



Questions & Answers

Frequently Asked Question about Barcode



What is it? Why is it used? What would it do for us?

First of all, let's look at where most people see barcode. Barcode first started being seen in grocery stores back in the 1970's. Since then, it has become a major part of the check out systems at almost all of the retail stores. Today, barcodes are just about everywhere, and are used for identification in almost all types of business. Bar Codes have become HUGE in the making, packaging, and distribution of products that most of us don't ever see. An example might be in the manufacturing of an automobile. We have never seen a study or any specific numbers of how many bar code labels might be used in the production of an automobile. However, we are sure there would be at least several thousand used in the production of a single car. So what are all of them being used for? Let's first answer some of the frequently asked questions, maybe that will help you understand why Bar Code has become so popular.

What is Bar Code?

Barcode is a series of bars and spaces that are encoded to represent characters. Bar codes are designed to be machine-readable. When your local retail store scans the barcode as your items are being checked out, the bar code does not contain the price of the item, it only identifies the item for the computer and then the computer tells the cash-register the price of the item. So really the bar code acts as a license plate to help identify the item.

How is Barcode read?

Bar code is actually read in much the same way as we read text from a page. It is read optically by using a light to measure the reflectance or the lack of reflectance. The reflectance is measured by what is called a photoreceptor, which in turn helps the computer decipher it. As this is done by a computer the process is extremely fast, in fact most decoders can do read many bar code per second, much faster than we can scan them.

What can Bar Code do for you?

There are many different processes where barcode would be of help to most people. The two significant ways that Bar Code will usually help are:

1. First is the speed of data input into the computer. An acceptance of a 12 character Bar Code can be accomplished in .2 to .3 of a second. The speed of course will depend on what you are doing but let's go back to the checkout line at your favorite supermarket. We often complain about the wait in lines, but watch the checker and see how fast the items are being scanning into the cash register. Just pause for a second and think how long the wait would be without them inputting the information with bar code. Bar Code will often shorten the process time by eighty to ninety percent from the manual method.
2. Second is the accuracy of the bar code. Studies have indicated that the most accurate of human keyboard input will be one mistake every 300 keystrokes. Using Code 39, which is the name of the Bar Code most often used in industry, we find the worst case scenario is about one mistaken character in 10,000,000.

Is all of Bar Code the same?

No there are many different types of barcode. The different types are called Symbologies. A is much the same as the fonts we use in typing a letter into the computer (the font we are using for this segment is Times New Roman). While there are over forty different Symbologies, there are less than ten which are used most often. The one usually used in retail operations is called UPC, other leading Symbologies are: Code 39, Postnet (used by the Post

Office), Interleaved 2 of 5, Code 128 and many more. For information on which one you should use, contact us at WAKE, Inc. and we can discuss with you which symbology would be work best for you.

How can I print Bar Code?

There are many options are available to you. It depends on what and how you are going to use barcode, how long you want it to last, and the environment it needs to survive in. Earlier we likened a symbology to a font. Well you can also get fonts of bar code that will allow you to type barcode in much the same way we are keying in this information. You could then print it with Dot-matrix printers, Laser printers and Inkjet printers. The majority of printing is done on Thermal Transfer label and tag printers. Most then use label designing software to design the label and to print what you need on the label. Contact us at WAKE, we can assist in determining what might be the best for your application.

Can there be bad Bar Code?

Absolutely there can be. There are many things that can happen in the printing of the Bar Code that will effect the readability of it. Usually it is out of "Spec", by the width of the bars or spaces, the contrast being less than what it should be, the reflectivity not being correct. There are also such things as x-dimensions, ratios and quite zones being incorrect. With the advances in the various scanners being used today, often, even if it is out of "Spec" it may be able to be read. Where problems often occur is at some other location if they are being read by equipment that is not quite as up to date as your equipment. If they happen to be the customer, then you could have a problem.

Is there a way we can verify the Bar Code for quality and readability?

Barcode verifiers are available from WAKE to help you measure the various characteristics of the Bar Code you are producing. In another section of this site, we do offer some information on verifiers. It is essential that attention be paid to all of the various aspects of your bar code. More and more firms are demanding the Bar Code be up to proper specifications.

For additional information on any questions you might have regarding Bar Code, the printing of it, or the scanning of barcode, feel free to contact us WAKE, there will be no obligations on your part.