

Rapsodo®

PITCHING 2.0

USER MANUAL

YOUR RAPSODO BASEBALL KIT

WHAT IS IN THE PACKAGE?



DOWNLOAD THE RAPSODO PITCHING APP

THE FREE RAPSODO PITCHING APP MUST BE DOWNLOADED IN ORDER TO USE THE DATA TRACKING MONITOR.

1. From your mobile device, find the 'App Store' icon and click on it.
2. Enter "Rapsodo Pitching Hitting" in the Search function at the bottom left of the screen.
3. The App Store will display the app icon, and feature a "free" button next to it.
4. Click on the "Free" button to download, and confirm by tapping on "Install App".
5. A new icon depicting the app will be displayed on your device's desktop.
6. Once the download is complete, follow the connection steps to sync your app with your device.

IOS REQUIREMENTS

iPad Air 2 or newer

We are always improving coverage of new devices; please refer to our website for updated list of compatible devices.

SETTING UP THE MONITOR AND THE RCE ON THE FIELD

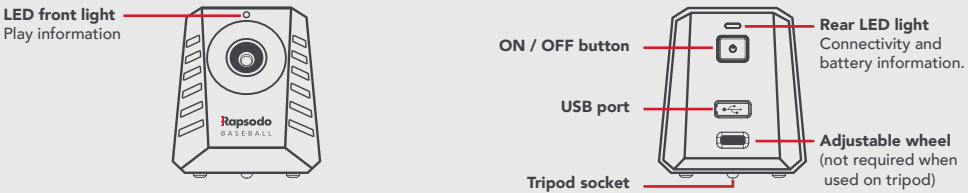
Rapsodo Ground pitching operates in tank: The technology is based on camera and radar. As correct positioning is important to get the quality of results, it is recommended to carefully follow the set up instructions.

SETTING UP THE MONITOR AT FRONT POSITION		
I. INTERNAL TANK SET-UP	II. TANK POSITIONING	III. CALIBRATION
1. Attach monitor to mount plate. 2. Place RCE in housing. 3. Connect USB from monitor to RCE	The shield shall be installed 15'6" from the home plate and the camera opening should face the hitter. The protective cover should be on same axis as the home plate and the pitcher's mound. The protective cover should be placed on an even surface and should not be used on a wet or excessively dusty surfaces. The protective cover shall only be used at designated distance and on a flat surface as described in this user manual. The protective cover designed to reflect off balls away from hitter and catcher. Improper placement of protective cover may cause balls to ricochet back towards to hitter or catcher and may cause injury.	1. Align Monitor angles with help of application. 2. Use azimuth view and tape measure to position tank directly in the middle of the mound and home plate. 3. Use provided calibration ruler 4'11" (1.5 m) to calibrate tank.

YOU'RE READY TO TRACK THE PITCH

GETTING TO KNOW RAPSODO

The Rapsodo monitor features 2 LED displays, one at the front and one at the rear, which provide information during each step of the set up process and in the data tracking mode. The tables hereafter provide an overview of each status, and will be key throughout the "getting started" instructions.



UNDERSTANDING THE MONITOR & LED DISPLAYS

CHARGING THE MONITOR

- Charge the monitor's battery by plugging in the provided USB cable (or any standard USB charger) into the port on the rear monitor panel. The rear LED will become an amber color, confirming that the device is charging.
- Once the battery level is sufficient, the rear LED will turn off.
- **Note for future usages:** if the rear LED light is flashing red, the battery level is low and requires charging.
- Please refer to "Understanding LED messages" section for further details.

TURNING ON THE RAPSODO MONITOR

- To turn the monitor on, press the ON/OFF button (located on its rear side).
- The front LED display will turn RED, which means that the monitor is switched on, but not ready to measure yet.
- The rear LED will also become active (its color depends on the state of the device. Please refer to "Understanding LED messages" section for details).

TURNING OFF YOUR RAPSODO

- When the training session has concluded, just turn the Rapsodo monitor off by simply pressing on the ON/OFF button (located on its rear side).
- It is recommended to store in the bags provided with the product package.

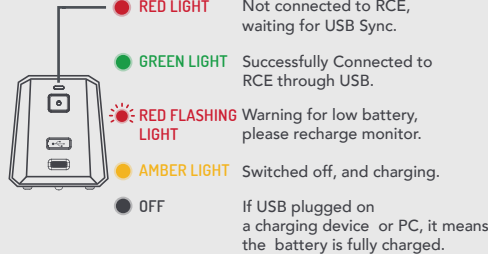
FRONT LED DISPLAY:

The front LED display provides information on the monitor status, and will give the "green light" to hit when the device is ready to measure.

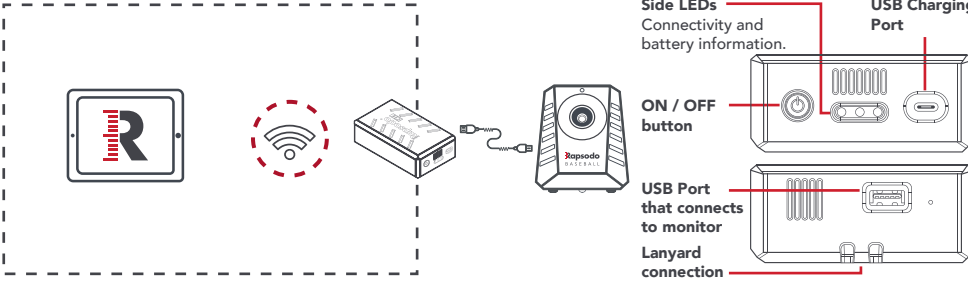


REAR LED DISPLAY:

The rear LED display provides information on connectivity and battery. This display will be especially important when pairing the app with the monitor.



GETTING TO KNOW RAPSODO COMPUTE ENGINE (RCE)



UNDERSTANDING THE RCE & LED DISPLAYS

PURPOSE OF RCE

- Rapsodo Compute Engine works with the Monitor. It communicates with the monitor via USB and analyzes the data captured by the monitor.
- Rapsodo Compute Engine communicates with the PC or iOS device via WiFi. See the PAIR THE RCE AND THE APP section for how you can connect to RCE to your PC or tablet.
- The LEDs on the RCE mimics the monitor. Please see below for further details. You can always rely on monitor's LED for status of the combined system.

CHARGING THE RCE

- Charge the RCE's battery by plugging in the provided USB C Type cable to the port on the side of the Power Button (Type C USB connector). The Power LED will become amber color, confirming that the RCE is charging.
- Once the battery level is sufficient, the Power LED will turn off.
- **Note for future usages:** If the Power LED is flashing red, the battery level is low and requires charging.

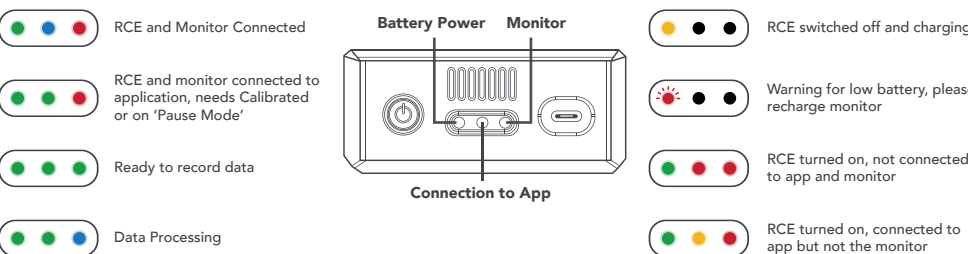
TURNING ON THE RCE

- To turn RCE on, press the power button.
- The Power LED will turn on and RCE will be ready to connect to Monitor.

TURNING OFF THE RCE

- When training session is completed, RCE can be turned off by simply pressing Power Button. It will take a few seconds for RCE to turn off. (After going through a proper shutdown sequence)

SIDE LEDs DISPLAY:



STARTING TO MEASURE PITCH

The monitor and the RCE should be switched on and paired to the app. The front LED display should show a GREEN light on the monitor and all LEDs should be GREEN for the RCE.

As a reminder, if the monitor shows a RED light, it means the device is not connected.

ANYTIME THE MONITOR FRONT LED IS GREEN, IT MEANS THAT IT IS READY FOR MEASUREMENT, AND YOU CAN HIT.

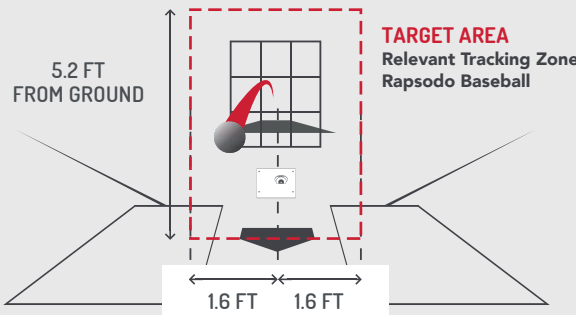
After a hit, the front LED of the monitor turns BLUE to indicate that it is calculating hit data. Once the results are ready, the front LED turns GREEN and results appear automatically on your app dashboard.

NOTE – optimum baseballs condition: The use of synthetic cover baseballs and balls featuring surface blemishes near the seams are not recommended, as they may yield incorrect measurements.

If you have purchased a subscription, you will be able to add players and enable several other features. Please refer to cloud.rapsodo.com for further details.

FRONT PITCHING MODE:

The monitor captures data only if the pitched ball passes through the target zone as shown in the diagram below. If the ball is not passing through the target area, monitor may not measure or measurements may not be optimal.



FEDERAL COMMUNICATION COMMISSION INTERFERENCE STATEMENT

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.

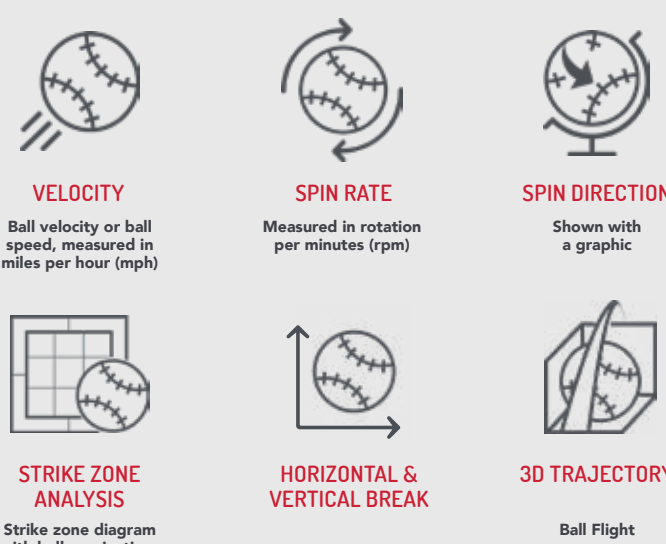
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate 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 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.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

WHAT DATA GETS MEASURED



PAIR THE RCE AND THE APP

To operate the Rapsodo Ground Pitching, the RCE and Monitor have to be connected via USB and RCE must be connected to Pitching App via WiFi.

Once both RCE and Monitor are turned on and connected via USB, the Side RCE LED lights will sequence; Green, Blue, Red, indicating you are ready to connect to the RCE Wifi and application.

Once connected and calibrated, you will be ready to record data.

PAIRING THE RCE WITH WiFi (FOR IOS DEVICES OR PC)

WiFi DIRECT MODE

The WiFi Direct mode does not require an existing WiFi network or router. In this mode, the monitor RCE will appear as a WiFi router and you can attach your tablet to the RCE via WiFi as if it is connecting to a router. This is the **default mode** for the RCE. Even if you want to connect in WiFi network mode in future uses, you need to set up this mode first to configure the RCE to a known network.

1. Connect to the access point named "RapsodoBaseball_XXXX" in WiFi. The XXXX denotes a unique number for your monitor.
 - **On your tablet:** Go to Settings → WiFi. You should see "RapsodoBaseball_XXXX". Connect by tapping it in the list.
2. Open the app. It will attempt to connect to the RCE. Once the connection is established, a green check mark appears on the WiFi icon and the RCE's connection LED and monitor's rear LED will turn green.

Important Note: Only one tablet or PC can be paired to the RCE at a time. If you want to use another device, you must first disconnect the tablet and/or PC, and follow the same procedure to sync the new device.

GENERAL INFORMATION

INTERFERENCE

Rapsodo Baseball is an extremely sensitive and accurate data-tracking monitor. While Rapsodo hardware has been engineered to achieve accuracy within a regular baseball environment; many everyday items like electrical appliances, computers, cell phones, bulbs, ... may produce electrical or optical interference that can generate false readings. You need to be aware of these kind of products in the environment where Rapsodo Baseball is used, as they may cause interferences. One technique to test for interference is to make a measurement in the same direction with no object in motion and see if you get data results. Please also read the "Federal Communication Commission Interference Statement".

USE IN WELL-LIT ENVIRONMENTS

Rapsodo baseball should be used in well lit locations. Performance may vary in certain lightning conditions, particularly in low light conditions, which may result in incorrect measurements.

DO NOT USE RAPSODO BASEBALL IN WET CONDITIONS

Your Rapsodo monitor is not water-resistant. Do NOT use the device under rain, water exposure or wet environments, as the product may get damaged.

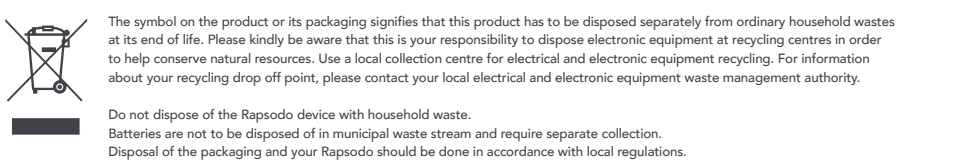
APP UPDATES

Rapsodo will periodically update and improve the features of the Rapsodo Baseball app. It is recommended that users regularly download the latest version to make for the highest monitor performance.

RETURN POLICY AND WARRANTY

Rapsodo provides a (1) one-year limited warranty for manufacturing defects. Under conditions of the warranty agreement, purchasers will be entitled to repair or replacement for defective Rapsodo products. This warranty begins from the date of initial purchase. Rapsodo may also choose to refund the purchase price of the product to the purchaser, at its sole discretion. Warranty detailed information and return policy can be found online at www.rapsodo.com/warranty.

REGULATORY NOTICE: WASTE ELECTRICAL AND ELECTRONIC EQUIPMENT



SUPPORT

We are happy to help. If you have any questions, or need any assistance, please contact us at:

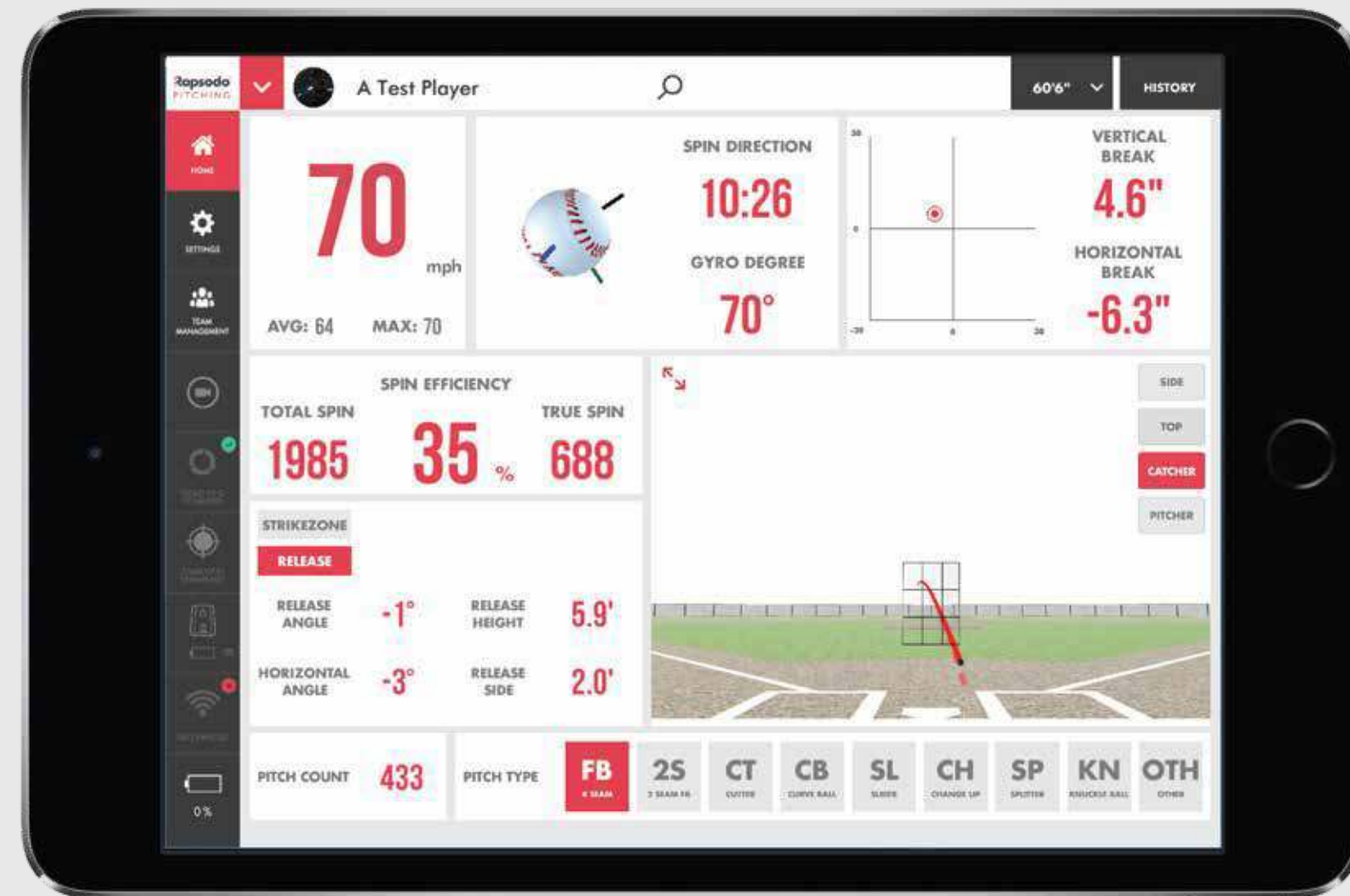
- ✉ support@rapsodo.com
- ☎ Toll Free Number (USA): 844-772-7763 / 2
- 🏢 Rapsodo Inc, 8228 Brentwood Industrial Dr., St. Louis MO 63144

Make sure to visit **Rapsodo.com** for more details and to download the manual about the application screens.

More troubleshooting and assistance can be found on the website: www.rapsodo.com/support

In some versions of the Protective Cover, there may not be a adjustable head for calibration. In these cases, the protective cover is designed with the correct calibration metrics and no adjustment will be necessary as long as you place it on a flat surface and ensure the camera axis is aligned to home plate and pitchers' mound.

Rapsodo® PITCHING 2.0



ANALYZE. CORRECT. PERFECT.



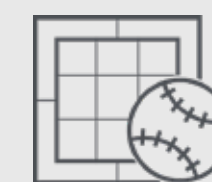
VELOCITY



SPIN RATE



SPIN DIRECTION



STRIKE ZONE
ANALYSIS



HORIZONTAL &
VERTICAL BREAK



3D TRAJECTORY

KNOW YOUR NUMBERS



QUICK START GUIDE

1. DOWNLOAD RAPSODO PITCHING 2.0 APP

Download the latest version of Rapsodo Baseball app to make for the highest monitor performance.



2. CHARGE AND TURN ON THE MONITOR

On the monitor's rear side:

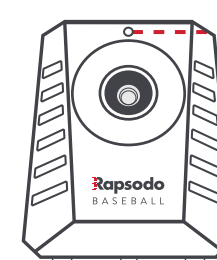
- charge via USB port
- turn on by pressing the Power button

When on:

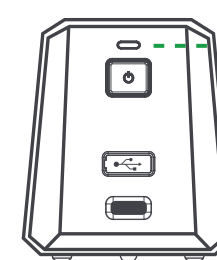
- front LED turns RED, rear LED turns active.
- To turn off Rapsodo Baseball, press the Power button again.

3. UNDERSTANDING LED COLOR CODES

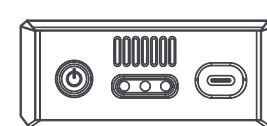
Use the opposite charts below for LED codes and to identify Rapsodo Baseball's various operational modes.



- RED**
Not ready
- GREEN**
Data ready,
monitor ready
- BLUE**
Processing data
(wait for green light
to hit again)

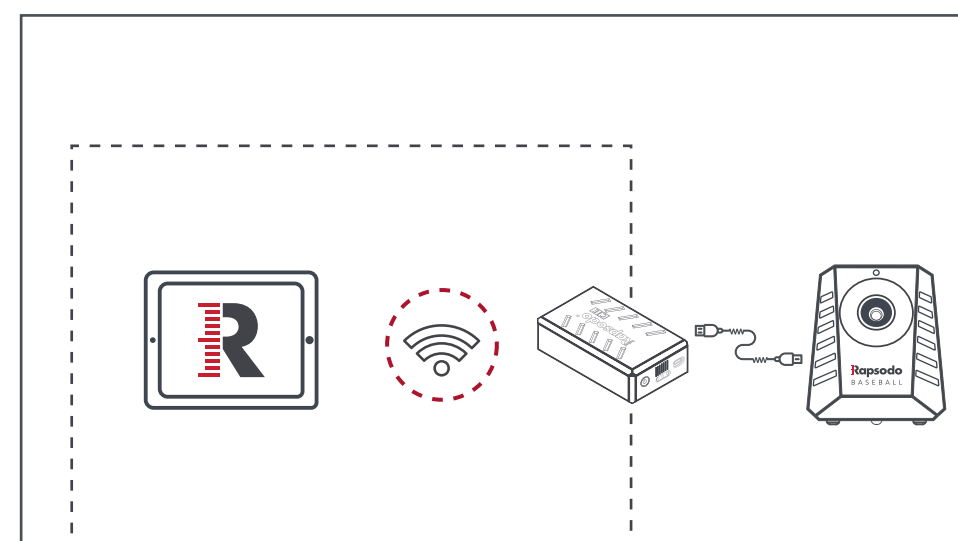


- GREEN**
Successfully
Connected to RCE
through USB
- RED**
Not connected to
RCE, Waiting for
USB Sync
- RED FLASHING**
Low battery
- AMBER**
Charging
(switched off)



- RCE and Monitor Connected
- RCE and monitor connected to
application, needs Calibrated
or on "Pause Mode"
- Ready to record data
- Data Processing
- RCE switched off and charging
- Warning for low battery, please
recharge monitor
- RCE turned on, not connected
to app and monitor
- RCE turned on, connected to
app but not the monitor

4. PAIR THE RCE AND THE APP



PAIRING THE RCE WITH WiFi (FOR IOS DEVICES OR PC)

WiFi DIRECT MODE

- Place monitor and RCE in tank and connect the two via USB.
- Turn on both RCE and Monitor.
- Connect Tablet to RCE WiFi.
- Click wifi icon in Pitching application.
- Calibrate:
 - Monitor Angles
 - Azimuth View
 - Tape Measure
 - Calibration Ruler
 - 15'6"
- Pitch!

REMEMBER: ONLY 1 IPAD CAN BE PAIRED TO THE MONITOR AT A TIME.

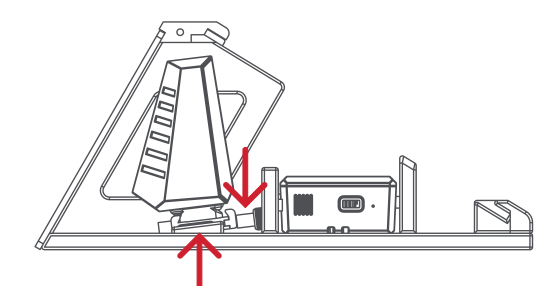
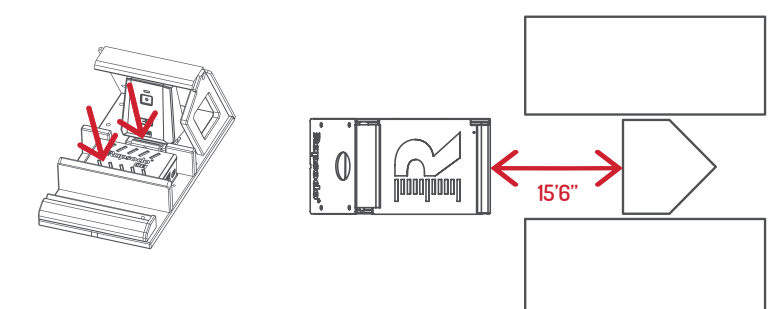
5. SETTING UP TANK

1. ASSEMBLE

The shield shall be installed 15'6" from the front of home plate to back of the tank. The Tank should be facing the pitcher's mound perfectly in line with home plate and the pitcher's mound.

ATTACH THE MONITOR TO MOUNT PLATE

Place the RCE to its housing and connect the USB cable to the monitor. Turn both devices ON.



7. YOU'RE READY TO TRACK THE HITS

Anytime the monitor's front LED is green, it means that it is ready for measurement. Pitch from the regular distance, facing the monitor. After a pitch, the green light also means that data of the ball you just played are available on the App dashboard.

Use in well lit environments. Be aware of electrical items which may cause interferences. Do not use under rain or wet environments.