

Alert and alarm conditions

When an **ALERT** is activated:

- 1. The infusion continues
- 2. 2/3 beeps are heard approximately every 3 to 4 minutes
- 3. A screen message indicating the cause of the alert displays intermittently with the infusion running screen

Alert activates approximately 15 minutes prior to infusion end

When an **ALARM** is activated:

- 1. The infusion stops
- 2. A continuous audible alarm activates (this will continue until either the **YES** key is pressed to mute or the problem is rectified)
- 3. A screen message displays to indicate the cause of the alarm
- 4. The infusion status indicator (LED) turns red

Troubleshooting

Screen	Description	Implication/Action
Low Battery	Alert: Battery is almost depleted	Prepare to change battery
Program Nearly Complete	Alert: Infusion will end soon	Prepare to change syringe or turn pump off
Pump Paused Too Long	Alarm: Pump has been left in STOP mode (on hold) for 2 minutes	Either start the infusion, continue pause or turn the pump off
End Battery	Alarm: Battery is depleted	Change battery
End Program	Alarm: Infusion is complete	Close down or start new infusion
Syringe Displaced, Check Syringe	Alarm: One or more of the syringe detection sensors is not detecting	Check screen messages for assistance Check the syringe and re-seat as necessary
Occlusion Check Line & Syringe	Alarm: Pt access device is either blocked, occluded, clamped or kinked	Flush/replace access device, release the clamp or un-kink tubing

Technical problem/error and failure identification

Two examples of system failure screen messages are shown here:

The pump alarms if an internal system fault has been detected and the unit will be inoperative.

- Power the pump off and then power on again.
- If the problem cannot be rectified, power off the pump and remove from patient use.

Follow local policy and/or contact your authorised Medical Engineering Department for advice if necessary.
(If possible, record the code number and a summary of the fault).

NOTE: Screen information is representative only
Refer to Operating Manual for details on Keypad Lock

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System Error. Press &
Hold INFO for Details
If problem persists send pump for service.

ERROR
Startup MotMov Fail
If problem persists send pump for service.

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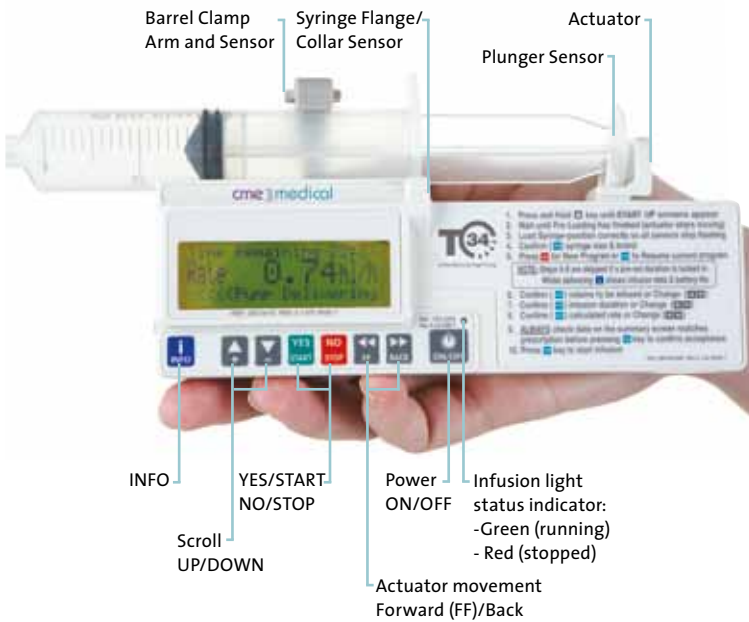
Ambulatory Syringe Pump

LOCK OFF (Prime and Load)

Quick user guide



Feature recognition



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The information contained in this guide is a summary only, based on default settings. Refer to Operating Manual for full operating instructions. Users must have undertaken training before operating this device.

Screen information is representative only and some text wording/screen information may vary slightly with different software versions. You must refer to local policy and procedures for specific guidance on pump settings/set-up and use of accessories (e.g. cannula and administration lines).

Always follow screen prompts. Before pressing keys to proceed, ensure selections made correspond with what is required.

Starting an infusion Lock OFF (Prime and Load)

Scenario

Pump settings: Lock OFF, default duration 24 hours

Syringe: Using a 20ml BD Plastipak syringe with primed line

Infusion required: Deliver syringe contents (12ml) over 12 hours

1. Ensure barrel clamp arm is down and no syringe in place
2. Press **ON/OFF** key to power on *The actuator moves (pre-loading) and the first four screens display automatically*

3. Software version and pump identification displays
 - The actuator is moving to the position of the last syringe that was in place at the start of the previous infusion

- Pump default settings display

- Check battery level: press **INFO** key then **YES**
Load the syringe

(If necessary, align syringe to sensors and use the **FF/BACK** keys to move the actuator for syringe placement)

4. If the syringe size/brand displayed matches the one used, confirm by pressing **YES**

(Use **↑↓** keys to select the matching syringe if necessary)

5. Observe pump default settings and wait for next screen to display

T34
Version NCAT xxxxx
ID: (Hospital name)

Pre-Loading
Use **NO** to Interrupt

Occlusion XXX mmHg
Max rate 5ml/h
Program lock OFF
Battery status 90%

Load Syringe



20ml BD Plastipak
Select **↑↓**, Press **YES**

Occlusion XXX mmHg
Max rate 5ml/h
Program lock OFF
Battery status 90%

6. Change volume if required
Confirm by pressing **YES**

20ml BD Plastipak
Volume 12ml
Change **↑↓**, Press **YES**

7. Change duration to 12:00
Confirm by pressing **YES**

20ml BD Plastipak
Duration 24:00
Change **↑↓**, Press **YES**

8. Reminder that default duration is changed and to check rate

Duration Changed
Please Check Rate

9. Check rate and confirm by pressing **YES**

20ml BD Plastipak
Rate 1.0ml
Confirm, Press **YES**

10. Check all settings and confirm by pressing **YES** *(If purging press **FF** key before pressing **YES** and follow screen prompts)*

Volume 12.0ml
Duration 12:00
Rate 1.0ml/h
Confirm, Press **YES**

11. Press **YES** to start the infusion when ready to do so

Start infusion?

12. Infusion running

Time Remaining 12:00
Rate 1ml/h
20ml BD Plastipak

last line
alternates

Time Remaining 12:00
Rate 1ml/h
<<< Pump Delivering

Monitoring whilst infusion is running

Press **INFO** key **once**:

Volume Infused
VTBI 12.0 VI 0.0

Press **INFO** key **twice**:

Battery Level
Empty 90% Full

Pump features and functions

Purge option (if enabled)

To reduce or eliminate slack (visible spaces at the syringe collar and plunger loading points) and ensure a faster start-up time (time to reach the programmed infusion rate), the user can purge the system (once only) up to a configured volume limit.

Accessing the Info menu

With *no* infusion running, press the **INFO** key.

Options for viewing are:

- Battery Level / Exit / Rate Setting / Event Log / Change Set-up
- Scroll menu using **↑↓** keys and press **"YES"** to view the option selected

Pre-Loading and Automatic Actuator Movement

- Pre-Loading and automatic actuator movement commences when the pump is powered up with the barrel clamp arm down and no syringe is in place. **NOTE: These sequences will not occur if the barrel clamp arm is raised when the pump is powered on.**
- During Pre-Loading, the display screens displays pump information and the actuator moves automatically.
- These simultaneous sequences clear a programme if still in the pump memory.
- At the end of Pre-Loading the actuator returns to the start position of the last infusion programmed.

Programme Protection: Resume or New Syringe?

Programme protection applies specifically to the ml/hour rate

This screen prompt displays if the programme is interrupted by alarm activation (e.g. syringe displacement, occlusion) the pump is powered off for any reason and powered on with a syringe in place and on completion of purge:

Pressing **"YES to Resume"** retains the current programme (ml/hr rate)

Pressing **"NO for New Syringe"** deletes the current programme enabling a new programme to be calculated using the syringe volume at that time.

The important feature to remember is that "Resume" protects the calculated infusion rate for the current syringe.

- If you increase the syringe volume and resume the programme, the duration of delivery will increase
- If you decrease the syringe volume and resume the programme, the duration of delivery will decrease