EasySet User Guide

Revision History

Version	Description	Date
V1.0.1	Add Functions.	May 09, 2017
V1.0.0	Initial release.	November 25, 2016

Table of Contents

Introducing EasySet

Introduction

EasySet, developed by Fujian Newland Auto-ID Tech. Co., Ltd., is a configuration tool for Newland's 1D/2D handheld barcode scanner, fixed mount barcode scanners and OEM scan engines. Its main features include:

✧ View device & configuration information of online device

✧ Configure device

✧ Update firmware of online device

✧ Load/modify existing XML configuration file; save current settings to an XML file

✧ Create/print/save programming barcodes to a PDF or Word file

✧ View/edit/save image stored on online device in the original image/BMP/JPG/TIFF format

✧ Send serial commands to online device and receive device response

✧ Supported languages: Chinese and English.

EasySet supports 32-bit/64-bit Microsoft WinXP/Win7/Win 8/Win 8.1/Win 10 operating systems.

EasySet can communicate with device via one of the following interface: RS-232, USB COM Port Emulation (udp_and_vcom_drv required), USB CDC (CDC - Virtual COM Driver required), USB DataPipe (udp_and_vcom_drv required), USB HID-POS.

Supported Products

Handheld barcode scanner: NLS-HR21, NLS-HR22, HR3290, NLS-NVH200.

Fixed mount barcode scanner: NLS-FM40C, NLS-FM50, NLS-FM430.
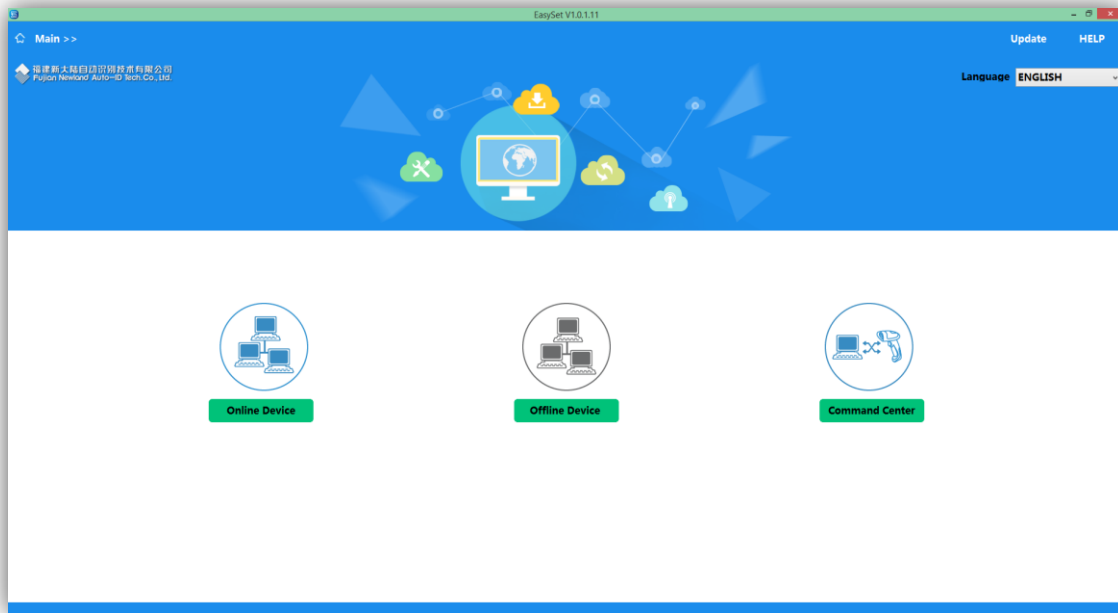
OEM scan engine: NLS-EM3086, NLS-EM20.

Install Driver

After installed EasySet,there is a "ufcom" zip in the installation directory.UnZip it and click "install.cmd" will install "UFCOM" Driver.

Using EasySet

Main Page

Install EasySet on your PC by following the on-screen instructions. When you start EasySet, it will display the Main page as shown below.

Working mode

EasySet provides three working modes: Online Device, Offline Device and Command Center.

Online Device: This mode is applicable to online configuration and firmware update. To use this mode, you need to connect your device(s) to PC.

Offline Device: This mode is applicable to offline configuration.

Command Center: This mode is applicable when you want to configure/control your device by sending serial commands to it. To use this mode, you need to connect your device to PC.

Languages

EasySet supports Chinese and English languages. To set the language, click on the arrow icon beside "Language" at the upper right of the Main page and then select your desired language.

Update

To update to the latest version of EasySet, click on "Update" at the upper right of the Main page.

Help

To view the *EasySet User Guide*, click on "Help" in the top right corner of the Main page or press F1 key.

Returning to Previous Page

The navigation path (e.g. Main>> Online Device>>) is displayed in the top left corner of every page. To quickly go back to a page within the path, simply click on the corresponding item in the path.

Online Device Page

Online Device is a working mode that allows you to view device information, configure device, update firmware, load/modify existing XML configuration file, and create/print/save programming barcodes to a PDF or Word file. To use this mode, (i) connect your device(s) to PC via RS-232, USB COM Port Emulation (udp_and_vcom_drv required), USB CDC (CDC - Virtual COM Driver required), USB DataPipe (udp_and_vcom_drv required), or USB HID-POS interface; (ii) start Easyset and then click on "Online Device" to open the Online Device page. All detected devices will appear on the Online Device page.

USB COM Port Emulatio,USB CDC and USB DataPipe also use "UFCOM" Driver。

Note: you may scan the barcodes on the Online Device page to quickly enable the USB COM Port Emulation feature. A driver is required for this feature to function.
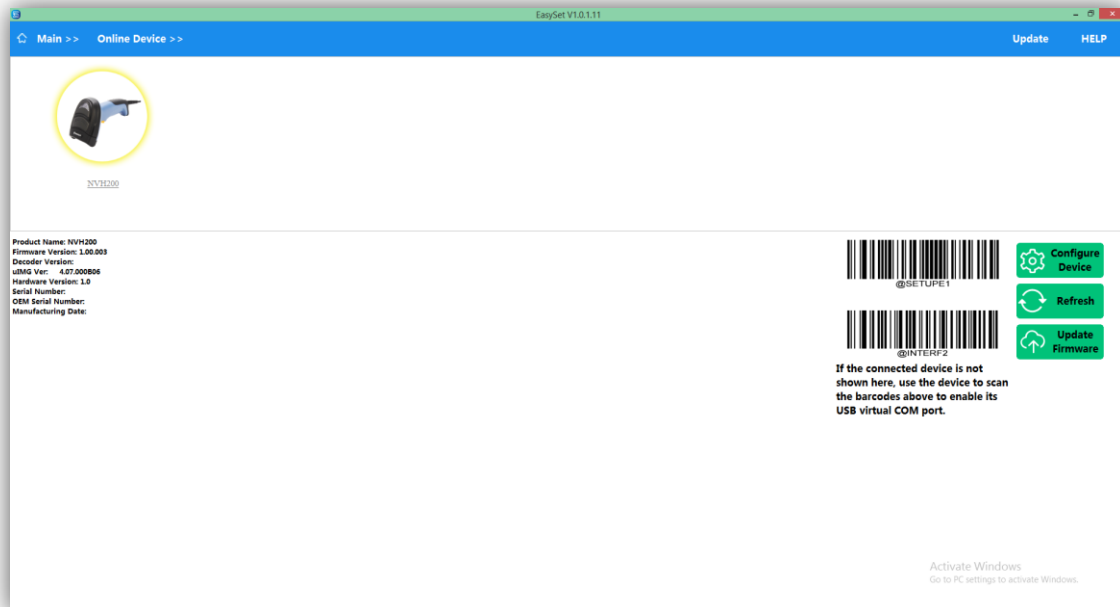
Device Information

To view the product information of a device, click on that device on the Online Device page. Product information includes product model, firmware version, hardware version, serial number, manufacturing date and so on.

Refresh

To redetect the devices connected to PC, click on "Refresh" on the Online Device page.

Configuring Device

To configure a device, (i) on the Online Device page, select that device then click on "Configure Device" or simply double-click on that device (The configuration information of the device will automatically be loaded into EasySet) to open the Configure Device page; (ii) on the Configure Device page, set the parameters as per actual needs.

For more information, see the "Configure Device Page" section.

Updating Firmware
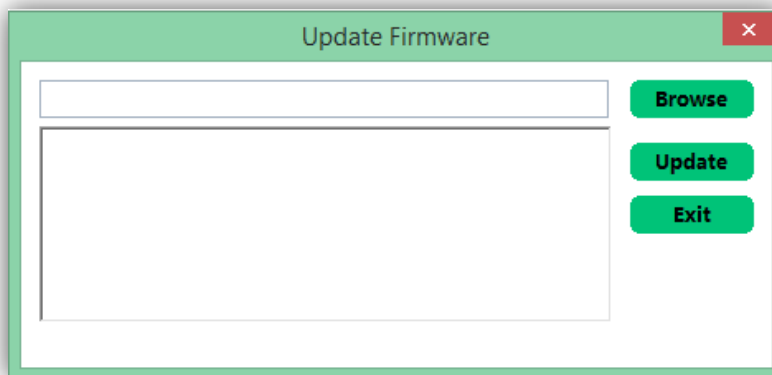
To update the firmware of a device, (i) select that device then click on "Update Firmware" on the Online Device page; (ii) click on "Browse", select the firmware file and click on "Update".

Offline Device Page

Offline Device is a working mode that allows you to set parameters of an offline device on EasySet, save current settings to an XML file, load/modify existing XML configuration file, and create/print/save programming barcodes to a PDF or Word file. To use this mode, click on "Offline Device" to open the Offline Device page.
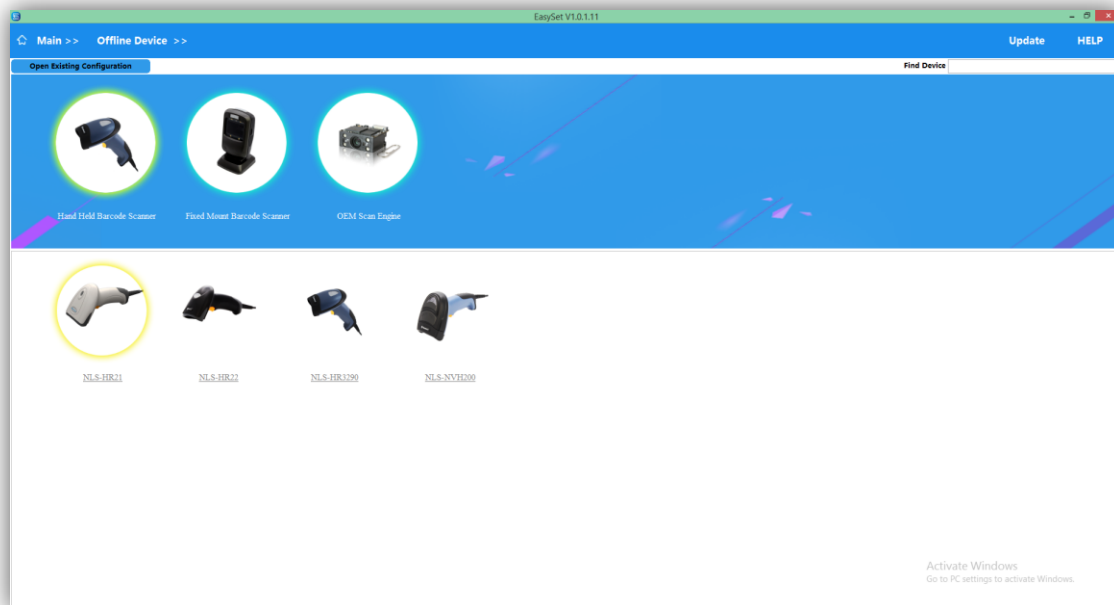
Selecting a Device

On the Offline Device page, you can select your desired device type and then double-click on the desired device to open the Configure Device page. Then you can set the parameters as per actual needs.

Finding a Device

On the Offline Device page, you can also enter your desired product model (such as HR22) in the Find Device field and then double-click on the matching device to open the Configure Device page. Then you can set the parameters as per actual needs.

Loading Existing Configuration File

To load an existing/external configuration file, click on "Open Existing Configuration" at the upper left of the Offline Device page, select the desired configuration file and then click on "open". EasySet will display the Configure Device page according to the configuration file. Then you can modify the configuration as per actual needs.

Configure Device Page

There are six tabs on the Configure Device page: **1.SETTINGS**, **2.SYMBOLOGIES**, **3.DATA FORMATTING**, **4.IMAGING**, **5.SCAN DATA WINDOW** and **6.COMPARE**.
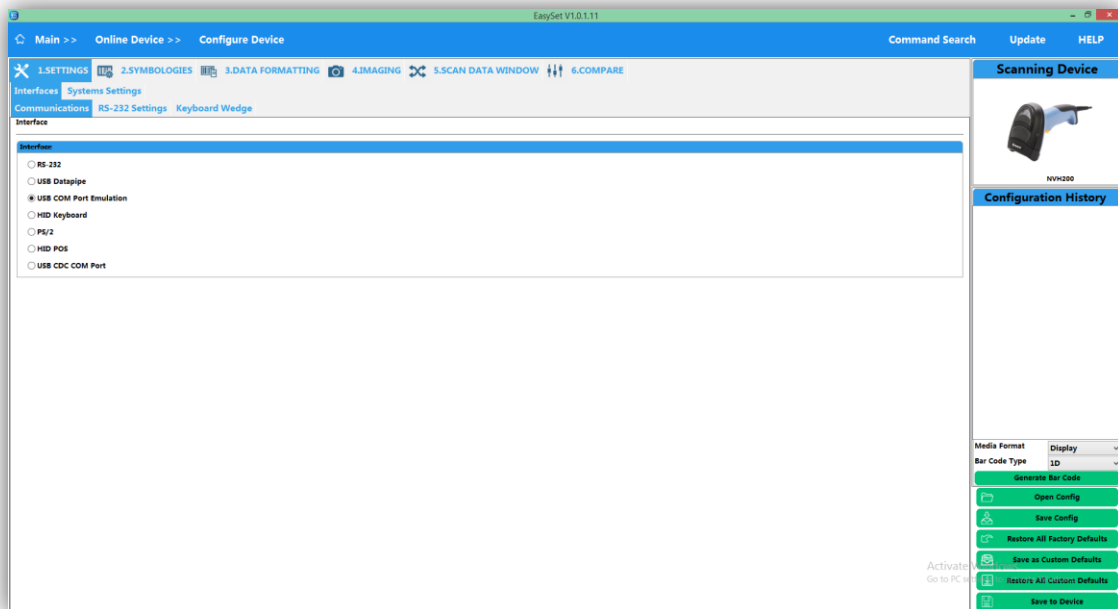
Setting Device

The **1.SETTINGS**, **2.SYMBOLOGIES** and **3.DATA FORMATTING** tabs on the Configure Device page are used for setting device.

1.SETTINGS: Modify communication interface settings (interface type, RS-232 settings, keyboard wedge, PS/2 settings) and system parameters (settings, scan settings, hardware).

2.SYMBOLOGIES: Modify symbology settings (global settings, 1D, 2D, OCR, Postal).

3.DATA FORMATTING: Modify prefix/suffix, Code ID, data formatter, data cut out/data packing, and driver license code settngs.

There are several control types.

➢   Radio Button: Select one option from a set of alternatives.
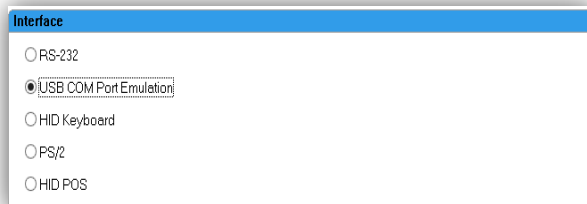
➢   Toggle switch: Click on "On" or "Off" to turn the feature on or off.

➢ Dropdown list: Select an item from a dropdown list.

Baud Rate	9600	Default: 3
RS-232 Check	1200 / 2400	Default: 0
RS-232 Stop Bits	4800 / 9600	Default: 0
RS-232 Data Bits	14400 / 19200	Default: 0
RS-232 RTS/CTS Flow Control	38400 / 57600 / 115200	Default: 0

➢ Dropdown list with "Custom" item: When selecting the "Custom" item from a dropdown list, you may enter a value within the given range in the edit box below.

Sensitivity(Auto Scan Mode)	Enhanced	Default: 2 Range: 1-16
	2	

➢ DEC edit box: Enter a decimal value within the given range.

Top of Central Area	40	Default: 40 Range: 0-100
Bottom of Central Area	60	Default: 60 Range: 0-100
Left of Central Area	40	Default: 40 Range: 0-100
Right of Central Area	60	Default: 60 Range: 0-100

➢ HEX edit box: Enter the hexadecimal value for each desired ASCII character in the left box, then the corresponding character(s) will display in the right box.

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

➢ Button: Click on the button to send the corresponding command.

Restore Code ID Default

➢ Tip: Pause the mouse pointer over a parameter or option for a second, then the corresponding command will appear in a pop-up text field.

Code 11 Decoding	Off ⬤ On	Default: 1
C11ENA		
Minimum Length 2		Default: 2 Range: 1-255

➢ Data format editing (data formatter): To enter a command, select the command on the left of the Data format page, click on the character(s) on the on-screen keyboard if you want to select one or more characters, and then click on "Add".
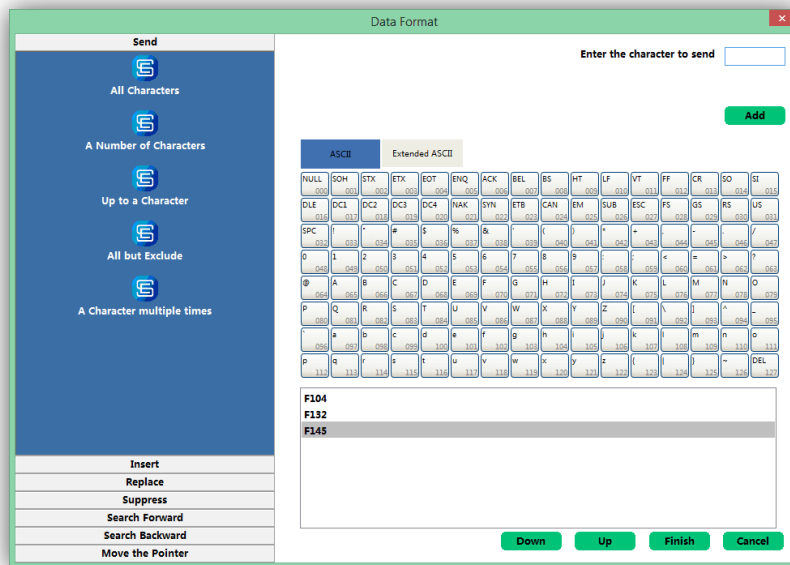
When using the Online Device mode, EasySet loads configuration parameters & data and factory default values from the connected device. If an external/existing configuration file is opened, Easyset loads configuration data from the file.

When using the Offline Device mode, EasySet loads configuration parameters & data and factory default values from its internal configuration file. If an external/existing configuration file is opened, Easyset loads configuration data from the external file while getting configuration parameters and factory default values from its internal configuration file.

Configuration History

All modified settings will be shown in the Configuration History box. To undo the change to a parameter, click on "Undo" beside that parameter.
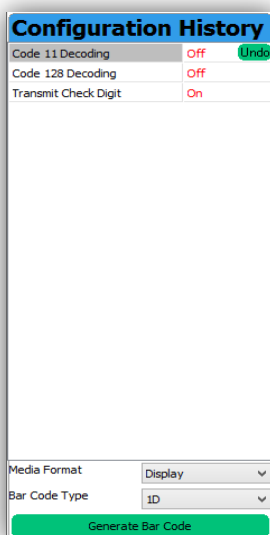

To create the programming barcodes needed for the modified settings listed in the Configuration

History box:

(i) click on "Generate Bar Code" at the bottom of the Configuration History box;

(ii) set the items in the Settings Code box on the left.

(iii) To print out or save the programming barcode sheet as a PDF or Word file, click on the appropriate button in the Settings Code box.
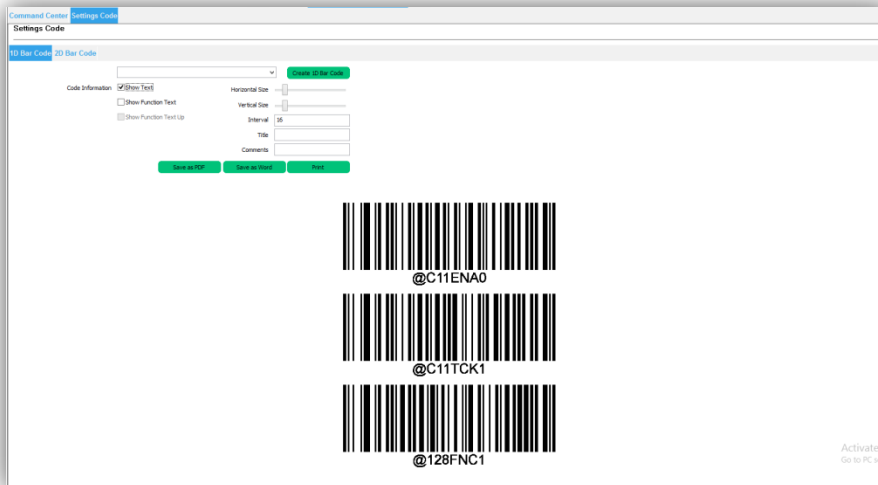
Compare

The features under the **6.COMPARE** tab are described as below.

When in the Online Device mode, you can compare current settings on EasySet against factory default settings by click oning "Default Vs Current".

When in the Offline Device mode, you can compare current settings on EasySet against factory default settings by click oning "Default Vs Current", or current settings on EasySet against an external configuration file by click oning "XML Vs Current" then "Browse Xml" and selecting the desired configuration file.

To view the Matched or Unmatched Settings table, select "Show Match Settings" or "Show Unmatched Settings".

To change some or all current settings to factory defaults or the settings in the external configuration file, select the desired or all item(s) in the Unmatched Settings table and then click on "Clone".

Saving Configuration

✧   When in the Online Device mode:

Open Config: Click on it, select a configuration file and then click on "Open" to load the file.
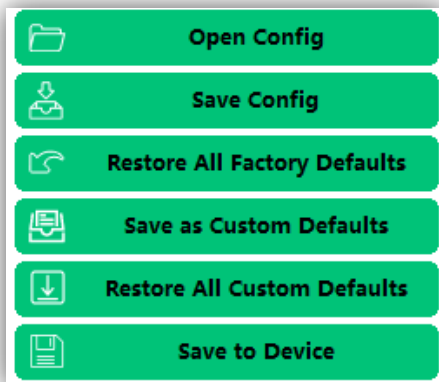
Save Config: Click on it, enter the file name and then click on "Save" to save the current settings to an .xml file.

Restore All Factory Defaults: Click on it to restore the current settings on EasySet to factory defaults.

Save as Custom Defaults: Click on it to save the current settings onto the connected device as custom defaults while keeping its configuration data intact.

Restore All Custom Defaults: Click on it to restore the connected device and the current settings on EasySet to custom defaults.

Save to Device: Click on it to save the modified settings to the connected device.

✧   When in the Offline Device mode:

**Open Config**: Click on it, select a configuration file and then click on "Open" to load the file.

Save Config: Click on it, enter the file name and then click on "Save" to save the current settings to an .xml file.

Restore All Factory Defaults: Click on it to restore the current settings on EasySet to factory defaults.

Imaging

The features (only available in the Online Device mode) under the **4.IMAGING** tab include viewing/ editing/ saving image stored on the device in the original image/BMP/JPG/TIFF format.
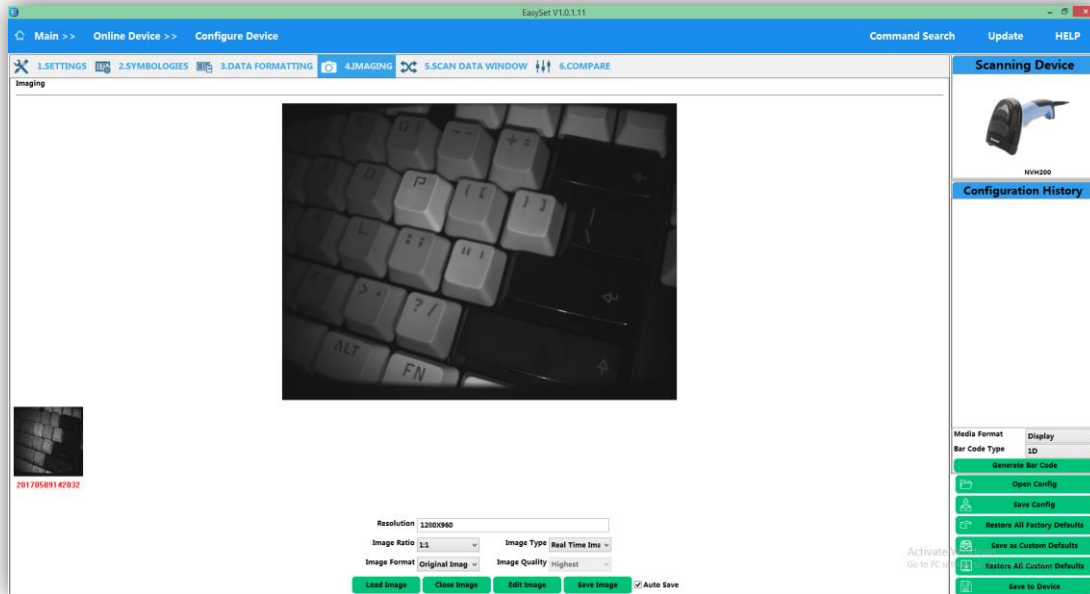

To view the real-time image/decode image stored on the connected device, select Real Time Image/Decode Image from the Image Type dropdown list and the desired image ratio, and then click on "Load Image".

To close one image, double-click on its thumbnail image. To close all images, click on "Close Image".

To save the current image, select the desired image format, click on "Save Image", and then enter a file name and click on "Save".

 (If you check "AutoSave", and when click on "Load Image",the image will automatically save to"AutoSave" folder under installation path.)

To edit the current image, click on "Edit Image", then edit the image in the pop-up Edit Image dialog box as per actual needs.
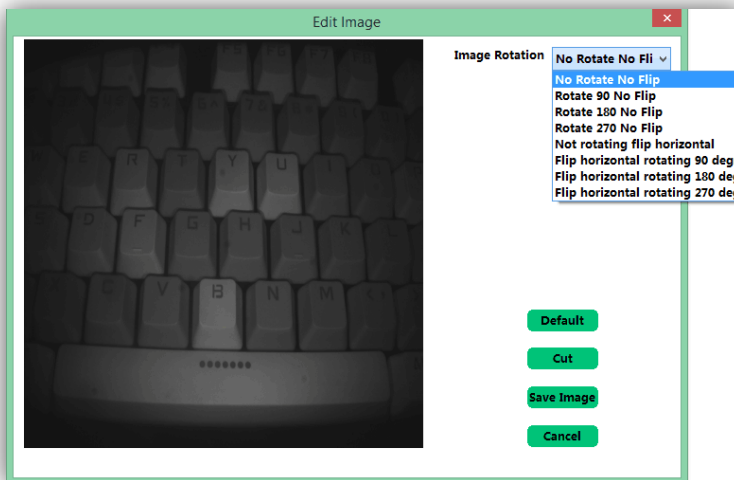
Scan Data Window

The features under the **5.SCAN DATA WINDOW** tab include sending serial commands to the device & receiving device response (only available in the Online Device mode), and creating/ printing/ saving programming barcode sheet representing serial command(s).

Command Center: Send one (e.g. 128ENA1;) or more serial command(s) (e.g. 128ENA1;CID12841;) to the connected device and receive device response that can be seen. Note that every serial command should be terminated by a semicolon (;) and capitalized.

Settings Code: Create/print/save 1D or 2D programming barcode sheet that represents one or more serial command(s) you enter. 1D programming barcode sheet can be created for a single serial command, whereas 2D programming barcode sheet can be created for a single (e.g. 128ENA1;) or multiple serial commands (e.g. 128ENA1;CID12841;). Note that a serial command should be terminated by a semicolon (;) and capitalized.
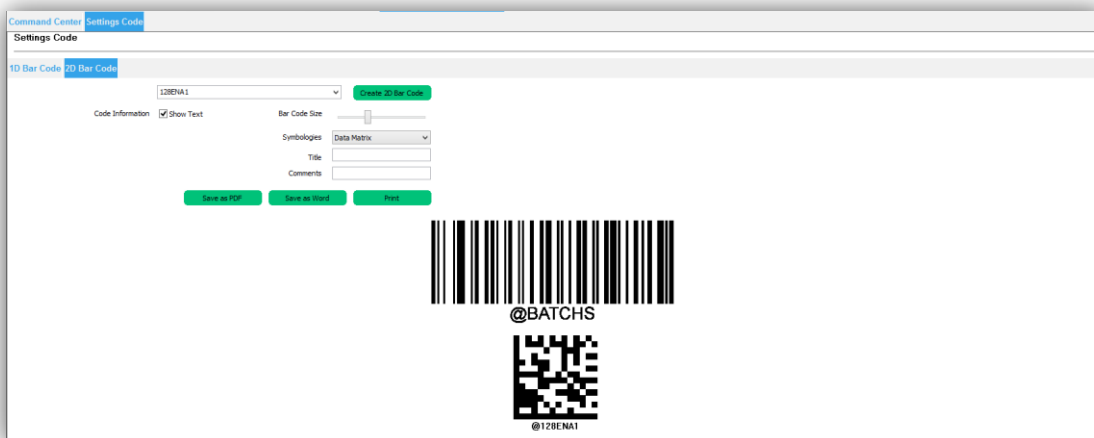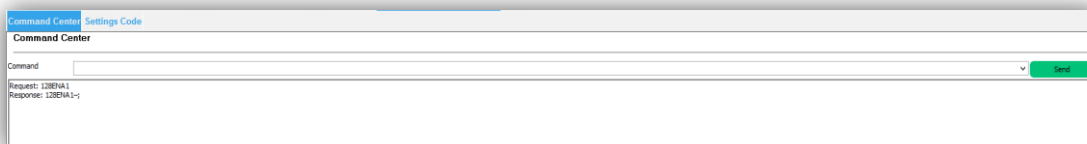
Command Search

To find a command, click on "Command Search" at the upper right of the Configure Device page and then enter the keyword and click on "Search" in the pop-up box. Double-click on the search result to quickly locate the corresponding parameter on the Configuration Device page.

Command Center Page

Command Center is a working mode that lets you send serial commands to the device and receive device response that can be seen on the Command Center page. To use this mode, (i) connect your device to PC via RS-232, USB COM Port Emulation (udp_and_vcom_drv required), USB CDC (CDC - Virtual COM Driver required), USB DataPipe (udp_and_vcom_drv required), or USB HID-POS interface; (ii) start Easyset and then click on "Command Center" to open the Command Center page. When you connect your device to PC via RS-232, all communication parameters (i.e. baud rate, data bits, parity bits and stop bits) on the Command Center page must be set to match the device.
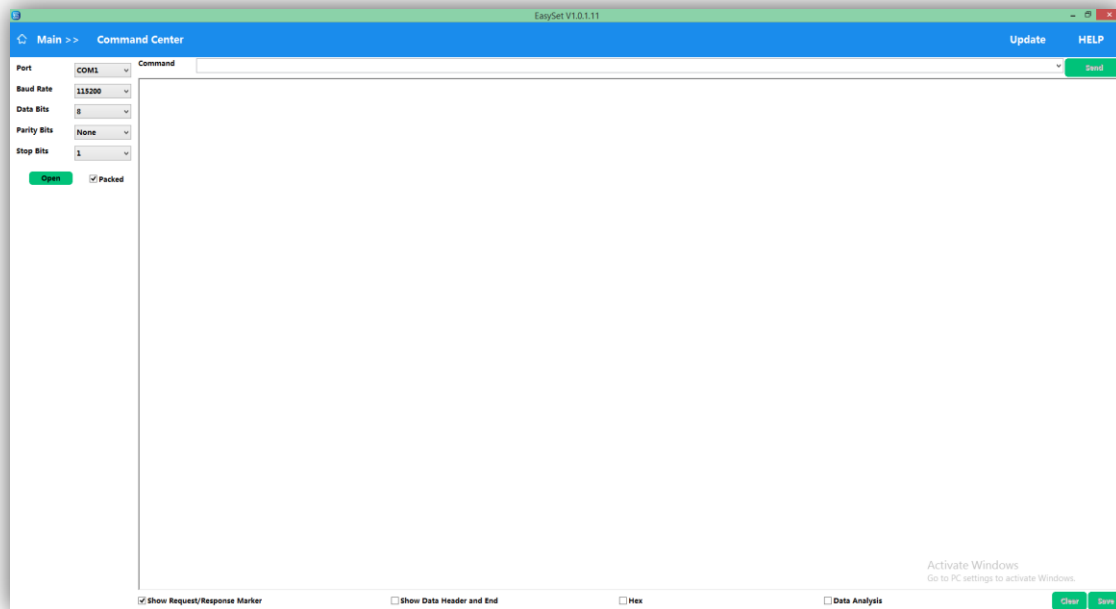
To send one (e.g. 128ENA1;) or more serial command(s) (e.g. 128ENA1;CID12841;) to a device, select the COM port connected to that device, input the command(s) in the Command field and then click on "Send".

If check "Paced",command(s) will packed send to a device, select the COM port connected to that device.Otherwise the original command(s) will be sent.

Check "Data Analysis",EasySet will accoding "Data Packing"(command:PACKAG) to analyze the data recived from device.

Headquarters
Fujian Newland Auto-ID Tech. Co., Ltd.
3F, Building A, No.1, Rujiang West Rd., Mawei, Fuzhou,
Fujian, China   350015
TEL: +86 - (0) 591-83978605
FAX: +86 - (0) 591-83979216
E-mail: marketing@nlscan.com
WEB：www.nlscan.com

Newland Europe BV
Rolweg 25, 4104 AV Culemborg, The Netherlands
TEL: +31 (0) 345 87 00 33
FAX: +31 (0) 345 87 00 39
Email: info@newland-id.com
WEB: www.newland-id.com
Tech Support: tech-support@newland-id.com

Newland North America Inc.
Address: 46559 Fremont Blvd., Fremont, CA 94538, USA
TEL: 510 490 3888
Fax: 510 490 3887
Email: info@newlandna.com
WEB: www.newlandna.com

Newland Taiwan Inc.
7F-6, No. 268, Liancheng Rd., Jhonghe Dist. 235, New
Taipei City, Taiwan
TEL: +886 2 7731 5388
FAX: +886 2 7731 5389
Email: info@newland-id.com.tw
WEB: www.newland-id.com.tw