Alarms

High Priority Alarm
If the pump is running, it always stops when a high priority alarm is activated. Accompanied by a red screen, it continues until acknowledged or until the condition that triggered the alarm goes away.

Medium Priority Alarm
This alarm does not stop the pump. Accompanied by an amber screen, it continues until acknowledged or until the condition that triggered the alarm goes away.

Low Priority Alarm
A low priority alarm does not stop the pump. Accompanied by a blue screen, the alarm automatically clears after 5 seconds or until the condition that triggered the alarm goes away.

Informational Message
This alarm does not stop the pump. This message appears in the status bar. It is displayed for 5 seconds and is generally silent, requiring no acknowledgement.

Troubleshooting

Screen is blank and alarm is sounding

Alarm Priority High. The pump has lost power and is no longer delivering. The pump was delivering and the batteries were removed or the battery door was opened. Clear this alarm by replacing the batteries or closing the battery door. Then turn the pump back on or the alarm stops after the power has been off for a minimum of 2 minutes.

Air-in-line detected. Press “acknowledge” then prime tubing

Alarm Priority High. The pump is stopped and can not run. The air detector has detected air in the fluid path; the fluid path may contain air bubbles. Acknowledge the alarm. Then, if the fluid path contains air bubbles, close the clamps, disconnect the fluid path from the patient, and follow the instructions for priming to remove the air.

Battery depleted. Pump stopped

Alarm Priority High. Install 4 new AA batteries or a fully charged rechargeable battery pack. In order to start delivery, good batteries must always be installed, even when an external source of power is connected. If appropriate, restart the pump.

Battery low. Replace battery.

Alarm Priority Low. Change the rechargeable battery pack or the 4 AA batteries soon.

Current settings require high/standard volume set. Change cassette

Alarm Priority High. A high volume or standard volume administration set is required. The pump is stopped and will not run. Remove the administration set to continue.

Delivery limit reached. Or, delivery limit reached and partial dose delivered Pump’s status bars read “KVO” - 0

Alarm Priority Low. The programmed delivery limit has been reached, and the pump is not delivering fluid. The alarm occurs when the continuous rate or a PCA dose has caused the delivery limit to be exceeded. Acknowledge the alarm (the alarm automatically clears after 5 seconds).

Pump’s status bars read “Del Limit”

Alarm Priority Low. The programmed delivery limit has been reached, and the pump is delivering fluid at the KVO rate of 0.1mL/hr. This alarm occurs when the continuous rate or a PCA dose has caused the delivery limit to be exceeded. Acknowledge the alarm (the alarm automatically clears after 5 seconds).

Downstream occlusion. Clear occlusion between pump and patient

Alarm Priority High. The pump has detected high pressure, which may result from a downstream blockage, kink in the fluid path, or a closed tubing clamp. Delivery pauses and resumes if the occlusion is removed. Remove the obstruction or stop the pump to silence the alarm for 2 minutes, then remove the obstruction and restart the pump.

Reservoir volume low

Alarm Priority High. Depending on how the alarm is programmed in Admin Settings. Level of fluid in the reservoir is low. Prepare to install a new reservoir, if appropriate.

Reservoir volume is zero. Pump stopped

Alarm Priority High. The reservoir volume has reached 0.0 mL. The pump stops and cannot run. Acknowledge the alarm. Install a new fluid container. Reset or edit the value of the reservoir volume.

Upstream occlusion. Clear occlusion between pump and reservoir

Alarm Priority High. Fluid is not flowing from the fluid container to the pump, which may be resulting from a kink, a closed clamp, or air bubble in the tubing between the fluid container and pump. Delivery is paused and will resume if the occlusion is removed. Remove the obstruction to resume operation. The alarm clears when the occlusion is removed. You will be required to acknowledge this alarm after it clears if it has occurred and cleared more than 3 times within 15 minutes.

Customer and Clinical Services
1-800-258-5361
www.smiths-medical.com

Troubleshooting continued

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Setting up the Pump for a New Patient

Prepare the pump for a new patient
1. Begin without the cassette attached to the pump.
2. Insert four new 1.5 volt AA alkaline batteries or a rechargeable battery pack.
3. Press the power switch to turn the pump on.
Start New Patient
4. Screen displays “Do you want to start a new patient?”

Changing a patient’s current program while the pump is running
With the pump running, all parameters can be changed except reservoir volume
Program the pump
1. Scroll A or Y to highlight the patient specific parameter you want to change. Press Select.
2. Unlock the keypad using the security code or the pump key.
3. The patient specific parameter is displayed. Scroll A or Y to the new value then press Save.
4. Unlock the keypad using the security code or the pump key.
5. The patient specific parameter is displayed. Scroll A or Y to the new value then press Save.
6. Confirm that you have selected the correct therapy, concentration (or unit). Press Select.
7. Screen displays “Do you want to start a new patient?” Press Yes.

Changing a patient’s current program

Stop the pump
1. Press Stop/Start.
Program the pump
3. Scroll A or Y to highlight the patient specific parameter you want to change. Press Select.
4. Unlock the keypad using the security code or the pump key.
5. The patient specific parameter is displayed. Scroll A or Y to the new value then press Save.
6. Unlock the keypad using the security code or the pump key.
7. The screen displays the current reservoir volume and a scroll range.
8. Press Select to the reservoir volume or scroll A or Y to adjust the value. Press Save.

Reseting the reservoir volume without changing the cassette
Changing the IV bag or syringe without changing the tubing
Stop the pump
1. Press Stop/Start.
2. “Stop Pump?” displays. Press Yes. Aseptically remove the empty IV bag or syringe from the tubing and attach the new IV bag or syringe.

Reset reservoir volume
1. Scroll Y until Reservoir Vol is highlighted. Press Select.
2. Scroll displays “Reservoir Volume remaining: XmL Reset?” Press Yes.

On-board Pump Reports: Event Log, Delivery History, PCA Dose Graph and Amount Given Pie Chart. Press Reports and scroll through the selections.

Viewing reports
Pump reports should be cleared in accordance with institution policy.
Pump may be running or stopped to view reports.
Option 1:
1. Press Stop/Start.
2. “Stop Pump?” displays. Press Yes. Aseptically remove the empty IV bag or syringe from the tubing and attach the new IV bag or syringe.
Option 2:
1. Scroll Y until Reservoir Vol is highlighted. Press Select.
2. Scroll displays “Reservoir Volume remaining: XmL Reset?” Press Yes.
3. “Clear to Given and PCA dose counters” Press Yes.
4. “Clear to Given and PCA dose counters” Press Yes.
5. “Clear to Given and PCA dose counters” Press Yes.
6. “Clear to Given and PCA dose counters” Press Yes.

Changing the batteries
Changing the batteries
Stop the pump
1. Press Stop/Start.
2. “Stop Pump?” displays. Press Yes. Aseptically remove the empty IV bag or syringe from the tubing and attach the new IV bag or syringe.

Changing the cassette
Changing the cassette
Stop the pump
1. Press Stop/Start.
2. “Stop Pump?” displays. Press Yes. Aseptically remove the empty IV bag or syringe from the tubing and attach the new IV bag or syringe.

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Changing the cassette
Stop the pump
1. Press Stop/Start.
2. “Stop Pump?” displays. Press Yes. Aseptically remove the empty IV bag or syringe from the tubing and attach the new IV bag or syringe.

Clearing given and PCA dose counters
1. Press Stop/Start.
2. Screen displays “Reservoir Volume remaining: XmL Reset?” Press Yes.
3. Press Select to reset the reservoir volume or scroll A or Y to adjust the volume. Press Save.
4. “Clear to Given and PCA dose counters” Press Yes.

Review pump settings
1. Press Review.
4. Screen displays “Reservoir Volume remaining: XmL Reset?” Press Yes.
5. “Clear to Given and PCA dose counters” Press Yes.
6. “Clear to Given and PCA dose counters” Press Yes.
7. “Clear to Given and PCA dose counters” Press Yes.
8. “Clear to Given and PCA dose counters” Press Yes.

Cassette not attached.
Attach cassette before starting pump.
“Prime Tubing” displays.
Press Yes if priming is needed.
“Disconnect tubing...” displays. Press Prime.
Press Stop/Prime when complete.
“Continue Priming?” displays. Press Yes or No.
“Stop pump?” displays. Press Yes when you are ready to begin the infusion. The pump begins running.

Begin without the cassette attached to the pump.
Insert four new 1.5 volt AA alkaline batteries or a rechargeable battery pack.
Press the power switch to turn the pump on.

Changing a patient’s current program

Stop the pump
1. Press Stop/Start.
Program the pump
3. Scroll A or Y to highlight the patient specific parameter you want to change. Press Select.
4. Unlock the keypad using the security code or the pump key.
5. The patient specific parameter is displayed. Scroll A or Y to the new value then press Save.
6. Unlock the keypad using the security code or the pump key.
7. The patient specific parameter is displayed. Scroll A or Y to the new value then press Save.
8. Confirm that you have selected the correct therapy, concentration (or unit). Press Select.

Stop the pump
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