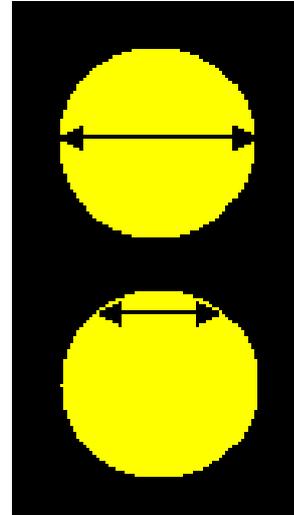


Why is range finding so important?

Air rifle pellets lose their already low energy very quickly which gives them quite a pronounced arc of trajectory. Additionally the effect of a cross wind becomes more significant the further the pellet travels and it's not unusual to have to aim 4 inches or more off centre at full distance to take this drift into account in even light winds. The diagram shows that the width of the target on its centre line is much larger than it is towards the top or bottom and this gives you a bigger margin of error when estimating the windage factor. The ability to read the wind over the entire 55 yards is incredibly difficult, so knowing the exact range of the target will allow you to hit this centre line which will increase the chance of a kill. Once you know how far away the target is you can adjust your point of aim. There are two ways of doing this, the first (and by far the most common method used in FT) is to dial the drop using the top elevation turret on the scope to move the cross hair to the actual point of impact. This requires target turrets that can be dialled during competition compensating for the pellet drop and the knowledge of how much to dial. The other is to make use of mildots. Mildots are equally spaced markings on the reticle that give you several potential aim points that follow the arc of the pellet. This is the method used primarily in HFT (due to the fact you are not permitted to adjust any part of your scope) and whilst slightly faster, is not as foolproof as dialing. The process is to establish a relationship between the dots and distance, so at 24 magnification, 55 yards may equate to 4.5 mildots. The difficulty is that the magnification you set your scope to will change the number of mildots. 4.5 mildots at 24mag would become 2.25 at 12mag or 1.125 at 6mag whereas dialling for the distance will always give a point of impact on the cross hair. Some scopes allow both dialling and also have mildots giving you a choice of method.



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Mounts



Once you've selected your scope you will need mounts to attach it to your rifle. They come in a variety of sizes and styles, but don't buy cheap mounts. We recommend 2 piece double bolt mounts. Good quality ones will centrally align your scope above the barrel and will not move once installed. This is especially important on spring guns which can have quite a pronounced recoil. You should always get the size recommended for your scope and ensure that they are high enough to clear any magazine. Setting up the scope can be a bit tricky the first time, so ask someone to talk you through it, and remember that the bolts only need to 'pinch' the scope and it is normal to have a gap between the top and bottom sections. Applying too great a force may end up destroying your scope by crushing the tube. All air rifles have a dovetail mount, so ensure that your mounts are designed to fit on a dovetail, live round rifles have a completely different mounting method and the mounts are not interchangeable.