the option you wish to use. All settings made on this screen will remain the same until changed even if the VectorX is switched OFF.

'Switch to Meters' – This option changes to Meters or Yards.

'Set Altitude' – This options allows you to change altitude settings based on your current location.

'**Set Temperature' –** This option allows you to change temperature settings based on current temperature.

'Back' – This option takes you back to the **'Select Activity'** screen.

Set Altitude

Select the arrow on the keypad for the option you wish to use.

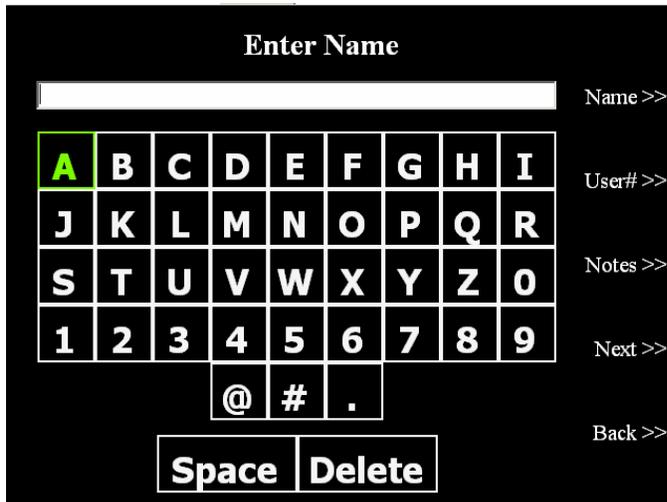**'>5000ft'**

'3000ft – 5000ft'

'1000ft – 3000ft'

<1000ft – The VectorX defaults to this setting**.**

'Back'

Set Temperature

'>90F'

'75F – 90F'

'60F – 75F' – The VectorX defaults to this setting.

'<60F'

'Back' – This option takes you **'Back** to the **'Set Conditions'** screen**.**
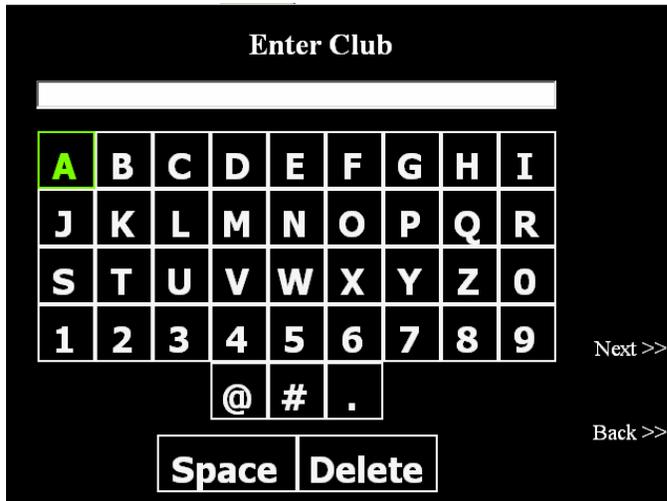
Fitting

To enter a '**Name'**, '**User#'**, or '**Notes'**, select the arrow next to that option.

 Move the arrow keys to the letter you wish to choose and press the circle to select, continue until all characters are entered and then select arrow for **'Next'** to continue to the **'Enter Club'**.

To '**Enter Club**' information, move the arrow keys to the character you wish to enter and press the circle to select. Continue until all characters are entered and then select arrow for '**Next'** to continue.

This takes you to the **Data** screen.

Data

Carry, **Offline** and **Total Distance** appear across the top of the screen.

The direction **Offline** will be represented by an "R" for Right or an "L" for Left.

Total Distance includes carry and roll.

VectorX measures ball speed, launch angle, back spin, side spin and side angle. Club speed and descent angle are calculated.

White numbers show data from the current shot. Gold numbers show the average of all shots for the item you are currently hitting.

'**Image'**, '**Profile'**, and '**Impact'** views can be accessed from the '**Data'** screen.

Launch Data:

Ball Speed: Measures in miles per hour (MPH) or kilometers per hour (KPH)

Club Speed: Calculates within 1 to 2 miles per hour (MPH) or kilometers per hour (KPH)

Launch Angle: Displayed in degrees.

Descent Angle: Calculated angle of the golf ball in relation to the ground as it descends from the apex of its flight.

Back Spin: Displayed in RPMs.

Side Spin: The label beside the number indicates draw/hook, fade/slice, or center. Displayed in RPMs.

Side Angle: The label beside the number indicates push, pull or center. Displayed in degrees.

Image

The '**Image'** view displays the image of the ball from the camera. The VectorX Launch Monitor uses a black line on the golf ball to measure the ball flight parameters; the line is indicated in red and blue by the software to validate how the shot was measured.

If the software misreads the black line or you determine the shot is not a good representation of the session, the shot can be deleted by selecting the arrow on the keypad next to the '**Delete'** option.

Select **'Options'** for additional settings related to the current session.

'Data', '**Profile'**, and '**Impact'** views can be accessed from the '**Image'** screen.
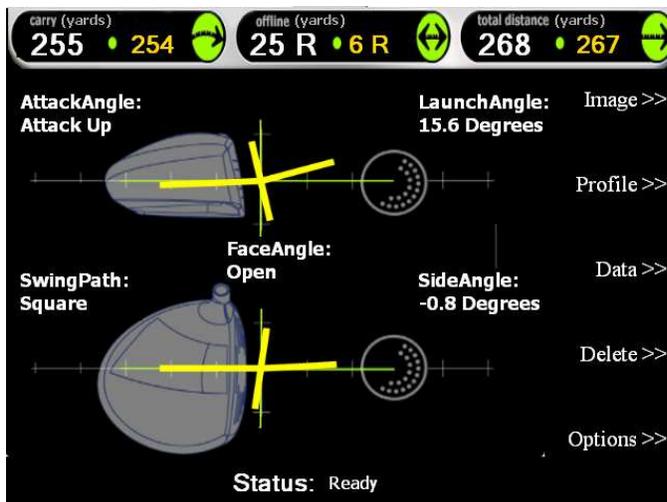
Profile

'Profile' shows a top down and side view of the ball flight using AccuSport's best-in-the-industry flight model.

'Image', **'Data'**, and **'Impact'** views can be accessed from the **'Profile'** screen.

Impact

The **'Impact'** view displays the attack angle, face angle, and club path for the selected shot.

'Image', **'Profile'**, and **'Data'** views can be accessed from the **'Impact'** screen.

Options

The '**Options'** screen gives you the choice to enter information for the '**Next Club'** or to advance to '**Finishing Options'** for the current session.

Select the arrow on the keypad for the option you wish to use:

Finishing Options

'**Finishing Options'** allow you to '**Add Finishing Notes', 'Clear All Data', 'Proceed to New Session', 'Save to USB'**, or go '**Back'** to the **Options** screen.

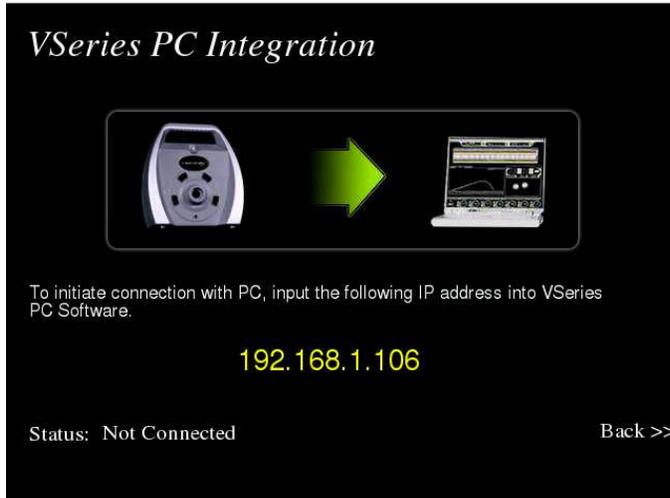'**Add Finishing Notes' –** enter information regarding the session.

'**Clear All Data'** – Immediately deletes all shots stored since either beginning a new session or turning on the VectorX.

'**New Session** – Proceeds to a new session to enter student and club information.

'**Save to USB'** – Insert flash drive into the USB port on the side of the VectorX and select Save to USB to save an excel file of the sessions since the system has been turned on. **Inserting flash drive once the VectorX has reached the Welcome screen and prior to shot capture is recommended.**
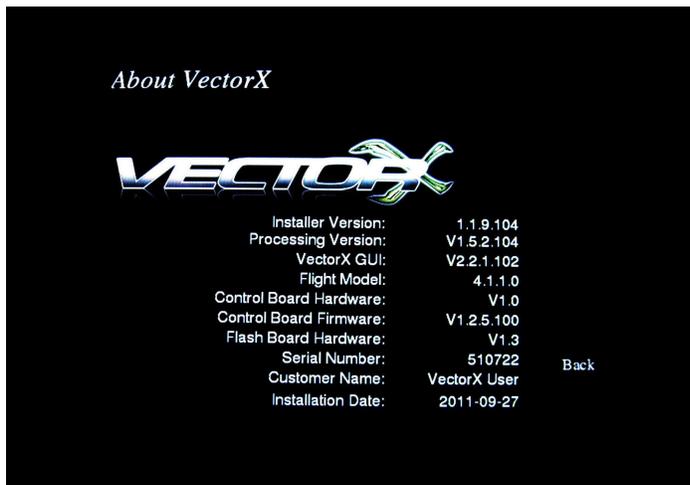
Run VSeries

The '**Run VSeries**' option connects the software to the VSeries interface modules if purchased as an add-on to the VectorX. The status will display "Connected' if available or 'Not Connected' if unavailable.

About VectorX

The '**About**' option can be selected from the **'Welcome'** screen or can be accessed from most screens by selecting the circle on the keypad as shown below.

This screen gives detailed information about the VectorX software and hardware of the VectorX.

General Questions

Whom should I contact with questions about the AccuSport warranty?

AccuSport Customer Support is available by phone or email:

Phone: 336-759-3300 x2
Toll-free: 866-759-3302 x2
support@accusport.com

Please have your serial number available.

HOURS: Monday – Friday 8:00 am to 5:00 pm EST

Free customer support during regular business hours while under warranty.

Weekend support available Saturday (10:00 am to 5:00 pm) and Sunday (1:00 to 5:00 pm). There is a per incident fee.

Visit our website www.accusport.com for additional user tips.

How does VectorX connect to my computer if the VSeries software modules have been purchased?
VectorX connects to your computer via Ethernet cable. For capturing swing video a FireWire IEEE 1394 port is also required on your computer.

How does VectorX work?
VectorX is triggered by the sound of the club hitting the golf ball. The camera takes two pictures of the golf ball within milliseconds of each other and advanced image analysis software determines the size, rotation, vertical path and distance between the two images. The software utilizes this information to accurately measure ball speed, launch angle, back spin, side spin and push/pull, and to calculate club head speed and angle of descent.

Can I use irons with VectorX?
Yes. In addition to drivers, irons can be used with the VectorX with minimal adjustment. Keep in mind that the VectorX needs to be positioned at the same level as the hitting surface to ensure the ball is not hit under the camera lens. We recommend changing the hitting position to the iron location on the setup template.

Will VectorX work for a left handed player?

Yes. For a left-handed golfer, position the VectorX facing the hitter and tee the ball up in the Left Tee Zone.

Does AccuSport provide product training?

The VectorX Launch Monitor is the first all-inclusive launch monitor with on-board processor. Training packages are available at an extra cost. For details, contact Customer Support.

Do I need to register my VectorX?

Yes. Registering your VectorX will activate your warranty. In addition, it will assure that your contact information is entered into our system so that you can receive software announcements and technical support for the warranty period. You can register your VectorX at www.accusport.com or by contacting Customer Support.

How accurate is club speed?

VectorX club speed is accurate to within 2 mph. This calculation is derived from ball speed, launch angle, back spin, side spin and push/pull, all of which are measured parameters.

Using VectorX

How important is ball placement?

Ball placement is crucial. If the ball is not placed in the correct hitting area or is not at the stated 10-14 inches, from the launch monitor, the ball capture or launch data will be affected. The Setup Template indicates where the ball should be placed for hitting.

Does it matter what kind of golf balls I use?

We recommend using a white ball with as few markings as possible, so that the software can clearly read the line on the ball. Be sure the ball is properly marked. Range balls or limited flight balls will affect measured launch data.

Troubleshooting

I am getting launch data for drivers, but the system is not capturing irons.

1. Make sure that VectorX is on the same level as the mat and that the ball is not being hit below the camera.

2. If the ball image is cut off at the side of the screen, use the setup template to verify that you are teeing up the ball correctly.

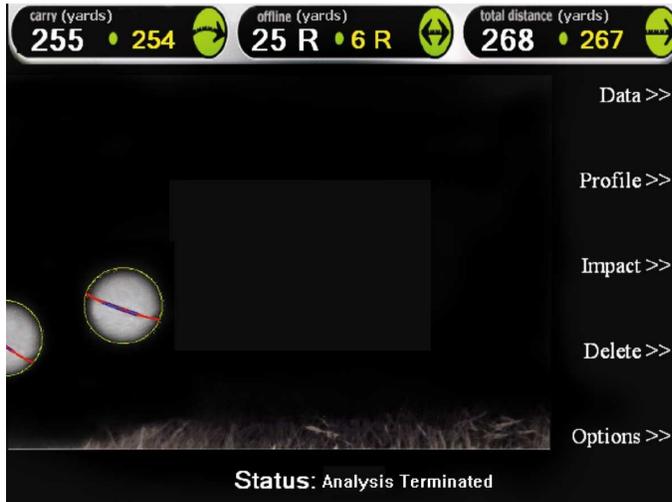**I am getting strange or incorrect readings.**

This may be due to lighting conditions or low battery.

1. Make sure the ball is marked properly by selecting the Image view, and that the software is reading the correct mark, not some other spot on the ball.

2. If the battery is low, charge it or use an alternate power source.

I cannot see the stripe on the ball.

Make sure when placing the ball in front of VectorX that the black line is facing the VectorX.

Error Messages

Status: Analysis Terminated

Analysis Terminated - This message indicates that the image of the ball has not been correctly captured. Use the setup template to verify that you are teeing up the ball correctly and that it is 10-14 inches from the unit.

No Planes – The software is unable to distinguish the black line on the golf ball. Make sure the line is clear and facing the unit when placed on the tee.

Beyond Hitting Range – The ball is teed up too far away from VectorX. Tee the ball up within the recommended 10-14 inches (shown on Setup Template)

Ball Clipped Top/Bottom/Right/Left Edge – A portion of the golf ball is cut off an edge of the image. Use the Setup Template to position the ball correctly for Drivers, Irons, and Wedges.