**CADD LEGACY PCA PUMP – QUICK REFERENCE GUIDE**

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| **PROGRAMMING / SET-UP SEQUENCE**  *Batteries must be installed, pump must be stopped and in LLO. Note: Value Not Saved is displayed if a value is scrolled and ENTER/CLEAR is not pressed. Press Next to continue programming* |
| **Main Screen Press NEXT** |
| **Enter Reservoir 1. Press ↑ or ↓ to select desired Reservoir Volume**  **Volume 2. Press Enter/Clear**  **3. Press NEXT** |
| **Enter Units 4. Press ↑ or ↓ to select desired units**  **5. Press ENTER/CLEAR**  **6. Press NEXT** |
| **Enter Concentration *Note: this screen does not appear is programming in millimeters***  **7. Press ↑ or ↓ to select desired Concentration**  **8. Press Enter/Clear**  **9. Press NEXT** |
| **Enter Continuous Rate 10. Press ↑ or ↓ to select desired Continuous Rate**  **11. Press Enter/Clear**  **12. Press Next** |
| **Enter Demand Dose 13. Press ↑ or ↓ to select desired Demand Dose**  **14. Press Enter/Clear**  **15. Press Next** |
| **Enter Dose Lockout** *Warning: when you enter a new value, any lockout time in effect will be*  *Cleared. A demand dose could be requested immediately upon starting*  *The pump, resulting in over -delivery*  **16. Press ↑ or ↓ to select desired Demand Dose Lockout**  **17. Press Enter/Clear**  **18. Press Next** |
| **Enter Doses per Hour** *Note: this screen will only appear if you have programmed a demand dose*  *And dose lockout is less than 1 hour*  **19. Press ↑ or ↓ to select desired Doses per Hour**  **20. Press Enter/Clear**  **21. Press Next** |
| **Clear Doses Given 22. Press Enter/Clear to clear the value for the number of doses given. The**  **Display will show 0**  **23. Press Next** |
| **Clear Doses Attempted 24. Press Enter/Clear to clear the value for the number of doses attempted**  **By the patient. The display will show 0**  **25. Press Next** |
| **Clear Given 26. Press Enter/Clear to clear the given value. The display will show 0**  **(ml, mg, mcg) 27. Press Next** |
| **Verify Air Detector 28. Verify the setting is correct. (To change the setting see Biomed**  **Status Functions section)**  **29. Press Next** |
| **\*These screens will appear only if you have programmed a demand dose** |
| **Verify Upstream 30. Verify the setting is correct (to change setting, see Biomed Functions)**  **Sensor Status 31. Press Next** |
| **Verify Programming 32. Press Next repeatedly to review program** |



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| **PUMP OPERATIONS** |
| **Change the Lock Level 1. Stop the Pump**  **2. Press LOCK**  **3. Press ↑ or ↓ until desired lock level appears**  **4. Press Lock or Enter/Clear**  **5. Press ↑ or ↓ until the lock level code appears**  **6. Press Lock or Enter/Clear** |
| **Stop the Pump 1. Press and hold Stop/Start until (------------) appears on the display**  **2. Release Stop/Start key. Stopped will appear on the display when**  **Pump is stopped** |
| **Start the Pump 1. Press and hold START/STOP until (----------------) disappears on the**  **Display**  **2. Release Stop/Start until (-------------------) disappears from the**  **Display** |
| **Prime the Fluid Path** *Pump must be stopped in LL0. Warning: do not prime the fluid path*  *With the tubing connected to a patient as this could result in over*  *Delivery of medication or air embolism*  **1.Press and hold Prime until the word Prime appear on the display**  **Along with (---------------)**  **2. Release the Prime key**  **3. Press and hold the Prime until priming appears on the screen.**  **Continue priming until the fluid path is free of air**  **4. Press Next to return to the main screen** |
| **Reset the Reservoir 1. Stop the Pump**  **Volume 2. Press Next to display the Reservoir Volume Screen**  **3. Press Enter/Clear to reset the value to previously programmed**  **Account** |
| **Turn the Pump On 1. Press and Hold On/Off until pump beeps and powers up** |
| **Turn the Pump Off 1. Press and hold On/Off until (-------------) appears on the display**  **2. Release On/Off key**  **3. The screen will go blank as the pump goes into a lower power**  **State** |
| **Change the Batteries: 1. Stop the pump**  **2. Push down and hold the arrow button on the battery door while**  **Sliding the door off. Remove and discard old batteries**  *Important: Always stop pump before removing batteries*  **3. Install new batteries, matching polarities shown on the pump.**  **Replace battery door and close**  **4. Start the pump.** *Warning: of a gap is preset anywhere between*  *The battery door and the pump housing, the door is not properly*  *Latched. If the battery door becomes detached or loose the batteries*  *Will not be properly secured which could result in loss of power or*  *Nondelivery of drug. Warning: Do not use rechargeable NiCad or*  *Nickel metal hydride (NIMH) batteries. Do not use Carbon zinc*  *(heavy duty) batteries* |
| **Biomed Functions** *Pump must be stopped in LL0*  **To Access 1. Press Lock**  **2. Press Lock or Enter/Clear**  **3. Press ↑ or ↓ until the biomed code appears**  **4. Press Lock or Enter/Clear**  **5. Press Next or go through the settings** |
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| **To Turn Air Detector ON-HIGH, 6. Press next until air detector appears**  **ON-LOW, or OFF 7. Press ↑ or ↓ until desired setting appears**  **8. Press Enter/Clear**  **9. Press Next** |
| **To Turn Upstream Sensor 10. Press Next until UPSTREAM Sensor appears**  **ON/Off 11. Press ↑ or ↓ until desired setting appears**  **12. Press Enter/Clear**  **13. Press Next**  *Warning: when the upstream occlusion sensor is turned off*  *The pump will not detect occlusions upstream (between*  *Pump and reservoir) Periodically inspect the reservoir for*  *Decreasing reservoir volume and inspect the fluid path for*  *Kinks, a closed clamp, or other upstream obstructions.*  *Upstream occlusions could result in under-or-non delivery of*  *Medications* |
| **To Exit Biomed Functions 14. Press Next until Next for Biomed, Enter for Main**  **Appears**  **15. Press Enter/Clear to return to main screen. Or press**  **Next to continue in Biomed settings loop** |
| **PROGRAMMING SCREENS** |
| **Main Screen Displays status of pump (stopped or run)** |
| **Reservoir Volume Units Volume of fluid in reservoir** |
| **Units Programming units (ml, mg, mcg)** |
| **Concentration Concentration of medications inn mg/ml or mcg/ml** |
| **Continuous Rate Continuous rate of infusion (ml/hr, mg/hr, mcg/hr)** |
| **Demand Dose Amount delivered when patient presses the DOSE Key or**  **Remote Dose Button** |
| **Dose Lockout Amount of time that must elapse between demand**  **Doses (appears if demand dose is programmed)** |
| **Doses per Hour Maximum number demand doses allowed in any one**  **Hour period (appears if demand dose is programmed and**  **Demand dose lockout is less than on hour)** |
| **Doses Given Displays number of demand doses given since screen was**  **Last cleared (appears if demand dose if programmed)** |
| **Doses Attempted Displays number of demand doses attempted since**  **Screen was last cleared (appears if demand dose is**  **Programmed)** |
| **Given Total amount of medication delivered since display was**  **Last cleared (ml, mg, mcg)** |
| **Air Detector (status only) Indicates if Air Detector is turned on or off and high or**  **Low sensitivity** |
| **Upstream Sensor (status only) Indicates if turned on or off** |
| **CHANGING CASSETTE** |
| **To Remove Used Cassette 1. Stop the pump**  **2. Close all tubing clamps**  **3. Disconnect tubing from patient**  **4. Use key to unlock used cassette**  **5. Remove and discard used cassette** |

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| **To Attach New Cassette 1. Close all tubing clamps**  **2. Insert new cassette hooks into pump’s hinge pins**  **3. Place pump with cassette on firm surface and push down on top of**  **Pump so cassette fits tightly against the pump**  **4. Insert a key into the lock, push in and turn until the line on the lock**  **Lines up with the arrow on the side of the pump**  **5. Gently twist and pull cassette to make sure it is attached properly**  **6. Press Set/Clear to reset reservoir volume, if appropriate**  **7. If the Air Detector is in use, make a small loop of tubing underneath the**  **Detector and hold it with your thumb. Place the tubing over the groove**  **In the air detector and tuck it under the catch. Seal the tubing into the**  **Groove by gently pulling the tube upward until it is under the retention**  **Nubs and flat in the groove**  *Warning:**Attach the cassette properly. An improperly attached cassette*  *Could result in unregulated gravity infusion of medication from the*  *Reservoir or a reflux on blood, which could result in death or serious*  *Injury to the patient. You must use a CADD Extension Set with anti-siphon*  *Valve or a CADD Administration Set with either an Integral or an*  *Add-on Anti-Siphon valve to protect against unregulated gravity infusion,*  *that can result form an improperly attached reservoir* |
| **DOSING** |
| **To Start Demand Dose *Pump must be running***  **1. Press DOSE or remote dose cord button** *NOTE: if you wish to stop*  *Delivery of the demand does, press and hold Stop/Start to stop the pump* |
| **To Start Clinician Bolus *Pump must be running***  **1.Press LOCK**  **2. Press ↓ until Clinician Bolus Code appears**  **3. Press Lock or Enter/Clear**  **4. Press ↑ or ↓ to select desired amount**  **5. Press DOSE or Enter/Clear to start bolus** *Note: If you wish to stop*  *Delivery of a clinician bolus, press and hold Stop/Start to stop the pump* |
| **To Use the Remote Dose 1. Use Remote dose button on cord is same manner as Dose key on**  **Cord/Button Pump keyboard**  **2. Attach the remote dose cord by inserting the connector into the**  **Accessory jack and pushing firmly until it snaps into place**  **3. Detach the remote dose cord by grasping the connector and**  **Pulling it out of the jack.** *Note: do not use excessive force or*  *Instruments, such as pliers, to remove the remote dose cord from pump* |

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| **ALARMS & TROUBLESHOOTING** |
| **The CADD Legacy PCA Pump signals with audible alarms and messages that appear on the display when a condition requires our attention.** |
| **Reservoir Volume Low Level of fluid in the reservoir is low. Prepare to install a new reservoir**  *Three Beeps* |
| **Reservoir Volume Empty Reservoir volume has reached 0.0 ml. Press Next or Stop/Start to silence**  *Two-tone Alarm* **alarm. Install a new reservoir if appropriate.** |
| **Low Battery Batteries are low, but pump is operable. Chang batteries soon.**  *3 two-tone beeps every 5 mins* |
| **Battery Dead Batteries are depleted and cannot operate pump; install new batteries**  *Two-tone alarm* **immediately** |
| **Battery Removed With AC adapter attached, batteries have been removed while pump was**  **Pump Won’t Run running, or you have tried to start pump with depleted batteries. Install**  *Two-tone alarm* **new batteries.** |
| **High Pressure High Pressure is being caused by an obstruction in the fluid path between**  *Two-tone alarm* **the pump and the patient. Remove the obstruction to resume operation.**  **Or press Stop/Start or Next to stop the pump and silence the alarm for**  **Two minutes, then remove obstruction and restart pump.** |
| **Upstream Occlusion Fluid is not flowing from the reservoir to the pump. Check for a kink or**  *Two-tone alarm* **air bubble in the tubing between the reservoir and pump. Remove the**  **Obstruction to resume operation. Press Stop/Start or Next to stop the**  **Pump and silence the alarm for 2 minutes then remove the obstruction**  **And restart the pump.** |
| **Screen Displays Current The cassette is not aligned with the pump, or is damaged, or a**  **Pump Status malfunction of the pump sensor is occurring. Reposition the pump to**  *Two-Beat Alarm* **silence the alarm. F repositioning the pump does not silence the alarm**  *(long-short)* **within two minutes, the pump will display “No Disposable Clam Tubing”** |
| **Air In Line Detected Air in Fluid Path. Press Next or Stop/Start to silence alarm. Make sure**  *Two-tone Alarm* **tubing is threaded in air detector properly. If the fluid path contains air**  **Close clamps, disconnect from patient and prime fluid path.** |
| **Stopped Pump is stopped. Start pump, if appropriate.**  *Three beeps every 5 minutes* |
| **Remote Dose Cord Remote dose cord removed while pump was running**  **Removed**  *Two beeps when pump stopped,*  *Two-tone alarm when pump is running* |
| **Programming Incomplete Verify all programming screens by pressing Enter/Clear before moving**  *Two-tone alarm when*  **to next screen or starting pump**  *Starting pump* |
| **Value Not Saved A value was not saved by pressing Enter/Clear. Press Next to resume**  **Programming.** |
| **Error An error has occurred. Remove pump from service.**  *Two-tone alarm* |
| **No Message Displayed The pump was running when batteries were removed or the batteries**  *Two-tone alarm*  **were removed within 15 seconds after stopping the pump. Batteries**  **Must be reinstalled.**  *IMPORTANT: always stop the pump before removing*  *Batteries* |
| **No Disposable Clamp The disposable was removed, or the cassette is not aligned with the**  **Tubing pump or is damaged, or a malfunction of the pump sensor is occurring.**  *Two Beeps (long-short)*  **Clamp the tubing immediately. Press Stop/Start or Next to silence the**  **Alarm** |
| **Service Due** *Two-Tone Alarm* **The Pump is due for service** |