

# Rifle Scope Reticles 101

What you need to know about reticles is written by one of our Rifle Scope Experts: Steven K. Ledin. In this article he will tell you everything you need to know about reticles. Steven has decades of hands-on experience with various types of firearms and sport optics, and he is also the lead moderator for our Riflescope Discussion Forum and writer for the Rifle Scope Blog site.

## Focusing Your Reticle

A reticle is the crosshair or aiming point in your field of view in a riflescope. To use a rifle scope reticle properly you must first focus it for your eye. Point your properly mounted rifle scope at the sky or a blank wall with the scope at its highest power. The eyepiece is adjustable on almost all rifle scopes. Some have a locking ring to prevent inadvertent movement. Loosen the locking ring and turn the whole eyepiece in or out a couple of full turns at a time until the scope crosshair is clear and sharp for your eye. Tighten the lock ring. On a fast focus (FF) eyepiece simply turn the ring until the reticle is sharp. On a fast focus eyepiece this may be only a fraction of a turn. Loosen the locking ring first, and tighten afterwards if applicable. Not all fast focus (FF) eyepieces have locking rings.

## Basic Reticle

The most basic reticles simply offer an aiming point. Fine crosshairs, Duplex, Nikoplex, 30-30, Heavy Duplex, or whatever the manufacturer wants to call them. They all give you a central aiming point. Thicker reticles show up better in low light or against busy backgrounds like foliage, and help draw your eye towards the center of your field of view. These reticle types are mostly used in hunting rifle scopes where extra precision is not a priority. Fine crosshairs, on the other hand can almost be invisible on a busy background, but excel at allowing you to adjust your shot in minute increments due to the small amount of target your crosshair covers up.

The amount of target your crosshair covers is called subtention. Fine cross hairs have minimum subtention. These are for accurate target guns mostly and easily disappear except on a clean paper target.

There are riflescopes with the reticle located in the first plane or the second plane. Almost all scopes for the American market have the reticle in the second plane. This means that the reticle does not appear larger as the magnification increases, just your target. Again, almost all scopes for the American market are in the second plane. *First plane scopes increase the size of the cross hair with the target. Subtention stays the same. On second plane scopes, since the reticle size stays the same as the magnification increases, the subtention decreases.* Less of your target is covered by your reticle.