PHILIPS

RESPIRONICS

Trilogy Evo

Quick start guide
for caregivers

Welcome to your Trilogy Evo ventilator from Philips Respironics. Trilogy Evo is designed for home, on-the-go, and hospital applications, for children and adults, so it can transition with patients through changes in their conditions or their environment.

Trilogy Evo features include:

· Easy to use with a large (8") touch screen

· Up to 15 hours of power[1] for peace-of-mind during extended trips when away from home

· Less than 13 lbs (5.8 kg) including internal and integrated detachable battery, for the perfect blend of weight and power

· Increased durability and improved mobility with in-use carrying case, or wheel chair and roll-stand mounts[2]

So your ventilator can stay with you wherever you go.

1. *Run time mode settings for Trilogy Evo: A/C-VC mode ActivePAP circuit, PEEP of 3 cmH2O and Vt 800ml*
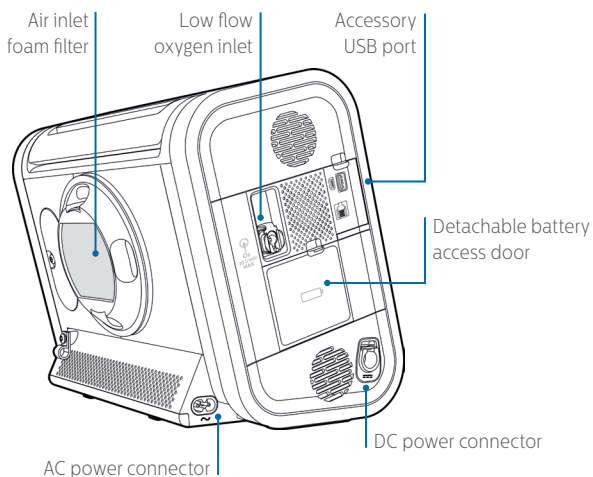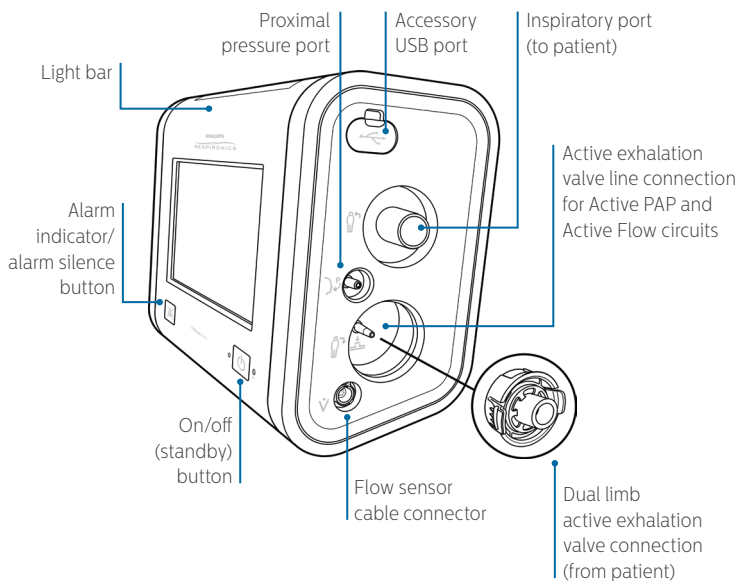2. *Available for purchase*

Adjusting to using your new ventilator, Trilogy Evo, will be easy.

· Settings to synchronize with your breathing pattern (inhale and exhale), for a natural and comfortable experience

· Multiple settings for timing, volume, and pressure, so it can be customized for your needs now and in the future

· Available support and training with additional information

This guide provides important information that will help you use the device. *Refer to the caregiver manual for complete details.*
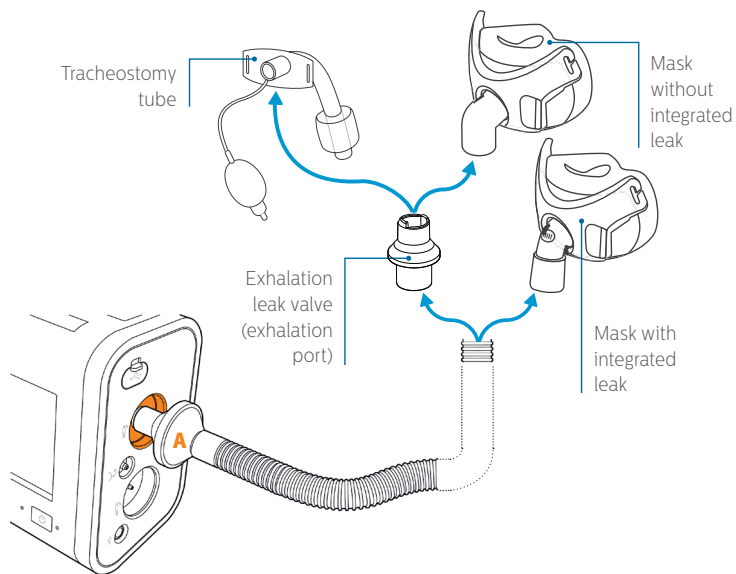
Overview

Proximal pressure port

Accessory USB port

Inspiratory port (to patient)

Light bar

Active exhalation valve line connection for Active PAP and Active Flow circuits

Alarm indicator/ alarm silence button

On/off (standby) button

Flow sensor cable connector

Dual limb active exhalation valve connection (from patient)

Air inlet foam filter

Low flow oxygen inlet

Accessory USB port

Detachable battery access door

DC power connector

AC power connector

Overview

Your Trilogy Evo has been programmed with _____ prescriptions:

Prescription name	Circuit to use					Accessories		
	Passive *see p.6*	ActivePAP *see p.7*	Active Flow *see p.8*	Dual Limb *see p.9*	MPV *see p.10*	Humidifier	O_2	Other

Additional notes:

Available circuit options
Passive circuit

Tracheostomy tube

Mask without integrated leak

Exhalation leak valve (exhalation port)

Mask with integrated leak

A

A. Connect the bacteria filter on the circuit to the inspiratory port.

A

Active PAP circuit

Active exhalation valve

Proximal pressure port

Connect to mask or trach
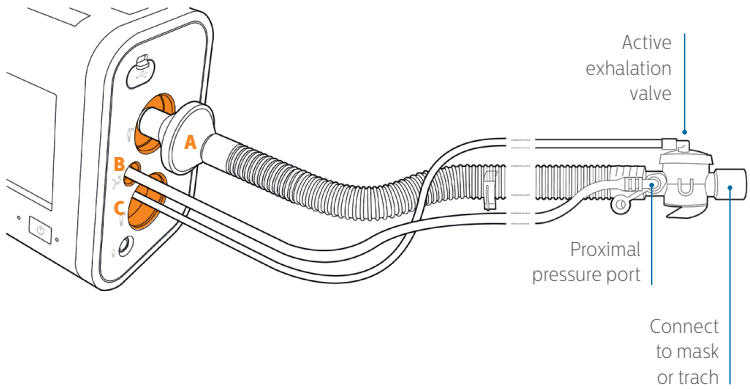
A. Connect the bacteria filter on the circuit to the inspiratory port.

B. Connect the proximal pressure line (wider diameter than active exhalation valve line) to the proximal pressure port.
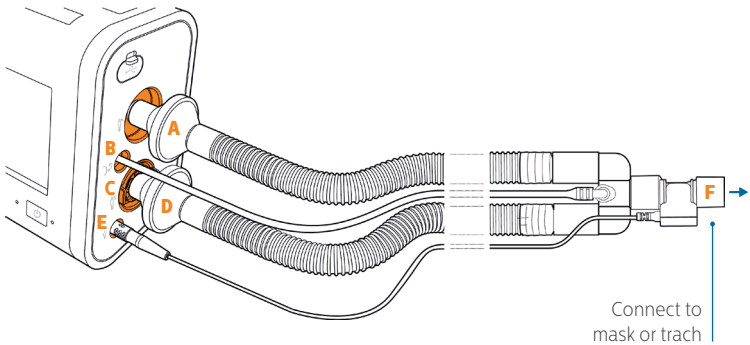
C. Connect the active exhalation valve pressure line to the active exhalation valve line connection.

Active Flow circuit
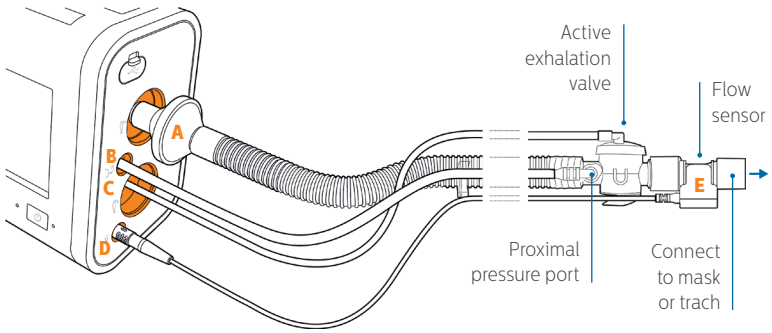
Active exhalation valve

Flow sensor

A

B
C

D

Proximal pressure port

E

Connect to mask or trach

A. Connect the bacteria filter on the circuit to the inspiratory port.

B. Connect the proximal pressure line (wider diameter than active exhalation valve line) to the proximal pressure port.

C. Connect the active exhalation valve pressure line to the active exhalation valve line connection.

D. Attach the flow sensor cable to the flow sensor cable connector.

E. Attach the flow sensor to the active exhalation valve on the circuit.

Dual Limb circuit

Connect to
mask or trach

A. Connect the bacteria filter end of the colored inspiration tube to the inspiratory port.

B. Connect the proximal pressure line to the proximal pressure port.

C. Install the active exhalation valve into the recessed AEV port. Press until both sides click into place.

D. Attach the bacteria filter end of the clear expiration tube to the AEV.

E. Attach the flow sensor cable to the flow sensor cable connector.

F. Attach the flow sensor to the Y-shaped connector on the circuit.

# Available circuit options *(continued)*
MPV circuit
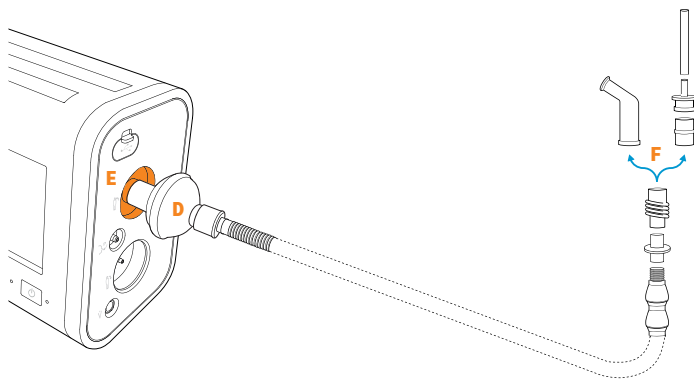
A. Fully extend and straighten the circuit support arm. See the diagram below.

B. Feed the circuit tube (15mm) through the center of the circuit support arm until it exits the other end.

C. Attach the clamp to a wheelchair if required.

D. Attach the reducer cuff and then the bacteria filter onto the device-end of the circuit tube.

E. Connect the bacteria filter on the circuit to the inspiratory port on the Trilogy Evo.

F. Attach the coupler and miniature flextube (optional) onto the circuit support arm before connecting your chosen patient interface.
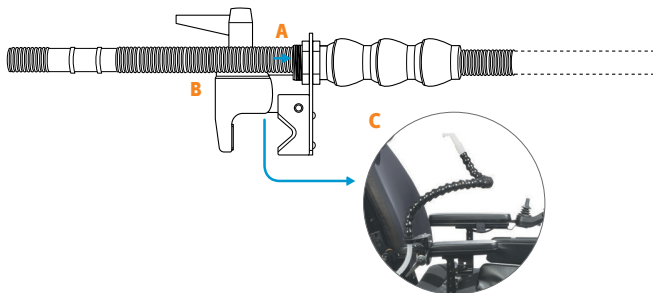
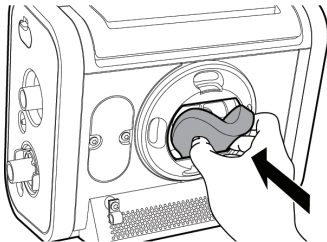# Getting started
Prepare for use
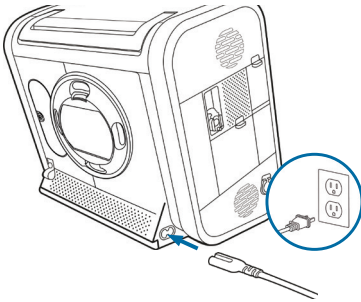
1. Plug in device

Use the AC cord provided to connect AC power. The green LED light next to the on/off (standby) button should be lit.
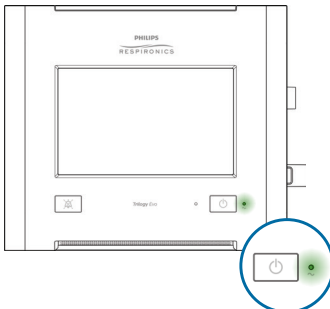

If AC power is not available, you can use battery or DC power.

2. Install filter

To install the air-inlet foam filter, pinch the filter as you press it into the filter cover as shown. Position it securely behind the top and bottom restraints.
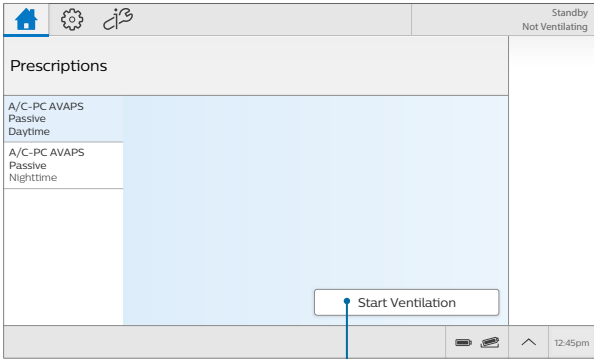

3. Starting Trilogy Evo

Make sure all accessories, cords, and circuit connections are attached. Press the on/off (standby) button.

If starting on battery power, a notification will appear at the top of the screen along with a beep every 30 seconds. Tap the reset icon beside the notification to acknowledge.

Home standby window*

The home standby window shows after the device is turned on

	Standby Not Ventilating
Prescriptions	
A/C-PC AVAPS Passive Daytime	
A/C-PC AVAPS Passive Nighttime	
	Start Ventilation
	12:45pm

Prescriptions
Your therapy prescriptions will
be listed here, for selection

Start Ventilation button

4. Select your prescription

5. Tap Start Ventilation to begin therapy

*If you want to stop therapy, press the on/off (standby)
button on the front panel, then tap Standby or Power Off.*

*Please note that your device's screens may look different than those pictured here.

Views

Tap **Views** drop down arrow to access multiple monitoring options

Prescription menu

Your prescription and circuit in use will be shown here. If your device is not ventilating, this area will read "Standby Not Ventilating"

A/C-PC AVAPS Passive
Daytime

Views

cmH2O

0   10   20   30

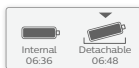AVAPS

12:45pm

12:45pm

Breath indicator

When the current breath is triggered by the patient, this indicator appears filled (dark green)

Manometer

This bar will move based on the pressure being delivered

Touchscreen lock

To prevent accidental therapy changes, use Touchscreen Lock. Lock the screen any time with the Status Bar shortcut shown here

Battery time

Estimated remaining battery time, based on prescription in use and breathing pattern

Internal
06:36

Detachable
06:48

Prescription settings

Prescriptions settings window

Tap the settings icon to view more details about your prescriptions

					Standby Not Ventilating
Daytime ⌄		Start Ventilation		⚙ ♩	

Circuit Passive	Tidal Volume 400 mL	PC Min/Max 10/20 cmH2O	PEEP 5 cmH2O	Insp. Time 1.5 s
Mode A/C-PC AVAPS	Breath Rate 15 BPM	Trigger Type Auto Trak	Trigger Sens. Auto	Rise Time 2
Advanced ...	AVAPS Speed 5 cmH2O/min			

Circuit			Using Default Calibration
Type Passive	Size Adult (19-22mm)	Active Humidification Off	

Alarm settings
Switch tabs to view alarm settings

⚙ ♩

Tap Circuit, Mode, or Advanced options on the left to see more information

Alarm settings

					Standby Not Ventilating
Daytime ⌄		Start Ventilation		⚙ ♩	

Circuit Passive ...	Tidal Volume Off/Off mL	MinVent 3.5/Off L/min	Resp. Rate Off/45 BPM	Circuit Disconnect 10 s
Mode A/C-PC AVAPS ...				
Advanced ...				

Prescription settings *(continued)*
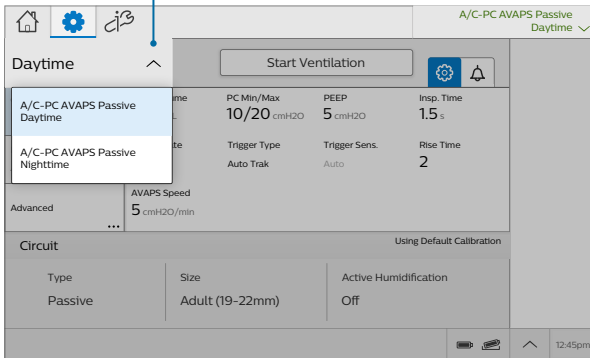## Selecting a different prescription while ventilating

Option 1.   In the home window, tap the prescription drop-down arrow to access the prescription menu. Then, select a prescription to switch therapy
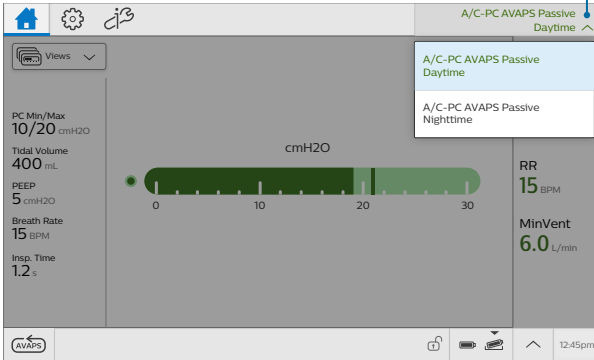
Option 2.   From the settings window, tap the drop-down arrow, select your new prescription, and then tap Switch Therapy
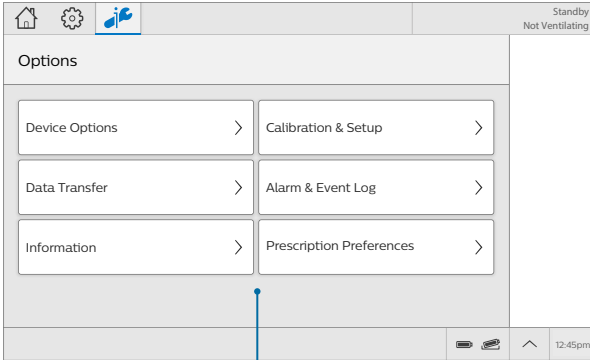

Circuit note: *The circuit settings must be the same as the current prescription. If the circuit settings differ, place the device into standby to change the physical circuit. Then, select the prescription from the home screen to start ventilation.*
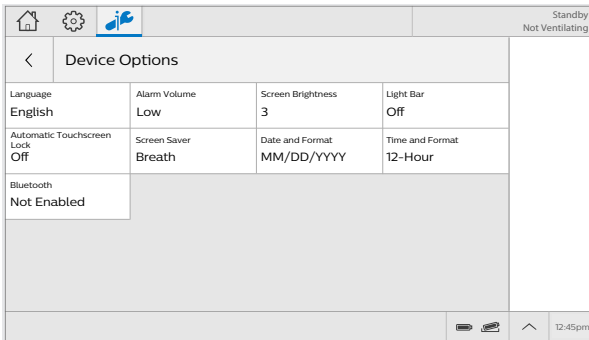
Options
Options window

⌂ ⚙ 🖐				Standby Not Ventilating

Options

Device Options ⟩	Calibration & Setup ⟩
Data Transfer ⟩	Alarm & Event Log ⟩
Information ⟩	Prescription Preferences ⟩

🖚 🖚   ∧   12:45pm

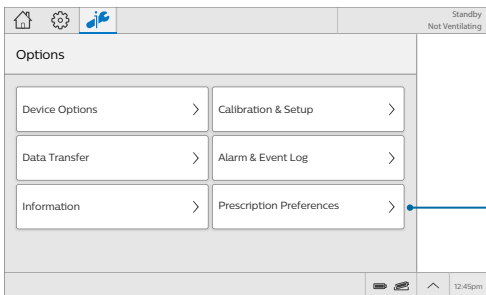Within this window, change device options, run calibrations and tests, and view and work with data

Device options

⌂ ⚙ 🖐				Standby Not Ventilating

⟨   **Device Options**

Language	Alarm Volume	Screen Brightness	Light Bar
English	Low	3	Off
Automatic Touchscreen Lock	Screen Saver	Date and Format	Time and Format
Off	Breath	MM/DD/YYYY	12-Hour
Bluetooth			
Not Enabled			

🖚 🖚   ∧   12:45pm
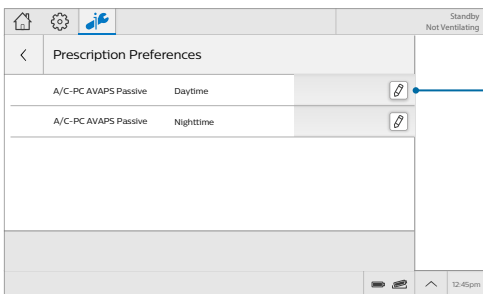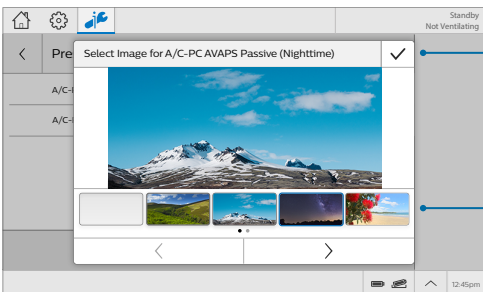
You are able to tap any of these device options and change if needed, including light bar, touchscreen lock, screen saver, and more

1. Tap Prescription Preferences

Options

Device Options	>	Calibration & Setup	>
Data Transfer	>	Alarm & Event Log	>
Information	>	Prescription Preferences	>

Standby
Not Ventilating

12:45pm

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2. Tap the pencil icon

Prescription Preferences

| A/C-PC AVAPS Passive | Daytime | ✎ |
| A/C-PC AVAPS Passive | Nighttime | ✎ |

Standby
Not Ventilating

12:45pm

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3. Choose your favorite image for each prescription

4. Accept by tapping the checkmark icon

Select Image for A/C-PC AVAPS Passive (Nighttime) ✓
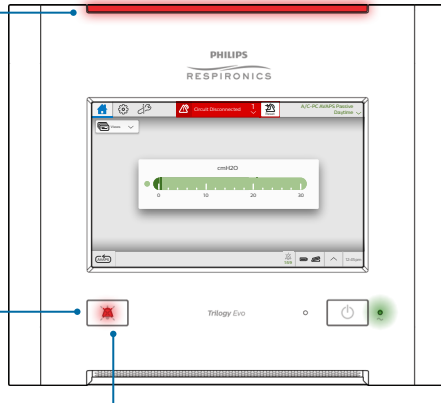
Standby
Not Ventilating

12:45pm

Alarms
Disconnected Circuit example

This is an example of an alarm situation that may occur and how to respond.

Light bar & alarm silence

When a circuit has become disconnected, you can see the high priority audio and visual indicators


Alarm silence button

Visually monitor the patient and ventilator at all times during an alarm silence period. Allowing alarms to continue without intervention may result in harm to the patient. If you want to silence the audible alarm for two minutes, press the Alarm Silence button

Resetting an alarm

Reconnect the circuit. When the alarm condition resolves, the alarm message will turn gray
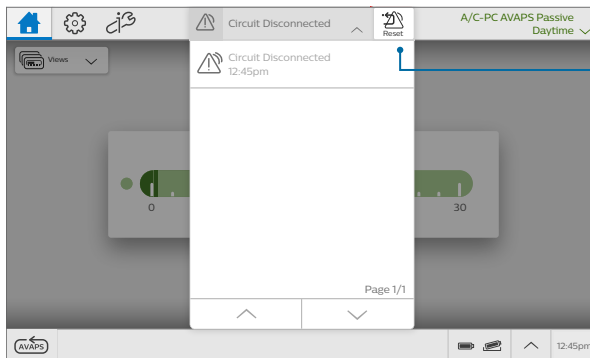
To clear the alarm message, tap the alarm reset icon

Alarms *(continued)*

Icon	Description	Light and Sound Indicators
	High priority alarm	Light bar flashes red
		Audible alarm repeats rapidly
	Medium priority alarm	Light bar flashes yellow
	Low priority alarm	Audible alarm repeats moderately
	System message	Single beep
	Resolved alarm or system message	None

Alarm name	What happened?	What to do
Ventilator Inoperative	The system self-test indicates a failure or malfunction of a component. The failure causes therapy to stop or not meet essential performance criteria.	Provide an alternate method of ventilation then contact customer service.
Ventilator Service Required	This alarm occurs when the device cannot perform to specification, a backup safety feature is compromised, or the delivery of therapy is compromised. The device continues to function.	Contact customer service.
Obstruction	The ventilator detects an obstruction in the patient's inhalation path, exhalation path, or external flow sensor. The ventilator detects that the leak device is missing.	• Check the circuit. Is it kinked or pinched? • Check the bacterial filter. Is it blocked? • If using an Active Flow or Dual Limb circuit, check the HME. Is it blocked? • Is the leak device blocked or missing? • Is the external flow sensor blocked?
Apnea	Time between patient-initiated breaths is more than the alarm setting.	• Is the circuit connected to the patient? • Is there a leak or disconnect? • Is the circuit kinked or pinched?
High Expiratory Pressure	During the expiratory phase, the delivered pressure exceeds the target patient pressure by 5cm H_2O or more.	• Check the circuit. Is it kinked or pinched? • Is the leak device blocked or occluded?

Alarm name	What happened?	What to do
High Inspiratory Pressure	During the inspiratory phase, the delivered pressure exceeds the target patient pressure by 5cm H_2O or more.	**Check the patient:** · Is the patient coughing or having excessive secretions? · Is the patient having bronchospasms? Is the tracheotomy tube stable? **Check the ventilator:** · Is the circuit kinked or pinched? · Is the leak device or the exhalation device blocked? · Are secretions in the HME?
Active Exhalation Valve Failed	The active exhalation valve is stuck closed.	· **Single-limb active circuit:** check all connections to the valve and check that the valve is clear. · **Dual limb circuit:** check that the valve is clear. · Replace the circuit or valve if necessary.
Check AEV Pilot Line	The active-exhalation pressure control line is not connected, becomes disconnected, or contains water droplets that affect the active exhalation valve line pressure reading.	Inspect the line. Empty or replace it if necessary.
Proximal Pressure Line Disconnected	The proximal pressure line is not connected.	· Is the line connected at both ends? · Is the line clean and not tangled? · Be sure the main circuit is connected and does not have large leaks · Be sure the exhalation valve is intact.
Circuit Disconnected (MPV)	When using mouthpiece ventilation, the system detects the circuit is disconnected.	Reconnect the circuit.
Circuit Disconnected	The patient is not connected to the ventilator breathing circuit or there is a large leak.	· Is the circuit connected to the patient? · Is the circuit connected to the ventilator? · Does a large unplanned leak exist?
Low Minute Ventilation	The patient's minute ventilation is less than or equal to the alarm setting. Or, no breath has occurred for 15 seconds.	· Is the circuit kinked or pinched? · Does the circuit have a leak or disconnect? · Remove excessive water from the tubing. · Is the bacterial filter blocked or not connected? · Is the leak device blocked or not connected? · Check the patient

Alarms *(continued)*

Alarm name	What happened?	What to do
Low Respiratory Rate	The patient's respiratory rate is less than or equal to the low respiratory rate alarm setting. Or, no breath has occurred for 15 seconds.	· Is the circuit kinked or pinched? · Does the circuit have a leak? · Is the circuit connected? · Check the patient.
High Inspiratory Pressure	Applies to volume modes. The measured patient pressure exceeds the High Inspiratory Pressure setting.	**Check the patient:** · Is the patient coughing or has excessive secretions? · Is the patient having bronchospasms? Is the tracheotomy tube stable? **Check the ventilator:** · Is the circuit kinked or pinched? · Is the leak device or the exhalation device blocked? · Are secretions in the HME?
No Trigger	Applies to mouthpiece ventilation. The time between patient-triggered breaths is greater than the No Trigger alarm setting.	· Check the patient · Is the circuit within reach? · Is the circuit intact? · Is the PEEP high enough to generate sufficient signal flow when the mouthpiece is touched?

USB data

If your homecare provider or clinician asks you to download your ventilator data to USB in order to review your therapy, carefully follow the next steps:

1. Connect the USB drive into any of the 2 USB connectors on either sides of the device.

2. In the menu bar, tap the ⊂ᵖᵇ options icon and then tap Data Transfer.

3. Tap **Export Data–USB** to start the transfer to the USB drive.

4. Tap **USB** in the pop-up to confirm the destination for the export.

5. Tap **Yes** in the pop-up to confirm export ventilator data to USB.

6. Wait for Export Data-USB to display **Success** before removing USB stick.

Notes

Device maintenance*
Cleaning the device

Frequency
Clean Trilogy Evo's exterior surface weekly

Supplies
- 1 lint-free cloth
- 1 soft-bristle brush
- Liquid dishwashing detergent solution:
 *1 teaspoon of liquid dishwashing detergent per gallon of warm water*

Instructions

1. To clean the exterior, first turn the device off and disconnect it from the power source detaching all accessories and connectors.

2. Use a dampened lint-free cloth (not dripping) with detergent solution to clean the exterior of the enclosure.

3. Use a soft-bristle brush in the areas around the screen, buttons, and any other areas where soil may be difficult to remove. Ensure you remove all visible soil.

4. Use a dampened lint-free cloth (not dripping) with clear water to remove all detergent residue.

5. Use a dry lint-free cloth to dry the enclosure.

6. Inspect the device for cleanliness and repeat the cleaning steps until the surfaces are visibly clean.

7. Inspect the device for damage after cleaning. If any parts are damaged, contact customer service.

For accessories cleaning/disinfection instructions vary based on the type of accessories you use. Please refer to your IFU for how to clean/dispose of your circuits.

Cleaning the battery
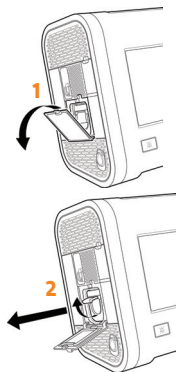
1. Open the detachable battery access door.

2. Lift the battery handle and pull it to remove it from the bay and follow the instructions for cleaning the device (pg. 22).

3. Allow the battery to air dry completely and then inspect it for damage after cleaning.

4. Slide the battery back into the bay until you hear a click.

Rinsing the air-inlet foam filter

The air-inlet foam filter is the gray foam located on the back panel. It protects Trilogy Evo from dirt and dust. This filter is for single patient use. Only use Philips Respironics-supplied filters. Ventilation can continue while you are replacing the filter.

Frequency
Rinse monthly and replace every six months.
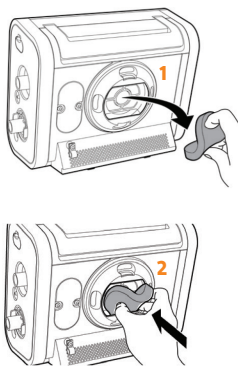
Instructions

1. Ensure you have a replacement filter nearby.

2. Pinch the filter and pull it out of the filter cover.

3. Insert the clean replacement filter into the filter cover. Ensure it is positioned securely.

4. Visually inspect the filter you just removed from the device – if it is damaged, discard it. Otherwise, rinse the dirty filter in clear water. Inspect the filter for cleanliness and repeat until the filter is clean.

5. Allow the filter to air dry completely before reinstalling it.

Notes

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Reorder information

Part No.	Description

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