
Scope Mounting Table

ADJUSTABLE Mounts and LOW Mounts

for Dovetail and Picatinny Rails

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I want to know how high my scope will be *before* I purchase a set of rings or an adapter rail. :-)
However, the information that manufacturers provide is hard to find, and often difficult to compare with the data of other manufacturers, because Sportsmatch measures their rings differently than Hawke, for example.
For that reason I made the following **scope mounting table** (thanks to forum members who have contributed ideas!).
The basis of the table is the info provided by manufacturers and sellers, or I have been able to measure the product myself. The stated "heights" have been converted into a standard height (this standard is shown in the graphics following the table).

Overview of How to Read the Table

The table begins with the scope tube (30mm scope tube).
Then come options for scope rings. Preference has been given to adjustable rings, low rings, and to 2-piece rings.
Then come additional accessories for elevation adjustment.
Then come dovetail-to-picatinny-rail adaptors, if necessary, and preferably with elevation adjustment.
The table ends with a summary: total height | total elevation adjustment | total price

The table assumes you have a dovetail rail on your gun. If you already start out with a picatinny rail, great – you can then simply subtract the height of the rail adaptor from the total height (the height given in the summary at the end of the table).

What's Included

The scope mount table is not exhaustive, of course...!
It gives preference to *elevation adjustable* mounts and rails (cant), *low* mounts, *2-piece* mounts, and *30mm* scope tubes.
It includes the following:

- Prices
- Part numbers
- Total elevation adjustment (cant)
- Special features, advantages and disadvantages
- Other scope tube sizes if available
- Total height of the bottom of scope tube above the gun's dovetail grooves

Abbreviations

orange lettering = height added to the scope height through the rail adaptor or the scope rings;
Note that due to their different designs, the height of picatinny devices is measured differently than the height of dovetail devices – only the summary of the total height is comparable;
Note that when the scope is mounted with a cant the actual scope height to be entered into a ballistic calculator will be a little bit less, depending on the amount of cant
blue lettering = price in \$ in 2019, without shipping unless noted
green lettering = max. elevation adjustment (cant)
● = something positive
red lettering or ● = something negative
Part numbers: are for 30mm rings
25, 30, 34 = 25mm meaning 1" // 30mm // 34mm = these numbers refer to the scope tube diameter for which the listed scope rings are available

Notes From the Table

¹ With adaptor, from UK or <https://www.ebay.com/itm/eaglevisioncam-Scope-mount-30mm-to-25mm-ring-adaptor-aluminium-uk/222367489395>

² Eagle Vision also has 34mm adjustable mounts: IPS-34 and INS-34

³ *Quality*: This adjustable rail seems too cheap to be good, but K_sqrd on GTA reported that his 4 have been working great for years, and on *springers*: <https://www.gatewaytoairguns.org/GTA/index.php?topic=163734.msg155827770#msg155827770>

⁴ Sportsmatch also makes mounts that are adjustable for windage. Those models have an even larger elevation adjustable range.

⁵ Important tips, hard to find online: Shorten the short leg of an allen wrench so that it fits under the scope body. That way, you don't have to remove the scope, or the rings, when making elevation adjustments. | Do download the manufacturer's instructions and read them. | 1 turn of the elevation screw moves the POI by 7" @ 20 yards.

⁶ 54moa with rings 3.5" apart (center to center of rings) | more moa can be achieved with the rings even closer, e.g. 63moa estimated with rings only 3.0" apart

⁷ Using a quick detachable mount with only the *rail adaptor inserts* makes no sense, because the rail adaptor inserts are not firmly attached to the dovetail rail; therefore maintaining zero when remounting the scope does not work well.

⁸ For the published 25moa of elevation cant, Hawke assumes the distance between the scope mounts to be 4.3" (11.0cm) (center to center). The closer the mounts are the steeper the cant. Using the published cant data for the shims that Burris uses in their XTR Signature Rings, we can interpolate the elevation cant for other ring distances.

| Cant (Elevation Added) in MOA by Burris XTR Signature Rings – With 25 MOA Scope Shims | | | | | | | | | | | | | | | | | |
|---|-------------------------|------|------|------|------|------|------|------------------------|------|------|------|------|------|------|------|------|------|
| | Interpolated/ Estimated | | | | | | | As Published by Burris | | | | | | | | | |
| Ring Spacing (in) | 2.00 | 2.25 | 2.50 | 2.75 | 3.00 | 3.25 | 3.50 | 3.75 | 4.00 | 4.25 | 4.50 | 4.75 | 5.00 | 5.25 | 5.50 | 5.75 | 6.00 |
| Cant (moa) | 56.1 | 51.2 | 46.8 | 42.9 | 39.5 | 36.5 | 33.9 | 31.6 | 29.6 | 27.9 | 26.4 | 25.0 | 23.7 | 22.6 | 21.6 | 20.6 | 19.8 |
| Decrease in Cant | – | 4.9 | 4.4 | 3.9 | 3.4 | 3.0 | 2.6 | 2.3 | 2.0 | 1.7 | 1.5 | 1.4 | 1.3 | 1.1 | 1.0 | 1.0 | 0.8 |

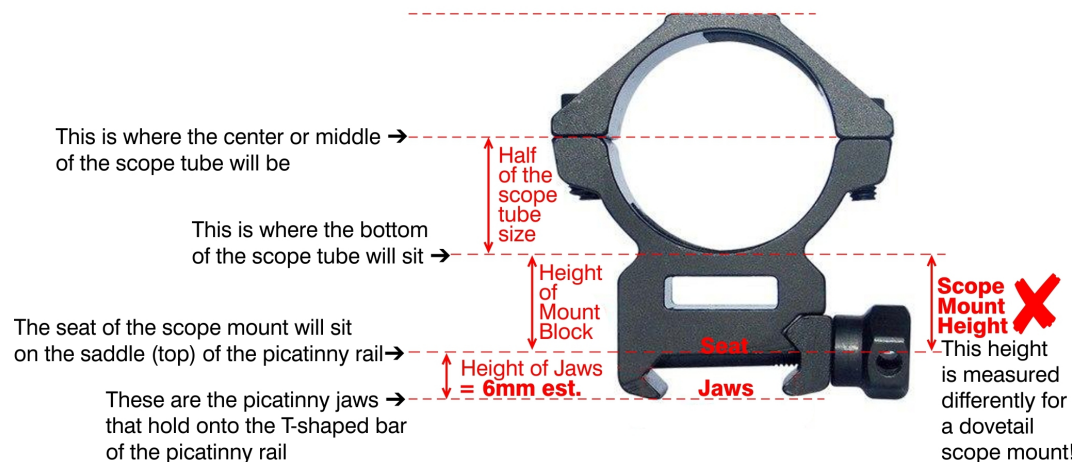
Note: The effect of the ring spacing seems to be non-linear, it increase progressively quicker the closer the mounts are.

Standards Used in this Scope Mount Table

Cf. the graphics!

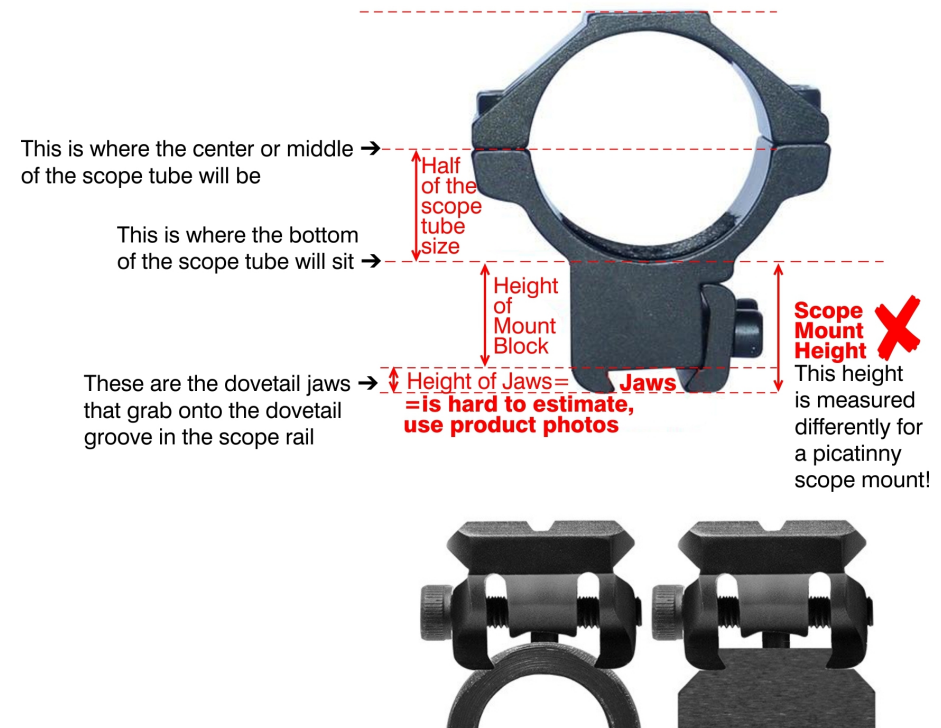
- **Picatinny Scope Mount Height**: measured from the seat of the scope mount (that will sit on the saddle of the picatinny rail) – to the bottom of the scope tube
- **Dovetail Scope Mount Height**: measured from the bottom of the scope mount's jaw (that will attach at the bottom of the gun's dovetail rail's groove) – to the bottom of the scope tube
- **Scope Rail Adaptor** [Dovetail-to-Picatinny-Rail Adaptor]: measured from the bottom of the gun's dovetail rail grove (bottom of the adaptor's grabbing jaw) to the saddle of the adaptor's picatinny rail
- **Canted Scope Rail** [Picatinny to Picatinny]: measured from the seat of the canted scope rail (that will sit on the saddle of the picatinny rail) – to the saddle of the canted scope rail [not pictured]

Picatinny Scope Mount [similar to Weaver]



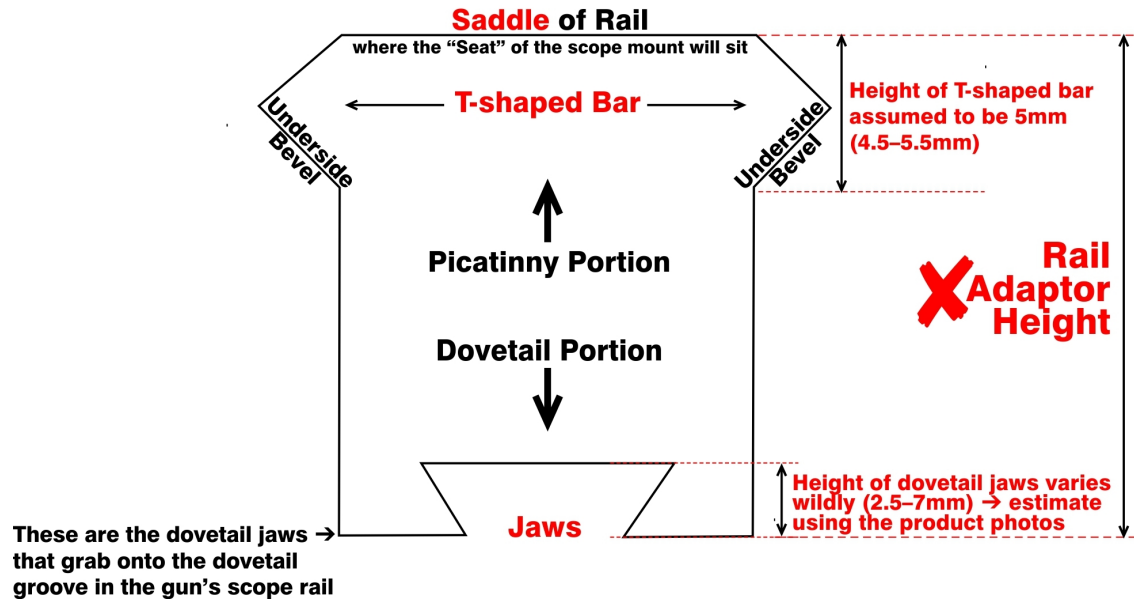
Dovetail Scope Mount

Airgun, rimfire, and shotgun dovetail, commonly 11mm (9-11mm, also 12mm, and more), but there is no standard!



Rail Adaptor

(Dovetail-to-Picatinny-Rail Adaptor)
View from behind



Picatinny Rail

[similar to Weaver]
View from behind

