Perfusor® Space Syringe Pump – Quick Reference Guidelines

Clear button

Parameter Setting Keys
Scroll menus, change/enter values

Bolus button

On/Off button

Ok button
To confirm settings

Syringe holder

Space Connect button
To link the pump to space control/
barcode scanner

Start/Stop
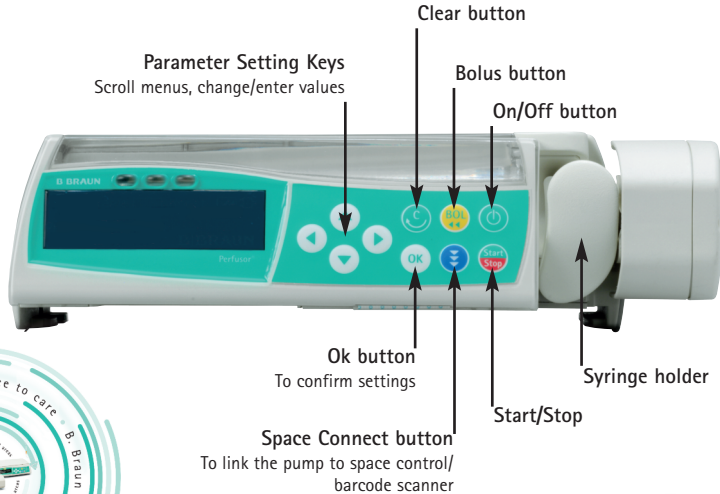
B | BRAUN
SHARING EXPERTISE

B. Braun Space to care
B. Braun Space to work · develop
Get system for all clinical area

BACCN
British Association
of Critical Care Nurses
Educational and procedural content
endorsed by BACCN

Software F/G/H/J

Turn pump on and load syringe:

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.
⚠️ 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.

5. Confirm the correct syringe brand and size by using 🔼🔽, then (ok).
   • The drive unit advances automatically and grips syringe.
⚠️ The syringe brand selected on the pump must correspond with the syringe inserted.
   Do NOT block the advancing drive.

- Start from the Main Menu.

Rate	--- ml/h	◀
VTBI	--- ml	▼
Time	--- h:min	
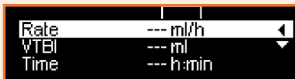
1. Press ◀ to open rate setting.
2. Select the correct rate using the directional keypad 🔘.
3. Press (Start/Stop) to commence infusion.
   - Moving arrows ◀◀◀◀ on the display plus a green operating light indicate the pump is infusing.

Setting a Volume To Be Infused:

1. Follow steps 1 and 2 from above.
2. Press (OK) to return to Main Menu.
3. Use 🔼🔽 to highlight the VTBI setting, and press ◀ .
4. Select the correct VTBI using the directional keypad 🔘 and press (OK) to confirm.
5. Press (Start/Stop) to commence infusion.

⚠ Check the displayed value with the value intended. Start only if the values correspond

During Infusion: The infusion will NOT be interrupted

1. Whilst the pump is running press ◀ to open the rate setting.

```
▲ Modify
Rate        __2.5_
C Undo           ml/h
```
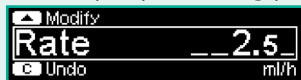
2. Select the new rate with ⚬⚬⚬ .
3. Press (OK) to confirm.
   If you do not press (OK) within 20 seconds a "value not accepted" alarm will sound.

Stopping the Infusion to change rate:
1. Press Start/Stop to stop infusion.
2. Press ◀ to open rate setting.
3. Select the correct rate with ⚬⚬⚬ .
4. Press Start/Stop to commence infusion with modified rate.

⚠ Always check the displayed value with the value intended.

Changing the syringe:

- Disconnect or clamp the line to the patient to avoid dosage errors during syringe change.
- Never leave the pump unattended during syringe change.
- Pump must be switched ON to perform syringe change.

1. Press 🔴 to stop infusion.
2. Open and close syringe holder without turning to the right.

⚠️ If syringe is completely empty you will not be able to turn syringe holder until the drive has withdrawn.

3. Answer YES with ⏶ to "Perform syringe change?"
   - Drive unit moves backwards into starting position.
4. Open syringe holder and pump door; remove syringe.
5. Repeat "Load Syringe".
6. Check set parameters in the main screen and press 🔴 to recommence infusion.

⚠️ Check the displayed value with the value intended.
Start only if the values correspond.

⚠️ The pump must be infusing in order to deliver a bolus.

- **To deliver a bolus with a preset bolus limit:**

> **OK** Man. Bol. 1200 ml/h ← ←
> **Bolus ml** 0 ◄
> ◄ Set Bolus Limit ml
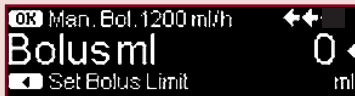
1. Press 🔴 to access the bolus screen.
2. Press ◀ to access the bolus limit screen.
3. Using ⚙️ set a bolus dose.
4. Press 🔴 to deliver the bolus.

⚠️ Remember that the bolus can be stopped at any time by pressing (ok).

- **To deliver a manual bolus:**

> **OK** Man. Bol. 1200 ml/h ← ← ←
> **Bolus ml** 0 ◄
> ◄ Set Bolus Limit ml
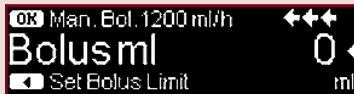
1. Press 🔴 to access the bolus screen.
2. Press and hold the (ok) to deliver a manual bolus.

- The pump will only allow a manual bolus to be delivered for a maximum of 10 seconds.

⚠️ Ensure you check the delivery rate on the bolus screen before delivering the bolus.

1. Stop the infusion by pressing 🔴 .
2. Press 🔵 once to access the Standby Function.
3. Answer YES with ⬆️ arrow key to "Use standby?"
   • **Standby will now be activated with previously used standby time.**

   ```
   ▨ ▭▯ |____    |  | ⏰
   C Cancel standby          23:55 ◄
   ```

4. To change the desired duration the pump goes into standby press ◄ arrow key.

   ```
   OK Confirm to activate Standby
   Standby        _0:01
   C Clear                 h:min
   ```
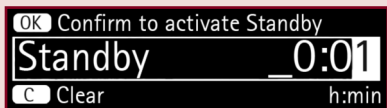
5. Use the directional keypad 🎲 to change the time or press 🔵 to clear and start from zero.
6. Once desired time has been chosen press (OK) to confirm.
   • **The pump will now start to count down the desired standby time.**
   • **Standby mode can be cancelled at any time by pressing 🔵.**

⚠️ **If the syringe is in-situ the pump cannot be switched off.**
Standby is activated after pressing 🔵 for 3 seconds.

BOLUS/
STANDBY MODE
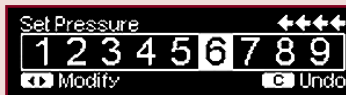
Adjusting pressure settings:

1. If the infusion is running press 🅒 to return to the Main Menu.
   When the infusion is stopped it will automatically be on the Main Menu screen.

   ```
   ⎀Special Functions        ▲
   ⎀Options                  ◀
   ⮕                         ▼
   ```
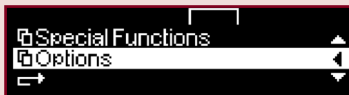
2. Use ⊙ to highlight the Options Menu.
3. Once Options is highlighted, press ◀ .

   ```
   Options        C Main Menu
   Pressure          8         ◀
   Data Lock        Off        ▼
   Bol. Rate    1200 ml/h
   ```
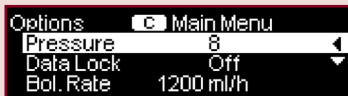
4. Press ◀ to access the Pressure settings.

   ```
   Set Pressure           ◀◀◀◀
   1 2 3 4 5 6 7 8 9
   ◀▶ Modify              C Undo
   ```

5. Use 🔅 to adjust the pressure alarm setting.
   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.
6. Press 🆗 to confirm the new pressure setting.
   • If the pump is running it will automatically default back to the running display. If the
     pump is not infusing, press 🅒 to return to the Main Menu.

1. From the Main Menu use the ⊙ to scroll down to the Options Menu.
2. Once the Options Menu is highlighted press ◀ to access.
3. Use the ⊙ arrow keys to highlight Data Lock and press ◀ to access.

```
Set Data Lock
  Off  Level1  Level2          OK▶
```

4. Use the ▶ to set Data Lock at Level 1 or Level 2 and then press (OK).

LEVEL ONE *will allow the user to start and stop the infusion, change the disposable, and turn the pump off. All other actions will require the code.*
LEVEL TWO *will only allow the user to stop the infusion. All other actions require the code.*

5. Activate Data Lock by using the directional keypad 🎮 to input the 4 digit code:
⚠ **Once activated any changes need to be made within 20 seconds. After this a key symbol appears on the screen. At this point any further changes to infusion parameters will require the code.**

6. De-activate the Data Lock by following steps **1** to **5** and returning the Data Lock level to **OFF**.

Stop infusion, remove syringe, turn off pump:

⚠ **The syringe must be removed in order to switch the pump off.**

1. Stop the infusion by pressing 🔴 .
2. Open and close syringe holder without turning to the right.

⚠ **If syringe is completely empty you will not be able to turn syringe holder until the drive has withdrawn.**

3. Answer YES with ⊙ to "Perform syringe change?"
   • Drive unit moves backwards into starting position.

4. Open syringe holder and pump door; remove syringe.
5. Turn the pump off by pressing 🔘 for 3 seconds.
6. The drive moves into "Parking Position".

⚠ **The drive will not approach Parking Position if it has not been allowed to extend fully OR if the syringe holder is left open. Switch on and repeat.**

⚠ **If the syringe is in-situ the pump cannot be switched off.**
   Standby is activated after pressing 🔘 for 3 seconds.

• Yellow LED Alarm

"Syringe nearly empty"
Very little fluid left in syringe.

Press (OK) to mute alarm, infusion will
continue and the time remaining will flash
on the display as a countdown timer.

"VTBI near end"
The pre selected volume is
nearly infused.

Press (OK) to mute alarm, infusion will
continue and the time remaining until
end of VTBI will flash on the display.

"Time near end"
Pre selected time has nearly finished.

Press (OK) to mute alarm, infusion will
continue and the time remaining will
flash on the display.

"Battery nearly empty"
The battery is almost discharged.
You have 30 minutes before the pump
will automatically turn off.

Press (OK) to mute alarm, connect to
mains or replace battery pack.

• Red LED Alarm

"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.

1. Press (OK) to mute alarm.
2. Check and act accordingly.
   Is the tubing kinked or damaged?
   Is the patient access patent?
   If there is an inline filter, is that patent?
3. Increase occlusion pressure if necessary (see Adjusting Pressure Settings).
4. Press (Start Stop) to recommence infusion.

"Syringe Holder"

The syringe holder was opened during a running infusion.

1. Close syringe holder, press (OK) to mute alarm.
2. Change syringe if needed or press (Start Stop) to continue.

• Red LED Alarm

"Syringe empty"
No fluid left in syringe.
Perform syringe change or end therapy.

"VTBI infused"
Pre selected volume infused and KVO inactive
To continue without VTBI
1. Press (OK) to mute alarm.
2. Press (Start/Stop) to resume.
Or to enter new VTBI
1. Press (OK) to mute alarm.
2. Use (↕) to highlight **VTBI** and press (◀) .
3. Use (⠿) to enter **VTBI** and press (OK) .
4. (Start/Stop) to restart infusion.
Or to end infusion
Remove syringe and turn the pump off.

"Time expired"
The pre selected time has expired.
To continue without preset time
1. Press (OK) to mute alarm.
2. Press (Start/Stop) to resume.
Or to enter new time
1. Press (OK) to mute alarm.
2. Use (↕) to select **time** and press (◀).
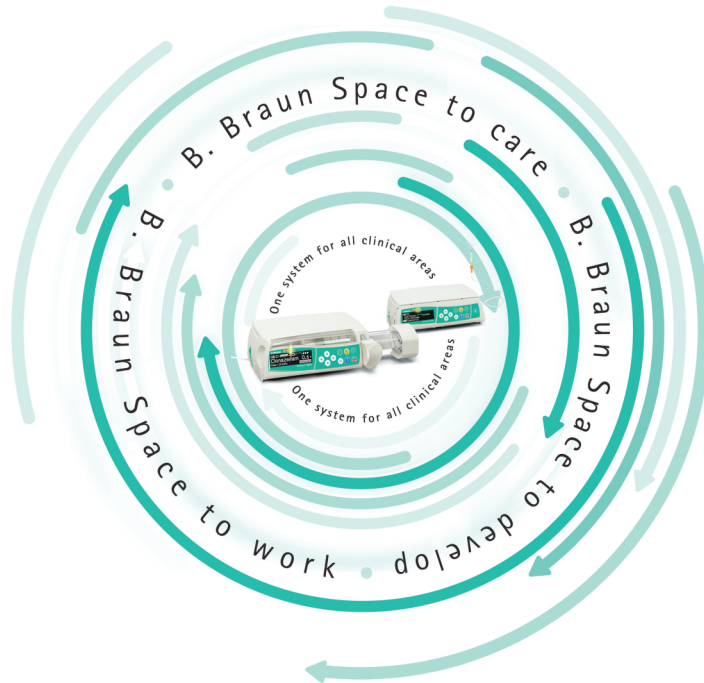**3.** Use (⠿) and (OK) to enter a **time**.
4. Press (Start/Stop) .
Or to end infusion
Remove disposable and turn the pump off.

"Battery empty"
The battery pack is discharged, you have 3
minutes before the pump will automatically
turn off.
Connect to mains or replace battery pack.

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One system for all clinical areas

This booklet is provided for reference only. Prior to operating this equipment all users should consult the full Instructions For Use.

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XX-SPIFUM-09-14