

EAN and UPC Bar Code Symbols

The System

EAN and UPC barcode symbols are the standard type of barcode symbols that are used on all retail products, newspapers, magazines and books. This information sheet deals with the EAN and UPC codes for retail products; newspapers, magazines and books do use the EAN barcode symbol but with a different numbering system (please see our additional information sheets for more details).

The EAN (European Article Number) is a 13 digit number that uniquely identifies a retail product everywhere in the world apart from the USA and Canada. Products being sold in the USA and Canada will need a UPC (Universal Product Code) which uniquely identifies a retail product worldwide.

How to Obtain a Number

In the UK the organisation that administers the EAN system is the 'e' centre. Once you have decided to barcode your products for the retail trade the 'e' centre is the first place you should contact:

Telephone 0207 655 9001

You will need to become a member by completing an application form and paying a joining fee and an annual subscription. They will then issue you with a unique number. This is known as your manufacturer's number and forms the first part of the 13 digit EAN. The first two digits of the number will be 50 which denote the UK as the country where the product is registered.

If you need a UPC your distributor in the USA or Canada may allow you to use one of their numbers, failing this the'e' centre will allocate a UPC to you.

On receiving your unique manufacturer's number you will need to allocate further digits to each product you wish to barcode, making a total of 12 digits in all. Different sizes, weights and colours or any product identified as a separate stock control unit should be numbered separately.

There are no rules for allocating these digits, but the simpler the system the less likely you are to run into problems.

However, the BPI (British Phonograph Industry) has set out the following recommendations for the record industry to use as the last figure before the check digit:

VIDEOS

- 1. DISC-Laser Vision
- 2. Cassette-VHS
- 3. Cassette-V2000 (Phillips)
- 4. Cassette-Betamax
- 6. DISC-CED Capacitance Electronic Disc
- 8. DISC-VHD (Very High Density)

DISCS

- 1. Long Playing Disc
- 2. 4.7" Compact
- 4. Long Playing Cassette
- 6. 12" Single Play Disc
- 7. 7" Single Play Disc
- 0. Others

There are also guidelines for other industries and if you are in doubt as to how to allocate your number then please contact us.

The final figure in this EAN 13 digit code is a check digit which is a mathematical calculation

based on the other digits and we can calculate this for you. We have an additional information sheet which shows how to calculate the check digit yourself should you need to.

Ordering a Film Master

Once you have the EAN you are ready to order a barcode film master. This is a piece of artwork which your printer will strip into the rest of the artwork for your product label or packaging. If your printer or design studio is using a computerised page layout system we can supply the barcode image on disk for incorporation into the on-screen artwork (please call for further details).

There are some details that we need to know for your film master. They are as follows:

Magnification

The nominal size for an EAN13 barcode symbol (known as the 100% magnification) is shown on the sample opposite. Wherever possible it is best to use this magnification and if printing quality is likely to be poor then it is wise to use a larger code.

If space is at a premium then the symbol can be made at 90% or 80% of this nominal size however some retailers including Tesco Plc will not accept any smaller than 90%. Once produced the symbols cannot be either photographically reduced or enlarged and so it is important to let us know the magnification that you require when ordering. (minimum 80%, maximum 200%)

Bar Width Reduction

Ink spread during the printing process will mean that the width of the bars of the printed symbol

will be larger than on the original film master. To compensate for the ink spread a reduction in the width of the bars is incorporated when we produce the film master. This reduction varies for different printing methods and printing surfaces so please let us know which method you will be using.

Film Specification

We can produce films as either positive or negative and with the film emulsion side up or down. Your printer should be able to supply you with these details or we would be happy to contact them on your behalf.

Smaller Codes

The height of the bars should not be truncated unless there is a space problem.

It is possible to be allocated an 8 digit code for a very small item through the ANA. Also, of course, all 'in store' products of own brands at Tescos, Sainsburys, Boots etc. have the smaller 8 digit code.

Please telephone us on the numbers below to discuss any queries or observations you may have. Our experience of more than 15 years in barcoding will simplify what may seem a complicated system. Once your needs have been established ordering from us will become an easy and pleasant routine.

Samples



EAN 13 Barcode at 100% Magnification (37x26mm)) ||||12345||67890|| UPC-A Barcode at 100% Magnification (37x26mm)

