# Indications for Use

The Alaris GH syringe pump can be used where:

* An infusion needs to be administered via a pump and the volume is less than 60ml
* An accurate flow rate is required
* The type of infusion indicates it- see injectable medicines information sheets on the intranet
* The type of patient indicates it – The Alaris GH can be used for adults and children

The Alaris GH pump can be used for adults and children, but is not suitable for neonates or patient controlled analgesia (PCA).   
  
The Alaris CC is used for neonates and is only available in SCBU.

# Safety Features

A number of features have been built into the pump and administration set to deal with the risks and problems of syringe pumps:

* Provision against accidental modification of settings
* Two distinct actions to change rate
* Two distinct and/or simultaneous actions to initiate bolus
* Syringe barrel clamp alarm, door open alarm or equivalent
* Syringe plunger disengagement alarm or equivalent
* Patient history log
* Volume infused display
* Technical history back up
* Battery back up
* accuracy to +/- 5%
* ability to view the time remaining
* ability to calculate the rate in
* occlusion alarm settings, allowing the rapid detection of downline back pressure in the administration set
* purge and bolus facility
* backoff facility – This feature is activated when the occlusion alarm pressure is reached. The backoff facility removes pressure from the line, preventing a post occlusion bolus. Volume infused reduces as the pressure goes down.

# Buttons

|  |  |
| --- | --- |
|  | On/off button |
|  | Run |
|  | Hold |
|  | Battery |
|  | Mains |
|  | Purge/Bolus |
|  | Mute alarm |
|  | Options |
|  | Set pressure |
|  | Chevrons to change rate etc |

# Pre-use checks

Before using the pump, check to see if the pump:

* is **C**lean
* has a **H**olding Device
* is **I**n tact
* is **P**lugged in and fully charged
* has been **S**erviced, and has an asset number

# Preparation

* The pump should be attached to a 5-legged drip stand
* Normal infection control procedures apply i.e. handwashing, decontamination, aseptic technique
* Select the appropriate administration set and check the set is in date
* Prepare the infusion, checking that all components are in date
* Record the pump asset number on the infusion pump check chart

# Quick Start guide

* Load the syringe
* Turn the pump on
* Check that the pump is showing the correct time and date. Other wise this could indicate that the battery has depleted at some stage. It will then need to go back to Biomed to be checked
* For clear set up, say yes if a new patient
* Confirm size and brand of syringe
* Ensure the extension set is connected to the syringe but not to the patient
* Purge
* Set the infusion rate (and volume to be infused if applicable)
* Connect to the patient
* Start the infusion by pressing Run
* When asked if you want to use Rate Lock, select Yes

# Occlusion Alarm Settings

After the infusion has run for about 15 minutes, the line pressure will establish.

* Press****
* Set the alarm to – line pressure +1

# Options button

The ? button on the bottom right-hand side of the pump has a series of options:

* **Rate lock**  
  When the rate lock is in place, you cannot:  
  - Change the rate  
  - Use the Purge/Bolus button  
  - Switch the pump off  
  - Set VTBI over time
* **Rate unlock** - Unlocks the rate lock
* **Drug** - Displays a drug name, instead of the syringe name  
  ICU Only
* **Set VTBI over time** - Calculates the rate of the infusion, from the volume and time taken
* **24 Log** - Allows the 24 hour log of volume infused to be reviewed since the volume was last cleared
* **Event Log** - Displays all the events for the pump

# Change the syringe

* Unlock the Rate Lock
* Put the infusion on hold
* Clamp the line
* Remove the syringe
* Disconnect from the extension set
* Connect the new syringe
* Load the syringe, confirming it
* Purge
* Re-connect the line
* Check the rate of the infusion and if correct
* Press Run
* Record in the patients notes and on the pump check chart

# Deliver a bolus dose

* Check the amount of bolus prescribed
* Make sure that you don’t put the pump on hold
* Press the Syringe button (top left-hand button on the right-hand side of the pump)
* The screen should say BOLUS
* Press the button down until the bolus dose has been given
* Check the patient following the bolus dose
* Carry out a set of observations if applicable
* Document on the prescription sheet, in the patients note and on the pump check chart

# Alarms and Alerts

The Alaris GH has 2 different alarm settings:

**Red** - Alert – the pump has stopped

**Amber** - Prompt – the pump is still running

**RED ALARMS:**

* **Battery empty**  
  Internal battery exhausted  
  Plug in
* **Check syringe**  
  This means that the syringe wings have not been slotted in correctly
* **Drive disengaged**Check the finger grips and position of the syringe
* **End of infusion**
* **Error code**Internal malfunction  
  Note code, complete faulty equipment label and return to equipment library
* **Occlusion**Excessive pressure measured at the syringe plunger. Backoff facility will be activated.  
  Identify and remove blockage before re-starting infusion

**AMBER ALARMS:**

* **AC Power fail**Pump has been unplugged and is now on battery  
  Plug in
* **Attention**  
  Pump has been left on hold for 2 minutes or more
* **Battery low**Battery has 30 minutes charge remaining  
  Plug in
* **Near end of infusion**  
  The infusion has 15 minutes remaining (10 for ICU pumps)
* **Titration not confirmed**Infusion rate has been changed but not started  
  Press Run if new rate is correct
* **VTBI Done (KVO or Continue)**The pre-set volume has completed

# Cleaning and Decontamination

This should be carried out:

* before and after patient use
* on transportation between wards
* before returning to the equipment library
* on a daily basis when in use a on patient
* where otherwise indicated e.g. following a spill or leakage

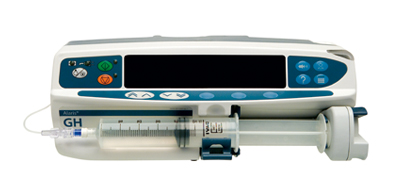
Use warm soapy water and a damp cloth or preferably use **Sanicloth Detergent wipes**

Do not:

* immerse the pump in water, it is not waterproof
* use alcohol wipes where the percentage of alcohol exceeds 70%, as this damages the surface of the pump

**Under no circumstances should any monitor, pump or equipment screen be cleaned with an alcohol based product as this can lead to a clouding of the plastic**

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**Alaris GH**

**QUICK GUIDE**

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* Indications for use
* Safety features
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* Pre-use checks
* Preparation
* Set up
* Occlusion alarm settings
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* Alarms and alerts
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**For further information:**

Contact the Medical Device Trainer on x4448 or

Go to the intranet: Departments/Medical Device Training

Version 1.0 March 2009

4TRG-QRG-002