Step 12  Advanced Serves: Really Getting the Initiative

Earlier you were introduced to simple topspin and backspin serves. If you have perfected those serves, it's time to learn more advanced ones. Some of the more popular serves to be explained here are the backhand sidespin serve, the forehand pendulum (also known as the high toss serve), and the backhand fast serve. Also shown are illustrated sequences of other popular serves. These serves are more advanced because they use speed or spin (including sidespin) to increase their effectiveness. Also discussed are the factors that make up a good serve—deception, spin, height, depth, and (for some serves) speed.

WHY ARE GOOD SERVES IMPORTANT?
At this point, you have mastered most aspects of the game, or at least are well on your way to doing so. However, your opponents probably have also, and they're going to do whatever it takes to keep you from using what you've learned. It's pointless having a good loop, for example, if every rally starts off with your opponent attacking and you blocking.

Good serves give you the initiative. Earlier, the four basic serves you learned gave you initiative at that level. However, now you're up against stronger competition (hopefully) and those serves won't help you so much anymore. Your opponent will probably have serves much better than those you learned earlier; the only way to keep up is to develop your own serves. Not only will they let you take the initiative when you serve, but they will also win you many points outright as your opponent struggles to return them without giving you setups.

To improve your serve, you must improve your deception and placement and increase the spin on the ball while still keeping it very low. First I'll talk about deception.

SERVICE DECEPTION
Deception is achieved by using a semicircular motion. For example, you may start with the racket pointing sideways, and swing first down, then sideways, and then up, all as part of the same swing. If done quickly, it is difficult to tell at which part of the swing contact was made. If done on the downward swing, you get chop. If done while swinging sideways, you get sidespin. If done while swinging up, you get topspin. You can also create sidespin/chop and sidespin/topspin by contacting the ball between the downward and sideways motion or between the sideways and upward motion. With practice, you can learn a variety of serves using semicircular motion, getting a different spin each time by contacting the ball at a different part of the swing. Note that although you have changed the spin, you have not changed the service motion!

To increase deception even more, use a deceptive motion after the serve. Exaggerate your follow-through in a direction other than that at contact. For example, for a chop serve, follow through up, and for a topspin serve, follow through down. Of course, if you do it every time, it becomes predictable. Judge how often you can get away with it. You don't want to let your opponent know you're serving topspin by always following through downward after the serve!

By varying where on the racket you contact the ball, you can also vary the spin. When you serve, not all parts of the racket move at the same speed. The tip usually moves faster than the base of the racket. So by contacting the ball at the tip, you can get heavy spin, and with the same motion, you can get very little spin by contacting the ball at the base. A no-spin serve, such as this, is as effective as a spin serve. Your opponent will have a hard time telling the difference between the two.

Of course, the best way to deceive an opponent is to put so much spin on the ball that the degree of spin becomes hard to read.

SPIN
For maximum spin, you must use both forearm and wrist. Failure to use either cuts down on your spin. You should also contact the ball toward the tip of the racket because it moves faster than the rest of the blade in a circular motion, giving more spin.

Don't think of the serve as a "gentle" shot. The serve can be almost a violent shot, since you want the racket to be moving as fast as possible at contact. At first, you will not be able to control the serve at top speed, so do it slower. Eventually you want to
get maximum racket speed at contact, and still just graze the ball while keeping it low.

**HEIGHT**
An often underrated part of the serve is its height. It is important to keep the ball low at all times. This requires a good touch. Always contact the ball as low to the table as possible, within 6 inches of it. That way it won’t bounce as high on the far side. It will also make it easier to serve short.

**DEPTH**
The last component of a good serve is its depth. There are two types of good serves: short or long.

A short serve should be short enough so that, if given the chance, it would bounce at least twice on the opponent’s side of the table. This makes your opponent reach over the table to stroke the ball, making it more difficult to attack. To serve short, make the ball bounce close to the net on your side of the table as softly as possible. If it bounces too close to your endline, it will have to travel too far to the net to stay short. The serve can be made either very short, so that it would bounce several times on the opponent’s side of the table, or so that its second bounce would be near the opponent’s endline. The first makes him reach way over the table, while the second keeps his target (your side of the table) as far away as possible while still making it difficult to attack.

A deep serve should bounce within 6 inches of the endline. This forces the opponent away from the table and puts his or her target (your side of the table) as far away as possible. A deep serve is easier to attack than a short serve, especially with the forehand, so it should usually be served fast into the backhand to force the opponent to return with the backhand. If your opponent keeps stepping around and using his or her forehand, a sudden serve down the line done very fast will catch your opponent out of position, often with an ace. If your opponent is attacking your deep serves effectively, serve short. If you can’t serve short effectively, learn to.

**EXECUTING THE BACKHAND SIDE SPIN SERVE**
Start facing to the left, with your feet and shoulders at about a 45-degree angle to the table (see Figure 12.1a). Hold the racket loosely in front of you. Toss the ball up between 6 inches and 2 feet. Backswing about 1-1/2 feet behind the ball, above and to the left of it. During the backswing, open the racket and cock your wrist back, so the racket points backward and slightly up. The racket should be tilted back at about 45 degrees to the floor (see Figure 12.1b).

Now swing forward using your forearm, as if you were going to do a chop serve. Contact the back bottom side of the ball slightly to the right when it drops to just above table level (see Figure 12.1c). This will give sidespin chop. At contact, snap your wrist and just graze the ball. Your elbow should snap upward, pulling the racket up (see Figure 12.1d). For deception, use a semicircular motion, going first down, then up.

To get sidespin topspin, delay contact until the racket is moving upward along the semicircular motion, and then graze the back of the ball, slightly to the right, with the racket going forward and up. To get pure sidespin, contact the back of the ball slightly to the right between the topspin and chop serve contact points.

By using this semicircular forward swing, you can now serve three serves (and all variations in between) with the same motion. The only difference is when contact is made, and if you learn to do the service motion very quickly, it will be difficult for your opponent to tell when it was done. So practice doing it faster and faster, whipping the racket down and then up so fast there’s no way the opponent will see contact! And, of course, by moving your forearm faster and snapping your wrist more, you’ll get more and more spin.
**Figure 12.1 Keys to Success: Backhand Sidespin Serve**

### Preparation Phase

1. Stand in backhand corner __
2. Face left (feet and shoulders at about a 45-degree angle to the table) __
3. Ball in palm ___
4. Racket held slightly behind ball ___
5. Racket open ___
6. Relax arm ___

### Execution Phase

**Backswing**

1. Bring racket to left side, behind future contact point __
2. Toss ball 6 inches to 2 feet high ___
3. Cock wrist back ___

**Forward Swing**

1. Pull forward with right shoulder ___
2. Accelerate racket with elbow ___
3. Racket goes through semi-circular motion ___
4. Contact
   a. Back bottom of ball slightly to the right during downward part of swing for sidespin/backspin ___
   b. Back of ball slightly to the right during bottom part of swing for pure sidespin ___
   c. Back of ball slightly to the right during upward part of swing for sidespin/topspin ___
5. Snap wrist at contact ___
6. Contact ball just above table height ___
7. Graze ball near tip of racket ___
EXECUTING THE FOREHAND PENDULUM SERVE

This is probably the most popular serve at the higher levels. At first, you will do it with a relatively low toss, perhaps 1 or 2 feet high. After you have learned it that way, you should learn to do it with a high toss, tossing the ball up to 10 feet in the air.

For this serve, you'll have to change your grip. Rotate the top of the blade away from you about 30 degrees. Hold the racket between your thumb and index finger. Slide your index finger, which usually lies along the bottom of the blade's surface, more onto the surface of the blade. Your index finger should make about a 45-degree angle to the bottom of the blade (see Figure 12.2). (Some point their index finger almost straight down.) Put your thumb onto the blade, with the soft part of the thumb partly resting on the sponge opposite your index finger. Hold the racket loosely. By holding the racket this way, you can rotate it with your wrist at least 180 degrees. Practice snapping the wrist a few times, accelerating as fast as you can.

Now stand to the left of your backhand corner, facing to the right so that your body is perpendicular to the endline. Hold the racket in front of you with the blade roughly parallel to the floor (see Figure 12.3a).

Now bring the racket back and away from the body with your elbow. Your arm should straighten somewhat, pointing mostly back. The racket should still be parallel to the floor and pointing almost straight back. Cock your wrist back during the backswing; this will point the racket a little to the side. For extra deception, hide the racket with your body until just before the forward swing (see Figure 12.3b).

Toss the ball straight up about 1 or 2 feet. Keep the ball within a foot of your body and just behind the endline.

During the forward swing, the playing elbow should stay almost motionless. Moving it forward will actually reduce the amount of spin produced by reducing elbow snap. Racket speed should come mostly from rotating the arm around the elbow and from the wrist. Bring the racket forward and toward your body as rapidly as possible in a semicircular motion. Graze the back bottom left side of the ball, snapping your wrist at contact (see Figure 12.3c). Elbow should still be high, racket open. This will give a sidespin/chop serve.
After contact, follow through up with a semi-circular motion, with the racket ending up almost against the stomach (see Figure 12.3d).

To get sidespin/topspin, contact the ball later in the swing. As the racket reaches the bottom of the swing, bring it up and in toward your body. Graze the left back side of the ball in an upward and sideways motion. By contacting the left back of the ball at the bottom of the swing with the racket going sideways, you'll get a pure sidespin.

Again, as with the backhand serve, the speed of the racket is important: The faster it’s moving, the more spin and deception you’ll get. For even more deception, follow through down or off to the side at the end of the stroke, keeping the upward part of the semicircular motion to a minimum.

Figure 12.3 Keys to Success:
Forehand Pendulum Serve

Preparation Phase

1. Stand in backhand corner
2. Face mostly to the right
3. Ball in palm
4. Adjust grip, wrist swings free
5. Racket held just behind ball
6. Racket and ball low to table
7. Racket parallel to floor
8. Relax arm

Execution Phase

Backswing

1. Rotate body backward
2. Bring racket back and away from body with elbow
3. Hide racket with body
4. Toss ball 1 or 2 feet high
5. Cock wrist back
**Forward Swing**

1. Rotate upper body forward __
2. Accelerate arm forward ____
3. Racket goes through semi-circular motion ____
4. Racket approaches ball from far side ____
5. Contact
   a. Back bottom of ball slightly to the left during downward part of swing for sidespin/backspin __
   b. Back of ball slightly to the left during bottom part of swing for pure sidespin ____
   c. Back of ball slightly to the left during upward part of swing for sidespin/topspin ______
6. Snap wrist at contact ______
7. Contact ball low to table ______
8. Contact near body ______
9. Graze ball near tip of racket ______

**Follow-Through Phase**

1. Pull racket up vigorously ____
2. Follow through down or to the side for extra deception _____
3. Return to ready position _____

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**EXECUTING THE HIGH TOSS SERVE**

One of the most popular serves at the higher levels is the high toss serve. Before attempting it, you should first learn the forehand pendulum serve—the high toss serve is merely an advanced version of this. A high toss can also be used with other serves, but the pendulum serve seems most effective with this toss.

For this serve, the ball is tossed 5 to 10 feet (and sometimes even more!) into the air. When the ball comes down, it's falling faster than with a lower toss. This will convert to extra spin on contacting your racket, if you graze the ball. Also, since the ball is traveling so much faster than normal, it's harder for the opponent to see contact, making the serve more deceptive. This also makes the serve far more
difficult to master; you’re trying to graze a rapidly moving object. The best way to practice any serve is to get a bucket of balls and serve, pick them up, and serve again.

**EXECUTING THE BACKHAND FAST SERVE**

You learned to do a backhand topspin serve earlier. But just getting it on the table isn’t enough. The serves taught so far are all spin serves. Now you’re going to learn a fast serve. The key to a fast serve is, of course, its speed. You don’t want to give your opponent time to react! The ball should bounce on the very end of the table, as close to the endline as possible.

Start as if you were doing the backhand topspin serve, which you learned in Step 4. Swing straight into the ball as if you were doing a backhand drive. The ball should hit your side of the table close to your endline to give it as much time to drop on the other side as possible. Contact the ball within an inch or so of the table surface.

At contact, you can either do a slight grazing motion to give it some topspin or serve it “flat.” A flat serve has no spin and is actually more effective than a spin serve when done very fast. To make the flat serve even flatter, put a slight amount of backspin on it to compensate for the ball’s rolling motion when it hits the table. That way it will be truly spinless and hard to handle.

Fast serves are usually done to the backhand, like deep spin serves. However, if your opponent is stepping around his backhand too soon, you can ace him with a fast serve to his forehand.

**OTHERSERVES**

Service is sometimes called the “trick” part of table tennis. You should master a few established serves, but you should also invent your own. Watch other players for ideas. You might try learning a forehand serve with the racket tip up. It can be done with the racket going either left to right (more common; see Figure 12.4, a and b) or right to left.

You might try using different grips, such as the Seemiller grip, which enables you to do a “windshield wiper” serve, with racket tip up and going in either direction (see Figure 12.5, a and b).
There are an incredible number of variations. Just remember to use circular motion of some sort on all spin serves. You can also experiment with different types of fast, deep serves (different placements, spin, etc.). Also experiment with different contact points on the racket, mixing up no-spin and spin. A great variation of all the spin serves explained so far is to simply contact the ball near the handle; this will make a no-spin serve look like it has spin.

Try to develop two types of serves: those that stop your opponent's attack and set you up for your own, and those that force an opponent into an immediate error. Generally, favor the first type, and use the second as a surprise. If you overuse the second type, a good player will adjust and you won't be able to use that serve anymore.

Detecting Service Errors

The three biggest problems beginners face when trying advanced serves is getting enough spin, keeping the ball low, and stopping their short serves from going long. Look over the error and correction section and make sure you aren't making any of these common mistakes.

**ERROR**

1. You're not getting enough spin.
2. Your opponent attacks your serve.
3. Your arm doesn't accelerate.
4. Your short serves are going long.

**CORRECTION**

1. Make sure you're grazing the ball. Accelerate at contact and snap your wrist.
2. Make sure the serve is low to the net. A short serve (especially with backspin) is usually harder to attack than a deep serve.
3. Relax your arm. Make sure your backswing is long enough to generate racket velocity.
4. Make the first bounce close to the net and low. Turn racket speed into spin, not forward motion, by grazing the ball lightly.

Advanced Service Drills

For the following drills, you'll need either a bucket of balls or a partner to return your serve. Unless you are instructed otherwise, catch the return and serve again.
1. Spin Serves

Do each variation of your four favorite spin serves. Go for as much spin as possible, even if it means you’re inconsistent at first.

Success Goal = 20 consecutive each of four favorite spin serves

Your Score =

(#) ______ consecutive spin serve #1
(#) ______ consecutive spin serve #2
(#) ______ consecutive spin serve #3
(#) ______ consecutive spin serve #4

2. Fast Serves

Serve your fast backhand serve (or any other fast serve variation that you prefer). Serve it as fast as possible, even if it means you’re inconsistent at first. The purpose of this serve is to catch your opponent off guard, and you can’t do that unless the serve is very fast.

Success Goal = 15 consecutive fast serves

Your Score = (#) ______ consecutive fast serves

3. Short Serves

Serve short with spin, first with backspin, then with sidespin. You may have to take off some of the spin to make sure the ball stays short, but not too much, and eventually you’ll be able to serve with full spin and still keep it short. The advantage to serving short is that it keeps your opponent from attacking effectively (especially loopers) while usually setting you up for an attack—especially a loop attack. Most players return serves deep, setting up your loop, and many players build their games around this.

Success Goal = 10 consecutive short backspin serves, 10 consecutive short sidespin serves

Your Score =

(#) ______ consecutive short backspin serves
(#) ______ consecutive short sidespin serves
4. High Toss Practice

Toss the ball up about 6 feet over your head. Without actually trying to catch the ball, try to make the ball hit your hand on the way down (don’t actually serve at this point). When you have mastered this, you can go on to practicing high toss serves.

**Success Goal** = 5 consecutive balls hit your hand

**Your Score** = (#) ____ consecutive balls hit hand

5. Accuracy Game

Play a game similar to the accuracy game taught in Step 4. Put four targets (such as a lid to a jar) on the opponent’s side of the table, one near each of the two corners, one in the middle backhand area, one in the middle forehand area. Serve fast topspin twice consecutively, aiming for the corner targets, then serve two sidespin serves consecutively, aiming for the two closer targets. Do this in a circuit. See who can hit the most targets in the circuit in a given amount of repetitions. Games are to 11 points.

**Success Goal** = Hit more targets than anyone else at least once

**Your Score** = (#) ____ times hit most targets

6. Serve Variations

Play regular games to 21 points with two variations. Each server chooses at least five different serves to use throughout the game. Each time the ball is served, the player must use a serve that is different from the last serve. If the receiver misses the serve outright, the server gets two points.

**Success Goal** = Use 5 different serves and try to win at least 1 game

**Your Score** =

(#) ____ serves used

(#) ____ games won

7. Serve and Attack Game

Play games where you practice serve and attack. Spot your partner 5 points. You serve every time, mixing up the serves. Your partner should receive passively, either by pushing or driving relatively slowly. You attack the return, and play out the point. Games are to 21 points. This drill allows the server to practice attacking, while the receiver learns to handle the server’s attack. The 5-point spot is to make up for the server’s advantage.
Success Goal = Win at least half the games played

Your Score = (#) ___ games won, (#) ___ games lost

8. Receive Attack Game

Play games where you practice attacking the serve. Your partner serves every time, and you attack deep serves with a loop while flipping short serves, backhand or forehand. Your partner spots you 5 points; games are to 21 points.

Success Goal = Win at least half the games played

Your Score = (#) ___ games won, (#) ___ games lost

9. Serve and Smash Game

Play a game where the server must always serve and smash, ending the point on the first shot after the serve. The receiver can return the serve with any kind of shot. The receiver is trying to keep the server from smashing and scoring. Whenever the server fails to make a point-winning smash on the first shot, the receiver becomes the server. There’s one catch—players can only score points when they’re serving! Games are to 11 points.

Success Goal = Win at least half the games played

Your Score = (#) ___ games won, (#) ___ games lost

Advanced Serves

Keys to Success Checklists

To spin the ball well when serving, you must remember several cues: loosen the arm, accelerate the racket into the ball, snap the wrist, and graze the ball. Ask your coach, instructor, or practice partner to watch you and verify that you are performing the advanced serves properly. Are your serves legal? Can you do both topspin and backspin with the same motion?

Have your evaluator use the Keys to Success checklists (see Figures 12.1 and 12.3), and also listen to the contact—a good grazing contact is almost soundless. Keep in mind that most of the sound comes from the ball sinking through the sponge and hitting the wood. Finally, make sure you can do all the variations of spins. Many players think they can serve topspin, backspin, or sidespin, but in reality all three turn out to be nearly the same.