



 **Kestrel**[®]
4000 Series Pocket Weather Trackers
Instruction Manual

AVAILABLE WITH
 **Bluetooth**[®]
WIRELESS DATA TRANSFER

NKhome.com

800.784.4221

CAUTION

Your Kestrel brand Weather Tracker is designed to provide accurate measurement of current conditions only. Depending on your location and environment, conditions may change rapidly.

Rapid temperature and humidity changes (ie moving your meter from indoors to outdoors) may cause inaccurate readings of temperature and humidity as well as all readings which rely on either of these values. Before relying on a Kestrel Weather Tracker readings, use care to either a) force air flow over the sensors by waving or slinging your meter through the air; or b) wait until your unit's readings have stabilized, indicating it has equilibrated to its new environment.

To maximize the accuracy and reliability of your readings:

- Ensure that your Kestrel Tracker is in good repair and within factory calibration.
- Take readings frequently and carefully according to the guidelines above.
- Allow your meter's readings to stabilize after significant changes in temperature or humidity (ie changing location from indoors to outdoors).
- Allow a margin of safety for changing conditions and reading errors (2-3% of reading is recommended).

Use extra care and good judgment when referring to your Kestrel Weather Tracker to make any decisions regarding safety, health or property protection.

WARNING

To reduce the risk of injury or death to persons, read and follow these guidelines!

The Heat Stress, Wind Chill and Thermal Work Limit indices are published indices developed by the National Weather Service to provide decision guidance based on average human physiological response. Certain individuals, animals, equipment or property may be more susceptible to harm relating to environmental conditions, requiring additional precautions. For example, very young or elderly individuals, individuals with asthma or sickling trait, and individuals who have not become acclimated to hot conditions are likely to be more prone to heat illness, heat exhaustion, heat stroke or death.

- Know yourself and the individuals and items you are responsible for.
- Where appropriate, seek the guidance of a medical professional.
- Know what to do in the event of heat illness.
- Be prepared with supplies to treat heat illness.
- Have and practice a heat illness action plan.

Your Kestrel Weather Tracker is an environmental meter, not a medical device. It is only one source of information and must be employed with care and good judgment.

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*for BLUETOOTH®-enabled models ONLY

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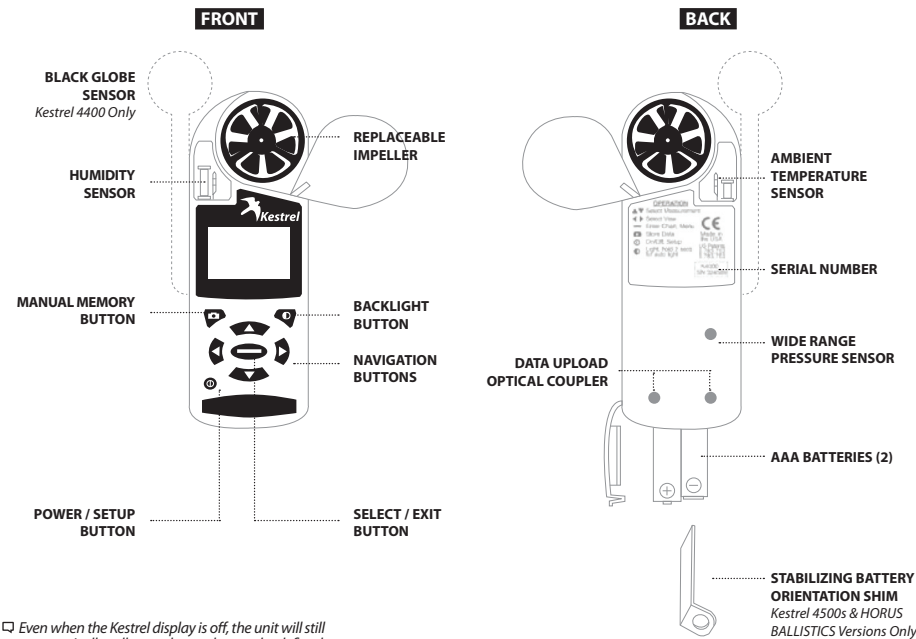
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NK, manufacturer of Kestrel Pocket Weather Trackers, is available to answer questions and provide support. Contact NK by phone: 610.447.1555; fax: 610.447.1577; email: info@NKhome.com; or web: NKhome.com

FEATURES & OPTIONS

Measurement	Icon	Units of Measure	4000	4200	4250	4300	4400	4500	4500 w/ Horus
Wind Speed Air Speed		mph fpm Bft m/s km/h kt	•	•	•	•	•	•	•
Volume Air Flow (CFM)		Cfm M ³ /h M ³ /m M ³ /s L/s		•					
Wind Direction		Cardinal Points, Degrees						•	•
Crosswind Calculation		mph fpm Bft m/s km/h kt					•	•	
Headwind Tailwind		mph fpm Bft m/s km/h kt					•	•	
Temperature*		°F °C	•	•	•	•	•	•	•
Wind Chill		°F °C	•	•		•	•	•	•
Relative Humidity		Gpp G/kg	•	•	•		•	•	•
Heat Stress Index		°F °C	•	•		•	•	•	•
Dewpoint Temp		°F °C	•	•	•	•	•	•	•
Humidity Ratio		Gpp G/kg		•	•				
Evaporation Rate		lb/ft ² /hr kg/m ² /hr				•			
Relative Air Density		lb/ft ³ kg/m ³			•				
Barometric Pressure		inHg hPa psi mb	•	•	•	•	•	•	•
Absolute Pressure		inHg hPa psi mb		•			•		
Altitude		m ft	•	•	•	•	•	•	•
Wet Bulb Temp		°F °C	•	•	•	•	•	•	•
Density Altitude		m ft	•	•	•	•	•	•	•
Pressure Trend			•	•	•	•	•	•	•
Backlit Display			•	•	•	•	•	•	•
Data Storage Points			4000	3200	3200	3600	2300	2900	2500
BLUETOOTH®			•	•	•	•	•	•	•
NV Backlight			•				•	•	•
Wet Bulb Globe Temp (WBGT)		°F °C					•		
Thermal Work Limit (TWL)		w/m ²					•		
Naturally Aspirated Wet Bulb Temp		°F °C					•		
Globe Temp		°F °C					•		
Mean Radiant Temp		°F °C					•		

GETTING TO KNOW YOUR KESTREL



Even when the Kestrel display is off, the unit will still automatically collect and store data at the defined rate (see "Memory Options"). To completely power down the unit, you must remove the batteries (and lose time / date and other settings).

* All Kestrel Trackers with temperature measurement allow you to measure air, water, and snow temperature.

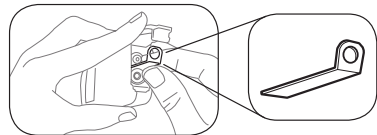
Battery Installation

- Insert batteries into bottom of Kestrel unit as shown on battery door.
- Snap door closed.

KESTREL 4500:

AAA batteries have a magnetic signature strong enough to affect the Kestrel 4500's compass readings. Please follow this extra step to ensure the batteries stay in proper orientation.

Before closing the door, push the plastic shim (provided with unit) between batteries and place clear ring on end over positive battery "bump."



☐ When replacing batteries in the Kestrel 4500, always keep the shim and re-insert with new batteries as described.

Turning ON and OFF

- Press **Ⓢ** to turn on the meter.
- Hold **Ⓢ** for 3 seconds to turn off the meter.

☐ You can also select "Off" on the Main Setup Menu options.

Main Setup Menu

- When unit is on, press **Ⓢ** to access the Main Setup Menu which is used to customize preferences.
- Press **⬅** and **➡** to scroll through the options.
- Press **Ⓢ** to select the highlighted option.

Date and Time Setup

- After battery installation, the meter will automatically enter the Date and Time Setting mode.
- Press **⬅** and **➡** to scroll to each option.
- Press **⬆** and **⬆** to adjust each option.
- Press the **Ⓢ** button to exit to the Main Setup Menu.

System

Contrast, auto shutdown, and calibrations can be reconfigured as needed in the System screen.

- Use **⬅** or **➡** to highlight one of the following options:

Contrast

- Press **⬆** or **⬆** to increase or decrease the display contrast from 0 (lightest) to 20 (darkest).

Auto Shutdown

- Press **⬆** or **⬆** to set the time at which the display will automatically shut off after non-use (choose 15 min, 60 min, or Off to de-activate auto shutdown).

☐ Battery life will be shortened if the Auto Shutdown is turned to "Off."

Baro Cal

☐ Recalibration of this sensor is not recommended without speaking to an NK technician. See "Barometric Pressure & Altitude Setup" section on page 10 for calibration instructions.

Humidity Cal

☐ Recalibration of this sensor is not recommended without speaking to an NK technician. Full humidity calibration instructions are provided with the Kestrel RH Calibration Kits. The unit may also be returned to NK for calibration.

Visit www.nkhome.com for more information.

Date & Time

- Press **Ⓢ** to enter the Main Setup Menu.
- Use **⬅** or **➡** to highlight Date & Time.
- Press **Ⓢ** to enter the Date & Time Screen.
- Press **⬆** or **⬆** to change each value.

Language

Display text can be set to 1 of 5 languages: English, French, German, Italian, and Spanish.

- Press **⬅** or **➡** to scroll the desired language.
- Press **Ⓢ** to select the highlighted language.

Restore

This menu contains options for global settings of all units to metric or imperial, and returning the reference values for the Alt and Baro screens to default (0 ft, 29.92 inHg).

To change units:

- Press **⬅** or **➡** to scroll to the desired setting and press **⬆** or **⬆**.

To return the reference values for the Baro and Alt screens to default:

- Scroll to Defaults and press **⬆** or **⬆**.

☐ The global units setting option is found on the "Units" sub menu on the Kestrel 4500 with HORUS Ballistics.

Memory Options

- Press **⬅** or **➡** to scroll to one of these options:

Clear Log	Go	Press ⬆ or ⬆ to clear stored data (will also clear Min/Max/Avg log).
Reset MMA	Go	Press ⬆ or ⬆ to clear Min/Max/Avg data (Chart data will remain intact).
Auto Store	On	Press ⬆ or ⬆ to turn "On" (data will automatically store at Store Rate) or "Off" (data will only store when manually captured with the button).
Store Rate*	1hr	Press ⬆ or ⬆ to increase or decrease frequency at which data is stored (from 2 sec - 12 hr).
Overwrite	On	Press ⬆ or ⬆ to turn "On" (will discard oldest data point to capture new data when log is full) or "Off" (will not capture new data when log is full).
Man Store	On	Press ⬆ or ⬆ to turn "On" or "Off" (Off will disable Ⓢ button).

* When unit is off, data will continue to be stored unless the 2 sec or 5 sec Store Rates have been selected.

Data Storage

To manually store data, press the **Ⓢ** button. The screen will confirm data storage status.

- **Data Stored:** verifies that data was captured and will appear on chart.
- **Full:** indicates overwrite is off and data log is full.
- **Off:** indicates that the Manual Store button has been disabled.

☐ See Main Setup Menu for more information on memory.

Measurements

Use this setup to "hide" unwanted Measurement screens from the normal Measurement navigation.

- Use or to scroll to the desired Measurement screen.
- Press to turn screen "On" and "Off".

☐ *The Kestrel Meter will continue to log data for hidden measurements. To view logged data of the hidden measurement, go to Measurement setup, select the Measurement screen you want to view, and turn it back "On."*

When the Kestrel is in Chart mode, the upper and lower limits of the graph scale may need to be adjusted to fully view all data points. You can customize these value limits using the Graph Scale setup.

- Press or to scroll to the Measurement you want to adjust, then press .
- In the new screen, use or to highlight "Set High" or "Set Low".
- Press to adjust the value limit of your chosen option.

Units

This setup option lets you select units of measure to best suit your application.

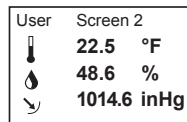
- Use or to scroll to each measurement.
- Press to change the unit of measurement.

User Screens

The Kestrel allows you to set up to 3 customized User Screens that will display 3 **current** Measurement values on the same screen. These screens are helpful for quick reference if you need to monitor multiple measurements at once. The User Screen option allows you to customize your user screens.

- Press or to highlight. User Screen 1, 2 or 3, then press .
- Use to set your preferred measurement option.
- Press or to highlight the remaining lines, and use to set those Measurement options.

Repeat these steps to set up the other User Screens. When accessed through the Measurement navigation, each User Screen will display current data for the chosen measurements as programmed.



Sample User Screen

SCREEN NAVIGATION

Measurement Screens

- Press or to scroll through the Measurement screens.

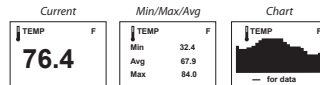
Measurement Modes

- From your chosen Measurement screen, use or to scroll through the Mode options:

Current: Displays instantaneous reading.

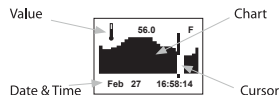
Min/Max/Avg: Displays the Minimum, Maximum, and Average readings from stored data (Displays -- if no data has been stored).

Chart: Displays graph of stored data points for each measurement.



To View Chart Data:

- Press while viewing a chart. A cursor will appear on the most recent data point.
- Press or to scroll through saved data:



The data value will be displayed at the top of the screen. The date and time when each data point was stored will be displayed at the bottom of the screen.

- Press or to review the chart data for other measurements.

MAX/AVG FUNCTIONS - Wind Speed & Wind Chill

These values are measured independently from stored and charted data to allow the user to start and stop the averaging period in the manner most appropriate for their application. Averaging on all wind-related values will be started and stopped together.

To measure these values:

- Press or to scroll to a wind measurement screen, then use to select Min/Max/Avg screen.
- Press to begin collecting data.
- Press again to stop data collection and display the Maximum and Average values.

☐ *This routine will work simultaneously for both measurements, regardless of which one is displayed when run. No other Min/Max/Avg or stored data will be affected.*

- To clear data, press when the screen says "— clear".

☐ *Other measurements will display min / max / avg data based on the data stored in the log (using either auto-stored or manually captured data). This data can be cleared by using "Reset MMA" under memory options.*

Backlight

- Press to activate backlight for one minute.
- Press again to deactivate the light manually.

Setting Barometric Pressure & Altitude

The Kestrel meter measures "station pressure", which changes in response to both changes in altitude and changes in atmosphere. Barometric pressure is a measurement of the air pressure adjusted to sea level. To obtain accurate barometric pressure and altitude readings, you must first know EITHER your location's current barometric pressure OR your current altitude.

☐ Station pressure is displayed if the reference altitude is set to zero.

☐ Be sure to adjust your reference measurements for altitude and/or barometric pressure when you change your location or when there have been dramatic changes in weather conditions.

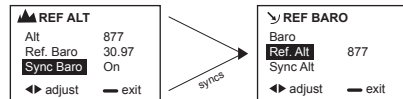
OPTION 1

Start with Known Altitude for your Location

- Use or to scroll to highlight the "BARO" screen
- Press to enter the "REF BARO" screen

Baro Displays current Barometric Pressure
 Ref Alt Use or to set the known Altitude
 Sync Alt Use or to switch "On" and sync the Baro reading to the "Altitude" screen

When "Sync Alt" is turned "On," the current Barometric Pressure data is automatically used as a reference for Altitude, and both screens will show accurate readings.

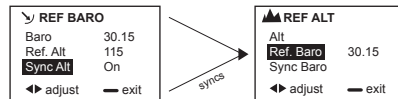


OPTION 2

Start with Known Barometric Pressure for your Location

- Use or to highlight the "Altitude" screen
- Press to enter the "REF ALT" screen

When "Sync Baro" is turned "On," the current Altitude data is automatically used as a reference for Barometric Pressure, and both screens will show accurate readings.



☐ "Density Altitude" screen data is calculated from the absolute values of station pressure, relative humidity and temp., and is not affected by the reference values entered in the "Baro" and "Altitude" screens.

BLUETOOTH SETUP (BLUETOOTH ENABLED METERS ONLY)

To transfer your Kestrel's real-time and logged data wirelessly and automatically to a laptop or PDA, follow these set up steps.

Enable the Kestrel's BLUETOOTH Capability

- Press to enter the Main Menu.
- Use or to highlight "Bluetooth," then press .
- Use or to change from "Off/Disabled" to "On/Ready".

Set BLUETOOTH Range

In Bluetooth screen:

- Use or to highlight "Range".
- Use and adjust the range to "Low" (3ft), "Medium" (10ft), or "High" (30ft).

Obtain your Kestrel BLUETOOTH PIN and ID

For added security, each Kestrel comes with a unique PIN and ID number to ensure proper pairing.

In the Bluetooth screen:

- Use to highlight "Info," then press to view your unique ID and PIN.

Pair Your Kestrel with Your Computer

First, make sure your Kestrel unit's Bluetooth is set to ON. Open the Bluetooth management software on your computer and follow the prompts to enter the PIN. A COM Port will be assigned and displayed in the software once connection to the Kestrel is established.*

☐ This is a general guideline for pairing your Kestrel with your computer. Individual Bluetooth software programs and navigation may vary, and some computers do not come equipped with Bluetooth capability and will need additional products to communicate via Bluetooth.

* A "Bluetooth Error" screen will appear on the Kestrel if pairing is unsuccessful.

Set Up Kestrel Communicator Software

- Go to: <http://www.nkhome.com/kestrel/software>.
- Download and install the Kestrel Communicator Software from this link.
- Once installed, the "Kestrel Communicator" icon will appear on your desktop. Click on the icon and use the "Help" tab to find full instructions for use.

Replacing the Kestrel impeller



- ❑ Press only the sides of the impeller when removing and inserting to avoid damaging the precision hub bearing. [ Figure 1].
- Press FIRMLY on the impeller module to remove it.
- Insert the new impeller so the side that has the small triangle (close to the perimeter) faces the front of the Kestrel when installed. Orient one "arm" of the module straight up. [ Figure 2]. The impeller can be pushed in from either side.

 Figure 1



 Figure 2




In addition to Wind Speed and Wind Chill, the **Kestrel 4500** and **Kestrel with Horus® Ballistics Software** also measure Direction, Headwind/Tailwind and Crosswind.




Digital Compass Calibration

- ❑ The **Kestrel 4500's** digital compass must be calibrated to correct for the AAA batteries' magnetic field. It must be re-calibrated every time the battery door is opened, and it will not display or log any direction values until calibration is complete.



***Impeller should be removed during calibration for best results.*

- Remove the impeller by pressing the edges to pop it out (reinsert after calibration is complete).
- Place the Kestrel meter in the foam stand provided so it remains balanced and vertical [ Figure 1]. You may also hold the Kestrel meter vertically in your hand and turn your body.

To Calibrate:


- In Main Setup Menu, use  or  to highlight "System", then press .
- Press  to highlight "Compass Cal", then press .

Follow the prompts on screen:

- Press  to start.
- Slowly spin the upright meter around three (3) full times.
- Each rotation should take approximately 10 seconds.
- When calibration is finished, the screen will read "Cal Complete".
- Press  to exit to Main Menu.

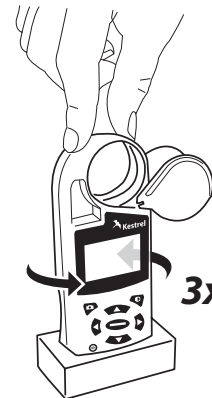
To verify the digital compass' accuracy, test it against a compass; the Kestrel meter readings should be within $\pm 5^\circ$ of the reference compass or better. If readings appear incorrect, simply run the calibration routine again.

Calibration Error Messages

There are three error messages that the meter may display during calibration. Press  to exit the error screen and run the calibration again.

- **Magnetic Batteries:** The magnetic field of the Kestrel's batteries is interfering with calibration. Simply open the battery door, rotate one or both batteries, and run the calibration again.
- **Too Slow:** The unit was spun too slowly during calibration.
- **Too Fast:** The unit was spun too quickly during calibration.

 Figure 1









Measuring Direction

❏ The Kestrel 4500's digital compass must be vertical to achieve accurate readings. Keep the unit positioned as close to vertical as possible when using any compass-related feature. After opening the battery door, you must re-run the calibration routine or readings will not register. For maximum accuracy, the impeller should be spinning while measuring to eliminate its magnetic pull.

True North vs. Magnetic North Readings

The Kestrel 4500 default Direction display mode is Magnetic North. To view Direction in True North mode:

- In the Direction screen press .
- Use  or  to choose your mode.
- If you choose True North, use  to highlight "Variation", then use  or  to input the Variation for your location.





To measure Direction:


- Hold the unit vertically and point the BACK of the unit toward the direction you want to measure.
- The unit will display the cardinal direction and degrees.




❏ The Direction measurement does not record Max and Average and will display N/A on that mode screen.

Measuring Headwind/Tailwind & Crosswind

The Kestrel 4500 & Kestrel with Horus automatically calculate Headwind and Crosswind with respect to a runway or target direction. You must first set the "Heading" to view these measurements:

- Press  while on the Headwind or Crosswind screen.
- Use  or  to choose "Auto Set" or "Manual Set", then press .

In Auto Set: Point the unit down the runway or target, then press  to automatically set the heading.

In Manual Set: Use  or  to enter the known runway or target heading, and press  to save.

❏ Both screens will always display the Magnetic North heading at the top (even if the Direction screen is set to True North mode).

- After setting the heading, scroll to the desired parameter and orient the Kestrel so the wind blows directly through the impeller.

SPECIALTY KESTRELS

KESTREL 4200 POCKET AIR FLOW TRACKER:







Air Flow Volume & Max/Avg for Air Flow

In addition to full Kestrel 4000 measurements, the **Kestrel 4200** also measures Volume Air Flow.

Measuring Volume Air Flow

The unit will display Air Flow Volume based on instantaneous data of Air Velocity and the Dimensions of the opening through which the air is flowing.

To set opening Dimension & obtain Air Flow data:

- Press  while on the Air Flow screen to enter the "Dimensional Setting" screen.
- Use  or  to change the "Shape" setting of your opening to "Round" or "Rectangular".
- Scroll down then use  or  to set the size of the opening to the appropriate Diameter or Length and Width.
- Press  to exit the Dimensional Setting screen and view Air Flow data.

Max/Avg for Air Flow

Follow the same steps listed to obtain "Max/Avg Wind Speed & Wind Chill" to acquire this additional data. The routine will work simultaneously for all 3 measurements, regardless of which one is displayed when running. No other Min/Max/Avg or stored data will be affected.

Humidity Ratio

Humidity ratio is a measure of the relative humidity of the air, expressed as grains of water per pound of dry air. This is displayed on the "Hum Ratio" screen.

Kestrel 4250 RACING WEATHER TRACKER:

The **Kestrel 4250** will display the actual air pressure, or Absolute Pressure, of your location on the "Pressure" screen. If your racing software asks for Station Pressure or Absolute Pressure, use the data from the Kestrel's "Pressure" screen. If it asks for Barometric Pressure and Altitude, scroll to the Baro or Alt screen and follow the steps on page 10.

Relative Air Density

Relative Air Density is the ratio of measured air density compared to standard air density and expressed as a percentage. Standard air density conditions are defined by the ICAO as 29.92 inHg, 0% relative humidity, and 59 degrees F. The Kestrel 4250 will display this value on the RAD screen.

Moisture Content

Moisture content is a measure of the relative humidity of the air, expressed as grains of water per pound of dry air. This is displayed on the "Moisture" screen.








KESTREL 4300 CONSTRUCTION WEATHER TRACKER:

Evaporation Rate




The **Kestrel 4300** will display the Evaporation Rate, as defined in ACI 308, based on instantaneous Wind Speed, Relative Humidity, Ambient Temperature and Concrete Temperature readings.

☐ *Evaporation is a guide to how quickly concrete will lose moisture in their pour location conditions.*

To measure Evaporation Rate:

- First, use a separate measuring device to obtain the Concrete Temperature.
- Use  or  to scroll to the Evaporation Rate screen, then press .
- Use  or  to enter the Concrete Temperature you obtained.
- Press  to exit the Setting Screen, then press  to enter the Averaging Screen.

☐ *Make sure the Kestrel 4300 is shaded while it takes the reading. Failure to shade the unit may cause inaccurate readings that will not meet ACI 308 criteria.*

- Position the Kestrel 20 inches above the concrete and facing the wind, and press  to begin readings.
- Count 6-10 seconds, then press  again to stop collection.
- The screen will display Avg/Min Evaporation Rate readings.
- To clear data, press .

MAINTENANCE & SERVICES

Batteries

Kestrel Pocket Weather Trackers require 2 AAA batteries. Average battery life is 300 hours based on typical use.

**For the Kestrel 4500, it is important to re-insert the shim along with the new batteries then recalibrate the digital compass to ensure correct wind direction readings.*

☐ *When using the Kestrel meter in extremely cold weather, it is recommended to use lithium batteries for optimal performance.*

Maintenance & Storage

To avoid scratching the window, store the Kestrel Tracker in the soft pouch.

Software

To download the Kestrel Communicator software visit: www.nkhome.com/kestrel-software.

Calibrations, Certifications & Service

Every NK product is tested and calibrated before it leaves our factory. We warrant that it will perform within specifications when you receive it. The unit may be returned to NK for factory calibration, or you can contact NK for field calibration instructions (RH Calibration Kits are available on our website).

Each Kestrel Meter comes with a Certificate of Conformity, stating the specifications for that product.

If you are concerned your Kestrel is not performing within specifications upon receipt, please contact us and we will review your concerns. If necessary, we will test or recalibrate any unit within 30 days of purchase.

Beyond 30 days, we offer reasonably-priced tests, calibration services, NIST-traceable calibrations, and full Kestrel Meter tune-ups.

We offer full factory service on every product we manufacture for as long as we make the product (and as long after as component availability permits). If we cannot repair a product, we will offer you a replacement under our Loyalty Discount* (even for accidental damage and misuse).

Please contact NK if you feel your product is not working properly. We can often solve product issues by phone or e-mail, saving you the time and expense of returning the unit. If we require the product to be returned, you can obtain a Return Authorization to expedite the handling of your return.

Made in the USA



Your Kestrel Pocket Weather Meter was designed, developed and built in the USA by Nielsen-Kellerman Co. of US and imported components. We are a lean manufacturing enterprise committed to continuous improvement of our products, processes, people and partners. We strive to conduct our business in a sustainable manner and minimize harm to the environment by actively implementing company-wide plans to conserve energy, reduce waste, and recycle.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.



Visit www.nkhome.com for the complete line of Kestrel Pocket Weather Meter Accessories

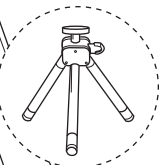


**Replacement
Impeller**
Item # 0801

**Screen Protector
& Cleaning Kit**
Item # 0794



Large Tripod
Item # 0792



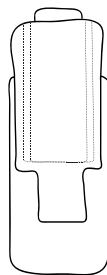
**Also available
Mini Tripod**
Item # 0807



Vane Mount
Item # 0791



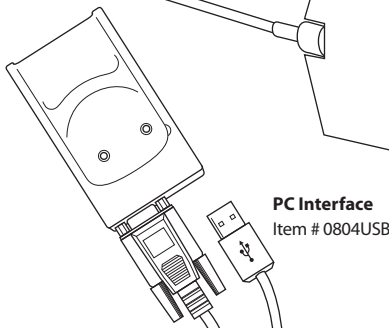
**BLUETOOTH®
Dongle**
Item # 0790



**Tactical
Carry Case**
Item # 0806

Color Options:

- Black
- Camo
- Olive Drab
- Desert Tan



PC Interface
Item # 0804USB

1.800.561.8187

www.itm.com

WARRANTY CERTIFICATE

Your Kestrel Pocket Weather Meter is warranted to be free of defects in materials and workmanship for a period of FIVE YEARS from the date of its first consumer purchase. NK will repair or replace any defective meter or part when notified within the warranty period, and will return the meter via domestic ground shipping or NK's choice of method of international shipping at no charge. The following are excluded from warranty coverage: damage due to improper use or neglect (including corrosion); damage caused by severe or excessive impact, crushing or mechanical harm; modifications or attempted repairs by someone other than an authorized NK repair agent; impeller failure not caused by a manufacturing defect; normal usage wear; failed batteries; and accuracy issues resolvable by recalibration. If no warranty registration or proof of purchase is provided, the warranty period will be measured from the meter's date of manufacture.

Except for the warranties set forth herein, NK disclaims all other warranties, expressed, implied or statutory, including, but not limited to, the implied warranties of merchantability or fitness for a particular purpose. Any implied warranties that may be imposed by applicable law are limited to the term of this warranty. In no event shall NK be liable for any incidental, special or consequential damages, including, but not limited to, loss of business, loss of profits, loss of data or use, whether in an action in contract or tort or based on a warranty, arising out of or in connection with the use or performance of an NK product, even if NK has been advised of the possibility of such damages. You agree that repair, and (upon availability) replacement, as applicable, is your sole and exclusive remedy with respect to any breach of the NK Limited Warranty set forth herein.

All **product liability** and **warranty options** are governed exclusively by the laws of the Commonwealth of Pennsylvania.



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**Kestrel® Pocket Weather® Meters are
designed and manufactured in the USA**



Please register your Kestrel Meter at NKhome.com