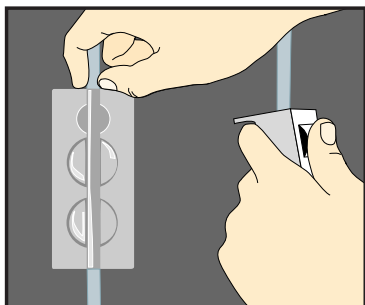


Model 3000 and Model 3100 Micro Modular Infusion Systems

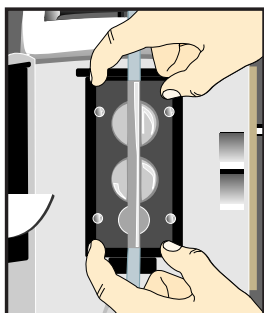
OPERATOR'S GUIDE

PRIMING

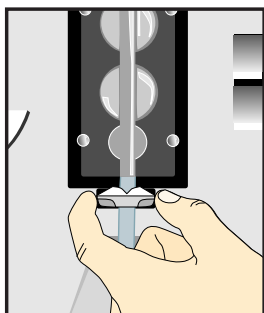


1. Remove administration set (tubing) from pouch. Discard if package is damaged or if protective end caps are missing or loose inside package.
2. Close lower roller clamp. Verify upper clamp is open.
3. Insert spike into solution container. Fill drip chamber at least one-third full. A completely filled drip chamber is acceptable.
4. Prime administration set by inverting cassette with flat side facing you. Slowly open lower roller clamp and allow solution to fill entire set. When all air has been expelled, close lower roller clamp.
5. Hang solution container so bottom of drip chamber is at least 6 to 12 inches above pump.

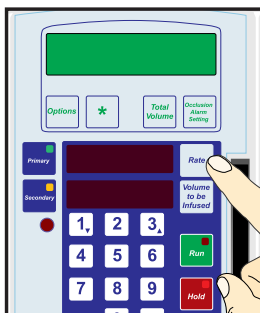
PUMP OPERATION



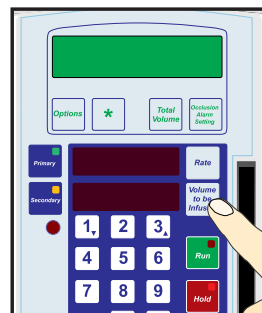
1. Pull door latch to open door.
2. Hold the cassette with flat side facing you. Place cassette in pump by aligning 4 holes in cassette with 4 pins in cassette with 4 pins.



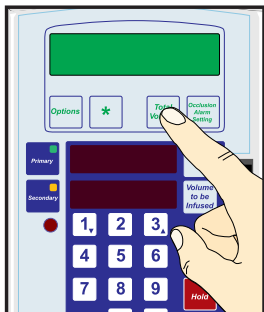
3. Place safety clip in slot and push fully inward.
4. Close and latch door.



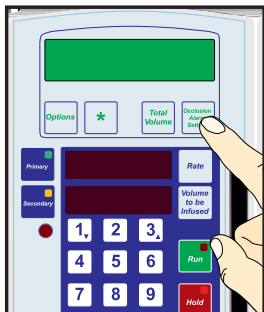
5. Press **Rate** and enter desired rate.



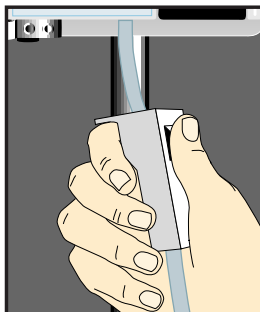
6. Press **Volume to be Infused** and enter desired volume.



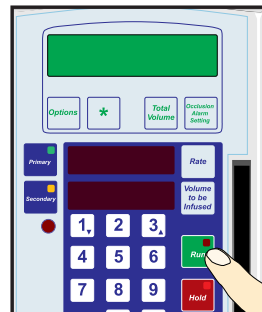
7. Press **Total Volume** and press ***** to clear previous total volume.



8. Press **Total Volume** to select the correct setting.

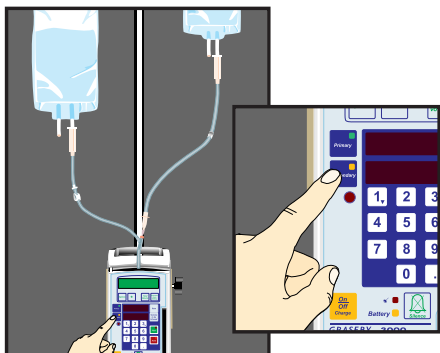


9. Open roller clamp.



10. Press **Run** to begin infusion. To stop infusion press **Run**. When Volume to be Infused reaches zero, pump switches automatically to KVO rate.

SECONDARY INFUSION



1. Press **Run**.
2. Press **Run**.
3. Press **Rate** and enter secondary rate.
4. Press **Volume to be Infused** and enter secondary volume.
5. Press **Run**.

Deltec

SIMS Deltec, Inc., St. Paul, MN 55112 U.S.A.

SIMS SMITHS INDUSTRIES
Medical Systems

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TROUBLESHOOTING

Visual alarms appear in the Message Display and are accompanied by a corresponding audio alarm. If a problem cannot be eliminated, remove pump from patient use and have it repaired by a Deltec certified technician.

DANGER: To avoid electric shock, never open the infusion pump housing. Refer all servicing to a Deltec-qualified technician.

NOTE: During Insistent, Back Up, and Continuous audio alarms, the pump automatically stops fluid delivery. When a Non-Insistent audio alarm occurs, the pump continues to deliver fluid.

MESSAGE DISPLAY	AUDIO ALARM TYPE	CAUSES AND CORRECTION
Close clamp! Load Safety Clip	Insistent Alarm	 tubing safety clip not correctly loaded. To load safety clip: 1. Close lower roller clamp first. 2. Open door. 3. Load safety clip. 4. Close door. 5. Open lower roller clamp.
Loading problem Check tubing set	Insistent Alarm	 Problem detected as door was being closed. 1. Open door. 2. Open upper tubing clamp, if necessary. Eliminate upper tubing restriction, if any. 3. Reload cassette, if necessary. 4. Close door.
On hold	Insistent Alarm	 Pump on hold 2 minutes with door closed, or 6 minutes with door open. Press or to silence audio alarm. Press to begin infusion, or turn pump off if not in use.
Air in cassette	Insistent Alarm	 Air detected in cassette. To remove air: 1. Close lower roller clamp. 2. Open door latch. 3. Wait briefly for cassette to fill. 4. Slowly close door latch. Repeat if necessary. Cassette loaded backward. Make sure cassette is properly loaded (flat side out, pillow side in).
No flow above pump	Insistent Alarm	 Insufficient flow from container to pump. • If empty, replace container. • Raise container height so bottom of drip chamber is at least 6-12 inches above pump. • Open upper tubing clamp if closed, or eliminate upper tubing restriction, if any. • Replace administration set if vent filter is wet, spike is damaged, or other set problem.
Occlusion below pump	Insistent Alarm	 Pressure below pump exceeds Occlusion Alarm Setting. • Open lower roller clamp if closed, or eliminate lower tubing restriction, if any. • Change if not appropriate for infusion. • Verify patient access device is patent.
Door open	Insistent Alarm	 Door was opened while pump was running. Press before opening door.
Secondary was set	Non-Insistent Alarm (repeated twice)	 Secondary Volume to be Infused was set, but Primary was started. Reset, if desired, and press while Secondary is selected.
Rate change not completed	Non-Insistent Alarm	 Running Rate Change was attempted but not properly completed. Press or to silence audio alarm. Re-enter Running Rate Change.
KVO ___ ml this infusion	Non-Insistent Alarm	 Infusion is complete and pump has switched to KVO rate. Press or to continue KVO delivery without alarm (pump re-alarms every 6 minutes) Press and program new infusion, or remove set and turn pump off, if finished.

MESSAGE DISPLAY	AUDIO ALARM TYPE	CAUSES AND CORRECTION
Low battery Plug in cord	Non-Insistent Alarm	 Battery nearly depleted (1/2 hour or less remains). Plug in cord, if possible Press or to silence alarm for 6 minutes and continue running.
Battery too low Plug in cord	Insistent Alarm	 Battery is depleted. Cord must be plugged in to continue infusion.
System check Turn off, then on	Insistent, Back Up, or Continuous Alarm	 Potential pump problem detected. Turn pump off, then on. If alarm persists, remove pump from use and have it repaired by a Deltec-qualified technician.
Pump needs service	Insistent, Back Up, or Continuous Alarm	 Electrical or mechanical problem. Do not use. Needs repair by Deltec-qualified technician.

PUMPS WITH DOSE-RATE CALCULATION OPTION

MESSAGE DISPLAY	AUDIO ALARM TYPE	CAUSES AND CORRECTION
Dose setup not completed	Non-Insistent Alarm	 Dose-Rate Calculation setup began with pump running; dose variables not completed. Press or to silence alarm. If desired, re-enter dose variables.
Dose change not completed	Non-Insistent Alarm	 Running Dose Change was attempted, but not properly completed. Press or to silence audio alarm. Re-enter Running Dose Change.
Dose change not accepted	Non-Insistent Alarm	 Entered dose or calculated rate is invalid. Press or to silence audio alarm. Re-enter appropriate dose variables.

MESSAGE DISPLAYS WITHOUT AUDIO ALARM

MESSAGE DISPLAY	CAUSES AND CORRECTION
Keypad locked	 Keypad Lockout Button (on rear of pump) has been pressed. Unlock by pressing Keypad Lockout Button.
↓↑ ___ ml this infusion	 Quick Rate Change optional function has been selected.
Taper ___ ml this infusion	 Rate Taper optional function has been selected.
Cannot infuse * to review	 Rate Taper program (or Volume Over Time program on Dose-Rate pumps) cannot be infused as entered. Infusion variable(s) must be changed.
Cannot infuse * to review	 Dose-Rate Calculation program cannot be infused as entered. Infusion variable(s) must be changed.

Deltec

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This publication is intended as an operating reference only. For detailed instructions, specifications, warnings, warranty and additional information on operating the Model 3000 and Model 3100 Micro Modular Infusion Systems, please refer to the supplied with the product. Assistance with programming and operation of the Model 3000 and Model 3100 Micro Infusion Systems is available to clinicians 24 hours a day by calling 800-426-2448.