INSTRUCTION MANUAL
1000, 2000, 2500 & 2500NV,
3000, 3500 & 3500NV, 3500DT

Kestrel®
Weather & Environmental Meters
by NK
Your Kestrel brand Weather Meter 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 that rely on either of these values. Before relying on Kestrel Weather Meter 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 Meter 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 Meter to make any decisions regarding safety, health or property protection.
The table below shows all Measurement screens available, listed with their corresponding screen icon and "Hint" abbreviation.

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*The NV series features a dim red backlight for use in low or nighttime situations.
*Only one arrow icon will be displayed on screen to indicate the 3-hour pressure trend.

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

Turning ON and OFF
• Press \( \text{ } \) to turn on.
• Hold \( \text{ } \) for 3 seconds to turn off.
• The Kestrel Meter will automatically turn off if no buttons have been pressed for 45 minutes.

Select Measurement Mode
• Use \( \text{ } \) or \( \text{ } \) to access each Measurement screen.
• The instantaneous Measurement value will be displayed on each screen and updated once per second.

The Kestrel Meter will automatically turn off if no buttons have been pressed for 45 minutes.

Select the Unit of Measure
• Select the unit of measure. While holding \( \text{ } \), press \( \text{ } \) to scroll through the available units of measure for that measurement.

Adjust the Clock
• Use \( \text{ } \) or \( \text{ } \) to access the clock setting. While the time is blinking, hold either button down to adjust quickly. Simultaneously press \( \text{ } \) and \( \text{ } \) to exit clock setting.

The Measurement's icons and units of measure will be displayed in the lower line of the screen.

SETUP + OPTIONS

Select the Unit of Measure
• Select the unit of measure. While holding \( \text{ } \), press \( \text{ } \) to scroll through the available units of measure for that measurement.

Adjust the Clock
• Use \( \text{ } \) or \( \text{ } \) to access the clock setting. While the time is blinking, hold either button down to adjust quickly. Simultaneously press \( \text{ } \) and \( \text{ } \) to exit clock setting.

The Measurement's icons and units of measure will be displayed in the lower line of the screen.

BAROMETRIC PRESSURE & ALTITUDE ADJUSTMENT

SETTING REFERENCE BAROMETRIC PRESSURE & ALTITUDE: KESTREL 2500 & KESTREL 3500 ONLY
\( \text{ } \)
• 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 enter EITHER your location's current barometric pressure OR your current altitude.

Starting with Known Altitude for your Location
• Use \( \text{ } \) or \( \text{ } \) to highlight the "BARO" screen.
• Press \( \text{ } \) and \( \text{ } \) simultaneously until the word "REF" starts blinking on screen.
• Use \( \text{ } \) and \( \text{ } \) to adjust the value to the correct known Altitude.
• Press \( \text{ } \) and \( \text{ } \) simultaneously again to exit the setting mode.

After the Altitude reference is set, place the unit on a table and allow it to stabilize. The accurate Barometric Pressure reading will then be displayed on screen.

Note the correct barometric pressure reading above and use this to set the Altitude:
• Use \( \text{ } \) or \( \text{ } \) to highlight the "BARO" screen.
• Press \( \text{ } \) and \( \text{ } \) simultaneously until the word "REF" starts blinking on screen.
• Use \( \text{ } \) or \( \text{ } \) to adjust the value to the barometric pressure measurement noted above.
• Press \( \text{ } \) and \( \text{ } \) simultaneously again to exit the setting mode.

Once these steps are complete, both screens will display accurate readings.

Starting with Known Barometric Pressure for your Location
• Use \( \text{ } \) or \( \text{ } \) to highlight the "Altitude" screen.
• Press \( \text{ } \) and \( \text{ } \) simultaneously until the word "REF" starts blinking on screen.
• Use \( \text{ } \) or \( \text{ } \) to adjust the reference value to the correct known Barometric Pressure.
• Press \( \text{ } \) and \( \text{ } \) simultaneously again to exit the setting mode.

Note the correct altitude reading above and use this to set the Barometric Pressure:
• Use \( \text{ } \) or \( \text{ } \) to highlight the "BARO" screen.
• Press \( \text{ } \) and \( \text{ } \) simultaneously until the word "REF" starts blinking on screen.
• Use \( \text{ } \) or \( \text{ } \) to adjust the reference value to the correct known Altitude.
• Press \( \text{ } \) and \( \text{ } \) simultaneously again to exit the setting mode.

Be sure to adjust your reference measurements when you change your location for altitude and/or barometric pressure or when there has been dramatic change in weather conditions.
Replacing the Battery

When your display becomes dim or disappears, you need to change the battery.

1. Use a US nickel or similar coin to twist open the battery compartment.
2. Replace battery with a new, clean CR2032 coin-cell battery, with positive side (+) facing up.
3. CR2032 batteries are available in most stores that sell batteries.

Hold Mode

- Hold down \( \Delta \), then press \( \Delta \).
- The word “HOLD” will blink on each screen and all values will stop measuring and freeze in memory.
- Use \( \Delta \) or \( \Delta \) to view each Measurement screen in Hold Mode.
- To exit Hold Mode, hold down \( \Delta \), then press \( \Delta \) again.

Backlight*

- Press \( \Delta \) to activate the backlight for 10 seconds.
- Press \( \Delta \) again to manually deactivate the backlight before 10 seconds expire.

*The Kestrel 1000 Meter does NOT offer a backlight.

Water and Snow Temperature

The Kestrel Meter may also be used to measure the temperature of water and snow. Submerge the thermistor portion (curly exposed wire in window next to impeller) in water or snow to get an accurate reading. Kestrel Meters are completely waterproof, float and can be safely submerged in water according to IP-67 standards (up to 1 meter for a maximum of 30 minutes).

Max/Avg Function

To view the maximum wind gust recorded, press \( \Delta \) or \( \Delta \) until you see “MAX” appear at bottom of screen. Press again to view average wind gust. “AVG” will appear at bottom of screen. Both Max and Average are reset each time the unit is powered down. To restart averaging, simply turn the unit off and back on again.
**5-YEAR LIMITED PRODUCT WARRANTY**

Your Kestrel 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.
Kestrel® Weather & Environmental Meters are designed & manufactured in the U.S.A.

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