

Kestrel HVK Gun Loader Software



E 9.38	A
W 0.96/2.16R	
<hr/>	
Tgt	000° 825 yd
Wind	3oc 5mph

RANGE CARD			A
Rng	Elev	Wnd1	
800	8.88	0.92R	
850	9.89	0.97R	
900	10.98	1.04R	

TARGET		A
TD	L-R	
WD	3 oc	
WS1	5 mph	
WS2	10 mph	



Kestrel Ballistics Weather Tracker™ with Horus® ATrag® Software

Kestrel Pocket Weather Meters and Horus® Vision have partnered to provide a powerful shooting tool that combines the critical environmental data and targeting software solutions required for precision shooting -- all in one 114 gram pocket-sized unit. Previously, shooters would need to obtain environmental data from a Kestrel meter and then input that data into a PDA loaded with Horus® ballistics software. No more distractions from manually entering weather data into software! Now, the Kestrel Ballistics Weather Tracker™ with Horus® Software contains all of the necessary data and solutions in one device to minimize user workload and distraction. Plus, the Kestrel meter is IP67 waterproof and MIL-STD-810F rugged, allowing users to avoid the expense and weight of a ruggedized PDA. Shooters stay focused on target while workload, time lag and data-entry error shrink.

Simple, intuitive screens help you customize up to five targets according to location, distance, direction, declination and winds. Gun customization options are extensive, including seven pre-loaded guns with nine variations each.

The Kestrel 4500 precisely defines target winds with refined measuring and averaging of wind and direction plus "snapshot" setting of target bearing and wind direction. All calculations rely on ATrag's advanced proprietary algorithms, factoring coriolis and spin drift for extreme-distance bullet flight.

The new unit allows users to load and customize multiple guns and rounds from the extensive proprietary Horus® database. Simple, intuitive screens allow the user to create up to five targets customized for location, distance, direction, declination and winds. The Kestrel meter's highly accurate measuring and averaging of wind and digital compass for target bearing and wind direction assists in defining the target winds. Once these parameters are set, the Kestrel meter takes over - tracking the current met data and automatically updating the firing solution using Horus® advanced proprietary algorithms and taking coriolis and spin drift into account. No additional user input is required.

Kestrel HVK Gun Loader Software

Free Gun Loader Software is located on the included CD.

Horus Vision Gun Library software can be used to create gun profiles on your PC and upload them to your Kestrel.

By using Free Gun Loader Software, users can access Horus' library of nearly 1000 guns and loads (see special requirements).

HKGunLoader is free PC software for simplifying management of Kestrel with Horus gun files. Due to the nature of handheld navigation, gun-file management on the Kestrel with Horus might require clicking through dozens of screen views. HKGunLoader simplifies the process into one easy-to-use PC screen where users comfortably create and manage gun files quickly, in far fewer clicks. Files are easily transferred to and from the Kestrel with Horus via Bluetooth or optional Kestrel Interface cradle with USB cable.

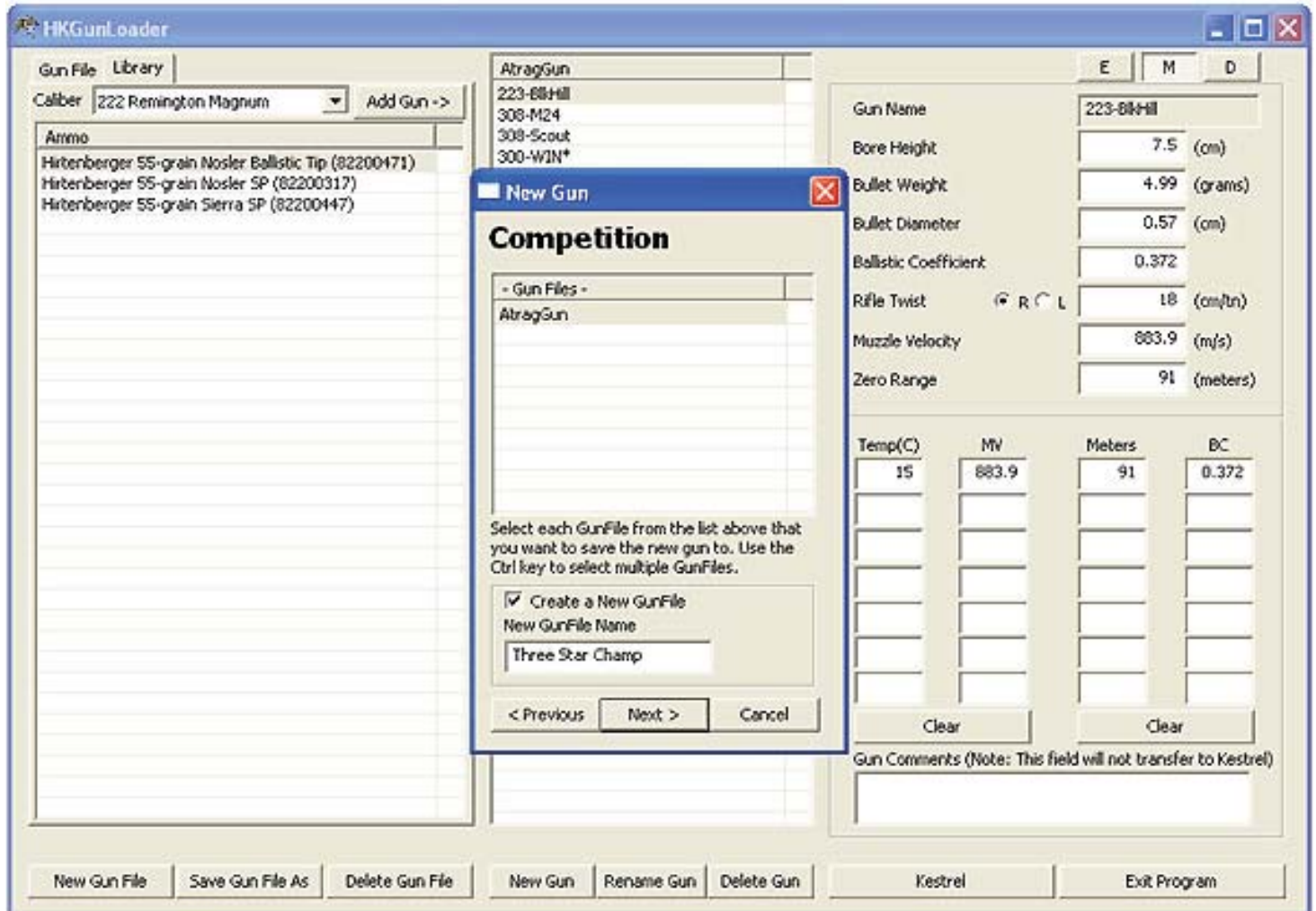
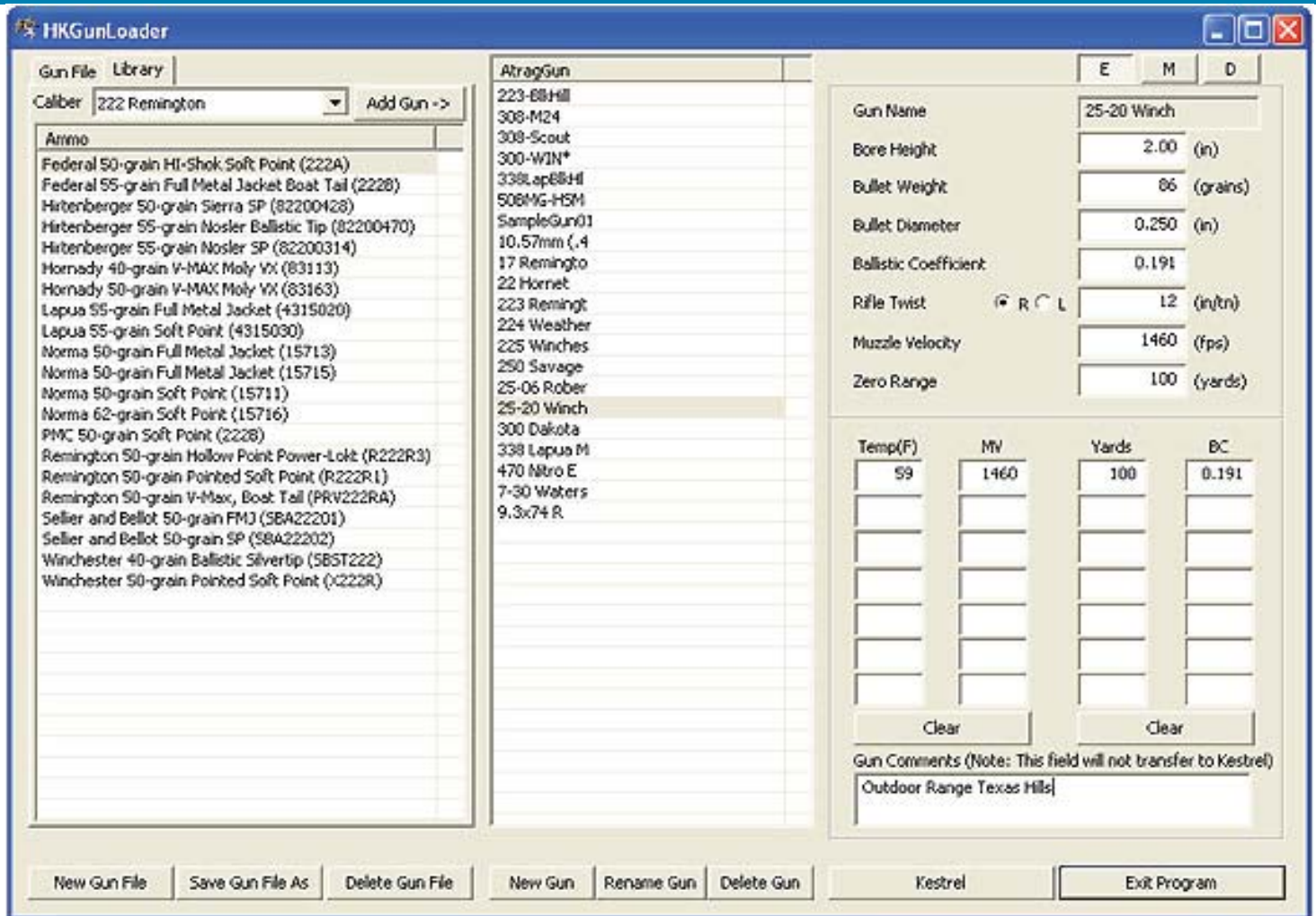
Bonus Database

HKGunLoader includes an extensive bonus database of popular guns and ammunition loads. This database is not contained on the Kestrel with Horus itself, and can only be taken advantage of by using HKGunLoader. Up to 900 unique gun/ammo combinations can be created and saved on PC. Users can selectively load a set of up to 50 saved combinations onto Kestrel with Horus for use at one time, then load a different saved set when needed.

Support for the Gun Library software is provided by Horus Vision. We have provided some assistance & FAQ's in this leaflet. For additional assistance please contact them directly:

Email: info@horusvision.com

A screenshop of the Gun Loader Software is shown on the following page.



Kestrel HVK Gun Loader Software Help

Features

General Benefits

- Simplifies creation and management of gun files for Kestrel with Horus
- Transfer data to and from Kestrel with Horus via wire or bluetooth (see requirements below)
- Bonus database allows creation of 900+ gun/ammo combinations, for use in Kestrel with Horus gun files
- Transfer up to 50 saved gun/ammo combinations for use at one time, onto Kestrel with Horus
- English and Metric units
- Stand-alone software runs on most PCs

Requirements

PC System Requirements: Windows XP, Vista, or 7

Wired Connection Requirements: Connect Kestrel with Horus to PC USB port via optional Kestrel Interface cradle (sold separate, not included with Kestrel with Horus).

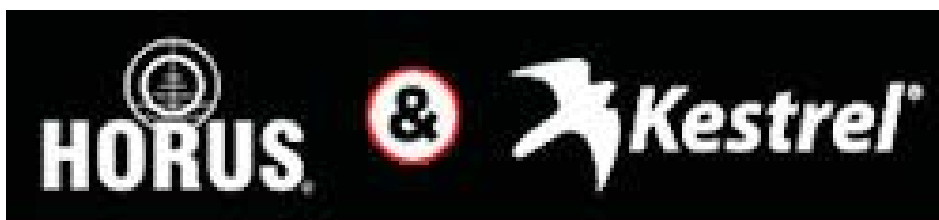
Bluetooth Connection Requirements: Connect Kestrel with Horus to PC via internal PC bluetooth or external bluetooth adapter. For PCs without internal bluetooth, we recommend Kensington 2-port (in and out) bluetooth adapters. Kensington K33902US Bluetooth USB Micro Adapter is proven to work; other models might have issues. Requires Kestrel with Horus with bluetooth capabilities.

Installation Instructions

1. Download free software installer to PC. Save to hard drive.
2. Locate HKInstaller.zip on hard drive and unzip.
3. Locate HKInstaller.msi in unzipped HKInstaller folder, and double click to begin installation. The HKGunLoader Setup Wizard will appear.
4. Complete installation by following guided prompts in Setup Wizard dialog box.

Note for Windows 7 and Vista users: on the Select Installation Folder Screen, you must change the default installation folder from C:\Program Files\HKGunLoader\ to C:\HKGunLoader (or another folder outside Program Files).

5. To begin using HKGunLoader, double click HKLoader icon (saved to desktop by default).



Kestrel Ballistics Weather Tracker™ with Horus® ATrag® Software

TECH CORNER

For those of you who have used the Kestrel with the Horus Ballistics in it, you know how powerful it is. However, it can also be a bit intimidating. A customer once asked me, "What is the bare minimum I need to do to get the Kestrel to give me the information I need to make my shot?" For those of you who can't wait to get out to the range and use your new Kestrel, please refer to the information below:

In the comfort of your own home:

Enter the information for your gun(s).

Use Google Earth to determine the Latitude of the place where you'll be shooting (this should be easy if going to a range.) Enter this data for "Lat", found in the Environment menu.

Calibrate the Kestrel's compass.

Be sure "Auto" is set to Yes in the Environment menu.

On site (range/hunting location/etc):

Select the gun from the Gun Selection menu.

Enter the range of the target .

Use the camera button "quick key" while Tgt is highlighted in Horus mode to start the Direction of Fire (DoF) capture, note the degrees change as the Kestrel is moved (this is the angle between the target and True North.*)

Keeping the Kestrel vertical, point it so the back of the Kestrel faces the target

Press the camera button again to lock the DoF.

Note that the Wind capture has started automatically

Now turn the Kestrel so the wind blows directly into the back of the unit

Press the camera button again to lock the direction and wind readings, or allow it to run continuously for real-time updates to the firing solution.

Aim accordingly, and FIRE!

IMPORTANT

There is NO need to use a Horus reticle with this unit. The aiming solution can be displayed in mils, clicks (settable to that style scope), minutes of angle or shooters minutes of angle. So, the aiming solution can be used with whatever reticle and scope setup you are using.

The only aspect of the calculator that is identifiably "Horus" as far as the user is concerned is that it allows for drop-truing of the ballistics curve – a fancy way of saying that the user can input real-world results from that gun and round in the field to improve the accuracy of the ballistics curve. The other characteristics are behind the scenes details of how Horus applies the ballistics calculations and uses information like coriolis to improve the accuracy of the aiming solution.

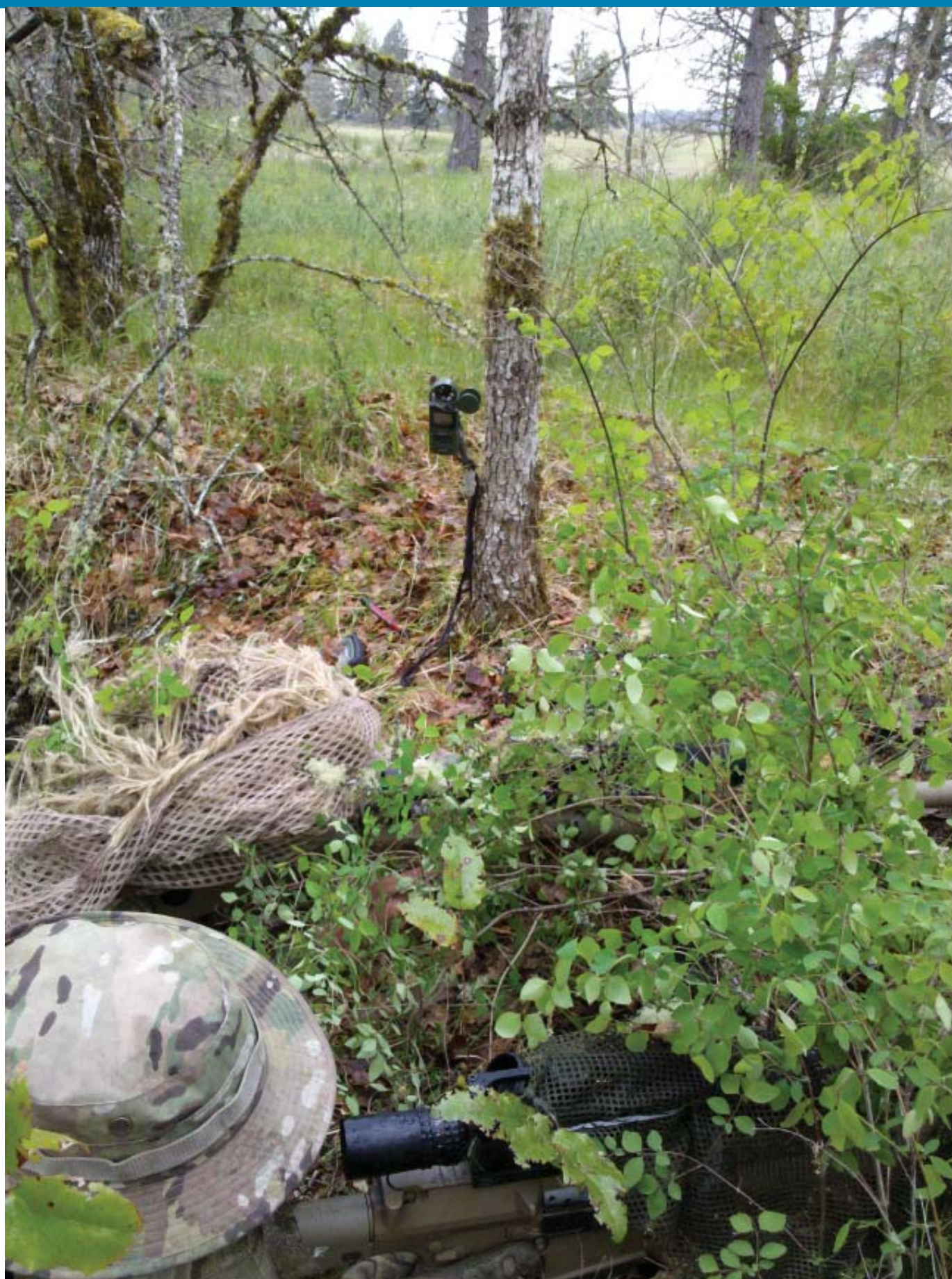
	Feature	Abbreviation	Units	Minimum	Maximum
Target	Active Targets	N/A	A through E	1	5
	Target Range	TR	yards	25	4000
			meters	23	3658
	Wind Direction	WD	o'clock	1	12
			degrees	0	360
	Wind Speed	WS1 or WS2	mph	0	50
			m/s	0	22
			km/h	0	80
			fps	0	73
			knots	0	43
	Direction of Fire	DoF	degrees	0	360
			o'clock	1	12
	Inclination Angle	ldeg	degrees	0	60
Inclination Cosine	lcos	no units	1.000	0.500	
Target Speed	TS	mph	0	50	
		m/s	0	22	
		km/h	0	80	
		fps	0	73	
		knots	0	43	
Target Direction of Movement	TD	Left to Right OR Right to Left			
Gun	Name Characters	N/A	0 through 9; A-Z; a-z; +/./:&* and space		
	Muzzle Velocity	MV	fps	300	4500
			m/s	91	1372
	Ballistic Coefficient	BC	no units	0.100	2.000
	Bullet Weight	BW	grains	10	1500
			grams	0.6	97.2
	Bullet Diameter	BD	inches	0.10	1.00
			mm	2.54	25.40
	Zero Range	ZR	yards	25	1000
			meters	23	914
	Bore Height	BH	inches	0.10	5.00
			cm	0.25	12.70
	Rifling Twist	RT	inches/revolution	1.00	36.00
cm/revolution			2.54	91.44	
Twist Direction	RTd	Left OR Right			
Sight Adjustment	Click	/mil	1	10	
		/tmoa	1	10	
Environment	Latitude	Lat	degrees	90S	90N
	Temperature	Temp	fahrenheit	-50	140
			celsius	-46	60
	Station Pressure	SP	inHg	12.00	32.00
			mb	406.4	1083.6
			hPa	406.4	1083.6
			psi	5.89	15.72
	Relative Humidity	RH	%	1	100
Density Altitude (computed)	Dalt	ft	-10732	32767	
		meters	-3271	9987	
Coriolis	Coriol	Yes OR No			

Kestrel™/Horus® Software Comparison Chart

	1X	2X	MX	Kestrel HV
Accurate Targeting Calculator	✓	✓	✓	✓
Available on SD 'chip'	✓	✓	✓	N/A
Display in Mils, MOA, Clicks	✓	✓	✓	✓
English (Imperial) and Metric	✓	✓	✓	✓
Clicking Memory	✓	✓	✓*	N/A
Muzzle Velocity Interpolation (MV Temp Table)		✓	✓	✓
Target Speed Estimator		✓	✓	✓
Target Range Estimator		✓	✓	✓
Range Card Generator		✓	✓	✓
Custom Notes for Guns		✓	✓	N/A
Gun List		✓	✓	✓
Save Multiple Gun List on 'chip'			✓	N/A
Dual units of measure			✓	✓
Coriolis & Spin Drift			✓	✓
Ballistic Coef Interpolation (BC Dist Table)			✓	✓
Multiple Targets			✓	✓
Dual Cosine/Degree Inc Angle			✓	✓
Dual Wind Speeds			✓	✓
Drop Truing			✓	✓
Instant Wind for DoF & WS1 Acquisition				✓

* only available when coriolis is switched off.





Nielsen Kellerman Australia P/L
19 Bancks Cres, McKellar ACT 2617
Ph: (02) 6258 9380 Fax: (02) 6258 2546
www.nk.com.au info@nk.com.au



*Kestrel Reliability &
Quality Is Now Backed
by a 5-Year Warranty*