



BF48 SERIES

BF48

Flash turbo, Heavy duty & Elegant

BF481 Long Range CCD

BF482 Laser scanner

User's Manual Scanner Settings



Scanner Setting

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1. Scanner setting Installation

Please follow the Installation procedure:

Access to CD ROM, under the CD ROM directory: "Scanner Setting Software\Tools\Scanner setting"

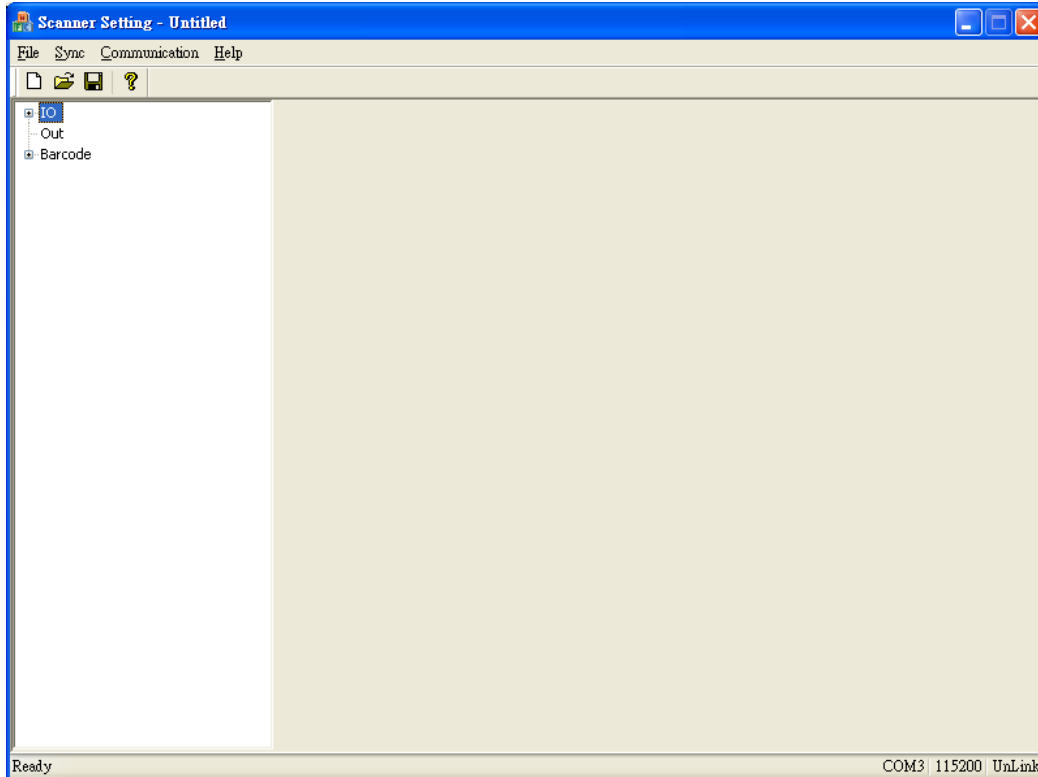
Copy the "Scanner setting" Folder to computer. For example: copy to desktop



2. How to start Scanner setting

Access to the folder where user had previously installed:

1. Execute "Common.exe" in "Scanner setting" Folder.
2. Please refer to the picture below:

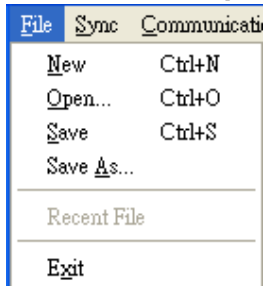


Note: Before executing the software for scanner configuration, the scanner must scan the "Enter" and "ISP" barcodes to activate the configuration mode (**please refer to Appendix 3**). After scan the barcodes, wait for few seconds for LED to change to flashing green color.

By this procedure, this means the scanner is in configuration mode, and the user is able to configure the scanner by "Scanner setting" software.

3. Scanner setting Menu Options

3.1 File menu options



New: Create a new file .

Open: Open existing file .

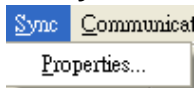
Save: Saving files. When saving files, the system will save the configuration file with the extension of “.dat”.

Save As: Save as another file.

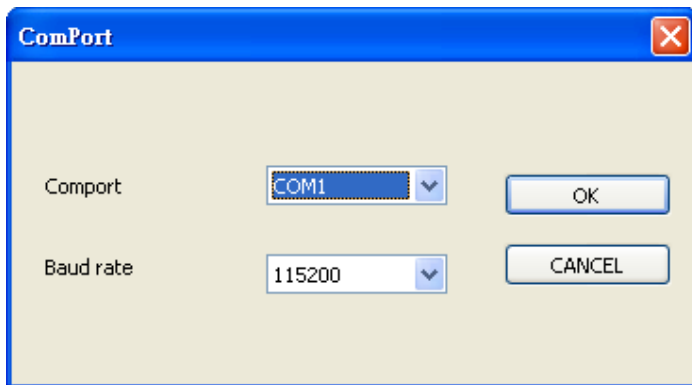
Recent file: record of recent opened file.

Exit: Software termination.

3.2 Sync menu options



Properties: select this option will show the communication setting window as below.

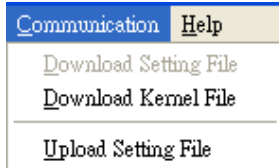


Comport: Selection of COM port for file transmission.

Baud rate: The file transmission speed rate setting.

Note: For “How to know COM port selection”, please refer to **appendix 3**

3.3 Communication menu options



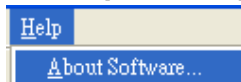
Download Setting File: Download Setting File from PC to Scanner

Download kernel File:Download Kernel File from PC to SCANNER

Upload Setting File: Upload Setting File from SCANNER to PC

Note: If connection failure. Please refer to Appendix 1 for synchronization troubleshooting information.

3.4 Help menu option



About Software: Information of Scanner setting software version

3.5 Toolbar



New: Creates a new file.

Open: Open existing file.

Save: Saving the file.

About: Information of Scanner setting software version.

3.6 Status Bar

Status bar enables the user to notify the connection status.

When connection is not connected, the status is indicated as “UnLink”.

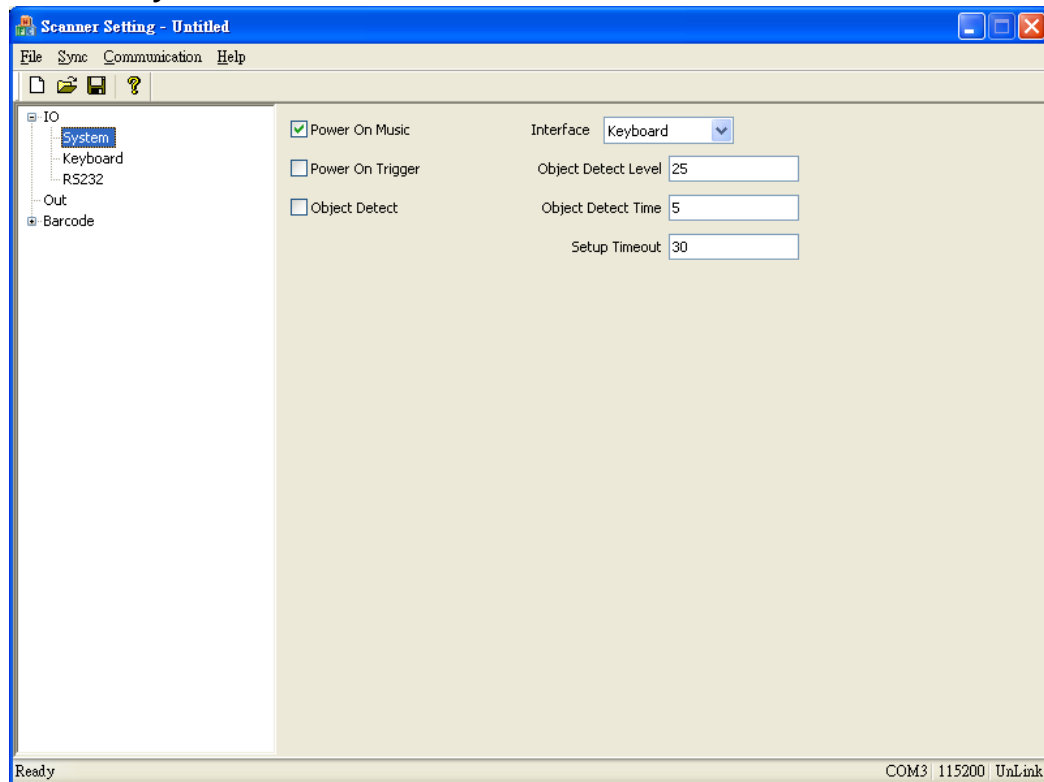


When connection is connected, the status is indicated as “Link”.



4. Scanner setting functions

4.1 "IO \ System"



Power On Music: Enable this function will activate the music when the power is on.

Power On Trigger: Enable this function will activate the LED light source without trigger.

Object Detect: This is auto sensor function. So even the LED is off, but when object or barcode under the scan range, it will be auto LED on and scan barcode by set Enable.

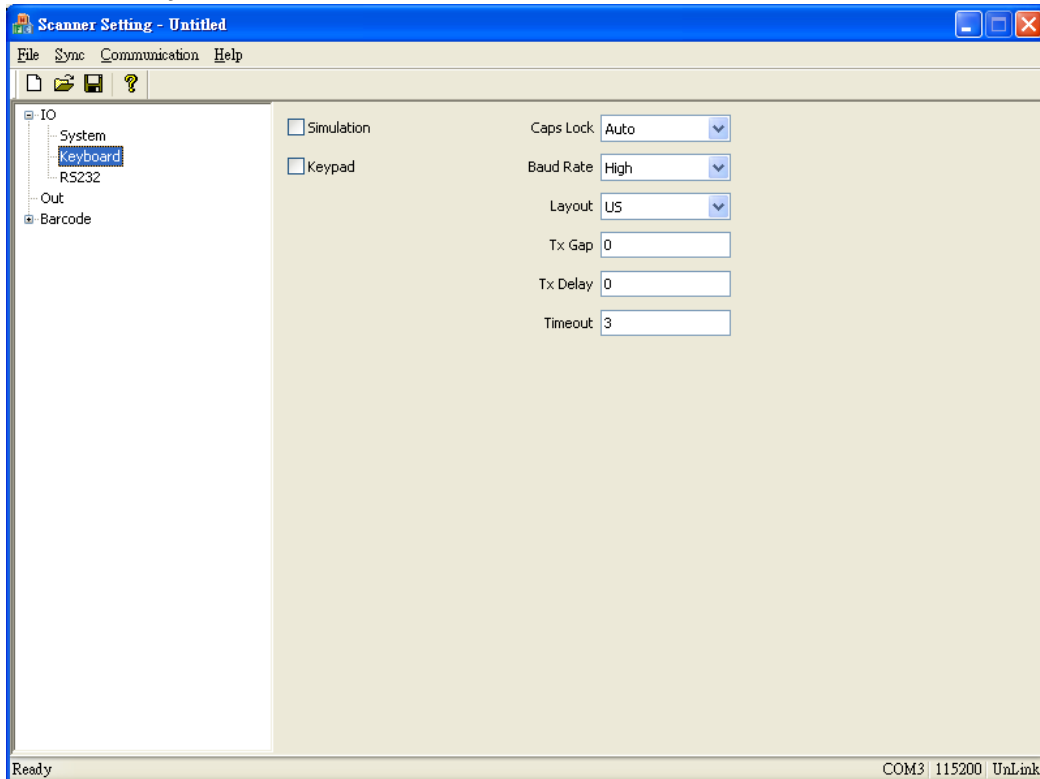
Interface(Keyboard,RS232): Cable interface selection, **Default: Keyboard**

Object Detect Level: It is the function of auto detection. You can set up the level of detection sensitivity you want

Object Detect Time: It can adjust the Count for auto detection Count

Setup Timeout: this function enables to set the duration of the configuration time. If the user does not perform any actions after entering the setting mode, the setting mode will automatically exit.
(Unit:1sec) (Range:0-255,Default:30).

4.2 "IO \ Keyboard"



Simulation: The PC usually checks the keyboard status during power on. It is recommended to Enable this function if the user working without keyboard installation. It simulates keyboard timing and passes the current keyboard status to pc during power on.

Keypad: The settings of the numeric keypad, the keypad must be selected if the application program only accepts numeric keypad. (The right hand side of the numeric keys on the keyboard, and "NumLock" control key must be on.)

Caps Lock: The options of Caps lock

Auto: This option enables the scanner to detect the current status of keyboard Caps lock and display the barcode data.

Alt + Keypad: If this option is selected, Caps Lock and output will be independent. Please refer to the ASCII code table.

Caps Lock Off: This option enables the barcode data in lowercase when the keyboard is not installed in the PC/ Terminal.

Caps Lock On: This option enables the barcode data in uppercase when the keyboard is not attached with the PC/ Terminal.

Example Barcode "ABCdef"

Status Selection	Caps Lock On	Caps Lock Off
Auto	ABCdef	ABCdef
Alt+Keypad	ABCdef	ABCdef
Caps Lock Off	abcDEF	ABCdef
Caps Lock On	ABCdef	abcDEF

Baud Rate(Low, Middle, High): Baud rate setting, **Default: High.**

Layout (US, UK, JP, FR, GR, IT, SP, Po): The options enable the user to specify the language to match with computer keyboard layout.
Default: US.

US: USA

UK: UK

JP: Japan

FR: France

GR: Germany

IT: Italian

SP: Spanish

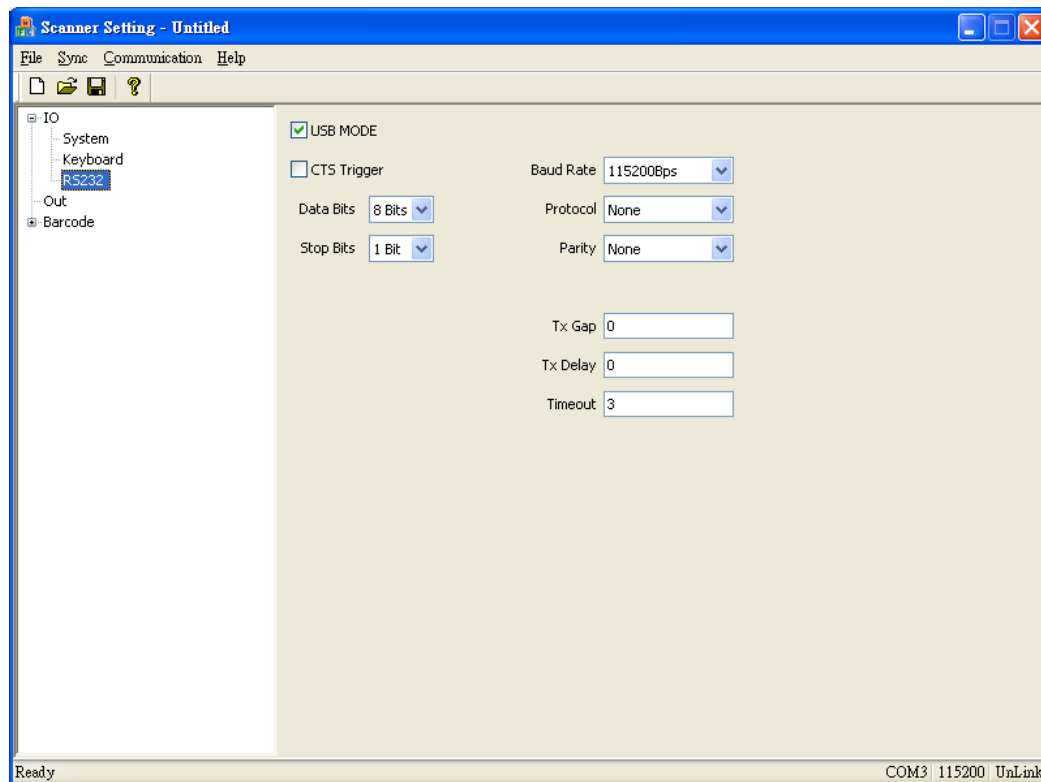
Po: Portuguese

Tx Gap: The delay time settings between each barcode data characters transmission. If the transmission delay time setting is too high, the application program may not be able to receive all the barcode data characters. (Unit:1ms) (Range:0-255,Default:0)

Tx Delay: The delay time settings between the barcode data output, this enables the user to set the output timing between each barcode data scanned. (Unit:10ms) (Range:0-255,Default:0).

Timeout: the timeout setting for the handshaking acknowledgment from the host PC. If scanner did not receive acknowledgement from the host PC, the warning sound will be active. The function is particular useful for some application which the host PC will take longer response time. (Unit:1sec) (Range:0-255,Default:3).

4.3 “IO\RS232”



USB MODE: If the scanner is in USB virtual COM interface, this option must be selected. (**USB MODE enable**), otherwise, the data will not be output to the PC.

CTS Trigger: this option enables an external device to control scanning. The CTS trigger is controlled by applying an external trigger signal to the CTS input, this option is only available when the trigger mode is set to “Mementary”.

Data Bits (7 Bits, 8 Bits): Default: 8 Bits

Stop Bits (1 Bit, 2 Bits): Default: 1Bit

Baud Rate: Default: 115200Bps

Protocol (None, RTS/CTS, CTS/RTS, Scanner Ready, Data Ready, XON/XOFF): Default: None

Parity (None, Odd, Even, Mark, Space): Default: None

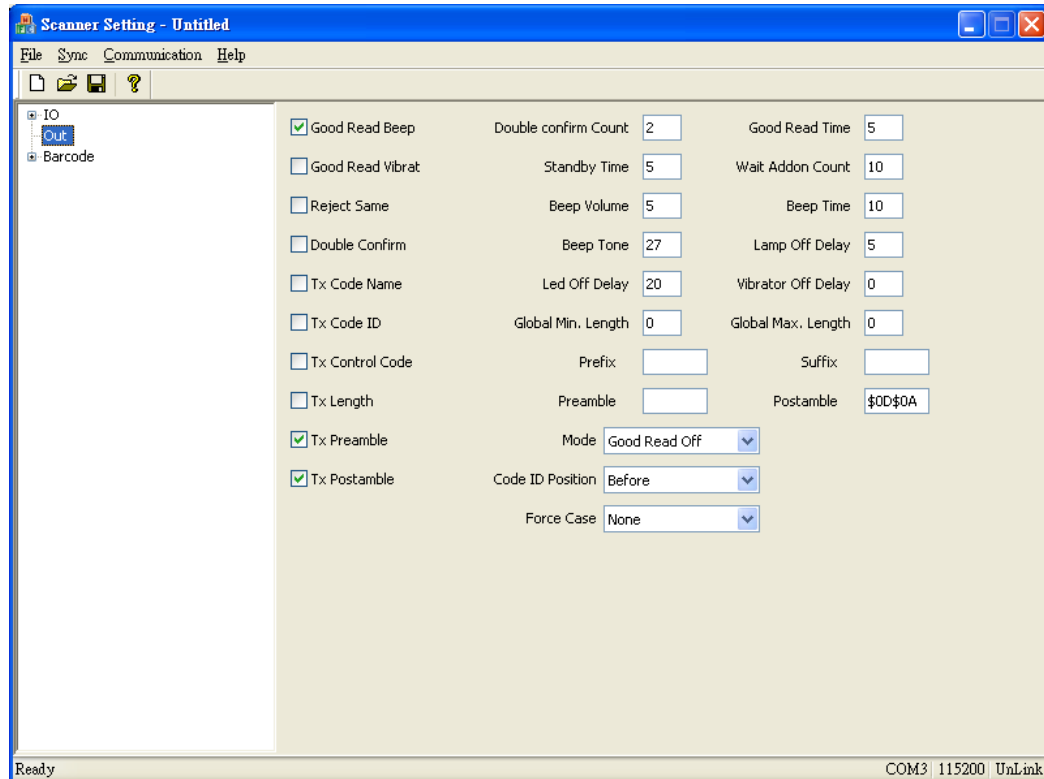
Tx Gap: The delay time settings between each barcode data characters transmission. If the transmission delay time setting is too high, the application program may not be able to receive all the barcode data characters. (Unit:1ms) (Range:0-255,Default:0)

Tx Delay: The delay timing settings between the barcode data output, this enables the user to set the output timing between each barcode data scanned. (Unit:10ms) (Range:0-255,Default:0)..

Timeout: the timeout setting for the handshaking acknowledgment from the host PC. If scanner did not receive acknowledgement from the host PC, the warning sound will be active. The function is particular useful for some application which the host PC will take longer response time. (Unit:1sec) (Range:0-255,Default:3).

Note: If “**USB MODE**” option is enable, it does not support **Protocol** setting.

4.4 Out



Good Read Beep: This option enables the Beep sound when the barcode data is successfully read.

Good Read Vibrator: This option enables the vibration when the barcode data is successfully read.

Reject Same: The option enables to reject the same barcode data scanned; this option is only available when the trigger mode is set to “Continue” and “Timeout off”.

Double Confirm: This option enables the scanner to double confirm the barcode data, if this option is enabled, the scanner will require more times of successful decoding to confirm the barcode data. This setting will refer to the double confirm count, the more confirm counts will inhibit miss-reading barcodes.

Tx Code Name: This option enables to show the barcode symbologies before the barcode data.

Tx Code Id: This option enables to show the barcode ID before or after the barcode data.

Tx Control Code: This option enables to send out the control code when some certain barcode has encoded control code within.

Tx length: This option enables to indicate the barcode length in front of barcode data.

Tx Preamble: This Option enables to append characters before the barcode data.

Tx Postamble: This Option enables to append characters after the barcode data.

Double Confirm Count: This enables the user to configure the double confirm count, selecting higher value will affect the decoding speed. (Range:1-10,Default:2)

Good read Time: This enables to set the scanning duration time for the same barcode, this function only available when the trigger mode is set in “**Continue**”, “**Momentary**” and “**Alternate**” mode.
(Unit:100ms) (Range:0-255,Default:5).

Standby Time: When the light source turns off, this function enables to set the time to turn off the main power of the scanner. (Unit:1sec)
(Range:0-255,Default:5).

Wait Addon Count: This setting is used for WPC add-on code, such as UPCA, UPCE, EAN13 and EAN8. The WPC code must be decoded first, then Add-on code. Add-on code may not be decoded with WPC at the same time. Therefore, you can set wait add-on count to force the add-on code must be output with WPC code together.
If the Wait Add-on Count is set as “0”, the barcode data will only be output with add-on code. (Range:0-99,Default:10)

Beep Volume: This enables to set the volume of the Beep sound(Range:1-10,Default:10)

Beep Time: This enables to set the duration of the beep sound. Default: 10 ms. (Range:0-99,Default:10).

Beep Tone: This enables to set the frequency of beep sound, (Unit:100Hz)
(Range:1-50,Default:27)..

Lamp Off Delay: This enables to set the duration time of laser beam power on, the laser beam will automatically turn off if barcode label not scanned. This setting is only available when the trigger mode is set as “**good read off**” or “**Timeout Off**” (Unit:1sec) (Range:0-255,Default:5).

Led Off Delay: This enables to set the LED indicator flashing time, (Unit:10ms)
(Range:0-255,Default:20).

Vibrator Off Delay: This enables to set the duration time of vibrator,
(Unit:10ms) (Range:0-255,Default:10)

Global Min. Length: this function enables to set the minimum barcode length, if the barcode data is less than minimum length, the barcode will not be decoded. (Range:0-64,Default:0)

Global Max. Length: This function enables to set the maximum barcode length, if the barcode data is greater than maximum length, the barcode will not be decoded. (Range:0-64,Default:0)

Note: the **Global Min and Max length setting only applicable in fixed barcode length type symbologies, for example, Code39, Code 128, Code 93, Interleaved 2 of 5 and etc.**

Preamble: This function enables to append the characters before the barcode data transmitted.

Postamble: This function enables to append the characters after the barcode data transmitted.

Prefix: Up to 10 characters can be programmed for prefix data. The prefix data will be place after preamble data and before the barcode data.

Suffix: Up to 10 characters can be programmed for suffix data. The Suffix data will be place before postamble data and after the barcode data.

Mode: This option enables to set the scanning trigger mode, **default:** “**Good Read Off**”

Test: This option enables the scanner to keep reading continuously, and same barcode reading is allowed without double confirm. The feature can test the scanning performance and sensitivity.
(Diagnostic mode)

Continue: This option enables the scanner to read the barcode continuously without triggering.

Good Read Off: Triggering to activate scanning, the light source of scanner stops scanning when the barcode is successfully read, or no barcode is read after the “**Lamp Off Delay**” duration time elapsed.

Timeout Off: Triggering to activate scanning, and scanner stops scanning when no barcode is read after the “**Lamp Off Delay**” duration time elapsed.

Momentary: The trigger acts as a switch. Triggering to activate scanning and release to stop scanning.

Alternate: The trigger acts as a toggle switch, triggering to activate or stop scanning

Code ID Position: the option enables to set the position of Code ID. **Default:** “**Before**”.

Before: Barcode ID append before the barcode data

After: Barcode ID append after the barcode data.

Force Case: The option enables to set the case conversion **Default:** “**None**”

None: No case conversion

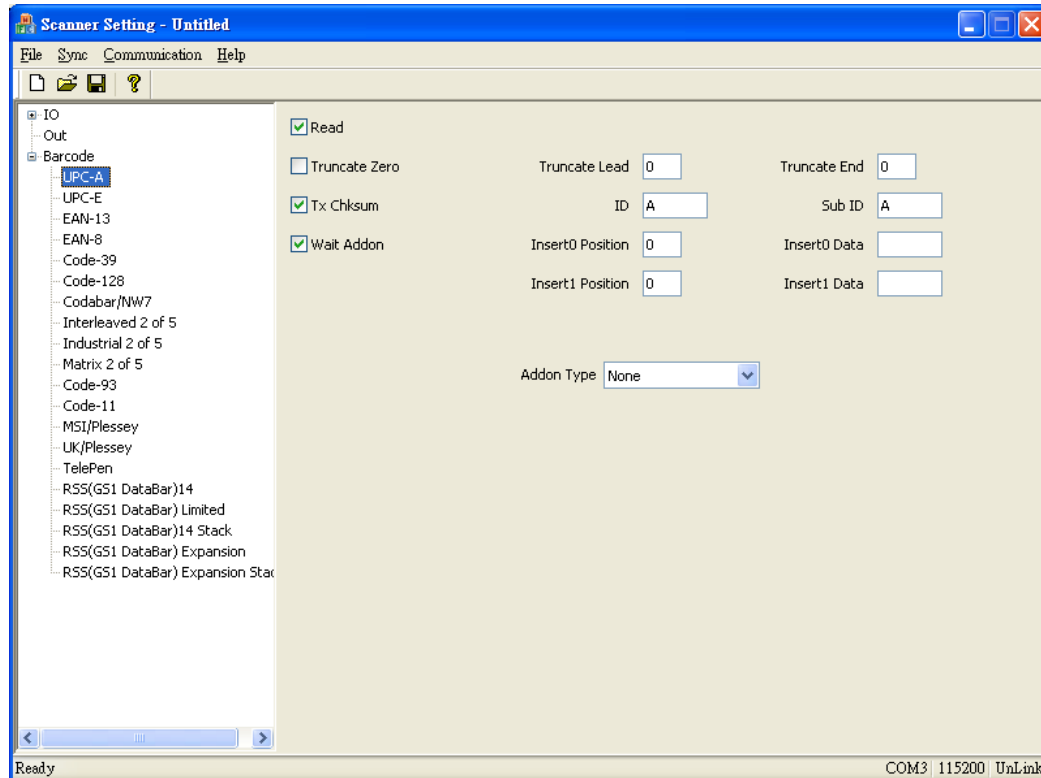
Inverse: Inverse case (Uppercase converted to Lowercase and Lowercase converted to Uppercase).

Lowercase: Convert all characters to lowercase.

Uppercase: Convert all characters to uppercase.

4.5 Barcode

4.5.1 UPC-A



Read: The option enables to read the UPC-A barcodes.

Truncate Zero: The setting enables to remove “0” digit in the beginning of barcode.

TX Checksum: The option enables to display the check digits.

Wait Addon: The option enables to display supplemental characters together with the barcode.

Truncate Lead: This enables to truncate the barcode data from the beginning of the barcode. (Range:0-255)

Truncate End: This enables to truncate the barcode data from the end of the barcode. (Range:0-255)

ID: ID data, Default value is A.

Sub ID: Sub ID data, Default value is A.

Insert0 Position: The position of the data insertion, if the insertion data position is in the first position of the barcode data, specify as 0. If the insertion data position is behind the barcode data, specify as 255. (Range:0-255)

Insert0 Data: User can specify the characters in the Insert0 Position.

Insert1 Position: The position of the data insertion, if the insertion data position is in the second position of the barcode data, specify as 1. If the insertion data position is behind the barcode data, specify as 255. (Range:0-255)

Insert1 Data: User can specify the characters in the Insert1 Position.

Addon Type: The options enable to read supplemental characters.

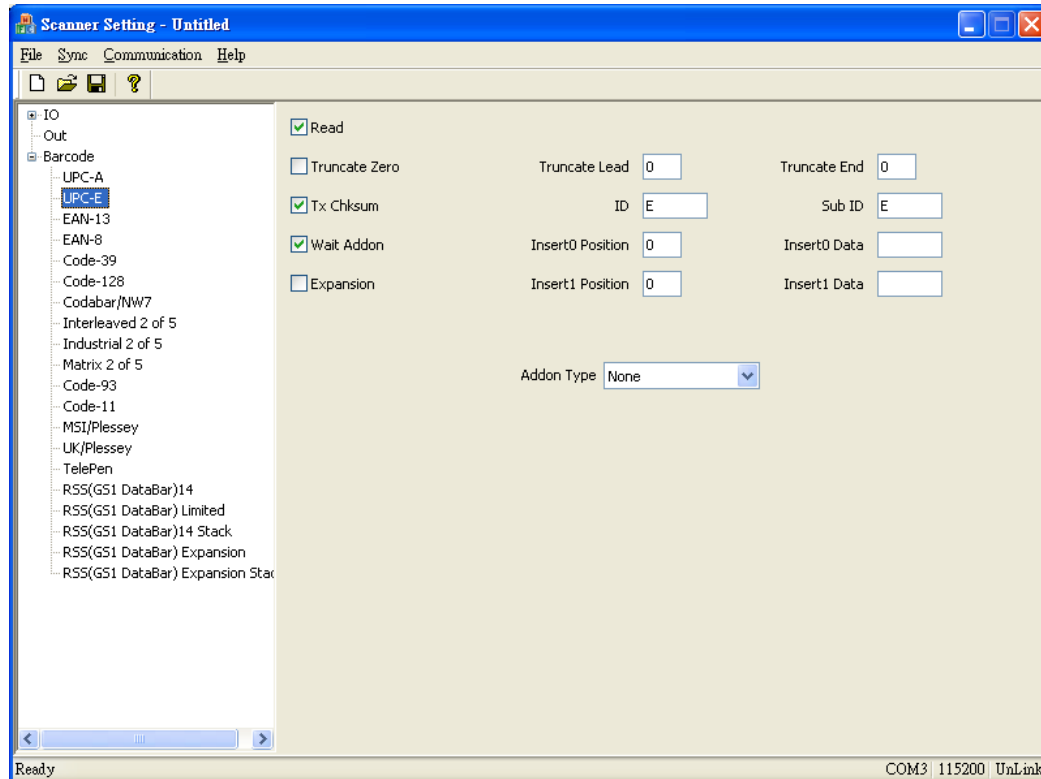
None : No Add-on code.

Addon2 : 2 supplemental characters.

Addon5 : 5 supplemental characters.

Addon2+5 : 2+5 supplemental characters.

4.5.2 UPC-E



Read: The option enables to read the UPC-E barcodes.

Truncate Zero: The setting enables to remove “0” digit in the beginning of barcode.

TX Checksum: The option enables to display the check digits.

Wait Addon: The option enables to display supplemental characters together with the barcode.

Expansion: This option enables to extend the UPC-E barcode to UPC-A barcode.

Truncate Lead: This enables to truncate the barcode data from the beginning of the barcode. (Range:0-255)

Truncate End: This enables to truncate the barcode data from the end of the barcode. (Range:0-255)

ID data: ID data, Default value is E.

Sub ID Data: Sub ID, Default value is E.

Insert0 Position: The position of the data insertion, if the insertion data position is in the first position of the barcode data, specify as 0. If the insertion data position is behind the barcode data, specify as 255. (Range:0-255)

Insert0 Data: User can specify the characters in the Insert0 Position.

Insert1 Position: The position of the data insertion, if the insertion data position is in the second position of the barcode data, specify as 1. If the insertion data position is behind the barcode data, specify as 255. (Range:0-255)

Insert1 Data: User can specify the characters in the Insert1 Position.

Addon type: The options enable to read supplemental characters.

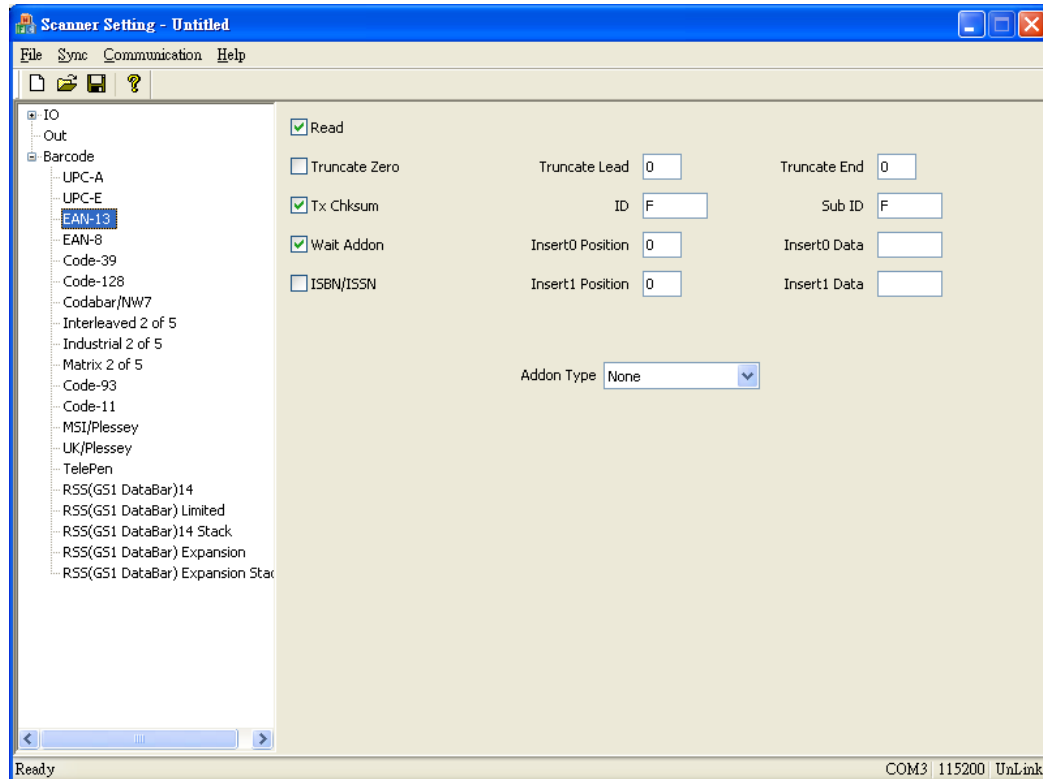
None : No Add-on code.

Addon2 : 2 supplemental characters.

Addon5 : 5 supplemental characters.

Addon2+5 : 2+5 supplemental characters.

4.5.3 EAN-13



Read: The option enables to read EAN-13 barcodes.

Truncate Zero: The setting enables to remove "0" digit in the beginning of barcode.

TX Checksum: The option enables to display the check digits.

Wait Addon: The option enables to display supplemental characters together with the barcode.

ISBN/ISSN Conversion: This option enables to convert the EAN-13 barcodes to ISBN/ISSN format barcode.

Truncate Lead: This enables to truncate the barcode data from the beginning of the barcode. (Range:0-255)

Truncate End: This enables to truncate the barcode data from the end of the barcode. (Range:0-255)

ID: ID data, Default is F.

Sub ID: Sub ID data, Default is F.

Insert0 Position: The position of the data insertion, if the insertion data position is in the first position of the barcode data, specify as 0. If the insertion data position is behind the barcode data, specify as 255. (Range:0-255)

Insert0 Data: User can specify the characters in the Insert0 Position.

Insert1 Position: The position of the data insertion, if the insertion data position is in the second position of the barcode data, specify as 1. If the insertion data position is behind the barcode data, specify as 255. (Range:0-255)

Insert1 Data: User can specify the characters in the Insert1 Position.

Addon Type: The options enable to read supplemental characters.

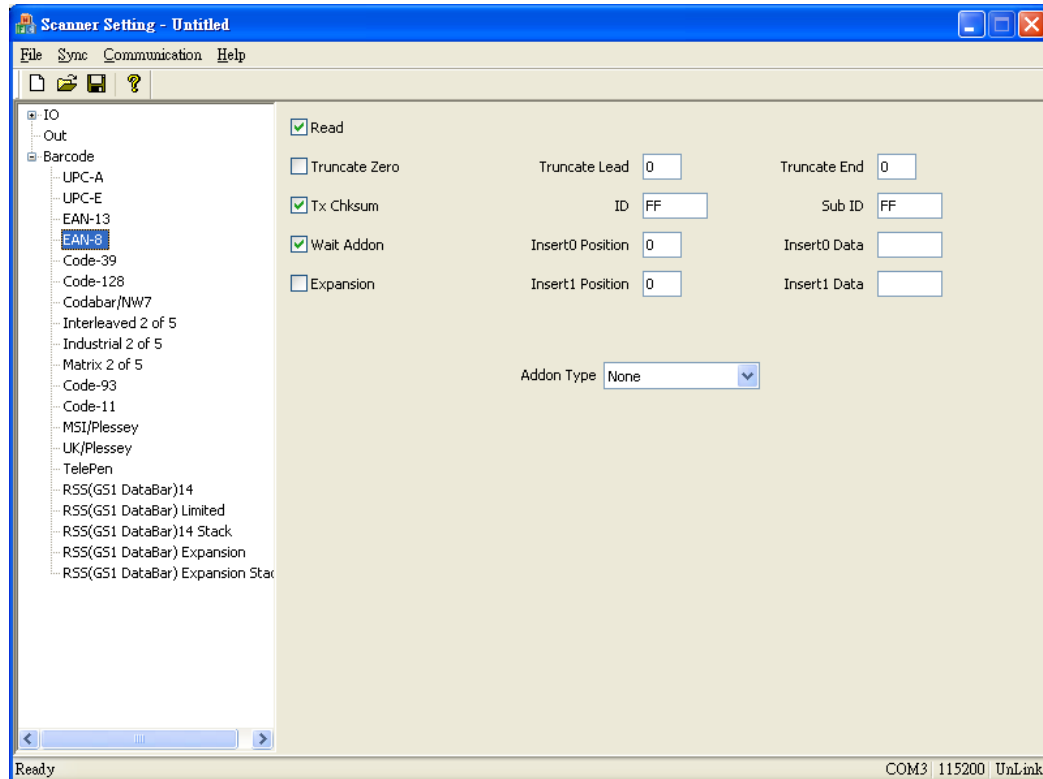
None : No Add-on code.

Addon2 : 2 supplemental characters.

Addon5 : 5 supplemental characters.

Addon2+5 : 2+5 supplemental characters.

4.5.4 EAN-8



Read: The option enables to read EAN-8 barcodes.

Truncate Zero: The setting enables to remove “0” digit in the beginning of barcode.

TX Checksum: The option enables to display the check digits.

Wait Addon: The option enables to display supplemental characters together with the barcode.

Expansion: This option enables to extend the EAN-8 barcode to EAN-13 barcode.

Truncate Lead: This enables to truncate the barcode data from the beginning of the barcode. (Range:0-255)

Truncate End: This enables to truncate the barcode data from the end of the barcode. (Range:0-255)

ID: ID data, Default is FF.

Sub ID: Sub ID data, Default is FF.

Insert0 Position: The position of the data insertion, if the insertion data position is in the first position of the barcode data, specify as 0. If the insertion data position is behind the barcode data, specify as 255. (Range:0-255)

Insert0 Data: User can specify the characters in the Insert0 Position.

Insert1 Position: The position of the data insertion, if the insertion data position is in the second position of the barcode data, specify as 1. If the insertion data position is behind the barcode data, specify as 255. (Range:0-255)

Insert1 Data: User can specify the characters in the Insert1 Position.

Addon Type: The options enable to read supplemental characters.

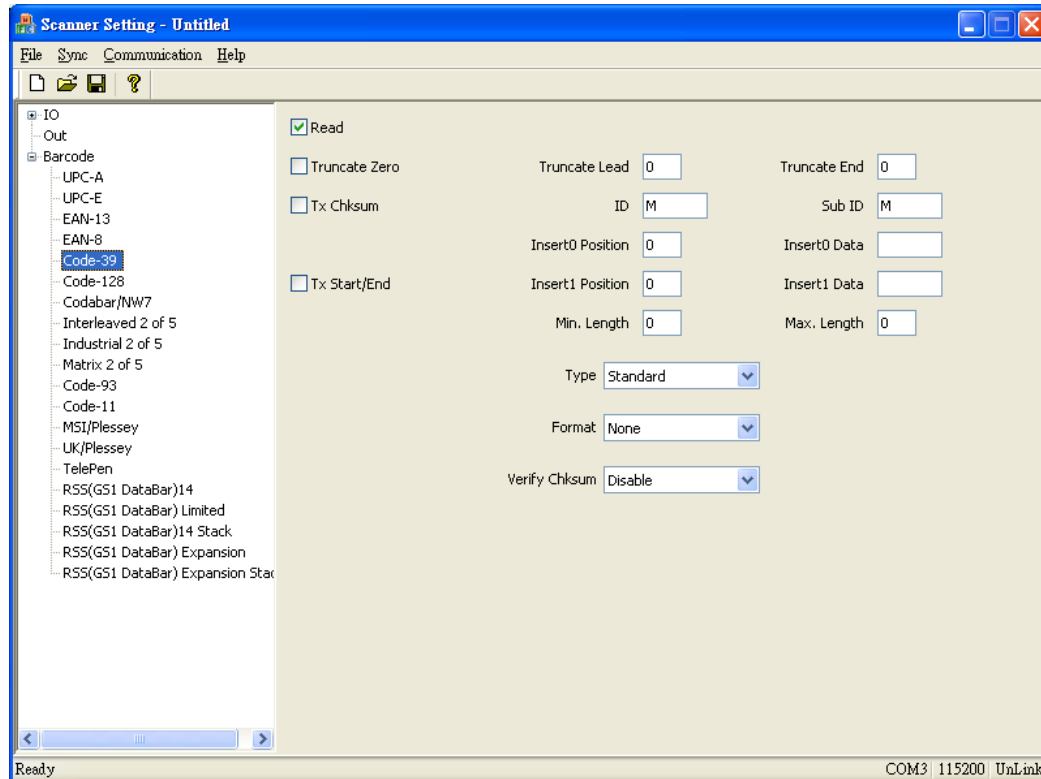
None : No Add-on code.

Addon2 : 2 supplemental characters.

Addon5 : 5 supplemental characters.

Addon2+5 : 2+5 supplemental characters.

4.5.5 Code-39



Read: The option enables to read Code-39 barcodes.

Truncate Zero: The setting enables to remove "0" digit in the beginning of barcode.

TX Checksum: The option enables to display the check digits.

TX Start/End: The setting enables to display "*" in the beginning and the end of the barcode.

Truncate Lead: This enables to truncate the barcode data from the beginning of the barcode. (Range:0-255)

Truncate End: This enables to truncate the barcode data from the end of the barcode. (Range:0-255)

ID: ID data. Default is M.

Sub ID: Sub ID data. Default is M

Insert0 Position: The position of the data insertion, if the insertion data position is in the first position of the barcode data, specify as 0. If the insertion data position is behind the barcode data, specify as 255. (Range:0-255)

Insert0 Data: User can specify the characters in the Insert0 Position.

Insert1 Position: The position of the data insertion, if the insertion data position is in the second position of the barcode data, specify as 1. If the insertion data position is behind the barcode data, specify as 255. (Range:0-255)

Insert1 Data: User can specify the characters in the Insert1 Position.

Min Length: If barcode data length is less then the Min length, it will not be able to read this code. Default "0" represents no limits on barcode length. (Range:0-64)

Max Length: If barcode data length is more then the Max length, it will not be able to read this code. Default "0" represents no limits on barcode length. (Range:0-64)

Type: format options, default is Standard.

Standard : Standard Code 39 code.

Full ASCII : Full ASCII Code 39 code.

Format: This option enables to convert the barcode to Code-32.

Disable: Disable code 32 conversion.

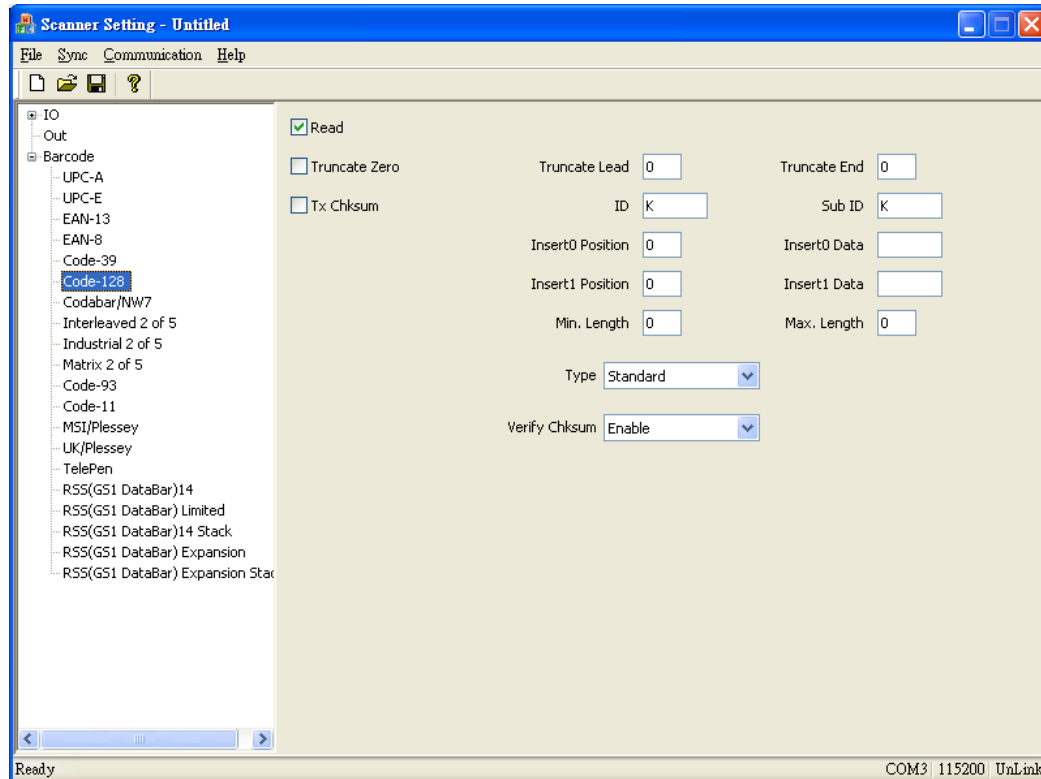
Code-32 A: The converted barcode does not display character “A” in the beginning of the barcode.

Code-32 With ‘A’: The converted barcode displays character”A” in the beginning of the barcode.

Verify Checksum: The option enables to verify the check digits, if this option is enable, any barcodes without check digits will not be able to scan.

Note: If Min length & Max length value are specified (not equals to 0) , when Min length > Max length, The decoded barcode data will only display the value of Min. Length and Max. Length.

4.5.6 Code-128



Read: The option enables to read Code-128 barcodes.

Truncate Zero: The setting enables to remove "0" digit in the beginning of barcode.

TX Checksum: The option enables to display the check digits.

Truncate Lead: This enables to truncate the barcode data from the beginning of the barcode. (Range:0-255)

Truncate End: This enables to truncate the barcode data from the end of the barcode. (Range:0-255)

ID: ID data, Default is K.

Sub ID: Sub ID data. Default is K.

Insert0 Position: The position of the data insertion, if the insertion data position is in the first position of the barcode data, specify as 0. If the insertion data position is behind the barcode data, specify as 255. (Range:0-255)

Insert0 Data: User can specify the characters in the Insert0 Position.

Insert1 Position: The position of the data insertion, if the insertion data position is in the second position of the barcode data, specify as 1. If the insertion data position is behind the barcode data, specify as 255. (Range:0-255)

Insert1 Data: User can specify the characters in the Insert1 Position.

Min Length: If barcode data length is less then the Min length, it will not be able to read this code. Default "0" represents no limits on barcode length. (Range:0-64)

Max Length: If barcode data length is more then the Max length, it will not be able to read this code. Default "0" represents no limits on barcode length. (Range:0-64)

Type: Data Type.

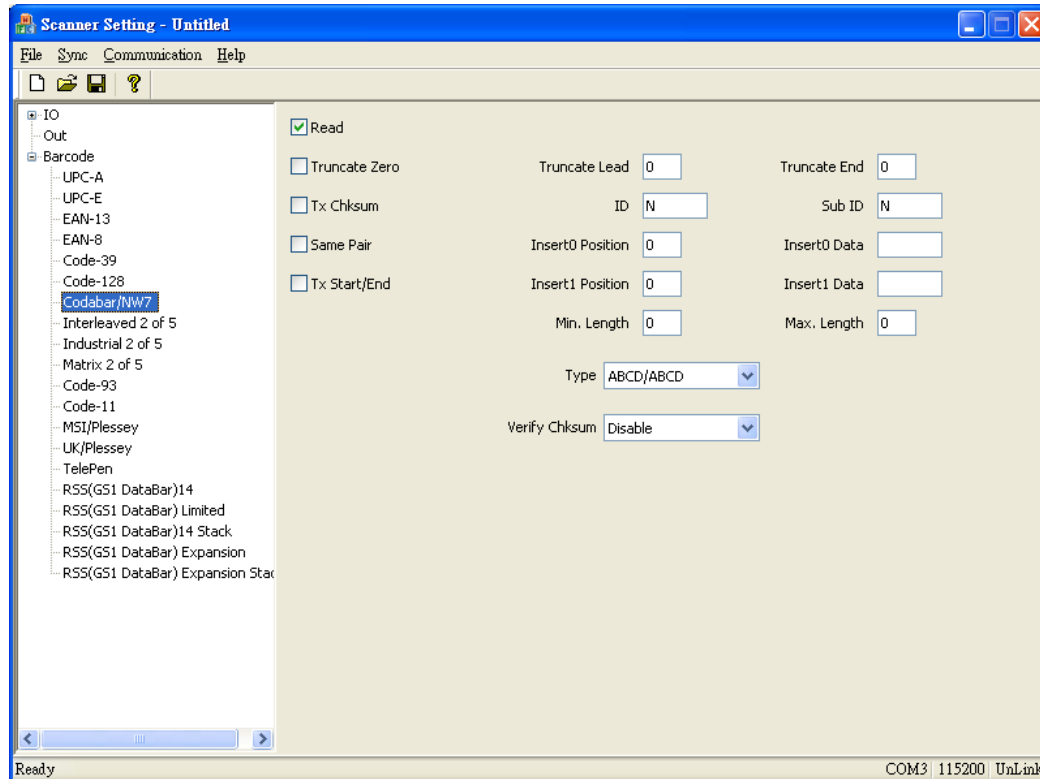
Standard: Standard Code-128.

UCC-128: This enables to convert to UCC-128 code.

Verify Checksum: The option enables to verify the check digits, if this option is enable, any barcodes without check digits will not be able to scan.

Note: If Min length & Max length value are specified (not equals to 0) , when Min length > Max length, The decoded barcode data will only display the value of Min. Length and Max. Length.

4.5.7 Codabar/NW7



Read: The option enables to read Codabar/NW7 barcodes.

Truncate Zero: The setting enables to remove "0" digit in the beginning of barcode.

TX Checksum: The option enables to display the check digits.

Same Pair: User can specify if the starting and the ending of the barcode are the same.

TX Start/End: The setting enables to display the beginning and the end of the barcode.

Truncate Lead: This enables to truncate the barcode data from the beginning of the barcode. (Range:0-255)

Truncate End: This enables to truncate the barcode data from the end of the barcode. (Range:0-255)

ID: ID data, Default is N.

Sub ID: ID data, Default is N.

Insert0 Position: The position of the data insertion, if the insertion data position is in the first position of the barcode data, specify as 0. If the insertion data position is behind the barcode data, specify as 255. (Range:0-255)

Insert0 Data: User can specify the characters in the Insert0 Position.

Insert1 Position: The position of the data insertion, if the insertion data position is in the second position of the barcode data, specify as 1. If the insertion data position is behind the barcode data, specify as 255. (Range:0-255)

Insert1 Data: User can specify the characters in the Insert1 Position.

Min Length: If barcode data length is less then the Min length, it will not be able to read this code. Default "0" represents no limits on barcode length. (Range:0-64)

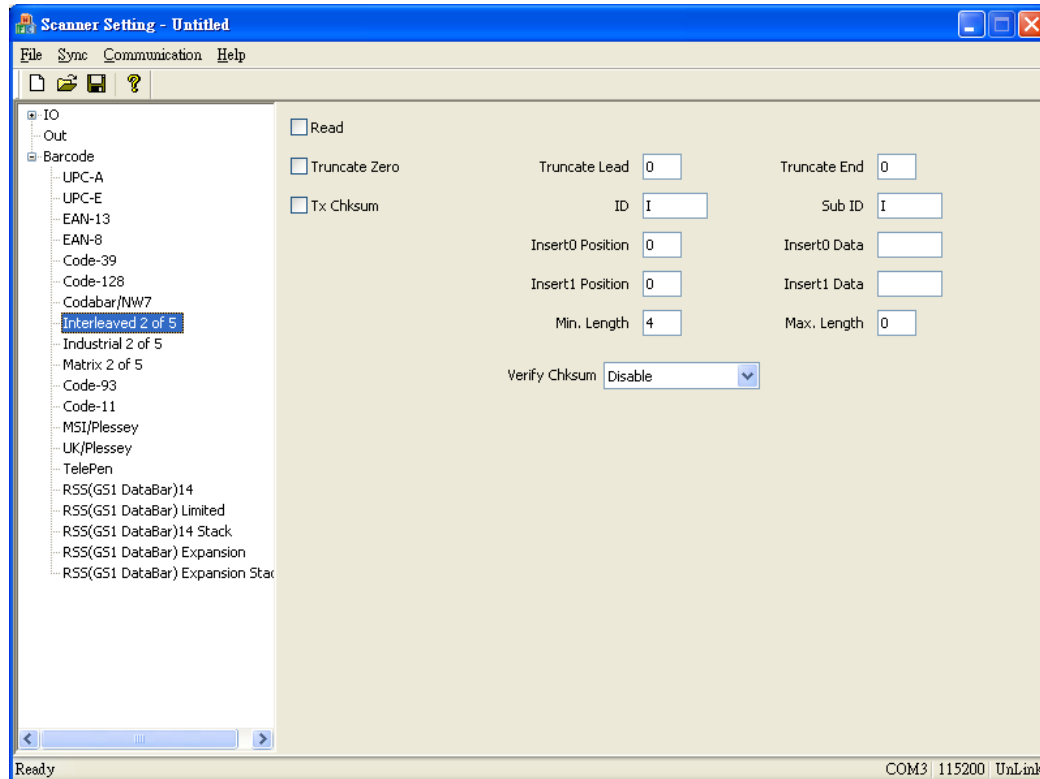
Max Length: If barcode data length is more then the Max length, it will not be able to read this code. Default "0" represents no limits on barcode length. (Range:0-64)

Type (ABCD/ABCD, abcd/abcd, ABCD/TN*E, abcd/tn*e): User can specify the starting and the ending of the barcode. Default is ABCD/ABCD.

Verify Checksum: The option enables to verify the check digits, if this option is enable, any barcodes without check digits will not be able to scan.

Note: If Min length & Max length value are specified (not equals to 0) , when Min length > Max length, The decoded barcode data will only display the value of Min. Length and Max. Length.

4.5.8 Interleaved 2 of 5



Read: The option enables to read Interleaved 2 of 5 barcodes.

Truncate Zero: The setting enables to remove "0" digit in the beginning of barcode.

TX Checksum: The option enables to display the check digits.

Truncate Lead: This enables to truncate the barcode data from the beginning of the barcode. (Range:0-255)

Truncate End: This enables to truncate the barcode data from the end of the barcode. (Range:0-255)

ID: ID data, Default is I.

Sub ID: Sub ID data Default is I,.

Insert0 Position: The position of the data insertion, if the insertion data position is in the first position of the barcode data, specify as 0. If the insertion data position is behind the barcode data, specify as 255. (Range:0-255)

Insert0 Data: User can specify the characters in the Insertion0 Position.

Insert1 Position: The position of the data insertion, if the insertion data position is in the second position of the barcode data, specify as 1. If the insertion data position is behind the barcode data, specify as 255. (Range:0-255)

Insert1 Data: User can specify the characters in the Insertion1 Position.

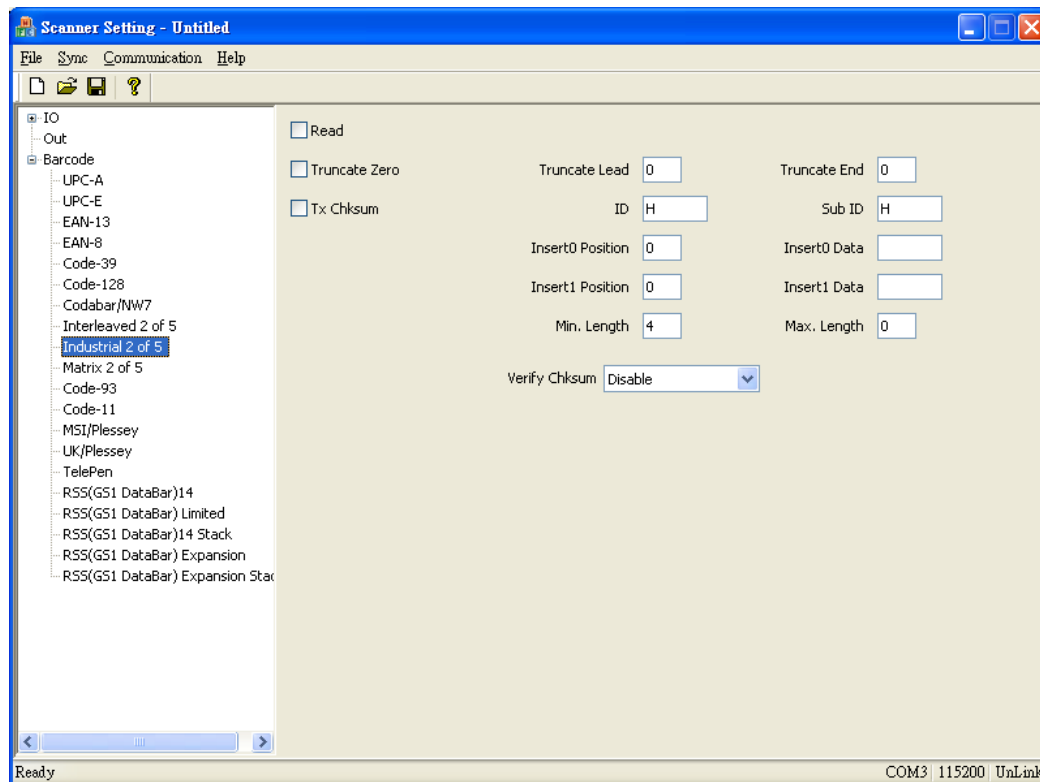
Min Length: If barcode data length is less then the Min length, it will not be able to read this code. Default "0" represents no limits on barcode length. (Range:0-64,Default:4)

Max Length: If barcode data length is more then the Max length, it will not be able to read this code. Default "0" represents no limits on barcode length. (Range:0-64)

Verify Checksum: The option enables to verify the check digits, if this option is enable, any barcodes without check digits will not be able to scan.

Note: If Min length & Max length value are specified (not equals to 0) , when Min length > Max length, The decoded barcode data will only display the value of Min. Length and Max. Length.

4.5.9 Industrial 2 of 5



Read: The option enables to read Industrial 2 of 5 barcodes.

Truncate Zero: The setting enables to remove "0" digit in the beginning of barcode.

TX Checksum: The option enables to display the check digits.

Truncate Lead: This enables to truncate the barcode data from the beginning of the barcode. (Range:0-255)

Truncate End: This enables to truncate the barcode data from the end of the barcode. (Range:0-255)

TX Checksum: The option enables to display the check digits.

ID: ID data, Default is H.

Sub ID: Sub ID data, Default is H.

Insert0 Position: The position of the data insertion, if the insertion data position is in the first position of the barcode data, specify as 0. If the insertion data position is behind the barcode data, specify as 255. (Range:0-255)

Insert0 Data: User can specify the characters in the Insert0 Position.

Insert1 Position: The position of the data insertion, if the insertion data position is in the second position of the barcode data, specify as 1. If the insertion data position is behind the barcode data, specify as 255. (Range:0-255)

Insert1 Data: User can specify the characters in the Insert1 Position.

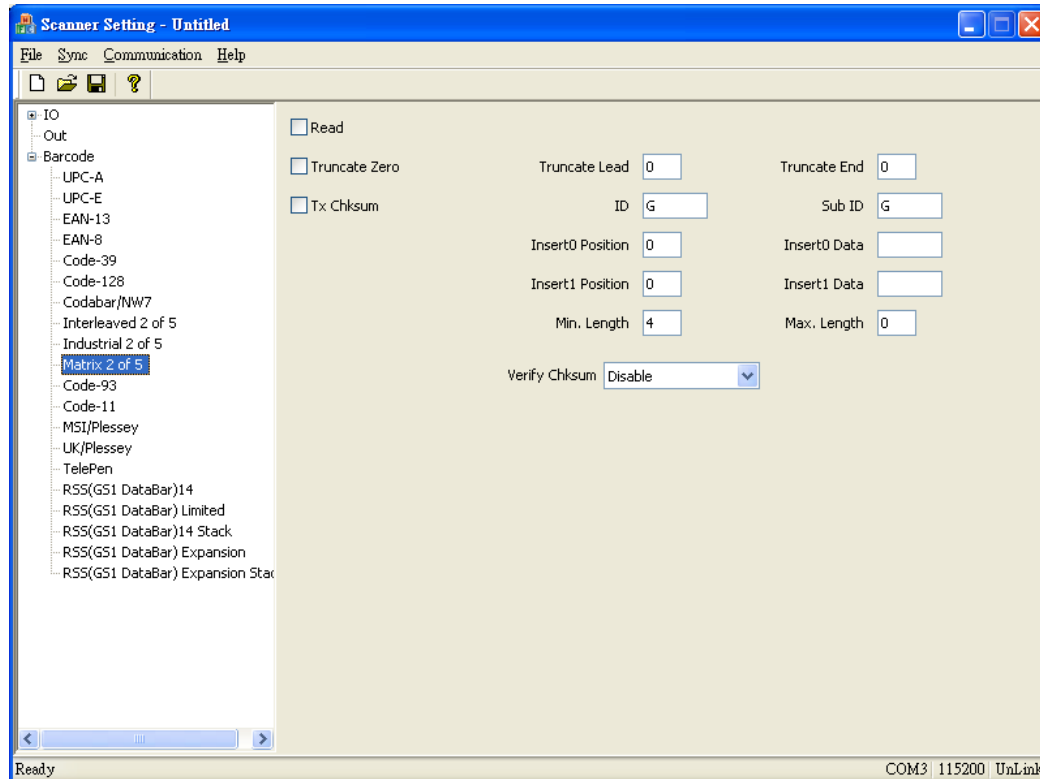
Min Length: If barcode data length is less then the Min length, it will not be able to read this code. Default "0" represents no limits on barcode length. (Range:0-64,Default:4)

Max Length: If barcode data length is more then the Max length, it will not be able to read this code. Default "0" represents no limits on barcode length. (Range:0-64)

Verify Checksum: The option enables to verify the check digits, if this option is enable, any barcodes without check digits will not be able to scan.

Note: If Min length & Max length value are specified (not equals to 0) , when Min length > Max length, The decoded barcode data will only display the value of Min. Length and Max. Length.

4.5.10 Matrix 2 of 5



Read: The option enables to read Matrix 2 of 5 barcodes.

Truncate Zero: The setting enables to remove "0" digit in the beginning of barcode.

TX Checksum: The option enables to display the check digits.

Truncate Lead: This enables to truncate the barcode data from the beginning of the barcode. (Range:0-255)

Truncate End: This enables to truncate the barcode data from the end of the barcode. (Range:0-255)

ID: ID data, default value is G.

Sub ID: Sub ID data, default value is G.

Insert0 Position: The position of the data insertion, if the insertion data position is in the first position of the barcode data, specify as 0. If the insertion data position is behind the barcode data, specify as 255. (Range:0-255)

Insert0 Data: User can specify the characters in the Insert0 Position.

Insert1 Position: The position of the data insertion, if the insertion data position is in the second position of the barcode data, specify as 1. If the insertion data position is behind the barcode data, specify as 255. (Range:0-255)

Insert1 Data: User can specify the characters in the Insert1 Position.

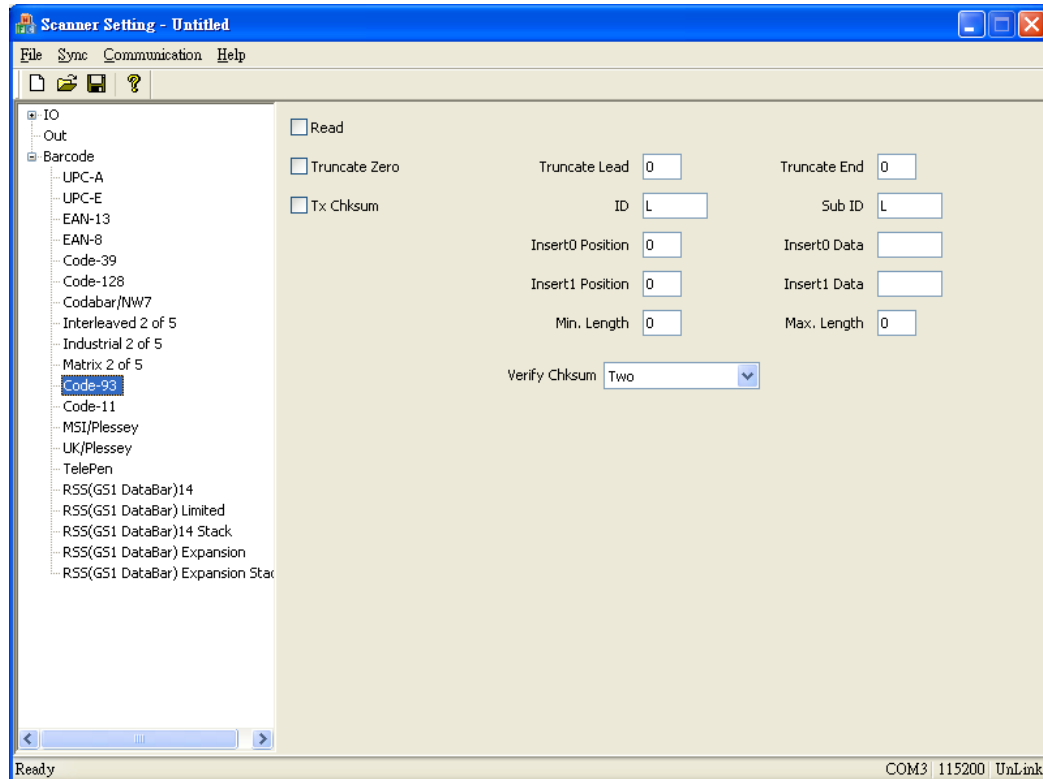
Min Length: If barcode data length is less then the Min length, it will not be able to read this code. Default "0" represents no limits on barcode length. (Range:0-64,Default:4)

Max Length: If barcode data length is more then the Max length, it will not be able to read this code. Default "0" represents no limits on barcode length. (Range:0-64)

Verify Checksum: The option enables to verify the check digits, if this option is enable, any barcodes without check digits will not be able to scan.

Note: If Min length & Max length value are specified (not equals to 0) , when Min length > Max length, The decoded barcode data will only display the value of Min. Length and Max. Length.

4.5.11 Code-93



Read: The option enables to read the Code 93 barcodes.

Truncate Zero: The setting enables to remove "0" digit in the beginning of barcode.

TX Checksum: The option enables to display the check digits.

Truncate Lead: This enables to truncate the barcode data from the beginning of the barcode. (Range:0-255)

Truncate End: This enables to truncate the barcode data from the end of the barcode. (Range:0-255)

ID: ID data, Default is L.

Sub ID: Sub ID data, Default is L.

Insert0 Position: The position of the data insertion, if the insertion data position is in the first position of the barcode data, specify as 0. If the insertion data position is behind the barcode data, specify as 255. (Range:0-255)

Insert0 Data: User can specify the characters in the Insert0 Position.

Insert1 Position: The position of the data insertion, if the insertion data position is in the second position of the barcode data, specify as 1. If the insertion data position is behind the barcode data, specify as 255. (Range:0-255)

Insert1 Data: User can specify the characters in the Insert1 Position.

Min Length: If barcode data length is less then the Min length, it will not be able to read this code. Default "0" represents no limits on barcode length. (Range:0-64)

Max Length: If barcode data length is more then the Max length, it will not be able to read this code. Default "0" represents no limits on barcode length. (Range:0-64)

Verify Checksum: Options of checksum, default is Two

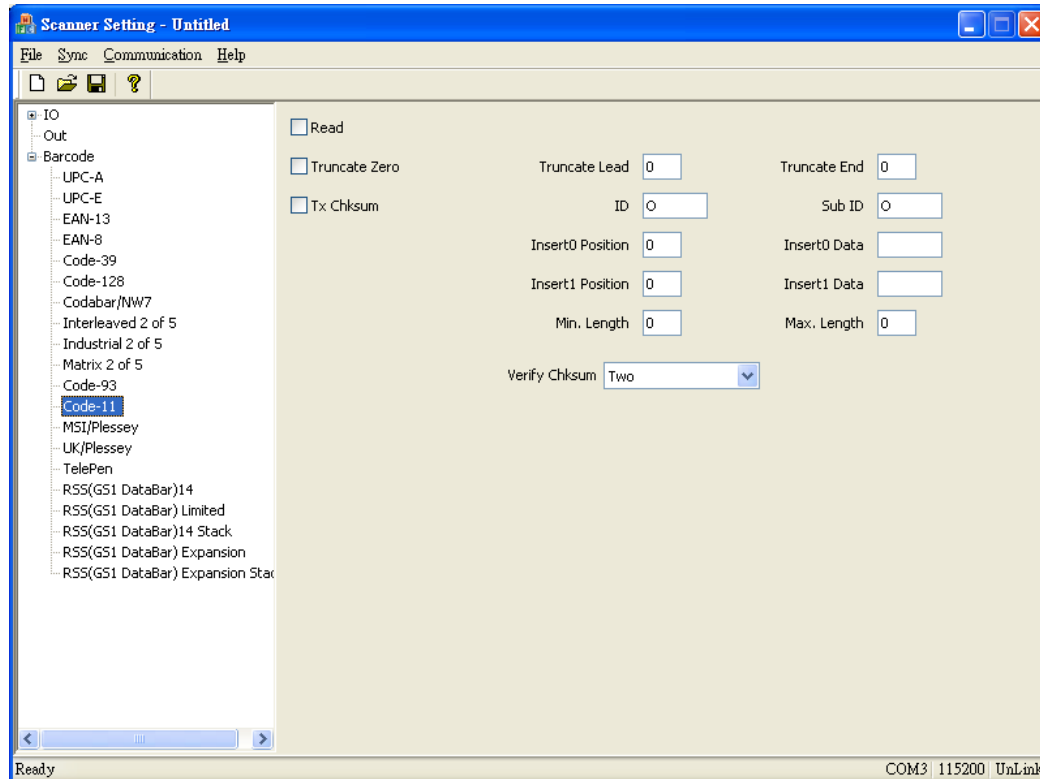
Disable: No check digits check

One : 1 digit check

Two : 2 digits check

Note: If Min length & Max length value are specified (not equals to 0) , when Min length > Max length, The decoded barcode data will only display the value of Min. Length and Max. Length.

4.5.12 Code-11



Read: The option enables to read Code 11 barcodes.

Truncate Zero: The setting enables to remove “0” digit in the beginning of barcode.

TX Checksum: The option enables to display the check digits.

Truncate Lead: This enables to truncate the barcode data from the beginning of the barcode. (Range:0-255)

Truncate End: This enables to truncate the barcode data from the end of the barcode. (Range:0-255)

ID: ID data, Default is 0.

Sub ID: Sub ID data, Default is 0.

Insert0 Position: The position of the data insertion, if the insertion data position is in the first position of the barcode data, specify as 0. If the insertion data position is behind the barcode data, specify as 255. (Range:0-255)

Insert0 Data: User can specify the characters in the Insert0 Position.

Insert1 Position: The position of the data insertion, if the insertion data position is in the second position of the barcode data, specify as 1. If the insertion data position is behind the barcode data, specify as 255. (Range:0-255)

Insert1 Data: User can specify the characters in the Insert1 Position.

Min Length: If barcode data length is less then the Min length, it will not be able to read this code. Default “0” represents no limits on barcode length. (Range:0-64)

Max Length: If barcode data length is more then the Max length, it will not be able to read this code. Default “0” represents no limits on barcode length. (Range:0-64)

Verify Checksum: Checksum options, default is Two

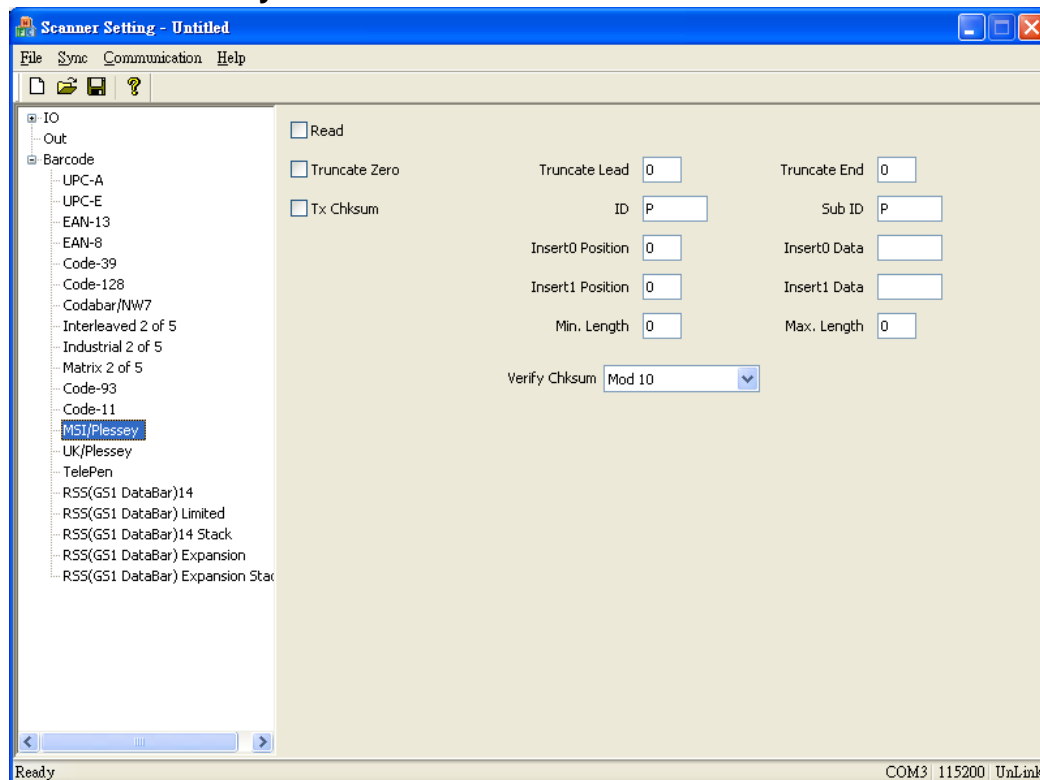
Disable: No digit check

One : 1 digit check

Two : 2 digits check

Note: If Min length & Max length value are specified (not equals to 0) , when Min length > Max length, The decoded barcode data will only display the value of Min. Length and Max. Length.

4.5.13 MSI/Plessey



Read: The option enables to read the MSI/Plessey barcodes.

Truncate Zero: The setting enables to remove "0" digit in the beginning of barcode.

TX Checksum: The option enables to display the check digits.

Truncate Lead: This enables to truncate the barcode data from the beginning of the barcode. (Range:0-255)

Truncate End: This enables to truncate the barcode data from the end of the barcode. (Range:0-255)

ID: ID data, Default is P.

Sub ID: Sub ID data, Default is P.

Insert0 Position: The position of the data insertion, if the insertion data position is in the first position of the barcode data, specify as 0. If the insertion data position is behind the barcode data, specify as 255. (Range:0-255)

Insert0 Data: User can specify the characters in the Insert0 Position.

Insert1 Position: The position of the data insertion, if the insertion data position is in the second position of the barcode data, specify as 1. If the insertion data position is behind the barcode data, specify as 255. (Range:0-255)

Insert1 Data: User can specify the characters in the Insert1 Position.

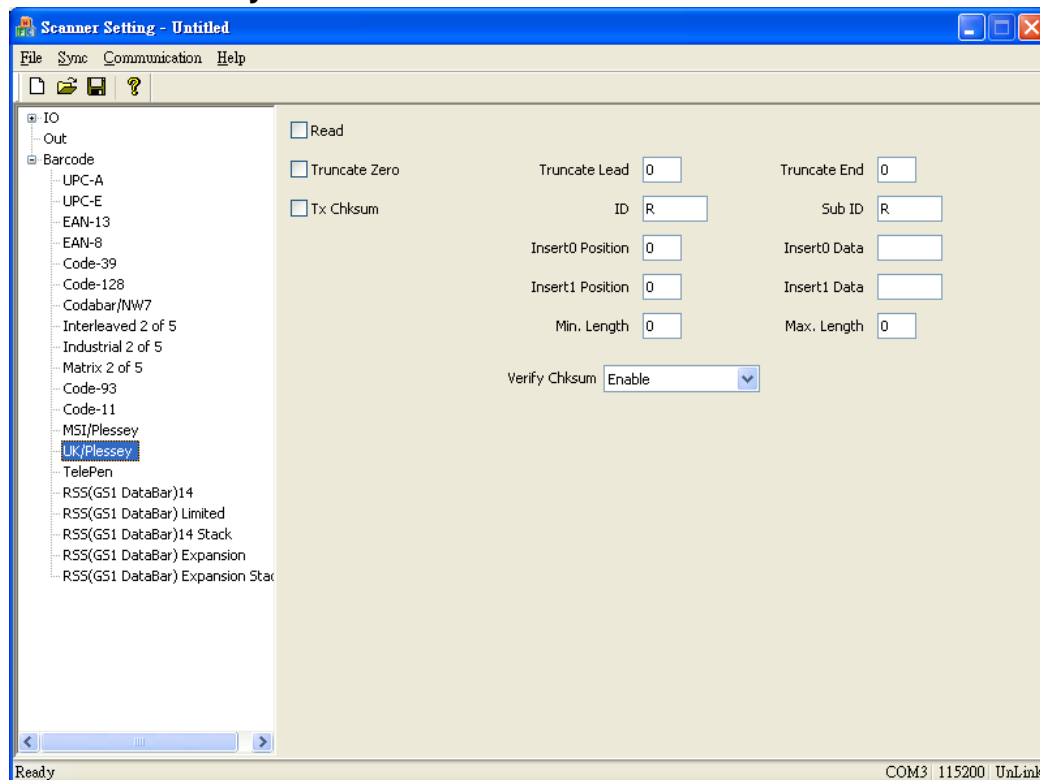
Min Length: If barcode data length is less then the Min length, it will not be able to read this code. Default "0" represents no limits on barcode length. (Range:0-64)

Max Length: If barcode data length is more then the Max length, it will not be able to read this code. Default "0" represents no limits on barcode length. (Range:0-64)

Verify Checksum (None, Mod 10, Mod 10/10, and Mod 11/10): Checksum Options. Default is “**Mod 10**”

Note: If Min length & Max length value are specified (not equals to 0) , when Min length > Max length, The decoded barcode data will only display the value of Min. Length and Max. Length.

4.5.14 UK/Plessey



Read: The option enables to read UK/Plessey barcodes.

Truncate Zero: The setting enables to remove "0" digit in the beginning of barcode.

TX Checksum: The option enables to display the check digits.

Truncate Lead: This enables to truncate the barcode data from the beginning of the barcode. (Range:0-255)

Truncate End: This enables to truncate the barcode data from the end of the barcode. (Range:0-255)

ID: ID data, Default is R.

Sub ID: Sub ID data, Default is R.

Insert0 Position: The position of the data insertion, if the insertion data position is in the first position of the barcode data, specify as 0. If the insertion data position is behind the barcode data, specify as 255. (Range:0-255)

Insert0 Data: User can specify the characters in the Insert0 Position.

Insert1 Position: The position of the data insertion, if the insertion data position is in the second position of the barcode data, specify as 1. If the insertion data position is behind the barcode data, specify as 255. (Range:0-255)

Insert1 Data: User can specify the characters in the Insert1 Position.

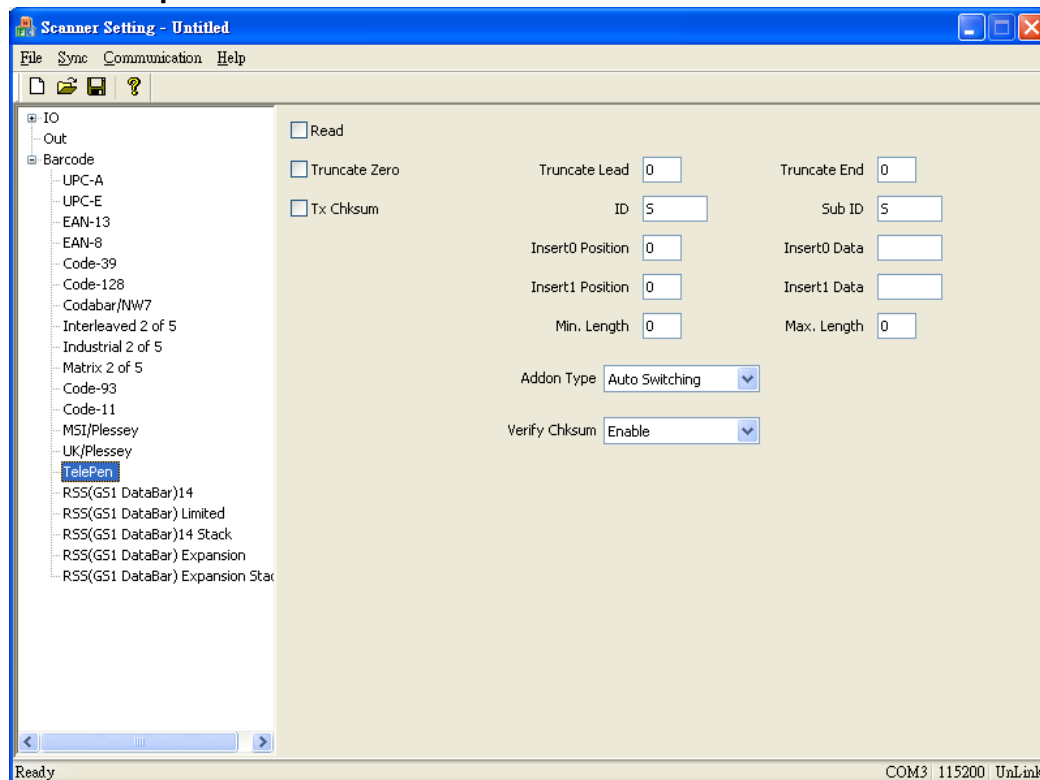
Min Length: If barcode data length is less then the Min length, it will not be able to read this code. Default "0" represents no limits on barcode length. (Range:0-64)

Max Length: If barcode data length is more then the Max length, it will not be able to read this code. Default "0" represents no limits on barcode length. (Range:0-64)

Verify Checksum: The option enables to verify the check digits, if this option is enable, any barcodes without check digits will not be able to scan.

Note: If Min length & Max length value are specified (not equals to 0) , when Min length > Max length, The decoded barcode data will only display the value of Min. Length and Max. Length.

4.5.15 Telepen



Read: The option enables to read Telepen barcodes

Truncate Zero: The setting enables to remove "0" digit at the beginning of barcode

Tx Checksum: The option enables to display the check digits

Truncate Lead: This enables to truncate the barcode data from the beginning of the barcode. (Range:0-255)

Truncate End: This enables to truncate the barcode data from the end of the barcode. (Range:0-255)

ID: ID data, **Default setting is S.**

Sub ID: Sub ID data, **Default setting is S.**

Insert0 Position: The position of the data insertion, if the insertion data position is in the first position of the barcode data, specify as 0. If the insertion data position is behind the barcode data, specify as 255. (Range:0-255)

Insert0 Data: User can specify the characters in the Insert0 Position.

Insert1 Position: The position of the data insertion, if the insertion data position is in the second position of the barcode data, specify as 1. If the insertion data position is behind the barcode data, specify as 255. (Range:0-255)

Insert1 Data: User can specify the characters in the Insert1 Position.

Min Length: If barcode data length is less then the Min length, it will not be able to read this code. Default "0" represents no limits on barcode length. (Range:0-64)

Max Length: If barcode data length is more then the Max length, it will not be able to read this code. Default "0" represents no limits on barcode length. (Range:0-64)

Type: Data type, **Default :** "Auto Switching".

Numeric: Numeric format.

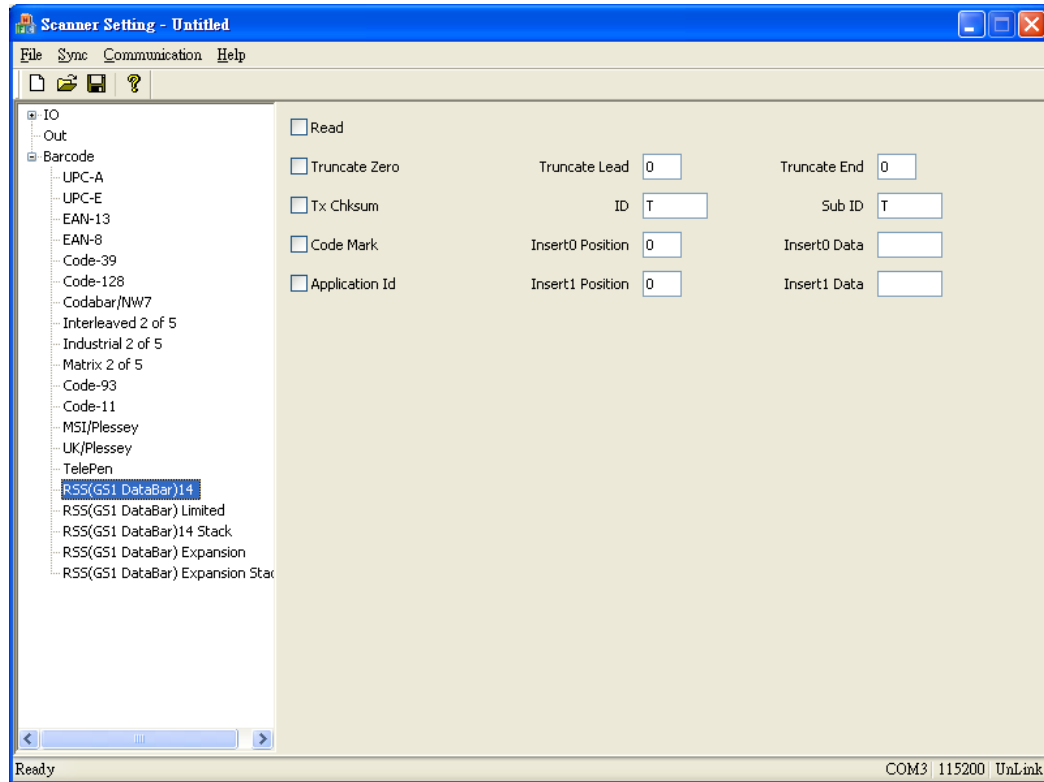
ASCII: ASCII format.

Auto Switching: Numeric or ASCII format

Verify Checksum: The option enables to verify the check digits, if this option is enable, any barcodes without check digits will not be able to scan.

Note: If Min length & Max length value are specified (not equals to 0) , when Min length > Max length, The decoded barcode data will only display the value of Min. Length and Max. Length.

4.5.16 RSS14



Read: The option enables to read RSS14 barcodes

Truncate Zero: The setting enables to remove “0” digit at the beginning of barcode

Tx Checksum: The option enables to display the check digits

Code Mark: The option enables to insert “**je0**” in front of the barcode.

Application ID: The option enables to insert “**01**” in front of the barcode.

Truncate Lead: This enables to truncate the barcode data from the beginning of the barcode. (Range:0-255)

Truncate End: This enables to truncate the barcode data from the end of the barcode. (Range:0-255)

ID: ID, **Default setting is T.**

Sub ID: Sub ID, **Default setting is T.**

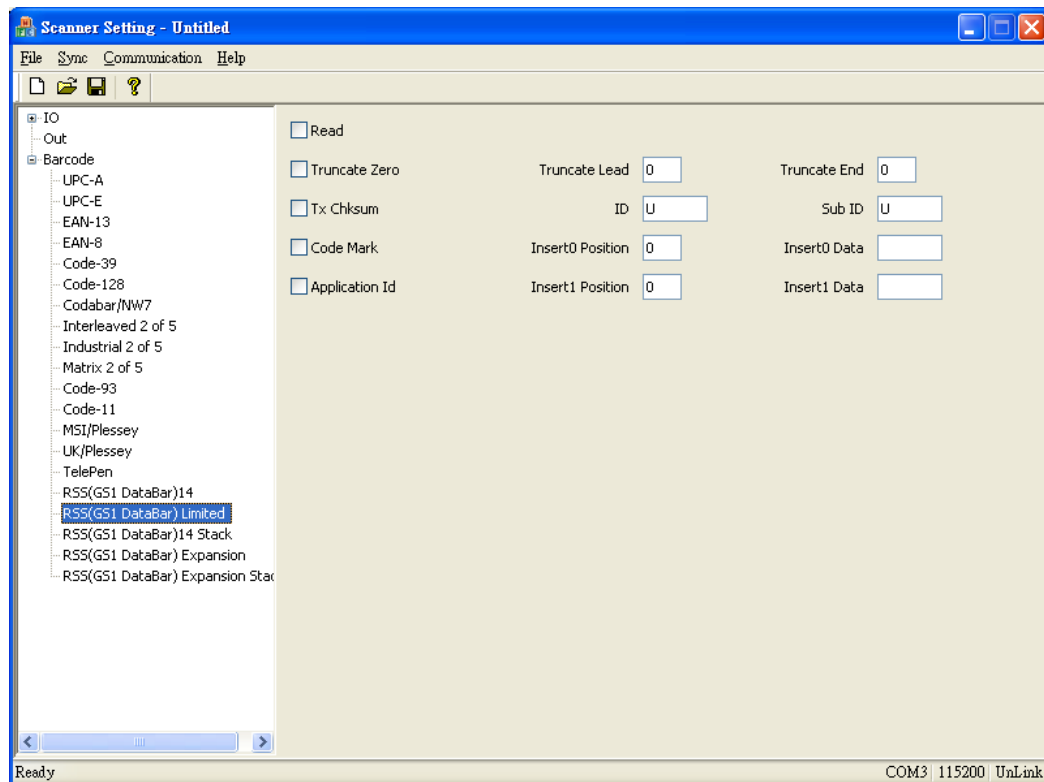
Insert0 Position: The position of the data insertion, if the insertion data position is in the first position of the barcode data, specify as 0. If the insertion data position is behind the barcode data, specify as 255. (Range:0-255)

Insert0 Data: User can specify the characters in the Insert0 Position.

Insert1 Position: The position of the data insertion, if the insertion data position is in the second position of the barcode data, specify as 1. If the insertion data position is behind the barcode data, specify as 255. (Range:0-255)

Insert1 Data: User can specify the characters in the Insert1 Position.

4.5.17 RSS Limited



Read: The option enables to read RSS Limited barcodes

Truncate Zero: The setting enables to remove "0" digit at the beginning of barcode

Tx Checksum: The option enables to display the check digits

Code Mark: The option enables to insert "je0" in front of the barcode.

Application ID: The option enables to insert "01" in front of the barcode.

Truncate Lead: This enables to truncate the barcode data from the beginning of the barcode. (Range:0-255)

Truncate End: This enables to truncate the barcode data from the end of the barcode. (Range:0-255)

ID: ID, **Default setting is U.**

Sub ID: Sub ID, **Default setting is U.**

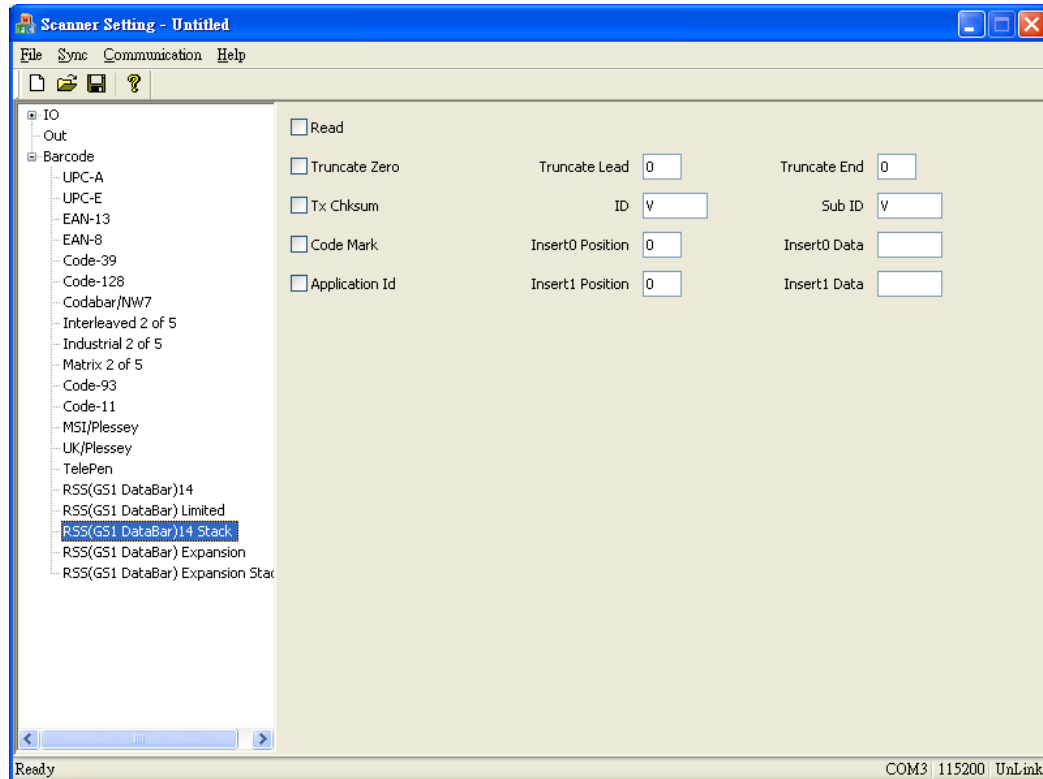
Insert0 Position: The position of the data insertion, if the insertion data position is in the first position of the barcode data, specify as 0. If the insertion data position is behind the barcode data, specify as 255. (Range:0-255)

Insert0 Data: User can specify the characters in the Insert0 Position.

Insert1 Position: The position of the data insertion, if the insertion data position is in the second position of the barcode data, specify as 1. If the insertion data position is behind the barcode data, specify as 255. (Range:0-255)

Insert1 Data: User can specify the characters in the Insert1 Position.

4.5.18 RSS14 Stack



Read: The option enables to read RSS14 Stack barcodes

Truncate Zero: The setting enables to remove “0” digit at the beginning of barcode

Tx Checksum: The option enables to display the check digits

Code Mark: The option enables to insert “**je0**” in front of the barcode.

Application ID: The option enables to insert “**01**” in front of the barcode.

Truncate Lead: This enables to truncate the barcode data from the beginning of the barcode. (Range:0-255)

Truncate End: This enables to truncate the barcode data from the end of the barcode. (Range:0-255)

ID: ID, **Default setting is V.**

Sub ID: Sub ID, **Default setting is V.**

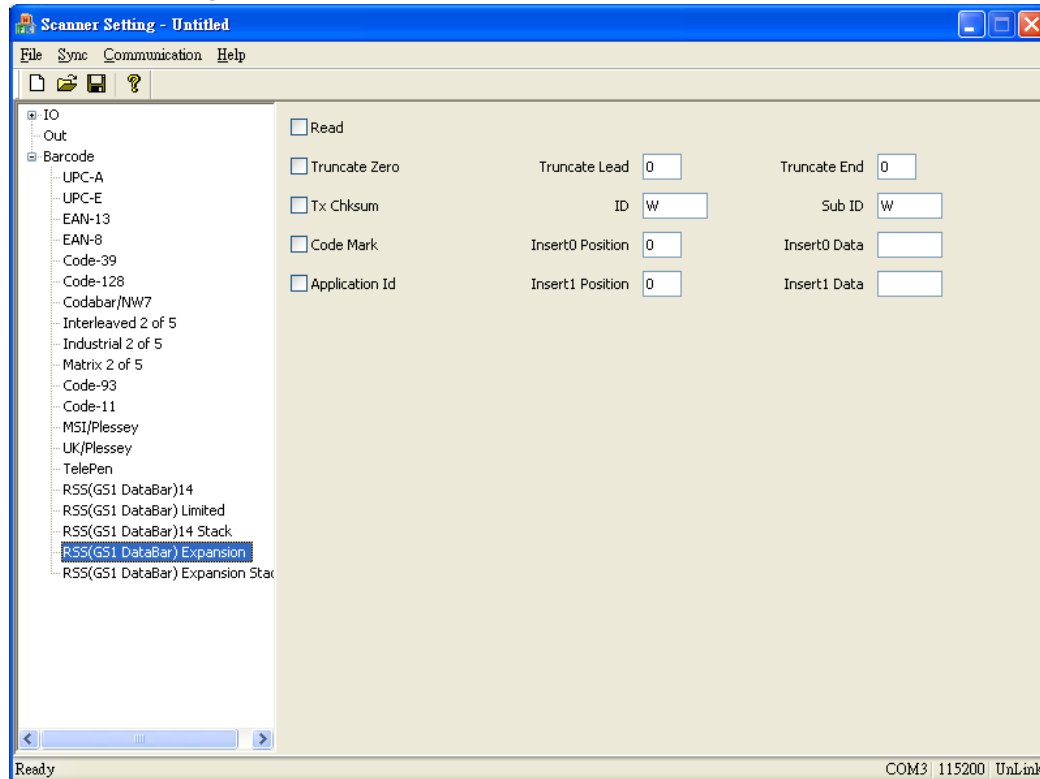
Insert0 Position: The position of the data insertion, if the insertion data position is in the first position of the barcode data, specify as 0. If the insertion data position is behind the barcode data, specify as 255. (Range:0-255)

Insert0 Data: User can specify the characters in the Insert0 Position.

Insert1 Position: The position of the data insertion, if the insertion data position is in the second position of the barcode data, specify as 1. If the insertion data position is behind the barcode data, specify as 255. (Range:0-255)

Insert1 Data: User can specify the characters in the Insert1 Position.

4.5.19 RSS Expansion



Read: The option enables to read RSS Expansion barcodes

Truncate Zero: The setting enables to remove “0” digit at the beginning of barcode

Tx Checksum: The option enables to display the check digits

Code Mark: The option enables to insert “**je0**” in front of the barcode.

Application ID: The option enables to insert “**01**” in front of the barcode.

Truncate Lead: This enables to truncate the barcode data from the beginning of the barcode. (Range:0-255)

Truncate End: This enables to truncate the barcode data from the end of the barcode. (Range:0-255)

ID: ID, **Default setting is W.**

Sub ID: Sub ID, **Default setting is W.**

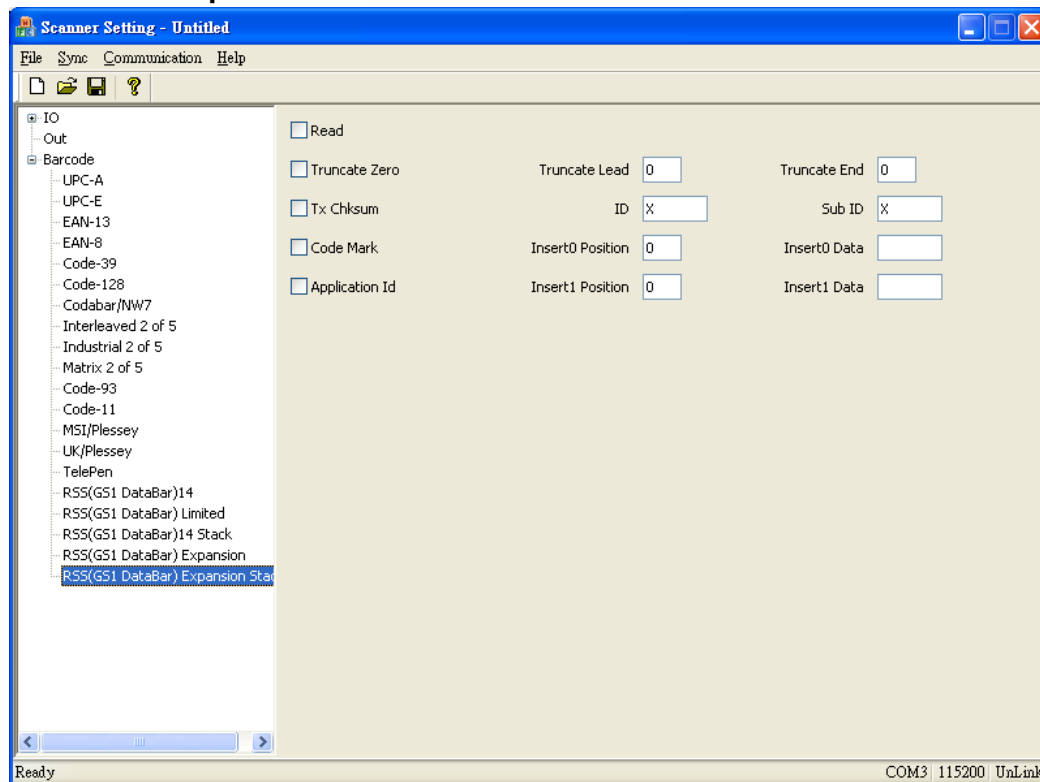
Insert0 Position: The position of the data insertion, if the insertion data position is in the first position of the barcode data, specify as 0. If the insertion data position is behind the barcode data, specify as 255. (Range:0-255)

Insert0 Data: User can specify the characters in the Insert0 Position.

Insert1 Position: The position of the data insertion, if the insertion data position is in the second position of the barcode data, specify as 1. If the insertion data position is behind the barcode data, specify as 255. (Range:0-255)

Insert1 Data: User can specify the characters in the Insert1 Position.

4.5.20 RSS Expansion Stack



Read: The option enables to read RSS Expansion Stack barcodes

Truncate Zero: The setting enables to remove "0" digit at the beginning of barcode

Tx Checksum: The option enables to display the check digits

Code Mark: The option enables to insert "je0" in front of the barcode.

Application ID: The option enables to insert "01" in front of the barcode.

Truncate Lead: This enables to truncate the barcode data from the beginning of the barcode. (Range:0-255)

Truncate End: This enables to truncate the barcode data from the end of the barcode. (Range:0-255)

ID: ID, **Default setting is X.**

Sub ID: Sub ID, **Default setting is X.**

Insert0 Position: The position of the data insertion, if the insertion data position is in the first position of the barcode data, specify as 0. If the insertion data position is behind the barcode data, specify as 255. (Range:0-255)

Insert0 Data: User can specify the characters in the Insert0 Position.

Insert1 Position: The position of the data insertion, if the insertion data position is in the second position of the barcode data, specify as 1. If the insertion data position is behind the barcode data, specify as 255. (Range:0-255)

Insert1 Data: User can specify the characters in the Insert1 Position.

Appendix 1. Synchronization Troubleshooting

If the connection failed to connect between Scanner and PC, error message will pop up as following.



Please refer to the following instruction to resolve the problem:

1. Please double check with COM port and Baud rate, if setting has changed due to any reason, please correct settings.
2. If problem still existed, please contact your local dealer.

Appendix 2. ASCII code command

Some of the configuration column has no default value, the user is able to enter the characters or command by referring to the ASCII code table.

The “\$00” represents single data character, therefore, “\$00\$00” means two data characters inserting to the setting column.

Referring to “00” from ASCII code table, it represents “NULL”, by inserting the commands by ASCII code, user must add extra “\$” in front of the ASCII code.

Appendix 3. How to Know COM port Selection

For how to know which COM port is connected between the scanner and the PC, please connect the scanner with the PC and scan the following barcode “Enter” and “ISP” to switch to Configuration mode.

Configuration Mode Barcode

Enter	
ISP	

After scan the “Enter” and “ISP” barcode, wait for few seconds for the LED to change to flashing green color. And from the device manager, the user is able to see the COM port connect to PC.

Please refer to the picture below.

