



Hit Analyzer Pro R1 Operational Instructions

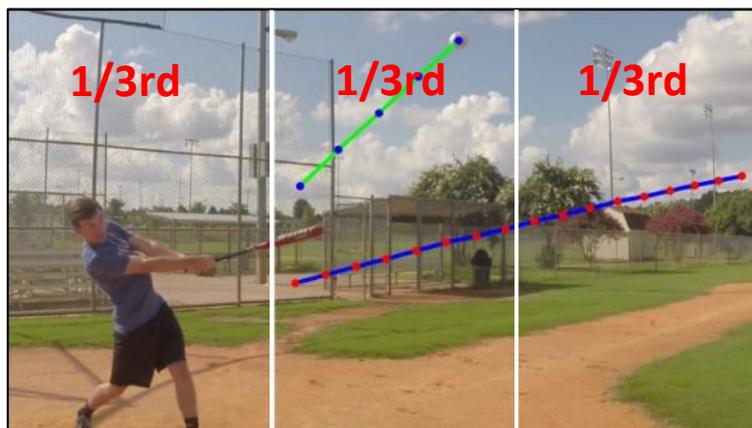
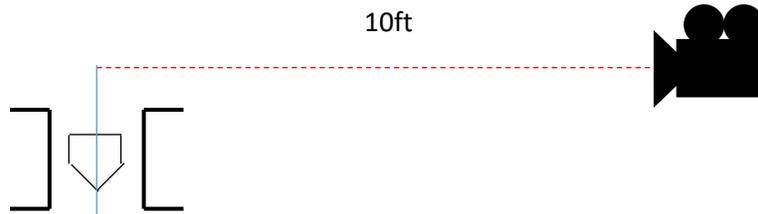
First, I would like to congratulate you on your successful download of *Hit Analyzer Pro R1* and a big thanks from the designers and engineers at PA Software, LLC! Before you get started, we recommend you read through these instructions to get a feel for the basic functionalities of this amazing program.

Required Hardware/Software:

- Microsoft's Windows 10 or Mac's OS X
- GoPro Hero 3 or Hero 4 with minimum of 720p and 120fps recording capability
- Tripod or any equivalent camera mounting hardware

Setup for Video Capture:

Setting up for recording videos is simple. Mount your recording device to a secure, fixed platform, such as a tripod. The platform should be placed at approximately 10 ft. from the center of the plate and to the side of the batter while being forward enough so the athlete is located in an outer third of the video (refer to images).





Capturing Video:

Capture videos in short individual clips. The program doesn't have the capability to analyze multiple swings in a single clip. Ensure all video clips are recorded in 720p and 120fps.

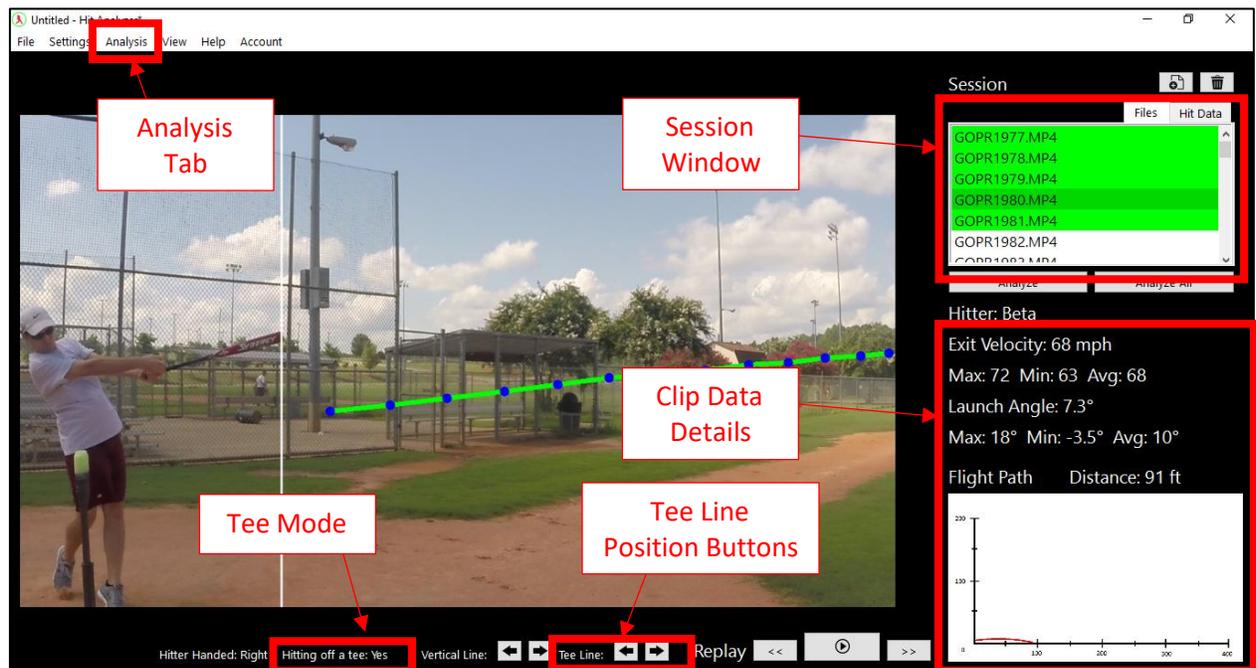
Importing Video:

Once videos are finished being recorded upload them to your desktop or laptop. Open the *Hit Analyzer* application. Import videos to the software by clicking the "paper" button in the upper right corner of the program (refer to image).



Analyzing Video:

Imported video has the option of being analyzed in two different methods; either “Tee Mode” being enabled or disabled. This function is located in the bottom left hand corner of the program (refer to image). This is used for evaluation of hitting on a tee, or if a ball is thrown during batting practice. It is important the correct method is chosen in order to obtain the most accurate results. “Tee Mode” can be turned on and off with the Analysis tab at the upper left corner of the screen, or by pressing “Ctrl + t”.



If “Tee Mode” is enabled you will notice a green vertical line show up on the screen. This green line is to be placed over the top of the ball in the screen and can be moved left and right by toggling the “Tee Line” buttons at the bottom of the screen.



The second white line defines the “Search Region” in the recording. This region is the area of the recording where the program will look for the hit baseball or softball. The number of points found in this region will help to calculate the flight characteristics of the batted ball. If four points or fewer are located in this region there is a higher chance for error in the calculations. Therefore, if the analysis of a video results in only a few data points the user has the option to adjust the “Search Region” to gather more data. The “Search Region” can be adjusted using the buttons at the bottom of the screen.



Whether or not “Tee Mode” is enabled or disabled, the hit analysis can be initialized in two different ways; double clicking on the file in the “Session” window, or selecting a file in the “Session” window and clicking the “Analyze” button. Clicking the “Analyze All” button will analyze the remaining videos in the Session Window that have not been analyzed.

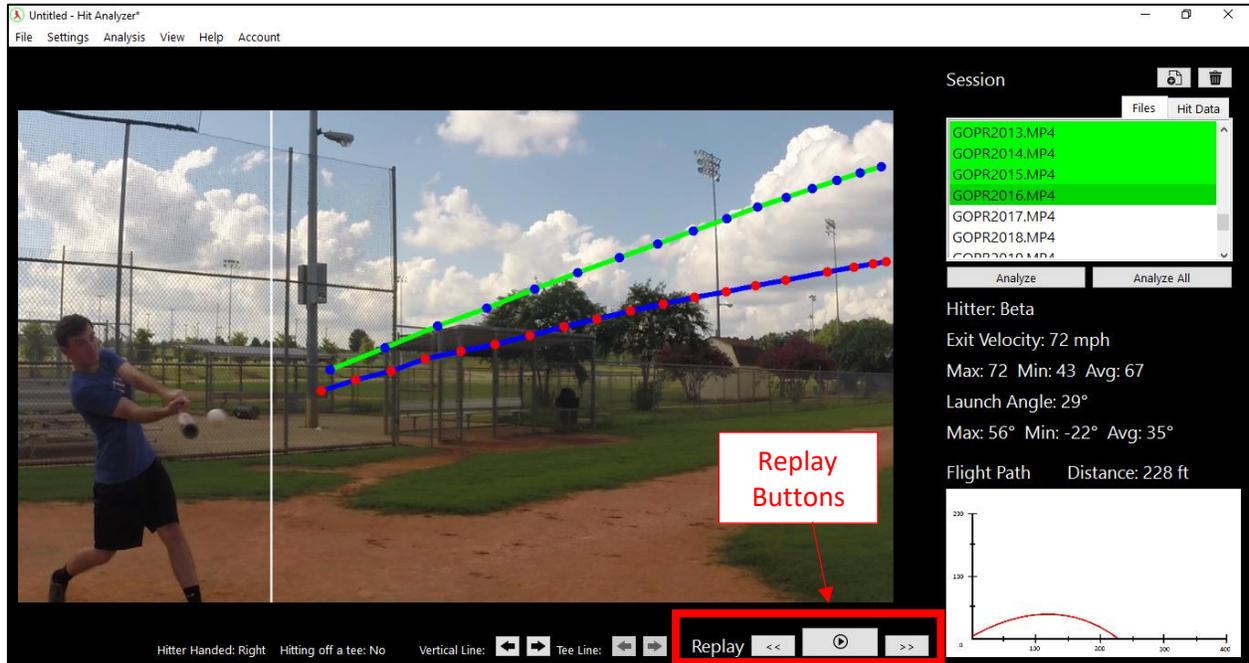
Once a video has been selected for analysis, the program will step through each frame and gather data on that particular hit. Depending on if “Tee Mode” is enabled or disabled, you will see two different colored lines. A green line is the batted ball flight path, while a blue line is a pitched ball’s flight path.

The completion of a successful analysis will display a variety of statistics in the bottom right hand corner of the program.



Post Analysis Video Evaluation:

No matter if the program was able to calculate the characteristics of a hit or not, the coach or athlete has the ability to replay any video. Frame by frame, forwards and backwards. The replay function is located at the bottom of the program.



Questions/Comments/Suggestions:

In the event there are difficulties running the program, or you have questions/comments/suggestions on certain program functionalities or performance, please contact us through our website at www.pasoftware.us. We look forward to your feedback and hope you enjoy this amazing software!