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INSTALLATION AND INSTRUCTION MANUAL – SM-101QD BALLISTIC ADJUSTMENT MOUNT (BAM)

The SM-101QD BALLISTIC ADJUSTMENT MOUNT (BAM) is a quick-detachable sight mount with ballistic compensation and high repeatability for specific distances using 7.62 NATO ammunition.

The mount is designed to be used together with a non-magnified Optical Sight Unit (OSU), and has provisions for mounting an Aimpoint 3X or 6X magnification unit in an Aimpoint twist or tip-off mount (not supplied with the SM-101QD) aligned behind the OSU.

Parts

The SM-101QD consist of the following main parts:

- BAM Mount Body (marked SM-101QD)
- Locking lever (marked QD-001) and side clamp
- BAM Bridge Assembly (marked SM-102)
- Two Adjustment Knobs (marked SM-105 and SM-106)

All parts are marked with a part number and a batch number for maintenance and logistics support.

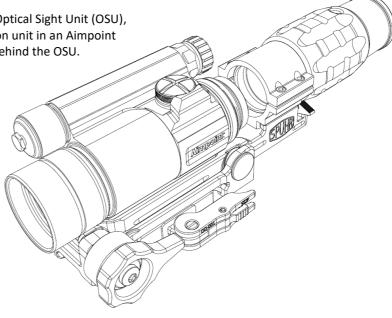
Specifications

Settings: 250 / 400 / 500 / 600 m (7.62 NATO)

Tolerances: 0.4 MIL at any setting Weight: 315 g / 0.694 lb

Material: 7075-T651 (minor parts stainless steel)

Finish: Black Hard Coat Anodizing



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Installation

Upon delivery from the manufacturer the SM-101QD BAM needs to be fitted with an OSU such as the Aimpoint Comp M4 prior to being attached to a Picatinny (MIL-STD-1913) or NATO (STANAG 4694) rail.

Protruding from the Bridge Assembly are two red silicon covers (indicated in picture 1) covering the primary mounting screws for the OSU; these silicon covers should be left in place until installation of OSU is to begin.

To attach OSU to BAM follow these steps:

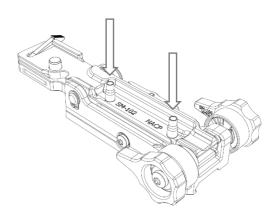
- Prepare the OSU by applying a drop of Loctite® 243™ Blue to each screw hole on the OSU's bottom.
- 2. Remove the silicon covers from the mounting screws.
- 3. Insert a T25 torx driver through on of the holes in the bottom of the Mount Body and into the corresponding torx slot in the mounting screw, before lowering the OSU onto the BAM.

Note: Orientate the OSU so that the objective is in in the same end as the BAM's adjustment knobs.

4. As the attachment screws are spring loaded they need to be tightened in an alternating fashion until completely tight.

Note: In their instructions Aimpoint specifies "Tighten firmly." If specific torque value is wanted please contact the manufacturer of your OSU for more detailed instructions.

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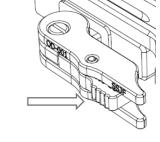
Picture 1: SM-101QD. Arrows indicating silicon covers



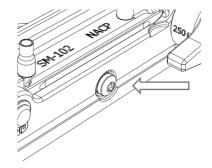
The SM-101QD has a quick-detachable locking lever with a tensioning screw on the opposite side of the Mount Body. The tension of the lever is adjusted from the factory, but due to variances between different rail manufacturers the tension may require re-adjustment prior to use.

To attach the BAM to a Picatinny or NATO rail for the first time follow these steps:

- 1. Prepare the rail by wiping it clean. For maximum environmental protection apply a lite coat of oil to the rail (CLP is fine) as to prevent corrosion of the rail due to humidity trapped between the rail and the BAM.
- 2. Release the locking lever and open it fully by depressing the locking latch (see arrow in picture 2) and pulling on the lever.
- 3. Seat the BAM fully on the rail and push it forward.
- 4. Close the locking lever carefully. If the lever closes, skip to step 8.
- 5. If the lever won't close open it fully then, using a T20 driver, loosen the tensioning screw two turns (see arrow in picture 3) by screwing it counter-clockwise.
- 6. Close the locking lever fully and tighten the tensioning screw.
 - **Note:** Tighten until snug do NOT overtighten!
- 7. Release the locking lever and repeat process from step 3.
- 8. Grab hold of the BAM (with OSU) and pull it to the rear. If the BAM moves on the rail repeat from step 6, otherwise installation is complete.



Picture 2: Locking Lever with Locking Latch on left side



Picture 3: Tension Screw on right side



Instruction Manual

The SM-101QD BAM is designed to compensate for the ballistics of a 7.62 NATO cartridge being fired at certain set distances. As such the two adjustment knobs are marked with the distances that particular mount unit has been calibrated for. All measurements are in meters unless otherwise specified.

- 1. To attach or remove BAM from Picatinny or NATO rail, depress the locking latch on locking lever while pulling on lever (see picture 4.) Open lever with side clamp fully before attaching or detaching unit from rail.
- 2. To aim and operate the OSU, use as normal.
- 3. To adjust the range setting for use at extended ranges, rotate the adjustment knobs forward until the desired range indication is facing the operator. Use the lowest setting for all targets from 0-250 meters.

The ballistic adjustments are as follows:

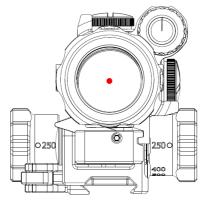
- 250 m Zero
- 400 m 1.7 MIL
- 500 m 3.1 MIL
- 600 m 4.8 MIL

Note: For the highest repeatability adjust from low setting to high (if shooting at 600 meters and switching to target at 400, turn adjustment to 250 and then back up to 400.)

- 4. To attach an Aimpoint 3X or 6X unit, use the standard Aimpoint TwistMount (or tip-off) ring as you would on any standard Aimpoint TwistMount base.
- 5. When storing BAM make sure that the locking lever is closed as to prevent debris from being trapped between the Side Clamp and the Mount Body, as well as from accidental damage.



Picture 4: Locking Lever with Locking Latch on left side



Picture 5: Aiming with 250-meter setting



Maintenance

The BAM sight mount is designed to withstand any abuse a firearm might be subjected to, and it should therefore basically be treated as a firearm in regards to cleaning and lubrication.

If the unit has been used in or near saltwater, it is recommended that the mount be wash in fresh water. Loose particles like sand and dirt etc., can be brushed off or removed using compressed air. Moving parts should have a small amount of a good firearms lubricant like BreakFree CLP, Slip 2000, or similar.

All parts are secured with Loctite and we strongly recommend that service and repair requiring disassembly only be performed by armorers who have been trained by the manufacturer.

To care for the BAM follow these steps.

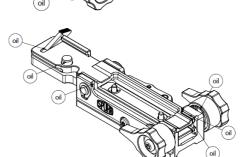
Daily care:

- Wipe off dirt and debris from exposed surfaces.
- Rotate adjustment knobs fully between all settings while paying attention to any difference in friction between settings.
 - o If increase in friction is noticed add lubrication to designated points (see picture 6.)

Note: Daily care does not require the BAM to be removed from rail.

Weekly care:

- Remove BAM from rail.
- Wipe off dirt and debris from exposed surfaces.
- With the locking mechanism open, and using a brush or compressed air, wipe away any dirt or debris between the Side Clamp and Mount Body.
- Apply lube to designated points (see picture 6.)



Picture 6: Lubrication points

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