# UPC Bar Codes: A Quick Intro and Basic Suggestions

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The topic of UPC Bar Codes is probably best handled with a text document rather than a video clip. There are too many words and not enough action.

To get to the screen that lets you set up UPC Bar Codes. From the **Main Menu** select **ENTER, VIEW, EDIT ITEMS in a library** (if you have the Full Version of the Program it will be the third item on the Main Menu).

The screen at right is the library selection screen. Click on **Set Library Options**. The resulting screen is shown below.





Three of the choices are obvious. Some of our Canadian customers asked for the option to turn off the printing of Hardiness. Most users find it useful.

The option for UPC assignment is our focus.

We refer repeatedly to UPC Barcodes because there are several barcode systems available. Most are used for parcel tracking, inventory control and other uses. The UPC Barcode is a system devised to identify a specific item or product. Its use is administered by a non-governmental agency. More on that later.

In the discussion we mention Price Lines. A price line is a set of values that the user assigns to a library item. It can include any or all of the following: a Size (Brief Description), a SKU or User Code, a Price and a UPC Bar Code Number. Here is a screen shot of price lines assigned to Abelia 'Edward Goucher' (in my library) so you will know what we are talking about.

	Price Information:				
	Brief Description	SKU or User Code	Unit Price	UPC Number	•
►	1 gal	HN95930-01	\$7.99	4-41000-01867-9	
	5 Gal	AN85421-05	\$27.99	4-10000-01155-3	
		1 11 105 700 04	47.00	1 1 0 0 0 0 0 0 0 0 0 0	

When the 1 gal Abelia Edward Goucher is selected for printing and printed on a 1" loop lock label, the result looks like this:





# YOU WILL HOWEVER, NEED TO MAKE THE SELECTION FOR <u>MANUAL UPC ENTRY</u> IN ORDER TO PREVENT AUTOMATIC UPC ASSIGNMENT.

### Back to Bar Code setup:

The first two choices automatically assign a new UPC Number to each new price line you attach to a library item.

- Auto NO Duplicates automatically assigns a unique Bar Code numbers to each new price line.
- Auto allow duplicates works as above, but allows the user to overwrite with a code previously used.
- Manual UPC entry is exactly what it sounds like.

#### So, how do you determine which method to use?

Most retail outlets that do not already have a Point of Sale System in place select Auto - No Duplicates.

If you are a retailer and are not currently using a Point of Sale System, we recommend that you select this item and let the program assign a UPC Bar Code Number for each item. There is no requirement to print them, and there are no penalties for not doing so. It's just a matter of planning ahead.

A few years from now, if you decide to implement a Point of Sale System your items will already have UPC Bar Codes assigned and it can save many hours of entry time. Growers who have been assigned a **Vendor Number** may use this option as well. The Gardenware program has a utility for assigning a beginning UPC Number and will automatically assign a new unique numbers to each price line.

Some retail operations wish to be able to assign the same Bar Code to multiple items. For instance, imagine a business that doesn't care about information about specific 4 inch perennial varieties, but only wants to know how many 4 inch perennial plants were sold at the \$3.49 price point. For this purpose the program allows the same UPC Bar Code to be used for multiple items. Using **Auto - allow duplicates**, the program will remind the user prior to saving the entry that the UPC code just entered is a duplicate.

Users currently using a Point of Sale System who already have UPC Bar Code Numbers for their items will typically enter those UPC numbers manually into the Gardenware Program and, obviously, will select **Manual UPC entry.** 

For more detailed information on UPC codes, what they represent and how they're used, please continue to the next pages.

# UPC Bar Codes: An Attempt at a Non-Technical Primer

UPC stands for Uniform Product Code. The assignment of UPC vendor numbers used to be handled by an organization known as the Uniform Code Council. Beginning in 1972 the organization has gone through changes and is now part of an international standards organization. The following description of the changes to that organization are described here from the **Simply Barcodes** website:

http://www.upccode.net/upc-guide/uniform-code-council.html

The Uniform Code Council then merged with EAN International into GS1, Global Standards One. GS1, thereby, effectively became the single worldwide origination point for UPC and EAN numbers (now known as GTIN-12 and GTIN-13, respectively).

On the 7th of June 2005 the UCC become the official GS1 member organization for the United States of America under the new name of GS1 US.

If your company grows or distributes plants that need UPC Bar Coded labels you will need to contact the agency and apply for a **Vendor Number.** Going on-line will probably reveal a number of entities that offer to supply you with a 'legal' or 'official' bar code number. (Such statements make us wonder if there are scammers issuing 'illegal' vendor numbers.) *We would recommend going to the GS1 US web site.* <u>http://barcodes.gs1us.org/dnn\_bcec/Default.aspx</u> There is much more information available as well as an online application initiation form.

### The Anatomy of a UPC Barcode



The leftmost number is generally referred to as a **Classification Number**. The next set of numbers are (normally) the **Vendor Number**. The **Classification and Vendor** numbers are assigned by the supplier of UPC Bar Codes. The number of digits they assign as a vendor number is apparently relative to the number of items an applicant needs to bar code. The number of digits to the right of the vendor number, up to and including the 11th digit is used by the vendor or manufacturer to assign to their individual items. The last number is called a **Check Digit**. It is not an assigned number. The **Check Digit** is a calculated number arrived at by a mathematical manipulation of the first 11 numbers.

You probably know that UPC Bar Codes for the individual products we commonly use are the same everywhere. From Canada through Mexico and beyond, a 12 oz Coca Cola Classic has the same bar code.

Unfortunately, there are no such standards in our industry. A No. 1 Wiltonii Juniper from Monrovia will have a different number than the same item from Hines which is different from Carolina Nurseries which is different from, well, you get the idea. In addition, many good but smaller growers don't even supply products with UPC Bar Codes. (Please tell them about Gardenware – Thanks.)

## Good news for retailers:

In their wisdom, the Uniform Code Council assigned the **Classification Number** of **4** for in-house (individual business) use. No Vendor will be assigned a **Classification Number** of **4**! For retail garden centers this makes it easy to assign a single UPC Bar Code for **all** No. 1 Wiltonii Juniper no matter who delivered them and to deal with them as one item rather than multiple items in their POS System.

When your program was installed, the beginning numbers for each library is set to **4**. We arbitrarily set the second numbers to identify the library. **4-10000** etc indicates the Nursery Library. **4-2000** etc, the Perennial Library, **4-3** etc, the Indoor Plant Library **4-4** the Bedding Plant Library and **4-5** etc, the Other Stuff Library.

You have total freedom to make any changes you like but if you have no specific reason to change, this has worked well for most users. Remember, however that if you are a retail outlet making your own UPC Bar Code Numbers it would be wise to always make the **Classification Number** a **4**.

## UPC Bar Codes and the Point of Sale System

If you are using or plan to use a Point of Sale system, most of them have a **look up** capability so you don't have to re-tag similar items. This means that if you assign a UPC Bar Code to No. 1 Wilton Juniper, you can click on the ones supplied by Hines, Monrovia and any other supplier and the system can look up the UPC Bar Code Number you assigned and the price you assigned to it and scan it just as if it were your label. That means that you use the UPC Bar Code labels furnished by multiple suppliers but only need to track one number per item instead of one number for each supplier of every item. *For most users this makes life with a Point of Sale System much more simple*.

Some users wish to track each item from each supplier. That is certainly an option. For most users, however it is simply another layer of complication. Most of us don't need that. The vendors can tell you very quickly how much of each item you purchased from them and generally do when they are trying to get your order.

### Important note re: Bar Code Numbers in Gardenware - They cannot be edited

After a few of our users experienced major problems with employees 'editing' UPC Bar Code Numbers and creating havoc, we changed the program to make it impossible to edit the Bar Code Number. If a Bar Code Number is entered incorrectly the Price Line may simply be deleted and re-entered. It is a little more work but the integrity of the bar code numbers will not be compromised by accident or misuse.

If you have questions, we'll help if we can.

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