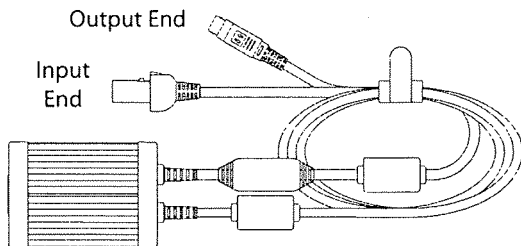


# DC POWER ADAPTER USER GUIDE

## DESCRIPTION

The DC Power Adapter and accessories allow you to operate many Respironics BiPAP<sup>®</sup> systems from a 12 VDC power source. Using the included Automobile Cigarette Lighter Adapter (or “Auto Adapter”), the Power Adapter plugs into a standard vehicle cigarette lighter socket. Using the included Battery Adapter Cable, it can be connected directly to a free-standing 12 VDC battery.



## GENERAL OPERATING INFORMATION

### Low Battery:

When operating a BiPAP<sup>®</sup> Harmony<sup>®</sup>, Synchrony<sup>®</sup>, or BiPAP S/T unit, the therapy device will sound an alarm when the battery requires recharging. You should stop using your therapy device with the battery immediately because the DC Power Adapter will automatically shut down shortly after the alarm sounds.

When operating a BiPAP Pro 2 or BiPAP Plus unit, the DC Power Adapter will shut down when the battery voltage is outside of the input voltage range (see Specifications later in this manual). Stop using your therapy device with the battery when this occurs.

If the DC Power Adapter shuts down when the battery is fully charged, follow the steps for remedying lack of output power in the Troubleshooting Guide later in this manual. The adapter will shut down when it is overloaded or if there is an excessive voltage drop between it and the battery.

### Placement of Power Adapter:

Do not operate the DC Power Adapter on or near a heating vent or piece of equipment that is generating heat above room temperature or in direct sunlight.

### Dispersion of Heat:

The DC Power Adapter will get warm during normal operation. The amount of heat generated will vary with the therapy device being operated. In order for proper heat dispersion to occur, do not place items on or over the DC Power Adapter during operation. Make sure that air is allowed to circulate freely around the adapter.

## WARNINGS AND CAUTIONS

Refer to the BiPAP S/T, BiPAP Harmony, Synchrony, and the BiPAP Pro 2/Plus User Manuals for a complete list of warnings and cautions associated with the use of this accessory with these therapy devices.

### WARNINGS

- Serious Shock Hazard. Do not open the DC Power Adapter. There are no user serviceable parts inside the adapter. Refer all servicing to your medical equipment supplier or Respiroics.
- When using the Battery Adapter Cable, the black clamp must always be connected to the negative terminal of the battery, and the red clamp must always be connected to the positive terminal.
- When connecting the Battery Adapter Cable to a battery, DO NOT allow loose-fitting metal jewelry to touch the battery posts.
- Always disconnect the cables from the power source and the therapy device before moving the equipment.
- When operating with the Auto Adapter, DO NOT operate while the vehicle is running.
- Not for use in a mobile environment.

### CAUTIONS

- The DC Power Adapter and accessories are designed for use with the Respiroics' products listed later in this document. The power adapter should not be used for any other purposes.
- Only Respiroics' connecting cables should be used. Use of any other cable types may cause damage to the adapter and the therapy device.
- The DC Power Adapter is intended for use on 12 V "positive hot" electrical systems. These systems may also be referred to as "negative ground" systems. If you are unsure about your electrical system's polarity, check with the vehicle's manufacturer.
- Do not connect the DC Power Adapter to household or recreational vehicle AC distribution wiring. Using the adapter on AC distribution wiring may cause damage to the AC power source, the adapter, and the therapy device.
- Respiroics recommends that a fully-charged 12 VDC 100 amp-hour, deep cycle marine-type battery be used. Use of a battery rated less than 100 amp-hours may reduce the length of operation. Each battery type has its own operating and recharging characteristics. You should be familiar with the requirements of the battery type that you are using.
- DO NOT leave the Auto Adapter plugged into your vehicle when the Power Adapter is not in use.

## FOR OPERATION FROM A FREE-STANDING 12 VDC BATTERY

Items Required: Respiroics Therapy Device  
12 VDC Battery  
DC Power Adapter  
Battery Adapter Cable

**NOTE:** The battery should be fully charged before use.

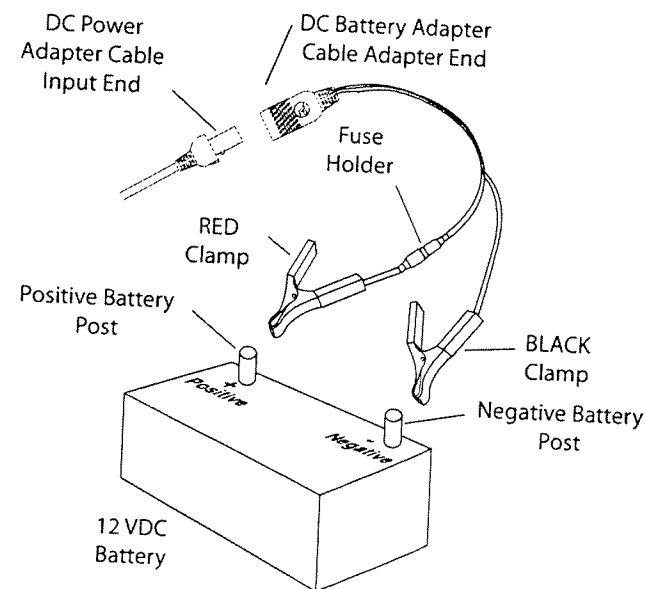
- Step 1 Turn OFF the therapy device.
- Step 2 Plug the DC Power Adapter's input cable into the Battery Adapter Cable.
- Step 3 Connect the Battery Adapter Cable clamps to a free-standing 12 VDC battery as follows (see illustration):

**Red Clamp - Positive Post (+)**

**Black Clamp - Negative Post (-)**

- Step 4 Plug the DC Power Adapter's output cable into one of the power receptacles on the rear of the Respiroics device.
- Step 5 Turn the therapy device on, and verify proper operation.

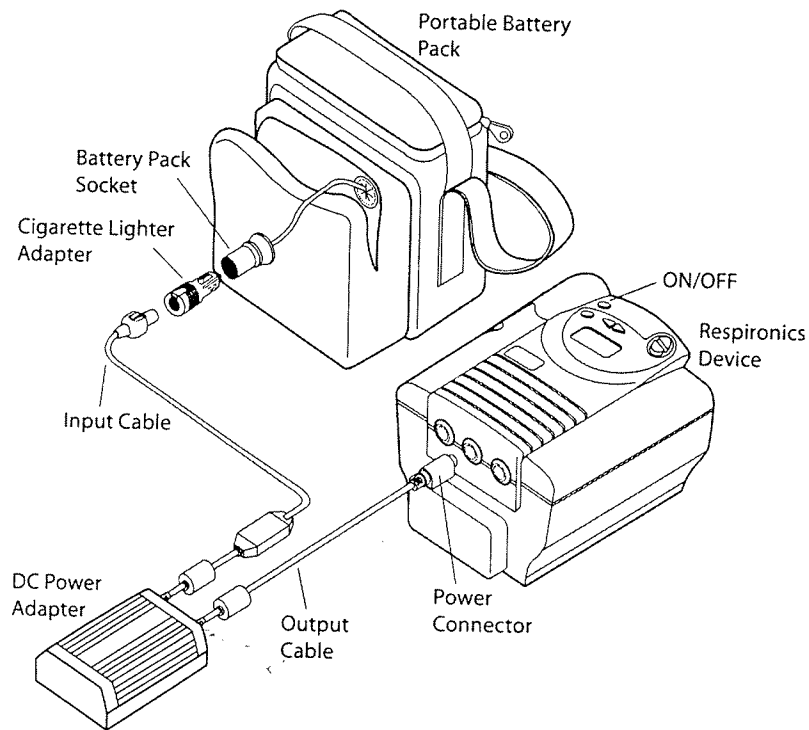
**NOTE:** Actual power consumption will vary according to prescription pressures and breathing patterns. The lower the prescription, the less power required.



## FOR OPERATION FROM A PORTABLE BATTERY PACK

Items Required: Respironics Therapy Device  
Portable Battery Pack  
DC Power Adapter  
Cigarette Lighter Adapter

- Step 1 Turn OFF the therapy device.
- Step 2 Connect the input cable end of the DC Power Adapter to the Cigarette Lighter Adapter.
- Step 3 Plug the Cigarette Lighter Adapter into the socket of the portable battery pack.
- Step 4 Plug the DC Power Adapter's output cable into one of the power receptacles on the rear of the Respironics device.
- Step 5 Turn the therapy device on, and verify proper operation.

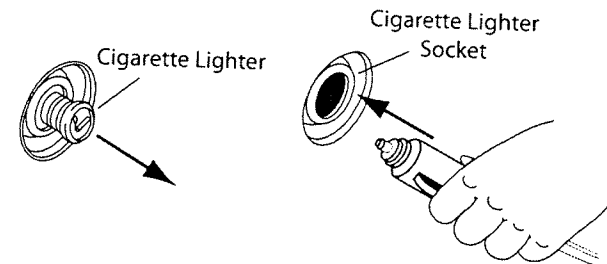


## FOR OPERATION FROM A VEHICLE CIGARETTE LIGHTER CONNECTION

Items Required: Respironics Therapy Device  
DC Power Adapter  
Cigarette Lighter Adapter

- Step 1 Turn OFF the therapy device.
- Step 2 Connect the Cigarette Lighter Adapter to the input cable end of the Power Adapter.
- Step 3 Remove the cigarette lighter from its socket.
- Step 4 Plug the Cigarette Lighter Adapter into the cigarette lighter socket.
- Step 5 Plug the DC Power Adapter's output cable into one of the power receptacles on the rear of the Respironics device.
- Step 6 Turn the therapy device on, and verify proper operation.

**CAUTION:** Use of this system with an automotive battery may drain the battery. Monitor operation to ensure there is sufficient power remaining to start the vehicle.



## SPECIFICATIONS

Voltage In: 10.5 - 16.7 VDC (The DC Power Adapter shuts down when the input voltage is outside of this range.)

Voltage Out: 20.0 ±2.0 VDC

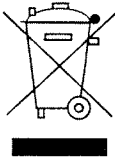
Maximum Continuous DC Output Power: 60 watts (3.0 A @ 20.0 VDC)

Operating Temperature: 5° to 40°C (41° to 104° F)

## SERVICE

**WARNING:** *Serious Shock Hazard. Do not open the DC Power Adapter. The fuse is the only serviceable part. Refer all other servicing to your home care professional or Respironics, Inc.*

## WEEE/RoHS RECYCLING DIRECTIVES



Compliant with the Waste Electrical and Electronic Equipment and Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Recycling Directives. If you are subject to these directives, refer to [www.respironics.com](http://www.respironics.com) for the passport for recycling this product.

## TROUBLESHOOTING GUIDE

**Problem: Lack of Power Output**

POSSIBLE CAUSES	SUGGESTED REMEDY
Automotive battery drainage	Refer to vehicle operator's manual.
Poor connections of DC cable system	Check that all connections are secure.
Battery Adapter Cable/Auto Adapter fuse is blown	Verify the correct fuses are being used. See the Fuse Replacement table later in this manual.

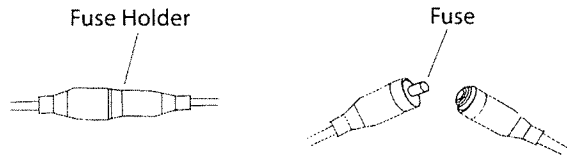
## REORDERING

REORDER NUMBER	DESCRIPTION
1012975	DC Power Adapter Kit. Includes: DC Power Adapter Battery Adapter Cable Cigarette Lighter Adapter
1022403	Battery Adapter Cable
1022402	Cigarette Lighter Adapter
1028869	Portable Battery Pack

## FUSE REPLACEMENT

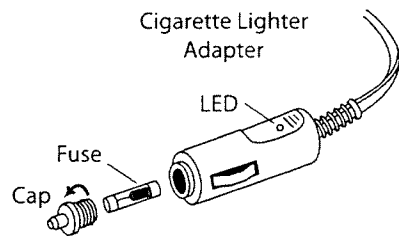
### BATTERY ADAPTER CABLE

- Step 1 Open the fuse holder by securing one end while turning the other end counter-clockwise.
- Step 2 Replace the fuse. See the table below for information on fuse types.
- Step 3 Close the fuse holder by securing one end and then turning the other end clockwise until the connection is tight.



### CIGARETTE LIGHTER ADAPTER

- Step 1 Open the fuse holder by turning the cap counter-clockwise and removing the fuse holder to expose the fuse.
- Step 2 Replace the fuse, being careful not to dislodge the spring inside the fuse holder. See the table below for information on fuse types.
- Step 3 Replace the tip of the fuse holder and cap. Turn the cap clockwise until the connection is tight.



REPLACEMENT FUSE	MANUFACTURER	PART NUMBER
North America: UL/CSA 248 5 mm x 20 mm Medium Time Delay 8 A 125/250 VAC	Cooper Bussmann	GMC-8A or equivalent
	Littlefuse	0234008 or equivalent
Worldwide: IEC 60127 5 mm x 20 mm Time Lag (T) 6.3 A 250 VAC	Wickmann	1951630000 or equivalent
	Schurter	0034.3125 or equivalent

## LIMITED WARRANTY

Respironics, Inc.® warrants that the DC Power Adapter shall be free from defects of workmanship and materials and will perform in accordance with the product specifications for a period of one (1) year from the date of sale by Respironics, Inc. to the dealer. If the product fails to perform in accordance with the product specifications, Respironics, Inc. will repair or replace, at its option, the defective material or part. Respironics, Inc. will pay customary freight charges from Respironics, Inc. to the dealer location only. This warranty does not cover damage caused by accident, misuse, abuse, alteration and other defects not related to material or workmanship.

RESPIRONICS, INC. DISCLAIMS ALL LIABILITY FOR ECONOMIC LOSS, LOSS OF PROFITS, OVERHEAD OR CONSEQUENTIAL DAMAGES WHICH MAY BE CLAIMED TO ARISE FROM ANY SALE OR USE OF THIS PRODUCT. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

THIS WARRANTY IS GIVEN IN LIEU OF ALL OTHER EXPRESS WARRANTIES. IN ADDITION, ANY IMPLIED WARRANTIES, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR THE PARTICULAR PURPOSE ARE LIMITED TO ONE YEAR. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.

To exercise your rights under this warranty, contact your local, authorized Respironics, Inc. dealer or Respironics, Inc. at one of the addresses below.

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