RailScales LLC Cage: 7RAL1 P.O. Box 2845 Claremore, OK 74018

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PEQ - LEAF® / PN:1217

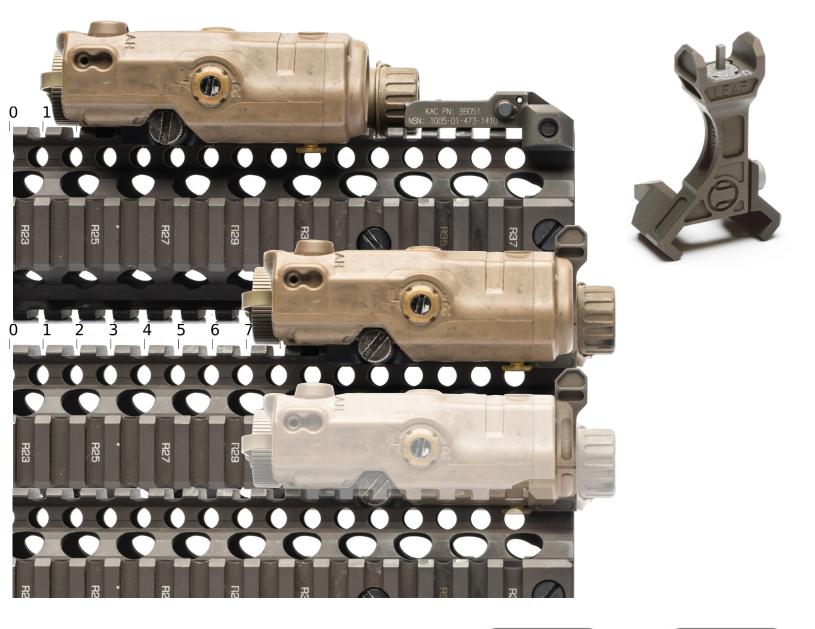


Laser Emitter Aiming Fixture for L3® AN/PEQ-15 ATPIAL series lasers.

The PEQ - LEAF® is a fixed adjustable front sight that attaches to picatinny rail systems. It was specifically designed to decrease the mounting footprint of the AN/PEQ15 ATPIAL series laser on the MK18 Mod 1/CQBR weapon system using the Daniel Defense® RIS II Rail (P/N:DD-8020, NSN:1005-01-548-1385). Currently, the issued Knight's Armament Company® MK18 front sight (P/N:99051, NSN:1005-01-473-1410) is used with an PEQ/ATPIAL series laser, which creates ergonomic and functional issues. In addition, 12 o'clock rail space for optimally mounting illumination/laser pressure pads is greatly diminished. Using the KAC MK18 front sight also creates IR splash from both the illuminator and the laser apertures which greatly increases the users IR signature. The PEQ - LEAF® eliminates both of these problems by mounting in front of and underneath the PEQ unit with almost no perceivable footprint.

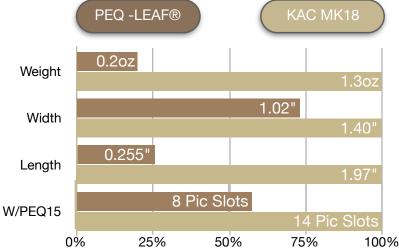
Forward Mounted

PEQ - LEAF® places the PEQ unit 6 picatinny slots closer to muzzle. This creates a 60% smaller footprint allowing an extra 2.364 inches of top rail space for optimal pressure pad placement. This gives the user's pressure pad ideal placement for increased ergonomics and activation. This also pushes the laser to the forward most position allowing the Infrared apertures to clear the beam lenses eliminating all beam splash from the front sight.



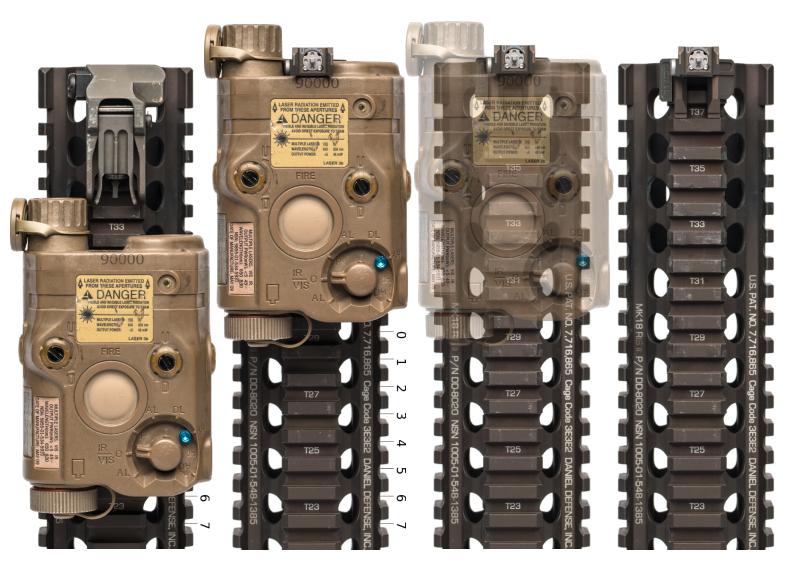
Specs & Dimensions

PEQ - LEAF® weighs in at a featherweight 0.2oz, 85% lighter than the issued KAC MK18 sight. It is also 27% thinner and 87% shorter. The PEQ - LEAF® is CNC machined out of 7075-T6 aluminum then finished with a Type 03 hard coat anodizing. The screw is machined out of 416 stainless steel, heat treated, and then coated in black oxide.



No Footprint

PEQ - LEAF® mounts underneath the front of the PEQ laser unit via two support legs with 4 recoil lugs. The mounting footprint is nearly non existent, taking up 1/2 of a picatinny slot.



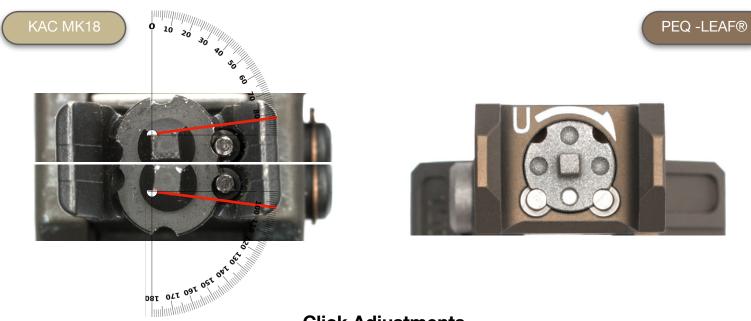
Recoil Lugs

The KAC MK18 front sight contains zero recoil lugs which puts all the stress on the mounting screw. The PEQ - LEAF® contains four indexing and recoil lugs which puts all of the impact force on the lugs and not the mounting screw. The integral picatinny clamp on the PEQ - LEAF® also retains 94% of the same length as the KAC MK18 front sight.



Dual Detent™

The KAC MK18 front sight post detent cut and detent boss have a very loose fitment resulting in undesirable slop. This variance in rotational fitment allows the front sight post to over rotate 7.5 degrees either direction totaling 15 degrees of variance. To eliminate this unwanted movement the PEQ - LEAF® was developed with our Patent pending Dual Detent[™] mechanism. The Dual Detent[™] eliminates all unwanted movement and precisely locks in the front sight post. The detents are backed by a compression spring and provides each detent with 15in lbs of force. This results in precise and positive clicks when adjusting the post. The front sight post also features 4 indexing dots, which a user can paint fill to indicate their confirmed zero if desired. PEQ - LEAF® also includes its own precision adjustment tool.



Click Adjustments

Instead of one generic adjustment (i.e. 1/2 moa) for the PEQ - LEAF®, we have calculated all of the relevant military weapon system specific adjustments at SOP zeroing distances. The PEQ - LEAF® comes with the front sight post height adjusted close to the 50/200m zero, but can be provided with a set height upon request. Both meter and yard zero distances are provided. Custom zeroing adjustment tables can be made with the formula provided at the bottom of the chart below.

Weapon System	Barrel Length	Sight Radius	25M	50M	100M	200M	25YD	50YD	100YD	200YD
MK18/CQBR	10.3"	15.5"	0.40"	0.75"	1.50"	3.03"	0.35"	0.69"	0.99"	2.77"
M4A1/Block II	14.5"	18"	0.33"	0.65"	1.30"	2.61"	0.30"	0.60"	1.19"	2.38"
M27 IAR	16"	16"	0.37"	0.74"	1.46"	2.94"	0.34"	0.67"	1.34"	2.67"
HK416	10.4"	13.4"	0.44"	0.88"	1.75"	3.50"	0.40"	0.80"	1.60"	3.20"
MP7	7.087"	9.75"	0.60"	1.20"	2.41"	4.82"	0.55"	1.10"	2.20"	4.41"

Calculating Front Sight Post adjustment per click: Target Distance in inches / Sight Radius, X 0.00625, / 1.047



Lower IR Signature

The issued KAC MK18 front sight has a significant IR signature when used in conjunction with a PEQ unit. The PEQ illuminator and laser beams both hit the KAC MK18 sight creating enormous IR splash which further exposes the users IR signature as well as degrades the users NVG image quality. The PEQ - LEAF® was designed to sit behind the PEQ unit's illuminator and laser beam lenses. By sitting to the rear of the lenses all IR splash is eliminated from the front sight, the new forward placement of the PEQ unit also eliminates any potential quad rail IR splash.

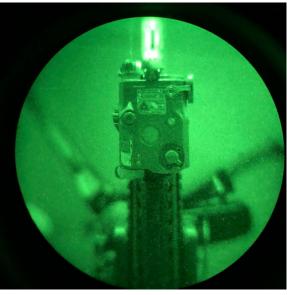












IR Splash PEQ - LA5B on dual high setting, through PVS15 night vision goggles. *IR splash does appear brighter through the camera lens.

Multi Adjustment Tool

The PEQ - LEAF® includes its own precision front sight adjustment tool for the front sight post as well as the PEQ illuminator and laser adjustments. The tool is also machined out of 7075-T6 aluminum and includes a split key ring. The hole is also big enough to accommodate mil spec 550 paracord. The current procedures for adjusting PEQ units call for either a brass casing, a penny, or another implement to be used which can gaul and prematurely wear out the adjustment. The slot on the tool is specifically designed to fit the adjustment mechanism slot, increasing its longevity.



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