Rotations, Specialization, Positions, Switching and Stacking

Introduction
In this section, we will cover some of the basic principles that are useful for new players to understand how to position themselves at the beginning of rallies during a volleyball match.

To start, take a quick look at the court shown on the right. That will give you a frame of reference for a lot of the diagrams that follow.
Service Rotation

Most people who have played any volleyball have been introduced to the idea of service rotation. There are six positions on the court (3 front row and 3 back row) and one of the positions is the designated server. Players rotate through each of these positions, serving when they rotate to the designated position.

Here you can see the court split into 6 equal parts - 3 front row players and 3 back row players. Position 1 is the server’s position. When you rotate to that spot, it’s your turn to serve. (Note: you can actually serve from anywhere behind the endline. You don’t have to serve from that region of the court).

Players rotate “clockwise” through each of these positions. Another way to remember it is the player in 1 serves first, the player in 2 serves next, the player in 3 serves third, and so on.

The order of rotation is set at the beginning of the game and maintained throughout the game (excepting substitutions). You rotate after you win a point off of the opposing team’s serve.

You can use this system to describe where you are in the service rotation. For instance, if you started the game as the server, you would be starting in position 1. The next time your team wins the serve, you rotate and you would now be in position 6 of the service rotation. You might not PLAY in this position during a point (as you’ll see later). You might not even STAND in this physical location during the serve (as you’ll also see later), but this is your position in the service rotation.
Player Positions, Part I

The numbering system used to describe where you are in the service rotation can also be used to describe where you are playing on the court during the play and not just during the serve.

So if you play the front row, middle position, you would play the “3”. So if a person described herself as a “4”, you could tell where she usually plays by matching it up to the position on the court. This method is less common for describing player positions, but is very commonly used to reference areas of the court (see below).

Another way to describe a player’s position focuses on the actual physical position where the player is playing (left front, middle front, right front, left back, middle back, left back). Note the orientation assumes you are facing the net.

These descriptions are most commonly used when you want to target a region of the opponent’s court. Reminder! These systems assume a frame of reference where you are facing the net. So as you face the net, position “1” on your side is right back. If you want to serve to the opponent’s position “1”, you have to serve the area your opponents would consider right back (as they face the net).
Player Positions, Part II

So you can describe where a player is in the service rotation using the numbering system described. You can use the same numbering system to describe where the player plays during the point or you can use a physical description of the player’s location to describe where the player plays during the point.

Yet another way of describing where a player plays during the point is to describe the player’s primary responsibilities. The name is by no means a complete job description!

Setter
This player distributes the ball to various hitters, trying to set up high quality attacks. There is usually one setter on the court although some systems use two setters. We look for many different qualities in potential setters. Many people focus on a player’s “hands” when thinking about good setters. That is, how pretty does the set look? Does it come out of the player’s hands with no spin? While this is a factor, we look for at least three other characteristics in a setter. Does the player have good set placement (the ability to put the ball in the right place at the right height at the right tempo)? Does the player have enough speed or anticipation to get to many balls that are passed imperfectly? Finally, does the player have the ability to lead the team and get them to give her a little extra effort on the court?

Outside hitter (also called left side)
This player is usually responsible for a majority of the hitting from the outside (left front) position. Often, this player is also one of the primary passers in serve receive. There are usually two outside hitters on the court. Leaping ability and power are two commonly considered characteristics for the outside hitter, but the outside hitter actually needs to have a balanced set of skills. She needs to be able to pass really well. She needs to be able to play quality defense. She needs to be able to score (as opposed to just hit hard).

Middle blocker (sometimes called middle hitter)
This position is primarily responsible for blocking the opposing team’s middle hitter and helping to block against the opposing team’s left and hitters. At more advanced levels of play, the middle is also expected to provide a source of high percentage offense. There are usually two middle blockers. Height is always useful for a middle blocker, but she also needs to have a reasonable jump and good timing. She needs speed to cover the net from sideline to sideline, agility in order to maneuver around the court efficiently and a good sense of spatial relations so she can locate the ball and teammates while on the move.
Player Positions, Part II (continued)

Opposite (also called right side)
The opposite usually starts opposite the setter in the service rotation (hence the name). This position has different expectations based on the level of play, but typically, the opposite hits from right front, serves as the primary blocker against the opposing team’s outside hitter, serves as one of the primary passers and acts as the backup setter if the setter makes the first defensive contact on the ball. There is usually one opposite on the court (if there aren’t two setters). At beginning levels, the opposite is usually someone who has one particularly good quality that you want to get onto the court. For instance, she might be a really good blocker or the next best setter. Another common candidate for the beginning opposite is someone who has the smarts and attitude to handle playing on the right side (which is often more difficult and disorienting for the novice, right-handed player). A final useful consideration is whether the hitter is left-handed or not; left-handed hitters usually have an easier time hitting from the right side of the court. At upper levels, the role of opposite assumes more importance. She is expected to be the best all-around player as she is expected to pass out of as many rotations as possible, shut down the other team’s primary outside hitter with her blocking, and terminate points with great efficiency at the net and from the back row. At intermediate levels, the opposite is usually somewhere in between: she is usually one of the top all-around players, so you really want her playing, but there may be other players who are better at the outside hitter and middle blocker positions.

Libero
A specialized defensive player who substitutes for another player in the back row. The libero needs to be able to pass really well and play outstanding defense. She also needs to play the role of leader of the defensive effort. Speed, reaction time and the ability to read the hitter are useful qualities in addition to the desire to get every ball. There are several limitations on this player. She may substitute freely for any back row player, but if she comes out, she must wait one rally before returning to the game. The libero may not attack the ball above the height of the net nor may she serve, block or attempt to block. If the libero overhand sets from in front of the 10 foot line, the hitter may not complete an attack hit on that ball above the height of the net.

Defensive specialist (also called a DS).
A defensive player that substitutes for other players in the back row. Like the libero, you are looking for passing and defense from the DS and you look for the same qualities in a DS as you do in a libero. The major difference is a DS substitutes in for a specific player and can then only switch with that player, while the libero can come on and off the court substituting for multiple players. The DS may serve, attack the ball above the height of the net from behind the 10-foot line and set, but, as a back row sub, may not block. Since the DS may serve, it is a particularly effective substitution if the DS has a really great serve.
Specialization

As described in the last section, players have specific roles on the court. Generally, you try to have individuals specialize in one of these positions. This enables people to focus on developing particular skills and enables the team to take advantage of each individual’s strengths. Following this principle, most teams have specific players (setter, middle, opposite, etc.) block and play defense in specific positions on the court (left front, middle back, etc.). There are some practical reasons (described below), but it can also help people progress faster by letting them focus on learning one position at a time.

**The setter plays position 2 (right front) when she is front row and position 1 (right back) when she is back row.** Why the right side? Most teams run their offense with the setter positioned in the front row, about one-third of the way along the net from the right antenna. From this position, she is able to set two hitters (the outside and the middle) a ball that is traveling right to left. The right to left ball is easier to hit for the right-handed hitter (and most hitters are right-handed) because the hitter swings before the ball has a chance to travel across her body, losing altitude as it does so. So the ball coming from the right is easier to track, time and reach. By having the setter play on the right side, it minimizes the time and distance required to transition between her setting location and her defensive position.

**The outside hitter plays position 4 (left front) when she is front row.** Left front is the default set for the setter, particularly if the play breaks down. This is the highest, furthest set, so it gives your team the most time to recover from a bad contact, adjust and still make an effective attack. As a result, you typically want your best, most consistent hitters on the left side. Another benefit is hitting from the left front gives the hitter a long dimension of the court (the diagonal) to work with. **In the back row, the outside hitter typically plays either position 5 (left back) or position 6 (middle back).**

**The middle blocker plays position 3 (middle front) when she is front row.** This way she can most easily participate in blocking hitters on either the right or the left. **In the back row, the middle blocker typically plays either position 6 (middle back) or position 5 (left back).**

**The opposite plays position 2 (right front) when she is front row and position 1 (right back) when she is back row.** This way, she is matched up against the other team’s outside hitter (who is hitting from the other team’s left front) and she’s in the best position to serve as the backup setter.

**The libero and the DS play every back row position.** They usually start with position 6 and substitute for the middle blocker.
Switching, Part I

Players have to rotate through all 6 service positions. At the same time, you want the players to play as much as possible in their position of specialization. The solution is to have players switch places on the court as early as conveniently possible during the course of a play.

There are some basic rules governing this switching:

**Before the serve, you must be in the correct service rotation.**
This means that you must be in the correct relative position to your teammates, although your absolute position does not have to be fixed. This is covered in more detail in the next section.

**You may only switch positions once the ball has been contacted by the server.**
If you leave your spot too early, your team will be called out of rotation and the other team will automatically win a point.

**You almost never switch between front row and back row.**
There’s no official rule saying you can’t switch front row to back row and vice versa, but a player who is in the back row (position 4, 5 or 6 in the serve receive rotation) may not block and may not hit the ball above the height of the net from the area in front of the 10-foot line. So this kind of switch would put your team at a pretty big disadvantage.

**Switch as soon as you can, but only when you have enough time.**
Not everyone has to switch at the same time, or as soon as the server contacts the ball. In some situations, switching too soon will put you on the move while the other team is sending the ball back to you. That can create a lot of confusion for your side. It is common to switch right away if you are serving, but to wait for one exchange (ie your team receives the ball and sends it back over the net) before switching if you are in serve reception. Teams will decide before the serve if they are going to “stay for one” and then switch or just stay in position for the whole rally.
Switching, Part II

Before you switch, you have to be in the correct serve receive rotation. This means you have to be in the correct relative position relative to your teammates. What does this mean exactly?

Let’s go back to the basic serve receive rotation diagram. In a given service rotation, one player is in each of the 6 positions shown in the picture. Remember, these positions just reflect an abstracted ideal: you have 3 players in the front row and 3 players in the back row. In actual play, players won’t be positioned in this simple way.

In order to preserve the same relative position of the serve receive rotation, each player has two axes of relative position to worry about: within her row and between rows. Where is she in relation to players in the same row? Where is she in relation to the player who is her counterpart in the other row?

Let’s take some examples:

Say you’re in position 4 of the service rotation. You are in the left position of the front row. Looking at the same row, you see you must always be to the left of the player who is in position 3 of the service rotation. Looking at the back row, you see you must always be closer to the net than the player who is in position 5 of the service rotation. These are the ONLY two players you have to worry about! Furthermore, you can be ANYWHERE on the court as long as you are to the left of the player in position 3 of the service rotation and closer to the net than the player in position 5 of the service rotation. You can be further away from the net than the player in position 6. You can be on the right of the player in position 1.

Say you’re in position 6 of the service rotation. You are in the middle position of the back row. Looking at the same row, you see you have to be between the two players in the back row. Looking at the front row, you see you must be further from the net than the player who is in position 3 of the service rotation. These are the only players you have to worry about! And you can be anywhere on the court as long as you are between the other two back row players and further from the net than the player in position 3 of the service rotation.
Switching, Part III

So given the rules described previously and the diagram to the right as a reference, you should be able to see how the first row of diagrams all represent legal formations prior to the serve while the bottom row of diagrams all represent a team that is out of rotation.
Stacking

Since you know you want to switch your players into their regular spot on the court, teams often set up before the serve in a stacked formation. That is, they pick one player to anchor the formation and then arrange other players close to this player (or stack them together) so they can switch positions with a minimum of movement. Remember you still have to honor the restrictions on switching. Stacking is a pre-serve arrangement of players that makes switching easier and more efficient.

There are some basic principles for how you stack:

**When you are serving, you stack around the middle blocker in the front row**
Since the middle is a primary blocker, you want her ready to block as you serve to the other team and not having to move on a switch.

**When you are receiving serve, you stack to put the setter close to her setting position**
This gives the setter the least distance to travel to get to her setting position and helps you get into your offense as soon as possible. The only time this does not apply is when the setter is in the service rotations that would put her in position 4 or position 5. In these cases, apply the next principle...

**When you are receiving serve, try to stack to put the front row outside hitter close to front left.**
When the setter is in position 4 or position 5, forming the stack to accommodate the setter forces the outside hitter to set up too far away from left front. So even if you make it easier for the setter to set, you make it much harder for the outside hitter to hit. So for these two service rotations, the priority switches to stacking around the outside hitter.
Service Rotations, How to Stack and Switch

Following are examples of how to stack and switch in the various service rotations.

To start, we’ll set up a team on the court as shown in the diagram.

The setter (S) is in position 1. The opposite (O) is in position 4, opposite the setter. Outside hitter 1 (H1) is in position 2. Outside hitter 2 (H2) is in position 5. Middle blocker 1 (M1) is in position 6. Middle blocker 2 (M2) is in position 3. Any libero or DS substitutions should just follow the stacking and switching for the player they are replacing.

Many teams, including most of ours, default to starting the setter in position 1, so it’s useful to consider this arrangement of players as Service Rotation 1. Why start the server in position 1? With a one setter system, starting the setter in position 1 maximizes the time you have three hitters in the front row who are all eligible to hit at the net. There will be times when you want to start the game with a different server, either to maximize your serve, serve receive or blocking/hitting matchups in the front row. In these cases, simply rotate until you get to the desired service rotation and then start the game with that alignment. Leave the relative service order of players the same. M1 and H1 are typically the middle and outside hitters who are the best scorers at their position. Why? When the setter is front row, there will be fewer front row options to set. By keeping the better scorers near the setter in the rotation, you ensure that stronger offensive options are front row when the setter is front row. In the diagrams that follow, you’ll see options for how to stack and switch for the serve and the serve receive out of each service rotation. The following symbols will be used to illustrate how players move on the court. If there are libero or DS substitutions, they usually follow the roles laid out for the players they are replacing.
Service Rotation 1, Serve

This is the set-up pre-serve. The front row sets up around M2. Note a server off the court does not have to worry about her position relative to her teammates.

Transition to Defense

The setter serves, then runs to her defensive position. H2 and M1 wait to see that there is no overpass, then move to defensive positions. O and H1 switch as soon as the setter serves.

Base Position for Defense

The team is now in base position for defense.
Service Rotation 1, Serve Receive

Stack

Options out of this stack include dropping H1 or M2 back to cover short serves or sliding H1 all the way back and having O, H2 or M1 step out of the serve receive. You should work out how to maintain relative position of players in each of these scenarios.

Transition to Attack

Setter releases immediately. H1 and M2 release to hit, but watch for short serves coming to them. O, H2 and M1 receive serve first and then move.

Ready to Attack

The team is ready to attack, with three primary options. Once the set goes up, the other players look to cover their hitter in case she gets blocked. The basic idea is have at least 2 players covering short and 2 players spaced out covering deep.

Hitter Coverage

Follow red arrows if left front hits, green arrows if middle front hits, blue arrows if right front hits. If a player has no arrows for a given attack, she should still be ready but others have priority for coverage.

Switch to Defense

Wherever you end up once your team puts the ball over, look to switch positions. Here is an example of the switch if the opposite hit from left front.

Base Defense

The team is now in base position for defense.
Service Rotation 2, Serve

This is the set-up pre-serve. The front row sets up around M2. Note a server off the court does not have to worry about her position relative to her teammates.

The H1 serves, then runs to her defensive position. Note she could serve from the left side of the court and shorten her run. M1 and S check for overpass, then move. O switches as soon as H1 serves.

The team is now in base position for defense.
**Service Rotation 2, Serve Receive**

**Stack**
Options out of this stack include dropping M2 back to help cover short serves or sliding the opposite all the way back to pass where M1 is standing. You should work out how to maintain relative position of players in each of these scenarios.

**Transition to Attack**
Setter releases immediately. O and M2 release to hit, but watch for short serves coming to them. H2, M1 and H1 receive serve first and then move.

**Ready to Attack**
The team is ready to attack, with three primary options. Once the set goes up, the other players look to cover their hitter in case she gets blocked. The basic idea is have at least 2 players covering short and 2 players spaced out covering deep.

**Hitter Coverage**
Follow red arrows if left front hits, green arrows if middle front hits, blue arrows if right front hits. If a player has no arrows for a given attack, she should still be ready but others have priority for coverage.

**Switch to Defense**
Wherever you end up once your team puts the ball over, look to switch positions. Here is an example of the switch if H2 hit from left front.

**Base Defense**
The team is now in base position for defense.
**Service Rotation 3, Serve**

This is the set-up pre-serve. The front row sets up around M1. Note a server off the court does not have to worry about her position relative to her teammates.

The M2 serves, then runs to her defensive position. H1, H2 and S move, watching for the overpass, as soon as M2 serves.

The team is now in base position for defense.
Service Rotation 3, Serve Receive

Stack

Note that here the priority is to put the front row hitter (H2) close to hitting position. S has to run across the net to her spot, although she can move all the way over to H1 as her starting position. There are MANY variations of this stack you can exploit to get your best passers passing, particularly by involving the opposite.

Transition to Attack

Setter releases immediately. M1 lets her clear and then moves to hit. O watches for short serves but then moves to hit. H2, H1 and M2 receive serve first and then move.

Ready to Attack

The team is ready to attack, with three primary options. Once the set goes up, the other players look to cover their hitter in case she gets blocked. The basic idea is have at least 2 players covering short and 2 players spaced out covering deep.

Hitter Coverage

Follow red arrows if left front hits, green arrows if middle front hits, blue arrows if right front hits. If a player has no arrows for a given attack, she should still be ready but others have priority for coverage.

Switch to Defense

Wherever you end up once your team puts the ball over, look to switch positions. Here is an example of the switch if H2 hit from left front.

Base Defense

The team is now in base position for defense.
This is the set-up pre-serve. The front row sets up around M1. Note a server off the court does not have to worry about her position relative to her teammates.

The O serves, then runs to her defensive position. H1 and M2 watch for overpass then move. S and H2 switch as soon as O serves.

The team is now in base position for defense.
**Service Rotation 4, Serve Receive**

**Stack**

Again, this stack puts the front row hitter close to her attack position. H2 can cover short serves or slide all the way back and pass in place of H1, M2 or O. You should work out how to maintain relative position of players in each of these scenarios.

**Transition to Attack**

Setter releases immediately upon the serve. M1 lets her clear and then moves to hit. H2 moves to hit. H1, M2 and O receive serve first and then move. The opposite now is looking to hit from the back row, not front row.

**Ready to Attack**

The team is ready to attack, with three primary options. Once the set goes up, the other players look to cover their hitter in case she gets blocked. The basic idea is have at least 2 players covering short and 2 players spaced out covering deep.

**Hitter Coverage**

Follow red arrows if left front hits, green arrows if middle front hits, blue arrows if right front hits. If a player has no arrows for a given attack, she should still be ready but others have priority for coverage.

**Switch to Defense**

Wherever you end up once your team puts the ball over, look to switch positions. Here is an example of the switch if H2 hit from left front.

**Base Defense**

The team is now in base position for defense.
Service Rotation 5, Serve

This is the set-up pre-serve. The front row sets up around M1. Note a server off the court does not have to worry about her position relative to her teammates.

The H2 serves, then runs to her defensive position. M2 and O watch for overpass then move. S switches as soon as H2 serves.

The team is now in base position for defense.
Service Rotation 5, Serve Receive

Stack

This stack puts the setter close to her setting spot. H1 can cover short serves or slide all the way back and pass in place of M2, O or H2. You should work out how to maintain relative position of players in each of these scenarios.

Transition to Attack

M1 and H1 move to hit once the serve is contacted. M2, O and H2 receive serve first and then move. The H2 is looking to hit from the back row, not front row.

Ready to Attack

The team is ready to attack, with three primary options. Once the set goes up, the other players look to cover their hitter in case she gets blocked. The basic idea is have at least 2 players covering short and 2 players spaced out covering deep.

Hitter Coverage

Follow red arrows if left front hits, green arrows if middle front hits, blue arrows if right front hits. If a player has no arrows for a given attack, she should still be ready but others have priority for coverage.

Switch to Defense

Wherever you end up once your team puts the ball over, look to switch positions. Here is an example of the switch if H1 hit from left front.

Base Defense

The team is now in base position for defense.
Service Rotation 6, Serve

This is the set-up pre-serve. The front row sets up around M2. Note a server off the court does not have to worry about her position relative to her teammates.

The M1 serves, then runs to her defensive position. H2 and O move, watching for overpass. H1 switches as soon as M1 serves.

The team is now in base position for defense.
Service Rotation 6, Serve Receive

Stack

This stack puts the setter close to her setting spot. H1 can cover short serves or slide all the way back and pass in place of O, H2 or M1. You should work out how to maintain relative position of players in each of these scenarios.

Transition to Attack

M2 and H1 move to hit once the serve is contacted. O, H2 and M1 receive serve first and then move. The M1 is looking to hit from the back row, not front row.

Ready to Attack

The team is ready to attack, with three primary options. Once the set goes up, the other players look to cover their hitter in case she gets blocked. The basic idea is have at least 2 players covering short and 2 players spaced out covering deep.

Hitter Coverage

Follow red arrows if left front hits, green arrows if middle front hits, blue arrows if right front hits. If a player has no arrows for a given attack, she should still be ready but others have priority for coverage.

Switch to Defense

Wherever you end up once your team puts the ball over, look to switch positions. Here is an example of the switch if H1 hit from left front.

Base Defense

The team is now in base position for defense.