

American Marine is proud to introduce the **PINPOINT™ Nitrate Monitor**. The only truly affordable and accurate digital Nitrate measurement instrument for marine saltwater. The **PINPOINT™ Nitrate Monitor** has been designed as a precision spot-testing instrument. A 9-volt battery is recommended. Replace battery when "LOBAT" appears on the display.

NOTE: The Nitrate Monitor unit is NOT waterproof and must be operated on a dry surface. Liquid contact on the printed circuit board will cause corrosion and void warranty.

Set-up

Unwrap the plastic protective packaging from both the meter and the probe. Carefully unscrew and remove the plastic storage bottle from the end of the probe. You may leave the bottle top on the probe. DO NOT discard the storage bottle, it will be used for calibration, measurement and storage. Remove the battery cover on the back of the monitor and install a 9-volt battery. Attach the BNC connector to the input on the front of the monitor, and rotate _ turn clockwise to lock the connector.

High Range Calibration

1) Pour 10 ppm Nitrate Calibration Fluid into the storage bottle to the fill line. Insert the end of the probe into the fluid and screw the top onto the bottle. Check the flat probe tip is not resting on the bottom of the bottle.

2) Slide the Range Switch to the HIGH position

3) Press and release the ON/OFF button to power on the monitor.

4) Press and release the Calibrate button. "CAL" will appear on the display and the number 10 will flash slowly for about 40 seconds.

5) When the number 100 starts to flash rapidly, the meter is ready for the 100 ppm fluid. Don't rush; you have as much time as you need. Unscrew the bottle and return the 10 ppm calibration fluid back into its original bottle. Pour 100 ppm nitrate calibration fluid into the storage bottle to the fill line. Insert the end of the probe into the fluid and screw the top onto the bottle. Check the flat probe tip is not resting on the bottom of the bottle.

6) Press and release the Calibrate button. The number 100 will flash slowly for about 40 seconds. When the flashing stops the meter is fully calibrated for the HIGH Range. Pour the 100 ppm calibration fluid back into the original container.

7) Pour a water sample to the fill line on the storage bottle and insert the probe to determine the exact Nitrate level. Allow up to one minute for the reading to stabilize. When finished, rinse the probe with R/O or deionized water and blot dry with a paper towel prior to storage.

Low Range Calibration

1) Pour 1 ppm Nitrate Calibration Fluid into the storage bottle to the fill line. Insert the end of the probe into the fluid and screw the top onto the bottle. Check the flat probe tip is not resting on the bottom of the bottle.

2) Slide the Range Switch to the LOW position

3) Press and release the ON/OFF button to power on the monitor.

4) Press and release the Calibrate button. "CAL" will appear on the display and the number 1 will flash slowly for about 40 seconds.

5) When the number 10 starts to flash rapidly, the meter is ready for the 10 ppm fluid. Don't rush; you have as much time as you need. Unscrew the bottle and return the 1 ppm calibration fluid back into its original bottle. Pour 10 ppm nitrate calibration fluid into the storage bottle to the fill line. Insert the end of the probe into the fluid and screw the top onto the bottle. Check the flat probe tip is not resting on the bottom of the bottle.

6) Press and release the Calibrate button. The number 10 will flash slowly for about 40 seconds. When the flashing stops the meter is fully calibrated for the LOW Range. Pour the 10 ppm calibration fluid back into the original container.

7) Pour a water sample to the fill line on the storage bottle and insert the probe to determine the exact Nitrate level. Allow up to one minute for the reading to stabilize. When finished, Rinse probe with RO or deionized water and blot dry with a paper towel prior to storage.

Troubleshooting and Important Points to Remember on back

PINPOINT™

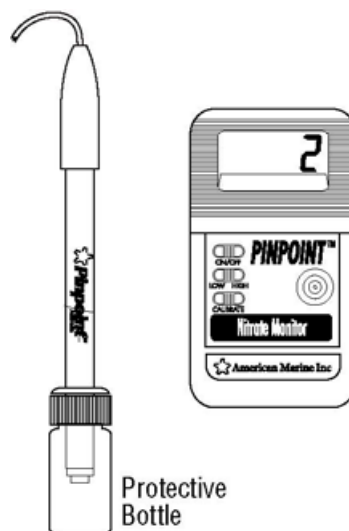
Nitrate

Monitor

User's Guide

American Marine Inc.
54 Danbury Road, Suite 172
Ridgefield, CT 06877 U.S.A.
Phone/FAX 914-763-5367
www.americanmarineusa.com

©Copyright 2006
American Marine Inc.



American Marine Inc

The world's finest selection of electronic measurement and control instruments designed and optimized for the professional aquaculture industry.

PH

ORP/REDOX

Oxygen

Calcium (Marine)

Conductivity Freshwater Hardness

Wireless Temperature

Nitrate (Marine)

Salinity (Marine and Koi)

Complete line of all calibration materials and accessories

-Accuracy, Innovation, Integrity-

Important Points to Remember

- **PINPOINT Nitrate Monitor** has been designed as a precision spot testing monitor. Continuous Nitrate Monitoring may not be possible in most situations and may require frequent recalibration and probe replacement.
- **PINPOINT Nitrate Monitor** is NOT waterproof and must be operated on a dry surface. Liquid contact with the printed circuit board may cause corrosion and void warranty.
- **PINPOINT Nitrate Monitor** has 2 independent ranges:
 - 0 – 10 ppm NO₃
 - 10–100 ppm NO₃
 - Accuracy for either scale after calibration is +/- 1 ppm NO₃
 - Resolution for either scale is 1 ppm NO₃
- When the probe is not in use, the tip should be stored in the protective bottle-dry. That is with NO fluid added to the bottle. A properly stored probe may have a life of up to 2-3 years.
- For greatest accuracy all calibration and sample fluids should be at (the same) room temperature.
- Calibration is recommended before each measurement.
- **PINPOINT Nitrate Probe** should be kept very clean. Rinse off the probe tip with RO/DI water and blot with a paper towel to dry prior to storage. Do not use any cleaning fluids or chemicals.
- Calibration fluids can be reused and should be replaced occasionally. Calibration Fluid replacement will depend on individual technique and be indicated by the inability to calibrate.
- For increased stability allow the probe tip to soak in calibration fluid 5 minutes before initial calibration.
- **Er...P** on the display indicates a probe malfunction. Check to see that the BNC is properly attached to the meter input.
- **Lo** on the display indicates the probe is measuring a nitrate value below the selected scale.
- **High** on the display indicates the probe is measuring a nitrate value above the selected scale.

Warranty

PINPOINT™ Nitrate Monitor by American Marine Inc. is warranted to be free of defects in material and workmanship for a period of 2 years from date of sale.

PINPOINT™ Nitrate Probe is warranted to be free of defects in material and workmanship for a period of 6 months from the date of sale.

Positive proof of purchase is required for warranty claim.

Removal or alteration of the serial number will void warranty.

American Marine Inc. will not be liable for any costs of removal, installation, transportation charges, or any other charges, which may result in connection with a warranty claim.

American Marine Inc. will not be liable for any damage or wear to products or livestock caused by abnormal operating conditions, water damage, abuse, misuse, unauthorized alternation or repair or if the product was not installed in accordance with the printed operating instructions.

Any defective product to must be sent freight prepaid with appropriate documentation supporting the warranty claim. Replacement or repair will be at the discretion of American Marine Inc. Typical turnaround time within 48 hours. Overnight delivery available.

American Marine Inc.
54 Danbury Road, Suite 172
Ridgefield, CT 06877 U.S.A.
www.americanmarineusa.com