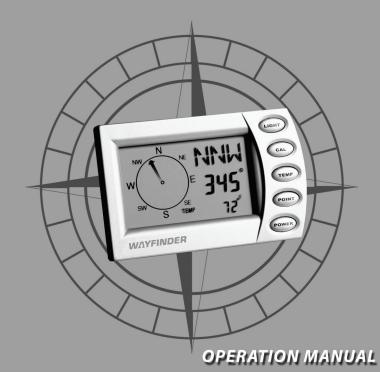


# V2000



### QUICK REFERENCE GUIDE

#### Getting started:

- 1. Install battery, observing diagrammed polarity (page 1).
- 2. Plug 12-volt adapter into "POWER" jack and your vehicle lighter socket (page 1).
- Adhere peel-and-stick temperature sensor to interior or exterior location, and plug into "TEMP" jack (page 2)
- Mount compass to windshield with suction cups in a position that does not block driver's view, is more than 5" away from a speaker, and puts the controls within reach (page 3).
- Adjust compass so it is level and facing rear of vehicle (not toward driver). Never loosen pivot screw! To adjust, simply pull to right against springloaded pivot (page 3).

#### Before first use:

Calibrate compass to your vehicle:

Hold (a) button and follow on-screen directions. You simply turn your vehicle in one complete circle, taking 20 to 60 seconds to complete (page 5).

#### Using your compass:

- Press over button to switch on; unit shuts off automatically about 10 minutes after your vehicle stops moving.
- Read your compass heading three ways: by any of 16 cardinal points, numerically in 5° increments, and graphically by an arrow on the compass rose.
- Hold **POINT** button to store a bearing and follow a desired course (page 6).
- Press **TEMP** button for a temperature reading (page 6).
- Press LIGHT button to switch screen backlight on or off (page 6).

*Note: Be sure to read the manual for detailed instructions.* 

### CONGRATULATIONS!

Now you have a new navigational partner when you drive — one of the most modern and accurate compasses available for use in all types of vehicles. To get the most from your compass, please read this manual thoroughly, and keep it in a safe place for future reference.

#### Features

- Three compass displays.
- Memory stores your compass heading to help you stay on course.
- Interior or exterior thermometer for accurate comfort monitoring.
- ICE alert warns of hazardous road conditions.
- Alert for magnetic interference.
- Auto power off conserves battery.
- Bright backlight with auto on/off for night use.
- Two power modes: 12-volt and/or internal battery for cord-free use.

### EASY INSTALLATION

**Note**: *Remove the protective overlay film from the LCD screen.* 

#### Step 1: Install the battery.

Slide open the battery cover on the rear of the unit and insert the battery straight down (not at an angle), observing the correct polarity. Replace the cover. The screen should come on with a quick quality test. If the display becomes stuck, remove the battery, wait about a minute, then reinsert the battery.

### Step 2: Plug in the 12-volt adapter.

Insert the small end into the jack marked "Power" on the back of the unit, and plug the large end into your vehicle lighter receptacle.

#### **Power notes**

• Use of the 12-volt adapter or hardwire kit (see *Optional Accessories* on page 8) is highly recommended to avoid draining the unit's battery and losing memory settings.

- Keep the unit plugged into your vehicle while changing the battery to avoid losing memory settings.
- Since not all vehicles supply constant power to the lighter socket, a battery must be in the unit at all times to retain memory settings.
- Unit shuts off automatically about 10 minutes after the last detected change in magnetic field. During night use, a built-in light sensor automatically switches on the screen backlight (disabled when the unit is operating on its battery alone).

### Step 3: Install the temperature sensor.

Mount the sensor inside for monitoring interior temperatures or outside for exterior temperatures (required for ICE alert feature). If used inside, place the sensor in a natural airflow, out of direct sunlight, and not in the direct outflow of a vent. For exterior use, select a ventilated location outside the passenger compartment, such as the grill area or doorjamb (away from sunlight and engine heat).

Making sure the surface is free of dirt, use the peel-and-stick pad to adhere the sensor. Mount to a less heat-conductive plastic or rubber component instead of to a steel body part. (As all vehicles are different, you may need to experiment to find the best site.)

Use the included retainer clips to secure the sensor cable to the windshield or dashboard. Plug the sensor connector into the jack marked "TEMP" on the back of the compass.

*Note:* A longer 30-foot temperature sensor is available (see **Optional Accessories** on page 8).

*Note:* Do not leave the Wayfinder V2000 in a parked vehicle that is likely to be exposed to extremely hot or cold temperatures.

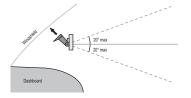
#### Step 4: Mount on windshield.

Slide the compass into the mounting bracket until it clicks securely into place (it only fits one way). Slide the suction cups into their mounting holes (if not pre-installed).

Select a location on the windshield that will not obstruct the driver's view, is at least 5 inches away from an audio speaker (to prevent interference), and permits easy reach of the compass buttons. Clean the window glass.

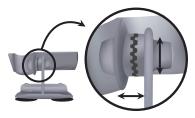
Press the suction cups firmly against the windshield.

For accurate readings the compass can be tilted up or down no more than 20° from horizontal (road level).



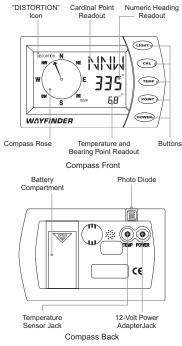
To adjust the angle, grasp the springloaded pivot and pull to the right, freeing the locking teeth (see diagram below). Set the bracket to the correct angle and release the pivot. The locking teeth will re-engage in this new position.

*Note:* never loosen the pivot screw as small internal parts could become lost.



**Important:** The screen should point toward the rear of the vehicle (not at the driver) so that the compass is aligned with the direction of travel.

### CONTROLS AT A GLANCE



The screen shows your heading in one of 16 cardinal points (N, NNE, NE, etc.), and an arrow on the compass rose points toward that direction. Plus, your precise heading is shown numerically in increments of 5°.

#### Buttons and icons

**Light button:** Press LIGHT to switch the backlight on or off, or hold for two seconds to adjust the auto shut-off interval.

**Cal button:** Press or hold **CAL** to begin calibration.

**Temp button:** Press **ress** to display the temperature, or hold to select Fahrenheit or Celsius.

**Point button:** Press **Press** to display a stored bearing point, or hold to store a new bearing.

**Power button:** Press **rewer** to switch the Wayfinder V2000 on or off.

"Distortion" icon: Indicates that magnetic interference is compromising compass accuracy, or that the battery has been changed and calibration is required.

#### **OPERATION OF YOUR COMPASS**

#### Calibrating the compass

For accurate readings, your compass must be calibrated before the first use, and any time it is moved to a new location in a vehicle or whenever the memory settings are lost from a power interruption. Recalibration is also required after a change to your vehicle (such as installation of a stereo), or whenever "DISTORTION" is displayed continuously on the screen.

Always calibrate with the compass in place on your windshield and electrical devices such as headlights, stereo, etc. switched on. Select a level section of pavement, such as an empty parking lot or a non-busy street. For boats, calibration is best performed in a calm harbor or marina.

#### Calibration steps:

1. Hold CAL

The message "PRESS AGAIN TO START OR PRESS LIGHT TO

CANCEL" cycles in the lower right corner.

- 2. Press CAL
- Now "TURN ONCE" will flash in the lower left corner, and "TURN ONCE THEN PRESS CAL TO END" appears in the lower right corner for approximately 2 minutes.
- 3. Turn vehicle in one complete circle in either direction. Take at least 20 seconds, but not more than 60 seconds to complete (circle size does not matter).



 Press (all ) "DONE" displays briefly in lower right corner. The V2000 is now calibrated.

### Let the compass guide you

You can enter a course direction (bearing point) and a guiding arrow will appear on the compass rose. (Until a bearing is stored,  $00^{\circ}$  displays in the lower right corner.)

#### To enter a bearing point:

- 1. Align your vehicle so that the desired numeric heading appears.
- 2. Hold POINT

The message "PRESS AGAIN TO STORE" cycles in the lower right corner.

3. Press POINT

The stored bearing point appears in the lower right corner, and a flashing arrow points toward that direction on the compass rose. This bearing point remains in memory until you enter a new bearing point or the battery is replaced.

4. Press POINT

Turns display of stored bearing point on or off.

#### Using the thermometer

Press (rem) to turn the temperature display on or off. (If the temperature sensor has not been properly installed, "PLUG IN THE SENSOR" will appear on the screen.) The Wayfinder V2000 displays temperatures between 1°F and 158°F (-17°C to 70°C), or will indicate that the measured temperature is above or below this range.

#### To select °C or °F:

1. Hold TEMP

The message "PRESS AGAIN TO STEP HOLD TO SELECT" cycles in the lower right corner.

- 2. Press TEMP Either °C or °F flashes in the lower right corner.
- 3. Press Temp To toggle between °C and °F
- Hold TEMP Until "DONE" displays, saving your selection in memory.

#### ICE alert

When the exterior sensor is properly installed, the Wayfinder V2000 can alert you to dangerous road conditions. Any time the temperature drops to 35°F (2°C), it automatically switches to temperature mode and "ICE" will flash in the bottom right corner along with the temperature. This is shown until any button is pressed. (ICE alert feature will not work if the temperature sensor is not installed or is installed incorrectly.)

#### Adjusting the screen backlight

Press more to switch on the backlight. When operating on the internal battery, the backlight has been set to shut off automatically after 10 seconds, conserving power. To change this setting:

1. Hold ught

"PRESS AGAIN TO STEP," "HOLD LIGHT TO SELECT" cycles in the lower right corner. 2. Press LIGHT

The values 00, 10, 30, 60, and 180 seconds appear in sequence.

3. Hold (UGHT)

To select the desired interval until "DONE" displays. Note: selecting 00 disables the auto shut-off feature.

4. Press LIGHT

The backlight remains on for the selected time, then shuts off.

When using the 12-volt adapter or optional hardwire kit, the built-in light sensor overrides the auto-shutoff function. Now the backlight operates whenever the compass is on in low-light conditions such as night. It will switch off whenever no magnetic field change has been detected for about 10 minutes, or when you press the comp button.

### **OPTIONAL ACCESSORIES**

- 15-foot hardwire kit connects the unit directly into your 12-volt power system (recommended for installation only by a qualified automotive accessory installer).
- 30-foot temperature sensor for vehicles requiring a longer sensor cable.

Each is available for an additional charge by calling our customer service department at (888) 422-6672 from anywhere in the U.S.A., (707) 566-2260, or by e-mail at customerservice@pincorp.com.

#### FREQUENTLY ASKED QUESTIONS

# *How does the Wayfinder V2000 work?*

Developed by PNI Corporation for the U.S. military, the patented magnetic sensor technology, called magneto-inductive, is the greatest advance in compass technology in 60 years. It senses the difference between the magnetic fields of the earth and your vehicle, then electronically subtracts the latter to display accurate compass readings. This superior performance is achieved with reduced power consumption and at a lower cost. The technology is so advanced, it has been adopted for compasses in GM, Ford, and Chrysler automobiles, Polaris jet skis, Bayliner boats, and Timex watches.

# Where can the Wayfinder 2000 be used?

You'll find it a valuable help to navigation in any type of vehicle, including cars, trucks, vans, SUVs, off-road vehicles, boats, and RVs.

# What is calibration, and why is it necessary?

Calibration permits the Wayfinder V2000 to distinguish between the earth's magnetic field and stray magnetic fields such as those generated

by a vehicle's steel body or electronics. Without calibration, the built-in microprocessor interprets the detected magnetic fields as coming entirely from the earth, which can produce inaccurate compass readings.

### What does the "DISTORTION" alert mean?

This indicates magnetic distortion from stray magnetic fields caused by electronics or metal. The message may appear briefly when driving over a bridge, under an overpass, over railroad tracks, within close proximity to a strong magnetic field, or when the battery is installed. The message will go away when you move beyond the source of distortion. If it appears continuously or right after calibration, the unit needs to be calibrated again in a location where there is less magnetic interference.

# How can I improve the calibration process?

Remember to match conditions to your actual use before calibrating. For example, calibrate with both the temperature sensor and 12-volt adapter attached (if you intend to use the 12-volt adapter). If you typically drive with your headlights and stereo on (or any other electronic device), turn these on prior to calibration.

# How can the bearing point feature help me?

In nice weather most drivers can sense the direction they are headed by the position of the sun and features of the landscape. But at night and in the fog you can rapidly lose your way. Setting a bearing point to a desired heading or to a landmark lets you monitor and maintain your heading and remain on course. A bearing point also lets you vary your course and get back to your original bearing path.

### SERVICE AND REPLACEMENT

#### **Customer Service**

For customer service questions, our customer service department can be contacted by e-mail at customerservice@pnicorp.com, or call us between 8:00 a.m. and 5:00 p.m. (PST), Monday through Friday.

### **Replacement Service**

For the fastest service, it is best to contact or return your unit to the place of purchase within 30 days of the purchase. If you wish to return the unit for replacement or repair to PNI Corporation, please follow these steps:

- 1. Obtain a return merchandise authorization (RMA) number by contacting PNI:
  - By phone at (888) 422-6672 (toll-free within the U.S.A. only) or at (707) 566-2260 between 8:00 a.m. and 5:00 p.m. (PST).

- By fax at (707) 566-2261.
- You may also contact us by e-mail at the following address customerservice@pnicorp.com.
- 2. Provide a proof of purchase, such as a mechanical reproduction or carbon copy of your sales receipt. If you send your original receipt, it cannot be returned. Proof-ofpurchase must show printed date of purchase, model number, and place of purchase. There will be a charge for repair/replacement if no proof of purchase is provided, or if the 12-month warranty period is past.

Once you have acquired a RMA number, pack the unit securely to prevent damage in transit. If possible, use the original packing material and box. Be sure to send the entire product.

3. Ship prepaid and insured by way of a traceable carrier such as

United Parcel Service (UPS), FedEx Parcel Service, or First Class Mail to avoid loss in transit.

 Write the issued RMA number on the outside of your package and send your proof-of-purchase and description of the problem to:

#### **PNI** Corporation

Attn: RMA#\_\_\_\_

5464 Skylane Boulevard, Suite A Santa Rosa, CA 95403-1084

Be sure to type or clearly print your name and the address where your wish the replacement to be sent. After receipt of your documents and unit, a replacement unit will be sent to you. Please allow 2 to 3 weeks after receipt of your returned product for delivery of your replacement.

#### SPECIFICATIONS

#### Power

1 x Lithium CR123 battery 12V DC adapter

#### Battery Life

*3,600 hours without backlight, 140 hours with constant backlight usage* 

Display resolution / accuracy  $5^{\circ}/\pm 5^{\circ}$ 

**Temperature resolution/accuracy**  $1°F / \pm 3°F$  within operating range

**Storage temperature** -40° to 185°F (-40° to 85°C)

**Operating temperature** 14° to 140°F (-10° to 60°C)

**Dimensions** (without bracket) 4 x 2<sup>1</sup>/<sub>2</sub> x 1<sup>1</sup>/<sub>4</sub> inches (101.6 x 63.5 x 31.7 mm)

**Weight** (with bracket, with battery) *4.4 oz* (*124.7g*)

#### LIMITED WARRANTY; LIMITATION OF LIABILITY

PNI Corporation ("PNI") manufactures its products, which include accessories, from parts and components that are new or equivalent to new in performance and expressly warrants to the original retail purchaser who is also the original user that this product will be free of defects in workmanship and materials for one (1) year from the date of purchase. Implied warranties are limited to such person for the same period.

If the product is found by PNI to be defective, PNI's entire liability and your exclusive remedy for breach of warranty, express or implied, shall be that PNI will repair or replace the product and return the product or its replacement to you at no charge, provided that you ship the product to PNI at your expense with a description of the defect and subject to the other conditions of this warranty. Should the product prove to be irreparable, PNI may substitute an equivalent product of the same or similar style and of a value not in excess of the original purchase price of your product. PNI warrants the repaired or replacement product to be free from defects in material and workmanship for the balance of the original warranty period, extended by the time period from your shipment to PNI for repair or replacement until the repaired or replaced product was received by you.

This warranty will be void if the serial number or other identification marks on the product or its accessories have been defaced, damaged or removed. This warranty does not cover wear and tear due to normal use, or damage to the product as the result of improper usage, neglect of care, alteration, accident or unauthorized repair, nor does this warranty apply to the battery necessary to operate the product.

This warranty is extended only to the original retail purchaser who is also the original user and may not be transferred or assigned to subsequent owners. In order to validate your warranty, you must provide proof of purchase acceptable to PNI, together with the product shipped for warranty repair/replacement. Products returned to PNI must be pre-authorized by PNI with an RMA (return material authorization) number marked on the outside of the package. Please refer to the Service and Replacement section for PNI Corporation contact information.

THE FOREGOING WARRANTY IS GIVEN IN LIEU OF AND PNI DISCLAIMS ALL OTHER EXPRESS WARRANTIES OR REPRESENTATIONS IN FACT OR IN LAW WITH RESPECT TO THIS PRODUCT, INCLUDING, BUT NOT LIMITED TO, ANY WAR-RANTY OR REPRESENTATION THAT USE OF THE PRODUCT WILL BE UNINTERRUPTED OR ERROR FREE.

Except for the breach of warranty remedies set forth herein, or for personal injury, PNI shall have no liability for any indirect or speculative damages (including, but not limited to, consequential, incidental, punitive and special damages) relating to the use of or inability to use this product, whether arising out of contract, negligence, tort, or under any warranty theory, or for infringement of any other party's intellectual property rights, irrespective of whether PNI had advance notice of the possibility of any such damages, including, but not limited to, loss of use, revenue or profit. In no event shall PNI's total liability for all claims regarding the product exceed the price paid for the product. PNI neither assumes nor authorizes anyone to assume for it any other liabilities.

Some states and provinces do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights and you may have other rights that vary by state or province.

### Your Opinion Matters!

Please take a few minutes to register and let us know about yourself. It will help us serve you better in the future, and all information will remain confidential.

To register, log on to:

www.pniservice.com

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