SPD Employee Continuing Education

Training Guides

Janus 2020 Scanning and Barcoding

Prepared by the SPD Advisory Group

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Scanning and Barcoding

One of the most critical parts of your job is to ensure that your inventories are accurate. You can accomplish this by using a barcode reader to scan barcodes in the secondary storage areas. After you have scanned the barcode, you enter the count of the item in stock. When you upload the results of the scan and count, the supplies in the primary storage area are automatically reduced to replenish the secondary storage areas.

Barcodes are symbols made up of black bars and white spaces. Each bar and space can be wide or narrow. Combining wide and narrow bars and spaces in different ways allows them to represent a lot of information in a small space.

Because barcodes do not directly match the alphabet, they need to be read and interpreted by something. Typically light pens or laser guns are used to read bar codes.

Use barcoding to simplify the inventory process. While you still need to count stock by hand, you can use a barcode reader and upload the information to the computer. This improves the accuracy of the count and reduces the time it takes to enter the count manually.

Barcode Manager Menu

Simply scanning barcodes and entering counts into the barcode reader does not complete the physical inventory. You must connect the barcode reader to the terminal and upload the data into the VISTA for processing.

The Barcode Manager menu has three submenus that we will discuss. They are:

> **Barcode User**
> > *Download Barcode Program*
> > *Upload Barcode Program*
>
> **Data Manager**
> > *Enter/Edit/View*
> > *Schedule Data to Process*
> > *Status of Data*
>
> **Labels**
> > *Inquire Label*
> > *Print Label*

Printing Labels

Note: Before you can print labels for your inventory point, information about the items contained at that inventory point must be loaded into the secondary.

From the inventory point main menu, select the Barcode Manager. Next, select *Print Labels* from the Labels menu. Press <enter>.

1. **CUSTOM LABEL NAME** appears**.** Type PRIMARY/SECONDARY LABEL or ??. (Entering a double question mark brings up more options.) Press <enter>.

2. You see a prompt that says: Do you want to SEARCH the GENERIC INVENTORY file before sorting (Y/N)? N// To accept the default response NO, press <enter>.

3. The next prompt says: **SORT BY: INVENTORY POINT//** Again, accept the default by pressing <enter>.

4. **START WITH INVENTORY POINT: FIRST**// appears. Enter the name (or the number assigned to the inventory point) of the primary/secondary inventory point from which you want the label to print.

   Example:

   START WITH INVENTORY POINT: FIRST// 660-SPD <enter>

5. **GO TO INVENTORY POINT: LAST//** appears. Enter the inventory point name or assigned number again.

   Example:

   GO TO INVENTORY POINT: LAST// 660-SPD <enter>

6. **WITHIN INVENTORY POINT, SORT BY: 1 <enter>** INVENTORY ITEM appears.

7. **INVENTORY ITEM SUB-FIELD:** .01 <enter> ITEM NO. appears.
   Note: If you enter ??, a sub-menu appears with more choices.

8. **START WITH ITEM NO.:** FIRST// appears. Enter the item Master File Number for the item for which you want to print the label. If you want to print a set of labels for all items in the inventory point, accept the default of FIRST by pressing <enter>. However, for this exercise, only print one label.

   Example:

   START WITH ITEM NO.: FIRST// 1780 <enter>
   GO TO ITEM NO.: LAST// 1780 <enter>
           WITHIN ITEM NO., SORT BY: <enter>
   STORE IN 'SORT' TEMPLATE: <enter>

9. **DEVICE:** appears. Enter the name of the barcode printer that was established by IRM and press <enter>. The label prints.

Scanning Labels

Follow these steps to scan labels.

1. Turn the reader on.

2. Hold the scanner a few inches from the label you want to scan. Point the scanner window at a slight angle facing toward the label.

3. Hold down the yellow trigger to run the scanner. Make sure the beam crosses all the bars on the label. When the label has been read, release the trigger.

4. Enter the quantity on hand.

Warning: Do not look directly into the window or into a refection of the laser beam while the reader is scanning. Consistent exposure to laser beams can damage your vision.

Turning the Scanner On and Off

The yellow Enter key on the upper right hand corner of the keypad turns the scanner on and off. When you press **Enter** to turn the scanner off, the scanner saves information stored in memory while it turns off power to most of the hardware including the Central Processing Unit (CPU).

When you press **Enter** to turn the scanner on, it returns to where it was when you turned it off. In other words, if you were running a program when you turned the scanner off, it returns to the same point in the program when you turn it back on. Even if you change the battery pack while the scanner is turned off, it will return to where it was when you turn it back on.

Entering Inventory

Start by turning the scanner on. Enter the name of the file for the data records. You may want to enter your initials and the current date for the name. If more than one person uses this scanner, it will make it easier to determine which data you scanned. After you name the file, you see the following menu:

1. Enter Inventory

2. Transmit Data

3. Review/Delete

Enter (1-3)

Select 1 to scan labels. You see:

> IE:
>
> QTY:
>
> #:

Scan a label. Information appears on the IE line on the display. After the item displays, enter the quantity. After you enter the quantity, you can scan another label. Continue this process until all items have been scanned and counted. When you have finished, press the '.' and 'Enter' keys. All the information you entered is stored in the scanner.

Reviewing and Deleting Data

The third option on the software's Main Menu is Review/Delete. Choose this option to view information currently stored in the scanner. You will see:

'How far back do you want to go?'

Enter the number of a specific record or a range of records you want to see. After you have reviewed the records, you see:

'Which records do you want to delete?'

If you want to delete a record, enter the number of the record now. If you don't want to delete any records, enter a '0'. You exit the Review/Delete option.

Transmitting Data

Select this option to upload data from the scanner to the Generic Inventory Package (GIP) program. However, you must first connect the scanner to the docking terminal. Go to the inventory point in GIP, select the *Barcode Manager Menu*, select the *Barcode User Menu*, and then the 'Upload Barcode Data' option. You see a prompt asking you to enter the device to which the scanner is connected. Enter the name or keystroke that was assigned to the device. You see:

>>>Use the TRANSMIT option on the barcode reader to start sending the data:

Select the 'Transmit Data' (2) option on the scanner to begin the upload.

Troubleshooting

If you have problems scanning bar codes, find your problem in the list and follow the instructions:

You cannot see a red light when aiming at a wall. It is possible you are too far from the wall. Try moving to within two feet of the wall and test the scanner again. Or, test the scanner by pointing at the floor.

The scanner does not register the bar code label you are trying to scan. Be sure that you aim the beam so that it crosses the entire label in one pass. If the scanner still does not register, print a new label.

When you try to scan a label, the scanner turns off or will not turn on. If the scanner is chirping every five seconds and the Battery icon displays, you have a low NiCad battery pack. Turn off the reader and replace the pack.

You scan a label that contains a valid configuration command but the scanner beeps and displays an error message such as "Bad command or filename." Make sure that the Configuration Manager TSR is loaded into memory. Type cfgmgr and press Enter to load Configuration Manager and then rescan the bar code label.

You scan a label to enter data at the DOS prompt, but the scanner beeps and displays an error message such as "Bad command or filename." Make sure that the application expecting the data is running. If necessary, start the application and scan the label again.

If you are still having trouble with the scanner, do the following:

- Inspect the print quality of the bar code label. Try scanning a label that you know scans properly. Compare the two labels. You might have to replace the label that does not scan.

- Make sure the scanner is turned on. Press **Enter** to turn it on.

- Clean the scanning window with a solution of ammonia and water. Wipe it dry. Do not touch the window with any abrasive material.

- Scan the bar code again. Vary the scanning angle and distance.

Data Manager Menu

Use this menu to manage and view data processing from the scanners.

- **Enter/Edit/View**—This option lets you view data uploaded from the scanner and the data's status. You can enter, edit, or view barcode data. The following prompts appear:

    Select **BARCODE PROGRAM NAME**: Enter the name of the program (for example, EXPENDABLE PHYSICAL COUNT or EXPENDABLE USAGE) and press <enter>.

    The system displays the Date/Time of the latest Data Upload. If this is not the upload you want, enter '??' and press <enter>. Other upload dates you can choose from appear.

    Data records appear in the following format:

    [* (optional)] [IE] [INVENTORY LOCATION NUMBER] space [ITEM NUMBER] space [QUANTITY]

    An asterisk (*) indicates that the data record has already been processed. If you want to re-process the record, you must remove the asterisk.

    Note: If you need to reschedule data processing, SC at the Data Manager Option prompt to select the 'Schedule Data to Process' sub option.

Managing Battery Power

There are several power management features you can use to maximize the life of the lithium backup battery and the NiCad battery pack.

Situation	Ways to Save Battery Power	Description
You don't need to use the scanner again for five minutes, a few hours, or up to a week.	• Put the scanner into Suspend mode. • Use the Automatic Shutoff feature.	Suspend mode saves the NiCad battery pack's power. Press Enter to put the scanner into Suspend mode. Make sure the battery pack is charged (not in low battery state). Automatic Shutoff puts the scanner into Suspend mode when there has been no activity for the amount of time you specify.
You don't need the scanner again for a week or longer.	• Put the scanner into Storage mode and remove the NiCad battery pack.	Storage mode saves the lithium backup battery's power. You must remove the NiCad battery pack when you put the scanner into Suspend mode.
The NiCad battery pack charge becomes low while you are using the scanner.	• Remove the battery pack and insert another charged battery pack. • Attach an external power supply to charge the battery pack installed in the scanner. • Put the scanner into Storage mode.	Unless the scanner is in Storage mode, you must keep a charged battery pack installed in it to save the lithium backup battery's power.

Recognizing a Low or Discharged Battery

If you see a Battery icon or hear a chirping sound, the scanner is telling you that the NiCad battery pack or lithium backup battery are almost discharged. Read the information that follows to tell which battery is low or discharged.

Low NiCad or Lithium Battery Warning		What You Need to Do
NiCad battery pack is low (15 to 45 minutes left).	The Battery icon turns on and stays on.	If you are using a J2020, replace the battery pack soon. If you are using a JR2020,

Low NiCad or Lithium Battery Warning		What You Need to Do
		replace the battery pack immediately because you will loose RF communications soon.
NiCad battery pack is critically low (1 minute left).	The Battery icon remains on. The scanner chirps every 5 seconds for 1 minute and then turns off. The scanner double-beeps when you enter valid data and double-clicks when you press any key.	Replace the battery pack immediately or attach an external power supply. The laser scanner and RF communications are turned off 15 seconds after the first chirp.
Lithium battery is critically low (1 minute left).	The Battery icon is not displayed. The scanner chirps every 15 seconds for 1 minute and turns off. The scanner double-beeps when you enter valid data and double-clicks when you press any key. The Backup Battery screen appears each time you turn the scanner on.	You must keep a charged NiCad battery pack installed in the scanner. You can also attach an external power supply. Save all your data and back up all your files from drive E. Contact your Intermec service representative to replace the lithium battery.

Caution: When the Battery icon appears, save your data and replace the battery pack as soon as possible. If you don't replace the battery pack, you may lose data.

Avoiding NiCad Battery Pack Problems

You can avoid problems with the NiCad battery pack by following these guidelines:

- Always turn the scanner off before you remove the battery pack.

- Clean the contacts on the battery pack periodically. A cotton swab and rubbing alcohol can be applied to the gold contacts on the sides of the battery pack.

- If the battery pack seems to have lost its charge capacity, discharge it using the communications dock or the battery charger before you charge it. It is only necessary to discharge the battery pack when you notice problems. If the battery pack still does not hold a charge, try replacing it with a new battery pack.

- If the JL2010 optical link adapter does not charge the battery pack when it is connected to a power supply, check the spring contacts and contact surfaces on the optical link adapter for signs of corrosion or contamination. Clean the battery contacts with a cotton swab and rubbing alcohol if necessary.

Use the following information to resolve other problems you may encounter with the NiCad battery pack.

When you press Enter to turn the scanner on, nothing happens or the scanner turns itself off immediately.	Make sure the battery pack is installed properly. Push the bottom of the pack firmly to lock it into the handle. The battery pack may be discharged. Replace it with a spare charged battery pack or charge the battery pack and try again.
The Battery icon appears at the top of the scanner display.	The scanner displays the Battery icon when there are about 15 to 45 minutes of power left. If you are using a J2020, replace the battery pack soon. If you are using a JR2020, replace or recharge the battery pack immediately. You will lose RF communications soon. **Caution**: When the Battery icon appears, save your data and replace the battery pack as soon as possible.
You see all these symptoms: • The Battery icon remains on. • The scanner chirps every five seconds for one minute and turns off. • The scanner sounds a double-beep when you enter or scan data and sounds a double-click when you press any key.	The battery pack charge is critically low. Save your data. Replace the battery pack with a charged one, charge the current battery pack, or attach an external power supply. The laser scanner and RF communications are turned off 15 seconds after the first chirp.
You see all these symptoms: • The Battery icon is not displayed. • The scanner chirps every 15 seconds for one minute and then turns off. • The scanner sounds a double-beep when you enter or scan data and sounds a double-click when you press any key. • The Backup Battery screen appears every time you turn the scanner on.	The lithium backup battery is critically low. Keep a charged NiCad battery pack installed in the scanner. You can also attach an external power supply. Save all your data and back up all the files on drive E. Contact you Intermec service representative to replace the lithium backup battery.
The scanner appears to be locked up and you cannot enter data.	Press **Enter** to turn the scanner off. If the scanner will not turn off, see the next

	problem in this table for help. Press Enter to turn the scanner on. If the scanner displays the Boot Loader menu with the message "Bad Saved State", press **XXX** to cold boot the scanner. You may be able to save the contents of the physical RAM drive.
	Caution: When the scanner performs a cold boot, all files on the physical RAM drive are destroyed.
The user application is not receiving the bar code input properly.	Reader Services may have been unloaded. The scanner cannot decode bar code labels unless Reader Services are loaded.
	Verify that the IF EXIST D:\RDG.BAT CALL D:\RDG.BAT command is in the AUTOEXEC.BAT, and then warm boot the scanner to reload Reader Services.
	If you cannot load Reader Services, you may have assigned too much conventional memory to the physical RAM drives.
	Caution: Do not press any keys while the scanner is performing a warm boot or you may lose data.
Battery icon appears at the top of the scanner display.	The scanner displays the Battery icon when there are approximately 15 to 45 minutes of power left in the NiCad battery pack. If you are using a J2020, replace the battery pack soon.
	If you are using a JR2020, replace or recharge the battery pack immediately. You will lose RF communications soon.
	Caution: When the Battery icon appears, save your data and replace the battery pack as soon as you can.

Battery Maintenance

Follow these steps to charge the battery pack , dispose of the battery pack, or replace the battery pack.

Charging the Battery Pack

You must use one of the following accessories to charge the NiCad battery pack:

- Communications dock
- Battery charger
- Optical link adapter connected to a power supply

The battery pack does not need to be fully discharged before you recharge it. You should only discharge the battery pack if you notice that it is not holding a charge properly. Both the communications dock and battery charger maximize battery life and prevent loss of battery capacity.

Note: Charge batteries at a 68º room temperature to increase charge capacity and charging cycles. Warmer room temperatures diminish this effect.

Disposing of NiCad Battery Packs

There are two good reasons to recycle NiCad battery packs. First they are made of recyclable materials. Secondly, the Environmental Protection Agency has classified worn out or damaged NiCad battery packs as hazardous waste. It may be illegal to discard these battery packs.

Removing the Battery Pack

The battery pack sits inside the handle of the scanner.

Caution: Make sure the scanner is turned off before you remove the battery pack. Leaving it turned on may result in loss of data.

To Remove the Battery Pack

1. Switch the scanner off.

2. Hold the scanner with the handle pointing down. Press on the top part of the raised circular button firmly and, at the same time, push the battery pack up until you hear a click. Pull down gently. The pack releases from the handle and slides down approximately ½ inch before stopping.

   Note: Do not hold the scanner with the handle up to remove the battery pack. Hold it with the handle facing the floor.

3. Using your thumb and forefinger, squeeze the two yellow buttons firmly and push the pack up a little. This releases the latches inside the handle. Pull down gently and the battery pack will slide out of the handle.

Installing the NiCad Battery Pack

1. Hold the scanner with the handle pointing down.

2. Position the battery pack underneath the empty handle with the molded rubber end on the bottom.

3. Slide the battery pack up into the reader handle. Push very firmly on the bottom of the pack until it locks into the handle. As the battery pack latches into the handle you will hear two clicks.

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Scanning and Barcoding Post Test

1. When you conduct a physical inventory using a scanner to read barcode labels:
   a. Leads to a less accurate inventory.
   b. Simplifies the inventory process and reduces time.
   c. Requires two people to do the job.
   d. Completes the physical inventory in one step.

2. Barcodes exactly match the alphabet so any scanner can read any barcode.
   True   False

3. When you press the yellow Enter key on the keypad to turn the scanner off:
   a. All information stored in the scanner is erased.
   b. The scanner goes into Suspend mode and saves power.
   c. Information stored in the scanner is saved.
   d. b & c.

4. After you review records, what number do you enter if you don't want to delete the records?

5. What option do you select to send information from the scanner to the computer?
   a. TRANSMIT
   b. SEND
   c. UPLOAD
   d. DOWNLOAD

6. Which battery is low when the scanner chirps and the Battery icon is lit?
   a. Lithium backup battery.
   b. NiCad battery pack.

7. You must always discharge the battery pack fully before you recharge it.
   True   False

8. Make sure the handle is facing _____ when you replace the battery pack.

9. NiCad battery packs are recyclable?
   True   False

10. What does GIP stand for?
    a. Government Inventory Practices

b. Generic Inventory Practices
c. Good Inventory Principles
d. Generic Inventory Package

Answer Key

1. b

2. False

3. d

4. 0

5. a

6. b

7. False

8. Down or toward the floor

9. True

10. d