Real Time Barcoding ™

User Guide
Real Time Barcoding

Car-Part.com

Checkmate Real Time Barcoding User Guide

This edition obsoletes all previous editions.

Manual History

Publication Number	Product Version	Publication Date
RTB-4000-A-UG-C	4.0.0.0	November 11, 2011

Contents

Overview

Barcoding is an effective means of inventory control. Use your barcode scanner for doing an inventory audit or locating parts. With Barcoding, you do not have to write locations on the tags when you put the parts away; all you need to do is scan the part tag and rack location. There is no writing or manual entry necessary! You can also delete parts by scanning the part tags for purging old stock, selling to core buyers, etc. All of the barcoding information is immediately and wirelessly transferred to Checkmate.

Requirements

Operating System	Windows XP or greater
RAM	512 MB
Disk Space	100 MB
Checkmate version	Build 69 or greater*
*Requires Checkmate license if used on system that is not currently being used as a terminal.	

Getting Help

Car-Part.com takes customer service seriously. We have a variety of support options available to help you if you have questions about our products or if you need help for any reason. Your questions are very important to us and we want your experience to be a positive one. Please contact us with any questions or concerns using any of the following methods.

Phone Support

If you have a question not covered in this guide, Car-Part.com offers phone support. Please call 859-344-1925 with your questions.

Online Support using Car-Part Messaging (iCPM)

Support technicians are available online using Car-Part Messaging (iCPM) support rooms. These technicians are available LIVE to help answer any questions you may have.

The support rooms are staffed:

Monday–Friday: 8:00AM–8:00 PM ET

To enter an iCPM support room:

1. Double-click the **iCPM** icon on your desktop.

2. **Car-Part Messaging** opens.

3. Double-click the name of the **Support Room** from your bookmark list.

4. Type **HELP** and a brief explanation of your issue. A Car-Part.com support technician will answer and help with your issue.

Training

If you have ongoing training needs, Car-Part.com has a team of product training specialists to help you install, configure and learn how to use our products quickly. If you are interested in product training, please call our training department at 859-344-1925 and a trainer in your area will call to set up phone or onsite training.

Comments

We welcome your comments and suggestions concerning the content and organization of this guide as well as the accuracy and the usability of the instructions it contains. Email us at documentation@car-part.com. We're listening!

Equipment

PM8300DKAR

The main piece of the Real Time Barcoding (RTB) system is the Datalogic© PM8300DKAR scanner and the BC8060 base station cradle. The PM8300 scanner is water resistant to ISO standard of IP4 and is certified to resist drops from 6 feet onto concrete. It can complete up to 60,000 scans on a single charge and comes with a removable battery for a quick swap recharge. The unit has a range of 100 feet from the base station cradle (an area of over 3,000 square feet). The unit can scan barcodes up to 10 feet away.

PM8300DKAR Keypad and Display

Battery, signal strength, and caps lock indicators

Backlit 4 line/ 13 character screen

Function keys for pre-programmed functions

Soft-touch alpha/ numeric keypad

Shift key (used to switch between alpha and numeric modes)

Enter key
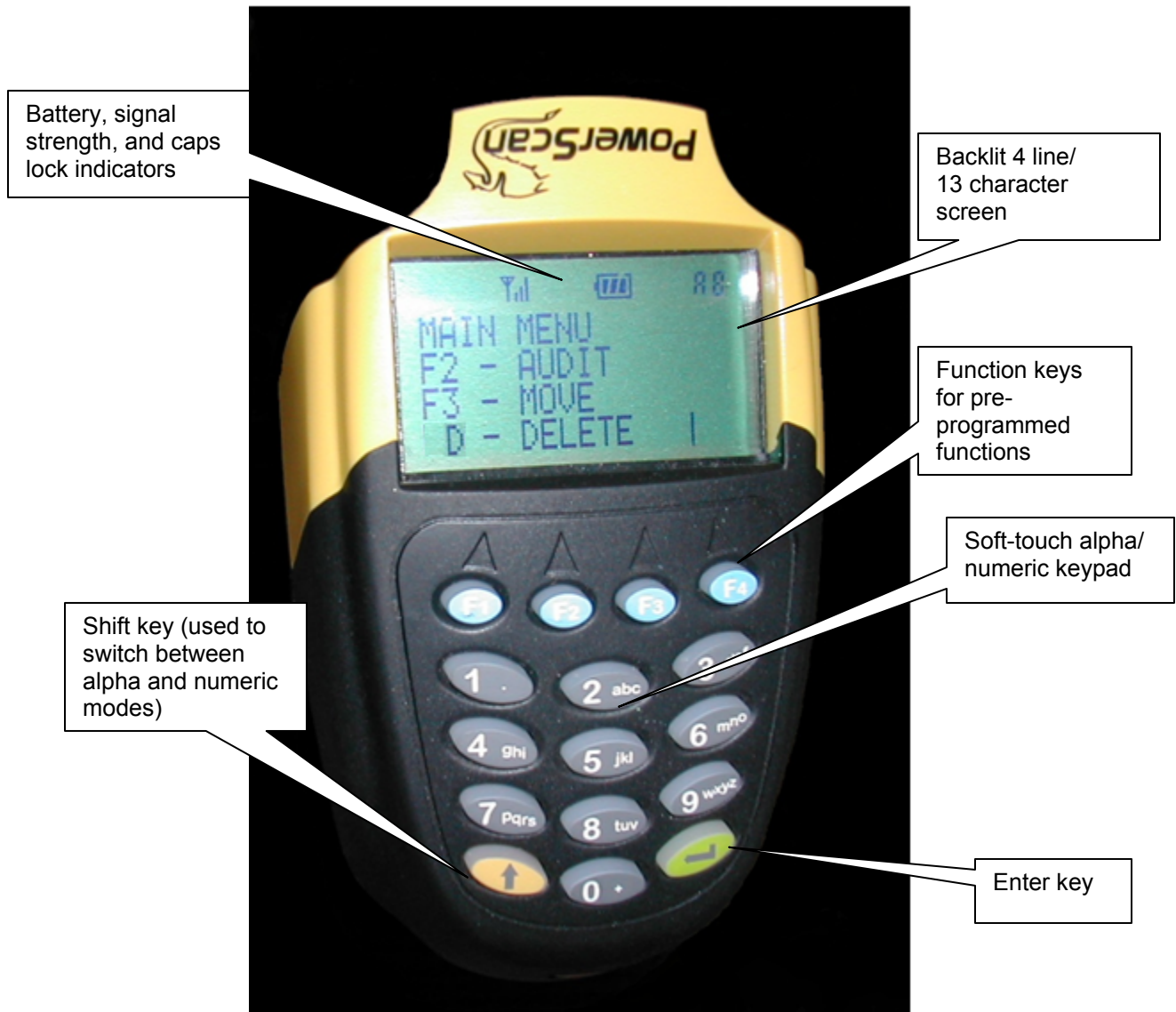
Base Station Cradles

There are two versions of the base station cradle: The BC-8060 and the BC-8030.

The base station cradle serve as both the scanner's charging station and the receiving base for the scanner. A USB cable or an RS-232 9-pin serial cable can be plugged into the multi-interface slot. (A USB cable is highly recommended because most new computers don't come with serial ports anymore.) The unit can be run exclusively on the USB port power; however, it is recommended to use the external power supply with the unit. This will insure that the unit is transmitting using maximum power, and also cuts down on charging time for the scanner (typical charge times are 4 hours with external power supply attached, and 6 hours using USB only).

On the BC-8060 model, there is also an RS-485 port. This port is used if the system will be used in the STAR Network configuration. This model also has a **Locate** button, which can help you find a misplaced scanner (this feature is only available in the stand-alone configuration).

STARGATE

The STARGATE module is a repeater that is used to extend the range of the scanner beyond the base station. The range of the STARGATE is the same as the base station (100 feet), but several units can be attached in serial to each other so the total coverage of a warehouse can be achieved. The units are attached to each other using either CAT5e/6 cable. The length of the cable between units can be up to 3,000 feet. More detail regards to setting up a STAR network can be found later in this document.

Keypad

The keypad consists of 16 buttons.

- **F1** (**STATUS**) – Press this key to view the current status of the scanner. For example, if the scanner was placed in **Sleep** mode and awakened, this function will tell you what the last function was and what it is currently expecting. For example, the screen might say **AUDIT MODE – PLEASE SCAN NEXT TAG** to let you know that the scanner is in **Audit** mode and expects you to scan a tag.

- **F2** (**AUDIT**) – Press this key to access the **Audit** function. The **Audit** function is the method of scanning a current location, then scanning the parts within that location. This will be discussed in more depth later in this document.

- **F3** (**MOVE**) – This key puts the scanner in **Move** mode, which allows you to change the location of a part. If you are *already* in **Audit** mode, you can also press this key to move the last part you scanned.

- **D** (**DELETE**) – This function places the scanner in **Delete** mode. Use <u>*extreme caution*</u> in this mode. Any tag scanned will <u>*immediately*</u> be removed from the system.

- **0/+** – This key (when used by itself and pressing **Enter**) is the **Escape** key. If at any point you wish to go back one level in the menu or function, press this key and then press the **Enter** key. It you are at the main menu, it will sign you out. If you aren't logged in, this key will prompt for the login name.

- Period (**.**) – This key will display the current date and time and the current yard number.

- ↑ – This is the **Shift** key. Much like a cell phone keypad, you can use this key to toggle between using letters or numbers.

- **___|** (**Enter**) – This key is used with every key *except* the function keys. The **Enter** key is used to send the information that you have entered with the keypad (such as a password, tag number, location, etc.) After you type the information, press this **Enter** button to send the information back to the server.

- **F4 (Backspace)** – This function will move the cursor one character to the left and delete the character.

Sleep Mode – After one minute of no activity, the scanner will enter Sleep Mode. It can be "woken" by pressing the trigger.

Power Off – After 60 minutes of no activity, the scanner will turn off. To turn it back on, press the trigger.

Workstation Screen

To open the Real Time Barcoding workstation on your computer, go to ***Start>Programs>Car-Part>RTB***. Below is the Real Time Barcoding screen that will show on your computer.
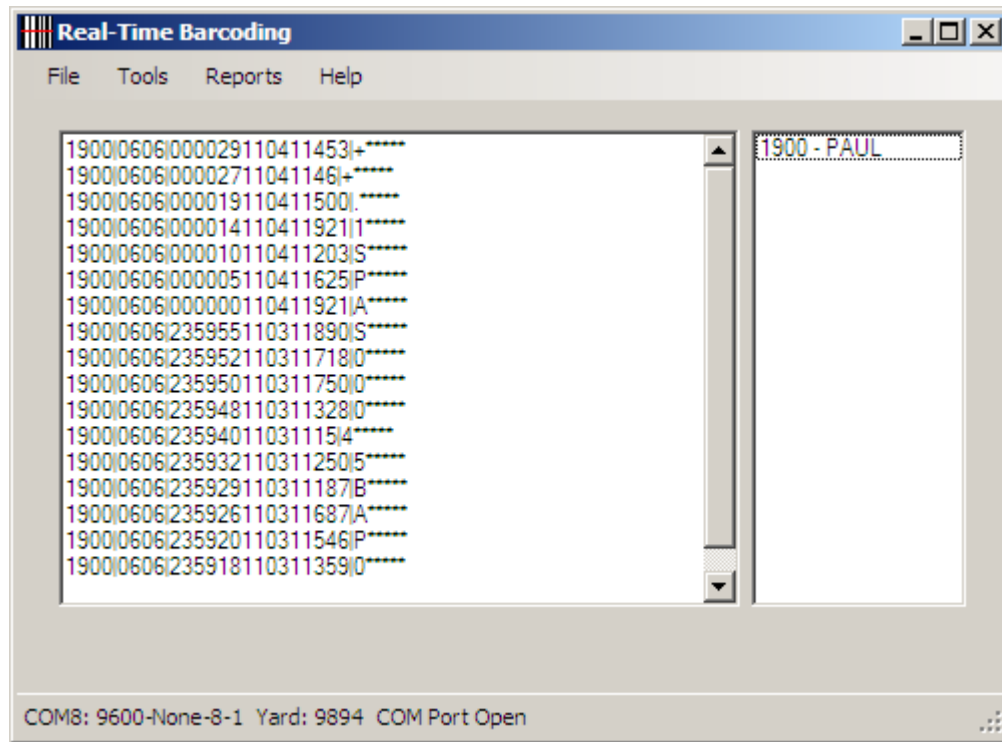
The panel on the left displays the raw data that has been scanned. The column on the right displays a list of online users who are currently scanning. If you close this window, the information will be removed from these panes. The next time you start Real Time Barcoding, they will be blank (until more information is sent).

Scanning

To begin a scanning session, open the workstation on your computer. Press the trigger of the scanner to turn the unit on. If you are not sure which function the scanner was last left in, press **F1**.

The main menu will now appear. Each different section is detailed below. Pressing **0/+** at the main menu will log you out of the system.

Note: If you see the message **NOT SIGNED IN, PRESS 0 LOGIN**, press the **0/+** button and press **Enter**. At the **PLEASE LOGIN** prompt, enter your Checkmate password (this can be either typed in on the keypad or scanned off a preprinted barcode label).

Audit Mode

Use **Audit** mode when you want to confirm the location of your parts. In **Audit** mode, you will scan a location and then scan all the tags in that location. After you are done auditing an area, you can run an **Audit Report** back at your workstation. (This process will be discussed later in this document.)

1. Press **F1** from the main menu to enter **Audit** mode.
2. At the **LOCATION** prompt, scan the current location (or type with keypad).
3. At the **TAG** prompt, scan the first tag.

4. After the tag is scanned, a display of information will be shown.

```
TRA-60062D
LOC: LB4B00D
QTY: 1 REQ:11
STK: 98HK123R
```

 The information would be broken up into:
 Part code–Interchange number
 Location of the part (according to Checkmate)
 Quantity on hand | Number of requests
 Stock Number (if the part is located in another yard, the yard number will display
  instead of the Stock number, e.g., Yard: 9211)

5. At this point, you can scan the next tag, press **0/+** to go back to **LOCATION** and switch to another location, or press **F3** to move the last scanned part.
6. If you pressed **F3**, the prompt **CHANGE LOCATION/ SCAN NEW LOC** will appear. You can now scan the new location barcode (or enter the information with the keypad). When the new location is entered, the system will change the part's location and display the information again this time with the updated location. If the part is located in a different yard, scanning a new location will move the part to the new location in that same yard. If

the new location has the format of Yard#<space>/<period>NewLocation, the part will be moved into the different yard into the specified location. For example, **123.BAY1** will move the part from its current location/yard to yard 123 in location BAY1 within yard 123.

7. If a scanned tag has more than one part associated with it, the following warning will display: **WARNING: MULTIPLE PARTS**. You can now press **F1** (**Status**) to see all parts associated with this tag number. The parts will be displayed in the following format: PARTCODE/STOCK #/ LOCATION. For example:

```
TRA/123A/YARD1
ENG/933B/W1B12
ALT/1120/RACK1
F1 FOR MORE
```

You can now either scan the next tag or press **0/+** to escape back to change to a new scan location. You cannot change part locations on tags with multiple parts.

8. When finished, press **0/+** to escape back to the main menu.

Move Mode

Use **Move** mode to move large quantities of parts. **Move** mode does not display each part's information as you scan (as opposed to the **Audit** mode, which gives you information about your parts as you work).

1. Press **F3** from the main menu.
2. At the **SCAN TAG** prompt, scan the part tag.
3. At the **NEW LOCATION** prompt, scan a new location. The screen confirms that the part has been moved successfully.
4. You will now be prompted to scan the next tag. If you press **F1** (**Status**) after scanning the tag number, the screen will display the part information associated with that tag number.

```
TRA-60062D
LOC: LB4B00D
QTY: 1 REQ:11
STK: 92T1243R
```

If the part is located in a different yard, scanning a new location will move the part to the new location in that same yard. If the new location has the format of Yard#<space>/<period>NewLocation, the part will be moved into the different yard into the specified location. For example, **123.BAY1** will move the part from its current location/yard to yard 123 in location BAY1 within yard 123.

5. Scan the new location or press **0/+** to return to the **SCAN TAG** prompt.
6. When you are finished, press **0/+** to return to the main menu.

Delete Mode

This mode will mass delete of parts from the system. It cannot be stressed enough that *this is a very dangerous* feature of Real Time Barcoding. Any tag scanned is *immediately* deleted from the system. This mode is disabled by default but can be enabled through the **Options** menu.

If you do not want to use this feature, it can be turned on and off by going into the **Options** tab on the Workstation Real Time Barcoding software

1. Press **D** from the main menu.
2. At the **SCAN TAG** prompt, scan the tag.
3. If the part exists in the system, it will display **PART DELETED** and prompt for the next tag.
4. When you are finished, press **0/+** to escape back to the main menu.

Audit Report

Back at the workstation, you can run the **Audit Report**, which will give you a report of scan activity. To access the report, click **Reports** at the top of the window.
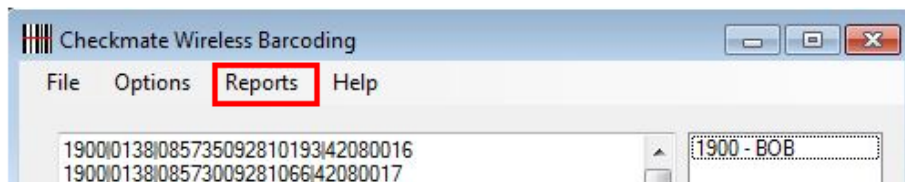
The **Reports** window will open.
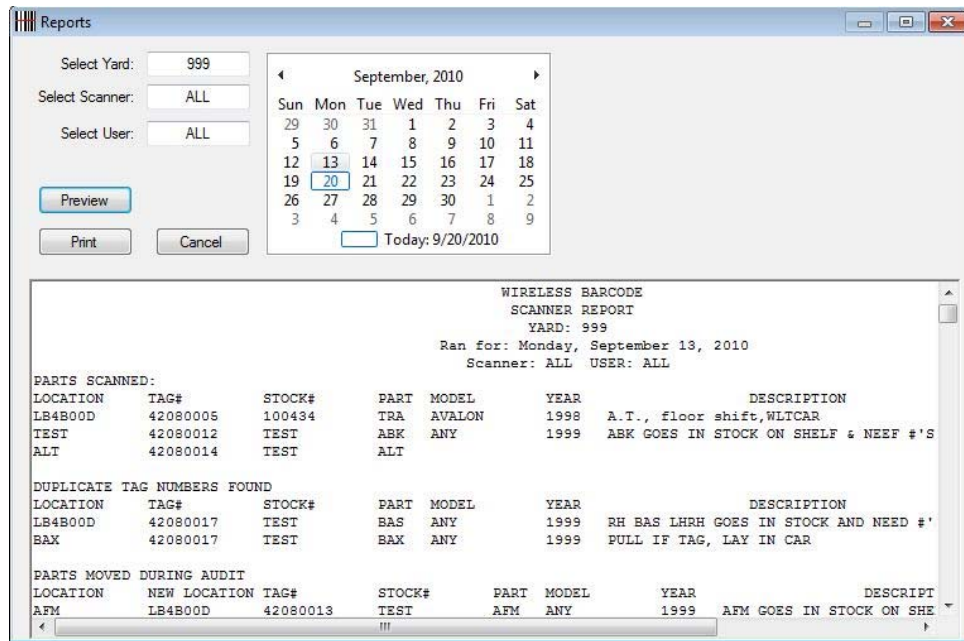
Provide the yard number in the **Select Yard** field. Use the **Select Scanner** and **Select User** boxes to select which scanner(s) and which user(s) you wish to build the report for. Click **Preview** to display the report on the screen.

The report shows:
- Parts that were scanned
- Duplicate tag numbers scanned
- Parts moved during **Audit** mode
- Parts assigned to this location in Checkmate that were not scanned during the audit (missing parts)
- Parts moved in **Move** mode
- Parts deleted in **Delete** mode

The next page contains an example of an Audit Report.

Reports

Select Yard: `6`

Select Scanner: `ALL`

Select User: `ALL`

◄ **November, 2011** ►

Sun	Mon	Tue	Wed	Thu	Fri	Sat
30	31	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	1	2	3
4	5	6	7	8	9	10

☐ **Today: 11/4/2011**

[Preview] [Save]

[Print] [Cancel]

Report Processing Statistics

Records to Process: 12

Current Record: 12

```
                        WIRELESS BARCODE
                        SCANNER REPORT
                           YARD: 6
                 Ran for: Friday, November 04, 2011
                     Scanner: ALL  USER: ALL


PARTS SCANNED:
LOCATION      TAG#        STOCK#      PART  MODEL     YEAR              DESCRIPTION          IC#      QOH   SCANID USER
=================================================================================================================
TAG NOT FO    44 SD11555  TAG NOT FO  TNF   TAG NOT FO                                               1900   PAUL
9894 WBH03    4208000052  P0911034    STT   CAMRY     02                                     59920B  2     1900   PAUL
9894 WBM00    4208000047  P0911034    SPN   CAMRY     02                                     58753A  1     1900   PAUL
9894 WAT02    4208000051  P0911034    STR   CAMRY     02                                     58726A  1     1900   PAUL
9894 YARD-    4208000049  P0911034    STB   CAMRY     02                                     59162B  1     1900   PAUL
TAG NOT FO    4208000041  TAG NOT FO  TNF   TAG NOT FO                                               1900   PAUL
9894 YARD-    4208000043  P0911034    RVW   CAMRY     02                                     56597B  2     1900   PAUL
9894 WAT02    4208000051  P0911034    STR   CAMRY     02                                     58726A  1     1900   PAUL

DUPLICATE TAG NUMBERS FOUND
LOCATION      TAG#        STOCK#      PART  MODEL     YEAR              DESCRIPTION          IC#      SCANID USER
=================================================================================================================


PARTS MOVED DURING AUDIT
LOCATION      NEW LOCATION TAG#        STOCK#      PART  MODEL    YEAR          DESCRIPTION        IC#      QOH   SCANID  USER
=================================================================================================================
TRUCK1        BAY1         4208000050  P0911034    STB   CAMRY    02    REAR                       59163B         1900   PAUL

PARTS MISSING FROM (OR NOT SCANNED IN) LOCATIONS
LOCATION      TAG#        STOCK#      PART  MODEL     YEAR              DESCRIPTION          IC#      SCANID
=================================================================================================================


PARTS MOVED DURING MOVE MODE
LOCATION      NEW LOCATION TAG#        STOCK#      PART  MODEL    YEAR          DESCRIPTION        IC#      QOH   SCANID  USER
=================================================================================================================


PARTS DELETED
LOCATION      TAG#        STOCK#      PART  MODEL     YEAR              DESCRIPTION          IC#      QOH   SCANID USER
=================================================================================================================
TRUCK1        4208000041  P0911034    RRG   CAMRY     02    RH,W/MTR                         58531          1900   PAUL

END OF REPORT.
```

Audit Report Export

The information in the Audit Report can be accessed through Checkmate Classes for customizable reports. The Checkmate Class is called **RealTag** and follows this format:

Field Name

ID: Unique identifier for the record
BaseID: This is the record type. Each record type has a particular function:
      6666 – Parts deleted in Delete Mode
      7777 – Parts Scanned
      7778 – Parts in location
      7800 – Parts moved in Audit Mode
      8800 – Parts moved in Move Mode
Data: This is the data regarding the record type. This information varies due to what the BaseID is set to:
6666:   ScannedLocation{Tag#{Username{PartCode\Stock#\Location
7777: ScannedLocation{Tag#{Username{PartCode\Stock#\Location
7778:   ScannedLoc.}PartCode}Model}Year}IC#}Stock#}Tag#}PartLoc.}Description
7800: ScannedLoc.{NewLocation{Tag#{Username{PartCode\Stock#\Location
8800:   ScannedLoc.{NewLocation{Tag#{Username{PartCode\Stock#\Location
DateTime: Date and time stamp of the transaction in the format of HHMMSS.mmmmMMDDYY
ScannerID: Scanner used in scan
Yard: Yard number of scan

Special Note: Under the 7777 transaction, if multiple parts exist, the data field will reflect the part/stocknumber/location of each part separated by a delimiter. For example:
TEST{42080010{BOB{KNE\T238\TEST}STR\T238\TEST

Another key factor to keep in mind: The 6666 transactions will not appear in the class until AFTER a NightRunner has run.

Error Messages/Troubleshooting

While using the scanner, you may encounter the following error messages.

ERROR: RX/TX TIMEOUT

Cause:
- A. The user is out of range of the receiver
- B. The Real Time Barcoding program isn't running

Solution:
- A. Step closer to the receiver
- B. Start the Real Time Barcoding program by going to ***Start>Programs>Car-Part>RTB***.

ERROR: DATABASE NOT AVAILABLE

Cause: Scanning a tag/location when the scanner can't communicate with the main Checkmate system

Solution: Check to make sure the ODBC information is correct under **Options** and that **Test Connection** works properly. It could also be that the classes have not been loaded properly; make sure all classes are loaded. If you need help, contact your Checkmate support rep.

ERROR: Cache ODBC: class error….

Cause: Error shown on the computer where Real Time Barcoding is loaded. It means that the system cannot access information in the class.

Solution: Be sure to turn on ODBC logging under Windows ODBC connections (contact your Checkmate support rep if you need help with this). Once this is enabled, recreate the error and contact your checkmate support rep. The error will be recorded in a log for further investigation.

ERROR: UNKNOWN SCAN

Cause: The barcode may not have been decoded correctly, the barcode may have been generated incorrectly, or this was an invalid scan.

Solution: Try scanning again. If still happens, try another barcode. If that reads successfully, the first barcode may have been generated incorrectly. If neither of these are the case, then the scanner was expecting a different command. For example, if **LB4000B** is scanned at the main menu, it is an invalid scan. Scan a valid command.

ERROR: TAG NOT FOUND

Cause: Scanning a barcode not found in the system

Solution: Verify that the part exists in Checkmate. If the part doesn't exist, it's a valid error message. If it does exist, contact Checkmate Support.

ERROR: NO USER FOUND

Cause: A password was entered that that isn't set up in Checkmate **6,11**.

Solution: Add user into Checkmate or verify password.

ERROR: /*32: FAIL*/

Cause: This is the result of issuing the **#+Alive<xxxx>** command to a STARGATE.

Solution: This shows that there is a problem with that particular STARGATE unit. Reinitialize the unit and try again. If the error continues to appear, double-check the cable connecting to that unit. If the error message continues, replace the unit.

ERROR: /*Two-Ways Out of Sequence! Xxxx*/

Cause: This is caused when information is not being correctly sent to or received by the scanner.

Solution: Contact your Checkmate support rep.

ERROR: Deleted Parts not showing on Audit Report

Cause: The data files used to create the report are updated with NightRunner.

Solution: Run a NightRunner or CDLBLD. If you need help with this, contact your Checkmate support rep.

ERROR: COMXX NOT AVAILABLE

Cause: The cradle is plugged into a different port than originally configured for.

Solution: In the Real Time Barcoding window on your computer, go to *Options>COM Port Setup* and select the proper serial port.

Special Barcodes

Scan these barcodes from the main menu to perform the specified tasks.

Reset All Defaults

```
$    +    $    #
```

Reset All Base Defaults

```
$    +    R    X    5    $    -
```

The barcode below enables the cradle to be seen as a serial port instead of a USB keyboard. It is also needed if the setup is reset to factory defaults.

USB-COM*

The barcode below can be used if the barcode included with the cradle was malformed or incorrect.

ADDRESS 0012, BIND

```
$   +   R   F   0   0   1   2   R   N   0   $   -
```