OWNER'S MANUAL



DL SPORTS Inc. Marksman Rifles

CAUTION: PRIOR TO USING YOUR D & L SPORTS, INC. .FIREARM, READ AND UNDERSTAND THESE INSTRUCTIONS THOROUGHLY AND COMPLETELY. IF THERE IS ANYTHING THAT YOU DO NOT UNDERSTAND, CONTACT D & L SPORTS FOR FURTHER INFORMATION.

D & L SPORTS, INC. P.O. Box 4843 Chino Valley, AZ. 86323

PH: (928) 636-1726 FAX: (928) 636-1757

WEB: WWW.DLSPORTS.COM

e-mail: dlsportscustom@gmail.com

Congratulations on obtaining a premium grade DL Sports Inc. firearm. Years of development, research and testing have been factored into the features, safety and reliable operation of this firearm. This instruction manual has been provided to give you an overview of the operation and maintenance of the firearm for safe and proper use. Following these instructions will help ensure the firearm performs properly for years to come. **Prior to handling, loading or firing this firearm be sure to read and thoroughly understand all the safety rules and instructions in this manual.** Failure to do so could result in injury, death or property damage.

FIREARMS SAFETY - IMPORTANT WARNINGS

READ THIS SECTION! DO NOT PROCEED WITHOUT FIRST READING THE SAFETY SECTION!

As the owner or custodian of a firearm, it is your responsibility to ensure the safe handling and storage of all your firearms and ammunition. The following is a brief list of basic safety rules. For additional safety information, refer to a qualified firearms instructor, the NRA, the D & L Sports, Inc. website at WWW.DLSPORTS.COM or contact D & L Sports, Inc. directly.

- 1. CONSIDER ALL GUNS AS ALWAYS BEING LOADED! TREAT THEM WITH THIS IN MIND AT ALL TIMES!
- 2. NEVER COVER ANYTHING WITH THE MUZZLE THAT YOU ARE NOT WILLING TO DESTROY!
- 3. KEEP YOUR FINGER OFF OF THE TRIGGER UNTIL YOUR SIGHTS ARE ON TARGET AND YOU ARE READY TO FIRE.
- 4. BE SURE OF YOUR TARGET AND WHAT IS BEYOND! ASSURE YOU HAVE THE CORRECT TARGET AND A SAFE BACKSTOP!
- 5. ALWAYS WEAR YOUR SAFETY EQUIPMENT; EYE AND EAR PROTECTION AND BALLISTIC PROTECTION!
- 6. IF YOUR FIREARM FAILS TO FIRE, KEEP IT POINTED IN A SAFE DIRECTION FOR ONE MINUTE PRIOR TO CLEARING THE CHAMBER IN CASE OF DELAYED FIRING (HANGFIRE). KEEP THE MUZZLE POINTED IN A SAFE DIRECTION AND ALL PERSONS AND BODY PARTS AWAY FROM THE EJECTION PORT WHILE CLEARING THE CHAMBER. WEAR GLOVES AND THE ABOVE LISTED SAFETY EQUIPMENT.

- 7. DRUGS AND ALCOHOL DO NOT MIX WITH FIREARMS! DO NOT HANDLE OR OPERATE FIREARMS OR AMMUNITION WHILE OR AFTER HAVING CONSUMED ANY DRUGS OR ALCOHOL OF ANY KIND IN ANY AMOUNT.
- 8. STORE YOUR FIREARMS IN A QUALITY GUN SAFE AND KEEP YOUR AMMUNITION LOCKED UP SEPARATELY! KEEP YOUR FIREARMS AND AMMUNITION SECURED AWAY FROM CHILDREN AND UNAUTHORIZED PERSONNEL. DO NOT STORE LOADED FIREARMS!
- 9 DO NOT LEAVE YOUR FIREARM UNATTENDED!
- 10. SELECT A PROPER FIRING RANGE WITH A SAFE BACKSTOP AND PROPER VENTILATION. BE SURE TO HAVE AN EMERGENCY MEDICAL PLAN AND SUPPLIES AT YOUR RANGE LOCATION. DO NOT SHOOT AT SURFACES WHICH MAY CAUSE RICOCHETS, UNSAFE BULLET SPLATTER, OR FRAGMENTATION!
- 11. KNOW YOUR EQUIPMENT AND ITS CAPABILITIES, AS WELL AS YOUR OWN!
- 12. ALWAYS USE PROPER SPECIFICATION FACTORY LOADED AMMUNITION, QUALITY MAGAZINES, AND CONDUCT ROUTINE PREVENTATIVE MAINTENANCE.
- 13. DO NOT KEEP OR CARRY FIREARMS FOR SELF DEFENSE OR OTHERWISE WITHOUT PROPER TRAINING AND PROFICIENCY!
- 14. ALWAYS SAFELY CHECK THE CONDITIONS OF ANY FIREARM YOU COME IN CONTACT WITH!

 OBTAIN COMPETENT ASSISTANCE IF YOU ARE UNSURE HOW TO CHECK THE CONDITION OF AN UNFAMILIAR FIREARM.
- 15. TO AVOID LEAD INGESTION, DO NOT EAT OR DRINK DURING SHOOTING ACTIVITIES. WASH HANDS THOROUGHLY AFTER SHOOTING AND BEFORE EATING OR DRINKING!

- 16. ASSURE THAT YOUR FIREARMS ARE PROPERLY ZEROED WITH THE AMMUNITION YOU INTEND TO USE.
- 17. PRECISION OR CUSTOM FIREARMS MAY HAVE LIGHTER TRIGGER PULLS THAN GENERAL ISSUE FIREARMS. BEFORE LOADING ANY AMMUNITION, AND WITH THE MUZZLE POINTED IN A SAFE DIRECTION, TEST THE FEEL OF THE TRIGGER PULL. CONTACT DLS INC. IF YOU WANT THE TRIGGER PULL ADJUSTED. TEST THE MECHANICAL SAFETY FOR PROPER FUNCTION. DO NOT CARRY, TRANSPORT, CASE, SLING OR STORE YOUR FIREARMS WITH A LOADED CHAMBER. DO NOT LOAD THE CHAMBER UNTIL YOU ARE POINTED IN A SAFE DIRECTION AND YOU ARE READY TO FIRE

DO NOT SACRIFICE SAFETY FOR ANY PERCEIVED ADVANTAGE!

Good safety habits will become second nature if they are always observed. Safe habits are especially important in high-stress situations; unintentionally shooting yourself or someone else will do little to help you complete the task at hand. *Make safety a habit at all times!*

Formal firearms training from a knowledgeable and competent firearms instructor should be obtained before using any firearm.

Anyone who possesses a firearm for defensive purposes needs to understand the legalities of defense situations. Consult the legal authority in your jurisdiction.

Feel free to contact D & L Sports, Inc. with any questions about the safe operation of your firearm, for information about gun safety, or to obtain additional firearm locks or security equipment. Additional copies of this manual are also available from D& L Sports, Inc. and on line at WWW.DLSPORTS.COM.

ADDITIONAL FIREARMS SAFETY RULES, NOTICES, AND WARNINGS

- 1. Discharging firearms in poorly ventilated areas, cleaning firearms, or handling ammunition may result in exposure to lead and other substances known to cause birth defects, reproductive harm, and other serious physical injury. Have adequate ventilation at all times. Wash hands thoroughly after exposure, and before eating or drinking.
- 2. Always be sure the gun is safe to operate and the barrel is clear of any obstruction. Seek professional assistance as needed.
- 3. Your D & L Sports, Inc. firearm is equipped with effective and well designed mechanical safety devices. However, you should never completely rely on any mechanical safety, firearm, or other related device. All mechanical devices have the potential of unexpected and/or unforseen failures. Have your firearm routinely professionally inspected for safety and function, and perform routine preventative maintenance. Acquire regular firearms training from a qualified instructor skilled in your area of activity. Carry additional devices to help assure your survival if this device should fail. Wear adequate ballistic protection.
- 4. NO MECHANICAL SAFETY MECHANISM IS A SUBSTITUTE FOR PROPER AND SAFE GUN HANDLING. Any mechanical safety mechanism can break down or malfunction. YOU AND YOU ALONE ARE PERSONALLY THE ULTIMATE SAFETY MECHANISM.
- 5. Using the wrong ammunition can result in malfunctions, serious injury, or death. Catastrophic damage could occur. Loading the wrong ammunition in your magazine or chamber can allow a cartridge or casing to move ahead of the chamber, and a live cartridge to chamber and fire behind it. This could cause catastrophic damage, injury, and/or death. Do not allow ammunition or cartridge cases to be intermixed. Your D & L Sports, Inc. firearm is not designed for, nor should you use overpressure, +P, or reloaded ammunition in your firearm. Doing so can cause catastrophic damage, injury, and/or death, as well as violate your service

- agreement. Use only factory loaded, new ammunition from a reputable, expert and professional ammunition manufacturer. Only use ammunition specifically marked and designated for your rifle. Only use factory loaded match grade ammunition for best target accuracy. Use factory loaded and designated hunting ammunition for game. Test fire selected ammo in your rifle for proper safety, reliability, and zero before use in the field.
- 6. Always be sure of your target and backstop as well as the maximum range and penetration of the ammunition that you are using. Consider the possibility of over-penetration before you fire.
- 7. If a bullet is stuck in the bore, do not attempt to shoot it out by using another cartridge, or by blowing it out with a blank or cartridge with the bullet removed. This can generate excessive pressure, damage the firearm and cause serious personal injury, or death. Consult a qualified gunsmith.
- 8. Before performing any cleaning or maintenance, make sure the firearm is completely unloaded. This includes the magazine and chamber. Allow no live ammunition in your work area. **WARNING:** Firearms are still capable of discharging when the magazine is removed.
- 9. Before performing any disassembly of the firearm, make sure you are wearing eye protection.
- 10. PRIOR TO SHOOTING, MAKE SURE THE BORE AND CHAMBER ARE DRY, CLEAN, AND UNOBSTRUCTED. DO NOT LOOK DOWN THE BORE FROM THE MUZZLE END.
- 11. You understand it is your personal responsibility to make final determination as to whether D & L Sports, Inc. products are suitable for your intended uses. You assume all liability for making such determination.
- 12. If you attempt to fire your firearm and it does not result in the normal loud bang, keep the barrel pointed in a safe direction. An improperly charged cartridge may have stuck a bullet in the barrel. Do not attempt to fire again. Have the firearm checked by a competent gunsmith for barrel obstructions.

- 13. All D & L Sports, Inc. firearms come with gun safety locks. Be sure to use them as needed. Contact your local gun store or D & L Sports, Inc. directly if you misplace your gunlock and need a replacement. Firearms safety is your responsibility.
- 14. All D & L Sports, Inc. products must be used for legal purposes only or criminal penalties will result.

Based on the Magnuson-Moss Warranty Act, D & L Sports, Inc. offers no express warranty on its products, provides no written warranty card, and disclaims any and all express and implied warranties. However, D & L Sports, Inc. is concerned about delivering professional service to owners of D & L Sports, Inc. products. D & L Sports, Inc. continues to honor all requests for service which D & L Sports, Inc. considers reasonable.

By purchasing products from D & L Sports, Inc., or doing any other business with D & L Sports, Inc., you are agreeing to arbitrate any controversy or claim you may have against D & L Sports, Inc. arising out of or related to or in connection with your purchase and/or the use of any product, such arbitration to be conducted in accordance with the Arbitration Rules of the American Arbitration Association and such arbitration, by agreement, shall be held in the city and state where D & L Sports, Inc. has its principal place of business at the time any demand or claim is made against D & L Sports, Inc.

Placing any order for any product from, or interacting with D & L Sports, Inc. in any way indicates you understand and agree with all information and statements contained in, and agree to abide by, the D & L Sports, Inc. liability waiver / hold harmless agreement.

D&L Sports Inc. cares about your safety and satisfaction. See the D&L Sports inc. Lifetime Customer Assistance Program available at no charge with any D&L Sports inc. signature firearm.

PRECISION RIFLE INFORMATION

BEFORE loading this rifle, review and follow the rules of firearms safety, including these foundational firearms safety rules:

Treat all guns as if they were loaded all the time.

Never let your muzzle cover anything you are not willing to destroy.

Keep your finger off the trigger until your sights are on the target and you are ready to fire.

Be sure of your target and what is beyond.

BEFORE loading this rifle, consider these issues:

Adjusting the Rifle to Fit

When using a precision rifle and optic combination you may need to adjust the rifle to your body size and the scope to your eyesight. Refer to the scope's operation manual for focus requirements. Be sure to set the correct eye relief to avoid impact injury, and re-level the reticle if required. If you adjust the front and back position of the scope in the rings, or reposition the rings, make sure that no part of the scope comes into contact with the barrel, scope mount, or bolt handle during operation. If you need to adjust the length of pull on your 2020 or newer MR30 series of rifle (if equipped with an adjustable butt plate) back out the lock screws on the sides of the rear stock frame. Adjust to suit you. Once the best length of pull is selected for your body and your shooting style it is important to install the correct number of spacer washers on the twin bars holding the adjustable butt plate. This will assure the chosen adjustment position will hold solid during long term shooting and recoil. Then add a drop of #242 blue Loctite to each lock screw before reinstalling them back into the sides of the stock frame.

Scope Protector / Carry Handle

If your rifle is equipped with a scope protector / carry handle it may have attachment bolts and spacers of various lengths. They are fitted to different areas of the rifle. If you remove the handle to attach a scope or for other reason, it is very important to label each bolt and spacer as you take it out of the handle. This will allow you to get each bolt and spacer back into the correct position when you reinstall the handle. Failing to do so could result in reinstalling a bolt into a position that will cause a bind against the inner surfaces of the rifle thus resulting in a safety, accuracy or functional problem. If you need more room under the scope protector for a taller elevation turret you may not have to remove the entire handle. You can reinstall the horizontal handle bar from under the U shaped uprights to over top of the U shaped uprights. This will give you more scope turret room.

Sighting Considerations

The sighting capability of your rifle is of critical importance. Optical sights / scope can break or malfunction. If you do not travel with a complete back up shooting system, consider carrying a pre zeroed and ringed back up scope, and the means to mount and confirm zero of your back up scope. Never completely trust return-to-zero mounting systems. Always live fire to confirm a precise zero of the scope and rifle.

Iron Sights

Your rifle may or may not be equipped with iron sights. Sights may come in the form of aperture, ghost ring, or forward mounted rear notch sight. In order to be the most heavy duty and durable the forward mounted rear notch sight is generally not user adjustable by conventional screwdriver / allen wrench means. They generally have a 25 yard close zero. The aperture and or ghost ring rear sights are knowledgeable user adjustable. Front banded, clamped and pinned front sight blades are not user adjustable.

Ammunition Considerations

Always be sure to use the correct caliber, brand and bullet weight of factory loaded match grade ammunition. You will not get match grade accuracy performance from bulk ammo, cheap ammo, most hunting ammo, or general issue military or range ammunition. Use only high quality, factory loaded match grade ammo and bullets for best safety, reliability and rifle accuracy performance. Using improper or reloaded ammo can cause safety, accuracy, and functional problems. Do not use blunt nose bullets. Pointed protected tip bullets feed the smoothest. Use bullets intended for your shooting goals. Match bullets for best accuracy, premium hunting bullets for live hunting situations. Only use professionally loaded match, premium or trophy grade ammo from a long term reputable company, such as Hornady, Nosler, Federal or Black Hills Ammunition.

Magazine

Magazines are a critical part of your shooting system. You should only use magazines fitted to and well tested in your exact rifle. Steel single point feed AI box magazines in 5 and 10 round capacity are quality base magazines. However, experience has revealed that they work best when they are enhanced by fitting and tuning them to function most reliably in your rifle. 2020 and newer MR30 series rifles come equipped with enhanced magazines. (The base plate is inscribed with a small E for easy identification). The magazine base plate comes off for easy cleaning. Just tap the base plate forward with a small rubber mallet to assist you in removal. Keep your magazines and ammo free of dirt, sand, debris, oil and other lubrication. If your magazine body and or feed lips become bent or damaged, do not use the magazine. Replace it with a new enhanced magazine. To minimize damage and contamination of your spare magazines carried in the field, use quality magazine pouches.

Cleaning / Lubrication

Consider your environmental conditions when choosing lubricant. If operating in freezing conditions the lubricant must be dry or non-freezing. Use best winter practices when operating in freezing conditions. Do not use thick grease inside the bolt body or on the striker / spring assembly. Doing so can interfere with proper striker movement and cause unreliability in ANY temperature conditions.

Do NOT use stainless steel brushes for any cleaning of your precision rifle. Only use quality nylon or bronze brushes. In non-freezing conditions use a small amount of a quality bolt grease on these OUTER surfaces of the bolt: on the rear of the bolt's locking lugs and on the camming surface at the rear of the bolt body. Study and adhere to a proper precision rifle cleaning and maintenance routine. Use a bore guide and one-piece coated cleaning rod, quality nylon or bronze bore brushes, bore cleaner and cotton mops. Under field conditions, carry a quality undersized sectional knock out rod in case you have to clear a mud packed muzzle or a stuck case. Make sure the bore is clean, dry and unobstructed before firing.

Triggers should not be disassembled or adjusted by operator level personnel. Consult DLS inc or a competent professional gunsmith. Improper trigger adjustments and or tampering can create dangerous mechanical conditions. Have routine function and safety inspections completed by a competent gunsmith.

Muzzle Devices / Sound Suppressors

When considering a legal sound suppressor, keep in mind that it adds length, weight and expense to the rifle. It also adds the potential for zero shifting, loss of zero, missing your target and dangerous baffle strikes. If you decide to use a legal sound suppressor you must assure proper bore to suppressor alignment to avoid baffle strikes, deflected bullets, and injury or death. If you are using a permanently mounted suppressor and plan

on cleaning the barrel bore all the way through the suppressor, you must not use cleaning patches or they will become lodged in the suppressor. NEVER attempt to shoot out a bore obstruction. Get professional assistance to cure the problem.

Important note when changing muzzle devices: OBTAIN PROFESSIONAL ASSISTANCE. COMPLETELY UNLOAD FIREARM AND COMPLETELY REMOVE THE BOLT FROM THE FIREARM. If your rifle comes with a muzzle brake installed and you want to operate with a different muzzle device you will need to understand the removal and installation procedures. To remove the muzzle brake you will need to grip the BARREL just behind the muzzle brake in a dedicated, padded barrel vise. You will need to warm the muzzle brake all the way around its circumference and loosen the bottom set screw before turning off the muzzle brake in a CCW direction. If you fail to grip the barrel behind the muzzle brake, you may actually loosen the barrel from the action, dangerously altering the headspace, and creating a condition that can cause death or severe injury when the rifle is fired. You must insure proper bore through muzzle device alignment BEFORE firing. Get professional assistance with this activity.

Ejection / Bolt Operation from the Root

If your rifle is equipped with a fixed or 'mechanical' ejector you will have the choice of pulling the bolt open slowly and picking the empty case out of the ejection port, or operating the bolt briskly and having the empty case be thrown out of the ejection port.

With a precision rifle action it is best to operate the bolt body straight forward and straight backward. This means you only use the bolt knob to lift upward, and close downward. For moving the bolt body forward move your thumb down to the base of the bolt handle (the root of the bolt handle) where it joins the bolt body and push it straight forward to chamber a cartridge, then use the bolt handle knob to close the bolt handle

downward. Or to avoid contact with the safety lever tab some shooters like to use their thumb on the rear of the bolt shroud to push the bolt straight forward before closing the bolt handle downward.

(Do NOT load the rifle's chamber with a live cartridge and close the bolt until the muzzle is pointed in a safe direction and you are ready to fire).

Cocked Striker Indicator

On DLS inc signature actions, there is a cocked striker indicator at the rear of the bolt shroud. The indicator will protrude from the rear of the bolt shroud when the striker is in the cocked condition. This alerts the operator to the condition of the rifle. The rifle should not be in the cocked/ loaded chamber condition during general field carry or movement, vehicle entry or carry, gun rack carry, sling carry, case carry, storing or otherwise transporting the rifle. Follow firearms safety rules ALL the time.

Safety Lever Location / Positions

On DLS inc signature actions the mechanical safety lever location may be at the top / rear of the action above and behind the area of the bolt handle, or along the edge of the trigger guard of the rifle (depending on trigger variant). Safety levers in either location will be in the "fire" position when they are fully forward, in the direction toward the front / muzzle of the rifle. The safety lever is in the "on safe" position when the lever is at its rearmost position toward the buttstock of the rifle. Keep in mind that a mechanical safety lever on a firearm is not an excuse to not follow all firearms safety rules all the time. Unloaded chamber carry is the safest. Dedicated attention must be paid to not allowing the safety lever or trigger to be snagged on other objects. Do not allow the rifle to dangle during sling carry. Control the rifle in a safe direction at all times.

(CRF) Controlled Round Feed

If your rifle is equipped with CRF, as DLS inc signature actions are, it means that the cartridge comes under the control of the extractor as soon as the cartridge leaves the magazine during the feeding cycle. As the bolt is pushed forward the cartridge is stripped out of the magazine and the extractor rim of the cartridge SLIDES UNDER the extractor claw. (The extractor claw does not snap over the extractor rim of the cartridge). CRF avoids the problem of 'double feed' stoppages that push feed actions can experience. It also means that the rifle operator should always load the chamber by cycling a cartridge into the chamber by using the bolt to briskly strip the cartridge from the magazine and feed it into the chamber. Do NOT directly single load cartridges into the chamber and close the bolt over the cartridge. (Unless you are in emergency conditions and a magazine is not available).

Action Operation from the Bolt Handle Knob

If you want to operate the bolt action from the knob on the end of the bolt handle (instead of by the root of the bolt handle) it is important to understand and practice the technique that allows the action to operate smoothly. When the bolt is all the way open and to the rear and you want to move the bolt forward to chamber a round it is important not to push the handle up or to the sides. Use one continuous rolling motion of your hand and wrist to push the bolt body slightly down, then straight and briskly forward for the smoothest feeding cycle.

(If your rifle is equipped with a push feed action and plunger ejector you will need to understand how to best operate the system for your style of shooting.)

Magazine Release Lock

The detachable box magazine is a critical component of your shooting system. You should always have fitted and tested spare magazines. If your MR-30PG rifle is equipped with a magazine release lock to avoid losing your magazine from the rifle in field conditions, and you want to remove the magazine for reloading, simply rotate the lock wheel on the trigger guard in a CCW direction to loosen the captive lock wheel to the open position. Once the lock wheel is in the open position it will allow magazine release lever operation in order to remove the magazine from the rifle. Once a fresh magazine is locked into the rifle, turn the lock wheel CW to lock the magazine release closed. There is no need to over tighten the lock wheel, finger firm tight is fine. Keep in mind that single point feed magazines cannot be loaded while they are seated in the rifle. You will have to remove the magazine from the rifle and slide new cartridges in from the front of the magazine feed lips. The slot in the magazine release lock wheel is in case the lock is too tight and you need to use a coin, key, knife or screwdriver to help you loosen the lock to extract the magazine from the rifle.

Stock Compass

If your rifle stock has an integral compass it is important that you keep steel away from the compass. Any fasteners in this area should be brass. Steel will adversely affect the compass reading and possibly cause permanent damage. It is wise to routinely check compass accuracy when you are in areas where you are sure of your directions. You can also test the stock compass against known accuracy compasses. The stock mounted compass is primarily used to assist tactical marksmen in orientating themselves in their areas of responsibility. To avoid misinformation on tactical operations, confirming compass accuracy should be part of your maintenance routine. Keep in mind that the dial in the stock compass is luminous. It will glow green once it is exposed to light. Do not let it give away covert activity.

Zero Confirmations

Zero confirmations are a vital part of your success as a marksman and or hunter. If you are a marksman that also does patrol work you should make it a near daily routine to stop by the live fire range for a 1-3 shot zero confirmation in addition to your regular higher volume precision rifle training. This will help assure emergency response confidence in the rifle system and give you forewarning if any mechanical issues are arising. Hunters should zero their shooting system before hunting season and confirm zero when they reach base camp before they go into the game fields. After a thorough bore cleaning shooters should fire a confirmation group to confirm their zero is still exact and that they are carrying a slightly fouled bore that will impact where it is expected to.

Sling / Case Carry

If you plan on sling carry of your rifle it is critical to use a safe, heavy duty and long term durable sling system. The sling studs (anchors) must be ultra secure in the stock, the sling swivels (aka sling hangers) must be full one piece loops, not light duty wire pressed into a center piece. Swivels should have threaded lock collars to avoid unexpected detachment. Operators who need a silent sling set up can use numerous layers of properly secured cord to lash their sling in place. This eliminates the noise that steel swivels can cause. The sling should be adjusted for proper carry and hold the rifle with the muzzle pointed in a safe direction. You should not depend on simple buckle tension to hold the sling secure. Once adjusted, the sling should be professionally sewn in place to eliminate slippage problems. Sling carry should only be done with an empty chamber. Care must be taken to avoid having the rifle's safety lever, trigger, bolt handle, scope adjustments etc snag on other equipment and being unexpectedly activated. Casing the unloaded rifle in a quality drag bag can avoid some of the problems related to sling carry. The drag bag can then be carried with backpack straps. When using the drag bag, or any other style of rifle case, the rifle should only be carried unloaded, and the muzzle end of the case should be marked for additional muzzle control safety.

Bolt Stop

Bolt stop designs vary depending on the action. You will need to understand the bolt stop in order to remove the bolt from the action for cleaning the bore (Do not clean the bore from the muzzle end. Only from the chamber end toward the muzzle end). Also understand how to close the bolt stop to retain the bolt after the cleaning is done. Some bolt stop designs will open outward and upward, some will be a rocker switch, some will be push up tabs, and some will be a rotational knob. If done properly, none will require serious force to operate.

The DLS inc signature short action uses a simple rocker arm to retain and remove the bolt. Simply push down on the rear of the rocker arm (at the left rear of the action) to open the bolt stop and allow the bolt to slide out the rear of the action. The rocker snaps back into its closed position once the bolt is removed. To reinstall the bolt simply align the bolt with its track and push the bolt into the action. The bolt will cam the bolt stop out of the way and then self-lock into place. Double check that the bolt is retained in the action by pulling back on the bolt and making sure that its rearward movement is stopped by the bolt stop.

In order to remove some bolt assemblies from the action, such as long action magnums, you may need to lift the entire cheek piece assembly completely out of the stock. Before doing this, make note of your preferred cheek piece height adjustment so you can return to this exact setting each time you reinstall. To remove the cheek piece assembly, simply loosen the lock screws in the sides of the stock frame and lift the cheek piece assembly out. Contact DLS inc if you need assistance.

Summary

It is recommended that you do not load ammunition into the rifle until you intend to use it. It is recommended that you do not load the chamber until you intend to fire the rifle. It is recommended that you do not carry the rifle with a loaded chamber. It is recommended that you do not chamber a round and close the bolt handle until the muzzle is pointed in a safe direction and you are prepared to fire and intend to fire.

It is critical to understand and test the trigger type and pull weight you have in your rifle BEFORE loading the rifle with any live ammunition. Precision rifles can be equipped with triggers of lesser pull weight than standard issue rifles. It is critical that you understand how much trigger pull weight will make each type of rifle discharge. Become familiar with the pull weight feel before ever loading the rifle with any live ammunition. Be sure to test the trigger unit to assure that it is safe and compatible with your intended usage. If you need trigger pull adjustment, contact DLS inc for assistance.

Be sure to follow all safety rules all the time, secure your firearms from theft, and away from untrained and unauthorized personnel, as well as children. Contact D&L Sports Inc with any safety and or operational questions you may have before loading live ammunition in this rifle. Thank you. dlsportscustom@gmail.com 928 636 1726.

D&L Custom Scope Reticle



The D&L Tactical reticle is now available in a 2.5x - 25x 52mm tactical scope with zero stop and illuminated reticle.

The DLS inc reticle and scopes are available for shooters who want field practical rifle scopes with proven performance. These scopes are available directly from DLS Inc for those wanting an optic mounted and zeroed on their next MR-30PG rifle build.

At a time when so many different scopes and reticles are available on the shooting market it is only logical to ask why this scope reticle is the right choice for your precision rifle. The answer is simple: proven field practical performance. This scope reticle has continually evolved since it was first designed by Dave Lauck in the 1980s. The D&L MR-30PG rifle and this scope reticle has been the only precision shooting combination to ever win the triple crown of tactical shooting, and do so all in the same year: The International Tactical Rifleman's Championships, The Carlos Hathcock Shootoff, and the Golden Egg Shoot (hitting a chicken egg with one cold shot at 500 yards). It has also been the most frequent reticle used to successfully gain entry into the One Mile Club (hitting a 11" x 16" target at 1800 yards). It is state of the art in clean, crisp clarity. It is the recommended optic for your precision rifle.

The 2.5x - 25x magnification range has proven to be excellent for all around tactical shooting, hunting and field competition use from 0 - 2000 yards. We have tried nearly all magnification ranges on the market and continue to return to this 2.5 - 25x magnification bracket. Optical advancements allow these scopes to be field durable, reliable, crisp, clear and bright without being overly large and heavy. (This scope is approximately 13" long and 24oz.) The 52mm objective lens on this scope makes for a compact package with great performance.

The reticle itself was designed to be clean and simple. No clutter or confusing grid patterns with so many aiming points that they lead to mistakes in the field. The reticle allows for simple use under field conditions. No complicated formulas or math equations which commonly lead to mistakes and wasted time.

While hosting the ITRC we encouraged shooters to bring scopes and gear they thought would work best under field conditions. There were no restrictions related to optics. We wanted to see what worked and what failed. Shooters would show up to the ITRC with a wide range of gear and ideas, including computer driven programs to help them solve the realistic field shooting problems provided by the ITRC competition. It was very common to see shooters so wrapped up in technology solutions for field shooting challenges that they missed shooting opportunities, or failed due to confusion. These failures included instructors who were teaching the program they were using. Then shooters realized that simple and reliable techniques were most practical when shooting under field conditions.

The D&L reticle was designed for use with second focal plane scopes. First focal plane scopes have come on strong over the last decade, but much of this has been due to promotional hype. Now that shooters have experienced how thick first focal plane reticles become at high magnification, and how small targets can be blocked by the thick reticle, there has been a swing back to second focal plane scopes. The second focal plane scope gives the same reticle size appearance at all magnifications. The only thing you need to remember when using the D&L second focal plane reticle in the field is: when ranging with the reticle, set the scope on maximum power (25x). This was done because the power ring stops at 25x. This means you can get the power ring setting right every time without even looking at it. Maximum magnification also means you will have the most precise reticle placement over the target, thus achieve the most accurate range estimation.

The D&L reticle was designed to be in spacings which are familiar to you in your daily activities: inches and yards. The spacing between the windage dots on the crosswire is 3" on 25X @ 100 yards. Simple to use, simple to remember. Tactical shooters seeing a 6" wide face target being bracketed between the two centermost dots will realize the target is at 100 yards. Seeing a face target bracketed between the vertical crosshair and the next dot will cause you to realize the target is at 200 yards. At longer ranges, from 300 yards to 1000 yards, the shooter uses the inverted T brackets at the bottom of the scope's field of view. With

the magnification set to 25x, place the intersection of the inverted T on the Adam's apple of the target. The vertical line of the T is 10" tall at the designated distance. The horizontal line of the T is 20" wide. Choosing the inverted T which most closely fits the target's head and shoulders will give you the approximate distance to the target. This system works well when your rangefinder goes down. Hunters and target shooters can apply the known sizes of the inverted Ts to their targets when conducting reticle comparison range estimation.

The distance between the two thick ends of the vertical crosshair is 10" at 100 yards on 25x. This spacing allows shooters on a KD range to create a diagram in their data book that positions the thick part of the crosshair at the top of their target and mark the point on the diagram where the crosshair intersects the target. The farther away the target is from the shooter, the farther down the crosshair will be on the target. This is another form of simple and effective reticle comparison range estimation.

Once distance is estimated, and confirmed with multiple other methods, the elevation can be dialed in for a precise shot. The scope has ¼ moa click adjustments, but this is complication you can do away with when you use a speed turret inscribed with the load data from the ammunition you are using. Developing information for your speed turret should be done live fire on a known distance range, not via a computer program. Doing things right is the right way to do things, even if it is more work. Once this data is known and inscribed on your speed turret you do not have to count clicks, you simply dial to the correct distance inscribed on the turret. This scope has a zero stop so you will not get lost in your turret revolutions.

Since wind is a variable factor, holding for wind is more field practical than dialing for wind. The dots on the horizontal crosshair of the D&L reticle help you when holding for wind deflection. Simply remember that the dot spacing is 3" at 100 yards on 25x. This means the dot spacing is 6" at 200 yards, 9" at 300 yards, 12" at 400 yards, 15" at 500 yards, 18" at 600 yards and so forth. Estimate the wind deflection based on your load, and apply the correct hold off dot.

Shooters operating in low light conditions will benefit from the illumination feature on this scope. The illumination intensity can be adjusted with the simple push of an external button, the turret does not have to be removed for internal adjustment.

More information can be found in the Advanced Tactical Marksman book by Dave Lauck.

This scope comes with tactical turrets which are easy to use, durable, repeatable and waterproof.

Shooters who are skilled in field practical shooting recognize the value of having a rifle scope with a zero stop, and a blank turret on which to temporarily write, or permanently inscribe their 'come up' DATA. This eliminates the need to 'do math' or 'count clicks' under field conditions. Shooters must do their own DATA development on a 'known distance' range and in sync with their own rangefinder to develop the exact DATA for their shooting system of rifle, scope, rangefinder, and ammunition. Once a custom elevation 'speed turret' is inscribed with your personal ballistic data for your shooting conditions you simply need to range the target and dial the elevation turret to that range. If there is any question about what turret revolution the scope is on, simply dial down to the pre-set zero stop, then dial to the correct range from that known zero stop point. Blank speed turrets are now available for the 2-25x - 52mm scope with custom DL reticle. Ultra-simple installation: simply install the speed turret over the existing stock turret and snug it into place.

Shooters operating in different temperature climates and or different altitudes can prepare additional speed turrets for different operational or hunting environments for the best precision.

Optical Sight Adjustment and Zero Checks

Be sure to follow the manufacturer's recommendations on sight adjustment and zeroing. Conduct regular live fire zero checks with both optical and iron sights to confirm your firearm is always zeroed.

Collimator zero checks can be conducted in 'no fire' zones until live fire zero checks can be conducted. When using a spud mounted collimator always completely remove the bolt from the rifle and place the bolt in the spud container. This will be a reminder to ALWAYS remove the spud from the rifle before reinstalling the bolt and live firing the rifle. Firing the rifle with the bore obstructed by the spud may cause death, injury and or property damage. Improper installation of the spud in your bore can damage the rifling and or crown.

Changing sights, optics or ammunition, as well as cleaning, maintenance, rough handling and or dropping or impacting the shooting system will require reconfirming, and perhaps adjusting, the firearm's zero.

Trigger Control

Prior to live fire, it is best to practice dry firing your firearm with a snap cap in the chamber to learn the trigger's pull weight, travel distance, and how the trigger "feels". (Only load the chamber with a snap cap by cycling it into the chamber from the magazine.) Dry fire only at a live fire range with the firearm pointed downrange at a safe backstop. Never "dry fire" at a backstop which is not capable of containing a live bullet. Remember the safety rules! Continue to dry fire practice under instructor observation until you feel comfortable with the firearm, and safe gun handling practices are achieved.

Trigger pull should be a controlled movement. It is often times referred to as a squeeze or press. There should be no jerking of the firearm due to anticipation of the shot. The shot should not be a surprise. You should know exactly when the firearm will fire. This is learned by getting the feel for your trigger from dry fire practice.

To begin your live firing, load the magazine and firearm. Do not move the safety to the "Fire" position until you are ready to fire at your target. Keep you finger off of the trigger until your sights are on target and you are ready to fire. Always keep a firm grip on the firearm and always keep the muzzle pointed in a safe direction.

Notice, Warning, and Disclaimer

Firearms, ammunition and shooting activities can result in death, serious bodily injury, and/or property damage. You are responsible for adhering to gun laws and safety rules and obtaining proper training and safety equipment to minimize the potential for shooting related deaths, injuries, and/or hazards. You have agreed to accept all terms of the site posted D & L Sports, Inc. liability waiver including all liability for death, injuries and/or damages related to the use of, or association with, D & L Sports, Inc. custom or customized firearms, and/or products, even in the event of negligence, or gross negligence on the part of D & L Sports, Inc. D & L Sports, Inc. products are sold "as is" and "with all faults" and are used at your own risk. D & L products are not recommended for any specific task. The end user makes this determination. This is due to the unpredictable environments in which products may be used. D & L Sports, Inc. expressly disclaims liability for incidental or consequential damages. As a condition of sale, any claim arising out of any interaction with D & L Sports, Inc. will be settled in the jurisdiction D & L Sports, Inc. is primarily operating in at the time of the claim. Do not proceed with any firearms activities without complete understanding and agreement of and with the above information. Please take the time to read and understand all information in this manual. Feel free to call with any questions about this manual, gun safety, or mechanical issues before you proceed with any shooting activities. Consult the D & L Sports, Inc. website at WWW.DLSPORTS.COM for further information.

Individual components in D & L Sports, Inc. firearms, and those customized by D & L Sports, Inc., are professionally fit to operate safely and reliably with that specific firearm. Parts should not be interchanged with other firearms of any make or model. Other components, of any make, should not be installed in D & L Sports, Inc. firearms or D & L Sports, Inc. customized firearms. Doing so may cause the firearm to be unsafe and/ or unreliable, which may cause death or injury. Failure to maintain your firearms and related gear in proper working order may result in death or injury. Obtain professional advice and assistance with these matters.

Never allow the muzzle to cover anything or any person that you are not willing to destroy. If you point this firearm at a person or object and discharge the firearm intentionally or accidentally, death or personal injury may result.

Never trust any mechanical safety on any firearm. Firearms safety begins in your brain, and you **MUST** pay attention to what you are doing with a firearms at all times. Use common sense.

Never handle a firearm for any reason, without first determining whether the firearm is loaded. You must **ALWAYS** assume that firearms are loaded. You must **ALWAYS** follow **ALL** gun safety rules.

Warnings

This firearm and all firearms should be inaccessible by children at all times. This firearm should **never** be kept where children or unauthorized personnel can gain access to it. You are responsible for safe and secure storage of your firearms and related gear. Contact D & L Sports, Inc. if you need assistance in obtaining gun locks, gun safes, or other safety equipment.

1911 style pistols, semi automatic rifles, pistols, carbines, bolt action rifles, shotguns, revolvers, and other custom or customized firearms and gear requires dedicated and specific training for their safe use. You should seek and obtain such training from a competent instructor. When you purchase firearms and gear from D & L Sports, Inc., you are affirmatively representing to D & L Sports, Inc. that you have obtained specific and dedicated training in the use of such items. This includes training related to legal concealed weapon carry and self defense situations.

This firearm **will still fire** with the magazine removed. If you remove the magazine, but leave a loaded cartridge in the chamber, this firearm **will discharge** if the trigger is activated. Personal injury or death could result from your failure to understand this.

No safety on this firearm should be removed, disabled, or rendered inoperable. Removing a safety or disabling a safety could result in personal injury or death. Each component of this firearm is critical to proper and safe functioning.

You should not attempt to perform "gunsmithing" repairs or any modifications on this firearm. As indicated elsewhere in this manual, if any concern arises, contact D & L Sports, Inc. immediately.

Statement of Customer Service

Lifetime Customer Assistance Program

D & L Sports, Inc. would like to relate the following important information:

Customer service, quality products, and after the sale assistance have been and always will be the foundation of D & L Sports, Inc. D & L Sports, Inc. continues this commitment by offering a lifetime assistance program with all D & L Signature firearms. This program is available to all reasonable and ethical D & L Sports, Inc. clients, for all reasonable requests. D & L Sports, Inc. reserves the right to make final determination on what requests are reasonable and what conduct is acceptable. Any anti-American or other behavior determined to be unacceptable by D & L Sports, Inc. will lead to the termination of business and assistance with and from D & L Sports, Inc. The D & L Sports' goal of complete customer satisfaction has been in place for decades. This has created a long list of satisfied, repeat clients. D & L Sports, Inc. looks forward to adding you to this list.

D & L SPORTS, INC. is dedicated to personal, professional service. If you have any questions regarding your firearm, firearms safety, or shooting activities, contact D & L Sports, Inc.

Thank you for your interest in D&L Sports inc.

MAINTENANCE LOG/ NOTES

Name:	_	
Rifle:		
	Field Data	
	Ammunition:	
	Ammunition Lot Number:	
	Serial Number:	
	Scope:	
	Zero Distance:	
	Zero Stop Distance:	

