

# **Operation Manual**

## **BCP-8000 Job Generator Utility**

Oct, 10, 2012

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## 1. Introduction

The Job Generator Utility for Windows is a tool assistant for users to create their own data collecting applications without developing program code. The utility can help user to simulate the working sequences when developing applications on PC. The whole process of the application development is just by keying parameters or required factors in the dialogue boxes in the job generator utility and downloading it to the terminal. A new application can be developed promptly and the job of collecting data can be started at once.

## 2. How to execute the Job Generator Utility

Running the utility, the Main Menu, Figure 1 will be shown.

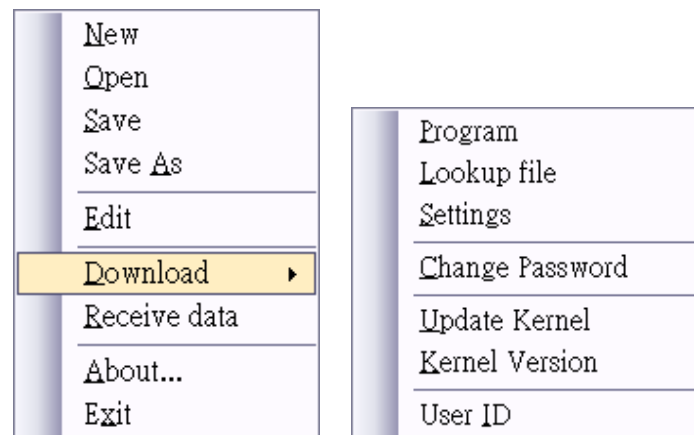


Main Menu, Figure 1

At this window, following two operational ways are available to lead the utility into Main Setting Window.

Move the mouse cursor to any location on the picture of the terminal and click right button. or move the cursor to the location of "PWR" key of the terminal and click left button.

The Main Setting Window (figure 2) will be shown as below:.



Main Setting Window, Figure 2

### 3. Main Setting Window

Main Setting Window comprises of a set of commands which are aimed to manage application files such as create, save,...functions and communicate application files between PC and terminal.

The commands are listed below:

- 3.1. New: To create a new application file.
- 3.2. Open: To open an old application file.
- 3.3. Save: To save the current editing application file.
- 3.4. Save As: To save the current editing application file to a new file.
- 3.5. Edit: To edit the current editing application file.
- 3.6. Download: To receive files from PC.
  - 3.6.1. Program: To receive application file from PC.
  - 3.6.2. Lookup File: To receive the lookup file(s) from PC.
  - 3.6.3. Setting: To receive setting file from PC.
  - 3.6.4. Change Password: To receive the password setting file from PC.
  - 3.6.5. Update Kernel: To receive the kernel file from PC.
  - 3.6.6. Kernel Version: To receive the kernel version file from PC.
  - 3.6.7. User ID: Allow 5 levels login-account – one “Admin” level and 4 “User” level. There are total 64 user ID can be set.  
(please refer to the “**Note: User ID: Security Levels of Authority**” next page for further information)
- 3.7. Receive Data: To upload data to PC.
- 3.8. About: To display information pertaining to the Job Generator Utility.
- 3.9. Exit: To close the Job Generator Utility.

### Note: User ID: Security Levels of Authority

The BCP-8000 can assign different levels of authority to the users (at least 1 Admin user ID and up to 64 IDs).

The User ID levels are as follow:

- **Admin:** user ID of this level has full authority of the User IDs (create, edit and delete user account, and change the levels of the entire users) and data management.

There should be at least 1 admin level user for the BCP scanner.

- **User:** there are 4 levels (level 1 to level 4) of user IDs for different users.

**Level 1:** each user of this level has the authority to modify its own user name and password. The users of this level can browse, delete, and edit the data as well.

**Level 2:** each user of this level has the authority to modify its own user name and password. Unlike Level 1 users, the users of this level can only browse, and delete the data.

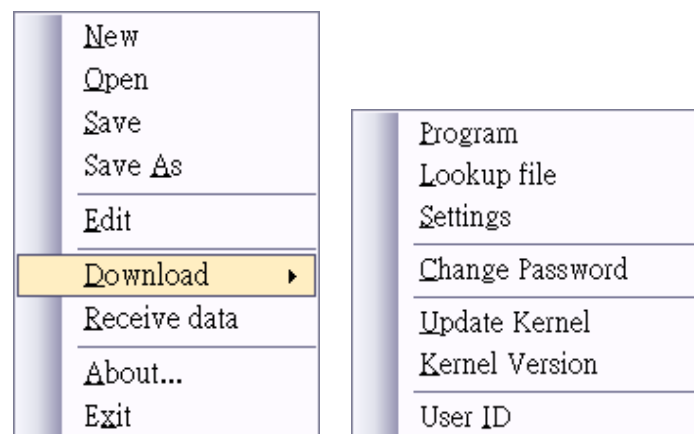
**Level 3:** each user of this level has the authority to modify its own user name and password. The users of this level can only browse the data and unable to modify the scanned data.

**Level 4:** the users of this level can operate the scan work only.

Step 1:

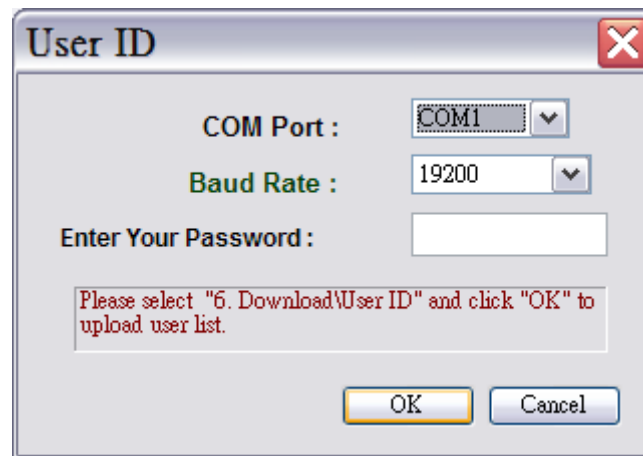
Right-click the mouse and activate the main menu.

Select Download>> and click on the "User ID" to access the function.



### Step 2:

Select the proper COM Port, baud rate, password (if previously configured) to access the function (make sure the BCP unit is entering the USER ID menu as well).



**User ID**

COM Port : COM1

Baud Rate : 19200

Enter Your Password :

Please select "6. Download\User ID" and click "OK" to upload user list.

OK Cancel

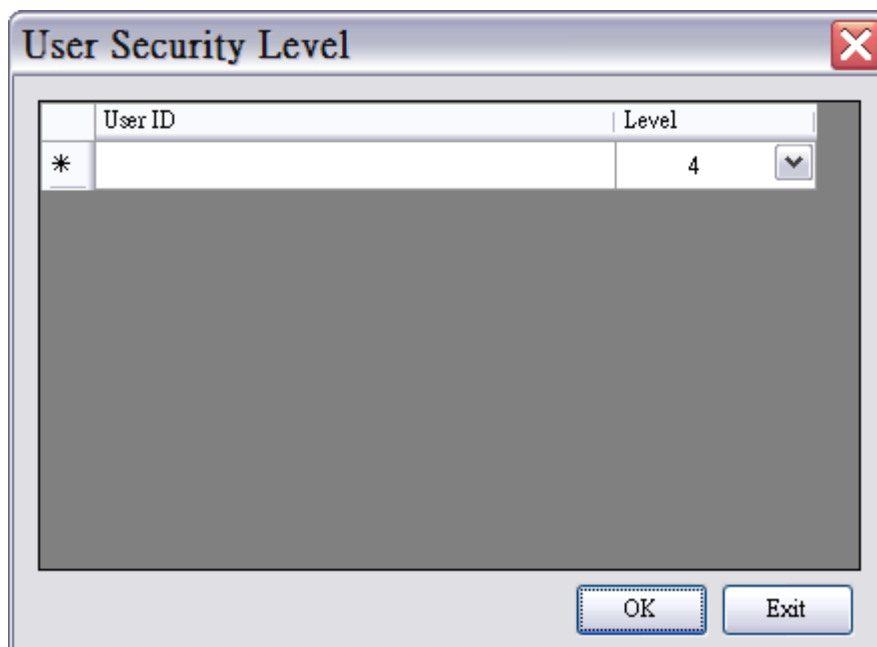
### Step 3

User can modify the user ID on this menu.

Admin Level Users can create, delete or modify the User ID and its Security Levels.

User ID: Numeric Number recommended)

Level: Admin, and 1~4 (user)



**User Security Level**

User ID	Level
*	4

OK Exit

#### 4. Application Template

Move the mouse cursor to the “New” item of the Main Setting Window (figure 2) and click mouse left button, the Application Template, will be shown (figure 3).

Line	Data Type	Prompt	Input Source	Min Length	Max Length	Lookup	Properties
#1	None		Both	0	50	None	More..
#2	None		Both	0	50	None	More..
#3	None		Both	0	50	None	More..
#4	None		Both	0	50	None	More..
#5	None		Both	0	50	None	More..
#6	None		Both	0	50	None	More..
#7	None		Both	0	50	None	More..
#8	None		Both	0	50	None	More..

Application Template, Figure 3

The Application Template which includes Form, Menu, and Lookup, Barcode, and Startup settings to formulate the application's running sequence and data attributes.

The template can help user develop an application by clicking mouse button and entering parameters or factors into the dialogue boxes.

##### 4.1. Form

The Form is aimed to regulate the data attributes and make the path of the application's routine. The user is requested to key in all the needed information in the dialogue boxes of the template which may design the running sequence or may define data attributes.

There are up to 10 forms can be defined and every form can be defined up to 8 input fields which contains maximum data length up to 50 characters.

###### 4.1.1. Name:

Assign a name of the form (form ID). There are up to 10 name# can be assigned.

###### 4.1.2. Esc:

Map out the running route of the form# to one of the next steps, “Main Menu” or “form#” or “menu#”.

###### 4.1.3. Next:

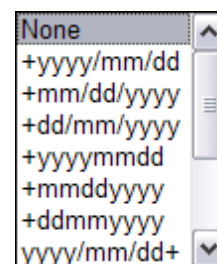
Map out the running route of the form# to one of the next steps, “Main Menu” or “form#” or “menu#”.

#### 4.1.4. Date Stamp:

None: No Date Stamp appends to the record.

+yyyy/mm/dd: Date Stamp to be appended to the rear of the record in the format of yyyy/mm/dd.

yyyy/mm/dd+: Date Stamp to be appended to the front of the record in the format of yyyy/mm/dd.

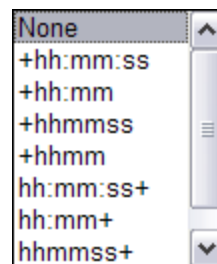


#### 4.1.5. Time Stamp:

None: No Time Stamp appends to the record.

+hh:mm:ss: Time Stamp to be appended to the rear of the record in the format of hh:mm:ss.

hh:mm:ss+: Time Stamp to be appended to the front of the record in the format of hh:mm:ss.



#### 4.1.6. Lookup

Assign the form# to refer to which lookup file or not to do lookup function. One form refer to one lookup file only if lookup function is enabled..

None: Not to enable the lookup function.

Lookup1: Refer to Lookup1 file.

Lookup2: Refer to Lookup2 file.

Lookup3: Refer to Lookup3 file.

#### 4.1.7. Record

Save: Save is the default value. The data which collected in the field by running the designed sequence in this form will be saved to record immediately.

Update Lookup: To update the lookup file that the form is current referred to.

Save & Update: Save the record to the data file also update the current lookup file which the form is referred to.

Passdown: The form will not be saved as a data file. It will link to the next assigned menu(s) or form(s).

#### 4.1.8. Data Type:

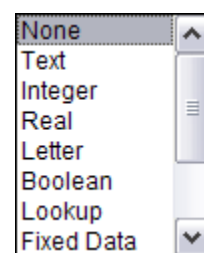
None: The field is blocked, which does not allow any data key in.

Text: Allow any characters (e.g. &\*abe123...) key in to the field.

Integer: Allow any integer (e.g. 12345...) key in to the field.

Real: Allow any real number (e.g. 1.23) key in to this filed.

Letter: Allow any alphabet character (A to Z) key in to this filed.





**Boolean:** Allow only "0","1","y" or "N" key in to this field.

**Lookup:** This setting can call the Lookup at this manual designated as 4.1.6. to find a referred file and to manage the key in data to check with referred lookup file.

**Fixed Data:** Prompts will be shown when the filed is presented at the terminal and the prompts to be saved to record (data file).

**Prompt:** Prompts will be shown when the filed is presented at the terminal and the prompts will not be saved to record (data file).

**Counter:** The record counts will be shown but not to save to record (data file).

**Passdown:** This field's data is from the preceding form or menu which Record (please refer to 4.1.7 Record) type is defined as passdown.

**Extension:** Duplicate the preceding line's Data Type except the prompts in this filed. This function is for data display purpose of the form when preceding line doesn't have enough space to display the content of data in the terminal. When user operates the BCP unit and access a form, If he data input is over the space of the preceding line on the display, the overflowed data would be shown at this duplicate line via the extended line. The maximum data length of proceeding filed minus preceding field's prompt length is the maximum data length of this extension line. Tips: user can assign an extended line after the field to expand the display area.

**Increment:** This data type can generate a continuous number automatically to next record after the data is saved (e.g. 00001, 00002... etc). User can define the length, initial value, alignment with filled number data of the field, and the increment method (increment by each record or increment by block).

**Properties**

**Form #1** **Line #1**

**Increase by**

☒ Record ☐ Block

**Field Data**

Fix data length : 6

Right aligned(fill with 0) ▼

**Increment:** 1

☒ Initial value 000001

☐ Add prefix code

☐ Add suffix code

OK Cancel

#### Calculation (multiple):

This data type can assign one field as the multiplication of two specified fields.

Press “More” to enter the submenu and select the specified fields (Line #)

**Properties**

Form #1 Line #6

Designated Calculation Fields

Line # 3 (multiplicand)

Line # 4 (multiplier)

Field Data

☐ Fix data length 0

OK Cancel

Summation: This data type can assign the field as the total amount of a designated field.

**Properties**

Form #1 Line #7

Designated Summation Fields

Line # 6

Field Data

☐ Fix data length 0

OK Cancel

#### 4.1.9. Prompt

Specify the heading of the input field.

#### 4.1.10. Input Source

Assign the data input by keypad, scanner, or by both of them.

#### 4.1.11. Min Length

Min Length can define the minimum length of the data. If set to “0”, then, it doesn't limit any data input. Press “enter” to jump to next data input field if it intends to leave empty. If the min. length is set over “0” and the input data number is less than set value, then the system would give a warning message.

To purge the setting and re-define the length, press “ESC” to restart the job and input data again.

#### 4.1.12. Max Length

Max Length can define the maximum length of the data input (up to 50 digits).

If the data input is over the area that the field can display, then, the input data will be left-scroll or the overflowed. The input data would be display to next the line if the line is set to Extension.

If the input data is over the maximum length setting there would have a warning message Press “ESC” and input data again.

#### 4.1.13. Lookup

Here the lookup field to be set to update or refer to the lookup file (4.1.6.) whenever the matched lookup setting call at Data Type (4.1.8.) is called. One more important notice that if the numeric input data comes a “+” or “-” symbol in front of it; it means any updated data will be added or subtracted from the original lookup file. Please notice that it is designed the lookup file data won't be subtracted to below “0”.

#### 4.1.14. Properties

Move mouse cursor to the “Properties” item and click left button, the Properties, figure 4 will be shown.

**Properties**

Form #1

Field Data

☒ Fix data length 0

☐ Initial value or text

☐ Add prefix code

☐ Add suffix code

Line #1

Barcode Input

☐ Read partial barcode

Start position: 1

Maximum length: 0

☐ Check leading code

☒ Auto ENTER

OK Cancel

Properties, Figure 4

#### 4.1.14.1. Fixed data length

It limits the length of the inputted data. Tick the box of "Fix data length," and there are 4 options of alignment will be shown as shown in Figure 5.

The image shows a 'Properties' dialog box with two tabs: 'Form #1' and 'Line #1'. Under 'Form #1', the 'Field Data' section has a checked box for 'Fix data length' with a value of '0'. Below this is a dropdown menu for alignment, which is currently open, showing five options: 'Left aligned(padded with sp)', 'Left aligned(padded with space)', 'Right aligned(fill with space)', 'Left aligned(padded with 0)', and 'Right aligned(fill with 0)'. There are also checkboxes for 'Initial value or text', 'Add prefix code', and 'Add suffix code'. The 'Barcode Input' section under 'Line #1' has a checked box for 'Auto ENTER' and input fields for 'Start position' (value 1), 'Maximum length' (value 0), and 'Check leading code'. 'OK' and 'Cancel' buttons are at the bottom.

Alignment Setup, Figure 5

#### 4.1.14.1.2. Left aligned (padded with space)

In Figure 6, select "Left aligned (padded with space)", the input data which is less than the setting of data length will be filled with space.

This image is similar to Figure 5, but the alignment dropdown menu is now closed, and 'Left aligned(padded with space)' is the selected option. The 'Fix data length' checkbox is still checked, and the value is 0. The 'Barcode Input' section is identical to the previous figure.

Figure 6

#### Example

Fix data length: 10

Barcode data	Display data
54321	54321_____

#### 4.1.14.1.3. Right aligned (padded with space)

In Figure 7, select “Right aligned (padded with space)”, the input data which is less than the setting of data length will be filled with space.

**Properties**

**Form #1** **Line #1**

**Field Data**

- ☒ Fix data length
- Right aligned(fill with space)**
- ☐ Initial value or text
- ☒ Add prefix code **User ID:**
- ☐ Add suffix code

**Barcode Input**

- ☐ Read partial barcode
- Start position: 1
- Maximum length: 0
- ☐ Check leading code
- ☒ Auto ENTER

**OK** **Cancel**

Figure 7

#### Example

Fix data length: 10

Barcode data	Display data
54321	____54321

#### 4.1.14.1.4. Left aligned (padded with 0)”

In Figure 8, select “Left aligned (padded with 0)”, the input data which is less than the setting of data length will be filled with 0.

**Properties**

**Form #1** **Line #1**

**Field Data**

- ☒ Fix data length
- Left aligned(padded with 0)**
- ☐ Initial value or text
- ☒ Add prefix code **User ID:**
- ☐ Add suffix code

**Barcode Input**

- ☐ Read partial barcode
- Start position: 1
- Maximum length: 0
- ☐ Check leading code
- ☒ Auto ENTER

**OK** **Cancel**

Figure 8

#### Example

Fix data length:10

Barcode data	Display data
54321	5432100000

#### 4.1.14.1.5. Right aligned (padded with 0)

In Figure 9, select “Right aligned (padded with 0)”, the scanned data which is less than the setting of data length will be filled with space.

Figure 9

#### Example

Fix data length: 10	
Barcode data	Display data
54321	0000054321

#### 4.1.14.2. Initial value or text

Assign the initial value (default value) or text in the input field.

#### 4.1.14.3. Add prefix code

Prefix code can be appended to the data. The prefix code can be any string (e.g. BFR:345\*&) or any a 3-digits decimal ASCII codes which is led by “\” (e.g. “\065\097” equals to “Aa”).

Examples:

“\” equals to “\”, “\n” or “\N” equals to “\010”, “r” or “R” equals to “\013”, or “\t” or “\T” equals to “\009”, “\e” or “\E” equals to “\027”.

#### 4.1.14.4. Add suffix code

Suffix the code can be appended to the data. The suffix code can be any string (e.g. BFR:345\*&) or any a 3-digits decimal ASCII codes which is led by “\” (e.g. “\065\097” equals to “Aa”).

Examples:

“\” equals to “\”, “\n” or “\N” equals to “\010”, “r” or “R” equals to “\013”, or “\t” or “\T” equals to

“\009”, “\e” or “\T” equals to “\027”.

#### 4.1.14.5. Read partial barcode

The barcode data can be displayed partially at the data field.

The default value of the field is 50 digits.

**Start Position:** Set the first digit of the barcode data to display at the data field.

The default value is from 1<sup>st</sup> digit.

**Maximum Length:** Set the maximum barcode data length at the data field.

The default value is 50 digits.

Example:

Start position	Maximum length	Barcode data	Data Displayed
2	10	9876543210	876543210
2	3	9876543210	876

#### 4.14.6. Auto ENTER

After reading barcode by scanner, an “ENTER” will be automatically executed and to move the cursor to next field.

#### 4.2. Menu

Move the mouse cursor to “MENU” and click left button to access the Menu Window (as figure 10 below).

Item No.	Item Name	Next
#1		Main
#2		Main
#3		Main
#4		Main
#5		Main
#6		Main
#7		Main
#8		Main
#9		Main
#10		Main

MENU, Figure 10

The “Menu” is to help user on mapping out the running route as well as the descriptions of an application. User is requested to key in all the needed parameters or required factors in the blanks of the template which may portray the functions or may design the running sequence of the application. There are up to 10 menus can be defined.

##### 4.2.1. Name:

Assign a Menu # (Menu ID) of the current menu.

##### 4.2.2. Esc:

Map out the running route to one of the next steps, “Main Menu” or “form#” or “menu#”.

##### 4.2.3. Caption:

Assign a heading of the menu.

##### 4.2.4. Data

**Save Caption:** This item provides selection to save or not to save the caption of the menu to the record.

**Save Selected Item:** This item provides options to save or not to save the item name of the field



to the record.

Passdown: This item provides options to save or not to save the caption of the menu and to save selected item of the field to the record.

**Note**

To save captions, selected Item or both of them, the passdown item box must be left blank.

4.2.5. Item No.

There are up to 10 item no. can be assigned.

4.2.6. Item Name

Assign the name of the field.

4.2.7. Next

Mapping out the running route of the "MENU" to steps are:

"Main Menu" , "form#" or "menu#".

### 4.3. Lookup

A lookup file is a database file which is the object to be referred, updated when the lookup file is called. It is designed to a maximum of three lookup files in the system. The figure 11 indicates the lookup setting parameters below:

**Application Template**

Form    Menu    **Lookup**    Barcode    Startup

Name:

Member length:

Number of fields:

Field property

☒ fixed length

☐ Delimiter  (ASCII)

☒ Lookup data can be uploaded

Action when the input has no match:

Field	Offset	Length	Key field
#1	1	4	<input checked="" type="radio"/>
#2	6	10	<input type="radio"/>
#3	17	5	<input type="radio"/>
#4	23	5	<input type="radio"/>
#5	1	0	<input type="radio"/>
#6	1	0	<input type="radio"/>
#7	1	0	<input type="radio"/>
#8	1	0	<input type="radio"/>

OK Cancel

MENU, Figure 11

#### 4.3.1 Name:

Assign which lookup file to be referred or edited.

#### 4.3.2. Member length:

Assign the maximum record length for the lookup file.

#### 4.3.3. Number of fields:

Assign the number of fields for the lookup file.

#### 4.3.4. Field property:

Fixed length: Assign the data field is a fixed length.

Delimiter: Assign a delimiter, an ASCII code, to separate the data filed.

#### 4.3.5. Lookup data can be uploaded:

Assign the lookup data to be uploaded to PC only.

#### 4.3.6. Action when the input has no match:

Choose one of the actions below in case of the input data is not match in the lookup file.

Continue: The operation will be progressed to next input field without any halt or any message warning.

Show Warning Messing: The operation will be halted and a warning message is shown.

Append to lookup file: The current recode will be appended to the lookup file.

Show Warning Message & Append: A warning message will be shown and the current recode will be appended to the lookup file.

#### 4.3.7. Field:

There are maximum 8 fields can be set.

#### 4.3.8. Offset:

Assign the start position for each field for the lookup file.

#### 4.3.9. Length:

Assign the length for each field, maximum 50 digits, of the lookup file.

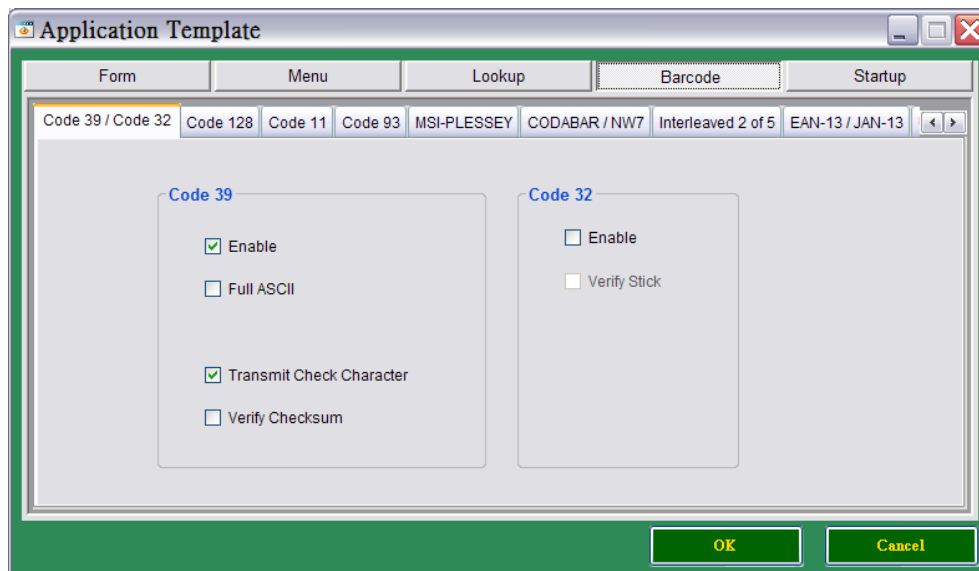
#### 4.3.10. Key field:

The key field is aimed to find the matched data in the lookup file. Only one key field can be set among the Fields (4.3.7.).

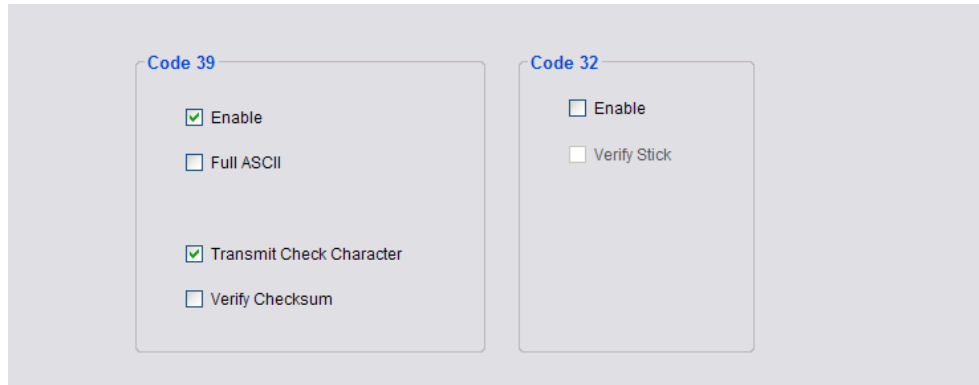
#### 4.4. Barcode

Move the mouse cursor and click left button to access the “Barcode” menu.

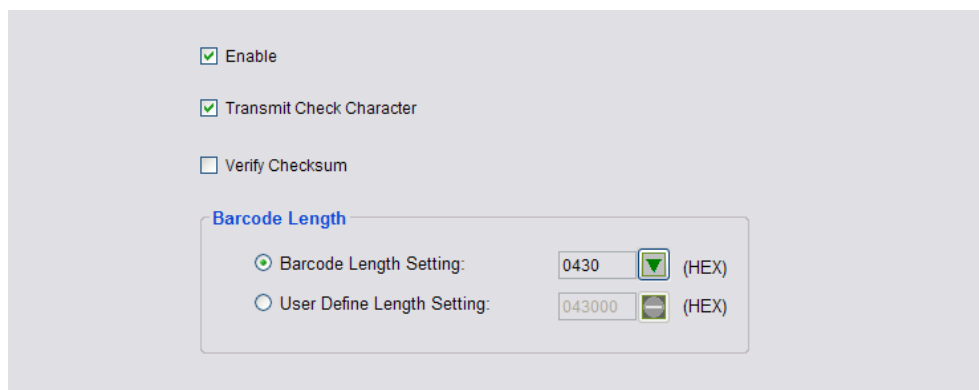
The Barcode Windows offer parameters for user to set the required settings to applications.



##### 4.4.1. Code39



##### 4.4.2. Interleaved 2 of 5



#### 4.4.3. Code 128

☒ Enable

☒ Checkdigit (not send checkdigit)

☒ UCC / EAN / 128

#### 4.4.4. Code 11

☒ Enable

Number of Check Character

☐ One ☒ Two

☒ Transmit Check Character

☐ Checkdigit

#### 4.4.5. Code 93

☒ Enable

☒ Checkdigit

#### 4.4.6. MSI-Plessey

☒ Enable ☐ Verify Checkdigit

Enable MOD

☐ MOD 10-10 ☒ MOD 10 ☐ MOD 11-10

Transmit/Truncate Checkdigit

☐ Truncate 1st checkdigit ☒ Transmit checkdigit

☐ Truncate 1st\_2nd checkdigit

#### 4.4.7. CODA BAR / NW7

☒ Enable

☐ Transmit Start/End Character.

Start/End Transmit Type

☐ ABCD/ABCD ☒ abcd/abcd

☐ ABCD/TN\*E ☐ abcd/tn\*e

#### 4.4.8. EAN-13 / JAN-13

☒ Enable ☐ Truncate 2nd digit.

☐ ADD-ON 2/5 ☒ Checkdigit

☒ Transmit Check Character.

☐ Truncate 1st digit.

#### 4.4.9. UPC-A

☒ Enable
 ☐ UPC-A Convert to EAN-13.

☐ ADD-ON 2/5

☒ Transmit Check Character.

☐ Truncate Leading Digit.

#### 4.4.10. EAN-8 / JAN-8

☒ Enable
 ☐ ADD-ON 2/5
 ☒ Transmit Check Character.
 ☐ Truncate Leading Digit.

**EAN-8 Convert to EAN-13**

☐ Enable 1 [add zeros in the front of barcode]
 ☐ Enable 2 [add zeros in the middle of barcode]
 ☒ Disable

#### 4.4.11. UPC-A

☒ Enable
 ☐ UPC-A Convert to EAN-13.

☐ ADD-ON 2/5
















☒ Transmit Check Character.

☐ Truncate Leading Digit.

## 4.4.12. ISBN / ISSN

☐ Enable

## 4.4.13. CODE ID

<input checked="" type="checkbox"/> Code 39 / Code 32	<input checked="" type="checkbox"/> EAN-13	<input checked="" type="checkbox"/> Code 128
4  (HEX)	1  (HEX)	9  (HEX)
<input checked="" type="checkbox"/> Industrial 2 of 5	<input checked="" type="checkbox"/> UPC-E	<input checked="" type="checkbox"/> Code 11
7  (HEX)	3  (HEX)	B  (HEX)
<input checked="" type="checkbox"/> China Postage	<input type="checkbox"/> Code 4	<input checked="" type="checkbox"/> CODABAR / NW7
D  (HEX)	 (HEX)	5  (HEX)
<input checked="" type="checkbox"/> Code 93	<input checked="" type="checkbox"/> Interleaved 2 of 5	<input checked="" type="checkbox"/> EAN-8
A  (HEX)	8  (HEX)	9  (HEX)
<input checked="" type="checkbox"/> MSI/PLESSEY	<input checked="" type="checkbox"/> Matrix 2 of 5	<input checked="" type="checkbox"/> UPC-A
C  (HEX)	6  (HEX)	18  (HEX)

## 4.4.14. GS1

☐ Enable

☐ Send Check Digit

☐ Prefix Code Enable




## 4.4.15. Industrial 2 of 5 / ITIA


☒ Enable

☒ Transmit Check Character ☐ IATA

☐ Verify Checksum

**Barcode Length**

☒ Barcode Length Setting: 0218  (HEX)

☐ User Define Length Setting: 021800  (HEX)


## 4.4.16. Matrix 2 of 5


☒ Enable

☒ Transmit Check Character

☐ Verify Checksum

**Barcode Length**

☒ Barcode Length Setting: 0228  (HEX)

☐ User Define Length Setting: 022800  (HEX)


## 4.4.17. CHINA POSTAGE


☒ Enable

☒ Transmit Check Character

☐ Verify Checksum

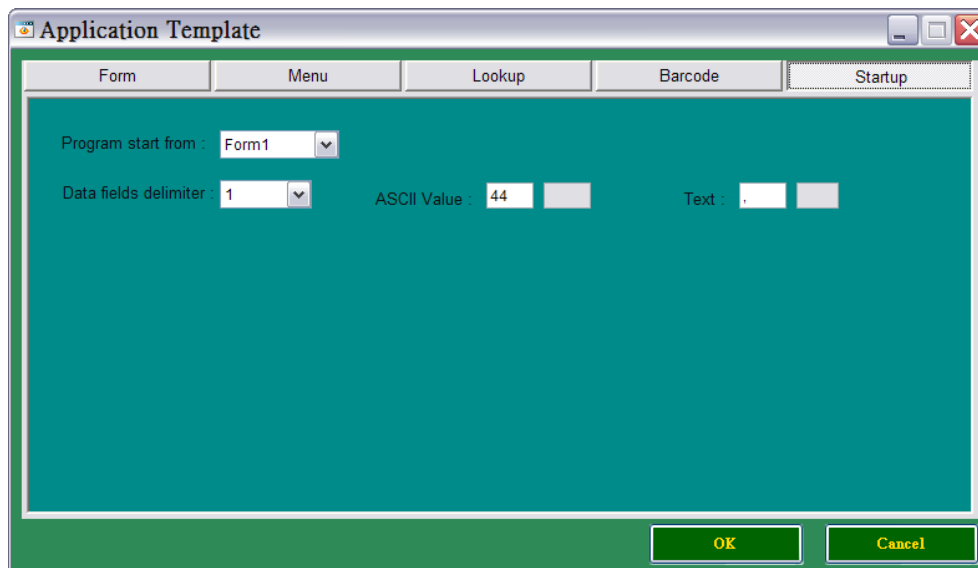
**Barcode Length**

☒ Barcode Length Setting: 0228  (HEX)

☐ User Define Length Setting: 022800  (HEX)

#### 4.5. Startup

Move the mouse cursor to the “Startup” tap button and click left button (Figure 12).



The screenshot shows a window titled "Application Template" with a tabbed interface. The tabs are "Form", "Menu", "Lookup", "Barcode", and "Startup". The "Startup" tab is selected. Inside the tab, there are four input fields: "Program start from" with a dropdown menu showing "Form1", "Data fields delimiter" with a dropdown menu showing "1", "ASCII Value" with a text box showing "44", and "Text" with a text box showing ".". At the bottom right of the window are two buttons: "OK" and "Cancel".

Startup, Figure 12

The Startup can specify the location where the application to be started from and the format of record. The user is requested to key in parameters or the required factors in the dialogue boxes of the template.

##### 4.5.1. Program start from

Assign the application where to start from, either from form# or menu#.

##### 4.5.2. Data field delimiter

Assign the number of delimiter(s) of the data field either by one digit or two digits.

##### 4.5.3. ASCII Value

Assign delimiter ASCII value.

##### 4.5.4. Text

Assign delimiter text.

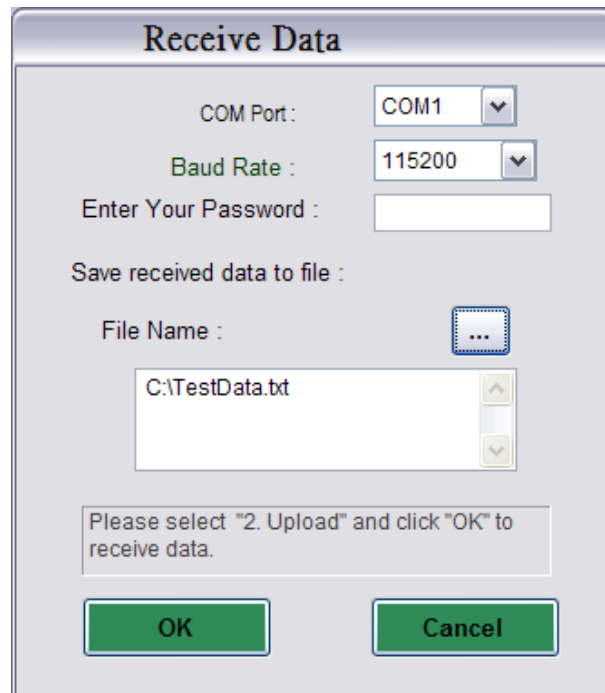
#### Note:

The editing Application Template, when “OK Button” is pressed, the setting is saved to memory only (it is not saved to the file). While “Cancel Button” is pressed, the setting won’t be saved to memory or saved to file. The editing Application Template which saved at memory can be recalled by pressing “PWR” key, then select “Edit” to recall the editing Application

Template.

## 5. Receiving Data

At Main Setting Window (figure 2) move the mouse cursor to the “Receive Data” item and click the left button. The Receive Data Window, figure 13 will be shown.



Receive Data, Figure 13

There are two interface cables available for connecting the terminal to PC: USB (serial) and RS-232. Set the COM Port and Baud Rate then click “OK” to confirm.

### Suggestion

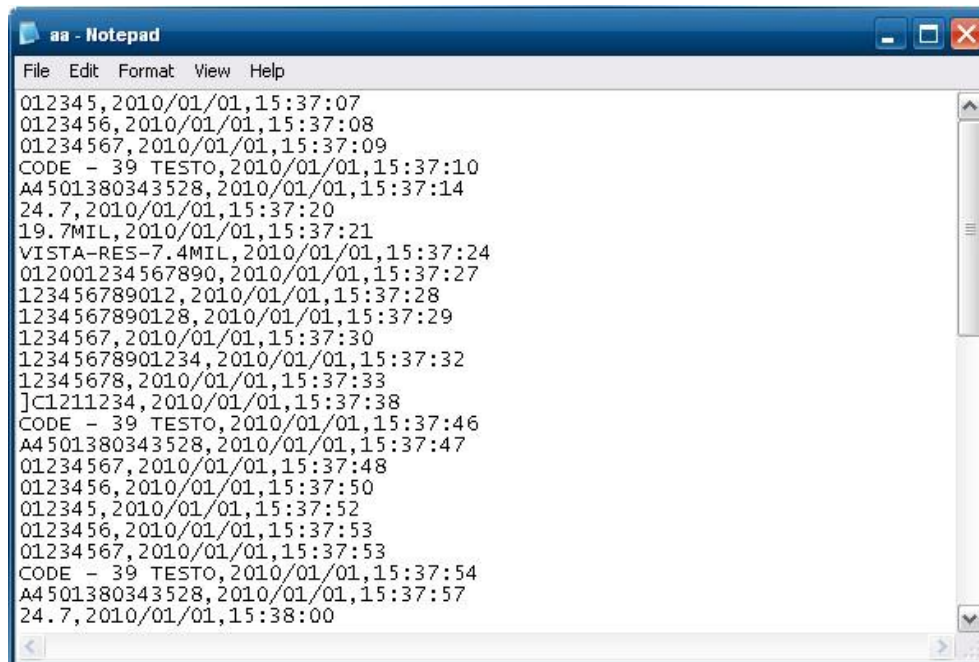
Before click “OK” button, user has to double check if the terminal is uploading files and the cable is properly connected to PC and the terminal.

A dialog box, View Data (figure 14) will be shown as below:.



View Data Selection, Figure 14

User can view the collected data by simply click “Yes” button and review the data.(figure 15).

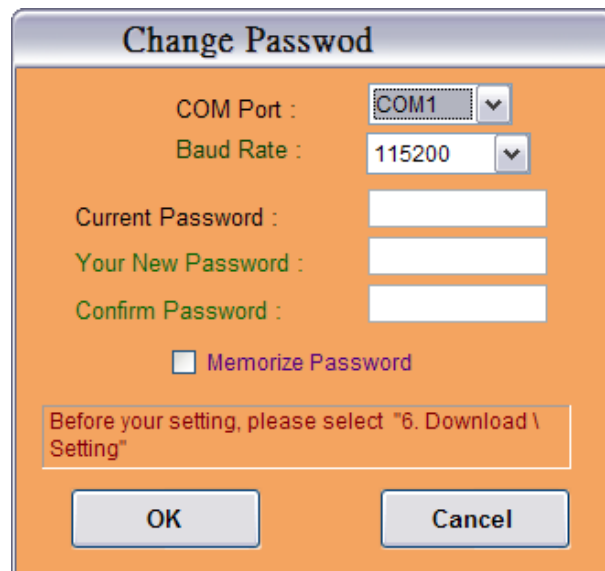


Reviewing Data, figure 15

If user doesn't want to view the collected data, then, click “N” button, the collected data would be saved to the designated file.

## 6. Change Password

At Main Setting Window (figure 2), move the mouse cursor onto the “Download” item and click the left button, and then move the mouse cursor onto “Change Password” item and click the left button. The Change Password Window will be shown (figure 18).



The image shows a 'Change Password' dialog box with an orange background and a grey title bar. The title bar contains the text 'Change Passwod' (note the typo). Inside the dialog, there are several fields and controls:

- COM Port :** A dropdown menu showing 'COM1'.
- Baud Rate :** A dropdown menu showing '115200'.
- Current Password :** A text input field.
- Your New Password :** A text input field.
- Confirm Password :** A text input field.
- Memorize Password :** A checkbox that is currently unchecked.
- Instructions:** A red-bordered box containing the text: 'Before your setting, please select "6. Download \ Setting"'.
- Buttons:** 'OK' and 'Cancel' buttons at the bottom.

Change Password, Figure 18

The password length is up to 10 characters, and lower case a~z, upper case A~Z, and 0-9 are allowed. The password would be changed only after the current password verified. When setting up a password for the first time, leave the “Current Password” item blank, and fill in the “Your New Password” item and the “Confirm New Password” item accordingly.

After the password is configured, any communication between the terminal and PC would request password verification.

When the “Memorize Password” function is enabled; user need not to enter the password every time when terminal works to communicate with PC.

## 7. Setting

At Main Setting Window (figure 2), move the mouse cursor onto the “Download” item and click the left button, and then move the mouse cursor onto the “Setting” item and click the left button. One of the Download Setting window, figure 14~17, will be shown.

### 7.1. Buzzer Pitch

The buzzer’s pitch can be adjusted to meet user’s optimal needs. At the figure 14, the bar represents the pitch value, between 0~255 Hz. User just need to drag the arrow to travel it to any position in the bar, while the bar is traveling, the small window shows a rotated number which represents the pitch value. User can use “Test” item to try out the best value of the pitch before save it as a file or download it to the terminal.

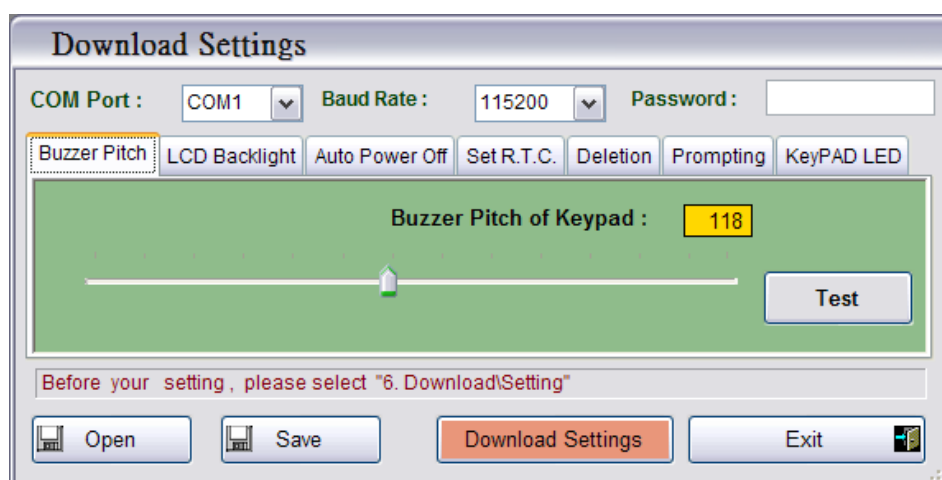


Figure 19

### 7.2. LCD Backlight

The LCD backlight can be switched off in the pre-defined period of time without press any keypad or do a scan on the terminal. At the figure 20, the bar represents pre-defined LCD backlight off time value (0-60 second). Drag the arrow to travel it to any position in the bar, while the bar is traveling, the small window shows a rotated number which represents the pre-defined off time value. To set the backlight always on, click the “Always On” item. User can save it as a file or just download it to the terminal. Factory default is off.

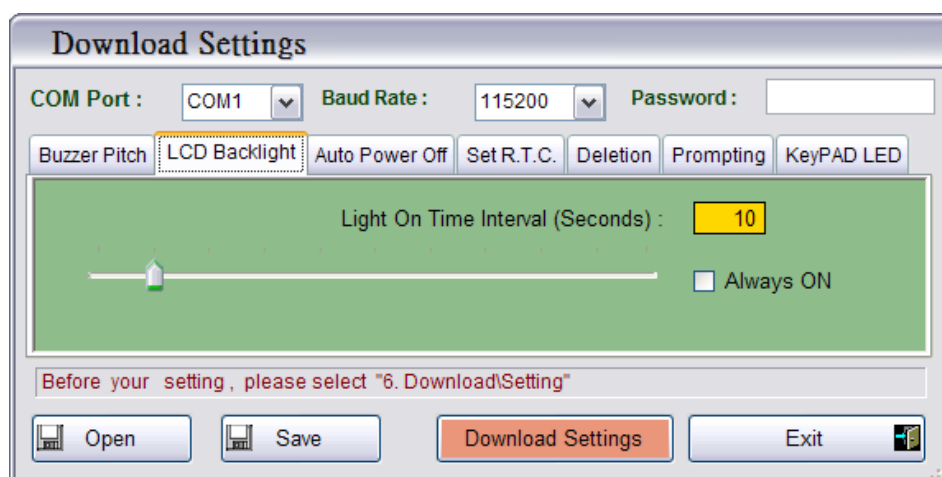


Figure 20

### 7.3. Auto Power Off

The terminal can be set to auto power off in the pre-defined period of time without press any keypad or do a scan on the terminal. At figure 21, the bar represents pre-defined off time value, 0-60 minute. User just need to drag the arrow to travel it to any position in the bar, while the bar is traveling, the small window shows a rotated number which represents the pre-defined off time value. User is also able to set the terminal always on by click the "Disable" item. User can save it as a file or just download it to terminal.

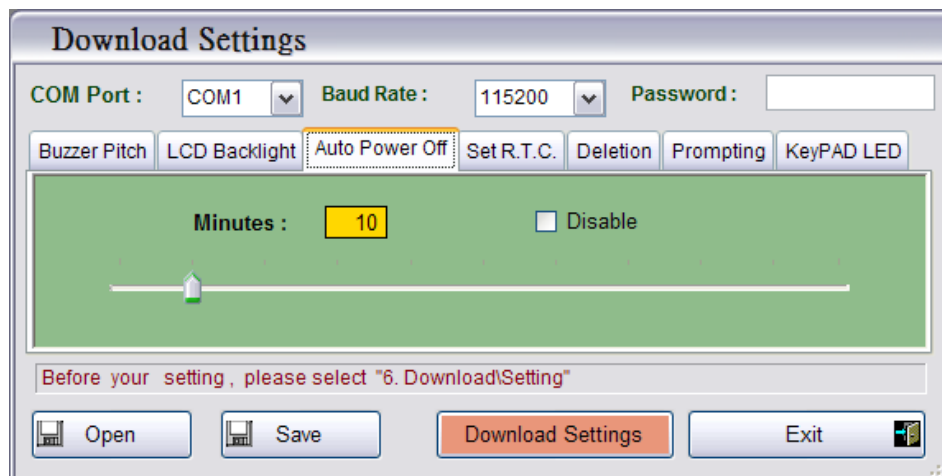


Figure 21

### 7.4. Set R.T.C.

The terminal's real time clock has to synchronize with host PC. At the figure 22, user can save it as a file or just download it to the terminal.

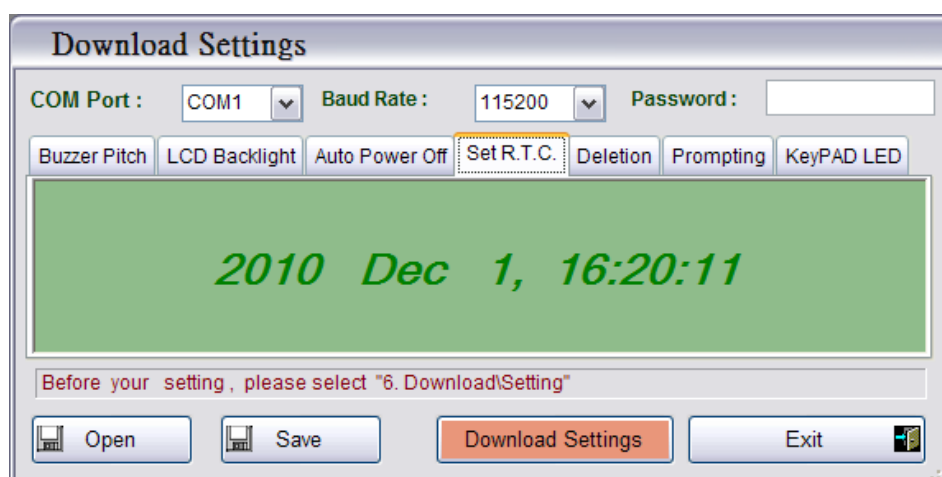


Figure 22

### 7.5. Deletion

The collected data would be deleted from terminal after the data transmission completes automatically. Referring to the figure 23, user can activate the delete function by ticking the box.

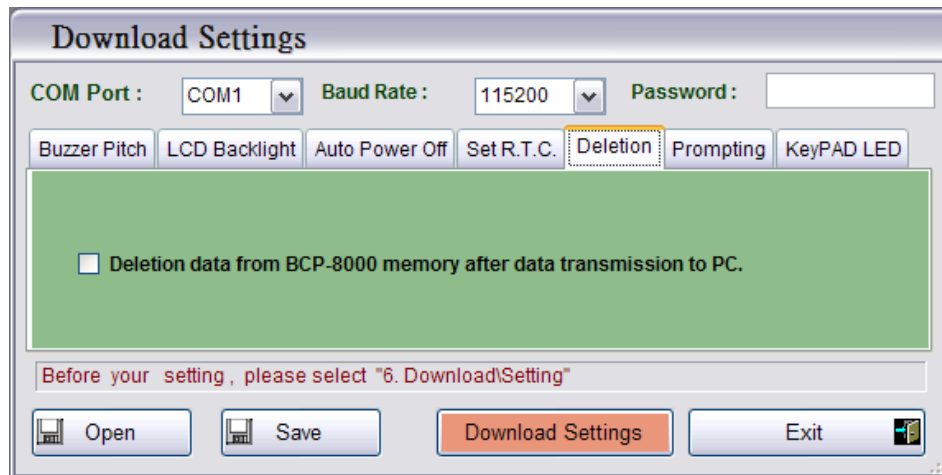


Figure 23

### 7.6. Prompting

The number of records will show on the screen as in figure 24 by setting the lasting time. Simply drag the arrow on the bar as shown in figure 24 from 0 to 9999 seconds.

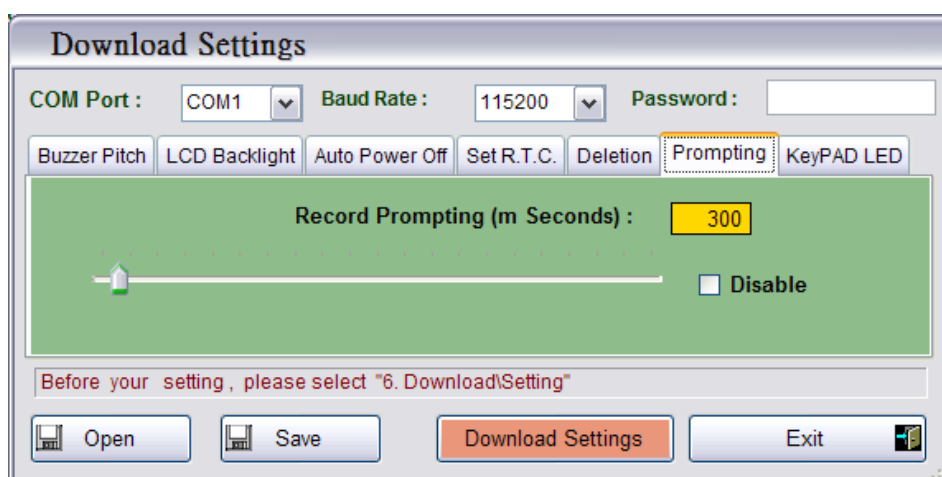
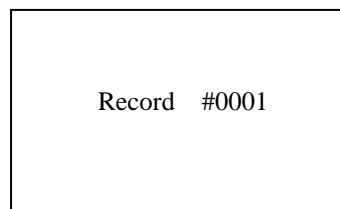


Figure 24

### 7.7. Key PAD LED (Reserved)



The function is reserved and not functioning.

## 8. Update Kernel Firmware

User can update kernel firmware of the terminal.

Before update the firmware, please make sure the cradle and PC are properly connected.

Make sure the terminal is properly placed onto the cradle.

Be careful to prevent the communication breakdown or other events that interfere in the communication while firmware is being up-dated.

### Note:

- Please quit other programs on your PC before update.
- Please refer to the qualified personnel to update the firmware.
- Any failures happen during the update process or bad connections may cause terminal halt-on.

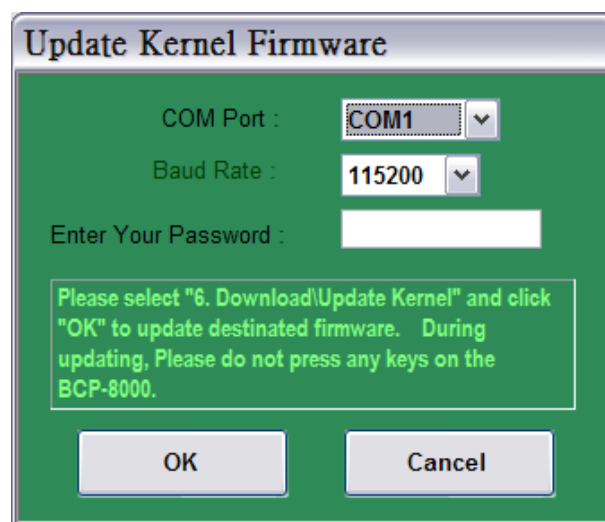


Figure 25

## 9. Get Kernel Version

User can get the kernel version from the terminal.

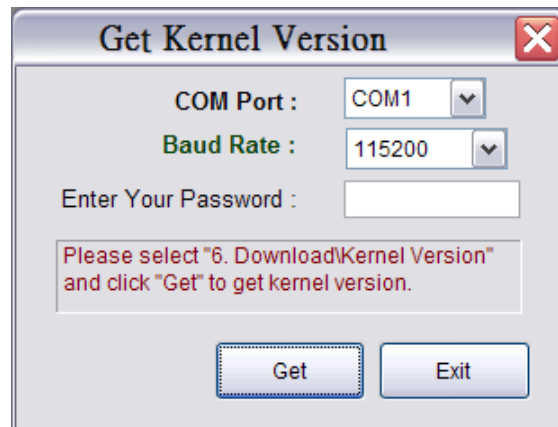


Figure 26

### 10. Example of Job Application

The chapter aims to tutor how to design an application. There is a Program Template File at CD disk, its file name is `tyssso.apg` which is the example file to guide user how an application be designed.

Assuming that the application consists of user identified number, location, item no. item, and quantity variables and the working flow of the application is framed as below:

#### 10.1. Run the Job Generator Utility

The Main Menu figure will be shown on the PC.

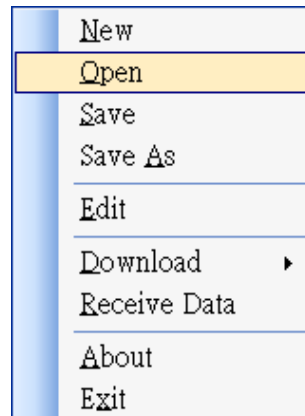


Main Menu, Figure 1

Move the mouse cursor to any location on the picture of the terminal (figure 1), and click right button, or

Move the mouse cursor to the location of “PWR” key of the terminal (figure 1), and click left button.

When one of those two above mentioned operational ways is performed, the Main Setting Window, figure 2 will be shown.



Main Setting Window, Figure 2

At figure 2, select “OPEN” item first and to read the example file, **tysso.apg**. After reading the **tysso.apg** file, the following figure will be shown on the PC.

 A screenshot of the 'Application Template' window. It has tabs for Form, Menu, Lookup, Barcode, and Startup. The 'Form' tab is active. At the top, there are settings for Name (Form1), Esc (Menu1), Date Stamp (+yyyy/mm/dd), Lookup (None), Next (Form2), Time Stamp (+hh:mm:ss), and Record (Save). Below this is a table with 8 lines of data.
 

Line	Data Type	Prompt	Input Source	Min Length	Max Length	Lookup	Properties
#1	Text	Empl. ID:	Both	1	50	None	More..
#2	None		Both	0	50	None	More..
#3	None		Both	0	50	None	More..
#4	None		Both	0	50	None	More..
#5	None		Both	0	50	None	More..
#6	None		Both	0	50	None	More..
#7	None		Both	0	50	None	More..
#8	None		Both	0	50	None	More..

 At the bottom right are 'OK' and 'Cancel' buttons.

Figure 26

The figure 26 shows the detailed settings of form1 at the Application Template.

Those settings are described as below:

Name: Form1 – this form’s ID

Esc: Menu1 – when an “Esc” command is called, the application would head into

Menu1.

Next: Form2 – when a “next” command is called, the application would head into Form2.

Date Stamp: +yyyy/mm/dd – the date stamp would be appended to the rear of record.

Time Stamp: +hh:mm:ss – the time stamp would be appended to the rear of record.

Lookup: None is the default value. The form won’t refer to any lookup files.

Record: Save is the default value.

The form of each line (Line #1 ~Line #10) will be saved to record immediately after collection.

Data Type: Text – allow any characters (e.g. &\*abe123...) to be inputted into the field.

Prompt: Empl. ID: the prompt represents an employee identified number.

Input Source: the data key-in is allowed by scanner or keypad. If the data is inputted by scanner, then the “ENTER” is automatically executed while the data key-in is by keypad, then the “ENTER” has to be pressed by operator to complete the key-in process.

Min Length: 1 – the number of the data is not less than 1 digit.

Max Length: 50 – the number of the data is not more than 50 digits.

Lookup: None - The field of this form will not refer to any lookup file’s field.

Properties: please refer to the figure below (figure 27).

Figure 27

Figure 27 shows that the prompt of “Empl. ID:” would be saved as prefix to the record.

And the “ENTER” will be executed when a data key-in is by scanner.

When finishes form1 setting. Move the mouse cursor to Name Com Box and click the left button to drop down more form# selections. The following figure 28 will be shown on the PC.

The 'Application Template' dialog box is shown with the 'Form' tab selected. The 'Name' dropdown is set to 'Form1'. Below it, a list of forms (Form1 through Form8) is visible, with 'Form1' at the top. The 'Esc:' dropdown is 'Menu1', 'Next:' is 'Form2', 'Date Stamp:' is '+yyyy/mm/dd', 'Time Stamp:' is '+hh:mm:ss', 'Lookup:' is 'None', and 'Record:' is 'Save'. A table with 8 lines is shown, each with a 'Prompt' field, an 'Input Source' dropdown, and 'Min Length' and 'Max Length' fields. The first line has 'Empl. ID:' as the prompt and 'Both' as the input source. The 'OK' and 'Cancel' buttons are at the bottom right.

Figure 28

Select the form2 and click left button. The following figure will be shown below (figure 29).

The 'Application Template' dialog box is shown with the 'Form' tab selected. The 'Name' dropdown is now set to 'Form2'. The 'Esc:' dropdown is 'Menu1', 'Next:' is 'Form2', 'Date Stamp:' is '+yyyy/mm/dd', 'Time Stamp:' is '+hh:mm:ss', 'Lookup:' is 'Lookup1', and 'Record:' is 'Save'. A table with 8 lines is shown, each with a 'Data Type' dropdown, a 'Prompt' field, an 'Input Source' dropdown, and 'Min Length' and 'Max Length' fields. The first line has 'Text' as the data type and 'Location:' as the prompt. The second line has 'Text' as the data type and 'Item No:' as the prompt. The third line has 'Text' as the data type and 'Item:' as the prompt. The fourth line has 'Integer' as the data type and 'Qty:' as the prompt. The 'OK' and 'Cancel' buttons are at the bottom right.

Figure 29

The figure 29 shows detailed settings of form 2 at the Application Template.

Those Settings are described as below:

Name: Form2 – this form's ID

Esc: Menu1 – when an "Esc" command is called, the application will head into Menu1.

Next: Form2 – when a next command is called, the application will head into Form2.

Date Stamp: +yyyy/mm/dd – the date stamp would be appended to the rear of record.

Time Stamp: +hh:mm:ss – the time stamp would be appended to the rear of record.

Lookup:           Lookup1: The form will refer to lookup file1.

Record:           Save: The form will be saved to record after collection immediately.

Data Type:       Text – allow any characters (e.g. &\*abe123...) to be inputted in the field.

Prompt:           Location: the prompt represents the locations.

Input Source:     data key-in is allowed by scanner or by keypad. If the data is key-in by scanner, then the “ENTER” is automatically executed while the data key-in is by keypad, then the “ENTER” key has to be pressed by operator to complete the key-in process.

Min Length:      1 – the number of the data is not less than 1 digit.

Max Length:      50 – the number of the data is not more than 50 digits.

Properties:        please refer to figure 30.

Figure 30

\*At this setting, an “ENTER” will be automatically executed when a data key-in is by scanner.

Prompt:           Item No: -- the prompt represents the item no.

Input Source:     data key-in is allowed by scanner or keypad. If the data is inputted by scanner, then the “ENTER” is automatically executed while the data key-in is by keypad, then the “ENTER” key has to be pressed by operator to complete the key-in process

Min Length:      1 – the number of the data is not less than 1 digits.

Max Length:      50 – the number of the data is not more than 50 digits.

Properties:        please refer to figure 31

Figure 31

\*At this setting, an “ENTER” will be automatically executed when a data key-in is by scanner.

Prompt: Item name: -- the prompt represents the item’s name.

Input Source: data key-in is allowed by scanner or keypad. If the data is inputted by scanner, then the “ENTER” is automatically executed while the data key-in is by keypad, then the “ENTER” key has to be pressed by operator to complete the key-in process.

Min Length: 1 – the number of the data is not less than 1 digits.

Max Length: 50 – the number of the data is not more than 50 digits

Properties: please refer to the figure 32

Figure 32

When setting proprieties, an “ENTER” will be automatically executed when a data key-in is by scanner.

Prompt: Qty: -- the prompt represents the quantity.

Input Source: keyboard – The information can be entered by **Keypad Only**,  
the “ENTER” key has to be pressed by operator to complete the process.

Min Length: 1 – the number of the data is not less than 1 digits.

Max Length: 10 – the number of the data is not more than 10 digits.

Properties: please refer to the figure 33

The image shows a 'Properties' dialog box with a blue title bar. It contains two main sections: 'Form #2' and 'Line #4'. The 'Form #2' section has a 'Field Data' sub-section with four checkboxes: 'Fix data length' (unchecked, with a value of 0), 'Initial value or text' (unchecked, with an empty text box), 'Add prefix code' (unchecked, with an empty text box), and 'Add suffix code' (unchecked, with an empty text box). The 'Line #4' section has a 'Barcode Input' sub-section with four checkboxes: 'Read partial barcode' (unchecked), 'Start position' (value 1), 'Maximum length' (value 0), 'Check leading code' (unchecked, with an empty text box), and 'Auto ENTER' (checked). At the bottom are 'OK' and 'Cancel' buttons.

Figure 33

When setting properties, an “ENTER” won’t be automatically executed when a data key-in is by keypad. User has to press “enter” to complete the data input.

When form2 setting is finished, move the mouse cursor to Menu.

Tab Button and click the left button. The following figure will be shown on the PC.



Item No.	Item Name	Next
#1	>Check Stock	Form1
#2	>Exit	Main
#3		Main
#4		Main
#5		Main
#6		Main
#7		Main
#8		Main
#9		Main
#10		Main

Figure 34

Figure 34 shows detailed settings of NENU. Menu1 is the first of the Application Template.

Those settings are described as below:

Name: Menu1 – this menu's ID.

Esc: Main – when an “Esc” command is called, the application would head to Main Menu.

Caption: <TYSSO Inventory> -- the heading of the application.

Date Checkbox: Select “Pasdown: ☒” and the menu's information won't be saved to record.

Item Name: “>Check Stock” and “>Exit” -- are prompts.

Next: “item1” is set the application heads to form1 and “item2” is set application heads to Main Menu.

When menu setting is finished, move the mouse cursor to Lookup Tab Button and click the left button. The following figure will be shown on the PC.

**Application Template**

Form    Menu    **Lookup**    Barcode    Startup

Name:

Member length:

Number of fields:

Field property

☒ fixed length

☐ Delimiter  (ASCII)

☒ Lookup data can be uploaded

Action when the input has no match:

Field	Offset	Length	Key field
#1	<input type="text" value="1"/>	<input type="text" value="5"/>	<input checked="" type="radio"/>
#2	<input type="text" value="7"/>	<input type="text" value="10"/>	<input type="radio"/>
#3	<input type="text" value="18"/>	<input type="text" value="6"/>	<input type="radio"/>
#4	<input type="text" value="1"/>	<input type="text" value="0"/>	<input type="radio"/>
#5	<input type="text" value="1"/>	<input type="text" value="0"/>	<input type="radio"/>
#6	<input type="text" value="1"/>	<input type="text" value="0"/>	<input type="radio"/>
#7	<input type="text" value="1"/>	<input type="text" value="0"/>	<input type="radio"/>
#8	<input type="text" value="1"/>	<input type="text" value="0"/>	<input type="radio"/>

OK    Cancel

Figure 35

Figure 35 shows detailed settings of Lookup. Lookup1 is the first of the Application Template.

Those settings are described as below:

Name:                Lookup1 – define lookup's ID.

Member length:    lookup file's length.

Number of fields:   field's length.

Field property:    Fixed length-- field's length is set to "fixed" to separate every field's data.

                         Delimiter-- field's length is separated by delimiter.

Lookup data can be uploaded: Lookup data can be uploaded to PC.

Action when the input has no match: Continue – The operation will be progressed to next input field without any halt or any message warning.

Offset:                the start position for field data.

Length:                the length of the field data.

Key field:            find the matched data in the lookup file.

### 10.2. Download the Program Template file to the terminal

At the Main Setting Window (figure 36), select the “download” item then program item, the Download AP Template figure will be shown.

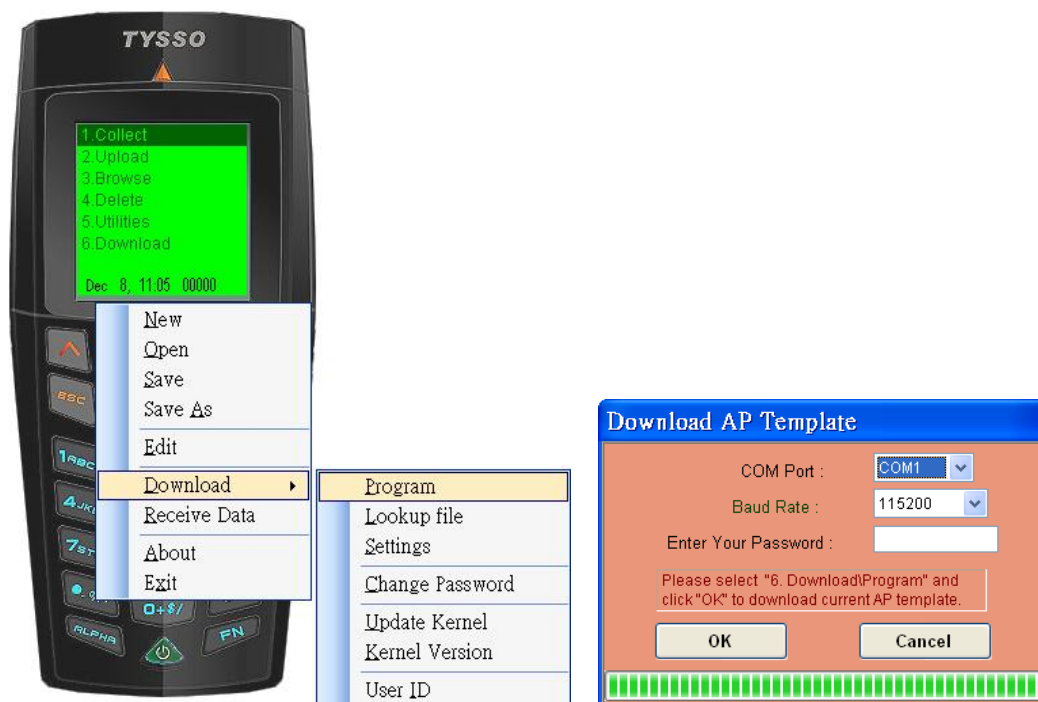


Figure 36

User has to select correct COM Port and proper Baud Rate, and enter information into blanks.

**However, before click “OK” button, user has to double check if the terminal is at receiving file state and if the cable is connected firmly between the PC and the terminal.**

The route to get to the state of the terminal to receive the program template file is via main menu\download\ program\enter.

### 10.3. Download the Lookup file to the terminal

At the Main Setting Window, select the “download” item then Lookup file item, the Download Lookup file figure will be shown.

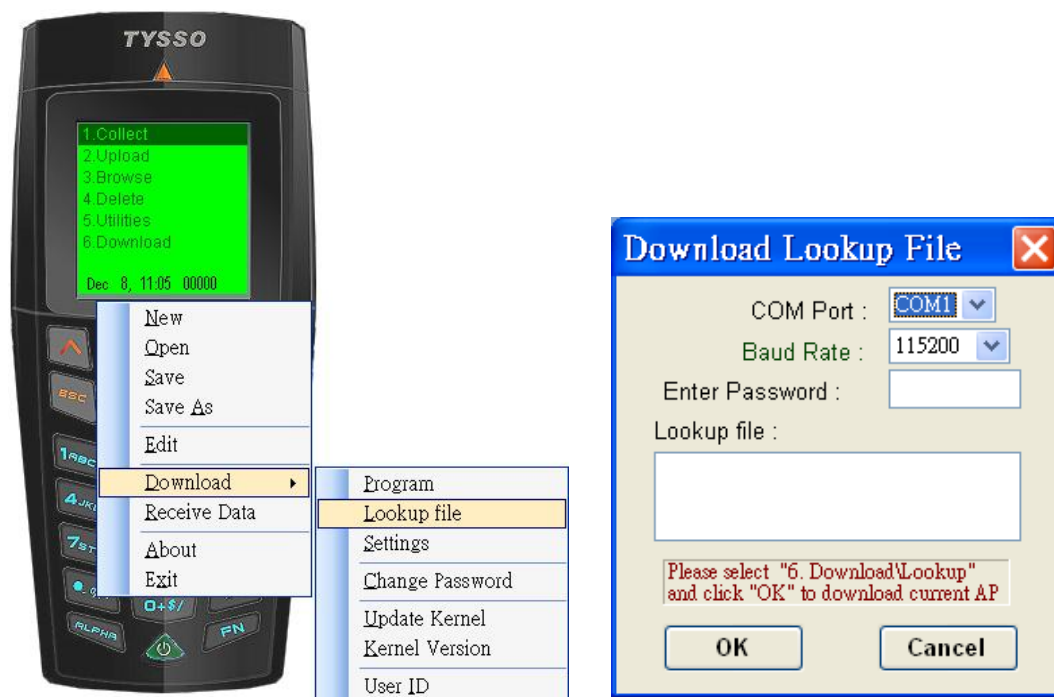


Figure 36

User has to select correct COM Port and proper Baud Rate and enter information into blanks. However, before click “OK” button, user has to double check if the terminal is at receiving file state and if the cable is connected firmly between the PC and the terminal.

The route to get to the state of the terminal to receive the lookup file is via main menu\download\ Lookup\enter.

#### 10.4. Collecting Data

When finishes the program template files downloading, the terminal is already equipped with the user’s defined application, Tysso Inventory. The way to enable the Tysso Inventory application terminal is via the route of main menu\collect data\enter.

#### 10.5. Uploading Data

Users will need to upload the collected data to PC when the data collection tasks are finished. At PC side, user has to run the Main Setting Window, figure 2, select the “Receive data” item and Receive Data figure will be shown.

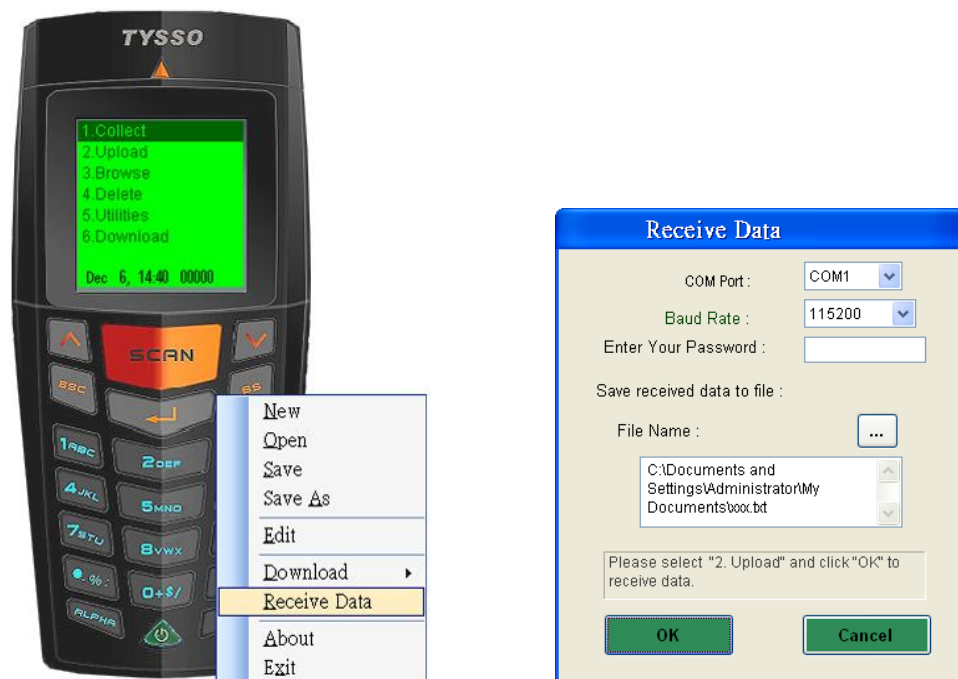


Figure 37

User has to select correct COM Port and proper Baud Rate and enter information into blanks. However, before click “OK” button, user has to double check if the terminal is at the status of uploading file state and if the cable is connected firmly between the PC and the terminal. The route to get to the state of the terminal to upload the data is via main menu\upload data\enter.

When finishes the uploading task, the following figure will be shown on the PC.

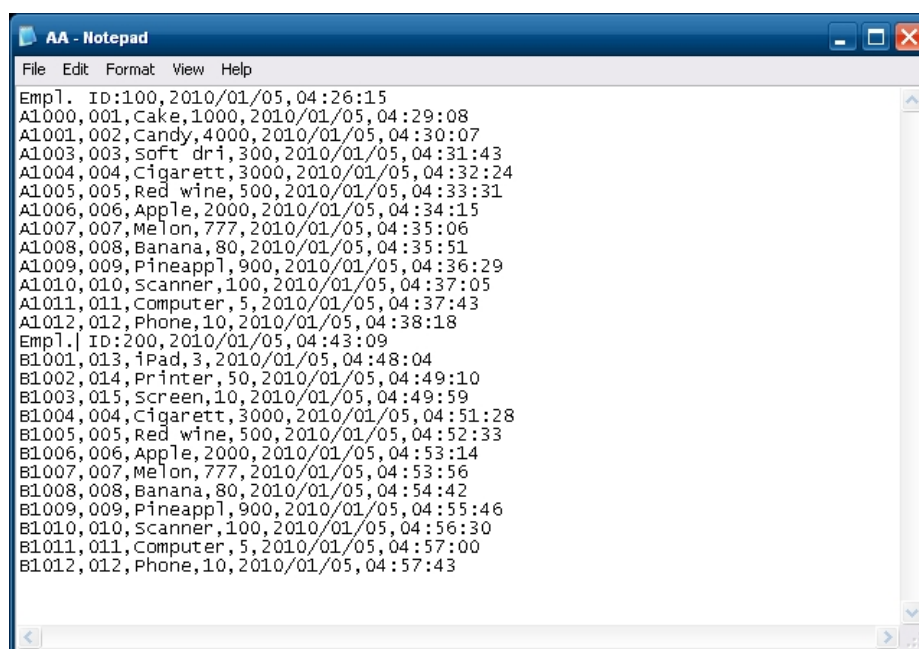


Figure 38

