

Kestrel 5700 Elite - Accuracy 1st Guidance

The Accuracy 1st features available in the Kestrel 5700 Elite and the Kestrel 5700X support the expert instruction and methods of Accuracy 1st training. The default settings and various calculations accessible within the Accuracy 1st feature set are intended to provide shooters with fast data for rapid engagement of targets.

Firmware version 1.35 introduced the Accuracy 1st menu set in the Kestrel Elite or Kestrel 5700X units.

Requirements for using the Accuracy 1st option:

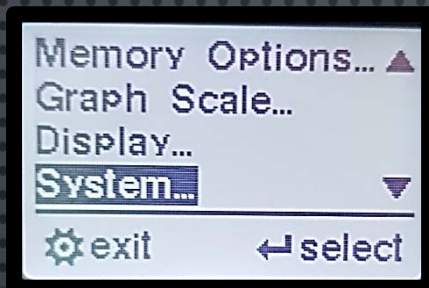
- Must have a Kestrel Elite or Kestrel 5700X with firmware version 1.35 or higher
- Gun Profile Elevation and Windage units must be in MIL
- Environment must be set to locked. It is advisable to do a capture before locking.

For more information on any of these topics please check our videos on [Youtube](#).

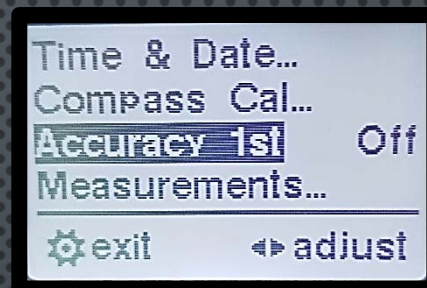
Kestrel 5700 Elite - Accuracy 1st Accessing Accuracy 1st Menu



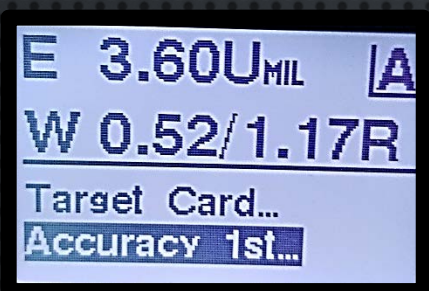
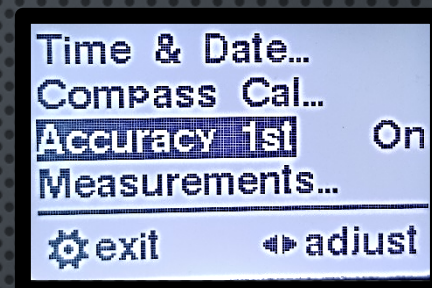
From Main Menu Select the Gear button to enter Main Menu.



Scroll down to System and press center button.



Scroll down Accuracy 1st and use right or left arrow to turn On. Then use Gear button to exit back to Main Ballistic screen.



Under Target Card will now be a new menu item called Accuracy 1st.



Enter this menu option and you should see the Accuracy 1st options.

Tip 1: If you cannot enter the Accuracy 1st menu (i.e., it is underlined), then your Environment is not locked.

Tip 2: If you try to calculate an Accuracy 1st value and see N/A, then you gun profile's units are not set to MILS.

Kestrel 5700 Elite - Accuracy 1st Quick Wind (QkWind)

Quick Wind is useful when you need to take a shot quickly and may not have time to setup a full wind capture. The calculated Quick Wind value allows the shooter to utilize his range for his windage hold.

NOTE: Before calculating any of these values, zeroing your gun and any truing should have been done prior. Also an environmental capture should have been recently done and then environment locked.

Example: After calculating your Quick Wind, you get a value of 4 mph.

This value tells you that when you have a 4 mph wind: $(\text{Your Range} / 1000)$ will be your windage hold. This can then be used in multiples of the same wind. This estimation works best in the supersonic region.

| Range | 4 MPH Wind | 8 MPH Wind | 12 MPH Wind |
|-----------|--------------|--------------|--------------|
| 400 Yards | 0.4 mil hold | 0.8 mil hold | 1.2 mil hold |
| 500 Yards | 0.5 mil hold | 1.0 mil hold | 1.5 mil hold |
| 600 Yards | 0.6 mil hold | 1.2 mil hold | 1.8 mil hold |
| 700 Yards | 0.7 mil hold | 1.4 mil hold | 2.1 mil hold |
| 800 Yards | 0.8 mil hold | 1.6 mil hold | 2.4 mil hold |

Kestrel 5700 Elite - Accuracy 1st Quick Wind (QkWind)

Kestrel Example: Since we found out our Quick Wind value was 4 mph, we plug that in as the W1 value on the Kestrel and set the WD at 3 o'clock (or 9 o'clock). You can see that the approximation works up until a certain range.

| Rng | Elv | ◀Wnd1▶ |
|-----|-------|--------|
| 100 | 0.06D | 0.08R |
| 200 | 0.21U | 0.17R |
| 300 | 0.81U | 0.26R |
| 400 | 1.54U | 0.36R |

With rounding, holds are very close to range / 1000.

| Rng | Elv | ◀Wnd1▶ |
|-----|-------|--------|
| 500 | 2.39U | 0.47R |
| 600 | 3.34U | 0.58R |
| 700 | 4.42U | 0.71R |
| 800 | 5.64U | 0.85R |

With rounding, holds are very close to range / 1000.

| Rng | Elv | ◀Wnd1▶ |
|------|--------|--------|
| 900 | 7.02U | 1.00R |
| 1000 | 8.59U | 1.16R |
| 1100 | 10.39U | 1.34R |
| 1200 | 12.45U | 1.54R |

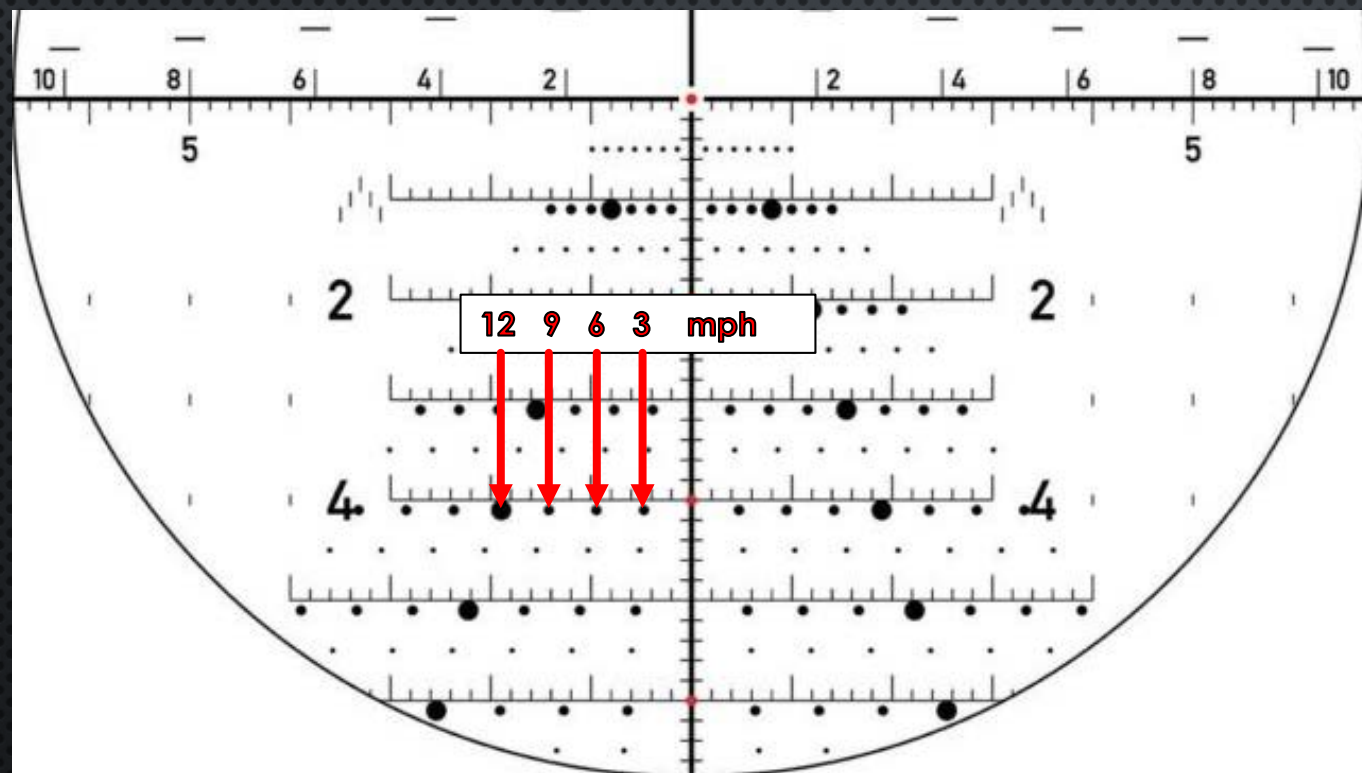
However at 900 yards, we see a discrepancy. This is called a density altitude correction. From this point onward, we will need to remember to add 0.1 mil.

At 1100 the DA correction is 0.2 mils and at 1200 it is 0.3 mils. So we need to add those and do so for X mph wind.

Kestrel 5700 Elite - Accuracy 1st Wind Dot (WndDot)

Wind Dot values can only be used with the Tremor™ series reticles. The value calculated relates to the wind needed for the dots shown on the reticle.

Example: After calculating your Wind Dot, you get a value of 3 mph. Each dot from the Y axis now represents 3 mph of wind. So locate the horizontal line of your elevation hold and count the dots outward based on the wind felt at the time of shot. Below suppose our elevation hold is 4 mils, we can then judge the windage based on the dots shown, in multiples of our Wind Dot value.

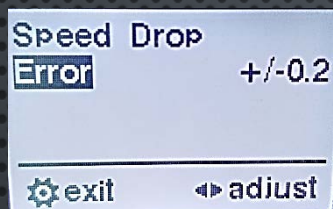


Kestrel 5700 Elite - Accuracy 1st Speed Drop (SpdDrp)

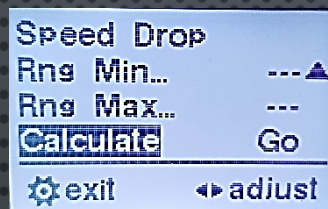
Speed Drop is a good way to get an estimation on your elevation hold based on the range in which you are shooting. The Kestrel will provide you with a range in which this estimation should be valid.



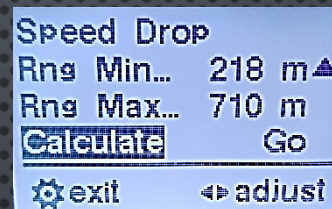
Enter the Accy1st menu option and select SpdDrp.



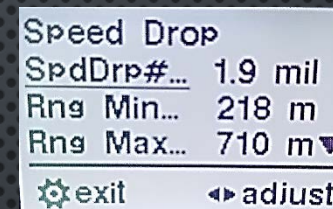
Press the center button to adjust accuracy to either +/- 0.1 or 0.2 mils.



Scroll down to the bottom and select Calculate.



The range in which this estimation is accurate will show up.



The Speed Drop hold will show up at the top.

In this example, we can estimate to subtract 1.9 mils from our target range distance to get a close approximation to our hold. This would be valid between the range of 218 m and 710 m.

The elevation hold would be $(\text{Range}/100)^* - \text{Speed Drop}$.

The next slide will show a full example of how this is applied.

*Round this number to the nearest tenth

Kestrel 5700 Elite - Accuracy 1st Speed Drop (SpdDrp)

Speed Drop Example:

Speed Drop = 1.9 mils

Range Min = 218 m (This is the minimum range this estimation works)

Range Max = 710 m (This is the maximum range this estimation works)

If shooting a target at 300m, we can guess an elevation hold: $(\text{Range}/100) - \text{Speed Drop} = \text{Elev Hold}$
 $(300 / 100) - 1.9 = \underline{1.1} \text{ mils } (+/- 0.2 \text{ mils})$

If we look at the Range Card on the Kestrel, we can see how close we are between these ranges:

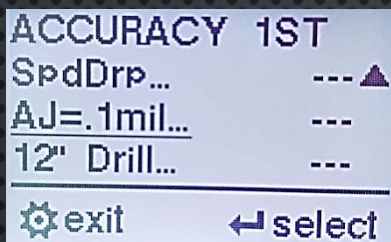
| Rng | Elv | |
|-----|-------|--|
| 200 | 0.37U | 2.00 - 1.9 = 0.1 (Target is below Min Range) |
| 300 | 1.06U | 3.00 - 1.9 = 1.1 (within 0.1 mil) |
| 400 | 1.91U | 4.00 - 1.9 = 2.1 (within 0.2 mil) |
| 500 | 2.88U | 5.00 - 1.9 = 3.1 (within 0.2 mil) |
| 600 | 3.99U | 6.00 - 1.9 = 4.1 (within 0.1 mil) |
| 700 | 5.27U | 7.00 - 1.9 = 5.1 (within 0.2 mil) |
| 800 | 6.72U | 8.00 - 1.9 = 6.1 (Target is above Max Range) |
| 900 | 8.39U | 9.00 - 1.9 = 7.1 (Target is above Max Range) |

} Within Speed Drop Range

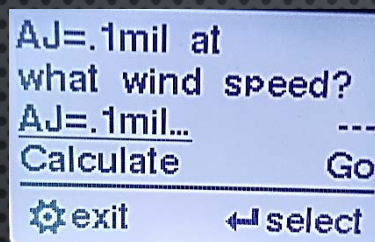
Pro Tip: If you dial your scope down 1.9 mils, then you can just use your range (divided by 100) as your elevation hold.

Kestrel 5700 Elite - Accuracy 1st Aerodynamic Jump (AJ)

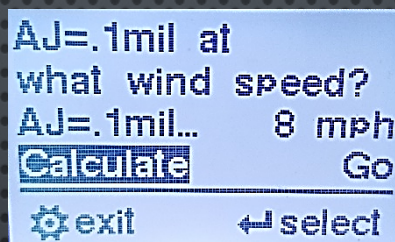
Aerodynamic Jump in the Accuracy 1st menu will provide you with an estimate of how much AJ to apply to a target at ANY range based on a set wind speed.



Enter the Accy1st menu option and select AJ=.1mil.



Scroll down to calculate and press the center button.



The wind speed shown represents 0.1 mil of AJ at any range.

This 0.1 mil would then be added (left wind) or subtracted (right wind) to the elevation hold based on the wind value or a factor of this wind value. See table for example using 8 mph.

| Range | 4 MPH Wind | 8 MPH Wind | 16 MPH Wind |
|-----------|--------------|-------------|-------------|
| 400 Yards | Add 0.05 mil | Add 0.1 mil | Add 0.2 mil |
| 500 Yards | Add 0.05 mil | Add 0.1 mil | Add 0.2 mil |
| 600 Yards | Add 0.05 mil | Add 0.1 mil | Add 0.2 mil |
| 700 Yards | Add 0.05 mil | Add 0.1 mil | Add 0.2 mil |
| 800 Yards | Add 0.05 mil | Add 0.1 mil | Add 0.2 mil |

Note: Chart shows values for a left wind. Subtract these values if wind is coming from your right.



Kestrel 5700 Elite - Accuracy 1st 12 Inch Drill

Please contact Accuracy 1st if you would like more information on this topic.

