



By your side
and beyond

Cardinal Health™ Kangaroo
OMNI™ Enteral Feeding Pump
Setup and Troubleshooting Guide



By your side and beyond

We want to make it as easy as possible for you to set up, use and troubleshoot the Kangaroo OMNI™ Enteral Feeding Pump.

This guide contains an overview of how to set up the pump and address common issues, alerts and alarms you may encounter.

For more information, including a full list of alerts and error codes, please refer to the Kangaroo OMNI™ Enteral Feeding Pump Instructions for Use located on the USB that comes with the pump or online at mykangaroolearning.com.





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Kangaroo OMNI™ Enteral Feeding Pump

Pump overview

Section

1



1. Handle

2. Pump status indicators

- – Warning alarm
- – Notice or caution alarm
- – Standby or feeding

3. Night mode button

4. Valve actuator

Mechanism for opening and closing the valve that allows for feeding or flushing

5. Selection buttons

Press a key to select the option that appears next to it on the screen

6. Power button

Press once to power on; press and hold to power off

7. Power indicator light

Shines a green light when the pump is connected to a power source

8. Occlusion sensor

Detects blockages in Kangaroo OMNI™ Feeding Sets

9. Rotor

Mechanism that turns to help move enteral fluids through the feeding set tubing

10. ENFit™ Cap Holder

Molded cavity that can be used to hold an ENFit™ Cap



Battery

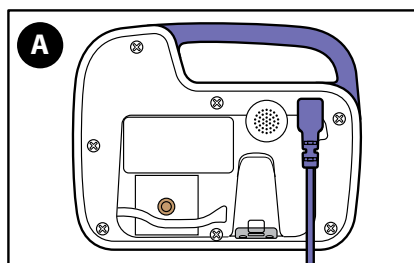
Section

2

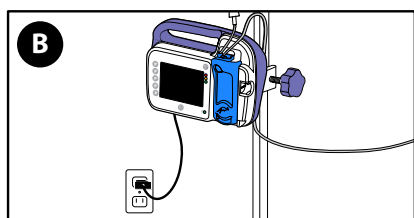


Charging the Kangaroo OMNI™ Enteral Feeding Pump battery

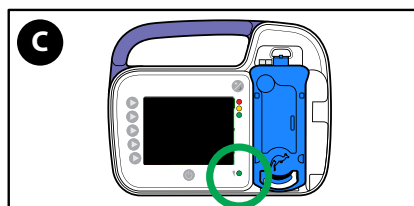
Unplugging the pump from a power source will automatically place the pump on battery power. To recharge the battery, plug the pump into a power source, such as an electrical outlet, and it will automatically begin charging.



A. Plug the power adapter into the power adapter port located on the back of the Kangaroo OMNI™ Enteral Feeding Pump.



B. Plug the other end of the power adapter into a nearby electrical outlet.



C. Confirm the green power indicator light is on to ensure the Kangaroo OMNI™ Enteral Feeding Pump is receiving power.

Note: Charge the Kangaroo OMNI™ Enteral Feeding Pump for a minimum of 12 hours before initial use.

Power-related issues

In many instances, battery or power cord issues can be easily diagnosed and addressed.

- Ensure the power cord is plugged completely into the pump.
- Ensure the green power indicator light on the pump is lit when the pump receives power. If the green light is not lit, the pump is not receiving power. Check to see if the power adapter looks damaged and confirm that the power outlet is functioning properly.
- Replace the power adapter if needed.

Note: Only use the power adapter that is provided with the pump.

Long-term storage

After extended periods of storage, it may be necessary to fully charge the battery to obtain optimum performance.

Feeding set configurations

Section

3



Kangaroo OMNI™ Feeding Sets

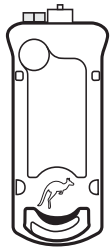
Feeding sets that are compatible with the Kangaroo OMNI™ Enteral Feeding Pump:

Kangaroo OMNI™ Feeding Set

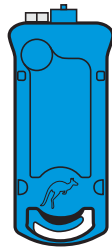
Designed for enteral feeding regimens

Below are a few examples of the Kangaroo OMNI™ Feeding Sets for use with the Kangaroo OMNI™ Enteral Feeding Pump:

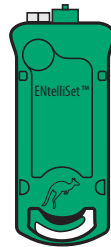
Clear
Feed only



Blue
Feed and flush (hydrate)



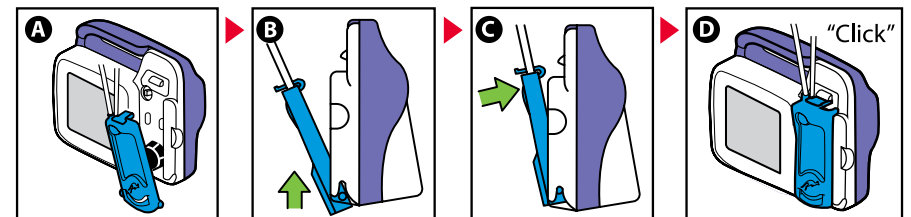
Green
Thick formula



Loading a Kangaroo OMNI™ Feeding Set

The feeding set has a colored cassette that is loaded directly onto the pump. To load the feeding set, slide the bottom pegs of the cassette up into the slots, then lock the top of the cassette into place. You will know when the feeding set is properly loaded when you hear an audible click.

The proper loading sequence of Kangaroo OMNI™ Feeding Sets is shown on the pump display as follows:



Proper cleaning

Section

4



Cleaning the Kangaroo OMNI™ Enteral Feeding Pump

The pump has an IPX6 rating, meaning it is protected against water projected by a powerful nozzle (6.3 mm) against the enclosure of the pump from any direction. This also means the pump can be cleaned under running water. However, it is recommended that the pump be cleaned after each feeding set use to prevent bacterial contamination of the pump. To clean the pump housing, clean the outside surface with a damp cloth or sponge. For difficult-to-clean areas, it is permissible to wash the pump under running water. Avoid submerging the pump or washing with high pressure nozzles. To disinfect the Kangaroo OMNI™ Enteral Feeding Pump, you have two options:

1. **70% isopropyl alcohol, lint-free wipes:** Use at least two 70% isopropyl alcohol, lint-free wipes to wipe down the pump as necessary.
2. **10% bleach solution:** Use lint-free wipes saturated with the solution and wipe down as necessary.

Avoid use of sharp objects during the cleaning process. For additional cleaning needs, you may use a soft bristle toothbrush.

Cleaning the Kangaroo OMNI™ Power Cord with Adapter

The cord with adapter has an IPX0 rating and is not water resistant. This means the product will be damaged if cleaned with a wet cloth, under running water or submerged in liquid. If cleaning is necessary, unplug the product and wipe the exterior with a cloth dampened with isopropyl alcohol. Allow excess moisture to evaporate prior to use.

For full cleaning instructions, please visit the **Cleaning** section of the Kangaroo OMNI™ Enteral Feeding Pump Instructions for Use.

Cleaning or rinsing Kangaroo OMNI™ Feeding Sets

Note: Reusing feeding sets can impact feeding accuracy. Feeding sets are designed for single-patient use with a recommended 24-hour use time.

Inappropriate cleaning or rinsing of the feeding sets can damage the feeding set.

If rinsing must be done, follow these steps:

1. Rinse the feeding set bag with water until clean.
2. Fill bag with 200 mL or more of water.
3. Enter the prime pump screen.
4. Press and hold the **Prime Feed** button until clean water exits.
Note: A patient must NOT be connected to the pump when priming occurs.
5. Pour remaining water from feeding set bag.
6. Prime water out of tubing.

Accuracy



Section

5

Specifications

Standard formulas: The Kangaroo OMNI™ Enteral Feeding Pump is designed to meet the accuracy specifications of +/- 5% or 0.5 mL/hr, whichever is larger.

Thick formulas: The Kangaroo OMNI™ Enteral Feeding Pump is designed to meet the accuracy specifications of +/- 10% or 1.0 mL/hr, whichever is larger, when used with thick formulas. Thick formula can generally be described as enteral fluids of smooth consistency that would be categorized as Level 2, 3 or 4 drinks within the International Dysphagia Diet Standardization Initiative (IDDSI) framework. IDDSI is an internationally recognized framework that can be used to categorize the viscosity of various foods and liquids. This framework can be useful when trying to define thick or blenderized tube feeds.

Please see the **Safety & Warnings** section of the Kangaroo OMNI™ Enteral Feeding Pump Instructions for Use for additional information.

Correct fluid level (hang height)

Make sure to hang the prepared bag or pre-filled container so the starting volume of fluid is 10 in. (25.4 cm) above the top of the Kangaroo OMNI™ Enteral Feeding Pump. Greater distances can create the potential for over-delivery. Lesser distances can create the potential for under-delivery.

Thick formula and food thickness

Thick formulas, such as blenderized tube feeds, have a wide variation of viscosity or thickness that can affect accuracy.

Some enteral formulas, especially blenderized tube feeds, contain chunks, seeds or lumps that may increase the risk of occlusion in a feeding pump. It is important that enteral fluids are homogenous and have a smooth consistency when using a feeding pump. Smooth (non-chunky, non-lumpy) blenderized tube feeds have a lower risk of clogging the feeding tube or feeding set than chunky and lumpy blenderized tube feeds.

Other considerations

Powder formulas must be thoroughly mixed to avoid clumps that can block the pump's rotor. Air bubbles and foam caused by too much mixing can also block the pump's sensors. For best results, if you see foam, let it settle for 1-2 minutes before priming the feeding set. Do not wait too long, however, or the formula may separate.

Temperature

Ambient temperatures can impact formula temperatures, potentially affecting enteral feeding pump accuracy. Lower formula temperatures may cause the pump to under-deliver, while high temperatures may cause the pump to over-deliver.

Feeding set reuse

Using the feeding set beyond the recommended 24 hours can impact the delivery accuracy of the pump by subjecting the silicone tubing to excessive or repeated strain.

Note: Do not reuse feeding sets for more than one patient.

Pre-fill/closed system

All pre-fill systems require that the nutrition bottle vents to allow the formula to flow. If a pre-fill bottle or bag does not vent properly, it may result in under-delivery of formula.

Back pressure

Back pressure or resistance generated during pump operation is created from factors including, but not limited to, thick fluids and small French-size feeding tubes, which can affect flow rate.

Backpack use

Backpack use may increase the risk for false alarms, kinked tubing and accuracy variation. Kangaroo™ Backpacks are designed and tested to be used with Kangaroo™ Enteral Feeding Pumps with all of these possibilities in mind, although there is still a chance that they may occur. In some cases, it may be hard to achieve the proper bag hang height in a small backpack, reducing the feeding pump's overall accuracy.






Pump status indicators



Section 6

The Kangaroo OMNI™ Enteral Feeding Pump status LED indicator lights on the upper right of the pump screen provide a quick visual indication of the pump's status. There are five LED light patterns to know.



-  **Solid green = pump running**
A solid green light means the pump is running normally.
-  **Blinking green = ready**
A blinking green light indicates the pump is ready to provide nutrition.
-  **Solid yellow = information**
A solid yellow light is a **low-priority alarm**: The pump is still running normally, but you must take action soon or else it will begin to not function properly.
-  **Blinking yellow = caution**
A blinking yellow light indicates a **medium-priority alarm**: The pump has stopped delivering nutrition, and you need to take action before the pump will run normally again.
-  **Blinking red = critical warning**
A blinking red light indicates a **high-priority alarm**: The pump has stopped delivering nutrition and will be out of service until the issue is resolved.

Common alarms



Section 7

Now that you know about the different pump status indicators, it is time to understand the alarms associated with them. This section will explain the Kangaroo OMNI™ Enteral Feeding Pump common notifications and alarms and how to quickly resolve them.

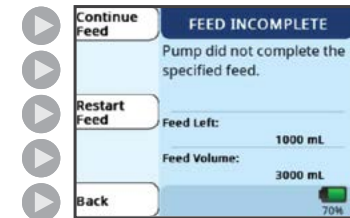
Blinking green notifications



Feed complete

Definition: A successful feed occurred.

Resolution: Press **Done**.



Feed incomplete

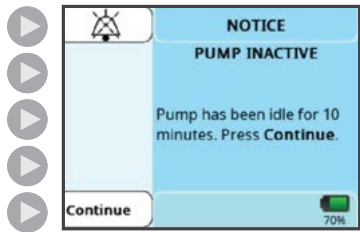
Definition: A feed is interrupted before the entire nutrition amount is delivered.

Resolution:

- Press **Continue Feed** to continue the feeding regimen.
- Press **Restart Feed** to begin a new feeding regimen.

Common alarms

● Solid yellow alarms

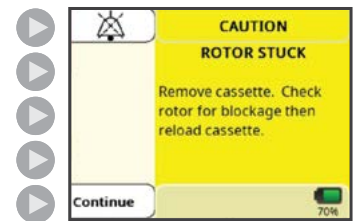


Pump inactive

Definition: The pump has not been actively running for more than 10 minutes.

Resolution: Press **Continue** to return to the previous screen.

☀ Blinking yellow alarms

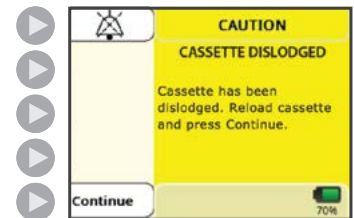


Rotor stuck

Definition: There is excessive resistance on the rotor.

Resolution:

1. Ensure the pump is unplugged from an electrical outlet.
2. Clean the rotor with a wet cloth.
3. Reload the cassette.

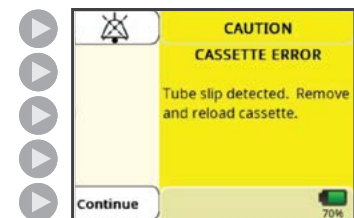


Cassette dislodged

Definition: The cassette is not properly loaded into the pump.

Resolution:

1. Reload the cassette.
2. Press **Continue**.



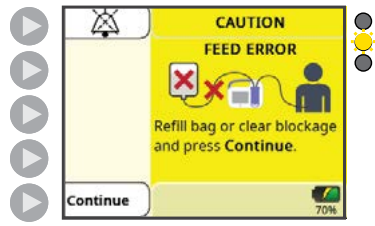
Cassette error

Definition: There is an unusual operating condition occurring.

Resolution:

1. Remove the cassette.
2. Inspect cassette for irregularities.
3. Correct irregularities.
4. Reload the cassette.

Blinking yellow alarms (continued)



Feed error

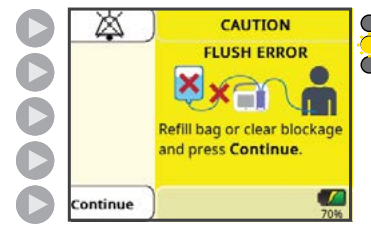
Definition: The feed bag is empty or there is a clog or a kink in the tubing between the feed bag and the pump.

Resolution:

1. Check to see if the feed bag is empty.
If the bag is empty:
 - a. Refill the bag.
 - b. Press **Continue**.
 - c. Ensure a patient is NOT connected to the feeding pump.
 - d. Prime the pump for next feed.
2. Check the tubing between the feed bag and the pump to locate the blockage and clear it, if possible. Then restart feeding/flushing.

Backup plans:

1. If the alarm continues, ensure the pump is unplugged from an electrical outlet.
2. Remove the cassette.
3. Clean and dry the occlusion sensor region.
4. Reload the cassette.
5. Press **Skip Prime**.
6. Press **Start** to restart feeding.



Flush error

Definition: The flush bag is empty or there is a clog or a kink in the tubing between the flush bag and the pump.

Resolution:

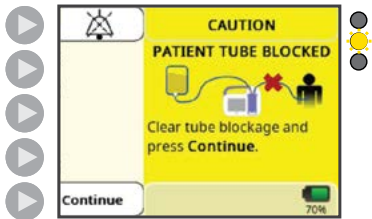
1. Check to see if the flush bag is empty. If the bag is empty:
 - a. Refill the bag.
 - b. Press **Continue**.
 - c. Ensure a patient is NOT connected to the feeding pump.
 - d. Prime the pump for next flush.
2. Check the tubing between the flush bag and the pump to locate the blockage and clear it, if possible. Then restart feeding/flushing.

Backup plans:

1. If the alarm continues, ensure the pump is unplugged from an electrical outlet.
2. Remove the cassette.
3. Clean and dry the occlusion sensor region.
4. Reload the cassette.
5. Press **Skip Prime**.
6. Press **Start** to restart feeding/flushing.

Common alarms

Blinking yellow alarms (continued)



Patient tube blocked

Definition: There is a clog in the tubing between the pump and the patient.

Resolution:

1. Check the tubing between the pump and the patient to locate the blockage and clear it, if possible.
2. Restart feeding.

Backup plans:

1. If the alarm continues, ensure the pump is unplugged from an electrical outlet.
2. Remove the cassette.
3. Clean and dry the occlusion sensor region.
4. Reload the cassette.
5. Press **Continue** and restart feeding.

Further assistance on blinking yellow alarms

Have you followed the resolution directions for the blinking yellow alarms but are still getting an alarm?

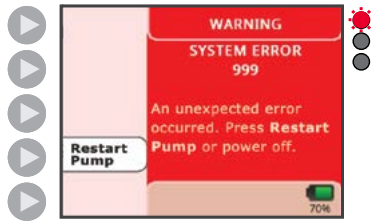
Try this:

Replace the feeding set.

If that still does not fix the alarm:

1. Press **Power Off** and use a different Kangaroo OMNI™ Enteral Feeding Pump.
2. Call Cardinal Health Customer Service.

Blinking red alarms



System error

Definition: A general error.

Resolution:

1. Press **Restart Pump**.

For further assistance

Please refer to the Instructions for Use for a complete list of notifications, alarms and resolution instructions. A copy of the Instructions for Use can be found on the USB that comes with the Kangaroo OMNI™ Enteral Feeding Pump or online at mykangaroolearning.com.

We're with you every step of the way. By your side and beyond.

Visit mykangaroolearning.com for setup and troubleshooting videos and additional resources that can help you get the most out of your Kangaroo OMNI™ Enteral Feeding Pump.

For additional assistance, please refer to your Instructions for Use, contact your Cardinal Health sales representative or call Customer Service.