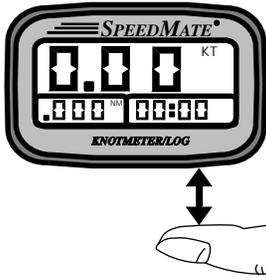


# SPEEDMATE<sup>®</sup>

## KNOTMETER/LOG

### OPERATING INSTRUCTIONS

**SPEEDTECH INSTRUMENTS**  
 10413 Deerfoot Drive, Great Falls, VA 22066 USA  
 Toll Free (800) 760-0004

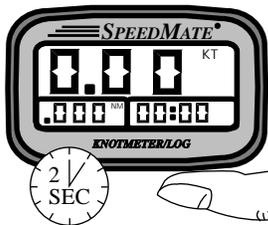


#### ON/START/STOP:

Push and release the button to turn the unit on.

Push and release AGAIN to start unit.

Push and release again to stop unit.



#### ZEROING:

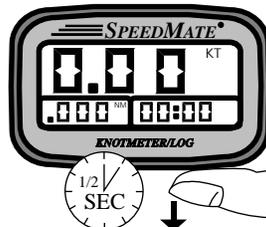
Hold the button for 2 seconds then release to zero display and reset speed memory.

Push and release AGAIN to start unit.

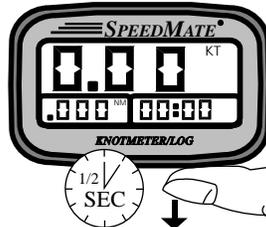
NOTE: If you hold the button too long, you will enter function/units selection (see box to the right). Simply release the button on the desired function or display units.

#### CHOOSING TIME, MAX OR AVERAGE:

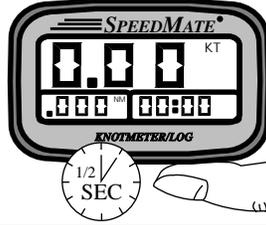
Hold the button for 1/2 second (until lower right window changes) then release to select time, max or average display. Display mode can be changed at any time.



- Time:** Displays running time from start or the last time the unit was zeroed.



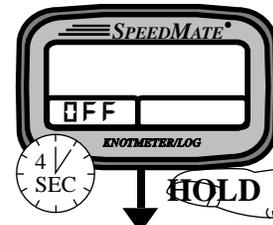
- "MX":** Displays the maximum speed achieved since start or the last time the unit was zeroed.



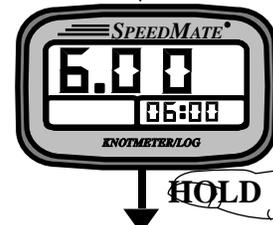
- "AV":** Displays the average speed since start or the last time the unit was zeroed.

#### CHOOSING FUNCTIONS AND DISPLAY UNITS:

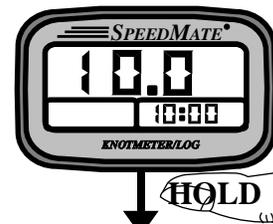
Pressing and HOLDING the button for more than 3 seconds will cause the display to roll through the following choices:



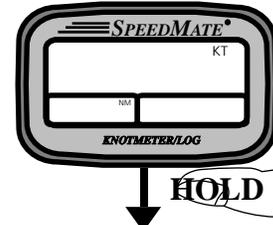
- Power Off:** Release the button to turn the unit off. (Note: the unit will also power down automatically after 17 minutes of receiving no button pushes or information from the speed sensor.)



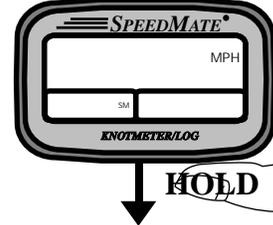
- 6/3 Minute Countdown:** Release the button to engage the 6-minute or 3-minute countdown timers. See "Countdown Timer", next page, for more instructions.



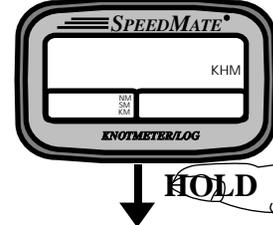
- 10/5 Minute Countdown:** Release the button to engage the 10-minute or 5-minute countdown timers. See "Countdown Timer", next page, for more instructions.



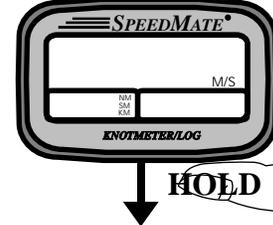
- Knots Display:** Release the button to display speed in knots ("KT") and distance in nautical mile ("NM").



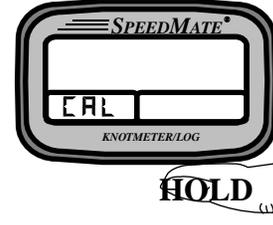
- MPH Display:** Release the button to display speed in miles per hour ("MPH") and distance in statute miles ("SM").



- KMH Display:** Release the button to display speed in kilometers per hour ("KMH") and distance in kilometers ("KM").



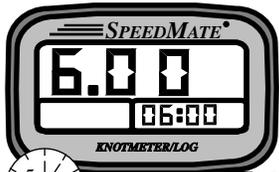
- M/S Display:** Release the button to display speed in meters per second ("M/S") and distance in kilometers ("KM").



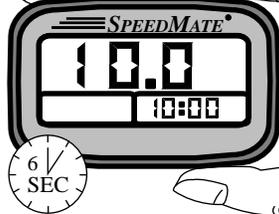
- Calibration:** Release the button to enter the calibration function. See "Calibration", next page, for more information.

## COUNTDOWN TIMER:

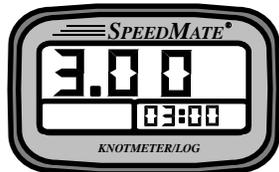
To allow you to take hands-free measurements from a running start, the SpeedMate offers the choice of four countdown starts: 10-minute, 6-minute, 5-minute and 3-minute. In each case, once the countdown timer reaches zero, the speed, distance and time will be zeroed and will immediately begin counting up with no button presses needed. The display units (KT, MPH, KMH or M/S) and display mode (time, max or average) will be the same as they were before the countdown timer was started, so be sure to follow the directions on the previous page to make these selections before starting the countdown timer.



- 1) **Select Desired Timer:** (See previous page). Press and hold the button to choose the desired timer. After approximately 5 seconds, the 6/3-minute timer will appear followed by the 10/5-minute timer. Release the button on your desired selection.



- 2) **Start the Countdown:** Press the button to start the countdown from 6:00 or 10:00.



- 3) **Change the Countdown Value:** If desired, you can change the countdown from 6:00 to 3:00 or from 10:00 to 5:00 by pressing the button a second time after starting the countdown.



- 4) **Re-start the Countdown:** Press the button again to start the countdown from 3:00 or 5:00. Pressing the button again restarts the countdown from 3:00 to 5:00. (To get back to 6:00 or 10:00, you will have to repeat Step.)



- 5) **After the Timer Reaches Zero:** The distance, speed and time are zeroed and start running normally with no further button presses.

Note: To abandon a countdown and resume normal operation, hold the button for 2 seconds.

## CALIBRATION:

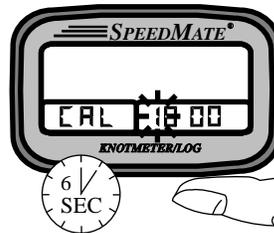
If you need to measure speeds and distances very accurately, you can calibrate your unit. To calibrate, travel over a known distance on a body of water with no current while using your SpeedMate. Divide the true distance by the distance shown on your display and multiply by 1000 to obtain the calibration value:

$$\frac{\text{true value}}{\text{displayed value}} (1000) = \text{Calibration value}$$

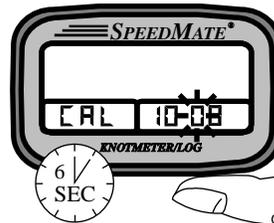
For example: if you know you have sailed 1 mile, but your display shows 0.96, your calibration value would be 1042:

$$\frac{1.00}{0.96} (1000) = 1042$$

Once you have calculated your calibration value, follow the steps shown to enter it. Make a record of your calibration value for future reference! You may need to re-enter it after changing the battery.



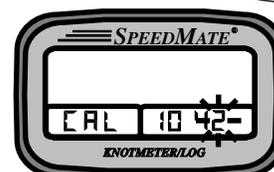
- 1) **Select Calibration Function:** Hold the button down until "CAL" shows in the button left window (approx 10 seconds), then release. The current calibration value will be shown in the bottom right window with the first digit flashing.



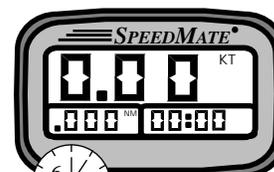
- 2) **Select Digit:** Hold the button down for 1 second then release to move the flashing digit to the right.



- 3) **Change Digits:** Press and release the button to change the flashing digit.



- 4) **Enter Calibration value:** Continue until you have entered your correct calibration value.



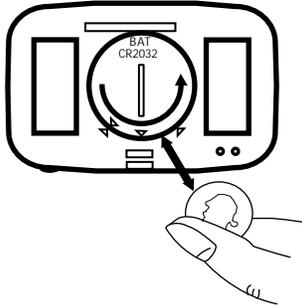
- 5) **Exit Calibration:** Hold the button down for 5 seconds to exit the calibration function.

## REPLACING THE BATTERY:

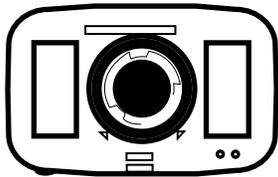
A faint display indicates that the battery is becoming weak. Follow the steps shown to replace the battery with a new CR2032 lithium cell.



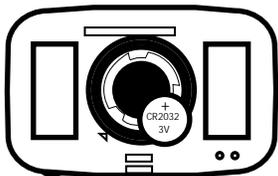
- 1) A faint display indicates that the battery is weak.



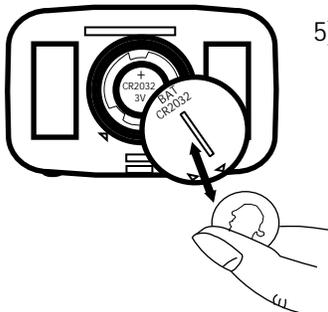
- 2) Open battery compartment with a coin.



- 3) Remove the battery. Hold the button down for at least 10 seconds (discharges the resistor).



- 4) Insert a replacement 3V lithium CR2032 battery.

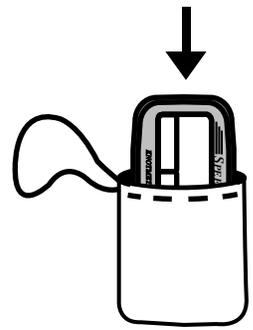


- 5) Carefully replace the battery door, seating the O-ring seal and aligning arrows. Close the battery door with a coin.

- 6) After releasing the button, follow Calibration step "1" (previous page) to check that the calibration value is correct. If the unit shows "0000", the calibration value has been lost from memory and the unit will not operate properly. Follow Calibration steps "2" through "5" to re-enter the correct calibration value: either the value you calculated when you calibrated your unit or "1000" if you have not calibrated your unit.

## STORAGE:

Always store the unit in the protective pouch to prevent scratching of the display window.



## TRANSPORTING YOUR BOAT:

When transporting your boat, take steps to protect the speed sensor from spinning in the wind and being exposed to fine grit. Either cover the impeller, secure it with tape or a rubber band, or remove it.

## WARRANTY:

This product is warrantied for a period of one year from date of purchase. Please return any defective instrument to SpeedTech Instruments or its local in-country distributor, round trip shipping prepaid, together with a copy of the original sale receipt. SpeedTech Instruments or its local in-country distributor, at their discretion, will replace any defective product or have it repaired. The provisions of this warranty do not apply to any products which have been subjected to misuse, negligence, accident or which have been repaired or altered without SpeedTech's prior written consent. No other warranties, expressed or implied, are made with respect to this product, including but not limited to, any implied warranty for fitness for a particular purpose.

## **SPEEDTECH INSTRUMENTS**

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