smiths medical cadd[:]

CADD[®]-Solis VIP Ambulatory Infusion Pump

Quick Start Guide



- A Battery Compartment
- B Display
- C Indicator Lights
- D USB Port
- E Blue AC Power Light
- F AC Power Jack

- G Remote Dose Cord Jack
- H Keypad
- I Cassette Latch
- J Help Messages
- K Cassette/Keypad Lock
- L Power Switch

• Install a new set of AA batteries or a rechargeable battery pack:



• Turn on the pump using the power switch on the side of the pump:



• To start programming, select Tasks:



• Press T to highlight View Advanced Tasks then press Select.



• Using the 💟 key, highlight Start New Patient.



then press **select** to confirm.

Enter the 3-digit security code. Press
 or
 to display each digit then press
 select
 to confirm and advance to the next digit.
 Once the complete 3-digit code has been
 entered, press Accept Value.



 Highlight the appropriate therapy: PCA / Continuous / Intermittent / Step / Taper by pressing T or then press select to confirm.



Next highlight a qualifier by pressing
 T or then press select to confirm.



• Then highlight the drug by pressing 💟 or 🔺 and press select to confirm.



• A screen asking you Are these correct? appears. To confirm select YES or to cancel select NO.



• The Review screen appears. Select Review.



• The various delivery settings then appear on the screen.

To confirm a setting, press Accept Value, the symbol ✓ appears on the left.



To edit the highlighted delivery setting, press <u>select</u>

Next adjust the value by pressing $oldsymbol{\nabla}$ or $oldsymbol{\Delta}$ then select Save.

Confirm your choice by pressing Accept Value, the symbol ✓ appears on the left.

• When you have confirmed all of the settings, press Next.

- The pump will then require you to attach the cassette or the bag, if this has not yet been done (to attach the disposable see the section titled *Attaching the cassette or tubing*).
- The pump will then explain to you how to prime the tubing.
- Once priming is complete, the pump will ask if you want to start delivery. Press Yes to start.









I WANT TO CHANGE A PROGRAM SETTING DURING DELIVERY

Should you wish to change one of the program settings while the pump is running, follow the instructions below:

- 1. Press the Stop/Start key 🖲.
- 2. Press the key just below Tasks.



- 3. Using the 💌 key, scroll down until the white box highlights View Delivery Settings then press **select**).
- Then select the setting you want to edit and enter the keypad code to continue.

You can then edit the value using the ${\ensuremath{\overline{\mathbf{N}}}}$ or ${\ensuremath{\overline{\mathbf{A}}}}$ keys and press Save to confirm.

5. Your modification has been saved. Press the Stop/Start key.



- 6. The pump then asks you to Review pump settings, select Review.
- 7. You must then confirm each item (the symbol ✓ appears by each item, acknowledging your confirmation).
- Once confirmation is compete the pump displays the question Start the Pump? Confirm by pressing Yes.

ATTACHING THE CASSETTE / ERA

- Clamp the tubing, make sure the cassette latch is unlocked and open the cassette latch to 90 degrees.
- 2. Insert the cassette hooks into the hinge pins on the bottom of the pump.
- 3. Without holding the cassette latch, push up on the cassette until it firmly clicks into place.
- 4. Lift the cassette latch into the closed position.
- 5. Insert the pump key and turn it clockwise to lock the cassette if using PCA mode.
- 6. When set to PCA mode you must lock the cassette in order to be able to start delivery. To lock the cassette, insert the key into the cassette/keypad lock and turn clockwise.









An uneven gap indicates that the cassette is not properly latched.

REMOVING THE CASSETTE OR TUBING

- 1. Make sure that delivery has stopped and clamp the tubing.
- If the cassette is locked, insert the key and turn it counter-clockwise until it is in the unlocked position.
- 3. Push down on the cassette latching lever until the cassette detaches.





QUICK CHANGE OF DISPOSABLE, SAME INFUSION VOLUME, SAME PROGRAMMING

- With the pump switched on, stop delivery by pressing the Stop/Start key .
- Attach the new disposable. The pump displays the question Reset reservoir volume to XX mL? Press Yes to confirm.
- **3**. Follow the instructions for priming the tubing.
- The question Start the Pump? appears. Select Yes if you want to restart the previous programming.

CHANGE OF DISPOSABLE WHILE MODIFYING THE INFUSION VOLUME

- 1. Switch off the pump by pressing the Power on/off key 0.
- 2. Remove the disposable.
- 3. Attach the new disposable.
- 4. Switch on the pump.
- 5. Press the button just below Tasks.
- 6. Using the 💌 key, scroll down until the white box highlights View Delivery Settings then press select.
- Using the Velume then press select.
- 8. Enter the security code.
- Next press T or to select the new reservoir volume then press Save.
- 10. Press the Stop/Start key, then select Review. Confirm all of the settings and then press Next.
- The question Start the Pump? appears. Select Yes if you want to restart the previous programming.



I WANT TO PRIME THE TUBING

Make sure that delivery has stopped, that the tubing is disconnected from the patient and that the clamps are open.

If the pump displays the screen: Prime tubing?

- 1. The screen displays Prime tubing? Select Yes (unlock the keypad, if necessary).
- 2. Select Prime.
- 3. Once you have pressed Prime, you do not need to hold your finger down on the key.
- 4. Once priming is complete and the air is removed from the line, select **Stop Priming**.

If the pump does not display the screen: Prime tubing?

- 1. In the Tasks menu, press 💟 or 🛦 to select Prime tubing and press select (unlock the keypad, if necessary).
- 2. Select Prime.
- 3. Once you have pressed Prime, you do not need to hold your finger down on the key.
- 4. Once priming is complete and the air is removed from the line, select **Stop Priming**.

I WANT TO CONSULT THE DELIVERY REPORTS

The reports can be viewed at any time, whether the pump is running or stopped.

- 1. In the Tasks menu, press 🔽 or 🛦 to highlight View Reports and then press select).
- 2. Next press 💌 or 🛋 to highlight which report you want to view and press select).
- 3. Press Back to return to the report selection menu then Back again to return to the first screen.

I WANT TO PROGRAM A DELAYED START

You can program a delayed start once you have confirmed your programming and completed the priming. It must be done before starting delivery.

- 1. Go to the Tasks menu.
- 2. Press To highlight Set Next Dose Start Time then press select to confirm.



3. Set the desired delivery start time then select Confirm.



 A confirmation screen will appear displaying the delivery start time. To confirm select Yes or to cancel select No.



5. Start delivery by pressing the Stop/Start key: a delayed start screen will appear.

Note: the delivery start time will now be visible in the delivery settings. To view these settings go to the Tasks menu then select Delivery Settings.

PCA / PCEA mode



Purple screen PCA mode Yellow screen Epidural PCA

Continuous Rate:	Specify the drug delivery rate. If the prescription does not require the continuous rate, enter 0.		
PCA Dose:	Amount of drug delivered by pressing the PCA Dose key or the Remote Dose Cord Button.		
PCA Lockout:	Minimum time that must elapse between the time one PCA dose starts and the time that the next PCA dose is available.		
Delivery Limit:	This option is used to restrict the amount of drug delivered to the patient (including continuous + PCA doses, but not clinician boluses) within a specified time frame (between 1 hour and 12 hours).		
Max Doses/Hr:	Maximum number of PCA doses allowed within a 1-hour period.		
KVO Rate:	The KVO (Keep Vein Open) function allows the delivery of a minimal amount of drug to help maintain catheter patency.		
Reservoir Vol.:	Reservoir volume (cassette or bag).		
Start Time:	If a delayed start is programmed, the delivery start time is indicated here.		

TAPER MODE (TPN - TOTAL PARENTERAL NUTRITION)



2,290 million Stopp	nd 🕹 👬			
HP .	CALLER P.			
THE OWNER.				
Delluery Se	Place.			
Press 'select' to edit				
Infusion Volume	2,000 ml			
Taper Up	1 Hos @ Miles			
Taper Down	1 Hits @ 20ks			
Infusion Duration	\$2 His 970m			
Bace				

Green screen

Infusion Volume:	Total volume of fluid to be delivered ≠ reservoir volume.		
Taper Up:	Duration for the taper up period.		
Taper Down:	Duration for the taper down period.		
Infusion Duration:	Time required to deliver the infusion volume.		
Plateau Rate:	Maximum rate at which medication is delivered. This rate is automatically calculated by the pum		
KVO Rate:	The KVO (Keep Vein Open) function allows the delivery of a minimal amount of drug to help maintain catheter patency.		
Reservoir Vol.:	Reservoir volume (cassette or bag).		
Start Time:	If a delayed start is programmed, the delivery start time is indicated.		





Continuous Rate:	Specify the delivery rate of the solution.		
KVO Rate:	The KVO (Keep Vein Open) function allows the delivery of a minimal amount of drug to help maintain catheter patency.		
Reservoir Vol.:	Reservoir volume (cassette or bag).		
Start Time:	If a delayed start is programmed, the delivery start time is indicated.		

INTERMITTENT MODE





Blue screen

Dose Volume:	Dose volume to be delivered.			
Dose Duration:	Time required to deliver a dose.			
Dose Cycle:	Time from the start of one dose to the start of the next dose.			
Dose Rate:	Automatically calculated by the pump (cannot be modified), indicates the rate at which the dose is delivered.			
Next Dose:	Indicates the time at which the next dose will start.			
KVO Rate:	The KVO (Keep Vein Open) function allows the delivery of a minimal amount of drug to help maintain catheter patency.			
Reservoir Vol.:	Reservoir volume (cassette or bag).			

STEP MODE





Olive screen

Infusion Volume:	Total volume of fluid to be delivered ≠ reservoir volume.			
Initial Rate:	Delivery rate that starts at the beginning of an infusion.			
Rate Increment:	The amount of drug by which you want delivery to increase with each step. Every step must increase by the same amount.			
Plateau Rate:	Maximum rate at which medication is delivered.			
Step Duration:	Delivery time of each step. This time is the same for each step and for the initial rate, with the exception of the plateau.			
Infusion Duration:	Time required to deliver the infusion volume. Automatically calculated by the pump.			
KVO Rate:	The KVO (Keep Vein Open) function allows the delivery of a minimal amount of drug to help maintain catheter patency.			
Reservoir vol.:	Reservoir volume (cassette or bag).			
Start Time:	If a delayed start is programmed, the delivery start time is indicated.			

ALARM HELP SCREENS

For certain alarms, such as occlusion alarms and the cassette detector, you have the option of viewing help screens to help you to solve the problem.

1. When an alarm is triggered, select Silence to mute the alarm.

2. If help screens are available for the alarm, Help appears above the right soft key. Press this key to view the help screens.



Alarm



cknowledge

ALARM HELP SCREENS

Air in-line detected: High Priority Alarm = stops delivery

The air detector has detected air in the fluid path. The current delivery is automatically stopped. Select Acknowledge to clear the alarm. If the fluid path contains air bubbles, close the clamps and disconnect the fluid path from the patient. Next prime the line to remove the air and restart delivery.

Battery low: Low Priority Alarm (blue screen)

Select Acknowledge to clear the alarm, or the alarm will automatically stop after 5 seconds. You must replace the batteries or charge the rechargeable battery pack.

Downstream Occlusion: High Priority Alarm = stops delivery

The pump has detected an occlusion between the pump and the patient, which may be resulting from a kink in the fluid path, a closed tubing clamp, or a blockage. Delivery is paused and will resume if the occlusion is removed. This alarm has associated help screens. To access them press Silence then Help.

Reservoir volume low: Low Priority Alarm (blue screen)

Depending on your pump's settings, an alarm will sound to inform you that the volume in the reservoir (bag or cassette) is low and that a new bag or cassette must be installed quickly.

Upstream Occlusion: High Priority Alarm = stops delivery

Clear occlusion between pump and reservoir.

Liquid is not flowing between the bag/cassette and the pump. This malfunction may be resulting from a kink in the fluid path, a closed tubing clamp, or an air bubble in the tubing. Delivery is paused and will automatically resume once the occlusion is removed. If the alarm has been activated then cleared more than 3 times within 15 minutes, you are required to acknowledge the alarm before it can clear.

SETTINGS MENUS FOR THE CADD®-SOLIS VIP PUMP

Delivery Settings							
PCA	Continuous	Intermittent	Step	Taper			
Continuous Rate	ontinuous ate Continuous CA Rate CA Lockout* elivery Limit** lax oses/Hr**	Dose Volume	Infusion Volume	Infusion Volume			
PCA Rate		Dose Duration	Initial Rate	Taper Up			
PCA Lockout*		Dose Cycle	Rate Increment	Taper Down			
Delivery Limit**		Dose Rate	Plateau Rate	Infusion Duration			
Max		Next Dose	Step Duration	Plateau Rate			
Doses/Hr**			Infusion Duration				
KVO Rate	KVO Rate	KVO Rate	KVO Rate	KVO Rate			
Reservoir Vol.	Reservoir Vol.	Reservoir Vol.	Reservoir Vol.	Reservoir Vol.			
Start Time***	Start Time***		Start Time***	Start Time***			

* This setting does not appear if the PCA dose is zero.

** This setting may not appear, depending on the delivery limit method selected.

*** This setting appears only if a delayed start is in effect.

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