

13. 9PDT3100

Overview

RS-SQL interfaces with the Symbol PDT3100 in order to accommodate rapid and accurate integration of large volumes of record center operational information. The PDT3100 is an intelligent data collection device. It can be programmed and configured to provide a work structure for the data collector. It can detect many task-related errors immediately, as well as collate information, e.g., barcodes, into lists with specific meanings. In addition, the PDT3100 can be extended to work with other devices such as the O'Neil microFlash portable printer for printing customer receipts.

Communication between the PDT3100 and RS-SQL is two-way, or bi-directional. For example, RS-SQL can send the PDT3100 information about what things need to be picked and delivered and where they are located. If the warehouse operator makes a mistake, such as trying to deliver a box to the wrong customer, the programmed intelligence inside the PDT3100 can immediately detect the mistake at the point of delivery and thus prevent it from occurring.

The functions that are performed with the PDT3100 to track items and actions in RS-SQL include: Record Center Operations, Electronic Picklists, Route Operations and Refiling for Container, Filefolders, and Tapes. They are described in detail in this chapter.

The process to be followed in a delivery situation is this:

1. The workorder is generated in RS-SQL.
2. The Electronic Picklist is downloaded to the PDT3100.
3. The items to be delivered are picked and scanned into the PDT3100.
4. The completed picklist is uploaded back into RS-SQL.
5. The Route Ops information is downloaded into the PDT3100.
6. All items to be taken out in the truck are put together and their presence is validated (each item is scanned by the PDT3100). It can be validated workorder by workorder, or all items on the truck can be scanned. The PDT3100 tells you if you are missing any items for your delivery, or if any are there in error.
7. The truck driver goes to a customer site and delivers all items for a workorder. He scans items as they are delivered. He enters the name of

the person receiving the items. He prints a receipt with the microFlash printer, and has the receiver sign it.

8. When the driver returns to the facility, he uploads the PDT3100 information he received, and the activity file is updated with a validation and a delivery for each item.

Now you know when an order was placed, who placed it and who took it. You know when it was picked, and who picked it. You know when it was loaded onto the truck, and who loaded it. You know when it was delivered, who delivered it and who received it.

PDT3100 Functions

The Symbol PDT3100 offers multiple functions on a small, uncomplicated unit, but there are several keys on the 3100 that you must become familiar with. Notice that the full alphabet is represented on the keyboard, but that several of the letters share keys with numbers. The others have 'shift functions' that allow other alphabetic characters to be used.

Key	Function
ALPHA	Switches between primary and secondary keys. Primary keys are printed in blue, secondary keys are printed in black.
SPACE	Inserts a blank space.
SHIFT	Invokes third group keys.
PWR	Turns 3100 on and off and wakes it up from sleep mode.
FUNC	Invokes any key that is printed in green.
FUNC - A	In Record Center Ops and Scan Pickup Items, allows the user to enter an Alternate ID for a container or filefolder. In Electronic Picklist allows the user to see the Alternate ID.
FUNC - K	Press this combination to turn the prefix/suffix function on or off.
FUNC - S	Pressing this combination after scanning an item displays all known properties for the item. This allows you to change a property if necessary.
FUNC - T	When scanning a new pickup item, press Func T to enter the object's sub-type. While in the Enter Object Type screen, press the up or down arrow to view an object choice list.
FUNC - U	Used during Route Ops or Record Center Ops. Schedules the item to be returned to the customer or to the records center.
FUNC Up	Used in Electronic Picklist only. Press the Function key, then the Up Arrow to move to the first item on your list that has not been scanned.
FUNC Down	Used in Electronic Picklist only. Press the Function key with the Down Arrow to move to the last item on your list that has not been scanned.
FUNC - F4	Deletes last item scanned (from list of items scanned).
CTRL	Control Key - not currently used.
Right Arrow	Moves cursor to the right.
Left Arrow	Moves cursor to the left.

Up Arrow	Scrolls cursor up.
Down Arrow	Scrolls cursor down.
CLEAR	Return to previous screen - same as ESC on a PC.
BK SP	Moves cursor back one space to erase characters.
ENTER	Saves entry and moves to the next screen.
J - F - PWR	Warm boots the PDT3100. Press PWR to turn off PDT3100. Press and hold J and F keys. Press and release PWR. Release J and F. Leaves both program and important data intact. Is useful for restarting PDT3100 if it is "hung." However, it is not currently recommended for use because of erratic behavior following the Warm Boot.
FUNC - Space - M - PWR	Cold boots the PDT3100. Press PWR to turn off PDT3100. Press and hold FUNC, Space and M keys. Press PWR, then release. Release FUNC, Space and M. Erases all RS-SQL data from the PDT3100 but leaves the RS-SQL program intact. Use this as a last resort if the PDT3100 is not responding. You lose all scanned data but the PDT3100 functions correctly.
Trigger Buttons	Press the trigger button to scan an item. Pressing either trigger button also wakes the PDT3100 from sleep mode.

The scan head of the PDT3100 can be turned to the left or right to be more comfortable for you. You may also program either black trigger button to act as the scan trigger by pressing the **FUNC** key down, then pressing the trigger button of your choice. The opposite trigger button then acts as the **SHIFT** key.

Battery: During normal use, the cursor looks like a □ or a ▢. If the cursor's shape becomes a solid triangle shape, it indicates that the battery is low and needs to be replaced. The PDT3100 will operate with a standard 9-volt alkaline battery, but we recommend a 9-volt NiMH battery that can be recharged.

Menus

All of the options in the PDT3100 are available through the Main menu. The options are listed below and each option is described in a section later in this chapter.

Login

Electronic Picklist

Records Center Ops

Route Ops

Scan Refile

Refile Folder List

Refile Tape List

Refile Container Lst

Document Insert

Load Tote

Create 2D RCO Label

Communications

Scanning Techniques

The PDT3100 'sees' barcodes with a red laser beam that emits from the scan head at the top of the unit. When you press the trigger, you will notice that the laser beam can be seen on items that are close to it. This means that the scanner can read barcodes without touching or being very close to them. It can also read barcodes on uneven surfaces.

Aim the PDT3100 so that the window of the scan head is facing the barcode. When you press the trigger, the laser beam emits from the window and the red light on the back of the scan head lights. This tells you that the unit is trying to read a barcode. Make sure that the laser beam fully encompasses the barcode you are trying to read. When a read has been confirmed, the green "Decode" light glows.

Warning: Do not look directly into the laser scanner. This can cause eye damage.

When scanning containers and filefolders into generic locations and holding areas, you must be aware of how the scanner reads the entries. An operator may be tempted to scan the holding area location once, then proceed to scan all items in the area as follows:

900000	Incoming holding area
1000001	Container
1000002	Container
20000001	Filefolder
10000002	Filefolder
1000003	Container

However, if scanned in this order, the system sees the filefolders as being scanned into container 1000002. To ensure that the filefolders are scanned into the holding area, you need to scan the holding area, then the containers, scan the holding area again, and then the filefolders.

Login

Each time a new User picks up a PDT3100 to use, he must log in. Even if someone else has been using it, the new user must register himself as the person now using it. To login to the PDT3100, from the **Main** menu, highlight **Login** and press **Enter**. The following prompt appears:

```
ENTER YOUR ID & NAME
ID: _ _ _ _ _
YOUR NAME
_ _ _ _ _
```

Your ID is the barcode identifier that represents you. You may enter it in with the keypad, or you may scan your barcode when the cursor is in the ID field. You have 20 spaces in which to enter your own name. This name appears on delivery receipts.

If at any time during Record Center Operations a user barcode is scanned, the PDT3100 asks if you want to change the User ID. If you respond with Yes, you are taken to the **Login** screen, then returned to Records Center Ops. This is so that people working in the warehouse can share a PDT3100.

Electronic Picklist

As an alternative to carrying a hard copy of a picklist, RS-SQL allows you to download an electronic picklist directly into your PDT3100. Then the PDT3100 directs you through the warehouse and automatically 'checks off' the containers and files as you collect them. This allows RS-SQL to track actions associated with Deliveries, Accesses and Destructions. When you scan the items as you take them off the shelves, the PDT3100 notes what was taken, when it was taken, and by whom.

To download a picklist from RS-SQL, enter the **Workorder** grid and mark the workorders whose contents need to be picked. Then, under the **Options** menu, select **Picklist**, then **All Items to PDT3100**. (To select individual items from workorders to place on picklists, see *Workorders* chapter.) The **Communicate Only** dialog box appears (shown below) and you are instructed to insert the PDT3100 into its cradle. On the PDT3100, from the **Main** menu, highlight **Communications** and press **Enter**. The scanner beeps and offers the following message:

Insert PDT3100 Into Cradle, Press ENTER key when
ready

Put the PDT3100 into its cradle and press its **Enter** key. You see the communication process begin on the screen of your PC.

PDT3100 Communicate Only

Finished communicating with PDT3100.

Successful Sessions: 1

Progress:

Status	Action
OK	Send begin
OK	Recv PDT3100 version
OK	Recv common data
OK	Recv updated pick list
OK	Recv updated reassign List
OK	Recv updated delivery list
OK	Recv new pickup list
OK	Recv itemized pickup list
OK	Recv updated refil list
OK	Recv record center ops
OK	Recv updated CV list
OK	Recv updated locate list
OK	Recv updated restore list
OK	Send clear
OK	Send barcode lengths
OK	Send company name
TRANSMITTED	Send PICK LIST
OK	Send Urgent list & Object list
OK	Send PC date and time
OK	Send end

PDT3100/PC Date and Time

Difference in minutes: 4

Done

Port setup...

Retransmit

For Remote

Every time RS-SQL communicates with the PDT3100, several communications happen. Each 'packet' of information that is transferred back and forth is listed on the RS-SQL Communicate window, and its status is updated as the communications take place. First, RS-SQL sends a start command to the PDT3100. When the PDT3100 acknowledges it, communications begin and the other Actions on the list take place. When the transmission is complete, the RS-SQL screen tells you that it has finished communicating with the PDT3100, and all Status fields show OK or TRANSMITTED.

Once the picklist is downloaded to the PDT3100, the PDT3100 leads you through the warehouse, in Location order, to pick all the items on the list. From the **Main** menu in the PDT3100, select **Electronic Picklist**. The first item to be scanned appears on a screen similar to the one shown below:

```

> v
Loc:  10005
Con:  123403
F/T:  1334522      13

```

Scan (>) shows where the barcode number is entered. *Loc* is the location you are to go to first. *Con* is the container you are to retrieve. *F/T* is the folder or tape you are to

retrieve, if applicable. The number in the right corner represents the number of items you need to retrieve.

Go to the first Location listed, in this case, 10005. Don't scan the location barcode, but find the Container listed – 123403. Then find the Filefolder listed – 1334522 and scan its barcode number by aiming the scan head at the barcode and pressing the trigger. You will see a red horizontal line emit from the scan head. As it crosses the barcode, the PDT3100 beeps, letting you know that the scan has been read. (If necessary, you may enter the barcode number with the keypad. When all digits have been entered, press **Enter**.) The number at the bottom right of the screen (13 in our example) decreases by one, and the next location to go to appears.

You may scroll through the picklist by pressing the **Up** and **Down Arrow** keys. If you want to move to the top of the list, press the **Func** key and **Up Arrow** at the same time. This does *not* take you to the very top of the list, but to the first item on the list that has not yet been scanned. When you reach the very top of the list and press the **Up Arrow**, the PDT3100 beeps. All items that have been scanned show an asterisk (*) to the left of the number. When all items on the picklist have been scanned, the PDT3100 emits a long beep and it displays the following message:

All Items Picked

Press ENTER to Cont.

When you press **Enter**, you are returned to the **Main** menu. The next step is to upload the confirmed picklist back to the system. To do this, follow the *Uploading a Picklist* process below.

For an item that has been picked, a pick validation record for that item is posted to the activity file. Items on the picklist that were not picked create an exception in the RS-SQL **Processing Exception** grid (acknowledgeable only).

NOTE: You cannot load Route Ops into a PDT3100 that has a Picklist still in it. The Picklist, confirmed or not, must be uploaded back into RS-SQL.

Document Picklist

If a document is in a container or unregistered filefolder, the electronic picklist displays the following:

```
>
Loc: B1234
Cont: 000976
F/T: TFF00123
```

If a document is in a filefolder on an open shelf, the electronic picklist displays the following:

```
>
Loc: 11534
Cont:
F/T: TFF00089
```

If a document is in a registered filefolder, the electronic picklist displays the same as above. Even if you know the filefolder the document is in, it still only shows the

TFF. The information on the outcard directs you to the proper filefolder and the document to pull.

Pull the label off the outcard and place it on the TFF. When a document is removed from its original location, place the outcard in its place. This makes it easy to locate the original location when it comes time to restore the document. Scan the TFF barcode to perform a pick validation.

Special Barcodes

Not Found

During the picklist process, you can scan a special O'Neil barcode that indicates to the PDT3100 that the item to be picked was Not Found. Once the barcode has been scanned, you are prompted to confirm the Not Found status. When it is confirmed, the barcode number appears on the Picklist with a question mark (?) next to it.

For example, the PDT3100 prompts you to pull a filefolder from a container. The container code is 00000001. The filefolder code is TEMP00002. From the hard copy of the picklist, you can see that the filefolder has a description of "Carter, Erica." you find the container and open it. After a thorough search, the filefolder is not found. You scan the Not Found barcode. The following PDT3100 screen appears:

```
Not Found
FF/T: TEMP00002
Are you Sure? Y/N
```

Press **Y** and the PDT3100 marks that filefolder as Not Found. When you scroll up to see the item, you see it appear with a question mark as shown below:

```
Loc: A00001
Con: 00000001
?FF/T: TEMP00002
```

The question mark lets you know that the filefolder was Not Found. When the PDT3100 is downloaded to RS-SQL, an entry occurs on the **Communication** grid.

Reassign

During the picklist process, you can now scan a barcode that indicates to the PDT3100 that the item picked is to have its barcode reassigned to another number. Once the special O'Neil barcode is scanned, you are prompted to scan the new barcode and to enter **Y** or **N** to confirm or deny the new number. Once you have confirmed the number with a **Y**, the new barcode number appears on the picklist (PDT3100 screen) with an equal sign (=) next to it.

For example, the PDT3100 prompts you to pull a filefolder from a container. The container code is 00000001. The filefolder code is TEMP00001. From the hard copy of the picklist, you can see that the filefolder has a description of "Welch, Lauren." You find the container and in it, you find the filefolder. You pull a new barcode label from your supply, and attach it to the filefolder. Scan the Reassign barcode and then scan the new barcode. The following PDT3100 screen appears:

```
Old: TEMP00001
New: 123456789
Are you Sure? Y/N
```


Press **Y** and the PDT3100 marks that filefolder as reassigned. When you scroll up to see the item, you will see it appear with an equal sign as shown below.

Loc: A00001
Con: 00000001
=FF/T: 123456789

The equal sign lets you know this filefolder has been reassigned to the number shown. When the PDT3100 is downloaded to RS-SQL, you will see that a Re-Assignment occurred in the Database Updates section of the **Communicate and Process** dialog box.

Uploading a Picklist from the PDT3100 to RS-SQL

Once you have finished picking all items that were on your PDT3100 picklist, you can upload the picklist back to RS-SQL. If you have the PDT3100 validation option, a record of the picking is posted to the activity file for the items you picked.

From the PDT3100 **Main** menu, select **Communicate**. In RS-SQL **Operations** program, select **Datawand/PDT3100**. From the **Communication Sessions** grid, **Options** menu, select **PDT3100**, then **Communicate and Process** (you may choose **Communicate Only** if that is all you want to do at this time). Communicate and Process the data as described above.

Records Center Ops

Everyday Record Center Operations can be performed on the PDT3100. During Record Center Operations, the PDT3100's screen appears as shown below:

> v
Loc:
Con:
F/T:

Basic scanning rules are this:

Identify where you are

Identify what is there - Container then filefolders or tapes within the Container

Enter the Alternate ID if applicable (see section below)

Scan a Location barcode and then scan everything that is being placed in that Location. The system assumes that everything you scan is at that Location until you scan another Location barcode. Examples of good scans would be:

Location, Container, Filefolder, Filefolder, Filefolder, Container

Location, Container, Container, Tape, Tape

Location, Filefolder, Filefolder

In the first example, you would have filed two Containers. The first container had three filefolders placed in it. The second location had two containers, the second of which had two tapes placed into it.

If you scan out of order, the PDT3100 does not accept the scan. When you scan a barcode, the PDT3100 confirms its accuracy in the top line of the screen, where you see the √. Then, once it determines what type of barcode it is, it places the barcode number on the screen next to the appropriate title. Let's say your locations have five digit identifiers. When you scan a five-digit barcode, the PDT3100 acknowledges it, and places the number next to the *Loc* title. When you scan the container that goes into that location, the PDT3100 acknowledges it, and places the number next to the *Con* title.

If you scan a Container, Filefolder or Tape without scanning a Location, the PDT3100 simply does not accept the scan.

Alternate ID

When adding new Containers, Filefolders or Tapes to the system, you can add the customer's Alternate ID when you scan the item onto the shelf. To do this, simply scan the Location, and then scan the Container and/or Filefolder or Tape barcode. Press the **FUNC** key and then **A** (Function key first) to access the **Alternate ID** field as shown below. One of the following screens appear, depending on whether you are entering an Alternate ID for a Container or a Filefolder:

Enter Alternate ID	Enter Alternate ID
Con: 1234567	F/T: 12345678
√	√
Press ENTER To Save	Press ENTER To Save

Notice that the barcode number for the item appears on the screen. Enter the Alternate ID with the keypad and press **Enter** to save it. It does not show on the screen, but is saved in memory and is uploaded into RS-SQL. This option is also available during Pickup. See *Route Ops* section.

Route Ops

Route Ops lets you know what to do at each delivery stop and verifies that all route operations have been completed. Before you leave on your deliveries, it also allows you to verify that you have all the Containers, Filefolders and Tapes you need to deliver. When you download Route Operations to the PDT3100 from the **Workorder** grid, each workorder you marked on the **Workorder** grid is loaded into its memory. As each delivery takes place, you confirm that it did by scanning all the items delivered. Then you can print the customer a receipt confirming the action. If a customer has an unexpected pickup when you are there, you can either create a new workorder or modify the existing one to include it.

To load Route Ops into your PDT3100, from the **Workorder** grid, mark the workorders that are being delivered and from the **Options** menu, select **Route Ops to PDT3100**. The **Communicate and Process** dialog box appears. On the PDT3100, select **Communications** from the **Main** menu. Insert the PDT3100 into its cradle. When you are ready to begin communications, press the **Enter** key on the PDT3100.

Validating your Load

The second footprint in the RS-SQL validation process is confirming the presence of the item to be delivered on the truck that is delivering it. You may validate the items

by workorder, or you may simply scan everything on the truck and see if it is all there. To validate your load, from the **Main** menu of the PDT3100 choose **Route Ops**. From that menu, highlight **Confirm Load** and press **Enter**.

Confirm by Workorder

To confirm your load by workorder, you enter each workorder number and then scan all the items for that workorder. The PDT3100 tells you if there are any missing items, or if an item was scanned that is not on the workorder.

Highlight **Confirm by Workorder** and press **Enter**. The following screen appears:

```
CONFIRM BY WORKORDER
ENTER WORKORDER NO.
V _ _ _ _ _
Press CLEAR to Exit
```

You can enter a workorder number or press the **Up** or **Down Arrow** key to access a list of all workorders on the Route. To select one, simply highlight it and press **Enter**. You receive the following prompt:

```
SCAN ITEMS
Press CLEAR to Exit
```

Use the PDT3100 to scan all the items that you have for that workorder. When you scan an item that the PDT3100 is expecting, it gives a beep, and the number scanned appears to the left of the screen. If you scan an item that is not on that workorder, the PDT3100 gives an error tone and tells you that that number is an Invalid Item. It does not accept the scan, and asks you to continue. If you scan the same number twice, the PDT3100 also lets you know, and does not accept the scan.

When you have scanned all the items you feel are on that workorder, press **CLEAR**. If you have scanned all appropriate items, the PDT3100 gives the following response:

```
All Items Scanned
Press CLEAR to Exit
```

If all items are not scanned and you press **CLEAR**, the following screen appears:

```
Show Missing
Show All
Continue Scan
Exit
```

If you select **Show Missing**, you are prompted to **Display** them or **Print** them. If you choose Display, all items that were not scanned but were expected appear in list form on the screen of the PDT3100. You can scroll through the numbers by pressing the **Up** and **Down Arrow** keys. If you choose to print them, you are asked to connect your PDT3100 to a printer and press the **Enter** key when you are ready. The list then prints for you.

If you select **Show All**, you receive the same **Display** or **Print** prompt. Either way, all items display or print and those that have not been scanned are differentiated.

When you return to the list of workorders to be validated, the one you completed has an asterisk (*) next to it.

Confirm by Truck

If you are in a hurry to leave on your rounds, and don't have time to separate items by each workorder, you can validate them in any order, and just scan all the items in the truck at once. When you highlight and select **Confirm by Truck** from the **Confirm Load** menu, you are prompted to Scan All Items. Scan every item in your truck.

When you have scanned all the items in your truck, press **CLEAR**. If you have scanned all the items scheduled to go, the PDT3100 gives the following response:

```
All Items Scanned
Press CLEAR to Exit
```

If all items are not scanned and you press **CLEAR**, the following screen appears:

```
Show Missing
Show All
Continue Scan
Exit
```

If you select **Show Missing**, you are prompted to **Display** them or **Print** them. If you choose **Display**, all items that were not scanned but were expected appear in list form on the screen of the PDT3100. You can scroll through the numbers by pressing the **Up** and **Down Arrow** keys. If you choose to print them, you are asked to connect your PDT3100 to a printer and press the **Enter** key when you are ready. The list then prints for you.

If you select **Show All**, you receive the same **Display** or **Print** prompt. Either way, all items display or print and those that have not been scanned are differentiated.

Validate / Pickup

Now is the time that you actually deliver the goods to the customer. When you reach the customer site, under the **Route Ops** menu in the PDT3100, select **Validate / Pickup**. You are prompted to enter a workorder number. If you don't want to complete the entry by hand, you may press the **Up** or **Down Arrow** key to generate the list of workorders. Highlight the appropriate one and press **Enter**. You receive the following menu:

```
Scan Delivery Items
Print Delivery Rec.
Scan Pickup Items
Print Pickup Items
```

Scan Delivery Items

Once at the customer's site, take all the items to be delivered out of the truck, and confirm that they are being delivered. To do this, select **Scan Delivery Items** from the **Validate / Pickup** menu. You are prompted to scan the items. Once all items have been scanned, press **Clear** and you receive a prompt letting you know that all items have been scanned. If you have not scanned all items, you receive the following prompt:

```
Items Missing
Show Missing
```

Show All

You can choose to see all items that are missing, or to see all items that are on the workorder. All items that have already been scanned display with an asterisk (*) to the left of the number. Once you have highlighted your choice and pressed **Enter**, you can choose to **Display** or **Print** the list. If you choose to print it, you must connect your PDT3100 to a printer.

Print Delivery Receipt

Once all items have been delivered and validated, you can print a delivery receipt for the customer if you have an O'Neil microFlash printer. Highlight **Print Delivery Rec** from the **Delivery / Pickup** menu, and press **Enter**. You receive the following prompt:

```
Received By
- - - - -
Press CLEAR To Exit
```

Enter the name of the person receiving the delivery. When you press **Enter**, the PDT3100 prompts you to connect a cable and press **Enter** when you are ready to print. The receipt you print says DELIVER across the top. It lists the workorder number, the date, and the time. It then lists all items that were scanned and gives a total. Under that, it states:

```
Delivery Electronically Verified
Delivered By: (Name you used to log in)
Received by: (Name entered above)
```

Under the names, there is a space for the customer to sign, stating that all items were received, and at the bottom of the receipt the lines you programmed in RS-SQL, **Administration** program **Record Center Configuration** appears. These lines can be overwritten. For details, see *Setup* section of this chapter.

When you upload the Route Ops data to RS-SQL, all of this information is transmitted and processed into the RS-SQL database.

NOTE: When you enter the name of the person receiving the delivery, and the information is downloaded to RS-SQL, the **Customer Contact** column of the **Workorder** grid is updated to reflect the name. (You can view this column by using the **Format** menu, **Columns** option in the **Workorder** grid.)

Pickup Items

If your workorder includes pickup items, they can be itemized, un-itemized, or the workorder may include a selection of each.

Itemized Pickup

When there is an Itemized Pickup included on your workorder, the **Pickup** menu on the PDT3100 splits into two menus – **Itemized Pickup** and **UnItemized Pickup**.

Itemized Pickup: When you choose Itemized Pickup, the PDT3100 expects you to scan the items that have been specified on the workorder. If you scan an item that is not on the expected list, the PDT3100 asks you if you want to add this item to the UnItemized list.

UnItemized Pickup: When you choose the UnItemized Pickup option in the PDT3100, the PDT3100 expects to scan items that are not included on the Itemized PickUp list (if one exists). If an item is scanned that is included on the Itemized PickUp list, the PDT3100 asks you if you want to validate this scanned item into the Itemized List. If the workorder does not include an itemized pickup list, the Itemized PickUp option is not available, and you can simply scan the items that you are picking up.

Unitemized PickUps

When you pick up items at a customer site, you have the option to simply scan the new items into the existing Delivery workorder, or you can create a new workorder in the PDT3100 (see section below). It doesn't matter to the PDT3100 if the containers are being returned to your facility, or if they are new ones. While in **Delivery / Pickup**, select **Scan Pickup Items**. If there are no Itemized PickUp items on the workorder, you are prompted to scan the items being picked up. Press **Clear** when you have finished.

Alternate ID

When adding new Containers, Filefolders or Tapes to the system, you can add the customer's Alternate ID when you pickup the item. To do this, simply scan the barcode on the item, then press the **FUNC** key, then the **A** to access the Alternate ID field as shown below. One of the following screens appear, depending on whether you scanned an Alternate ID for a Container, a Filefolder or a Tape.

Enter Alternate ID Con: 123456 ----- Press CLEAR To Exit	Enter Alternate ID Fol: 12345678 ----- Press CLEAR To Exit	Enter Alternate ID Tap: 123456789 ----- Press CLEAR To Exit
---	---	--

Notice that the barcode number for the item appears on the screen. Enter the Alternate ID with the keypad and press **Enter** to save it. It does not show on the screen, but is saved in memory and is uploaded into RS-SQL.

Entering Item Type

If the items you are picking up are new, or if your pickup order is un-itemized, you can enter the item subtype through the PDT3100. For example, if you are picking up 10 containers, and three of them are 2 Cube, and seven are 1.2 Cube, you can enter that information into the PDT3100. To do this, scan the item's barcode number, and then press FUNC T on the PDT3100. Use the up and down arrow keys to show all sub-object types available.

Create New Workorder

Now, if you choose to create a new workorder, instead of using an existing one, press **Clear** until you are backed out to the **Route Ops** menu. Highlight **Validate / Pickup**, and press **Enter**. When the PDT3100 prompts you for a workorder number, you can enter it with the keypad. You may need to call your office to make sure you are entering a workorder number that has not been issued already. If you do, have the people at your office go ahead and create an empty workorder to reserve the number for you. Then when the PDT3100 is uploaded, the information is automatically placed into the workorder. When the PDT3100 is given a workorder number that it doesn't have in its memory, it asks you if you want to *Add a New Pickup Order?*

Select **Yes**. You may then scan the items being picked up and print a Pickup Receipt.

NOTE: It is a good idea for drivers to carry a supply of Container and Filefolder barcodes in case the customer doesn't have any. Then he can place the barcodes on the items and scan them. RS-SQL knows that the items belong to that customer, because they are associated to their workorder.

Print Pickup Items

Pickup Item Receipts are printed in the same manner as Delivery Receipts.

NOTE: If an item that does not exist in the RS-SQL system is scanned by the PDT3100, the processing routine must add the item to the database when the PDT3100 downloads into RS-SQL. This generates an Add activity for the item. The status at this point is set to Out. In the case of containers and tapes, the object type is just set to Container or Tape since the software does not yet know the container or tape type (unless it was entered into the PDT3100 by the driver). Then the appropriate validation activity is generated: either Pickup Validation or Receive Validation.

Schedule a Return

When you are delivering (or picking up) an item to (or from) a customer, you can schedule a return trip if necessary. For example, you could be delivering a container to a customer on Monday and he asks you to come back and pick it up on Friday. The PDT3100 allows you to enter the return date into the PDT3100. Then when the PDT3100 is downloaded into RS-SQL, the return information is placed on the Schedule (see Scheduling chapter).

When you scan the item being picked up or delivered, on the PDT3100 keyboard, press **CTRL U** (think U-turn). A screen appears that allows you to enter the scheduled return date and time (if necessary). For more information, see the *Scheduling* chapter.

Quick Check

There are times when you may want to confirm that you have the right containers ready for delivery without officially validating them in the system. The Quick Check option allows you to confirm that you have all the right items for a delivery without creating a validation record. This can be particularly handy when you have a customer who is on the 11th floor of a high-rise building. You certainly don't want to get up there with your load of containers just to find that you forgot one!

From the **Route Ops** menu, highlight **Quick Check** and press **Enter**. You are prompted to enter the workorder number, or you can select it from the workorder list by pressing the **Up** or **Down Arrow** key. Then you can enter all the items you are planning to take to the customer. If any items are missing, the PDT3100 lets you know the same way it did when you Validated.

Refiling Containers, Filefolders, and Tapes

RS-SQL allows you to scan the barcodes of containers or filefolders/tapes that need to be returned to containers and create a report that tells you where the container belongs, or what containers the filefolders/tapes should be in, and where those containers are currently located. This is called a Refile List. A refile list can be created for containers, filefolders, or tapes. You cannot create a single report for containers, filefolders, and tapes.

A Refile List can be printed out on paper, or you can load a Refile List into a PDT3100 and it will lead you to each container and allow you to confirm that each item has been refilled.

To generate a refile list you first need to scan all items to be refilled so you can load them into their respective grids. Using a PDT3100, choose **Scan Refile** from the PDT3100's **Main** menu. The screen displays **Scan Refile Items** and you can begin scanning barcodes for items that need to be refilled. You can scan different types of items (containers, filefolders, and tapes) at the same time if for operational reasons this is practical.

While scanning, you can view which barcodes have already been scanned by pressing the up or down arrow key on the PDT3100. If more than one type of item has been scanned, the screen displays three options. Select **Refile Container**, **Refile Folder**, or **Refile Tape**. If none of the selected item types have been scanned, the screen displays "Empty File...Press Enter to Cont." If that item type has been scanned, the barcodes list on the screen and you can use the up and down arrow keys to scroll through the list.

While scanning, you can also view a total count of items scanned by pressing **FUNC 2** on the PDT3100. If more than one type of item has been scanned, the screen displays three options. Select **Refile Container**, **Refile Folder**, or **Refile Tape**. If none of the selected items have been scanned, the screen displays "Empty File...Press Enter to Cont." If that item type has been scanned, the type displays along with the total number scanned.

You can download containers, tapes and filefolders from the PDT3100 to RS-SQL at the same time, but you must generate separate refile lists for each. You cannot download two refile lists - one for tapes and one for filefolders to a PDT3100.

Load Refile List from PDT3100

Once all items are scanned, they need to be loaded into the system. From the **Operations** program, **Options** menu, select **Filing** and then **Container Items** (substitute **Filefolder Items** or **Tape Items** depending on which refile list you want to load). The **Container** grid appears. From the **Options** menu, **Load Refile List From** submenu, select **PDT3100**. The **PDT3100 Communicate Refile List** dialog box appears.

NOTE: Support for the Datawand IIB in the **Container** grid, **Options** menu, **Load Refile List From** option (which is currently available in the corresponding Filefolder and Tape grids) is not available for Containers.

Once the PDT3100 is in the Communicate mode, insert it into its cradle and press its **Enter** key. Communications begin. When you close the dialog box, all containers that were scanned appear on the **Container** grid. When you are back at the loaded grid, you can re-sort the grid, save it for future use, print it, or send it to the PDT3100.

NOTE: The scanned containers must be loaded into the **Container** grid in order to determine their locations. Once the system has determined their location, the refile list can be sent back to the PDT3100 for refileing.

To generate a refile list for filefolders or tapes, follow the instructions above for generating a refile list for containers. Simply substitute the **Filefolder** or **Tape** grid for **Container** grid.

Refiling Containers, Filefolders, and Tapes

To refile a container you need to know where its original location was. To refile tapes and filefolders back into their containers, you need to know where their containers are. If you download the Refile List back into the PDT3100, it tells you what containers you need to find and where they are located. It also validates that you placed the folders in the correct containers.

Downloading the Refile List to the PDT3100

Once the items to be refiled have been loaded into the appropriate grid, mark those that are to be refiled, and under the **Options** menu, select **Refile List to PDT3100**. The **Communication Only** dialog box appears. Put your PDT3100 into the Communications mode and place it in the cradle. Press the **Enter** key on the PDT3100 to download the Refile List to the PDT3100. When communications are complete, you may begin refileing.

Refiling Containers

From the **Main** menu of the PDT3100, select **Refile Container Lst**. The screen of the PDT3100 shows the first location and the container. Scan the location, then the container. The PDT3100 accepts the scan and displays the next location and container.

NOTE: If an item on the refile list is not scanned to a location, an exception is generated stating "Item not refiled."

When your refileing is complete, download the information back into RS-SQL using standard communications procedures.

Refiling Filefolders and Tapes

To Refile filefolders or tapes into containers in your warehouse, download the list to the PDT3100 as described above. From the **Main** menu of the PDT3100, select **Refile Folders List** or **Refile Tape List**. The screen of the PDT3100 shows the first location to go to, the container to locate and the item to place into the container. In the bottom right corner of the screen, the number of items to be refiled displays.

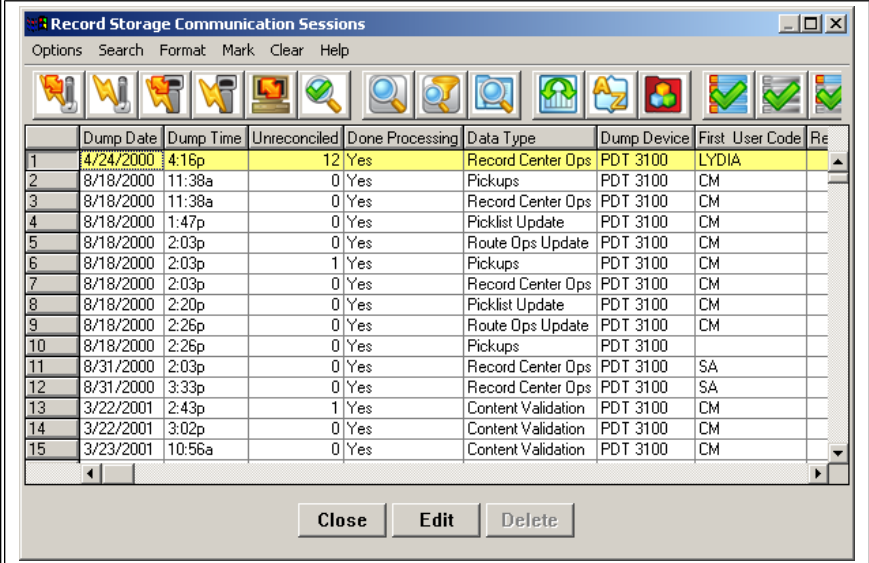
1. Scan the Location barcode shown on the screen and the PDT3100 accepts the scan. If you scan any other Location barcode, the PDT3100 asks if you want to move the item to the new location. When a Location has been accepted by the PDT3100, an asterisk (*) appears next to the Location.
2. Scan the Container barcode shown on the screen and the PDT3100 accepts the scan. If you scan any other Container barcode, the PDT3100 asks if you want to assign the item to the different container.

When a Container has been accepted by the PDT3100, an asterisk (*) appears next to the Container.

3. Scan the Filefolder or Tape that goes into this Container. If you scan the expected filefolder, the PDT3100 accepts the scan and displays the information for the next filefolder. The number at the bottom of the screen decrements by one. If you scan any filefolder other than that which is currently displayed, the PDT3100 will not accept the scan.

If there is more than one filefolder to be placed in a container, you do not have to scan the location and container for each filefolder. After the first filefolder has been scanned into the container, just scan the second filefolder. It is recorded as being filed in the same container.

When your refileing is complete, download the information back into RS-SQL using standard communications procedures, through the **Datawand/PDT3100 Communicate and Process** options in the **Operations** program. When you do, RS-SQL processes the refile information in two ways: a Refile List Update and Record Center Ops. Your **Communications Sessions** grid shows two communications sessions for one dump (as shown in the screen below). The Refile List Update records errors if not all of the tapes or filefolders were placed into containers, and the Record Center Ops session records any moves that you may have recorded during refileing. It also records any errors such as filing a filefolder belonging to one account into a container belonging to another. A move is recorded when you scan a location or container other than that which was listed on the refile report, and accept it as a new assigned location or container.



The screenshot shows a window titled "Record Storage Communication Sessions" with a menu bar (Options, Search, Format, Mark, Clear, Help) and a toolbar with various icons. Below the toolbar is a table with the following data:

	Dump Date	Dump Time	Unreconciled	Done Processing	Data Type	Dump Device	First User Code	Re
1	4/24/2000	4:16p	12	Yes	Record Center Ops	PDT 3100	LYDIA	
2	8/18/2000	11:38a	0	Yes	Pickups	PDT 3100	CM	
3	8/18/2000	11:38a	0	Yes	Record Center Ops	PDT 3100	CM	
4	8/18/2000	1:47p	0	Yes	Picklist Update	PDT 3100	CM	
5	8/18/2000	2:03p	0	Yes	Route Ops Update	PDT 3100	CM	
6	8/18/2000	2:03p	1	Yes	Pickups	PDT 3100	CM	
7	8/18/2000	2:03p	0	Yes	Record Center Ops	PDT 3100	CM	
8	8/18/2000	2:20p	0	Yes	Picklist Update	PDT 3100	CM	
9	8/18/2000	2:26p	0	Yes	Route Ops Update	PDT 3100	CM	
10	8/18/2000	2:26p	0	Yes	Pickups	PDT 3100		
11	8/31/2000	2:03p	0	Yes	Record Center Ops	PDT 3100	SA	
12	8/31/2000	3:33p	0	Yes	Record Center Ops	PDT 3100	SA	
13	3/22/2001	2:43p	1	Yes	Content Validation	PDT 3100	CM	
14	3/22/2001	3:02p	0	Yes	Content Validation	PDT 3100	CM	
15	3/23/2001	10:56a	0	Yes	Content Validation	PDT 3100	CM	

At the bottom of the window are buttons for "Close", "Edit", and "Delete".

Restoring Documents

Use the Refile List feature in the PDT3100 to restore your documents to their original location.

A Refile List can be printed out on paper, or you can load a Refile List into a PDT3100 and it will lead you to each location and allow you to restore each document into its original home.

To generate a refile list you first need to scan all TFFs containing documents to be restored so you can load the TFFs into the **Filefolder** grid. Using a PDT3100,

choose **Scan Refile** from the PDT3100's **Main** menu. The screen displays **Scan Refile Items** and you can begin scanning barcodes of the TFFs whose documents need to be restored.

Load Refile List from PDT3100

Once all items are scanned, they need to be loaded into the system. From the **Operations** program, **Options** menu, select **Filing** and **Filefolder Items**. The **Filefolder** grid appears. From the **Options** menu, **Load Refile List From** submenu, select **PDT3100**. The **PDT3100 Communicate Refile List** dialog box appears.

Once the PDT3100 is in the Communicate mode, insert it into its cradle and press its **Enter** key. Communications begin. When you close the dialog box, all TFFs that were scanned appear on the **Filefolder** grid.

NOTE: The scanned TFFs must be loaded into the **Filefolder** grid in order to determine their locations. Once the system has determined their location, the refile list can be sent back to the PDT3100 for refiling.

Restoring Documents

To refile a document you need to know where its original location was. If you download the Refile List back into the PDT3100, it tells you this information. It also validates that you placed the documents in the correct location.

Downloading the Refile List to the PDT3100

Once the TFFs have been loaded into the **Filefolder** grid, mark those that are to be restored, and under the **Options** menu, select **Refile List to PDT3100**. The **Communication Only** dialog box appears. Put your PDT3100 into the Communications mode and place it in the cradle. Press the **Enter** key on the PDT3100 to download the Refile List to the PDT3100. When communications are complete, you may begin refiling.

Restoring Documents

To Refile documents into containers or filefolders in your warehouse, download the list to the PDT3100 as described above. From the **Main** menu of the PDT3100, select **Refile Folder List**. The screen of the PDT3100 shows the first location to go to, the container to locate and the TFF.

1. Scan the Location barcode shown on the screen and the PDT3100 accepts the scan.
2. Look at the TFF label to determine which container or filefolder the document needs to be restored to.
3. Scan the Container barcode shown on the screen, if applicable, and the PDT3100 accepts the scan .
4. Scan the TFF containing the document to be refilled. If you scan the expected TFF, the PDT3100 accepts the scan and displays the information for the next TFF.
5. Look for the outcard that corresponds to the document you are refiling. Remove the outcard and place the document in its place

When your refiling is complete, download the information back into RS-SQL using standard communications procedures.

Document Insert

Document Insert is used when inserting documents into containers or filefolders.

NOTE: You must be using PDT3100 software version 3.027 or higher in order to use **Document Insert**. Downloading a Document Insert List to versions prior to 3.027 generates the error “OLD VERSION” and communication fails.

Insert into Container

When you select **Document Insert**, if the document is going to be inserted into a container, the PDT3100 screen displays the following:

```
>
Loc:00001
Con:111222  5      (Count of remaining insertions)
```

After inserting the document into the container, the warehouseman only needs to scan the container to mark the insertion. The **Con** field is marked as “scanned” using * as before (for example: *Con).

Insert into Unregistered Filefolder

When you select **Document Insert**, if the document is going to be inserted into an unregistered filefolder, the PDT3100 screen displays the following:

```
>
Loc:00001
Con:111222  5      (Count of remaining insertions)
```

After inserting the document into the filefolder, the warehouseman only needs to scan the container to mark the insertion. The Con field is marked as “scanned” using * as before (for example: *Con).

Insert into Filefolder

When you select **Document Insert**, if the document is going to be inserted into a filefolder, the PDT3100 screen displays the following:

```
>
Loc:00002
Con:111333
F/T:12345678      4
```

After inserting the documents into the filefolder, the warehouseman only needs to scan the filefolder to mark the insertion. The FF field is marked as “scanned” using * as before (for example: *T/F).

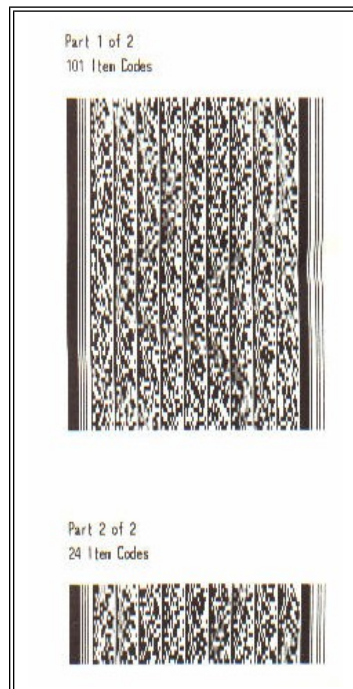
Shortcut Keys

The same shortcut keys that apply in other areas of the PDT3100 also work with the **Document Insert** menu option.

Load Tote

Load Tote allows you to scan items you want to include in a 2-D barcode.

The 2-D barcode is able to hold 800 bytes per barcode. The barcodes are separated by an end-of-line character (which counts as one byte when calculating the space available on the 2-D barcode). So typically one 2-D barcode can store up to 100 7-digit barcodes. If you scan more than 800 bytes, the scan is split into two separate barcodes. Each barcode has a heading indicating which part of the barcode it is and how many items are included on it.



Once you have scanned all the items you want to include, you can print the barcode to place on a tote.

To identify items for your 2-D barcode, on the PDT3100 select the menu option **Load Tote**. The screen displays the following message.

```
.....  
    Scan Tote  
    Scan WO Number  
    Scan Free Text  
    Print Tote
```

Select **Scan Tote** and press **Enter**. The following screen appears.

```
.....  
    Scan Tote Items
```

>

0 (Count of items added to tote)

As you scan an item, its code appears on the screen and the total count increments.

.....

Scan Tote Items

>

12344324 5

As with other options on the PDT3100 you can use the up and down arrow keys to move through the list of items already scanned. When you have finished scanning, press the **Clear** key. You are returned to the Load Tote menu.

Select the **Scan WO Number** menu option if you want the workorder number to print on the barcode label. The following screen appears.

.....

Scan WO Numbers

>

0 (Count of workorders scanned)

Scan or type in the workorder number. When you are finished, press **Clear** to return to the Load Tote menu.

You also have the option of typing or scanning free text that prints on the barcode label. Select the **Scan Free Text** menu option. The following screen appears.

.....

Scan Free Text

>

You can type a message here or scan in the text from a barcode. There is a limit of 60 characters. If your message needs to be longer than 60 characters, you can press **Enter** and type additional messages. All messages print on the barcode label. When you are finished, press **Clear** to return to the Load Tote menu.

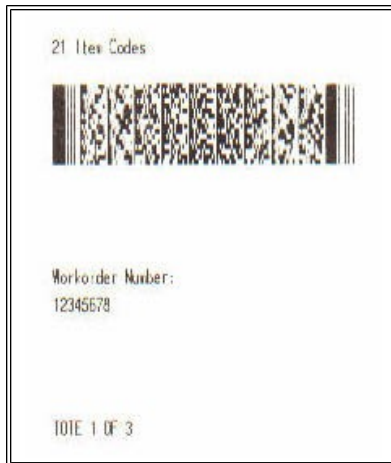
To print the 2-D barcode, select the menu option **Print Tote**. The following screen appears.

.....

NUMBER OF COPIES:

1>

The number of copies to print defaults to 1. If you want to print more than one copy, use the **BK SP** key on the PDT3100 keyboard to delete the 1 and enter the number of copies you want. Press **Enter** to begin printing.



When the barcode has printed, you are prompted with the **Print label** screen. If you wish to print additional copies, you can do so at this time. Note: the printer prints the same amount of copies you selected in the first screen.

The **Print label** screen continues to display each time you press **Y** to print. When you have finished printing, press **N** at the prompt and you are taken to the next screen.

When you select the menu option **Exit**, the following message displays on the screen:

Clear list (Y/N)?

If you are finished with this list, press the **Y** key. The list, including the workorder and any free text, is cleared and you are taken back to the main PDT3100 menu. If you want to return to the same list, press the **N** key. You are taken back to the main PDT3100 menu, but if you select the **Load Tote** menu option again, the list is still there. You receive a warning informing you that old tote data exists.

NOTE: The PDT3100 can only be used to print 2-D barcodes. It cannot scan them.

Label/Receipt Printer

This capability requires the usage of a rugged-ized printer to print 2-D barcodes. The O'Neil 2-inch and 4-inch microFlash printers are without question the best choice for this, and are recommended by O'Neil.

Your printer needs to have the PD417 driver (PDF-417 2D Barcode) installed to be able to print 2-D barcodes. Follow the instructions in the manual that came with your printer to print a self-test printout. This will tell you if the driver is installed.

Create 2D RCO Label

The **Create 2D RCO Label** menu option on the PDT3100 extends the usage of 2-D barcodes to Record Center Ops. The difference between this feature and Load Tote is that all barcodes scanned must be the same object type.

NOTE: While 2-D barcodes can be created on the PDT3100, they cannot be scanned with it.

Rules for 2-D RCO Scanning

- All barcodes must have the same base object type; either container, filefolder, or tape.
- Cannot include special barcodes such as Not-Found, In-Research, or Reassign.
- Prefix and suffix barcodes can be used following the normal usage rules.

Rules for 2-D RCO Scanning Sequence

- Scanning sequence of location, container, filefolder/tape still applies. However, if you scan a filefolder/tape or 2-D filefolder/tape barcode following the scan of a 2-D container barcode, the filefolders/tapes are put into the last container in the 2-D container barcode.

Create a Label

From the main menu, select **Create 2D RCO Label**. The following appears on the PDT3100 screen.

```
SCAN BARCODES
SCAN DESCRIPTION
PRINT 2D LABEL
EXIT
```

Select **Scan Barcodes** to begin scanning. The following screen appears.

```
Scan barcodes
v
```

Begin scanning the barcodes you want to include on the 2-D barcode. Once you have finished, press **Clear** to return to the **Create 2D RCO Label** menu. To add descriptive text to the barcode, select the **Scan Description** menu option. The following screen appears.

```
Scan Description
v
_ _ _ _ _
_ _ _ _ _
_ _ _ _ _
```

Here you can type or scan any text you want to appear on the printed 2-D barcode. When you are finished, press **Clear**. The description displays on the screen. Press **Clear** again to return to the **Create 2D RCO Label** menu.

To print the label, select the **Print 2D Label** menu option. The following screen appears.

```
NUMBER OF COPIES:
1v
```

Enter the number of copies you want to print and press **Enter**. The following screen appears.

```
Connect Cable...
```


Press ENTER key when ready

Make sure your printer cable is connected and press **Enter**. The label prints and when it is finished the following appears on the PDT3100 screen.

Print label (Y/N)? ^

Press **N** to continue without printing again. You are returned to the **Create 2D RCO Label** menu. Select **Exit** to return to the main menu. The following screen appears.

Clr barcodes (Y/N)? ^

Press **Y** to clear the list and you are returned to the main menu.

NOTE: You cannot save both a Load Tote and 2-D RCO Label list. You must clear one before you can create the other.

Content Validation

Content Validation is the process of ensuring that the barcoded contents of a container are the same as what is recorded in the RS-SQL database for that container by scanning the contents and processing the scans into the database. Content Validation helps ensure that when a container is returned to a customer, it contains the same barcoded filefolders or tapes as it did when it arrived at the record center. It also ensures that when a customer returns a container to the record center, it still contains all the filefolders or tapes that it did when it was delivered to the customer.

Content Validation can be done from various interfaces on the PDT3100:

- Electronic Picklist
- Refile Container Lst
- Content Validation

From Electronic Picklist or Refile Container Lst

In either screen, when a container is scanned as picked/refiled, if the container is on the Content Validation list you are prompted:

This CON in CV List

Scan Contents?

Yes,No,YesAll,NoAll

(1, 2, 3, or 4)?

If you press 1 or 3, the PDT3100 goes into **CV Mode**, prompting you to scan the contents of this Container.

> CV (this means CV mode)

*CON: 001331

F/T:

In CV mode, you can view all the filefolders/tapes that have been scanned into this Container by pressing **FUNC-V**. The list of scanned filefolders/tapes appears on the screen.

F/T:1331000

F/T:1331001

F/T:1331002

↑ ↓ CLEAR:Exit

You can scroll up or down to see more Filefolders/Tapes using the **Up** and **Down** arrow keys.

To leave CV mode, press **CLEAR** and you return to the previous screen to continue scanning the picklist/refile items as before.

Even if the Container is not in the Content Validation list, you can press **FUNC-O** to enter the CV mode for the current Container.

NOTE: If a Container is on the Picklist but not on the Content Validation list, the processing goes to the next picklist item without pausing for the above question.

From Content Validation

The **Content Validation** menu, has the following submenu.

CV - LIST ORDER

CV - ANY CONTAINER

EXIT

CV – LIST ORDER

If you choose **CV-LIST ORDER**, you are prompted to scan the container and its contents. The order of display will be the order of download.

Upon scanning the container, the PDT3100 goes into CV mode ready for scanning the contents as previously described.

NOTE: If you find no barcoded contents in the container, just press **CLEAR** to leave CV mode.

Once a Container has been Content Validated, it is marked with a **#** sign. There is also a counter that displays the number of containers that still need to be Content Validated. Below is an example of the screen.

>

#Con: 001331

F/T: 1331001

↑ ↓ CLr:Exit 5 (5 is the number of remaining Containers
that need to be Content Validated)

To go to the next Container to be Content Validated, press the **Down** arrow key and continue to work.

You can also press the **Up** arrow key to see the previous Container.

NOTES:

You can press **FUNC-V** to view all the Filefolders/Tapes scanned into the Container.

If you forget to Content Validate a Filefolder/Tape, you can add it by using the **Up** or **Down** arrow keys to search for the Container you want, scan the Container, and then scan the missing filefolder/tape.

CV-ANY CONTAINER

From here, you may choose any container to Content Validate in any order. Unlike the **CV- LIST ORDER** option, the container does not display. You will have to scan the container to indicate that it is to be Content Validated, and upon scanning the container, the PDT3100 will go into CV mode as before, waiting for scanning of Filefolders/Tapes.

Once a container is Content Validated, it is marked as such, and the counter of remaining containers to be Content Validated decrements.

In any of the following three cases:

- Press **FUNC-O** to enter CV mode from the **Electronic Picklist**
- Press **FUNC-O** to enter CV mode from the **Container Refile**
- **CV – ANY CONTAINER**

If the container is not in the Content Validation list, you are prompted with the following.

```
CONT. not in CV List
Validate Anyway?
Yes, No, YesAll, NoAll
(1, 2, 3, or 4)?
```

If a Container is not in the original list (there may be no containers in the original list), it will be added to the end of the list. Obviously, the counter would not be decremented when a new container is added to the Content Validation list.

If the container is in the Content Validation list, but has already been Content Validated, you are prompted with the following.

```
Cont. already Cved
Validate Anyway?
Yes, No, YesAll, NoAll
(1, 2, 3, or 4)?
```

If you elect to Content Validate again, the initial scans will not be ignored.

NOTE: The capability of rescanning provides you with a way of adding items to the original scans if you discover a mistake afterwards.

Another point to note is that the record center can have a policy to Content Validate during the picking and refiling or after the picking and refiling. You can choose to download the Content Validation and picklist/refile list at the same time or in separate downloading sessions. If downloaded together, you can do the content validating at the same time as you pick or refile or afterwards in another pass, as long as you don't dump the scanner.

Reassemble

Reassemble allows the record center to put filefolders/tapes back into the containers where they were previously stored.

The PDT3100 menu options include:

```
REASSEMBLE F/Ts
LOCATE ONLY
RESTORE ONLY
RESTORE DIRECTED
RESTORE ANY ORDER
LOCATE AND RESTORE
```

Locate Only

```
Counter
Loc: 99911
Con:123456
F/T: 000000000202
```

Scan F/T to mark it as located.

You can scroll through records by pressing the **Up** and **Down** arrow keys. Press **CLEAR** to exit.

Restore Directed

```
Counter
Loc: 90010
Con:107850
F/T:000000000202
```

To restore to the container: Scan Container, scan Filefolder/Tape.

After scanning the Filefolder/Tape, the next record will be displayed.

If restoring to the same container, you can scan the next Filefolder/Tape without having to scan the Container again.

You can scroll through records by pressing the **Up** and **Down** arrow keys. Press **CLEAR** to exit.

Restore Any Order

```
>
F/T:
```

After scanning the Filefolder/Tape to be restored, the PDT3100 shows the container it should be in.

```
>
*F/T:000000000202
```

Con:107850

Now you have to scan the correct container.

NOTE: You can not scroll through the records.

Locate and Restore

This option allows you to do the two jobs at the same time. The sequence of display in the PDT3100 is as follows:

```
Locate record 1
Restore record 1
Locate record 2
Restore record 2

Locate record n
Restore record n
```

If you use the **Up** and **Down** arrow keys to scroll through records, you can see the sequence as above.

The PDT displays the **Locate** record first.

```
LOCATE:           Counter
Loc:99911
Con:
F/T:000000000202
```

After locating the Filefolder/Tape (no scanning required), press the **Down** arrow key to display the **Restore** record.

```
Counter
Loc:90010
Con:107850
F/T:000000000202
```

To Restore to the Container, scan the Container and scan the Filefolder/Tape the same way as **Restore List Order**.

The PDT then shows the next Locate Record in the list to be located.

NOTE: After scanning the Filefolder/Tape, record **Locate** and **Restore** are both marked as scanned.

Scroll up (press **Up** arrow key) to see the previous scan. The PDT shows the restored record.

```
RESTORED:         Counter
Loc:90010
Con:107850
Loc:90010
```

Press the **Up** key one more time. The PDT shows the located record.

```
LOCATED:          Counter
Loc: 99911
Con:
*F/T: 000000000202
```

Scrolling down is the same way, depending on which record is showing in the PDT, the **Down** arrow key shows Locate or Restore record.

Setup

The Setup area of the PDT3100 allows you to configure the PDT3100 to suit your needs. To set your own parameters, from the **Main** menu, highlight **Setup** and press **Enter**. You receive the following menu:

```
Company Name
Time Out
Barcode Accuracy
Beeper Tone
Printer
Baud Rate
Available Space
Barcode Symbology
Diagnostics
Test Scan
```

Company Name

This is intended for your company name. Since RS-SQL deletes the PDT3100's memory each time they communicate, the two lines you programmed in the **Administration** program, **Record Center Configuration** area of RS-SQL are programmed to print on the bottom of receipts. However, after communicating with RS-SQL, you can override that by changing the information here. Anything typed here after communication takes place takes precedence and prints at the bottom of your receipts.

To change an existing Company Name, from the **Setup** menu, highlight **Company Name** and press **Enter**. Use the **BK SP** key to move the cursor backward to erase the existing characters. Use the **Alpha** key to switch between alphabetic and numeric characters. Enter the text you want using the keypad. You may use up to 15 characters, including spaces, per line. Press **Enter** to save the text, or press **Clear** to return without saving your changes.

Time Out

You may use this option to program your PDT3100 to 'go to sleep' after a determined number of seconds of non-use. The PDT3100 saves all information entered into it, but the screen goes blank to save battery power. When the screen has gone blank, just press **PWR** to 'wake it up.'

From the **Setup** menu, highlight **Time Out** and press **Enter**. The following appears on your screen:

```
TIME OUT (Second)
30
```

The screen above shows 30 seconds. You may delete the current setting by using the **BK SP** key. Enter an appropriate number of seconds with the keypad. This number will not be changed when the PDT3100 communicates with RS-SQL.

Barcode Accuracy

Each time the PDT3100 reads a barcode, it has the ability to read it a number of times and confirm that the same reading was taken each time. The more times the barcode is read and compared, the higher the percentage of accuracy. The default number is 4. This means that each time you push the trigger button to scan a barcode the PDT3100 actually reads the barcode four times and compares all the scans before confirming the scan as correct. You may set the number of reads up to nine, but keep in mind that although the reads will be more accurate with higher numbers, they will also take longer.

To set the Barcode Accuracy, from the **Setup** menu, highlight **Barcode Accuracy** and press **Enter**. The following prompt appears:

```
Enter Number Of
Identical Scans
Required for Good
Read: 4
```

Press **BK SP** to clear the current setting. You may enter only numbers from 1 to 9. Press **Enter** to save your entry and return to the **Setup** menu. Press **Clear** to return without saving your changes.

Beeper Tone

You may set the Beeper (Accept and Error) tones to suit your purposes. The tones may be made higher or lower, to be heard best in your surroundings. To access the **Beeper Tones** screen, from the **Setup** menu, highlight **Beeper Tone** and press **Enter**. You see the following prompt:

```
BEEPER TONE
-----
ACCEPT TONE
ERROR TONE
```

Use the **Up** and **Down Arrow** keys to scroll up and down, press **Enter** to choose **Accept Tone** or **Error Tone**. You receive the following prompt:

```
[ ] : Higher
[ ] : Lower
```

Use the **Up** and **Down Arrow** keys to change the beeper tone. As you press the keys, you will hear the tone go up and down. When you achieve the tone you desire, press **Enter** to save and return to the **Beeper Tone** menu. Press **Clear** to return to the **Beeper Tone** menu without saving the change.

Printer

There are three printer options that can be used with the PDT3100 and RS-SQL programs. You may use the microFlash Printer with a cable or the original O'Neil Receipt Printer (with red boots). Infrared communications require the optional infrared module on the PDT3100 and the infrared option in the microFlash Printer. The default printer selection is the microFlash Printer with a cable.

To reach the Printer Setup selection, from the **Setup** menu, highlight **Printer** and press **Enter**. You are offered the following selections:

```
PRINTER
MicroFlash Cable
MicroFlash Infrared
Red Receipt Printer
```

Use the **Up** and **Down Arrow** keys to scroll up and down. Press **Enter** to select an option.

Baud Rate

The Baud Rate is the speed at which the PDT3100 and RS-SQL communicate with each other. Both systems must be set at the same speed. Check your RS-SQL program for the setting it is using. (**Ops** program, **Options** menu, **Datawand/PDT3100** option, **Options** menu, **PDT3100** option, **Communicate Only** option. When you reach the **Communicate Only** dialog box, click **Port Setup**. The Baud Rate set up in RS-SQL shows.) RS-SQL and the PDT3100 can both communicate at a rate of 9600, and we suggest that setting.

In the PDT3100, highlight **Baud Rate** from the **Setup** menu and press **Enter**. Several options are available. Highlight the appropriate number and press **Enter**.

Available Space / Version

If you ever need to know how much space is available in your PDT3100 or what version it is running, you can check it by selecting **Available Space** from the **Setup** menu. When there is nothing more in the PDT3100 than barcode lengths sent down from RS-SQL, there are approximately 390,000 bytes available. This decreases as more data is stored.

Barcode Symbolology

The PDT3100 and RS-SQL read and recognize barcodes in Code 39, Code 128, Code 125, , CODABAR (the Start and End characters are stripped after the barcode is scanned), or any combination of the four. When you select **Barcode Symbolology** from the **Setup** menu, you can tell what symbology is turned on and what is turned off. To change the status from ON to OFF or OFF to ON, simply highlight the symbology you want to change and press the **Enter** key. When you Exit this screen, the symbology status is saved.

Diagnostic

This menu option is for troubleshooting purposes and should only be used with the assistance of O'Neil's Support department.

Test Scan

When you select **Test Scan** from the **Setup** menu you can scan any barcode to display the entire scannable barcode. It will display up to 40 characters, including hidden characters. When you scan a barcode, the entire barcode displays on the PDT3100 screen. Below the barcode, the symbology displays (Code 39, Code 128, etc.).

NOTE: The symbology must be turned on in order for the barcode to display (see *Barcode Symbology* section above).

Prefix/Suffix Option

You are accepting thousands of items into your record center. Each item is already barcoded by the customer and your PDT3100 scanner is able to read their barcode symbology. However, you know that if the customer's barcode numbers are not unique in your RS-SQL system, RS-SQL will not accept the items. If you could add a prefix or suffix to the Item Code, the barcode would be unique to your RS-SQL system. The **Prefix/Suffix** option in the PDT3100 scanner will allow you to scan these items and automatically apply a prefix or suffix to the barcode to make it unique.

Prefix/Suffix Processing Rules

1. The prefix/suffix feature applies to all or selected scans in the PDT3100. The user turns the **Prefix/Suffix** option on or off depending on which scan the prefix/suffix is to apply.
2. The user can enter prefix/suffix values and turn the prefix/suffix functions on or off using the PDT keypad, **FUNC-K**, or by scanning special barcodes to activate or deactivate the functions.
3. When using the keypad to change values, press the **BK SP** (backspace) key to clear the field and then enter your data. For example, to change **Prefix** option from "Y" to "N", press the **BK SP** key once and enter "N".
4. The user may add a prefix or suffix value to a scan, but not both on the same scan.
5. The value for the prefix or suffix can be from 1 to 10 characters.
6. The prefix/suffix entered applies to all scans when the **Prefix ON** or **Suffix ON** value is set to "YES" and the **Apply To All** value is set to "YES". Note: **Apply To All** on the keypad does exactly the same thing as the Default ON and Default OFF barcodes.
7. The prefix/suffix entered applies to only the next scan when **Prefix ON** value is set to "YES" and the **Apply To All** value is set to "NO".
8. If **Prefix ON** or **Suffix ON** is "YES", any scan of a barcode where the prefix/suffix is applied will produce a double beep.

Scanning Sequence

The **Prefix/Suffix** option can be used to apply a prefix or suffix to most scans in any of the PDT3100 functions. The following examples describe how to use the **Prefix/Suffix** options to control when the PDT will apply a prefix or suffix. The concepts described here can be applied to the other PDT3100 functions like Record Center Ops and Route Ops.

Example One

This example describes a **Filefolder Refile List** operation using the PDT3100. Note that in this example we use keypad entry (**FUNC-K**) to establish the initial settings and then use the prefix/suffix option barcodes to turn on and off the application of a prefix/suffix to the scans.

1. The user downloads their refile list into the PDT3100.
2. User enters **FUNC-K** on the PDT3100 keypad and then enters the starting values (user entry is shown in bold type):

Prefix ON (Y/N): **N**

Suffix ON (Y/N): **N**

Value: **XYZ** *Establish the prefix/suffix value of XYZ.*

Apply to All (Y/N): **N** *Notice that all the Y/N options are set to "NO" until the first scan with a prefix or suffix is needed.*

3. The user selects **Refile Folders List** on the PDT3100. The PDT directs the user to the Location, Container, and Filefolder to put away first. The user starts to refile the Filefolder:

Scan Location barcode.

Scan Container barcode.

Scan Prefix ON barcode. *Identify the "Value" (XYZ, set above) as a prefix or suffix. (Scan Suffix ON if this value should be a suffix.)*

Scan Default ON barcode *This tells the PDT3100 to apply a prefix/suffix to all the following scans. This is exactly the same as the "Apply to All" setting under FUNC-K. Note that if this were left at NO it would only apply the prefix/suffix to the next scan.*

Scan Filefolder barcode. *The prefix or suffix is added to each of these filefolder scans.*

Scan Filefolder barcode.

<Continue scanning until all filefolders for same Container are refilled. >

Scan Default OFF barcode. *Turn off the prefix/suffix for all subsequent scans. The PDT still remembers the "value" and that the value is a prefix (in this example).*

Scan Location barcode.

Scan Container barcode.

Scan Default ON barcode. *Turn the prefix/suffix back on for all subsequent scans.*

Scan Filefolder barcode.

Scan Filefolder barcode

*<Continue scanning until
all filefolders for same
Container are refilled. >*

Scan Default OFF
barcode. *Turn the prefix/suffix off for all subsequent scans.*

Example Two

This example describes a second way to complete a **Filefolder Refile List** operation using the PDT3100. In this example, we again use keypad entry (**FUNC-K**) to establish the initial settings and then use the prefix/suffix option barcodes in a different way to turn on and off the application of a prefix/suffix to the scans.

1. The user downloads their refile list into the PDT3100.
2. User enters **FUNC-K** on the PDT3100 keypad and then enters the starting values (user entry is shown in bold type):

Prefix ON (Y/N): **N**

Suffix ON (Y/N): **N**

Value: **XYZ** *Establish the prefix/suffix value of XYZ.*

Apply to All (Y/N): **N** *Notice that all the Y/N options are set to "NO" until the first scan with a prefix or suffix is needed.*

3. The user selects **Refile Folders List** on the PDT3100. The PDT directs the user to the Location, Container, and Filefolder to put away first. The user starts to refile the Filefolder:

Scan Location barcode.

Scan Container barcode.

Scan Prefix ON barcode. *Identify the "Value" (XYZ, set above) as a prefix or suffix. (Scan Suffix ON if this value should be a suffix.)*

Scan Filefolder barcode. *The prefix or suffix is added to the filefolder scan. Note: the prefix or suffix will be turned off for the next scan.*

Scan Prefix ON barcode. *Identify the "Value" (XYZ, set above) as a prefix or suffix. (Scan Suffix ON if this value should be a suffix.)*

Scan Filefolder barcode. *The prefix or suffix is added to the filefolder scan. Note: the prefix or suffix will be turned off for the next scan.*

*<Continue scanning
Prefix ON (or Suffix ON)
and then the filefolder*

*until all filefolders are
refiled. >*

In this example, you eliminate the use of the Default ON and Default OFF barcodes. You simply scan the Prefix ON or Suffix ON barcode before scanning the item to which you want it added.

Special Barcodes

These barcodes will be available for the user to control prefix/suffix features by scanning.

Barcode value: PF+++
Human Readable: Prefix ON
Definition: Set "Prefix ON" to YES.
Note: "Suffix ON" will be set to NO. Does not change the prefix / suffix value. Even if value field is empty, setting is applied, but special beep does not occur on barcode scan.

Barcode value: SF+++
Human Readable: Suffix ON
Definition: Set "Suffix ON" to YES.
Note: "Prefix ON" will be set to NO. Does not change the prefix / suffix value. Even if value field is empty, setting is applied, but special beep does not occur on barcode scan.

Barcode value: MD+++
Human Readable: Default ON
Definition: The prefix/suffix value will be applied to all scanned barcodes until explicitly turned off. (See MD---.)

Barcode value: MD---
Human Readable: Default OFF
Definition: Do not apply the suffix/prefix value to subsequent scans.

The user can create these barcodes to facilitate control of the prefix/suffix options by scanning with the PDT3100.

Barcode: +++<prefix or suffix value>.
Example: "+++ABC", "+++A0001", "+++30000", "+++30001", "++
+0001", and "+++90001".
Human Readable: The prefix or suffix, e.g., "ABC", "A0001"...
Definition: The prefix or suffix to append to the scan.

Note: This sets the prefix/suffix value. It does not change the state of "Prefix ON / Suffix ON". So, if "Prefix ON / Suffix ON" were both NO, the value would be set but not applied to subsequent scans until "Prefix ON / Suffix ON" becomes YES.

Barcode: PF+++<prefix value>
Example: "PF+++ABC", "PF+++A0001", and "PF+++30000"
Definition: Set "Prefix ON" to YES and set the prefix value.
Human Readable: "Prefix ON:<prefix value>"

Barcode: SF+++<suffix value>
Example: "SF+++XYZ", "SF+++Z0001", and "PF+++90000"
Definition: Set "Suffix ON" to YES and set the suffix value.
Human Readable: "Suffix ON:<suffix value>"

Warm and Cold Boot

The PDT3100 can be reset by rebooting it in the same manner as a personal computer. There are two types of boots: Warm Boot and Cold Boot. A warm boot resets the PDT3100 but retains all the data in memory. A cold boot clears all data that you have scanned into the PDT3100, but keeps the RS-SQL program.

Warm Boot

To warm boot your PDT3100, make sure the unit is turned off by pressing the **PWR** key. At the same time, press and hold down the **J** and the **F** keys. While they are being pressed, press the **PWR** key and release it. Then release the **J** and **F**. If you listen carefully, you will hear a click when you press the **PWR** key. The PDT3100 resets itself, but no data is lost.

Cold Boot

To reset your PDT3100 completely, you can give it a cold boot. To cold boot your PDT3100, make sure your PDT3100 is turned off. Then press and hold the **FUNC**, **Space** and **Up Arrow** keys, then press the **PWR** key and release it. Then release the first three keys. If you listen carefully, you will hear a click when you press the **PWR** key. The PDT3100 resets itself, and all data you had in the memory of the PDT3100 is lost and you will need to reload barcode information from RS-SQL (see *Download Barcode Length List* section).

Batteries

Your PDT3100 runs on a Nickel Cadmium (NiMH) battery that is available through O'Neil Software, Inc. It will also use a standard 9-volt battery that you can get at any hardware or grocery store. However, 9-volt batteries don't last very long, and cannot be recharged like the NiMH can. When the batteries are running low, the PDT3100 lets you know by changing the cursor from an open  or  to a solid one. When the

battery dies completely, or is taken out to be changed, the PDT3100's internal lithium battery will hold the information in the unit for a short period of time. This is the same battery that keeps the clock and calendar going even when the unit is turned off. It is unlikely that you will ever need to have the lithium battery changed, but if you do, the unit will inform you before it is necessary.

Download Barcode Length List

When the PDT3100 has been reset, or has had the batteries replaced, you will not be able to use it until the Barcode Length List has been downloaded from RS-SQL. Since the PDT3100 is an intelligent device, it is programmed to tell you if you do something wrong. It can't tell you if you've scanned something wrong unless it knows what barcode lengths represent which items. To download barcode lengths to the PDT3100 without downloading Route Ops or Picklists, from the **Options** menu in the **Operations** program in RS-SQL, select **Datawand/PDT3100**. The **Communication Sessions** grid appears. From the **Options** menu, select **PDT3100** and **Communicate Only**. The **Communicate Only** dialog box appears as shown below:

PDT3100 Communicate Only

Please insert PDT3100 into cradle . . .

Successful Sessions: 0

Progress:

Status	Action
In progress...	Send begin
	Recv PDT3100 version
	Recv common data
	Recv updated pick list
	Recv updated reassign List
	Recv updated delivery list
	Recv new pickup list
	Recv itemized pickup list
	Recv updated refile list
	Recv record center ops
	Recv updated CV list
	Recv updated locate list
	Recv updated restore list
	Send clear
	Send barcode lengths
	Send company name
	Send Urgent list & Object list
	Send PC date and time
	Send end

PDT3100/PC Date and Time

Difference in minutes: 0

Done

Port setup...

Retransmit

For Remote

From your PDT3100's Main menu, highlight **Communications** and press **Enter**. You are instructed to insert the PDT3100 into its cradle. Put the PDT3100 into its cradle and press its **Enter** key. Communications begin, and the barcode length information is downloaded to the PDT3100. Before you use the PDT3100, you must login. When you download Route Ops or an Electronic Picklist, the system automatically downloads the barcode lengths.

Freezing PDT3100

If you are in the PDT3100 menu system and you inadvertently press the **Alpha** key, when you try to scroll through the menu system all you get is a beep. The highlight bar won't scroll, and it may look like the PDT3100 is hung up or broken. Press the **Alpha** key again to shift the keypad out of the alpha mode.

Updating Your PDT3100

O'Neil Software, Inc. has created a program that enables you to update your PDT3100 through your PC, eliminating the need to have it sent in to have the new program loaded. The update utilizes a two-step process. The first is a communication between the PDT3100 and your PC where the PC determines what version the PDT3100 is currently running, and communications are begun. The second step is the actual conversion process. Throughout most of the process, instructions are offered on the PC screen. Therefore, they will not be repeated in this document.

Your PDT3100 update is a separate program and is sent to you on the RS-SQL CD. The first step is to copy the update program onto your C drive. Insert the CD into the CD-ROM drive.

Make a new directory on your C drive to hold the update program. Name the directory PDTUPDAT.

Copy all the files from the PDT3100 subdirectory on the RS-SQL CD to the new PDTUPDAT folder on your hard drive.

Remove the "Read Only" attribute on those files by editing the properties of the files in Windows Explorer.

Remove the RS-SQL CD from your CD-ROM drive.

Update Program

To start the update process, from the PDTUPDAT directory on your hard drive, double-click PDTUPDAT.EXE. This launches the update program.

The first screen you access shows all COM ports. Highlight the one you use for the PDT3100 and press **Enter**.

Put the PDT3100 into its cradle and follow the instructions on the screen. If you already have the PDT3100 cradle set up, you won't need to complete instructions 5 through 8.

Follow all other instructions on the screen exactly in the order they are given.

When initial processing is complete, your PC displays an instruction screen. The first section instructs you to put the PDT3100 into a Command Mode. You may remove the PDT3100 from its cradle, since this procedure can be awkward. When you have

finished, place it back in its cradle. Follow all instructions exactly. When you reach the bottom of the screen, press any key to continue to the next instruction screen.

When the upgrade is complete, your PC shows the **Reboot PDT3100** screen. If the status on your PDT3100 screen is showing as 0000, cold boot by following the instructions on the screen. You may remove the PDT3100 from its cradle to cold boot it. The Main menu should display on the PDT3100 screen.

If at any time the PDT3100 does not respond in the expected manner, if the final status is not 0000, or if power gets cut off in the middle of the process, call O'Neil Technical Support for assistance.

LS4004 Tri-Optic Scanner Setup

While the "Prefix/Suffix" capability of the PDT3100 has general utility, it was created in response to a perceived need in the user community for scanning Tri-Optic barcodes attached to tape cartridges. To scan Tri-Optic barcodes with the PDT3100, you need special hardware, the Symbol LS4004i Tri-Optic Scanner. Contact O'Neil Software, Inc., for more information about this product.

Once you have acquired the Symbol LS4004i Scanner, follow the directions below for configuring it.

1. Follow the instruction manuals included with your LS 4004i scanner to attach the scanner hardware components.
2. After the scanner hardware is connected, follow the standard instructions to download the RS-SQL PDT3100 scanner program into the LS 4004i Tri-Optic Scanner. (The RS-SQL PDT3100 program is compatible with the LS 4004i scanner.)
3. On the LS 4004i scanner select **LOGIN** so that the scanner is waiting for the user ID number.
4. Using the *Symbol LS 4000i Series Product Reference Guide* and *Synapse™ "Smart Cable" for Scanner/Wand Emulation Interface Guide* scan the following barcodes located in the manual (some barcodes are located in both manuals). If you do not have the manuals, they are available on Symbol's website at symbol.com.

Parameter Barcode Names	Symbol LS 4000i Series Product Reference Guide	Synapse™ "Smart Cable" for Scanner/Wand Emulation Interface Guide
"Set Synapse Emulation Defaults"	n/a	Page 4
"Send Bar Codes With Unknown Characters"	Page 5-96	Page 15
"Enable Convert All to Code 39"	n/a	Page 16
"Enable Trioptic Code 39"	Page 5-42	n/a
"Enable Interleaved 2 of 5"	Page 5-56	n/a
"I 2 of 5 - Any Length"	Page 5-58	n/a

5. The LS 4004i scanner is now setup for use.