

 **West Marine®**



2AMP PORTABLE BATTERY MAINTAINER | MODEL 14982037

Owner's Manual

SAFETY GUIDELINES / DEFINITIONS

HAZARD: Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

WARNING: Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION: Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

CAUTION: Used without the safety alert symbol indicates potentially hazardous situation which, if not avoided, may result in property damage.

RISK OF UNSAFE OPERATION. When using tools or equipment, basic safety precautions should always be followed to reduce the risk of personal injury. Improper operation, maintenance or modification of tools or equipment could result in serious injury and property damage. There are certain applications for which tools and equipment are designed. The manufacturer strongly recommends that this product NOT be modified and/or used for any application other than for which it was designed. Read and understand all warnings and operating instructions before using any tool or equipment.

IMPORTANT SAFETY INSTRUCTIONS

WARNING: This product or its power cord contains lead, a chemical known to the State of California to cause cancer and birth defect or other reproductive harm. Wash hands after handling.

GENERAL SAFETY WARNINGS AND INSTRUCTIONS FOR ALL APPLIANCES

READ ALL INSTRUCTIONS

WARNING: Read all instructions before operating product. Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury.

- **Keep children away.** Keep away from children. This is not a toy!
- **Use of accessories and attachments:** The use of any accessory or attachment not recommended by manufacturer for use with this unit could be hazardous.
- **Check for damaged parts.** Any part that is damaged should be properly repaired or replaced by manufacturer unless otherwise indicated elsewhere in this instruction manual before further use.

SPECIFIC SAFETY INSTRUCTIONS FOR POWER CORDS

- **Don't abuse cord.** Never carry appliance by cord or yank it to disconnect from receptacle. Keep cord from heat, oil, and sharp edges. Pull by plug rather than cord when unplugging the unit.
- **Ground fault circuit interrupter (GFCI)** protection should be provided on the circuits or outlets to be used. Receptacles are available having built in GFCI protection and may be used for this measure of safety.

Extension Cords

- **An extension cord should not be used unless absolutely necessary.** Use of an improper extension cord could result in a risk of fire and electric shock, and will void warranty. If an extension cord is used, make sure that the pins of the extension cord are the same number, size and shape as those in the maintainer.
- **If an extension cord must be used,** make sure your extension cord is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. The following table shows the correct size to use depending on cord length and nameplate ampere rating. If in doubt, use the next heavier gauge. The smaller the gauge number, the heavier the cord.

Recommended Minimum AWG Size for Extension Cords for Battery Chargers					
AC Input Rating Amperes		American Wire Gage (AWG) Size of Cord Length of Cord, feet (m)			
Equal to or greater than	But less than	25 (7.6)	50 (15.2)	100 (30.5)	150 (45.6)
0	2	18	18	18	16
2	3	18	18	16	14
3	4	18	18	16	14
4	5	18	18	14	12
5	6	18	16	14	12
6	8	18	16	12	10
8	10	18	14	12	10
10	12	16	14	10	8
12	14	16	12	10	8
14	16	16	12	10	8
16	18	14	12	8	8
18	20	14	12	8	6

Power Cord Safety

This appliance has a polarized plug (one blade is wider than the other) as a safety feature. This plug will fit into a polarized outlet only one way. If the plug does not fit fully into the outlet, reverse the plug. If it still does not fit, contact a qualified electrician. Do not attempt to defeat this safety feature.

SPECIFIC SAFETY INSTRUCTIONS FOR BATTERY CHARGERS/MAINTAINERS

- **This unit was designed for household use only.**
- **UL Safety Standards do not recommend any chargers be used onboard vessels. Never use in damp or wet locations. Always refer to the manual for proper usage.**
- **Do not operate** the battery maintainer near flammable liquids or in gaseous or explosive atmospheres. Motors may spark, and the sparks might ignite fumes.
- **Stay alert.** Use common sense. Do not operate battery maintainer when you are tired or impaired.
- **Store indoors.** When not in use, battery maintainers should be stored indoors in dry, and high or locked-up places – out of reach of children.

- **Unplug the battery maintainer** when not in use.

⚠ WARNING – BURST HAZARD: Do not use the unit for charging dry-cell batteries that are commonly used with home appliances. These batteries may burst and cause injury to persons and damage property. Use the unit for charging/boosting a 12 volt battery only. It is not intended to supply power to a low-voltage electrical system other than in a starter-motor application.

⚠ WARNING – RISK OF EXPLOSIVE GASES:

- Working in the vicinity of a lead acid battery is dangerous. Batteries generate explosive gases during normal battery operation. For this reason, it is of the utmost importance that each time before using the battery maintainer you read this manual and follow instructions exactly.
- To reduce the risk of battery explosion, follow these instructions and those published by the battery manufacturer and manufacturer of any equipment you intend to use in the vicinity of the battery. Review cautionary markings on these products and on the engine.
- This equipment employs parts (switches, relays, etc.) that produce arcs or sparks. Therefore, if used in a garage or enclosed area, the unit **MUST** be placed not less than 18 inches above the floor.
- **THIS UNIT IS NOT FOR USE BY CHILDREN AND SHOULD ONLY BE OPERATED BY ADULTS.**

⚠ WARNING – TO REDUCE THE RISK OF FIRE:

- Do not operate near flammable materials, fumes or gases.
- Do not expose to extreme heat or flames.
- If the vehicle accessory outlet fuse opens (blows) when plugging in this battery maintainer, do not use this battery maintainer with this vehicle accessory outlet:
 - Do not repeatedly replace the fuse.
 - Do not replace the vehicle accessory outlet fuse with one of a higher amperage rating.
 - Never attempt to patch the fuse with tin foil or wire.

Any of these actions may cause serious electrical damage and/or a fire.

⚠ CAUTION – TO REDUCE THE RISK OF INJURY OR PROPERTY DAMAGE:

- **NEVER ATTEMPT TO CHARGE A FROZEN BATTERY.**
- Do not charge the battery while the engine is operating.
- Stay clear of fan blades, belts, pulleys, and other parts that can cause injury to persons.
- When working with lead acid batteries, always make sure immediate assistance is available in case of accident or emergency.
- Always have protective eyewear when using this product: contact with battery acid may cause blindness and/or severe burns. Be aware of first aid procedures in case of accidental contact with battery acid.
- Have plenty of fresh water and soap nearby in case battery acid contacts skin.
- If battery acid contacts skin or clothing, wash immediately with soap and water for at least 10 minutes and get medical attention immediately.

- Never smoke or allow a spark or flame in vicinity of vehicle battery, engine or battery maintainer.
- Remove personal metal items such as rings, bracelets, necklaces and watches when working with a lead acid battery. A lead acid battery can produce a short circuit current high enough to weld a ring, or similar metal object, to skin causing a severe burn.
- Never allow battery acid to come in contact with this unit.
- Do not operate this unit in a closed area or restrict ventilation in any way.
- Always turn the battery maintainer off by unplugging it when not in use.
- **DO NOT OPEN THE BATTERY MAINTAINER** — there are no user-serviceable parts inside. Opening the battery maintainer will void manufacturer's warranty.
- Operate battery maintainer only as described in this Instruction Manual.

Connection Precautions

- Connect and disconnect terminal rings, battery clamps or vehicle accessory plug only after removing AC cord from electric outlet.
- Never allow terminal rings or clamps to touch each other.
- Attach clamps only as indicated in "Charging Using the Supplied Battery Clips."

⚠ CAUTION – TO REDUCE THE RISK OF PROPERTY DAMAGE WHEN USING THE UNIT IN WET ENVIRONMENTS: The housing of this unit is rated to IP67 dust-proof and waterproof standards. However, it is recommended that you observe the following:

- Never submerge the unit in water deeper than 1 meter, for time longer than 30 minutes and/or in temperatures other than between 41°F and 104°F (5°C and 40°C), or the unit could sustain permanent damage.
- Never submerge the unit in water unless the bushing (insulation) of the AC or DC cord is intact.
- Do not allow plug or clamps to be exposed to the elements for long periods of time; and never submerge them.
- Read and Understand This Instruction Manual Before Using This Unit.

FIRST AID

- **SKIN:** If battery acid comes in contact with skin, rinse immediately with water, then wash thoroughly with soap and water. If redness, pain, or irritation occurs, seek immediate medical attention.
- **EYES:** If battery acid comes in contact with eyes, flush eyes immediately, for a minimum of 15 minutes and seek immediate medical attention.

SAVE THESE INSTRUCTIONS

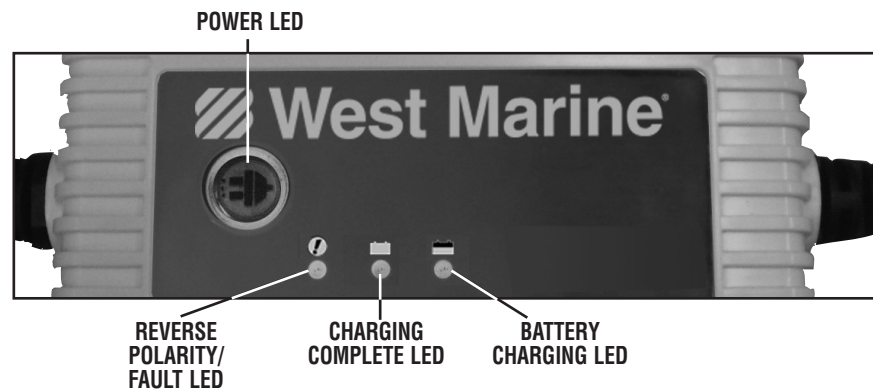
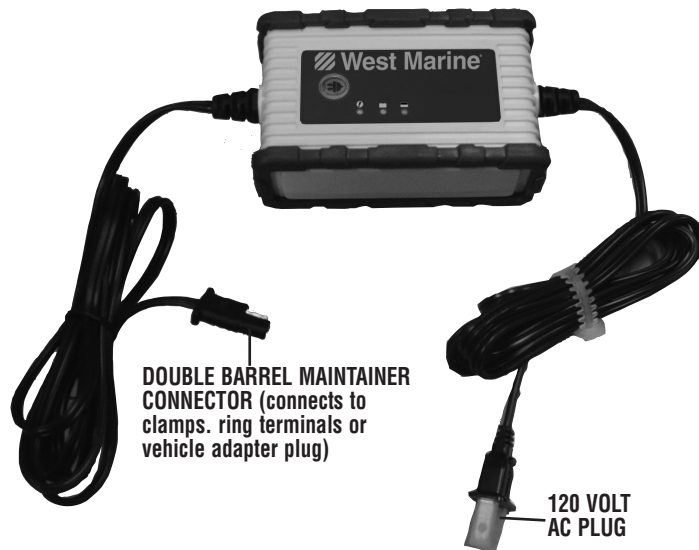
⚠ WARNING – TO REDUCE THE RISK OF INJURY:

Follow these instructions and those published by the battery manufacturer and manufacturer of any equipment you intend to use with this unit. Review cautionary markings on this product and on engine.

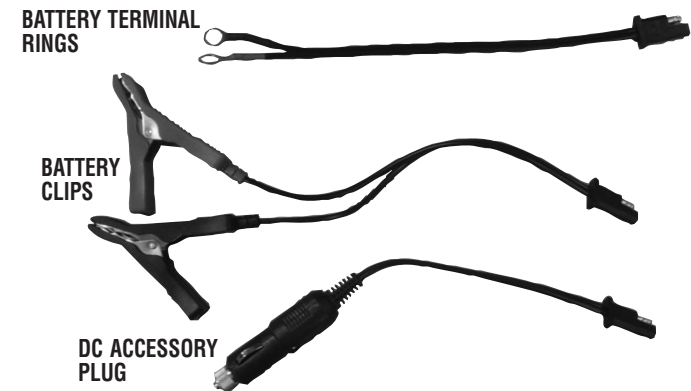
INTRODUCTION

Congratulations on purchasing your **West Marine® 2 Amp Waterproof Battery Maintainer**. Read this Instruction Manual and follow the instructions carefully before using your new battery maintainer.

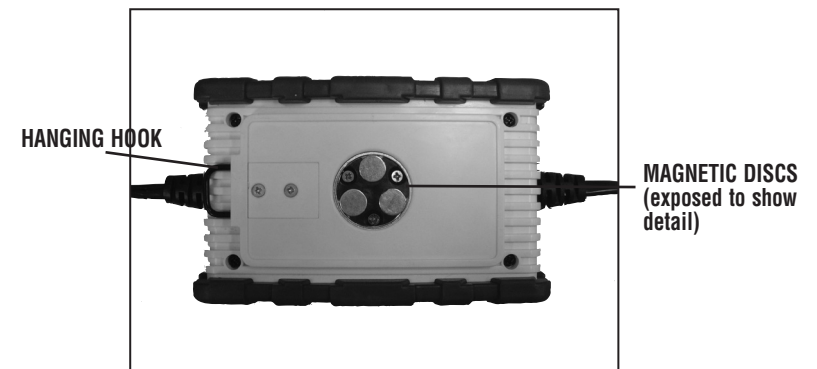
FEATURES



Battery Maintainer **6** 1-877-571-2391



BACK OF UNIT



Battery Maintainer **7** 1-877-571-2391

SETTING UP THE UNIT

Ensure that all installation and operating instructions and safety precautions are understood and carefully followed by anyone installing or using the battery maintainer. Follow the steps outlined in the "Important Safety Instructions" section of this manual.

To Mount the Unit Using the Magnetic Discs:

The magnetic discs in the bottom of the unit allow you to position the battery maintainer on any flat, secure metallic surface.

To Mount the Unit Using the Hanging Hook:

The hanging hook allows you to position the battery maintainer for convenient, hands-free operation.

CAUTION – TO REDUCE THE RISK OF PRODUCT DAMAGE:

- When the maintainer is hung by the hanging hook or attached using the magnetic discs, do not shake the maintainer or object that it is hanging from or attached to. Do not hang the maintainer from or attach the maintainer to any electrical wires or anything that it is not secure.
- Only use the hanging hook or magnet discs for hanging or positioning the maintainer. The hanging hook and magnetic discs are not intended to support additional weight. Do not attach or hang anything additional to the maintainer or risk of breakage may occur.

Preparing to Charge

1. Remove battery completely from boat/airplane or any confined area before charging when using the battery clips or the ring terminals..
2. If it is necessary to remove battery from vehicle to charge, or to clean terminals, always remove grounded terminal from battery first. Make sure all accessories in the vehicle are off, so as not to cause an arc.
3. Clean battery terminals, taking care to avoid getting corrosive material in eyes.
4. Add distilled water in each cell until battery acid reaches level specified by battery manufacturer. This helps purge excessive gas from cells. Do not overfill. For a battery without cell caps (maintenance free), carefully follow manufacturer's charging instructions.
5. Study all battery manufacturer's specific precautions, such as removing or not removing cell caps while charging, and recommended rates of charge.

Maintainer Location

- Locate maintainer as far away from battery as cables permit.
- Never place maintainer directly above battery being charged; gases from battery will corrode and damage maintainer.
- Never allow battery acid to drip on maintainer.
- Never operate maintainer in a closed-in area or restrict ventilation in any way.
- Marine batteries must be removed and charged on shore.
- Do not set a battery on top of maintainer.



OPERATING INSTRUCTIONS

Charging Using the Supplied Battery Clips

 **WARNING: A spark near the battery may cause an explosion. To reduce the risk of a spark near the battery, position AC and DC cords away from hood, door, or moving engine parts.**

1. Insert the double barrel tip of the battery clamp cable into the double barrel tip of the battery maintainer cable (male-to-female and female-to-male). Then plug the battery maintainer's power cord into an AC outlet. The power LED will light blue to indicate that the maintainer is plugged in and ready.
2. Check polarity of battery posts. Positive (POS, P, +) battery post usually has larger diameter than negative (NEG, N, -) post.
3. Determine which post of battery is grounded (connected) to the chassis. If negative post is grounded to chassis (as in most vehicles), see 4. If positive post is grounded to the chassis, see 5.
4. For negative-grounded vehicle, connect positive (red) clamp from battery maintainer to positive (POS, P, +) ungrounded post of battery. Connect negative (black) clamp to vehicle chassis or engine block away from battery. Do not connect clip to carburetor, fuel lines, or sheet-metal body parts. Connect to heavy gauge metal part of the frame or engine block.
5. For positive-grounded vehicle, connect negative (black) clamp from battery maintainer to negative (NEG, N, -) ungrounded post of battery. Connect positive (red) clamp to vehicle chassis or engine block away from battery. Do not connect clip to carburetor, fuel lines or sheet-metal body parts. Connect to a heavy gauge metal part of the frame or engine block.



Note: If the clamps are incorrectly connected with regard to polarity, the reverse polarity/fault LED () will light. Unplug the maintainer; then remove the clamps. Reconnect the clamps properly.

6. When the unit is properly connected and charging, the battery charging LED () will light yellow to indicate the battery is charging.
7. When the charging complete LED () lights green, the battery is fully charged.

When disconnecting maintainer, disconnect AC cord, remove clamp from vehicle chassis, and then remove clamp from battery terminal.

Charging Using the 12 Volt DC Accessory Plug

The 12 Volt DC Accessory Plug may be used with the battery installed.

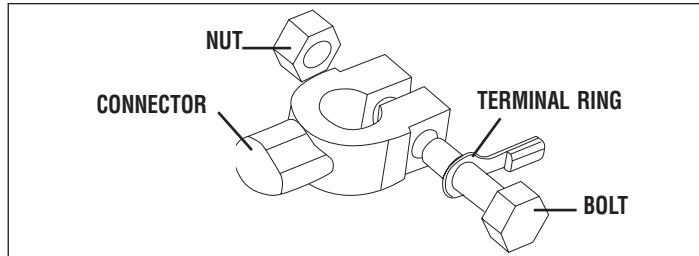
1. Insert the double barrel tip of the 12 volt DC accessory plug cable into the double barrel tip of the battery maintainer cable (male-to-female and female-to-male). Then plug the battery maintainer's power cord into an AC outlet. The power LED will light blue to indicate that the maintainer is plugged in and ready.
2. Insert the 12 volt DC accessory plug into the vehicle's 12 volt DC accessory outlet. Rotate the adapter slightly to make sure there is good contact.
3. When the unit is properly connected and charging, the battery charging LED () will light to indicate the battery is charging.
4. When the charging complete LED () lights, the battery is fully charged.

When disconnecting maintainer, disconnect AC cord, and then remove the 12 volt DC accessory plug from the vehicle accessory outlet.

Connecting and Charging the Battery with the Terminal Rings

CONNECTING THE MAINTAINER WITH TERMINAL RINGS

The maintainer's output leads have crimped, color-coded terminal rings (RED-POSITIVE and BLACK-NEGATIVE). These rings connect directly to the corresponding connectors on the battery posts.



1. Remove the nuts from the bolts of the battery post's connectors.
2. Position the RED terminal on the bolt of the POSITIVE battery post connector.
3. Position the BLACK terminal on the NEGATIVE post connector; then replace the nuts.

IMPORTANT: If there is any problem connecting the output leads, check with a reputable auto supply store or contact the Customer Service Department toll-free at 1-877-571-2391 for assistance in finding an appropriate connection device for your particular application.

CHARGING WITH THE TERMINAL RINGS

1. With the ring terminals connected to the battery and with ring terminal connector held as far away from the battery as practical, insert the double barrel tip of the terminal ring cable into the double barrel tip of the battery maintainer cable (male-to-female and female-to-male). Then plug the battery 2AMP PORTABLE BATTERY MAINTAINER's power cord into an AC outlet. The power LED will light blue to indicate that the maintainer is plugged in and ready.

Note: If the terminal rings are incorrectly connected with regard to polarity, the reverse polarity/fault LED (⚡) will light. Unplug the maintainer; then remove the terminal rings. Reconnect the terminal rings properly.

2. When the unit is properly connected and charging, the battery charging LED (🔋) will light yellow to indicate the battery is charging.
3. When the charging complete LED (🟢) lights green, the battery is fully charged.

When disconnecting maintainer, disconnect AC cord, and then remove the terminal rings from battery terminals.

CARE AND MAINTENANCE

Storage

- Store the unit in a clean, dry, cool place when not in use.
- Clean the unit casing and cords (as necessary) with a dry (or slightly damp) cloth. Ensure that unit is completely disconnected from battery and power source before cleaning.
- To maintain the operating condition and maximize the life of the maintainer cords, always coil them loosely for storage. Do not wrap them around the unit or crimp them with a tight band.

Fuse Replacement (12 Volt DC Charging Adapter)

1. Remove plug from accessory outlet. Remove the cap of the 12 volt DC accessory plug by turning counterclockwise and lifting off.
2. Remove center pin and spring. Remove fuse.
3. Replace fuse with same type and size fuse (5 amp).
4. Replace center pin and spring inside plug.
5. Replace the cap by fitting it onto the plug and turning clockwise.

ACCESSORIES

Recommended accessories for use with this unit may be available from the manufacturer. If you need assistance regarding accessories, please contact Customer Service at 1-877-571-2391.

⚠ WARNING: The use of any accessory not recommended for use with this appliance could be hazardous.

SERVICE INFORMATION

Whether you need technical advice, repair, or genuine factory replacement parts, contact Customer Service at 1-877-571-2391.

LIMITED ONE-YEAR WARRANTY

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

West Marine warrants this product to the original purchaser to be free from defects in material and workmanship for a period of one year from the date of the original purchase.

West Marine agrees, at our option, during the warranty period, to repair any defect in material or workmanship or to furnish an equal new, renewed or comparable product (whichever is deemed necessary) in exchange without charges, subject to verification of the defect or malfunction and proof of the date of purchase. Subsequent replacement products are warranted for the balance of the original warranty period.

Who is covered? This warranty is extended to the original retail purchaser for products purchased from an authorized West Marine dealer and used in the U.S.A.

What is covered? This warranty covers all defects in material and workmanship in this product. The following are not covered: software, installation/removal costs, damage resulting from accident, misuse, abuse, neglect, product modification, improper installation, incorrect line voltage, unauthorized repair or failure to follow instructions supplied with the product, or damage occurring during return shipment of the product. Specific license conditions and copyright notices for the software can be found via www.baccusglobal.com

What to do?

1. Before you call for service, check the troubleshooting guide in your owner's manual. A slight adjustment of any custom controls may save you a service call.
2. If you require service during the warranty period, you must carefully pack the product (preferably in the original package) and ship it by prepaid transportation with a copy of the original receipt from the retailer to an authorized service center.
3. Please describe your problem in writing and include your name, a return UPS shipping address (P.O. Box not acceptable), and a daytime phone number with your shipment.
4. For more information and for the location of the nearest authorized service center please contact us by one of the following methods:
 - Call us toll-free at 1-877-571-2391
 - E-mail us at CustomerService@baccusllc.com

Exclusion of Certain Damages: This warranty is exclusive and in lieu of any and all other warranties, expressed or implied, including without limitation the implied warranties of merchantability and fitness for a particular purpose and any obligation, liability, right, claim or remedy in contract or tort, whether or not arising from the company's negligence, actual or imputed. No person or representative is authorized to assume for the company any other liability in connection with the sale of this product. In no event shall the company be liable for indirect, incidental or consequential damages.

TROUBLESHOOTING

Problem	Cause	Action
Unit not charging	No power to unit	Check that the maintainer is properly connected to a live 120 volt AC outlet
	Battery will not accept a charge	If the battery to be charged has fallen below 2 volts, it cannot be charged with these maintainers

SPECIFICATIONS

14982037
BC2WWM

Input	120VAC, 60Hz, 0.6A
Output	12VDC, 2A nominal (only for use with 12V systems)

FCC COMPLIANCE

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

Warning: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

NOTES

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Toll Free: 1-877-571-2391

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