Quick Reference Guidelines for Perfusor® Space PCA

1. Press to switch on the pump. The pump will go through a series of self checks and the drive arm will extend.

2. Open the pump door then open the syringe holder and turn fully to the right.

3. Insert the syringe with wings upright. Ensure the green clasp is situated to the right of the wings.

4. Close the syringe holder and the pump door.

5. Confirm the correct syringe brand and size by using the drive unit advances automatically and grips syringe.

   The syringe brand selected on the pump must correspond with the syringe inserted. If the wings of the syringe are not correctly placed within the green clasp, “Syringe Invalid” will be displayed on the screen. Open syringe holder and replace syringe correctly.

DO NOT block the advancing drive.

Ensure the green clasp is situated to the right of the wings.

If the wings of the syringe are not correctly placed within the green clasp, “Syringe Invalid” will be displayed on the screen. Open syringe holder and replace syringe correctly.

Turning Pump On & Inserting Syringe
Quick Reference Guidelines for Perfusor® Space PCA

Setting Up The Therapy

1. The pump will ask you **MUST** answer **YES** by using the arrow key: otherwise the pump will not function as a PCA!
2. Highlight the relevant drug category/drug profile using and then press to confirm.
3. The pump will confirm ‘Data Lock is Active’.

4. If you have not already done so – secure both the front and rear locking mechanisms:
   - The Screen will now display the default settings for your chosen protocol
   - Use to scroll through the Main Menu to check ‘Bolus, Max Limits & Background Rates’

5. Press to commence PCA:
   - If an initial bolus is possible, input the amount you wish to deliver using and press .

Moving arrows on the display plus a **Green** operating light indicate the pump is infusing:

- The **Green** light remains lit, but arrows become stationary when the bolus is complete.
- Once the PCA has been commenced any changes will require the 4 Digit Code.
Quick Reference Guidelines for Perfusor® Space PCA

Changing Rates & Understanding The Display

The background/basal rate can only be adjusted by inputting the 4 digit Clinician’s Code!
You may not be authorised to do this – please contact your pain service.
The background/basal rate can only be adjusted by inputting the 4 digit Clinician’s Code.

1. Whilst pump is infusing, press

2. Select new rate by using

3. Confirm new rate by pressing

If user does not press within 20 seconds, an amber 'value not accepted' reminder alarm will sound. Pump will continue to run at previous rate.

Pump screen will display:

- Battery Capacity
- Pump Locked
- Pump Running
- Infusion Information
- Pressure Monitoring
- Current Therapy
- Background Rate

(Inflection: 033:00:00)
Morphine

0:
0:
0:

Patient Bolus History

The pump will give you access to information about the patient's use of their PCA:

Pressing \( \text{ } \) will bring up the patient usage history screen.
- Rem.lock = remaining Lockout time.
- A/D = actual number of Administered boluses, compared to boluses demanded by patient.
- Rem.limit = remaining available drug which can be administered, within the pre-set period of time.

Pressing \( \text{ } \) a second time will bring up the SpacePCA-Chart.

- Points above the axis represent the number of boluses administered and those below represent the number that have been refused.
- The chart has a 15 minute resolution and shows a max of 5 points per 15 minutes. Should more than 5 boluses be given/refused in this time, the last point will turn bold.
- Changes to the PCA parameters are displayed as arrowheads at the bottom of the chart.
Quick Reference Guidelines for Perfusor® Space PCA

Patient Bolus History

More detailed information is accessible via the Status Menu:

1. While pump is running, press the Main Menu.
2. Use to scroll down to highlight Status and press to access.

The following describes what this information tells the user:

- **Volume** = cumulative volume administered.
- **Time** = cumulative running time, cannot be cleared.
- **Rem. Limit** = remaining available drug which can be administered, within the pre-set period of time.
- **Rem. Lock** = remaining lockout time.
- **Amount** = cumulative amount of drug administered.
- **Volume t** = cumulative volume, cannot be cleared.
- **Time t** = cumulative running time, cannot be cleared.
- **A/D** = actual number of administered boluses, compared to boluses demanded.
- **A/D** = percentage of how many successful button presses the patient has had.

More detailed information is accessible via the Status Menu:

1. While pump is running, press the Main Menu.
2. Use to scroll down to highlight Status and press to access.

The following describes what this information tells the user:

- **Volume** = cumulative volume administered.
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Quick Reference Guidelines for Perfusor® Space PCA

Patient Administered Bolus & Additional Bolus Requirements

⚠️ Ensure that the patient has had adequate education on the use of their patient control hand held button. They must understand their PCA pump fully!
- Use the clasp to fasten the patient handset cord to the patient's bedding or clothing.
- Advise the patient of how long the ‘Lockout’ period is, and why this is important.

1. Each time the patient presses the button, outside of the prescribed Lockout period, the patient will receive the prescribed bolus of the medication.

2. At this time, the screen will display the amount of the bolus being delivered, called PCA Bolus. The arrows will once again move.

Additional Bolus Requirements:

1. Press 🔄 to access the Bolus Screen 🔄.
   The 4 Digit code will be required at this point.

2. Press 🔄 to access the set Bolus Dose Screen.

⚠️ Use 🔄 to set the required bolus.

3. Press 🔄 key to commence bolus delivery.

⚠️ Once the bolus has completed the pump will default back to the Running Display.
Adjusting the Pressure Settings

1. If the infusion is running press \( \text{to return to the main menu. If the pump is not} \)
   running, \( \text{automatically default back to the running display. If the pump is not} \)
   stopped, \( \text{will automatically default back to the running display.} \)

6. \( \text{Press} \ \text{to confirm the new pressure setting.} \)

   \( \text{Adjust in accordance with local policy. The higher the pressure alarm level is set, the higher the} \)
   resistance must rise before triggering an occlusion alarm. Increasing the pressure alarm setting may
   lead to a prolonged alarm reaction time.} \)

5. \( \text{Use} \ \text{to adjust the pressure alarm setting.} \)

4. \( \text{Press} \ \text{to access the pressure settings.} \)

3. \( \text{Once Options is highlighted, press} \ \text{to highlight the Options menu.} \)

2. \( \text{Highlight the Options menu.} \)

\( \text{Quick Reference Guidelines for Perfusor® Space PCA} \)
Clamp the line to the patient to avoid dosage errors during syringe change. Never leave the pump unattended during syringe change.

1. Stop the infusion by pressing \( \text{Stop} \).

\[ \text{The 4 Digit code will be required at this point if running in Data Lock 3.} \]

2. Pull back on the Syringe Holder and release back into the closed position. (fig C)

3. Answer YES with \( \text{ } \) arrow key to “perform syringe change?”

\[ \text{Drive unit moves backwards into starting position.} \]

4. Again pull back on the Syringe holder and turn fully to the right, open pump door and remove syringe. (fig D)

5. Replace Syringe and load as per scenario 1, or turn the pump off by pressing \( \text{ } \) for 3 seconds.

\[ \text{If syringe is completely empty you will not be able to turn syringe holder until the drive unit has withdrawn.} \]
Troubleshooting AMBER Alarms

**Quick Reference Guidelines for Perfusor® Space PCA**

- **Troubleshooting AMBER Alarms**

- **Syringe nearly empty**
  - Very little fluid left in syringe.
  - Press to mute alarm, connect pump will automatically turn off.

- **VTBI near end**
  - Pre selected volume is almost finished.
  - The pre selected time has almost finished.
  - Press to mute alarm, infusion will continue and the time remaining until end of VTBI will flash on the display.

- **Battery nearly empty**
  - The battery is almost discharged.

- **Time near end**
  - Pre selected time has almost finished.
  - Press to mute alarm, infusion will continue and the time remaining until end of VTBI will flash on the display.

- **AMBER Alarms**
  - The pre selected volume is almost finished.
  - Press to mute alarm, connect pump will automatically turn off.

- **Time near end**
  - Pre selected time has almost finished.

- **Battery nearly empty**
  - The battery is almost discharged.

- **VTBI near end**
  - Pre selected volume is almost finished.
  - Press to mute alarm, infusion will continue and the time remaining until end of VTBI will flash on the display.

- **Syringe nearly empty**
  - Very little fluid left in syringe.
  - Press to mute alarm, connect pump will automatically turn off.

**Note:**
- Press to mute alarm, connect pump will automatically turn off.
- You have 30 minutes before the battery is almost discharged.
- Press to mute alarm, infusion will continue and the time remaining until end of VTBI will flash on the display.
- Pre selected time has almost finished.
- Press to mute alarm, infusion will continue and the time remaining until end of VTBI will flash on the display.
- Very little fluid left in syringe.
Quick Reference Guidelines for Perfusor® Space PCA

Troubleshooting RED Alarms

"Device alarm"  
- Press to switch the pump off, then immediately switch back on. If self check is then completed, continue to use the device. Should alarm re-occur, note the error code, withdraw pump from use and report fault as per local policy.

"Pressure high"  
- Occlusion in the system, set pressure level was exceeded.  
- Press to mute alarm.  
- Check and act accordingly.  
- Is the tubing kinked or damaged?  
- Is the patient access patent?  
- Increase occlusion pressure if necessary (see Adjusting Pressure Settings).  
- Press to restart the pump.

"Syringe holder"  
- The syringe holder was opened during a running infusion.  
- Close syringe holder, press to mute alarm.  
- Change syringe if needed or press to continue the therapy.

"Syringe empty"  
- No fluid left in syringe.  
- Perform syringe change or end therapy.
Quick Reference Guidelines for Perfusor® Space PCA

Troubleshooting

**RED Alarms**

“Battery empty”
- The battery pack is discharged, user has 3 minutes before the pump will automatically turn off.
- Connect to mains or replace battery pack.

“VTBI infused”
- Pre-selected volume infused and KVO inactive.

To enter new VTBI:
1. Press to mute alarm.
2. Highlight VTBI, press.
3. Use to enter VTBI and press.
4. to restart infusion.

Or to end infusion:
- Remove syringe and turn the pump off.
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This booklet is provided for reference only. Prior to operating this equipment all users should consult the full Instructions For Use.