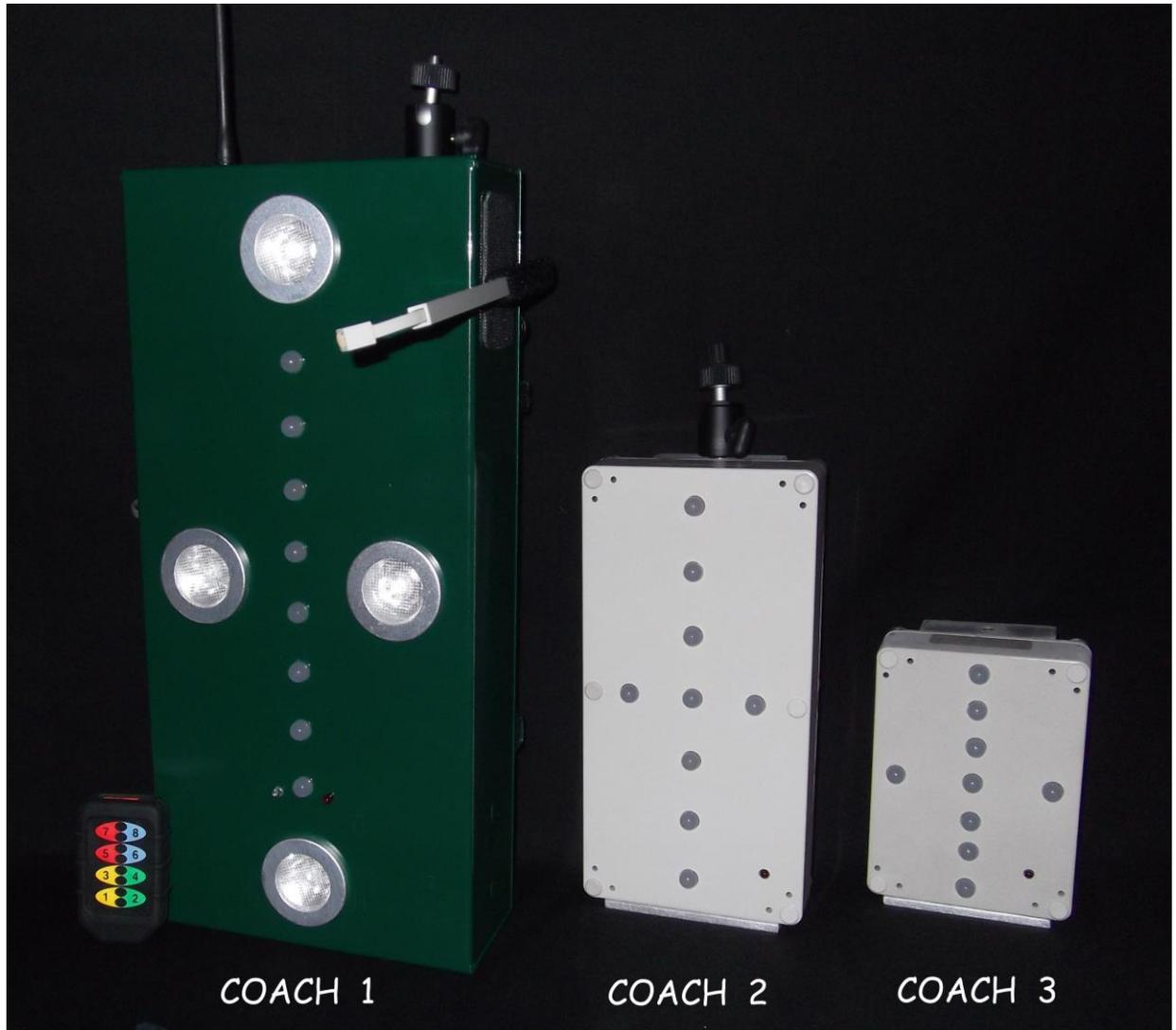


SPLIT STEP COACH 3

Baseball USERS

MANUAL



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INTRODUCTION

What factors make some individuals superior in skills during sporting events? This question has been asked by many coaches/trainers for as long as civilizations have existed.

The Split Step Coach (SSC) does not address all the factors, but it does address the issue of timed movement; movement has been and is a core factor that can help dedicated athletes in any sport be the best they can be. The SSC devices are best used when shadowing (i.e. no moving balls), but T-ball hitting can complement the learning experience.

SSC trains to maximize the starting acceleration with resulting speeds that allow quicker positioning of the individual or athlete, and thus better control of muscle groups involved in executing a [swing](#), a catch, a [kick](#), a [shot](#) or other [complex movements](#). A document on our website (www.Sports-Split-Step.com) called the '[Fundamental Movement](#)' provides an in-depth look behind the SSC line of products: COACH 1 (SSC1), COACH 2 (SSC2), COACH 3 (SSC3). More information can be obtained in several [Newsletters](#) found under Documents at our website (www.sports-split-step.com).

Directing our attention to the game of baseball, one might ask, "What are some of the fundamental movements seen with professional baseball players?"

FIELDING

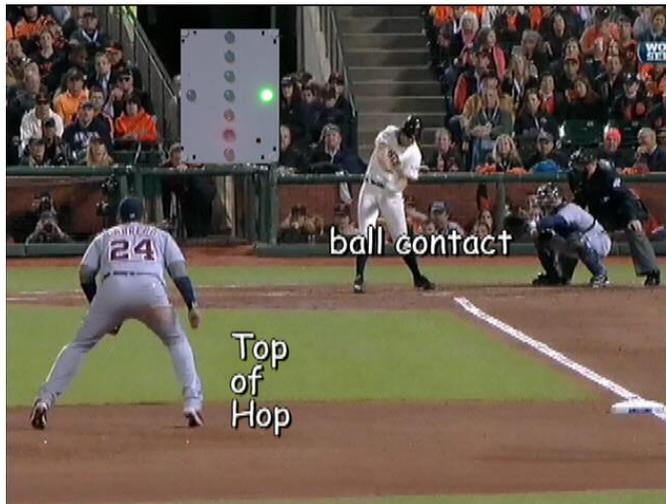
Professional baseball players will perform the same basic movements on each and every ball hit by the batter before the batter strikes the ball. The fielder positions themselves on the field to be in best possible position before executing the following moves.

1. Before the batter hits the baseball, the defensive player will have moved to the most likely spot where the batter will hit the ball.
2. As the pitcher begins their windup the fielders will begin to load their legs for performing a HOP into the air before the batter hits the ball; [Pedroia](#) may have the best timing and hop of all major league players.
3. Ball contact by the batter is an important time and the fielder's goal is to be at the TOP of their HOP when the bat strikes the ball, a point where their head and eyes are perfectly still and non-moving.
4. Reading the direction of the ball coming off the bat is a most important skill to develop and the fielder's goal is to determine this direction as they

begin to descend from the TOP of the HOP to the playing surface. Timing is crucial for insuring the fielder the best possible chance to field the ball.

5. The fielder will always try (with some exceptions) to land on the foot that is away from the incoming ball so that gravity can help them accelerate as quickly as possible in the proper direction for the incoming ball.

6. After the fielder gets near the 'catch' they begin taking shorter steps in preparation for their throw.



[Miguel Cabrera](#) pre-pitch hop (World Series 2012)

BATTING

Professional players have their own rituals and timing, but all will have a loading and unloading to their swing. In this photo Barry Bonds has 1) determined where the pitch is coming, 2) whether to hit the ball, 3) loaded the bat and arms, 4) fully loaded the body and 5) about to start the kinetic chain by initiating what is called the forward 'stride'.



Barry Bonds forward stride

In the past both these athletes developed these skills thru hard work and practice on the field with at least two and maybe three players involved (pitcher, batter and fielder). This is normally possible, but the hours of training to develop the number of executions uses up a lot of human resources and time for players/coaches to get the 10,000 reps needed to develop the muscle memory (sensory-motor pathways). A new teaching device can reduce the number of players involved and allow individuals (or groups of players) to initially train these skills and develop the timing and reactions necessary for training the sensory-motor pathways.

Features & Differences of the Split Step Coach Series

COACH 1

Top of the line tool for indoor and outdoor training

Features include:

1. Large Panel Display,
2. Sixteen Progressive-skill Drills
3. Three levels of difficulty
4. Remote Control
5. Battery operation with charger
6. Advanced Color Feature
7. I-Pad Option
8. Video Option & Mount

COACH 2

Middle of the line tool for indoor and outdoor training

Features include:

1. Ten Progressive-skill Drills
2. Three levels of difficulty
3. Remote Control
4. Battery operation with charger
5. Advanced Color Option
6. Additional Five Drill Option
7. Camera Mount Option

COACH 3

Economical tool for indoor and outdoor training

Features include:

1. Ten Progressive-skill Drills
2. Additional Five Drill Option
3. Three levels of difficulty
4. Manual Pushbutton Control
5. Battery operation with charger
6. Camera Mount Option

COACH 4 Baseball App for mobile devices

Very economical tool for indoor and limited outdoor training

Features include:

1. Ten Progressive-skill Drills
2. Three levels of difficulty
3. Screen Menu Selections of Drills, Difficulty, Random
4. Volume and Brightness control thru mobile device

SSC emulates the movements and timing of athletes in many of the today's sports. Furthermore it provides a platform by which the player can perform what Daniel Coyle in his New York Times bestselling book, '[The Talent Code](#)', describes as 'Deep Training'. Deep Training is where an athlete executes repetitively sport specific movements at controlled speeds, so that execution can be near 95% perfect. In so doing the sensory-motor pathways for remembering are greatly enhanced; skill levels are easily adjusted with the SSC so more/less demands on reaction speed and complexity are available. By keeping the athlete on the verge of being challenged their motivation can be maintained for longer periods, thus aiding both athlete and coach.

Training Advantages

1. Shortens and enhances the training of the pre-pitch and batter's stride.
2. Promotes better field coverage for infielders and outfielders.
3. Can be used with athletes before, during or after the introduction of swings or fielding balls.
4. Movements and technique can be practiced without having the skills required for hitting or catching a real ball.
5. Can be used on the field, in the batting pen, your driveway, or most any open area.
6. Precise measurements can be recorded with a video camera for evaluating an athlete's progress within the 3 different levels of difficulty and 16 different drills.
7. Allows the athlete to train with the same drills at various speeds so that accuracy in execution can be assured before increasing complexity.
8. The SSC provides a group of drills used with training batting skills and another group of drills for training fielder's movements.
9. The group of fielding drills allows the fielders to train both the timing of the pre-pitch move and the timing of the catch/throw.

Fundamental movements for in/out-FIELDERS using SSC3

The following list describes in more detail the relationship between the Split Step Coach (SSC) LEDs and the desired movements for **fielders**.

1. On the front surface of the SSC, there is a vertical column of RED LEDs that will begin to sequence in a downward direction as the pitcher begins their windup and the batter prepares for their back foot loading sequence.



2. When all the RED LEDs turn ON the fielder should be fully loaded and ready to begin their vertical hop and rise into the air.



3. A beep will occur and all of the RED LEDs will turn OFF as the fielder begins to rise into the air; the goal of the fielder is to be at the TOP of their HOP when the bat contacts the ball.



4. Sometime between when the fielder starts to leave the ground and the 'Top of the Hop', various Green Directional LEDs (DLs) will turn ON to indicate one of 8 possible directions in which the fielder must move.



5. The challenge and skill that must be developed is to have the fielder determine the direction of the ball before landing on the ground.
6. In fact, determining the direction early enough so that the fielder can land on the offside foot allowing gravity to help accelerate them in the direction of the ball.

7. The *Green Directional LEDs (DLs)* will remain ON as fielder lands on the ground and the vertical RED LEDs will begin to sequence in an upward direction.



8. As the player runs to the fielding position the RED LEDs continue to ripple upwards; when about $\frac{1}{2}$ of the RED LEDs have turned ON the fielder should be nearing the point of their catch of the imaginary ball.



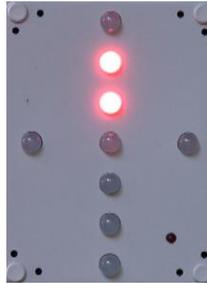
9. Just after all vertical RED LEDs turn ON, the *Green Directional LEDs*, and RED LEDs will be turned OFF and another audible beep will occur as the fielder releases the throw.



Fundamental movements for BATTERS using the SSC3

The following list describes in more detail the relationship between the Split Step Coach (SSC) LEDs and the desired movements for batters.

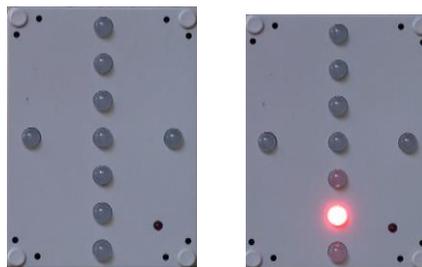
1. On the front surface of the SSC, there is a vertical column of RED LEDs that will begin to sequence in a downward direction as the pitcher begins their windup and the batter prepares for loading the back side foot.



2. When all the vertical RED LEDs turn ON the batter should be ready to begin their stride forward as the pitcher has just completed his windup and is about to release the pitch.



3. After all the LEDs go OFF a beep will occur and the pitcher releases the ball; as the vertical RED LEDs begin moving upward, the batter begins their stride forward.



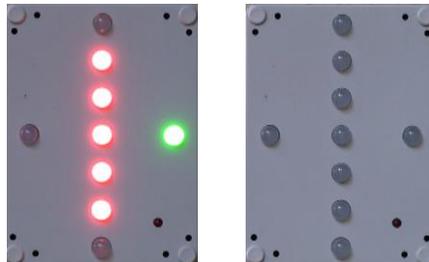
4. As the pitched ball proceeds toward the batter vertical RED LEDs will begin to sequence upward and the DLs will come ON as the batter begin the loading for the swing.



5. Reading the ball direction indicated by the DLs (i.e. pitched ball) is a most important skill to be learned and the batter must be able to read both the type of pitch and strike zone location as the swing continues.
6. In fact, determining the direction early enough so that the can adjust their swing to the pitched ball.



7. The Green Directional LEDs (DLs) and RED LEDs will be turned OFF as a beep occurs (imaginary ball strikes the bat); they will remain OFF until the next sequence begins (i.e. pitcher begins their next windup).



Setting up the SSC3 Hardware

1. Unpack the SSC3 display panel and battery charger.
2. You might want to 'top off' the battery with an overnight charge before teaching a lesson; a fully charged battery lasts about 8 hours of continuous running.
3. Power up the unit by using the ON/OFF switch on the rear of the chassis.
4. The SSC3 will directly to a medium/large sized tripod, hang from a wall bracket, or set on a table and all can be seen thru a batting cage net.
5. The panel's front surface should be aligned perpendicular to the athletes for best viewing of the LEDs; positioning the unit so the sun is not on the front surface would be best.
6. The unit can also be laid flat on the playing field in front of a hitting 'Ball Tee' (within 1 to 2 feet) when practicing with a stationary ball.
7. The default conditions after powering up are
 - a. Table 1 drills (BASIC)
 - b. Low difficulty (Beginner)
 - c. Automatic sequencing of Table 1 drills (i.e. 5 different drills)
 - d. After power-on or whenever a new selection is made via the pushbuttons on the rear, the SSC3 will use the front panel LEDs to indicate the new settings (status reporting).
 - e. The drills will begin after Status Reporting.

Status Reporting occurs immediately after pressing a pushbutton

1. BEGINNER => Bottom Green DL is ON
2. INTERMEDIATE => Bottom & Right Green DLs are ON
3. ADVANCED => Bottom, Right & Top Green DLs are ON
4. DRILL #1 => Top RED LED is ON
5. DRILL #2 => Top 2 RED LEDs are ON
6. DRILL #3 thru DRILL #5 turn on a corresponding number of RED LEDs
7. Left Directional Green LED will be turned ON when in random (OPEN) mode
8. When Table 1 is selected 1 Beep will occur
9. When Table 2 is selected 2 Beeps will occur
10. When Table 3 is selected 3 Beeps will occur

General Operations

1. There are 5 different drills in each of 3 different tables.
 - a. Table 1 drills are very basic drills for batters
 - b. Table 2 drills are more complicated for batters
 - c. Table 3 drills are drills used with both in/out fielders
2. The user can stop the startup automatic sequencing of drills by pressing the Red Button once for $\frac{1}{2}$, which will select Drill #1 (TOP RED LED will flash) while keeping all other parameters the same.
3. Once the Red Push-Button is pressed, Drill #1 will run continuously, until another drill is selected by pressing the RED Button again.
4. The Red Button can continue to be used in this fashion thru DRILL #5 at which time another push would activate the automatic sequencing mode.
5. Drills with repeating sequences (i.e. CLOSED) are used to familiarize the athletes with the various drills, while random sequences (i.e. OPEN) are more challenging and can be selected by holding the Black Button down until the front panel LEDs flash; whenever OPEN drills are selected the LEFT GREEN DL will come on when the status reporting occurs.
6. Levels of difficulty will vary from Beginner to Intermediate to Advanced by making the required execution time shorter for the more skilled athletes.
7. Batting drills (Tables 1 & 2) have very slow executing times for Beginners with faster executing times for Intermediates; Advanced timing are equivalent to professional ball players.
8. Fielding drills (Table 3) have 3 different speeds that vary in speed, but are not as slow as the batting drills for the Beginner & Intermediate; the Advanced speeds are equivalent to professional ball players.

Back Panel Button Control Functions

1. The Red Push-Button located on the rear of the unit performs 2 functions.
 - a. Sequence thru each of the 5 drills with multiple presses ($\frac{1}{2}$ second press for each selection).
 - b. Sequence thru BEG, INT or ADV with multiple presses (1 second press for each selection).
2. The Black Push-Button located on the rear of the unit performs 2 functions.
 - a. Sequence thru 3 different drill tables with multiple presses of the Black pushbutton ($\frac{1}{2}$ second press for each selection).
 - b. Toggle between the CLOSED and OPEN (random) operation (press and hold until front panel LEDs flash, then release).

Quick Guide for the SSC3

Table 1 Drills

(A Sequence of Movements for **Batting**)

1. Vertical moving RED LEDs only (Timing swing for batters or hop for fielders)
2. Vertical moving RED LEDs & LEFT of strike zone (L) Green DL
3. Vertical moving RED LEDs & RIGHT of strike zone (R) Green DL
4. Vertical moving RED LEDs & TOP of strike zone (T) Green DL
5. Vertical moving RED LEDs & BOTTOM of strike zone (B) Green DL

Table 2 Drills

(A Sequence of Movements for **Batting**)

1. Vertical moving RED LEDs & L-R, R, L-R, L, L-R, R of strike zone
Green DLs
2. Vertical moving RED LEDs & B-R, T-R, B-L, T-L, B-R, T-R of strike
zone Green DLs
3. Vertical moving RED LEDs & T, B, R, L, T, B of strike zone Green DLs
4. Vertical moving RED LEDs & B-L, T-R, B-R, T-L, B-L, T-R of strike
zone Green DLs
5. Vertical moving RED LEDs & B-R, T-R, B-L, L, R, L-R of strike zone
Green DLs

Table 3 Drills

(A Sequence of Movements for **Fielding**)

1. Vertical moving RED LEDs & L-R, R, L-R, L, L-R, R of player Green DLs
2. Vertical moving RED LEDs & B-R, T-R, B-L, T-L, B-R, T-R of player
Green DLs
3. Vertical moving RED LEDs & T, B, R, L, T, B of player Green DLs
4. Vertical moving RED LEDs & B-L, T-R, B-R, T-L, B-L, T-R of player
Green DLs
5. Vertical moving RED LEDs & B-R, T-R, B-L, L, R, L-R of player Green
DLs

Limited 3 Year Warranty

Sports Split Step provides product purchasers with a limited 3 year warranty for all products.

Limited 3 Year Warranty Clauses

1. In order to be eligible for Sports Split Step Limited 3 Year Warranty, product registration must be completed by the purchaser. The warranty of the purchased product is activated from the completion date of the product registration at Sports Split Step or from an authorized distributor. Sports Split Step reserves the right to determine the eligibility of the product registration if the registration process is delayed by the purchaser for more than three months after the original purchase date. Satisfactory proof is required to claim the warranty; for example, the invoice from the initial purchase.
2. The Limited 3 Year Warranty is for the original purchaser only. In the event of a sale or product transfer by the original purchaser to a third party, the warranty period shall be as described in the “After the Limited 3 Year Warranty Period”.
3. If the product is operated under a normal operating environment during the warranty period and a malfunction is not caused by external or internal self-assembly, Sports Split Step reserves the right to exchange components, repair, or substitute the appropriate types of products at its discretion.
4. All replaced parts will be brand new parts. These can include but are not limited to: new components, modules, or substitute products for repairing.
5. When the product has exceeded the warranty period, warranty clauses, or is otherwise inapplicable to warranty (please refer to the “After the Limited 3 Year Warranty” section), maintenance service, replacement, shipment, and any other related charges might occur.

Other Exception Clauses

Sports Split Step guarantees its products against defects in materials and workmanship under limited conditions. However, under the following exceptions, Sports Split Step has no liability to provide warranty services for the repair or maintenance without charge.

1. Damages caused by accidental events, damages due to the human force or self-assembly, damages caused by negligence of maintenance or modification behaviors without authorized technical support.
2. Damages resulting from any natural disaster.
3. The appearance of a product due to dust, dirt and age, normal wear of mechanical components and accessories outside of the product itself.
4. Purchasers are responsible to pack the repair product in good condition and ship it to the original distributor/representative. Shipping charges must be paid by the sender.

After the Limited 3 Year Warranty Period

If the received products have exceeded the warranty time, Sports Split Step will still provide the related repair and or maintenance services. However, the owners of the products are responsible for the repair and or maintenance charges, the return shipping charges and any additional costs.

Call Factory (530-272-7345) for any questions or problems you encounter.