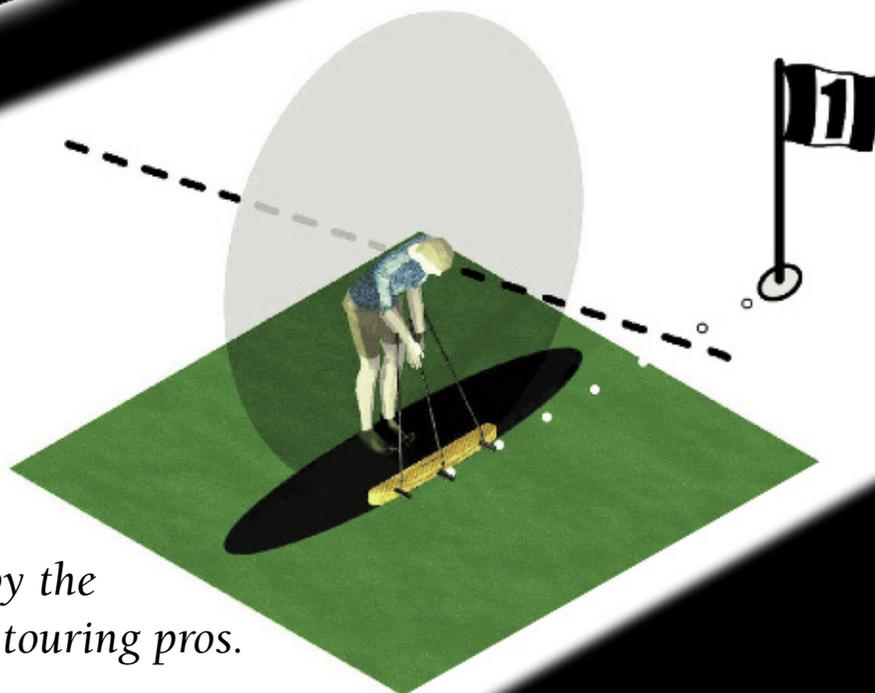


2200 year old mathematical theory combines with space age computer design and CNC manufacturing to produce **The Putting Arc®**.
Now you can feel, see and learn the Perfect Putting Stroke.

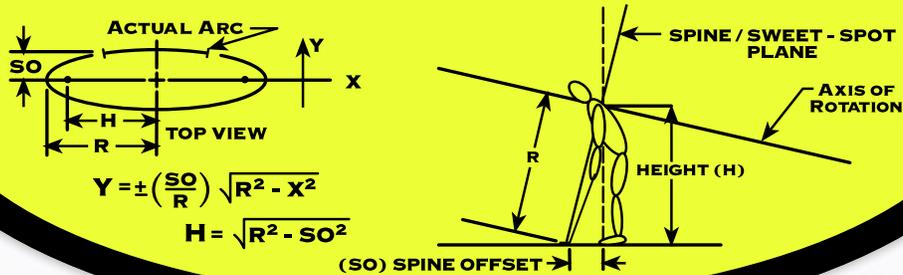


Learn the 'arc type' stroke used by the vast majority of the modern day touring pros.

For a 'Quick Start' and simple instructions, go to the back page.

WHY IT WORKS

THE GEOMETRY AND MATH OF THE PUTTING ARC® (BASED ON THE EQUATIONS OF APOLLONIUS OF PERGA, 200 B.C.)



The Putting Arc works because...

1. It is based on a natural body movement which can be quickly learned and repeated. Results can be seen in several days ... thousands of repetitions are not required.
2. The clubhead travels in a perfect circle of radius R, on an inclined plane. The projection (or shadow) of this circle on the ground is a curved line called an ellipse, and this is the curve found on **The Putting Arc**.
3. The putter is **always** on plane (the sweet spot/spinal pivot plane). The intersection of this plane with the ground is a straight line, the ball/target line. (See Iron Archie - page 11)
4. The clubface is always square to the above plane. It is only square to the ball/target line at the center line on **The Putting Arc**. You are learning an inside to square to inside putting stroke. (See Iron Archie - page 11)
5. The lines on the top of **The Putting Arc** show the correct club face angle throughout the stroke, including a square initial alignment. **This concept is as important as the arc itself**, and it is a patented feature of **The Putting Arc**.
6. In this perfect putting stroke, there is only one moving part. The hands, arms and shoulders rotate as a unit. No manipulation of the hands or arms is required to follow the correct path with a correct clubface. It happens automatically.
7. There are only 2 ways for the putter to travel straight back and straight through...
 - 1) The spinal axis of rotation must be horizontal.
 - 2) You have to manipulate the clubface and clubhead path during the stroke.

Both are unnatural, require many moving parts, and are difficult to repeat consistently. **The Putting Arc can cure the bad habits you have formed trying to make the putter go straight back and straight through down the line, and it will teach you the precision needed to be a consistently great putter.**

Important Note: Do not attempt to move the putter head in a curve! With a correct setup, the heel of the putter will perfectly track along the face of the Putting Arc, and this will happen automatically because the putter is moving on an inclined plane - just like in a full swing.

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What should I know about The Putting Arc?

If you ask 20 people how the putter should move back and through the ball, 18 would say “straight back and straight through.” Unfortunately this is incorrect for the majority of golfers. In order for the putter to move straight back and through, the golfer must swing the putter on a plane which is absolutely vertical or perpendicular to the ground. The spinal axis of rotation must be horizontal. Most golfers cannot do this and their putting plane is at an angle which lies between horizontal and vertical. Therefore, the perfect putting path would not be “straight back and straight through.”

Instead, it would travel back and through on an arc. Apollonius of Perga, who lived between 262 BC and 190 BC, was the first to calculate the measurements of this arc, and **The Putting Arc** was created using his formulas.

For every foot the putter head moves from the ball, the putter head itself should move inside from 1/8 to 3/4 of an inch, depending on the set-up measurements of the golfer. The sweet spot of the putter head is then capable of staying in a perfect relationship to the correct quadrant of the ball.

The Putting Arc will enable you to create a pure putting stroke in which the putter head moves back (and slightly upward and inward at the same time) while the face of the putter stays square to the “putter path” instead of the “target line”. This enables the proper closure on the ball and the proper release of the putter head.

The Putting Arc uses geometric dimensions to make certain the player obtains the correct stroke path, proper putter face closure, and proper putter face release during the stroke. **The Putting Arc** ensures the proper stroke path and face angle, which leads to a lot of “made” putts.

The Putting Arc is built from the golf swing and putting concepts of Homer Kelley, Mark Evershed, Ben Doyle, Mike Shannon, VJ Trolio, the Conic Section formulas of Apollonius, and the applied mathematics of Joey Hamilton. Without the information these men gave to the game of golf, **The Putting Arc** could never have been created.

Tour Results:

The Putting Arc is now being used by over 600 touring pros. These pros have recorded 332 worldwide wins, and with 112 wins and 7 majors in 2006. None of these pros are being paid to use **The Putting Arc**.

16 of the 24 2005 Presidents Cup contestants and 6 of the 12 singles winners in the 2005 Solheim Cup were known **Putting Arc** users.

The winners of the following tournaments had one thing in common, **The Putting Arc**: 2005 Indiana Open, 2006 Indiana Open, 2005 Georgia Women's Amateur, 2006 Mississippi Women's Amateur, 2006 Texas Women's Amateur, 2006 USGA Women's Mid-Amateur, 2006 USGA Women's Senior Amateur, 2006 Mississippi Women's Senior Amateur.

20 graduates of the 2006 PGA Tour Q School were known **Putting Arc** users.

Quotes & Testimonials:

“In a study we did for my new book, Fix Your Yips Forever, we found that an overwhelming number of players who have the yips have a straight-back, straight-through stroke. To beat the yips or just improve your putting, try to feel the same flowing arc in your stroke as you do in your full swing.” - Hank Haney in the January 2007 issue of Golf Digest

“I really owe a lot of my success to The Putting Arc.” - Kyle Reifers: #1 Ranked Amateur in the USA, All American and 2006 NCAA Runnerup at Wake Forest, Monday qualified and won the 2006 Chattanooga Classic on the Nationwide Tour with a final round 61, earned his 2007 PGA Tour Card in his first try at Q School

“The Putting Arc has more graduates from the Hooters Tour than anything else around.” - Hooters Tour player

“It's the best training aid for putting that I have ever seen.” - PGA Tour veteran and two time major winner

“I've only used it for a short period of time and I've already made a million dollars using it.” - PGA Tour Multiple Winner

“It made me over five million dollars-that's how I know it works.” - PGA Tour Multiple Winner

“This past year we led all division I NCAA men's golf teams with a 29.69 putts per round average - It is a great training aid and we use it every day.” - Division I College Golf Coach

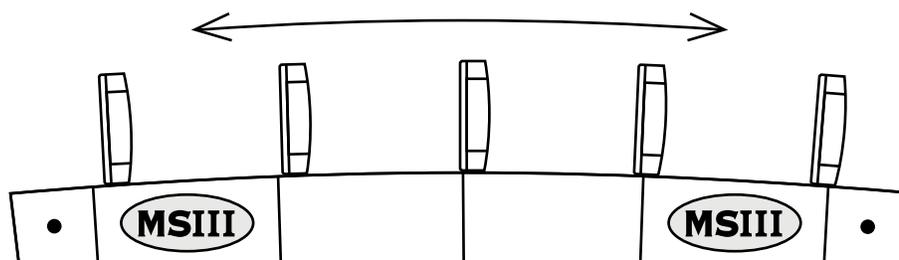
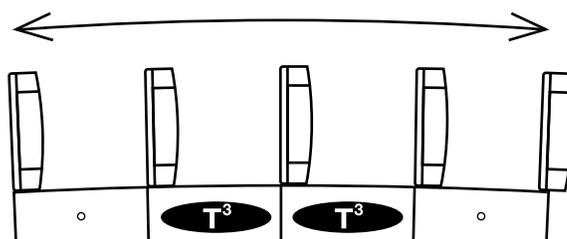
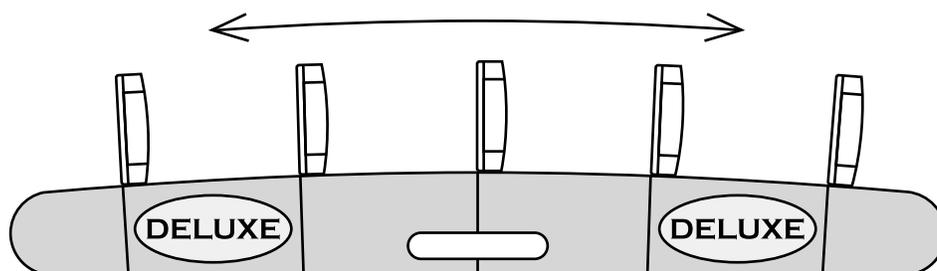
“I haven't had a chance to play very much this summer but have been using my Putting Arc at home. Last week I won our Member/Member Tournament. I shot 73, 74 with a 7 handicap and puttied great, with no three putts.” - Michigan Amateur Golfer

“JL III sent me a Putting Arc a while back and my daughter uses it on a regular basis. I do believe it is the best putting tool I have ever seen.” - Mother of a High School Golfer

“Hey – I’ll read all the technical stuff tonight... just quickly tell me how I can prove to myself that The Putting Arc actually works!”

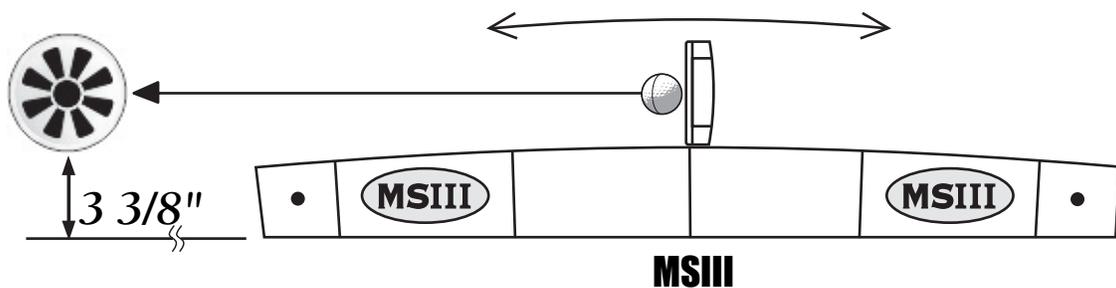
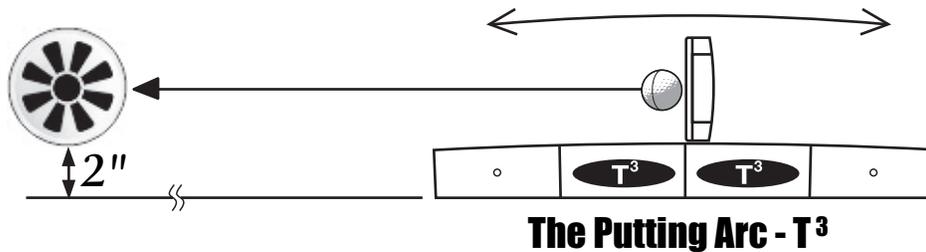
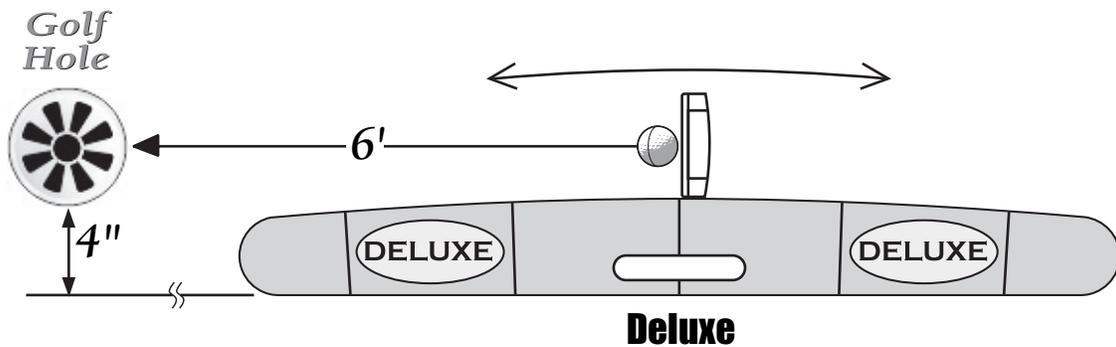
Using The Putting Arc

1. First – erase from your mind the idea that the putter travels straight back and straight through towards the target and that you must keep the putter face square to the target line (9 of 10 golfers believe this.) This is only true if the axis of rotation is horizontal or the golfer manipulates the putter with his/her hands or arms. The putting stroke you will learn with **The Putting Arc** requires only a pure rotation about a point on the spine, and has no hand or arm manipulation. The resulting stroke is the inside to square to inside stroke used by the vast majority of the pros on the modern PGA Tour.
2. Place **The Putting Arc** on the ground and take your putting stance as if the back of the ball were even with the top center line. Your shoulders should be square with the straight (handle) edge of **The Putting Arc** and the center of your spine even with the center line of **The Putting Arc**.
3. Swing the putter back and forth with the heel riding on **The Putting Arc** and the putter face staying square to the arc of **The Putting Arc**. (Not the ball/target line). Allow the putter to rise as it travels away from the centerline in either direction, and do not try to keep it low. The putter face is square when it is lined up with the top lines on **The Putting Arc** at each of the five positions. If you simply rotate your shoulders about your spine with no hand or arm manipulation, this will happen automatically.
4. Do the above until you can repeat it consistently then turn to the next page.



Proving The Putting Arc works

1. Find a 6' straight and level putt on an indoor or outdoor putting green (The T3 is designed for an outdoor putting green only.)
2. Place **The Putting Arc** 6' from the hole so the straight handle side is pointing 4" left of the hole (2" for an T3, 3 3/8" for an MSIII) You can get down and sight along this edge or use a string, and be very accurate. Anchor the T3 model to the green with two golf tees.
3. Align the rear of the golf ball with the center line on **The Putting Arc** and place your putter behind the ball, so the heel of the putter is touching **The Putting Arc**, then move the ball until it is even with the center line on your putter. (See back page for diagram)
4. Make a putting stroke as you learned on page 4. If you do it correctly you will make 9 out of 10. If you do not make this many:
 - A. You are manipulating your hands
 - B. You are moving your body or head.
 - C. Your shoulders are not aligned with the ball/target line
 - D. **The Putting Arc** is not correctly aligned left of the hole.
 - E. Your "spine pivot point" is not centered on **The Putting Arc**.



“Just allow the heel of the putter to ride back and through.”

Three Basic Drills:

An overview of the three drills for The Putting Arc

1. Indoors without a ball (acquiring visual guidelines while building the correct putting stroke).
2. Outdoors with a ball and target (building a stroke).
3. Outdoors with a ball and a target while using **The Putting Arc** as a reference. (Practicing the correct putting stroke while using visual guidelines and feel).

Drill #1 – Indoors without a ball:

The very first drill is to be done indoors. All you need for this drill is a putter and The Putting Arc. (If you have a T3, anchor it to the carpet with duct tape.)

- Step one** Find a room suitable to practice your putting stroke. There is no ball needed in this drill.
- Step two** Place **The Putting Arc** on the floor and set up to an imaginary ball with your putter. The heel of your putter head should be touching **The Putting Arc** at address.
- Step three** Begin the backstroke while keeping the heel of the putter head against the arc (the head of the putter will move up as it goes back.)
- Step four** Stop the putter head at the completion of the backstroke and monitor the putter face. It should be at the same angle as the right Putter Face Alignment Line (the lines on top of **The Putting Arc**).
- Step five** Move the putter head through the forward stroke until the completion of the stroke. At this point look to the left Putter Face Alignment Line to ensure the putter face has made the proper release. Remember the putter face stays square to the putter path instead of the target line.

Two Very Important Tips Concerning Drill #1:

- 1) Don't use a ball. Concentrate only on putter face alignment.
- 2) You should constantly use your EYES to trace both the movement of the putter head and putter face. Drill #1 should be done very SLOWLY during its entirety. This is the only time you should watch the putter head move back and through during the stroke.

Drill #2 – Outdoors with a ball and target:

Drill #2 should be done on a practice green with both a ball and a putter.

- Step one** Find a straight flat 5' putt (one which does not break) and align **The Putting Arc** so the handle side is aligned to a point approximately four inches from the left edge of the hole. (2" for a T3 - anchor the T3 with 2 golf tees.)
- Step two** Address the ball and place the putter head behind the ball. Now, simply move the putter head back and through, maintaining contact between the HEEL of the putter and **The Putting Arc**. Visually check that the putter face is aligned with the lines on top of **The Putting Arc**. Allow the putter head to naturally move upward during both the back and forward stroke.
- Step three** Place a ball on the centerline of your putterface, or approximately 1-1/2" to 2" from the arc side of **The Putting Arc** while making certain the back of the ball rests even with the center Putter Face Alignment Line. (see back page for diagram)

Step four Make a stroke as in Step 2, keeping your EYES on the BACK of the ball. FEEL the proper path and alignment of the putter head.

Step five Watch your ball go into the hole and sense the path of the putter during this perfect putting stroke.

Important Tips Concerning Drill #2:

You should stroke only ten to twenty balls in one spot. Any more than this could damage the grass on the putting green. You should NOT watch the putter head move back and through. This drill was created to send information to the brain concerning the proper feel of the putting stroke. This drill will increase your confidence and awareness of your NEW AND IMPROVED putting stroke.

Drill #3- Outdoors with a ball and a target ...no contact between putter and Putting Arc:

Drill #3 should be done on a practice green with both a ball and a putter.

Step one Find a flat 5' putt and align **The Putting Arc** so the straight (handle) side of The Putting Arc points approximately 4 1/4" to 4 1/2" inches left of the edge of the hole. (3 1/4" for an T3, 2 3/8" for an MSIII)

Step two Place a ball approximately three inches in front of the arc of **The Putting Arc** while making certain the back of the ball rests in front of the center PUTTER FACE ALIGNMENT LINE, and the heel of the putter is 1/4" to 1/2" from the Putting Arc.

Step three Take a stance and place the putter head behind the ball. Move the putter head back and through the ball while keeping your eyes on the ball. Upon completion of the stroke YOUR EYES SHOULD GO DIRECTLY TO THE PUTTER FACE AND PUTTER HEAD. You must make sure the putter face is aligned with the left PUTTER FACE ALIGNMENT LINE and the putter head is the same distance from **The Putting Arc** as it was at address (remember in this drill you DO NOT want the heel of the putter riding **The Putting Arc**.)

Two Very Important Tips Concerning Drill #3:

Watch The Ball Your eyes should remain on the ball during the backstroke and through stroke. At the completion of the stroke and after the ball has come to rest, you should then look to your putter head and putter face for information.

After you have learned the concepts to the putting stroke, alternate between Drill #2 and Drill #3 every 10 putts. This will prevent you from unconsciously building a side force into your putting stroke.

What are the basic concepts to be learned?

You are learning a putting stroke with no manipulation of the hands.

You are learning to keep the putter face "square" to the putter path instead of square to the target line.

You are learning the simplest, most repeatable putting stroke with the fewest moving parts. You simply move your hands back and through, and allow your arm and shoulders to rotate around your spine.

Theory, Quotes & Observations

Theory

The **Putting Arc** is a unique blend of the very old and the very new. The exact shape of **The Putting Arc** is based on the work done by the mathematician Apollonius of Perga in the second century BC, in his books on conic sections. The actual arc of **The Putting Arc** is called an ellipse, and Apollonius first calculated this shape some 2200 years ago. **The Putting Arc** itself is produced on a state-of-the-art CNC router that is capable of generating the arc with an accuracy of several thousandths of an inch.

The Putting Arc allows any golfer to quickly learn a putting stroke which has the minimum moving parts, and relies on a pure rotary motion around a specific point on the golfer's spine. In its purest form this stroke is controlled by a forward and backward motion of the hands, arms and shoulders in a pure rotation. No manipulation of the hands or putter face is required to make this stroke.

The actual arc of **The Putting Arc** is based on the projection of an inclined circle on a horizontal plane. The size of the circle and the angle of the plane are exactly determined by specific physical dimensions of the golfer in his/her putting stance. The dimensions are the spinal pivot point, the horizontal offset of this point from the ball, and the distance from the heel of the putter to the sweet spot of the putter.

The Putting Arc is available in a basic size that will fit a wide range of golfers. With this standard model, the heel of the putter should be less than 1/8" from the correct arc at a point 13" from the center of **The Putting Arc** for most golfers. For a more accurate fitting, **The Putting Arc Deluxe** can be specially ordered using the golfer's critical measurements as mentioned above. This special unit will be hand ground to very close tolerances according to a computer-generated template. A copy of this template will also be shipped with the finished **Putting Arc**. This template will list the golfer's name, date, critical dimensions and the arc itself, all of which will be a valuable reference point for future use.

To visualize a simplified version of the actual arc (ignoring the upward travel of the putter and the heel/sweet spot dimension), imagine a plywood circle with a 51" radius, (a good average distance from the spinal pivot point to the ball.) Now, take this circle outdoors at high noon and hold it horizontal above the ground. The shadow projected on the ground will be a perfect circle with a radius of 51". This would be the arc of **The Putting Arc** if the golfer laid on the ground and swung the putter horizontally. Believe it or not, this would be a very accurate way to putt, if the pivot point and ball position could be reliably repeated.

Next, hold this large plywood circle perfectly vertical to the ground. The shadow created would be a straight line that is 102" long. This line is a form of an ellipse, and if this ellipse were used for **The Putting Arc**, both sides would be straight and parallel. A putting stroke in which the axis of rotation is horizontal would result in a straight-line putter head movement. This is obviously a very good way to putt, since ball position variation will have no effect on the initial direction of the putt. This is probably one reason the USGA does not allow putters with the shaft 90 degrees to the putter head. It is also a very hard thing for the human body to do, and your eyes will not be above the ball, for optimum alignment.

The above examples are the two extremes of **The Putting Arc**. Most golfers fall in between these extremes, with their putting plane (the plywood circle) at an angle to the ground. The exact angle of this circle is determined by the golfer's measurements and the resulting shadow on the ground is the ellipse mentioned above, the one used to manufacture **The Putting Arc**.

The Putting Arc works for short putters, belly putters and long putters equally well. For long putters, some golfers hold the end against a part of their body and pivot the club around this point. In this case the critical golfer's measurements are based on the end of the putter and not the spinal pivot point. However, if the golfer anchors the long putter in his/her chest or belly button and allows the hands, arms and shoulders to rotate when putting, then the critical measurements are the same as for a short putter.

The Putting Arc allows any golfer to quickly learn a putting stroke which has the minimum moving parts, relying on a simple, natural rotary motion centered around a specific point on the golfer's spine. No manipulation of the hands or putter face is required to make this stroke. The fundamental motion of this stroke is used by most of the really great putters on the modern professional tour.

Quotes & Observations

“Exactly what path should the putter follow?”

The putting stroke has long been a topic of debate and discussion. Nearly every book written on golf instruction has made a point to discuss the putting stroke. Here are a few quotes from various golf instruction books:

“Some, when putting, play the ball off the left foot, others off the right foot, and still others anywhere in between. One class of good putters stands with the head over the ball. Another group of good putters does well with the ball fairly far away from them. Some are putting very well with a putter that is swung in pendulum fashion between the legs. Others play up to the green right-handed, then putt left-handed. Opposed to this minority, there are those who play left-handed up to the green and putt right handed”

Tommy Armour, How To Play Your Best Golf All The Time, 1953.

“Your putter should track back and forth along the target line. It’s OK if your putter swings slightly inside to along to back inside that line. But if it swings outside that line, adjust accordingly.”

Hank Johnson, How To Win The Three Games Of Golf, 1993.

“For other than the very short putts, the path of the putting stroke should be inside-to-inside, the same as for every other shot.”

Peter Kostis, The Inside Path to Better Golf, 1982.

“The straight-back-and-through path is especially important on putts of five feet or less, where I’m not hitting the ball very hard. On longer putts, where I’m forced to turn my shoulders more in order to take the putter back further, the putterhead tends to move to the inside a little. That’s fine; I’d have to separate my arms from my body too much to keep the putter moving along the straight-back path.”

Tiger Woods, How I Play Golf, 2001.

“The putter blade stays relatively low to the ground, and because the arms and shoulders are working together, the path of the club naturally flows from slightly inside the target line on the backstroke, to square at impact, and back to slightly inside on the follow-through. There is no question in my mind that this is the most consistent stroking action over the long haul.”

Butch Harmon, The Four Cornerstones of Winning Golf, 1997.

The quotes on the previous page are but a few of the thousands of quotes, tips, and philosophies of putting. It seems the confusion does not lie in the philosophy, the confusion lies in the details. How far if any should the putter move inside the target line on the backstroke? How far if any should the putter move inside the target line on the through stroke? Should the putterface remain square to the target line or the putter path? These are the questions which affect your mind's ability to decide how you will putt.

The answers to these questions lie in The Putting Arc.

The frustrations golfers feel on the golf course come from their lack of knowledge concerning the details involved in golf. Sure the putter head works back inside the target line, but how much? Sure the putter face opens and closes, but how much? When is a putt straight-back-and-through? When does a putter-head begin to move to the inside a little?

Consider the quote given to the public by Tiger Woods in his book, How I Play Golf, 2001. "The straight-back-and-through path is especially important on putts of five feet or less, where I'm not hitting the ball very hard. On longer putts, where I'm forced to turn my shoulders more in order to take the putter back further, the putterhead tends to move to the inside a little."

Reading this quote gives the player two options:

1. Learn a stroke which moves along **The Putting Arc**.
2. Learn two strokes (one which is straight-back-and-through and a second which moves to the inside a little on the way back and through)

Knowing the complexities involved in learning a single, pure putting stroke it would not be advised to learn two. If that would be the case, why not learn five or six different swings for draws, cuts, straight shots, hooks, etc.

Does the putter ever move straight back and straight through? It may be just a matter of how precise your measuring device is. The putting stroke which appears to be straight-back-and-through on a four-foot putt is the same as the putting stroke which appears to move inside-back-and-inside through on a twenty foot putt. **These are not two separate putting strokes, they are the same putting stroke which can be learned by using The Putting Arc.**

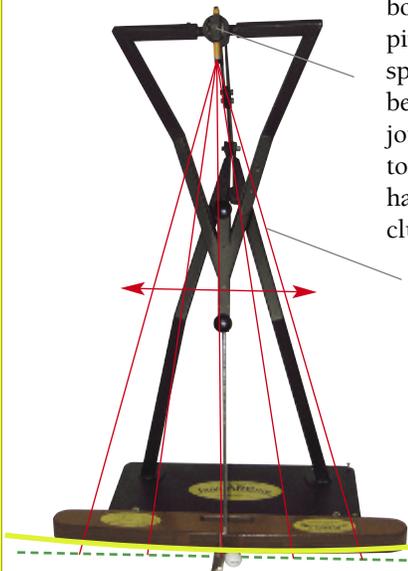
An Important Note:

Your **Putting Arc** should give you many years of service if the heel of your putter is smooth. Before using your **Putting Arc**, check your putter for nicks or scratches on the heel and file or sand them smooth if you find any.

Meet "Iron ARChie" Pat.No. 6,569,030 BI and see the Perfect Putting Stroke

The ideal putting stroke is one in which the upper body, arms and shoulders pivot about a point on the spine approximately between the shoulder joints. Nothing else needs to move and there is no hand manipulation of the club face.

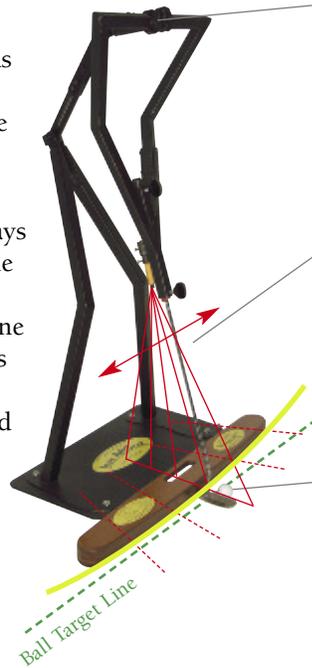
This line laser proves that Iron ARChie always swings "on plane". The laser tracks perfectly along the ball/target line as Iron ARChie swings back and forth, even though the putter head moves on an arc.



Ball Target Line

The pivot point on Iron ARChie is set to the same dimensions used to calculate The Putting Arc curve.

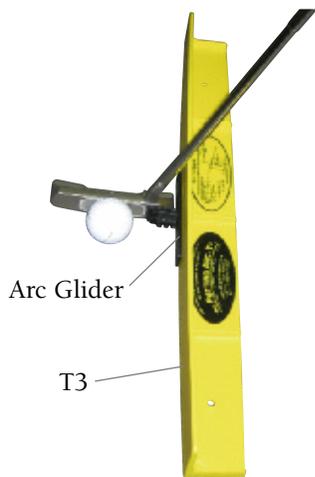
This laser shows the correct clubface angle during the putting stroke. The putterface alignment lines on top the The Putting Arc match perfectly with the laser as Iron ARChie swings back and forth. These lines are perpendicular to the arc and not the ball/target line.



Ball Target Line

Place a ball here and Iron ARChie will make 100% of his 6' putts using good golf balls on a good putting surface.

New Products from The Putting Arc



Arc Glider

T3

The Arc Glider™
PAT. PEND.

Turn your Putting Arc into a putting machine (works with all 3 arcs)



Calibrated Target

Hand Switch

Laser & Mount

Mirrors

Laser Putter Aligner™
PAT. PEND.

Measure & learn perfect putterface alignment at home.



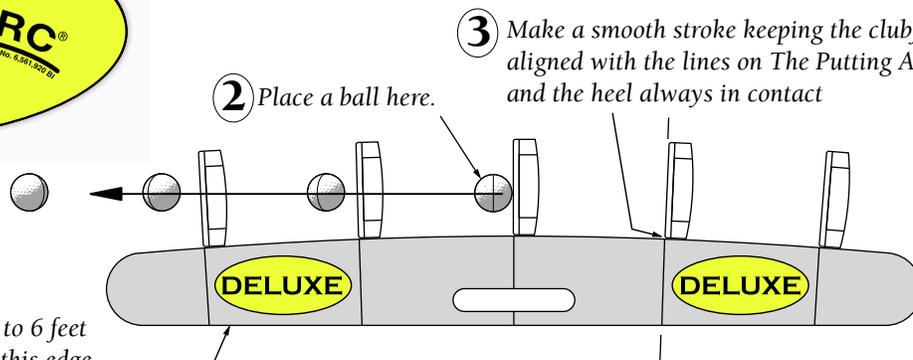
The Putting Arc Stroke
One Hour Instructional DVD
By V.J. Trolio

Available at thePuttingArc.com • 1-800-898-0701

Three Easy Steps to the Perfect Putting Stroke



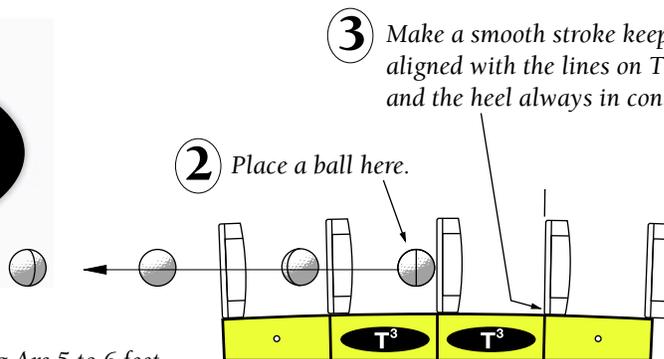
- ① Place Putting Arc 5 to 6 feet from golf hole with this edge aligned 4" left of hole.*



- ③ Make a smooth stroke keeping the clubface aligned with the lines on The Putting Arc and the heel always in contact



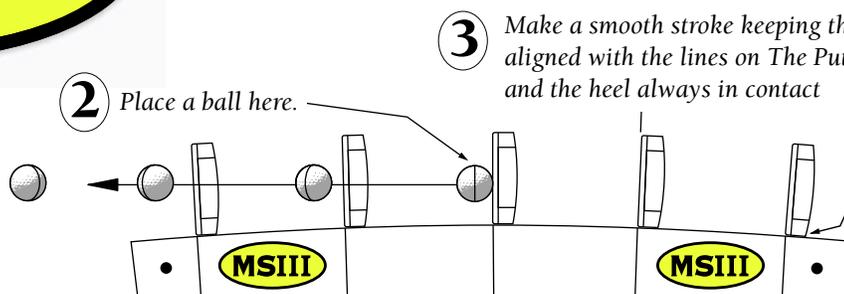
- ① Place Putting Arc 5 to 6 feet from golf hole with this edge aligned 2" left of hole and anchor to green with golf tees.*



- ③ Make a smooth stroke keeping the clubface aligned with the lines on The Putting Arc and the heel always in contact



- ① Place Putting Arc 5 to 6 feet from golf hole with this edge aligned 3 3/8" or two balls left of hole.*



- ③ Make a smooth stroke keeping the clubface aligned with the lines on The Putting Arc and the heel always in contact

* Note - this distance is for a 4" putterhead length. It is slightly less for a shorter head and slightly more for an oversize head.