



NSync User Guide

Revision History

Version	Description	Date
V1.0.0	Initial release.	September 26, 2016
V1.2.1	Add ODBC Export to Excel	November 06, 2017

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Overview

NSync is a tool for NLS-BS80 barcode scanners (hereinafter referred to as “**the scanner**” or “**the BS80**”) to assist the user in performing such tasks on one or more scanners as checking/setting the date & time and saving/deleting data.

The NSync only supports in batch mode. So if you need to get the device barcode, the device must work in batch mode.



Batch Mode

It supports 32-bit/64-bit Microsoft WinXP/Win 7/Win 8/Win 8.1/Win 10 operating systems.

Connecting the BS80 to PC

Connecting the BS80 to PC via USB

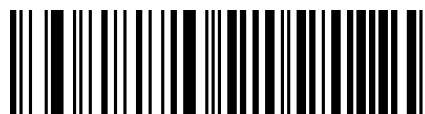
Step 1: Install CDC-Virtual COM Driver on PC by following the on-screen instructions.

Step 2: Connect the BS80 to PC with a USB cable.

Step 3: Use the BS80 to scan the **USB Mode** barcode and then the **USB COM Port Emulation** barcode.

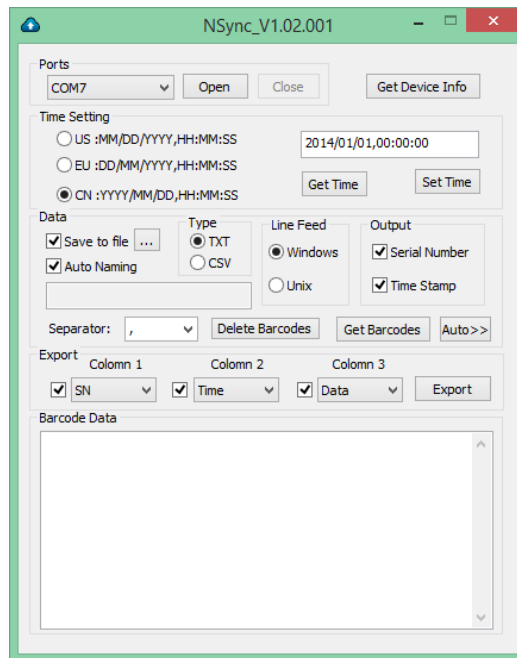


USB Mode



USB COM Port Emulation

Step 4: Double click the NSync.exe file on PC.



Connecting the BS80 to PC via Bluetooth

If your PC is equipped with Bluetooth feature, you can connect the scanner(s) to PC via USB or Bluetooth.

Step 1: Use the BS80 to scan the **Bluetooth Mode** barcode, the **SPP** barcode and the **Delete Bluetooth Pairing** barcode.



Bluetooth Mode




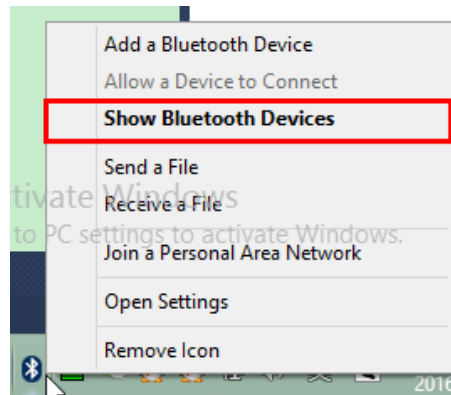
SPP



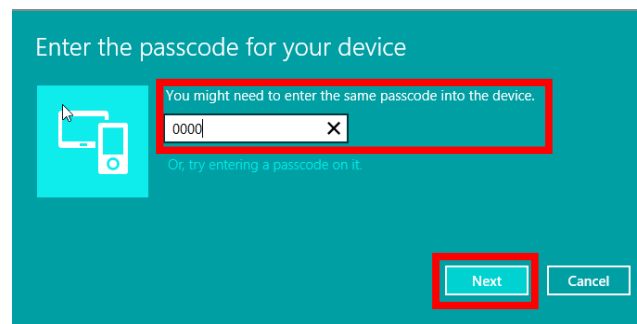
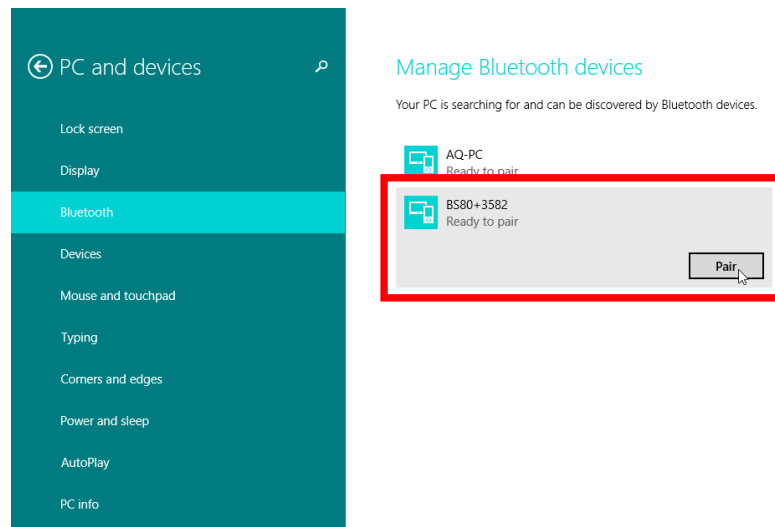
Delete Bluetooth Pairing

Step 2: Connect the BS80 to a Bluetooth-enabled PC. Make sure that Bluetooth is turned on.

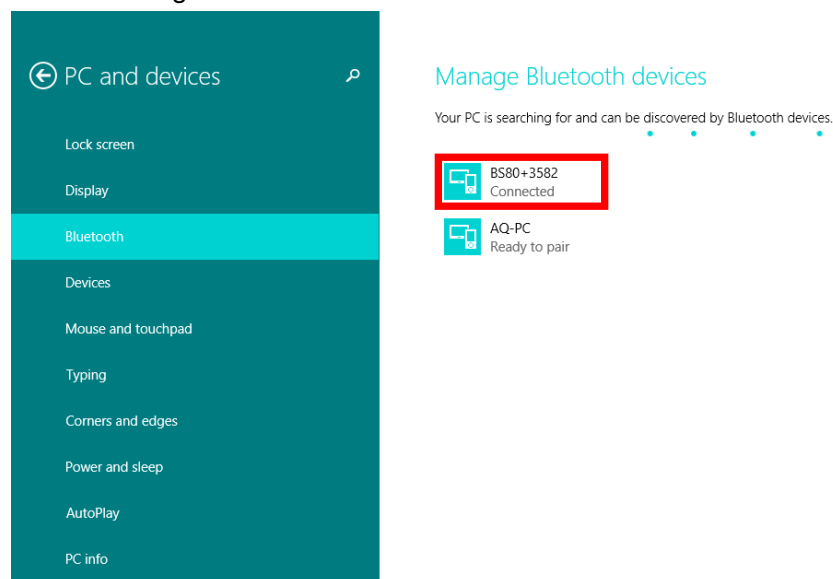
(1) Right click on  on the status bar of PC. On the pop-up menu, select “Show Bluetooth Devices”.



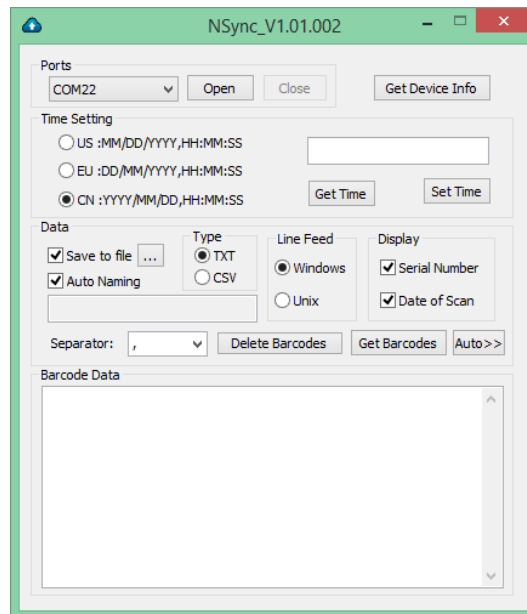
(2) Select “BS80XXXX” and click on “Pair”. Enter the password “0000” and then click on “Next”.



(3) The “Connected” message means the connection is OK.



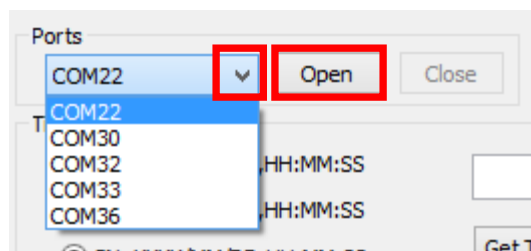
Step 3: Double click the NSync.exe file on PC.



Detecting Connected Device(s)

When one or more scanners are properly connected to PC via USB or Bluetooth, as described in the previous sections, you can find the COM ports used in “Ports” dropdown list on NSync.

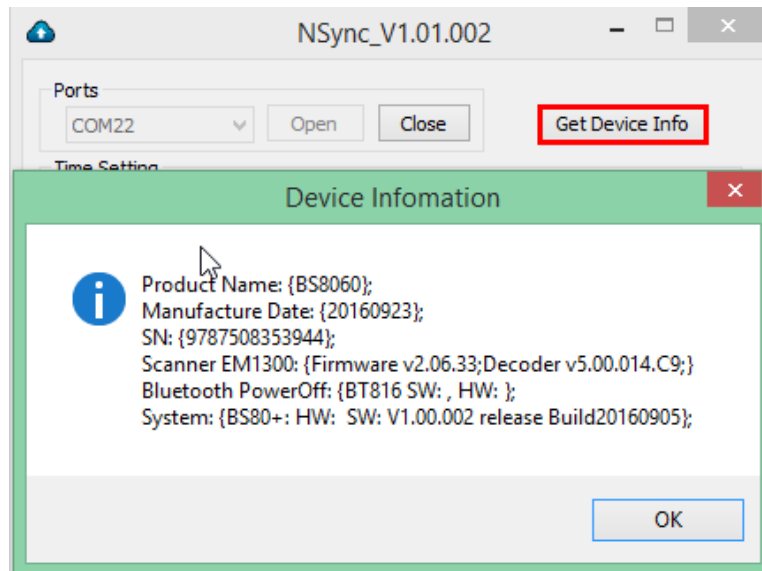
If you want to operate on one scanner, click on the arrow icon, select the COM port(s) used to connect the scanner from the dropdown list and click on “Open” to open the COM port.



Then you can follow the instructions in the following sections to check/set the date & time of the scanner and to save/delete data on it.

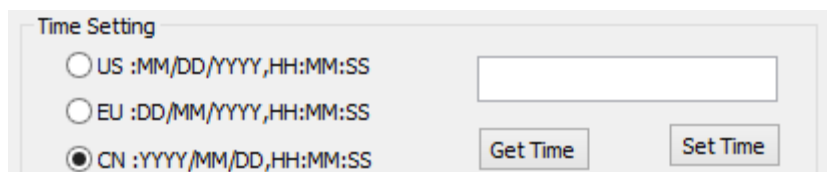
If you want to operate on another scanner, you need to close the current COM port by clicking on “Close” and then open the corresponding COM port.

Get Device Info



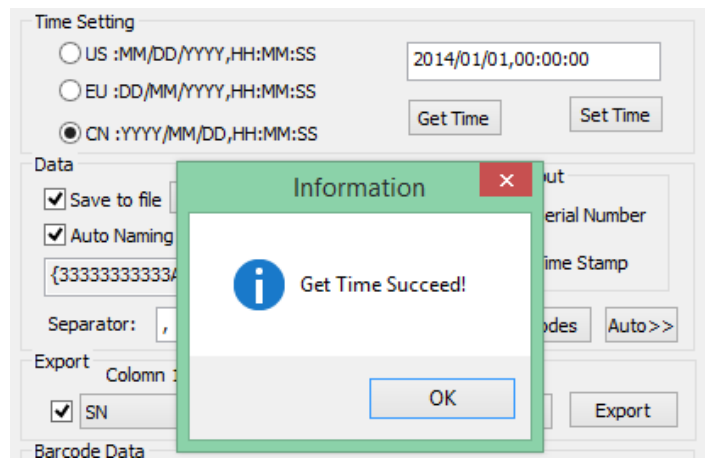
Open com, click “Get Device Info”,NSync will show device information. Include: product name, date of production, serial number, hardware version number, firmware version number, etc..

Time Settings



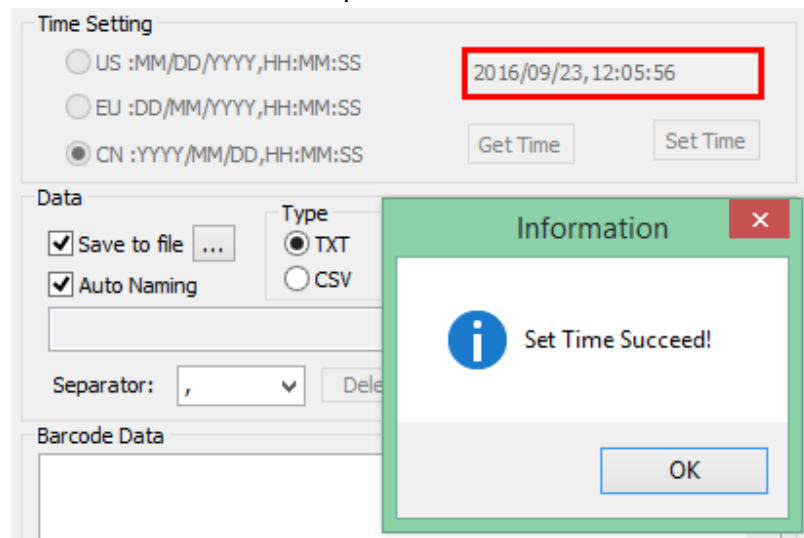
Checking Date & Time

To view the time of the scanner, click on “Get Time”.

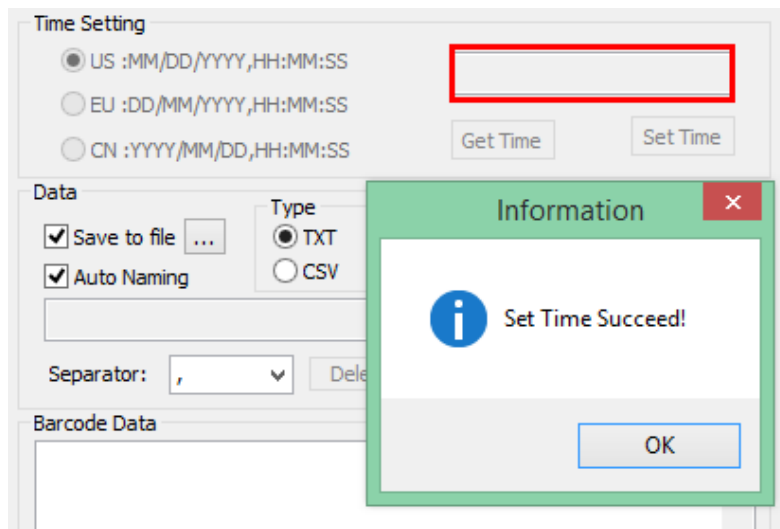


Setting Date & Time on the BS80

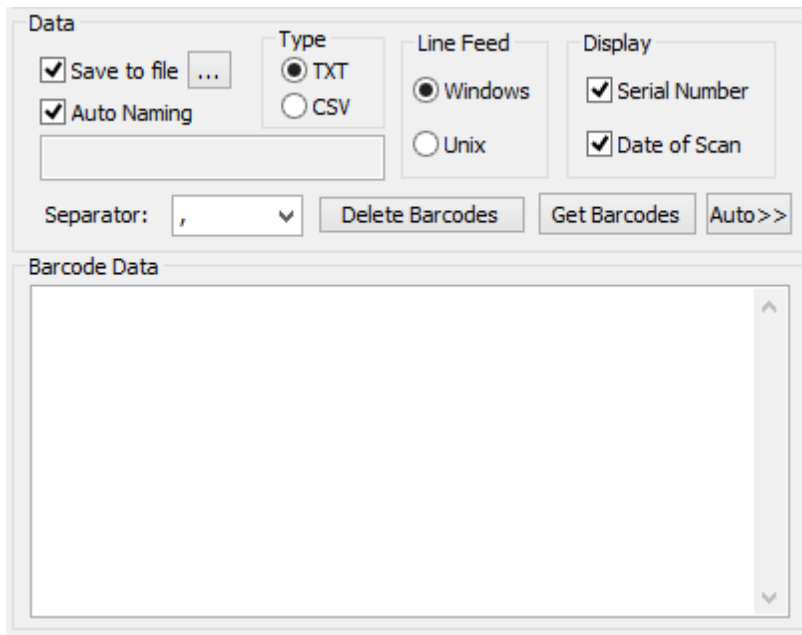
To set the date & time, choose the desired format, enter the date and time in the chosen format and then click on “Set Time”. Note that this operation will also set the date format of the scanner.



To synchronize the scanner’s clock with PC’s clock, choose the desired format, leave the box blank and then click on “Set Time”. Note that this operation will also set the date format of the scanner.



Data Handling




Saving Data to File

Data is saved to a file in the following format:

[Serial Number] + [Separator] + [Time Stamp] + [Separator] + [Barcode Data] + [Line Ending]

You can set the file type & name, save location, line ending and separator on NSync as per your needs.

Save to file: Check this item to save the stored data of the scanner to a file. To set the file save location, click  next to **Save to file**, and navigate to the desired directory. The default file save location is where the NSync software lies.

Auto Naming: Check this item to use the default file name {xxx}_yyyymmdd_nnn where xxx is the scanner's serial number, yyyymmdd is file creation date and nnn is file number that will autoincrement, starting from 001 (for example, {6957303822102}_20160921_001) or uncheck it to use a user-defined file name. When **Auto Naming** is unchecked, you need to enter a desired file name in the box beneath **Auto Naming**.

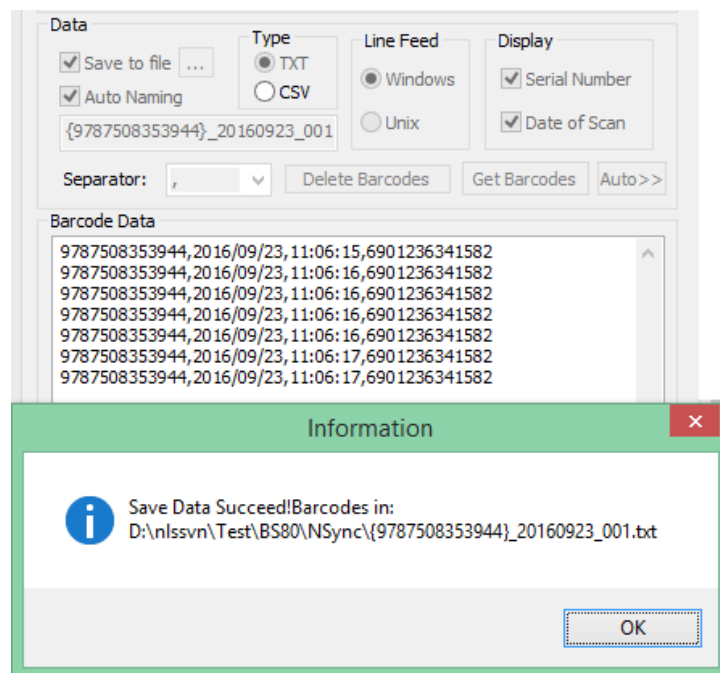
Type: Choose the file type.

Line Feed: Choose "Windows" to use Windows line ending or choose "Unix" to use Unix line ending.

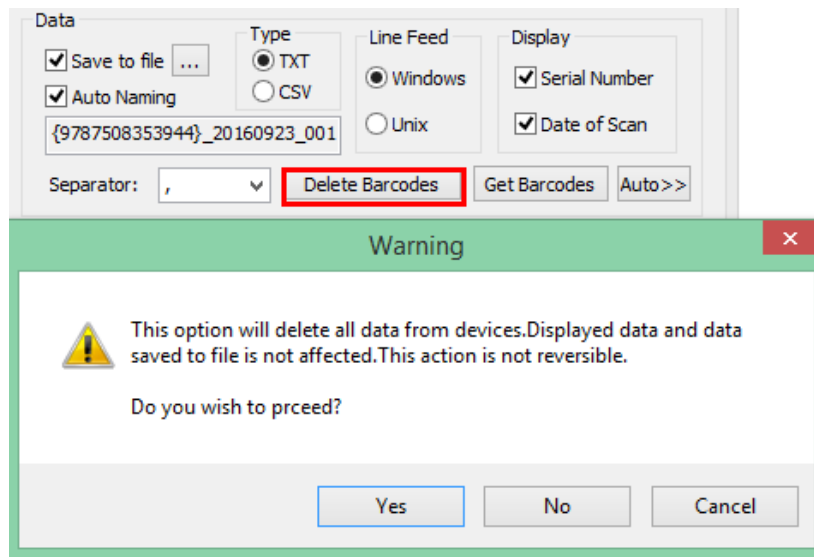
Separator: Click on the arrow beneath **Delete Barcodes** and select a separator character from the dropdown list, or enter the desired separator character(s) in the box next to **Separator**. Separator can be one or more visible characters or one tab.

After finishing the settings above, click on "Get Barcodes" to generate a file. If everything is OK, the "Save Data Succeed" message will be displayed.

Display: For output and saved bar code data, you can choose whether to output Serial Number and Date of Scan.

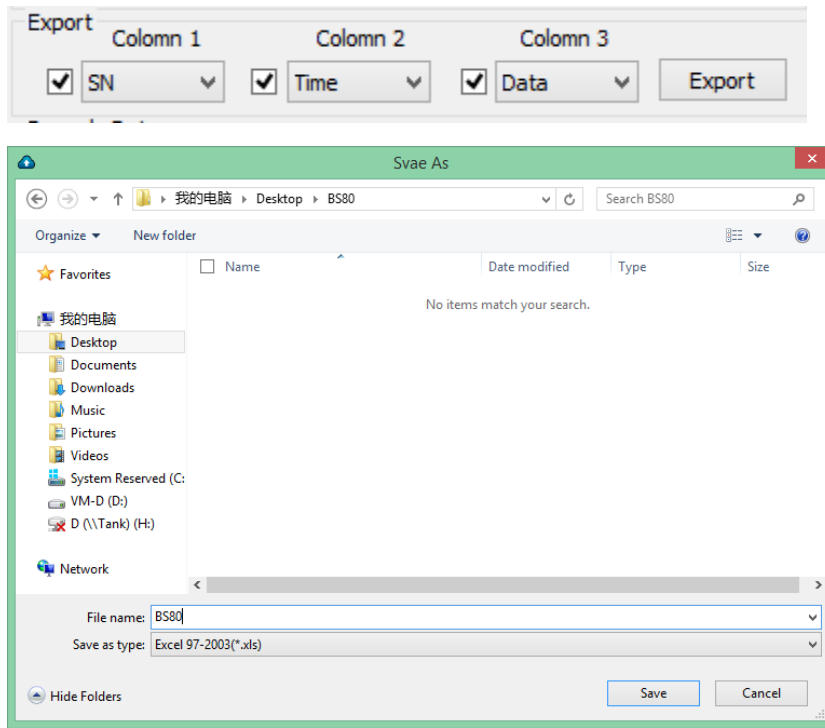


Deleting Data



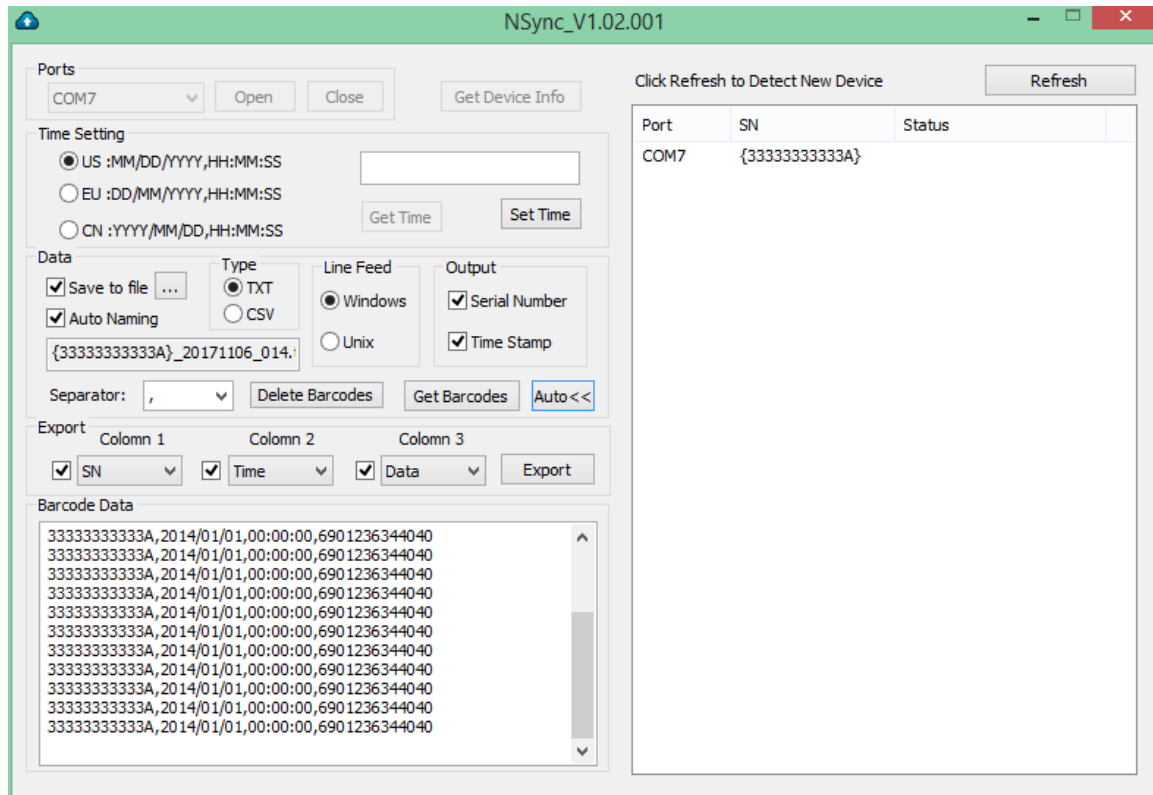
To remove stored data from the scanner, click on “Delete Barcodes”. Delete operation is irreversible, if you choose Yes, delete device data.

ODBC Export to Excel



The last data got can be exported to the Excel table used ODBC, according to the exported content and column name chosen by the user.

Auto Mode



If you wish to operate on multiple connected scanners, click on “Auto>>” to enter the Auto mode. Then you can follow the instructions in the previous sections to set the date & time and to save/delete data on all connected scanners.

When more scanners are connected to your PC, click on “Refresh” to detect new devices.

NSyncCmd

You may use the following parameters when running NSyncCmd.exe in Command Prompt or other program such as Visual Studio 2010. Examples are given in the following sections to illustrate these two cases respectively.

When running NSyncCmd.exe with no parameter, stored data on the scanner(s) will be saved to .txt files with the default file name in the default path and using comma (“,”) as separator.

Default path: The directory where the NSyncCmd.exe file lies.

Default file name: {xxx}_yyyymmdd_nnn (xxx: the scanner's serial number, yyyymmdd: file creation date, nn: file number that will autoincrement, starting from 001, e.g. {6957303822102}_20160921_001)

Parameter Table

Parameter	Function	Example
-help > [file name]	Obtain the help message	NSyncCmd.exe -help > help.txt Obtain the help message in help.txt
-l	List all BS80 device COM ports	NSyncCmd.exe -l
-n [file name] (This parameter cannot be used together with -csv)	Set the file name	NSyncCmd.exe -n BS80Data.txt Save data to BS80Data.txt If -n parameter is left out, then {xxx}_yyyymmdd_nnn.txt will be used as the file name. If -n parameter is left out and -csv parameter used, then {xxx}_yyyymmdd_nnn.csv will be used as the file name. xxx: the scanner's serial number yyyymmdd: file creation date nnn: file number that will autoincrement, starting from 001.
-csv (This parameter cannot be used together with -n)	Set the file type to csv	NSyncCmd01.001.exe -csv Save data to .csv file(s) If -csv parameter is left out, then data will be saved to a .txt file.
-c [COM port number]	Open a COM port	NSyncCmd_V1.01.001.exe -c 11 Save data on the scanner connected to COM11 to a file. If -c parameter is left out, then data on each connected scanner will be saved to a separate file.
-p [path]	Set the file path	NSyncCmd_V1.01.001.exe -p D:\test\ Save data to file(s) at D:\test\ If -p parameter is left out, then current path will be used.
-s [separator]	Set the separator (Separator can be one or more visible characters or one tab.)	NSyncCmd_V1.01.001.exe -s tab Save data to file(s) using tab as separator. If -s parameter is left out, then comma (",") will be used as separator.
-u	Use Unix line ending	NSyncCmd_V1.01.001.exe -u Save data to file(s) using Unix line ending. If -u parameter is left out, then Windows line ending will

		be used.
-rm [COM port number]	Delete device data	NSyncCmd_V1.01.001.exe -rm 11

Error Messages

Error	Message	Remark
ERRORNOBS80	1001	No BS80 was detected.
ERRORCOMSELECTWRONG	1002	The device connected to the COM port was not BS80.
ERRORCOMNOSELECT	1003	未选择要获取条码数据设备端口号
ERRORPATH	1004	Path was missing in -p parameter.
ERRORNWITHCSV	1005	Parameters -n and -csv were used together.
ERRORFILENAME	1006	File name was missing in -n parameter.
ERRORSEPARATOR	1007	Invalid separator.
ERROROPENCOM	1008	Failed to open the COM port.
ERRORSEND CMD	1009	Failed to send the command.
ERRORREAD DATA	1010	Failed to read the data.
ERROROPENFILE	1011	Failed to open the file.
ERRORNOSEP	1012	Separator was missing in -s parameter.
ERRORDELETENOSELECT	1013	未选择要删除条码数据的设备端口号
ERRORDELETEFAILED	1014	删除条码数据失败

Running NSyncCmd in Command Prompt

NSyncCmd.exe is at C:\Users\Tank\Desktop\NSync.

Step 1: Open the Start menu and then click Run. In the Run dialog box, type cmd and press Enter.

Step 2: In the Command Prompt window, type **cd C:\Users\Tank\Desktop\NSync** and press Enter.

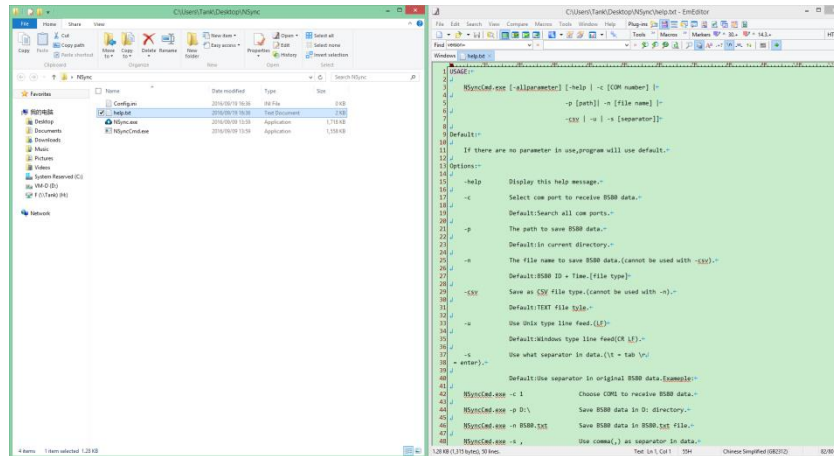
Step 3: In the Command Prompt window, type the command you want and then press Enter. Refer to **Parameter Table** above for the information about commands.

Example 1: To obtain the help message, you can type **NSyncCmd.exe -help > help.txt**

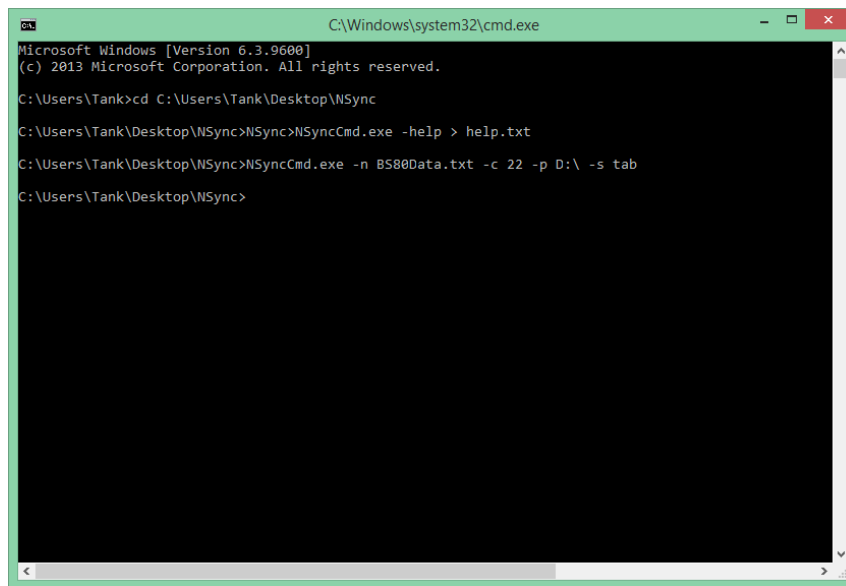
The help message obtained will be in the help.txt file whose location is where NsyncCmd.exe lies (i.e. C:\Users\Tank\Desktop\NSync)

```
C:\Windows\system32\cmd.exe
Microsoft Windows [Version 6.3.9600]
(c) 2013 Microsoft Corporation. All rights reserved.

C:\Users\tank>cd C:\Users\tank\Desktop\NSync
C:\Users\tank\Desktop\NSync>NSyncCmd.exe -help > help.txt
C:\Users\tank\Desktop\NSync>
```

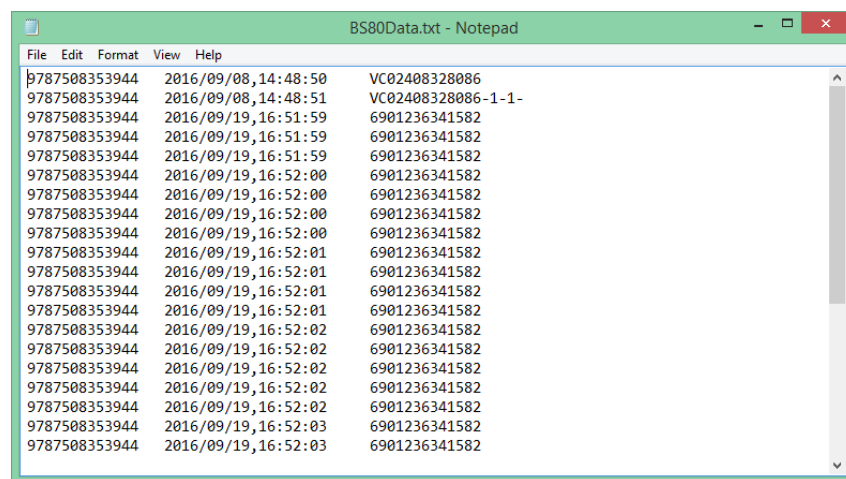


Example 2: To save data on the scanner connected to COM22 to BS80Data.txt at D:\ and using tab as separator, you can type **NSyncCmd.exe -n BS80Data.txt -c 22 -p D:\ -s tab**



```
C:\Windows\system32\cmd.exe
Microsoft Windows [Version 6.3.9600]
(c) 2013 Microsoft Corporation. All rights reserved.

C:\Users\tank>cd C:\Users\tank\Desktop\NSync
C:\Users\tank\Desktop\NSync>NSyncCmd.exe -help > help.txt
C:\Users\tank\Desktop\NSync>NSyncCmd.exe -n BS80Data.txt -c 22 -p D:\ -s tab
C:\Users\tank\Desktop\NSync>
```



9787508353944	2016/09/08,14:48:50	VC02408328086
9787508353944	2016/09/08,14:48:51	VC02408328086-1-1-
9787508353944	2016/09/19,16:51:59	6901236341582
9787508353944	2016/09/19,16:51:59	6901236341582
9787508353944	2016/09/19,16:51:59	6901236341582
9787508353944	2016/09/19,16:52:00	6901236341582
9787508353944	2016/09/19,16:52:00	6901236341582
9787508353944	2016/09/19,16:52:00	6901236341582
9787508353944	2016/09/19,16:52:00	6901236341582
9787508353944	2016/09/19,16:52:01	6901236341582
9787508353944	2016/09/19,16:52:01	6901236341582
9787508353944	2016/09/19,16:52:01	6901236341582
9787508353944	2016/09/19,16:52:01	6901236341582
9787508353944	2016/09/19,16:52:02	6901236341582
9787508353944	2016/09/19,16:52:02	6901236341582
9787508353944	2016/09/19,16:52:02	6901236341582
9787508353944	2016/09/19,16:52:02	6901236341582
9787508353944	2016/09/19,16:52:02	6901236341582
9787508353944	2016/09/19,16:52:03	6901236341582
9787508353944	2016/09/19,16:52:03	6901236341582

Running NSyncCmd in Visual Studio 2010

Example: NSyncCmd.exe is at C:\Users\tank\Desktop\NSync. Save data on the scanner connected to COM22 to BS80Data.txt at D:\ and using tab as separator.

Header file:

```
#include<stdlib.h>
```

Add the following code:

```
system("C:\\Users\\Tank\\Desktop\\NSync\\NSyncCmd.exe -n BS80Data.txt -c 22 -p D:\\ -s tab ");
```

Note that you should use double backslashes in file path instead of single backslashes and absolute

path instead of relative path.

If NSyncCmd.exe is in the project directory, file path can be left out:

```
system("NSyncCmd.exe -n BS80Data.txt -c 22 -p D:\ -s tab ");
```



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