Scope Mounting Table

ADJUSTABLE Mounts
+ Dovetail-to-Picatinny ADAPTORS
+ LOW Mounts

2020-10 | Matthias | JungleShooterX@gmail.com

This Can Help You

- If you want to know how high your scope will be *before* you purchase a set of rings or an adapter rail. :-)
  Because 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.
- If you want to know what options are out there for adjustable mounts and adjustable rails – for elevation and also for windage
- If you want to know

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 groves

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

2020-10 SCOPE MOUNTING TABLE: With Preference for: 30mm | Elevation Adjustment (Cant) | Low Mounts

Matthias | JungleShooterX@gmail.com

▼ ▼ ▼ Scope Tube, 30mm ▼ ▼ ▼

Convert to Picatinny Rail

Burris XTR Signature Rings			**Burris** AR-Signature QD P.E.P.R. Mount 1-Piece	**Eagle Vision** Adjustable Mounts		**FX** No Limits Adjustable Mounts *Picatinny*	**Sportsmatch** Adjustable Mounts *Picatinny*		**Hawke** Match Mounts 2-Piece *Weaver*, Low	**Vector** Mark *Weaver* Mounts, Low	**Leupold** Quick Release *Weaver*-Style Scope Rings
1.00" height	1.25" height	1.50" height					Elevation	Elevation + Windage			
10-11mm No. 420221	16-17mm No. 420222	22-23mm No. 420223	24-25mm No. 410352	23-29mm No. FAE-S50	21-26mm No. INS-30	20-23mm No. 30000-P	19-20mm No. ATP72	24-27mm No. ATP90	5mm No. 22115	7mm No. SCTM-27	8mm Matte, No. 174074
25, 30, 34	25, 30	25, 30, 34	30, 34, 35	25[1], 30, 34[2]	25[1], 30, 34[2]	25, 30	25, 30, 34	25, 30, 34	25, 30	25, 30, 34	25, 30
54[6] MOA Adjustable			47 MOA Adjustable	50 MOA Adjustable	41 MOA Adjustable	46 MOA Adjustable	45 MOA Adjustable[4]	65 MOA Adjustable	Optional, cf. below	——	——
75$			**123$**	**75$** incl. S/H UK	**102$** incl. S/H UK	**70$**	**80$** incl. S/H UK	**132$**	**23$**	**13$**	**70$**
● Are thick = Somewhat block a good view of the turret settings.							● Are slim = Are not in the way of the turret settings	● Also have Windage Adjustment ● Are slim = Not in the way	● Are slim. **2mm** Hawke Mount Inserts No. 22161		● Quick Detachment ● Are slim = Not in the way of the turrets
● Cant adjustments in controlled steps.			● Quick Detachment	● Cant adjustments are a trial and error process.			● Cant is micro-adjustable.		**25**[8] MOA ● *FIXED*		
									23$		

FX No Limits Adjustable Mounts *Dovetail*	**Sportsmatch** Adjustable Mounts *Dovetail*		**Hawke** Match Mounts 2-Piece *9-11mm*, Medium	**UTG** PRO 30mm 2-Piece Low Profile P.O.I. *Dovetail*	**Vector** Scope Rings Low *Dovetail* 30mm
	Elevation	Elevation + Windage			
25-29mm No. 30000	23-24mm No. ATP61	26-28mm No. ATP66	14mm No. 22107	13mm No. RDU013010	11mm SCOT-55L SCOT-55A
25, 30	25, 30, 34	25, 30, 34	25, 30	25, 30	25, 30
46 MOA Adjustable	45 MOA Adjustable[4]	75 MOA Adjustable	Optional, cf. below	——	——
70$	**80$** incl. S/H UK	**130$** incl. S/H UK	**23$**	**48$**	**11$**
	● Are slim = Are not in the way of the turret settings	● Also have Windage Adjustment ● Are slim = Not in the way	● Are slim. **2mm** Hawke Mount Inserts No. 22161	● Look good	
● Adjstmnt trial-error.	● Cant is micro-adjustable.		**25**[8] MOA ● *FIXED*		
			23$		

Hawke Match Mounts 2 Piece *Weaver* Low		**Vector** 30mm Mark *Weaver* Mounts, Low	**Hawke** Match Mounts 2-Pc *Weaver* Low No. 22115
5mm No. 22115		7mm No. SCTM-27	5mm No. 22115
24, 30		24, 30, 34	25, 30
Optional, cf. below	——	——	Optional, cf. below
23$	**23$**	**13$**	**23$**
● Are slim. **2mm** Hawke Mount Inserts No. 22161			● Are slim. **2mm** Hawke Mount Inserts No. 22161
25[8] MOA ● *FIXED*	——	——	**25**[8] MOA ● *FIXED*
23$			**23$**

Full Adaptor Rail: **8mm** added to scope height
Eagle Vision Dovetail-to-Picatinny Adaptor No. PDRA-150 | ● Quality: Despite "Made in the UK" the picatinny saddle of mine rose to form a V-shape ➔ Maybe this does not matter...? ➔ Rick67 on AGN: Insert a needle on each side of the picatinny jaws!
OR——————————————————OR
Rail Adaptor Insert: **6mm** added to scope height (● As they are just an inch short their attachment to the dovetail rail is not as sturdy as a full adaptor rail, and they probably do not provide a repeatable scope position when switching out scopes)
UTG Dovetail-to-Picatinny Adaptor MNT-DT2PW01 (also available: Eagle Vision PDRA-26 from UK)

15cm long rail (No. PDRA-150) |OR|
2.6cm short rail insert (No. MNT-DT2PW01; No. PDRA-26)

Full Rail: **48$** (incl. 15$ ship from UK) (PDRA-150) |OR| ***Rail Insert:*** **10$** (MNT-DT2PW01 / the PDRA-26 costs 16$ plus added shipping from UK)

20mm
UTG Drooper Tapered Scope Rail Dovetail-to-Picatinny No. MNT-DNT06

12cm long rail

33 MOA *FIXED*

15$

16-23[7]**mm**
Hawke Adjustable Scope Rail – with Dovetail-to-Picatinny Adaptor[5]
● Quality: Seems too cheap, but *good report* by K_sqrd on springers[3]
● Cant adjustm. in controlled steps.

18.7cm long (22404)
13.7cm long (22403)

100 MOA Adjustable

27$** |OR| **25$

▲ ▲ ▲ Gun's Dovetail Groove ▲ ▲ ▲

Summary: Total Height from the bottom of the gun's dovetail rail's groove – to the bottom of the scope tube, in mm | Total Elevation Adjustment Range in MOA | Total Price in $

With Full Adaptor Rail: (includes 8mm added scope height)																					
18-19	24-25	30-31	32-33	31-37	29-34	28-31	27-28	32-35	15	15	16	25-29	23-24	26-28	14	13	11	27	25	23–30[7]	23-30[7]
54[6]	54[6]	54[6]	47 Quick Det.	50	41	46	45	65+Windage	25[8] Fixed	——	0 - Quick Det.	46	45	75+Windage	25[8] Fixed	——	——	58[8] Fixed	33 Fix	100	125[8]
123	123	123	171	123	150	118	80	180	94	61	70	70	80	130	47	48	12	61	38	40	73
With Rail Adaptor Insert: (includes 6mm added scope height)																					
16-17	22-23	28-29	30-31	29-35	27-32	26-29	25-26	30-33	13	13	14										
85	85	85	133[7]	85	112	80	42	142	56	23	32[7]										

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_sgrd on GTA reported that his 4 have been working great for years, and on *springers*: https://www.gatewaytoairguns.org/GTA/index.php?topic=163734.msg1558277?0#msg1558277?0

[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

Burris XTR Signature Rings: Cant Depends on How Close to Each Other the Rings Are Installed

Cant (Elevation Added) in MOA by Burris XTR Signature Rings – With *25 MOA* Scope Shims

	Estimated / Interpolated						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
Change 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, i.e., cant increases progressively quicker the closer the rings are installed to each other.

[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 rings are to each other 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 ring distances other than 4.3" (11cm) (cf. table).

Sources of Data

The basis of the table is the info provided by manufacturers and sellers, or I have been able to measure the product myself. The "heights" stated in the various sources have been converted into a standard height (what that standard is is shown in the graphics at the end of this article).

Thanks to forum members who have contributed ideas!

To err is human. I am human. Therefore, I make errors. Sorry. If you find one, or have a suggestion, send me an email. Thanks!