

# TrackMan Operator Training

The following setup and use information is the same for using TrackMan in the Indoor setting or Outdoor setting unless noted





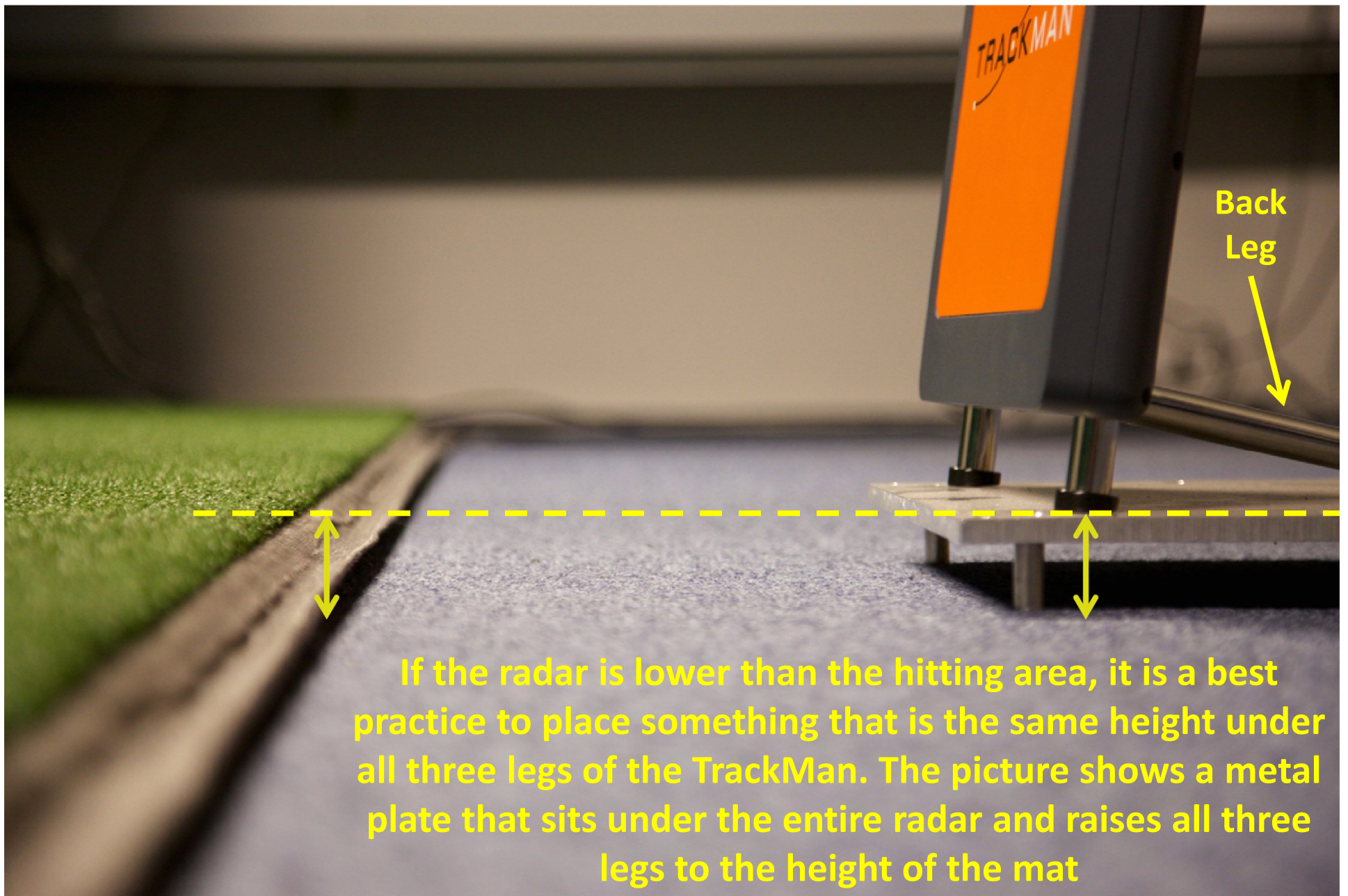


**1. There are two bottom legs that must be extended prior to setting up and turning on the radar. Pull the legs out until they click into place**

**2. When you are finished using the system, simply tap the two bottom legs so that they collapse back inside the radar**





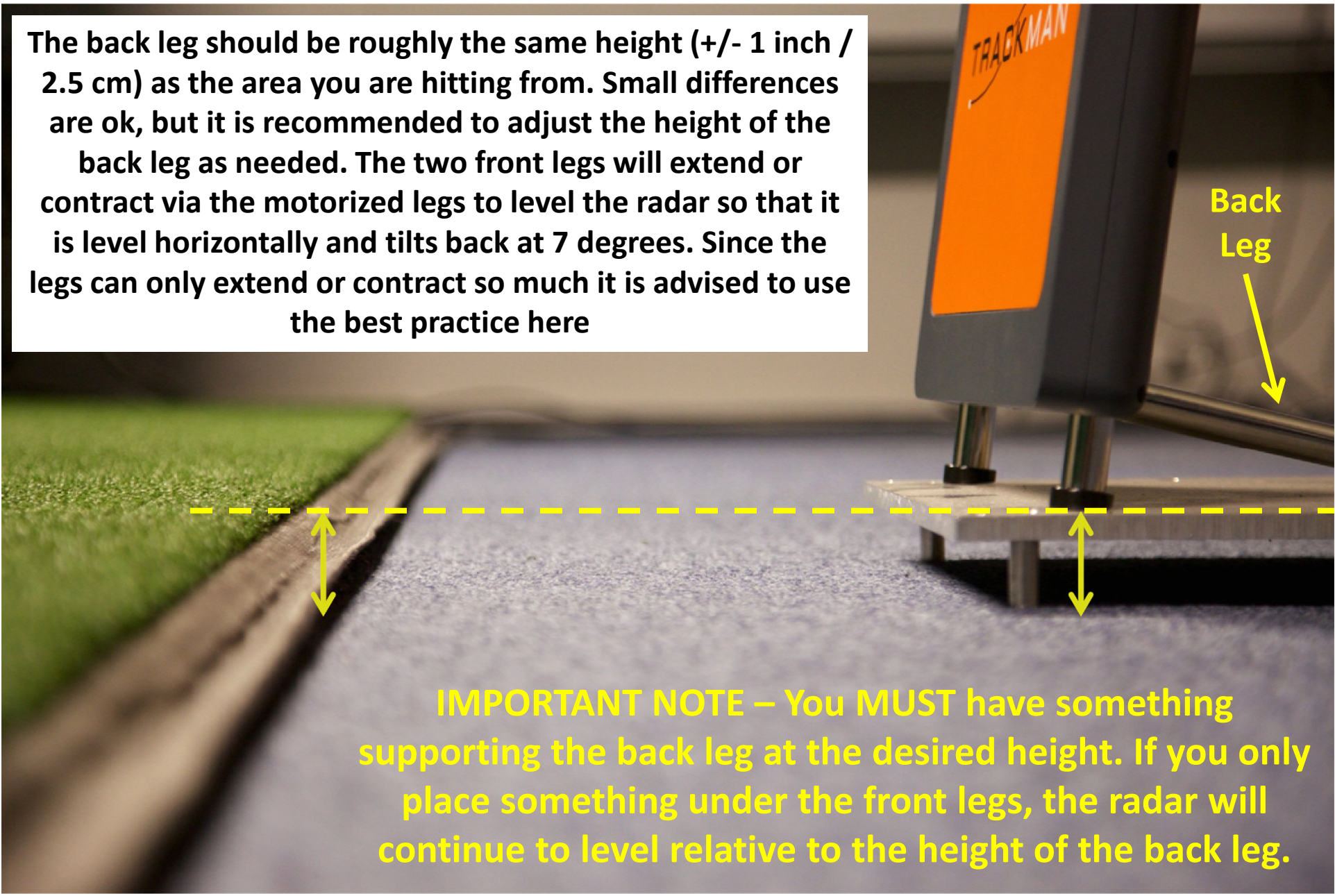


If the radar is lower than the hitting area, it is a best practice to place something that is the same height under all three legs of the TrackMan. The picture shows a metal plate that sits under the entire radar and raises all three legs to the height of the mat



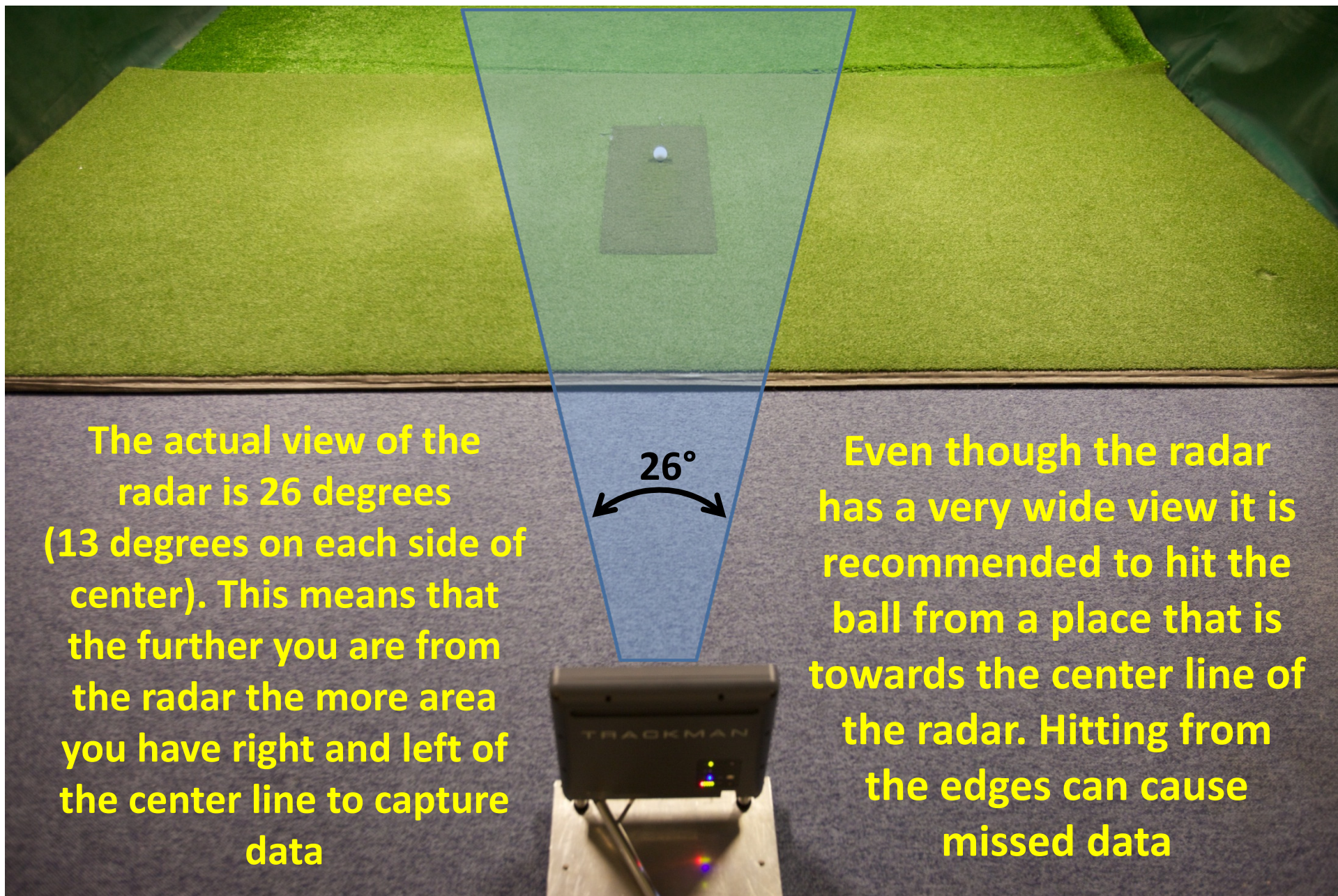
The back leg should be roughly the same height (+/- 1 inch / 2.5 cm) as the area you are hitting from. Small differences are ok, but it is recommended to adjust the height of the back leg as needed. The two front legs will extend or contract via the motorized legs to level the radar so that it is level horizontally and tilts back at 7 degrees. Since the legs can only extend or contract so much it is advised to use the best practice here

Back  
Leg



**IMPORTANT NOTE – You MUST have something supporting the back leg at the desired height. If you only place something under the front legs, the radar will continue to level relative to the height of the back leg.**

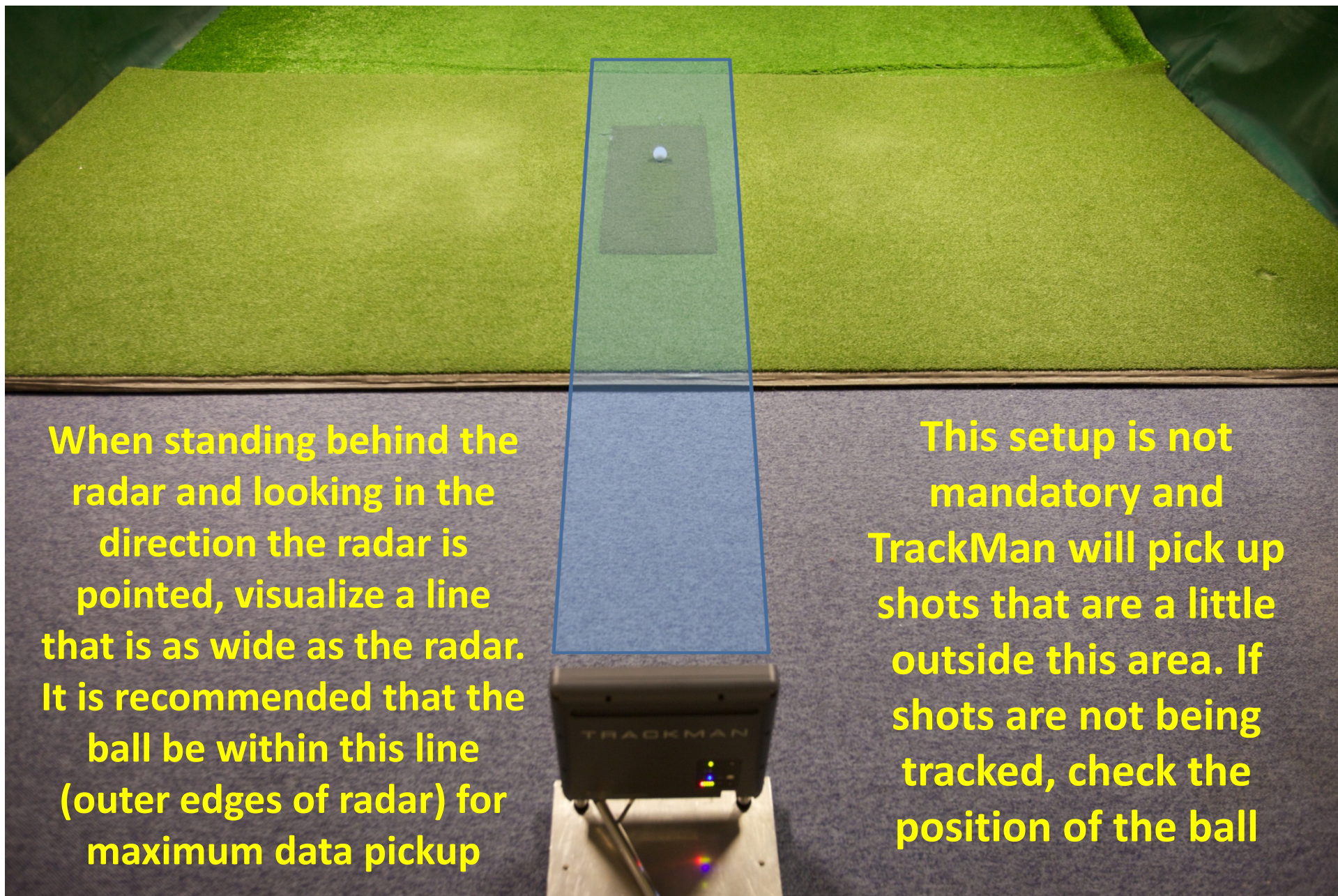




The actual view of the radar is 26 degrees (13 degrees on each side of center). This means that the further you are from the radar the more area you have right and left of the center line to capture data

Even though the radar has a very wide view it is recommended to hit the ball from a place that is towards the center line of the radar. Hitting from the edges can cause missed data

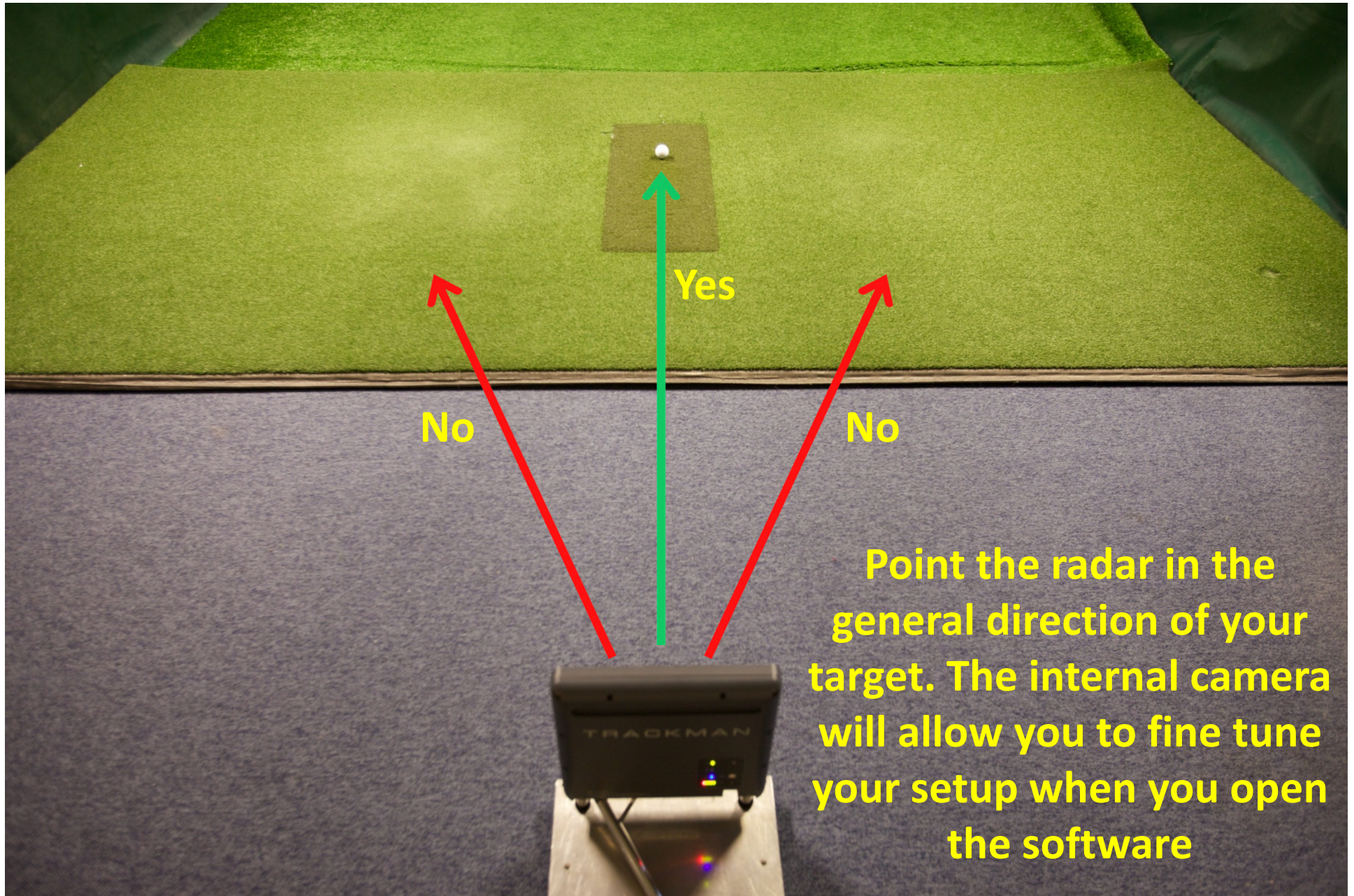




When standing behind the radar and looking in the direction the radar is pointed, visualize a line that is as wide as the radar. It is recommended that the ball be within this line (outer edges of radar) for maximum data pickup

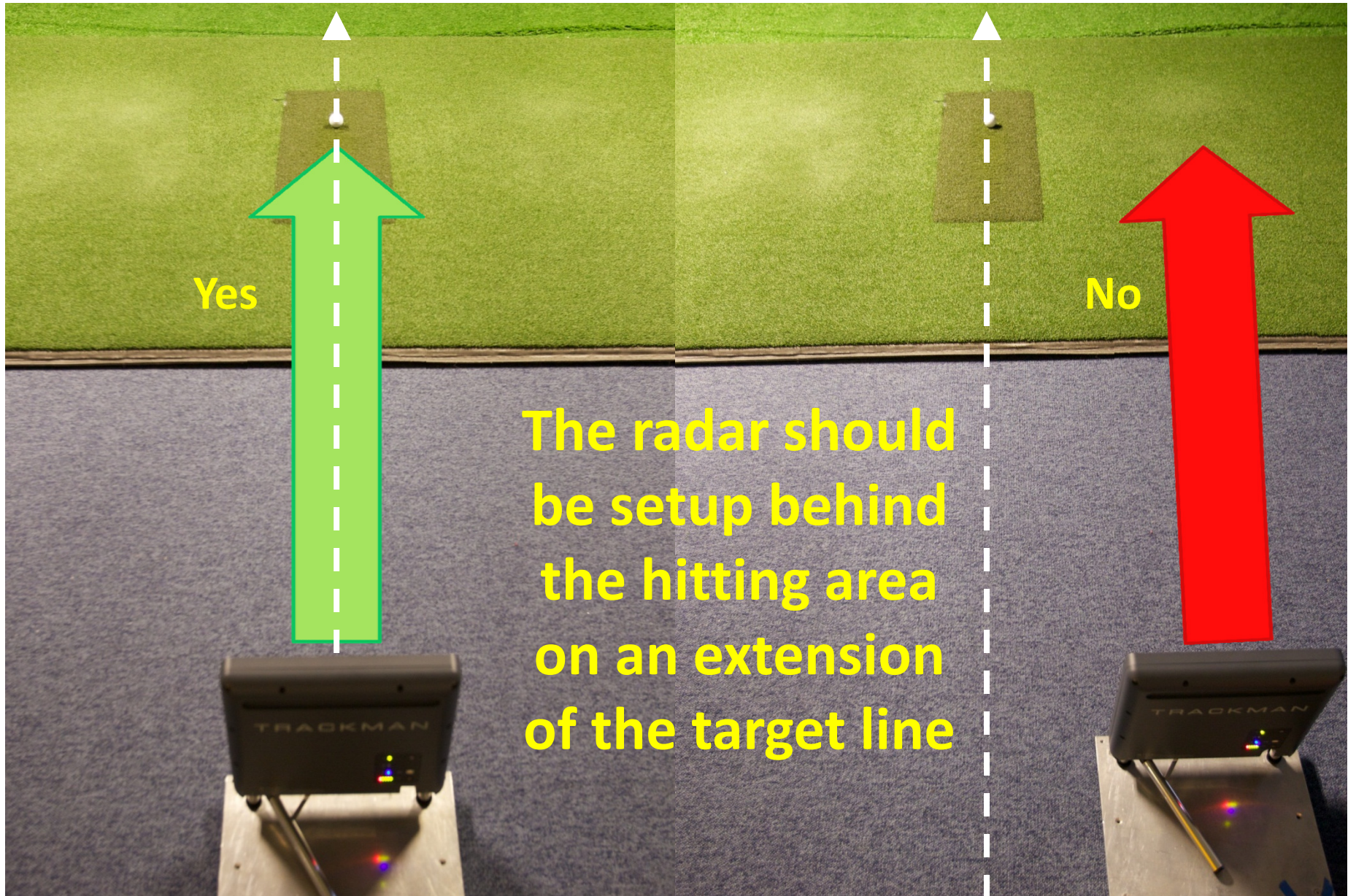
This setup is not mandatory and TrackMan will pick up shots that are a little outside this area. If shots are not being tracked, check the position of the ball





**Point the radar in the general direction of your target. The internal camera will allow you to fine tune your setup when you open the software**



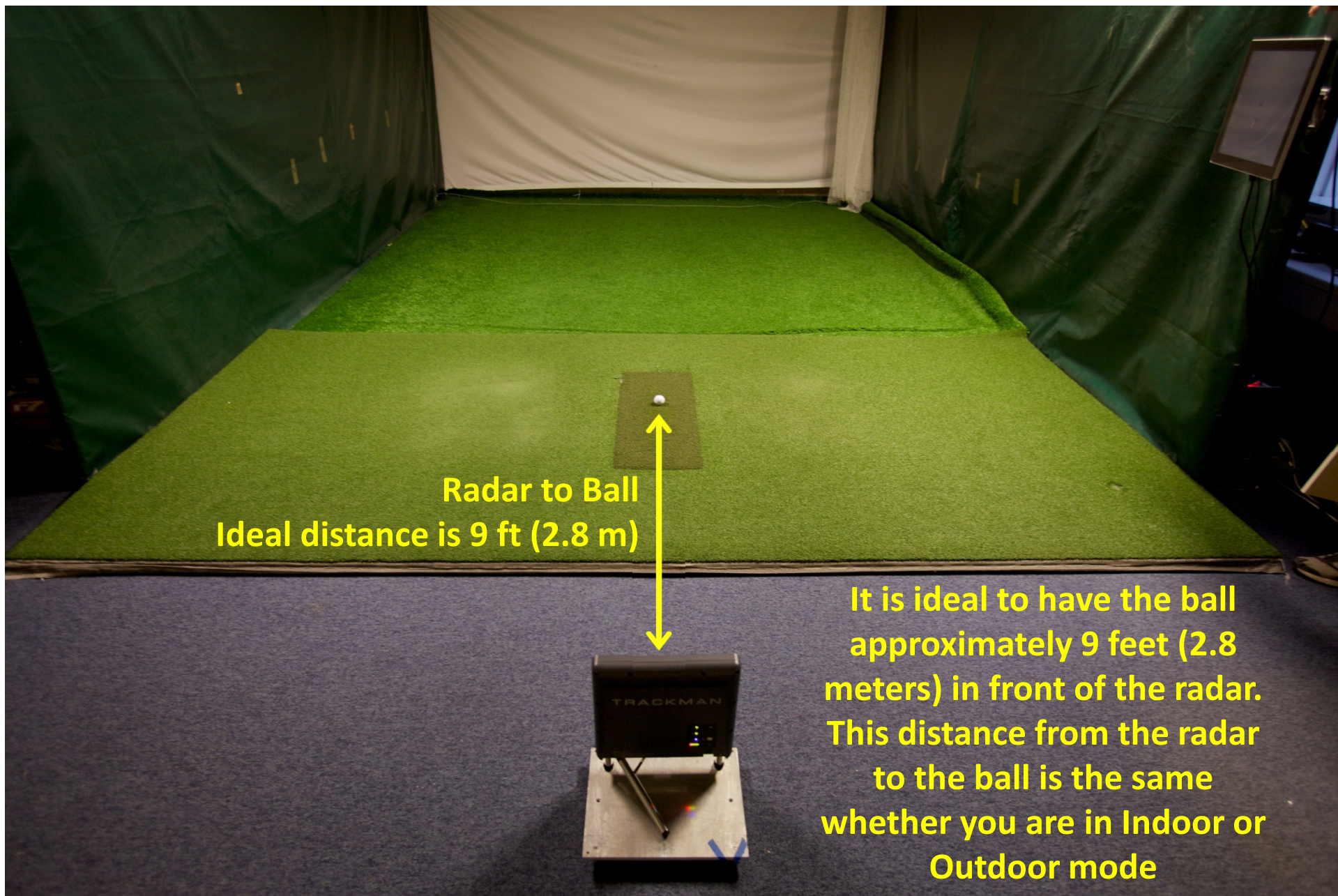


Yes

No

The radar should be setup behind the hitting area on an extension of the target line

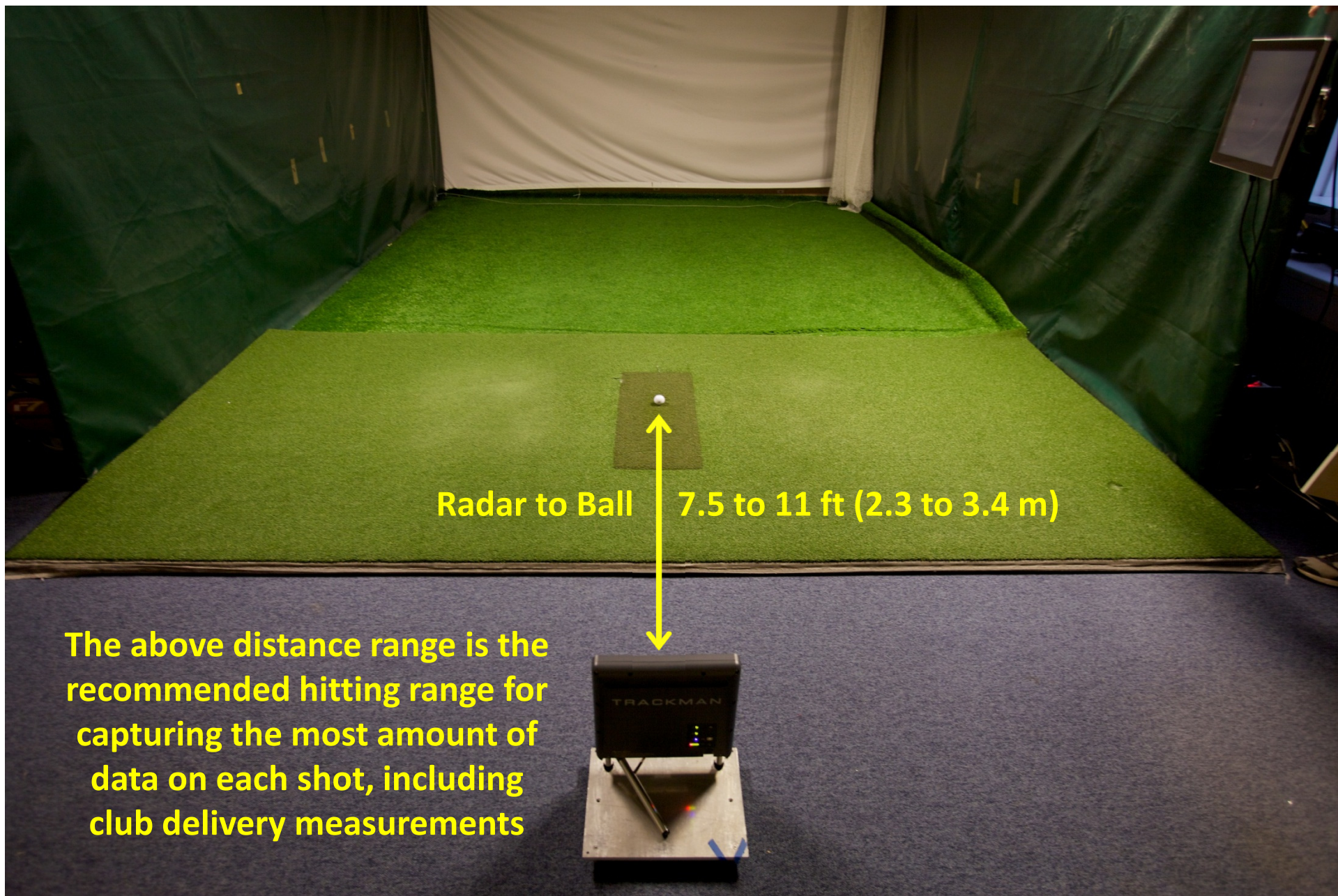




**Radar to Ball**  
**Ideal distance is 9 ft (2.8 m)**

**It is ideal to have the ball approximately 9 feet (2.8 meters) in front of the radar. This distance from the radar to the ball is the same whether you are in Indoor or Outdoor mode**





**Radar to Ball 7.5 to 11 ft (2.3 to 3.4 m)**

**The above distance range is the recommended hitting range for capturing the most amount of data on each shot, including club delivery measurements**



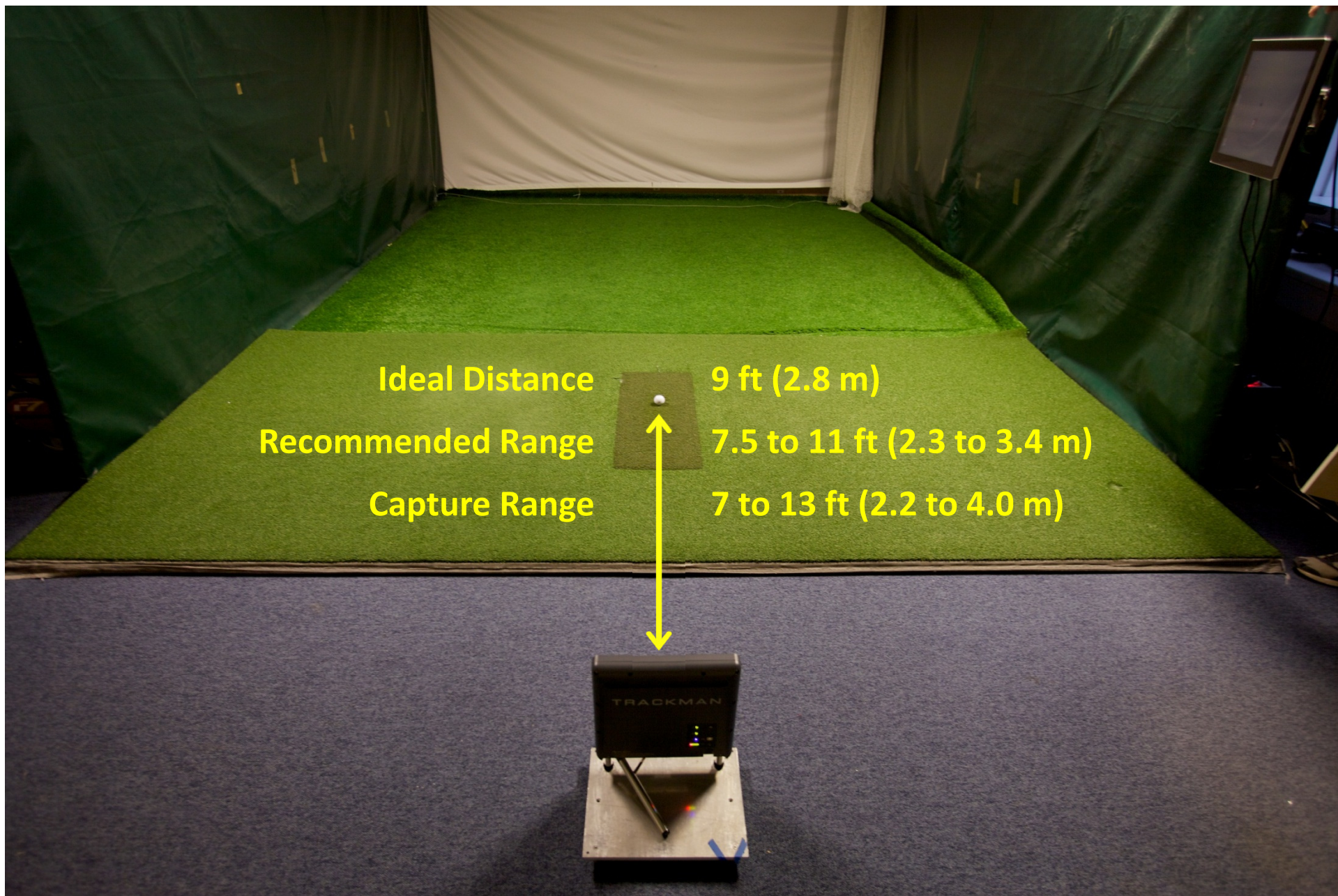


**Radar to Ball 7 to 13 ft (2.2 to 4.0 meters)**

**The above distance of 7 – 13 ft (2.2 – 4.0 m) will allow you to track all golf shots. This is the capture range for TrackMan**

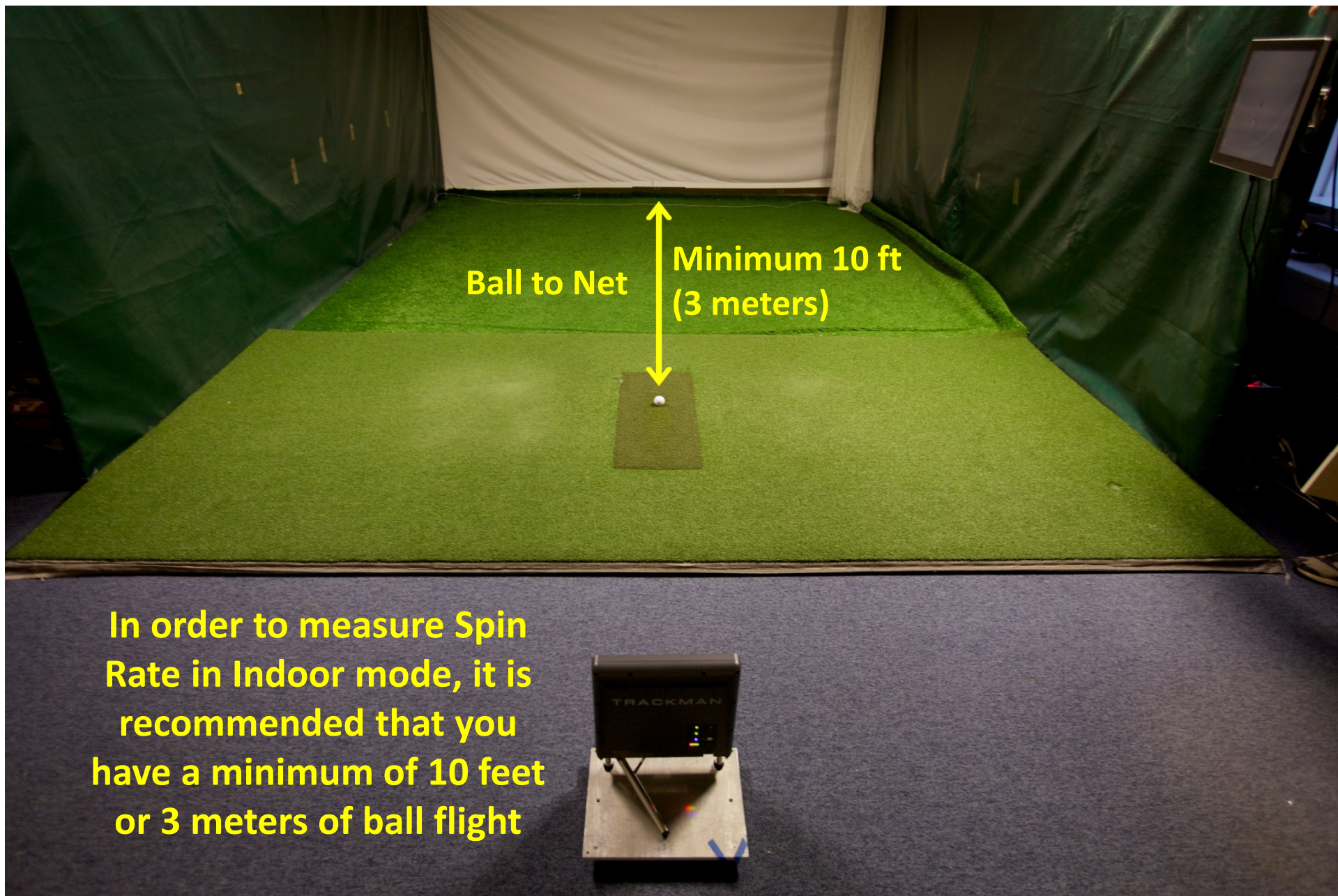
**NOTE: The above distances should have no problem tracking golf shots and measuring all launch conditions and trajectories. Hitting from the extremes may see a reduced pickup on club delivery measurements**





**Ideal Distance** 9 ft (2.8 m)  
**Recommended Range** 7.5 to 11 ft (2.3 to 3.4 m)  
**Capture Range** 7 to 13 ft (2.2 to 4.0 m)





Ball to Net

Minimum 10 ft  
(3 meters)

In order to measure Spin Rate in Indoor mode, it is recommended that you have a minimum of 10 feet or 3 meters of ball flight



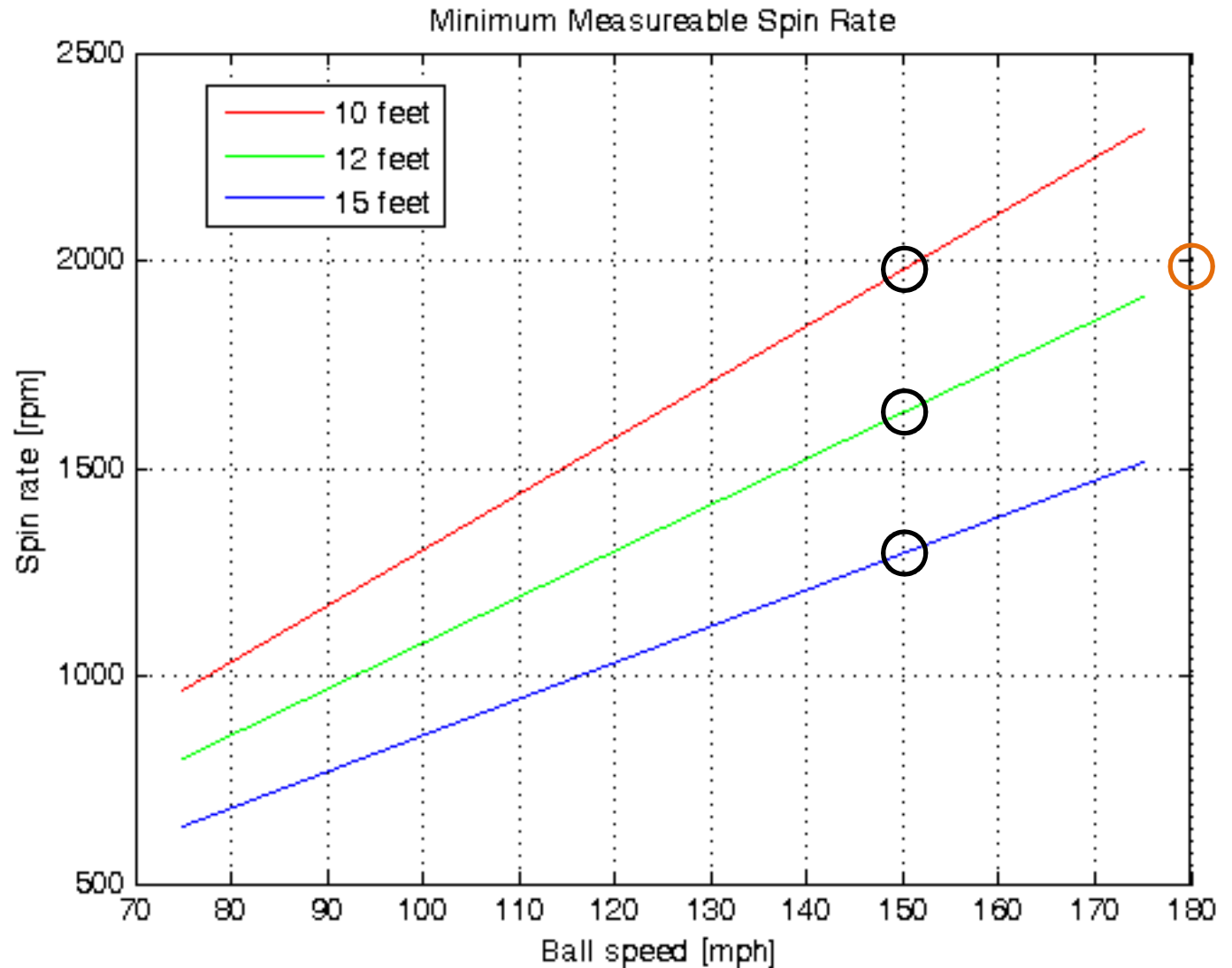


The minimum distance required to measure the Spin Rate when there is limited ball flight depends on the Ball Speed and Spin Rate combination. The following chart shows what is possible at 10 feet, 12 feet, and 15 feet depending on the Ball Speed and Spin Rate

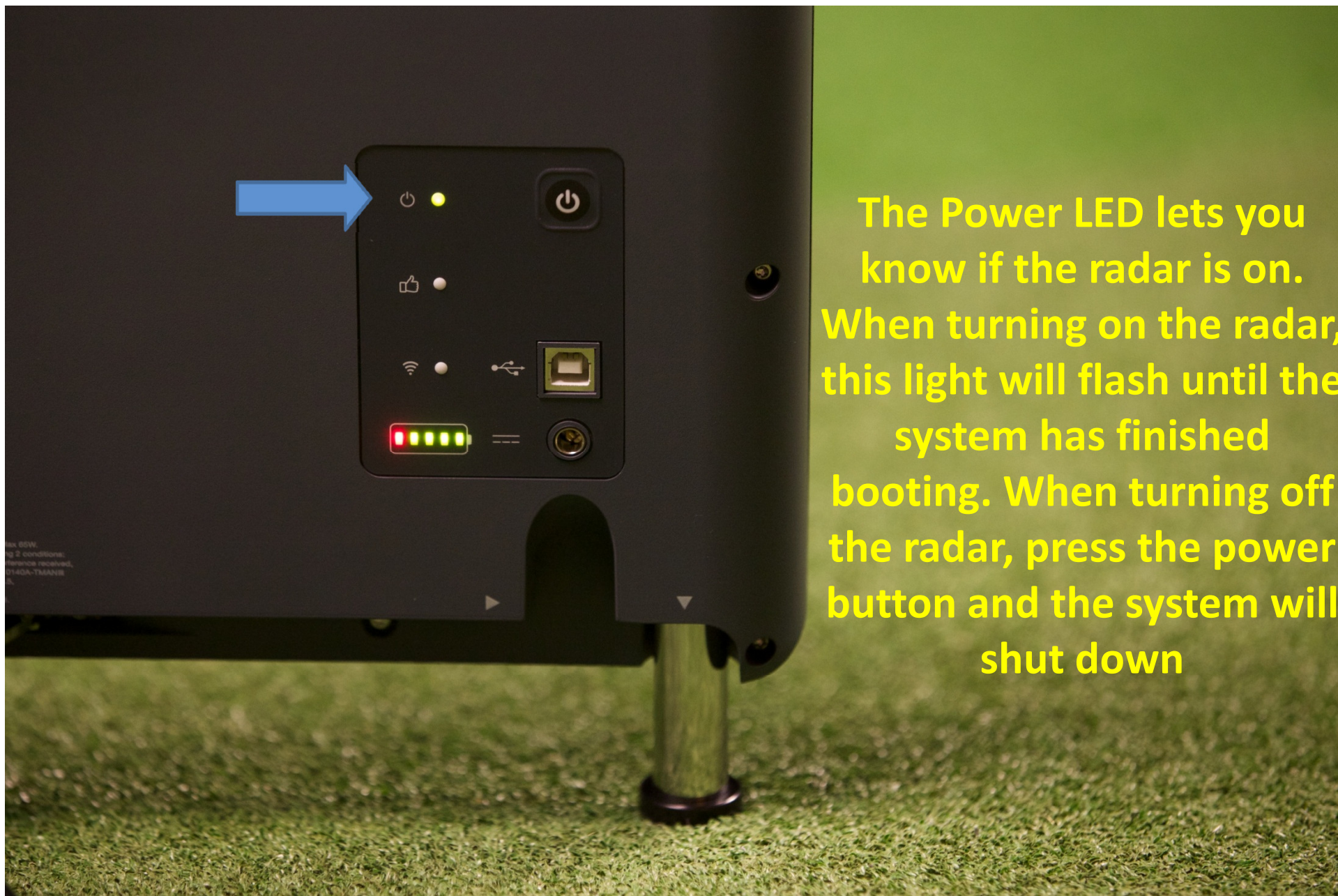
### EXAMPLE

At 150 mph Ball Speed, Spin Rates above ~1300 at 15 feet; 1650 at 12 feet; and 1950 at 10 feet

If a golfer has a Ball Speed of 180 mph, you would need ~12 feet in order to measure Spin Rates down to 2000 rpm







The Power LED lets you know if the radar is on. When turning on the radar, this light will flash until the system has finished booting. When turning off the radar, press the power button and the system will shut down





The blue Wireless LED only means that you can connect your iPhone, iPad, or computer to the TrackMan now. You must use the local Wi-Fi settings on your device to make sure the connection is established

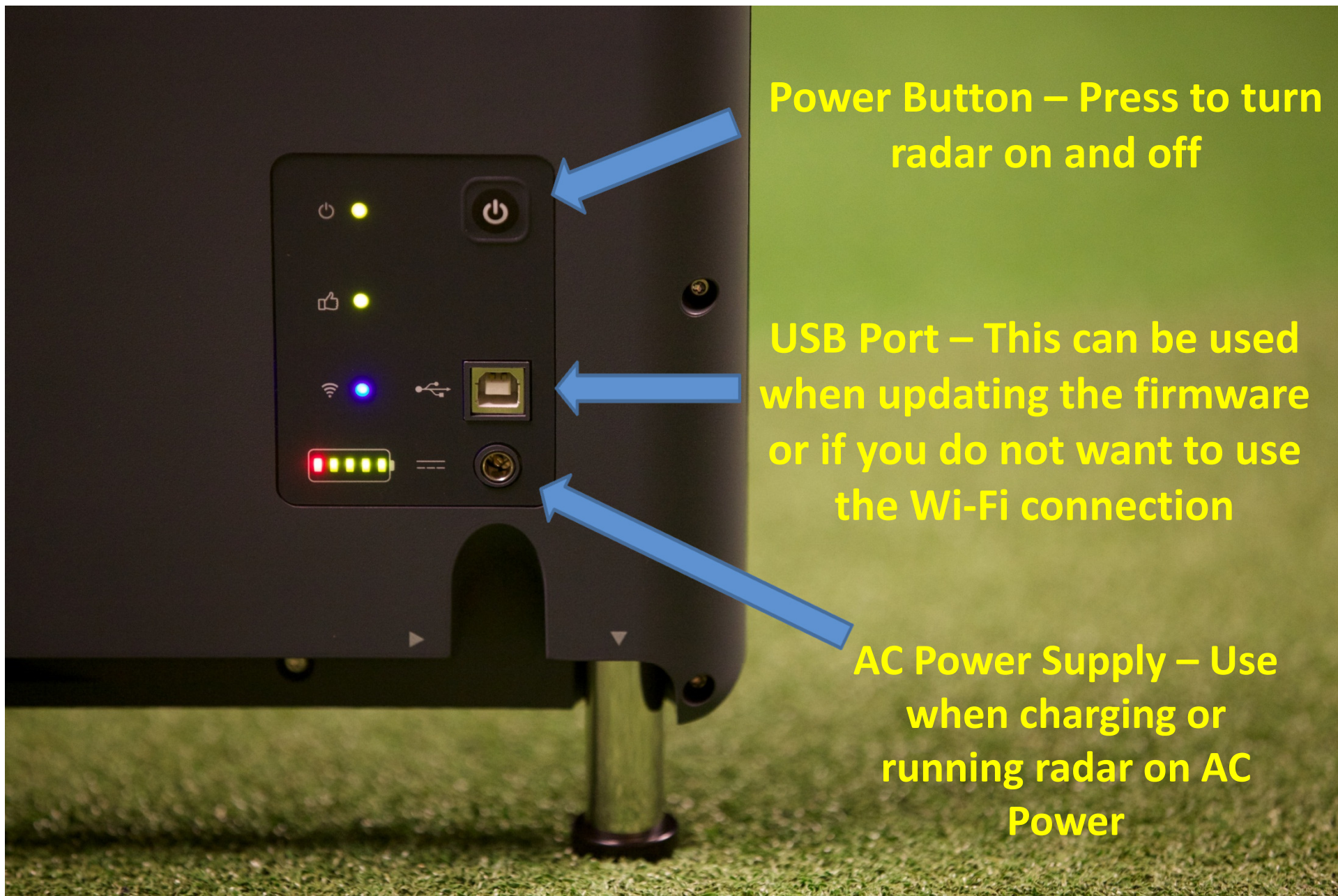




**Thumbs up means the system is armed and ready to collect data. If this LED is not on while in the Live tab of TPS, try clicking the Home tab and then going back to the Live tab.**

**You can click between the Home, Live, and Analyze tab without affecting the current session. Clicking on an application button under the Home tab will start a new session**





**Power Button – Press to turn radar on and off**

**USB Port – This can be used when updating the firmware or if you do not want to use the Wi-Fi connection**

**AC Power Supply – Use when charging or running radar on AC Power**



Start

# IMPORTANT

If you have less than 30 yards/meters of ball flight, select **INDOOR**.  
If you have more than 30 yards/meters of ball flight, select **OUTDOOR**

- Players
- Clubs
- Balls
- Share
- Settings
- Tutorials
- About
- ✕ Exit

Online ●

Current User: Justin Padjen

Change User



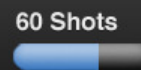
Shot Analysis



Shot Library



Short Game



TrackMan  
Combine

Indoor  Outdoor



Short Game

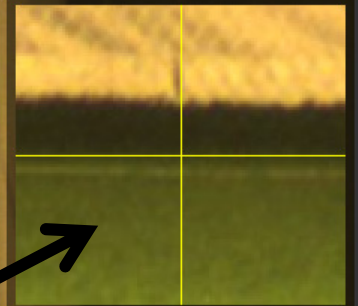
Indoor  Outdoor



The "crosshair" should be placed at the bottom of the target if visible in the image. The vertical line should go through the target. Move the mouse to the bottom of the target and left click once

A zoomed image is available in the top right corner to make small adjustments on the target selection. You can use the arrow keys on your keyboard or click in this image to fine-tune your selection

Select the appropriate distance from either the ball to the net or ball to the target depending on Indoor or Outdoor mode



Freeze Image

Exp. comp.  +2.0

Tee-up to net distance

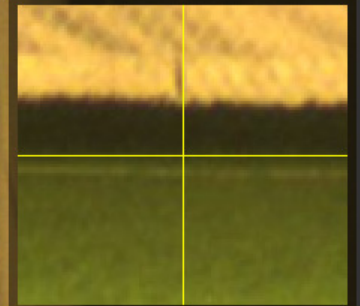
15-18 ft

Continue



The blue shaded area represents the recommended hitting area. For optimal results, the ball should be hit from a location inside or touching the blue shaded box

Use the exposure compensation (brightness) to make additional adjustments to the picture if you are having trouble seeing the target



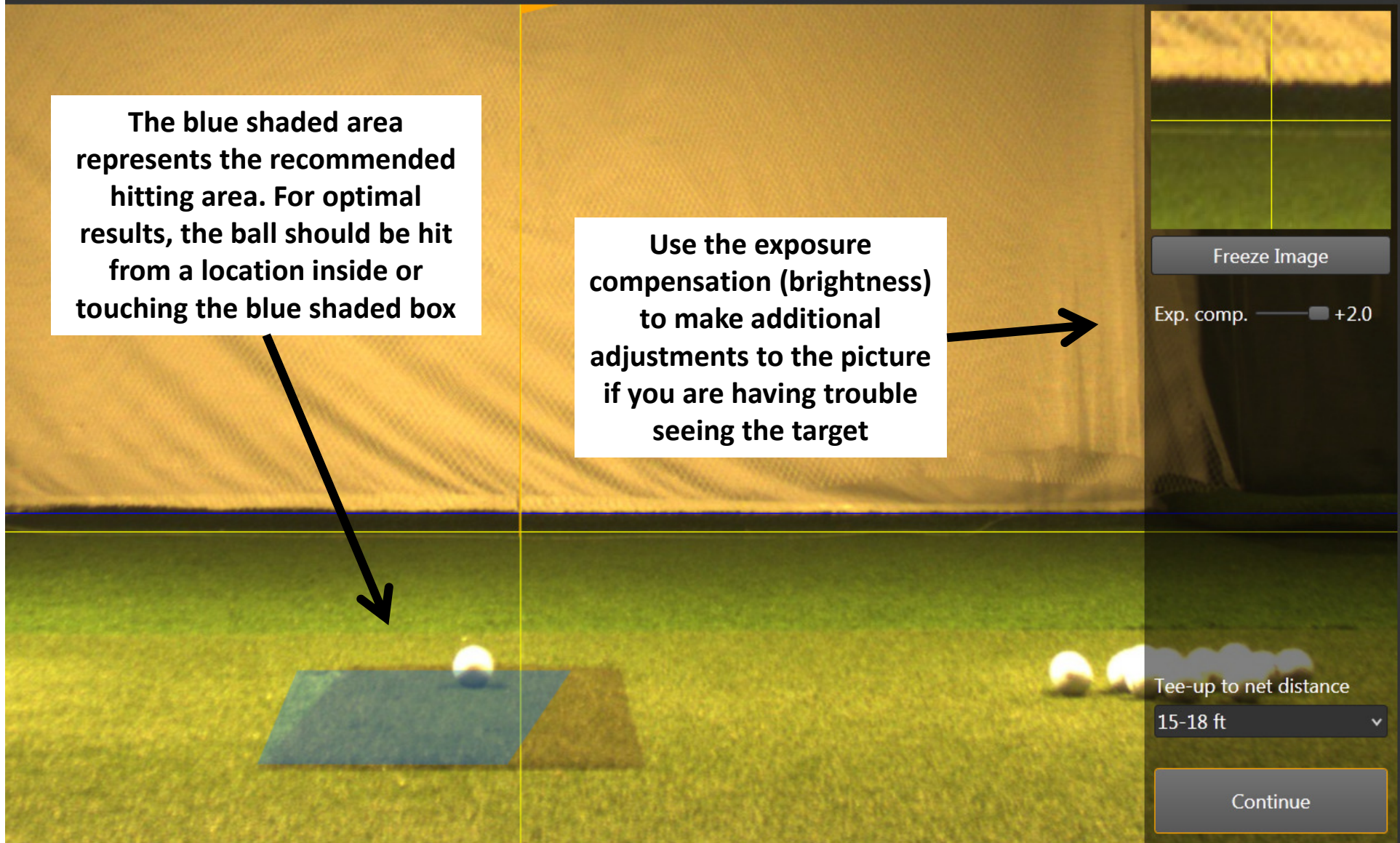
Freeze Image

Exp. comp.  +2.0

Tee-up to net distance

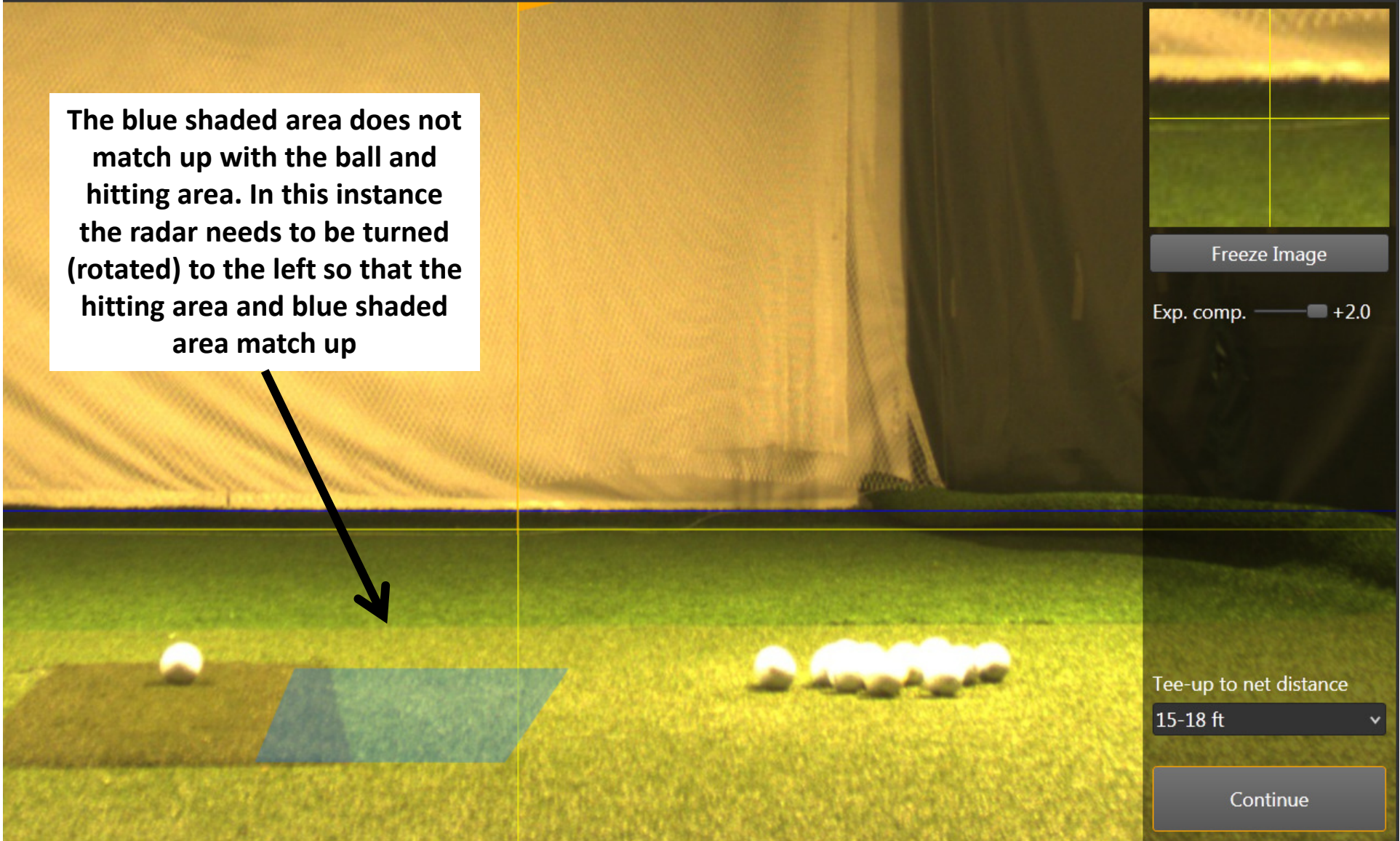
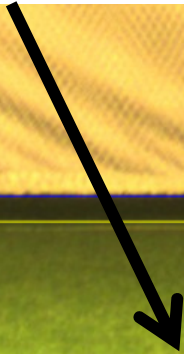
15-18 ft

Continue

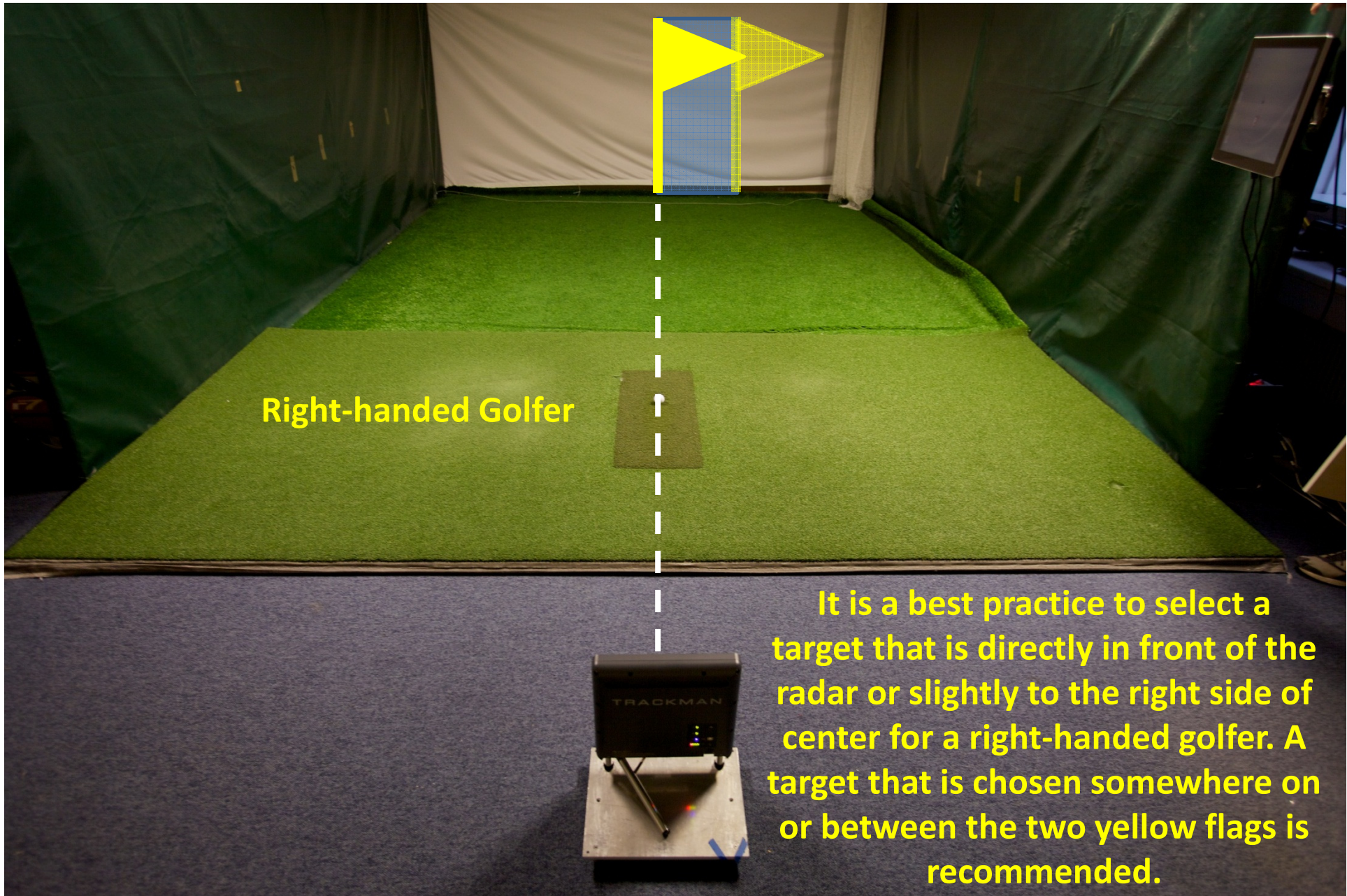




The blue shaded area does not match up with the ball and hitting area. In this instance the radar needs to be turned (rotated) to the left so that the hitting area and blue shaded area match up



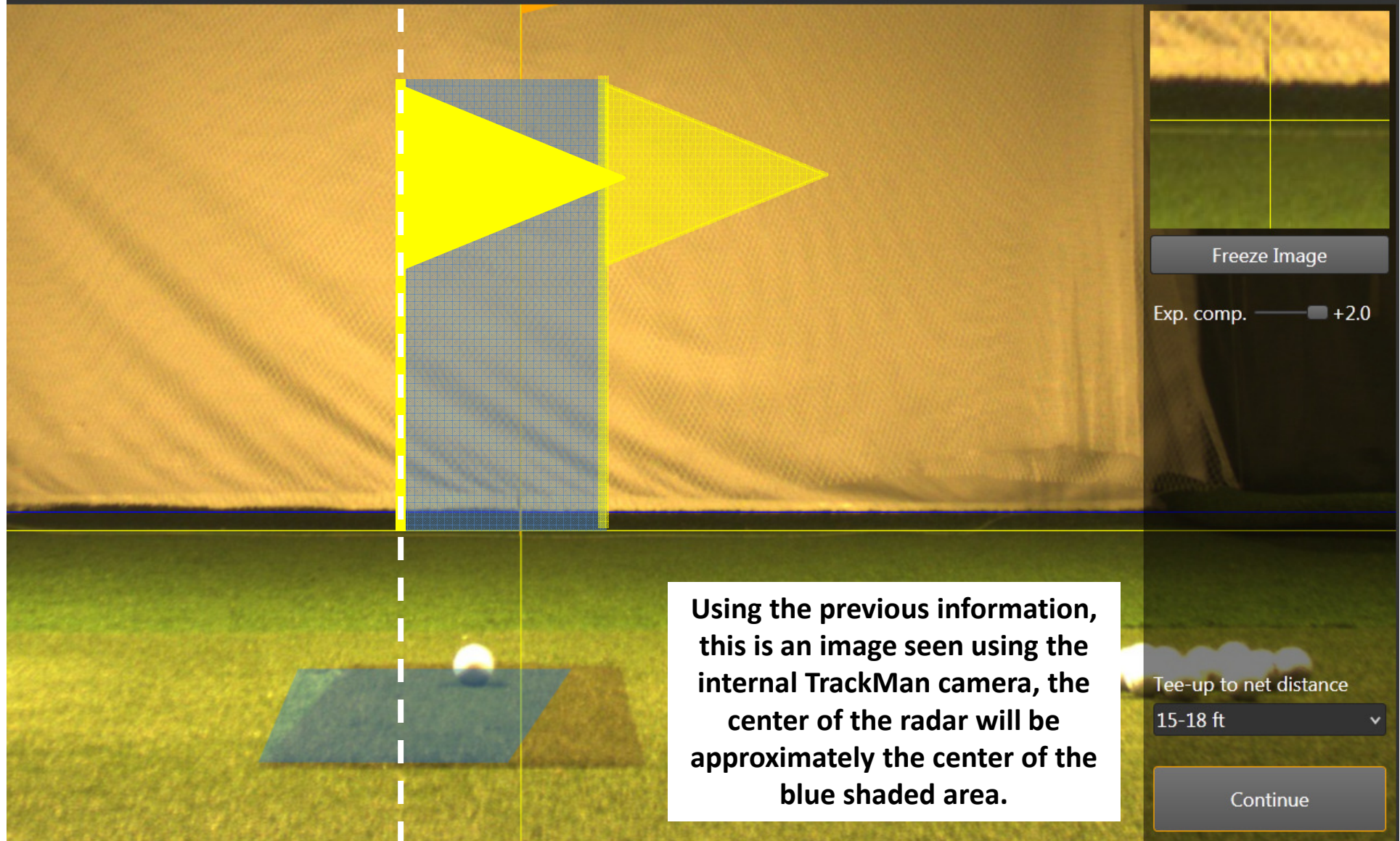




**Right-handed Golfer**

**It is a best practice to select a target that is directly in front of the radar or slightly to the right side of center for a right-handed golfer. A target that is chosen somewhere on or between the two yellow flags is recommended.**





Using the previous information, this is an image seen using the internal TrackMan camera, the center of the radar will be approximately the center of the blue shaded area.

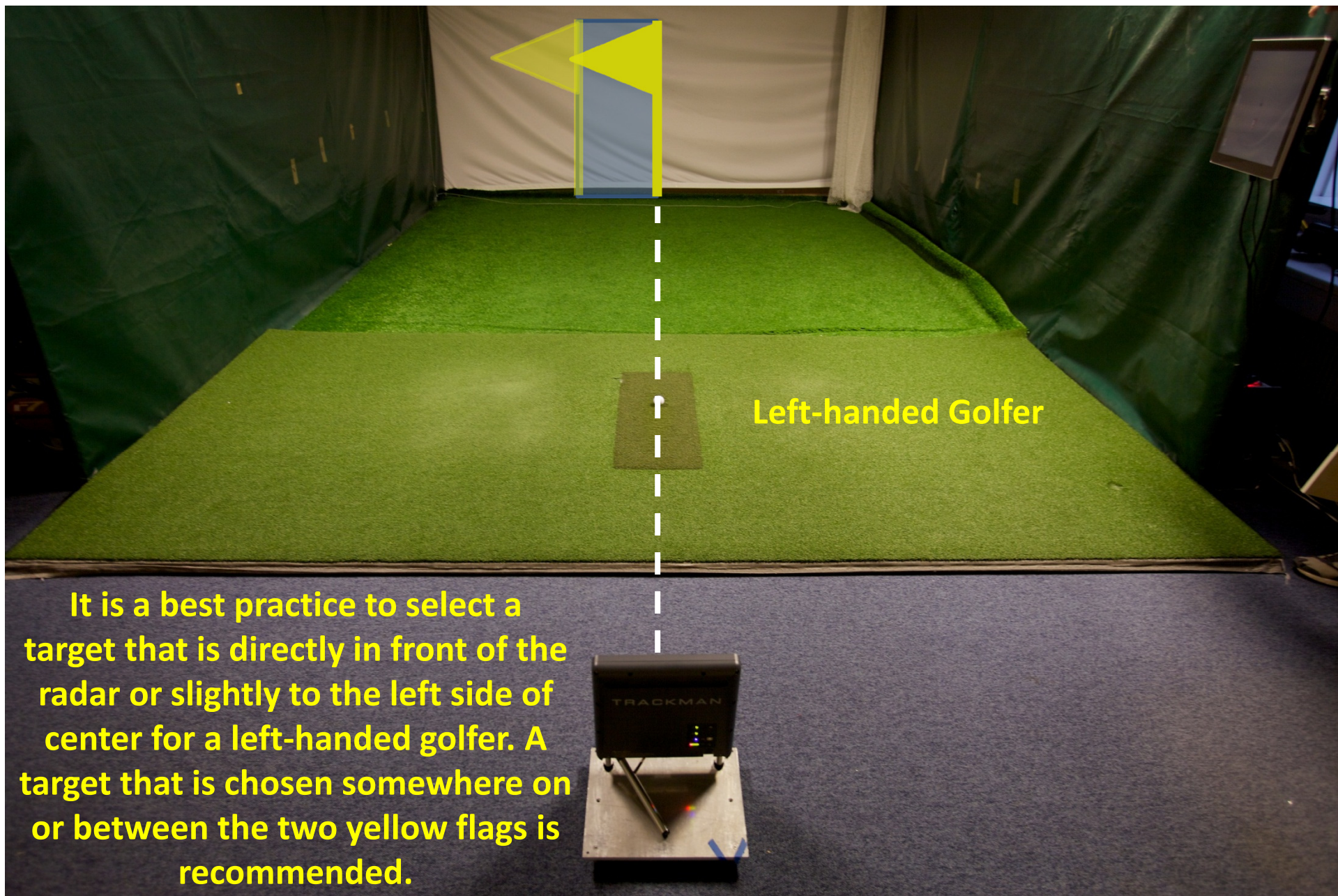
Freeze Image

Exp. comp.  +2.0

Tee-up to net distance  
15-18 ft

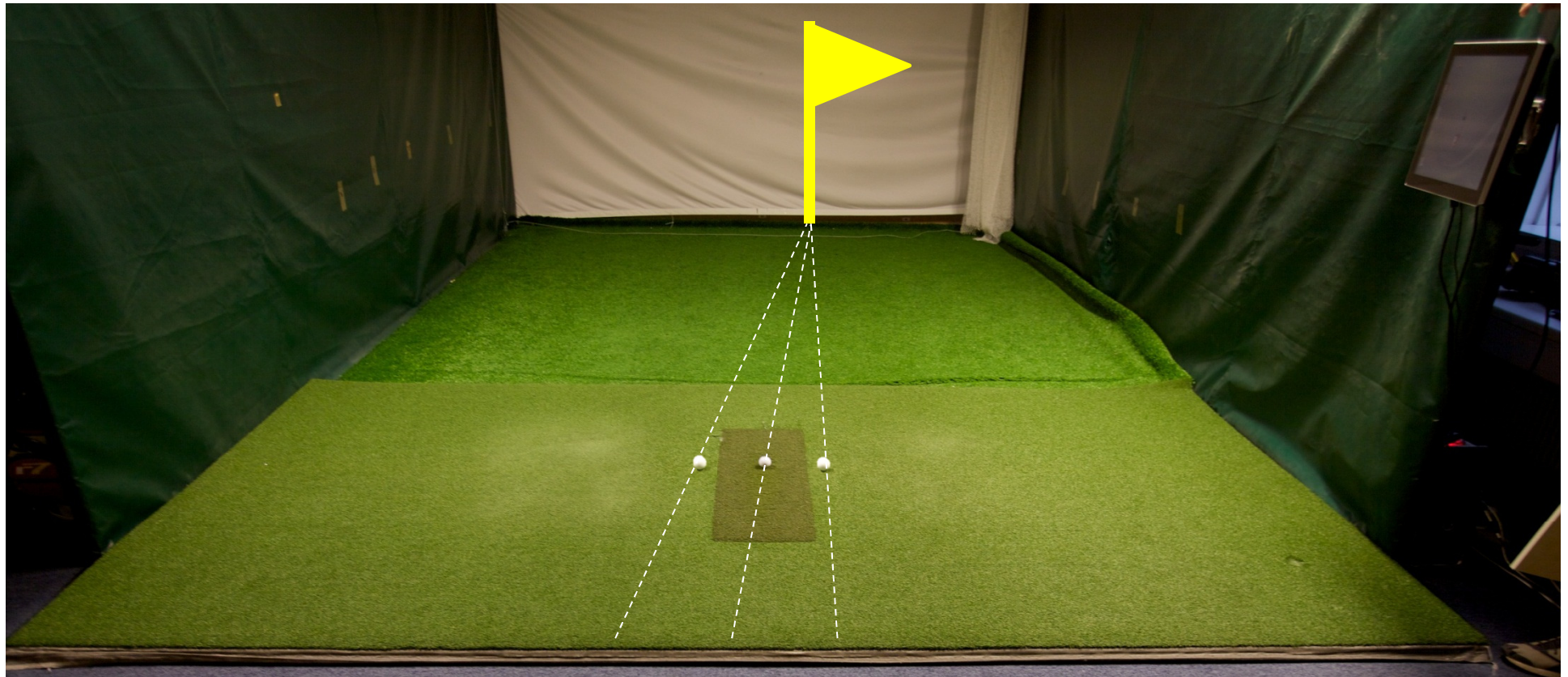
Continue





It is a best practice to select a target that is directly in front of the radar or slightly to the left side of center for a left-handed golfer. A target that is chosen somewhere on or between the two yellow flags is recommended.





**Data is measured relative to a target line that connects where the ball took off and the target chosen by the internal TrackMan camera**



**Use the TPS software to establish the target using the internal camera and the "tee-up to net/target distance". The TrackMan app only requires you to select the target using the internal camera**



All information about metallic dots is for INDOOR mode only

Point metallic dot in direction of target



Alternative



The metallic dot should be pointed straight towards the target so that it can rotate backwards (as depicted by the blue arrow) when it is struck. If there is limited ball flight before the net, the dot can be rotated to point almost directly away from the target, but you don't want the club to impact the dot on the shot.



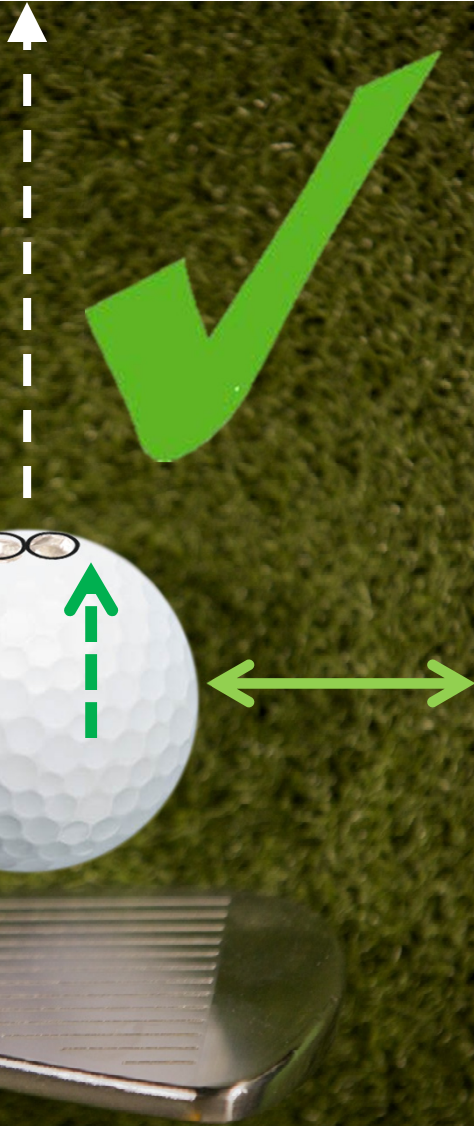


★ Jamie Lovemark, Driver, Feb 25, 2012 5:50 PM		
CLUB SPEED	BALL SPEED	SPIN RATE
121.4	178.7	2560
mph	mph	Measured rpm
★ Jamie Lovemark, Driver, Feb 25, 2012 5:41 PM		
CLUB SPEED	BALL SPEED	SPIN RATE
121.3	178.3	<i>2770</i>
mph	mph	Estimated rpm

When using TrackMan with limited flight distance (< 30 m/yds), make sure the software is set to INDOOR. In order to receive measured Spin Rates, a special metallic sticker must be placed on the golf ball. If the Spin Rate is not measured a calculated number will be provided. This number will be in italics (see above 2770). Measured looks like 2560 above



Two dots can be used if a lot of spin rates are being missed (calculated). Make sure the dots are either pointed towards the target or away from the target



The metallic dots should run parallel to leading edge of the club head (grooves)



The metallic dots should not run parallel to the target line



TrackMan will only output data that it is confident in. This example shows a shot where certain club delivery measurements are missing.

This can occur for a couple of reasons, but first make sure you are using the recommended setup procedures.

Also, data points such as 'From Pin', 'Target', and 'Score' are only applicable to the TrackMan Combine.

The screenshot shows the 'Visible Data' window in TrackMan, displaying a grid of golf metrics. The metrics are organized into four sections: Club, Launch, Flight, and a bottom row of additional metrics. Some metrics are highlighted with a yellow border, indicating they are available or confident data points.

Visible Data					
Club					
CLUB SPEE. ✓ 84.6 mph	ATTACK AN. ✓ ---	CLUB PAT. ✓ ---	DYN. LOFT 33.0 deg	FACE ANG. 0.0 deg	SPIN LOFT ---
FACE TO PA. ✓ ---	SWING PL. ---	SWING DIR. ---			
Launch					
BALL SPEE. ✓ 107.3 mph	SMASH FAC. 1.27	LAUNCH AN. ✓ 28.2 deg	LAUNCH DIR. -0.6 deg	SPIN RAT. ✓ 5151 rpm	SPIN AXIS 5.1 deg
Flight					
HEIGHT 112.9 ft	CARRY ✓ 159.3 yds	TOTAL 168.8 yds	SIDE 15.8R ft	SIDE TOT. 17.1R ft	LAND. ANG. 47.4 deg
FROM PIN ---	TARGET ---	HANG TIME 6.09 s	LAST DATA 155.6 yds	SCORE ---	



**To increase club delivery pickup rate in certain situations, the radar can be moved slightly off of the target line and turned in to face the hitting area. This can allow the radar to see post impact club data better (example for right handed golfer)**

