NORMAL OPERATION
Plug the pump into AC wall outlet.

BATTERY OPERATION
Unplugging the pump from the AC line will automatically put the pump on battery power. To recharge the battery, plug the pump into an AC wall outlet. Pump will automatically begin charging.

These general instructions are for inserting the Kendall Healthcare Pump Administration Sets into the Kangaroo 224 Feeding Pump.

1. Fill the feeding bag prior to setting up pump.
2. Close roller clamp on pump set.
3. Press “ON”
4. Wait while pump performs systems check.
5. When display reads 0, set rate by turning knob on side of pump.
6. Insert drip chamber into drip chamber guides.
7. Open roller clamp, fill entire line with fluid, close roller clamp.
8. Attach distal connector to feeding tube.
9. Grasp the silicone portion of tubing and gently stretch around the pumps rotor. Insert the pump set retainer disc into retainer lock on the pump. Thread tubing through tubing guide.
10. Open roller clamp, press “START/HOLD”. While pump is running, dots will flash across display.

TO CHANGE RATE:
1. Press “START/HOLD”.
2. Set new rate by rotating knob on side of pump.
3. Press “START/HOLD”.

Kangaroo® 224 Feeding Pump
Listed below are some of the probable cause of alarm conditions and their corrections.

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Probable Cause</th>
<th>Corrections</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flow Error Alarm (FLO Err)</td>
<td>Feeding container is empty. Feeding tube or feeding set tubing is occluded. Drip chamber is improperly placed in pump. Drip chamber walls are coated with feeding formula. Sensors in upper drip chamber guide are blocked.</td>
<td>Refill feeding container. If bag has been in use for 24 hours, replace. Locate point of occlusion and correct. Note: occlusion may occur upstream or downstream from pump. Check to make sure roller clamp on feeding set tubing is open. Check to make patency of the feeding tube. Check to make sure drip chamber is properly “locked” in position in drip chamber guide. Check to make sure formula is not preventing detectors from proper operation. If formula cannot be removed from inside walls of chamber via chamber manipulation, replace set. Check to make sure detectors are free of dried formula. Remove any deposits by using a cotton swab dampened with warm soapy water.</td>
</tr>
<tr>
<td>Low Battery Alarm (Lo BAT)</td>
<td>Battery has been run down below point of maintaining accuracy of pump.</td>
<td>Plug pump power cord into wall outlet.</td>
</tr>
<tr>
<td>Hold Error Alarm (Hld Err)</td>
<td>Pump set has been left in the hold mode for over 2 ½ minutes.</td>
<td>Press “START/HOLD” to silence alarm, then press “START/HOLD” again to restart pump.</td>
</tr>
<tr>
<td>No Set (no SEt)</td>
<td>Pump set has been improperly placed onto pump.</td>
<td>Check to make sure only Kangaroo Pump Set has been placed onto the pump. Check to make sure that retainer clip on pump set has been properly positioned into retainer lock on pump.</td>
</tr>
<tr>
<td>System Error Alarm (SYS Err)</td>
<td>Rotor is not turning while pump is running. Rotor is turning but is not detected by rotor sensors.</td>
<td>Return pump for technical service.</td>
</tr>
<tr>
<td>No Audible Alarm</td>
<td>Battery is fully discharged. Alarm circuitry failure.</td>
<td>Charge battery for a minimum of 15 hours. Return pump for technical service.</td>
</tr>
</tbody>
</table>