

Guide to using the Nikko Stirling LRX reticle

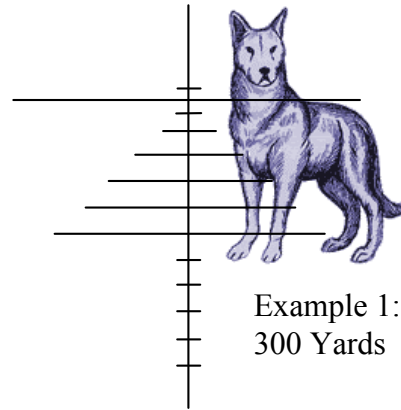
The new Nikko Stirling LRX reticle uses everyday measurements to allow you to quickly and accurately, range find and determine the correct hold over for any rifle or ammunition.

No factors, coefficients, millirads or complicated calculations need to be learnt or performed.

Using a reticle to measure a target requires you to set the scope to 10X magnification. At this magnification the LRX reticle will measure at 100 yards a height of 1 inch to the first horizontal line and then two inches to the second line, increasing by a further 2 inches to each subsequent line

Quick accurate range finding

Range finding is now easy. All you need to know is the approximate dimensions of the target. Commonly in hunting predators, antelope or deer we use the chest dimension behind the forelegs.



Example 1:
300 Yards

For example: a Coyote has a chest height of 12 inches. If you use the reticle to measure the height and note it measures 4 inches high then you can calculate the range as follows.
Example 1:

The Coyote is normally 12 inches in the chest. Simply $12 / 4 = 3$

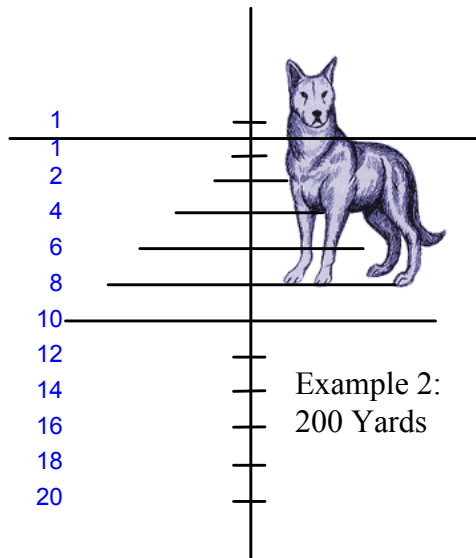
multiplied by 100 = 300 yards.

The distance is 300 yards.

Example 2:

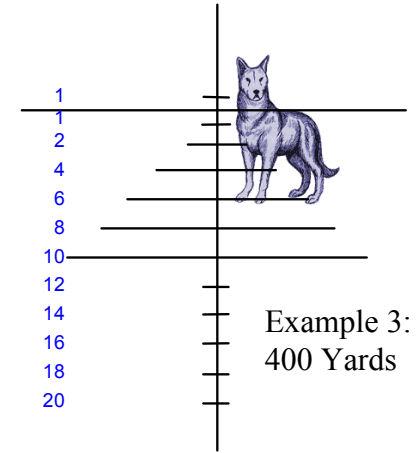
If the Coyote chest measured 6 inches then it is closer

at $12 / 6 = 2$ multiplied by 100 or 200 yards.



Example 2:
200 Yards

Example 3:
However if it measured only 3 inches then it is $3 / 12 = 1 / 4$ multiplied by 100 or 400 yards.



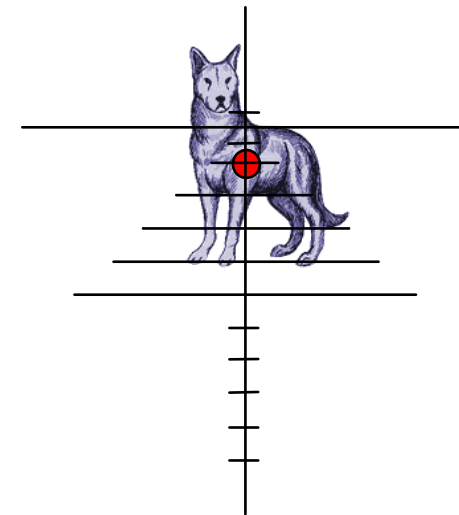
Example 3:
400 Yards

Quick accurate hold over markers

All you need to know is the trajectory or amount of bullet drop of your chosen rifle and ammunition at a know distance. Again the scope is set to 10x magnification.

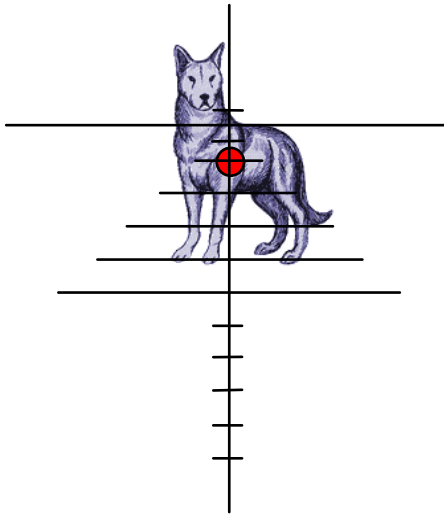
Remember at 100 yards the distance between each horizontal bar is 1 inch to the first line and then two inches to the second line, increasing by a further 2 inches to each subsequent line.

Using Example 1 above we know the Coyote is 300 yards away. So at 300 yards the distance between the horizontal line when measured at the target is 3 inches to the first line and then six inches to the second line, increasing by a further 6 inches to each subsequent line.



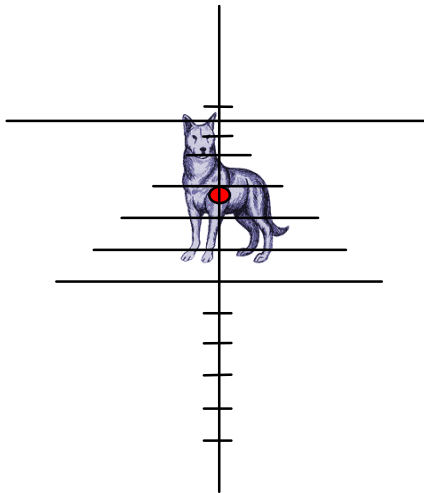
Using the Hold over markers accurately

Now you have chosen your favorite rifle and ammunition for this 300 yard shot. For this example we will use a .243 win with Hornady 75gr HP bullet. You have sighted in the rifle to zero at 200 yards and you know the bullet drops by 5.8 inches at 300 yards (either you measured this yourself on a range or you read the manufacturers data found on the box!)



So in order to shoot the coyote you have to hold over the desired bullet impact point by 5.8 inches. Normally you can round this up to 6 to make it easier! Remembering that the second line is actually 6 inches at 300 yards you can simply place the cross formed by the second line and the vertical center line on the Coyote and shoot.

If the next coyote that day you found to be 400 yards as in example 3 above, then the measurement would be 4 inches to the first line and 8 inches to the second line, increasing by a further 8 inches to each subsequent



line. You know the desired holdover for the Hornady ammunition is 17.6 inches (say 18 inches). Given the above the third line down is 16 inches and the fourth is 24 inches. So you can now shoot using the intersection of the third line and the center line 3 and a quarter horizontal lines as the aiming point.

You can make these calculations prior to hunting to simplify this more.

This Handy Table shows the actual measurement of the horizontal lines in inches at each distance from 100 to 1000 yards

Part Two: Wind Drift

The wind affects the accuracy of your ammunition and needs to be compensated for just like the bullets trajectory. This is most pronounced in the case of a crosswind. Head winds and tailwinds also effect the bullet path by affecting the bullet drop, however there effect is less important than a cross wind which we will discuss here.

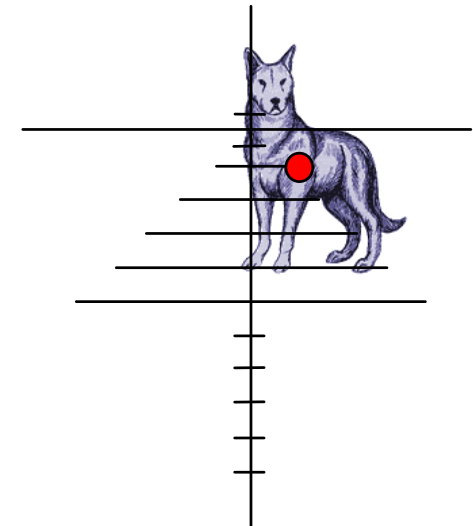
Both bullet and ammunition manufacturers publish wind drift effect for each bullet at common velocities. Like the bullets trajectory the wind drift effect depends on a bullets characteristics.

The LRX reticle horizontal lines are again set to exact inches at 100 yards. This allows you to easily calculate and adjust for wind drift. The first line measures 1 inch either side of the centre vertical line and the second measures 2 inches. The third measures 4 inches, the fourth 6 inches and the fifth measures 8 inches. These measurements of the horizontal lines are the same as the corresponding measurements for the bullet drop. This allows you to use the same table above to make the correct wind drift adjustment for a given distance.

Using the example above the 243 caliber 75 gr. HP bullet which has a known wind drift of 8.25 inches at 300 yards with a 10 MPH crosswind. In this example we will use a Crosswind

moving from left to right across the target. This wind will push the bullet 8.25 inches to the right so we will need to adjust our aim point to the left by 8.25 inches.

Using the above chart, at 300 yards we can see the 2nd line is 6 inches either side of the centre and the third line is 12 inches. So for the 8.25 inch wind effect we just need to aim just beyond the second line. Remember from this same example above the bullet is also dropping about 6 inches so the hold over is also the second line.



	100	200	300	400	500	600	700	800	900	1000
1st line	1	2	3	4	5	6	7	8	9	10
2nd line	2	4	6	8	10	12	14	16	18	20
3rd line	4	8	12	16	20	24	28	32	36	40
4th line	6	12	18	24	30	36	42	48	54	60
5th line	8	16	24	32	40	48	56	64	72	80
6th line	10	20	32	40	50	60	70	80	90	100