

Department of
NURSING

Drug Delivery via Ambulatory Pump



What is an Ambulatory Pump?

An ambulatory pump provides pain medication continuously via a small catheter inserted into your spine. (Fig. 1)

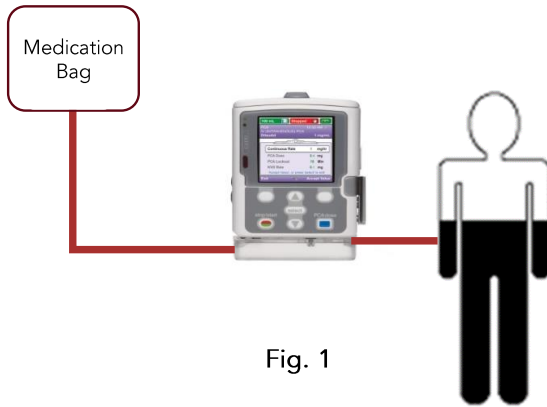


Fig. 1

How Does the Ambulatory Pump Work?

The pump runs on battery. It is programmed to release medication slowly at a preset flow rate into the spine.

How do You Know if the Pump is Working?

Pump display shows green and reads "RUNNING" (Fig. 2)

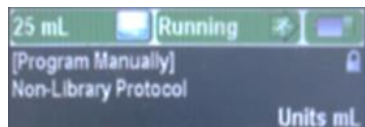


Fig. 2

How do You Know if the Pump is not Working?

Pump is not running or an alarm sounds. Display shows red and reads "STOPPED" (Fig. 3)

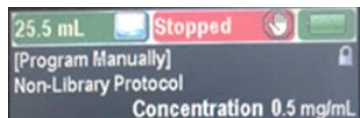


Fig. 3

How Often Should the Pump be Checked?

Always check the pump two to three times daily to ensure that it is working properly, i.e. the reservoir volume is reducing and pump shows "RUNNING". (Fig. 4)

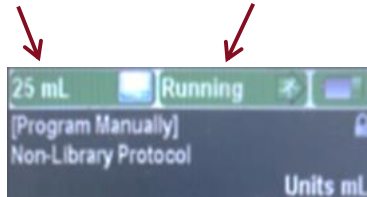


Fig. 4

When Should You Refill the Medication?

Acute Pain Service (APS) will contact you weekly to check on your status and medication balance before deciding on the next refill date.

What Medication are You Receiving?

Pain medications such as opioids (e.g. Morphine / Fentanyl) and numbing medicine are used for treatment.

Will the Medication Cause any Side Effects?

Yes, common side effects include:

- Nausea
- Vomiting
- Constipation
- Drowsiness

Care of Pump

- **Always** keep pump in carrying bag to protect medication. (Fig. 5)



Fig. 5

- **Always** carry bag with pump close to your body. (Fig. 6)



Fig. 6

- **DO NOT** wet the bag and pump as they are not waterproof. (Fig. 7)
- **DO NOT** drop or break the pump. (Fig. 8)



Fig. 7



Fig. 8

Care of Catheter and Wound Dressing

A waterproof dressing is applied over the catheter. (Fig. 9 & 10)



Fig. 9



Fig. 10

- **DO NOT** wet the dressing site.
- If corners of the dressing comes off, **secure** with micropore tape.
- **DO NOT** remove the old dressing or change it unless instructed by doctor or nurse.
- **DO NOT** stop your infusion or disconnect any tubing from the pump unless instructed by doctor or nurse.
- **Check** the dressing site for redness, swelling or odour.



If You Experience any of the Following:

- High fever, temperature (above 37.5 °C)
- Redness, unpleasant smell, pus or discharges around catheter site
- Worsening pain
- Disconnection of the medication delivery system
- Pump error messages/alarms

Contact Acute Pain Service (APS) at 9788 3473 immediately.

Parts of the Pump

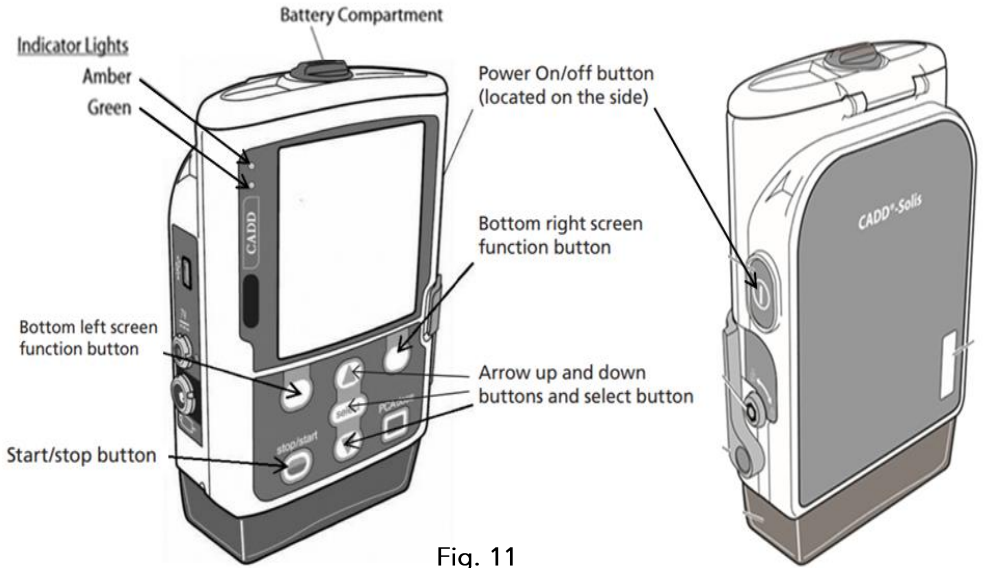


Fig. 11

Screen Display

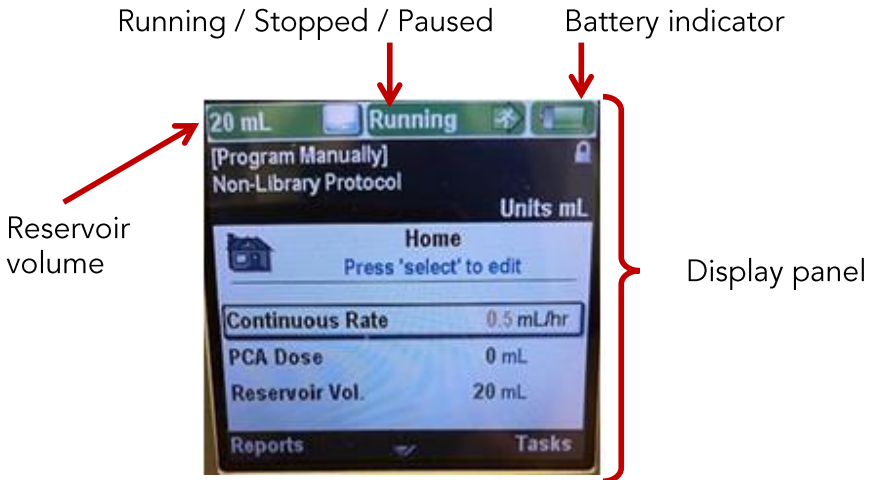
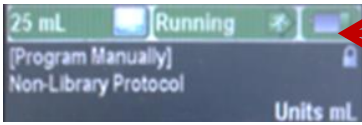


Fig. 12

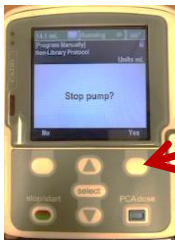
How do You Change the Batteries?



Battery indicator shows **low**



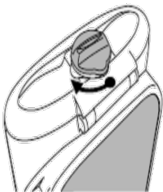
1. Press power button to switch off pump



2. "Stop Pump?" Press Yes



3. "Power down?" Press Yes



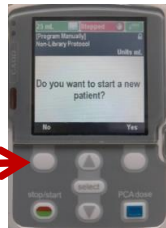
4. Turn knob to open battery door and remove used batteries.



9. "Start Pump?" Press Yes



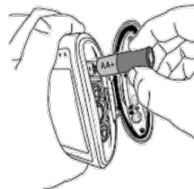
8. Press Start / Stop button to start pump



7. "Do you want to start a new patient?" Press No



6. Press & hold power button to switch on pump



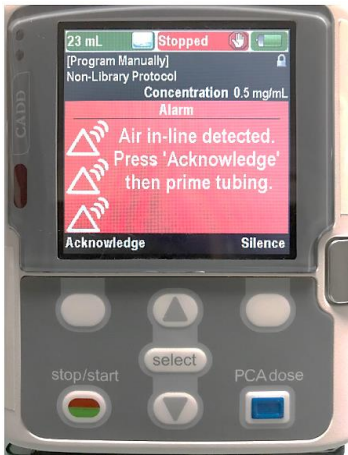
5. Insert 4 new 1.5V AA alkaline batteries. Close battery door. *Note: ONLY use alkaline batteries.*

What Should You do When the Alarm Sounds?

Check the display screen for alarm message.

Alarm type 1: Air in-line detected

Air is in the line.



1. Press "Silence".
2. Contact APS for further instructions.

Alarm type 2: System fault alarm

A system fault number will appear on the screen.



1. Press "Silence".
2. Record the 5-digit error code.
3. Contact APS for further instructions.

Alarm type 3: Upstream Occlusion

Fluid is not flowing from medication bag to the pump.



1. Press "Silence".
2. Check the line between medication bag and pump for bends or kinks in the line.
3. Check that all the clamps are open.
4. Once obstruction is released, the alarm will stop.
5. Press "Acknowledge" to resume pump, ensuring it is on "Running" mode.

Alarm type 4: Downstream Occlusion

Fluid is not flowing from pump to you.



1. Press "Silence".
2. Check the line between you and the pump for bends or kinks in the line.
3. Check that all the clamps are open.
4. Once the obstruction is released, the alarm will stop.
5. Ensure pump is back on "Running" mode.

Pain Management Clinic

TTSH Medical Centre, Level B1

Contact:

6357 7000 (Central Hotline),

6889 4829 (Appointment Hotline)



Scan the QR Code with your smart phone
to access the information online or visit
<http://bit.ly/TTSHConditions-Treatments>.

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