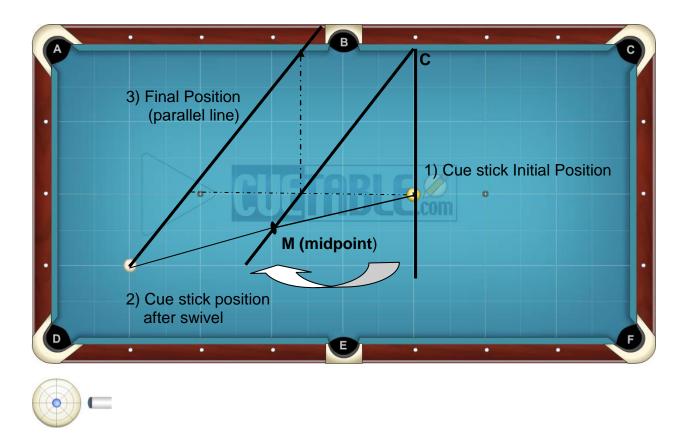
Parallel System



This is a popular system and a practical one to use in a game – you will see quite a few top players using this method in competition when calculating kick shots. Step 1 - place your cue tip under the rail (some prefer on top of the rail) opposite the object ball – this would be point C above. Step 2 - keeping that point steady, swivel the butt of the cue toward the cue ball until the cue is over the midpoint between the two balls (point M). Judging the midpoint can be difficult, especially if the balls are different distances from the rail or far apart, but do your best. It's usually helpful to eyeball the midpoint before you start the point and swivel process with the cue. Be careful not to move the tip when swiveling! Step 3 - keeping the angle consistent, move the cue stick parallel to that line until it's over the cue ball. With practice making this parallel movement is fairly easy. Where the cue stick crosses the rail is your aim point.

There is another alternative to the swivel and parallel approach that finds the same point on the rail and may be easier to visualize depending on the position of the balls. It also eliminates any inaccuracies in keeping the cue stick parallel to the midpoint line. To start, you still perform steps 1 and 2 as above. When your cue stick is in position over the midpoint between the object balls, visualize a line through the object ball and parallel to the rail you are kicking into (see dashed line above). Where the cue stick and this object ball line meet draw a line from that point to the rail and that is your aim point. You can see from the diagram that both methods result in the same aim point on the rail. Try both methods and see which one is easiest for you to visualize and execute.

This system also has a two rail counterpart that is very useful, I will cover that in a future article on two rail kicking systems coming soon.

Ghost Ball or Image System



This system also works fairly well, especially if the object ball is near the rail and the cue ball approach is relatively shallow. In this case you should be planning to make the ball instead of just hitting it. There is a standard approach to this system and an alternate approach — I'll cover both.

In the standard approach, shown in the left side of the diagram above, you are kicking at the 6. To plan your route, imagine that there is another table next to the actual table and the cushions overlap each other. You are essentially aiming at a ghost ball located in the same spot on the ghost table. To determine this correct aim line, measure the distance from the center of the desired position of the cue ball to the rail (see red line to the right of the purple line above). In practice it's easiest to use your cue stick and mark the distance with your finger. Now slide the cue stick back that same distance (until the tip of your cue is even with the nose of the cushion) and sight from your finger (which is still marking the distance) to the cue ball. Aim at this spot, shoot with soft to medium speed and you should make the hit. You may need to play with the speed or add a touch of running english to suit the angle, your stroke and your table. You can also use this system in reverse (imagine the locations of the cue ball and 6 ball are reversed).

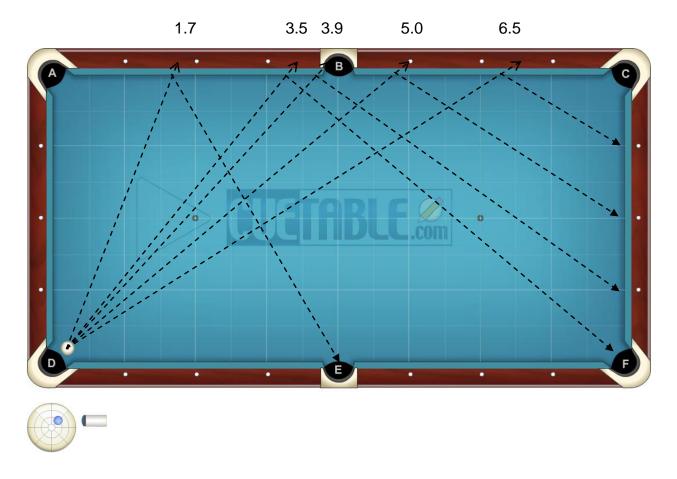
On the right side of the diagram you are trying to make the one ball rail first, presumably for positional purposes. You can use the same exact method as above, but I find sometimes that measuring to the rail track (worn spot on the cloth about an inch off the cushion) is more accurate in judging where to aim, especially with shallow approach angles and when the object ball is near the rail. You'll see in the diagram the measurements are the same but the dividing purple line (representing the image table) is on the rail track rather than the nose of the cushion. Use a soft-medium speed and running english. Once you establish your image point with either of these methods, make sure to find a diamond reference on the rail so when you get back to the cue ball you have a definitive point to aim at.



This is an excellent complement to many different systems, not just one rail systems. It's really more of a method of estimating than a system itself, but I include it here because of its usefulness in determining aiming points that are not on exact tracks. It is similar to the principle used in the Image Table system.

If you know or can calculate a track or line, but your shot doesn't fall exactly on that line, you can use the Spot on the Wall system to estimate the correct aim line. Sight down a line or track that you know works, and pick a point on that line approximately a table away – if shooting on a 9 foot table and down the length of the table, pick a spot about 9 feet away. If shooting across the table, pick a spot about 4 ½ feet away. A little more usually won't hurt, which is probably why I've read a lot of articles and references over the years telling you to pick a point 10 – 12 feet away and never mentioning length vs. width or different table sizes.

In the example above, we are trying to kick at the 7 ball, and we know that the standard equal angle track would work as shown by the dashed line. So we just sight down that line and pick a spot about 4½ feet away – could be a picture or spot on the wall, a spot on another table, a chair, etc. Just try to pick a spot on something stationary – people have a tendency to move... Now we simply aim at this spot from wherever our cue ball is, shoot with either medium speed and center ball or a firm speed with a touch of running english and we should make the hit, and if we hit it nice and full and with some speed the 7 ball will hopefully travel three or four rails leaving our opponent hooked behind the 8 and 9.



Last but not least, I include this as an obvious but sometimes overlooked "system". I can tell you that in addition to all of the systems that I know and use, simply spending time at the table and memorizing the cue ball path from and to various key diamonds around the table has elevated my kicking game immensely. I'll put a plug in for the Bob Henning books (The Pro Book and The Advanced Pro Book and associated DVDs). He mentions this concept in his books and shows quite a few reference shots, banks, safeties, and kicks that if studied and practiced will give you a lot of confidence every time these standard shots come up in a game. I've shown a few sample tracks above that are running english routes through diamonds from the corner pocket. From the corner, hitting through diamond 6.5 with lag speed and running english will take you to the first diamond, 5.0 goes to the second diamond, etc. I like memorizing these routes since they occur frequently and are less sensitive to speed and spin than similar center ball routes, not to mention the center ball routes can be quickly calculated using one of the systems above. For more information, get Bob's books and/or DVDs and work with the included reference shots, you won't regret it.

There are quite a few shots that come up that fall on or near a cue ball track line that I've learned. When these shots come up, I don't need to calculate anything, just recall the aim point and visualize the line, confident that I will not only hit the ball but hit it with the speed and spin I envision. If the cue ball is slightly off line, I use the Spot on the Wall system to adjust the line for my cue ball position. I try to memorize the routes using a lag speed (soft – medium) and then learn what adjustment I need to make the hit when using a firm speed. If there is a blocker ball in the way of the ideal track line, I know I can aim about ½ diamond above the line and then adjust by using an extra tip of english to compensate (since ½ diamond in and ½ diamond out equals 1 diamond difference total, and one extra tip of english equals 1 diamond). If I need to shorten the line a bit I can use less english, more speed, and/or draw as needed.