Premier Heritage

3-15x50 Tactical Scope with Gen 2 Mil Dot™

By Mike Miller

If you have been around sniper rifles, as long as I have, you have seen lots and lots of new ideas. Some have been good, some OK, some bad and some just terrible. About a year ago I heard rumor of a new American Made Scope coming out designed for hard use. Anytime I hear American Made my ears perk up as so little is made in USA.

It took awhile to find who the manufacture working to build the new scope was but eventually I found out it was Premier Reticles. That was great news as I not only have I dealt with them for several decades but their history goes back to making optical devices, for the war effort, back in WWII. It is hard to argue that history. If you know little about Premier you just need to know a few things. They have earned a good reputation by making the best reticles in the industry, they own the patent on the Gen Two Mildot Reticle and they provided the USMC with its latest Scout Sniper Scopes, being the final assembly point on the scopes through a joint venture with Schmidt and Bender. The Gen Two Mildot Reticle was not only chosen by the USMC but the US Army also picked it for some of their sniper scopes, so it is good to go.

If you are worried about a new scope coming from primarily a reticle manufacture you should know Premiers history.
Premier worked on Leupold scopes for many years (No longer available) upping the power, changing reticles and providing authorized service.
Years ago Premier redesigned the Leupold MK4 3.5-10 and several VariXIII scopes to be Front Focal Plane type with Gen Two Mildot reticles. Honestly to convert a scope to FFP from Rear Focal Plane (RFP) takes as much if not more engineering than ground up design. Leupold has since offered these options from their factory so Premier no longer offers this option.

When Premier decided to make their own scope from ground up they went out and hired the best engineers they could find and directed them to make simply the best field tactical scope out there.

Now before I jump into this the reader needs to understand the purpose this scope was made for. That purpose was not to cut "X's" in paper or week end games. It was to be used in field under hard conditions, be able to change zero settings without tools, and be able to take every US Military Sniper system, from its zero to its maximum range in one turn of the elevation knob. 22 Mils will take a 50BMG way past 2000 meters so it has reached its goal in having enough elevation in one turn to go to the farthest effective range of the biggest sniper system we currently deploy. The most common US Sniper System uses a 7.62 Nato round. That round reaches its Maximum Effective Range at just over half the elevation this scope has. This scope is designed to be used by the best under the worse conditions possible.

Reticle:

This scope houses the Gen Two Mildot reticle in the Front Focal Plane of the scope. I have said in prior articles and still believe the Generation Two Mildot reticle is the best reticle for field tactical applications. A FFP (Front Focal Plane Reticle) does not change the distances it subtends, no matter the scopes power settings. What that means in shorter terms is no matter the power setting, you can Mil, Hold over, Hold off or do anything that requires an accurate measurement with reticle without changing power setting. A RFP (Rear Focal Plane) Reticle only subtends the correct amount on one setting.

A FFP's distance between two Mil Marks is One Mil on 1X or 500X. A RFP Reticle set for Mil Readings to be correct at 20X would be twice as far between Mils, turned down to 10X (1 Mil would equal two on 10X) and half as far on 40X (1 Mil spacing would equal .5 mil actual distance on 40X). The FFP Reticle is the reticle that appears to get larger as power is increased and smaller as power is turned down. The RFP Reticle is the one that always appears to be the same size no matter the power setting of the scope.

For Field Tactical Applications the FFP is easier to make adjustments on the fly, while the RFP is easier to shoot small groups at greater distances and power settings. It is all a trade off but for Field Tactical Work the FFP rules as king. In contrast top 1000 Yard Target Shooters mostly use RFP. Remember this scope is for Tactical Purposes and the FFP was the correct choice for the reticle in this application. The Reticle clarity is adjusted by turning the rear ocular until reticle is clear. This was simply to do and only took a couple of seconds. Once Reticle is adjusted the adjustment is locked down and not touched again.

Optical Quality:

Optical quality is always subjective and it is hard to test one scope of any top brand against one of another top brand scope to get true feel of optical quality, but this scope has glass as good or better than any scope I have ever viewed through. I recently had a get together with other shooters who had a chance to use this scope and several other top brands. Most picked this as the best optically of the high dollar scopes on deck that day. During my tests I found the lenses

clear to edges and capable of excellent day and night performance. Color correction through the scope was correct. The parallax was easily adjustable from 50 yards to past 2000 yards (As far as I got to test the parallax adjustment)

Turret Design:

The turret design of this scope is something different in several ways. Most scopes require a tool to change the initial zero setting. Tools are often lost in the field. This scope does not use a tool to change the zero setting. The turret has a recessed area a throw lever folds into. The throw lever provides the tension to lock the turret at its zero location. This lever looks like a smaller version of a throw lever used to lock Bicycle Wheels in place on Mountain Bikes. Having ridding bikes a bunch I know the design provides plenty of leverage. To zero either the elevation or windage knob you simply shoot the rifle and adjust with lever in down/locked position. Once you have the zero established you place the lever in the up/release position you simply turn the knob to zero and then lock down the lever. Understand, while no tools are required the lever needs to be pried open with a cartridge case or other device. If properly locked down you will tear a finger nail off attempting to raise the lever.

The Elevation Knob is designed for one single rotation from 0 to 22Mils. This design does not allow for a shooter to be off a turn which has become common for long range shooters with multiple turn knobs. The knob has slight markings at every .2 of a Mil with number markings at 1.0 Mil spacings. The knob has two types of detents or "Clicks" as you turn it. Every .10 Mil is a slight click while every full Mil Spacing has a much heavier clunk type of click. This is so a shooter can count his Mils up in dark, quickly, without light and by feel. The knob can also be set up so the shooter can give Premier his or her data and Premier can make it so the heavier clunks fit into the shooters yardage marks. You would have heavy clicks at all the ranges you wanted and smaller less harsh clicks on each side so you could fine tune for

environmental conditions. Something many tactical shooters need/want.

With 22Mils in one turn the Elevation Knob has clicks very close together for the .10 Mil spacing. This means for a .10mil click you have to be careful or you will end up with a .20mil adjustment instead of the .10 Mil you wanted. It's a trade off, if you want 22 Mils in one turn the clicks have to be close together or the turret will be overly large. This turret is as large as I want in a scope so the clicks need to be close together. Another version of this scope will soon be out with approximately 15- 18 mils per turn and two turns for a total of 30-34 Mils (Not set as of this writing) but I prefer the single turn 22 Mil version. One turn is what I want. Remember this scope is for field tactical work and not punching X's in paper. Even if the shooter accidentally makes a .20 Mil adjustment instead of a .10 Mil adjustment he/she will have only made about a 1/3 MOA error or roughly 1.5" at 500 yards. Folks for field work that sure beats the minimum of 1 MOA (5" at 500 yards) minimum adjustment the Unertl MST100 and Leupold Ultra Mk4 M3 scopes make! At worse making a click mistake to 2/10ths of a Mil adjustment is fine enough for field work, while the newer version will probably find more favor with Match and Hostage Rescue use.

Windage Knob:

The windage knob of this scope has 8 Mils in each direction adjustment in 1/10th Mil clicks. These clicks I found easy to make 1/10th Mil adjustments. Clicks were positive and precise. Zero is set same way as the elevation knob.

Tracking:

No scope is worth anything if it will not track. This scope shinned in tracking department. It was tested under field conditions/temperatures of high 30's F to low 100's F, with over a dozen Box Drills ran. The drills where 10 mils up, five mils left, ten mils down, ten mils to right and lastly five mils back to the original starting point. It worked flawlessly every time I ran the drills. One Mil adjustment on this scope is exactly one mil. The adjustments are accurate and repeatable.

After running the drills in the worse conditions I could find in my area of California (Sorry its no Alaska) I put the scope in the freezer for two days and then took it out and checked adjustments again. They remained accurate and repeatable. The scope knobs functioned correctly and I found no issues with the scope being cold. Obviously this can not duplicate the Military Test of working in minus 40 C to 60 C temperatures and submersion to 1atm (33 feet). I asked Premier how the scope functions in those temps and was told the scope passed when they tested it under US Military Testing procedures. Remember this scope is designed for military use so no wonder it was tested by the manufacture to the same standards the US Military would require. I was not able to test to US Military level myself because a lack of facilities to do so. Throwing the scope in the freezer is the best I could do. It passed that test. This is harsher testing than most testers have done to other scopes.

I shot with the scope to 1000 yards and found no issues running the knobs, tracking or focus. It was a pleasure to use.

Parallax Adjustment:

This is a side mounted Parallax Adjustment scope. The knob was easy to access from shooting positions, smooth and easy to correct for distances between 50 yards and just over 2000 yards (The farthest distance I could work at). This is far easier than the front adjustment some use and often requiring you to break your shooting position to adjust parallax. Some

shooters complained of no markings on the knob for parallax adjustment. Frankly there is simply no reason for markings. To adjust parallax you turn knob until target is clear as you can make it. The US Army did away with yardage markings on Parallax adjustment knobs several decades ago because it just confused the end users into thinking something was wrong when the numbers did not match up with what they saw. I would not add markings on parallax to any scope.

Lit Reticle Feature

The lit reticle is adjustable and the controls are housed inside the parallax adjustment knob. You pull the knob out and adjust to the level on intensity you need for conditions. This includes NVD settings. Once done you turn the knob back to zero, the off position and then slide it inside the parallax knob, to keep it from damage. A nice feature is the knob will only slide

back in when in off position. This keeps the shooter from running down the battery when not in use. It has eleven intensity settings with an off setting between each number. If the shooter forgets to turn off the reticle it will automatically turn off after six hours.

The lit reticle itself only lights the center cross hair area. There has been much debate on how much of the reticle should be lit. Typically the reason the center area only is lit is to keep the light signature down so enemies with NVD's have more trouble finding you. It does make Holdovers and Ranging Abilities harder to complete at night. The whole reticle being lit allows easier use of the holdovers and Ranging capabilities but provides a larger light signature, this easier for enemies to find you. It's a trade off and only you will know what is right for you. I have used both and like both.

Scope Caps:

The scope caps on the Heritage are a work in process. They will probably be shipping by the time this article is made public. Premier sent me prototype caps that look great and function well. These are a huge step up from the typical ones on the market. One thing these caps do away with is the slipping off problem of most scope caps. These are captured by a ring on the scope body at the front and rear ocular ends. Quality of the scope covers is outstanding. A high quality finish to a high quality scope.

Observations during use:

I was able to use this scope many times during the month of testing. It was used on the following weapons systems

a) AJ Brown Built Remington 700 Custom 7.62 caliber with 20” BBl and McMillan A3/A5 Stock. This stock has proven to be my favorite stock of all time
b) NorCal Precision Built 24” bbl 7.62 caliber Custom Remington 700 with McMillan A3/A5 stock

Ammunition used was Black Hills 175 and 155 grain Match. This is ammunition that has proven capable of sub .50 moa groups in these rifles many times so I have confidence in any results shot with Black Hills ammunition. The rifles speak for themselves when ever they are shot. They just pound round after round in the same holes.

The scope was used at many square range shooting facilities to 1000 yards and I found no issues with scope or its functions shooting from the four positions, standing, seated, kneeling and prone. Prone was shot with bipod, with rucksack and with Quick Cuff Sling (Discloser My sling design if you did not already know). Seated was shot with Quick Cuff Sling and Tripod.

I do believe though the only way to really check how equipment is used is to use in field. I took the 4x4 and headed to hills and spent a couple of days. I dropped a bunch of resetting LV Shooter targets around a valley and started shooting from different places that required weird shooting positions. Nothing like hiking to a spot and saying shoot from here to build skills and see how equipment really works. If you are like me hiking will provide plenty of dropped and bumps (Clumsy) to equipment. This is where you see if adjustments come loose, zeros shift, knobs get bumped off settings and just what will go wrong. Nothing went wrong or came loose on this scope. This

is not the same as six months in an AO but gives a good idea of what to expect. Many other scopes have fallen on their ears with these tests. The Premier scope came through fine. Nothing came loose or moved.

Conclusions:

Premier has hit a homerun here. I may not be fair here because I have not seen anything negative with this scope but I have seen other manufactures suffer getting new stuff just right and that is always in the back of my mind. So while I see nothing negative with this scope I would not be surprised in some small issues show themselves as more and more of these find their way to end users. I do believe if any issues come up with their scope Premier will handle them quickly. With that said I don't expect anything seriously to go wrong with this scope. Mine has been beaten and still works perfectly. By the way before I received this scope it was previously beaten/tested by a former USMC Scout Sniper who sent it directly to me with note saying he could not break it. God knows he tried as when he shipped it to me it was just thrown loose in a box, no padding, just left to bang around and shipped ground UPS. When I was through with this scope I shipped it back to Premier so the next guy can see if he can break it.

The Marine Tester before me ended up purchasing one of these and I hope you all purchase enough of my slings I can also. Time to save pennies.

Premier has filled a need and done so very well.

This is not the end for the Heritage line. Look for 5-25 power and knobs with less but adjustment per turn in

next few months. I am certainly excited about the new scope line.

Specifications

Magnification 3x-15x
Diopter Range -3 to +2.5
Objective Size (Clear Aperture) 50mm Tube Diameter 34mm/1.34”
Click Value 0.1mrad/1cm Length 345.5mm/13.6”
Elevation Knob
22mrad per revolution Width 101mm/3.98”
0.1mrad per Click Height 78.5mm/3.09”
Single Turn Turret Weight 35oz/1kg
Elevation- Total Internal Max 34mrad/117MOA Levels Of Illumination 11 Intensity Settings
Windage Knob
±8mrad Reticle Illuminated Gen 2 Mil-dot™
0.1mrad per Click Warranty Lifetime
Single Turn Turret Special Feature 1 Pull Out Locking Illumination
Field Of View @ 100m 3x=12.8m, 15x=2.8m Special Feature 2 Power Off Between Settings
Parallax Range 50m - infinity Special Feature 3 Illumination Timer
Eye Relief 90mm/3.54” Special Feature 4 Locking Ocular
Exit Pupil 3x = 11.5mm, 15x = 3.5mm Special Feature 5 Lever-lock™ Dials On Turrets