

Manual Scanner Newland FM 305X

Configuration with EasySet software

V231000

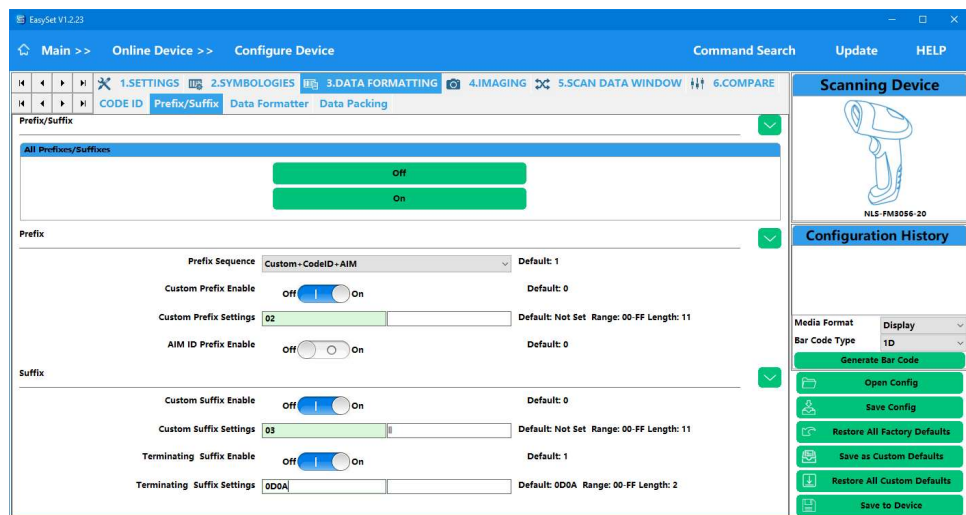
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1. DOWNLOAD SOFTWARE

<https://www.newland-id.com/service/software-drivers/easyset-software/>

V. 1.2.30



2. IMPORTANT NOTICE

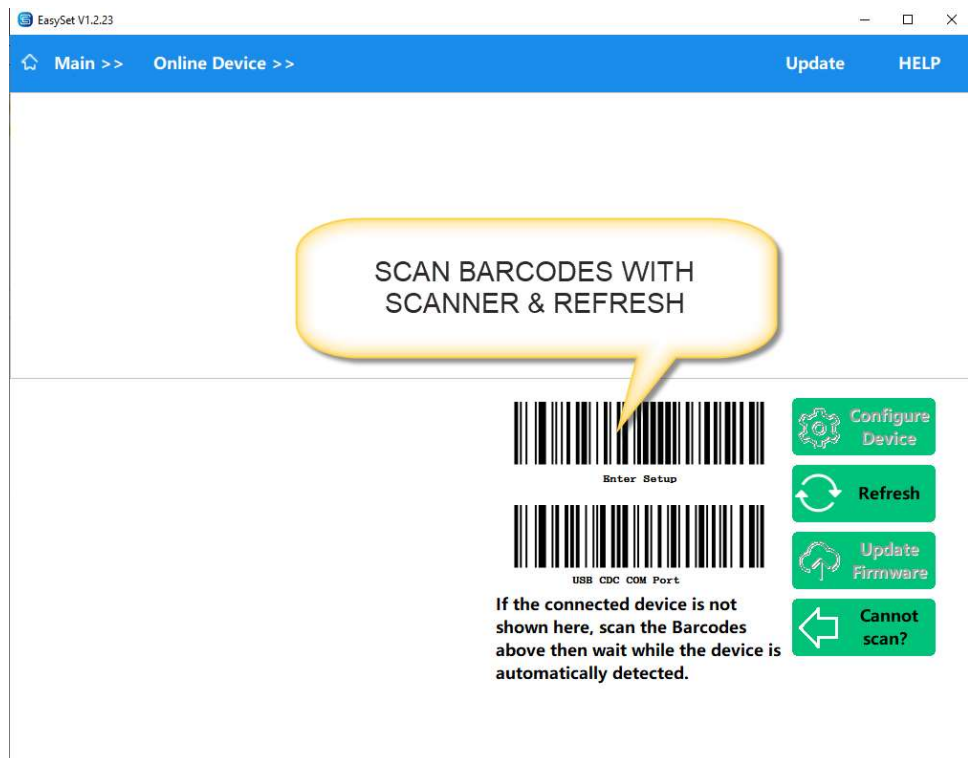
Do NEVER do a Factory Restore with the Easyset software



(In this case you will need a RS232- cable to connect again with the scanner)

Remark: As an alternative can do a Factory Defaults with the Barcode-scan-program-procedure

3. START





NLS-FM3056-20

Product Name: NLS-FM3056-20
 Firmware Version: 1.00.095
 Decoder Version: 0390
 Hardware Version:
 Serial Number: FCAC0010
 OEM Serial Number:
 Manufacturing Date: 2020-03-13



 **Configure Device**



 **Refresh**

 **Update Firmware**

 **Cannot scan?**

If the connected device is not shown here, scan the Barcodes above then wait while the device is automatically detected.



 **Configure Device**



 **Refresh**

 **Update Firmware**

 **Cannot scan?**

If the connected device is not shown here, scan the Barcodes above then wait while the device is automatically detected.



EasySet V1.2.23

Main >> Online Device >> Configure Device Command Search Update HELP

1.SETTINGS 2.SYMBOLOGIES 3.DATA FORMATTING 4.IMAGIN

Interfaces Systems Settings

Communications RS-232 Settings Keyboard Wedge PS/2 Settings


Interface

Interface

- RS-232
- HID Keyboard
- PS/2
- HID POS
- IBM SurePOS(Table-Top)
- IBM SurePOS(Hand-Held)
- USB CDC COM Port

Is now TEMP in COM PORT MODE

Scanning Device



NLS-FM3056-20

Configuration History

Media Format Display

Bar Code Type 1D

Generate Bar Code

Open Config

Save Config

Restore All Factory Defaults

Save as Custom Defaults

Restore All Custom Defaults

Save to Device



4. FAST METHOD FOR ZORGI OR PRIMUZ APPLICATIONS

If you want to go fast, download our preconfigured config files and just sent it to the scanner.

Follow this procedure:

Download:

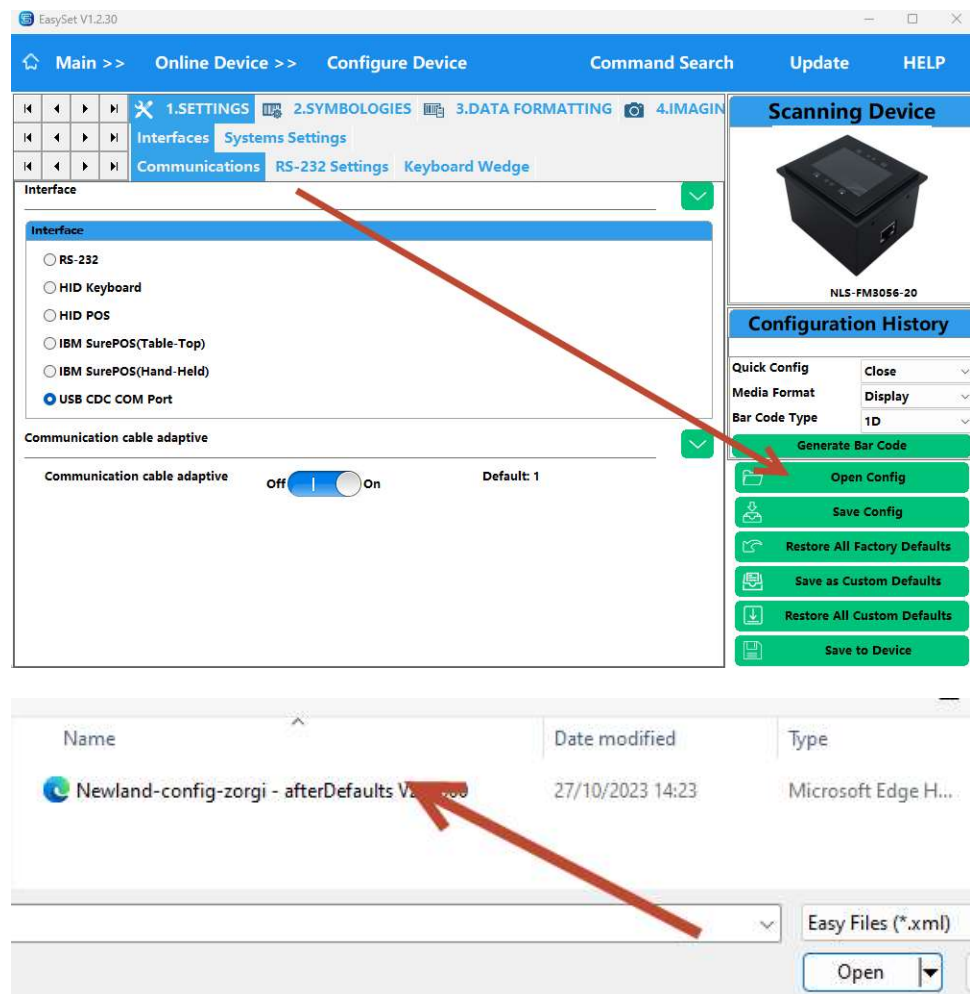
Zorgi: Newland- Config – Zorgi - Afterdefaults - XML V231000.pdf

Primuz: Newland- Config – Primuz - Afterdefaults - XML V231000.pdf

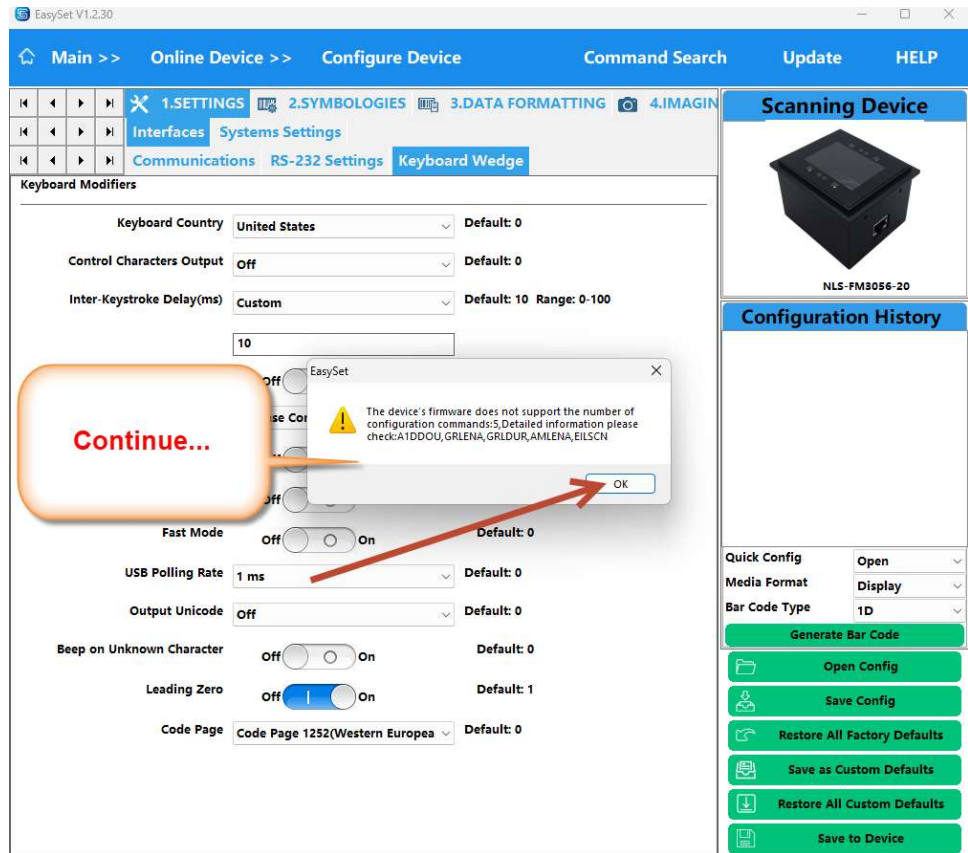
Modify:

Make XML: Open the above config .pdf, CTRL-A, CTRL-C, Open Notepad, CTRL-V, Save as .XML

Start procedure to save config file to device:



The screenshot shows the EasySet V1.2.30 software interface. The main window displays configuration options for the scanner, including Interface (RS-232, HID Keyboard, HID POS, IBM SurePOS, USB CDC COM Port) and Communication cable adaptive (Off/On). A red arrow points from the 'USB CDC COM Port' option to the 'Save to Device' button in the right-hand 'Configuration History' panel. Below the main window, a file explorer window is open, showing a file named 'Newland-config-zorgi - afterDefaults V231000.xml' with a date modified of 27/10/2023 14:23. A red arrow points from the file name to the 'Open' button in the file explorer.



EasySet V1.2.30

Main >> Online Device >> Configure Device Command Search Update HELP

1.SETTINGS 2.SYMBOLOGIES 3.DATA FORMATTING 4.IMAGIN

Interfaces Systems Settings

Communications RS-232 Settings Keyboard Wedge

Keyboard Modifiers

Keyboard Country: United States Default: 0

Control Characters Output: Off Default: 0

Inter-Keystroke Delay(ms): Custom Default: 10 Range: 0-100

10

EasySet

The device's firmware does not support the number of configuration commands:5, Detailed information please check: A1DDOU,GRLENA,GRLDUR,AMLENA,EILSCN

Continue...

OK

Fast Mode: Off On Default: 0

USB Polling Rate: 1 ms Default: 0

Output Unicode: Off Default: 0

Beep on Unknown Character: Off On Default: 0

Leading Zero: Off On Default: 1

Code Page: Code Page 1252(Western Europea) Default: 0

Scanning Device

NLS-FM3056-20

Configuration History

Quick Config: Open

Media Format: Display

Bar Code Type: 1D

Generate Bar Code

Open Config

Save Config

Restore All Factory Defaults

Save as Custom Defaults

Restore All Custom Defaults

Save to Device

EasySet V1.2.30

Main >> Online Device >> Configure Device Command Search Update HELP

1.SETTINGS 2.SYMBOLOLOGIES 3.DATA FORMATTING 4.IMAGING

Keyboard Wedge

Control Characters Output Control - ASCII ... Default: 0

Inter-Keystroke Delay(ms) No Delay Default: 10 Range: 0-100

0

Caps Lock Off On Default: 0

Convert Case No Case Conversion Default: 0

Numeric Character Use Numeric Keypad Off On Default: 0

Use Numeric Keypad Off On Default: 0

Fast Mode Off On Default: 0

USB Polling Rate 1 ms Default: 0


Output Unicode Off Default: 0

Beep on Unknown Character Off On Default: 0

Leading Zero Off On Default: 1

Code Page Code Page 1252(Western Europea Default: 0

Scanning Device



NLS-FM3056-20

Configuration History

Matrix 2/5 Decoding	On
ITF-14 Decoding	Disable
Maximum Length	7099
Micro QR Decoding	On
Interface	HID Keyboard
Add Data Format	Data Format
Keyboard Country	Belgium
Control Characters Output	Control - ASCII
Inter-Keystroke Delay(ms)	No Delay(0)
Custom Prefix Enable	On
Custom Prefix Settings	02

Quick Config Open

Media Format Display

Bar Code Type 1D

Generate Bar Code

Open Config

Save Config

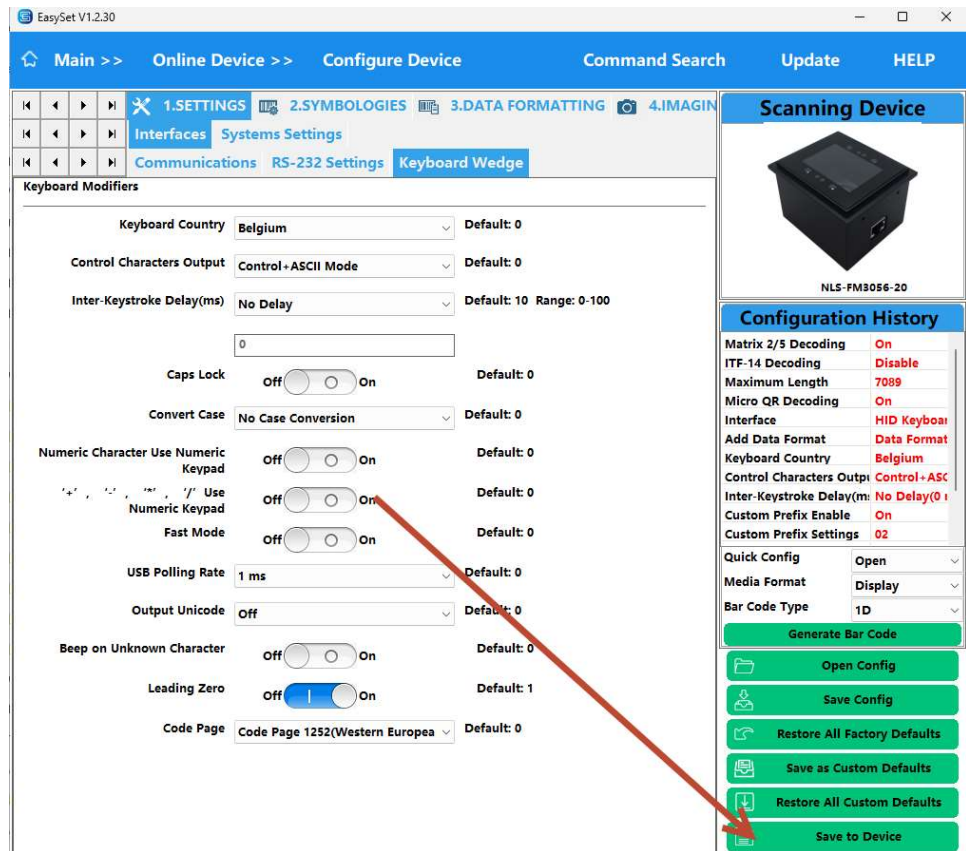
Restore All Factory Defaults

Save as Custom Defaults

Restore All Custom Defaults

Save to Device

After loading config file...Changes are visual..



EasySet V1.2.30

Main >> Online Device >> Configure Device Command Search Update HELP

1.SETTINGS 2.SYMBOLOGIES 3.DATA FORMATTING 4.IMAGING

Interfaces Systems Settings

Communications RS-232 Settings Keyboard Wedge

Keyboard Modifiers

Keyboard Country: Belgium Default: 0

Control Characters Output: Control-ASCII Mode Default: 0

Inter-Keystroke Delay(ms): No Delay Default: 10 Range: 0-100

Caps Lock: Off On Default: 0

Convert Case: No Case Conversion Default: 0

Numeric Character Use Numeric Keypad: Off On Default: 0

Use Numeric Keypad: Off On Default: 0

Fast Mode: Off On Default: 0

USB Polling Rate: 1 ms Default: 0

Output Unicode: Off Default: 0

Beep on Unknown Character: Off On Default: 0

Leading Zero: Off On Default: 1

Code Page: Code Page 1252(Western Europea Default: 0

Scanning Device

NLS-FM3056-20

Configuration History

Matrix 2/5 Decoding	On
ITF-14 Decoding	Disable
Maximum Length	7099
Micro QR Decoding	On
Interface	HID Keyboa
Add Data Format	Data Format
Keyboard Country	Belgium
Control Characters Outp	Control-ASC
Inter-Keystroke Delay(m	No Delay(0
Custom Prefix Enable	On
Custom Prefix Settings	02

Quick Config: Open

Media Format: Display

Bar Code Type: 1D

Generate Bar Code

Open Config

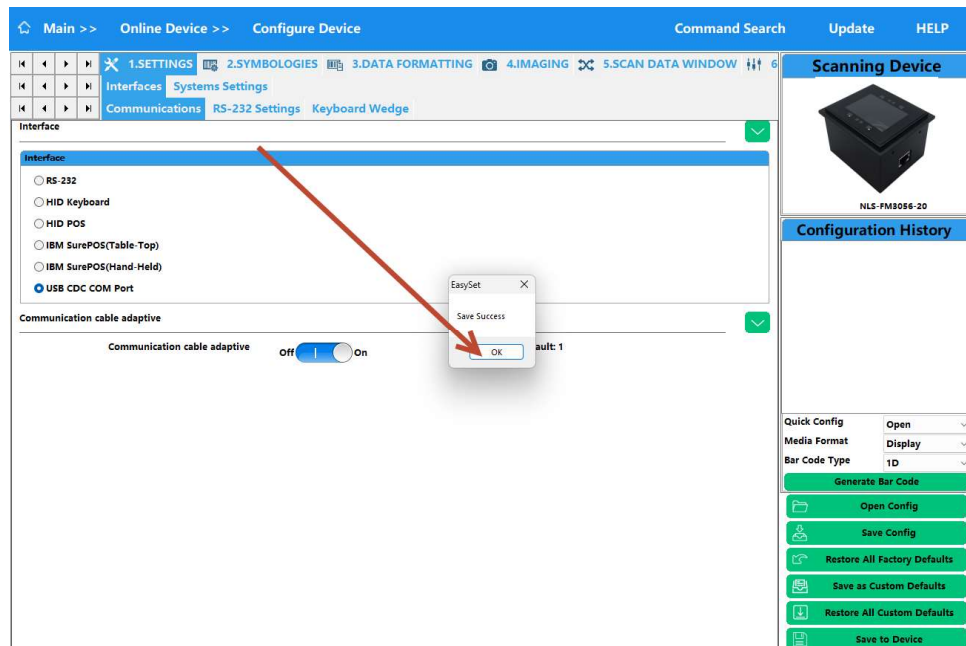
Save Config

Restore All Factory Defaults

Save as Custom Defaults

Restore All Custom Defaults

Save to Device



Main >> Online Device >> Configure Device Command Search Update HELP

1.SETTINGS 2.SYMBOLOGIES 3.DATA FORMATTING 4.IMAGING 5.SCAN DATA WINDOW

Interfaces Systems Settings

Communications RS-232 Settings Keyboard Wedge

Interface

Interface

RS-232

HID Keyboard

HID POS

IBM SurePOS(Table-Top)

IBM SurePOS(Hand-Held)

USB CDC COM Port

Communication cable adaptive

Communication cable adaptive: off On Default: 1

EasySet Save Success OK

Scanning Device

NLS-FM3056-20

Configuration History

Quick Config: Open

Media Format: Display

Bar Code Type: 1D

Generate Bar Code

Open Config

Save Config

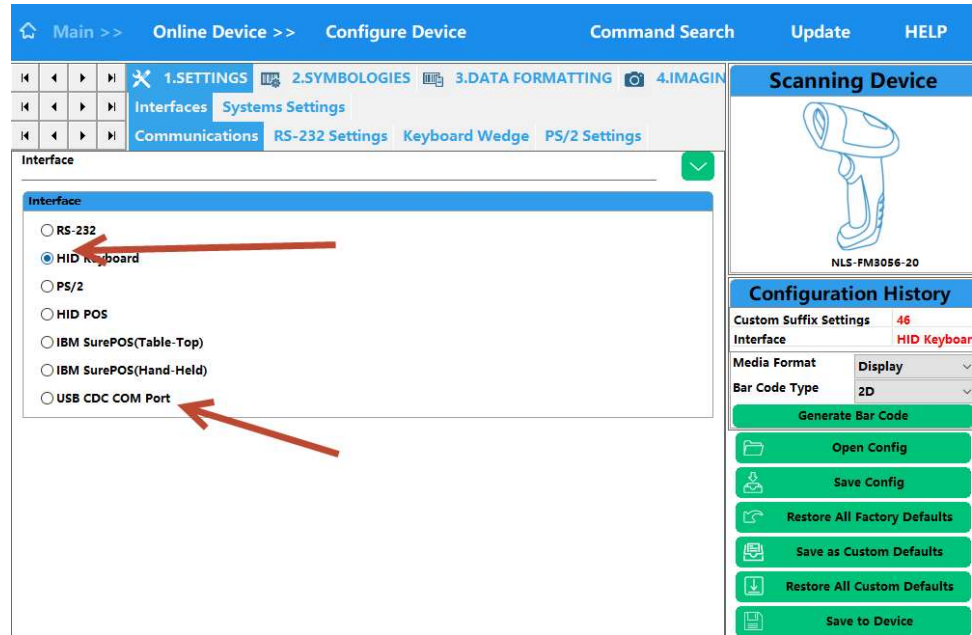
Restore All Factory Defaults

Save as Custom Defaults

Restore All Custom Defaults

Save to Device

SWITCH BACK FROM COM-PORT TO HID KEYBOARD DON'T FORGET!!!!



1.SETTINGS 2.SYMBOLOGIES 3.DATA FORMATTING 4.IMAGIN

Interfaces Systems Settings

Communications RS-232 Settings Keyboard Wedge PS/2 Settings

Interface

Interface

- RS-232
- HID Keyboard
- PS/2
- HID POS
- IBM SurePOS(Table-Top)
- IBM SurePOS(Hand-Held)
- USB CDC COM Port

Scanning Device

NLS-FM3056-20

Configuration History

Custom Suffix Settings 46

Interface HID Keyboard

Media Format Display

Bar Code Type 2D

Generate Bar Code

Open Config

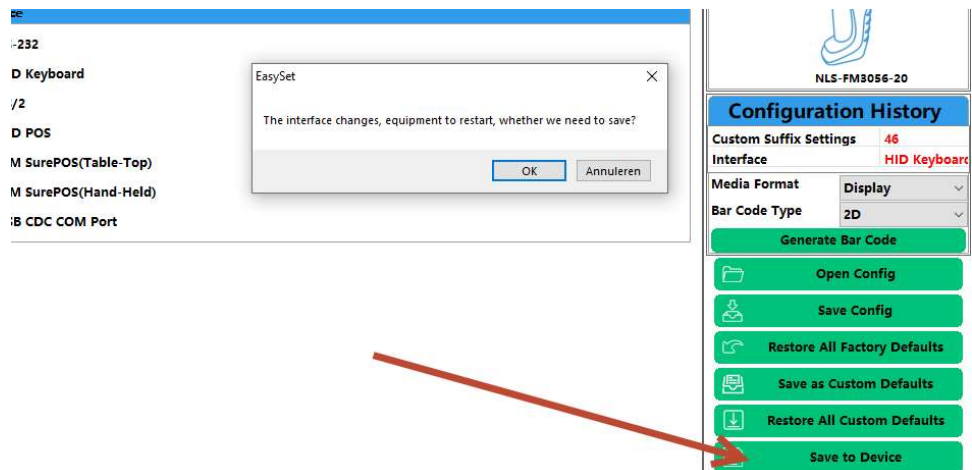
Save Config

Restore All Factory Defaults

Save as Custom Defaults

Restore All Custom Defaults

Save to Device



RS-232

D Keyboard

/2

D POS

M SurePOS(Table-Top)

M SurePOS(Hand-Held)

IB CDC COM Port

EasySet

The interface changes, equipment to restart, whether we need to save?

OK Annuleren

Configuration History

Custom Suffix Settings 46

Interface HID Keyboard

Media Format Display

Bar Code Type 2D

Generate Bar Code

Open Config

Save Config

Restore All Factory Defaults

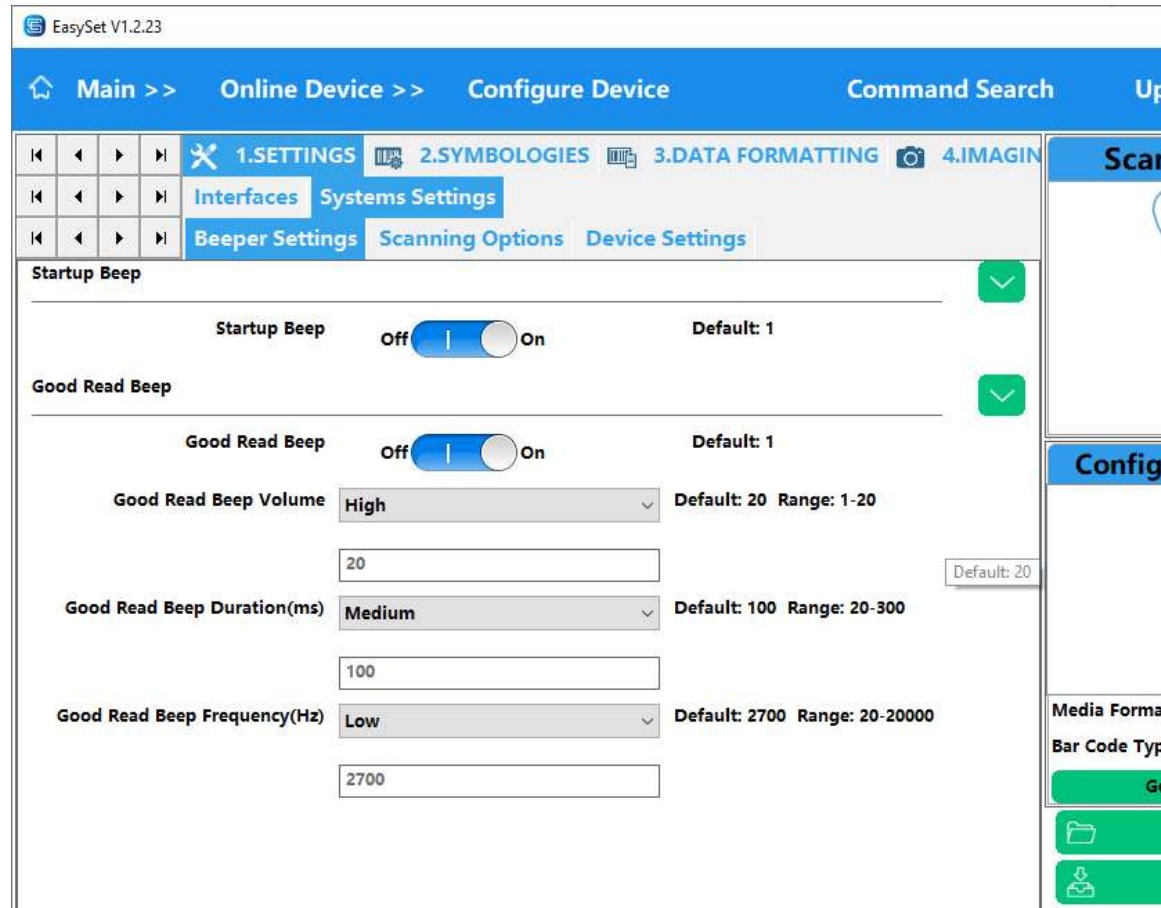
Save as Custom Defaults

Restore All Custom Defaults

Save to Device

5. SET BEEPER SETTINGS

Change audio settings of scanner if needed.



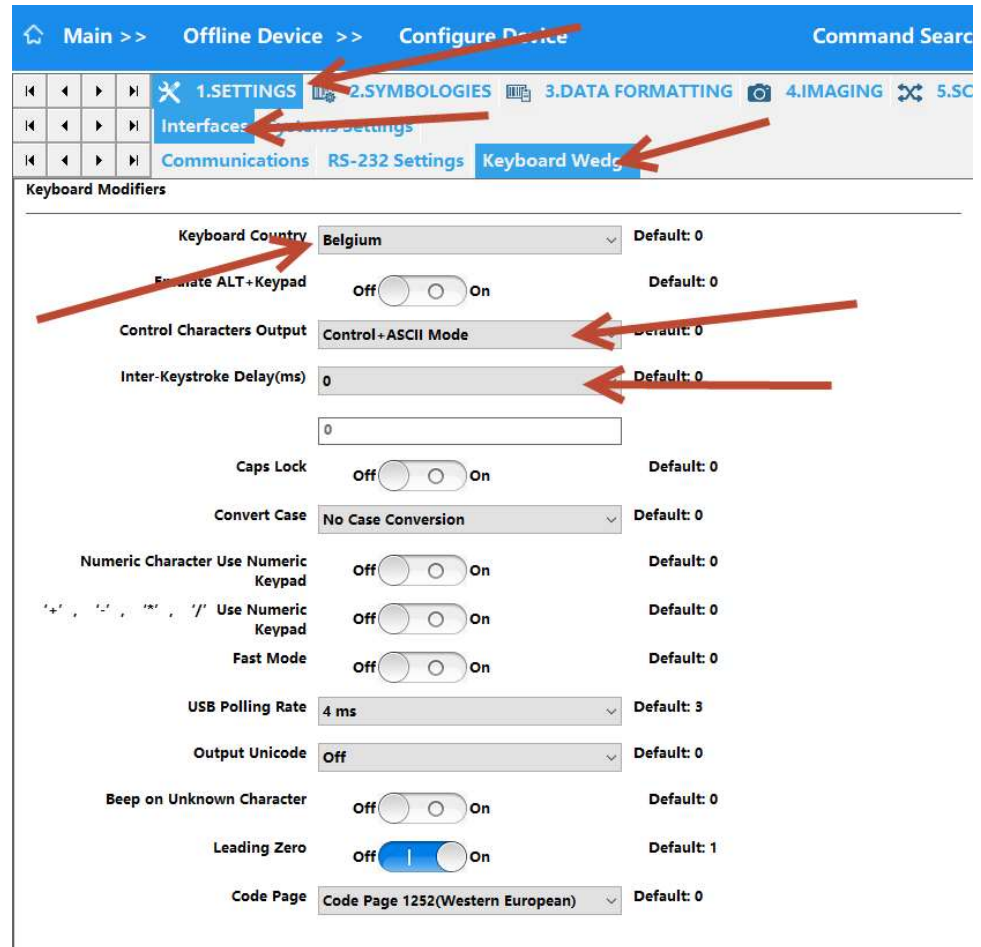
The screenshot shows the EasySet V1.2.23 software interface. The main menu includes 'Main >>', 'Online Device >>', 'Configure Device', 'Command Search', and 'Up'. The navigation pane on the left shows '1.SETTINGS' selected, with sub-menus for 'Interfaces', 'Systems Settings', 'Beeper Settings', 'Scanning Options', and 'Device Settings'. The 'Beeper Settings' page is displayed, featuring the following configuration options:

- Startup Beep:** A toggle switch is currently set to 'On'. The default value is 1.
- Good Read Beep:** A toggle switch is currently set to 'On'. The default value is 1.
- Good Read Beep Volume:** A dropdown menu is set to 'High'. The default value is 20, with a range of 1-20. A text input field below the dropdown contains the value '20'.
- Good Read Beep Duration(ms):** A dropdown menu is set to 'Medium'. The default value is 100, with a range of 20-300. A text input field below the dropdown contains the value '100'.
- Good Read Beep Frequency(Hz):** A dropdown menu is set to 'Low'. The default value is 2700, with a range of 20-20000. A text input field below the dropdown contains the value '2700'.

Green checkmarks are visible on the right side of the 'Startup Beep' and 'Good Read Beep' sections, indicating that the settings are applied. A 'Default: 20' label is also present next to the volume input field.

6. CHANGE KEYBOARD LAYOUT

Keyboard country: Belgium
 Control Characters Output: Control-ASCII Mode
 Inter Keystroke Delay: 0



Keyboard Modifiers

Keyboard Country	Belgium	Default: 0
Enable ALT+Keypad	Off	Default: 0
Control Characters Output	Control+ASCII Mode	Default: 0
Inter-Keystroke Delay(ms)	0	Default: 0
Caps Lock	Off	Default: 0
Convert Case	No Case Conversion	Default: 0
Numeric Character Use Numeric Keypad	Off	Default: 0
Use Numeric Keypad	Off	Default: 0
Fast Mode	Off	Default: 0
USB Polling Rate	4 ms	Default: 3
Output Unicode	Off	Default: 0
Beep on Unknown Character	Off	Default: 0
Leading Zero	Off	Default: 1
Code Page	Code Page 1252(Western European)	Default: 0

7. CODE ID PREFIX => OFF

SET Code ID Prefix → OFF

EasySet V1.2.23

Main >> Online Device >> Configure Device Command Search

1.SETTINGS 2.SYMBOLOGIES 3.DATA FORMATTING 4.IMAGING

CODE ID Prefix/Suffix Data Formatter Data Packing

Code ID

Code ID Prefix Off On Default: 0

Restore Code ID Default

1D Symbologies Code ID

Code128	6A	j	Default: 6A Range: 01-FF Length: 2
GS1-128 (UCC/EAN-128)	6A	j	Default: 6A Range: 01-FF Length: 2
EAN-8	64	d	Default: 64 Range: 01-FF Length: 2
EAN-13	64	d	Default: 64 Range: 01-FF Length: 2
UPC-E	63	c	Default: 63 Range: 01-FF Length: 2
UPC-A	63	c	Default: 63 Range: 01-FF Length: 2
Interleaved 2 of 5	65	e	Default: 65 Range: 01-FF Length: 2
ITE-14	65	e	Default: 65 Range: 01-FF Length: 2

8. ADD PREFIX & SUFFIX

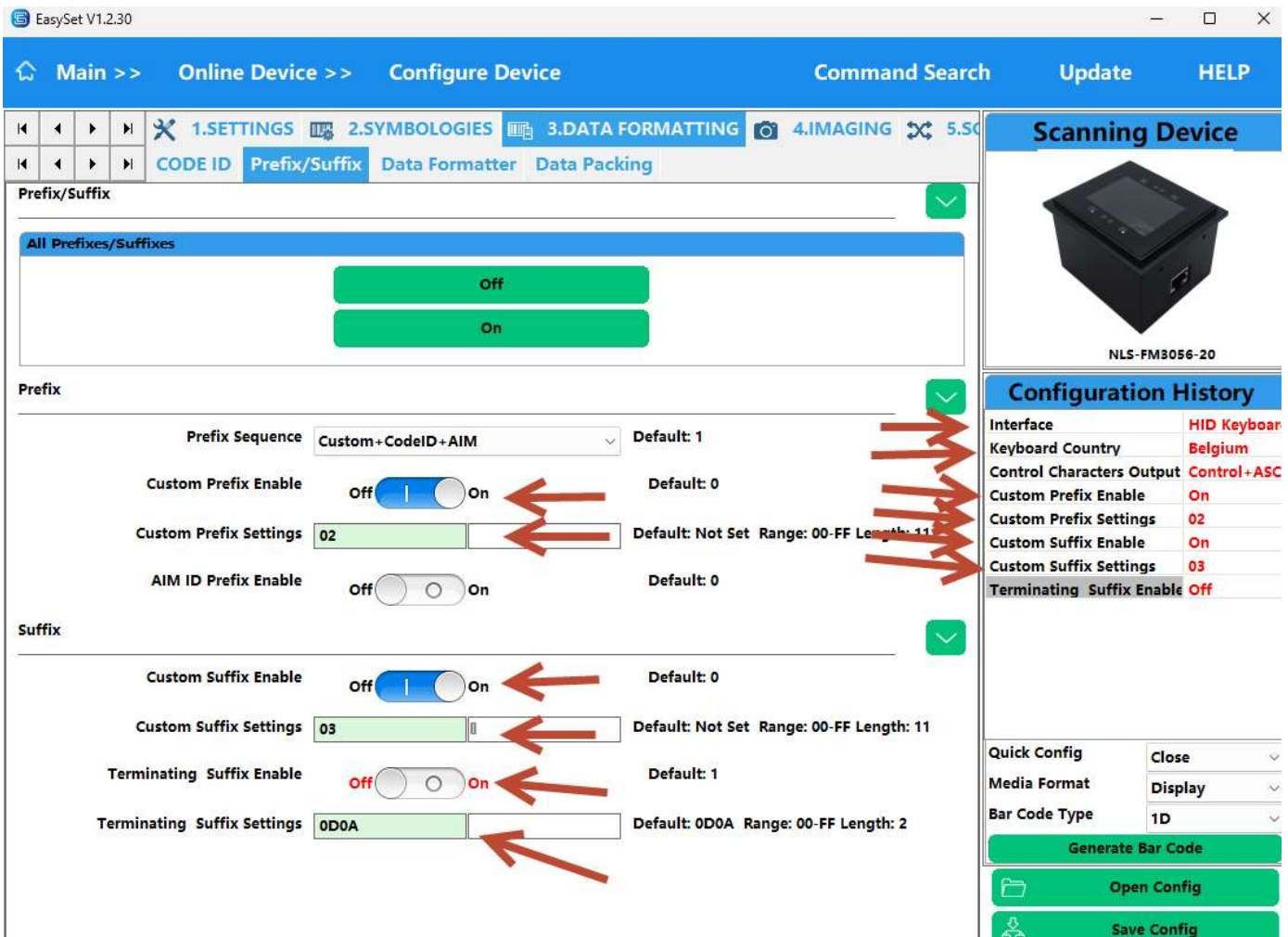
8.1. Example Zorgi configuration

Example with Prefix: CTRL-B = Start Of Text = STX = HEX 02
 → Attention no visible character in application text field!

Example with Suffix: CTRL-C = End of TeXt = ETX = HEX 03
 → Attention visible character as a square in application text field!

Example final output after scanning 3x "123456":
 Barcode = 123456
 Final output = 123456123456123456 (visually in Notepad)

Remark: You can download the config file: Newland- Config – Zorgi - Afterdefaults - XML V231000.pdf and use the procedure



The screenshot shows the EasySet V1.2.30 software interface. The main menu includes 'Main >>', 'Online Device >>', 'Configure Device', 'Command Search', 'Update', and 'HELP'. The 'Configure Device' section is active, showing '1.SETTINGS', '2.SYMBOLOGIES', '3.DATA FORMATTING', '4.IMAGING', and '5.SCANNING'. The 'Prefix/Suffix' tab is selected, displaying 'All Prefixes/Suffixes' with 'Off' and 'On' buttons. The 'Prefix' section includes:

- Prefix Sequence: Custom+CodeID+AIM (Default: 1)
- Custom Prefix Enable: Off (toggle) (Default: 0)
- Custom Prefix Settings: 02 (text field) (Default: Not Set Range: 00-FF Length: 11)
- AIM ID Prefix Enable: Off (toggle) (Default: 0)

 The 'Suffix' section includes:

- Custom Suffix Enable: Off (toggle) (Default: 0)
- Custom Suffix Settings: 03 (text field) (Default: Not Set Range: 00-FF Length: 11)
- Terminating Suffix Enable: Off (toggle) (Default: 1)
- Terminating Suffix Settings: 0D0A (text field) (Default: 0D0A Range: 00-FF Length: 2)

 Red arrows point to the 'Custom Prefix Enable', 'Custom Prefix Settings', 'AIM ID Prefix Enable', 'Custom Suffix Enable', 'Custom Suffix Settings', 'Terminating Suffix Enable', and 'Terminating Suffix Settings' fields. On the right, the 'Scanning Device' section shows an image of the NLS-FM3056-20 device. Below it, the 'Configuration History' table lists settings:

Interface	HID Keyboard
Keyboard Country	Belgium
Control Characters Output	Control+ASC
Custom Prefix Enable	On
Custom Prefix Settings	02
Custom Suffix Enable	On
Custom Suffix Settings	03
Terminating Suffix Enable	Off

 At the bottom right, there are 'Quick Config' dropdowns for 'Close', 'Media Format' (Display), and 'Bar Code Type' (1D), along with 'Generate Bar Code', 'Open Config', and 'Save Config' buttons.

8.2. Example Primuz configuration

Download our config file:

Newland- Config - Primuz - Afterdefaults - XML V231000.pdf

8.3. Example Random scenario

ATTENTION USE HEX codes!!

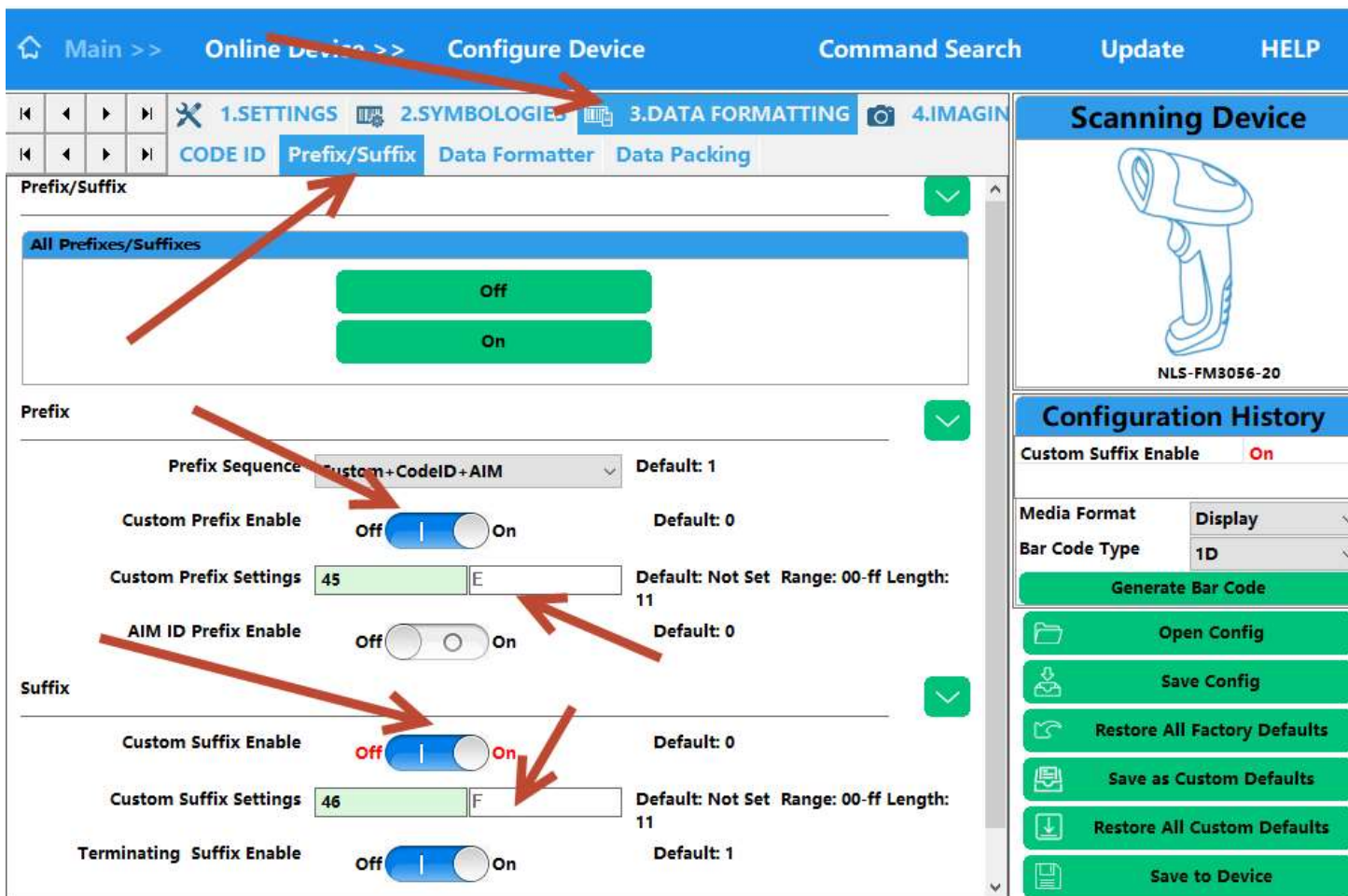
Example with Prefix: "E" = HEX 45 for ascii table.

→ This will add an "E" in front of the scanned barcode/QR code

Example with Prefix: "F" = HEX 46 for ascii table.

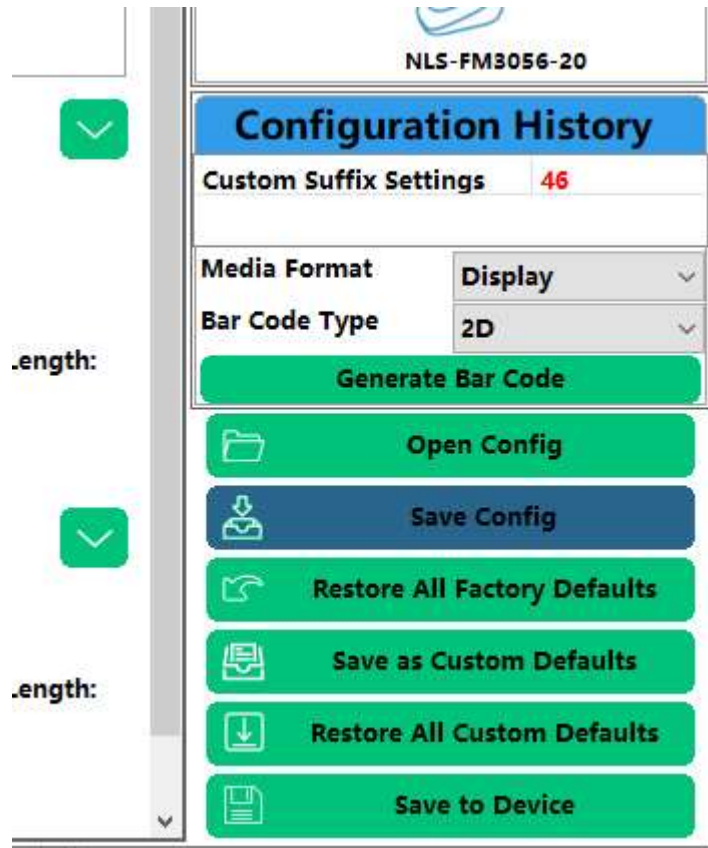
→ This will add an "F" after the scanned barcode/QR code

Example final output:
Barcode = 123456
Final output = E123456F



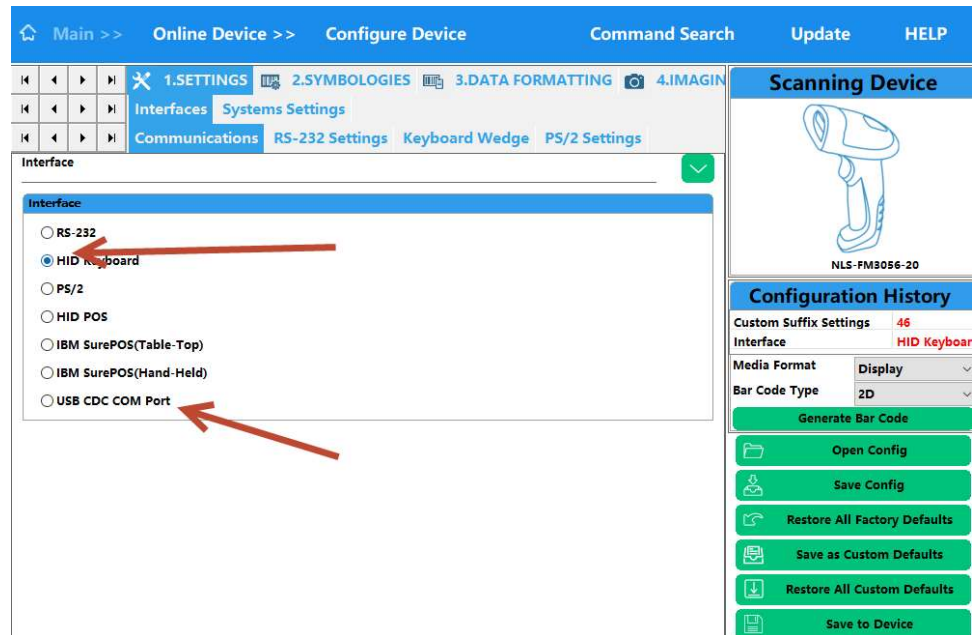
The screenshot displays the 'Configure Device' interface for a scanning device. The main configuration area is divided into sections for Prefix and Suffix. In the Prefix section, the 'Prefix Sequence' is set to 'Custom+CodeID+AIM'. The 'Custom Prefix Enable' toggle is turned on, and the 'Custom Prefix Settings' are configured with the hexadecimal value '45' and the character 'E'. The 'AIM ID Prefix Enable' toggle is turned off. In the Suffix section, the 'Custom Suffix Enable' toggle is turned on, and the 'Custom Suffix Settings' are configured with the hexadecimal value '46' and the character 'F'. The 'Terminating Suffix Enable' toggle is turned off. The right sidebar shows the 'Scanning Device' section with a barcode scanner icon and the model 'NLS-FM3056-20', and a 'Configuration History' section with various configuration management buttons.

9. SAFE CONFIG TO RE-USE



10. SWITCH BACK FROM COM-PORT TO HID KEYBOARD

DON'T FORGET!!!!!



Main >> Online Device >> Configure Device Command Search Update HELP

1.SETTINGS 2.SYMBOLOGIES 3.DATA FORMATTING 4.IMAGIN

Interfaces Systems Settings

Communications RS-232 Settings Keyboard Wedge PS/2 Settings

Interface

Interface

- RS-232
- HID Keyboard
- PS/2
- HID POS
- IBM SurePOS(Table-Top)
- IBM SurePOS(Hand-Held)
- USB CDC COM Port

Scanning Device

NLS-FM3056-20

Configuration History

Custom Suffix Settings 46

Interface HID Keyboard

Media Format Display

Bar Code Type 2D

Generate Bar Code

Open Config

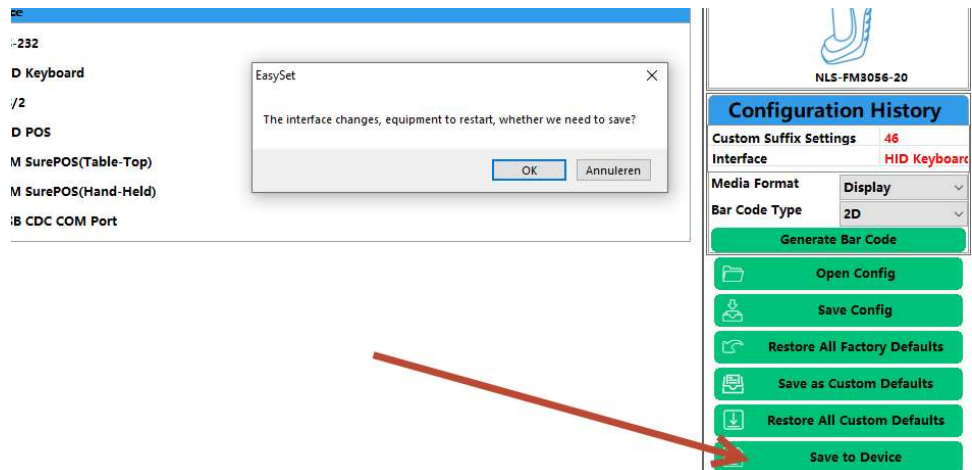
Save Config

Restore All Factory Defaults

Save as Custom Defaults

Restore All Custom Defaults

Save to Device



EasySet

The interface changes, equipment to restart, whether we need to save?

OK Annuleren

RS-232

D Keyboard

/2

D POS

M SurePOS(Table-Top)

M SurePOS(Hand-Held)

B CDC COM Port

NLS-FM3056-20

Configuration History

Custom Suffix Settings 46

Interface HID Keyboard

Media Format Display

Bar Code Type 2D

Generate Bar Code

Open Config

Save Config

Restore All Factory Defaults

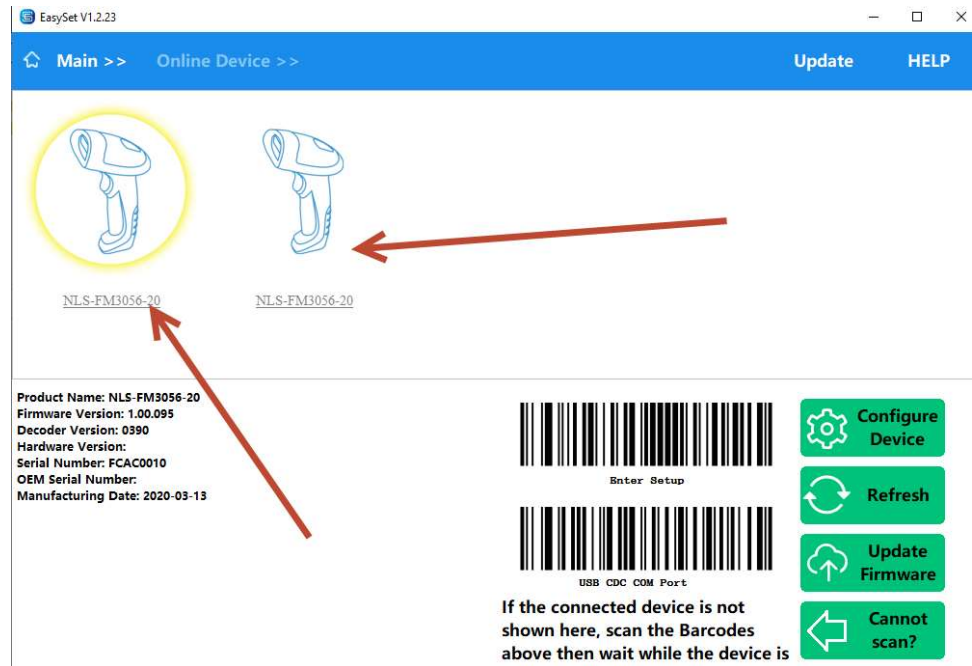
Save as Custom Defaults

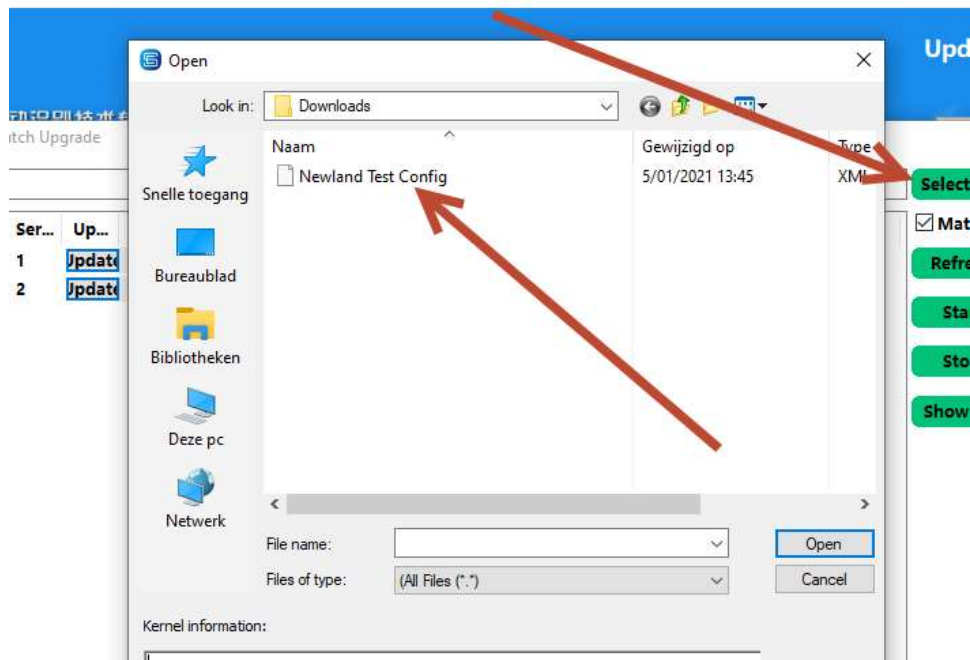
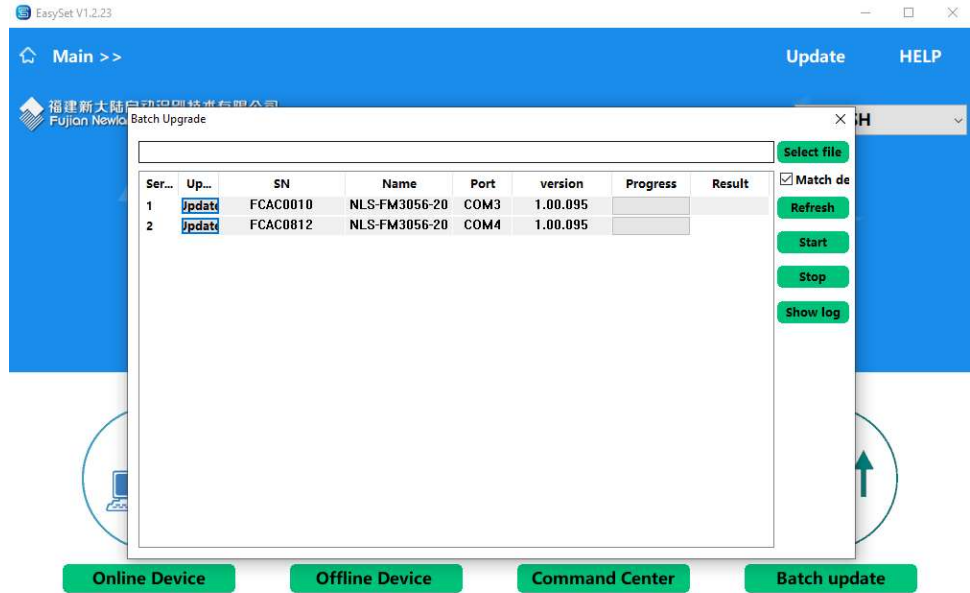
Restore All Custom Defaults

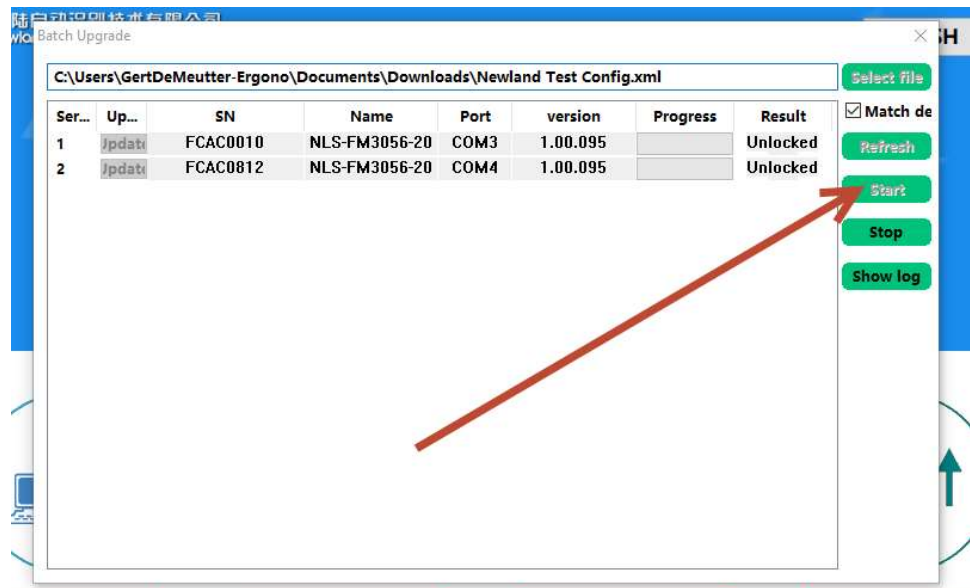
Save to Device

11. BATCH UPDATE

Connect multiple scanners to USB ports of a PC







12. KEYCODES FUNCTION KEYS

ASCII Function Key Mapping Table

ASCII Function	ASCII Value (HEX)	Function Key Mapping Disabled	Ctrl+ASCII
NUL	00	Null	Ctrl+@
SOH	01	Keypad Enter	Ctrl+A
STX	02	Caps Lock	Ctrl+B
ETX	03	ALT	Ctrl+C
EOT	04	Null	Ctrl+D
ENQ	05	CTRL	Ctrl+E
ACK	06	Null	Ctrl+F
BEL	07	Enter	Ctrl+G
BS	08	Left Arrow	Ctrl+H
HT	09	Horizontal Tab	Ctrl+I
LF	0A	Down Arrow	Ctrl+J
VT	0B	Vertical Tab	Ctrl+K
FF	0C	Delete	Ctrl+L
CR	0D	Enter	Ctrl+M

13. KEYCODES NUMBERS

virtual key codes from Win32API.

- 8 - Backspace
- 9 - Tab
- 12 - 5 in the numeric keypad when Num Lock is off
- 13 - Enter
- 16 - Shift
- 17 - Ctrl
- 18 - Alt
- 19 - Pause/Break
- 20 - Caps Lock
- 27 - Esc
- 32 - Space
- 33 - Page Up
- 34 - Page Down
- 35 - End
- 36 - Home
- 37 - Left arrow
- 38 - Up arrow
- 39 - Right arrow
- 40 - Down arrow
- 44 - Print Screen
- 45 - Insert
- 46 - Delete

- 48 - 0
- 49 - 1
- 50 - 2
- 51 - 3
- 52 - 4
- 53 - 5
- 54 - 6
- 55 - 7
- 56 - 8
- 57 - 9

- 65 - A
- 66 - B
- 67 - C
- 68 - D
- 69 - E
- 70 - F
- 71 - G
- 72 - H
- 73 - I
- 74 - J
- 75 - K
- 76 - L
- 77 - M
- 78 - N



- 79 - O
 - 80 - P
 - 81 - Q
 - 82 - R
 - 83 - S
 - 84 - T
 - 85 - U
 - 86 - V
 - 87 - W
 - 88 - X
 - 89 - Y
 - 90 - Z
-
- 91 - left Win
 - 92 - right Win
 - 93 - Popup
-
- 96 - 0 in the numeric keypad
 - 97 - 1 in the numeric keypad
 - 98 - 2 in the numeric keypad
 - 99 - 3 in the numeric keypad
 - 100 - 4 in the numeric keypad
 - 101 - 5 in the numeric keypad
 - 102 - 6 in the numeric keypad
 - 103 - 7 in the numeric keypad
 - 104 - 8 in the numeric keypad
 - 105 - 9 in the numeric keypad
 - 106 - * in the numeric keypad
 - 107 - + in the numeric keypad
 - 109 - - in the numeric keypad
 - 110 - . in the numeric keypad
 - 111 - / in the numeric keypad
-
- 112 - F1
 - 113 - F2
 - 114 - F3
 - 115 - F4
 - 116 - F5
 - 117 - F6
 - 118 - F7
 - 119 - F8
 - 120 - F9
 - 121 - F10
 - 122 - F11
 - 123 - F12
-
- 144 - Num Lock
 - 145 - Scroll Lock
 - 160 - left Shift
 - 161 - right Shift
 - 162 - left Ctrl
 - 163 - right Ctrl

14. ADVANCED: REMARKS GENERAL

In notepad you can test the reading of barcodes and QR-codes. How ever you can't visually see the CTRL-B and CTRL-C

15. ADVANCED: TESTING WITH CONNECTO KB INPUT.EXE

Remark: for advanced use only with the tool KB_input.EXE.

CTRL-B Barcode CTRL-C gives in the Connecto KB_input.exe result:

162 66(barcode)... 162 67