

Digital Vehicle Compass

63-1120

OWNER'S MANUAL — Please read before using this equipment.

Thank you for purchasing a RadioShack Digital Vehicle Compass. Your compass conveniently provides accurate heading information inside your vehicle. It incorporates the same magnetic sensor technology that is used in factory-installed vehicle compasses. The compass electronically separates the Earth's magnetic field from the magnetic fields generated by your vehicle, to provide accurate compass headings.

Automatic Shut-Off — conserves power by turning off the compass about 10 minutes after you park the vehicle when there are no significant changes in the surrounding magnetic fields.

Magnetic Distortion Detection — alerts you when outside magnetic interference is affecting compass accuracy.

INSTALLING BATTERIES

Your compass requires two AAA batteries (not supplied) for power. For the best performance and longest life, we recommend RadioShack batteries. Battery life is about 11 months (based on an average of 8 hours of compass use and 2 hours of backlight use per week).

Cautions:

- Use only fresh batteries of the required size and recommended type.
- Do not mix old and new batteries, different types of batteries (standard, alkaline, or rechargeable), or rechargeable batteries of different capacities.

1. Slide the battery compartment cover in the direction of the **OPEN** arrow to remove it.
2. Place two AAA batteries in the compartment as indicated by the polarity symbols (+ and –) marked inside.
3. Replace the cover. All the arrows flash. After you install or replace batteries, you must calibrate the compass (see “Calibrating the Compass” on Page 4).

If all the arrows and digits flash, and the backlight turns on when you turn on the compass, replace the batteries or use vehicle battery power (see “Using Vehicle Battery Power”).

Warning: Dispose of old batteries promptly and properly. Do not burn or bury them.

Caution: If you do not plan to use the compass for a month or more, remove the batteries. Batteries can leak chemicals that can destroy electronic parts.

USING VEHICLE BATTERY POWER

This compass is designed to be used with RadioShack’s 12V DC adapter Cat. No. 270-031A (available at your local RadioShack store). Using any other adapter could void the warranty and damage the compass.

You can power the compass from a vehicle’s 12V power source (such as cigarette-lighter socket) using a 12V, 3 amp DC adapter (not supplied, available at your local RadioShack store).

Cautions:



You must use a power source that supplies 12V DC and delivers at least 3 amps. Its center tip must be set

to positive and its plug must fit the compass' jack. Using an adapter that does not meet these specifications could damage the compass or the adapter.

- Always connect the DC adapter to the compass before you connect it to the power source. When you finish, disconnect the adapter from the power source before you disconnect it from the compass.

Note: Since not all vehicles have constant power supplied to the power outlet, two AAA batteries are required to retain the compass calibration settings in memory (although they do not power the compass when vehicle battery power is used).

Insert the barrel plug of the 12V DC adapter (not supplied) into the **DC12V** jack on the back of the compass. Then insert the DC plug into your vehicle's power outlet.

MOUNTING THE COMPASS

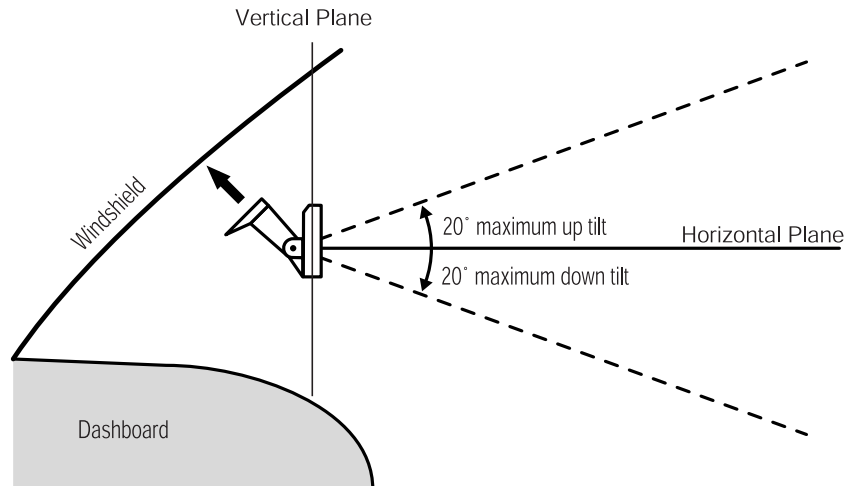
Choose a clean mounting location on the vehicle's windshield where the compass is at least 5 inches away from any stereo speakers and will not obstruct the driver's field of view.

Your compass comes with three suction cups for secure mounting.

1. Insert the small ball head of each suction cup into the larger hole on the bottom of the bracket and slide it into the bracket's smaller hole so it fits tightly.
2. Place the compass in the holder.

Note: To remove the compass from the holder, simply slide it out.

3. Firmly press the bracket with the compass against the vehicle's windshield.



4. Adjust the angle of the bracket so that the face

of the compass points to the back of the vehicle. Then adjust the bracket to an angle no more than 20° above or below the horizontal plane.

5. Tighten the bracket's screw to hold it at the desired angle.

Caution: If you use a reflective sun shade, do not leave the compass between the sun shade and the windshield. The extreme heat might damage the compass.

Note: Your compass will not calibrate correctly and will not be accurate unless it is mounted so the display faces the back of your vehicle and is titled no more than 20° above or below the horizontal plane. The selected angle must stay fixed after calibration for the compass to remain accurate.

CALIBRATING THE COMPASS

Calibration enables the compass to separate the earth's magnetic field from the magnetic fields generated by external influences (such as your vehicle) so it can provide accurate heading information.

When calibrating the compass, you must drive your vehicle in one complete circle. Be sure your vehicle is on level ground in an open area, such as a parking lot.

The size of the circle and the direction your vehicle points when beginning or ending the circle do not matter. The circle does not need to be perfect, but it must be completed within 2 minutes.

Important: If you do not calibrate your compass properly, it will not work correctly or accurately. You must calibrate your compass when you use it the first time and recalibrate it anytime:

- you move the compass to a different location
- you adjust the bracket/display angle
- you remove and replace the batteries
- **DIS** appears steadily
- all the arrows flash

1. Ensure the compass is securely mounted (see “Mounting the Compass” on Page 3).
2. Hold down **LIGHT** and **POWER** at the same time until all arrows flash at the same time.

Note: If you have just installed/replaced the batteries, all the arrows and digits briefly appear, then all the arrows flash at the same time and the backlight turns on. Begin from Step 3 to calibrate your compass.

3. Press **POWER**. The arrows appear one at a time.
4. With the compass mounted, drive in one complete circle and then press **POWER**. The current compass heading appears.

Note: If you press **LIGHT** while calibrating your compass (except after installing/replacing batteries), the compass does not store the calibration setting and the original setting is unchanged.

USING THE COMPASS

The 8 displayed cardinal points for this compass are N, NE, E, SE, S, SW, W, and NW.

Distortion Detection

When **DIST** appears, the compass is detecting magnetic interference that compromises its accuracy. Distortion occurs when there has been a significant change in the surrounding magnetic fields, such as when you are driving under an overpass, or over a bridge. The steel in these structures causes inaccurate readings in any magnetic compass, but unlike other compasses, this compass detects interference and alerts you.

If **DIST** appears continuously, recalibrate your compass (see “Calibrating the Compass” on Page 4).

Turning the Compass On and Off

Press **POWER** to turn the compass on and off. Or, you can press **LIGHT** to turn on the compass and the backlight.

To turn off the compass and the backlight, press **POWER**.

Important: The compass automatically turns off after about 10 minutes to conserve power if no significant changes occur in the surrounding magnetic fields.

Using the Backlight

To turn on the backlight, press **LIGHT**. To turn off the backlight, press **LIGHT** again.

The backlight automatically turns off after about 1 minute if it is powered by internal batteries. It automatically turns off after about 10 minutes if it is powered by vehicle battery power, unless significant changes occur in the surrounding magnetic fields.

CARE

Keep the compass dry; if it gets wet, wipe it dry immediately. Use and store the compass only in normal temperature environments. Handle the compass carefully; do not drop it. Keep the compass away from dust and dirt, and wipe it with a damp cloth occasionally to keep it looking new.

Modifying or tampering with the compass' internal components can cause a malfunction and might invalidate its warranty. If your compass is not performing as it should, take it to your local RadioShack store for assistance.

SPECIFICATIONS

| | |
|---|---|
| Power | 2 × AAA Batteries Optional 12V DC Adapter |
| Sampling cycle | 0.5 Second |
| Display resolution | 22.5° |
| Accuracy | ±5° |
| Storage temperature | – 40° to 160°F (– 40° to 71°C) |
| Operating temperature | – 4° to 140°F (– 20° to 60°C) |
| Dimensions (with bracket, HWD) | 2 ⁵ / ₈ × 2 ³ / ₄ × 2 ³ / ₄ Inches (66.0 × 69.9 × 69.9 mm) |
| Dimensions (without bracket, HWD) | 2 ¹ / ₂ × 2 ¹ / ₂ × 1 Inches (63.5 × 63.5 × 25.0 mm) |

Weight (with bracket, without batteries) 2.8 oz (79.4 g)
Weight (without bracket and batteries) 2.0 oz (56.7 g)

Specifications are typical; individual units might vary. Specifications are subject to change and improvement without notice.

Limited One-Year Warranty

This product is warranted by RadioShack against manufacturing defects in material and workmanship under normal use for one (1) year from the date of purchase from RadioShack company-owned stores and authorized RadioShack franchisees and dealers. EXCEPT AS PROVIDED HEREIN, RadioShack MAKES NO EXPRESS WARRANTIES AND ANY IMPLIED WARRANTIES, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO THE DURATION OF THE WRITTEN LIMITED WARRANTIES CONTAINED HEREIN. EXCEPT AS PROVIDED HEREIN, RadioShack SHALL HAVE NO LIABILITY OR RESPONSIBILITY TO CUSTOMER OR ANY OTHER PERSON OR ENTITY WITH RESPECT TO ANY LIABILITY, LOSS OR DAMAGE CAUSED DIRECTLY OR INDIRECTLY BY USE OR PERFORMANCE OF THE PRODUCT OR ARISING OUT OF ANY BREACH OF THIS WARRANTY, INCLUDING, BUT NOT LIMITED TO, ANY DAMAGES RESULTING FROM INCONVENIENCE, LOSS OF TIME, DATA, PROPERTY, REVENUE, OR PROFIT OR ANY INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, EVEN IF RadioShack HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Some states 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.

In the event of a product defect during the warranty period, take the product and the RadioShack sales receipt as proof of purchase date to any RadioShack store. RadioShack will, at its option, unless otherwise provided by law: (a) correct the defect by product repair without charge for parts and labor; (b) replace the product with one of the same or similar design; or (c) refund the purchase price. All replaced parts and products, and products on which a refund is made, become the property of RadioShack. New or reconditioned parts and products may be used in the performance of warranty service. Repaired or replaced parts and products are warranted for the remainder of the original warranty period. You will be charged for repair or replacement of the product made after the expiration of the warranty period.

This warranty does not cover: (a) damage or failure caused by or attributable to acts of God, abuse, accident, misuse, improper or abnormal usage, failure to follow instructions, improper installation or maintenance, alteration, lightning or other incidence of excess voltage or current; (b) any repairs other than those provided by a RadioShack Authorized Service Facility; (c) consumables such as fuses or batteries; (d) cosmetic damage; (e) transportation, shipping or insurance costs; or (f) costs of product removal, installation, set-up service adjustment or re-installation.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

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