



# Ambulatory Syringe Drivers T34 In Service



**REM SYSTEMS**

A ParagonCare Brand

# Distribution

The T34 syringe driver is distributed in Australia by:



Freecall: 1800 737 222

Email: [customerservice@remsystems.com.au](mailto:customerservice@remsystems.com.au)

# Agenda

- ✓ Interactive Online T34 Training
- ✓ Equipment Check
- ✓ T34 Set Up and Review
- ✓ Clinical applications
- ✓ Features, benefits, lockbox and keys
- ✓ The running of the T34
- ✓ Critical reminders
- ✓ Loading the syringe into T34
- ✓ Troubleshooting
- ✓ Accessories



# T34 e-learning




- To access the e-learning portal from BD please follow instructions below:
- Use Google Chrome
- If you have no account to the BD e-learning portal please use following link and register yourself
- Go to the portal:
- <https://bd.elmg.net/?rc=8eb4d38bf17d20725ca8a4d3a58f0b22>




A ParagonCare Brand

# T34 e-learning

Please click here to register yourself:



English ▾

 BD

Remember me [Have you forgotten your password?](#)

[Don't have an account yet? Register yourself!](#)

# Specifications

- **Max Volume**
- **Syringes**
- **Battery**
- **Weight inc. battery**

17-18.4 ml in 20 mL Syringe

All brands 2 to 50mL

Disposable 9V

262gm



# Key Features

- **No user calculations**
  - reduces programming errors
- **No mandatory consumables**
  - uses and detects any brand and size of syringe
- **Easy to read, large screen display**
- **Program lock - no change of duration or rate**
  - patient safety
- **Audible and visual alarms**
  - patient safety
- **Complies with standards**

# Key differences in 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> Editions

T34 1<sup>st</sup> and 2<sup>nd</sup> Edition



T34 3<sup>rd</sup> Edition



T34 Key Difference are  
Version 3 now have  
buttons with symbols



**3<sup>rd</sup> Edition**

**Syringe Collar Sensor**

**Actuator**

**Instructions**

**Barrel clamp arm**



Press INFO for infusion data, battery check, change setup, keypad lock

UP/DOWN arrows: Program pump, change numbers, scroll in menus

YES/START: Select menu options, confirm data  
NO/STOP: Change data, go back

FF/BACK: Move actuator, for syringe insertion or prime line

LED: Green when running, red when stopped

**1<sup>st</sup> & 2<sup>nd</sup> Edition**

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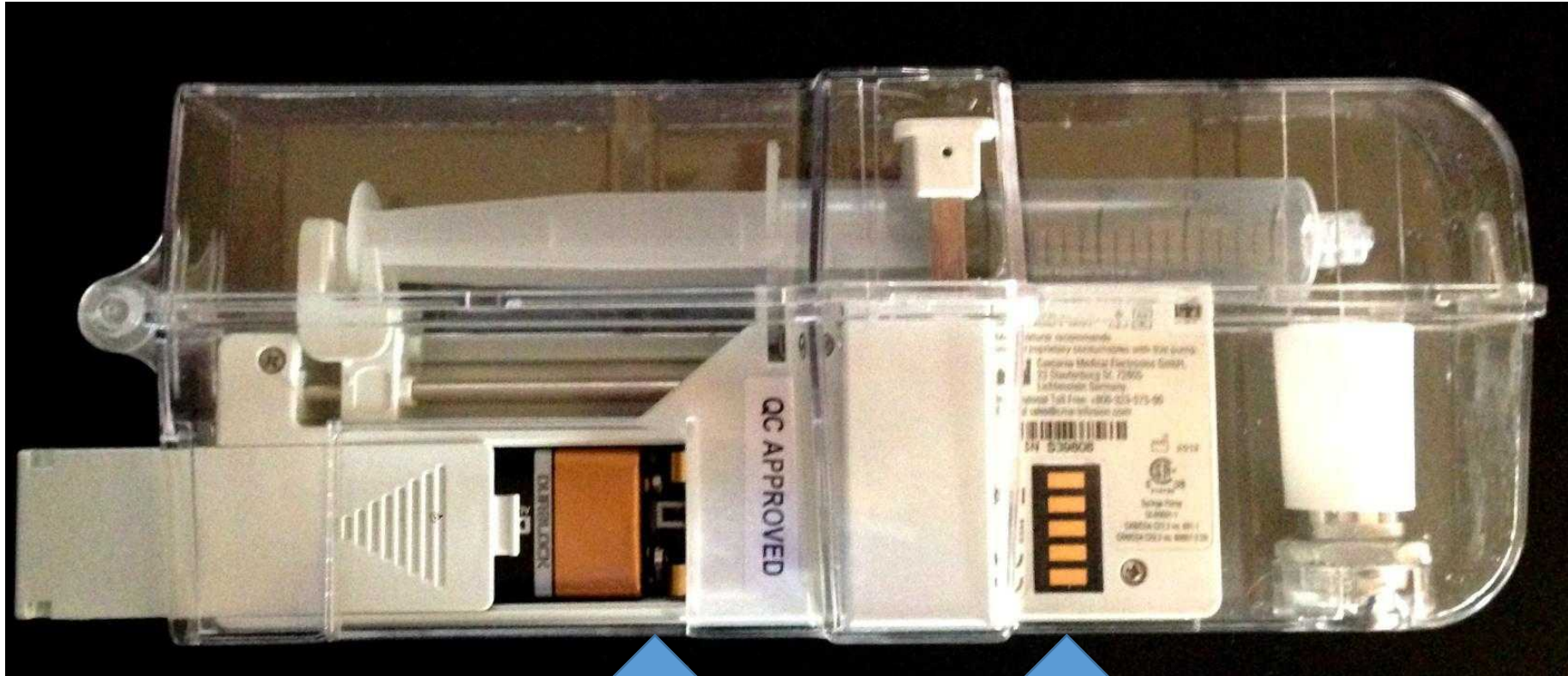
YES/START: Select menu options, confirm data  
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1. Press and Hold key until START UP screens appear
  2. Wait until Pre-Loading has finished (actuator stops moving)
  3. Load Syringe-position correctly so all sensors stop flashing
  4. Confirm syringe size & brand
  5. Press for New Syringe or to Resume current program
- NOTE:** Steps 6-8 are skipped if a pre-set duration is locked in. Whilst delivering shows infusion data & battery life.
6. Confirm volume to be infused or Change
  7. Confirm infusion duration or Change
  8. Confirm calculated rate or Change
  9. **ALWAYS** check data on the summary screen matches prescription before pressing key to confirm acceptance
- key to start infusion

# Rear View



Battery 9V Duracell, can  
be replaced without  
opening lockbox

Terminals for communication station

# Syringe Detection

Three Key Points:

**A: Barrel clamp arm** detects size / width of barrel and secures it to the T34

**B: Syringe collar sensor:** a small metal switch to detect secure loading of syringe collar

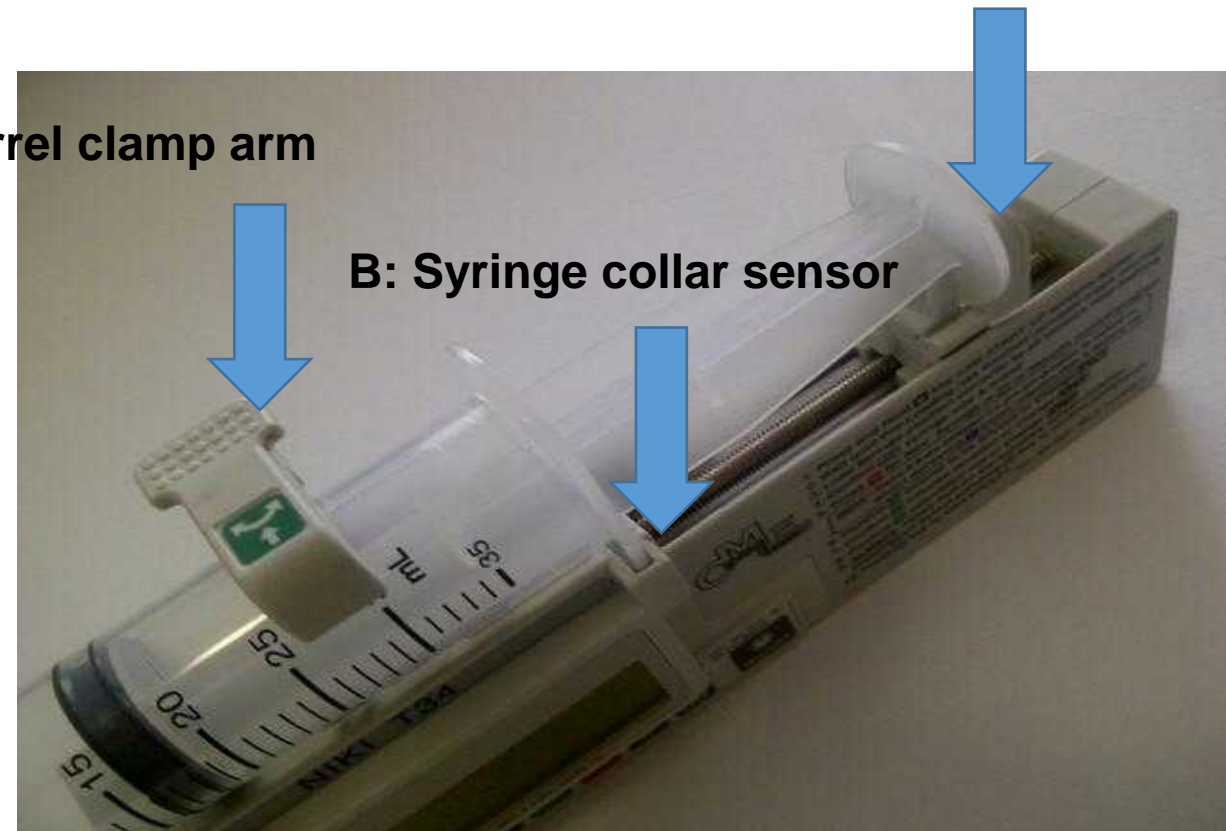
**C: Plunger sensor:** detects secure loading of syringe plunger. Ensure plunger is secure within the groove in the actuator

**Pumps are setup and programmed to identify syringe brand of your choice**

**A: Barrel clamp arm**

**B: Syringe collar sensor**

**C: Plunger sensor**



To insert syringe, lift clamp and rotate 90



# Load Syringe Step by Step

1. Place syringe on top of clamp and ensure clamp is DOWN
2. Turn on
3. Align Syringe Collar with groove in the syringe collar sensor
4. Press either > or < to align the actuator with the end of plunger
5. Lift Clamp, rotate 90 degrees
6. Place syringe on pump
7. Close clamp by rotating 90 degrees

Syringe is now secure and T34 is ready to use

# Pump Operation – Setting a new infusion

TURN ON : Ensure the Barrel Arm is down and in set up position - the actuator will move to same plunger position as for the last full syringe



1. Software version is displayed; watch screen carefully

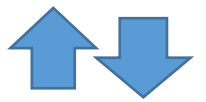


2. Screen display: Ensure **Program Lock ON**

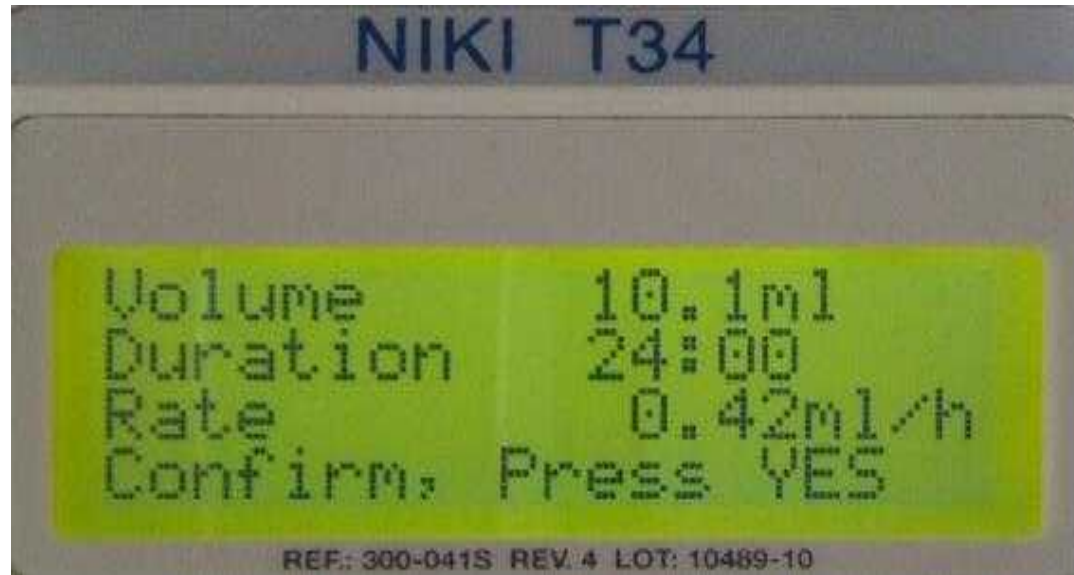
# Pump Operation – Setting up a new infusion



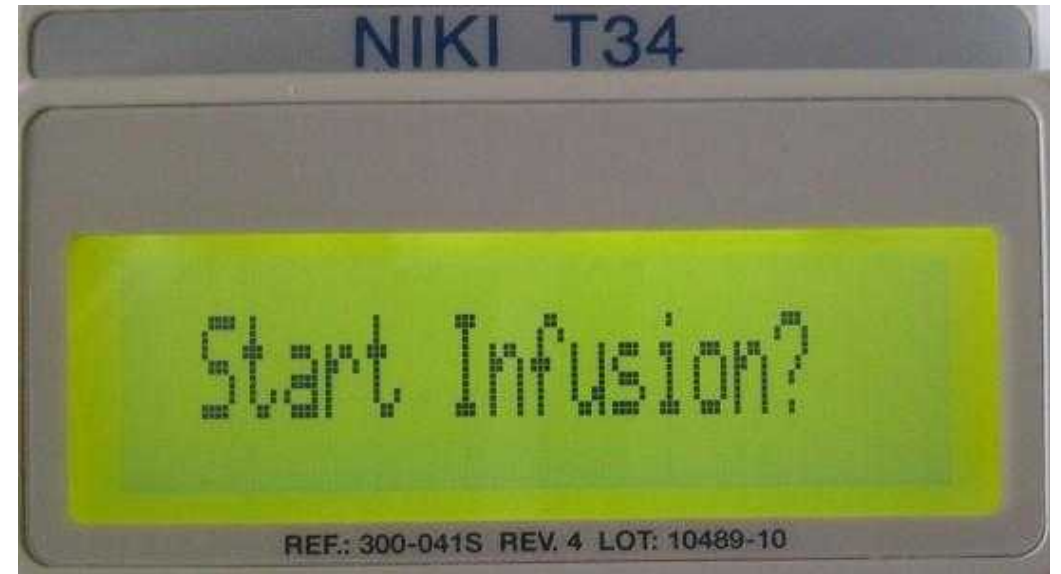
3. The pump will prompt : Load syringe;  
proceed and load the syringe

4. Check syringe **brand and size**   
If the display is not correct use the  
Arrows to identify the correct brand and size syringe

# Pump Operation – Setting up a new infusion



5. Check **volume**, **duration** and infusion rate

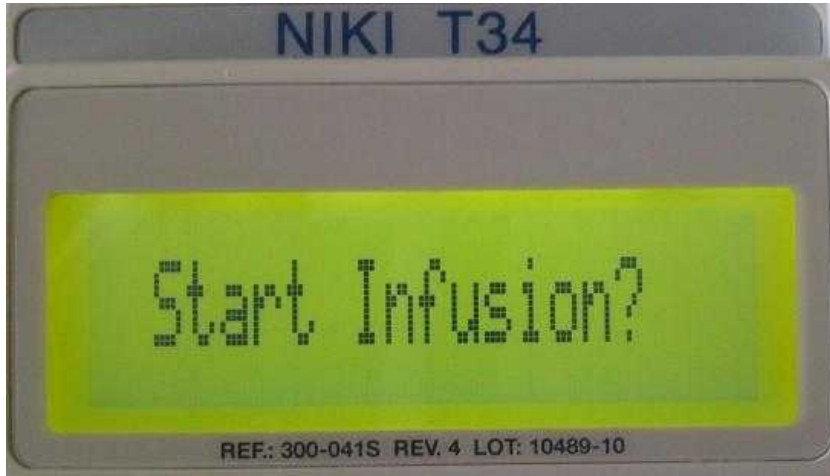


6. **Start Infusion?**

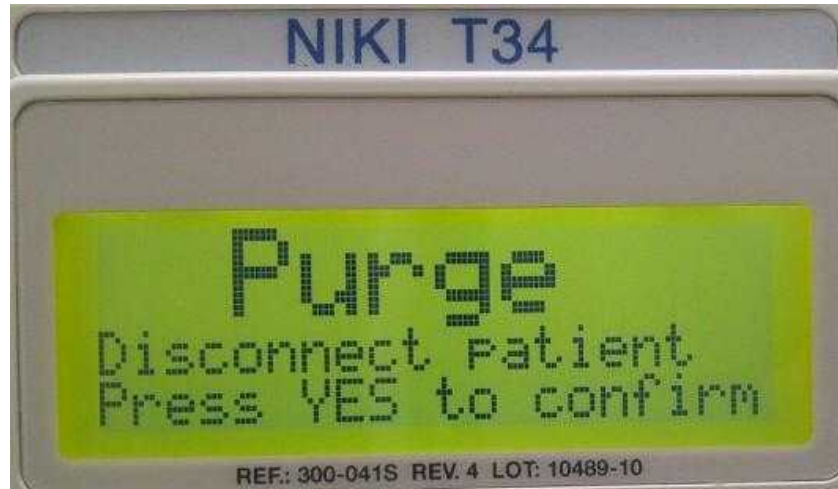
**NO** still need to prime/purge the line.....



# Priming / Purging a NEW Line



**STEP 1.** Before starting the infusion, press ◀ ◀ FF button



**STEP 2.** Check patient is NOT connected and press YES

**NB:** Maximum purge is set at 2.0mL.

Only **ONE** purge is allowed each time the T34 is turned on. To re-purge, the pump must be turned off and on again.



**STEP 3.** Press and hold the ◀ ◀ FF button. Observe the fluid moving down the line. Hold down ◀ ◀ FF button until purge is completed You can pulse the FF button

# Confirm Size and Brand



**STEP 4.** Confirm **size and brand** of syringe AGAIN



**STEP 5.** Press **YES to Resume** (same syringe/infusion)  
NO for New Syringe (if you changed syringes  
after priming)

# What does this mean?



**STEP 6.** T34 is asking, do you want to:

**PRESS YES to resume:** the mLs / hour rate already calculated for this 24 hour infusion (SAME SYRINGE SAME INFUSION)

**OR**

**NO for New Syringe** will recalculate the mLs / hour rate with the volume that is now left in the syringe (note: if you select this at this point it will calculate the initial volume minus the prime volume and deliver over 24 hours – the rate will change and the patient will only receive the total volume remaining over 24 hours)

# Recalculated Data Screen

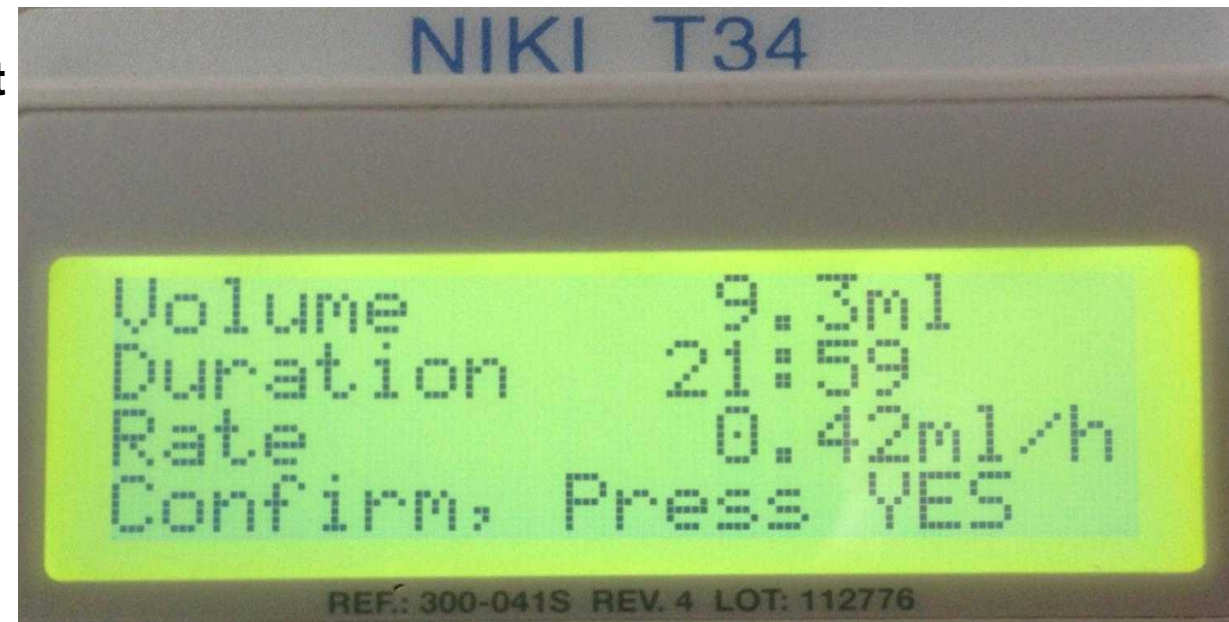
## STEP 7

T34 takes into account the volume in the extension set

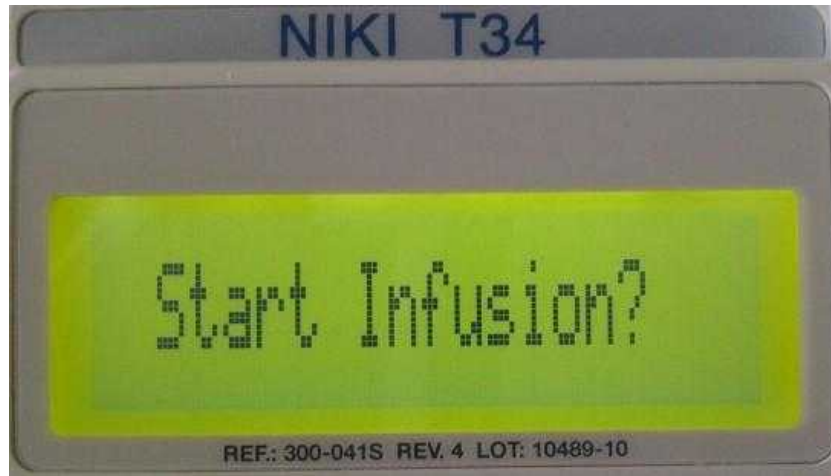
Calculates the new volume remaining in the syringe

Maintains the same mLs / hour rate

Recalculates the duration of the infusion



# Next Screen / Running Screen



**STEP 8.** This screen is displayed again once the purge is complete. Connect the extension set to the patient's subcutaneous cannula and press YES



## RUNNING SCREEN

Once infusion is started:

- Time Remaining is displayed at the top of the screen
- Infusion Rate is displayed in mL / hr
- Syringe brand display alternates with <<<< Pump delivering

# IMPORTANT CHECKS WHEN USING A T34

- When using the T34 for Palliative Care, the default or standard settings must include:

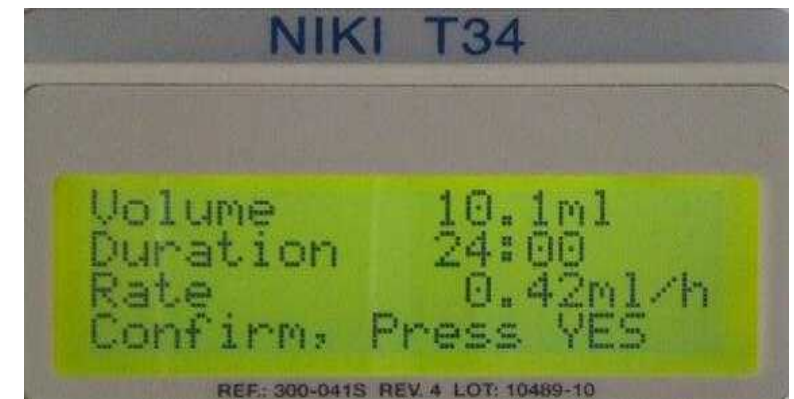
1. Program **LOCK ON**



2. Correct **Brand and Size of Syringe**



3. **Duration set at 24:00**



# Alarms / Alerts

**Alarms are audible and visual. The T34 will prompt you to take action to rectify any alarm or alert**

- Pump paused too long: take action
- Syringe displaced: check syringe sensors
- Occlusion: check the infusion line and site

# Alarms / Alerts (cont.)

- Near End: (of infusion) Infusion nearly complete, prepare new 24 hour syringe
- End of Infusion: Program has completed
- Low battery: Stop infusion, turn off T34 Install new battery and turn on
- End battery: Install new battery and restart infusion



## .....caution

- If the alarm sounds, read the alarm message on the screen before silencing the alarm, correct the cause and restart
- This screen is then displayed...what do you press next?
- Yes or No?



### **Press YES to Resume**

Press NO only if it is a NEWLY filled syringe for the patient.

If no is pressed, the T34 will recalculate the volume in the syringe over 24 hours

# Scenario:

- The alarm sounds after 8 hours of 10mL infusion (rate is 0.42 mL / hr)
- The volume remaining in the syringe is 6.6 mL
- Should you press YES to stay at same rate 0.42 mL / hr?



**Press YES to resume THE SAME INFUSION AT the SAME RATE**

What if NO is pressed?

- If you accidentally pressed NO for new syringe, the remaining 6.6mL will be **recalculated** over 24 hrs and the new rate of 0.28 mL / hr would be incorrect

# Check Infusion Data & Battery

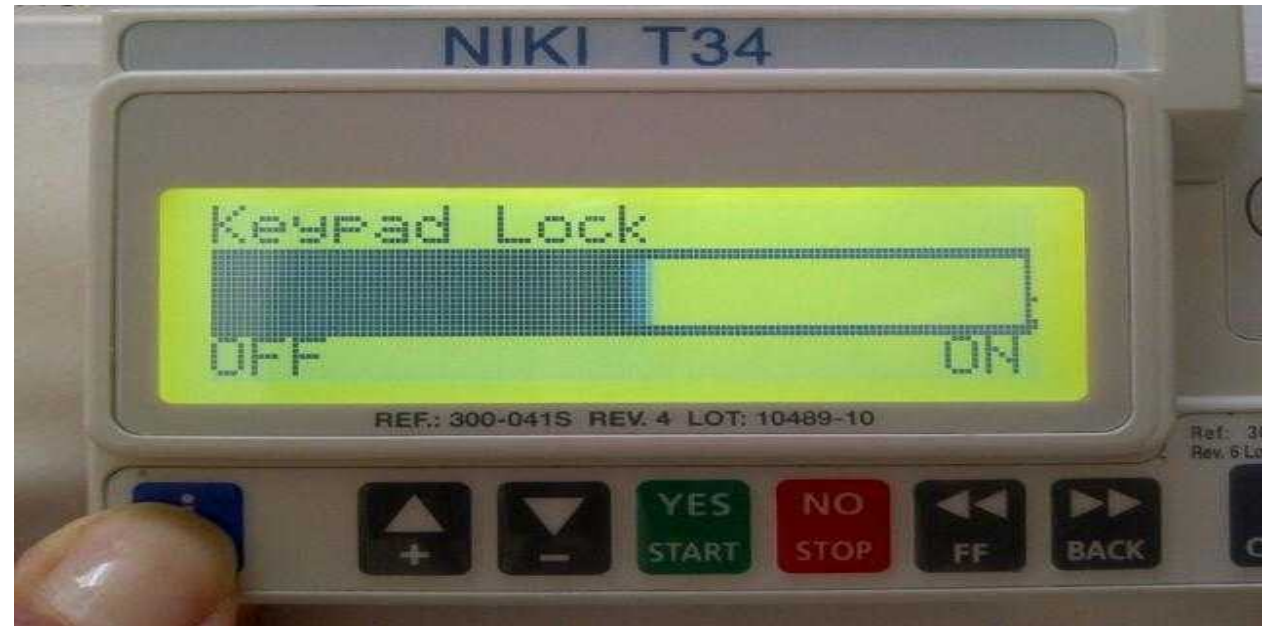
- Press INFO button to display infusion data :
- VTBI..... Volume To Be Infused
- VI.....Volume Infused
- Battery Level.....e.g. 74%



- The information on the screen should match that of the syringe being used. E.g. VTBI 16.2 should be approximately the same as the remaining volume in the syringe

# Key Pad LOCK Feature

- To turn ON the Keypad Lock, hold down the **INFO** button until bar has crossed the screen and a beep is heard
- Keypad Lock OFF: T34 can be stopped and turned off
- Keypad Lock ON: T34 can be stopped but NOT turned off
- To turn off, repeat the procedure used to lock the Keypad, hold down until a beep is heard



# T34 Accessories – Locked Box / Pouch



- Lockbox key
- Small Lockbox fits up to 30mL syringe (max 18ml infusion)
- Large Lockbox fits up to 50ml Syringe (max 32ml infusion)
- Duracell batteries preferred

# Subcutaneous Starter Kits

Available from REM SYSTEMS

Ensures you have all items for each infusion

Are pre-packaged for convenience, to reduce cost, save time and waste



# Thank You

For further assistance when using the T34 Syringe Driver, please contact REM SYSTEMS Customer Service on 1800 737 222 to be connected with your local REM SYSTEMS Territory Manager