

Titanium Gunworks

LED-Sight



picture: Aleko Jensen, Lokisale, Tanzania 2004

Titanium Gunworks

This product is international protected by utility model and design patents !

1 Imprint

The LED-Sight is a product of

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Please thoroughly read this manual and follow the hints given, else guarantee will be void.

2 Usage

The LED-Sight aids you to quickly acquire a target during hunting and sport shooting. It is designed to be mounted onto a sporting firearm.

If you modify the sight or use it in a different way as suggested in this manual, guarantee will be void, and Titanium-Gunworks will not accept any compensation claims or legal liabilities.

Usage of firearms is dangerous, and can cause death and injury. Follow the safety instructions. Never use a faulty or incorrectly mounted LED-Sight, as you might not hit the intended target and endanger other persons. Before usage, make sure the LED-Sight is correctly mounted. Titanium-Gunworks will not be responsible for any legal liabilities resulting from the use of a firearm. Every firearms owner is responsible for safe usage of his weapon.

3 Safety Issues

While mounting or adjusting the LED-Sight, or while changing batteries or switching the LED-Sight on or off, make sure the firearm is unloaded and does not aim at humans or any other unsafe direction! Never use a faulty LED-Sight, since you could miss your intended target and place other humans at risk. Titanium-Gunworks will not be responsible for any legal liabilities resulting from the use of a firearm. Every firearms owner is responsible for safe usage of his weapon.

4 Usage of the LED-Sight

4.1 Mounting

Before mounting the LED-Sight onto a firearm, make sure the firearm is unloaded. For safety reasons, it is advised you either take the bolt out of the weapon, or dismantle it in a way it can not fire by accident. The firearm must not be loaded or pointed onto a person!

Do not try to disassemble the LED-Sight! Don't try to push the sight into the base or removing it!

The LED-Sight is to be mounted onto a bolt size M3.

If your firearm already has such a bolt mounted (see picture), demount the sight to be replaced with an appropriate screwdriver. Place the cylindrical bolt #10 into the spring #5 and put both of them together into the small hole in front of the upright bolt (see technical drawing at the end of this manual). It is recommended to fix the sight case to the barrel using an appropriate glue (like UHU endfest 300), using the instructions given for your particular glue. Use the glue only thinly at the edge of the sight mounting. Too much glue can hamper the correct usage of the LED-Sight. Take care the spring #5 is seated correctly in its hole. Take the barrel nut #6 and screw it onto the bolt, using a flat screwdriver size 3.5x0.6 or 3.0x0.5. Fasten the barrel nut carefully; too much pressure can damage the sight case.

If possible use only UHU endfest 300! The UHU 300 is based upon epoxy glue. Other glues, especially one-second glues and Loctite will cause damage to the light fibre. Also, do not use glues or Loctite to secure the nut, as already the evaporating solvents in these glues can damage the light fibre. No warranty will be given for LED-sights damaged by glue solvents!

Put the battery #2 and spring #3 and put them into the battery lid #4, as shown in the drawing. Take the battery lid with battery inserted, and screw it clockwise into the sight case.

Should your firearm not have the required M3 bolt, please ask a qualified gunsmith to insert one into your barrel. This should not be a problem for most commonly used firearms. However, it is not advised that you mount this bolt on your own, since it might damage the barrel, and cause personal injury.

4.2 *Fitting the Rear Sight*

Your LED-Sight will only work well if your rear sight meets certain criteria. The groove of your rear sight should have a 3mm width and be 3.5 to 4.0mm deep. If your rear sight does not meet these criteria, this usually can be adjusted with a small file. Please ask a competent gunsmith to do that for you.

4.3 *Height adjustment*

The LED-Sight can be adjusted in height using a 1.5mm Allen key. Sight in your firearm to the fired range. Take care your firearm is unloaded and points into a safe direction while adjusting the sight.

If your firearm shoots too high, turn the grub screw anticlockwise. The sight will rise upwards from the sight case.

If your firearm shoots too low, turn the grub screw clockwise. The sight will sink deeper into the sight case.

4.4 *Turning the LED-Sight on/off*

By carefully turning the battery lid clockwise, the battery will hit the contact and the LED will start to glow. Don't force the battery lid too far into the case, since this will damage the LED-Sight.

By turning the battery lid anticlockwise (about 1/4 to 1/2 turn) you can switch the LED off.

4.5 *Battery exchange*

Only exchange the battery while your firearm is unloaded and does not point onto a person!

To exchange the battery turn the battery lid #4 anticlockwise until it comes loose from the mounting case #1. Take the battery #2 from the battery lid #4 and replace it with a new one. Take care not to lose the spring #3 - in case you lose it, you can replace it with a shortened spring from a ballpoint pen. Also take care that all contacts are clean before screwing the new battery back into the mounting case.

It is advised to slightly lubricate the o-seal #8 with oil from time to time in order to keep operation smooth. Do not use too much oil; a thin film is sufficient. Avoid droplets of oil to enter into the battery compartment.

5 Hints for using your LED-Sight

The illumination power of the LED-Sight is controlled by several factors. Most important are the state, age and quality of the battery used, but also temperature, brightness of the target and mode of usage (permanently or temporarily switched on) influence the illumination power.

All batteries have reduced voltage at lower temperature. The lithium battery used in the LED-Sight is less sensitive to cold temperatures than a common alkali battery, but still it will give have less power and capacity at lower temperatures. If you plan to use the LED-Sight at low temperatures, use a fresh battery and think about having replacement batteries ready.

6 Care and Maintenance

The electronics of the LED-Sight is completely waterproof. However, avoid moisture to enter the battery compartment. This might damage the battery, and might result in secondary damage to the LED-Sight or your firearm. If the LED-Sight has been subjected to moisture, demount the battery as shown in chapter 4.5 and thoroughly dry all parts. Take care the battery compartment is completely dry before putting the battery back in. From time to time, apply a thin film of oil to the o-seal #8, as described above.

7 Demounting and Disposal

If you wish to demount your LED-Sight, take out the barrel nut #6 with an appropriate screwdriver and take off the mounting case. If you have used glue on the case, use a hair dryer to weaken the glue and carefully tap the case with a piece of wood or similar.

If you wish to dispose of the LED-Sight, please give the battery to your local recycling center. The remaining LED-Sight can be disposed off in your household rubbish.

8 Troubleshooting

8.1 *The LED is not glowing*

- Exchange the battery.
- Is the spring #3 still between battery #2 and lid #4? If not you can make a replacement spring from a shortened ballpoint pen spring.
- Are all contacts clean? If not, carefully clean them.

8.2 *The LED is blinking when you turn it on, but only lights up in a certain position of the switch knob*

- Open the battery lid and carefully clean the metal contact (on the side which will be inside the LED-Sight when fully assembled). You can use fine sanding paper, a sharp knife or a medium coarse knife sharpening block to do so.

9 Where to get replacement batteries and LED-Sights

Only use lithium batteries of type **BR 435**.

We have already established the fact that not every battery brand works equally well in the LED-Sight. The best results were obtained using the Panasonic BR 435, which has the phrase "national" imprinted on its body. Batteries from other suppliers sometimes do not bring the required power, and the LED will only glow faintly.

Do not use other batteries, since they might not work or even damage the LED-Sight.

If you need further LED-Sights or batteries, please contact

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10 Service and Warranty

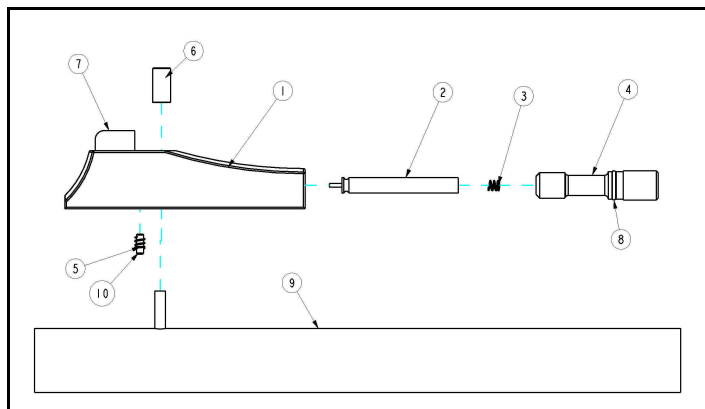
The LED-Sight you have bought is a high quality item. However, despite thorough controls, it is possible that a particular item can be faulty. Therefore, we offer you a 24 months warranty from the date of purchase.

Should you have reason to complaint, please return the product to the dealer you have bought it from. We reserve the right to either repair or exchange the product.

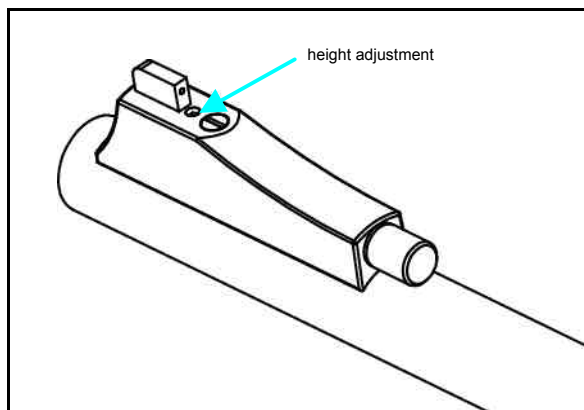
11 Technical Data

Power supply:	lithium battery type BR 435
Measurements:	(LxWxH): approx. 78 x 11.5 x 22 mm
Weight:	approx. 13 g
Adaptor:	Bolt M3

12 Technical Drawings















Exploded Drawing



LED-Sight as mounted on barrel

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13 Possibilities of installation

Manufacturer	Model	Conversion Kit		Remark	
Benelli	Argo			Adaptor Benelli & Standard-Bolt Nut M3	
Blaser	R 93 K 95			Standard-Bolt Nut M3	
Browning	BAR			Adaptor Browning	
Heym	SR 21 SR 30			Standard-Bolt Nut M3	Lower the hole in the LED-Sight 0,5-1,0mm deeper maybe
Mauser	M 03			Standard-Bolt Nut M3	
Remington	750			Adaptor Remington	
Rößler	Titan			Bolt Nut M4	Drill the hole in the LED-Sight through with a 4mm drill
Sako				Adaptor Sako & Standard-Bolt Nut M3	
Sauer	202			Standard-Bolt Nut M3	
All others		Potrusion Bolt M3		Standard-Bolt Nut M3	Let a gunsmith install a potrusion bolt in size M3 on your barrel or contact us for further assistance