

Alaris IVAC PCAM Syringe Pump - Set Up

The Alaris IVAC PCAM Syringe Pump Directions For Use Manual should be kept in a central area & easily accessible for users. Please familiarize yourself with this Manual (*Features of the Pump, Controls & Indicators, Symbol Definitions, Main Display Features & Operating Precautions*) prior to using the above infusion device.

Please ensure Wishaw General Hospital's Acute Pain Service Protocols, Policies and documentation e.g. PCA Prescription & Observation Chart, PCA Guidelines, Paediatric PCA Guidelines are followed at all times.

Any member of staff using the above device should have received training and deem themselves competent prior to using the device.

Getting Started: Initial Set-Up

Check that the pump is complete, undamaged and that the voltage rating specified on the label is compatible with your AC power supply.

Connect the pump to the AC power supply for 24 hours to ensure that the internal battery is fully charged. The pump will automatically operate from its internal battery if the pump is switched on without being connected to the AC power supply.

Loading a syringe

1. place the pump on a stable horizontal surface.
2. prepare, load and prime the single use disposable BD Plastipak syringe and extension set using standard aseptic technique.
3. open the cover by turning key in **Lock 2**.
4. squeeze the finger grips on the plunger holder and slide the mechanism to the left. Lift the syringe clamp and rotate clockwise.
5. insert the syringe into the slots on the plunger holder.
6. squeeze the finger grips on the plunger holder and slide the mechanism to the right until the syringe finger flanges locates in the V slot.
N.B. gently advance the syringe until the finger flanges touch the front of the V slot closest to the syringe clamp. This is important to prevent delay at the start of the infusion.
7. rotate the syringe clamp anticlockwise until it locks onto the syringe barrel to secure the syringe.
8. check the syringe plunger and finger flanges are correctly located in their slots.
9. check the syringe type and size being used matches the display. If required, the make of the syringe can be changed by pressing the **CHANGE TYPE** softkey. Press **OK** to confirm syringe.

Changing a syringe during infusion

When changing the syringe **LOCK 1** should remain in the **RUN** position except when a change is required to the protocol

1. press the STOP button to halt the infusion and place the pump on hold.
2. open the cover using LOCK 2.
3. close the extension line to the patient.
4. change the syringe, fitting the new syringe as per instruction above.
5. follow steps 7 to 10 of 'Starting the Pump' section on the next section.

Starting the pump (New Patient)

1. connect pump to AC power supply using the AC power cable. Note: the pump will operate on an internal battery when not connected to an AC power source for a limited time.
2. SET - Insert key into **LOCK 1**. Turn to **SET** position.
3. **NEW PATIENT?** Answering **NO** will retain all previous patient history, except for the PCA lockout time remaining which will be reset to PCA AVAILABLE. **YES** will automatically reset the patient history to zero. Check time and date is correct and answer **YES** or **NO**.
4. **SELECT/MODIFY PROTOCOL** - carefully check the protocol displayed. If required press **MODIFY PROTOCOL** to adjust the current protocol, or **NEXT PROTOCOL** to select an alternative pre-set protocol.
5. RUN - Turn **LOCK 1** to the **RUN** position and remove the key from the pump.
6. CONFIRM PROTOCOL - carefully check that protocol is correct. Press **OK**.
7. CONFIRM SYRINGE - Check that the syringe type and size being used matches display. If required, the make of the syringe can be changed pressing the **CHANGE TYPE** softkey. Press **OK**.
8. PURGE (*if required*) - the **PURGE** buttons can only be used when the cover is open and **LOCK 1** is in the **RUN** position. When the purge operation is complete close the cover.
9. CONNECT PATIENT - connect the PCA extension set to the patients intravenous cannula. Recheck the protocol.
10. START. Press the START button to commence pump operation. Either **PCA AVAILABLE** or **CONTINUOUS INFUSION** will be displayed with the rate, demand & drug totals. If selected, a loading dose will be delivered.
11. PROTOCOL - press **PROTOCOL** softkey at any time to display the protocol summary. To return to the main screen press **QUIT**.

Purge

The PURGE button allows the delivery of a limited volume of fluid in order to purge the extension set prior to being connected to a patient.

1. **PURGE** can only be operated with the Cover open and the **LOCK 1** in the **RUN** position.
2. Press the purge buttons together until fluid flows and priming of the syringe extension set is complete. The audible alarm will operate during use of the PURGE buttons and the volume used during priming will be shown in the volume infused display.

N.B. the **PURGE** feature is not activated when the cover is closed. Ensure that the extension set is disconnected from the patient before purging the line. No alarms are disabled during the operation of the PURGE feature.

Clinician Over-ride (if access approved)

The clinician over-ride feature can be used in RUN mode to administer an additional bolus dose or continuous background infusion of a limited dose and duration, for example during the PCA lock-out period. Clinician over-ride can also be used in SET mode to allow modification of the preset PCA protocol when this option has been disabled for normal use.

1. turn **LOCK 1** to **RUN** position and ensure green light is illuminated on the START button.
2. press and hold down the PURGE button for 2 seconds.
3. use PLUS and/or MINUS buttons and NEXT softkey to enter clinician access code.
4. select **BOLUS** or **CONTINUOUS** (if access approved).
5. use PLUS and/or MINUS buttons to select the dose delivered, when the correct value has been entered press **OK**.
6. use PLUS and/or MINUS buttons to select period over which the dose is to be delivered. Press **OK** when correct time has been entered.
7. **BEGIN BOLUS? YES** - clinician bolus/continuous infusion will be delivered to the patient. NO – Quit set-up and return to normal operation.

N.B. the delivery of the clinician over-ride continuous infusion will automatically halt while a Patient or Clinician over-ride bolus is being administered. To cancel clinician over-ride during delivery, press STOP button and press the **YES** softkey.

Patient History

Each time the pump is switched On it will ask if this is a new patient. Pressing YES will provide opportunity to re-set patient history. Pressing NO continues with the current protocol and retains all protocol records, event history, graphs etc. However any remaining PCA lock-out time will be cleared and PCA demand will be immediately available.

The pump will retain the events in a rolling memory. Following selection of a new patient, it remains possible in technician mode to access previous patient(s) history still held in memory.

Patient history can be accessed any time by pressing the HISTORY button. The pump provides a clear rolling 24 hour graphical representation of the PCA demand pattern and the drug administered to the patient. The graphs are up-dated when the history button is pressed and give values for each completed hour and current hour. The cumulative counters on the Drug Infused history screen up-date in real-time.

24 Hour Review

An hour by hour record of the last 24 hours, showing good and total PCA demands along with the total dose and volume per hour. This information provides the accurate demand pattern and drug infused values from which the other graphs are derived.

1. to access the 24 Hour Review press the HISTORY button once.
2. to return to the previous screen press the **BACK** softkey.
3. to scroll through to the next History screen press the HISTORY button.

PCA Demands

Provides a record of the last 24 hours good and failed PCA demands. The good demands are indicated by the shaded section of the graph and the failed demands by the clear section. The latest hour is shown at the right side of the display.

1. to access the PCS demand graph press the HISTORY button twice
2. to exit the screen press the BACK softkey.
3. to scroll through to the next History screen press the HISTORY button.

Drug infused

Record of the total amount of drug administered to the patient over the last 24 hours. The latest hour is shown at the right side of the display. This graph provides a clear picture of the actual drug administered, including loading dose, continuous background infusions, clinician over-rides and protocol changes.

1. to access the Drug Infused graph press the HISTORY button three times.
2. to return to the previous screen press the **BACK** softkey.
3. to scroll through to the next History screen press the HISTORY button.

Event Log

Record of events since 'NEW PATIENT' selected. Including, protocol selection and changes, patient demands etc. The event log will also record all alarms. All events are recorded against date, clock and total drug infused.

1. to access the Event Log press the HISTORY button four times.
2. to return to the previous screen press the BACK softkey.
3. to scroll through to protocol Summary press the HISTORY button again.

Acute Pain Service

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