

SmartMag (irPistol) User Manual

Thank you for your purchase of the irTactical system. This highly realistic law enforcement training tool has been developed to meet the needs of training programs world wide. The system is very dependable and can be used for a variety of exercises suiting the user. The patented SmartMag is the core of the irTactical system. It allows the corresponding weapon to fire and operate. The SmartMag is extremely durable so its design allows it to be used just like the real thing. Now you'll be able to train cheaper, faster, and anywhere.

Safety



WARNING

The irTactical system is designed to be very realistic in order to meet the needs of law enforcement training programs. Users must take care in keeping the irM4 separate from real firearms at all times. Training with the irTactical system must never occur in areas where real firearms and other hazardous equipment are being used. Serious injury or death may occur. Prior to using the SmartMag, please ensure that it visibly appears to be in good shape. If something seems loose or odd, contact irTactical.



CAUTION

The developers at irTactical have taken great care in designing a product that can be used safely. The irM4 is unable to fire a projectile and cannot be made to fire a projectile in any way. Instead, an infrared laser is emitted to 'simulate' a projectile. This beam of infrared light is completely invisible and eye safe. The irM4 is designed to emit this infrared light at safe levels that do not constitute a health hazard. However, as with any light source, we recommend that the user take precautions to avoid any unnecessary exposure such as intentionally aiming the rifle at someone's eyes or staring down the barrel at close range for extended periods of time.



CAUTION

Always pay attention to the training organizer and safety briefings when instructed. Be aware of any signs or special hazards in area. irTactical does not provide any training.



CAUTION

Never modify your SmartMag or irTactical gear in any way at any time for any reason. Repairing the SmartMag or replacing parts may only be done by a certified irTactical technician or with their permission. Disassembly of the SmartMag might damage sensitive electronics or internal components and immediately voids the factory warranty.

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Liability Statement

This product is surrendered by irTactical with the understanding that the purchaser and or user assumes all liability resulting from unsafe handling or any action that constitutes a violation of any applicable laws or regulations. Neither irTactical nor Predator Games shall be liable for personal injury, loss of property or life resulting from the use of this product under any circumstances. All information contained in this manual is subject to change without notice. irTactical and Predator Games reserve the right to make changes and improvements to products and manuals without incurring any obligation to incorporate such improvements in products previously sold.

Warranty

Predator Games and irTactical warrants that this product is found free from defects in materials and workmanship for a period of one year from the original date of purchase by the initial owner/purchaser. This warranty does not apply to a) defects discovered after purchase which were caused by the unauthorized modifications, alterations or misuse of the purchased product; b) consumable parts such as batteries, o-rings, or other components designed to diminish or may wear out over time; c) cosmetic damage, including but not limited to, scratches, dents, rips, tears, or broken plastics and metals; d) damage caused by accident, abuse, misuse, liquid contact, fire, flood, or other external cause; e) damage occurring from operating product outside of irTactical's published guidelines found in this manual or otherwise; f) damage caused by service such as upgrades and expansions performed by anyone who is not a representative of irTactical; g) irTactical products that have been functionally or capability modified without written permission from irTactical; h) defects caused by normal wear and tear or otherwise due to normal aging of the irTactical product; i) an irTactical product in which the serial number has been removed or defaced, or is otherwise illegible. Determining a product's warranty status is solely the responsibility of Predator Games and irTactical. Predator Games and irTactical will repair or replace, without charge, any of its products that have failed through defect in material or workmanship.

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Service

If you begin to notice odd performance with any of your irTactical gear, please contact irTactical Customer Service at 888-950-1221 right away. You may also email irTactical Service at support@irTactical.com.

All irTactical products are covered under a 1 year limited warranty from the time of purchase. If your irTactical product must be serviced, contact irTactical Customer Service at support@irTactical.com to receive return instructions. If your product is found to be outside of warranty, irTactical will contact you with any charges before proceeding to repair your product. You are responsible for all shipping charges to and from irTactical for both warranty and non-warranty repairs. In most cases, irTactical can simply send you the parts you require for repair if a technician has approved.

AS STATED ABOVE, YOU ARE RESPONSIBLE FOR ALL SHIPPING CHARGES TO AND FROM IRTACTICAL FOR ANY/ALL SERVICES BOTH UNDER WARRANTY AND NOT UNDER WARRANTY.

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The SmartMag

Take a few minutes and orientate yourself with the SmartMag. Become familiar with its functions and design. Users of the Glock type of pistols should quickly become accustomed to the SmartMag. It shares the same basic design and weight as a real magazine. It is constructed of glass-filled nylon for strength. There is a complex one way valve that connects to the weapon and a quick release handle that secures an 8 gram CO2 cartridge. The SmartMag is controlled by its internal circuit board.



1. Valve
2. Status and Venting Windows
3. Quick Release Door
4. SmartMag Body
5. Electronics (internal)

Battery Power

The SmartMag's power works in a very unique way. It has a small onboard battery that powers the reset electronics only. It does not require charging and cannot be recharged. The SmartMag is actually powered by the irPistol it is inserted into over a short range radio connection.

Preparation

The SmartMag requires very little preparation before use, but there are a few things to keep in mind. The irPistol SmartMag requires an 8 gram CO2 cartridge to work. These cartridges are universally available at a variety of locations and are commonly used in air guns and beverage carbonators. Use ONLY standard 8 gram CO2 cartridges as other types (threaded, shorts, different gasses) may damage the SmartMag or irPistol. We recommend Leland brand cartridges



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WARNING

Wear safety glasses while loading and unloading the SmartMag



WARNING

Do not use any type of cartridge aside from a standard 8 gram CO2 cylinder as outlined in Preparation.

Step 1

Open the SmartMag's Quick Release Handle by prying it down from the top of the mag near the valve. It should swing freely down about 90 degrees before it stops. Do not force it past this point or it may break.

Step 2

Insert a standard 8 gram CO2 cartridge into the SmartMag at an angle as shown, so that it slides in rounded end first with the cartridge neck protruding outwards. Then snap the protruding portion of the cartridge into the SmartMag past the detents so that sits completely inside the mag.



Step 3

Firmly grab the SmartMag and Quick Release Handle and swiftly snap the handle completely back to its secured position. The CO2 cartridge will be punctured during this time, so beware of high pressures. The design of the SmartMag utilizes the detents and pressure to keep the Quick Release Handle secure. The ammo count of the magazine will be reset at this time.

Step 4

Insert the SmartMag into the irPistol until it clicks. It should not fall out unless the magazine release button is pressed. When the ammo count on the SmartMag reads zero, the irPistol will no longer operate until the SmartMag is reloaded with a new CO2 cartridge.

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Worth Noting...

Each shot will reduce the ammunition count from the SmartMag by one. SmartMags come preset at 30 rounds (2 sets of 15 rounds per cartridge). Changing the CO2 cartridge will reset the ammo count. The irPistol will not function if the SmartMag reaches an ammo count of zero.

Due to our valving system, the SmartMag can be ejected from the irPistol at any time with minimal air loss. The SmartMag will contain its pressure until inserted into a pistol. This means you can fire 10 shots, eject and pass the SmartMag to your partner, so that he can load up his pistol and fire the remaining 5 rounds.

There is more than enough air pressure in the SmartMag to fully operate the irPistol until the SmartMag count reaches zero, even after ejecting and reinserting it several times.



WARNING

Wear safety glasses while unloading the SmartMag.
Pressurized gas and/or debris might be released.

Step 5

To empty the SmartMag, first eject it from the weapon. Open the quick release handle and be prepared for escaping gasses. Excess CO2 will bleed safely from the mag through the side venting windows. Take care to avoid placing bare skin near these windows while unloading the SmartMag. Once completely drained, pop the cartridge forward by using your fingers or another cartridge through the venting windows. The cartridge neck should now be sticking out of the mag. Grab it and pull it out.

Using the SmartMag

Maintenance

The SmartMag's simplified design requires very little regular maintenance. The gasket seat that seals the CO2 cartridge in the valve does require regular oiling. Apply 2-3 drops of the supplied oil to this seal as shown every 3-5 cartridge changes. Apply 2-3 drops of oil to the top of the valve at the same time. You will need to keep an eye on these seals to ensure they do not dry out or become damaged. Do not use any other oil or substance except that which was provided or approved by irTactical. For information on maintaining your SmartMag, please read the SmartMag Maintenance Guide.



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Handling

The SmartMag is constructed of glass-filled nylon, with steel and aluminum parts. This makes it very sturdy and strong. It can be handled just like a real magazine and withstand impacts from being dropped or slapped in and out of the irPistol, even when under pressure. However, it is recommended that you care for the SmartMag like any other piece of valuable equipment.

Performance Specifications

RF Range

The SmartMag communicates with the irPistol through a very short range radio. It only works when the SmartMag is fully inserted into the irPistol. Nearby SmartMags will not be affected.

Shot Count

The SmartMag as sold with the irPistol comes preset with an ammo count / shot count of 30 rounds, but requires ejection and reinsertion of magazine after 15 rounds.

Battery Life

The SmartMag has an onboard battery that only provides power to the microswitch for resetting the ammo count when a new CO2 cartridge is inserted. This battery lasts approximately 3 years or 100,000 resets. The SmartMag is fully powered by the irPistol through the wireless connection when fully inserted into the rifle.

Environmental Conditions

As with the rest of the irTactical system, the SmartMag is built to be used in a variety of environmental conditions. The SmartMag can be used in temperatures ranging from 32 - 110 degrees Fahrenheit (0 - 43 degrees Celsius). Colder weather may begin to decrease performance. The electronics are all coated to provide moisture resistance. Damp or dry playing areas will not affect the SmartMag. Using the mag in light rain is fine. Be sure to let it completely dry out before using again.



WARNING

Do not leave the SmartMag under pressure for an extended period of time. Remove CO2 cartridge from SmartMag if not in use for more than a day.