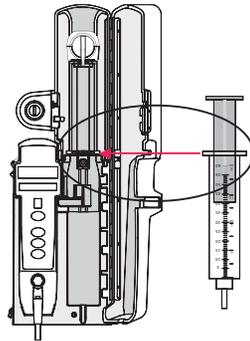


# Alaris® PCA module pocket guide

**Warning: before loading or unloading** syringe, always turn off fluid flow to the patient using tubing clamp. Uncontrolled fluid flow can occur when administration set is not clamped or turned off and may cause serious injury or death.

## Loading the syringe:

1. Pull syringe barrel clamp out, rotate it to left, gently release it.
2. Twist gripper control clockwise to raise drive head (gray) to its fully extended position.
3. Insert syringe by sliding flat edges between barrel flange grippers (see drawing).
4. Lock syringe in place by closing barrel clamp. To close barrel clamp, pull out and rotate it to right.
5. Twist gripper control clockwise, gently lower drive head, release gripper to lock plunger in place.



## Priming the Syringe using the Alaris® PCA module:

**Note:** Do **not** prime while attached to patient.

1. **Prime** soft key is available only after Syringe Type and Medication selection (prior to infusion mode selection).
2. At Infusion Mode screen, press **OPTIONS**, then press **PRIME SET WITH SYRINGE**.
3. Press and hold **PRIME** key to prime tubing.

## Programming guide

### Initial set-up:

1. Load syringe with administration set attached.
2. Press **SYSTEM ON KEY**.
3. Select **Yes** or **No** to "New Patient?"
4. Select appropriate profile.
5. If required, enter patient identifier or press **EXIT**.
6. Press **CHANNEL SELECT** key.

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**Operator Precautions:** For proper operation of the Alaris® System the user must be familiar with the features, disposables, administration sets, set-up and programming.

This guide includes selected information and suggestions and is not intended to be comprehensive instructions for the set-up and operation of the Alaris® System. For complete instructions along with Warnings and Cautions, refer to Alaris System Direction for Use (v8).

7. Set key to **PROGRAM** position.
8. Confirm time of day or change time if necessary.
9. Select correct syringe type and size. Press **CONFIRM**.  
**Note:** If installed syringe is not listed, press **ALL SYRINGES** and select correct syringe type and size.
10. Select correct medication and concentration.
11. At Infusion Mode screen, press **OPTIONS**, then press **PRIME SET WITH SYRINGE**.
12. Press and hold **PRIME** key to prime tubing.  
**Note:** Do **not** prime while attached to patient.
13. Press **EXIT** when priming is complete.
14. Select desired Infusion Mode and follow on-screen prompts to enter dosing parameters.
15. Close and Lock door.
16. Attach administration set tubing to patient.
17. Review and verify settings.
18. Open tubing clamp.
19. Press **START**.

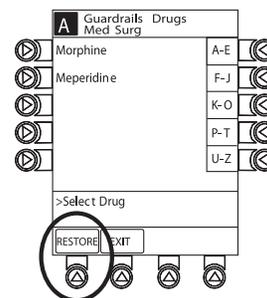
## Programming the Alaris® PCA module with PCA Pause

### Protocol enabled:

1. Perform steps 1-10 of initial set-up and then continue with following steps.
2. Review Clinical Advisory *Attach an Alaris® SpO2 or Alaris® EtCO2 Module Now*.
3. Press **CONFIRM**.  
**Note:** If a monitoring module is not attached and started, PCA Pause Protocol will **not** activate.
4. Press **NEXT** key to verify medication parameters.
5. Review Advisory *PCA Pause Limits Should be reviewed*.
6. Press **PAUSE LIMITS** to review the settings or press **CONFIRM**.
7. Select desired Infusion Mode and follow onscreen programming prompts.

## Change syringe and use Restore feature

1. Press **PAUSE** on PCA module.  
**Note:** Always clamp administration set and disconnect from patient before changing syringe.
2. Use PCA key to unlock door, remove syringe, press **SILENCE**.



3. Attach new syringe to tubing and load new syringe in to PCA module.
4. Set key to "Program" position and close door.
5. Press **CHANNEL SELECT** key.
6. Select and Confirm correct syringe type and size.
7. If using same drug, dosing units and concentration then press **RESTORE**.
8. Verify that drug, concentration and dosing parameters are correct.
9. Lock door and open tubing slide clamp.
10. Review settings and press **START**.

## Change program/mode:

1. Press **CHANNEL SELECT** key.
2. Press **PROGRAM**.
3. Set key to "Program" position or enter authorization code (if enabled).
4. Press **CHANGE MODE**. Select desired infusion mode and follow onscreen prompts.

## Give a clinician bolus dose:

1. Press **CHANNEL SELECT** key.
2. Press **Bolus Dose**.
3. Set key to "Program" position or enter authorization code (if enabled).
4. Enter bolus dose amount and lock door.
5. Press **CONFIRM**.
6. Review settings and press **START**.

## Beginning of shift/Summary Review:

1. Press **CHANNEL SELECT** key and verify settings.
2. Press **START** key.

## Access drug event history:

1. Press **CHANNEL SELECT** key.
2. Press **OPTIONS** then press **DRUG EVENT HISTORY**.
3. Press **EXIT** and then press **START**.

### Patient history/24 hr. history:

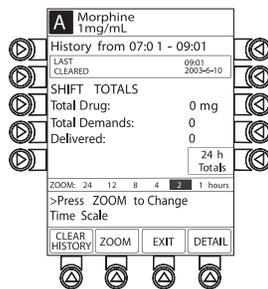
1. Press **CHANNEL SELECT** key.
2. Press **OPTIONS**.

Press **PATIENT HISTORY**.

**Note:** The top of the Patient History screen displays

- the exact time frame for patient history. History from ##:## - ##:##
- time that past history was "LAST CLEARED"

3. Press **ZOOM** key (time interval) as appropriate and review drug totals.
4. To clear patient history, press **CLEAR HISTORY** and then press **YES** or **NO**.
5. To view 24 hour totals: Press **24 h Totals**.  
**Note:** This is a moving window of time, meaning that after 24 hours the Patient History rewrites.
6. Press **EXIT** and then press **START**.



### PCA/Monitoring Trend Data:

**Note:** This function requires use of Alaris<sup>®</sup> PCA monitoring module(s):

1. Press **CHANNEL SELECT** on monitoring module
2. Press **OPTIONS**.
3. Press **PCA/Monitoring Trend Data**.
4. To exit: Press **MAIN**.
5. Press **MAIN SCREEN**.

### Change PCA Pause Alarm Limits:

1. Press **CHANNEL SELECT** key on PCA module.
2. Press **OPTIONS**.
3. Press **PCA Pause Limits**.
4. Select desired parameter and enter value.

**Note:** If acceptable range value is **not** within the hospital defined range, a prompt is provided.

5. Follow on-screen prompts.
6. Press **CONFIRM** and press **START**.

### Responding to PCA Pause Alarm:

1. Always follow hospital protocol.
2. Press **CONFIRM**.

**Note:** Main screen shows "PAUSED". The Alaris<sup>®</sup> PCA module cannot be restarted until patient's monitoring values have been re-established and are within hospital established limits.

3. Press **RESTART**.

**Note:** To view time and Patient PCA pause value that caused the PCA module to pause, access Drug Event History.

### Disabling and enabling PCA Pause Alarm:

1. Press **CHANNEL SELECT** key on PCA module.
2. Press **OPTIONS**.
3. Press **PCA Pause Limits**.
4. Select **Disable SpO<sub>2</sub>** or **Disable EtCO<sub>2</sub>**.
5. Press **CONFIRM**.
6. Press **START**.

**Note:** To enable PCA Pause function, follow steps 1-3 then press **Enable SpO<sub>2</sub>** or **Enable EtCO<sub>2</sub>**.

### Change Dose Request Cord audio and light setting:

1. Press **CHANNEL SELECT** key.
2. Press **OPTIONS**.
3. Press **Dose Request Set-up**.
4. Select desired Dose Cord Profile.  
(1 = light flashes, 2 = light on, 3 = light off)
5. Press **CONFIRM** then press **START**.

### To attach the Dose Request Cord:

Align the red markings on both the Alaris<sup>®</sup> PCA module and Dose Request Cord.

### To detach the Dose Request Cord:

Hold the body of latching connector on the Dose Request Cord and pull straight away from the Alaris<sup>®</sup> PCA module, without twisting or turning.

### Detaching the Alaris<sup>®</sup> PCA Module:

Use PCA key to unlock door. Locate black lever inside at bottom left and depress. At the same time: Hold the Alaris<sup>®</sup> PCA module and move the bottom of the Alaris<sup>®</sup> PCA module away from the Alaris<sup>®</sup> PC Unit.

### Troubleshooting

#### Alarms, errors, messages

**Note:** During an alarm state, the Alaris<sup>®</sup> PCA module is no longer infusing.

#### Incorrect concentration or dosing:

An incorrect concentration or dosing parameter may have been

programmed which could result in an excessive volume or dose being delivered.

1. Remove syringe.
2. Verify the concentration listed on syringe matches concentration (DRUG AMOUNT and DILUENT VOLUME) programmed into PCA module.
3. Reprogram.

**Note:** This message can be the result of an incorrect DRUG AMOUNT and/or DILUENT VOLUME entry or can occur if hospital-established Guardrails<sup>®</sup> limits are very wide. Be sure to enter either a drug amount per 1 mL or total drug amount per total volume. For example, a 30 mL syringe with concentration of 1 mg/1mL can be entered in 1 of 2 ways:

- DRUG AMOUNT 1 mg
  - DILUENT VOLUME 1 mL
- Or
- DRUG AMOUNT 30 mg
  - DILUENT VOLUME 30 mL

### Maximum Limit Reached:

Programmed maximum limit has been reached over time period specified. Infusion paused until time limit has expired. Alarm message **Max Limit Reached** will scroll in channel message display on the Alaris<sup>®</sup> PCA module. To silence safety alarm tone, press **SILENCE** key. The Alaris<sup>®</sup> PCA module will remain silent.

### Near End of Infusion Alert (NEOI):

Alert message **Near End** alternates with remaining **VTBI** on the screen until syringe is empty. Alert message will scroll in channel message display on the Alaris<sup>®</sup> PCA module. The Alaris<sup>®</sup> PCA module remains functional and will continue infusing. To silence safety alert tone, press **SILENCE** key. The Alaris<sup>®</sup> PCA module will remain silent until the **Syringe Empty** alarm sounds. When programmed in PCA Dose Only mode, the Green indicator light illuminates only when a PCA dose is being delivered. When programmed in PCA Dose and Continuous mode, the Green indicator light remains illuminated. Yellow indicator light will flash during NEOI Alert.

### Syringe empty:

Alarm message **Syringe Empty** will scroll in channel message display on the Alaris<sup>®</sup> PCA module. To silence safety alarm tone, press **SILENCE** key. The Alaris<sup>®</sup> PCA module will remain silent approximately two minutes and will re-sound.