Kestrel® Ballistics

LOAD AND GO™!

Getting started with the Kestrel 2700

www.kestrelballistics.com

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Notes on Wind Capture & Holds

Your Kestrel will calculate an accurate windage correction based on the wind in the location where you perform the wind capture. Although wind may vary downrange, using the Kestrel to measure wind at your shooting location will provide a starting point based on actual conditions and greatly improve your probability of success. When possible, take your wind measurements in an area free of obstruction near your shooting location. Practicing shooting at long distances with your Kestrel and learning to recognize and adjust for changes in wind is the best way to develop confidence in your abilities and proficiency in the art of long range shooting.

For additional help, support videos and a full manual visit **www.kestrelballistics.com/help or contact us at (610) 447-1555**

Out of the Box

1

Turn the 2700 On:

Press the center button to turn your Kestrel 2700 on. Pressing and holding the center button will turn it off.

Note: *To conserve battery, the Kestrel will also power off after 45 minutes of inactivity.*

2

Calibrate the Compass:

- Hold the Kestrel vertical.
- Press the center button.
- Carefully spin the Kestrel at about 8 seconds per rotation while the screen counts down from 30 to 0. (Either direction works.)

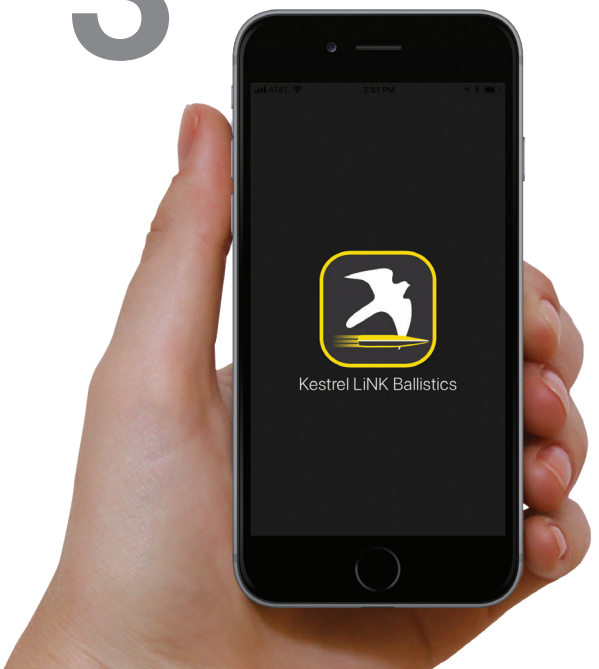
Trouble shooting: *If the calibration fails and returns to the CAL CPS screen, simply press the center button and repeat.*

When calibrated, the display will change to show the solutions screen.

Note: *Every time the battery is replaced the compass in the 2700 will need to be recalibrated and the screen will display "CAL CPS".*

3

Download the Kestrel LiNK Ballistics app:



GET IT ON Google play

Available on iTunes

***Note:** Make sure to choose LiNK Ballistics, not LiNK Weather, when selecting the app.*

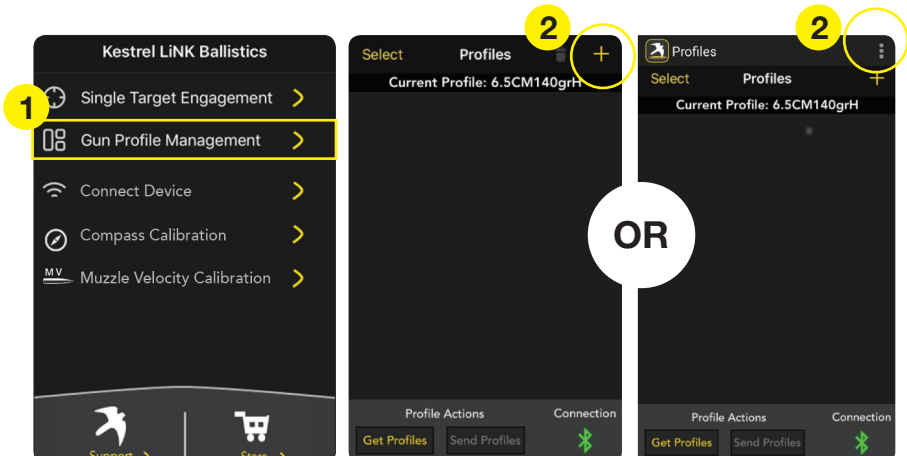
4

Connect your 2700 to your phone or tablet:
With your Kestrel turned on, open the app and connect to your 2700.

Troubleshooting: *Make sure Bluetooth is turned on in your mobile device. Do not try to connect the Kestrel using the Bluetooth menu in your mobile device, use the "Connect Device" option in the app instead.*

5

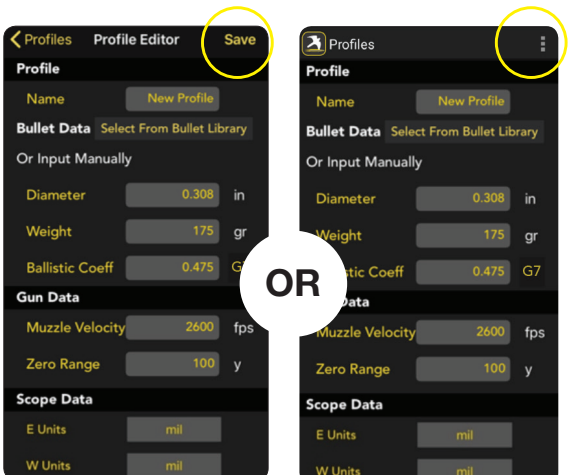
Create your gun profile:
Select gun profile management. Select + (IOS) or ⋮ (Android) to add a new profile.



iOS *Android*

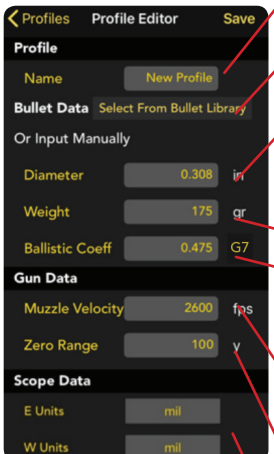
6

Enter your gun information:
Name your gun profile and enter required data. If you are unsure what information to enter in a field or where to find it, tap the name next to the field for additional guidance and refer to the following page. When done hit the “Save” button (iOS) or tap the three dots in the upper right corner (Android).



iOS ***Android***

Gun Profile Builder Tips



- *Try to pick a profile name you can differentiate from other gun/caliber combinations.*
- *Picking your bullet from the Bullet Library will auto-populate the Diameter, Weight and Ballistic Coefficient fields for your bullet.*
- *Be careful when entering bullet diameter as many common caliber names do not equal the actual measurement of the bullet diameter. The bullet library lists the actual bullet diameter next to the commonly used caliber names.*
- *Bullet Weight will be printed by the manufacturer on the box.*
- *The G1/G7 BCs in the Bullet Library are lab-tested and more accurate than most manufacturer data. For most long range bullets, a G7 BC produces more accurate solutions than a G1 BC. If your source for BCs does not indicate G1 or G7, assume G1.*
- *If you don't have access to a chronograph, enter the Muzzle Velocity from the ammo manufacturer or reloading guide and then use the MV Calibration tool in the app.* (See MV Calibration in Additional Tools)
- *We recommend using a distance of approximately 100 yards/ 100 meters to avoid zero shift due to environmental changes. Confirm your exact zero range with a laser or measuring tape.*
- *Make sure the Elevation & Windage Unit settings match the turrets and reticle in your scope. (MIL = MRAD/Milliradians, TMOA = True MOA (Most common), SMOA = Shooters MOA, or exactly 1" at 100 yards)*

7

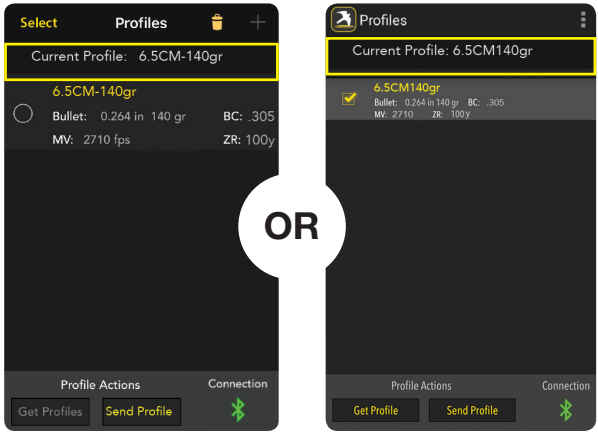
Send your gun profile to the 2700:
Select the desired profile, then tap "Send Profile" to transfer the profile to your Kestrel 2700.

iOS ***Android***

Note: *You can build and store multiple profiles in the app, but the 2700 can only hold one profile at a time. A profile is any unique combination of gun and bullet. To change profiles, simply transfer a new profile to the 2700.*

8

Confirm Profile Transfer:
To confirm your gun profile has transferred correctly to your 2700, check the “Current Profile:” line in the app and make sure the name of your new gun profile is shown.



iOS ***Android***

Load and go! *You can put away your phone now and head to the range. The 2700 works completely independently once your profile has been transferred.*

At the Range

Target Setup

Target setup is a three step routine to capture all the details of your shot environment.

1 **Update Temperature:**

Press the center button once to begin step one – temperature capture. To ensure an accurate temperature reading, air must be flowing over the blue temperature sensor. Confirm the thermometer is showing on the screen, then simply spin or swing the Kestrel by the lanyard. Spin for 5 to 10 seconds, then press the center button to record the temperature and move to the next step.

2 **Update Direction of Fire:**

Confirm the compass and target icons are showing on the screen. Holding the 2700 vertical, point the back of the Kestrel at the target. Press the center button again to confirm the direction of fire and move to the next step.

3

Update Wind Speed & Wind Direction:

Confirm the wind icon is showing on the screen. Holding the 2700 vertical, point the back of the Kestrel into the wind for at least 10 seconds to capture wind direction and average wind speed. Wind capture "snapshots" a moving 5 second average of wind speed and direction. Once representative wind values are shown on the screen, press the center button to capture the wind and end the target setup routine.

Note: *To update wind speed and direction without performing the other Target Setup steps double-tap the center button from the solution screen. Press any button to capture the wind and return to the solution screen–updated for the wind reading.*

Target Range

4

Set Target Range:

Press and hold the left or right buttons to scroll target range. The solution will update automatically when you stop scrolling the range.

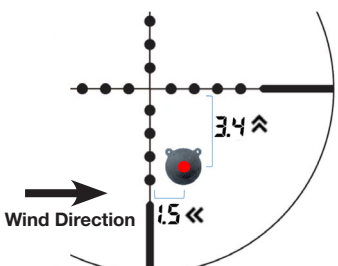
Note: *You can press the left or right button once to check your current range. You can also adjust target range without repeating the Target Setup Routine when your target is in the same direction and wind and temperature have not changed significantly.*

Shoot!

5 Take Your Shot:

The numbers and arrows on the solution screen show you how much, and in which direction, to shift your point of aim. The “E”, or Elevation line, shows you the up/down correction and the “W”, or Windage line shows the left/right correction.

Note: *It can be easy to forget whether to hold on the left or right side of your reticle. Remember, you always want to shift your muzzle toward the direction the wind is coming from.*

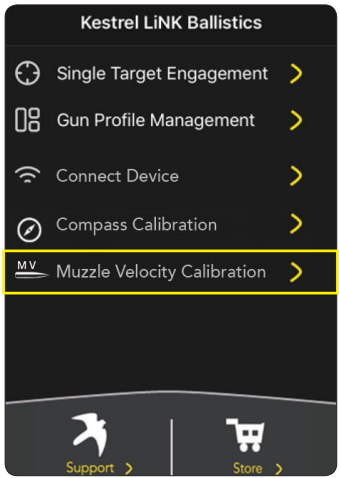


If your 2700 indicates 3.4 Up and 1.5 Left, aim your rifle 3.4 up from your target and 1.5 to the left of your target. Depending on your scope, you will change your point of aim by holding visually in your reticle or dialing using your scope’s turrets (or a combination of the two). Make sure the E & W units set in the 2700 match your scope’s turrets and reticle.

Additional Tools:

Muzzle Velocity Calibration:
If the solution provided by the Kestrel does not put you on target, first try repeating the Target Setup Routine and confirming your range.
If you're still hitting high or low, the Muzzle Velocity Calibration tool will adjust your muzzle velocity to provide on target solutions.

Connect your 2700 to the app, then follow the steps in the Muzzle Velocity Calibration tool. When the calibration routine is complete, the profile saved in your 2700 will be updated with the new muzzle velocity.



Changing units of measure:

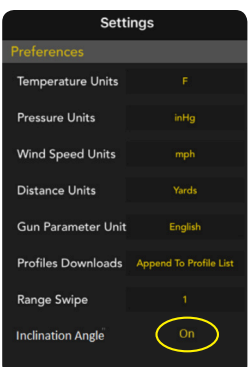
To change the units for target range, temperature or wind speed, follow the "At the Range" steps to navigate to the screen for the units you wish to change. Press the center and right buttons at the same time to step through the available units. To change elevation or windage units, create a new gun profile in the app and send it to the 2700.

Note: *Wind Speed measurements can be displayed in mph, m/s and km/h. Mph and m/s are indicated by icons. If no Wind Speed unit icon is shown, km/h is being used.*

Note: *Your Kestrel ships set to MILs. To change to MOA, see Gun Profile Builder Tips on pg. 9.*

Inclination Angle Correction:

The Kestrel 2700 can also correct for high angle shots. To turn Inclination Angle on, connect to the app and toggle the Inclination Angle setting from Off to On. With this setting turned on, the last step in the Target Setup routine will allow you to manually enter a shot angle by pressing the left or right buttons.



Wind Vane Mode:

As an added feature, your Kestrel 2700 can be used with the Kestrel Basic Series Vane Mount (sold separately) as a real-time wind speed and direction station for the Kestrel LiNK Ballistics App:

1 Connect your Kestrel to the Kestrel LiNK App.

2 Place your Kestrel in the Kestrel Basic Series Vane Mount (PN# 0782-K123) on a tripod in an open location exposed to the same winds affecting your shot. The Bluetooth range of the Kestrel is about 100 feet – reduced by trees or obstructions.

Note: *Using Wind Vane Mode will deplete your battery more quickly, particularly in cold weather.*

continued on next page

Vane Mount
Sold Separately

3 Select the Single Target Screen in the app.

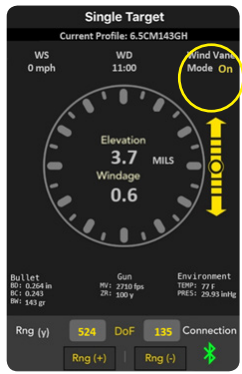
4 Toggle “Wind Vane Mode” to “ON” to command the Kestrel to start streaming real-time wind speed and direction data. Your solution will update in real time based upon changing winds.

5 While in Wind Vane Mode, the Kestrel will display the current wind readings and flash the wind icon to indicate it is connected and streaming.

6 To exit Wind Vane Mode:

- Toggle "Wind Vane Mode" to "Off" in the app;
- Navigate to any other screen in the app; or
- Press any button on the Kestrel.

Both the Kestrel and the App will display the last solution calculated. You will need to return to the single target screen in the app and toggle the Wind Vane Mode indicator back to On to restart wind streaming.



Note: *Unlike the major variables affecting your elevation hold which change slowly, winds change quickly so you will typically see wind speeds and holds varying in Wind Vane Mode. We recommend you use Wind Vane Mode as a tool to train your eye and feel to the holds needed for a range of wind speeds.*

Troubleshooting

- Use quality ammo with a consistent muzzle velocity. When purchasing or loading ammunition, check that the bullet used in your cartridge is listed in the bullet library. This will ensure you're using an accurate ballistic coefficient value. Refer to the app for example bullets.
- While using the muzzle velocity from an ammo box or reloading manual is an OK place to start, it's best to confirm your muzzle velocity with a chronograph. If the elevation solution value provided by the 2700 still does not put you on target, use the Muzzle Velocity Calibration tool in the app to adjust the muzzle velocity to match the real world performance of your rifle and cartridge. For best results, calibrate MV when there is little to no wind.
- Check that the distance to the target you have entered is accurate. Use a laser rangefinder or GPS if possible.
- Return your scope turrets to zero before dialing a new solution to avoid adding a new solution on top of a previous solution.
- Check the "Current Profile" line in the app to ensure that the correct gun profile is loaded into the 2700.
- Make sure that the values and units set in the gun profile match your gun, ammunition and target. For example, check that G1/G7, MILs/MOA and yards/meters selections are all set correctly.

By NK

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Kestrel® Weather and Environmental Meters are designed and manufactured in the USA

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