B|BRAUN

SHARING EXPERTISE

Quick
Reference
Guide

Infusomat® Space
Infusion Pump System
2ND Generation Software

Programming through screens:

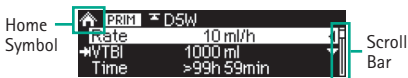The pump screens will always indicate what keys to press.

Entering values:

Use the left and right arrow keys to move the cursor so the desired numerical value is highlighted. Use the up and down arrow keys to increase or decrease the number.

Accessing Home Screen:

Pump returns to the Home screen when stopped. Press while infusion is running to return to the Home screen. Access all menus from the Home screen.

Home Symbol ─ ─ Scroll Bar

NOTE: Scroll Bar appears on screens when more information is available.

CHANGE PUMP DISPLAY

1. With the pump running, press ⬆ or ⬇ to choose preferred value to display on bottom left corner of display, (i.e. drug long name, Care Unit, volume totals, etc.)

Understanding Pump Symbols:

For a complete listing of pump symbols, refer to the last section of this guide.

1. Press 🔵 to power on.

2. Press door open key 🔺. Respond to prompt and press 🔺 to open door.

CAUTION: Keep the roller clamp closed while inserting IV line.

3. (1) Load IV line from right to left. Insert the two hole clip.

   (2) Attach white pronged clip.

NOTE: Ensure silicone tubing segment is not twisted.

   (3) Insert the green anti-free flow clip in the green slot (with hook facing down and away from pump) until the opening lever snaps out and the flashing yellow light goes out indicating pump has occluded IV line.

4. Press IV line into the air sensor guide and notches on right and left side of the pump.

5. Close the pump door by firmly placing pressure until you feel the pump pull the door shut.

NOTE: Do not open the roller clamp until programming prompt appears.

CAUTION: Pump door will not close and pump alarms if the anti-free flow clip is not properly inserted. Do not force door closed, check IV line and anti-free flow clip (green) for proper loading.

6. If priming is activated, press ⊚ to prime on the pump.

7. Note prompt to "Disconnect IV line from patient before priming", press ⊚ to confirm.

8. Respond to "Priming stopped" message by confirming with ⊚. Respond to "Repeat priming" prompt with ⊚ for "Yes" or ⊚ for "No".

PRIMARY INFUSION

1. "Continue last infusion?", press ⊚ for "Yes" or ⊚ for "No".

2. If "Yes", scroll to confirm each value using ⊚ and ⊚ to confirm values. If no, press ⊚ to program new infusion.

3. Select Care Unit using ⊚ and confirm with ⊚.

4. Select Patient Profile using ⊚ and confirm with ⊚.

5. Select "All drugs" or a drug category, using ⊚ and confirm with ⊚.

6. Select drug using ⊚ and confirm with ⊚. Navigate through the list with ⊚ and ⊚ or use ⊚ and ⊚ to skip through the alphabet (i.e. ABC–DEF).

7. Select drug concentration using ⊚ and confirm with ⊚.

8. If prompted, read and confirm clinical advisory with ⊚.

9. Enter or edit infusion parameters by scrolling to desired parameter and press ⊚ to open the value editor.

10. Use (◀) and (▶) to move to the digit to be programmed.

NOTE: The (C) may be used to clear existing values.

11. Use (▲) and (▼) to program new values.

12. Press (OK) to confirm value.

13. If value is outside soft limits, respond to prompt with (▲) for "Yes" to override soft limit and (▼) for "No". Note change in soft limit symbol when overridden. ⬇ or ⬆ .

NOTE: If value is outside hard limit, press (OK) to confirm message and edit value.

14. Scroll down to enter and/or review VTBI and Time. VTBI is required to start the infusion.

15. Press (Start/Stop) to begin infusion.

NOTE: The doserate/rate may be titrated while the pump is running.

1. Press ◀ to open editor.
2. Program desired value using ⬆⬇ . Press OK to confirm which initiates new doserate/rate.

CHANGE WEIGHT, BSA, VTBI AND TIME

NOTE: Changing VTBI or Time may change infusion rate/dose depending on infusion mode.

1. Press C to return to the Home screen if pump is infusing.
2. Scroll to Weight, BSA, VTBI or Time using ⬆⬇ .
3. Press ◀ to select.
4. Enter new value using ⬆⬇ .
5. Confirm with OK.

SECONDARY INFUSION

NOTE: Prime SECondary IV line manually, close roller clamp and connect to PRIMary IV line at needleless port ABOVE the pump.

1. Stop PRIMary infusion by pressing (Start/Stop).

2. Scroll to and select "SECondary" by using (scroll).

3. Four sub-menus will be displayed:

   - New SECondary

   - Use a Previous SEC infusion

   - Back to PRIM
     Determines switch back to PRIMary. "manual" stops the pump and alarms when the SECondary is complete. "Auto-change" converts to the PRIMary infusion when the SECondary is complete.

     NOTE: The method of switching back to PRIMary remains for all SECondary infusions until changed.

   - Basic infusion

4. Select "New SECondary" with (OK).

5. Select drug using (scroll) and confirm with (OK).

NOTE: SECondary medications will most frequently be set up as Dose Over Time infusions.

6. Enter Total Dose using (scroll) and confirm with (OK).

7. Enter Total Time using (scroll) and confirm with (OK).

NOTE: The pump calculates rate and VTBI.

8. Press (Start/Stop), note message to check bag height and unclamp SECondary. Press (Start/Stop) again to confirm message and begin infusion.

NOTE: The SECondary bag must be hung at least 8 inches above the PRIMary, measured from the bottom of the SECondary bag to the top of fluid level in the PRIMary.

NOTE: If SECondary rate exceeds 300 ml/hr clamp off PRIMary to prevent concurrent flow.

9. To resume PRIMary prior to completion of SECondary, press (Start/Stop). Scroll to and select "resume PRIMary" using arrow keys (keys). Confirm message "Infusion mode changed to PRIMary" with (OK).

10. Press (Start/Stop). Note message to clamp or remove SECondary. Press (Start/Stop) again to infuse PRIMary.

NOTE: To resume SECondary, follow same steps as above.

NOTE: To clear a SECondary infusion prior to completion, press (Start/Stop), then Press (C) and (▲) to "delete SECondary".

NOTE: Pump stores 5 of the previously administered SECondary medications. They are cleared when the Care Unit changes or the pump is powered off.

11. To select a previously administered SECondary, stop PRIMary by pressing (Start/Stop).

12. Scroll to and select "SECondary" menu using (keys).

13. Scroll to and select "Use a previous SEC infusion" using (keys).

14. Scroll to and select drug using (keys).

15. When all values are checked, press (OK) and then press (Start/Stop).

LOADING DOSE

1. Press ⬆ to answer yes to loading dose prompt.

2. Enter loading dose amount using ⚙ and confirm with ⓞⓚ.

3. Enter loading dose time using arrow keys ⚙ and confirm with ⓞⓚ.

4. Press ◀ to access doserate/rate editor to program continuous infusion.

5. Enter doserate or rate for continuous infusion using ⚙ and confirm with ⓞⓚ.

NOTE: "LDdos" and "Start" alternate in upper right corner of screen.

6. Press (Start/Stop) to begin infusion.

7. The loading dose may be stopped at any time by pressing (Start/Stop) . Press ⓞⓚ to confirm prompt with amount delivered of total programmed.

8. Press (Start/Stop) to resume infusion, respond to prompt to continue loading dose with ⬆ for "Yes" and ⬇ for "No".

NOTE: Once "No" is selected, continuous infusion will begin and loading dose is no longer accessible.

BOLUS DOSE

1. Press (BOL).

2. If prompted, select "Program a bolus dose and time" using ⚙ and select with ◀.

3. Enter bolus dose using ⚙ and confirm with ⓞⓚ.

4. Enter bolus time using ⚙ and confirm with ⓞⓚ.

5. Review bolus parameters and press (BOL) to begin bolus.

NOTE: The pump will automatically convert back to the continuous infusion when the bolus is complete.

6. If bolus is stopped by pressing ⓒ, press (ok) to confirm prompt with amount delivered of total programmed.

7. Respond to prompt to deliver remaining bolus with (▲) for "Yes" and (▼) for "No".

8. If pump is stopped by pressing (Start Stop) or for red alarm, press (ok) to confirm prompt with amount delivered of total programmed. Restart infusion by pressing (Start Stop), respond to prompt as above in step 7.

MANUAL BOLUS

NOTE: Drug Library limits do not apply to manual boluses.

1. Press (BOL) .

2. Select "Use Manual Bolus Feature" using (⚬⚬⚬) and select with (◀) .

3. Press and hold (BOL) .

4. Bolus amount will count up on pump display.

5. Manual bolus is limited to 10 seconds.

6. Bolus amount delivered is displayed when 10 seconds is complete or (BOL) is released.

7. The pump returns to the continuous infusion when the (BOL) is released or 10 seconds is complete.

CHANGE CARE UNIT

1. From the Home screen, scroll to "Change Care Unit" using ⚬⚬⚬ and select with ◀.

NOTE: Care Unit may be changed while the pump is infusing or stopped.

2. Scroll to desired Care Unit using ⚬⚬⚬ and select with ◀.

3. Pump will display confirmation message that Care Unit has been changed. Press ⓞⓚ to confirm.

4. If current values exceed soft limit, editor will be displayed. Respond to soft limit message.

NOTE: Pump will display message if Care Unit was not changed and reason why Care Unit cannot be changed (i.e. drug or concentration not available, programming exceeds hard limits).

BASIC INFUSION

1. Scroll to "Basic infusion" on Care Unit, Patient Profile, Drug Category or Drug selection screens. "Basic infusion" may also be accessed in the SECondary menu.

2. The pump requires responding to two prompts that exiting the drug library has no safety limits.

3. Enter two of the following three parameters using ⚬⚬⚬ : VTBI, Time and Rate. Press ⓞⓚ to confirm values. VTBI is required to start the infusion.

4. Press (Start/Stop) to begin infusion.

DOSERATE CALCULATION

The Doserate Calculator may be used to calculate a doserate for a medication that is not in the drug library. No dose limits apply.

1. To access the Doserate Calculator, go to the Home screen and scroll to "Options" menu.

2. Enter the following as prompted: concentration units, amount of drug in bag, volume of bag, program with weight/BSA/none, doserate units, and doserate amount. The pump calculates the flow rate in ml/hr.

ASSIGNING A BASIC OR DOSERATE CALCULATION INFUSION TO DRUG LIBRARY

1. From the Home screen, scroll to "Options" using ⚬⚬⚬ and select with ◀.

2. Scroll to "Assign to Drug Library" using ⚬⚬⚬ and select ◀.

3. Follow steps for drug library programming.

NOTE: All Drug Library limits will be applied to the infusion.

IV LINE CHANGE

NOTE: Always close roller clamp and disconnect the patient before changing IV line to avoid inadvertent free flow.

1. Press ⏹ to stop the infusion.

2. Press ▲ and respond to prompt to clamp IV line.

3. Open the pump door by pressing ▲. Once door finishes opening automatically, pull down on door to fully open. Expect some resistance.

4. Press down the green opening lever completely until it locks in place and yellow triangle light is flashing. Remove IV line from right to left.

5. Insert new IV line following steps in "Open Door and Load IV Line" section above.

END INFUSION AND POWER OFF

1. Press (Start Stop) to stop the infusion.

2. Follow steps 2 through 4 above to remove IV line.

3. Close the pump door.

4. Press (⏻) for 3 seconds to power off the pump.

NOTE: Pump cannot be powered off with IV line inserted.

STANDBY MODE

1. Press (Start Stop) to stop the infusion. Leave the IV line inserted in the pump.

2. Press and hold (⏻) for 3 seconds.

3. Exit Standby by pressing (C).

INFUSION TOTALS

1. From the Home screen scroll to "Infused Totals" using (◦°◦) and selecting with (◀).

2. PRIMary, SECondary and Totals of both are displayed.

3. Scroll to desired value using (◦°◦) and select with (◀).

4. Respond to "Reset values to zero?" prompt by pressing (▲) for "Yes" and (▼) for "No".

NOTE: Infusion totals are automatically cleared when "No" is selected to "Continue last infusion?" on power up.

1. Observe 🖹 alternating with 📶 on the top line of the pump display when a new Drug Library is available.

2. Press ⏹ to stop the infusion. Follow instructions above under "End Infusion and Power Off" to power off.

3. **Wait 10 seconds**, a progress bar will appear on pump, do not power pump back on until Drug Library Upload is complete as indicated by progress bar.

4. When pump is re-started, respond to two prompts that all values are cleared and new drug library has been loaded.

RED ALARMS AND TROUBLESHOOTING

Red alarms stop the infusion. The pump emits an audible signal and red LED flashes. The display states "Alarm" and the reason for the alarm. The alarm signals are confirmed and turned off by pressing ⓞⓚ. Correcting the alarm state depends on the cause of the alarm.

Red alarms:

"VTBI infused"	**"Time expired"**
"Battery empty"	**"Downstream Occlusion"**
"KVO finished"	**"Standby time expired"**
"Upstream Occlusion"	**"Air bubble/Accumulated air"**
"Danger of Free Flow"	

Troubleshooting RED ALARMS

Downstream/Upstream pressure - Check clamps and patient line.

Air bubble/accumulated air - Respond "Yes" or "No" to prompt for priming to clear the air. If "Yes" is selected to prime IV line, respond to prompt to disconnect IV line from patient.

Danger of Free Flow - Anti-free flow clip is not properly inserted. Confirm danger free flow messages, clamp the line, respond to open door prompt, remove the IV line and reinsert IV line per IV line loading instructions.

Other TROUBLESHOOTING

Door fails to close - Press open door button again while door is open and re-close door.

Persistent air in line alarm with no visible air - Close roller clamp, open door, remove IV line and inspect for bubble trapped in IV line at air in line sensor.

	Home screen, contains all menu options
	Primary infusion is programmed and/or running
	Secondary infusion is programmed and/or running
	Secondary, Dose Over Time infusion is programmed and/or running
	Pressure indicator, Top line: Current pressure level, Bottom Line: Set pressure limit
	Pump is locked
	Pump in Standby
	Infusion is within the range of the lower and upper soft limits
	Infusion is below the upper soft limit
	Infusion is above the lower soft limit
	Infusion is above the upper soft limit
	Infusion is below the lower soft limit

⚠	No hard or soft limits are set
🔋	Battery status
🔌🔋	Connected to power/battery status
◆◆◆	Scrolling arrows indicate pump is infusing
🗎	New drug library file is available
📶	Wireless is connected
✖	Wireless is not connected
Off	Wireless is turned off

For clinical and technical support, call 800-854-6851 or visit www.BBraunUSA.com