

Inventory Bar Code Reviewer's Guide

Barcode Add-On Modules for: *Business! Accounting and the Inventory Manager*

Barcoding your inventory increases the productivity of your order entry functions or warehouse personnel by saving many keystrokes while increasing the accuracy of data entry by eliminating mistakes from erroneous keystrokes.

To add barcoding to any software application you only need a barcode font, a simple scanning device and software that can print barcodes. Additionally, to support inventory in a warehouse or remote location, you will need a data collection device.

Barcoding in Database Creations Financial Software

Database Creations, Inc. manufactures and supports two major financial product lines that can include barcoding. These are:

- *Business!* - a complete accounting package for small (Standard Edition) to midrange (Pro Edition) businesses. Barcoding is supported for inventory, sales, and purchases.
- *Inventory Manager* – a complete inventory management package for any size business

Our barcoding software was designed to work specifically with these applications but can easily be adapted to work with any Microsoft based accounting or inventory management package that supports item and quantity data. There are two basic modules available:

Barcode Printing (Standard) Module

The Standard Bar Code module consists of a barcode printing module that allows you to print many types of reports that contain barcodes. These include labels (both individual roll type labels and laser/inkjet full page labels) and reports which include multi-column barcodes for scanning at a register or desktop. The hardware needed for this module includes a desktop scanner, a printer, and one or more Azalea fonts.

Warehouse Module

Our warehouse module provides a very extensive environment for importing data collected by a remote hand held data collection device and for updating your inventory database for transactions, transfers between locations or physical reconciliation counts. The hardware needed for this module includes a portable data collection device in addition to the hardware needed for the Standard module. All features and functions of the Standard module are also included with the Warehouse module.

Our modules are:

- Completely written in Microsoft Access and available for Access 2003, 2002, 2000, and 97
- Sold with open source code and not locked in any way
- Use Microsoft Access .MDA Library technology for maximum flexibility and ease of maintenance for new versions
- Written with industry standard coding techniques using easy-to-understand functions

- Documented with extensive source code comments
- Accompanied by professionally written end-user and developer user guides

Hardware, Software, and Fonts Needed for Barcoding

Database Creations offers a wide variety of barcode hardware such as scanners, printers, and data collection devices from the best manufacturers such as Symbol and Welch-Allyn for all price ranges. We also offer all of the standard barcode fonts in simple to use TrueType format from Azalea Software, the leader in barcode font technology. All of our fonts come with easy to use VBA functions and instructions to print your barcodes correctly in our applications or in your applications using only the Microsoft Access report writer.



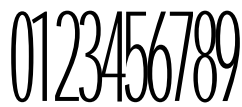
Desktop Laser Scanners from companies like Welch-Allyn and Symbol



Data Collection devices such as the new Palm based Symbol SPT-1500 or SPT-1700



Label Printers from DYMO/COSTAR the leader in low cost printing



Fonts are available from Azalea including UPC, Code 39, Code 128, Interleaved and Non-Interleaved 2 of 5, OCR, and Postnet. In order to use our software as is, you will need to use one of the Azalea bar code fonts. If you want to use your own font, not provided from Azalea, you may need to modify our program to correctly read the type of font you are using.



We create and manage our forms using PenDragon™ forms. This package interfaces Microsoft Access with the Symbol SPT palm devices by allowing you to create fairly sophisticated data entry forms and then easily synchronize your collected data between the Symbol SPT data collection device and your workstation. Our import facility in our barcode module then imports this data directly into our warehouse module. While an end-user can easily build the forms and move them to the Symbol SPT, developers get all the source code for extending the product and understanding how the conduit works using just Microsoft Access.

Printing Barcoded Data

Our barcoding software features a powerful interface for printing barcodes from your inventory data. This module includes many Microsoft Access report templates for labels and notebook style scannable pages as well as many control options for maximum flexibility and the productive use of our software.

To use this module, click on the **Bar Code Print...** button on the Inventory Form. The Bar Code Print Dialog is displayed as shown below.

Item Number	Qty to Prt	Qty In Stk	Bar Code	Description
<input type="checkbox"/> AA-105	0	73	785555530355	Books on Food
<input checked="" type="checkbox"/> AD-0017	35	68	076092002819	Adventures of the Lost Computer # 1-5
<input type="checkbox"/> AD-0018	0	14	093007537952	Adventures of the Lost Computer # 6-10
<input checked="" type="checkbox"/> AD-0019	1	5	9683264849	Adventures of the Lost Computer #1-10
<input type="checkbox"/> AS-0015	0	12	714466710303	Assorted Stuffed Animals
<input checked="" type="checkbox"/> BK-100	100	100	084072103623	The Adventures of the Teddy Bear Book 1
<input type="checkbox"/> BK-101	0	8	785555530355	The Adventures of the Teddy Bear Book 2

Sample Barcode Report Templates Include:

- Shelf labels for affixing to retail shelves including optional price display
- Warehouse labels for product locations and bins
- Product labels for placing on merchandise with optional serial number barcodes
- Report notebook format for workstation scanning with one barcode per line and detail
- Report notebook format with multiple barcodes per line and less detail

Control over your printing is easy because:

- You select which items to print and how many labels for each product
- Each product displays the quantity in stock and lets you print one or more labels per item
- Labels support single roll label printers and laser/inkjet printers on plain paper labels
- Reports use standard Avery brand label stock including two and three column labels
- You can customize any report template using the Microsoft Access report writer
- Each time you change the settings, they are saved for the next time you print
- You control display of product descriptions, bar code text, and prices

You determine the Azalea bar code family and specific type of Azalea bar code:

- UPC Codes (Bookland, Ver-A, Ver-B, ISSN, EAN8, EAN13, 2-Suppl)
- Code 39 (C39, ASCII)
- Code 128 (A,B,C, UCCEAN13)
- Interleaved 2 of 5 (
- Non-Interleaved 2 of 5
- OCR A/B for printing machine readable characters
- POSTNET font available for envelopes and postal scanning

Using the Warehouse Module

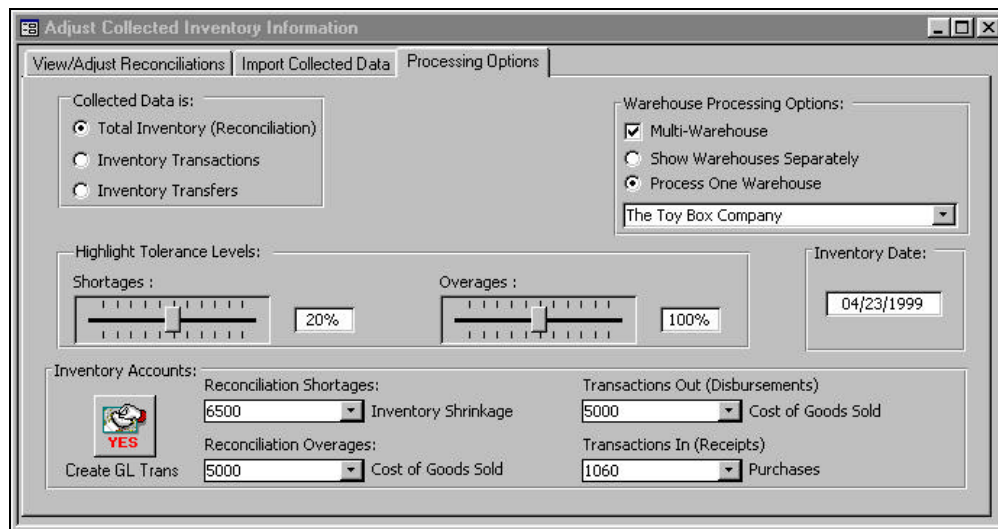
Our warehouse module is a complete system for companies who record inventory transactions remotely, or for mobile computing professionals who have the need to work with inventory data collected away from their desk using a data collection device such as a Symbol Palm based SPT 1500 or any other mobile collection device. Data collection devices let you scan and save data using a mobile terminal. This can be used to:

- Take a physical inventory and later reconcile it to the quantities reported to be in stock
- Record inflows (receipts) and outflows (shipments) of inventory at a loading dock
- Track inventory movement from one location to another including warehouses, parts cribs, work personnel and service vehicles. This lets you account for the location and movement of inventory at any time.
- Batch update your inventory with extensive error checking for quantities, negative inventory, valid serial numbers and validated warehouse amounts

You can access the warehouse module by clicking on the **Bar Code Data...** button from the Inventory Manager. A tabbed dialog form is displayed that lets you set various Processing options, import and process data and view and adjust data.

Controlling Your Collected Data

The warehouse module lets you determine what type of collected data you are working with and how to process it.



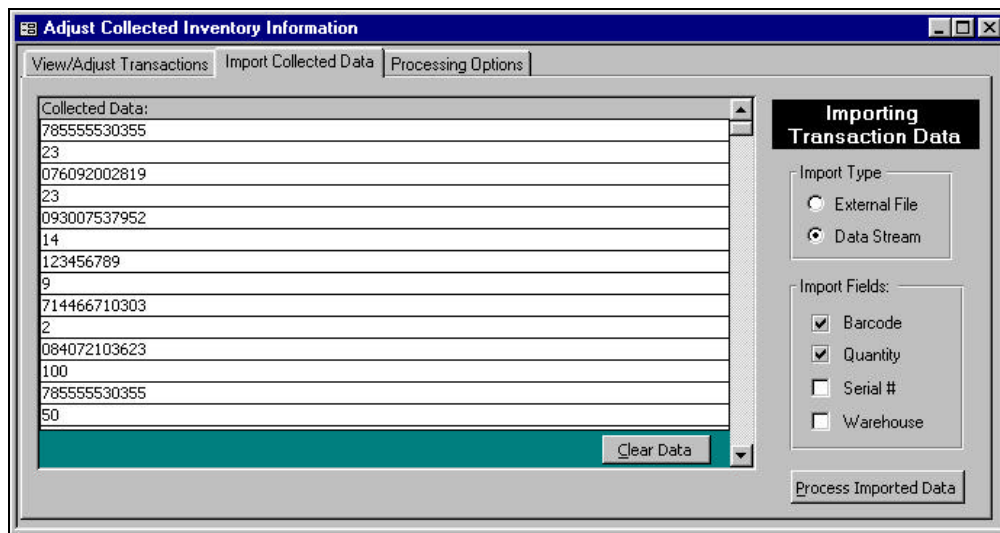
Depending on the type of collected data you select, you have various options for processing. These options include:

- Data can be processed for multiple warehouses where the location is part of the data and multiple warehouses can be processed together or you can select one warehouse to use to mark of all of the records
- Options to summarize or show all detail for transaction data
- Total Inventory data (reconciliation) can be automatically processed within desired tolerances for shortages and overages separately.

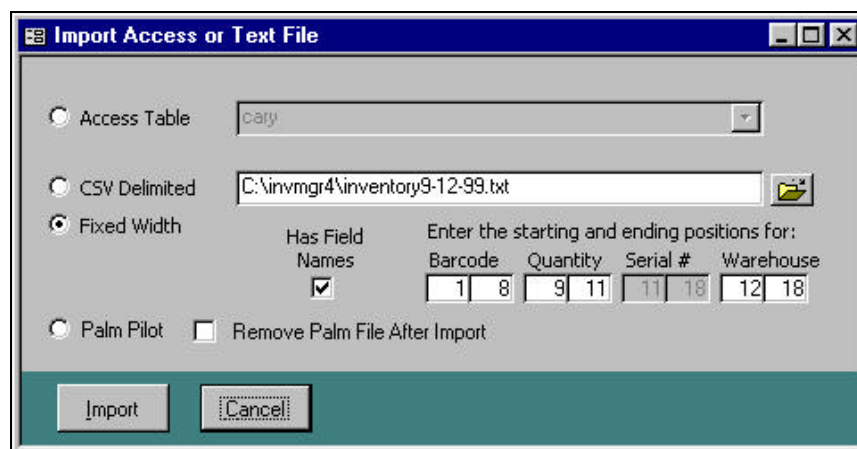
- An inventory date, which can be used to automatically enter the last date reconciled
- Optional general ledger entries can be created for reconciliation differences and transaction amounts using quantities and prices.
- All settings are saved each time so you only have to select the specific settings you need

Importing Collected Data

There are many ways to collect data using mobile data collection devices. The newest technology, such as Symbol's Palm Pilot based SPT data collection device, easily transfers data directly from the data collection device to your workstation to a Microsoft Access table at the touch of a button using the Palm HotSync™ cradle. Older technology requires either downloading streams of data using a serial cable or file downloads in one of the older ASCII formats. Once you move the data from the data collection device to your workstation, you can easily import the data into the Inventory table. This also works with external mainframe or personal computer data for batch updates.



Using our forms, the barcoding import module handles all of these formats with ease and features complete error checking and barcode verification. Additionally, you can control whether the data has Serial Numbers or contains separate Warehouse data along with the mandatory barcode and quantity information.



You can import data from the following data transfer methods of data collection devices:

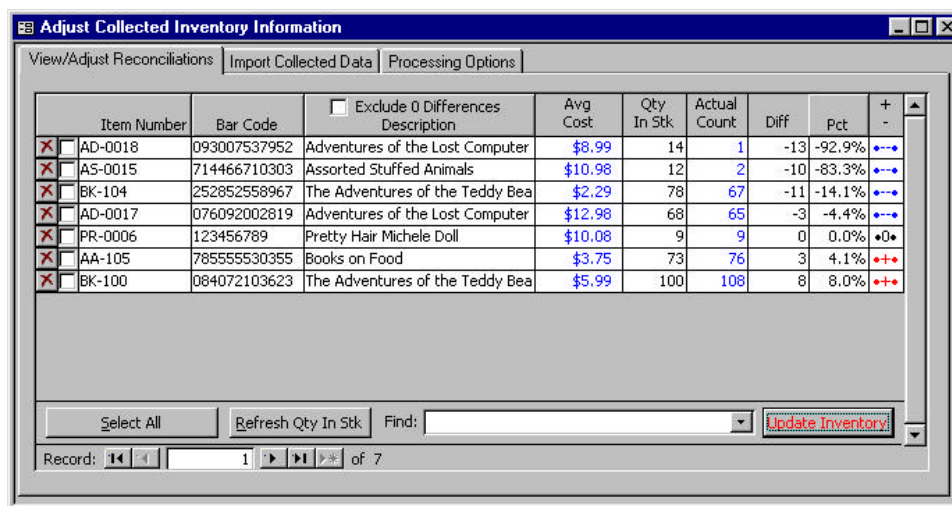
- Direct import of Access table data from other applications or data collection devices
- Direct import of CSV (Delimited) or Fixed Width ASCII text files
- Streaming serial data separated by CrLf or Tabs direct from older devices
- Data from Symbol SPT Palm Based device HotSync using Pendragon™ forms

Processing Physical Inventory Data for Reconciliations

Taking inventory can be a long and sometimes tedious task. Often, a physical inventory is taken in a warehouse using pencil and paper and then re-entered into the computer. By the time the physical inventory is taken, the data is out of date. By using a data collection device, the data only needs to be entered once. You can even download your current inventory into some data collection devices, scan or select the item in the warehouse and enter or verify the inventory. Once you have successfully imported collected data for a physical inventory, you can visually see the collected physical inventory data and quickly process the desired records. Multiple inventory records are automatically summarized.

You have control over many visual items:

- View the item number, barcode, description, avg. cost, current in stock quantities, physical inventory amounts, differences, percent differences, and visual symbols for differences
- Visually scan for *blue* records which indicate a physical count below in stock amount (•--•), *black* records (•0•) no difference, and *red* records (•+•) above expected inventory amounts
- View and sort the data by Item Number, Barcode, Description, and Percent difference
- Exclude collected data with no difference between current amounts and physical inventory
- Automatically select all records, no records, or only records within desired tolerances
- Refresh Quantity in Stock display to account for real time changes
- Quickly find a desired data item to verify amounts
- Change the cost amount or actual count data before processing



Once you have selected one or more records to process and adjusted any cost or quantity information, you can press the **Update Inventory** button to batch update your inventory records.

The processing engine performs the following functions:

- Only processes selected records while ignoring unselected and 0 difference records
- Performs extensive error checking for valid records and no inventory below 0
- If Multi-warehouse is selected, a two-line display shows the warehouse. All data is processed using the warehouse data in each record
- Adds or deletes the appropriate lines in the Inventory Products table and recalculates quantity in stock, average cost and updates the last inventory date.
- If General Ledger is used, creates general ledger transactions for each processed record. Checks for valid inventory and shortage/overage accounts
- Writes a record to the Inventory Transaction Log (Inventory Manager only)
- Deletes from the view each processed record leaving only unprocessed or unselected records

Processing Transaction Data for Loading Docks or Shipping Areas

Scanning data at a loading dock can reduce errors and eliminate double entry of data. You can even program a collection device with purchase order information. Once you have successfully imported collected data for inventory transactions, you can visually see the collected data and quickly process the desired records. Unlike physical inventory that is always positive, transactions can be both positive for inventory receipts and negative for shipments. You have the option to display each transaction separately or summarize transactions by item or item, warehouse, and serial numbers. You have control over many visual items:

- View the item number, barcode, description, avg. cost, current in stock quantities, transaction quantity, and adjusted in stock amount.
- Visually view and sort the data by item number, barcode, or description.
- Automatically select all records, or no records
- Refresh Quantity in Stock display to account for real time changes
- Quickly find a desired data item to verify amounts
- Change the cost amount or transaction counts before processing

Item Number	Bar Code	Description	Avg Cost	Orig In Stk	Adjust Amt	Adj In Stk
<input checked="" type="checkbox"/> AA-105	78555530355	Books on Food	\$3.75	73	-13	60
<input checked="" type="checkbox"/> AA-105	78555530355	Books on Food	\$3.75	73	50	123
<input checked="" type="checkbox"/> AA-105	78555530355	Books on Food	\$3.75	73	23	96
<input checked="" type="checkbox"/> AD-0017	076092002819	Adventures of the Lost Computer # 1-5	\$12.98	68	-6	62
<input checked="" type="checkbox"/> AD-0017	076092002819	Adventures of the Lost Computer # 1-5	\$12.98	68	45	113
<input checked="" type="checkbox"/> AD-0017	076092002819	Adventures of the Lost Computer # 1-5	\$12.98	68	23	91
<input checked="" type="checkbox"/> AD-0018	093007537952	Adventures of the Lost Computer # 6-10	\$8.99	14	-4	10
<input checked="" type="checkbox"/> AS-0015	714466710303	Assorted Stuffed Animals	\$10.98	12	-9	3
<input checked="" type="checkbox"/> BK-100	084072103623	The Adventures of the Teddy Bear Book 1	\$5.99	100	-15	85
<input checked="" type="checkbox"/> BK-100	084072103623	The Adventures of the Teddy Bear Book 1	\$5.99	100	100	200
<input checked="" type="checkbox"/> BK-104	252852558967	The Adventures of the Teddy Bear Book 3	\$2.29	78	78	156
<input checked="" type="checkbox"/> PR-0006	123456789	Pretty Hair Michele Doll	\$10.08	9	-1	8

Once you have selected one or more records to process and adjusted any cost or quantity information, you can press the Update Inventory button to batch update your inventory records.

The processing engine performs the following functions:

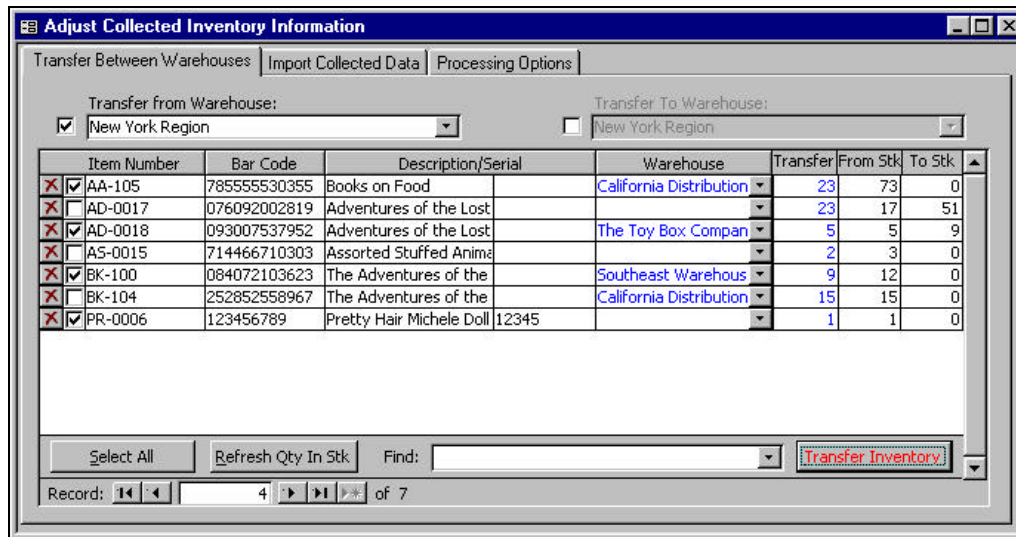
- Only processes selected records while ignoring unselected records
- Performs extensive error checking for valid records and inventory amounts going below 0
- Transactions are processed in highest positive through lowest negative for each item
- If Multi-warehouse is selected, a two-line display shows the warehouse and any serial number information. All data is processed using the warehouse data in each record
- Serial number changes are processed with only one quantity per record
- Adds or deletes the appropriate lines in the Inventory Products table and recalculates quantity in stock and average cost.
- If General Ledger is used, creates general ledger transactions for each processed record. Checks for valid inventory and receipts/disbursement accounts
- Writes a record to the Inventory Transaction Log (Inventory Manager only)
- Deletes from the view each processed record leaving only unprocessed or unselected records

Processing Inventory Transfers between Locations

Many companies transfer data from a location to service vehicles each morning. By scanning the data as it goes out, you always know where your inventory is. Once you have successfully imported collected data for inventory transfers, you can visually see the collected data and quickly process the desired records. Inventory transfers always create two records; the transfer *from* record and the transfer *to* record. You enter the quantities as positive numbers and the application takes care of subtracting from the *from* location and adding the quantity to the *to* location.

There are three ways you can collect and process inventory transfers:

- Designate all records to be from the one *Transfer From Warehouse* that you select at the top of the form and enter the *To* warehouse in each of the collected records
- Enter the *From* warehouse in each collected record and designate all records to go to the one *Transfer To Warehouse* that you select at the top of the form
- Designate all records to be from the one *Transfer From Warehouse* that you select at the top of the form and being transferred to the one *Transfer To Warehouse* that you select.



For each data item to be transferred you can:

- View the item number, barcode, description, serial number, warehouse, transfer quantity and the current in stock quantities in both the transfer from and transfer to warehouse.
- Visually view and sort the data by item number, barcode, description, or warehouse
- Automatically select all records or no records
- Refresh Quantity in Stock display to account for real time changes
- Quickly find a desired data item to verify amounts
- Change the warehouse or quantity to transfer before processing

Once you have selected one or more records to process and adjusted any warehouse or quantity information, you can press the **Update Inventory** button to batch update your inventory records.

The processing engine performs the following functions:

- Only processes selected records while ignoring unselected records
- Performs extensive error checking for valid records and no inventory amounts going below 0
- Serial number changes are processed with only one quantity per record
- Adds or deletes the appropriate lines in the Inventory Products
- Writes a record to the Inventory Transaction Log (Inventory Manager only)
- Deletes from the view each processed record leaving only unprocessed or unselected records

Learning More about the Bar Code Module

If you need more information about the bar code module or have questions on how it can be used with your type of business or applications you have developed, please feel free to contact us by one of the methods listed below.

Phone: 860-648-9151

E-Mail: info@databasecreations.com

Fax: 860-648-9137

Web: www.databasecreations.com

You can also download a demo of our Inventory Manager with bar code modules attached. While you can access all the bar code module forms, some functions are not available in the demo.