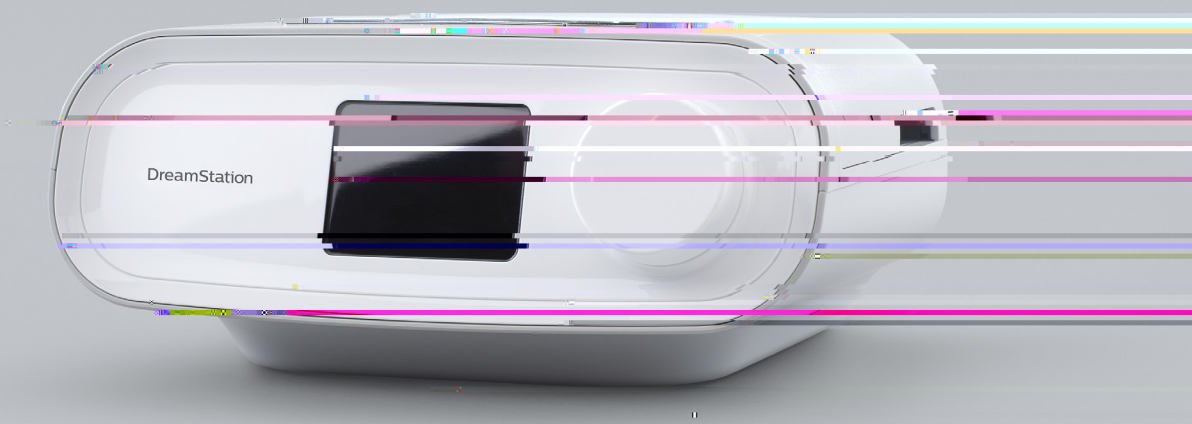
PHILIPS
RESPIRONICS

DreamStation

CPAP

CPAP Pro

Auto CPAP



User manual

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- Inspect the tubing for damage or wear. Discard and replace the tubing as necessary.
- Periodically inspect electrical cords and cables for damage or signs of wear. Discontinue use and replace if damaged.
- To avoid electrical shock, always unplug the power cord from the wall outlet before cleaning the device. DO NOT immerse the GHYLFH LQ DQ\ ÁXLGV
‡ ,I WKH GHYLFH LV XVHG E\ PXOWLSOH SHUVRQV VXFK DV UHQWDO GHYLFHV line between the device and the circuit tubing to prevent contamination.
- Be sure to route the power cord to the outlet in a way that will prevent the cord from being tripped over or interfered with by chairs or other furniture.
- This device is activated when the power cord is connected.
‡)RU VDIH RSHUDWLRQ ZKHQ XVLQJ D KXPLGLÀHU WKH KXPLGLÀHU PXVW DOZ WKH PDVN 7KH KXPLGLÀHU PXVW EH OHYHO IRU SURSHU RSHUDWLRQ
Note: Please see the “Limited Warranty” section of this manual for information on warranty coverage.

Cautions

A Caution indicates the possibility of damage to the device.

- Medical electrical equipment needs special precautions regarding EMC and needs to be installed according to EMC information. Contact your home care provider regarding EMC installation information.
- Mobile RF communications equipment can affect medical electrical equipment.
- Pins of connectors marked with the ESD warning symbol shall not be touched and connections shall not be made without special precautions. Precautionary procedures include methods to prevent build-up of electrostatic charge (e.g., air conditioning,

Installing/Replacing the Air Filters

Caution:

Connecting the Breathing Circuit

To use the system, you will need the following accessories in order to assemble the recommended breathing circuit:

- Philips Respironics interface (nasal mask or full face mask) with integrated exhalation port, or Philips Respironics interface with a separate exhalation device (such as the Whisper Swivel II)
‡ 3KLOLSV 5HVSLURQLFV ÁH[LEOH WXELQJ P IW
- Philips Respironics headgear (for the mask)

To connect your breathing circuit to the device, complete the following steps:

Navigating the Device Screens

The User Interface (UI) on this device allows you to adjust the device settings and view information about your therapy. The UI is comprised of the display screen and the control dial. Rotate the control dial in either direction to scroll through the menu options on the display screen.

Note: The display is not a touch screen. You must use the control dial to navigate the device menu.

To adjust a setting:

1. Rotate the control dial to your desired menu option.
2. Press the control dial to select that setting.
3. Rotate the control dial to change the setting.
4. Press the control dial again to save the change.

Note: The rotate dial icon on any screen indicates to rotate the dial to perform an action. The click dial icon on any screen indicates to press the dial to perform an action.

Note: Pressing the dial when the down arrow appears on any screen will take you to a sub-menu with more menu options. Pressing the dial when the up arrow appears on any sub-menu will return you back to the main menu.

Note: The screens shown throughout this manual are examples for reference only. Actual screens may vary based upon device model and provider settings.

Starting the Device

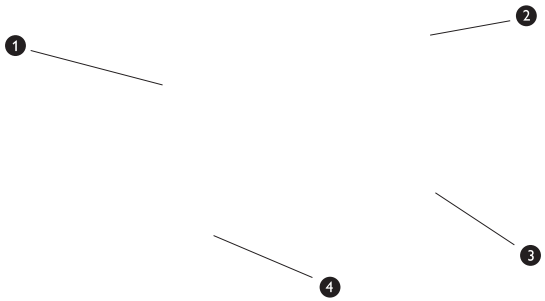
(QVXUH SRZHU LV VXSSOLHG WR WKH GHYLFH 7KH ÀUVW VFUHHQ W
the device model screen, and then the Home screen.

Home Screen

7KH ÀUVW WLPH WKH GHYLFH LV SRZHUHG RQ D SRS XS PD\ SURPSW
is Greenwich Mean Time, but if prompted you ma

0HQX 1DYLJDWLRQ 7KHUDS\ 21 DQG 2SWLRQDO +XP
:KLOH WKH GHYLFH LV GHOLYHULQJ WKHUDS\ \RX FDQ DGMXVW 7XEH
to choose either setting. Press and rotate the dial to change the setting.

Note: ,I \RX DUH XVLQJ WKH +XPLGLÀHU ZLWKRXW WKH +HDWHG 7XEH +XPLGLÀHU VHWWLQJ



Therapy Pressure Screen

Menu Navigation (Therapy OFF)

From the Home screen, you can scroll between the following menus. Only the menus available and enabled on your device will display.

My Info Preheat My Provider My Setup

My Info: This menu provides summary statistics of your therapy use.

Preheat (if available): 7 K L V I X Q F W L R Q O H W V \ R X Z D U P X S \ R X U K X P L G L À H U I R

Icon	Text	Description
90% Pressure	90% Pressure	This screen displays the nightly value of 90% Pressure for the most recent 1 day time frame. It also displays the average of these individual nightly values of 90% Pressure over a 7 day and a 30 day time frame. Available on the Auto model.

Preheat (if available):

Preheat On Screen

Preheat Off Screen

Note: The Preheat menu will only display if it is available on your device.

:KHQ XVLQJ D KXPLGLÀHU WKH GHYLFH FDQ SUHKHDW WKH ZDWHU WD
,Q RUGHU WR DFWLYDWH WKH SUHKHDW PRGH WKH EORZHU PXVW EH

Icon	Text	Description
VIC90	VIC90	This Visual Inspection Check screen will display a check code number created from information gathered over the most recent 90 day period. This 15 digit number will display as [[[[[[[[[[[[[[[. Your home care provider may periodically ask

Icon	Text	Description
	+XPLGLÀFDWLRQ	7KLVGLVSOD\V WKH +XPLGLÀFDWLRQ 0RGH EHLQJ)L[HG RU $GDSWLYH +XPLGLÀFDWLRQ ,I D KHDWHG DXWRPDWLFDOO\ VZLWFK WR +HDWHG 7XEH +XPLG appear next to the mode setting indicating that so long as the heated tube is attached to the device, this mode cannot be changed. However, the heater plate and tube temperature settings can still be adjusted on the device Therapy screen as normal.

Check Mask Fit

7KH RSWLRQDO FKHFN PDVN ÀW IHDWXUH FDQ EH HQDEOHG RU GLVDE
FKHFN WKH ÀW RI \RXU PDVN SULRU WR VWDUWLQJ WKHUDS\ 7KLV LV
assembly. Refer to your mask instructions if needed. Navigate to the Check Mask Fit screen under "My Setup" and press the control dial to initiate the check.

7KH GHYLFH ZLOO GHOLYHU D WHVW SUHVVXUH ZKLOH WKH VFUHHQ F
a red bar indicates improvement is needed. After the test, normal therapy will start and the screen will either display a green checkmark or a red "X". The green checkmark indicates that the leak found allows for optimal performance of the device. The red "X" indicates that the leak may affect device performance, however, the device will remain functional and deliver therapy.

Check Mask Fit Screen

Note: ,I \RX FKRRVH WR WU\ WR LPSURYH \RXU PDVN ÀW \RX FDQ VWR
WKH FKHFN PDVN ÀW 3OHDVH UHIHU WR WKH LQVWUXFWLRQV WKDW
procedure.

Sleep Progress

<RXU GHYLFH SURYLGHV VXPPDU\ LQIRUPDWLRQ DERXW \RXU WKHUDPS
screen displays your "Three Night Summary." It shows your nightly usage for the last 3 sleep sessions (measured in 24 hour periods, ending at noon each day). The most recent session is displayed in the right hand bar, labeled with the number of hours slept. A green bar indicates that you slept more than 4 hours, and a yellow bar indicates less than 4 hours of use.

The second screen shows the total number of 4+ hour nights that you have slept in the last 30 days. It provides a goal of sleeping at least 4 hours per night for 70% of the last 30 nights. Therefore the goal is 21 "good nights" of use. This screen provides a simple way to track your progress. The screen will stop displaying when you reach the goal, or after
WKH ÀUVW GD\V RI XVH KDV SDVVHG ZKLFKHYHU FRPHV ÀUVW

Three Night Summary Screen

Goal Progress Screen

Altitude Compensation

This device automatically compensates for altitude up to 7,500 feet. No manual adjustment is necessary.

Device Alerts

Device alerts are pop-ups that show up on the UI screen. There are 5 types of alerts described here:

- Status: These alerts are just the pop-up screen.
- ‡ 1 R W L À F D W L R Q These alerts consist of the pop-up screen in addition to a blinking Power LED on top of the device.
- Alert 1: These alerts consist of the pop-up screen, a blinking Power LED and an audible beep when displayed. This alert will not occur during therapy.
- Alert 2: These alerts consist of the pop-up screen, a blinking Power LED and an audible beep when displayed. This alert can occur during therapy.
- Safe State: These alerts consist of the pop-up screen, a blinking Power LED and a repeating audible beep.
  Note: Status alerts automatically time out after 30 seconds and their pop up screens disappear. All other alerts must be acknowledged to clear.

Alert Summary Table: 7 K H I R O O R Z L Q J W D E O H V X P P D U L] H V W K H D O H U W V

Alert	Icon	Type	Description	Possible Cause	Action
Data Activity: Do not remove SD card.		Status	SD card read/write underway.	n/a	No action needed.
Change Accepted		Status	& R Q À U P V D F F H S W D Q F H R I pd.5F F H(tion		

Alert	Icon	Type	Description	Possible Cause	Action
SD Card Removed.					

Alert	Icon	Type	Description	Possible Cause	Action
Automatic Off		Status	Displayed when therapy ends due to automatic off function.	The mask has been removed.	Put your mask back RQ FRQÀUP JRRG DQG WXUQ DLUÁRZ resume therapy.
Inlet blocked. &KHFN ÀO		1RWLÀFDWLRQ	Blocked Pathway	Blockage at device inlet.	Check device air inlet is not obstructed. &KHFN DLU ÀOWHU are installed properly; replace if needed.
Low Leak: Check Mask and Tube		1RWLÀFDWLRQ	Blocked Pathway	Blockage at tube or 9.8(Q q /Artifact BM(] TJ [4CID 49>>BDC 9 0 0 9 386.8	

Troubleshooting

Your device is equipped with a self-diagnostic tool call “Performance Check”. This tool can evaluate your device for certain errors. It also allows you to share key device settings with your Provider. Use Performance Check when directed by your provider.

The table below lists some of the problems you may experience with your device and possible solutions to those problems.

Problem	Why It Happened	What To Do
Nothing happens when you apply power to the device. The backlights on the buttons do not light.	There is no power at the outlet or the device is unplugged.	If you are using AC power, check the outlet and verify that the device is properly plugged in. Make sure there is power available at the outlet. Make sure the AC power cord is connected correctly to the power supply and the power supply cord is securely connected to the device's power supply. If the problem still occurs, contact your home care provider. Return both the device and power supply to your provider, so they can determine if the problem is with the device or power supply. If you are using DC power, make sure your DC power cord and battery adaptor cable connections are secure. Check your battery. It may need recharged or replaced. If the problem persists, check the fuse supplied with your DC cord. The fuse may need to be replaced. If the problem still occurs, contact your home care provider.
The airflow does not turn on.	There may be a problem with the blower.	Make sure the device is powered correctly. Make sure the Home screen appears on the user interface. Press the Therapy button. If the airflow does not turn on, there may be a problem with the blower. Contact your home care provider for assistance.
The device's display is erratic.	The device has been dropped or mishandled, or the device is in an area with high Electromagnetic Interference (EMI) emissions.	Unplug the device. Reapply power to the device. If the problem continues, relocate the device to an area with lower EMI emissions (away from electronic equipment such as cellular phones, cordless phones, computers, TVs, electronic games, hair dryers, etc.). If the problem still occurs, contact your home care provider for assistance.
The Ramp feature does not work when you press the Ramp button.	Your home care provider did not prescribe Ramp for you, or your therapy pressure is already set to the minimum setting.	If Ramp has not been prescribed for you, discuss this feature with your home care provider to see if they will change your prescription. If your provider has enabled Ramp, but the feature still does not work, check the current pressure setting on the Therapy screen. If the therapy pressure is set to the minimum setting (4.0 cmH_2O), or the Ramp starting pressure is the same as the therapy pressure, the Ramp feature will not work. Make sure that the ramp timw

Problem	Why It Happened	What To Do
, · P K D Y L Q J G L À L F X O W \ adjusting the heated K X P L G L À H U or the heated tube temperature setting.	The blower is not turned on, or the K H D W H G W X E H is not fully connected.	7 K H K X P L G L À H U V H W W L Q J D Q G W X E H W H P S H U D W X H 7 K H U D S \ 2 1 G L V S O D \ V F U H H Q & R Q À U P W K D W W K H E O Settings are visible on the right side of the screen, then adjust to desired comfort. If W K H E O R Z H U L V R Q E X W W K H K X P L G L À H U V H W W L Q J V V F U H H Q W K H Q X Q S O X J W K H G H Y L F H & R Q À U P W K D W H O H F W U L F D O F R Q W D F W V D U H Q R W R E V W U X F W H G R U D Q G R U K H D W H G W X E H D Q G U H F R Q Q H F W W K H G H Y L F the settings are still not visible, contact your provider for assistand0000· V S R Z H U V X

Warning:)RU VDIH RSHUDWLRQ WKH KXPLGLÀHU PXVW DOZD\V EH SRV
DW WKH PDVN 7KH KXPLGLÀHU PXVW EH OHYHO IRU SURSHU RSHU
Note: 5HIHU WR WKH KXPLGLÀHU·V LQVWUXFWLRQV IRU FRPSOHWH V

Using the SD Card

The DreamStation system comes with an SD card inserted in the SD card slot on the side of the device to record information for the home care provider. Your home care provider may ask you to periodically remove the SD card and send it to them for evaluation.

Updating Software Using the SD card

To check which version of software is currently on your device, navigate to My Provider and select Device Info.
You can update the device software using the SD card. The software update must be done when the therapy is off.

1. Insert an SD card with the new software version into the device. A pop-up screen appears asking “Would you like to upgrade software?”
2. Turn the control dial to select Yes and then press the control dial to start the upgrade. The busy icon appears while the upgrade is in progress. Do not remove power from the device.
3. If the software update is successful, the Change Accepted icon appears on the screen. Removed the SD card from the device to restart the device and use the new software.
4. If an SD card error is detected, the Change Rejected icon appears . Remove the SD card and reinsert. If the alert continues to occur, contact Philips Respironics at 1-800-345-6443 or 1-724-387-4000 for a new SD card.

Using the DreamStation Link Module

The Link Module is able to receive oximetry data and transfer it to the therapy device for home use or in a laboratory setting. For use in a laboratory setting, the Link Module also includes an RS-232 (or “DB9”) port to allow remote control of the DreamStation Sleep Therapy Device by a personal computer.

Note: Please consult the instructions that accompany the Link Module for installation and removal.
Note: There are no SpO2 alarms available.
Note: Oximetry data is not displayed.

Dispose of the module following the same disposal instructions for your therapy device.

Warnings:

- If you notice any unexplained changes in the performance of this device, if it has been dropped or mishandled, if water is spilled into the enclosure, or if the enclosure is broken, discontinue use. Contact your home care provider.

‡ 5HSDLUV DQG DGMXVWPHQWV PXVW EH SHUIRUPHG E\ 3KLOLSV 5H
8QDXWKRUL]HG VHUYLFH FRXOG FDXVH LQMXU\ LQYDOLGDWH WK

- Do not use any accessories, detachable parts, and materials not recommended by Philips Respironics. Incompatible parts or accessories can result in degraded performance.

Adding Supplemental Oxygen

Oxygen can be added to the patient circuit. Please note the warnings listed below when using oxygen with the device.

Warnings:

- When using oxygen with this system, the oxygen supply must comply with local regulations for medical oxygen.

‡

Supplying DC Power to the Device

A Philips Respironics DC power cord can be used to operate this device in a stationary recreational vehicle, boat, or motor home. In addition, a Philips Respironics DC battery adapter cable, when used with a DC power cord, allows the device to be operated from a 12 VDC free-standing battery.

Caution: $OZD\V HQVXUH WKDW WKH '& SRZHU FRUG VHFXUHO\ ÀWV LQ your home care provider or Philips Respironics to determine if you have the appropriate DC cord for your VSHFLÀF WKHUDS\ GHYLFH

Caution: :KHQ '& SRZHU LV REWDLQHG IURP D YHKLFOH EDWWHU\ WKH engine is running. Damage to the device may occur.

Caution: Only use a Philips Respironics DC Power Cord and Battery Adapter Cable. Use of any other system may cause damage to the device.

Refer to the instructions supplied with the DC power cord and adapter cable for information on how to operate the device using DC power.

Traveling with the System

When traveling, the carrying case is for carry-on luggage only. The carrying case will not protect the system if it is put through checked baggage. WUDYHOLQJ ZLWK WKH RSWLRQDO KXPLGLÀHU GR QR

For your convenience at security stations, there is a note on the bottom of the device stating that it is medical equipment and is suitable for airline use. It may be helpful to bring this manual along with you to help security personnel understand the DreamStation device.

If you are traveling to a country with a line voltage different than the one you are currently using, a different power cord or an international plug adaptor may be required to make your power cord compatible with the power outlets of the country to which you are traveling. Contact your home care provider for additional information.

Airline Travel

The device is suitable for use on airlines when the device is operating from an AC or DC power source.

Note: ,W LV QRW VXLWDEOH IRU DLUOLQH XVH ZLWK DQ\ RI WKH PRG

Cleaning the Device

Warning: To avoid electrical shock, always unplug the power cord from the wall outlet before cleaning the device.

'2 127 LPPHUVH WKH GHYLFH LQ DQ\ ÁXLGV

1.

6 S H F L À F D W L R Q V

Environmental

Operating Temperature: 5° to 35° C (41° to 95° F)
Storage Temperature: -20° to 60° C (-4° to 140° F)
Relative Humidity (operating & storage): 15 to 95% (non-condensing)
Atmospheric Pressure: 101 to 77 kPa (0 - 2286 m / 0 - 7500 ft)

Physical

Dimensions: 15.7 x 19.3 x 8.4 cm (6.2” L x 7.6” W x 3.3” H)
Weight (Device with power supply): Approximately 1.33 kg (2.94 lbs)

Service Life

The expected service life of the DreamStation Therapy Device and Link Module is 5 years.

Standards Compliance

This device is designed to conform to the following standards:
IEC 60601-1 General Requirements for Basic Safety and Essential Performance of Medical Electrical Equipment
ISO 80601-2-70 Sleep Apnea Breathing Therapy Equipment
EN 60601-1-2 Electromagnetic Compatibility
RTCA/DO-160G section 21, category M; Emission of Radio Frequency Energy

, (& & O D V V L À F D W L R Q

Type of Protection Against Electric Shock: Class II Equipment
Degree of Protection Against Electric Shock: Type BF Applied Part
Degree of Protection against Ingress of Water:
Device: Drip Proof, IP22
Link Module: Drip Proof, IP22
80W power supply: Drip Proof, IP22
Mode of Operation: Continuous

Electrical

AC Power Consumption (with 80W power supply) ² 9 $ & +] $
Note: Power supply is part of the medical electrical equipment.
DC Power Consumption: 12 VDC, 6.67 A
Fuses: There are no user-replaceable fuses.

5 D G L R 6 S H F L À F D W L R Q V

2 S H U D W L Q J) U H T X H Q F \ 5 D Q J H
Maximum Output Power: <10 dBm
Modulation: GFSK, P/4 DQPSK, 8DQPSK

Intake Port Filters

Pollen Filter: 100% Polyester
(I À F L H Q W # P L F U R Q V L] H
8 O W U D À Q H 1 %) L O W H U 6 \ Q W K H W L F) L E H U
(I À F L H Q W # P L F U R Q V L] H

Declared Dual-Number Noise Emissions Values

In accordance with ISO 4871
The A-weighted sound pressure level is:
Device: 26.1 dB(A) with and uncertainty of 2 dB(A).
' H Y L F H Z L W K + X P L G L À H U G % $ Z L W K D Q G X Q F H U W D L Q
The A-weighted sound power level is:
Device: 34.1 dB(A) with an uncertainty of 2 dB(A).
' H Y L F H Z L W K + X P L G L À H U G % $ Z L W K D Q X Q F H U W D L Q W
Note: Values determined according to noise test code given in ISO 80601-2-70:2015, using the basic standards ISO 3744 and ISO 4871.

Pressure Accuracy

Pressure Increments: 4.0 to 20.0 cm H_2O (in 0.5 cm H_2O increments)

Maximum static pressure accuracy, according to ISO 80601-2-70:2015:

Pressure	Static Accuracy
10 cm H_2O	± 0.3 cm H_2O

Static pressure accuracy has a measurement uncertainty of 3.7%

Maximum dynamic pressure variation, according to ISO 80601-2-70:2015:

Pressure	10 BPM	15 BPM	20 BPM
< 10 cm H_2O	± 0.4 cm H_2O	± 0.5 cm H_2O	± 0.8 cm H_2O
• W R 2 H P +	± 0.5 cm H_2O	± 0.8 cm H_2O	± 1.0 cm H_2O

Dynamic pressure accuracy has a measurement uncertainty of 4.3%

Note: $ O O W H V W V Z H U H S H U I R U P H G Z L W K D Q G Z L W K R X W K X P L G tubes and 15 mm heated tube.

Maximum Flow Rate (typical)

		Test pressures (cm H_2O)				
22 mm tubing	Measured pressure at the patient connection port (cm H_2O)	3.7	7.7	11.2	14.9	18.9
	$ Y H U D J H Á R Z D W W K H connection port (l/min)	S D W L H Q W		1hR2l.028 383	R2l.028 38	T5p4ort (l/min)

*XLGDQFH DQG 0DQXIDFWXUHU·V 'HFODUDWLRQ (OHFWURPDJQHWLF (PLVVLRQ
HQYLURQPHQW VSHFLÀHG EHORZ 7KH XVHU RI WKLV GHYLFH VKRXOG PDNH V

Emissions Test	Compliance	Electromagnetic Environment - Guidance
RF emissions CISPR 11	Group 1	The device uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment.
RF emissions CISPR 11	Class B	The device is suitable for use in all establishments, including domestic establishments and those directly connected to the public low-voltage power supply network.
Harmonic emissions IEC 61000-3-2	Class A	
9R OWDJH ÁXFWXDWLRQV)OLFNHU HPLVVLRQV IEC 61000-3-3	Complies	
Emission of Radio Frequency Energ		

Warranty

Respironics, Inc. warrants that the system shall be free from defects of workmanship and materials and will perform in accordance with the product specifications for a period of one year from the date of purchase by the end user. If the product fails to perform in accordance with the specifications during the warranty period, 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, water ingress, and other defects not related to material or workmanship. The Respironics, Inc. Service department shall examine any devices returned for service, and Respironics, Inc. reserves the right to charge an evaluation fee for any returned device as to which no problem is found after investigation by Respironics, Inc. Service.

This warranty is non-transferable by unauthorized distributors of Respironics, Inc. products and Respironics, Inc. reserves the right to charge dealers for warranty service of failed product not purchased directly from Respironics, Inc. or authorized distributors.

5HVSLURQLFV ,QF GLVFODLPV DOO OLDELOLW\ IRU HFRQRPLF ORVV may be claimed to arise from any sale or use of this product. Some states do not allow the exclusion or limitation of LQFLGHQWDO RU FRQVHTXHQWLDO GDPDJHV VR WKH DERYH OLPLWDW

This warranty is given in lieu of all other express warranties. In addition, any implied warranties – including any ZDUUDQW\ RI PHUFKDQWDELOLW\ RU ÀWQHVV IRU WKH SDUWLFXODU limitations on how long an implied warranty lasts, so the above limitation may not apply to you. This warranty gives \RX VSHFLÀF OHJDO ULJKWV DQG \RX PD\ DOVR KDYH RWKHU ULJKW

To exercise your rights under this warranty, contact your local authorized Respironics, Inc. dealer or contact Respironics, Inc. at:

1001 Murry Ridge Lane

Murrysville, Pennsylvania 15668-8550

REF 1120830