



## Metrologic Bar Code Scanners and the Sunrise 2005 Initiative

### Metrologic Scanners Are Sunrise 2005 Compliant

Issued: October 15, 2002  
Updated: November 14, 2003

Dear Metrologic Business Partner:

The Sunrise 2005 Initiative put in place by the Uniform Code Council (UCC) has created some confusion in the Auto ID industry as of late. Much of the confusion stems from an article printed in the August 12, 2002 issue of the *New York Times*. The UCC responded to the article with a letter to the editor and this has cleared up some of the misconceptions surrounding Sunrise 2005. (For reference, this letter is included in Appendix D at the end of this document.) Although the UCC response sufficiently clarifies Sunrise 2005, retailers throughout North America remain concerned and interested in the 'readiness' of their bar code scanners.

This white paper addresses major points surrounding Sunrise 2005, and provides a means for determining whether your Metrologic scanner is ready for Sunrise 2005. The points are as follows:

- The family of bar codes known as GTIN
- The Sunrise 2005 Initiative
- A 'Recommendation' from the UCC
- An emerging bar code symbology called RSS-14

#### 1) Global Trade Item Number (GTIN)

The Global Trade Item Number (GTIN) is the system created by the UCC for uniquely identifying products and services that are sold, delivered, warehoused and billed throughout the retail and commercial distribution channels. These GTIN identifiers are typically found in the form of a bar code that is printed on the product. Presently, there are four bar codes that fall under the GTIN umbrella of bar code symbols. These are as follows:

- UCC-12 (also known as UPC-A or UPC-E)
- UCC-13 (also known as EAN-13)
- EAN/UCC-14
- UCC-8 (also known as EAN-8).

Some of these bar codes are at the core of the Sunrise 2005 initiative that will be addressed in the next section. Examples of each of the GTIN family of bar codes can be found in Appendix A of this document.

#### 2) Sunrise 2005 'Requirement'

Sunrise 2005 is an initiative launched by the UCC as a means for getting retailers in North America to update their databases to allow for the automatic identification of 13-digit bar codes. Some retailers have systems and/or databases that allow for the identification of only UCC-12 bar codes (12-digit UPC-A or 6-digit UPC-E). The UCC set forth a voluntary implementation date of January 1, 2005 for retailers to update their systems to allow for the inclusion of UCC-8 and UCC-13 in identifying products and services.

The NY Times article incorrectly compared this date to the Year 2000 software bug and has caused an unnecessary stir throughout the Auto ID industry. This has prompted many of Metrologic's customers to call and inquire as to whether their Metrologic bar code scanner is Sunrise 2005 compliant. In addition, the Uniform Code Council's web site recommends that retailers call or write the manufacturers of their Auto ID equipment and ask if their device or system is Sunrise 2005 compliant.

When a Metrologic scanner scans and decodes a bar code, it simply transmits all of the characters (or digits) that are contained within the bar code. In addition, all Metrologic scanners can be programmed to transmit (or not transmit) check digits, code identifiers, prefixes, suffixes and number systems of a given bar code symbology. **Metrologic is proud to announce that all of our products are Sunrise 2005 compliant.** For reference, a handy look-up table is included in Appendix C of this document.

### 3) Sunrise 2005 'Recommendation'

The UCC added a statement at the end of their Sunrise 2005 documentation that *recommends* that retailers should take the extra step and expand their database to allow 14 digit bar codes. This additional change will allow the identification of the entire family of GTIN bar codes since EAN/UCC-14 was not included as part of the Sunrise 2005 initiative.

Although it is not a requirement, this has caused some confusion because the EAN/UCC-14 bar code is not commonly seen or used at the point-of-sale and it is mistakenly being equated with RSS-14. The EAN/UCC-14 bar code, although uncommon, is frequently used on shipping cartons/containers **and can be scanned by all Metrologic bar code scanners.** If your database can accept up to 14 digit bar codes, then your Metrologic scanners are ready for the *recommendation*. A problem can arise if your database accepts ONLY 14 digit bar codes. In this scenario, smaller GTIN bar codes such as UPC-E, would need to be expanded to 14 digits. Some older Metrologic products do not have the ability to expand all of the GTIN family of bar codes to 14 digits.

To assist you in determining if your Metrologic scanner is ready for the Sunrise 2005 *Recommendation*; Metrologic has created an easy to use flow chart. This flow chart and accompanied look-up table can be found in Appendices B & C included at the end of this document.

### 4) RSS-14 Reduced Space Symbology – Not Required for Sunrise 2005.

The RSS-14 bar code (Reduced Space Symbology) is an emerging symbology and is not part of the GTIN family of bar codes. Metrologic has received several inquiries as to whether our bar code scanners can scan and decode RSS-14 bar codes. Some of these customers were under the assumption that RSS-14 is included as part of the Sunrise 2005 initiative, and according to the UCC documentation, it is NOT.

Metrologic continues to make improvements to its bar code scanning equipment and recently introduced a software upgrade that allows our most popular scanner line, the MS9500 Voyager Series, to scan and decode the RSS-14 linear bar codes. Software upgrades for other Metrologic products will be available by the end of the year. Products equipped with Flash ROM can simply download the new software and scan these types of bar codes. For your convenience, the table in Appendix C lists all of the Metrologic bar code scanners that can scan RSS-14 bar codes.

For more information regarding Sunrise 2005, the UCC web site ([www.uc-council.org](http://www.uc-council.org)) provides a host of information such as, a 2005 Sunrise Preparation Check List, Understanding General Trade Item Numbers and more. If you have any additional questions regarding your bar code scanner, please contact your Metrologic representative.

Best Regards,



Garrett K. Russell  
Director of Product Marketing, Retail Products  
Metrologic Instruments, Inc.

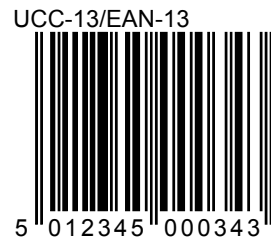
**Appendix A**

**GTIN Family of Bar Codes**

UCC-12 (UPC-A or UPC-E)



UCC-13/EAN-13



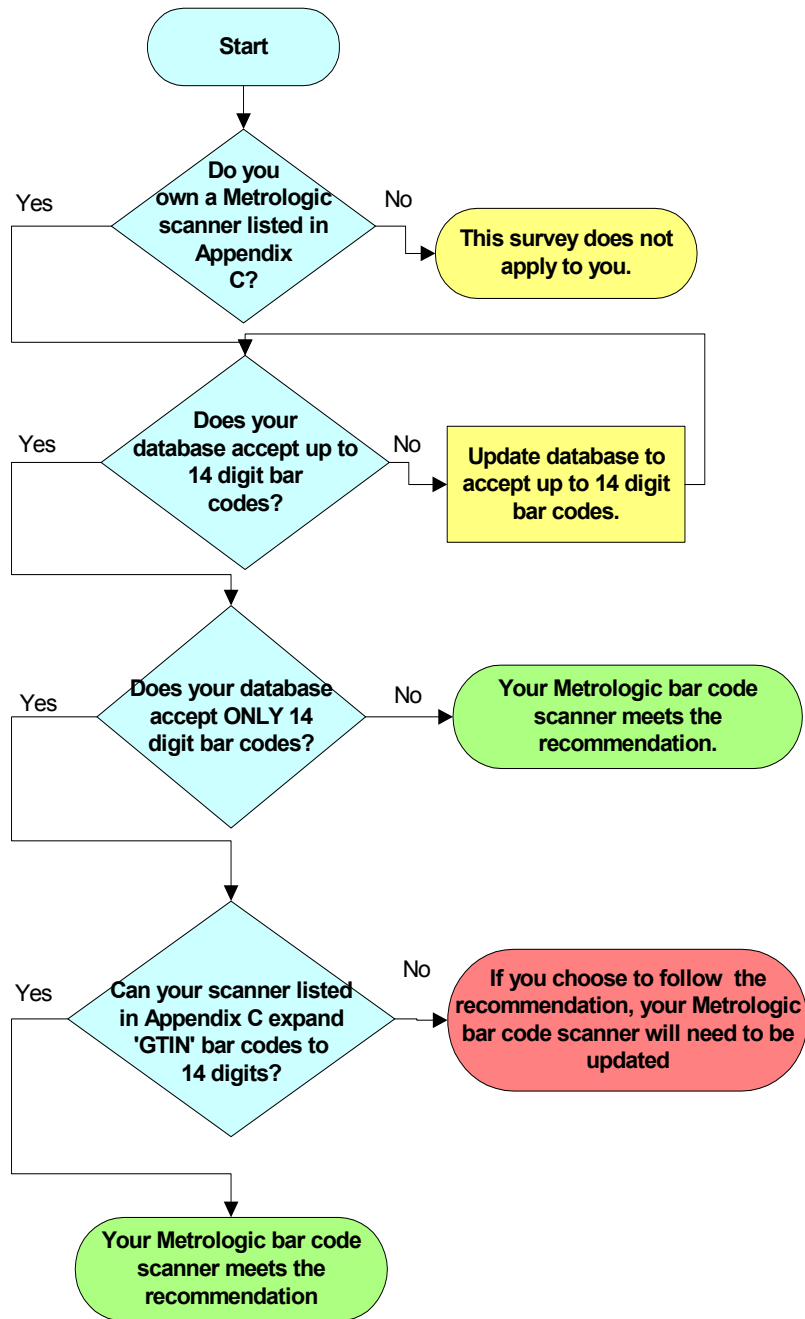
UCC-14/EAN-14



UCC-8/EAN-8



**Appendix B: Is Your Metrologic Scanner Ready for the UCC 14-Digit 'Recommendation'?**



**Appendix C: Scanner Compliance Look-up Table**

Metrologic Scanner	Sunrise 2005 Requirement					Scan UCC-14	Scan RSS-14	Expand GTIN bar codes to 14 digits
	Scan UCC-12 (UPC-A)	Scan UCC-12 (UPC-E)	Scan UCC-8 (EAN-8)	Scan UCC-13 (EAN-13)	Expand GTIN bar codes to 13 digits			
<b>Retail</b>								
MS2020, MS2021, MS2022	√	√	√	√	√	√	√	√
MS9520, MS9535 MS9540, MS9544	√	√	√	√	√	√	√	√
MS5145	√	√	√	√	√	√	√	√
MS7120	√	√	√	√	√	√	√	√
MS6520	√	√	√	√	√	√	√	√
MS7220	√	√	√	√	√	√	√	√
MS7320	√	√	√	√	√	√	√	√
MS7620, MS7625	√	√	√	√	√	√	√	√
MS6220	√	√	√	√	√	√		√
MS6720	√	√	√	√	√	√		***
MS6750	√	√	√	√	√	√	√	√
IS4220	√	√	√	√	√	√		***
<b>OEM</b>								
IS4120	√	√	√	√	√	√		***
IS6520	√	√	√	√	√	√	√	√
IS4610	NA	NA	NA	NA	NA	NA	NA	NA
<b>Industrial</b>								
Tech Series	√	√	√	√	√	√		***
HoloTrak 8000	√	√	√	√	√	√		***
HoloTrak C Series	√	√	√	√	√	√		***
HoloTrak Penta	√	√	√	√	√	√		***
iQ180	√	√	√	√	√	√		***
<b>Discontinued</b>								
MS951	√	√	√	√	√	√		***
MS700i	√	√	√	√	√	√		***
MS860i	√	√	√	√	√	√		***
MS6130	√	√	√	√	√	√		***
IS4230	√	√	√	√	√	√		***

**Legend:**

- √ Indicates that the scanner can perform this function
- NA Indicates a Non-Decode scanner, thus Sunrise 2005 is Not Applicable
- \*\*\* Can expand if scanning ONLY UCC/EAN bar code types, Cannot expand if scanning UCC/EAN and additional Code types.

Box indicates the Sunrise 2005 requirement

## Appendix D: Uniform Code Council's Response to the NY Times Article



To the Editors:

I would like to respond to Kate Murphy's article of August 12<sup>th</sup>, "Bigger Bar Code Inches Up on Retailers." There are some points the article made about the 2005 Sunrise Date that I would like to clarify so readers have a complete and accurate understanding about this important global harmonization initiative.

Since the Universal Product Code (U.P.C.) was developed and introduced in 1974 by the Uniform Code Council (UCC) in the United States, the North American system of product identification has been based on 12-digit data structures. Outside of North America, countries have used 13-digit data structures administered by EAN International. The January 1, 2005 Sunrise was established as a date the UCC would require that retailers, distributors, and manufacturers expand their databases in order to be able to accept EAN bar code symbols with numbers longer than 12 digits in length.

There were several points in the article that need clarification:

- **The U.P.C. is not changing or going away.** The familiar U.P.C. symbol that has become a ubiquitous part of modern commerce will continue to be 12 digits in length and not 13 digits. As a matter of fact, the system of bar code product identification will remain the same. The change, starting on January 1, 2005, is that products marked with EAN-13 symbols can be scanned at retail checkouts across the United States and Canada. Unlike the title of the article implies, the bar code symbols will not change. What will go away, however, is the need for non-North American companies to re-label products marked with EAN symbols with a U.P.C. in order to sell in North America.
- **It's not scanners, it's a database issue.** The vast majority of all scanners currently in use can scan an EAN-13 symbol; therefore, it is incorrectly stated in the article that scanners beyond a certain age will need to be scrapped is incorrect. The 2005 issue, at its core, is about expanding databases so that companies can scan store the 13 digits encoded in an EAN-13 symbol and not just 12 digits. In most cases, scanners can be easily upgraded at little or no expense to scan the 13-digit EAN bar code.
- **Expand now to take advantage of new tools.** By expanding databases to the recommended 14 digits, companies will be able to accept next-generation bar codes like Reduced Space Symbology (which encodes 14 digits) and use all of the standards and symbologies of the global EAN.UCC System.
- **We are not "running out" of numbers.** There is vast capacity in the EAN.UCC System for globally unique item identification far into the future. While the UCC has taken steps to preserve 12-digit capacity by assigning numbers based on the company's product identification needs, there is not an infinite amount of 12-digit numbers. There is a significantly larger pool of 13-digit numbers, and the 2005 harmonization effort will allow the UCC to issue EAN-13 numbers when it becomes necessary to do so.
- **The 2005 Sunrise initiative is not Y2K.** The suggestion that checkout scanners will seize up, computers crash, or entire systems fail after January 1, 2005 is absolutely incorrect. While companies that are not compliant may experience problems scanning the longer EAN-13 symbols, it will not disrupt commerce in North America. Probably the biggest and most visible issue could be the inconvenience to the consumer. The 2005 Sunrise Date is an

important issue; but it is erroneous to make January 1, 2005 a date that will produce panic and widespread disruption to the supply chain.

The Uniform Code Council will continue to work with our member companies in North America to provide education and factual-based information on the realities of the 2005 Sunrise Date. A 2005 Sunrise Date Information Kit is available from the UCC to help companies make a smooth and seamless transition. The kit can be downloaded from the UCC's website at [www.ucc-council.org/2005sunrise](http://www.ucc-council.org/2005sunrise).

We encourage companies to address this issue sooner rather than later and expand their databases to handle 14-digit data structures. These efforts will be a part of a continuing evolution toward a true, globally harmonious system of trade.

Sincerely,

John Terwilliger  
Vice President, Market Development  
Uniform Code Council, Inc.