



EKOS Cart

Instructions for Use

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Intended Use

The EKOS System Cart is intended for use exclusively with EKOS Control Systems.

Hazard Warnings

- TIPPING HAZARD - Do not tip the Cart more than 10 degrees.
- TIPPING HAZARD - Never operate the Cart without Battery properly installed.
- EXPLOSION HAZARD - Never store or operate the Cart in the presence of flammable gases.
- EXPLOSION HAZARD - Do not use spray cleaners while the battery is operating.
- ELECTRICAL HAZARD - The Battery does not require routine maintenance. There are no user-serviceable parts inside. Only qualified personnel should service the Battery.

Proper Use Warnings

- Leave the Battery plugged into a wall outlet and charging except for mobile operation.
- The Cart is intended for use with an EKOS Control Unit. Do not connect any other devices to the Battery.
- Do not spill liquids on the Battery. Electrical failure may occur.
- Do not leave the Battery discharged for an extended period of time. It will suffer permanent damage.
- Do not plug the Battery into itself; this will damage the Battery.
- Do not block cooling fan vents on rear of Battery.
- Only connect the Battery plug to Hospital Grade wall sockets.
- Do not set heavy objects on the handle or Control Unit tray.
- Do not use extension cords.

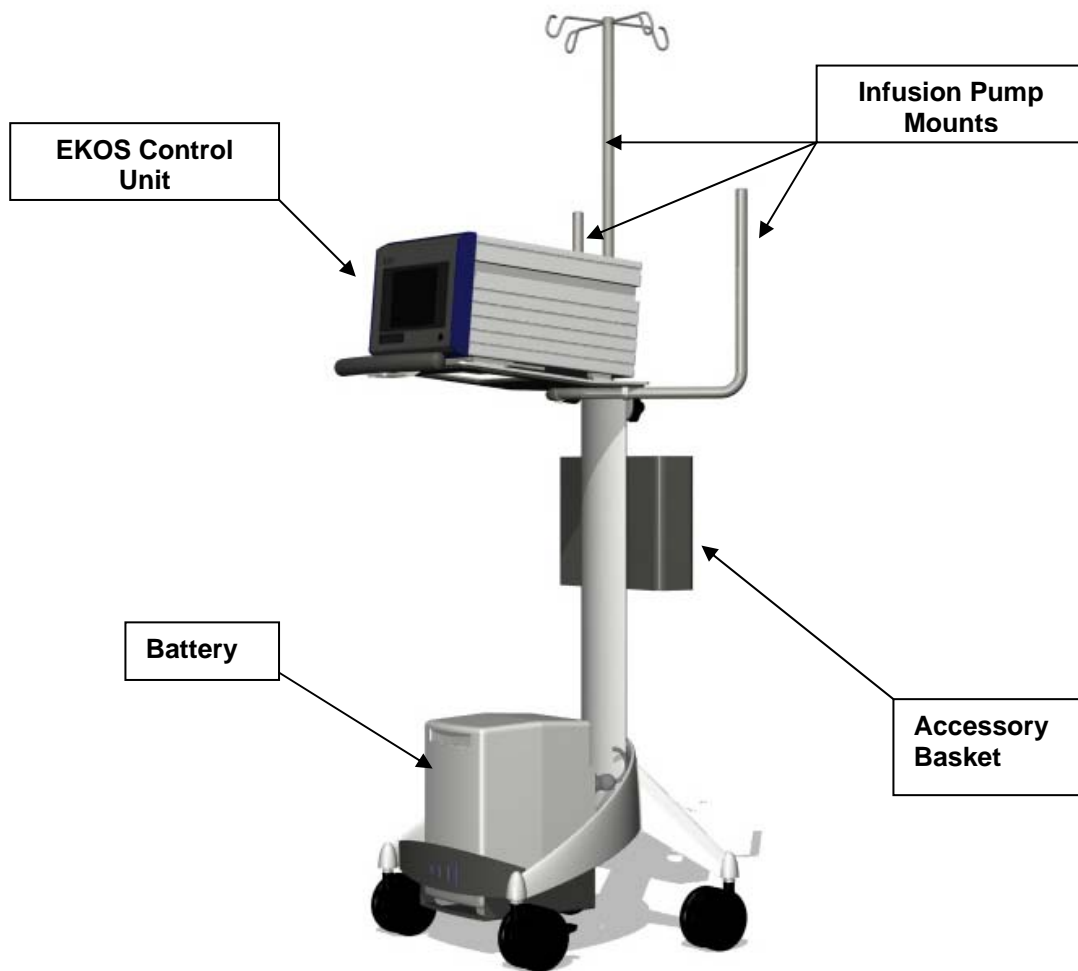


Figure 1: EKOS System Cart

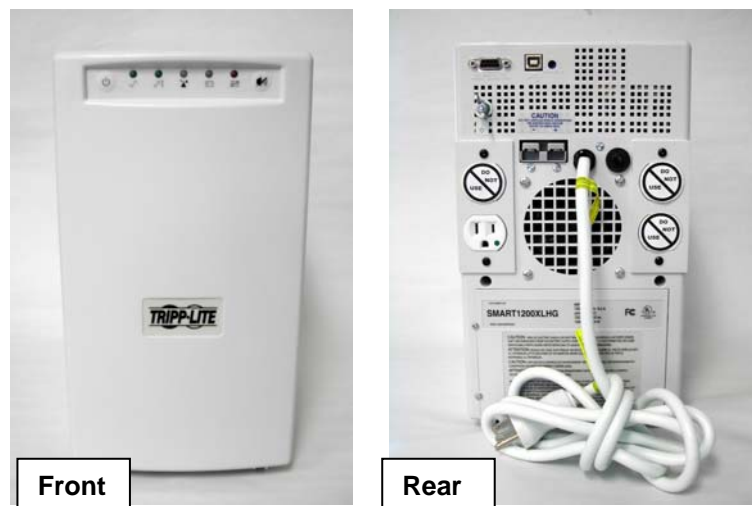


Figure 2: Battery

Description

The EKOS System Cart (Fig 1 & 2) includes a shelf for mounting the EKOS Control Unit, a Battery, and a tray for holding cables and Instructions for Use. Two casters have locks. Up to two infusion pumps may be mounted in three different locations. The Battery can provide power to the EKOS Control Unit for up to an hour of operation.

Directions for Stationary Use

- 1) Lock two front casters.
- 2) Plug the Battery into a power outlet. The BATTERY CHARGE LIGHT will be illuminated.
- 3) Plug the Control Unit into the Battery.
- 4) Press the "POWER" button for two seconds to Turn the Battery ON. (Alarm will beep once.)

Directions for Mobile Use

- 5) Unlock two front casters.
- 6) Unplug the BATTERY from the power outlet and store the cable in the Accessory Basket. An alarm will sound (four beeps followed by a brief silence, repeating) indicating that the BATTERY is unplugged. This alarm can be silenced using the "MUTE/TEST" button.

NOTE: If the alarm cannot be silenced using the "MUTE/TEST" button, a low Battery condition is indicated and the Battery must be charged before use.

- 7) After mobile use, plug the Battery into a power outlet. Keep the Battery plugged in at all times, except during mobile use, to keep the Battery fully charged.

Battery Control Buttons and Indicators



POWER Button:

To turn the BATTERY ON press and hold the POWER button for two seconds. The alarm will beep once.

To turn the BATTERY OFF press and hold the POWER button for one second. The alarm will beep once.

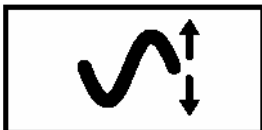


MUTE Button:

Press to mute BATTERY alarms.



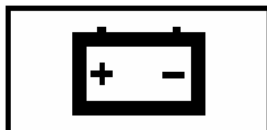
POWER: Green light illuminates continuously when BATTERY is ON and plugged in. LIGHT flashes and an alarm sounds (4 short beeps followed by a pause) to indicate the BATTERY is operating.



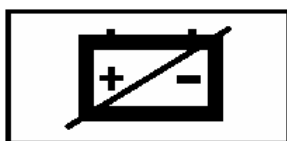
VOLTAGE CORRECTION: Green light illuminates continuously whenever BATTERY is automatically correcting high or low voltage inputs. BATTERY will emit a slight clicking noise. No action is required.



OUTPUT LOAD LEVEL: Red LIGHT (continuous or flashing) - remove any devices other than the EKOS Control Unit that are attached to the Battery. If LIGHT remains red, plug the BATTERY into a hospital power outlet.



BATTERY CHARGE: Red means Battery is beginning to charge; yellow means Battery is half charged; green indicates Battery is charged. Red light with continuous alarm indicates Battery is nearly discharged. Shut down is imminent. Plug into hospital power outlet immediately.



BATTERY WARNING: Red light and intermittent alarm mean Battery needs to be recharged. Allow BATTERY to recharge continuously for 12 hours. If Light or Alarm continues, contact EKOS Corporation for service or replacement.

Cleaning

Wipe down all surfaces with cleaning materials per standard hospital operating procedures.

Extended Storage

To store Battery, recharge once every 3 months for 12 hours.

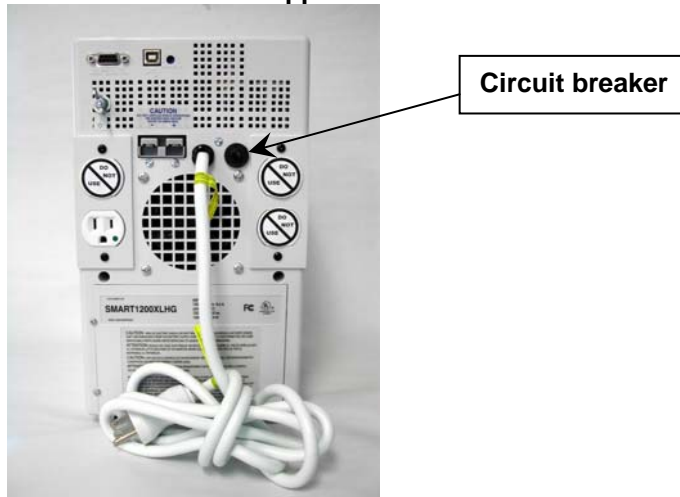
If Batteries discharge for an extended period of time, they will suffer permanent damage.

Service

Some indications that service is necessary for the Battery are:

1. A fully charged BATTERY will not operate the EKOS Control Unit for 1 hour of mobile use.
2. The “Battery Charge” or “Battery Warning” lights remain red after full charge.
3. Continuous alarms on a fully charged system which cannot be silenced by use of the “MUTE” button.

Check that the BATTERY System’s circuit breaker is not tripped.



If the problem continues, contact EKOS. A service technician will ask for the BATTERY model number, serial number and purchase date and will attempt to correct the problem over the phone.

Battery Replacement

Under normal conditions the Battery will last 3 to 6 years. Do not attempt to replace it. Call EKOS for repair, replacement parts and/or instructions.

BATTERY SPECIFICATIONS

Line isolation:	Prevents shock to users and sensitive electronic equipment
Overload protection:	Resettable circuit breaker
Battery recharge rate:	2-4 hours to 90%
Best electrical service:	15A, 120V, 60 Hz
Leakage current:	Less than 300 microamps
Typical battery lifespan:	3-6 years
Operating Temperature:	+32 to +104 °F
Storage Temperature:	+5 to +122 °F
Relative Humidity:	0 to 95%, non-condensing
Unit weight (lbs):	45.2
Material of construction:	PVC
Switches:	2 front panel mounted push-button switches for system enable, self-test and alarm cancel functions
Front panel LEDs:	battery charge level, AC line voltage levels, automatic voltage regulation status, UPS load level and replace battery warning
Alarms:	Audible alarm indicates power failure conditions (4 short beeps every 10 seconds), overload (continuous short beeps) and low battery (continuous tone)
Cooling method:	via rear-exit fan
Input connection type:	NEMA 5-15P Hospital Grade
Input cord:	6 ft., 14 gauge
Outlet type:	NEMA 5-15R Hospital Grade output receptacles
Back panel grounding lug	
Certifications:	UL1778 (USA, Series AGSM1200PSR3HG), UL 60601-1, cUL (Canada), FCC Class A (emissions). AC surge suppression conforms to IEEE 587 / ANSI C62.41 specifications

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