Dept:



COMPLETE	MRidium™ 3860 MRI IV Infusion Pump System Skills Checklist
	MRidium™ 3860 MRI IV Infusion Pump Soft Keys
STATUSTOP CHANNEL	START/STOP CHANNEL A: Pressing this control key starts or stops the 'Channel A' infusion sequence on the Infusion Pump and Remote
CANCEL	CANCEL: Pressing the control key returns function to the previous menu or display with no action.
	UP AND DOWN ARROWS: Pressing this control key will increase or decrease the value of the currently selected option. It is also used for on-screen menu navigation.
MENU	MENU: Pressing this control key activates the Main Menu Display.
ENTER	ENTER: Pressing this control key will activate, or select a menu choice, proceed from one prompt to the next and accept/store changes.
B	<ul> <li>START/STOP CHANNEL B: Pressing this control key starts or stops the 'Channel B' infusion sequence on the Infusion Pump and Remote.</li> </ul>
ALARM SILENCE	ALARM SILENCE. Pressing this control key temporarily silences audible alarms for two (2) minutes and clears alarms that have been resolved.
	POWER ON. Pressing this control key turns the pumpon.
Ò	POWER OFF. Pressing and holding this control key for longer than one(1) second turns the pump off.
ri	SPECIAL FUNCTION SOFT KEYS. The six (6) Soft Keys, located to the left of the pump's display screen, are used to perform variable functions depending on the current state of the device. When active there is a small arrow present to the right of the key on the pump's display.
	NUMERIC KEYPAD. The numeric keypad can be used to input numerical values or clear a recent entry ("C" key). After using keys to input values, pressing the "ENTER" key will save the input.



COMPLETE	MRidium™ 3860 MRI IV Infusion Pump System Skills Checklist
	<ul> <li>IV TUBING SETUP</li> <li>1057 SYRINGE IV SET <ol> <li>Remove IV tubing set from package, close WHITE Slide Clamp.</li> <li>Remove protective Clear Cap. Attach syringe with fluid to vented Syringe Adapter Fitting at top of I.V. set. Follow accepted hospital procedure. Ensure White Slide Clamp and FLOW-PREVENTER Clamp are open.</li> <li>With White Vent Cap closed, slowly push syringe plunger to prime I.V. Set and remove all air bubbles.</li> <li>Close White Slide Clamp, and then Close FLOW-PREVENTER Clamp by sliding black pinch clamp outward.</li> </ol> </li> <li>CAUTION: Do not place a stopcock between the syringe and the 1057 syringe adapter. An insecure connection can allow air to enter the line resulting in 'air in line' or 'bubble detected' alerts.</li> <li>Tip: When priming, DO NOT STRETCH the Silicon Segment of the IV Set as this can</li> </ul>
	<ul> <li>cause issues during infusions.</li> <li>IV TUBING SETUP         <ol> <li>1058 EXTENSION IV SET</li> <li>Ensure hospital primary IV infusion set is clamped closed. Remove preexisting infusion set from its non-MRI hospital pump. Ensure flow is stopped/clamped-closed before removal.</li> <li>b. Remove 1058 Extension set from package; close both the roller clamp and FLOW-PREVENTER Clamp.</li> <li>Attach female luer-fitting end of 1058 tubing to hospital primary infusion set at its distal end.</li> <li>Open clamps on hospital primary IV infusion set to prime the set manually with gravity. Ensure FLOW-PREVENTER Clamp is open while priming 1058 tubing.</li> <li>Invert and tap injection sites to clear any air bubbles.</li> <li>Close roller clamp and FLOW-PREVENTER Clamp by sliding black pinch clamp outward.</li> </ol> </li> <li>Tip: When priming, DO NOT STREETCH the Silicon Segment of the IV Set as this can cause issues during infusions</li> </ul>
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	<u>CAUTION</u> : Do not place a stopcock between the syringe and the 1057 syringe adapter. An insecure connection can allow air to enter the line.
	<ul> <li>LOADING IV TUBING</li> <li>Insert the round Disk on the IV set into the "Disk Slot" on top of the pump.</li> <li>Tilt up and insert the top of the Black FLOW-PREVENTER Clamp into the pump then push the bottom. The clamp will click when secured. Once installed, it is imperative to NOT push the Black FLOW-PREVENTER Clamp as this will result in an alarm.</li> </ul>
	<ol> <li>Position the IV tubing through the "Bubble Detector"</li> <li>CLOSE THE DOOR and Open All Clamps or Vent caps. There should be no flow in the drip chamber of the IV set or bubbles in the syringe. IF present, clamp the IV tubing set, remove air per hospital policy and reload set.</li> </ol>



COMPLETE	MRidium™ 3860 MRI IV Infusion Pump System Skills Checklist
	<ul> <li>PROGRAMMING MRidium<sup>™</sup> 3860 MRI IV Pump</li> <li>DERS LIBRARY AND DOSE RATE CALCULATOR         <ol> <li>Press the softkey by "New Patient- Drug Library A" or "New Patient- Drug Library B" on the Main Screen.                  </li> </ol> </li> <li>IF             Channel A or Channel B is currently running and you wish to setup the remaining channelpress the 'MENU' softkey and then Select the Dose Rate Calc 'A or B' you wish to work with.         </li> <li>Image: Image: Image:</li></ul>
	2. Press the UP OR DOWN arrow keys to scroll through
	<ul> <li>a. Once <i>Primary</i> is highlighted, press ENTER again.</li> <li>b. Program Entries such as: <ul> <li>b. Dose: followed by ENTER</li> <li>b. Weight (kg): followed by ENTER</li> <li>b. VTBI: followed by ENTER</li> <li>b. VTBI: followed by ENTER</li> </ul> </li> </ul>
	5. <b>'Push Start A' or 'Push Start B'</b> depending the channel you are working with. Be sure to press the channel you wish to start. If you mistakenly press the incorrect channelthe infusion running on that channel will then 'be paused' and the green light will no longer flash.

COMPLETE	MRidium™ 3860 MRI IV Infusion System Pump Skills Checklist
	<ul> <li>Programming MRidium<sup>™</sup> 3860 MRI IV Pump         *(If the pharmacy has not provided for 'Bolusing' within the drug library this option will not be         available).</li> <li>BOLUS DOSE         1. To program a Bolus, start by pressing the control key next to BOLUS on the Running         Screen.</li> </ul>
	<ol> <li>If both pump channels are running the 'Bolus' option will not appear on the running screen. Instead you must press the MENU softkey.</li> <li>Press 'Bolus A' or 'Bolus B' depending on which drug you intend to bolus.</li> <li>Press Dose Softkey. (if not pre-populated by pharmacy)</li> <li>Input Dose using Numeric Keys.</li> <li>Press the TIME button, Input TIME using Arrow Keysor</li> <li>Numeric Keys. (if not pre-populated by pharmacy)</li> <li>Press ENTER to Start Bolus.</li> </ol>
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COMPLETE	MRidium™ 3860 MRI IV Infusion Pump System Skills Checklist
	<ul> <li>DERS Drug Library ALERT MESSAGES         <ul> <li>In the event of an ALERT, press the ALARM SILENCE button. Then Review the 'On-Screen Message before proceeding.</li> </ul> </li> <li>MAX HARD Limit         <ul> <li>Selected dose or value exceeds the hospital's defined Drug Library 'Max Hard' Dosing Limit. Hard Limits cannot be over-ridden.</li> <li><u>Resolution:</u> <ul> <li>During Primary Infusion Programming: The primary infusion cannot be started with the existing inputted value. Modify the selected value to within the acceptable limits and proceed with programming.</li> <li>During Titration of a Primary Infusion: If this alert occurs during the titration of the primary infusion you must modify the selected value to within acceptable limits. If no entry is inputted within 15 secondsthe Alert audio and visual will terminate and the primary is inputted within the secondsthe Alert audio and visual will terminate and the primary infusion within the secondsthe Alert audio and visual will terminate and the primary infusion within the secondsthe Alert audio and visual will terminate and the primary infusion within the secondsthe Alert audio and visual will terminate and the primary infusion within the secondsthe Alert audio and visual will terminate and the primary infusion within the secondsthe Alert audio and visual will terminate and the primary infusion within the second visual will terminate and the primary infusion within the second visual will terminate and the primary infusion within the secondsthe Alert audio and visual will terminate and the primary infusion within the second visual will terminate and the primary infusion within the primary infusion withe primary infusion within the primary infusion within the pri</li></ul></li></ul></li></ul>
	<ul> <li>HIGH SOFT Limit         <ol> <li>Selected dose or value exceeds hospital defined Drug Library <u>'High Soft'</u> Limit.</li> <li><u>Resolution:</u> <ul> <li>During Primary Infusion Programming: The user must press 'ENTER' to accept the value inputted above the HIGH LIMIT or press CANCEL and enter a value within acceptable limits and proceed with programming.</li></ul></li></ol></li></ul>
	<ul> <li>MIN HARD Limit         <ol> <li>Selected dose or value exceeds the hospital's defined Drug Library <u>'MIN Hard'</u> Dosing Limit. Hard Limits cannot be over-ridden.</li> <li><u>Resolution:</u> <ul></ul></li></ol></li></ul>
	<ul> <li>LOWER SOFT Limit         <ol> <li>Selected dose or value exceeds hospital defined Drug Library <u>'Lower Soft'</u> Limit.</li> <li><u>Resolution:</u> <ul> <li>During Primary Infusion Programming: The user must press ENTER to accept the inputted value below the Lower SOFT LIMIT or press CANCEL and enter a value within acceptable limits and proceed with programming.</li></ul></li></ol></li></ul>



## MRidium<sup>™</sup> 3860 MRI IV Infusion Pump System Exam

Name:\_\_\_\_\_\_Date:\_\_\_\_\_

## **TRUE OR FALSE** (Circle correct answer)

1. TRUE	FALSE	When programming a medication, the programming weight range for the pump is 0.1 kg to 160 kg.
2. TRUE	FALSE	The MRidium™ 3860+ MRI IV Pump can be safely operated within the MRI suite.
3. TRUE	FALSE	The MRidium™ 1058 IV Extension tubing set may be connected directly to Smart Pump IV tubing sets.
4. TRUE	FALSE	It is necessary to 'Pause' the infusion before adjusting an infusion rate.
5. TRUE	FALSE	You must always press the 'Alarm Silence' key to silence the audible alarm.
6. TRUE	FALSE	An 'INLET OCCLUSION' alarm message indicates the IV has infiltrated.
7. TRUE	FALSE	The alarm message 'PT OCCLUSION' indicates an occlusion between the pump and patient.
8. TRUE	FALSE	A 'Check Door' alarm sounds when the Black Flow-Preventer Clamp has not been properly closed prior to loading the tubing set into the pump.
9. TRUE	FALSE	All MRidium™ 3860⁺ IV tubing sets must be self-primed on the pump.
10. TRUE	FALSE	After 'priming' the IV infusion sets and prior to installation; both the black 'Flow-Preventer' clamp and white 'slide or roller' must be clamped off.
11. TRUE	FALSE	The maximum flow rate for the MRidium™ 3860+ Infusion Pump is 999 mL/hr.
12. TRUE	FALSE	Take care not to 'stretch' the silicone tubing on the MRidium™ IV sets.
13. TRUE	FALSE	A Stopcock may be used between a syringe and the MRidium™ 1057 Syringe IV Tubing set. (IF APPLICABLE)
14. TRUE	FALSE	DERS Medication Dosing MAX Limits may be overridden by pressing the ENTER button.

## MRidium<sup>™</sup> 3860 MRI IV Infusion Pump System Answer Key

1.	TRUE	FALSE	When programming a medication, the programming weight range for the pump
			is 0.1 kg to 160 kg. (The weight must be entered in kilograms)
2.	TRUE	FALSE	The MRidium <sup>™</sup> 3860 <sup>+</sup> MRI IV Pump can be safely operated within the MRI suite.
3.	TRUE	FALSE	The MRidium™ 1058 IV Extension tubing set may be connected directly to Smart
			Pump IV tubing sets.
4.	TRUE	FALSE	It is necessary to 'Pause' an infusion before adjusting the infusion rate. (To adjust the RATE, press the 'RATE' soft key and set the new rate using the numeric key (or up/down arrow keys) and then Press 'ENTER' to accept the new value.
5.	TRUE	FALSE	You must always press the 'Alarm Silence' key to silence the audible alarm.
6.	TRUE	FALSE	An 'INLET OCCLUSION' alarm message indicates the IV has infiltrated. ('INLET OCCLUSION' indicates the occlusion is located between the fluid/medication and pump or the white cap of the MRidium™ 1057 Syringe tubing set is closed).
7.	TRUE	FALSE	The alarm message 'PT OCCLUSION' indicates an inclusion between the pump and patient
8.	TRUE	FALSE	A 'Check Door' alarm sounds when the Black Flow-Preventer Clamp has not been
			properly closed prior to loading the tubing set into the pump.
9.	TRUE	FALSE	All MRidium <sup>™</sup> 3860 <sup>+</sup> IV tubing sets must be self-primed on the pump. (All MRidium <sup>™</sup> 3860 <sup>+</sup> IV tubing sets must be primed with gravity)
11.	TRUE	FALSE	After 'priming' MRidium™ IV tubing sets, both the black 'Flow-Preventer' clamp and white 'slide or roller' must be fully clamped off.
12.	TRUE	FALSE	The maximum primary flow rate for the MRidium™ 3860+ Infusion Pump is 999 mL/hr.
			(Primary Flow Rate Range: 0.1mL – 99.9mL/hr, 100 – 999mL/hr)
13.	TRUE	FALSE	Take care not to 'stretch' the silicone tubing on the MRidium™ IV sets.
14.	TRUE	FALSE	A Stopcock may be used between a syringe and the MRidium <sup>™</sup> 1057 Syringe IV set tubing. (IF APPLICABLE) (Do not place a stopcock between the syringe and the 1057 syringe adapter. An insecure connection can allow air to enter the line)
15.	TRUE	FALSE	DERS Medication Dosing MAX Limits may be overridden by pressing the ENTER
			key. (DERS Medication Dosing MAX Limit cannot be overridden. Only DERS Dosing HIGH soft or LOW Soft Limits may be overridden by pressing the ENTER key).