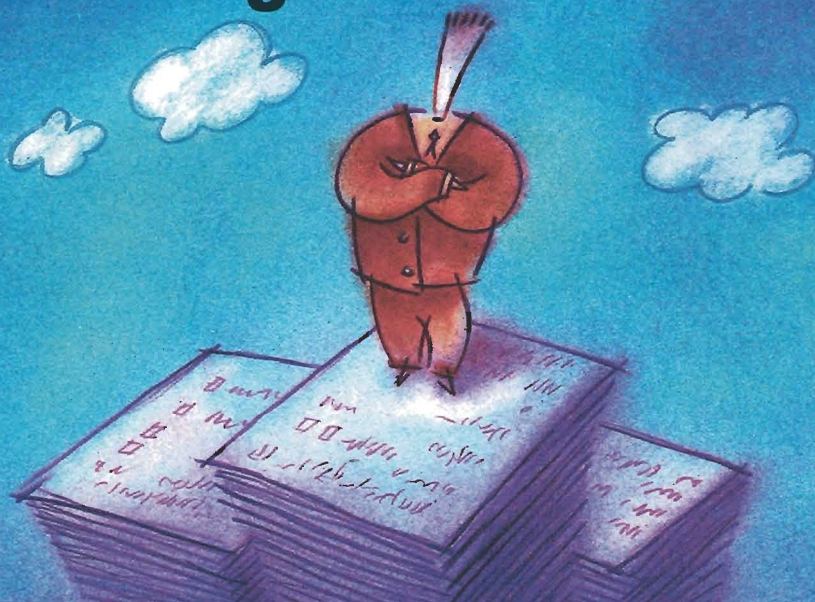


Bar Code: Technology for Lawyers, Lounge Lizards ... and Retailers



BAR CODE (BAR KÖD) N. (1) the acceptable form of conduct for lawyers as dictated by the American Bar Association; (2) a set of time-tested pickup lines for attracting the opposite sex at drinking establishments; (3) manufacturing guidelines for the construction of long metal objects (also known as crowbars); (4) a means of encoding information in an alternating sequence of varying-width bars and spaces so that information can be read efficiently and accurately by a computer.

I just bought the official NAMM *Bar Code Guidelines for the Music Products Industry* handbook. There were no handy pickup lines or ways to reduce legal fees, but there was help—and help is what this industry desperately needs. With all the fully bar-coded businesses in our world, why isn't the music products retail industry doing the same? Why are so many retailers still processing and counting inventory manually? Why are there different types of bar codes in use? Why is there only sometimes a hyphen between the words bar and code? Why aren't there more tuba players? These

questions have always puzzled me. So, let's discuss some possible answers that may unlock the mystery of the bar code and lead us to implement this very groovy technology for the new millennium.

Bar Code Basics

Definition No. 4 was the correct one, although someone really should write a book on barroom etiquette. Bar coding is a way of encoding information (such as manufacturer and product ID) on a label, and then scanning that label's data into a computer, producing the same result as keypunching the data. In simple

terms, bar coding is just an efficient way to input computer data.

Bar coding is used in numerous business applications, including inventory management and point-of-sale processing—the two most significant applications in any retailing business. Here's a few ways bar coding can help music products retailers:

Inventory Applications:

- Tracking inventory from receiving room to warehouse to sales floor to out-the-door;
- Counting inventory items, during interim counts (also known as cycle counts) and year-end physical counts;
- Tracking of goods shipped.

Point-of-Sale Applications:

- Processing sales transactions at the front counter;
- Product pricing, quantity and location lookups;
- Restricting data access to authorized employees;
- Controlling the cash register and access to cash;
- Controlling access to high-end products in secured areas of the store.

There are several other business applications suitable for bar coding. Bar codes can be used in processing payroll (i.e. employee time and attendance tracking) and fixed asset management (i.e. tracking office equipment, computers and store fixtures). The possibilities are endless. Like any new technology, implementing bar codes requires some effort, but the rewards most certainly outweigh any cost. In other words, don't ever let the mystery of bar coding stop you from using this wonderful tool.

Standards (SG, Strat and UPC)

There are several types of bar-code symbologies in use today (symbology is a \$10 word, so use it frequently to impress your friends). Uniform Product Code (UPC), Code 39 and Code 128 are just three of the hundreds of bar coding symbologies in use today due to different user needs to capture numeric, alpha, punctuation and special symbol data. A few years ago, NAMM adopted UPC as the standard for its members.

UPC is an all-numeric symbology that captures the product's supplier ID number and the supplier's product ID number (see inset A for an example of a UPC bar code). NAMM chose UPC because it's undoubtedly the most widely used inter-company method of identification used in the manufacturing, processing, packaging and distribution of products. It's also a flexible, universally recognized code and compatible with current Electronic Data Interchange (EDI) standards.

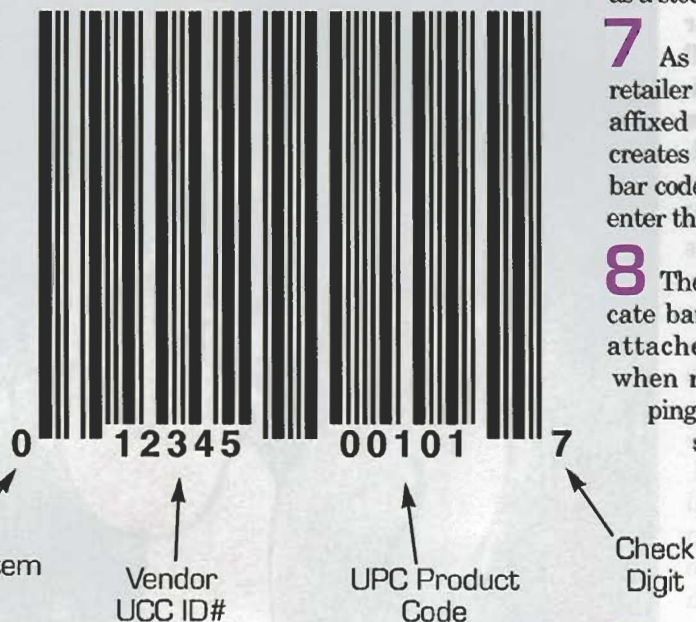
How Bar Codes Work

Bar coding is an ingenious technology that's rather simple to understand. Here's 10 steps that both suppliers and retailers need to follow to enjoy the benefits of bar coding:

1 A supplier applies for and receives a UPC six-digit supplier code from the Uniform Code Council (UCC) located in Dayton, Ohio. This number is globally unique to each supplier.

2 The supplier then creates its own internal five-digit product number.

[inset A]



3 Finally, a 12th digit check number is created by the bar-code software. Together, the combined 12-digit code forms a unique bar code (see inset A).

4 The supplier attaches a label with the bar code to each product it manufactures and ships to its retailing customers.

5 The supplier also distributes a product list with corresponding bar-code data to its retailing customers. The list is updated and redistributed as new products are made or as prices change.

6 The retailer receives the product list and bar-code data (sometimes via a floppy disk or CD-ROM) and enters the data into their accounting system

as a stocking item.

7 As product is received, the retailer scans the bar-code label affixed to the shipping box (or creates their own if there is no bar code on the shipping box) to enter the item into inventory.

8 The retailer prints a duplicate bar-code tag, so it can be attached to the actual item when removed from its shipping box. This extra step will soon be eliminated as NAMM has asked each supplier to print and attach the aforementioned bar-code tag.

9 Upon sale of the product, the bar-code tag is scanned, the product information is printed on a customer invoice and the item is removed from all pertinent inventory data files.

10 The retailer can now enjoy all of the benefits that bar coding offers.

Did you notice how the first five steps begin with actions taken by the supplier. Guess what? You just discovered the primary reason why the music product retailing industry has been slow to embrace the bar code. Because a concerted effort (i.e. \$\$\$) is needed, many suppliers have ignored the importance of bar coding their

product. In fact, less than 20 percent of music products suppliers are shipping bar-coded products. Shame on them!! That's why it's important for every retailer (did you forget you're the supplier's customer?) to keep the pressure on non-compliant suppliers to get with the program.

So what's a retailer to do? Ignore bar coding until all suppliers are

It's important for every retailer to keep the pressure on non-compliant suppliers to get with the bar-code program

bar-code compliant (a \$3 word that can be used to impress your co-workers)? Duh, no!! Sure, it would be easier if all suppliers were shipping their products with bar-code labels attached; all you'd have to do is scan their UPC labels. But at the rate they're moving, you'll be retired (or just tired) by the time this industry is fully bar-code compliant. So instead, use your own internal bar code, which accomplishes the same thing and provides you with countless, immediate benefits.

Countless, Immediate Benefits

And now, 10 of the countless, immediate benefits of bar coding:

- 1 Virtually eliminating keypunch errors.
- 2 Saving time (bar code is about 15 times faster and 10,000 times more accurate than keyboard data entry).
- 3 Dramatically reducing the effort to log incoming goods, to track inventory through and between stores, and to process the sale of inventoried items.
- 4 Lifting the burden of taking a physical inventory.
- 5 Eliminating illegible inventory tags.
- 6 Standardizing the naming conventions used to identify your inventory items.
- 7 More accurate reporting of critical management data (sales, gross profit and turns by product item).
- 8 Increasing cash flow due to (a) more efficient inventory management, (b) better tracking and inventory security and (c) reduced labor costs to perform all of the aforementioned tasks.
- 9 A basis for the future use of EDI is now in place.
- 10 You now have a method for effectively and efficiently tracking your store's inventory, as well as the comfort of always knowing the



financial value of that inventory.

Some Final Thoughts

Because accounting software is an integral component of bar coding, make sure your current accounting and point-of-sale software supports bar code. You can check out the latest in music products retailing accounting software by visiting software developer exhibit booths at both the Summer and Winter NAMM Shows.

There's also a wealth of bar code information and resources on the internet via search engines to websites and user groups. But best of all, you can also obtain industry bar-coding information by contacting Marybeth Connor at NAMM (800-767-6266).

Given the vast benefits of bar coding at a very manageable cost level, coupled with industry information and helpful resources, there's no excuse to not bar code. And by becoming a fully functional bar-coded retailer, you can try a new pickup line at the bars: "Hey honey, wanna see my hand-held scanner?"



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