User Guide TP-Tool Ver 1.4





CONTENTS

1.	INTRODUCTION	4
2.	SUPPORT DEVICE & INTERFACE	4
3.	USER INTERFACE	5
1)	Device Configuration Dialog	5
2)	FUNCTION SELECT DIALOG	6
3)	NV Logo Download Dialog	6
4)	User Setup Dialog	7
5)	Firmware Download Dialog	7
6)	NETWORK SETTING DIALOG (ETHERNET-II INTERFACE)	8
7)	WI-FI NETWORK SETTING DIALOG (WI-FI INTERFACE)	8
3. DI	ESCRIPTION OF EACH FUNCTIONS	
1)	LOGO DOWNLOAD	
2)	USER SETUP	
	(1) Description of User Setup Options	
	(2) New Option	
3)	FIRMWARE DOWNLOAD (USING TP-TOOL)	
	(1) TP-30 / TP-40 / TP35 / TP-45 series	
4)	FIRMWARE DOWNLOAD (USING USB MEMORY STICK)	23
5)	Firmware download (BOOT, Downloader)	24
6)	NETWORK SETTING DIALOG (ETHERNET-II INTERFACE)	25
	(1) Ethernet-II Network Dialog	25
	(2) Ethernet-II Network Setting Dialog	25
	(3) Web Server	
7)	NETWORK SETTING DIALOG (WI-FI INTERFACE)	
	(1) Wi-Fi Network Dialog	
	(2) Glossary of Terms	
	(3) Install a Virtual COM Driver (Windows XP, POSReady 2009)	
	(4) Install a Virtual COM Driver (Windows 7, POSReady 7)	
	(5) Infrastructure mode setting	
	(6) Limited AP setting	
	(7) Print Test page (Windows XP, POSReady 2009)	

(8)	Print Test page (Windows 7, POSReady 7)	.43
(9)	WLAN Tips	.46
(10)	WLAN factory reset	.47



1.INTRODUCTION

It is integrated software for POS Printer TP-30/40/35/45 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

- TP-30 / TP-40 / TP35 / TP45
- TP35 II / TP45 II

FUNCTIONS

- NV Logo download
- User Setup
- Firmware download

INTERFACES

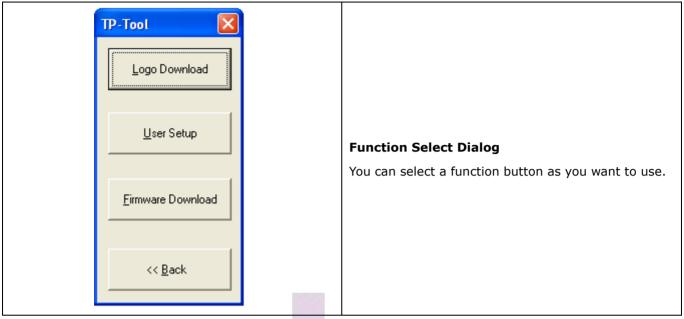
- RS-232c (Serial)
- IEEE1284 (Parallel)
- USB (Virtual COM , USB)
- Ethernet (TCP/IP)
- WLAN (TCP/IP) (TP35II / TP45II is not supported.)

3.User Interface

1) Device Configuration Dialog

	Device Configuration Dialog
TP-Tool Ver 1.11	You can select the device which you want to use
	comfortable, on the TP-Tool.
DEVICE PORT	
TP-30/35 S 🔹 COM1	<pre><device list=""></device></pre>
TP-30/35 S TP-30/35 P TD-30/35 P 115200	- TP-30/35S : TP-30/35 with Serial Interface
TP-30/35 U-I TP-30/35 U-II TP-30/35 E-II NONE	- TP-30/35U-I : TP-30/35 with Virtual COM
TP-30/35 E-II	Interface
TP-40/45 S 8 Bits	- TP-30/35P : TP-30/35 with Parallel Interface
TP-40/45 U-I	TP-30/35 U-II : TP-30/35 with USB Interface
TP-40/45 E-II Stop Bit 1	- TP-30/35 E-II : TP-30/35 with Ethernet-II
	Interface
OK Cancel	(TCP/IP type)
	- TP-30/35W : TP-30/35 with Wi-Fi Interface
	(TCP/IP type)
	- TP-40/45S : TP-40/45 with Serial Interface
	- TP-40/45U-I : TP-40/45 with Virtual COM
	Interface
	- TP-40/45P : TP-40/45 with Parallel Interface
	- TP-40/45U-II : TP-40/45 with USB Interface
	- TP-40/45-EII : TP-40/45 with Ethernet-II
	Interface
	(TCP/IP type)
	- TP-40/45W : TP-40/45 with Wi-Fi Interface
	(TCP/IP type)

2) Function Select Dialog



3) NV Logo Download Dialog

IP-Tool : Image Logo Setup Select Bitmap Preview Bitmap Upload Bitmap Print Bitmap Bitmap List No. Name Size Remove Reset Remove Reset Auto Center Align Check Check the item for automatic center align image.	NV Image Logo Download Dialog It is consisted with four property pages which are Select, Preview, Upload, Print Bitmap tab.
Number of Image Files 0 / 255 Total Image File Size 0 / 384 KByte OK Cancel	

4) User Setup Dialog

TP-Tool : User Setup	×	
SELECT USER SETUP FUNCTION	New Option	
Paper Width & Max. Column C 80mm C 58mm 💌		
Paper Type C Black C 2Color		
Water Mark Function C Disable C Enable I Image#		
Cutting postion adjustment Function C OFF C ON 0 Lines	oxhco	
Drawer open with cutting C Disable C Enable		
Kitchen Bell Type & Length Times		
Default Code Page		User Setup Dialog
NV Graphic Memory Size Kbyte	Paper Save Mode	User Setup Dialog
NV User Memory Size 📃 🗾 Kbyte	Sleep mode	You can change variable custom settings only for
Cutting Mode Select C Partial C Full Cut	WiFi Auto C Enable C Disable Keep-Connection	
Max Print Speed mm/sec	Bell C External C Buint-in	TP series.
Set Left Paper Margin 0 dot (0 ~ 512)	TP - COM1 Baud : 115200	
Drawer Open In Self-Test C Enable C Disable	Data:8 bit None Parity H/W Flow controlOne Stop Bit	
Reserved C OFF C ON		
Receive Buffer Size 📃 💌 Kbyte		
STOP BIT(COM PORT) C ONE C TWO		
Customize Setup Code(HEX)		
Get Value Set Value	Default EXIT	
A CONTRACTOR AND A CONTRACTOR	1000	

5) Firmware Download Dialog

EA Program Area Ext. Font CLCD font DOWNLOAD Area Boot Area	DEVICE TP - COM1 Baud: 115200 Data: 8 bit None Parity H/W Flow controlOne Stop Bit	Firmware Download Dialog You can update printer's firmware.
rmation HECKSUM : FileSize : (* Header[4] + FileSi	0 bytes ze[4] + data[n] + CS[2])	

6) Network Setting Dialog (Ethernet-II Interface)

Ethernet-II Network	Ethernet-II Network Dialog If you enter IP and Port number, You can access Ethernet-II interface.
Ithernet-II Network Setting X IP Port Subnet Gateway Mac Address Search Printer Change Setting EXIT IP Subnet Gateway PORT 0 IP DHCP DHCP DHCP DHCP	EthernetOII Network Setting Dialog You can change a printer network setting.

7) Wi-Fi Network Setting Dialog (Wi-Fi Interface)

WLAN(WiFi) Network	Wi-Fi Network Dialog If you enter IP and Port number, You can access Wi-Fi interface.
--------------------	--

WLAN Setup Dialog Ver. 1.06	X
VCOM Port	
SSID CHANNEL TYPE RSSI SECURITY	Infrastructure Dialog You can change a printer Wi-Fi network setting for Infrastructure
IP SUBNET GATEWAY 0 . 0 . 0 . 0 0 . 0 . 0 . 0 0 . 0 . 0 Exit Exit	
WLAN AP Network Setting Dialog Ver 1.06 VCOM Port I. OPEN AP SETTING AP NAME PASSWORD CHANNEL IP SUBNET GATEWAY · · · · MAC ADDRESS PORT 2. SET	Limited AP Dialog You can change a printer Wi-Fi network setting for Limited AP

3. Description of each functions

1) Logo download

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

(1)General feature

- Maximum memory capacity: 384Kbyte (It depends on NV graphics memory size of User Setup. TP-30/35 is fixed 128Kbyte.)
- 2. Total logo count : Maximum 255
- 3. Automatic center align
- 4. Black/White diverging point
- 5. Image data format : Changeable to a file
- 6. Gray Scale Image printing support.

(2)Logo registration sequence

- \checkmark 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.

✓ 1 oxhoo.bm 2 bitmap1.b	2976 3016	Reset Auto Center Align Check Check the item for automatic center align image.

✓ At Preview Bitmap tab, you can see the logo file you selected.	TP-Tool : Image Logo Setup Select Bitmap Bitmap List No. Name 1 oxhoo bmp 2 bitmap1.bmp 3016 OK Quality Number of Image Files 2 / 255 Total Image File Size 6 / 384 KByte OK Cancel
✓ 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.	TP-Tool : Image Logo Setup Select Bitmap Preview Bitmap Bitmap List 1 cxhoo.bmp 2976 2 bitmap1.bmp 3016 Printer Details Printer Name TP Port Name COM1

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. ✓ You can configure "Top/Bottom logo Setup" option.

Select Bitmap Preview Bitmap Up	oad Bitmap Print & Setup
Printing Range	Print Set Logo values Test
© All	Printer Details
C Selection	Printer Name TP
	Port Name COM1
Quality	Top Logo Setup Top Logo C Enable (Disable
Normal	
C Double Width	Logo Number 1
C Double Height	Logo Justification CENTER
C Quadraple	Prints the top logo at C Enable
	Bottom Logo Setup
Header	Bottom Logo 🕜 Enable 📀 Disable
No Header	Logo Number 2
C Add Header	Logo Justification CENTER 💌
	OK Cance
	OK Cancel

(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).

Select Bitmap Preview Bitmap Uploa Printing Range © All © Selection	d Bitmap Print & Setup Print Set Logo values Test Printer Details Printer Name TP	04/15/11 8:28 pm Sales Persa	(952) Order # Customer#	0
Quality Normal Double Width Double Height Quadraple Header No Header Add Header	Port Name CDM1 Top Logo Setup Top Logo C Enable C Disable Logo Number 1 Logo Justification CENTER Prints the top logo at C Enable C Disable Bottom Logo Setup Bottom Logo C Enable C Disable Logo Number 2		250g Cherry 13.99 each Sub-Total: Tax[7.125]: Total: Total Paid: Change:	13.99 13.99 1.00 14.99
	Logo Justification CENTER OK Cancel		oxhœ	>

- 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

SELECT USER S	ETUP FUNCTI	DN		New Option			
Paper Width & Max. Column	C 80mm	C 58mm	•	Emulation	C EPSON	C STAR	
Paper Type	C Black	C 2Color	•	Density		•	
Water Mark Function	🔿 Disable	C Enable 1	 Image#	AutoCut	C ON	C OFF	
utting postion adjustment Function	C OFF	C ON 0	_ Lines	SELF-TEST	⊂ Self-Test	C HexaDump	
Drawer open with cutting	I 🔿 Disable	C Enable		Kitchen Bell	OFF	C ON	
Kitchen Bell Type & Length		•	 Times 	USB mode	C USB	○ СОМ	
Default Code Page		ŀ	•	LCD Password	C Reset	C Don't touch	
NV Graphic Memory Size		Kbyte		Paper Save Mode		•	
NV User Memory Size	•	Kbyte		Sleep mode		-	
Cutting Mode Select	: 🔿 Partial	C Full Cut		WiFi Auto Keep-Connection	C Enable	C Disable	
Max Print Speed	-	mm/sec		Bell	C External	C Buint-in	h
Set Left Paper Margin	0	dot (0 ~ 512)		TP - COM1 Baud : 115200			
Drawer Open In Self-Test	: C Enable	O Disable		Data : 8 bit None Parity			
Reserved	C OFF	C ON		H/W Flow control0	ne Stop Bit		
Receive Buffer Size	•	Kbyte					
STOP BIT(COM PORT)	C ONE	C TWO					
Customize Setup Code(HEX)		0					F
CatVal		0.004		TEST		EVIT	
Get Value		Set Value		Default		EXIT	

~ **About Buttons** ST]

can test the printer and ck the printer's setting. If press this button, ter prints out some racters and cuts the er.

fault]

reset to default values of them.

t Value]

ueries the current setting es to the printer and ws those values on the bg.

t Value]

ets values with displayed the dialog or selected of printer.

IT]

s this application and rns to Function Select og.

(1) Description of User Setup Options

A. Paper Width & Max Column (Default : 80mm / 30 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 TP printer that prints background image on your receipt without any additional commands. You can use Watermark with Image Logo Downloader in TP-Tool. If you want to print background image, prepare the bitmap image which will be background. And then follow steps as below.

① Run Image Logo Downloader and select the prepared bitmap image. And check the image number.

TP-Tool : Image Logo Setu Select Bitmap Preview Bitma Bitmap List	-	At Bitmap	
Number of Image Files Total Image File Size	1 / 255 3 / 384 KByte		
		OK Cancel	

ſ	TP-Tool : Image Logo Setup	
	Select Bitmap Preview Bitmap Upload Bitmap Print Bitmap Bitmap List	
	No. Name Size Upload 1 oxhoo.bmp 2976 Printer Details	
	Printer Name TP Port Name USB	
	J Number of Image Files 1 / 255	
	Total Image File Size 3 / 384 KByte	
It will show the	e message box like below, click the "YES" button.	

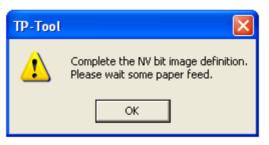
2 Go to the "Upload Bitmap" tab and click the "Upload" button.

- TP-Tool

 Image files are written in the NV Graphics memory of the printer.

 Yes
- 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.

3



- 6 Close 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.

TP-Tool : Use	r Setup			
	SELECT USER S	ETUP FUNCTIO)N	
Pape	r Width & Max. Column	© 80mm	⊂ 58mm [•
	Paper Type	C Black	C 2Color	•
	Water Mark Function	⊂ Disable	€ Enable	1 Image#
Cutting posti	on adjustment Function	C OFF	C ON 1	0 Lines
Di	rawer open with cutting	C Disable	C Enable	
Kite	hen Bell Type & Length		-	▼ Times
	Default Code Page			•
N	/ Graphic Memory Size	_	Kbyte	
	NV User Memory Size	~	Kbyte	
	Cutting Mode Select	C Partial	C Full Cut	
	Max Print Speed	-	mm/sec	
	Set Left Paper Margin	0	dot (0 ~ 512)	
Dr	awer Open In Self-Test	C Enable	C Disable	
	Reserved	C OFF	C ON	
	Receive Buffer Size	-	Kbyte	
ş	TOP BIT(COM PORT)	C ONE	C TWO	
Custon	nize Setup Code(HEX)		0	•
G	et Value		Set Value	

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.

R	Hideaway #2 16040 Cedar Ave S osemount, MN 5568 (952)	
04/15/11 8:28 pm	Order # Customer #	
Sales Perso	on:	
Al Fakher 2 1 @	250g Cherry 13.99 each	13.99*
	Sub-Total:	13.99
	Tax[7.125]:	1.00*
	Total:	14.99
	Total Paid: Change:	0.00
Thank You		
Alleline Fi		



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 : High / 1 times)

TP Printer 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.

Tone: Medium, High, Low tone Beep

Bell : Four different tone Beep

Other Bell(DK1/2): Blend bell (Internal oscillation type)

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

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

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

TP printer 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.

(TP-30/35 is fixed 128 Kbytes)

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

TP printer 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. (TP-30/35 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 : 270 mm/s or 230mm/s)

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.

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 40-column-format receipt on TP printer, 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)

TP printer'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

Some New Option is designed for TP printer that does not have dip switches.

(Only TP-40/45 LCD type : *)

A. Emulation (Default : EPSON) *

Select a printer's emulation mode.

B. Density (Default : Level 2) *

Select a Printer's paper density level.

C. Kitchen Bell (Default : OFF) *

Select whether to use Kitchen Bell.

D. Auto Cut (Default : ON) *

Select whether to use Auto Cut.

E. Self-Test (Default : Self-Test) *

Turn on the power while holding down the FEED button. The self-test begins. This option selects a self-test mode. (HEXADECIMAL DUMP MODE, Self-Test mode)

F. USB mode (Default : USB) *

Select whether to use a USB mode.

(When this option changed, please restart TP-Tool).

G. Sleep mode (Default : OFF)

Set a sleep mode. Default value is OFF.

H. Paper save mode (Default: OFF)

Set a Paper save mode. This mode saves paper.

I. LCD Password (Default: Don`t touch)

Reset LCD password value. (Only use LCD model)

J. Wifi Auto Keep-Connection (Default: Disable)

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

K. Bell (Default: External)

Set a kitchen bell to output the melody.

L. Bluetooth PWR form USB (Default : OFF)

Set the function of applying power to the Bluetooth module.

M. Upside-down (Default : Disable)

Set the function of upside-down print per page. (Max : 30cm page length) If WaterMark/Two Color/Top & bottom logo function is on, this function is impossible to use.

N. Bell Play Time (Default : Max)

Set the maximum duration of a kitchen bell melody.

O. After cutting (Default : Feed)

After the cut, set the operation of the printer. (For a printer jam occurs)



3) Firmware download (Using TP-Tool) (1)TP-30 / TP-40 / TP35 / TP-45 series

Firmware update sequences are below.

- 1. Remember folder directory with downloaded firmware file.
- 2. Turn the printer off.
- 3. Check the cable connection between printer and your $\ensuremath{\mathsf{PC}}$.

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.
- 4. Open the printer cover.
- 5.Turn on printer with FEED button; hold the feed button until the PAPER LED is ON. LCD model printer displays a message as shown.
- Now, Printer is ready to update firmware.
 (*Download mode)
 - 7.Run the "Firmware Update Dialog" on TP-Tool 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 TP-Tool)
- 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.)

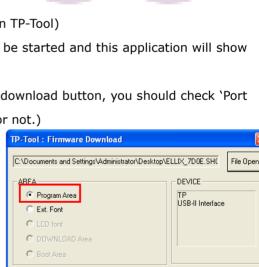
Information

CHECKSUM :

- 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.



PAPER OUT LED



FileSize :

0 bytes

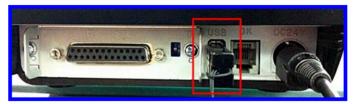
EXIT

(* Header[4] + FileSize[4] + data[n] + CS[2])



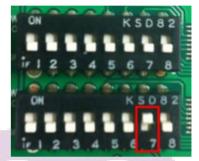
4) Firmware download (Using USB memory stick)

- 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.



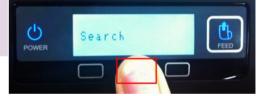
4. With dip switch:

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.



With LCD display:

Open the printer cover. Turn on a printer with holding the Button 2 of LCD display. After 2 seconds, Release the FEED button.



- 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.

• Does not support this feature, the printer boot version less than 1.10

• Depending on the version of the boot loader, it has the following limitations

(Except TP35II / TP45II)

- \Rightarrow Boot loader(1.14 or less) : Updatable range is max 2.09 printer firmware version.
- \Rightarrow Boot loader(1.15 or more) : Updatable range is from 2.10 printer firmware version.

5) Firmware download (BOOT, Downloader)

Many features has been added from firmware version 2.10. So you want to update to firmware 2.10 or higher than 2.09, you must follow the following steps (this procedure is that once you upgrade from older versions).

- 1. Proceed to 1 to 6 procedures of " 3) Firmware download (Using TP Tool) ".
- 2. Run the TP Tool utility (Ver 1.30 or higher) and set to the interface and the press the OK button.
- Hold down the CTRL button on the left side of the keyboard, press the "Firmware Download" button.



- 4. When the Firmware Update dialog, click the "Open" button to select the latest firmware version 2.10 or more.
- Select "Download Area" and click the "Download" button. When the update is complete, the buzzer will beep five times. Do not turn off the power during the update.
- When the "Download Area" update is complete, turn off the printer.
- Open the cover and turn on the power while pressing the paper feed button. In other words, run the download mode.

TP-Tool : Firmware Download		TP-Tool : Firmware Download	
C:\Documents and Settings\Administrator\My Docume	ents\F\v	C:\Documents and Settings\Administrator\My Docum	ents\FW.Sł
AREA Program Area Ext. Font DOWNLDAD Area Boot Area	DEVI(TP · (Baud Data None H/W Stop I	AREA Program Area Est. Font CLCD font DUWNLDAD Area Boot Area Information	DEVICE TP - COM Baud : 11 Data : 8 None Pa H/W Flo Stop Bit
CHECKSUM : NieSize :	0 by	CHECKSUM : FileSize :	0 bytes
(* Herder(4) + FileSize(DOWNLOAD		(* Header[4] + FileSize	

- Select the "BOOT Area" in the Firmware Update dialog, and then click on the "Download" button.
 Do not turn off the power during the update.
- 9. When you have completed the update to the "BOOT Area", update the "Program Area" for complete with all updates.

Note: Updated the boot loader and downloader cannot be downgraded. If this is the first update from the previous version(2.09 or less) to the new version(2.10 or more), please reset the user setup.

6) Network Setting Dialog (Ethernet-II Interface)

(1) Ethernet-II Network Dialog

When you selected a 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 "Ethernet-II Network Setting dialogue" It can change the network settings for the printer. Do you want to check printer's IP and Port number? Please run the Self-Test. You can confirm all the settings of the printer.

	Ethernet-II INTERFACE
	STATIC IP : 192.168.0.254
	PORT : 3000
	SUBNET MASK : 255.255.255.0
Enternet-II Network	GATEWAY IP : 192.168.0.1
	MAC ADDRESS : 00:13:62:01:02:03
IP: 192.168.0.254 PORT: 3000	RECEIVE ERROR : IGNORE
	RECEIVE BUF SIZE : 640 Kbytes
	EMULATION : EPSON
OK Cancel Network Setting	USE KP BELL : NO
	AUTO-CUTTER : Enable

(2) 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 printer normally.

3. Run the "Ethernet-II Network Setting Dialog." Press the "Search Printer" button

.

IP	Port	Subnet	Gatew	ay I	Mac Addres	S
Search Printer				Change Se	tting	EXIT
IP		Subnet		Gateway		PORT
· · ·		· ·				0

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.

	Windows Security Alert	🔐 Windows Security Alert
4	To help protect your computer, Windows Firewall has blocked some features of this program.	Windows Firewall has blocked some features of this program
	Ŭ,	Windows Firewall has blocked some features of EllixTool on all public and private networks.
	Do you want to keep blocking this program?	Name:
		Publisher:
	Name:	Path:
	Publisher:	Allow EllixTool to communicate on these networks:
		Private networks, such as my home or work network
	Keep Blocking Unblock Ask Me Later	Public networks, such as those in airports and coffee shops (not recommended because these networks often have little or no security)
	Windows Firewall has blocked this program from accepting connections from the Internet or a network. If you recognize the program or trust the publisher, you can	What are the risks of allowing a program through a frewall?
	unblock it. <u>When should I unblock a program?</u>	Allow access Cancel

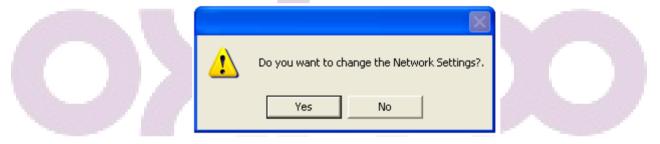
5. If you can see the "The Printer has finished searching." message, detected the printer's network settings appear. (If you cannot see any list, Please check cable and network.)

Ethernet-II Net	work Settii	ıg			E				
IP	Port	Subnet	Gateway	Mac Address					
192.168.0.254	3000	255.255.255.0	192.168.0.1	00:13:62:01:02:03					
		The printer	The printer has finished searching.						
Search Printer			ж	Setting EX	ат				
IP		Subnet	Gatewa	ay P	ORT				
	•	· ·		0					
□ рнср									

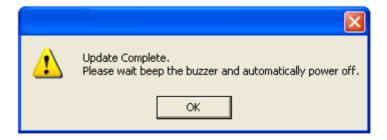
6. Choose one to change the IP. Enter the network settings you want (as shown). Finally, press the "Change setting" button.

Ethernet-II Network Setting								
Port	Subnet	Gateway	Mac Address					
3000	255.255.255.0	192.168.0.1	00:13:62:01:02	:03				
		Change S	Setting	EXIT				
	Subnet	Gatewa	N	PORT				
. 254	255 . 255 . 255		-	3000				
	3000	3000 255.255.255.0	3000 255.255.255.0 192.168.0.1 Change S	3000 255.255.255.0 192.168.0.1 00:13:62:01:02: Change Setting Subnet Gateway				

7. You can see the "Do you want 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.
- 10. If it is not progress as expected above procedure, please use USB communication for TCP / IP settings.

Turn off the power to the printer, please connect the USB cable to the PC and printer. Then, after you turn on the printer, please try again from 3 step.

(This feature will support F/W version 2.05 and TP Tool version 1.3.0 or higher.)

(3)Web Server

Only firmware version 2.10 or later TP30/40/35/45 Ethernet interface supports the Web server. Function provided by the Web server are as follows. (Function that supports every version of firmware, may be different.)

<Notice>

- Web server, has been optimized to Chrome browser. In addition, in accordance with the state of the other browsers and network, screen display may be different.
- For reliable management, as far as possible, please be used in situations where you do not have printing.

<Login Screen >

• In the address bar of your web browser: When "http // printer's ip" to enter, you will be able to connect to the printer. Master password is 0821.

← → C □ 192.168.1.184	
Login to Web page	
Password * Login	

<General Information Screen >

• Network information of the printer, the version of the firmware, you will be able to check the status.

Network Information	
Printer IP Subnet Mask Gateway Port MAC Address	192.168.001.184 255.255.255.000 192.168.001.001 9100 00.13.62.01.A3.6E
Printer Information	
Printer Version	STD 2.09
Check Status	
Printer Status	ID LE Refresh

<TCP/IP Setting Screen >

• You can change the network settings, such as the printer of IP. The changed setting is not apply till when you restart.

TCP/IP Setting			
Printer IP	192,168,001,184		_
Subnet Mask	255.255.255.000		
Gateway	192.168.001.001		
Port	9100		
	Network Config	-	

<User Setup Screen >

- You can change the basic code page, Kitchen Bell settings and receive buffer of the printer.
- After the setting, the printer will be restarted.

Kitchen Bell			
Kitchen Bell Type Kitchen Bell Times Kitchen Bell Output	 Bell Melody 1 Melody 2 Melody 3 Stimes Board Buzzer Internal Bell 		
Communication Received Buffer Size • 4 Kbyte • 20 Kbyte • 32 Kbyte • 64			
Printing .			
Default Code Page	PC437 (USA, Std Europe) 🔻		

<Password Setting Screen >

- You can re-configure the printer password. (Master password will not be changed.)
- When you press the Restart button, you can manually re-start of the printer.

÷		
P		

7) Network Setting Dialog (Wi-Fi Interface)

(1)Wi-Fi Network Dialog

When you selected a WLAN(Wi-fi) In the "Device Configuration Dialog" and pressed OK button, Wi-Fi 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 "Infrastructure Dialog" and "Limited AP Dialog". It can change the network settings for the printer. Do you want to check the printer IP and Port number? Please run the Self-Test. You can confirm all the settings of the printer.

WLAN(WiFi) Network	×	Graphic LCD Displ WIRELESS LAN(WLAN	
IP: 192.168.0.254 P	DRT : 6001 OK Cancel	SSID IP SUBNET MASK GATEWAY IP PORT	: I LOVE : 192.168.0.100 : 255.255.255.0 : 192.168.0.1 : 6001
Setting Infrastructure	Limited AP	CODE PAGE PAPER SAVE MODE PRINT DENSITY LIGHT[: PC437 : DFF : 1 2 3 4]DARK
			-

(2)Glossary of Terms

AP (Access Point)

AP, actually as a device is a hotspot that is like an Ethernet hub. It can be possible to communicate, which is binding one network with wireless clients (devices) nearly located in AP. And it can be possible to connect to WAN, backbone or another AP (hotspot) through the Ethernet line connected with one AP.

Infrastructure

If several terminals (PC, PCPOS etc.) or clients connect to one AP and they are composed to the same network, this is called 'infrastructure'. In other words, infrastructure is a structure that WLAN interface connects with PC or terminals through AP.



Limited AP

Limited AP, which WLAN interface is become AP by itself, can be possible to communicate directly with other terminals (PC, PCPOS etc.) or clients without any other APs.

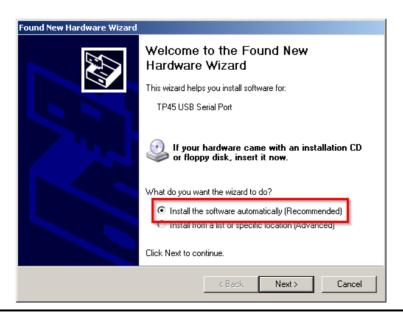


(3)Install a Virtual COM Driver (Windows XP, POSReady 2009)

Virtual COM port driver must be installed when WLAN Interface sets up. During installation, Please do these steps are following.

- 1. Turn a printer off.
- Install Printer Driver for installing virtual COM driver automatically.
 Please refer to the manual of Printer Driver Installer
 (Select a connection type of the printer: ETHERNET CONNECTION
 Create a TCP/IP Printer Port : The value for use later)
- 3. Connect a USB cable to printer and PC.
- 4. Turn a printer on.
- 5. When "Found New Hardware Wizard" is appeared, select a "Install the software automatically(Recommended)"

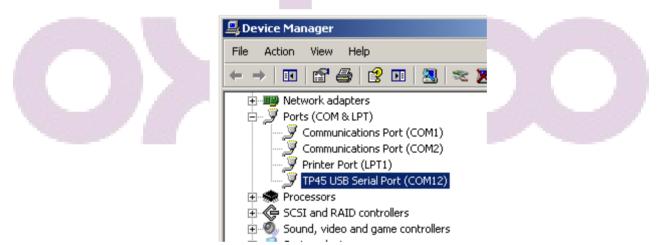




6. Select a "Continue Anyway" Button.



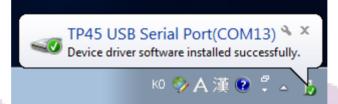
7. When the installation is completed, run the "Device Manager" for checking a New Virtual COM port number.



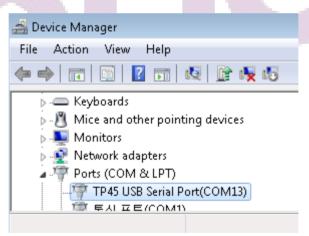
(4)Install a Virtual COM Driver (Windows 7, POSReady 7)

Virtual COM port driver must be installed when WLAN Interface to set up. During installation, Please proceed as follows, depending.

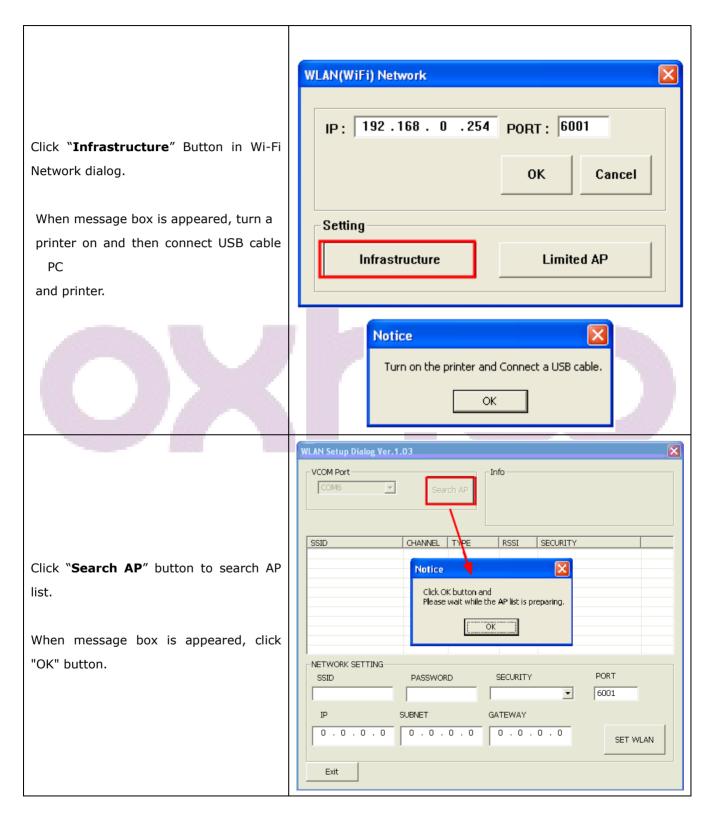
- 1. Turn a printer off.
- Install Printer Driver for installing virtual COM driver automatically.
 Please refer to the manual of Printer Driver Installer.
 (Select a connection type of the printer: ETHERNET CONNECTION Create a TCP/IP Printer Port: The value for use later)
- 3. Connect a USB cable to printer and PC.
- 4. Turn a printer on.
- 5. When Virtual COM port is installed properly in Windows, this balloon appears as shown.



6. When the installation is completed, run the "Device Manager" for checking a New Virtual COM port number.



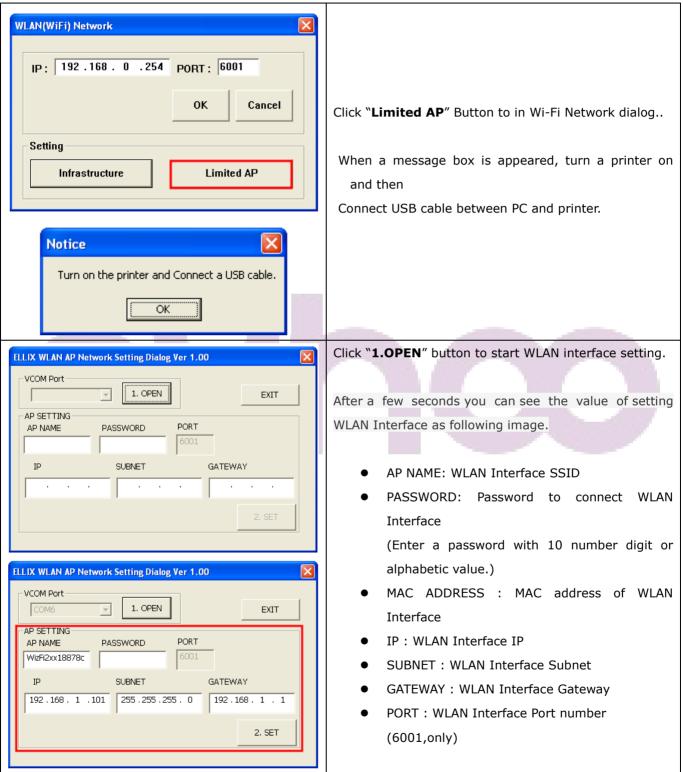
(5)Infrastructure mode setting



WLAN Setup Dialog Ver.1.03 When "Search AP" is completed, VCOM Port Info WLAN interface information and SSID : WizFi2xx18878c Security : NONE Search AP IP: 192.168.1.101 Subnet: 255.255.255.0 list of around the AP devices appear. Gateway : 192.168.1.1 SSID CHANNEL TYPE RSSI SECURITY HelloWireless 10 INFRA WEP SSID : AP Name 0 iptime 11 INFRA Ō NONE NETGEAR-1V 11 INFR A 0 WPA-PERSONAL CHANNEL: Communication WPA2-PERSONAL HARDWARE 11 **INFRA** 00 WPA-PERSONAL SAM4S3 11 **INFRA** 0 HelloDial LAP 11 INFRA 00 WEP channel KIC 12 INFR & Ο WEP OUTRIDER 12 00 WPA2-PERSONAL **INFRA TYPE** : Operation mode TANGTANG 13 INFRA Ō WPA-PERSONAL ALSnetwork 13 **INFRA** 00 WEP RSSI: Received signal strength -NETWORK SETTING indication SECURITY PORT SSID PASSWORD 6001 • O: Weak signal τD SUBNET GATEWAY OO: Normal signal 192.168.1.101 255.255.255.0 192.168.1.1 SET WLAN 000 : Strong signal Exit Select the SSID of AP which you want to WLAN Setup Dialog Ver.1.03 connect. (You must select Normal or VCOM Port Info Strong signal SSID for a safety SSID : WizFi2xx18878c Security : NONE Search &P IP: 192.168.1.101 communication.) Subnet : 255.255.255.0 Gateway : 192.168.1.1 CHANNEL TYPE RSSI SECURITY SSID ~ If you need a password for connection, jihun 03 INFRA 000 WEP INFRA WPA2-PERSONAL hurrerhona 01 00 HD_NOTE ALS LAB SAM4S 00 WPA2-PERSONAL enter a PASSWORD. 06 INFRA 06 07 **INFRA** 00 WPA-PERSONAL INFRA 00 WEP zio 08 INFRA 00 WPA2-PERSONAL BCNG 09 INFRA 00 WEP HARDWARE HeloDial LAP WPA2-PERSONAL If the security of SSID is WEP, you 11 **INFRA** 00 11 INFRA 00 WEP OUTRIDER 00 WPA2-PERSONAL 12 INFRA need to select WEP Encryption key. AL hetwork 13 **INFRA** 00 WEP NETWORK SETTING SECURITY SSID PASSWORD WEP Encryption Key 1234567890 JYW_WIFI WPA2 -Enter the Network setting values (IP, PORT GATEWAY IΡ SUBNET SUBNET, and GATEWAY) that are 192.168.0.100 255.255.255.0 192.168.0.1 6001 assigned from the network administrator. And then click "SET SET WI AN Exit WLAN" button.

Click the "OK" button; please wait for the completion of setting.	Notice 🔀 Click OK button and Please wait while the AP Setting is updating.		
When the setting is completed, this message appears as shown in the figure. Then disconnect the USB cable from the	Notice Set Complete! Please disconnect USB cable from printer. Turn off the printer and turn it on again. OK		
printer, the printer off and turn it on.			
Run the ping test at the command prompt. Ex) ping 192.168.0.100 Note: PC and the printer must be on the same network.	C:₩windows₩system32₩cmd.exeMicrosoft Windows XP [Version 5.1.2600](C) Copyright 1985-2001 Microsoft Corp.C:₩Documents and Settings₩jihun>ping 192.168.0.100Pinging 192.168.0.100 with 32 bytes of data:Reply from 192.168.0.100: bytes=32 time=67ms TTL=255Reply from 192.168.0.100: bytes=32 time=4ms TTL=255Reply from 192.168.0.100: bytes=32 time=2ms TTL=255Reply from 192.168.0.100: bytes=32 time=2ms TTL=255Reply from 192.168.0.100: bytes=32 time=2ms TTL=255Ping statistics for 192.168.0.100: Packets: Sent = 4, Received = 4, Lost = 0 (0% loss), Approximate round trip times in milli-seconds: Minimum = 2ms, Maximum = 67ms, Average = 18ms		

(6)Limited AP setting



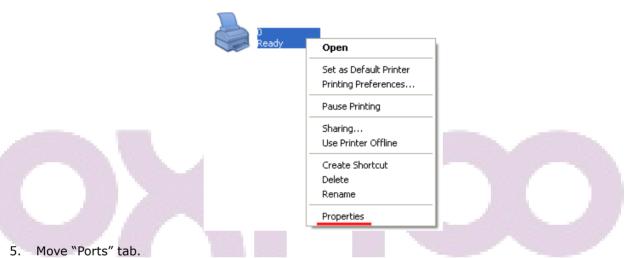
ELLIX WLAN AP Network Setting Dialog Ver 1.00 Enter unique AP name and 10-digit password and VCOM Port then set a network values (IP, SUBNET and 1. OPEN COM6 EXIT GATEWAY). AP SETTING PORT AP NAME PASSWORD TEST_AP 1234567890 Ex) AP NAME : TEST_AP GATEWAY τĐ SUBNET PASSWORD: 1234567890 192.168.0.123 255.255.255.0 192.168.0.1 IP: 192.168.0.123 SUBNET: 255.255.255.0 2. SET GATEWAY: 192.168.0.1 \rightarrow ch 1-11(USA only) Notice → ch 1-13(Europe, Japan) Click OK button and Please wait while the AP Setting is updating. Click the "2.SET" button; please wait for the ÖK completion of setting. When the setting is complete, a message appears Notice as shown in the figure. Set Complete! Please disconnect USB cable from printer. Turn off the printer and turn it on again. Disconnect the USB cable from the printer, then ÖΚ turn the printer off and turn it on. 오후 2:26 78 % 📶 olleh ᅙ Wi-Fi Networks TEST AP Forget this Network To make sure it is set up properly, try searching WLAN interface. **IP Address** This figure shows result of connection to WLAN DHCP BootP Static interface on IPhone. **IP Address** 192.168.0.124 Please refer to the manual for how to set up a wireless network of wireless LAN equipment Subnet Mask 255.255.255.0 you are using. Router 192.168.0.1 DNS 192.168.0.123

(7)Print Test page (Windows XP, POSReady 2009)

Install Printer Driver Installer . Please refer to the manual of Printer Driver Installer.

(Select a connection type of the printer: ETHERNET CONNECTION Input a Create a TCP/IP Printer Port: any value)

- 1. Turn a print off.
- 2. Disconnect a USB cable from printer.
- 3. Turn a print on again.
- 4. Select "OXHOO TPxx" in "Printers and Faxes" folder. Click a right mouse button and select "Properties".



?

About



OXHOO TP45

6. Select Standard TCP/IP Port and click "Configure Port" button.

	💩 OXHOO TP45 Properties 🛛 🕐 🔀
	Device Settings Device Control Extra Options About General Sharing Ports Advanced
	OXHOO TP45
	Print to the following port(s). Documents will print to the first free
	Print to the following ports). Documents will print to the first nee checked port.
	IP_192.16 Standard TCP/IP Port 0XH00 TP45 XPSPoit Local Port Microsoft XP's Document
	COM10: Local Port
	COM12: Local Port
	Add Port Delete Port Configure Port
	Enable bidirectional support
	OK Cancel Apply
7. Enter a WLAN IP ar	ıd Port number.
	onfigure Standard TCP/IP Port Monitor
	Port Settings
	Port Name: IP_192.168.0.100
	Printer Name or IP Address: 192.168.0.100
	Raw O LPR
	Raw Settings
	Port Number: 6001
	LPR Settings
	Queue Name:
	LPR Byte Counting Enabled
	SNMP Status Enabled
	Community Name: public
	SNMP Device Index: 1
	OK Cancel

8. Move "General" tab; click "Print Test Page". If a printer doesn't print any page, check network setting and run ping test.

SXH00 TP45 Properties			
Device Settings Device Control Extra Options About General Sharing Ports Advanced			
Location:			
Model: 0XH00 TP45 Features Color: No Paper available:			
Double-sided: No 80 x 297 mm[TP45] Staple: No			
Speed: Unknown Maximum resolution: 180 dpi			
Printing Preferences Print Test Page			
OK Cancel Apply			

(8)Print Test page (Windows 7, POSReady 7)

Install Printer Driver Installer . Please refer to the manual of Printer Driver Installer.

(Select a connection type of the printer: ETHERNET CONNECTION / Input a Create a TCP/IP Printer Port: The value for use later)

- 1. Turn a print off..
- 2. Disconnect a USB cable from printer.
- 3. Turn a print on again.
- Click "OXHOO TP xx" in "start → Control Panel → Hardware and Sound → Devices and Printers".
 Click a right mouse button and click "Printer properties".

5. Move "Ports" tab.	OXHOO - S	See what's printing Set as default printer Printing preferences Printer properties Create shortcut	l		
📾 OXHOO TP45	Properties			×	
General OX	(HOO TP45	Device Control		About anagement	

6. Select "Standard TCP/IP Port". Click "Configure Port" button

	🖶 OXHOO TP45 Properties		
	Security Device Settings Device Control Extra Options General Sharing Ports Advanced Color M	About	
	General Sharing Ports Advanced Color M	anagement	
	охноо тр45		
	Print to the following port(s). Documents will print to the first free checked port.		
	Port Description Printer	^	
	IP_192.168.0.100 Standard TCP/IP Port OXHOO TP45 Image: Microsoft Docu Local Port Microsoft Office		
	XPSPort: Local Port Microsoft XPS Do COM10: Local Port	cumen	
	COM11: Local Port COM12: Local Port	E	
		• •	
	Add Por <u>t</u> <u>D</u> elete Port <u>C</u> onfigure	Port	
	Enable bidirectional support		
	Enable printer pooling		
	OK Cancel		
7. Input a WLAN IP ad	dress and Port number (6001).		
	ifigure Standard TCP/IP Port Monitor	×	
	ort Settings		
	Port Name: IP_192.168.0.100		
1.	Printer Name or IP Address: 192.168.0.100		
	Protocol		
	Raw O LPR		
	Raw Settings		
	Port Number: 6001		
	LPR Settings		
	Queue Name:		
	LPR Byte Counting Enabled		
	SNMP Status Enabled		
	Community Name:		
	SNMP Device Index: 1		
	OK	Cancel	

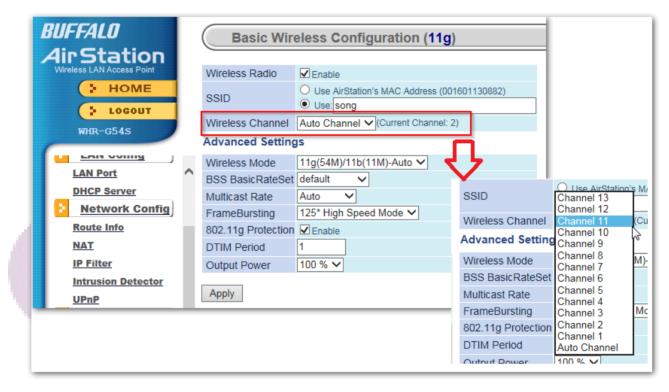
8. Move "General" tab; click "Print Test Page". If a printer doesn't print any page, check network setting and do ping test.

e	🚽 ОХНОО ТР4	5 Properties				×	
	Security	Device Settings	Device (Control E:	xtra Options	About	
	General	Sharing	Ports	Advanced	Color Mar	nagement	
	-	OXHOO TP45					
	Location:						
	<u>C</u> omment:						
	M <u>o</u> del:	OXHOO TP45					
	Features Color: No		Pa	per available:			
	Double-sic Staple: No		8	0 x 297 mm[T	P45]	*	
	Speed: Un						
	Maximum	resolution: 180 d	pi			Ŧ	
			Pr <u>e</u> ferenc	es	Print <u>T</u> est P	Dage	
				ОК	Cancel	Apply	

(9)WLAN Tips

The following content is the WLAN tips. Please reference.

- **Q**: Printer reaction is too slow, or ping time value is too large.
- A : Please try to move closer the physical distance to the WLAN interface and AP router. If there is no improvement, Please try to change the current channel of the wireless LAN channel (Wireless Channel) to another channel in the router settings. The following is an example of the router settings.



Q : WLAN settings are not saved in Infrastructure mode. The self-test sheet is not display before saved network

settings.

A : Is encryption method of router that you are trying to connect is WEP? WEP is an older encryption scheme is vulnerable to security. Also, the router operating in abnormal mixed mode, there is a possibility that WLAN configuration is not performed. The recommended encryption method is WPA system. Even as it's inconvenient, please change the router settings to WPA for security.

- **Q** : My AP is not detected in Infrastructure mode.
- A : Please try to move close to the distance of the AP and the printer. Also, please make sure that radio frequency

band of the AP is 2.4GHz. WLAN interface, does not support the AP frequency of 5GHz.

- ${\bf Q}$: WLAN communication error occurs intermittently.
- A : Cause of the problem is there are many. Connection of the AP and WLAN is the most major cause. In USER
 - SETUP in order to solve such a problem, it offers a "WiFi Auto Keep Connection" function. (Supports firmware
 - 2.00 or higher)

WiFi Auto ເ Enable C Disable Keep-Connection

(10) WLAN factory reset

To initialize the WLAN interface, please proceed as follows.

- ① Turn on the printer. And, wait for 10 seconds.
- ② Press 3 times per second the RESET button on the back of the printer.



- 3 Then, LINK LED will blink 3 times.
- ④ Turn off the printer



REV 1.4

	Revision History
Rev 1.0	Sep, 06, 2013
Rev 1.1	Jul, 23, 2014
Rev 1.2	FEB, 09, 2015
Rev 1.3	MAR, 03, 2015
Rev 1.4	SEP, 27, 2016