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# Quick Reference Card

# Medfusion<sup>®</sup> 3500 Syringe Pump Version 5.0.0



- Syringe Barrel Clamp
- 4 5 Syringe Barrel Flange Clip
- Syringe Plunger Holders
- Syringe Plunger Release
- AC Power Connection Port (on back of pump)

refer to the Operator's Manual.

Note: The following sample screens are designed to demonstrate pump functions/options for the Medfusion<sup>®</sup> 3500 syringe pump, version 5.0.0. The pump, depending on how your facility has customized the PharmGuard® medication safety software.

#### Power On:

- 1. Connect pump to the power source.
- 2. Press Power to switch on the pump. Observe the self-test. Do not move the syringe plunger driver or otherwise manipulate the pump until the profile selection screen appears.

#### **Program an Infusion:**

- Select Profile
- Select Category
- Select Drug Program
- Program Infusion Parameters
- Prime Pump
- Confirm all settings
- Press Start
- "Options" soft key can be selected for additional programming choices

**Note:** For timed infusions, a time entry will be required. An option to perform a flush could be prompted when the main infusion is complete.



#### Load syringe:

- Lift the syringe barrel clamp and swivel it away—rest it on the handle.
- 2. Squeeze the syringe plunger release lever on the syringe plunger driver and pull it out gently to extend it all the way outward.
- 3. Load the syringe onto the pump. Make sure the flange on the syringe barrel is secure in the syringe barrel flange clip.
- Squeeze the syringe plunger release lever on the end of the syringe plunger driver and gently advance the plunger driver toward the syringe plunger.
- Once it is flush with the syringe plunger, release the lever, so that both syringe holders close around the syringe plunger.

- 6. Turn and lower the barrel clamp onto the barrel of the syringe.
- 7. Verify that the correct syringe model and size are displayed.



8. Thread the tubing through the tubing holders.

### Syringe Loading/Troubleshooting:

If syringe is incorrectly loaded, the pump displays arrows to show the problem:

- 1 Check flange clip
- ← Check plunger driver
- ↓ Check barrel clamp

LOAD SYRINGE - PRESS	5 ENTER WHEN READY
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	Ť
	ENTER

#### Program a Loading Dose:

- Program Infusion
- Select Options soft key
- Select Loading Dose
- Program Loading Dose Parameters
- Press Start
- Confirm all settings
- Loading Dose will begin and main infusion will start automatically when loading dose is complete



PRESS THE NUMBER TO	SELECT THE PROGRAM OPTION			
🛙 BOLUS DOSE 🛛 🗟 DELAYED START				
🛛 PERIODIC CALLBACK ALARM 🛛 🔂 OVERRIDE OCCL LIMIT				
🛿 LOADING DOSE 🛛 🛛 🖥 CHANGE TO DOSE				
🛱 OVERRIDE ALARM LOUDNESS 🛛 🗟 VOLUME LIMIT				
	MORE			

#### Program a Bolus Dose:

- Program Infusion
- Start Infusion
- Select Bolus key or the Options soft key
- Select Bolus Dose
- Program bolus dose parameters
- Confirm bolus dose settings
- Start bolus dose
- Main infusion will begin automatically when bolus dose is complete



**Reverse Highlight** occurs when a value was entered outside of the soft limits for any of the parameters while programming an infusion. This example demonstrates a dose value where the soft limit was overridden.



#### FlowSentry<sup>™</sup> Pressure Monitor and Occlusion

Detection are two separate features in the pump that have separate algorithms, but work together to alert the clinician quickly about an increase in pressure within the infusion line. When pressure increases to the FlowSentry<sup>™</sup> monitor sensitivity setting, the pump may trigger a pressure increasing or an occlusion alarm. A change in pressure can occur with more viscous solutions or positional IV access.



**Override Occlusion Settings** is a way to adjust the settings for the current infusion. This can be done by selecting the Options soft key, and selecting "Override Occl Limit".

The current setting will be highlighted.

The choices are very low (most sensitive - the occlusion alarm will be triggered quickly), low, normal, and high (least sensitive - the occlusion alarm will be triggered slowly).



TVD is Total Volume Delivered. Appears on the display screen while an infusion is running. It is an accumulation of the amount of fluid that has been delivered during the time the pump has been powered on. This total includes the loading dose, bolus dose, and maintenance dose of the infusion. It is useful information for documentation of total fluid delivery to a patient.



#### **PVD is Programmed Volume Delivered.** Appears briefly on the screen while the pump is paused, or by pressing the Back key. It is an accumulation of the amount of fluid that has been delivered from a specific drug program. This total includes the loading dose, bolus dose, and maintenance dose of the infusion. It is useful for documentation of specific volume of medication delivered to a patient.



PDD is Programmed Dose Delivered. This option will have to be enabled in the PharmGuard® Toolbox software. It is available by selecting "Change To Dose" under the "Options" soft key selection. PDD is an accumulation of the dose that has been delivered from a specific drug program. It is only available for continuous weight based infusion modes. This total includes the loading dose, bolus dose, and maintenance dose of the infusion. It is useful for documentation of specific medication dosing that has been delivered to a

CONC WEIGHT	1000 mcg/mL 2.5 kg	KVO	248.	100% NICU 999 мсв N
DOSE	10 MCG/KG/MIN CHG DO	ISE (	RATE	4.5 ML/HR CLEAR TVD

#### patient.

#### **Quick Library Programming:**

Quick Library is an option that can be set up in a Configuration from the PharmGuard<sup>®</sup> medication safety software.

- With a Quick Library, starting an infusion can be as quick as Profile – Drug Selection – Start Infusion.
- Should a user need to change the dose or



the patient's weight that was pre-entered, using the soft keys can enable them to do so.

# **Program Options**

Options: Applies to the current infusion only.

Loading Dose: Ability to allow a specific loading volume or dose to be delivered. Dose will be programmed and delivered in the parameters of that specific infusion. Loading dose must be enabled for the specific drug for this feature to appear on the pump and will be delivered before the start of the main infusion.

**Bolus Dose:** Ability to allow a specific bolus volume or dose to be delivered. Dose will be programmed and delivered in the parameters of that specific infusion. Bolus dose must be enabled for the specific drug for this feature to appear on the pump.

**Periodic Callback Alarm:** Allows programming of an alarm to be generated at a programmed period of time. It can be set in either hours or minutes. The maximum allowable time is 8 hours.

**Standby:** Allows pre-programming of an infusion then postponing the start for a programmed interval of time. Standby mode begins after entering the time parameters. Do not press the Start key until it is time to start the infusion. The pump does not automatically start at the end of the standby period. The pump will sound an alarm notifying the clinician that Standby mode has ended. The infusion can be started at any time during standby by pressing the Start key.

**Delayed Start:** Ability to pre-program an infusion then postpone the start for a programmed interval of time. Delayed Start mode begins after entering the time parameters. The pump will automatically start the infusion at the end of the delayed start time. The infusion can be started at any time during delayed start by pressing the Start key.

**Volume Limit:** Allows a specific volume limit to be determined for an infusion. Once the pump has delivered the volume limit, the pump will alarm and stop. This is only available for continuous infusions.

KVO: Ability to allow a KVO (Keep Vein Open) rate to be delivered between infusions. A volume limit must be programmed for KVO to function. KVO rates are determined by the minimum flow rate for the syringe currently being used and the current infusion rate, whichever is less. Override Alarm Loudness: Ability to override the profile selection for a specific infusion. Able to select from a higher or lower value. The alarm cannot be totally disabled.

Override Occlusion Limit: Ability to override the profile selection for a specific infusion. Able to select from a higher or lower value.

**Toggle FlowSentry<sup>™</sup> Pressure Monitor:** Ability to override the profile selection for a specific infusion. Will either disable or enable FlowSentry<sup>™</sup> monitor.

Toggle Near Empty Tone: Ability to override the profile selection for a specific infusion. Will either disable or enable Near Empty Tone.

Toggle Empty Tone: Ability to override the profile selection for a specific infusion. Will either disable or enable Empty Tone.

Toggle PVD/PDD: Ability to have one or the other display on the pump during infusions. PVD is an acronym that means Programmed Volume Delivered. PDD is an acronym that means Programmed Dose Delivered.

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