## Section E

## Code Formatting

E/D = Enable/Disable
C/DNC = Convert/Do Not Convert
T/DNT UPC-A Check Digit
T/DNT UPC-E Check Digit
EX/DNEX UPC-E to 12 Digits
C/DNC UPC-A to EAN-13
T/DNT Lead Zero on UPC-E
C/DNC EAN-8 to EAN-13
T/DNT UPC-A Number System
T/DNT UPC-A MFR\#
T/DNT UPC-A ITEM\#
T/DNT Codabar Start/Stop Characters
E/DNE CLSI Editing
T/DNT Mod 43 Check Digit on Code 39
T/DNT Mod 10 Check Digit on ITF
T/DNT Code 11 Check Digit
T/DNT MSI Plessey Check Digit
T/DNT Code 39 Stop/Start Characters
T/DNT UK Plessey Check Digit

T/DNT = Transmit/Do Not Transmit
E/DNE = Enable/Do Not Enable

| (E-1) | E/D UK Plessey Special Format | (E-9) |
| :---: | :---: | :---: |
| (E-1) | C/DNC Telepen ${ }^{\text {L }}$ to E | (E-10) |
| (E-2) | T/DNT Matrix 2 of 5 Check Digit | (E-10) |
| (E-2) | E/D Transmit of LRC Calculation | (E-11) |
| (E-3) | Start LRC on Second Byte | (E-11) |
| (E-3) | Start LRC on First Byte | (E-12) |
| (E-4) | E/D Nixdorf ID Characters | (E-12) |
| (E-4) | E/D SANYO ID Characters | (E-12) |
| (E-5) | E/D AIM ID Characters | (E-13) |
| (E-5) | E/D SINEKO Mode | (E-13) |
| (E-6) | T/DNT EAN-13 Check Digit | (E-14) |
| (E-6) | T/DNT NCR Non UPC Characters | (E-14) |
| (E-7) | T/DNT EAN-8 Check Digit | (E-15) |
| (E-7) | E/D SNI Beetle Mode | (E-15) |
| (E-8) | E/D Cipher Lab 1021 IDs | (E-16) |
| (E-8) | E/D Newcode Formatting Mode A | (E-16) |
| (E-9) | E/D Newcode Formatting Mode B | (E-17) |



When this option is chosen, the scanner will transmit the UPC-A check digit.


When this option is chosen, the scanner will not transmit the UPC-A check digit.

Transmit UPC-E Check Digit


When this option is chosen, the scanner will transmit the UPC-E check digit.


When this option is chosen, the scanner will not transmit the UPC-E check digit.


When this option is chosen, the scanner will expand UPC-E to the 12 digit equivalent UPC-A.



When this option is chosen, the scanner will not expand UPC-E to the 12 digit equivalent UPC-A.

## Convert UPC-A to EAN-13



When this option is chosen, the scanner will convert UPC-A to EAN-13 by transmitting a leading zero before the bar code.

## *Do not Convert UPC-A to EAN-13 <br> 

When this option is chosen, the scanner will not convert UPC-A to EAN-13.


When this option is chosen, the scanner will output a zero before each UPC-E bar code.


When this option is chosen, the scanner will not output a zero before each UPC-E bar code.

## Convert EAN-8 to EAN-13



When this option is chosen, the scanner will convert EAN-8 to EAN-13 by transmitting five zeroes before the bar code.

## *Do not Convert EAN-8 to EAN-13



When this option is chosen, the scanner will not convert EAN-8 to EAN-13.


When this option is chosen, the scanner will transmit the UPC-A number system character.


Metrologic strongly discourages the disabling of this feature because duplicate numbers may result in the database when the scanner is programmed not to transmit the UPC-A number system character.
*Transmit UPC-A MFR\#


When this option is chosen, the scanner will transmit a UPC-A manufacturer number.


When this option is chosen, the scanner will not transmit a UPC-A manufacturer number.
*Transmit UPC-A ITEM\#


When this option is chosen, the scanner will transmit a UPC-A Item number.


When this option is chosen, the scanner will not transmit a UPC-A Item number.

Transmit Codabar Start/Stop Characters


When this option is chosen, the scanner will transmit Codabar's start and stop characters before and after each bar code.
*Do Not Transmit Codabar Start/Stop


When this option is chosen, the scanner will not transmit Codabar's start and stop characters before and after each bar code.

## Enable CLSI Editing <br> 

When this option is enabled, the scanner will perform CLSI library type editing before the information is transmitted to the host. This editing only works with 14 digit Codabar type labels.

## *Do Not Enable CLSI Editing <br> 

When this option is chosen, the scanner will not perform CLSI library type editing before the information is transmitted to the host

## Transmit Mod 43 Check Digit on Code 39



When this option is chosen, the scanner will transmit Code 39's Mod 43 check character. This feature works in conjunction with the Mod 43 Check on Code 39 option in Section A. Both must be enabled in order for this feature to work.
*Do Not Transmit Mod 43 Check Digit on Code 39


When this option is chosen, the scanner will not transmit Code 39's Mod 43 check character.

## Transmit Mod 10 Check Digit on ITF <br> 

When this option is chosen, the scanner will transmit the Interleaved 2 of 5 (ITF) mod 10 check character. This feature works in conjunction with the Mod 10 Check on ITF Both must be enabled in order for this feature to work

## *Do Not Transmit Mod 10 Check Digit on ITF <br> 

When this option is chosen, the scanner will not transmit the Interleaved 2 of 5 (ITF) mod 10 check character.

## Transmit Code 11 Check Digit



When this option is chosen, the scanner will transmit Code 11 check characters. This feature works in conjunction with the Enable Code 11 option in Section A. Both must be enabled in order for this feature to work.
*Do Not Transmit Code 11 Check Digit


When this option is chosen, the scanner will not transmit Code 11 check characters.


When this option is chosen, the scanner will transmit MSI Plessey's check digit characters. This feature works in conjunction with the Plessey options in Section A. This option and one or both of the MSI Plessey Mod options must be enabled in order for this feature to work.


When this option is chosen, the scanner will not transmit MSI Plessey's check digit characters.

Transmit Code 39 Stop/Start Characters


When this option is chosen, the scanner will transmit Code 39's start and stop characters before and after each bar code.
*Do not Transmit Code 39 Start/Stop Characters


When this option is chosen, the scanner will not transmit Code 39's start and stop characters before and after each bar code.


When this option is chosen, the scanner will transmit UK Plessey's check digit characters. This feature works in conjunction with the UK Plessey option.


When this option is chosen, the scanner will not transmit UK Plessey's check digit characters.

Enable UK Plessey Special Format


Disable UK Plessey Special Format



Transmit Matrix 2 of 5 Check Digit

*Do not Transmit Matrix 2 of 5 Check Digit


## Enable Transmit of LRC Calculation



When this option is chosen, the scanner will output an LRC (check character) after the bar code. In addition, ETX suffix and STX prefix must be enabled while CR and LF must be disabled.


When this option is chosen, the scanner will not output an LRC (check character) after the bar code.

Start LRC on Second Byte


The Scanner will calculate LRC (check digit) from the second character onwards.
*Start LRC on First Byte


The Scanner will calculate LRC (check digit) from the first character onwards.

## Enable Nixdorf ID Characters <br> 

When this option is enabled, the scanner will transmit the code identifiers before each bar code. Many Siemens/Nixdorf registers require these code identifiers.


When this option is chosen, the scanner will not transmit the code identifiers before each bar code.

## Enable SANYO ID Characters



When this option is chosen, the scanner will transmit code identifiers before each bar code. These identifiers are expected by many Sanyo registers.
*Disable Enable SANYO ID Characters


When this option is chosen, the scanner will not transmit code identifiers before each bar code

## Enable AIM ID Characters <br> 

When this option is chosen, the scanner
will transmit AIM symbology identifiers. Currently, the scanners do not support this feature.
*Disable AIM ID Characters


When this option is chosen, the scanner will not transmit AIM symbology identifiers. Currently, the scanners do not support this feature.

Enable SINEKO Mode

*Disable SINEKO Mode

*Transmit EAN-13 Check Digit


When this option is chosen, the scanner will transmit the EAN-13 check digit.

## Do Not Transmit EAN-13 Check Digit



When this option is chosen, the scanner will not transmit the EAN-13 check digit.

Transmit NCR non UPC Characters

*Do Not Transmit NCR non UPC Characters



When this option is chosen, the scanner will transmit the EAN-8 check digit.


When this option is chosen, the scanner will not transmit the EAN-8 check digit.

Enable SNI Beetle Mode


When this option is enabled, the scanner will transmit the ID characters that SNI Beetle cash register expects.

## *Disable SNI Beetle Mode



When this option is disabled, the scanner will not transmit the ID characters that the SNI Beetle cash register expects.

## Enable Cipher Lab 1021 IDs



Disable Cipher Lab 1021 IDs


Enable Newcode Formatting Mode A

*Disable Newcode Formatting Mode A


Enable Newcode Formatting Mode B

*Disable Enable Newcode Formatting Mode B


## Section F

## Communications

| Enter/Exit Program Mode | (F-1) | Enable Light Pen Communication | (F-2) |
| :--- | :--- | :--- | :--- |
| Recall Defaults | $(\mathrm{F}-1)$ | OCIA Output | (F-3) |
| Enable No Communication Mode | $(\mathrm{F}-1)$ | Multi-Drop Network | (F-3) |
| Enable RS-232 | $(\mathrm{F}-1)$ | Multi-Drop Address (Byte) | (F-3) |
| Enable IBM 4680 Communication | $(\mathrm{F}-2)$ | Load Keyboard Wedge Defaults | (F-3) |
| Enable Keyboard Wedge Emulation | $(\mathrm{F}-2)$ | Load IBM Defaults | (F-4) |
| Enable Stand-Alone Keyboard Scanner | $(\mathrm{F}-2)$ | Load OCIA Defaults | (F-4) |

## Enter/Exit Program Mode <br> 

This bar code should be scanned to enter the program mode. Scan the bar code(s) needed then exit the program mode by scanning bar code again.

Recall Defaults


This bar code should be scanned to go back to the original factory settings when programming the scanner. This bar code will return the scanner to the RS-232 communication protocol.

Enable No Communication Mode


This option should be selected if the scanner will not interface with a host device.

## *Enable RS-232



When this option is enabled, the scanner will work with RS-232 +/-12V serial output.


This option should be selected if communications with an IBM 46XX register is needed. This will enable RS485 communications. Not all scanners support this interface. The correct interface board is required.

## Enable Keyboard Wedge Emulation <br> 

This option should be selected if The scanner will provide keyboard emulation by converting the scanned bar code data to the PC keyboard scan code equivalent.

Enable Stand-Alone Keyboard Scanner


Allows the scanner to be used without an external keyboard present.

## Enable Light Pen Communication



This option should be selected if the scanner will be used in place of a light pen. It will provide light pen emulation of each bar code that is scanned.

## OCIA Output <br> 

This option should be selected if the communications requirement is OCIA (Optically Coupled Interface Adapter). This is a clocked (by the host) serial interface.

## Multi-Drop Network <br> 

This option should be selected if the scanner will provide RS-422 type output for National Semiconductor/CL cash registers. This is a specific format that is only supported when the proper interface is being used.

Multi-Drop Address (Byte)


## Load Keyboard Wedge Defaults <br> 

Scan this first, then select Normal or Stand Alone Mode

Load IBM Defaults



## Section G

## Scanner Operation

> E/D = Enable/Disable
> A/DNA = Activate/Do Not Activate

T/DNT = Transmit/Do Not Transmit
F/DNF = Flash/Do Not Flash

| Scanability ON | (G-1) | 5 Redundant Scans | (G-7) | Beep Before Transmit | (G-15) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Scanability OFF | (G-1) | 6 Redundant Scans | (G-7) | Beep After Transmit | (G-15) |
| Scan Count Mode ON | (G-1) | 7 Redundant Scans | (G-7) | E/D Communications Tim | (G-16) |
| Scan Count Mode OFF | (G-1) | E/D MAJIC | (G-8) | Razzberry Tone on Time O | (G-16) |
| Allw Prg Mode on Pwr up | (G-2) | E/D DTR Scan Disable | (G-8) | No Razzberry Tone on Tim | (G-16) |
| Allw Prg Mode on Pwr Anytime | (G-2) | Extra Same Symbol Check | (G-9) | Three Beeps on Time Out | (G-17) |
| Allw Prg Lbls on Pwr up | (G-2) | Normal Same Symbol Check | (G-9) | No Beeps on Time Out | (G-17) |
| Allw Prg Lbls Anytime | (G-2) | E/D Japan Mode | (G-9) | Normal Tone | (G-17) |
| E/D "DE" Disable Cmmnd | (G-3) | T/DNT NO READ if DC2 Activation | (G-10) | Alternate Tone 1 | (G-17) |
| E/D "FL" Laser Enable Cmmnd | $(\mathrm{G}-3)$ | A/DNA on DC2 Character | (G-10) | Alternate Tone 2 | (G-18) |
| 1 Scan Buffers | (G-4) | Motor on/off using M/O Commands | (G-11) | Alternate Tone 3 | (G-18) |
| 2 Scan Buffers | (G-4) | Enable ZR Type DE Simulation | (G-11) | Alternate Tone 4 | (G-18) |
| 3 Scan Buffers | (G-4) | No ZR Type DE Simulation | (G-11) | Alternate Tone 5 | (G-18) |
| 4 Scan Buffers | (G-4) | F/DNF Green LED if Rescan Allowed | (G-12) | Alternate Tone 6 | (G-19) |
| 5 Scan Buffers | (G-5) | Reverse LED Functions | (G-12) | No Beep | (G-19) |
| 6 Scan Buffers | (G-5) | Normal LED Functions | (G-12) | Always Power Save Mode | (G-19) |
| 7 Scan Buffers | (G-5) | No Green LED During NO READ Xmit | (G-13) | Power Save in 1 Minute | (G-19) |
| 8 Scan Buffers | (G-5) | Green LED During NO READ Xmit | (G-13) | Power Save in 2 Minutes | (G-20) |
| 0 Redundant Scans | (G-6) | Beep on BEL Command | (G-14) | Power Save in 5 Minutes | (G-20) |
| 1 Redundant Scans | (G-6) | Ignore BEL Command | (G-14) | Power Save in 10 Minutes | (G-20) |
| 2 Redundant Scans | (G-6) | Beep Twice on Supps | (G-14) | Power Save in 20 Minutes | (G-20) |
| 3 Redundant Scans | (G-6) | Single Beep on Supps | (G-14) | Power Save in 30 Minutes | (G-21) |
| 4 Redundant Scans | (G-7) | E/D Fast Beep | (G-15) | No Power Save Mode | (G-21) |


| Far Depth of Field | $(G-21)$ |
| :--- | :---: |
| Normal Depth of Field | $(G-21)$ |
| Close Depth of Field | $(G-22)$ |
| Ultra Depth of Field | $(G-22)$ |
| Optimal Depth of Field | $(G-22)$ |
| No Intercharacter Delay | $(G-22)$ |
| 1 msec Intercharacter Delay | $(G-23)$ |
| 10 msec Intercharacter Delay | $(G-23)$ |
| 25 msec Intercharacter Delay | $(G-23)$ |
| Variable Intercharacter Delay | $(G-23)$ |
| Infinite Same Symbol Time Out | $(G-24)$ |
| Same Symbol Time Out 100 msecs | $(G-24)$ |
| Same Symbol Time Out 200 msecs | $(G-24)$ |
| Same Symbol Time Out 500 msecs | $(G-24)$ |
| Same Symbol Time Out 1200 msecs | $(G-25)$ |
| Same Symbol Time Out 2000 msecs | $(G-25)$ |
| No Same Symbol Time Out | $(G-25)$ |
| Variable Same Symbol Time Out | $(G-25)$ |
| Variable Inter-Record Delay | $(G-26)$ |
| Turn Off Laser During Inter-Record Delay | $(G-26)$ |
| Leave Laser on During Inter-Record Delay | $(G-26)$ |
| Variable Communications Time Out | $(G-27)$ |
| Default Communications Time Out (2 secs) | $(G-27)$ |
| Short Comms Time Out (1 sec) | $(G-27)$ |
| Long Comms Time Out (4 secs) | $(G-27)$ |
| Variable Laser Time Out | $(G-28)$ |
| Default Laser Time Out (2 secs) | $(G-28)$ |
| Short Laser Time Out (1 sec) | $(G-28)$ |
| Long Laser Time Out (4 secs) | $(G-28)$ |

## Scanability ON <br> 

When this option is enabled, the scanner will enter scanability test mode. Do not enable this feature unless instructed to do so by a Metrologic representative.


Do not enable this feature unless instructed to do so by a Metrologic representative.

## Scan Count Mode ON



When this option is enabled, the scanner will enter scan count test mode. The firmware number of the scanner will also be transmitted to the host device. Do not enable this feature unless instructed to do so by a Metrologic representative.


Do not enable this feature unless instructed to do so by a Metrologic representative.


Will allow the scanner to enter program mode before any bar codes are scanned.

Allow Program Labels on Power up


Only allows the scanner to be configured if the configuration bar codes are the first bar codes scanned after power up.
*Allow Program Labels Anytime


Allows scanning of configration bar codes anytime.

## Enable "DE" Disable Command <br> 

When this option is enabled, the scanner will stop scanning when it receives an ASCII "D" from the host device. Scanning will resume when the scanner receives an ASCII "E". This feature will only work with RS-232 communication.


When this option is chosen, the scanner will not stop scanning when it receives an ASCII "D" from the host device.

## Enable "FL" Laser Enable Command



When this option is enabled, the laser will turn off when the scanner receives an ASCII "F" from the host device. The laser will turn on when the scanner receives an ASCII " $L$ ". This feature will only work with RS-232 communication.

## *Disable "FL" Laser Enable Command



When this option is chosen, the laser will not turn off when the scanner receives an ASCII "F" from the host device.


When this option is enabled, the scanner will scan continuously if two different labels are in the scan field.


When this option is enabled, the scanner will scan two different labels in the scan field at once. It will not scan the bar code again until the same symbol time out has elapsed.

## 3 Scan Buffers



When this option is enabled, the scanner will scan three different labels in the scan field at once. It will not scan the bar code again until the same symbol time out has elapsed.

## 4 Scan Buffers <br> 

When this option is enabled, the scanner will scan four different labels in the scan field at once. It will not scan the bar code again until the same symbol time out has elapsed.


When this option is enabled, the scanner will scan five different labels in the scan field at once. It will not scan the bar code again until the same symbol time out has elapsed.


When this option is enabled, the scanner will scan six different labels in the scan field at once. It will not scan the bar code again until the same symbol time out has elapsed

## 7 Scan Buffers



When this option is enabled, the scanner will scan seven different labels in the scan field at once. It will not scan the bar code again until the same symbol time out has elapsed.


When this option is enabled, the scanner will scan eight different labels in the scan field at once. It will not scan the bar code again until the same symbol time out has elapsed
*O Redundant Scans


2 Redundant Scans



6 Redundant Scans


7 Redundant Scans

*Enable MAJIC


Metrologic Algorithim for Joining Incomplete bar Codes will allow the scanner to read bar codes that are torn or incontinuous.


*Disable DTR Scan Disable


## Extra Same Symbol Check



## Enable Japan Mode




Forces the scanner to require 2 characters to be different between the bar codes before it recognizes them as different bar codes.
*Disable Japan Mode



Activate on DC2 Character

*Do Not Activate on DC2 Character


G-10

Motor on/off Using M/O Commands



G-11

Flash Green LED if Rescan Allowed


Reverse LED Functions

*Do Not Flash Green LED if Rescan Allowed

*Normal LED Functions


G-12

No Green LED During NO READ Xmit

*Green LED During NO READ Xmit


Beep on BEL Command


When enabled, the scanner will respond to a BEL character sent from the host by beeping. If a number is sent before the BEL character, within 200 ms of the BEL, the scanner will beep that many times. ie if the host sends '4' 'BEL' the scanner will beep 4 times.


## Beep Twice on Supps



The scanner will beep 2 times when a supple ment is scanned.


## Enable Fast Beep <br> 

When this option is selected, the scanner will use the selected tone but shorten the duration of the beep.

## *Disable Fast Beep <br> 

When this option is selected, the scanner will not shorten the beep duration.
*Beep Before Transmit


When this option is chosen, the scanner will beep before each label is transmitted.


When this option is chosen, the scanner will beep after each label is transmitted.

## Enable Communications Time outs <br> 

When this option is enabled, the scanner will time out if it does not transmit its data to the host after two seconds during communication. This is only valid in modes where some type of handshaking is involved.

## *Disable Communications Time outs <br> 

When this option is enabled, the scanner will not time out if it does not transmit its data to the host after two seconds during communica tion. This is only valid in modes where some type of handshaking is involved

## Razzberry Tone on Time Out



When this option is chosen, the scanner will produce an audible razzberry tone when communications have timed out.
*No Razzberry Tone on Time Out


When this option is chosen, the scanner will not produce an audible razzberry tone when communications have timed out.


When this option is chosen, the scanner will beep three times when communications have timed out.

## *Normal Tone



The following beeper tone options are available: Normal, Alt 1, Alt 2, Alt 3, Alt 4, Alt 5, Alt 6 and No Beep. When no No Beep is chosen, the scanner will not emit an audible beep.

Alternate Tone 1


The following beeper tone options are available: Normal, Alt 1, Alt 2, Alt 3, Alt 4, Alt 5, Alt 6 and No Beep. When no No Beep is chosen, the scanner will not emit an audible beep.

## Alternate Tone 2 <br> 

The following beeper tone options are available: Normal, Alt 1, Alt 2, Alt 3, Alt 4, Alt 5, Alt 6 and No Beep. When no No Beep is chosen, the scanner will not emit an audible beep.

## Alternate Tone 3 <br> 

The following beeper tone options are available: Normal, Alt 1, Alt 2, Alt 3, Alt 4, Alt 5, Alt 6 and No Beep. When no No Beep is chosen, the scanner will not emit an audible beep.

## Alternate Tone 4



The following beeper tone options are available: Normal, Alt 1, Alt 2, Alt 3, Alt 4, Alt 5, Alt 6 and No Beep. When no No Beep is chosen, the scanner will not emit an audible beep.

## Alternate Tone 5



The following beeper tone options are available: Normal, Alt 1, Alt 2, Alt 3, Alt 4, Alt 5, Alt 6 and No Beep. When no No Beep is chosen, the scanner will not emit an audible beep.

## Alternate Tone 6 <br> 

The following beeper tone options are available: Normal, Alt 1, Alt 2, Alt 3, Alt 4, Alt 5, Alt 6 and No Beep. When no No Beep is chosen, the scanner will not emit an audible beep


The following beeper tone options are available: Normal, Alt 1, Alt 2, Alt 3, Alt 4, Alt 5, Alt 6 and No Beep. When no No Beep is chosen, the scanner will not emit an audible beep

## Always Power Save Mode



The scanner will enter power save mode immediately after scanning a bar code.

Power Save in 1 Minute


The scanner will enter power save mode
1 minute after scanning a bar code.


The scanner will enter power save mode 2 minutes after scanning a bar code.


The scanner will enter power save mode 5 minutes after scanning a bar code.

## *Power Save in 10 Minutes



The scanner will enter power save mode 10 minutes after scanning a bar code.

## Power Save in 20 Minutes



The scanner will enter power save mode 20 minutes after scanning a bar code.


The scanner will enter power save mode 30 minutes after scanning a bar code.


The scanner will never enter power save mode (power save mode disabled).

## Far Depth of Field



Do not change this setting unless instructed to do so by a Metrologic representative.


Do not change this setting unless instructed to do so by a Metrologic representative.


Do not change this setting unless instructed to do so by a Metrologic representative.


Do not change this setting unless instructed to do so by a Metrologic representative.
*Optimal Low Density Depth of Field


Do not change this setting unless instructed to do so by a Metrologic representative.

## No Intercharacter Delay <br> 

*1 msec Intercharacter Delay


25 msec Intercharacter Delay


Variable Intercharacter Delay


The delay between characters being sent out of the scanner can be set in 1 millisecond increments by scanning this bar code and followed by the sequence of code bytes in section $M$ that range from 001 to 255 milliseconds.


When this option is selected, the scanner never scans the same bar code repetitively during a scanning session. This option overrides all of the same symbol rescan time outs.

## Same Symbol Time Out 100 msecs <br> 

The available same symbol time outs are 100 , 200, 500, 1200 and 2000 milliseconds. These numbers represent the amount of time that a bar code must be out of the scan field before that bar code can be scanned again.

## Same Symbol Time Out 200 msecs



The available same symbol time outs are 100 , $200,500,1200$ and 2000 milliseconds. These numbers represent the amount of time that a bar code must be out of the scan field before that bar code can be scanned again.


The available same symbol time outs are 100 200, 500, 1200 and 2000 milliseconds. These numbers represent the amount of time that a bar code must be out of the scan field before that bar code can be scanned again.

## Same Symbol Time Out 1200 msecs <br> 

The available same symbol time outs are 100, $200,500,1200$ and 2000 milliseconds. These numbers represent the amount of time that a bar code must be out of the scan field before that bar code can be scanned again.

## Same Symbol Time Out 2000 msecs <br> 

The available same symbol time outs are 100 , $200,500,1200$ and 2000 milliseconds. These numbers represent the amount of time that a bar code must be out of the scan field before that bar code can be scanned again.

No Same Symbol Time Out


When this option is selected, the same bar code is scanned again without any time delay. This option overrides any selected same symbol rescan time out option.

(refer to Intercharcter Delay) The time the scanner will wait for a response from the host; mutiple of 50 msecs.

## Variable Inter-Record Delay


*Leave Laser on During Inter-Record Delay


Turn Off Laser During Inter-Record Delay


Variable Communications Time Out



Default Communications Time Out (2 secs)

Short Comms Time Out (1 sec)


Long Comms Time Out (4 secs)



Short Laser Time Out (1 sec)


Long Laser Time Out (4 secs)


## Section H

## RS-232

Enable RS-232 Mode
No Parity
Odd Parity
Space Parity
Even Parity
Mark Parity
115200 Baud Rate
57600 Baud Rate
38400 Baud Rate 19200 Baud Rate
14400 Baud Rate
9600 Baud Rate
4800 Baud Rate 2400 Baud Rate 1200 Baud Rate 600 Baud Rate

E/D = Enable/Disable

| ( $\mathrm{H}-1$ ) | 300 Baud Rate | ( $\mathrm{H}-5$ ) |
| :---: | :---: | :---: |
| ( $\mathrm{H}-1$ ) | 8 Data Bits | (H-5) |
| ( $\mathrm{H}-1$ ) | 7 Data Bits | ( $\mathrm{H}-5$ ) |
| ( $\mathrm{H}-1$ ) | 1 Stop Bit | ( $\mathrm{H}-5$ ) |
| ( $\mathrm{H}-2$ ) | 2 Stop Bits | ( $\mathrm{H}-6$ ) |
| ( $\mathrm{H}-2)$ | E/D DTR Support | ( $\mathrm{H}-6$ ) |
| ( $\mathrm{H}-2)$ | E/D RTS/CTS Handshaking | ( $\mathrm{H}-7$ ) |
| ( $\mathrm{H}-2)$ | Character RTS/CTS | (H-7) |
| ( $\mathrm{H}-3$ ) | Message RTS/CTS | ( $\mathrm{H}-7$ ) |
| ( $\mathrm{H}-3$ ) | E/D RTS Counter Toggle | ( $\mathrm{H}-8$ ) |
| ( $\mathrm{H}-3$ ) | E/D XON/XOFF Handshaking | ( $\mathrm{H}-8$ ) |
| ( $\mathrm{H}-3$ ) | E/D ACK/NACK | ( $\mathrm{H}-9$ ) |
| ( $\mathrm{H}-4$ ) | Support BEL/CAN in ACK/NAK | ( $\mathrm{H}-9$ ) |
| ( $\mathrm{H}-4$ ) | Ignore BEL/CAN in ACK/NAK | ( $\mathrm{H}-9$ ) |
| ( $\mathrm{H}-4$ ) | E/D 5 Retires on ACK/NACK Time Out | ( $\mathrm{H}-10$ ) |
| ( $\mathrm{H}-4$ ) | E/D French PC Term | ( $\mathrm{H}-10$ ) |



When this option is enabled, the scanner will work with RS-232 +-12V serial output.


## Odd Parity



Parity is an extra bit attached to the transmitted data byte which is used to catch potential single-bit data transmission errors. The scanner's parity must match the host's parity. Select odd to make the additional parity bit either a 0 or 1 to guarantee that an odd number of bits are ones.

## *Space Parity



Parity is an extra bit attached to the transmitted data byte which is used to catch potential single-bit data transmission errors. The scanner's parity must match the host's parity. Select space to make the parity bit always 0 .

## Even Parity <br> 

The scanner's parity must match the host's parity. Select even to make the additional parity bit either a 0 or 1 to guarantee that an even number of bits are ones.

## Mark Parity <br> 

Parity is an extra bit attached to the transmitted data byte which is used to catch potential single-bit data transmission errors. The scanner's parity must match the host's parity. Select mark to make the parity bit always 1 .

115200 Baud Rate


A baud rate is a unit that measures the speed with which information is transferred. The baud rate of the scanner must equal the baud rate of the host device. Select the rate that matches the host device's requirements.

## 57600 Baud Rate <br> 

A baud rate is a unit that measures the speed with which information is transferred. The baud rate of the scanner must equal the baud rate of the host device. Select the rate that matches the host device's requirements.


A baud rate is a unit that measures the speed with which information is transferred. The baud rate of the scanner must equal the baud rate of the host device. Select the rate that matches the host device's requirements.


A baud rate is a unit that measures the speed with which information is transferred. The baud rate of the scanner must equal the baud rate of the host device. Select the rate that matches the host device's requirements.

## 14400 Baud Rate



A baud rate is a unit that measures the speed with which information is transferred. The baud rate of the scanner must equal the baud rate of the host device. Select the rate that matches the host device's requirements.
*9600 Baud Rate


A baud rate is a unit that measures the speed with which information is transferred. The baud rate of the scanner must equal the baud rate of the host device. Select the rate that matches the host device's requirements.

## 4800 Baud Rate <br> 

A baud rate is a unit that measures the speed with which information is transferred. The baud rate of the scanner must equal the baud rate of the host device. Select the rate that matches the host device's requirements.


A baud rate is a unit that measures the speed with which information is transferred. The baud rate of the scanner must equal the baud rate of the host device. Select the rate that matches the host device's requirements

1200 Baud Rate


A baud rate is a unit that measures the speed with which information is transferred. The baud rate of the scanner must equal the baud rate of the host device. Select the rate that matches the host device's requirements.

600 Baud Rate


A baud rate is a unit that measures the speed with which information is transferred. The baud rate of the scanner must equal the baud rate of the host device. Select the rate that matches the host device's requirements.

## 300 Baud Rate <br> 

A baud rate is a unit that measures the speed with which information is transferred.
The baud rate of the scanner must equal the baud rate of the host device. Select the rate that matches the host device's requirements


Number of data bits transmitted for each character
*7 Data Bits


Number of data bits transmitted for each character.


Number of stop bits transmitted with each character.
*2 Stop Bits


Number of stop bits transmitted with each character.

Enable DTR Support


When this option is enabled, the scanner will stop scanning when the Data Terminal Ready (DTR) signal goes inactive.


When this option is chosen, the scanner will not stop scanning when the Data Terminal Ready (DTR) signal goes inactive.

## Enable RTS/CTS Handshaking <br> 

When this option is enabled, the scanner will output a Request To Send (RTS) signal and wait for a Clear To Send (CTS) signal before any data is transmitted.

## *Disable RTS/CTS Handshaking <br> 

When this option is chosen, the scanner will not output a Request To Send (RTS) signal and wait for a Clear Io Send (CTS) signal before any data is transmitted
*Character RTS/CTS


When this option is chosen, the scanner will activate and deactivate its RTS signal on each character that it transmits.
essage RTS/CTS


When this option is chosen, the scanner will activate and deactivate its RTS signal on each message that it transmits. This mode should normally be enabled for Sanyo registers.

## Enable RTS Counter Toggle



On a good decode, the scanner will toggle the RTS line.


Enable XON/XOFF Handshaking


When this option is enabled, the scanner will stop transmission whenever an XOFF (ASCII 13 H ) is received. Transmission will resume after an XON (ASCII 11H) is received.

## *Disable XON/XOFF Handshaking <br> 

When this option is chosen, the scanner will not stop transmission whenever an XOFF (ASCII 13H) is received

## Enable ACK/NACK



When ACK/NAK is enabled, the scanner will not scan again unless an ACK (ASCII 06H) is received after transmission of a bar code. If a NAK (ASCII 15H) is received, the scanner will retransmit the bar code.


When this option is chosen, ACK/NAK handshaking will not occur.

Support BEL/CAN in ACK/NAK


The scanner will support BEL/CAN commands while using ACK/NAK handshaking (ACK/NAK handshaking must also be enabled).
*Ignore BEL/CAN in ACK/NAK


## Enable 5 Retires on ACK/NACK Time Out <br> 

When this option is enabled, the scanner will transmit five times when an ACK/NAK communication time-out is reached.


When this option is enabled, the scanner will transmit one time when an ACK/NAK communication time-out is reached.

Enable French PC Term


When this option is enabled, the scanner will transmit PC type make/break scan codes instead of ASCII data characters.
*Disable French PC Term


When this option is disabled, the scanner will not transmit PC type make/break scan codes instead of ASCII data characters.

