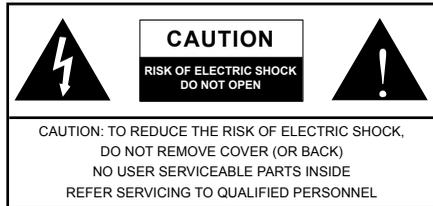


## IMPORTANT SAFETY INSTRUCTIONS

The apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus. The MAINS plug is used as the disconnect device, the disconnect device shall remain readily operable.

**Warning:** the user shall not place this apparatus in the confined area during the operation so that the mains switch can be easily accessible.

1. Read these instructions before operating this apparatus.
2. Keep these instructions for future reference.
3. Heed all warnings to ensure safe operation.
4. Follow all instructions provided in this document.
5. Do not use this apparatus near water or in locations where condensation may occur.
6. Clean only with dry cloth. Do not use aerosol or liquid cleaners. Unplug this apparatus before cleaning.
7. Do not block any of the ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plug, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Use only with a cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

**WARNING:** To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

**CAUTION:** Use of controls or adjustments or performance of procedures other than those specified may result in hazardous radiation exposure.



# MODEL CV-RG *DC-DC CONVERTER*

## INTRODUCTION

The Phonic DC to DC converter will allow users to connect a portable battery source to their RoadGear, for use at any location without a standard AC power source. The DC to DC converter changes plus 12 volt DC currents, from, say, a battery pack, into the plus / minus 48 volt DC current required by the RoadGear Integrated Mobile Audio System. It is recommended that users take the time to look carefully through this instruction leaflet as to gain maximum understanding of the operation and safety requirements of the DC to DC converter, then store the instruction leaflet in a place that is easy to find for future reference.

## SAFETY INSTRUCTIONS

Please read the following warnings carefully and keep in mind while operating the Phonic DC to DC converter.

- Take extreme caution when moving / operating / connecting battery packs, as a large battery is capable of short, high current output, able to cause physical harm to persons.
- Operate the DC to DC converter in a somewhat open area, allowing for adequate ventilation.
- When connecting or operating the DC to DC converter, do not allow loose jewelry, rings, or other conductive metals come into contact with battery terminals. Doing so may result in severe shock. Such things should be removed before attempting to operate the device.
- Do not expose this unit to moisture or rain, as to prevent fire or electrical shock.
- Sparks and open flames should not be in close proximity of a battery, as it may result in an explosion.
- As some batteries contain corrosive acids, try using sealed batteries as to avoid spillage of such materials.
- Do not attempt to disassemble or refit this product on yourself. Servicing should be undertaken by experienced and authorized Phonic technicians only.
- After transportation of electronic equipment in cold weather, condensation may form in or around internal circuits of such equipment, resulting in short circuits, damage to equipment and greatly increasing the risk of electrical shock. It is advisable to let all products reach ambient temperature before attempting to use them.

## CLEANING INSTRUCTIONS

Ensuring it is disconnected, use a slightly damp cloth to wipe the surface of the DC to DC converter. Under no circumstances should you allow water into the unit. Unconnected cables should be wiped occasionally as to avoid built up dust from entering equipment. Foreign matter should not be allowed to enter connections. Ensure that exposure to water and moisture is avoided.

## OPERATING INSTRUCTIONS

1. Ensure the on / off switch of your DC to DC connector is set to Off
2. Connect the two alligator clip terminals to the BP-RG battery pack; red clip connected to the positive terminal, black to negative.

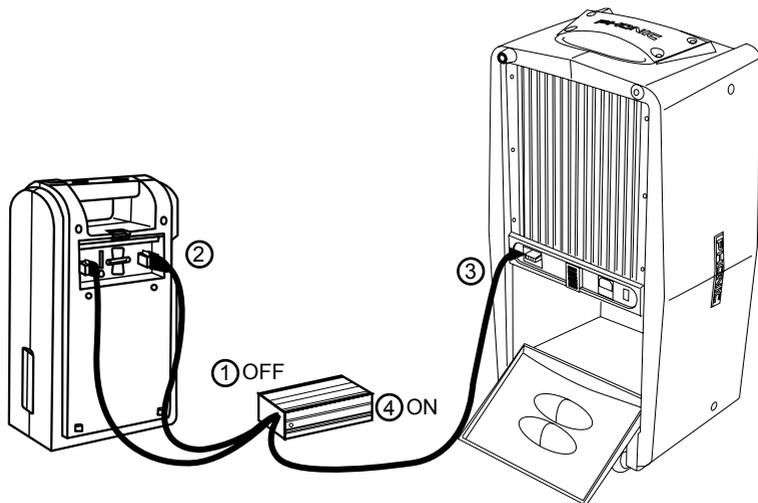
**NB.** If a clip accidentally comes loose while the Battery is in use, ensure you turn the DC to DC converter off before reconnecting to the battery. Not doing so may result in damage being done to both the DC to DC converter and the RoadGear.

3. Insert the adaptor's multi-pin terminal into the DC power input at the back of the RoadGear. Ensure the connector's clip is positioned the right way up to ensure the polarity of the connections is correct.
4. Turn the DC to DC converter's on / off switch on.

**NB.** When using the DC-to-DC converter, the on / off switch on the converter will act as the RoadGear's on / off button, as the connection of an external power supply bypasses the typical RoadGear AC power input and power switch.

## CV-RG SPECIFICATIONS

<b>Input Voltage</b>	DC 12V nominal
<b>Output Voltage:</b>	DC +48/-48V simultaneous
<b>Input Fuse:</b>	40 amp
<b>Output Fuse:</b>	10 amp
<b>Weight:</b>	1.27 kg (2.8 lbs)



## **TO PURCHASE ADDITIONAL PHONIC GEAR AND ACCESSORIES**

To purchase Phonic gear and optional accessories, contact any authorized Phonic distributor. For a list of Phonic distributors please visit our website at [www.phonic.com](http://www.phonic.com) and click on Get Gear. You may also contact Phonic directly and we will assist you in locating a distributor near you.

## **SERVICE AND REPAIR**

For replacement parts, service and repairs please contact the Phonic distributor in your country. Phonic does not release service manuals to consumers, and advice users to not attempt any self repairs, as doing so voids all warranties. You can locate a dealer near you at <http://www.phonic.com/where/>.

## **WARRANTY INFORMATION**

Phonic stands behind every product we make with a no-hassles warranty. Warranty coverage may be extended, depending on your region. Phonic Corporation warrants this product for a minimum of one year from the original date of purchase against defects in material and workmanship under use as instructed by the user's manual. Phonic, at its option, shall repair or replace the defective unit covered by this warranty. Please retain the dated sales receipt as evidence of the date of purchase. You will need it for any warranty service. No returns or repairs will be accepted without a proper RMA number (return merchandise authorization). In order to keep this warranty in effect, the product must have been handled and used as prescribed in the instructions accompanying this warranty. Any tempering of the product or attempts of self repair voids all warranty. This warranty does not cover any damage due to accident, misuse, abuse, or negligence. This warranty is valid only if the product was purchased new from an authorized Phonic dealer/distributor. For complete warranty policy information, please visit <http://www.phonic.com/warranty/>.

## **CUSTOMER SERVICE AND TECHNICAL SUPPORT**

We encourage you to visit our online help at <http://www.phonic.com/support/>. There you can find answers to frequently asked questions, tech tips, driver downloads, returns instruction and other helpful information. We make every effort to answer your questions within one business day.

# **PHONIC**

**support@phonic.com <http://www.phonic.com>**