PHILIPS

RESPIRONICS

BiPAP A40 Pro

BiPAP A40 EFL

Provider quick start guide

Contents

- Getting Started
- Navigating the Menu and Settings
- Display Parameters

- Supplemental Oxygen
- Connection to Oximetry
- Cleaning and Disinfection
- Humidification and Circuits

Warning! Remove this guide before giving the device to the patient. Only medical professionals should adjust pressure settings.

Note: These Quickstart Guide instructions do not replace the complete User Manual included with the device.



Getting Started

#	Device Navigation
1	Display Screen
2	Perform action specified on screen (humidifier setting, cancel action, or exit menu)
3	Navigate menus or change settings
4	Perform action specified on sceen (activate ramp, select/ modify/confirm parameters)
5	Alarm Indicator/Audio Pause Button
6	Start/Stop Button



#	Back of device	
1	Accessory slot (cover shown)	
2	SD card slot	5
3	DC power inlet	
4	AC power inlet	
5	Oxygen port	
6	Filter area	Ļ







ტ

Step	Start Therapy
1	Connect the device to AC or DC power source, or use detachable battery module
2	Press () to switch on the device
3	Select Therapy to start the treatment

How to Unlock

To unlock the device:

1	Press and hold 🛞 and 💌 for a few seconds to access Setup page	s
2	Scroll down and select 'Options'	
3	Modify 'Menu access' from 'Limited' to 'Full'	
4	Press OK to validate	(-
5	Press Finish and Exit to come back to the main screen	2
🕂 When 🕤 appears on the main screen,		



Stop Therapy

the device is unlocked

To stop therapy:

Option 1:

1	Press the power button $\textcircled{0}$
2	Select Standby to stop therapy
3	Press OK

Option 2:



Hold the power button (d) down for 3 seconds to stop therapy and power down the device.



Power Off

To power off the device:

Option 1:

1	Press the power button 🕲
2	Press the down button to select power off
3	Press OK

Option 2:

1

Hold the power button (b) down for 3 seconds to stop therapy and power down the device.

Navigating the Menu and Settings



To navigate through the Options menu:

• Use is to scroll through the menu.

• Use the left and right _____ buttons to perform the actions specified on the on-screen buttons and set according to your preference.

BiPAP A40 Pro display

Under 'Options', you have access to the following parameters:

Menu Access	Full (device unlocked), Limited (device locked)
Detailed View	On (monitored data on screen), Off (no montiored data on screen, only time and date)
Language	Choose desired language
Pressure Units	cmH ₂ O, hPa.
Breath Indicator	Machine (controlled breath), Patient (spontaneous breath)
Keypad Lock	Off (buttons active), On (buttons inactive)
Keypad Backlight	Off, On
LCD Brightness	1 (dimmest) – 10 (brightest)
Screen Saver	Dim (backlight is decreased), Breath (black screen, but manometer and breath indicator are visible), Off (no screen saver)
Date, Time Format	Date and time settings
Blower Hours	Number of hours the blower has been active
Therapy Hours	Number of hours the patient receives therapy (resettable)

Note: See the BiPAP A40 EFL User Manual or the ExpiraFlow Screening Quick Set-up Guide for ExpiraFlow Screening instructions.

Main Screen



SD card inserted

Symbols and Icons

Α	Apnea alarm enabled
*	Audio pause is active
8	Circuit disconnect alarm enabled
\boxtimes	SD Card error (bad memory card inserted)
	Detachable battery is 80% capacity
ŀ+	Detachable battery is 20% capacity
	Detachable battery is nearly depleted
н <mark>е</mark>	Detachable battery is being charged
HR	Heart Rate
SpO₂	Oxygen Saturation
Ð	Full Menu Access Mode (Provider mode)
FLEX: 1	FLEX enabled, FLEX setting (eg. 1)
AVAPS: 1	AVAPS enabled, AVAPS setting (eg. 1)
۰ <i>س</i> ۱	Humidifier connected, Humidifier setting (eg. 1)
£££1	Humidifier active, Humidifier setting (eg. 1)
x	Bad humidifier state (flashing symbol displays)
<u>الملم</u>	Heated tube connected, Tube Tempoerature setting (eg. 1)
<u></u> 1	Heated tube active, Tube Temperature setting (eg. 1)
<u>سم</u> x	Bad heated tube state (flashing symbol displays)
	Ramp activated

Menu, Settings, and Alarms

Settings

BiPAP A40 Pro Modes	C, S, S/T, T, PC, AVAPS-AE
BiPAP A40 EFL Modes	C tt, S, S/T, PC
Trigger Type	Auto-Trak, Auto-Trak, (sensitive), Flow Trigger
Flex Lock (only in S mode)	Off (unlocked), On (locked)
Flex (only in S mode)	Off, 1, 2, 3
ExpiraFlow (BiPAP A40 EFL) †	Off, On
Automated Airway Management ††	Off, On
AVAPS	Off, On
EPAP	4 to 25 cmH ₂ O, in 0.5 cmH ₂ O increments
Breath Rate	Auto, 0 to 40 BPM, increments of 1; 4 to 40 BPM (T and PC modes), increments of 1
Inspiratory Time	0.5 to 3 seconds, in 0.1 second increments
Rise Time Lock	Off (unlocked), On (locked)
Rise Time	1 (fastest) to 6 (slowest)
Ramp Length ††	5 to 45 minutes, in 5 minute increments
Ramp Start Pressure ††	4 cmH ₂ O to prescribed EPAP, in 0.5 cmH ₂ O increments
Heated Tube Humidification *	Off, On
Humidity Level *	1, 2, 3
Tube Temperature *	Off (0), 1, 2, 3, 4, 5
System One Humidfication	Off
	On (System One humidity control)
Tubing Type Lock	Off (unlocked), On (locked)
Tubing Type	15mm, 22mm
Bacteria Filter (symbol)	Off, On
System One Resistance Lock	Off (unlocked), On (locked)
System One Resistance (mask type)	Off (0), X1, X2, X3, X4, X5 or Invasive (only for BIPAP A40 Pro)

* only when using heated tube

† not availalbe when Automated Airway Management is enabled

†† not available when ExpiraFlow is enabled

Menu, Settings, and Alarms (continued)

Patient Alarms

Circuit Disconnect Alarm	Off, 15 or 60 seconds
Apnea Alarm	Off, 10, 20 or 30 seconds
Low Tidal Volume Alarm **	Off, On
Low Minute Ventilation Alarm	Off, 1 to 99 LPM, in 1 LPM increments
High Respiratory Rate Alarm	Off, 4 to 60 BPM, in 1 BPM increments
Low SpO ₂	Off, 50 to 95% in 1% increments

** only when AVAPS is enabled

Settings and Alarms: AVAPS-AE

AVAPS Rate	0.5 to 5 cmH ₂ O/min, in 0.5 cmH ₂ O/min increments
Tidal Volume	200 ml to 1500 ml, in 10 ml increments
Maximum Pressure	6 to 40 cmH ₂ O, in 0.5 cmH ₂ O increments
Pressure Support Max	Pressure Support Min to 36 cmH ₂ O, in 0.5 cmH ₂ O increments
Pressure Support Min	2 to Pressure Support Max cmH ₂ O, in 0.5 cmH ₂ O increments
EPAP Max Pressure	4 to EPAP Max cmH ₂ O, in 0.5 cmH ₂ O increments
EPAP Min Pressure	EPAP Min to 25 cmH $_2$ O, in 0.5 cmH $_2$ O increments
Breath Rate	Auto, 0 to 40 BPM, increments of 1

Ventilation Features Settings

ExpiraFlow

Pressure Support	Pressure Support: 0 to 36 cmH ₂ 0
EPAP Max	4 to 25 cmH ₂ O, in 0.5 cmH ₂ O increments
EPAP Min	$4 \text{ cmH}_2\text{O}$ to EPAP Max, in 0.5 cmH ₂ O increments
Max Pressure (AVAPS Enabled)	4 to 40 cmH ₂ O, in 0.5 cmH ₂ O increments
Pressure Support Min (AVAPS Enabled)	2 to 36 cmH ₂ O, in 0.5 cmH ₂ O increments
Pressure Support Max (AVAPS Enabled)	2 to Pressure Support Max cmH ₂ O, in 0.5 cmH ₂ O increments

Menu, Settings, and Alarms (continued)

Pressure Support	0 to 36 cmH ₂ O, in 0.5 cmH ₂ O increments		
EPAP Max	4 to 25 cmH ₂ O, in 0.5 cmH ₂ O increments		
EPAP Min	4 cmH ₂ O to EPAP Max Pressure, in 0.5 cmH ₂ O increments		
Max Pressure (AVAPS Enabled)	6 to 40 cmH ₂ O, in 0.5 cmH ₂ O increments		
Pressure Support Max (AVAPS Enabled)	2 to 36 cmH ₂ O, in 0.5 cmH ₂ O increments		
Pressure Support Min (AVAPS Enabled)	2 to Pressure Support Max cmH ₂ O, in 0.5 cmH ₂ O increments		

Automated Airway Management (AAM)

AVAPS

AVAPS Rate	0.5 to 5 cmH ₂ O/min, in 0.5 cmH ₂ O/min increments
Tidal Volume	200 to 1500 ml, in 10 ml increments
IPAP Max	4 to 40 cmH ₂ O, in 0.5 cmH ₂ O increments
IPAP Min	4 cmH ₂ O to IPAP Max, in 0.5 cmH ₂ O increments

Preheat Mode

In order to activate the Preheat mode, the blower must be "Off" and a humidifier or heated tube must be attached. From the Standby screen, select the Preheat key. The humidifier in use icon (3) or the heated tube in use icon (3) will be displayed.

Display Parameters

Limited View



Detailed View



BiPAP A40 EFL

BiPAP A40 EFL

Pressure	0 to 40 cmH ₂ O
Exhaled Tidal Volume (Vte)	0 to 2000ml
Leak	0 to 175 LPM
ΔXrs	0 to 25 cmH ₂ O/Liter/Second (BiPAP A40 EFL/ExpiraFlow Enabled)
Exhaled Minute Ventilation (MinVent)	0 to 25 LPM (Not available when BiPAP A40 EFL/ ExpiraFlow Enabled)
Respiratory Rate (RR)	0 to 60 BPM
Respiratory System Resistance (RTotal)	0 to 999 cmH ₂ O/Liter/Second (BiPAP A40 EFL/ExpiraFlow Enabled)
Percentage of Flow Limited Breaths (%FlowLim)	0 to 100% (BiPAP A40 EFL/ExpiraFlow Enabled)
I/E Ratio	9.9:1 to 1:9.9 (Not displayed if ExpiraFlow is enabled)

Alarms

When an alarm condition occurs:

1	The alarm LED indicator on the Alarm Indicator/Audio Pause button lights
2	The audible alarm sounds
3	A message appears on the screen describing the type of alarm
4	To silence the alarm for 60 seconds, press the Alarm Indicator/Audio
	Pause button
5	If the alarm is not resolved, the audible alarm will sound again

Refer to the User Manual to review all alarm descriptions, types, informational messages, and what to do when an alarm occurs.

Ventilator Inoperative Alarm Guidance for Patient

If patient experiences a Ventilator Inoperative alarm, they should be trained to follow the procedures in the User Manual.

If a Ventilator Inoperative alarm occurs, the patient has to power off the device to acknowledge the alarm.

1	Press Start/Stop button
2	If the display is operational, the "Power Off" confirmation screen appears
3	Press the power button 🐵 to shut off device and silence the alarm
4	Immediately remove patient from ventilator and connect them to alternate source of ventilation
5	Contact your home care service provider for service

Refer to the Settings and Alarms section to review the settable patient alarm parameters.

Humidification & Circuits

Humidification

The BiPAP A40 Pro and BiPAP A40 EFL support SystemOne Heated and Heated Tube Humidification for additional patient comfort. Refer to the Accessory Guide for humidifier details and replacement water chambers.

Note: Heated Tube Humidification requires a Heated Tube Humidifier with a Heated Tube Circuit (HT, 15mm Heated Tube)

Connecting Inline Bacteria Filter



Notes:

- a. Heated Tube Humidification requires: Heated Tube Humidifier and HT15 circuit
- b. If an inline bacteria filter is required with humidification:
 - i. Heated Humidifier: Attach filter between humidifier and circuit
 - ii. Heated Tube Humidifier: Attach filter between circuit and mask

Docking and Undocking Humidifier

To attach the humidifer:

- Remove the side panel on the right or outlet side of the device
- Align and push the ventilator and humidifier together

To remove the humidifier:

Pull the release latch outward on the bottom of the humidifier



Note: do not turn Ventilator and Humidfier upside down.

Filling the Humidifier Chamber



Battery Module

To connect the battery module to the BiPAP A40 Pro or BiPAP A40 EFL and install the detachable battery, complete the following steps:

1	Remove the side cover on the therapy device
2	Line up the detachable battery module and the therapy device side by side
3	Press the two units together until they snap into place
4	Insert the detachable battery into the battery module, and close the lid
5	Verify the battery symbol appears on the display



Circuits and Humidification

The circuits and inline bacteria filter components supported for the BiPAP A40 Pro and BiPAP A40 EFL are:

Part Number	Description	Application	
1007800	Tubing 6 ft., High-Temp	NIV Therapy- Bi PAP A40 Pro and BiPAP A40 EFL	
HT15*	15mm Heated Tube	NIV Therapy- Bi PAP A40 Pro and BiPAP A40 EFL	
PR15*	15mm Tube	NIV Therapy- Bi PAP A40 Pro and BiPAP A40 EFL	
1032907	SystemOne Performance Tubing 6 ft. (22mm)	NIV Therapy- Bi PAP A40 Pro and BiPAP A40 EFL	
C06417	Filter, Bacterial, Disposable single component	Bacteria filter is required when ExpiraFlow EFL Screening is enabled	
342077	Bacteria Filter, Box 10 pack		
C06418	Filter, Bacterial, Disposable, Case of 50		
332113	Whisper Swivel II	To be used with the AF541 mask during screening	

*The BiPAP A40 Pro and BiPAP A40 EFL share the same circuits as the DreamStation Sleep Therapy and non-invasive Ventilator platform.

Supplemental Oxygen

Supplemental O, must not exceed 15 L/min at a maximum pressure of 10 psi.

Please refer to the User Manual for all warnings, cautions, and alarms.



When administering fixed-low flow supplemental oxygen, the oxygen concentration may not be constant. The inspired oxygen concentration will vary, depending on pressure, patient flows, and circuit leak. Appropriate patient monitoring should be used, as medically indicated, such as an alarming pulse oximeter.

Note: Low flow oxygen may be added into the patient circuit or mask instead of directly into the oxygen inlet port on the back of the ventilator.

Part Number Description		Application	
1040390	Oxygen Quick - Connect Insert, 2 Pack - Oxygen inlet adapter	Integrated O ₂	
312710	O ₂ Enrichment Attachment Connector	Required accessories to provide supplemental O_2 in the patient circuit.	
302418	Pressure Relief Valve	Note: Supplemental O ₂ cannot be	
C06334	Connector/M 22mm ID, Female	added in heated tube circuit with the SystemOne Heated Tube Humidifier	
1044191	Adapter, 22mm X 15mm OD - Connects circuit to Pressure Relief Valve		

Connection to Oximetry



To connect the oximetry module:

Α	Remove the cover from the accessory slot on the back of the device
В	Remove the cover from the oximetry

- accessory
 Plug the oximetry accessory into the accessory slot
 Plug the oximetry sensor into the oximetry
- D Plug the oximetry sensor into the oximetry module
- E Insert SD Card

When the oximetry module is connected, and detailed view is ON, the SpO_2 and heart rate values are monitored on the main screen (see below).



For a list of accessories refer to "Accessory List" part number 1142478 that is included with your ventilator system, or contact Philips Respironics Customer Service.

Cleaning and Disinfection Overview

	Home Cleaning	Home Disinfection	Hospital cleaning	Hospital Disinfection
Ventilator Exterior	mild liquid dishwashing detergent and water, weekly	70% Isopropyl Alcohol if available, cloth with chlorine bleach (8.3% sodium hypochlorite), 1 to 10 part reduction in water weekly	mild liquid dishwashing detergent and water, weekly and between patients	70% Isopropyl Alcohol cloth with chlorine bleach (8.3% sodium hypochlorite), 1 to 10 part reduction in water weekly and between patients
Air Path	N/A	Note: Use an inlet filter and bacteria filter	N/A	Note: Use an inlet filter and bacteria filter between patients Keredusy® disinfection (ozone) treatments

Note: Refer to the User Manual for complete details on the procedures and methods for cleaning and disinfection.



Respironics Inc. 1001 Murry Ridge Lane Murrysville, PA 15668 USA Respironics Deutschland GmbH & Co. KG Gewerbestrasse 17 82211 Herrsching, Germany ECIREP



1142619 R00 JJB 06/20/2019

© Koninklijke Philips N.V., 2019. All rights reserved.