

QUICK REFERENCE GUIDE



Eclipse 5™

Transportable Oxygen Concentrator with autoSAT®

Eclipse 5 New Features

- **NEW:** All continuous flow and pulse flow settings available while operating on DC power
- **NEW:** Battery cartridge will re-charge when unit is connected to DC power for all continuous flow settings up to 2.0 LPM and all pulse flow settings 1 to 9
- **NEW:** Next generation internal components enhance unit reliability

Weight

Eclipse 5 Only: 15.0 lb (6.8 kg); Eclipse 5 w/ Battery Installed: 18.4 lb (8.4 kg)

Flow Rates

Continuous Flow		Pulse Flow			
0.5 LPM	2.0 LPM	1.0 (16 mL)	3.0 (48 mL)	5.0 (80 mL)	8.0 (160 mL)
1.0 LPM	2.5 LPM	1.5 (24 mL)	3.5 (56 mL)	5.5 (88 mL)	9.0 (192 mL)
1.5 LPM	3.0 LPM	2.0 (32 mL)	4.0 (64 mL)	6.0 (96 mL)	
		2.5 (40 mL)	4.5 (72 mL)	7.0 (128 mL)	

Battery Life

Continuous Flow		Pulse Flow		
0.5 LPM – 4.4 Hours	2.0 LPM – 2.0 Hours	1.0 (16 mL) – 5.4 Hours	4.0 (64 mL) – 4.0 Hours	7.0 (128 mL) – 2.5 Hours
1.0 LPM – 3.7 Hours	3.0 LPM – 1.3 Hours	2.0 (32 mL) – 5.1 Hours	5.0 (80 mL) – 3.7 Hours	8.0 (160 mL) – 2.0 Hours
		3.0 (48 mL) – 4.9 Hours	6.0 (96 mL) – 3.5 Hours	9.0 (192 mL) – 1.7 Hours

NOTE: 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 Eclipse on AC or DC power is between 2 - 5 hours, dependent upon the flow setting. The battery may be re-charged while the Eclipse 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 Eclipse plugged into AC power at all times while it is OFF. Note that while the unit remains plugged in and OFF, the internal fan may continue to run while the battery is charging and produce a faint humming noise.

Battery Gauge

The Eclipse 5 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.

On/Off

Press and hold the ON/OFF button (top left Blue Button) for two seconds to power on the Eclipse 5. Upon power up, the audible alarm should sound for 3 seconds, and all three lights on above the display screen should illuminate. It is normal for 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 two seconds to power off the Eclipse 5.

Changing Flow Mode

Press the flow mode button (bottom left blue 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.

Oxygen Concentration

The Eclipse 5 is designed to produce 90% oxygen (-3%, +5.5%) at all continuous and pulse flow settings.

AC Power Supply

1. The Eclipse 5 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 Eclipse 5, the external power light on the far right side of the control panel will illuminate green.
4. The Eclipse 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 Eclipse 5 comes with a DC power supply that will allow the unit to be powered from an automotive-style power outlet.
2. The Eclipse can operate at all flow settings while using DC power.
3. The Eclipse battery will recharge while in use and connected to DC power at 2.0 LPM or lower, and at all pulse flow settings. There is not sufficient power to run the Eclipse and recharge the battery on DC power at 2.5 LPM and 3.0 LPM settings.
4. If the DC power supply is plugged into and receiving power from a DC outlet, and the power supply is properly plugged into the side of the Eclipse, a green LED on the power supply brick will illuminate.
5. If the DC Power Supply is properly connected to the Eclipse 5, the external power light on the far right side of the control panel will illuminate green. The Eclipse DC power supply is rated between 11.5-16 VDC.
6. It is suggested to always have a motor vehicle cranked and running before inserting the DC power supply into the accessory outlet.

Alarm/Light Indicators

Condition	Green Light	Yellow Light	Red Light	Audible Alarm	Alarm Code*
Low Battery	ON	FLASHING	OFF	2 Beeps	010
Warm (Hot) Battery	ON	FLASHING	OFF	1 Beep	002
Low 9V Battery	OFF	OFF	OFF	3 Beeps @ Start-up	-
Concentration < 85%	OFF	FLASHING	OFF	-	008
Concentration < 70%	OFF	OFF	FLASHING	3 Beeps	004
Flow Rate Error/Blocked Flow	OFF	FLASHING	OFF	1 Beep	020
Cannot Charge Battery	Dependent on Eclipse Power	ON	OFF	OFF	001
Battery Communication Error	Dependent on Eclipse Power	FLASHING	OFF	1 Beep	100
No Breath Detected	ON	OFF	OFF	OFF	200

*Alarm Codes are accessed by pressing the no-smoking icon once when the unit is in an alarm state. When this button is pressed, the screen will display a 3 digit alarm code "ALRM = xxx" for 10 seconds. This is an extremely useful troubleshooting tool.

FAIL Codes and Power Loss Alarm

FAIL codes will display on the screen if the Eclipse 5 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 Eclipse. If the FAIL code occurs again, contact technical support.

If the Eclipse 5 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 Eclipse. 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 Eclipse 5 and can be removed and cleaned with soap and water. Allow to dry thoroughly before re-installing the filter.
2. The power cartridge (battery) must be calibrated once monthly. Battery calibration consists of fully discharging the battery to zero and re-charging fully from an empty state. The patient can still breathe off of the Eclipse while the battery is being calibrated. This procedure ensures the longest possible battery durations.
3. The Eclipse 5 should run for a minimum of 2 hours each month. This helps to ensure and prolong the life of the Eclipse 5.
4. 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.

Nasal Cannula and Tubing

The Eclipse 5 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 Eclipse 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.

Hour Meter

The Eclipse 5 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".