Carl Zeiss Sports Optics



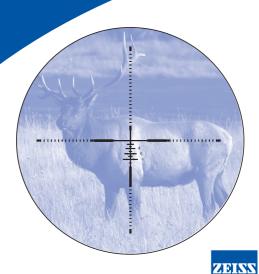
Carl Zeiss Optical, Inc. 13005 N. Kingston Ave., Chester, VA 23836 1-800-441-3005 www.zeiss.com/sports



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Sports Optics

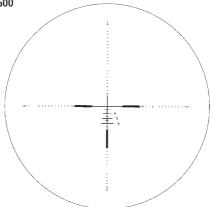




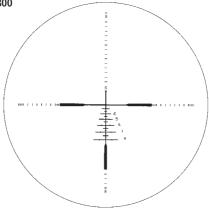
User Manual

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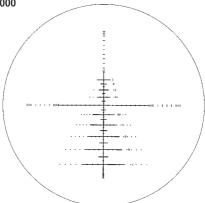




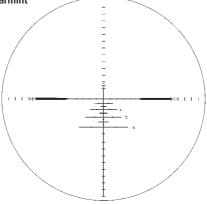
Rapid-Z[™] 800





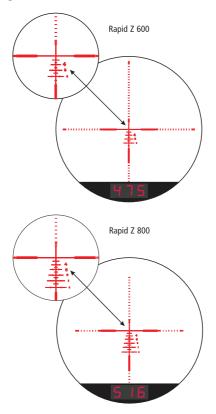


 $\textbf{Rapid-Z}^{\scriptscriptstyle{\mathsf{TM}}}\ \textbf{Varmint}$



USERMANUAL

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USER MANUAL

INDEX

1.	Introduction	3
	Classification	
3.	Availability	5
4.	Parallax	5
5.	Zeroing	6
6.	Holdover / Shot Placement	7
7.	Features	9

Rapid-Z™ is a Trademark of Carl Zeiss Optical, Inc.

1. INTRODUCTION

Congratulations on the purchase of your Zeiss riflescope with the new Rapid-Z[™] ballistic reticle. Rapid-Z[™] reticles are the most advanced design in ballistic reticles.

This reticle combined with the quality optics and performance that Carl Zeiss is known for will provide you with the best riflescope to take afield or to a range.

Rapid-Z[™] reticles provide extremely versatile and accurate targeting information based upon target distance, the optical power of the scope, caliber class, and ammunition characteristics. Rapid-Z reticle and Zeiss scope combinations save valuable time and allow hunters to take ethically placed shots at extended ranges without making elevation and windage turret adjustments or guessing holdover and elevating the center cross hair.

Rapid- Z^{∞} reticles are available in distinct designs, each of which supports a variety of calibers and purposes. While a caliber associated with one design (for instance, the Rapid- Z^{∞} 600) may potentially be used with another reticle design (such as the Rapid- Z^{∞} 800), optimum performance is achieved with the recommended specified caliber, reticle and riflescope combination.

RAPID-Z™

Currently available in most Zeiss scopes with second image plane reticles, each caliber will require a slightly different magnification setting to correctly place the shot at the exact distance. Every dimension in the design of the Rapid-2™ has been carefully engineered. These reticles can also be used for different ranging purposes through the utilization of the internal reticle dimensions.

With the Rapid-Z[™] reticle designs and the existing Zeiss riflescopes, Zeiss provides an optical solution for every shooting and hunting need.

2. CLASSIFICATION

To achieve optimum performance Zeiss classifies the various reticle designs as listed below. Please note that the reticles are not limited to these calibers or uses, but this is the most efficient way to unite the shooter to his exact needs with the best magnification options, correct distances normally encountered with those calibers, the correct scope and the best ballistic reticle designs possible. This is what will set Zeiss and the Rapid-Z™ apart from other common holdover reticle patterns.

RETICLE	CLASSIFICATION	CALIBER CLASS (EXAMPLE)		
Rapid-Z [™] 600	Standard Hunting	.243, .270, .30-06, .300 Win Mag, .325 WSM etc.		
Rapid-Z [™] 800	Standard Hunting & Hot Magnum	7MM REM MAG, .30-378 W MAG, .338 RUM, 7MM STW, 270 WSM etc.		
Rapid-Z [™] 1000	Long Range Tactical	.308 Win. (.5 BC Bullets)		
Rapid-Z [™] Varmint	Fast/Light Weight Bullets	.204 Ruger, .220 Swift, .22-250, .223 etc.		

USER MANUAL

3. AVAILABILITY

Rapid-Z™ Model Matrix

Conquest	Rapid-Z™ 600	Rapid-Z™ 800	Rapid-Z [™] 1000	Rapid-Z [™] Varmint
3-9x40	•			
3-9x50	•			
3.5-10x44	•	•		
3.5-10x50	•	•		
4.5-14x44		•	•	
4.5-14x50		•	•	
6.5-20x50			•	•
Victory				
6-24x56			•	•
6-24x72			•	•
Diarange 3-12x56	•	•		
Diarange 3-10x50	•	•		

4. PARALLAX

All Zeiss Rapid- Z^{∞} riflescopes without an adjustable parallax knob are factory set to be parallax free at 300 yards. This is to help compensate for the effects of parallax at longer distances. Please set your adjustable parallax knob settings to normal for the appropriate distances.

5. ZEROING THE RAPID-Z™

To properly adjust your Zeiss Rapid-Z[™] riflescope, first zero your rifle at 200 yards on the center cross hair using your chosen ammunition.

Access the Zeiss website (www.zeiss.com/sports). Log on to the Zeiss Rapid-Z™ Ballistic Calculator, or download the sample Rapid-Z™ Factory Ammunition charts. Locate your brand of ammunition, caliber, load, etc., for the correct magnification ring power setting.

Set magnification ring to the specified setting. Your rifle will now be accurate to point of aim on all holdover cross hairs at the corresponding distances in yards, (Example: 4 = 400 yards).

5.1. TO ZERO - Step By Step Instructions

Example	
Scope:	Zeiss Conquest 3.5-10x44
Reticle:	Rapid-Z™ 600
Caliber:	Factory Loaded .300 WSM
Ammo:	Federal Vital Shok with 180 Grain Nosler Accubond
BC:	.526
Velocity:	2960 with 24 Inch Barrel
Altitude:	Zero
Temp:	59 Degrees F

- Log on to www.zeiss.com/sports and access the Zeiss Rapid-Z[™] Ballistic Calculator, or download the sample Rapid-Z[™] Factory Ammunition Charts.
 - a. Zeiss Rapid-Z™ Ballistic Calculator: Follow the online step-by-step instructions to get the correct magnification ring setting.
 - b. Zeiss Rapid-Z™ Factory Ammunition Charts: Find your brand, (in this case "Federal"), along with the correct caliber and load. Go to the column that lists the correct magnification ring setting. Based on the given data from the example, the value for the correct magnification ring setting would be 9.8.

5.1. TO ZERO - Step By Step Instructions (cont.)

- Zero your rifle at 200 yards using the center cross hair.* If access to a 200 yard range is not available, then zero at 100 yards and follow the manufacturer's recommended height of shot placement over the target bulls-eye for a 200 yard zero (example 1.5 inches high at 100 yards).
- 3. To confirm correct magnification setting, place a target at a known distance (e.g. 400 yards). Using the holdover crosshair with the number 4 centered on target properly and safely, fire a group down range. The shot placement should be on target. Note: Always check your zero out to the longest distance you will shoot.
- 4. To fine tune your point of aim:
 - If shots are slightly high, turn the magnification ring up in very small (<1/4) power increments.
 - If shots are slightly low, turn the magnification ring down in very small (<1/4) power increments until correct zero is achieved.
 - Note: At extended ranges altitude and temperature affect Point of Impact (Example: 0 to 10,000 ft. = POI shift beyond 500 yards of 8", or more.)

For a complete list of all standard calibers and bullets types please visit the Zeiss web site at www.Zeiss.com/sports

*Note: The Rapid- Z^{m} 1000 center cross hair is 500 yards. Please zero at 200 yards and verify at long distances.

6. HOLDOVER / SHOT PLACEMENT

Rapid-Z[™] reticles can be used with numerous caliber and load combinations. Holdover values in the reticle correspond to those exact distances in yards. Once your rifle is zeroed at 200 yards on the center cross hair and with the magnification ring set to the recommended power setting (obtained on the the Zeiss website) the reticle will now be ready for long range shooting. Example: At 600 yards use the "6" holdover line, at 450 yards use the "4.5" holdover line (short line between "4" and "5"). **Reference Figures 1 & 2.**

Figure 1: Correct Holdover - Shot Placement

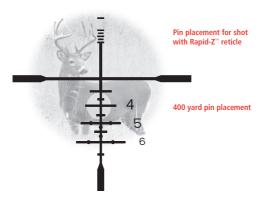
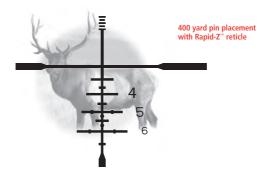


Figure 2: Correct Holdover - Shot Placement



7. FEATURES

Ranging:

Your Rapid-Z[™] reticle also comes with an integrated ranging system etched into the reticle. **Note:** All ranging must be done with the riflescope set on the maximum magnification setting regardless of the scope model or reticle choice. The ranging hash marks represent 2 inches at 100 yards. At the top and bottom of the ranging scale, hashmarks are divided into 1/2 inch increments. Therefore you can range any target of known size such as a whitetail deer's brisket = 18" or an elk = 24". Simply divide the known size of the animal by the total number of inches covered, and multiply the sum by 100 for the range to target. (Note: The Rapid-Z[™] Varmint reticle corresponds to 9" at 300 yards.) **Please reference Figure 3, 4 and 5 for an example.**

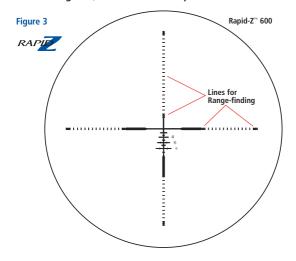


Figure 4: Range Finding Example With Rapid-Z™ Reticle - Whitetail Deer

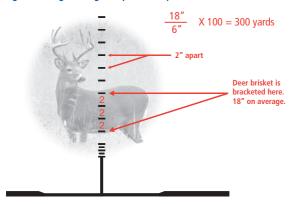
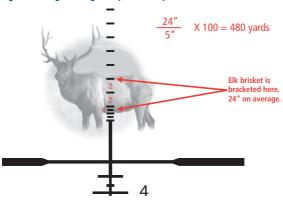


Figure 5: Range Finding Example With Rapid-Z™ Reticle - Bull Elk



Fast Ranging:

Another ranging feature of the Rapid-Z[™] reticle is the fast ranging system. Please note that the vertical cross hair directly above center and between the first hash mark is exactly 18" at 300 yards or 6" at 100 yards (corresponding to the standard height of a whitetail deer brisket). This is most useful to the hunter and can be utilized to make a snap measurement in the field (with your scope set on maximum power) to determine if a whitetail is at a distance of 300 yards or closer. **Please reference Figure 6 & 7 for an example.**

Note: Variations in the size of game animal species can affect ranging and therefore point of impact. It is recommended that electronic range finding devices are used whenever possible.

Figure 6: Fast Range Finding Example With Rapid-Z™ Reticle

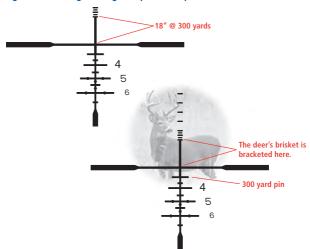
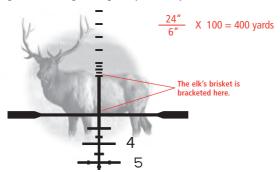


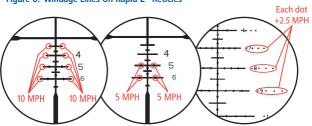
Figure 7: Fast Range Finding Example With Rapid-Z™ Reticle



Windage:

Windage lines on the Rapid-Z[™] reticles are set to 10 mph bullet drifts. What is unique about the Zeiss Rapid-Z[™] is that there are also 5 mph hash marks on the solid 10 mph wind line. Exception: The Rapid-Z[™] 1000 has 2.5 mph marks along the solid 10 mph line with 2.5 mph reference marks out to 20 mph winds for even more precise shooting. You can compensate for distance and windage at the same time by using the corresponding holdover line. **Please reference Figure 8 for an example.**

Figure 8: Windage Lines On Rapid-Z™ Reticles



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