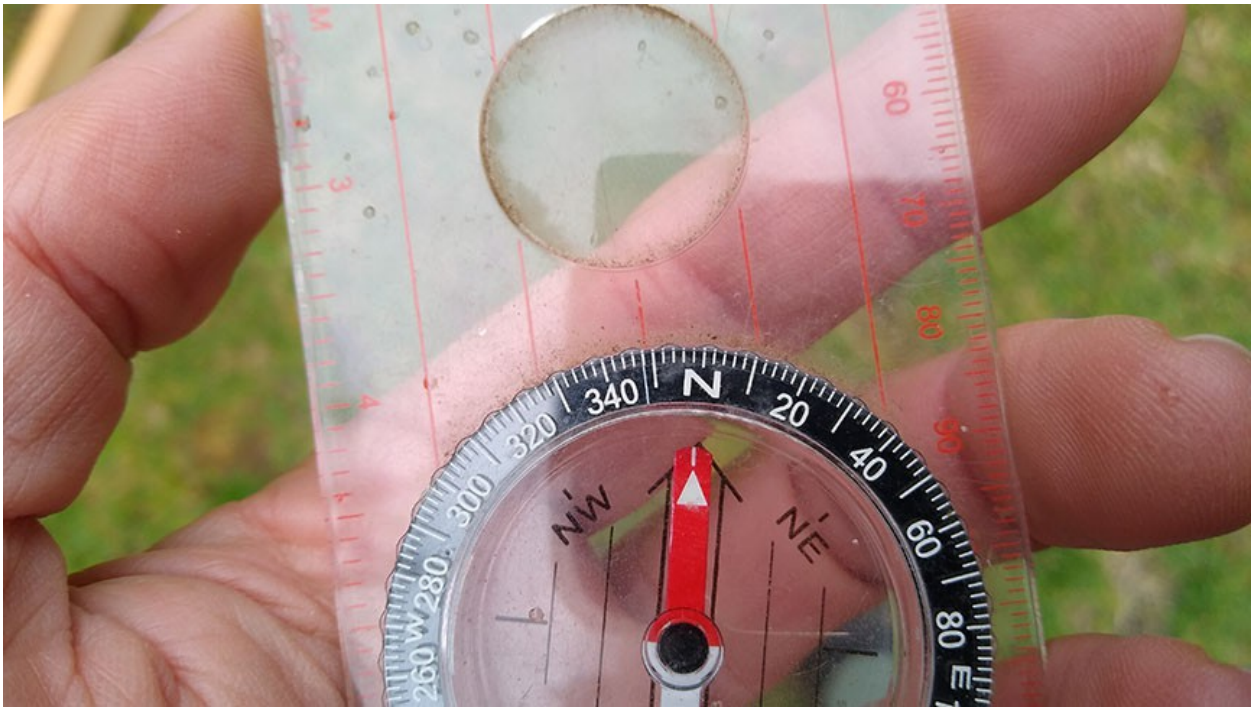
# Assembly Instructions for the 3/4” Ra Apex Connector

You will need four 3/4” dowels, all of the same length. If you are in a country which uses the metric system, that is equivalent to about 19mm. 20mm dowels might be a little tight, but could work if you hand sand the ends of each dowel. In the U.S., Lowe’s sells 3/4” dowels that are 6 feet long for about $5 each. Make sure you get them as straight as possible. If you want to quickly set it up, just make sure the dowels insert into the holes with a little bit of friction. If they are loose, they probably won’t be at the right angles. You can stiffen them up by adding a layer or two of tape.

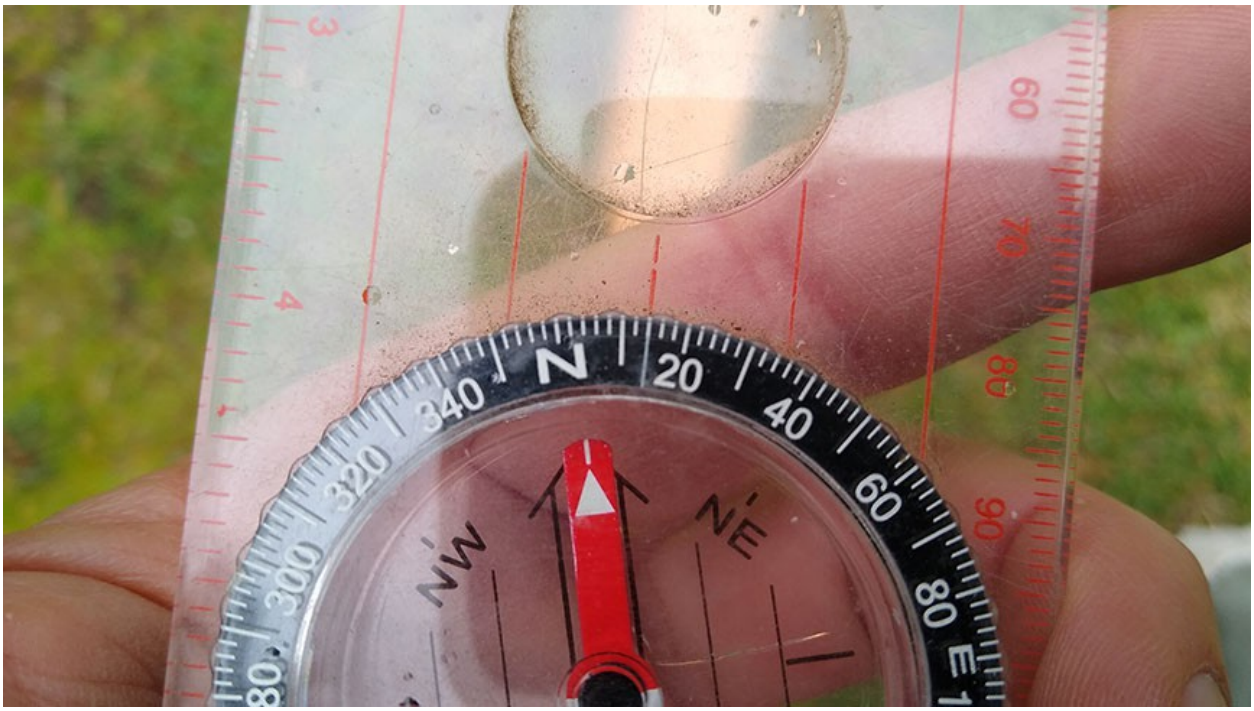
But if you want your pyramid to be as effective as possible, then you will want to make sure it is level, square, and aligned to either true or magnetic north. The best way to align it is to use a 2x4 or a similar piece of wood cut (or marked) to the width of your pyramid. To calculate this, take the length of your dowels and divide them by 1.115, and then add 1.18” (30mm). So if you are using 72” (6-foot) dowels, that would be 72” / 1.115 = 64.574”, plus 1.18”, which equals 65.754” (or about 65+3/4”). So mark or cut your 2x4 to 65+3/4” long for 6-foot dowels. Keep in mind that dowels may not be the exact length advertised. I have often noticed the 72” dowels from Lowe’s can be 1/4” longer, in which case, you would divide 72.25” by 1.115 instead of 72”. If some are longer and some are shorter, then it is best to trim them all to the same length, if possible.

If you want to align the pyramid to magnetic north, set the bezel ring of the compass to 0°. You can see the thin white line going through the “N” on my compass in the picture below:

If you want to align it to true north, go to www.magnetic-declination.com to find your declination. If it is, for example, +12°E, then rotate the bezel 12° *to the right, or clockwise.* In the picture below, you can see that after rotating the bezel to the right, the little white line of my compass is 12° *to the left* of the N, at 348°. (The bezel is in 2° increments, so six ticks to the left of “N”.)




As another example, if it is -14°W, then rotate the bezel 14° *to the left, or counterclockwise:*

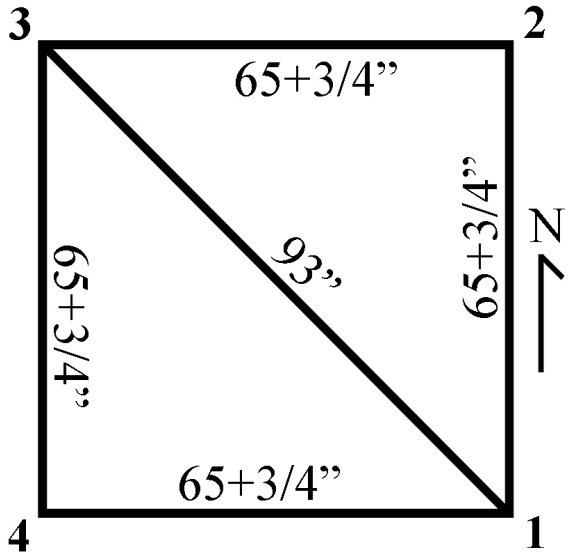


Next, pushing the baseplate of the compass against your 2x4, align it so that the red magnetic needle matches the arrow on the baseplate. Make sure there is no metal within 6 feet of the compass, including phones, watches, jewelry, glasses, keys, etc. In the example below, the compass is set to -14°W:

For more specific instructions on how to align your pyramid, go to www.PrecisionPyramids.com and click the “Alignment” link at the top. Also, here is a link to a decent, inexpensive compass if you should need one: https://amzn.to/3E6qxc6

With your 2x4 aligned to true or magnetic north, you now have the location for the first two corners of your pyramid. If it is inside, mark them with masking tape. If it is outside, use nails (which you might find are better pushed all of the way into the ground so as to not get in the way of the pieces while setting up your pyramid):

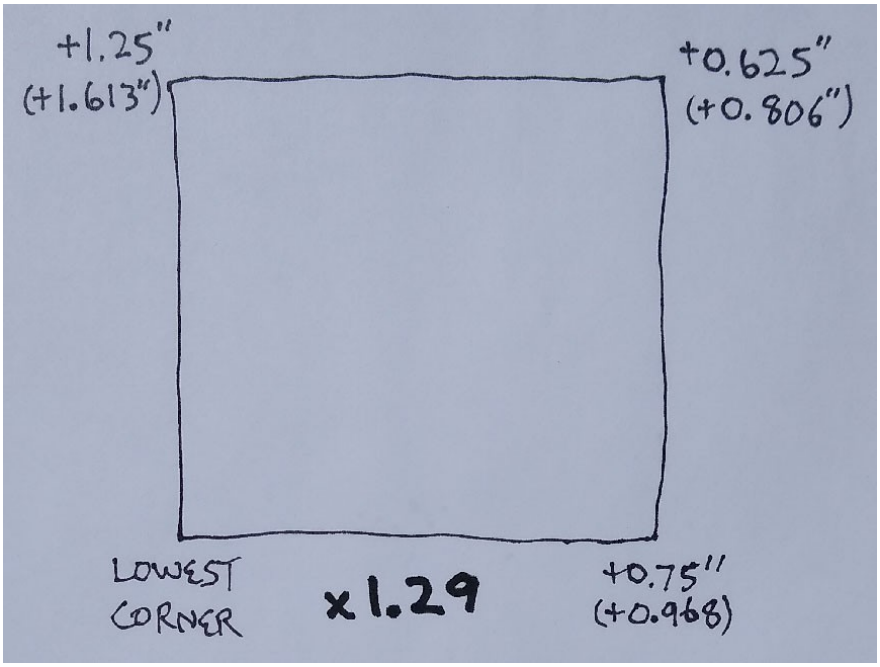
After your first two corners are marked, to find Corner #3, you will need to measure off of Corner #1 the diagonal length with a tape measure, which is 1.414 times the width of your pyramid. If you are using 6-foot dowels, that would be 93” (2362mm). Then match it up with the side length (65+3/4” or 1670mm for 6-foot dowels) off of Corner #2 using your 2x4 or a second tape measure:




For Corner #4, measure your pyramid’s width (65+3/4” for 6-foot dowels) off of the two nearest corners (#1 and #3). Then measure the opposite diagonal to see how close it is to the first diagonal. If it is within 1/4” (6mm), that is well done.

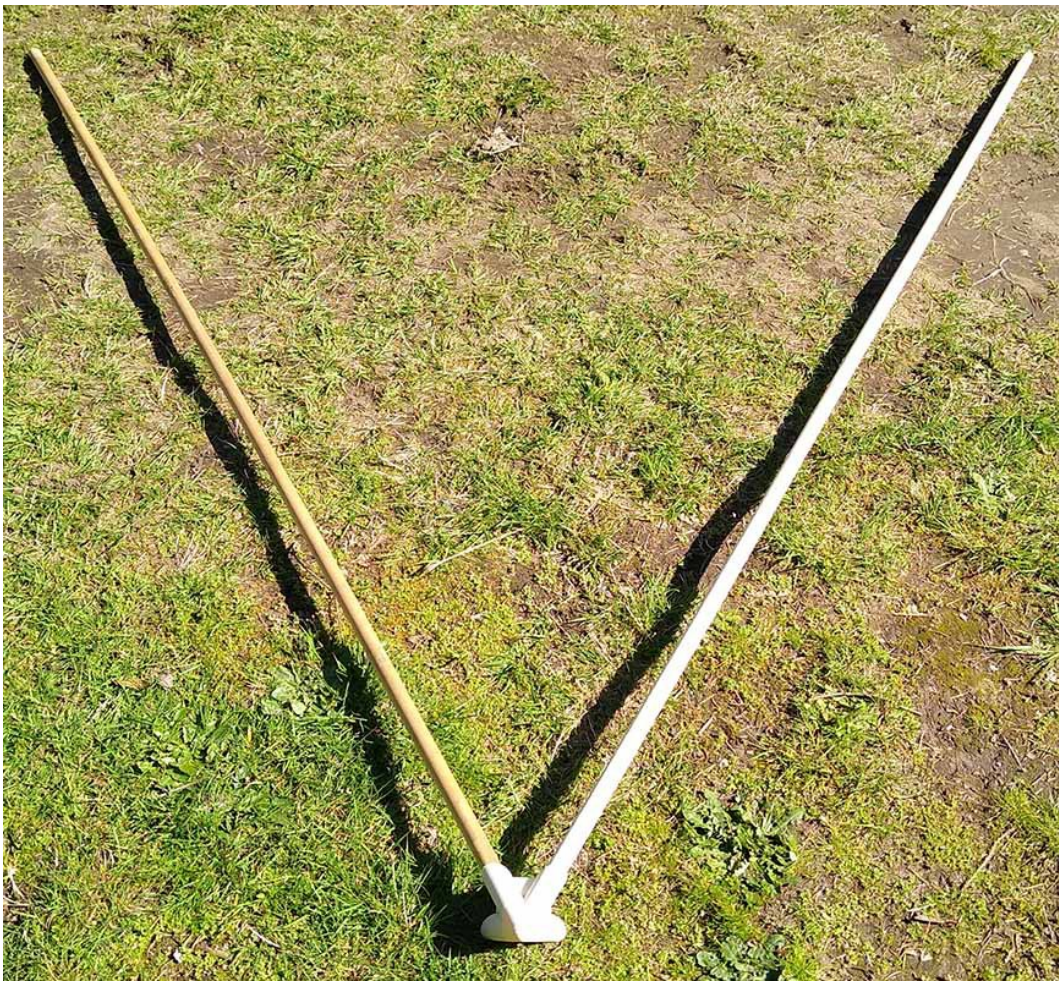
For those who are setting up their pyramid outside, it should be on as level of an area as possible. If you want to make sure it is completely level, place a level on top of your 2x4, and measure how much higher the other three corners are from the *lowest* corner:

Then draw a diagram to show how much higher each of these three corners are. Because the dowel rods are at an angle, multiply each length on your diagram by 1.29. So if one corner was 0.75" higher than the lowest corner, then the new number would be 0.968" (about 1"):




With these new numbers, mark a little line with a Sharpie on the bottom ends on three of the dowel rods the appropriate distances and place them near the nails for each of these three corners. Next, dig three tiny holes with a sharp object like a screwdriver and insert each dowel rod into the holes at an angle as you dig them to let you know when they are deep enough. When you set up your pyramid, you will be inserting the bottom ends of the rods into the tiny holes so that each line is at the level of the ground on the *inside* of the pyramid:

Once your four corners are marked, insert two of your rods into the apex connector piece, with the bottom ends in line with two of your corners:



Dowels are almost never perfectly straight. Look down their lengths as you insert them into the apex piece and rotate them so that they will bow up in the middle. That way, when the pyramid is set up, gravity will help to counteract the bow in the dowels. Also, if the dowels are loose in the holes, add a layer or two of tape to tighten them up.

Next, raise up the apex piece and insert the third rod. Have the fourth rod leaning against your shoulder as you insert the third rod. Then immediately insert the fourth rod. As you insert each rod, make sure the bottom ends match up with each remaining corner; otherwise, the rods won't want to go into the holes. Never try to force the rods in; adjust the angle instead.

After all four rods are in, check to make sure the four bottom ends are at the right locations and that all four rods are fully inserted into the apex piece. Also try to rotate them so they bow up in the middle. If it is outside, remove the four nails, as the metal could interfere with the energy. You can replace each nail with a toothpick or part of a skewer so you will know if the pyramid gets knocked out of position.

May you have magical adventures. If you should have any experiences or experiments you would like to share, please join our community forum at www.PrecisionPyramids.com/forum

And please be sure to recycle any packaging. If it came in plastic bubble wrap, including the envelope, they can be recycled with plastic bags at local grocery stores like Walmart and Safeway.