



QUICK REFERENCE GUIDE

eQuinox™

Transportable Oxygen Concentrator with autoSAT®

Weight

eQuinox only: 12.2 lbs (5.4 kg)
12 Cell Battery Pack - 1.85 lbs (0.84 kg)
24 Cell Battery Pack - 3.6 lbs (1.63 kg)

Flow Rates

Continuous Flow		Pulse Flow		
0.5 LPM	2.0 LPM	1.0 (16 mL)	4.0 (64 mL)	7.0 (128 mL)
1.0 LPM	2.5 LPM	2.0 (32 mL)	5.0 (80 mL)	8.0 (160 mL)
1.5 LPM	3.0 LPM	3.0 (48 mL)	6.0 (96 mL)	9.0 (192 mL)

Continuous Flow

Battery Type	12-Cell	24-Cell
0.5 LPM	2.48 hrs	5.28 hrs
1 LPM	2.16 hrs	4.84 hrs
2 LPM	1.21 hrs	2.75 hrs
3 LPM	0.80 hrs	1.84 hrs

Pulse Flow

Battery Type	12-Cell	24-Cell
Setting 1.0 Bolus 16 mL	2.82 hrs	6.03 hrs
Setting 2.0 Bolus 32 mL	2.78 hrs	5.94 hrs
Setting 3.0 Bolus 48 mL	2.38 hrs	5.39 hrs
Setting 4.0 Bolus 64 mL	2.31 hrs	4.94 hrs
Setting 5.0 Bolus 80 mL	2.22 hrs	4.75 hrs
Setting 6.0 Bolus 96 mL	1.70 hrs	3.85 hrs
Setting 7.0 Bolus 128 mL	1.56 hrs	3.33 hrs
Setting 8.0 Bolus 160 mL	1.28 hrs	2.72 hrs
Setting 9.0 Bolus 192 mL	1.0 hrs	2.15 hrs

*Pulse flow times are calculated based on 12BPM. Higher breath rates will decrease battery times on pulse mode only.

Recharge Time

1. The typical time to recharge the battery inside the eQuinox on AC or DC power is between 2-5 hours, dependent upon the flow setting. The battery may be re-charged while the eQuinox is either ON or OFF.
2. The battery will recharge using the optional desktop charger in approximately 3 hours.
3. It is acceptable to leave the eQuinox plugged into AC power at all times while it is OFF.

Battery Gauge

The eQuinox has a battery status gauge on the right side of the display screen. Each of the 5 horizontal gray bars represents approximately 20% of the total battery charge. When a battery is being charged, the indicator bars will blink in a waterfall-type fashion. If a battery is not installed, or is improperly installed, the battery status gauge will not appear on the screen. Each battery has a built-in gauge on the back of it. There are 5 lights, each indicating approximately 20% of a battery charge, that will illuminate blue when the TEST button is pressed to display the battery charge.

When running on battery power, the display screen of the eQuinox will cycle periodically to show the remaining battery charge in hours and minutes.

On/Off

Press and hold the ON/OFF button (top left button) for two seconds to power on the eQuinox. Upon power up, the audible alarm should sound for 3 seconds, and all three lights above the display screen should illuminate. It is normal that the yellow and/or red lights may remain on for up to 5 minutes during warm-up. Once warm-up is complete, only the green light should be on. Press and hold the ON/OFF button for 2 seconds to power off the eQuinox.

Changing Flow Mode

Press the flow mode button (bottom left button) to toggle between pulse and continuous flow. The light adjacent to the button will illuminate when in pulse mode and will blink with each breath detection and delivery. If the unit is in pulse mode but does not detect a breath, it will switch to continuous mode for 15 seconds to search for a breath.

Oxygen Concentration

The eQuinox is designed to produce 90% oxygen (+5.5/-3%) at all continuous and pulse flow settings.

AC Power Supply

1. The eQuinox will run at all flow rates and recharge a battery while connected to AC power.
2. Each AC Power supply has a removable cord. If the AC power supply is plugged into and receiving power from a wall outlet, a green LED light on the power supply brick will illuminate.
3. If the AC Power Supply is properly connected to the eQuinox, the external power light on the far right side of the control panel will illuminate green.
4. The eQuinox AC Power supply is rated for 100-240VAC and 50-60Hz. When traveling, the power supply will automatically adjust to the specific voltage for each country. If needed, you may use outlet adapters that can be purchased from CAIRE or from a local electronics store.

DC Power Supply

1. Each eQuinox comes with a DC power cable that will allow the unit to be powered from an automotive-style power outlet.
2. The eQuinox can operate at all flow settings while using DC power.
3. The eQuinox battery will recharge while in use and connected to DC power. When connected to DC power, the eQuinox will first run the unit, and will use any leftover power to distribute a trickle charge to the battery. If there is not sufficient power to re-charge the battery, the battery icon will remain solid and no battery charge will be lost.
4. If the DC Power cable is properly connected to the eQuinox, the external power light on the far right side of the control panel will illuminate green. The eQuinox DC power cable is rated between 11.5-16 VDC.
5. It is suggested to always have a motor vehicle started and running before inserting the DC power supply into the accessory outlet.

Nasal Cannula and Tubing

The eQuinox uses a standard nasal cannula. Tubing length should not exceed 50 ft (15.2 m) on a continuous flow setting, or 7 ft (2.1 m) on a pulse flow setting or when using a humidifier bottle on continuous flow.

Humidifier Bottle

A humidifier bottle may be used with the eQuinox on CONTINUOUS FLOW SETTINGS ONLY, and ONLY WHEN THE UNIT IS STATIONARY. If the unit is to be transported or moved, the humidifier bottle MUST be removed.

Alarm/Light Indicators

Condition	Green Light	Yellow Light	Red Light	Audible Alarm	Alarm Code*
Low Battery	ON	FLASHING	OFF	2 Beeps	1000
Warm (Hot) Battery	ON	FLASHING	OFF	1 Beep	0200
Low 9V Battery	OFF	OFF	OFF	3 Beeps @ Start-up	-
Concentration < 85%	OFF	FLASHING	OFF	-	0008
Concentration < 70%	OFF	OFF	FLASHING	3 Beeps	0004
Flow Rate Error/Blocked Flow	OFF	FLASHING	OFF	1 Beep	0020
Cannot Charge Battery	Dependent on eQuinox Power	ON	OFF	OFF	0100
Battery Communication Error	Dependent on eQuinox Power	FLASHING	OFF	1 Beep	0400
No Breath Detected	ON	FLASHING	OFF	OFF	0001
Reduced Flow Rates on DC Power	OFF	ON	OFF	OFF	0800

**Alarm Codes are accessed by pressing the no-smoking icon once when the unit is in an alarm state. Press the button repeatedly to cycle through the provider menu until the screen displays a 4 digit alarm code "ALRM = xxxx". This is an extremely useful troubleshooting tool.

FAIL Codes and Power Loss Alarm

FAIL codes will display on the screen if the eQuinox undergoes a system malfunction. When a FAIL code is displayed, the unit will stop running and the red light will be illuminated. To clear this code, remove the battery and any external power source, wait 5-10 seconds, re-install the power, and re-start the eQuinox. If the FAIL code occurs again, contact technical support.

If the eQuinox experiences a power loss (via battery or external power) the red light will illuminate and the audible buzzer will sound. The screen may display *****. To clear this alarm, it may be necessary to remove the battery cartridge and disconnect external power from the eQuinox. Re-connect to external power or install a charged battery to re-start the machine.

Maintenance

1. The Air Intake filter must be removed and cleaned by the patient at least once weekly. The air intake filter is located on the upper rear of the eQuinox and can be removed and cleaned with soap and water. Allow to dry thoroughly before re-installing the filter.
2. The eQuinox should run for a minimum of 2 hours each month. This helps to ensure and prolong the life of the eQuinox. The patient may still breathe off of the machine during this monthly run time.
3. Annual Preventative Maintenance should be performed by the equipment provider. This should be done a minimum of once per year, regardless of the hours of operation. Preventative Maintenance consists of:
 - a. Replace the Air Intake Filter
 - b. Replace the Compressor Filter
 - c. Replace the HEPA Filter
 - d. Replace the 9V Battery

Note: Step-by-step instructions for all of these maintenance procedures can be found in the Provider Technical Manual.

Hour Meter

The eQuinox hour meter is accessible through the provider menu. Press the "no smoking" icon on the left side of the display panel until the screen reads "HRS xxxxx".

Voice Module

The eQuinox is equipped with the capability of providing vocal notifications and operational status intended to supplement information displayed to the end user via LED lights and/or the unit display. The voice module will alert users of flow rate changes, alarm conditions, power supply changes, and low battery durations.

The voice module can be turned ON or OFF and has adjustable volume. It also features 8 different languages. All settings can be changed through the provider menu that is accessed by pressing the no-smoking button on the left side of the display panel. Reference the user's manuals for full instructions on how to adjust voice module settings.

Go to www.CAIREmedical.com for more information.