

RED-BALL YELLOW-BALL GREEN-BALL

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Bret Hobden, in the publication called '[The 5 Keys to Tennis](#)', defines 5 types of balls that a tennis opponent can hit to you as a player. We have presented some definitions from that document to provide a foundation for a new product development.

"The **DEFENSE** Phase occurs when you have received a very difficult ball. In this phase, for example, you might be under attack and/or find yourself out of position and off balance. Your objective is to make a shot that will allow you enough time to get back into the point. The ability to identify this phase is important for beginning players, as they tend to find themselves in difficult situations more often than intermediate or advanced players".

"The **COUNTERATTACK** Phase occurs when you have received a difficult ball. In this phase, however, you're not strictly on the defensive. You may be under attack, but may not necessarily be out of position or off balance. Your objective is to reply with an aggressive shot. As good anticipation, footwork, and timing are required to mount an effective counterattack, this tactic is most often used by advanced players".

"The **RALLY** Phase occurs when you receive a ball at or near your personal CONTROL RATING, or your Rally Speed. In this phase you are in a neutral exchange until a different phase is initiated either by you or your opponent. Your objective is to maintain the rally, without taking risks, until a different phase occurs. Rallying with good placement that affects your

opponent's mobility and footwork can also produce a change in the phase of play. This is a situation that all players at every level encounter".

"The **CHALLENGE** Phase occurs when you receive an easy ball. In this phase you have the opportunity to challenge your opponent by delivering a difficult ball. Your objective is not necessarily to attempt an outright winner, but rather to pressure your opponent into a defensive situation or a situation in which your opponent will be forced into making a 'best shot'. This tactic can also result in a weak return by your opponent and set you up for an easy putaway. Players at all levels can challenge their opponents".

"The **ATTACK** Phase occurs when you receive a very easy ball. In this phase, you do have the opportunity to hit an outright winner. Your objective is to win the point by hitting a ball that your opponent has almost no chance of returning. Because power and/or placement normally determine the ultimate effectiveness of an attack, advanced players will especially benefit from this phase".

To simplify the 5 groups lets combine the DEFENSE & COUNTERATTACK into one group. In addition let's combine the CHALLENGE & ATTACK into one group making only 3 groups. Much like the USPTA we are going to assign COLORS to each of the group to allow an easy way to reference a phase.

RED will be used for the **DEFENSE**+COUNTERATTACK group, **YELLOW** will be used for the RALLY group and **GREEN** will be used for the **ATTACK** + CHALLENGE group.

To summarize the classifications we might come up with the following:

RED BALL

1. You are out of position
2. You are off balance
3. You are not centered
4. You can only block the ball
5. You are under attack

YELLOW BALL

1. You can rally the shot
2. You are not under attack
3. You have time to hit with placement
4. You can hit like this all day long
5. You are waiting for opportunity

GREEN BALL

1. You receive an easy shot
2. You can hit with pace
3. You can hit with depth
4. You can hit with angle
5. You can pressure your opponent
6. You can move into the court

Ok, so we have a pretty good understanding of the 3 phases of play, but how does one go about learning how to deal with each of these possible situations on court?

One has to wonder if 'shadowing' or moving on the court without balls can provide a progressive way to acquire some very important skills.

Many coaches use a technique called 'shadowing' and this does allow a player to move around to different locations on the court, during which the coach can call out the type of ball from the opponent (i.e. RED, or YELLOW or GREEN). This gives the player some audio feedback and they can then decipher the information and respond accordingly. This kind of practice will build the audio sensory/motor skills and establish what is called the 'myelin' pathways from the audio sensory input (impulses to the brain) to the motor outputs (impulses to the muscles). However, wouldn't it be more realistic if we could provide both audio and visual information to the player?

There are ways in which further training can be acquired using both the audio and visual sensors (ears & eyes) for training motor skills. If we had a way to alert a defensive player as to when the opponent was about to hit the ball, we could allow them to include a split step into the movement as well as moving to a location and simulating a stroke. Of course the coach could snap their fingers (audio) or simulate an opponent's swing by pointing their finger (visual) and that works pretty well for the first 'shadowing' move, but after that it gets pretty tricky for the coach to concentrate on his timing (snapping and pointing fingers) and the player's stroke and response. In other words for the coach to try and give timing signals and observe a player is not as effective as one might like.

Assume for a moment that 1) you had a way to signal the defensive player, something that might correspond to the coach swinging a racket, snapping their fingers or pointing, thus allowing them to prepare and time the start of their split step using their eyes and ears (as in a real tennis match). Then assume 2) you had a way to signal the defensive player as to

which direction the ball is coming. Then assume 3) you had a way to signal the player when to prepare to slow down as they get to the hitting position. And on top of that assume 4) you had a way to signal the defensive player as to when they had to make contact with the imaginary ball. In addition, assume 5) you were able to tie multiple shots together as in a 'pattern of play' so that a recovery move can be added to the process and other sequential shots initiated.

Such a [device](#) exists and it contains the proper timing information as measured from professional players like Nadal, Djokovic, Federer, [Hewitt](#) and others.



Split Step Coach (SSC1)

In addition, the latest version of this device (SSC1) has added what coaches and USPTA feel is another important aspect of tennis and that has to do with the type of BALL your opponent

has just hit ([RED, YELLOW or GREEN](#)). We have now come full circle back to the definitions defined in the introduction and how they integrate into the training progression. Training the advanced athlete to respond to the 'type of ball' pushes the player to yet another skill level.

Training all these skills can be daunting, but is possible with the Split Step Coach:

1. Timing the Split Step
2. Sensing ball direction
3. Sensing the type of ball (RED, YELLOW, GREEN)
4. Deducing what to do with the ball
5. Moving to the imaginary ball
6. Setting up for the shot
7. Timing the hit
8. Recovering and centering for the next shot

To have a Beginner, Intermediate and Advanced mode with progressive drills (patterns of play) suited to those levels and then have the ability to randomly select between ball phases (RED, YELLOW, GREEN) makes for a progressive approach and a most interesting teaching tool.

As with all complicated skills, breaking the movements down into manageable pieces ('chunking', as [Daniel Coyle](#) calls it) is a must so that the coach can maintain control over each segment of learning. The Split Step Coach provides 'Chunking' of each of the 8 categories. Check out the [research](#) that has gone into this line of products.

Adding a ball machine [Timing Light](#) to the coach's tool kit provides a natural progression from 'shadowing' to hitting real live tennis balls. The timing skills developed by using the SSC

can now be transferred directly to the ball machine delivery:
i.e. timing the start of the split step, determining the ball's
direction, landing, moving to the ball, hitting a real ball, and
then recovering.



Playmate



Sports Attack



SAM

To make the transition from the SSC1 to Playmate ball machine, the setups for all the knobs on the Playmates Control Box have been provided for the 'patterns of play' for the 3 different SSC levels (BEG, INT, ADV). These settings can be accessed in the Appendix at the end of the [SSC1 Operators Manual](#).

The various programs for developing our junior players can now take advantage of a much simpler ball machine (called the [Enhanced Tennis Twist](#)) with a lot of the features seen on the Timing Light and Split Step Coach.



Enhanced Tennis Twist (ET²)

