



Cerner Millennium BMA QuickStart Guide

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1.0 Introduction

Code Corporation is a market leader in manufacturing and distributing bar code readers for Bar Coded Medication Administration (BCMA). The physical size, configurability, modular design, reliability, and superior bar code reading performance of Code readers make them a perfect fit for the bedside environment. The Code Reader 2500 (CR2500), in wireless or cabled configurations, or the Code Reader 1200 (CR1200) cabled reader can be used in this environment. However, Code Corporation recommends the use of the wireless CR2500 for convenient operation and to eliminate the possibility of a cable interfering with patient care.

Through Code's experience in implementing bar code readers in hospitals, the Bar Coded Medication Administration QuickStart Guide has been developed to provide users quick and easy instructions to configure Code bar code readers to the preferred workflow, as outlined in this Guide.

For more information about Code bar code readers, user manuals are available on our website at:
<http://www.codecorp.com/manuals.php>

To configure a Code bar code reader for a bedside environment, you will:

- ① Select the use case that best fits needs.
- ② Scan the configuration code(s) to set up the CR1200 or CR2500 for the selected use case. Follow additional steps, where applicable, to program the CodeXML® Bluetooth® Modem.
- ③ (Optional) Scan User Feedback Setting codes.

Note: CR2500 reader firmware version 4512 (with boot version 3652) and CodeXML® Bluetooth® Modem processor firmware of 0170 (with USB firmware of 0016) or higher is required to configure your CR2500. Refer to Appendix A for firmware version verification instructions. If the firmware version displayed is below the required version or not displayed at all, please contact Code Corporation at (801) 495-2200 or visit our website (<http://www.codecorp.com/downloads.php>) for upgrade instructions.



2.0 BMA Use Cases

The following Use Cases have been detailed to allow quick and easy configuration of a Code reader to the preferred bedside workflow.

- ① Select the Use Case that fits your needs.
- ② Scan the configuration code(s) assigned to the selected Use Case to set up the bar code reader for the selected process.

2.1 Use Case #1 - Bar Code Reader Dedicated to a Workstation on Wheels

The CR2500 is wirelessly connected to a workstation on wheels using the CodeXML® Bluetooth® Modem, which interfaces to the PC as a USB keyboard. The CR2500 can be charged while on the cart or the batteries can be charged out daily. The Universal Mountable Charger (UMC) or BH1 Charger is recommended in this environment.



CR2500



BH1 Handle



Use Case #1 - CR2500 is dedicated to a Workstation on Wheels that is shared within a unit. The CR2500 can either be wirelessly or cabled to the workstation. To configure a cabled CR2500, see 2.4 Use Case #4 - Cabled CR2500 or CR1200.

2.1.1 Use Case #1 - Reader Configuration Code

Scan the following code to set up a wireless CR2500, dedicated to a workstation on wheels:

CR2500 Palm Format



M782_01

CR2500 with Handle

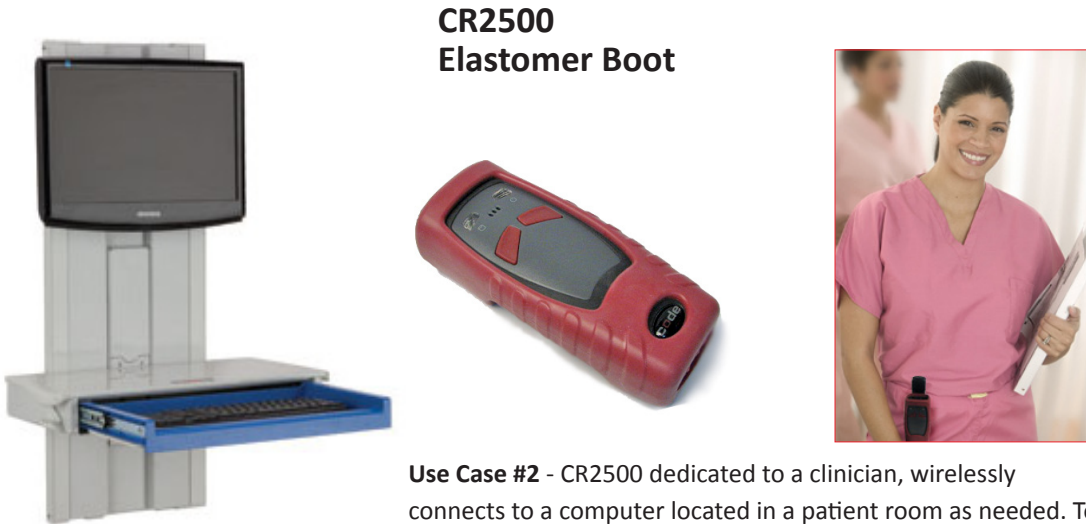


M783_01

2.2 Use Case #2 - Bar Code Reader Dedicated to a Clinician

This use case enables a clinician to carry the CR2500 from room to room and wirelessly connect to the appropriate PC by scanning the QuickConnect Code printed on the CodeXML® Bluetooth® Modem. The CodeXML® Bluetooth® Modem interfaces to the PC using the USB keyboard. In this use case, the readers and extra batteries are charged at a central location.

Wireless readers are rugged, lightweight, and are easily carried by the clinician. Code's two-bay charger provides the convenience and economy because the reader need not be removed from service for battery charging. Batteries can be charged offline and are quickly changed without any tools.



**CR2500
Elastomer Boot**

Use Case #2 - CR2500 dedicated to a clinician, wirelessly connects to a computer located in a patient room as needed. To configure a cabled CR2500, see 2.4 Use Case #4 - Cabled CR2500 or CR1200.

2.2.1 Use Case #2 - Reader Configuration Code

Scan the following code to set up a wireless CR2500 dedicated to a clinician:

CR2500 Palm Format



M784_01

CR2500 with Handle



M785_01

2.2.2 Use Case #2 - Modem Configuration Code

Scan the QuickConnect code on the CodeXML® Bluetooth® Modem and wait for a single beep, this will indicate that a wireless connection to the modem has occurred.



Then, scan the M742_01 programming code.



M742_01

2.3 Use Case #3 - Bar Code Reader Dedicated to a Patient Room

In this use case the CR2500 is wirelessly connected to a computer in a patient room, using the CodeXML® Bluetooth® Modem which interfaces to the PC as a USB keyboard. The CR2500 and extra batteries are charged in the patient room.



CR2500 Elastomer Boot Single Bay Battery Charger



Use Case #3 - CR2500 is dedicated to a patient room. The CR2500 can either be wirelessly or cabled to the workstation. To configure a cabled CR2500, see 2.4 Use Case #4 - Cabled CR2500 or CR1200.

2.3.1 Use Case #3 - Reader Configuration Code

Scan the following code to set up a wireless CR2500, dedicated to a patient room:

CR2500 Palm Format



M786_01

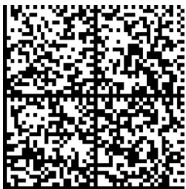
CR2500 with Handle



M787_01

2.4 Use Case #4 - Cabled CR2500 or CR1200

Scan the following code to set up a cabled Code bar code reader dedicated to either a patient room or a workstation on wheels:



M788_01



4.0 User Feedback Settings

Vibrate On Beep On



M107_01

Vibrate On Beep Off



M109_01

Vibrate Off Beep On



M108_01

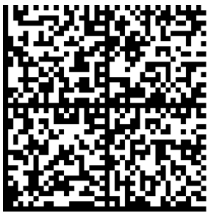
Save User Feedback Settings



M188_02

5.0 Ignoring Second Bar Code on IV Bag

Note: Bar code usually begins with a 17



CC000909_02

6.0 Factory Default Settings

To reset reader to factory defaults, scan the following code:



M049_03

Save Factory Default



M188_02

Clear All CodeXML® Rules



M052_01

APPENDIX A

I. CodeXML® Bluetooth® Modem Firmware Version Instructions

To ensure a consistent experience with Code products, it may be necessary to check the firmware versions of the Code Reader and the CodeXML® Bluetooth® Modem. Below are step by step instructions. The responses from the reader or modem will appear to the host PC similar to decoded data. If using USB Keyboard mode, the data can be viewed by opening Microsoft Word or Notepad.

1. Connect to the CodeXML® Bluetooth® Modem by reading the QuickConnect Code on the modem.
2. Scan the Code Below to output the CodeXML® Bluetooth® Modem version information.



CodeXML® Bluetooth® Modem Version Information



M153_01

Format is: **PPPUUUUXXE**
P: Processor Firmware Version
U: USB Firmware Version
E: If 1, modem is pre-emptible (Processor Firmware 0170+)

II. Code Reader Firmware Version Instructions

Scan the Reader Version Information code below to output the firmware version number. If modem processor version is 0160 or earlier, you will scan the USB Keyboard Mode code and connect it to a USB cable.

Reader Version Information



M153_01

USB Keyboard Mode



M134_02

Format is: **Xap/iAAAABBBRRRRSSSSSSSS**
A: Application version
B: Boot version
R: Radio Version
S: Serial Number