SHC, SAM4S

User Guide

ELLIXSet Ver 1.0

for ELLIX32/37

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www.sam4s.com

CONTENTS

1. INTRODUCTION

It is integrated software for POS Printer ELLIX 32/37 series and it includes the all of the necessary utility for our printer product. If you want to other resource for our printer example windows driver, OPOS driver and other interface driver, please visit our web site.

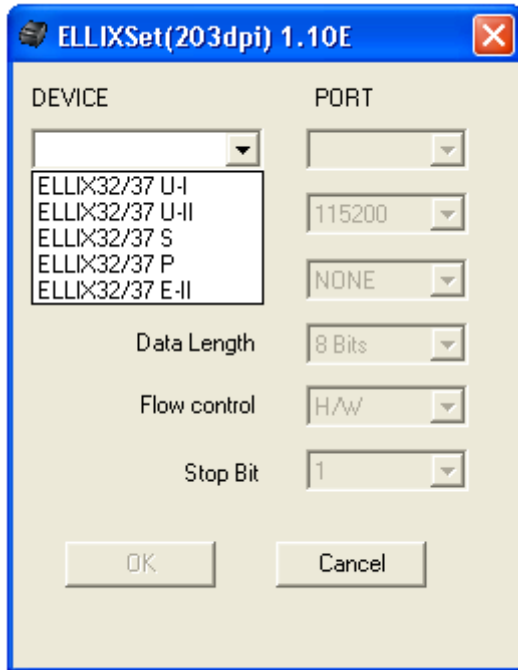# 2. SUPPORT DEVICE & INTERFACE

DEVICES

- ELLIX32 / ELLIX37

FUNCTIONS

- NV Logo download
- User Setup
- Firmware download

INTERFACES

- RS-232c (Serial)
- IEEE1284 (Parallel)
- USB (Virtual COM , USB)
- Ethernet (TCP/IP)
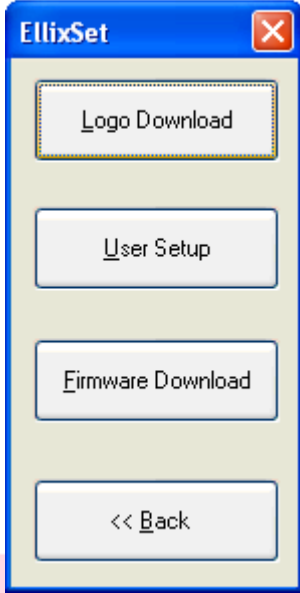
3. User Interface

1) Device Configuration Dialog

Device Configuration Dialog

You can select the device which you want to use comfortable, on the ELLIXSet.

<DEVICE LIST>

- ELLIX32/37 U-I : ELLIX32/37 with Virtual COM Interface
- ELLIX32/37 U-II : ELLIX32/37 with USB Interface
- ELLIX32/37 S : ELLIX32/37 with Serial Interface
- ELLIX32/37 P : ELLIX32/37 with Parallel Interface
- ELLIX32/37 EII : ELLIX32/37 with Ethernet-II Interface
  (TCP/IP type)

2) Function Select Dialog
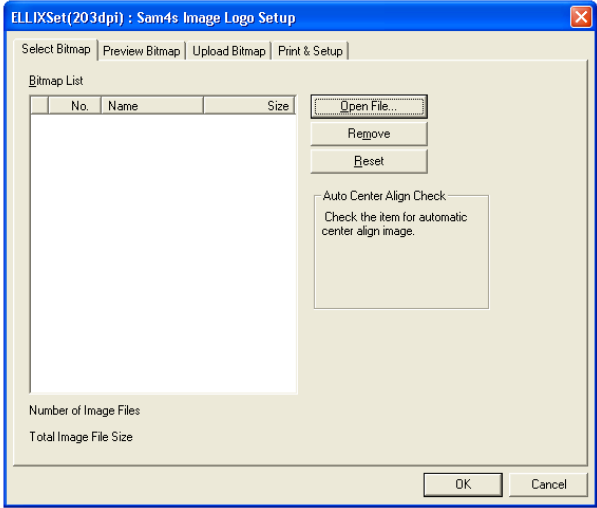

Function Select Dialog

You can select a function button as you want to use.

3) NV Logo Download Dialog

NV Image Logo Download Dialog

It is consisted with five property pages which are Select, Preview, Upload, Print tab.

4) User Setup Dialog

User Setup Dialog

You can change variable custom settings only for ELLIX 32 / 37 series.

5) Firmware Download Dialog

Firmware Download Dialog

You can update printer's firmware.

6) Network Setting Dialog (Ethernet-II Interface)

Ethernet-II Network Dialog

If you enter IP and Port number, You can access

Ethernet-II interface.

ELLIX Ethernet-II Network Setting Dialog

You can change a printer network setting.

3. Description of each functions

1) Logo download

Logo download function can be used for image downloading to NV (Non-Volatile) memory of ELLIX or for image printing from it.

(1) General feature

1. Maximum memory capacity: 384Kbyte

   (It depends on NV graphics memory size of User Setup. ELLIX32/37 is fixed 128Kbyte.)

2. Total logo count : Maximum 255

3. Automatic center align

(2) Logo registration sequence

✓ Select the bitmap file stored in a printer. ✓ If you want to save with "Automatic center align" feature, check the checkbox located at the head of Bitmap No. like a red square. Note) It is very useful the case of printing a small logo image.	
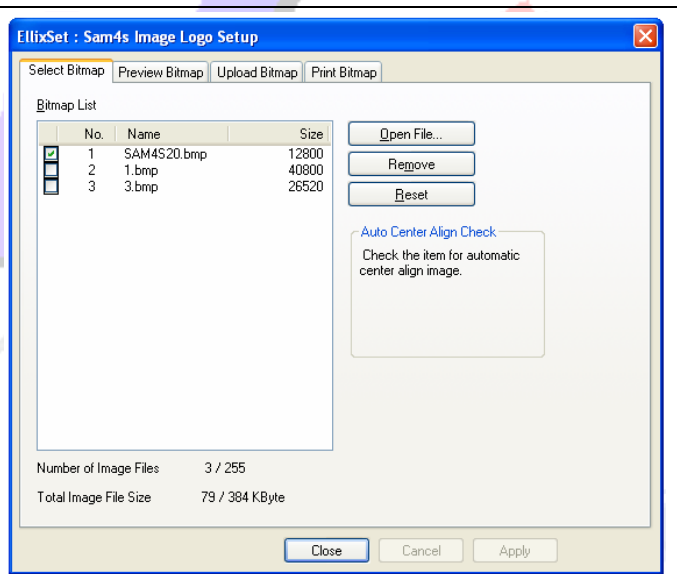
✓ At Preview Bitmap tab, you can see the logo file you selected.
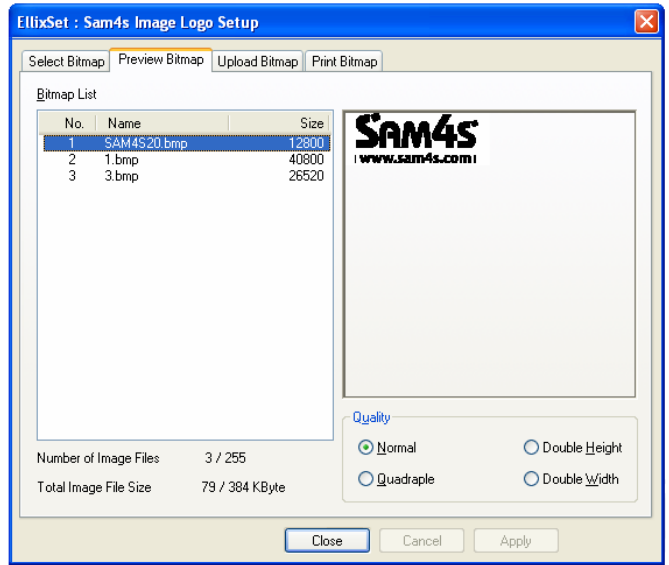
✓ If you press the Upload button, the Bitmap image data will be downloaded in the NV graphics memory area of the connected printer. If uploading process finishes successfully, the printer feeds paper a little.
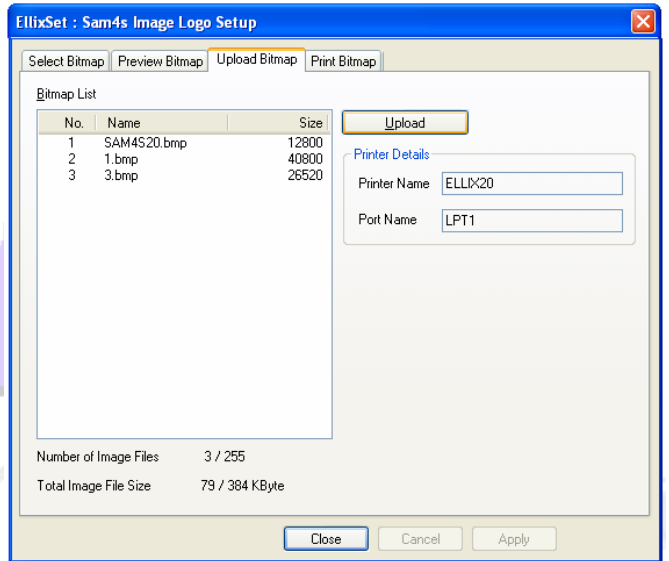
✓ You can specify the Printing Range for the logos uploaded in the printer's NV graphics memory area. Selectable choices are below :

All : Prints all logo images saved in the printer connected currently.

Selection : Prints the selected logo image saved in the printer connected currently. Selection range can be from 1 to 255. But you can select multiple logo-images by using ',' or '-' in the edit box.

(e.g. "1,5,10" or "1-5,8,20-22")

✓ You can specify Quality.

Normal : Print in single height and width

D/Width : Print in double width

D/Height : Print in double height

Quadruple : Print in double height and width

✓ You can select option with/without Header as a numbering value of the logo. It is printed on top of logo image.
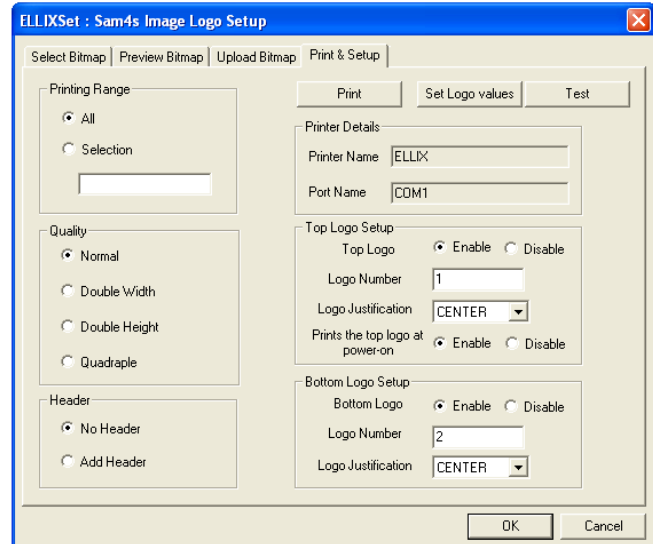
(3) Top/bottom logo printing

You can specify the top/bottom logo printing in "Print Bitmap" tab. When use this function, you should use cutting command (ex : GS V m n).

[Top logo Setup]

- Top Logo : Enable/disable top logo printing

- Logo number : Sets top logo number.

- Logo Justification : Specifies left/ center/ right justification.

- Prints the top logo at power-on : Makes extended settings for top logo printing.

[Bottom logo Setup]

- Bottom Logo : Enable/disable bottom logo printing

- Logo number : Sets top logo number.

- Logo Justification : Specifies left/ center/ right justification.

2) User setup

ELLIXSet(203dpi) : User Setup

SELECT USER SETUP FUNCTION

Paper Width & Max. Column ○ 80mm ○ 58mm
Paper Type ○ Black ○ 2Color
Water Mark Function ○ Disable ○ Enable 1 Image#
Cutting postion adjustment Function ○ OFF ○ ON 0 Lines
Drawer open with cutting ○ Disable ○ Enable
Kitchen Bell Type & Length Times
Default Code Page
NV Graphic Memory Size Kbyte
NV User Memory Size Kbyte
Cutting Mode Select ○ Partial ○ Full Cut
Max Print Speed mm/sec
Set Left Paper Margin 0 dot (0 ~ 576)
Drawer Open In Self-Test ○ Enable ○ Disable
Reserved ○ OFF ○ ON
Receive Buffer Size Kbyte
STOP BIT(COM PORT) ○ ONE ○ TWO
Customize Setup Code(HEX) 0

Get Value   Set Value   TEST Default EXIT

New Option
Paper Save Mode
Sleep mode
WiFi Auto Keep-Connection ○ Enable ○ Disable
Bell ○ External ○ Built-in
Bluetooth PWR from USB ○ OFF ○ ON

ELLIX32/37 - COM1
Baud : 115200
Data : 8 bit
None Parity
H/W Flow controlOne Stop Bit

✓ **About Buttons**

[TEST]

You can test the printer and check the printer's setting. If you press this button, ELLIX prints out some characters and cuts the paper.

[Default]

Can reset to default values of all options.

[Get Value]

It queries the current setting values to the printer and shows those values on the dialog.

[Set Value]

It sets values with displayed on the dialog or selected of the printer.

[EXIT]

Quits this application and returns to Function Select Dialog.

(1) Description of User Setup Options

A. Paper Width & Max Column (Default : 80mm / 32 column In 58mm)

This is an option of the paper width for printing. It can be set the paper 58mm or 80mm width.

B. Paper Type and Black Density (Default : Black / Medium)

This is an option of the paper type. It can be set Black or 2Color. The second color can be red or blue by 2 color thermal paper type.

C. Water Mark Function (Default : Disable)

It is ELLIX that prints background image on your receipt without any additional commands. You can use Watermark with Sam4s Image Logo Downloader in ELLIXSet. If you want to print background image, prepare the bitmap image which will be background. And then follow steps as below.

① Run Sam4s Image Logo Downloader and select the prepared bitmap image. And check the image number.
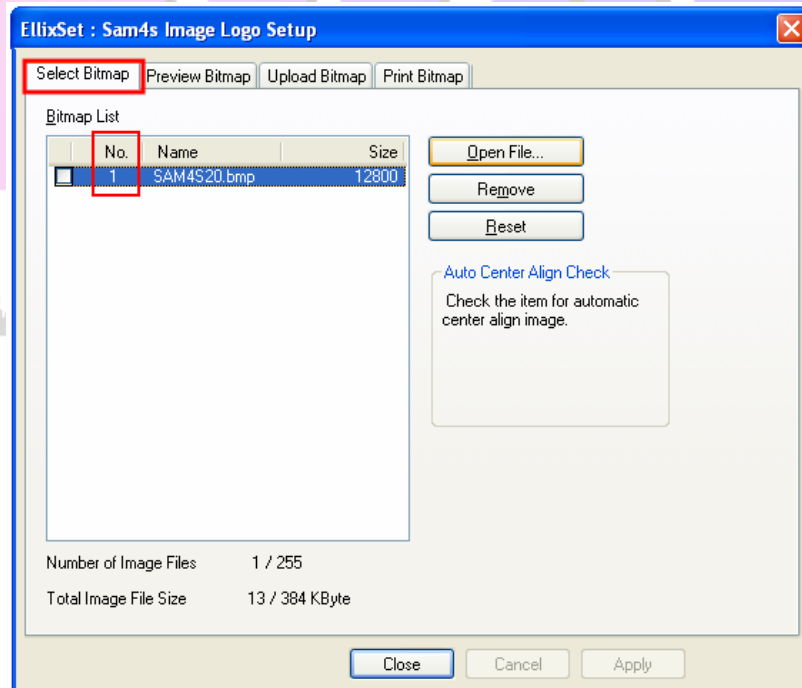
② Go to the "Upload Bitmap" tab and click the "Upload" button.
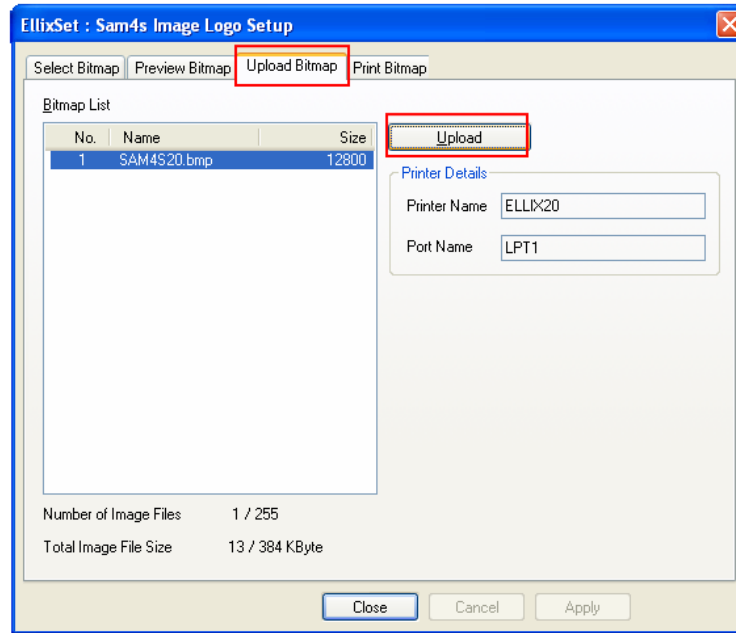
③ It will show the message box like below, click the "YES" button.
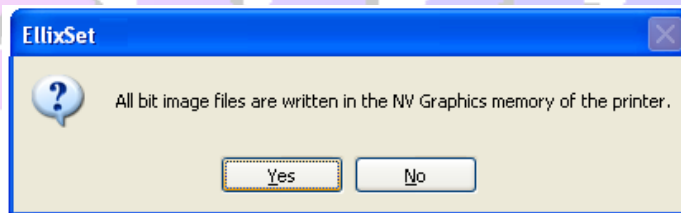
④ All of images saved before on the printer will be deleted and new image data will be downloaded on your printer.
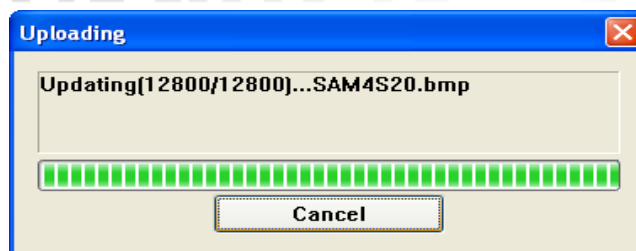
⑤ Printer feeds some paper when the logo upload is completed successfully.

⑥ Close Sam4s Image Logo Downloader and run User Setup from Function Select Dialog.

⑦ Set Enable of the Water Mark Function and input the number of logo image that you want to print as a background. (Refer step ①) And then click the "Set Value" button. The printer will be set values newly and Water Mark Function setting is finished.

⑧ Try to click the "TEST" button and you will see the fantastic receipt with background image.

Left picture is the sample receipt that is applied the Water Mark Function. Right one is bitmap image that is used as a background image.

D. Cutting position adjustment Function (Default : Disable / 0 Line)

If your receipt is cut wrong, this option will be very useful with you, it makes the application not change.

When this option set to enable, printer will feed amount (line number input) of paper before cutting.

E. Drawer open with cutting (Default : Disable)

This option will make drawer take an open-signal when printer is received the paper cutting command.

F. Kitchen Bell Type & Length (Default : Sam4s Bell / 3 times)

ELLIX offers one bell and three melodies for using on kitchen. It is possible to adjust ringing time or length of melody.

The offered bell types are below.

Sam4s Bell: Default sam4s bell

Melody 1 ~ 3: Three different melodies

Other Bell: Blend bell (Internal oscillation type)

G. Default Code Page (Default : PC437-USA, Standard Europe)

If you want to fix the specified codepage as default, select one of codepages in the list and then click the "Set Value" button.

H. NV Graphic Memory Size (Default : 384Kbytes)

ELLIX has NV (Non-volatile) memory area for saving graphics and user data. The NV Graphic memory size is 384Kbytes maximum and is 0byte minimum. You can take this size freely with this option. But it must be set in a range from 0 to 384Kbytes.

Note) Total size of NV memory (NV graphic and NV user memory) is 448Kbytes. Even if you will set the amount over 448Kbytes, it will be automatically set to possible size.

(ELLIX32/37 is fixed 128 Kbytes)

I. NV User Memory Size (Default : 64 Kbytes)

ELLIX has NV (Non-volatile) memory area for saving graphics and user data. The NV Graphic memory size is 320Kbytes maximum and is 64Kbytes minimum. You can take this size freely with this option. But it must be set in a range from 64 to 320Kbytes.

Note) Total size of NV memory (NV graphic and NV user memory) is 448Kbytes. Even if you will set the amount over 448Kbytes, it will be automatically set to possible size. (ELLIX32/37 is fixed 64 Kbytes)

J. Cutting Mode Select (Default : Partial Cut)

You can choose one type of cutting between partial cut (with un-cut point in a center of paper) and full cut.

K. Max Print Speed (Default : 180 mm/sec)

If printer, especially machine is fast and data transfer-speed is low, that is, two of them have speed mismatched. This case may be cause of an intermittent printing. You can control print speed from this option for better printing, e.g. smooth printing.

- ELLIX32/37 Max Speed : 180mm/sec

L. Set Left Paper Margin (Default : 0 dot)

Left margin of paper is changeable for better receipt (printed) shape. For example, if you are using 46-column-format receipt on ELLIX, you may be seen a print-result tended to left side. In this case you can take much better result, if you set 24-dots which is the value of left margin.

M. Drawer Open In Self-Test (Default : Disable)

Check the drawer operation at print self-test mode.

N. Received Buffer Size (Default : 4Kbytes)

ELLIX's received buffer can be 64Kbytes maximum. You can change buffer size with this option.

O. Stop Bits (COM) (Default : ONE)

Stop bits used during serial communication can be changed.

P. Customize Setup Code (Default : 0)

You can enter a Customize Setup Code .

(2) New Option

A. Sleep mode (Default : OFF)

Set a sleep mode. Default value is OFF.

B. Paper save mode (Default: OFF)

Set a Paper save mode. This mode saves paper.

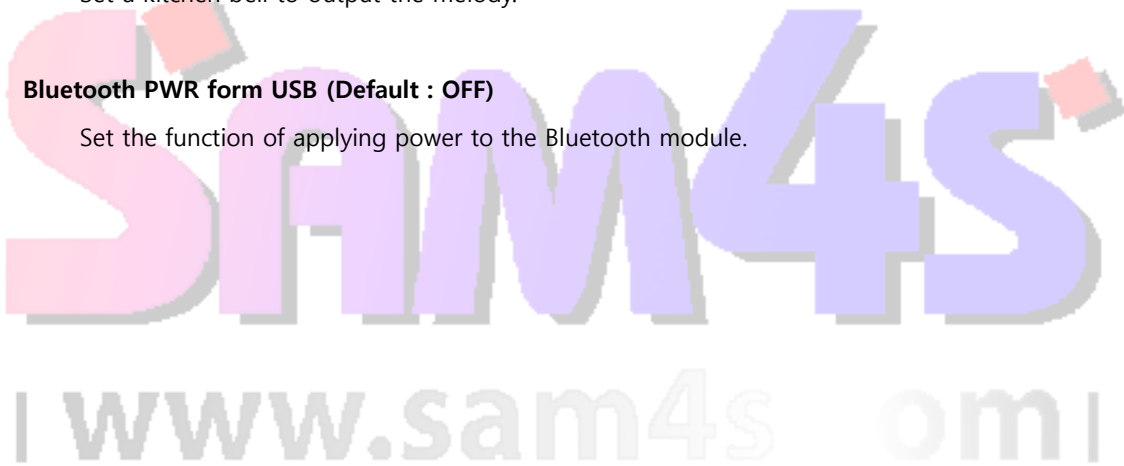**C. Wi-Fi Auto Keep-Connection (Default: Disable)**

When abnormal disconnect is occurred, this option will be reduced re-connection time.

D. Bell (Default: External)

Set a kitchen bell to output the melody.

E. Bluetooth PWR form USB (Default : OFF)

Set the function of applying power to the Bluetooth module.

3) Firmware download (Using ELLIXSet)

(1)   ELLIX32 / 37

Firmware update sequences are below.

ERROR LED

1. Remember folder directory with downloaded firmware file.
2. Turn the ELLIX off.
3. Check the cable connection between ELLIX and your PC .

   If a printer have dip Switches, please turn off all dip switches.

   When printer interface is WLAN, please connect USB cable for f/w update.

PAPER OUT LED

4. Open the printer cover.
5. Turn on ELLIX with FEED button; hold the feed button until the PAPER LED is ON.
6. Now, ELLIX is ready to update firmware. (*Download mode)
7. Run the "Firmware Update Dialog" on ELLIXSet and open the downloaded firmware file.
8. And then, select the download area which you want to update. (generally select the "Program area")
9. Select the connected port on your PC. (Already selected on ELLIXSet)
10. If you click the download button, the firmware update will be started and this application will show the status with progress-bar on dialog bottom side.

    (If progress-bar does not proceeding well, when you click download button, you should check 'Port Select' or cable connection whether   settings are correct or not.)
11. If download is done, printer will notify download completion with 5 times buzzer. (in surely case that download is succeeded). And then turn off a printer.
- If buzzer does not ring that means communication ERROR is occurred during download. In this case, please check Cable connection status (It should be fasten – Normal).
12. Please try to operate 'SELF TEST' and check the updated firmware version.
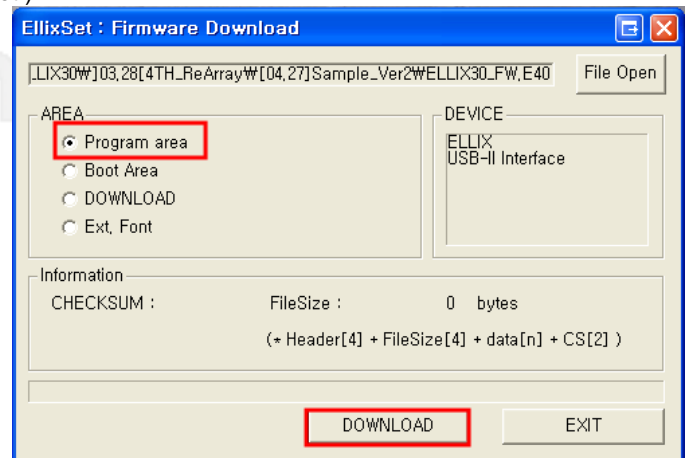
## 4) Firmware download (Using USB memory stick)

Firmware update sequences for ELLIX32 / 37 series are below.

1. Format a USB memory stick to FAT file system.

2. Copy the firmware file to USB memory stick.(No folder)

3. Turn off a printer. And then connect a USB memory stick to printer USB port.
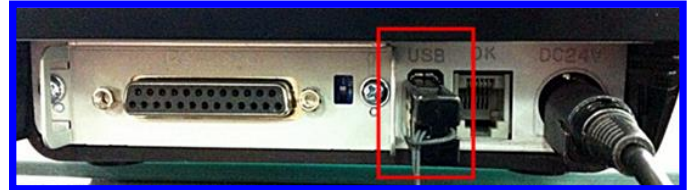
4. **ELLIX32/37 with dip switch**:

   Turn on the switch 7th of dip switch 2nd. Open the printer cover. Turn on a printer with holding the FEED Button. After 2 seconds, Release the FEED button.
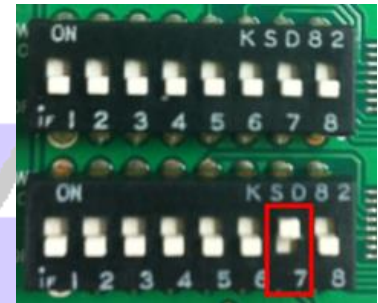
5. If firmware update is done, printer will notify update completion with 3 times buzzer. (in surely case that download is succeeded). And then turn off a printer.

6. Do self-test for confirming the updated firmware version.

5) Network Setting Dialog (Ethernet-II Interface)

(1) Ethernet-II Network Dialog

When you selected an Ellix32/37 Ethernet-II In the "Device Configuration Dialog" and pressed OK button, Ethernet-II Network Dialog is appears. Enter the IP address and port number to connect. Press the OK button. Function Select Dialog will be executed.

In addition, you can select the "ELLIX Ethernet-II Network Setting dialogue" It can change the network settings for the printer. Do you want to check ELLIX IP and Port number? Please run the Self-Test. You can confirm all the settings of the printer.
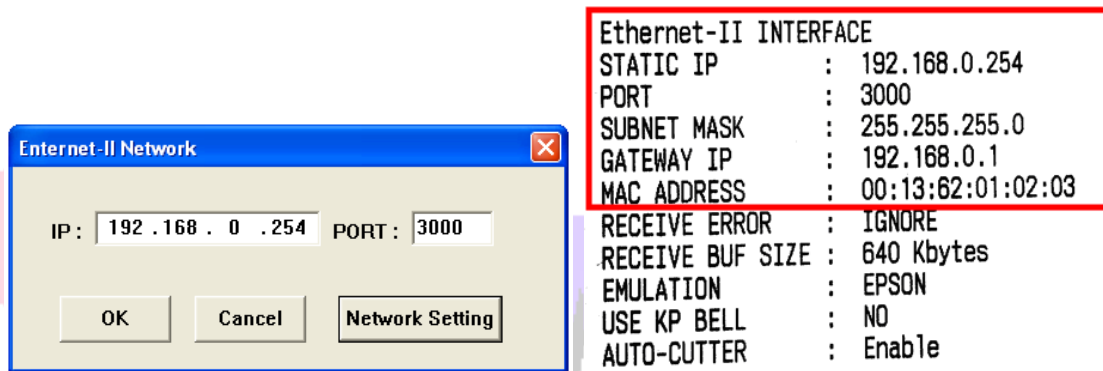
(2) ELLIX Ethernet-II Network Setting Dialog

Here you can change the network settings for the printer. If you would like to change the network settings, please follow these steps.

1. The printer is connected to the router. PC must be connected to the same router.
2. Turn on ELLIX normally.
3. Run the "ELLIX Ethernet-II Network Setting Dialog." Press the "Search Printer" button.
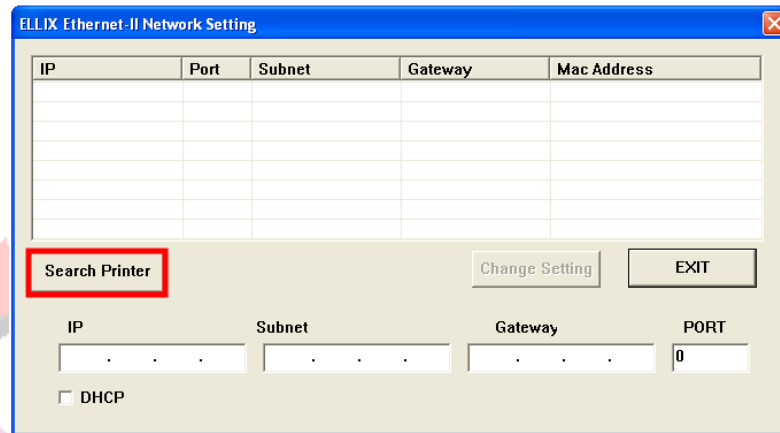

4. If you can see the "Windows Security Alert" message, Click a "Unblock" button (Windows XP) or "Allow access" button (Windows 7). And retry the 3 Step.
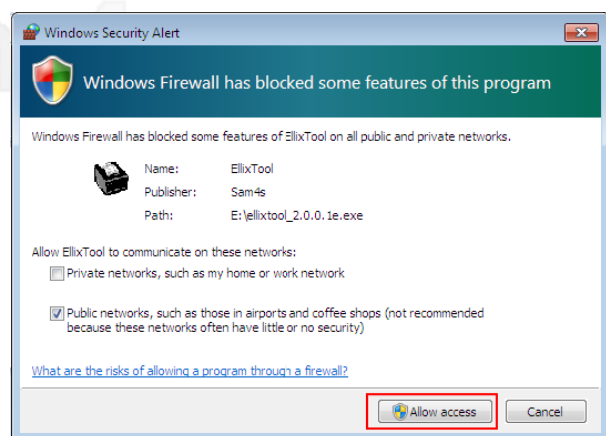
5. If you can see the "The Printer has finished searching." message, detected the printer's network settings appear. (If you can not see any list, Please check cable and network.)
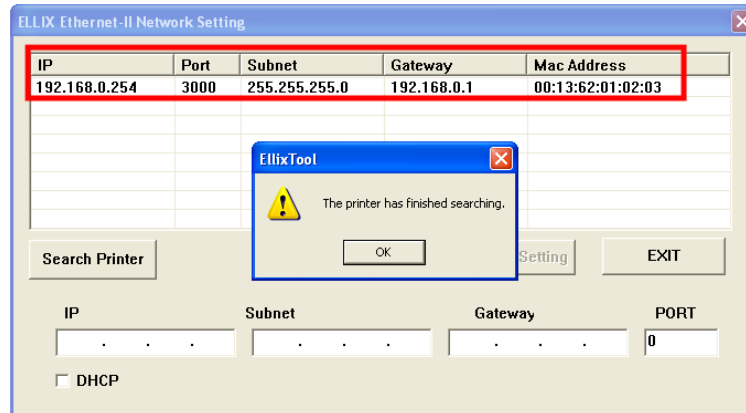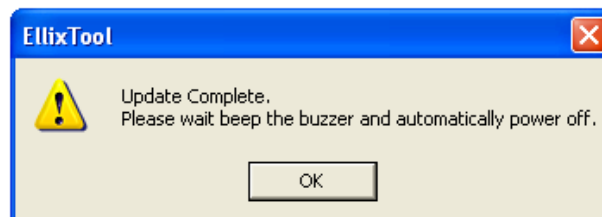

6. Choose one to change the IP. Enter the network settings you want (as shown). Finally, press the "Change setting" button.
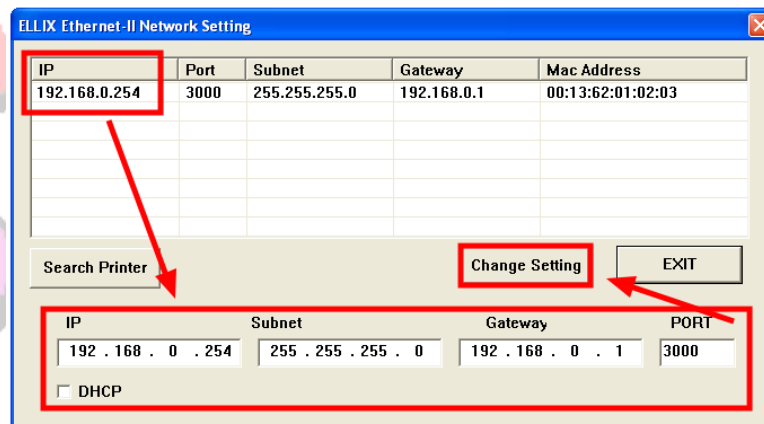
7. You can see the "Do you wand to change the Network Setting?" message. Press the "Yes" button.
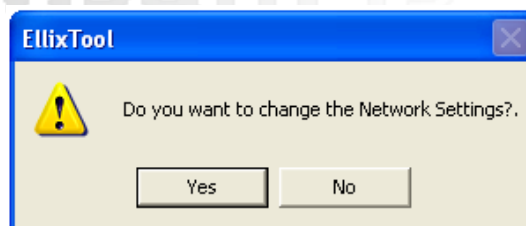
8. Printer will notify update completion with buzzer, and then printer will be restart.

9. Do self-test for confirming the updated network setting.

REV 1.0

	Revision History
Rev 1.0	MAR, 30, 2015