# Explanation of the version changes - RJS Inspector 5000 Firmware

## The Inspector 5000 firmware 1.202 changes from the previous 1.110:

- Modify bar code find process to increase priority of centered bar codes over 1D or 2D search order selected on the Setup menu
- Corrected bug in Code 93 check digit calculation
- Improved error handling for Code 128 and Code 93 decoders
- During calibration process, removed displayed calibration reflectance values used by the system during calibration

Datamatrix

- Improve bar code location when quiet zones have excessive graphics (including halftones)
- Modify displayed Grading tab parameters for Datamatrix symbols and added functionality to grey out unused parameters
- Set maximum aperture to 60 mil (75mil module size)
- Improve L pattern line determination to support ignoring extraneous pixels adjacent to the L pattern
- Modified Reflectance Margin center pixel calculation

## The Inspector 5000 firmware 1.110 changes from the previous 1.109:

- Allow for AI(30) – variable count to be encoded without the requirement of AI(00), AI(01), or AI(02) at a prefix
- Improve handling of quiet zones for UPC-A with addendums
- Add firmware to handle corner cases

## The Inspector 5000 firmware 1.109 changes from the previous 1.108:

- Integrated GS1 Datamatrix to library and standardized with GS1-128 library
- Corrected communication string header for TP140A/B
- Corrected decode error when a partial scan of a Shipping Container Code occurs
- Removed extraneous <null> characters in Bar/Space printout
- Changed "USS 93" to "Code 93" on Grade tab
- Fixed coloring issues on the Profile tab
- Fixed Auto Optic and CR3 Scanner orientation after backward scan on the Profile tab
- Removed Erase DB Date Range menu item on the Setup tab
- Modified Erase DB menu item to clear entire database on the Setup tab

## The Inspector 5000 firmware 1.108 changes from the previous 1.005 (1.004 through 1.107 not released):

- New Setup option for re-grading for ITF-14 and Code 128
- Show numeric grade for parameters on Grade tab when Metric is selected from the Setup menu

- Implement latest ISO/IEC specification Defects determination.
- Application Compliance history display shows details when the cursor is on the first line
- Added ITF-14 message pop ups
- Change to a special font character to reduce previous the four character message "<F1>" to a single character F1
- Change to a special font character to reduce previous the four character message "<SP>" to a single character Sp
- Corrected Encode tab display issue with EAN-13 bar codes, check digit was displayed twice (once as data and once as the check digit)

## The Inspector 5000 firmware 1.105 changes from the previous 1.008 (1.009 through 1.104 not released):

- When a Code 128 or GS1-128 bar code is scanned, if different type (as compared to the Setup parameter) user is given the option to modify the Setup parameter
- Display Pass/Fail screen after final scan when set to multi-scan (2-10 scan average)
  *For single scan or Continuous scan (CR2/CR3) the Pass/Fail Setup parameter determines if the Pass/Fail screen is displayed*
- Increased Bar/Space count value on Grading tab to 3 digits
- For Pass/Fail parameters, use the Setup value for "Minimum Passing Grade" when calculating the average parameter result
- Changed the calibration instructions and added an end-of-calibration screen
- Changed Application Compliance results to add "W" (warning) in history for narrow bar width
- Added the total number of combined Bars and Spaces to the Grading tab
- Corrected Code 93 bus for "too few characters error" with bar codes encoding 5 or less digits for an issue if last encoded character was a stop character
- Corrected "Intercharacter gap" to use all scans in the averaging for the displayed parameter result
- Corrected Decode and Edge Determination error as part of Reference Decode error
- When scanner is changed, system displays the Grade screen and the Profile is cleared
- Added calibration dates to Status/Instruction screen
- 2D Camera with support for 1D verification only
- Added the ability to log off from the I-5000 web server interface

## The Inspector 5000 firmware 1.008 changes from the previous 1.007:

- Correct erroneous calibration expired messages displayed when in Laser (partial ISO/ANSI) mode

## The Inspector 5000 firmware 1.007 changes from the previous 1.004 (1.005 and 1.006 not released):

- Allow Setup Parameters, Minimum Passing Grade and Minimum Marginal Grade to be within 0.1 of each other
- Bar code inspections when field calibration is expired:
  - Calibration warning after every scan
  - Non-calibrated scans are not saved in Reports
  - Printing options are disabled for non-calibrated scans

## The Inspector 5000 firmware 1.004 changes from the previous 1.003:

- Printer output modified to enable use of the printer feed button on the TP140A printer
- Allow for bar code inspection when field calibration is expired:
  - Pop-up message that inspection results were captured with an out of date calibration
  - Grade tab displays yellow bars around the overall grade results to indicate inspection data may be invalid
  - Prohibit printing of inspection results for inspection results were captured with an out of date calibration
  - Reorganize Setup screen items into logical groups

**The Inspector 5000 firmware 1.003 changes from the previous 1.001 (1.002 not released):**
- Allow for an unnecessary FNC1 character at the end of GS1-128 bar codes
- Add a Setup option "GS1-128 END FNC1" to *allow* or *not allow* an unnecessary FNC1 character at the end of GS1-128 bar codes
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**The Inspector 5000 firmware 1.001 changes from the previous 0.999 (1.000 not released):**
- Optimize ISO15416 (2016) verification library for Defects and Decodability

**The Inspector 5000 firmware 0.999 changes from the previous 0.986:**
- Correct quiet zone rounding issue for ITF-14 symbology
- Updates to the Grading tab
- Updates to verification library for scan averaging
- Automated recovery to resolve back light failure
- Implement requirements for forced calibration of Auto Optic and 2D Scanners

**The Inspector 5000 firmware 0.986 changes from the previous 0.985:**
- Changed detection threshold used to detect CR2/CR3 Laser scanners
- Added support for using the Laser trigger to exit low-power mode - if trigger is held scan mode starts after a small startup delay
- Changed NBW calculator from a popup to a primary screen to be consistent with other sub-screens