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KIL01600™ 6x22 mm LASER RANGEFINDER

**OWNERS MANUAL** 



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SIG SAUER <sup>®</sup> Electro-Optics Infinite Guarantee <sup>™</sup>

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This manual is available in the following languages: French, Spanish, German, Italian, Portuguese, Russian, Afrikaans, Swedish, and Norwegian. Please visit sigsauer.com for Owners Manual downloads.

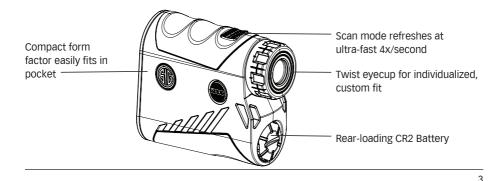
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#### INTRODUCTION

Congratulations on the purchase of your SIG SAUER® Laser Rangefinder. Your KILO® is one of the most compact, advanced and simple to use rangefinders on the market. All of SIG SAUER's rangefinders feature the fastest digital signal processing engine while streamlining the user interface for a no hassle, out of box experience.

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#### CONTENTS:

• KILO1600™ Digital Laser Rangefinder

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- CR2 Battery (1)
- Premium Padded Ballistic Nylon Case
- Lanyard

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• Instruction Manual



#### **KEY FEATURES:**

 6 x 22 mm monocular with SpectraCoat<sup>™</sup> anti-reflection coatings for superior light transmission and optical clarity.

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- Revolutionary Lightwave<sup>™</sup> DSP Technology for the fastest and longest distance rangefinder engine.
- HyperScan provides 4 range updates per second in scan mode while RangeLock reports the last range result when ranging distant targets.
- Features line of sight or angle modified range. Units in yards or meters to tenth Y/M resolution.
- Transparent OLED display for daytime and low light use.
- Lumatic ™ Display automatically calibrates display brightness to changing ambient light conditions.
- Compact, lightweight polymer housing with eyecup and diopter adjustment.
- Simplified user interface with RANGE and MODE buttons only.



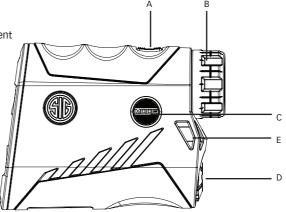




#### **PRODUCT IDENTIFICATION:**

- A- Power/Range Button
- B- Eyecup / Diopter Focus Adjustment
- C- Mode Button
- **D-Battery Compartment**
- E- Lanyard

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#### LIGHTWAVE™ DSP TECHNOLOGY

SIG SAUER's proprietary Lightwave DSP engine leverages HyperScan – an advanced power management technique that provides the fastest refresh rate in scan mode (4 times per second) even at distances up to a mile. Our DSP engine uses the latest generation field programmable gate array (FPGA) running sophisticated signal processing algorithms to reduce false positives while finding weak or distant targets.

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#### RANGING ACCURACY, RESOLUTION AND MAXIMUM RANGES

The KILO1600<sup>™</sup> provides line of sight or angle modified range information accurate to ±0.5 yards or meters out to 500 yards; ±1 yard from 500 - 1000 yards and ±2 yards beyond 1000 yards. Range is displayed in 0.1 yard or meter resolution.

RANGING PERFORMANCE IN HYPERSCAN MODE				
	Reflective	Trees	Deer	
KIL01600™	Up to 2000 yds	Up to 1000 yds	Up to 800 yds	



#### MODES OF OPERATION - ANGLE MODIFED RANGE (AMR) AND LINE OF SIGHT (LOS)

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Angle modified range is the equivalent horizontal range to the target and is comparable to the "horizontal leg" of a triangle. AMR is also known as "rifleman's rule" and uses the LOS range and angle of incline to calculate the horizontal distance the projectile travels between shooter and target. AMR is very accurate for shorter distances (i.e. < 400 yards) and archery.

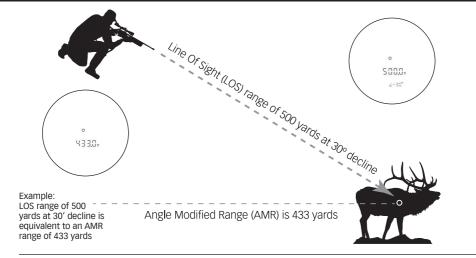
Line of sight is the range to the target independent of angle. It is comparable to the "hypotenuse" of a triangle. When ranging in LOS mode, the distance is displayed in addition to the angle of incline. This method is preferred for those long range shooters and hunters wanting to use the LOS range and angle of incline to calculate a very precise holdover using a ballistic calculator smartphone application and/or wind measurement device.

For example, if the rangefinder is in LOS mode the line of sight range of 500 yards would be displayed along with the angle of -30 (degrees decline). Use LOS in combination with a ballistic calculator to calculate an exact holdover in minutes of angle or milliradians.

If the rangefinder is in AMR mode the angle modified range of 433.0 yards would be displayed. This is the equivalent horizontal range and can be used in combination with a ballistic / holdover reticle or with the SIG Ballistic Turret SBT™ dial.



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#### TRANSPARENT ORGANIC LIGHT EMITTING DIODE DISPLAY (T-OLED)

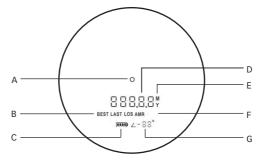
The KILO1600<sup>™</sup> rangefinder features a T-OLED red display for any ambient light condition.

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- A Circle center aiming feature
- B Target Selection: BEST or LAST target
- C Battery Status indicator
- D 5 Character alphanumeric digits for range
- E Range Unit of Measure: Y or M
- F Mode Selection: LOS or AMR
- G Angle of incline / decline

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## A WARNING

#### Safety and Operation Procedures

The KILO is classified as a Class 3R product.

- Do not press the RANGE button while aiming at the human eye or while looking into the transmitting optics on the objective side.
- Do not leave the KILO within reach of small children.
- Do not take the product apart or modify the product in any way to expose internal electronics that might cause damage or electric shock.

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• Do not use any other power source other than a CR2 battery or equivalent.





#### OPERATION

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The KILO1600 is designed to get you up and running without the typical complexity of buried menus and programming modes. The rangefinders come out of box in the following configuration:

- (A) Angle Modified Range (equivalent horizontal range)
- (B) Best Target (rangefinder returns the best or most likely target, not the first or last)
- (C) Automatic Brightness Control
- (D) Unit of Measure in Yards





#### SET UP

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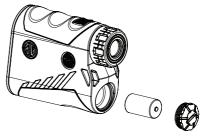
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#### Installing the Battery

Remove the battery cap by turning the cap in a counter-clockwise direction. Insert (1) CR2 Primary Lithium battery (-) terminal side first. The (+) terminal should be facing out. Place the cap onto the (+) battery terminal and reinstall the battery cap by turning the cap in the clockwise direction.

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▲ CAUTION - Be careful to not cross-thread the cap.





After installation of the battery and depressing the RANGE button, the status of the rangefinder is displayed:

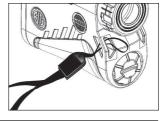




#### Installing the Lanyard

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Install the lanyard loop through the lanyard attachment point. Pass the lanyard back through the loop for secure attachment.

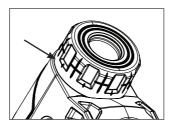




#### **Diopter Adjustment**

The diopter or focus adjustment is integral to the eyecup. The focus adjustment is used to bring the display into sharp focus along with the target image. The diopter adjustment can turn clockwise or counter-clockwise depending upon the user's prescription.

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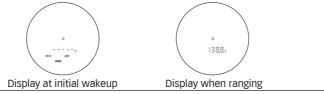
#### **DISPLAY INFORMATION**

The display shows you the center aiming circle, the unit of measure (Y), Angle Modified Range mode (AMR) and the remaining battery status. The display will remain active for up to 30 seconds , or whatever timeout has been set within in the SIG BDX App. You can then press the RANGE button to determine range to target.

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If you press the RANGE button while the rangefinder is off and continue to hold the RANGE button down, the rangefinder will automatically switch into SCAN mode within 1 second.

After determining the distance to the target, the rangefinder will continue to display the center aiming circle and range data for 30 seconds – and only the range data. All other information is not shown after initial wakeup to prevent clutter in the field of view.





#### HyperScan MODE

While the rangefinders support single button push ranging operation, it is highly recommended that you push and hold the RANGE button down to activate HyperScan mode. This mode allows you to scan targets at 4X/second which significantly improves ranging performance at extreme distances. As the ranging distances are updated very quickly in HyperScan mode, once you release the RANGE button the last acquired distance will be displayed. When in HyperScan mode ranging distant targets, the display may update between no result and a distant range - by using RangeLock technology the rangefinder will report the last range result when the RANGE button is released.

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#### CHANGING MODES OF OPERATION

The rangefinder ships with the most common modes already configured. However, you can access and change the following features:

- · Line of Sight (LOS), or Angle Modified Range (AMR)
- Best or Last Target
- Display Brightness (AUTO + 3 Low, 3 Medium and 3 High)
- Units of Measure (Y or M)



#### **RANGEFINDER CONFIGURATION – PROGRAMMING SEQUENCE**

### 1. Mode Selection (AMR or LOS)

To enter programming mode, press and release the RANGE button to wakeup the rangefinder. Once the display is visible, press and hold the MODE button for 2 seconds – then release the MODE button and the current selection will be flashing (AMR is the default setting). You can switch between AMR, or LOS by pressing and releasing the RANGE button. Confirm your selection by pressing and releasing the MODE button which will save your setting and index to the next setting for configuration. If you do not press and release the MODE button the rangefinder will save your selection and turn off.

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## 2. Target Selection (BEST or LAST)

BEST or LAST should be flashing (BEST is the default setting). You can toggle between BEST or LAST by pressing and releasing the RANGE button. Confirm your selection by pressing and releasing the MODE button which will save your setting and index to the next setting for configuration. If you do not press and release the MODE button the rangefinder will save your selection and turn off. BEST Target can be used for most situations, however, when hunting through foliage or in high grass the LAST Target is recommended.

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#### 3. Display Brightness

Display Brightness (Lumatic OLED Display) - AUTO will be used in most cases which leverages the ambient light sensor located in the objective of the rangefinder. This sensor samples the ambient light conditions and automatically adjusts the display to the local environment. You can change this to 9 individual settings: LOW 1 - 3, MED 1 - 3, and HI 1 - 3. Note - if you accidently leave the unit on Setting LOW 1 you may not be able to see the display. If this occurs, go into the dark environment and change the illumination setting.





#### 4. Unit of Measure Selection (Y or M)

Your current selection will be flashing (Yards is default). You can toggle between Y or M by pressing and releasing the RANGE button. Confirm your selection by pressing and releasing the MODE button which will save your setting and index to the next setting for configuration. If you do not press and release the MODE button the rangefinder will save your selection and turn off.







## FREQUENTLY ASKED QUESTIONS (FAQ):

## Q: I can't get the display to focus.

A: You need to adjust the diopter ring to your vision. Rotate the eyecup / diopter ring in either direction until the display comes into sharp focus.

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## Q: I can't seem to range very far past trees or animals.

A: Your KILO will perform differently based on changes in ambient conditions such as bright sunlight or snow, rain or fog, temperature and the reflectivity of the target being ranged. For example, at dusk and dawn your rangefinder may be able to range trees at over 1000 yards but in bright sunlight may only achieve 500 yards. If your KILO will not range at least 400 yards under normal conditions (fog and rain excluded) please contact customer service. Your product may have fallen out of alignment.





## Q: My battery drains too fast.

A: Most rangefinders will provide over 4000 individual range calculations using a fresh CR2 primary lithium battery. Your KILO exceeds this specification. When heavily using SCAN mode the battery may appear to drain faster since your KILO is ranging 4x per second in HyperScan mode. This is normal operation but you should keep a spare CR2 battery when heading out to remote locations.







#### KIL01600™ 6x22 mm SPECIFICATIONS

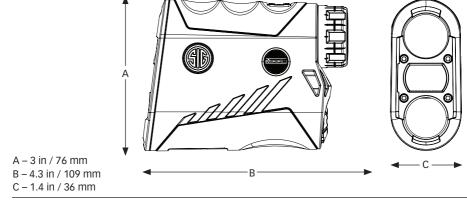
Magnification		6X		
Maginication	οΧ			
Objective Clear Aperture	22 mm			
Exit Pupil	3.7 mm			
Eye Relief	17 mm			
Angular (FDV)	6°			
FOV @ 100yds	34.18 ft			
Laser Divergence	4.00 x 0.2 MRAD			
Range Response Time	.25 sec			
Scanning	Yes			
Range Resolution Under 100 yds	.1 yds			
Max Range	Reflective up to 2000 yds	Trees up to 1000 yds	Deer up to 800 yds	
Weight with Battery		5 oz / 140 g		

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## **A** DANGER

# CLASS 3R LASER PRODUCT INVISIBLE LASER RADIATION AVOID DIRECT EYE EXPOSURE.

This product complies with IEC 60825-1: 2014-05 Ed 3.0 and complies with FDA performance standards for laser products except for conformance with IEC 60825-1 Ed.3., as described in Laser

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Notice NO. 56, dated May 8, 2019.

P o < 23W,  $\lambda$  = 905 nm, t = 22 ns



This product has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. The equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with these instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this product does cause interference to radio or television reception the user is encouraged to try to correct the interference by one or more of the following:



- · Reorient or relocate the receiving antenna
- · Increase the separation between this product and the receiver
- · Connect the equipment to an alternative outlet or receiver
- · Consult a technician.

Shielded interference cable must be used with the equipment in order to comply with the limits for a digital device pursuant to Subpart B of Part 15 of FCC Rules.

Specifications and designs are subject to change without any notice or obligation on the part of the manufacturer.

## **A** CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.



# LASER APERTURE

# SIG<sub>SAUER</sub>

#### FCC STATEMENT:

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference, and
  This device must accept any interference received,
- including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

#### NOTE:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

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This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- · Increase the separation between the equipment and

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#### receiver.

• Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

• Consult the dealer or an experienced radio/TV technician for help.

#### **INDUSTRY CANADA:**

This device complies with Industry Canada licence RSS standard(s). Operation is subject to the following two conditions:

. This device may not cause interference, and

 This device must accept any interference, including interference that may cause undesired operation of the device. Le present appareil est conforme aux CNR d'Industrie Canada applicable aux appareil radio exempts de licence.

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L'exploitationestautorisée aux deux conditions suivantes:

l'appareil ne doit pas produire de brouillage, et
l'utilisateur de l'appareildoit accepter tout brouillage radio électrique subi, mêmesi le brouillage est susceptible d'encompromettre le fonctionnement

The device meets the exemption from the routine evaluation limits in section 2.5 of RSS 102 and compliance with RSS-102 RF exposure,users can obtain Canadian information on RF exposure and compliance.







#### SIG SAUER Electro-Optics Infinite Guarantee™

SIG SAUER has manufactured the most rugged, dependable high-performance firearms for over two centuries. Our heritage of design, engineering and precision-manufactured quality predates the existence of any other optics company worldwide. We understand the importance of quality in the line of fire, at the shooting range or on your next hunt. SIG SAUER Electro-Optics had to earn the right to wear that badge and the Infinite Guarantee has your back, forever. Period.



We will repair or replace your SIG SAUER product in the event it becomes damaged or defective, at no charge to you. If we cannot repair your product, we will replace it with a product in perfect working order of equal or better physical condition. It doesn't matter how it happened, whose fault it was, or where you purchased it.

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#### SIG SAUER Infinite Guarantee™

- Unlimited Lifetime Guarantee
- No Receipt Required

- Fully Transferable
- No Warranty Card Required
- No Time Limit Applies
- No Charge

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If you ever have a problem, no matter the cause, we promise to take care of you when it counts. Please note that our Infinite Guarantee does not provide coverage for intentional damage, misuse, cosmetic damage that does not affect the performance of the optic, loss, theft or unauthorized repair or modification. Excludes electronic components.

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**SIG SAUER Electronic & Tritium Component Limited 5-Year Warranty** For components not included under the SIG SAUER® Infinite Guarantee™, this warranty covers any defects in materials and workmanship in the electronic and Tritium components of illuminated riflescopes/sights, pistol sights, electronic sights, flashlights, lasers, binoculars, spotting scopes, and rangefinders. This warranty lasts for five years from the date of manufacture. If, during that five-year

period, these products are found to have electronic or Tritium component defects in materials or workmanship, SIG SAUER will repair your product, at no charge to you. If we cannot repair your product, we will replace it with a product in perfect working order of equal or better physical condition.

> WARNING: CANCER AND REPRODUCTIVE HARM www.P65Warnings.ca.gov



FOR PRODUCT SERVICE ON THIS MODEL, PLEASE CALL 603-610-3000

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