The ball machine is a great way to work on technique and even tactics if you set it up correctly, but remember it can be your best friend or your worst enemy. (Doing something incorrectly for 1000 balls will make you better at doing things incorrectly)! The advantages, however, outweigh the disadvantages. Let’s say the the average point is 3 shots, the average game is 6 points, the average set is 9 games and the average match is 2.5 sets, all in the average match time, 1.5 hours (This is pretty accurate by the way). If you do the math, this means that in an hour and a half, you will hit 67.5 forehands (Volleys and serves are even lower)! You will hit this many forehands in 10 minutes on the ball machine. Below are some of my favorites one and two player drills with accompanying video at the end of each explanation, so lets get started! (By the way, if you don’t have access to a machine, have a partner feed you balls and repay the favor)!

A FEW THINGS TO REMEMBER BEFORE YOU GET STARTED

HAVE A GAME PLAN
Knowing what the plan is will save time and allow you to hit more balls

SET UP TARGETS
You should always be aiming for an area of the court when you practice

TAKE YOUR TIME
Don’t start too fast. You will tire out much quicker than the machine
One Player

1. Groundstroke Accuracy

MACHINE SET UP - Place machine where you prefer and have it feed forehands to the same spot. If you can, make sure you give yourself time to recover so you can hit on the move a bit more.

There are basically three shots that you will need to master - crosscourt, crosscourt angle and down the line. This is a great place to start. Make sure that when you set up the targets, that you place them with room for error (approximately 4 to 5 feet from the lines). You should do both forehand and backhand side (see video).

A good way to practice is to work on one target at a time and then go to the next target either after a certain number of balls or after a certain time limit. After you have worked on each of the targets, try doing them in order or mix it up (you will see all of this in the video). Remember that in a match you do not get three tries to hit the ball accurately, you have to do it on the “First Try.” This is a good way to practice changing direction. The more you do this, the better you will get.

Make sure you are focusing on any mechanical issues that you may be working on and most importantly, USE GOOD FOOTWORK and STAY BALANCED throughout the exercise. It is easy to get “sloppy” after a while on the machine. This is why it is good to mix things up and keep things fresh.

Variation - Set up and area (or box) and don’t change areas until you have successfully hit in the designated area a certain number of times. Or even more challenging, set up cones and don’t switch until you have knocked each one over (I saw Anna Kournikova doing this once when she was a junior player once).

CLICK HERE to see the video of this drill

Realtennis Network
TIP

Two of the key controls that you will have to vary is **HEIGHT** and **SPEED**. Usually when you INCREASE one, you will have to DECREASE the other. For example, if you want balls to travel higher over the net, you will have to increase the height, but you will need to decrease the speed to get the ball to land in the same spot in the court.

**One Player**

2. **All Forehands**

**MACHINE SET UP** - Place machine in middle of court and have it oscillate from side to side giving you time to hit forehands from both sides giving you time to recover.

It is important that if you have a weapon, you should want to hit it from as many positions as possible. I am sure that if Roger Federer worked out on the ball machine, this would have been one of his favorites.

If your forehand is your weapon, do this drill with forehands. If your backhand is your weapon, do this drill with backhands. The important thing is to make sure that if you are going to run around your backhand to hit a forehand, you want to make sure you keep your feet underneath you and stay balanced as you hit.

The inside out shot is a great shot because it disguises your next shot and tends to “freeze” your opponent which will definitely give you an edge.

You can definitely change up your targets. Hit your running forehand crosscourt as well as down the line and when you are running around your backhand to hit your forehand, work on both inside-out (crosscourt) and inside-in (down-the-line).

Make sure that you work on one target at at time for a while and then go ahead and mix it up like in the previous drill. Repetition is important to get “muscle memory" but being able to execute on the “first shot" is important in a match so you will want to get good at doing this.

**CLICK HERE** to see the video of this drill

Realtennis Network
TIP

Ball machines work with air pressure or with wheels. The wheels are better because it is easier to control spin and it is quieter for the players playing next to you.

One Player

3. On The Rise - Moonball Combination Drill

MACHINE SET UP - Need to have machine feed a higher ball that will push you back and at the same time allow you to move in and hit it early. Higher ball means SLOW the speed down.

You definitely do not have to get pushed back behind the baseline if you do not want to. Hitting the ball early (or on the rise) has some really good advantages.

1. You will take LESS steps to get to the ball which also means quicker recovery

2. You will TAKE TIME AWAY from your opponent because it will take less time for your ball to get back to him/her.

3. A ball loses about 55% of its speed at the arc of the bounce (apex). If you are hitting it on the way up, it has not lost as much speed allowing you to hit more offensive shots

4. Balls that were not typically “approach shots” are more attractive to come in behind since you are up into the court more.

THIS IS A GREAT MOVE AGAINST PLAYERS WITH WEAK SECOND SERVES. A WEAK SECOND SERVE IS AN OPPORTUNITY FOR YOU TO CONTROL THE POINT. HITTING ON THE RISE WILL MAKE THIS EASIER.

When you get pushed back, hit with a semi-open stance (off your back foot), but balanced and hit “Arc Balls” or “Moonballs.” You want to keep this ball fairly deep and high giving you time to recover and making it tough on your opponent to hit offensive shots back to you. High balls (especially to the backhand) are tough to hit offensively.

CLICK HERE to see the video of this drill
Setting up and taking down the ball machine does take time. If you want to hit more balls, show up a bit early, bring an extra extension cord (just in case) and make sure you have ball hoppers for pick-up. The more prepared you are, the more balls you will be able to hit.

**One Player**

### 4. Volley Accuracy and Combinations

**MACHINE SET UP -** Middle of court and have it oscillate (eventually) from side to side giving you time to hit forehands and backhand volleys. Adjust to desired height and speed.

Just like groundstrokes, it is important to do a lot of repetition work on volleys. Remember that when you are working on these to recover (see video). Just standing there will do you little good when it comes to a match. The ball machine will feed balls right where you want, but your opponents will try to make your life miserable and make you move to hit. As always, when you are moving keep your feet underneath you and work on good posture (balance).

Start with the deep target on the forehand side and once you get comfortable with that move to the middle target and then finally the short angle. What you should be doing here, is adjusting your grip pressure and even spin depending on the volley you are trying to execute. The shorter angle will require more touch (*Down the line is important too*).

After you have done this, alternate targets so you can get used to changing from a firmer volley to a softer volley “on the first ball.” You can see all of this in the video below.

Once you have completed the forehand side, go ahead and do the same thing on the backhand side. Pay attention to your technique and balance so that you will play the way you practice!

[CLICK HERE](#) to see the video of this drill
One Player

5. Close In Volleys

MACHINE SET UP - Baseline and have it oscillate from side to side. Set it to have the ball start high but drop in front of you 1/2 between net and service line. This will force you to move in.

You can play tennis two ways: 1. Hit the ball that has been delivered to you or 2. MOVE YOUR FEET and hit the ball that you want to hit. I would prefer the second. This means that you will have to move your feet and NOT wait for the ball to come to you, but to go after it.

This volley drill will help you do just that. starting just ahead of the service line, If you wait for the ball to come to you, you will end up hitting a ball BELOW net level (not good) and you will have to hit UP on the ball, setting up your opponent. If you move in, you will be hitting a ball ABOVE net level (very good), allowing you to hit more offensively and to more areas of the court, keeping you in control of the point. I like this way much more!

Set the machine up so there is enough time for you to recover back to the “T” after each ball and prepare to move so that you can hit the ball ABOVE net level. I like to make sure that when I finish, my racquet head stays above net level (this encourages me to move in soon enough).

Set up targets and work on hitting to different areas of the court. If you hit the ball above the net down the line and crosscourt are open. If low, soften it up and hit a short angle. Hitting up the line on a low ball will force you to pop it up.

CLICK HERE to see the video of this drill
If you don’t have access to a facility that has a machine, there are portable machines with rechargeable batteries which allow you to take them to any public court. These machines hold approximately 100 balls. “Tennis Tutor” makes one of these machines.

One Player

6. High Deep Volleys

MACHINE SET UP - Middle of court and have it oscillate from side to side. Set it to have the ball feed high and deep allowing you to move back into “No Mans Land” to volley.

This drill will allow you to work on volleys that force you to move back. Why volley this ball? It keeps you in control of the net in doubles and there may be no other option in singles. In doubles, you would want to hit this back to the “Back” player if there is one, giving you time to recover back up with your partner and still in control of the net. If you let this ball bounce, then your opponents will most likely move in and take control of the net (and the point). If both players are up at the net, then you will be forced to hit it low at their feet or lob it.

When working on this ball, try to hit all of your shots past the service line by “Hitting Out” on the ball (don’t hit down). It is easy to drop the racquet and hit down, but concentrate on extending out (as if your racquet were sliding across a high bookshelf). Any short balls will put you and your partner in a tough spot.

Work both the down the line ball and the crosscourt ball. Remember you are trying to hit it to the “Back Player” in doubles.

As always focus on good footwork and BALANCE.

CLICK HERE to see the video of this drill
7. Backcourt Overheads

MACHINE SET UP - Middle of court and have it oscillate from side to side. Set it to have the ball feed as high as it can and it should land just in front of the baseline (adjust speed to get this).

When you work on overheads, set it up to where you are hitting them from just behind the service line or “No Man’s Land.”. If you are just starting out, the middle of the service box may be OK, but most players will have the ability to lob over your head and force you back near or behind the service line. This is where you will hit most of your overheads from.

There are two good ways to work on target practice. The first is to hit both overheads to the same target (the deuce side) and then to the same target on the other side (add side). Next alternate down-the -line for both and then crosscourt for both. Mixing it up is good.

If you are a right hander, you may want to work on a slice to the deuce side (especially when hitting from the deuce side), pulling your opponent off the court, but stick to flat when hitting to the add side. There are no bad answers here, it’s an overhead, but try to think logically.

As a doubles player, hit any offensive overheads to the FRONT player and defensive overheads to the BACK person.

CLICK HERE to see the video of this drill
Start the machine feeding slower than you think. It may seem slow at first but after 50 balls then 100 balls, you will start to slow down, but the machine will not! This is a common mistake that a lot of players make.

**Two Player**

**8. Groundstroke to Volley**

MACHINE SET UP - Slide it to the side away from the volleyer (safer for the volleyer). Have it oscillate from FH and BH for the Baseline player. Give the baseline player enough time to recover.

This is a great warm-up drill. The volleyer should pick a box and stand somewhere near the center of it. If like the illustration above, the baseline player will be hitting all of his forehands crosscourt and all of his backhands down the line.

Come up with a number like “20.” After the baseline player has hit 20 balls that the volleyer can touch, switch sides of the net. Do not switch halves yet, unless the machine is in the middle. otherwise you will have to adjust the positioning of the machine 4 times instead of 2. After each player has accomplished 20 balls, move the machine to the other side and do it again. Now forehands will be going down the line and backhands will be going crosscourt.

You could even make this competitive where if the baseline player hits the ball anywhere on the deuce side of the court and the volley does not come back then he gets one point. Every time the volleyer hits a ball back (crosscourt let’s say), he gets two points. Play to 20 points and switch. Anything is possible.

Baseline player should focus on good footwork and good posture (BALANCE). The volleyer should take a split step just before the baseline player strikes the ball and retain good balance and mechanics as well.

[CLICK HERE](#) to see the video of this drill
TIP

Start the machine feeding slower than you think. It may seem slow at first but after 50 balls then 100 balls, you will start to slow down, but the machine will not! This is a common mistake that a lot of players make.

Two Player

9. Groundstroke to Low Volley

MACHINE SET UP - Machine in the middle of court, but have it oscillate from left to right on the DEUCE SIDE ONLY and the the ADD SIDE ONLY. Give the baseline player time to recover.

Important in this drill that he volleyer starts BEHIND THE SERVICE LINE to work more on first volleys. This player will be getting a lot of “Low Volleys” and “Half Volleys” which are important to execute well if you want to stay in control of the point. Stay BALANCED and keep split stepping just before the baseline player strikes the ball.

The volleyer should try to keep most of these deeper to the baseline player unless receiving a ball that allows for something different (want to keep back player back).

The baseline player needs to focus on keeping the ball low in hopes of setting himself up for the next shot (hopefully a short floaty ball). Pace is not too important here. LOW/SLOW balls are very difficult to get back because the volleyer has to supply his own power. If you are able to hit with topspin the volleyer will have a more difficult time because the ball is “Dipping” (topspin takes pace off the ball as well). A hard low ball is not too difficult to get back because the volleyer is back far enough to not have to worry about the net and the power makes it easier to get back with less effort.

Do this on both the deuce and add side. Make it competitive after you have successfully completed a designated number of attempts.

CLICK HERE to see the video of this drill
TIP

Ball machines can feed balls as fast as 100 mph or more. NEVER walk in front of the machine even if you think that it is empty. Balls can get stuck inside and come out unexpectedly, injuring you if you are not careful.

Two Player

10. Volley to Volley Hot Seat Drill

MACHINE SET UP - Set up machine as if it were the baseline player and have it hit to the player's FH volley and then the same on the other side but have it hit to the player's BH volley.

This drill simulates a return going down the line with the server's partner hitting the volley at the net person's feet (down the middle is also a great shot to hit, but little practice for the volleyer).

This ball will usually be a ball at or above the net, so the so-called server's partner will be receiving offensive volleys. This follows the “Front-To-Front” and “Offense-Defense” tactics that doubles players need to execute, hitting the ball to the player who has the least amount of time to react to an offensive shot and LOW at his FEET.

The player on the ball machine side should be standing around the service line and a bit toward the middle (like a returner's partner). Make sure you are taking a split step just before the volleyer makes contact and do not let the volleyer on the other side push you back. Hold your ground and prepare to hit a lot of low and half volleys.

Switch sides of the net with your partner and after you have both successfully completed the first side, do the other with the machine acting as the deuce court returner hitting balls to the net person's backhand.

Play out points as a good progression to this drill (one point every time player 1 gets it back and two points every time the player in the HOT SEAT gets it back). Play to 20.

CLICK HERE to see the video of this drill.
TIP

Two player drills are a great way to practice because the person being hit at (by the player receiving the machine feed) is getting balls that are as realistic as they would be in match play (most likely all over the place).

Two Player

11. Poach and Dig

MACHINE SET UP - Set up machine as if it were the returner and have it feed balls crosscourt just past the center line to the net person’s backhand.

Similar to the previous drill, this drill simulates a “POACH” by the server’s partner, hitting the ball to the opposing net person. Make sure you are moving in at an angle and NOT LATERALLY. This cuts off the ball easier and gives you a more offensive and even higher volley.

This drill follows the tactics of “Hitting In The Direction You Are Moving” and “Don’t Skip A Lane” (Go to: www.freetenniscourse.com To get my 6 doubles tactics, including the ones in the previous drill, that are solid and time tested).

The angle is tempting, but if you don’t hit it perfectly, you have left a down-the-line shot open plus a lot of recovery for you and your partner. Hitting in the direction you are moving causes almost ZERO recovery and a lot of balls coming back to you.

Opposing net player should “DIG” out the Low and Half volleys and attempt to hit balls that are not going to “Wound” him. This is a great reaction drill.

Switch sides of the net with your partner and after you have both successfully completed the first side, do the other with the machine acting as the deuce court returner hitting balls to the net person’s forehand.

Play out down-the-line points, after the poach, as a good progression to this drill.

CLICK HERE to see the video of this drill

Realtennis Network
MACHINE SET UP - Set up machine at the baseline and in the center. Have it oscillate left to right, giving receiver a high volley on one side and an overhead on the other. Feed to both sides.

A lot like the Reaction and Hot-Seat drills. The receiver is working on high deep volleys and overheads, but should try to hit them to the feet of the player in the mid-court so as to keep him/her in a neutral or defensive position. Obviously the overhead is more offensive, so there is more room for error here.

The player on the machine side is working on shots that will hopefully get him/her back in control of the point.

Basically the “team” on the machine side has just hit a retrievable lob or volley to the opposing team and should be trying to hopefully pull themselves out of a hole and get back into control of the point.

The player on the machine side will get a lot of “Transition” shots that usually is one of the deciding factors in a doubles match (players that can handle mid-court balls better will tend to not be afraid of getting up to the net as soon as possible and not “Wait for the right shot.”) and the team that gets to the net first wins a higher % of the points.

Make sure you go after the ball being hit at you and hold your ground.

**CLICK HERE** to see the video of this drill
TIP

With an advanced ball machine, instead of it feeding the same ball (height, speed and spin...), you can program it to feed each individual ball with its own defined direction, speed, spin, height and depth. You can get an amazing workout with a machine like this (check out the machine at the very end of the video, it does this).

Two Player

13. Return and Poach

MACHINE SET UP - Set up machine as if it were the baseline player and have it feed balls crosscourt to the receiver's forehand and backhand sides in the add then the deuce court.

Another poach drill, but this time the player poaching is receiving the "realistic" ball from the baseline player who is receiving the machine fed ball (have the machine oscillate from FH to BH but on the same half of the court so that the baseline player can work on crosscourt and inside-out shots. The video just shows a BH feed. Better to do both if possible).

The receiver should focus on trying to keep the ball as low as possible and vary his shots by hitting in front and behind the poacher (but still crosscourt). This is also great practice for the poacher.

The player poaching should work on the timing of when to poach. Don't just stroll across, but wait until the feed from the machine bounces and then make your move like you would in a match. If you practice leaving too early, it will not do you any good.

Practice hitting the ball in the direction of the opposing net person and not "Behind you."

Switch sides of the net with your partner and after you have both successfully completed the first side, do the other with the machine acting as the deuce court player hitting balls from side to side to the deuce court baseline player.

CLICK HERE to see the video of this drill
Try to place the machine in different areas of the court instead of just in the middle. This will help you out on balls that are coming from different directions and not just the center of the court.

**Two Player**

**14. Poach And Fake**

**MACHINE SET UP** - Set up machine as the baseline player (server) and have it feed balls crosscourt to the receiver's FH and BH sides with plenty of time in between balls for players to reset.

This is a fun competitive drill. The net person's job is to try to get the receiver to hit the ball back to him/her by either “Poaching” or “Faking”.

Remember that faking does little good in a match if you do not poach. Once the returner sees you poaching, they give you more attention and will fall for a “Good” fake from time to time giving you an easy volley down the middle (a good returner will pick a spot BEFORE the point starts or lob the return, but no lobbing in this drill).

If Poaching occurs right after the bounce, then if you plan on Faking, you must do it sooner (before the bounce) to give the receiver time to change his/her mind and hit down the line.

Play to 15 (or whatever). If the returner gets the ball in play (anywhere) without the volley coming back over the net, then the returner gets a point. If the net person can get the volley back anywhere, then the volleyer gets a point and nothing for the receiver.

If it is too easy for the receiver, give the volleyer 2 points for every successful volley in play.

**CLICK HERE** to see the video of this drill
I hope that you can use this material to start working on specific parts of your game. If you need help on how to set up a drill using the machine or with a partner, please do not hesitate to contact me with any question.

My goal is not to give you a lot of material on what I know, but to have a relationship with you helping you with the questions that you want answered.

As you may have noticed from my podcast, I have relationships with top players and coaches from around the world and look to bring their knowledge to you.

If there is anything that you would like to learn more about, please send me a note and I will answer it for you or save it for one of the experts in an upcoming interview or maybe even have it headlined in one of my videos.

Thanks for taking the time to look over this manual and I look forward getting to know you and help take your game to the next level.

Regards,

Coach Mick, USPTA
Realtennis Network