Barcode Verification

Runners Point utilizes three different bar code types:

- UPC-A
- EAN-13
- Interleaved 2 of 5

Understanding ISO/ ANSI

Like most barcode scanners, barcode verifiers read a narrow path through the bar code and convert reflected light into a Scan Reflectance Profile: bars are represented by troughs and spaces are represented by peaks. Barcode verifiers analyze this data to provide information about a bar code’s quality.

The analysis can be either Traditional, or conforms to ISO/ANSI. Runners Point insists on ISO/ANSI compliant verification. The ISO/ANSI standard specifies seven major parameters that should be measured and graded, the average of all seven parameters provides an overall grade for the bar code. In ISO terminology 4 is best, 0 is Fail, in ANSI terminology A is best, F is Fail.

Interpreting Barcode Verification Results

Verifiers assign a single grade that is the average of all the results and scans for a particular bar code. Because the quality of the bar code can differ depending on which part of the code is scanned, the ISO/IEC standard recommends that each bar code being verified should be scanned ten times. Ten Scan Reflectance Profiles are required to determine Overall Grade.
### Overall Grade

<table>
<thead>
<tr>
<th>Grade</th>
<th>What This Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.5 or better (A)</td>
<td>Bar codes which achieve this result should scan easily first time with most scanning equipment. The aim should be to produce codes of this quality whenever the printing processes and materials allow.</td>
</tr>
<tr>
<td>2.5 - 3.5 (B)</td>
<td>Codes of this quality may read after a single scan. If a second scan is required, the probability of success is very high.</td>
</tr>
<tr>
<td>1.5 - 2.5 (C)</td>
<td>This is the minimum quality that most bar codes should achieve. It means that re-scanning might be required to get a successful read. Barcodes with this result will get a final test with the actual scanners used at the item sorter.</td>
</tr>
<tr>
<td>0.5 - 1.5 (D)</td>
<td>Fail: barcodes will be rejected</td>
</tr>
<tr>
<td>0.0 - 0.5 (F)</td>
<td>Fail: barcodes will be rejected</td>
</tr>
</tbody>
</table>

Runners Point requires that barcodes must be grades A or B and must be a minimum of 12 millimeters, unless otherwise approved in writing by Runners Point. For an approval please contact the Supply Chain dept. at the RDC.

The cause of low grades could be caused by one factor, or a combination of problems:

**Defects**

Defects are variations in reflectance of either the bars or the spaces. It is a measure of the ‘noise’ that results from unwanted dips and spikes in the Reflectance Profile. For example, artifacts that have been introduced by the printing process such as dark spots in the spaces or ink voids on the bars.

**Decodability**

Decodability is a measure of how easily distinguishable the different sizes of bars and spaces are in a bar code. The better a bar code is printed, the more easily a scanner can identify bars and spaces, and the higher the grade assigned by the verifier.

Printing errors (or damage) could mean that a narrow bar might be mistaken for a wide bar. For each type of bar code it’s possible to calculate the point at which a bar of one type could be mistaken for another. This is a measure of the bar code’s tolerance. Decodability is the fractional amount of this tolerance remaining.
**UPC and Catalog requirements**

Our company is fully committed to the use of UPC (Universal Product Code). We expect all vendors to assign UPC/EAN numbers, mark all merchandise with UPC/EAN bar codes, utilize UPC on all EDI documents and maintain a third party catalog. Data integrity and quality assurance is critical to Runners Point’s ability to manage its business.

The following requirements apply to all footwear, apparel, accessories and general merchandise product.

- Runners subscribes to SPS Commerce to receive vendor UPC-A / EAN-13
- Vendors are required to provide access to their UPC / EAN’s through this service
- Your UPC catalog on SPS must contain at least the following information:
  - UPC
  - Product Identification, style, color, size, etc.
  - Product Description
- The Uniform Code Council guidelines state that UPC’s are to be retained for 30 months (for fashion merchandise) and 48 months (for basic merchandise) after the last activity before reassigning them to new styles, colors and sizes.
- The technical specifications for the UPC / EAN symbol and number are defined in the UPC Symbol Specification Manual.
- Footwear, apparel and general merchandise should be identified using UPC Version.
- Footwear, apparel and general merchandise should be identified at the lowest product variant level (size/color). Each unique size and color must have a different UPC number.
- UPC is an item identification standard. Standard shipping assortments and other vendor/retailer pre-pack arrangements do not preclude item specific UPC marking requirements.
- The UPC bar code symbol should be a minimum of 12 mm in height, unless otherwise approved in writing by Runners Point B.V. & Co. KG
- The UPC bar code symbol is to be printed with black bars on a white background
- The UPC numerals printed beneath the symbol should be .108” high at nominal size and are to be printed in the 1-5-5-1 format (i.e., 0 12345 67890 5). All twelve (12) of the UPC numerals must be printed including the check digit to enhance accuracy for key-entry purposes where the bar code cannot be scanned.
• Tickets and tags are to be attached in a secure manner. This will ensure that the correct UPC symbol is associated with the product and the adhesive retail price stickers, which may be added, remain securely attached.

• Particular attention should be given to the print quality of the UPC symbol. Scanning characteristics must be verified.

Contacts and Organizations

If you are not EDI capable and need to get started, we recommend you contact our partner organizations:

UPC/EAN Catalog Service SPS Commerce
1450 Energy Park Drive, Suite 127
St. Paul, MN 55108
Telephone: 88-USE WEB EC
webecsupport@spscommerce.com

Barcode Information

Bar Height

*Runners Point requires a minimum barcode height of 12mm*, for EAN/UPC Barcodes it is important to ensure that the height remains in proportion to the size, and does not drop below the minimum specified.

Quiet Zones

The Quiet Zones for linear barcodes are the solid, light areas before the first bar and after the last bar. These areas are extremely important as they allow the scanner to recognize the beginning and end of the barcode. Any obstruction or reduction in the Quiet Zones will most likely result in scanning difficulties.

The minimum size required for the Quiet Zones depends on the size of the barcode. It is recommended to allow slightly more than the minimum required Quiet Zones to allow for any possible ink spread or plate registration issues. *Runners Point requires a quiet zone of at least 10mm.*

Colours

*Runners Point requires a white label with black bars.* The colors and type of ink you choose for your barcodes are important. As a scanner reads a barcode using an infrared light source it sees the symbol differently to the human eye. A barcode with dark bars on a solid light background is essential for successful scanning.
Ticket / Label and Placement Guidelines

Affixing Adhesive Stickers:

**Shoe Boxes:** Stickers should be placed on the lower left or right-hand corner of one end of the box so as not to cover product information. The sticker should not be applied to the box lid except in cases when the lid covers most or all of the box (overlay lid). American size (as ordered on PO) must always be clearly marked on box.

**Flip-Flops / Sandals:** Stickers should be placed on the outer sole.

**Socks:** Affix sticker on the back of the sock band for all banded socks (singles and multiple pairs). Affix sticker in the upper right-hand corner on the back of the packaging for all multi-pack bundles.

**Shoe Care products:** Barcodes may be directly printed on the container, but must pass a scan test.

**Hats:** Affix sticker on the underside of the bill of the hat. If no bill exists, then attach a hang tag through the inside tag or through a seam near the back. Tags are not to be visible when the hat is on display. In case it is packed in a box, the ML sticker should be on top of the box.

**Boxed Accessories:** Affix stickers on the right, front of box.

**Hang Tag Guidelines**
(Includes all hang tags applied to apparel and accessories.)

**Flip-Flops / Sandals**

**Shirts, Tops & Jackets:** Affix to the (size) tag inside the collar (at back of neck) and put the tag inside the garment so it is not visible through the polybag.
**Shorts & Pants:** Affix to the inside (size) tag on the waist (usually back center) and put the tag inside the short so it is not visible through the polybag.

**Head Wear:** Affix a hang tag through the inside tag or through the seam at the back of the item.

**Packs:** (i.e., day packs, backpacks) Affix a hang tag through the seam of the front zipper for day and backpack styles.