

WARNING!

READ BEFORE USING

- **COACHES AND PITCHERS MUST EXERCISE CAUTION WHEN TRAINING OR THROWING BREAKING BALL PITCHES. PITCHING EXCESSIVE BREAKING BALLS, ESPECIALLY IF NOT DONE CORRECTLY, CAN RESULT IN INJURY.**
- **BASEBALL PITCHERS UNDER THE AGE OF 14 SHOULD NOT THROW BREAKING BALLS.**
- **WEAR PROTECTIVE HEAD AND CHEST GEAR WHEN CATCHING THE BALL. BEING HIT BY A PITCHED REVFIRE BALL CAN CAUSE SEVERE INJURY.**
- **WHEN PLAYING CATCH WITH THE REVFIRE BALL, DO NOT LOOK AT THE REVFIRE MONITOR UNLESS YOU HAVE THE BALL IN YOUR POSSESSION.**
- **BEFORE THROWING THE REVFIRE BALL, BE CERTAIN THAT THE CATCHER IS LOOKING AT YOU AND IS READY TO CATCH THE BALL.**
- **COACHES SHOULD NOT STAND IN THE PITCHER'S LINE OF FIRE WHEN USING THE REVFIRE MONITOR. COACHES SHOULD STAND OFF TO THE SIDE.**



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. Modifications to the device could void the user's authority to operate the equipment.

FCC ID: UDJ-T1

To use the RevFire:

1. Run the RevFire app on an iPhone or Android with Bluetooth enabled.
2. Throw the RevFire ball. You must throw a pitch with a full windup and release.
3. If the RevFire ball's motion sensors detect an acceleration event characteristic of a full windup, followed by ball flight for 0.3 to 1.2 seconds, followed by ball catch, the RevFire ball will initiate transmission of speed and spin information via Bluetooth Low Energy (BLE) to the iPhone or Android device running the RevFire app which will display the information.

RevFire User Manual

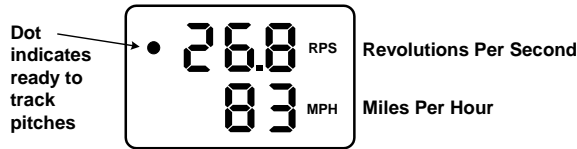
2 MODES OF OPERATION

The RevFire handheld monitor has two modes of operation, **AUTO** and **BUTTON**. Units ship in Auto mode. Auto mode is for use by a catcher. It displays the spin rate and speed for every pitch without requiring button presses. Button mode is preferred by observing coaches and requires the user to hold the ON button down during a pitch. Once the mode is set, the mode will be maintained until the batteries are changed or the user changes the mode as described in the section entitled “TO CHANGE MODE OF OPERATION”.

The appearance of a circular dot as shown below indicates that the monitor is ready to track pitches and display the Revolutions Per Second (RPS) and Miles Per Hour (MPH). Each toss detected by the monitor will result in a beep and the display of RPS and MPH data. A good knuckleball cannot be detected by the RevFire system.

A coach holding the monitor should stand within 40 feet of the **catcher**. The monitor may be set next to or worn by the catcher as well. When the monitor is used by the catcher, Auto mode must be used.

The monitor will turn off automatically if no pitch is detected or button pressed for 2 minutes.



AUTO MODE (For use by catcher)

To monitor pitches, press the ON button. After pressing the ON button there is no need for any further button presses. In Auto mode, both pitcher-to-catcher and catcher-to-pitcher tosses will be monitored. Auto mode is required if the monitor is used by the catcher. In Auto mode the pitch must be caught. If throwing against a tarp or net, use Button mode.

BUTTON MODE (Preferred by coaches)

In Button mode the monitor will display pitch data only for those pitches thrown while the ON button is pressed. The circular dot will appear only while the ON button is pressed. ON must be released and pressed again for the next pitch. Button mode is best for coaches and is required if the pitcher is throwing against a tarp or net. With Button mode, the pitcher's pitch data is not overwritten by the catcher's return toss to the pitcher or by balls dropped by the catcher. Also, the pitcher's pitch count is accurate. The RevFire monitor will revert to Auto mode when the batteries are changed.

TO DISPLAY MAX RPS AND MAX MPH

The monitor keeps track of the greatest spin rate and speed detected. To display these statistics, press the STATS button until the words “MAX RPS” and “MAX MPH” are displayed as shown below. The MAX RPS and MAX MPH did not necessarily occur on the same pitch.



To return to tracking pitches, press the ON button.

TO RESET MAX RPS AND MPH TO ZERO

With MAX RPS or MAX MPH displayed, press and **hold** the STATS button until cleared to zeroes. Both RPS and MPH will be cleared.

TO DISPLAY PITCH COUNT

The RevFire monitor will count the number of ball tosses it detects. To display the toss count, press the STAT button once or twice until the count is displayed as shown in the example below:



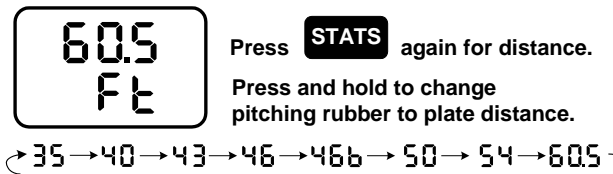
In Auto mode, if the monitor is positioned such that it detects tosses by both the pitcher and the catcher, the actual pitch count would be half the value displayed. In Button mode, the count increases only when a pitch is detected while the ON button is pressed.

TO RESET PITCH COUNT TO ZERO

With the toss count displayed, press and **hold** the STATS button until the count is cleared to zeroes.

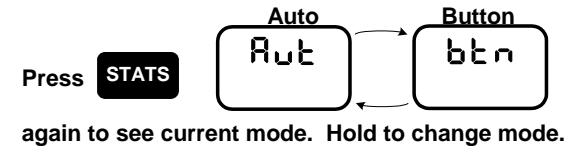
TO CHANGE PITCHING DISTANCE

The distance from the pitching rubber to the pointed tip of home plate must be set in the monitor to get a correct speed reading. To display the current distance press the STAT button until the distance is shown in “Ft”. To change the distance setting, press and **hold** the STAT button until the distance number changes. Release at the proper setting. The monitor can be set to 35, 40, 43, 46, 46b, 50, 54, or 60.5 feet. 35, 40, 43, and 46 are for fastpitch softball. 46b, 50, 54, and 60.5 are for baseball. For best speed accuracy, the catcher should place his/her feet 3 feet behind the point of home plate. Or, if throwing against a tarp or net, place it 2 feet behind the point of home plate.



TO CHANGE MODE OF OPERATION (AUTO vs BUTTON)

Press the STAT button until either “Aut” or “btn” appears. This is the current mode of operation. To change, hold the STAT button. The display will toggle between “Aut” and “btn”. Release at desired mode.



USING MULTIPLE REVFIRE BALLS

The RevFire monitor will track only one ball at a time – the first one thrown after the monitor is turned on. If multiple RevFire balls are being used nearby, you can select the ball you wish to track. **The monitor will lock onto the first RevFire ball thrown after the user presses STAT and then ON and will IGNORE ALL OTHER REVFIRE BALLS.** To change balls simply press STAT, then before the ball of interest is thrown, press ON.

LOW BATTERY INDICATOR

The AA batteries should be replaced with new Alkaline batteries at least once a season or when the low battery indicator is displayed. After changing the batteries, the pitching distance will be 60.5 Ft and the mode will be Auto.

SPIN AND SPEED ACCURACY

The spin rate is accurate within +/- 0.25 RPS regardless of how far or fast the ball is thrown. The speed is based on the ball's flight time and is typically within +/- 2 MPH of a 'peak' detection radar gun if the catcher places his/her feet 3' feet behind home plate and if the correct distance setting is used. The location or position of the monitor does not affect spin or speed accuracy. If the pitch hits the ground before crossing the plate, the speed is not accurate.

THINGS TO REMEMBER

If the RevFire does not appear to be working, review the following:

1. The RevFire monitor tracks only one ball at a time. To switch to a new ball review “USING MULTIPLE REVFIRE BALLS”.
2. For correct speed calculation, the distance setting must be correct and the catcher must place his/her feet 3' behind the plate.
3. Pitches thrown at the ground may not measure accurately.
4. Good knuckleballs cannot be detected with the RevFire.
5. Verify that the mode of operation (Auto vs. Btn) is as expected.
6. The first two tosses of a RevFire ball after it has been idle for 2 or more minutes will not be detected by the monitor.
7. The monitor should be positioned 40 feet or closer to the catcher.
8. There may be radio interference (older cordless phones, wireless baby monitors, wireless video transmitters) in the area. Try using the ball away from homes or offices, or try turning off these devices.
9. A small rattling sound inside RevFire balls is normal.