



# TM-T88V

# Software User's Manual

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M00023005 EN

## Cautions and Trademarks

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# Cautions and Trademarks

## Cautions

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## ESC/POS Command System

EPSON ESC/POS is a proprietary POS printer command system that includes patented or patent-pending commands. ESC/POS is compatible with all types of EPSON POS printers and displays (excluding the TM-C100 printer). ESC/POS is designed to reduce the processing load on the host computer in POS environments. It comprises a set of highly functional and efficient commands and also offers the flexibility to easily make future upgrades.

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**Cautions and Trademarks**

# For Safety

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## Key to Symbols

The symbols in this manual are identified by their level of importance, as defined below. Read the following carefully before handling the product.

 <b>Caution:</b>	Provides information that must be observed to avoid damage to your equipment or a malfunction.
<b>Note:</b>	Provides important information and useful tips.

## Restriction of Use

When this product is used for applications requiring high reliability/safety such as transportation devices related to aviation, rail, marine, automotive etc.; disaster prevention devices; various safety devices etc; or functional/precision devices etc, you should use this product only after giving consideration to including fail-safes and redundancies into your design to maintain safety and total system reliability. Because this product was not intended for use in applications requiring extremely high reliability/safety such as aerospace equipment, main communication equipment, nuclear power control equipment, or medical equipment related to direct medical care etc, please make your own judgment on this product's suitability after a full evaluation.

## Aim of the Manual

This manual provides information on how to use TM-T88V Software & Documents Disc for the product users or development engineers who use the software.

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# Overview

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This chapter describes the specifications of TM-T88V Software & Documents Disc.

## TM-T88V Software Installer

TM-T88V Software Installer allows you to install various drivers and utilities for the TM-T88V printer.

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## Drivers and Utilities to be Installed

### Drivers

- ❑ **Advanced Printer Driver Ver5**  
Windows printer driver. The following versions are provided.
  - ❑ Advanced Printer Driver Ver.5.xx
  - ❑ Advanced Printer Driver Ver.3.04 (For Windows 2000)
- ❑ **UPOS**  
Stands for **Unified Point of Service**. This is the standard specification of POS market, which defines drivers for controlling POS peripheral devices in various operation environments. The following drivers are provided.
  - ❑ OPOS ADK
  - ❑ OPOS ADK for .NET
  - ❑ JavaPOS ADK for Windows

### Utilities

- ❑ **TM-T88V Utility**  
Allows you to check and configure the TM-T88V settings.
- ❑ **EpsonNet Config**  
This utility is for configuring network settings, such as IP address, of the printer connected to an Ethernet.
- ❑ **EpsonNet Simple Viewer**  
This allows you to monitor the status of the printer connected to a network printer or client computer (POS or KIOSK terminal). Using this with TM-T88V Utility makes it possible to change the settings of TM-T88V connected to a client computer.
- ❑ **Epson TM Virtual Port Driver**  
This allows you to convert TM-T88V from serial / parallel to USB / Ethernet. When your POS application has a serial / parallel port of TM-T88V, and you want to connect TM-T88V via USB / Ethernet, you can use the USB / Ethernet-connected printer from the application as though the printer is serial printer. Because the tool performs the conversion automatically, you do not need to change the application's ESC/POS commands that controls the printer connected via serial / parallel port.

## Overview

# Support OS

The following lists the supported operating systems for running the TM-T88V drivers and utilities.

- Windows 8 (32 bit / 64 bit <sup>\*1</sup>)
- Windows 7 SP1 (32 bit / 64 bit <sup>\*1</sup>)
- Windows Vista SP2 (32 bit / 64 bit <sup>\*1</sup>)
- Windows XP SP3 (32 bit)
- Windows 2000 SP4 <sup>\*2</sup>
- Windows Server 2012 (64 bit <sup>\*1</sup>)
- Windows Server 2008 R2 SP1 <sup>\*1</sup>
- Windows Server 2008 SP2 (32 bit / 64 bit <sup>\*1</sup>)
- Windows Embedded for Point of Service <sup>\*3</sup>
- Windows Embedded POSReady 2009 <sup>\*3</sup>

<sup>\*1</sup> The OPOS ADK can be used under 64-bit OS as long as the system meets the operating requirements. For more details, see the release note before installing the OPOS ADK.

<sup>\*2</sup> The printer driver for Windows 2000 is Advanced Printer Driver Ver.3.04. The OPOS ADK for .NET and the Epson TM Virtual Port Driver cannot be used under Windows 2000. TM-T88V Utility does not support the USB printer class TM-T88V.

<sup>\*3</sup> EpsonNet Simple Viewer is not supported.

## Restrictions on Using Multiple Drivers on the Same System

TM-T88V Software Installer may not install the driver, or if the driver can be installed, the combination of the existing driver and the newly installed driver may not be supported. Refer to the following table.

Before TM-T88V driver is installed	TM-T88V Software Installer				
	A	B	C	D	E
Advanced Printer Driver Ver.3	✓	-	-	-	-
Advanced Printer Driver Ver.4.00 to 4.08	!	-	_*	_*	_*
Advanced Printer Driver Ver4.09 or 4.17	-	-	-	-	-
Advanced Printer Driver Ver4.50 to 4.53	-	-	✓	✓	✓
Advanced Printer Driver Ver4.54 or later	-	✓	✓	✓	✓

### Overview

Before TM-T88V driver is installed	TM-T88V Software Installer				
	A	B	C	D	E
OPOS ADK Ver.2.67 former	-	-	!	-	-
OPOS ADK Ver.2.68 or later	-	✓	!	✓	-
current OPOS ADK for .NET Ver.1.11.8 former	-	-	-	!	-
OPOS ADK for .NET Ver.1.11.20 or later	-	✓	✓	!	-
JavaPOS ADK Ver.1.11.18 former	-	-	-	-	!
JavaPOS ADK Ver.1.11.20 or later	-	✓	-	-	!
TM-S1000 Driver	-	✓	✓	✓	-
TM-S9000/2000 Driver	-	✓	✓	✓	-
TM-J9000 OPOS ADK	-	✓	✓	✓	-
TM-J9000 Advanced Printer Driver	-	✓	✓	✓	-
TM-J9000 Status API	-	✓	✓	✓	-
TMCOMUSB Ver.2	-	-	-	-	-
TMCOMUSB Ver.3 and Ver.4. or Epson TM Virtual Port Driver Ver.5 to Ver.7.00	✓	-	✓	✓	✓
Epson TM Virtual Port Driver Ver.7.10a or later	-	✓	✓	✓	✓
Epson InkJet Printer Driver	✓	✓	✓	✓	✓

A : Advanced Printer Driver Ver.3.04

B : Advanced Printer Driver Ver.5

C : OPOS ADK Ver.2.7x (TM-T88V)

D : OPOS ADK for .NET Ver.1.12.x (TM-T88V)

E : JavaPOS ADK for Windows Ver.1.13.x (TM-T88V)

✓ : Supported

- : Not supported

\* : Can not be installed.

! : TM-T88V Software Installer starts in update mode. The installer shows the version of driver already installed on the computer and allows you to select whether to update the driver or not.

## How to Access the Manuals

The manuals of the drivers and utilities are also installed.

To see the manuals, access the manual data as follows.

- ❑ Advanced Printer Driver Ver.5

**Start - All Programs / All apps(Windows 8) - EPSON - EPSON Advanced Printer Driver 5 - EPSON APD5 TM-Txx Manual**

The Easy Install does not install the manuals. Install the manuals separately after finishing the Easy Install.

☞ See [“Installing Advanced Printer Driver Ver5 Manual”](#) on page 26



## Overview

- ❑ Advanced Printer Driver Ver.3.04  
This is saved in the following folder.  
C:\EPSON Advanced Printer Driver\Manual
- ❑ OPOS ADK  
**Start - All Programs / All apps(Windows 8) - OPOS - Manual**
- ❑ OPOS ADK for .NET  
**Start - All Programs / All apps(Windows 8) - EPSON OPOS for .NET - Manual**
- ❑ JavaPOS ADK for Windows  
**Start - All Programs / All apps(Windows 8) - Epson JavaPOS ADK - Documentation**
- ❑ TM-T88V Utility  
Except Windows 8:  
**Start - All Programs - EPSON - TM-T88V Software - TM-T88V Utility User's Manual**  
Windows 8:  
**Start - All apps - EPSON TM-T88V - EPSON TM-T88V Utility User's Manual**
- ❑ EpsonNet Simple Viewer  
**Start - All Programs / All apps(Windows 8) - EpsonNet - EpsonNet Simple Viewer - User's Manual**

## Differences Depending on the OS

The content of the descriptions of some operations in this book may be different depending on the OS. See the following.

Item	Description
Screens shown	Screens in Windows 7 are used for the descriptions in this manual.
Confirmation and setting of the printer driver	<p>Windows 8 <b>Desktop - Sidebar Settings - Control Panel - Hardware and Sound - Devices and Printers</b></p> <p>Windows 7 <b>Start - Control Panel - Hardware and Sound - Devices and Printers</b> Right click the printer driver, and select the <b>Printer properties.</b></p> <p>Windows Vista <b>Start - Control Panel - Hardware and Sound - Printers</b> Right click the printer driver, and select the <b>Properties.</b></p> <p>Windows XP <b>Start - Control Panel - Printers and Faxes</b> Right click the printer driver, and select the <b>Properties.</b></p> <p>Windows 2000 <b>Start - Settings - Control Panel - Printers</b> Right click the printer driver, and select the <b>Properties.</b></p>
Starting the TM-T88V Utility	<p>Windows 8 <b>Start - All apps - EPSON TM-T88V - EPSON TM-T88V Utility</b></p> <p>Windows 7 <b>Start - All Programs - EPSON - TM-T88V Software - TM-T88V Utility</b></p> <p>Windows Vista <b>Start - All Programs - EPSON - TM-T88V Software - TM-T88V Utility</b></p> <p>Windows XP <b>Start - All Programs - EPSON - TM-T88V Software - TM-T88V Utility</b></p>

Overview

Item	Description
Uninstall a program	Windows 8 <b>Desktop - Sidebar Settings - Control Panel - Uninstall a program</b> Windows 7 <b>Start - Control Panel - Uninstall a program</b> Windows Vista <b>Start - Control Panel - Uninstall a program</b> Windows XP <b>Start - Control Panel - Add or Remove Programs</b> Windows 2000 <b>Start - Settings - Control Panel - Add/Remove Programs</b>

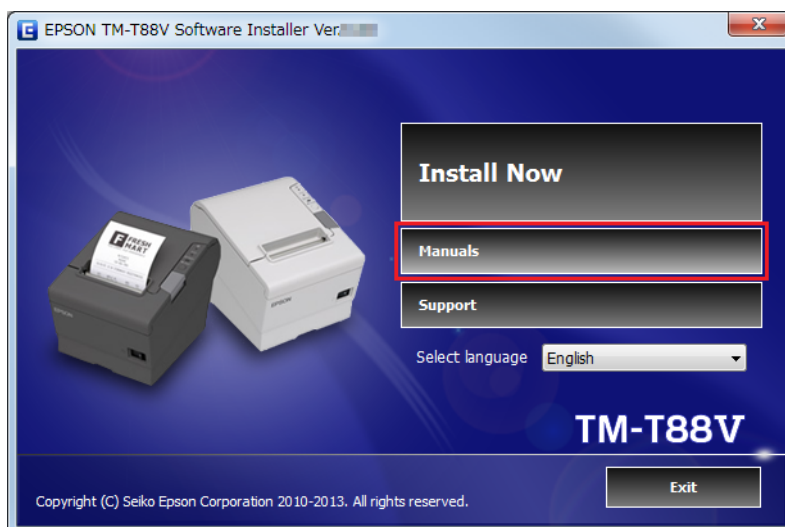
## Viewing the User's Manual

- ❑ Software User's Manual (this manual):  
Explains about TM-T88V Software & Documents Disc, how to install the driver, how to use the utilities, and so on.
- ❑ User's Manual:  
Describes how to set up TM-T88V hardware, what are included in the box, how to handle the hardware, compliant safety standards, safety precautions, and so on.
- ❑ Technical Reference Guide:  
Provides all information necessary to develop, design, and/or install a system that uses TM-T88V, or to develop or design a printer application for TM-T88V.

The following is how to view the manuals.

- 1 Insert the TM-T88V Software & Documents Disc to the computer. The TM-T88V Software Installer is automatically read and the **EPSON TM-T88V Software Installer** screen appears. Click the **Manuals** button.

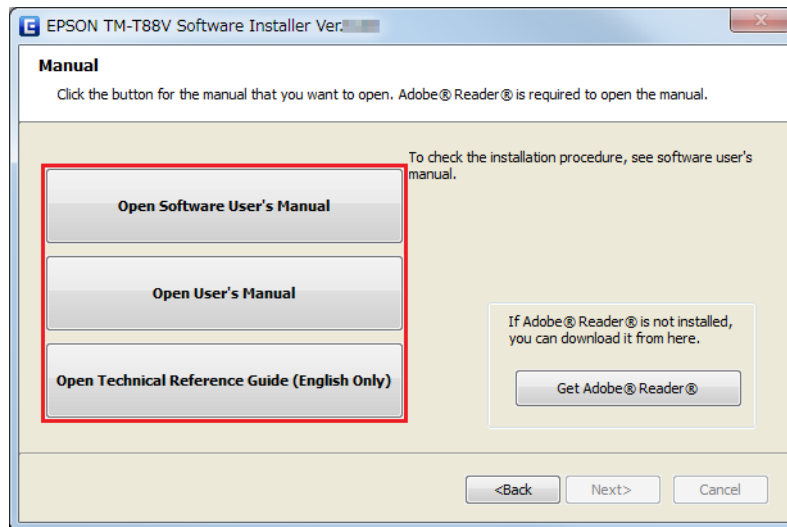
When the TM-T88V Software Installer is not automatically read, double click the **TMInstallNavi.exe** icon in the TM-T88V Software & Documents Disc.



## Overview

2

The **Manuals** screen appears. Click the manual button you want to see.



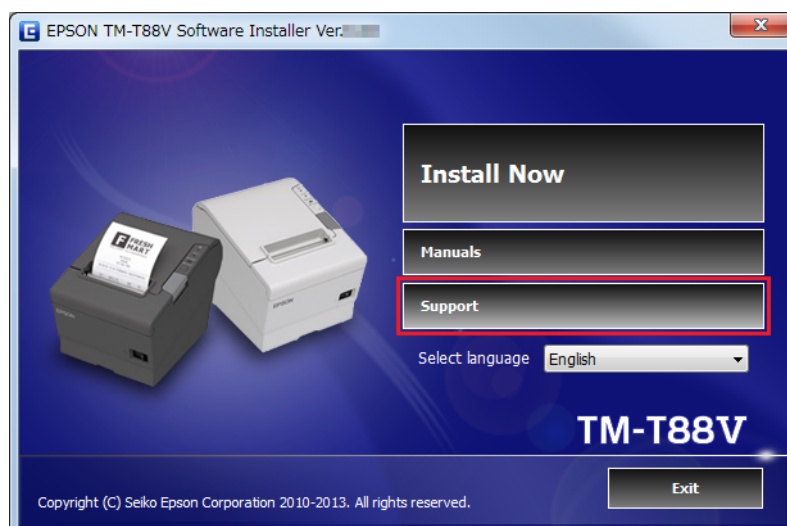
## Getting the URL of Epson Support Website

The website provides a variety of product information and the latest driver download service.

1

Insert the TM-T88V Software & Documents Disc to the computer. The TM-T88V Software Installer is automatically read and the **EPSON TM-T88V Software Installer** screen appears. Click the **Support** button.

When the TM-T88V Software Installer is not automatically read, double click the **TMInstallNavi.exe** icon in the TM-T88V Software & Documents Disc.



## Overview

- 2 The **Support Information** screen appears. Click the button of your area. The URL of Epson support website is displayed.



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# Installation

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This chapter describes how to install the printer drivers and conduct a test print after the installation. The uninstallation procedure is also provided.

☞ See “[Uninstallation](#)” on page 44

**Caution:**

- ❑ *Install with administrator privileges.*
- ❑ *Close all running applications before the installation.*

## Installation Types

You can select the installation type from the following.

- ❑ **Easy Install:** ☞ See “[Easy Install](#)” on page 13  
This is a standard installation, which installs the TM-T88V printer driver and TM-T88V Utility. If you are using an Ethernet / Wireless LAN connection, EpsonNet Config and EpsonNet Simple Viewer are also installed.
- ❑ **Custom Install:** ☞ See “[Custom Install](#)” on page 29  
You can select printer drivers and utilities you want to install. Select this installation type if you want to install the OPOS driver, JavaPOS driver, the printer driver manual, and sample programs and tools for developing programs.
- ❑ **Update mode:** ☞ See “[Update Mode](#)” on page 42  
If the printer driver and/or UPOS is already installed, the driver version is displayed and you can select whether to update the driver or not.

## Easy Install

**Caution:**

- ❑ *When installing, connect just one printer to the computer. Do not connect multiple printers.*
- ❑ *Turn off the printer and then start the installation.*

**1**

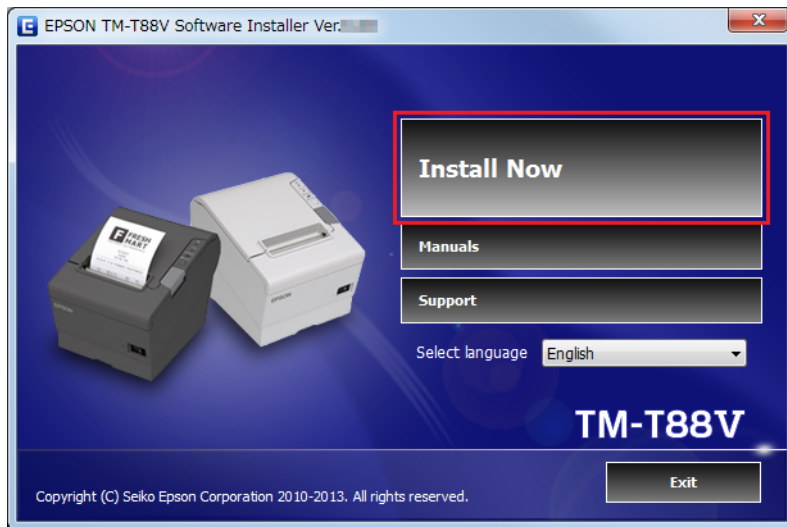
Insert the TM-T88V Software & Documents Disc into the computer. The TM-T88V Software Installer is automatically read and the **EPSON TM-T88V Software Installer** screen appears. Click the **Install Now** button.

**Note:**

*The displayed language can be changed from **Select language**.*

## Installation

When the TM-T88V Software Installer is not automatically read, double click the **TMInstallNavi.exe** icon in the TM-T88V Software & Documents Disc.



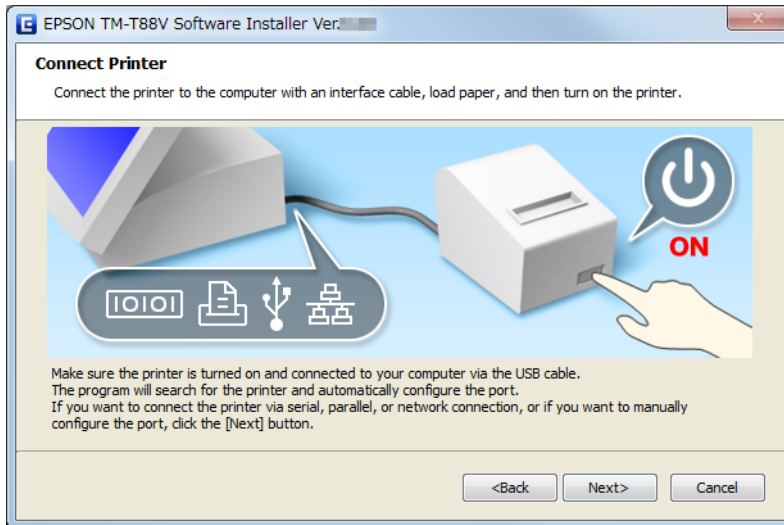
**2** The **License Agreement** screen appears. Read the content and select the **I accept the terms in the license agreement**. Then click the **Next** button.

**3** The **Select Installation Type** screen appears. Click the **Easy Install** button.



### Installation

**4** The **Connect Printer** screen appears. Connect the computer to the printer, and turn the printer on.

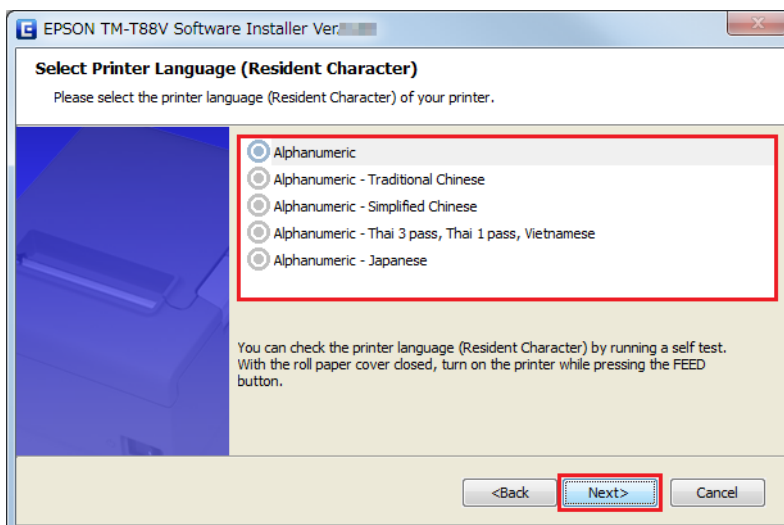


When the USB connection between the computer and printer is established, a pop-up message; **Installing device driver software** appears on the task tray, and the setup is automatically started. Proceed to Step 10 when the setting is finished.

When you connect the printer using an interface other than USB, or when installing the driver without connecting the printer, click the **Next** button.

**5** The **Select Printer Language (Resident Character)** screen appears. Select the language of your printer and click the **Next** button.

**Note:**  
 The language can be checked in **Resident Character** that is printed in the self test. To start the self test, turn on the power button while holding down the FEED button with the paper roll cover closed. Continue holding down the FEED button until printing starts.

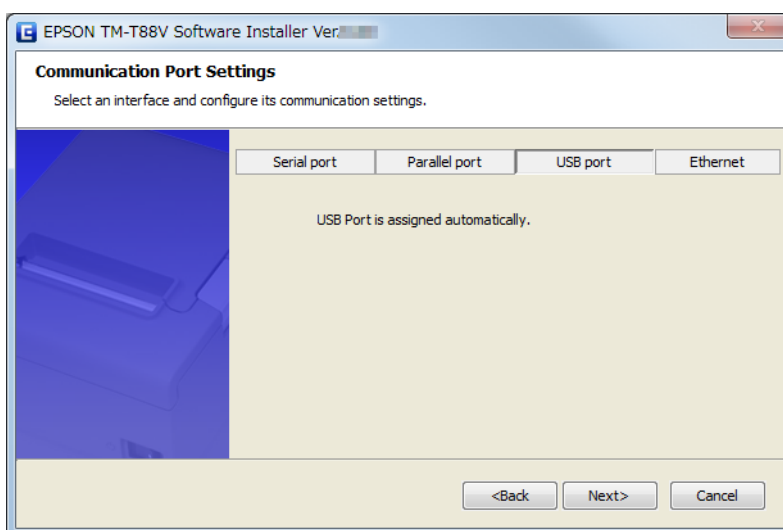


If you are using a Windows 2000 computer, proceed to Step 10.

## Installation

**6** The **Communication Port Settings** screen appears. The setting varies depending on the connection method. Select the port to connect the printer.

Serial connection	Proceed to Step 7.
Parallel connection	Click the Parallel port button. Select the LPT port and click the Next button. Proceed to Step 10.
USB connection	Click the USB port button, and then click the Next button. Proceed to Step 10.
Ethernet connection	Proceed to Step 8.



**7** Click the **Serial port** button. Configure the communication settings, then click the **Next** button. Proceed to Step 10.

Select the COM port, Bits per second, Data bits, Parity and Stop bits.

**Note:**  
*The driver's serial communication setting should be the same as that of the printer.*

**8** Click the **Ethernet** button.

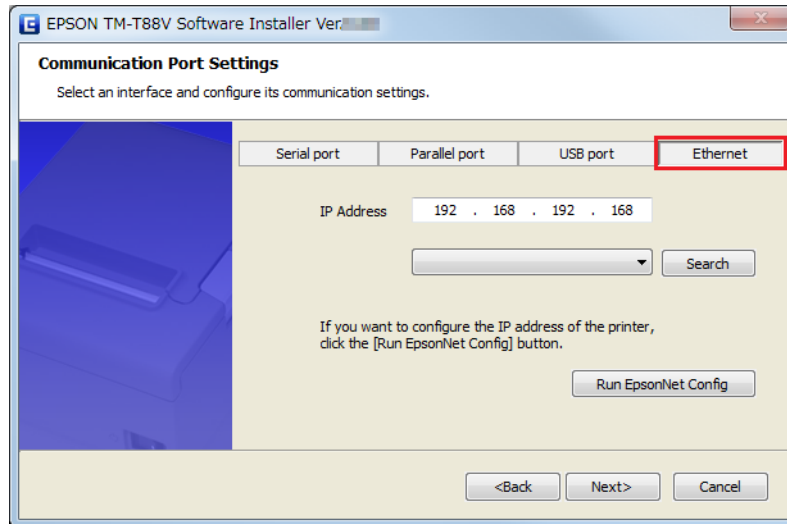
When printer is already networked	Proceed to Step 7.
When using Ethernet	Click the Run <b>EpsonNet Config</b> button and configure the printer's network setting using the EpsonNet Config. <a href="#">🔗 See "Network Address Setting for Ethernet Printer" on page 19</a>
When using Wireless LAN	Click the Run <b>EpsonNet Config</b> button and configure the printer's network setting using the EpsonNet Config. <a href="#">🔗 See "Printer's Network Setting for Wireless LAN Connection" on page 20</a>
When configuring the network setting after installing the driver.	Proceed to Step 7.



## Installation

**Note:**

When the *EpsonNet Config* is not installed, the **Cannot start EpsonNet Config. Do you want to install it now?** message appears. Click the **Yes** button to install it.



9

Configure the IP address of the printer on **IP Address** and then click the **Next** button. Proceed to Step 10.

When configuring the network setting after installing the driver, assign the printer driver port IP address you configure here to the printer, or change the printer driver port IP address to the one that will be set to the printer.

10

The Start Installation screen appears. The driver and utility to be installed are listed.

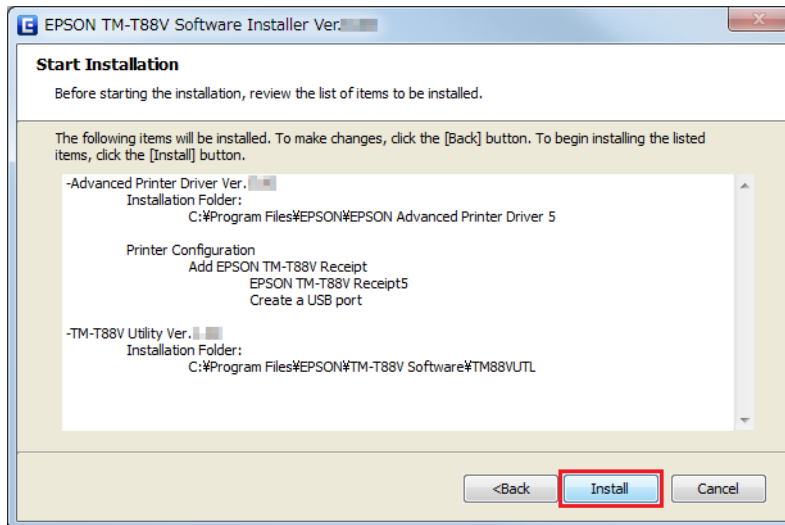
- Advanced Printer Driver Ver.5.xx
- TM-T88V Utility Ver. x.xx
- EpsonNet Config Ver. x.xx (Only for Ethernet connection)
- EpsonNet Simple Viewer (Only for Ethernet connection)

Click the **Install** button to start the installation.

### Installation

If you are using a Windows 2000 computer, installation of Advanced Printer Driver Ver. 3.04 automatically starts after TM-T88V Utility is installed.

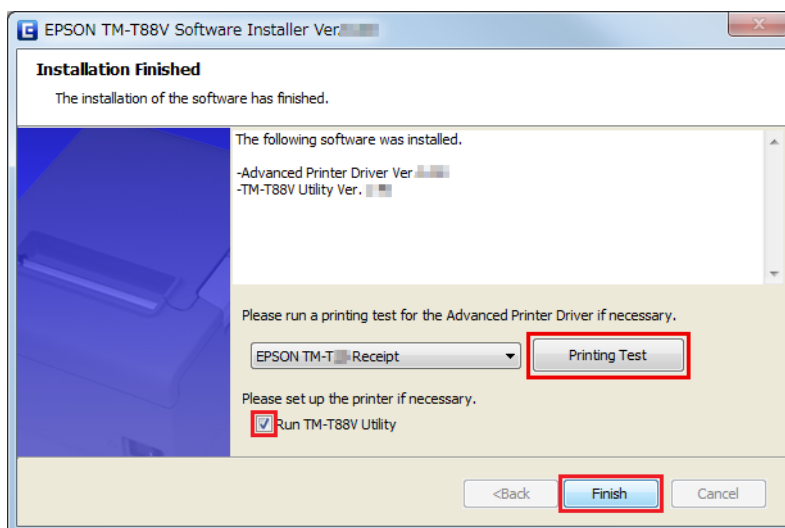
☞ See “Installing Advanced Printer Driver Ver. 3.04” on page 27



11

When the installation is completed, the **Installation Finished** screen appears.

When conducting test print	Click the <b>PrintingTest</b> button. When the test print is finished, click the <b>Finish</b> button to end the installation.
When exiting the installation	Uncheck the <b>Run TM-T88V Utility</b> . Then click the <b>Finish</b> button to end the installation.
When setting the printer using TM-T88V Utility continuously	Check the <b>Run TM-T88V Utility</b> checkbox (the box is checked by default). Click the <b>Finish</b> button to end the installation. The TM-T88V Utility starts to run. ☞ See “TM-T88V Utility” on page 63



This is the end of the printer driver installation. For information on how to print using the printer driver.

☞ See “Using the Printer Driver” on page 49

## Installation

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# Network Address Setting for Ethernet Printer

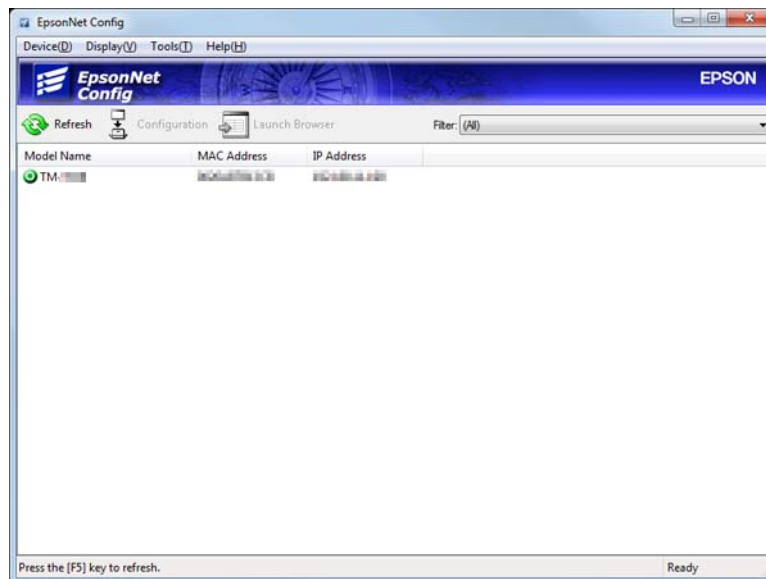
If you are using an Ethernet connection, configure the IP address using the EpsonNet Config.

**1** Start the EpsonNet Config.

When the EpsonNet Config is already installed, start it by clicking **Start - All Programs - EpsonNet - EpsonNet Config Vx - EpsonNet Config**.

**2** The **EpsonNet Config** screen appears.

Check that the target printer is listed in the screen.



**3** Select the printer you want to configure, then click the **Configuration** button.

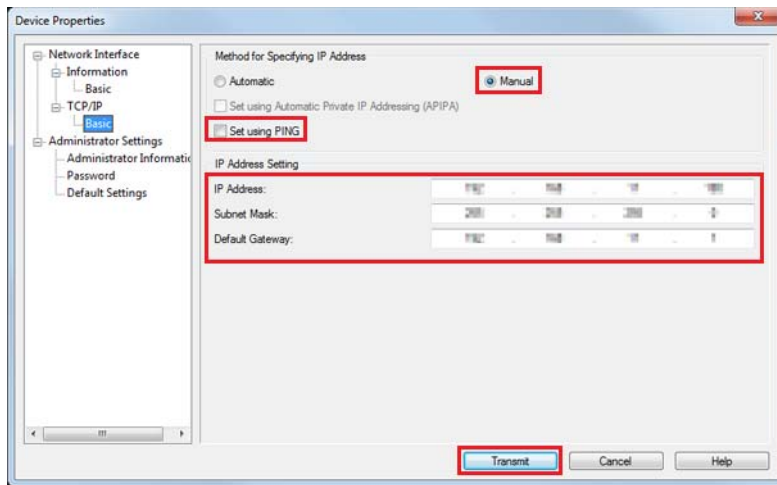
When the printer does not appear, click the **Refresh** button.

**4** The **Device Properties** screen appears. Select the **Network Interface - TCP/IP - Basic**.

## Installation

**5** Configure the printer IP address. Then click the **Transmit** button.

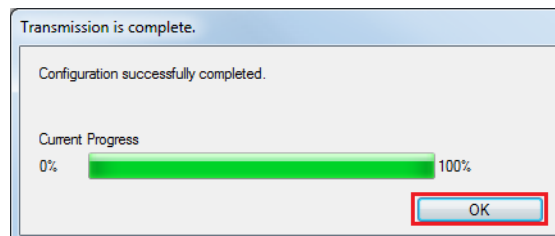
Select the **Manual** and **Set using PING**. Then configure the IP Address, Subnet Mask and Default Gateway.



**6** The confirmation screen appears. Click the **Yes** button.

**7** The configured settings are sent to the printer. After approx. 30 seconds, the completion screen appears.

Click the **OK** button.



**8** Confirm the settings on the **EpsonNet Config** screen.

**9** Quit the EpsonNet Config.

## Printer's Network Setting for Wireless LAN Connection

When using a Wireless LAN connection, use the EpsonNet Config to configure the network setting.



**Caution:**

Connect the printer to the computer using the printer's UB-R03 USB connector.

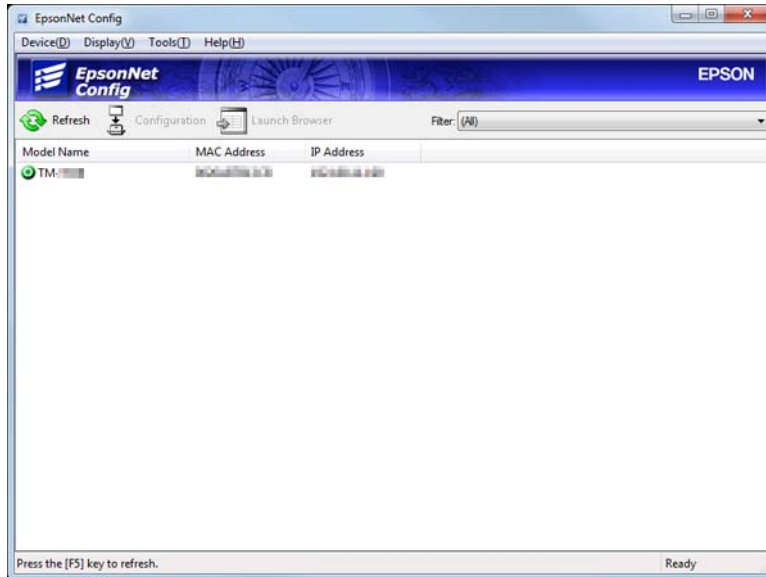
**1** Start the EpsonNet Config.

When the EpsonNet Config is already installed, start it by clicking **Start - All Programs - EpsonNet - EpsonNet Config Vx - EpsonNet Config**.

## Installation

**2** The **EpsonNet Config** screen appears.

Check that the target printer is listed in the screen.



**3** Select the printer you want to configure, then click the **Configuration** button.

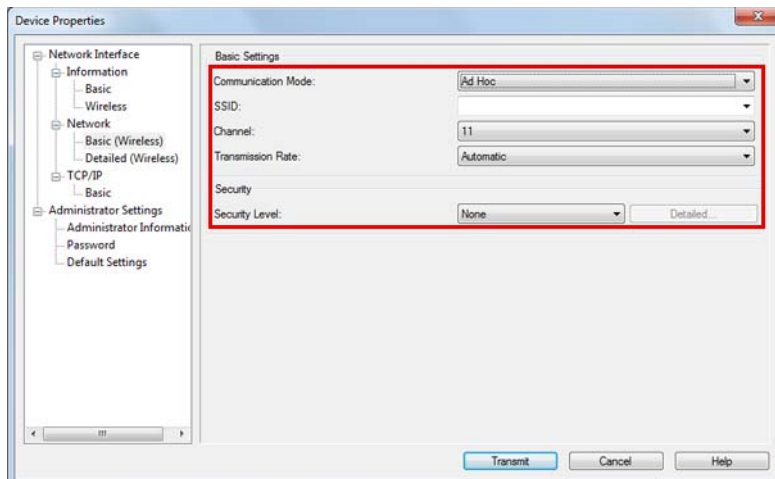
When the printer does not appear, click the **Refresh** button.

**4** The **Device Properties** screen appears. Select the **Network Interface - Network - Basic(Wireless)**.

**5** Set the wireless LAN.

If the communication mode is Ad Hoc.	Proceed to Step 6.
If the communication mode is Infrastructure.	Proceed to Step 7.

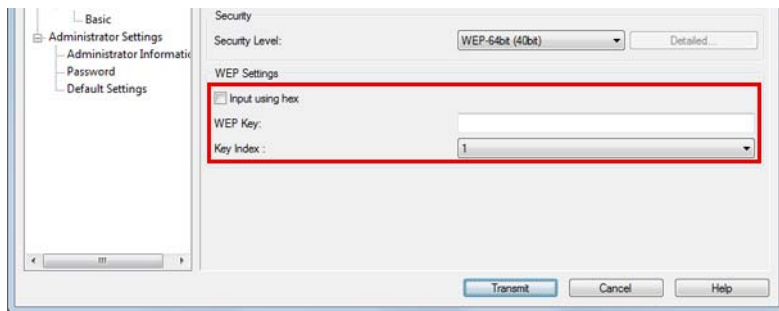
**6** When the communication mode is Ad Hoc, the wireless LAN settings are as follows. When finished configuring the settings, go to step 8.



### Installation

Setting	Description
Communication Mode:	Select <b>Ad Hoc</b> .
SSID:	Set the SSID. The maximum is 32 alphanumeric characters.
Channel:	Select the channel.
Transmission Rate:	Select the transmission rate.
Security Level:	Select the security level.

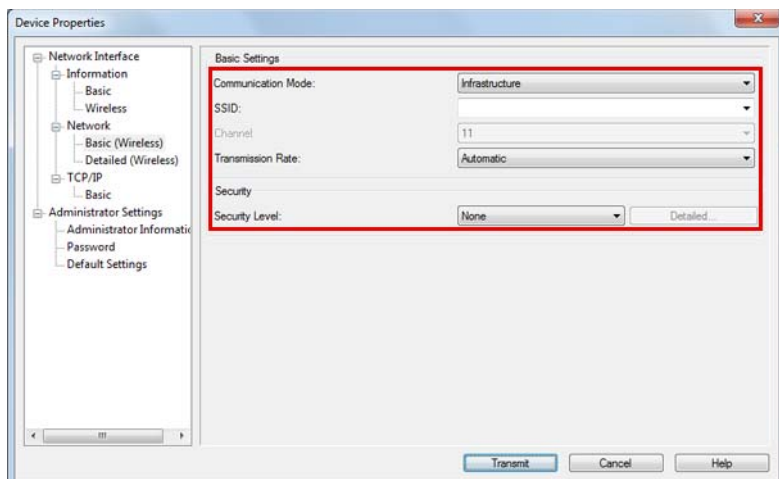
If the Security Level is **WEP-64bit(40bit)** or **WEP-128bit(104bit)**:



Setting	Description
Input using hex	Check the checkbox choosing the WEP Key to be input as a hexadecimal number.
WEP Key:	The WEP Key length varies depending on the Security Level. For WEP-64bit(40bit), ASCII 5 characters For Hex WEP-64bit(40bit), 10 places For WEP-128bit(104bit), ASCII 13 characters For Hex WEP-128bit(104bit), 26 places
Key Index:	Select the key index.

7

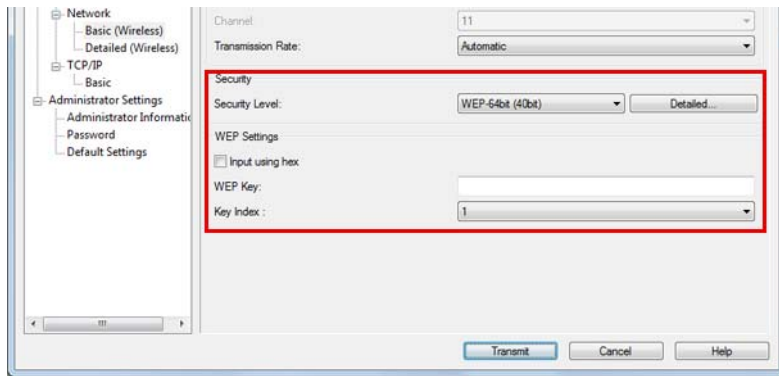
When the communication mode is Infrastructure, the wireless LAN settings are as follows. When finished configuring the settings, go to step 8.



### Installation

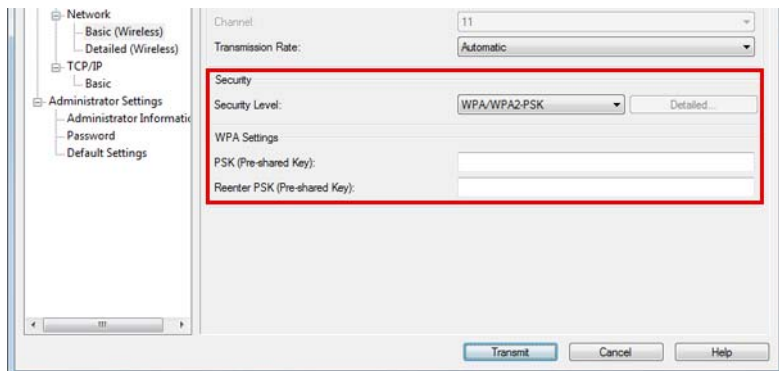
Setting	Description
Communication Mode:	Select <b>Infrastructure</b> .
SSID:	Set the SSID. The maximum is 32 alphanumeric characters.
Transmission Rate:	Select the transmission rate.
Security Level:	Select the security level.

If the Security Level is **WEP-64bit(40bit)** or **WEP-128bit(104bit)**:



Setting	Description
Input using hex	Check the checkbox choosing the WEP Key to be input as a hexadecimal number.
WEP Key:	The WEP Key length varies depending on the Security Level. For WEP-64bit(40bit), ASCII 5 characters For Hex WEP-64bit(40bit), 10 places For WEP-128bit(104bit), ASCII 13 characters For Hex WEP-128bit(104bit), 26 places
Key Index:	Select the key index.
Detailed	Display the Detailed Security Settings screen. Select the AP Authentication Method from <b>Open System</b> or <b>Shared Key</b> in the Detailed Security Settings screen.

If the Security Level is **WPA/WPA2-PSK**:



## Installation

Setting	Description
PSK (Pre-shared Key):	Input the Pre-shared Key. ASCII 8 to 63 characters
Reenter PSK (Pre-shared Key):	Input the Pre-shared Key again.

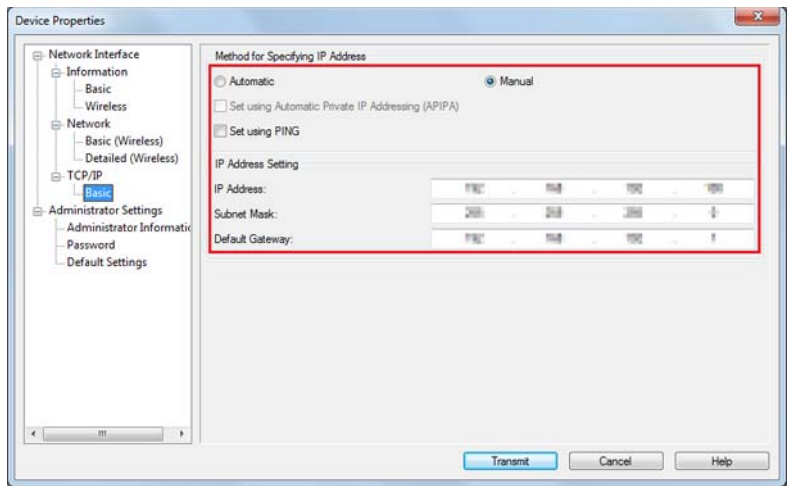
**8** Select the **Network Interface - TCP/IP - Basic**.

**9** TCP/IP settings such as the IP Address.

The setting items are different for Manual and Automatic. Record the IP Address to use for confirming the setting. When you set the IP Address yourself, select **Manual**. When using the IP Address allocated from the router by DHCP, select **Automatic**.

For setting the IP Address Manually	Proceed to Step 10.
For setting the IP Address Automatically	Proceed to Step 11.

**10** Set the IP Address, the Subnet Mask and the Default Gateway. When finished, go to step 12.

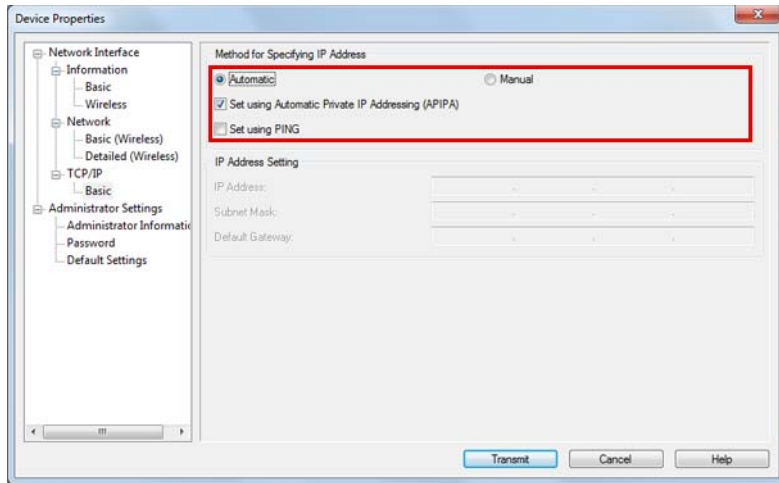


Setting	Description
Automatic/Manual	Select <b>Manual</b> .
Set using PING	When setting the IP Address using the PING command from the network computer, check the <b>Set using PING</b> checkbox.
IP Address	Set the IP Address.
Subnet Mask	Set the Subnet Mask.
Default Gateway	Set the Default Gateway.



## Installation

**11** Set the TCP/IP. When finished, go to step 12.

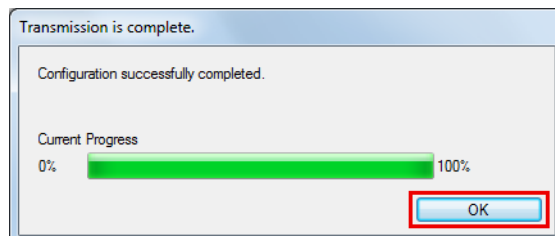


Setting	Description
Automatic/Manual	Select <b>Automatic</b> . Acquire the IP Address, the Subnet Mask and the Default Gateway from the DHCP server. Even if you set the Subnet Mask and the Default Gateway, the value acquired from the DHCP is set.
Set using Automatic Private IP Addressing (APIPA)	If the value cannot be acquired from the DHCP server, the IP Address is set automatically by checking the Set using Automatic Private IP Addressing (APIPA) check box. The Subnet Mask and the Default Gateway is set the setting value.
Set using PING	When setting the IP Address using the PING command from the computer of the network, check the <b>Set using PING</b> checkbox.

**12** After setting the TCP/IP, click the **Transmit** button.

**13** The confirmation screen appears. Click the **Yes** button.

**14** The configured settings are sent to the printer. After approx. 10 seconds, the completion screen appears. Click the **OK** button.



The **EpsonNet Config** screen appears again.

**15** Click the **Refresh** button and confirm the settings.

**Installation**

**16** Quit the EpsonNet Config.

**Installing Advanced Printer Driver Ver5 Manual**

The Easy Install does not install the Advanced Printer Driver manual. To see the manual, install it separately.

**1** Insert the TM-T88V Software & Documents Disc into the computer. The TM-T88V Software Installer is automatically read and the **EPSON TM-T88V Software Installer** screen appears. Click the **Install Now** button.

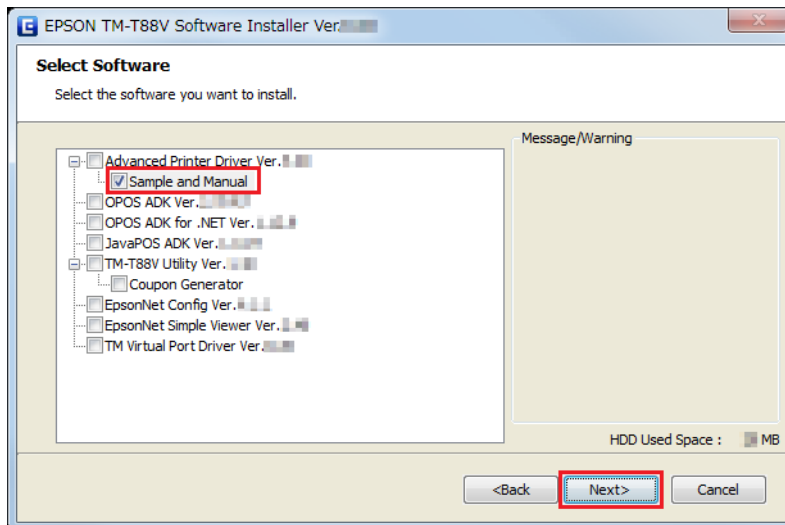
When the **TM-T88V Software Installer** is not automatically read, double click the **TMInstallNavi.exe** icon in the TM-T88V Software & Documents Disc.

**2** The **License Agreement** screen appears. Read the content and select the **I accept the terms in the license agreement**. Then click the **Next** button.

**3** The **Update Software** screen appears. Click the **Next** button.

**4** The **Select Software** screen appears. Check the **Sample and Manual** checkbox and click the **Next** button.

Clear the checkbox for the drivers or utilities that you do not install here.



**5** The **Start Installation** screen appears. Click the **Install** button.

**6** The **EPSON APD5 Sample&Manual - InstallShield Wizard** screen appears, click the **Next** button.

**7** The **License Agreement** screen appears. Read the content and select the **I accept the terms in the license agreement**. Then click the **Next** button.

**8** The **Ready to Install the Program** screen appears. Click the **Install** to install the sample programs and manual of Advanced Printer Driver.

**9** The **InstallShield Wizard Complete** screen appears. Click the **Finish** button.

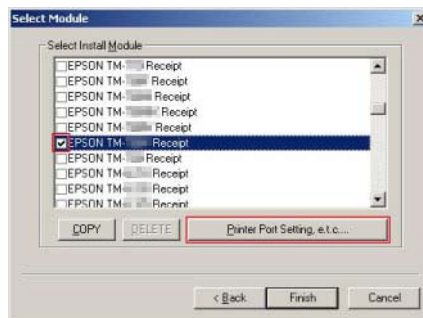
## Installation

**10** The **Installation Finished** screen appears. Click the **Finish** button to finish the installation.

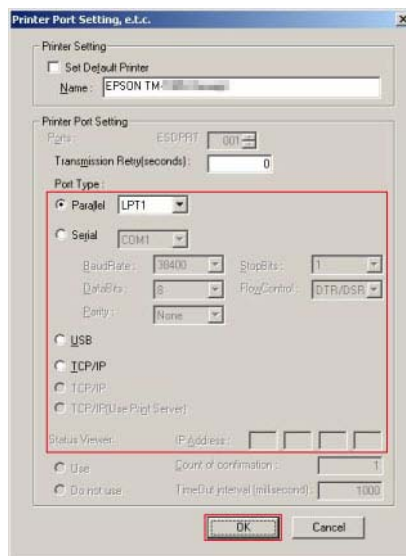
This is the end of the installation of the Advanced Printer Driver manual.

## Installing Advanced Printer Driver Ver. 3.04

- 1** The **License Agreement** screen appears. Read the content and select the **I accept the terms in the license agreement**. Then click the **Next** button.
- 2** The **Location to Save Files** screen appears. Specify the location and click the **Next** button. The file will be extracted.
- 3** The **Select OS** screen appears. Your OS and language are automatically detected and selected. Confirm that the selection is correct, and click the **Next** button.
- 4** The **Select Module** screen appears. Check the checkbox for **EPSON TM-T88V Receipt** and click the **Printer Port Setting, e.t.c....** button.



**5** The **Printer Port Setting, e.t.c** screen appears. In **Port Type**, Select the port to connect the printer and configure the port setting. Then click the **OK** button.



## Installation

Setting		Description
Parallel		Select the parallel port to be used.
Serial		Select the serial port to be used.
	BaudRate	Sets the BaudRate. (The default is <b>38400</b> .)
	DataBits	Sets the DataBits. (The default is <b>8</b> .)
	Parity	Sets the Parity. (The default is <b>None</b> .)
	StopBits	Sets the StopBits. (The default is 1.)
	FlowControl	Sets the data flow control type to be used between the computer and serial device. (The default is <b>DTR/DSR</b> .)
USB		There are no items to configure.
TCP/IP	IP Address	Enter the printer IP address.

- 6** The **Select Module** screen appears again. Click the **Finish** button. The installation will start.
- 7** When the installation is finished, you will be prompted whether to restart the computer. Click the **No** button.



- 8** The **Installation Finished** screen appears. Click the **Finish** button to finish the installation.
- 9** Restart the computer.

This is the end of the installation of Advanced Printer Driver Ver. 3.04.

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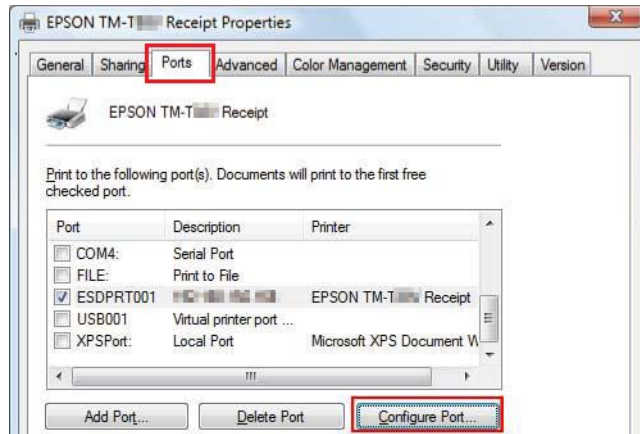
## Configuring IP Address of the Printer Driver

The following explains how to configure the printer's IP address for the installed printer driver. This will change the Epson port setting.

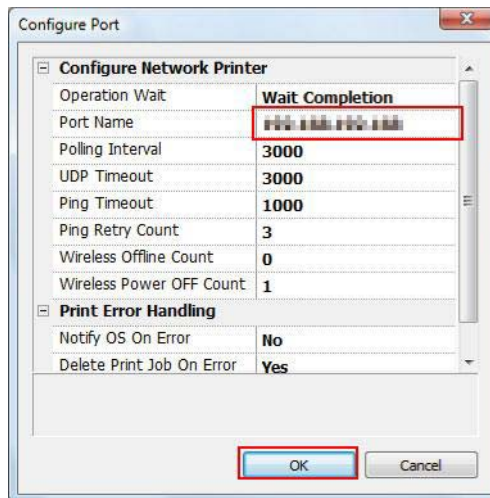
- 1** Select from **Start - Control Panel - Hardware and Sound** and open **Printers** and then right click the target printer driver and select **Properties**.  
 ↪ See [“Differences Depending on the OS” on page 9](#)

## Installation

- 2 The property screen of the printer appears. Select the **Ports** tab and then click the **Configure Port...** button.



- 3 The **Configure Port** screen appears. Set a configure port while referring to the screen and click the **OK** button.



- 4 The display returns to the Properties screen. When you click the **OK** button, the changes you made become effective.

## Custom Install

**Caution:**

- ❑ When installing, connect just one printer. Do not connect multiple printers.
- ❑ When you are prompted whether to restart the computer during the installation, select **No** and continue the installation. Restart the computer and the printer after all the installation is finished. If you select **Yes** and restart the computer during the installation, the rest of the drivers will not be installed.
- ❑ If you select more than one drivers to install them under Windows 2000, you will be prompted that this may cause the printer to malfunction. Under Windows 2000, you can install only one driver.

The following items can be installed with the Custom Install. The TM-T88V Software & Documents Disc is required for Custom Install

- ❑ Advanced Printer Driver Ver.5

## Installation

- Sample and Manual
- OPOS ADK
- OPOS ADK for .NET
- JavaPOS ADK
- TM-T88V Utility
  - Coupon Generator
- EpsonNet Config
- EpsonNet Simple Viewer
- Epson TM Virtual Port Driver

---

## Displaying the Select Software Screen

The TM-T88V Software & Documents Disc is required for Custom Install. You can select items you want to install in **Select Software** screen. Follow the steps below to display the **Select Software** screen.

- 1** Insert the TM-T88V Software & Documents Disc into the computer. The TM-T88V Software Installer is automatically read and the **EPSON TM-T88V Software Installer** screen appears. Click the **Install Now** button.

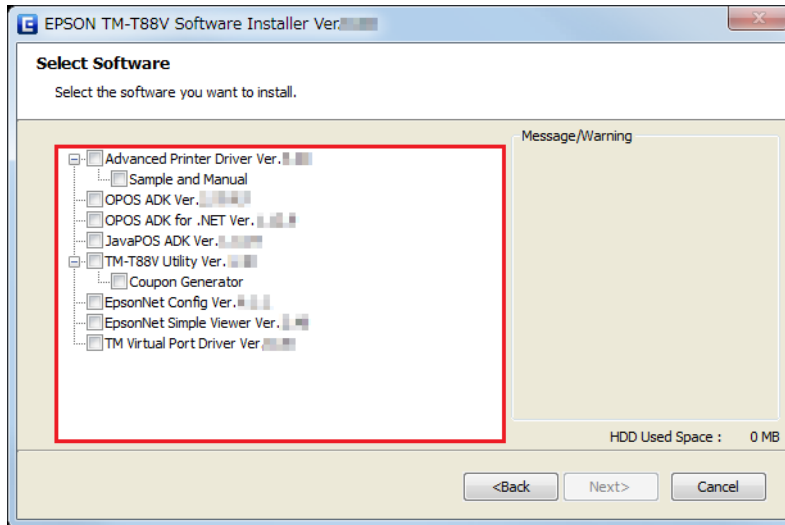
**Note:**  
*The displayed language can be changed from **Select language**.*

When the TM-T88V Software Installer is not automatically read, double click the **TMInstallNavi.exe** icon in the printer driver CD.

- 2** The **License Agreement** screen appears. Read the content and select the **I accept the terms in the license agreement**. Then click the **Next** button.
- 3** The **Select Installation Type** screen appears. Click the **Custom Install** button.

## Installation

- 4** The **Select Software** screen appears. Check the items you want to install from the list.  
 After this step, follow the installation procedure for each item.



## Installing the Printer Driver

The printer driver can also be installed with Easy Install in the TM-T88V Software & Documents Disc. Easy Install installs all items of the printer driver, and Custom Install allows you to select items you want to install from the following.

- Advanced Printer Driver Ver.5
- Sample and Manual  
 Under Windows 2000, the **Sample** is not available. Only the **Manual** is available.

Follow the steps below to execute the printer driver installation.

- 1** Insert the TM-T88V Software & Documents Disc into the computer and follow the steps.  
 See “[Displaying the Select Software Screen](#)” on page 30
- 2** Select the **Advanced Printer Driver Ver.5.xx**. Clear the check box for the items you do not want to install. Click the **Next** button.
- 3** The **Check Install** screen appears. Check the **Warning**.  
 Check the computer environment and click **Next** to continue the installation.

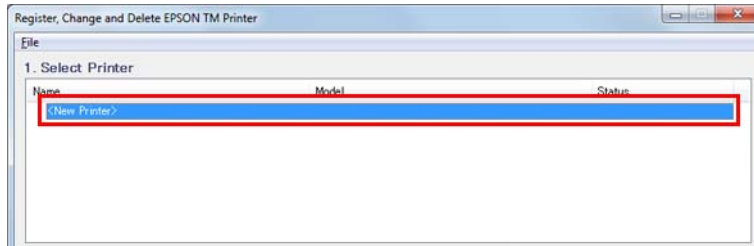
**Note:**  
 In the **Warning**, the versions of Epson driver/tool that can coexist with the APD5 are listed.

- 4** The **License Agreement** screen is displayed. After checking the contents and selecting **Agree**, click **Install**.  
 Installation of Advanced Printer Driver Ver.5 begins.

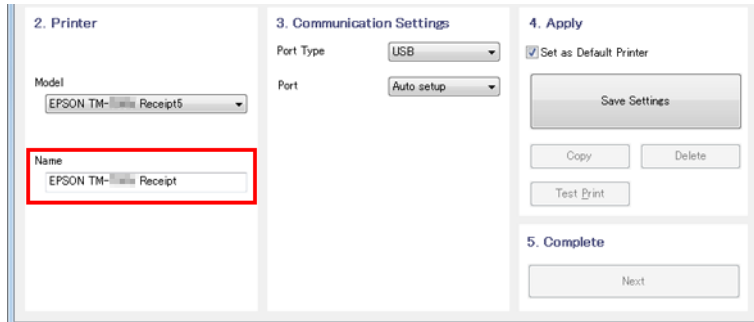
### Installation

**5** The **Printer Registration** screen appears.  
Here, connect the printer to the computer and turn the printer's power on. Click **Next**.

**6** The **Register, Change and Delete EPSON TM Printer** screen is displayed.  
From **1. Select Printer**, select **<New Printer>**.

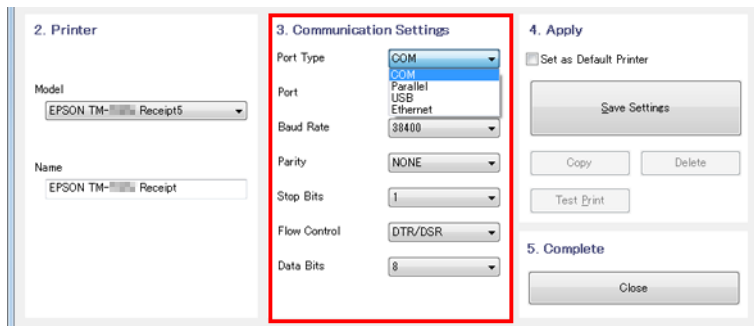


**7** Set the followings from **2. Printer**.




Item	Description
Name	Specify the printer driver name. Do not use Unicode/2-byte characters for the name.

**8** Select a port to use (Serial/USB/Ethernet) from **Port Type** under **3.Communication Settings**. Necessary settings are done according to the interface.



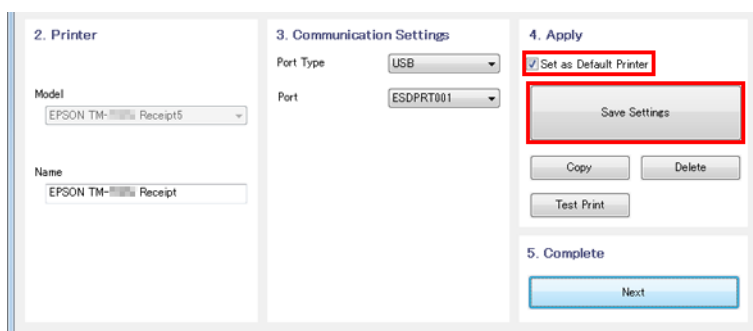


### Installation

Port type	Item	Description
COM		Communicate with serial port. Set the following communication setting.
	Port	Specify the number of serial port used for connecting the printer.
	Baud Rate	Specify the baud rate.
	Parity	Specify the parity.
	Stop Bits	Specify the stop bits.
	Flow Control	Specify the method of data flow between the computer and the printer.
	Data Bits	Specify the data bits.
Parallel		Communicate with parallel port. Set the following communication setting.
	LPT Port	Specify the number of parallel port used for connecting the printer. Usually, the port number is automatically displayed and no setting is required.
USB		Communicate with USB port. Set the following communication setting.
	USB Port	Specify the USB port used for connecting the printer. Usually, no setting is required.
Ethernet		Communicate with Ethernet port. Set the following communication setting.
	Ethernet Port	Specify the Ethernet port used for connecting the printer. Usually, no setting is required.
	IP Address	Set the IP address of Ethernet port the TM printer is connected.
	Set to Printer	Setup the IP address to the printer itself.  See "Network Address Setting for Ethernet Printer" on page 19

**Note:**  
 When path through connection is used by the driver of APD4 customer display, adjust the TM printer's communication settings with the communication settings of customer display driver set by APD4.

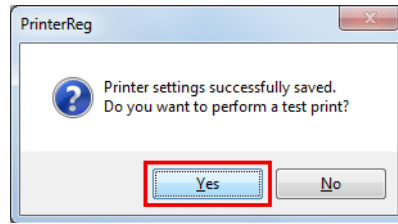
**9** Set the followings from 4. Apply and click **Save Setting**.



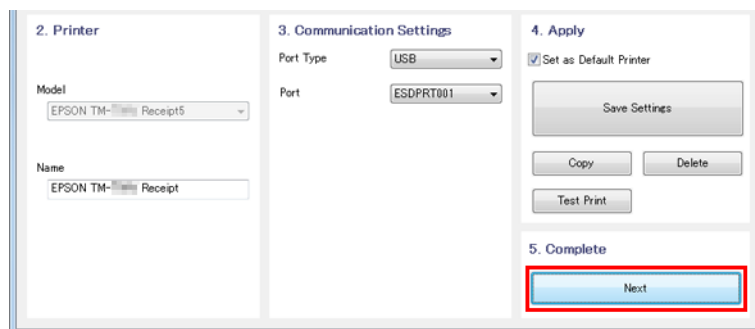
Item	Description
Set as Default Printer	Check when configuring the printer as that normally used from the Windows applications.

## Installation

- 10** When the printer is registered, the screen comes up as shown below.  
Click **Yes**. Test page printing of Windows is carried out.



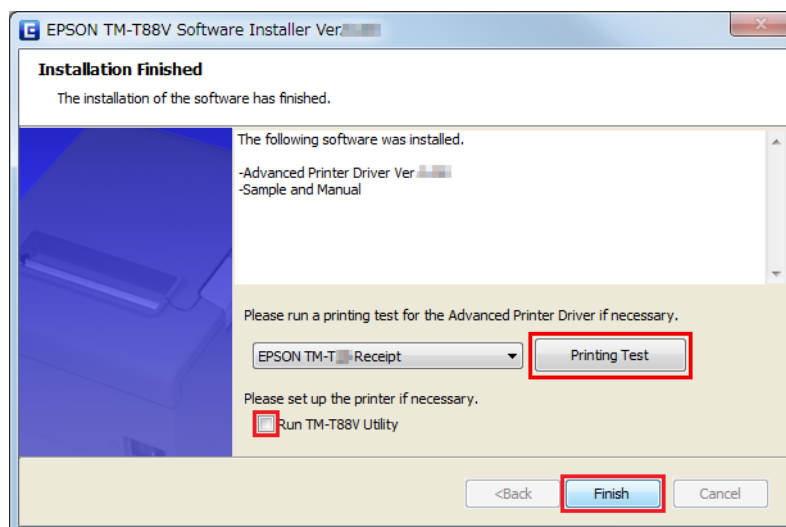
- 11** After confirming the test page printing of Windows, click **Next** under **5. Complete**.



- 12** The **Installation Complete** screen appears.  
Click **Close** to finish the installation.

- 13** When the installation is completed, the **Installation Finished** screen appears.  
When conducting test print:

Click the **Printing Test** button. When the test print is finished, click the **Finish** button to end the installation.




This is the end of the printer driver installation.

## Installation

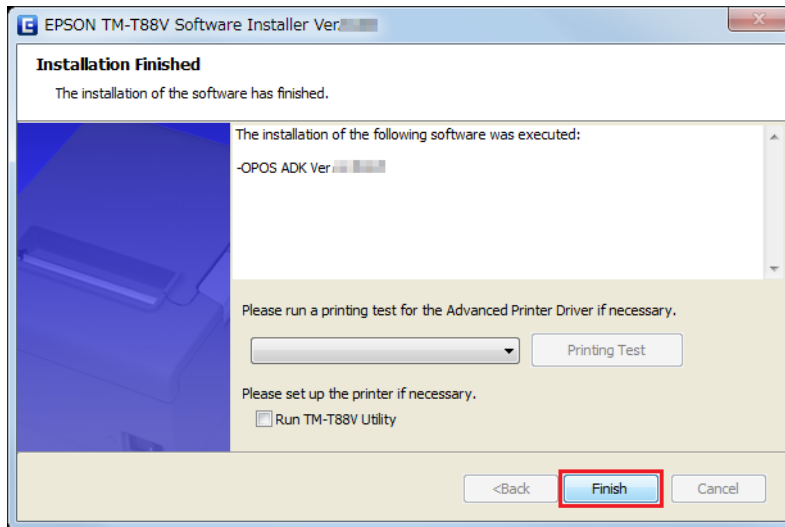
---

### Installing the OPOS ADK

- 1 Insert the TM-T88V Software & Documents Disc into the computer and follow the steps.  
 See “[Displaying the Select Software Screen](#)” on page 30
- 2 Check the **OPOS ADK Ver. x.xx**. Clear the check box for the items you do not want to install. Click the **Next** button.
- 3 The **Start Installation** screen appears. The driver and utility to be installed are listed. Click the **Install** button to start the installation.
- 4 The **Choose Setup Language** appears. Select your language, and click the **Next** button.
- 5 The **EPSON OPOS ADK for TM-T88V Version x.xx xxx** appears. Click the **Next** button.
- 6 The **Software License Agreement** screen appears. Read the content and select the **I accept the terms in the license agreement**. Then click the **Next** button.
- 7 The **Select Registry File** screen appears. Click the **Next** button.
- 8 The **Setup Type** screen appears. Select **Developer** and then click the **Next** button.  
Click the **Browse** button to change the default installation location.
- 9 The **Start Copying Files** screen appears. Click the **Next** button.
- 10 The **Port selection** screen appears. Select the port. Click the **Next** button to start the installation.
- 11 The **InstallShield Wizard Complete** screen appears. Click the **Finish** button.

## Installation

- 12** When the installation is completed, the **Installation Finished** screen appears. Then click the **Finish** button to end the installation.



This is the end of the OPOS ADK installation.

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## Installing the OPOS ADK for .NET

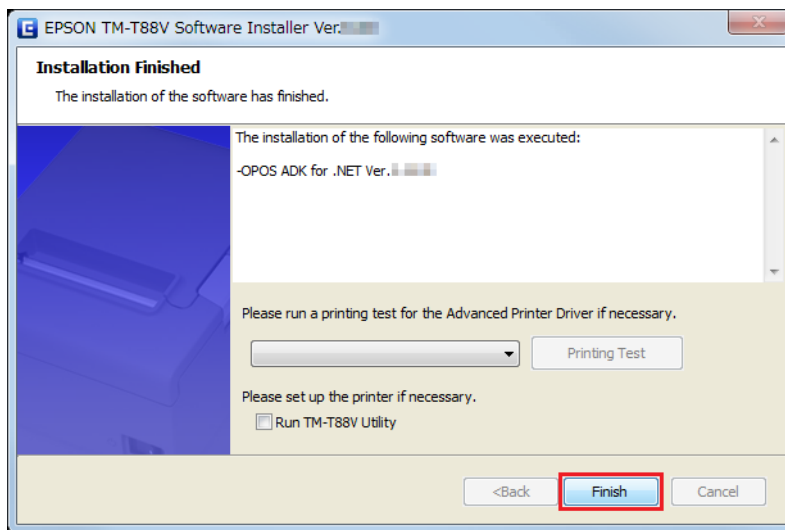
**Note:**

To install the OPOS ADK for .NET, Microsoft .NET Framework and Microsoft POS for .NET are required.  
Install Microsoft .NET Framework and Microsoft POS for .NET Ver.1.11 beforehand.

- 1** Insert the TM-T88V Software & Documents Disc into the computer and follow the steps.  
☞ See “[Displaying the Select Software Screen](#)” on page 30
- 2** Select the **OPOS ADK for .NET Ver. x.xx.x**. Clear the check box for the items you do not want to install. Click the **Next** button.
- 3** The **Start Installation** screen appears. The driver and utility to be installed are listed. Click the **Install** button to start the installation.
- 4** Install the EPSON OPOS ADK for .NET.  
The **EPSON OPOS ADK for .NET x.xx.x - InstallShield Wizard** screen appears.  
Select the language, and then click the **Next** button.
- 5** The **Welcome to the InstallShield EPSON OPOS ADK for .NET** screen appears. Click the **Next** button.
- 6** The **License Agreement** screen appears. Read the content and select the **I accept the terms in the license agreement**. Click the **Next** button.
- 7** The **Setup Type** screen appears. Select **Developer** and then click the **Next** button.  
Click the **Browse** button to change the default installation location.

## Installation

- 8 The **Setup Type** screen appears. Select the port and click the **Next** button.
- 9 The **Start Copying Files** screen appears. Click the **Next** button to start the installation.
- 10 The **InstallShield Wizard Complete** screen appears. Click the **Finish** button.
- 11 When the installation is completed, the **Installation Finished** screen appears. Then click the **Finish** button to end the installation.



This is the end of the OPOS ADK for .NET installation.

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## Installing the JavaPOS ADK

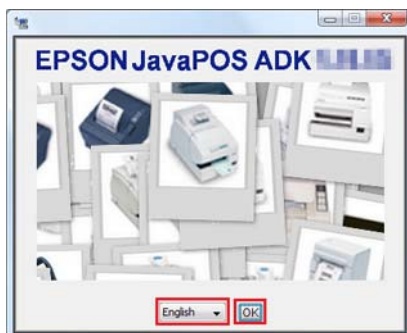
**Note:**

To install the JavaPOS ADK, Java Runtime Environment and Java Advanced Imaging API are required.  
 Make sure to install the above software before installing JavaPOS ADK.

- 1 Insert the TM-T88V Software & Documents Disc into the computer and follow the steps.  
 ☞ See [“Displaying the Select Software Screen” on page 30](#)
- 2 Select the **JavaPOS ADK Ver. x.xx.x**. Clear the check box for the items you do not want to install. Click the **Next** button.
- 3 The **Start Installation** screen appears. The driver and utility to be installed are listed. Click the **Install** button to start the installation.

## Installation

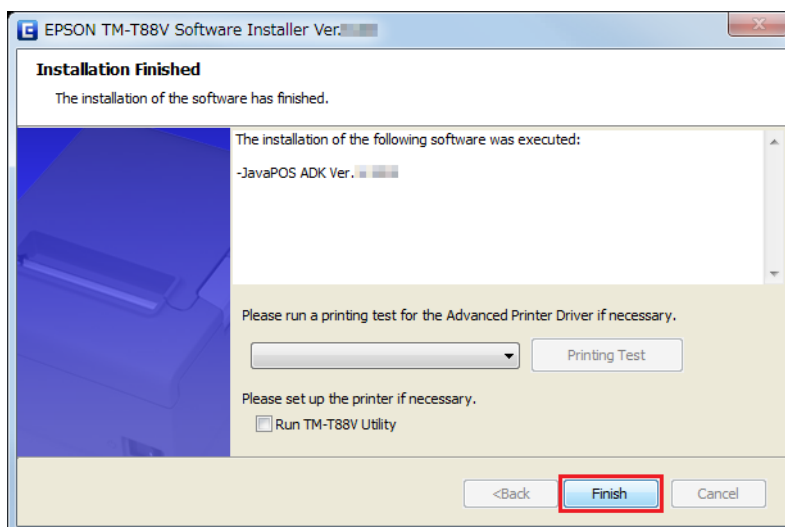
- 4 The **EPSON JavaPOS ADK x.xx.x** screen appears. Select the language and then click the **OK** button.



- 5 The **Introduction** screen appears. Click the **Next** button.
- 6 The **License Agreement** screen appears. Read the content and select the **I accept the terms in the License Agreement**. Click the **Next** button.
- 7 The **Choose JVM** screen appears. Click the **Next** button.
- 8 The **Choose Install Set** screen appears. Select **Developer** and then click the **Next** button.
- 9 The **Choose Folder Location** screen appears. Click the **Next** button.
- 10 The **Choose your communication** screen appears. Select the port and click the **Next** button.
- 11 The **Location for jpos.xml** screen appears. Click the **Next** button.
- 12 The **Pre-Installation Summary** screen appears. Click the **Install** button to start the installation.
- 13 The **Installation Complete** screen appears. Click the **Done** button.
- If a message to ask you to restart the computer appears, select **No, I will restart my system myself**.

## Installation

- 14** When the installation is completed, the **Installation Finished** screen appears. Then click the **Finish** button to end the installation.



This is the end of the JavaPOS ADK installation.

---

## Installing the Utility

The utility can also be installed with Easy Install on the TM-T88V Software & Documents Disc.

Easy Install installs TM-T88V Utility for a serial, parallel or USB connection, and for an Ethernet / Wireless LAN connection, it installs TM-T88V Utility, EpsonNet Config and EpsonNet Simple Viewer.

Custom Install allows you to select utilities you want to install from the following.

- TM-T88V Utility Ver. x.xx
  - Coupon Generator
- EpsonNet Config Ver. x.xx
- EpsonNet Simple Viewer Ver.x.xx
- Epson TM Virtual Port Driver Ver. x.xx

Follow the steps below to execute the utility installation.

- 1** Insert the TM-T88V Software & Documents Disc into the computer and follow the steps.  
 ↗ See [“Displaying the Select Software Screen” on page 30](#)
- 2** Select the utilities you want to install from the list. Clear the check box for the items you do not want to install. Click the **Next** button.
- 3** The **Start Installation** screen appears. The drivers and utilities to be installed are listed. Click the **Install** button to start the installation.

## Installation

**4** TM-T88V Utility is installed.

Proceed to Step 12 if you do not install any other utility or driver.

The installation is started without displaying any other screens.

**5** EpsonNet Config is installed.

The installation is started without displaying any other screens.

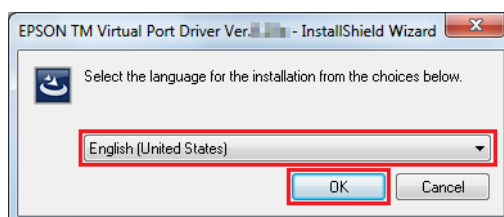
**6** EpsonNet Simple Viewer is installed.

Proceed to Step 12 if you do not install any other utility or driver.

The installation is started without displaying any other screens.

**7** Install the Epson TM Virtual Port Driver.

The **EPSON TM Virtual Port Driver Ver. x.xx - InstallShield Wizard** screen appears. Select the language used for installation and click the **OK** button.



**8** The **Welcome to the EPSON TM Virtual Port Driver Ver. x.xx Setup Wizard** screen appears. Click the **Next** button.

**9** The **License Agreement** screen appears. Read the content and select the **I accept the terms in the license agreement**. Then click the **Next** button.

**10** The **Ready to Install the Program** screen appears. Then click the **Install** button.

**11** When the following screen appears, click the **Restart Later** button.

**Note:**

*If you restart your PC at this point, the installation process may not be completely performed. Be sure to select the **Restart Later** button.*

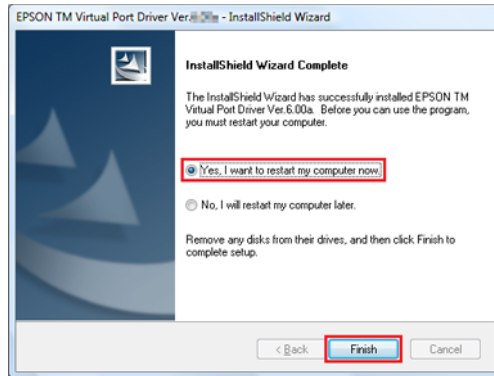
**12** The **InstallShield Wizard Complete** screen appears. Click the **Finish** button.

If the restart of your PC is requested, select **Yes, I want to restart my computer now**. and click the **Finish** button.



## Installation

If you restarted the computer, there's no need to proceed to Step 12, but the installation is complete.



### Caution

If the restart of your PC is requested on the **InstallShield Wizard Complete** screen, be sure to select **Yes, I want to restart my computer now.**

13

When the installation is completed, the **Installation Finished** screen appears.

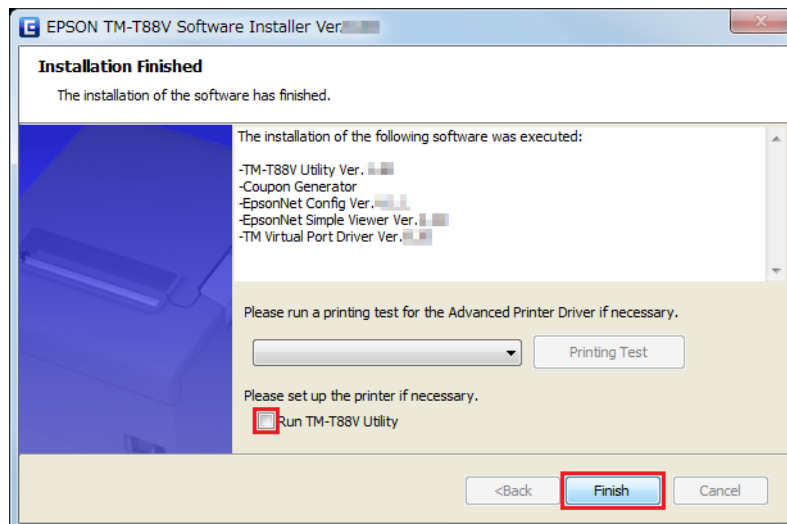
When exiting the installation:

Uncheck the **Run TM-T88V Utility** (the box is unchecked by default). Then click the **Finish** button to end the installation.

When setting the printer using TM-T88V Utility continuously:

Check the **Run TM-T88V Utility** checkbox. Click the **Finish** button to end the installation. The TM-T88V Utility starts to run.

☞ See “**TM-T88V Utility**” on page 63



This is the end of the utility installation.

**Installation**

# Update Mode

**Caution:**

- When installing, connect just one printer. Do not connect multiple printers.
- When you are prompted whether to restart the computer during the installation, select **No** and continue the installation. Restart the computer and the printer after all the installation is finished. If you select **Yes** and restart the computer during the installation, the rest of the drivers will not be installed.

The update mode allows you to update the printer driver already existing on the system, or check to see if the selected newer version of printer driver can exist with the existing printer driver on the same system.

When the Advanced Printer Driver, OPOS ADK, OPOS ADK for .NET, JavaPOS ADK, and Epson TM Virtual Port Driver are already installed, the driver installation is carried out in the update mode.

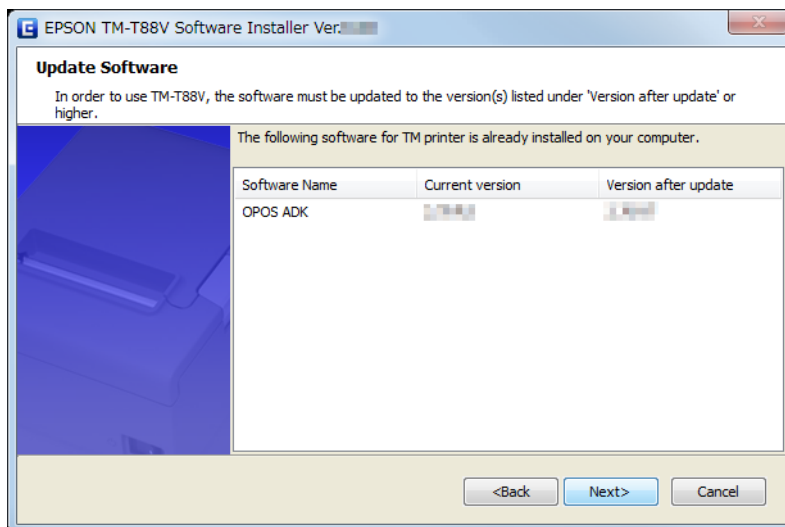
Under Windows 2000, you will be just notified that installing the new driver may cause the printer to malfunction due to the incompatibility with the existing one.

- 1** Insert the TM-T88V Software & Documents Disc into the computer. The TM-T88V Software Installer is automatically read and the **EPSON TM-T88V Software Installer** screen appears. Click the **Install Now** button.

**Note:**  
The displayed language can be changed from **Select language**.

When the TM-T88V Software Installer is not automatically read, double click the **TMInstallNavi.exe** icon in the TM-T88V Software & Documents Disc.

- 2** The **License Agreement** screen appears. Read the content and select the **I accept the terms in the license agreement**. Then click the **Next** button.
- 3** The **Update Software** screen appears. The system is checked and existing driver and its version are displayed. Click the **Next** button.

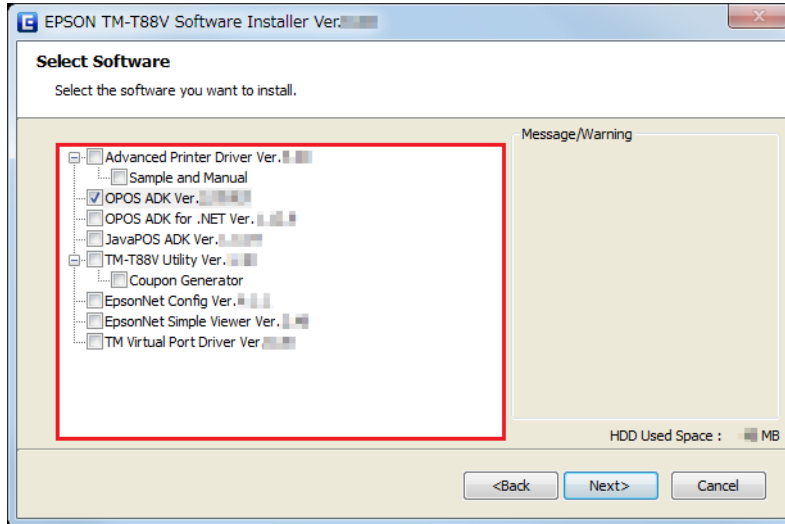


- 4** The **Select Printer Language (Resident Character)** screen appears. Select the language of your printer and click the **Next** button.

### Installation

- 5 The **Select Software** screen appears. Check the checkbox for the drivers and utilities you want to install and uncheck the checkbox for those you do not need.

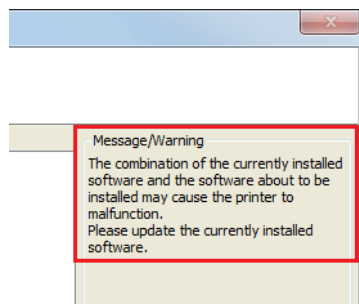
Items that require updating are automatically selected.



- 6 The installer checks the validity of the update or the combination of the drivers. A warning message is displayed if the combination can cause the printer to malfunction. Check the screen for the warning message, and click the **Next** button.

When you click the **Next** button with the warning message displayed, a warning screen appears. Click the **OK** button to proceed to Step 6.

**Note:**  
 If you select more than one drivers to install them under Windows 2000, you will be prompted that this may cause the printer to malfunction. Under Windows 2000, you can install only one driver.



- 7 The **Start Installation** screen appears. Check that the listed items to be installed are correct, and click the **Install** button.
- 8 When the installation is finished, the **Installation Finished** screen appears. Click the **Finish** button to end the installation.

**Installation**

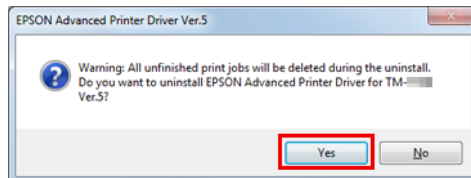
# Uninstallation

- Uninstall the printer driver
- Uninstall the TM-T88V Utility
- Uninstall the EpsonNet Config
- Uninstall the Epson TM Virtual Port Driver
- Uninstall the EpsonNet Simple Viewer
- Uninstall the OPOS ADK
- Uninstall the OPOS ADK for .NET
- Uninstall the JavaPOS ADK

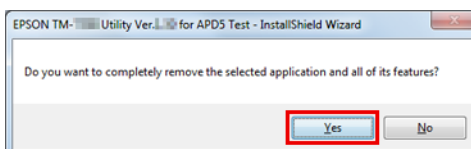
## Uninstalling the Windows Printer Driver

 **Caution:**  
 Do not delete the printer driver in **Start - Control Panel - Hardware and Sound - Printers**.  
 See *“Differences Depending on the OS” on page 9*  
 Even though the icon (the printer driver) disappears from the screen, the printer driver is not uninstalled.

- 1** Quit all applications running on the computer.
- 2** Select **Start - Control Panel - Uninstall a program - EPSON Advanced Printer Driver for TM-T88V Ver.5** and click **Uninstall**.
- 3** The uninstallation confirmation screen appears. Click the **Yes** button.  
 The Advanced Printer Driver Ver.5 is uninstalled.



- 4** The uninstallation confirmation screen for model specific utility is displayed. Click **Yes** when not using the model specific utility with other drivers and applications. Click **No** when not uninstalling.  
 The Advanced Printer Driver Ver.5 utility is uninstalled.




## Installation

- 5 The **Uninstallation Complete** screen is displayed. Uninstallation is complete after clicking **Finish**.


---

### Uninstalling the TM-T88V Utility

- 1 Quit all applications running on the computer.
- 2 Select **Start - Control Panel - Uninstall a program - EPSON TM-T88V Utility**. Click **Uninstall**.  
For information of the differences in screen selections based on the OS versions.  
 See [“Differences Depending on the OS” on page 9](#)  
When the **User Account Control** screen appears, click the **Continue** button.
- 3 The TM-T88V Utility uninstallation confirmation screen appears. Click the **Yes** button.
- 4 The uninstallation of the TM-T88V Utility starts.
- 5 The **Uninstall Complete** screen appears. Click the **Finish** button to finish the uninstallation.


---

### Uninstall the EpsonNet Config

- 1 Select **Start - Control Panel - Uninstall a program - EpsonNet Config**. Click **Uninstall**.  
For information of the differences in screen selections based on the OS versions.  
 See [“Differences Depending on the OS” on page 9](#)  
When the **User Account Control** screen appears, click the **Continue** button.
- 2 The EpsonNet Config uninstallation confirmation screen appears. Click the **Yes** button.
- 3 The uninstallation of the EpsonNet Config starts.
- 4 The **Uninstall Complete** screen appears. Click the **Finish** button to finish the uninstallation.

---

### Uninstalling the Epson TM Virtual Port Driver

- 1 Select **Start - Control Panel - Uninstall a program - EPSON TM Virtual Port Driver**. Click **Uninstall**.  
For information of the differences in screen selections based on the OS versions.  
 See [“Differences Depending on the OS” on page 9](#)  
When the **User Account Control** screen appears, click the **Continue** button.

## Installation

- 2 The Epson TM Virtual Port Driver uninstallation confirmation screen appears. Click the **Yes** button.
- 3 The uninstallation of the Epson TM Virtual Port Driver starts.
- 4 When uninstallation is complete, the window automatically closes.

---

## Uninstalling the EpsonNet Simple Viewer

When uninstalling this tool, also uninstall EpsonNet SDK for Windows, unless you are using it with another application. Follow the steps below to uninstall this tool.

- 1 Select **Start - Control Panel - Uninstall a program - EpsonNet Simple Viewer**. Click **Uninstall**.  
 For information of the differences in screen selections based on the OS versions.  
 ↗ See [“Differences Depending on the OS” on page 9](#)  
 When the **User Account Control** screen appears, click the **Continue** button.
- 2 The **Uninstall Confirmation** window appears. Click on the **Yes** button. This tool will be uninstalled.
- 3 The **Uninstall Complete** window appears. click on the **Finish** button.  
 If EpsonNet SDK for Windows is not been used with any another application, perform Step 4 through Step 6.
- 4 The **Uninstall or change a program** window appears. Double-click on **EpsonNet SDK for Windows**.
- 5 The **Uninstall Confirmation** window appears. click on the **Yes** button. The EpsonNet SDK for Windows will be uninstalled.
- 6 The **Uninstall Complete** window appears. click on the **Finish** button.  
 When **Yes, I want to restart my computer now.** is selected, the computer will restart.

---

## Uninstalling the OPOS ADK


- 1 Quit all applications running on the computer.
- 2 Select **Start - Control Panel - Uninstall a program - EPSON OPOS ADK Version x.xx**. Click **Uninstall**.  
 For information of the differences in screen selections based on the OS versions.  
 ↗ See [“Differences Depending on the OS” on page 9](#)  
 When the **User Account Control** screen appears, click the **Continue** button.
- 3 The EPSON OPOS ADK uninstallation confirmation screen appears. Click the **Yes** button.

## Installation

- 4 The **Information** screen appears. Click the **Yes** button.
- 5 The **ADK Selection** screen appears. Click the **Next** button.
- 6 The **Confirm Deletion** screen appears. Click the **Start** button.
- 7 The uninstallation of the EPSON OPOS ADK starts.
- 8 The **Uninstall Complete** screen appears. Click the **Finish** button.  
When **Yes, I want to restart my computer now.** is selected, the computer will restart.


---

## Uninstalling the OPOS ADK for .NET

- 1 Quit all applications running on the computer.
- 2 Select **Start - Control Panel - Uninstall a program - EPSON OPOS ADK for .NET x.x.x.** Click **Uninstall.**  
For information of the differences in screen selections based on the OS versions.  
 See [“Differences Depending on the OS” on page 9](#)  
When the **User Account Control** screen appears, click the **Continue** button.
- 3 The EPSON OPOS ADK for .NET uninstallation confirmation screen appears. Click the **Yes** button.
- 4 The uninstallation of the EPSON OPOS ADK for .NET starts.
- 5 The completion screen appears. Click the **Finish** button to complete the uninstallation.

---

## Uninstalling the JavaPOS ADK

- 1 Quit all applications running on the computer.
- 2 Select **Start - Control Panel - Uninstall a program - EPSON JavaPOS ADK.** Click **Uninstall.**  
For information of the differences in screen selections based on the OS versions.  
 See [“Differences Depending on the OS” on page 9](#)  
When the **User Account Control** screen appears, click the **Continue** button.
- 3 The **Uninstall Epson JavaPOS ADK** screen appears. Click the **Uninstall** button.

## Installation

- 4 The uninstallation of the EPSON JavaPOS ADK starts.
- 5 The completion screen appears. Click the **Done** button to finish the uninstallation.



---

# Using the Printer Driver

---

This chapter explains how to use the major functions of the printer driver.

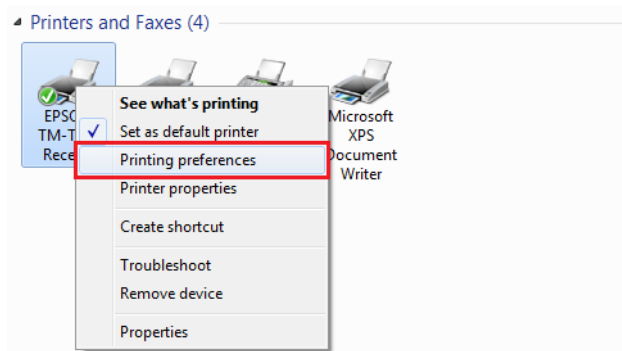
## Printer Driver Access Methods and the Application Range

Depending on how you access the printer driver, the application range of the settings you make on the printer driver varies.

- ❑ Accessing the printer driver from the printer driver's Print menu  
The print settings you made on the printer driver are applied to the print settings of the all users configured on the computer. You must have administrative privileges to make the settings.
- ❑ Accessing the printer driver from the printer driver's Properties  
The print settings you made on the printer driver are applied to your print settings only. They are not applied to the settings of other users. This method is recommended.
- ❑ Accessing the printer driver from the application's print setting menu  
The print settings you made on the application are applied to the application only. The settings are canceled when you quit the application. When you start the application again, the print settings configured in the printer driver's properties are applied.

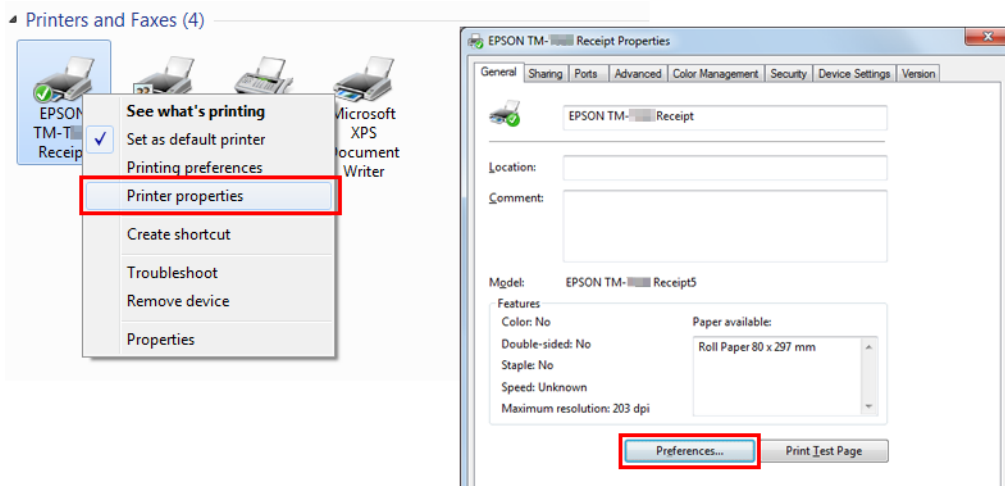
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## Accessing from the Printer Driver's Print menu

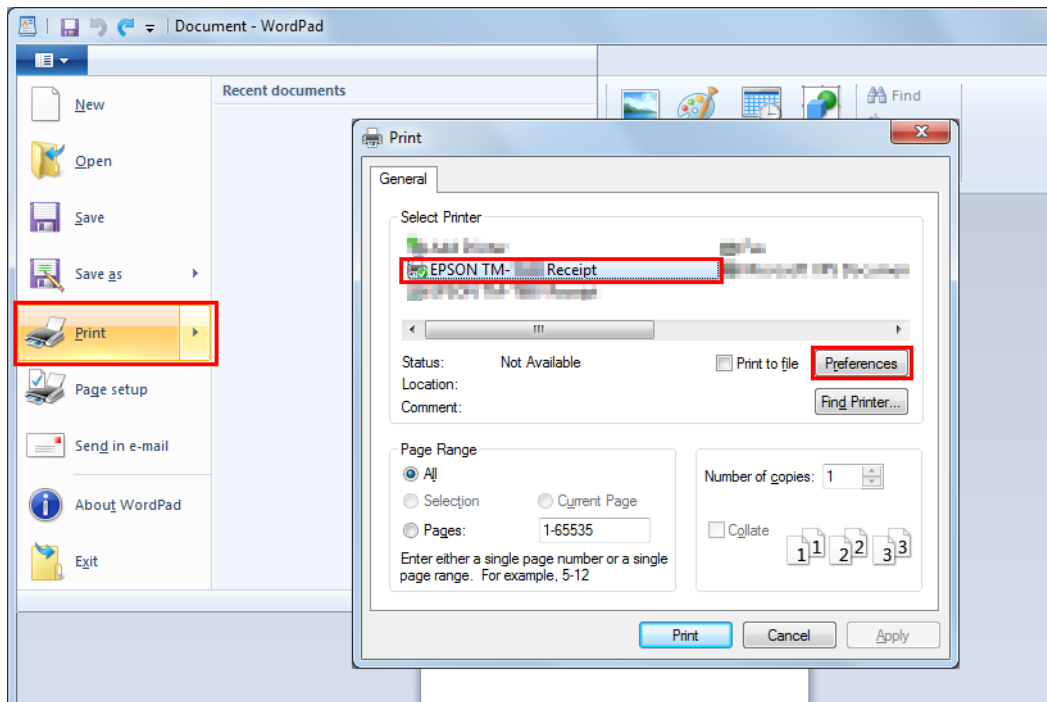


## Using the Printer Driver

### Accessing from the Printer Driver's Properties



### Accessing from the Application's Print Setting Menu

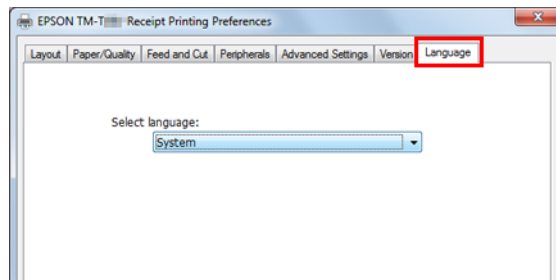


### Language for Displaying Properties

The language used in the Advanced Printer Driver screen and Help can be selected from 24 languages. Selecting the language that is easiest for you to understand will help you correctly configure the settings in the Advanced Printer Driver. The language that initially appears is set based on the language information in your operating system.

## Using the Printer Driver

- 1 Select the **Language** tab from Printing Preferences.



- 2 Select the language that you wish to use in the screens and Help from the **Select language** pull-down list. When finished, click the **OK** button.

The languages that can be selected are shown below.

Selectable languages			
Chinese-Hongkon	Chinese-Simplified	Chinese-Traditional	Croatian
Czech	Danish	Dutch	English
Finnish	French	German	Hungarian
Italian	Japanese	Korean	Norwegian
Portuguese	Russian	Slovenian	Spanish
Swedish	Thai	Turkish	Vietnamese

## How to Use the Basic Functions

 [“Paper Feed and Cut Setting” on page 51](#)

 [“Peripheral Device's Action Settings” on page 53](#)

 [“Logo Printing” on page 55](#)

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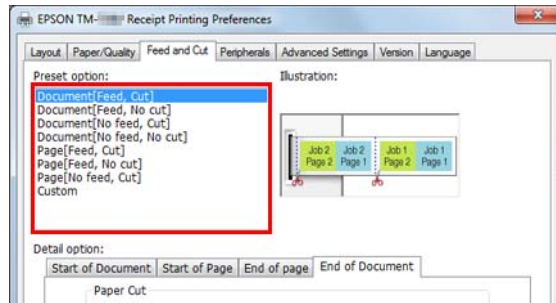
## Paper Feed and Cut Setting

It sets the timing of auto-cut and paper feed before and after the printing.

- 1 Select **Feed and Cut** tab from printing preferences.

## Using the Printer Driver

- 2 Select a cut and paper feed method displayed in the **Preset option** list and click **OK**.  
Select using the illustration of paper feed and cut displayed in **Illustration** for your reference.



**Note:**

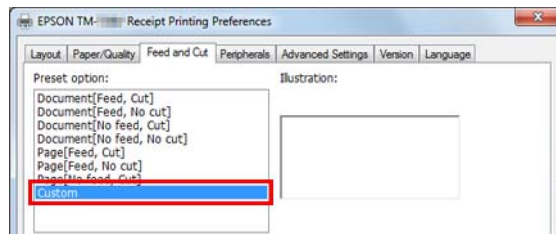
- Feed: Paper is fed to the auto-cutter's cutting position after printing a document.*
- No Feed: Paper is not fed after printing a document.*

## Customization of Paper Feed and Cut

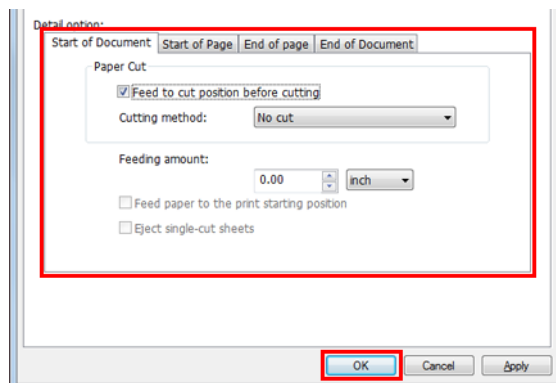
Customization is possible, when no preset function is desired, such as specifying the amount of paper feed and modifying the timing control.

Follow the steps below.

- 1 Select **Custom** from the list of **Preset option**.



- 2 Select the control timing from **Detail option** tab to setup the action.



Settings are described below.

### Using the Printer Driver

Item		Description
Timing	Start of Document	At the beginning of document printing
	Start of Page	At the beginning of each page in the document
	End of Page	At the end of each page in the document
	End of Document	At the end of document printing
Action	Feed to cut position before cutting	When checked, paper is fed to the cutting position of auto-cutter.
	Cutting method	Auto-cutter will not act when No cut is selected.
	Feeding amount	The amount of paper feed can be specified by inches.
	Feed paper to the print starting position	When checked, paper is fed to the head position.
	Eject single-cut sheets	When checked, single cut sheets are printed.

**3** Click OK.

## Peripheral Device's Action Settings

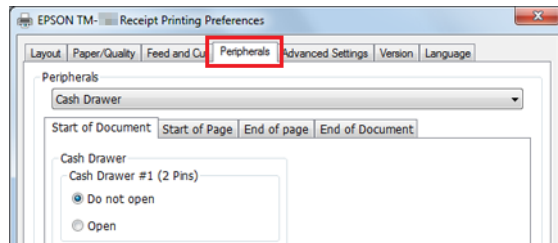
It sets peripheral device's actions such as the cash drawer and buzzer.

**Caution**  
 Option buzzer can be operated only with the APD5 utility.  
 See "Buzzer" on page 54

### How to Setup

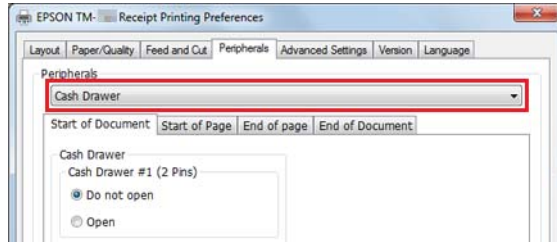
Follow the steps below.

**1** Select **Peripherals** tab from Printing Preferences.

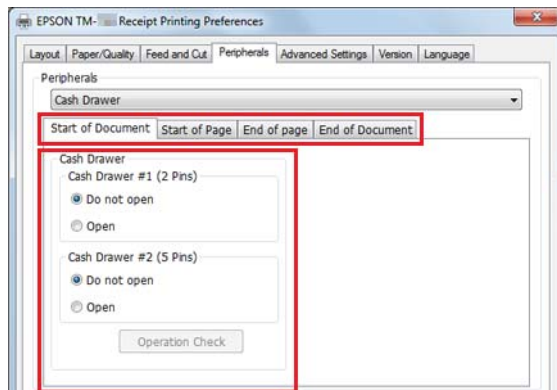


## Using the Printer Driver

- From the **Peripherals** pull down list, select the combination of peripheral device to be connected to the printer.



- Select the timing to set the peripheral device settings.  
 See [“Setting of Peripheral Device” on page 54](#)



- Confirm **Current settings** and click **OK**.

### Setting of Peripheral Device

Settings may be different depending on peripheral devices.

**Note:**  
 Cash drawer and external buzzer cannot be used simultaneously.

#### Cash Drawer

Settings of cash drawer are shown below.

Peripherals	Setting Value	Description
Cash Drawer #1 (2 Pins)	Do not open	Drawer #1 (2 pins) does not open.
	Open	Drawer #1 (2 pins) opens.
Cash Drawer #2 (5 Pins)	Do not open	Drawer #2 (5 pins) does not open.
	Open	Drawer #2 (5 pins) opens.

#### Buzzer

Settings of buzzer are described below.


## Using the Printer Driver

Peripherals	Setting Value	Description
Built-in Buzzer	Turn off	Built-in buzzer does not sound.
	Turn on	Built-in buzzer sounds.
External Buzzer	Turn off	External buzzer does not sound.
	Turn on	External buzzer sounds.
	Pattern	Specify buzzer sound pattern.
	Count	Specify buzzer sound frequency.

## Logo Printing

Logo can be printed at the beginning and the end of printing.

There are 2 printing methods.

- Print by Registering Logo to Printer Driver  
 See **“Print by Registering Logo to Printer Driver”** on page 55
- Print by Registering Logo to Printer  
 For detail, see Advanced Printer Driver Ver.5 Printer Manual.

**Note:**

- The file formats that can be registered are BMP, JPEG, GIF and PNG.
- The maximum file size that can be registered is 2047 x 831 dots (width x height). Number of dots is calculated as follow. Calculation formula: Number of dots = length (cm) / 2.54 (1 inch) x resolution level of TM printer (DPI)

## Print by Registering Logo to Printer Driver

**Note:**

When using a serial interface, it is recommended to register a logo to the printer. For detail, see Advanced Printer Driver Ver.5 Printer Manual.

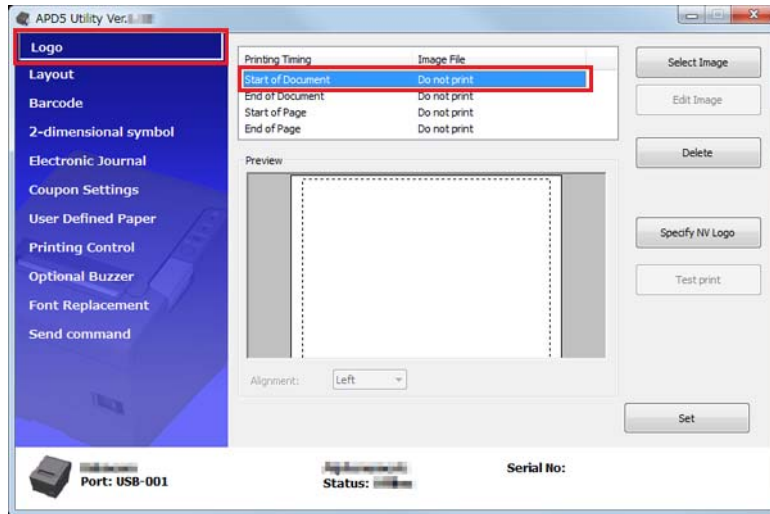
Follow the steps below to register a logo and print.

- 1** Launch the APD5 utility.
- 2** Select **Logo**.

### Using the Printer Driver

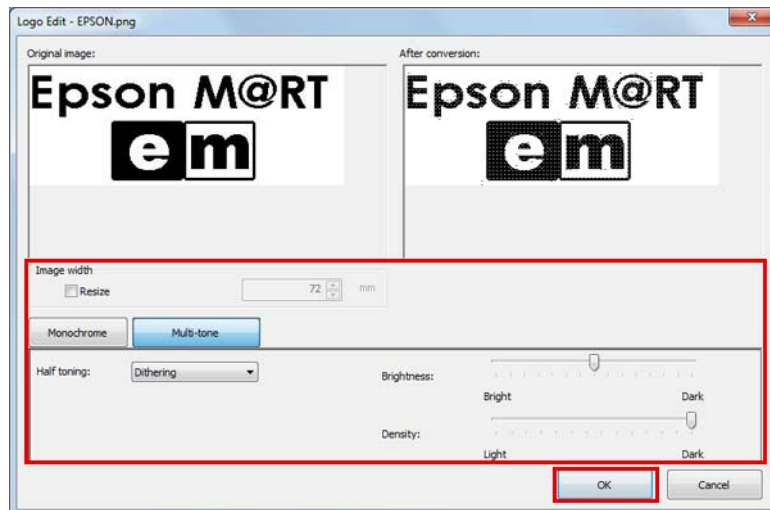
**3** Select the position where the logo is printed.

Select the printing position from **Start of Document / End of Document / Start of Page / End of Page**.



**4** Click **Select Image** to specify the logo to print.

**5** The **Logo Edit** screen is displayed. Refer to the preview at the upper part of the screen and edit the image data for logo. When editing is done, click **OK**.



Settings are described below.

Item	Description
Resize	When checked, the image can be resized. If the image size is bigger than the paper width and its size is not changed, any part that doesn't fit the paper is cut off.
Image width	Setup the image size after resizing. (Unit : mm)
Half toning	Setup the half-toning type. Select from <b>Dither</b> / <b>Error Diffusion</b> / <b>None</b> .



## Using the Printer Driver

Item	Description
Brightness	Setup the brightness. Select from 5 levels.
Density	Setup the printing density.







**6** Click Set.

The logo is registered to the driver.

**7** When printing, the logo is printed at the position set in the APD5 utility.



## Advanced Method

-  ["User Defined Paper Setting" on page 57](#)
-  ["Barcode Printing" on page 59](#)
-  ["2 dimensional symbol Printing" on page 59](#)
-  ["Coupon Printing" on page 60](#)
-  ["Buzzer Settings" on page 61](#)
-  ["Other Convenient Functions" on page 62](#)

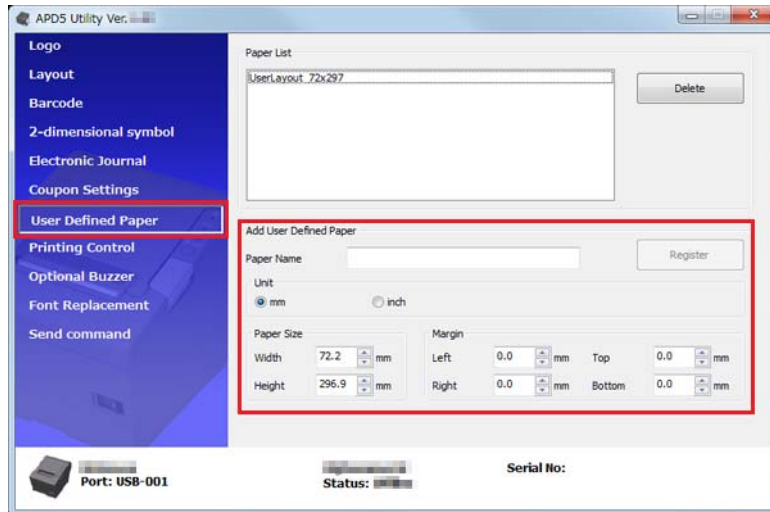
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## User Defined Paper Setting

Regular paper size can be printed using the user defined paper setting. It cannot expand/reduce according to the printer's paper width.

## Using the Printer Driver

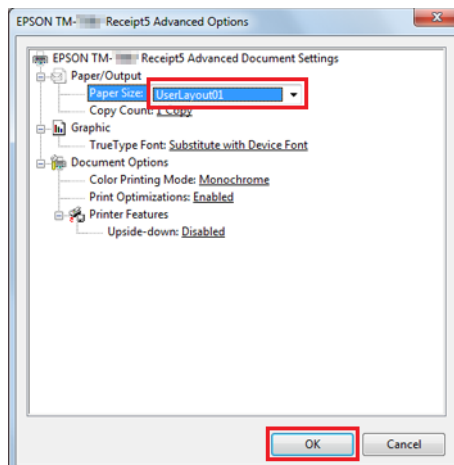
- 1 Select **User Defined Paper** of the APD5 utility to setup user defined paper.



Item	Description
Paper Name	Name of the user defined paper. This name is displayed in Printing <b>Preferences - Layout</b> .
Unit	Specify the unit for the paper width setting.
Paper Size	Specify the user defined paper size (width, height).
Margin	Specify the user defined paper size space (top, bottom, left, right).

- 2 Reopen **Printing Preferences** and select the **Layout** tab. Click **Advanced** and detail document setting of the printer appears.

- 3 From the paper size, select the user defined paper you defined. Click **OK**.



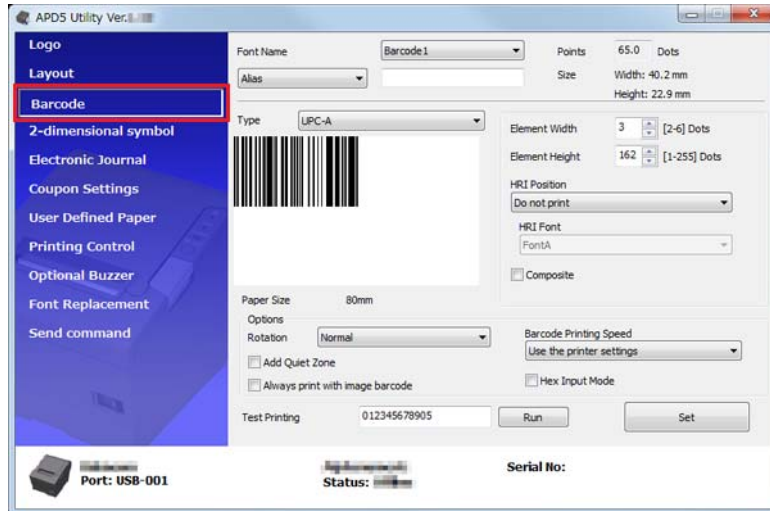
## Using the Printer Driver

### Barcode Printing

Set a barcode font to the Advanced Printer Driver. Barcode can be printed without having barcode encoder in an application or preparing graphic data of barcode. High precision reading of barcode can be printed comparing to when the barcode data is set in an application.

**1** Barcode font can be setup from **Barcode** of the APD5 utility.

For detail, see Advanced Printer Driver Ver.5 Printer Manual.



**2** Specify a barcode font to barcode data using the application.

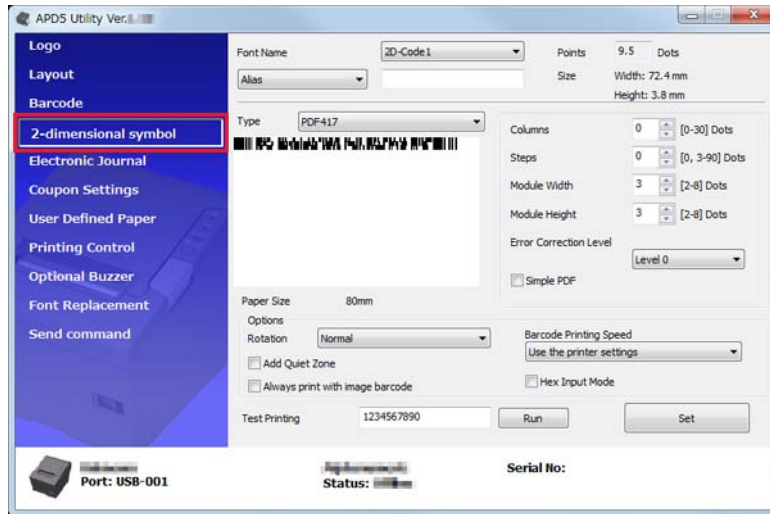
**3** Barcode is printed based on the settings of the APD5 utility.

### 2 dimensional symbol Printing

It sets a 2 dimensional symbol font to APD5. The 2 dimensional symbol printing is possible for the customer without implementing the 2 dimensional symbol encoder or preparing a 2 dimensional graphic data in an application.

## Using the Printer Driver

- 1 2 dimensional font can be set from **2-dimensional symbol** of the APD5 utility.  
For detail, see Advanced Printer Driver Ver.5 Printer Manual.

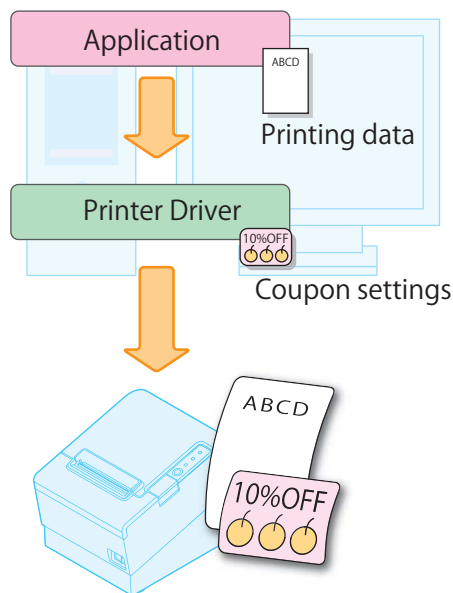


- 2 Specify a 2 dimensional font to 2 dimensional data using the application.
- 3 2 dimensional symbol is printed based on the settings of the APD5 utility.

## Coupon Printing

APD5 provides the coupon printing function.

Coupons can be printed with various settings without modifying the customer's POS application.



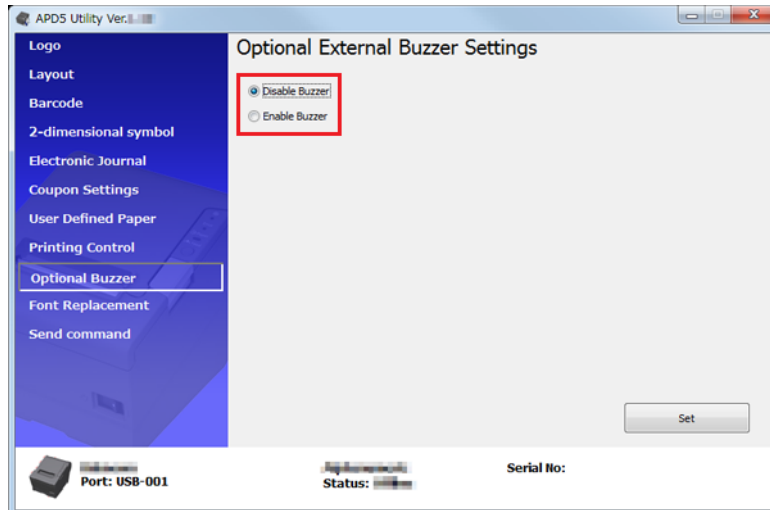
**Note:**  
For detail, see *Advanced Printer Driver Ver.5 Printer Manual*.

## Using the Printer Driver

### Buzzer Settings

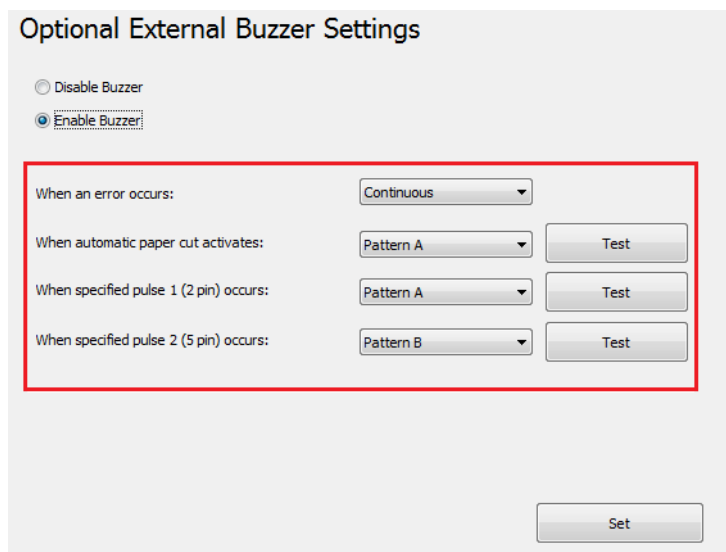
Allows you to configure whether an external optional buzzer is used and the buzzer pattern settings. Configure as follows.

- 1 Click the **Optional Buzzer** menu.
- 2 Select whether or not the buzzer is used.



Disable Buzzer	Do not use the external buzzer. Go to step 4.
Enable Buzzer	Use the external buzzer. Go to step 3.

- 3 Specify when the external buzzer sounds and the buzzer pattern.



Setting	Description
When an error occurs:	Configure the buzzer setting when an error occurs.

### Using the Printer Driver

Setting	Description
When automatic paper cut activates:	Configure the buzzer setting when automatic paper cutting takes place. To test the buzzer sound, click the <b>Test</b> button.
When specified pulse 1 (2 pin) occurs:	Configure the buzzer setting when the specified pulse is generated. To test the buzzer sound, click the <b>Test</b> button.
When specified pulse 2 (5 pin) occurs:	Configure the buzzer setting when the specified pulse is generated. To test the buzzer sound, click the <b>Test</b> button.

**4** Click the **Set** button. The settings are reflected in the printer.

---

## Other Convenient Functions

Printer driver can be also used the ways shown below.

- Print by Registering Logo to Printer
- Sending Commands
- Print Device Font in .NET Environment
- Printing start position setting
- Print the 80mm width layout with 58mm width
- Alias name setting to font
- Creation of emulation font
- Replacing function of device font
- Printing Control Settings

**Note:**  
For detail, see *Advanced Printer Driver Ver.5 Printer Manual*.

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# TM-T88V Utility

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This chapter explains how to use the TM-T88V Utility that configures this printer.





## Overview

**Caution:**






While saving the settings, do not turn off the printer or terminate the connection with the printer.

TM-T88V Utility provides the following functions.

**For general users**

- Operation Check:  See [“Operation Check” on page 71](#)
- Electronic Journal <sup>\*1 \*2 \*3</sup>
- Storing Logos:  See [“Storing Logos” on page 73](#)
- Coupon Settings <sup>\*1 \*2 \*3</sup>
- Paper Reduction:  See [“Paper Reduction Settings” on page 79](#)
- Automatic Paper Cut:  See [“Automatic Paper Cut Settings” on page 80](#)

**For printer administrators**

- Printing Control:  See [“Printing Control Settings” on page 82](#)
- Font:  See [“Font Settings” on page 83](#)
- Optional Buzzer:  See [“Optional Buzzer” on page 84](#)
- Communication I/F:  See [“Communication I/F Settings” on page 86](#)
- Setting Backup/Restore:  See [“Setting Backup/Restore” on page 89](#)

\*1 Cannot be used on Windows 2000.

\*2 If the coupon driver or Epson TM Virtual Port Driver Ver.8 is not installed, this is disabled.

\*3 For details, refer to the TM-T88V Utility User's Manual.

## Starting the TM-T88V Utility

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### Starting the TM-T88V Utility

Activate the TM-T88V Utility as follows.

## TM-T88V Utility

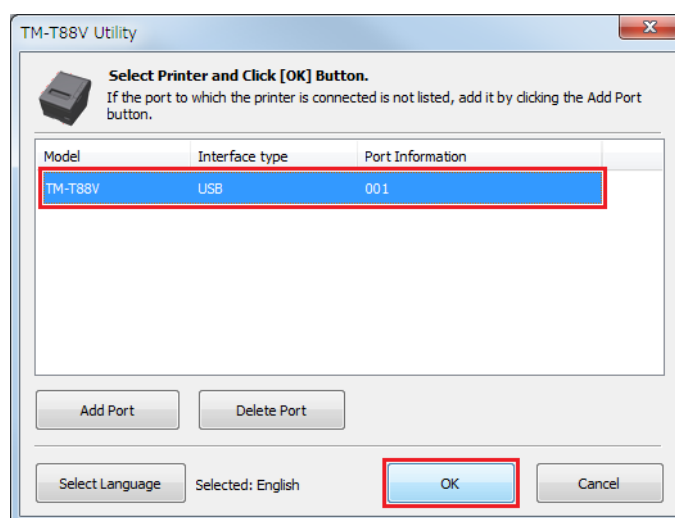
If you have checked **Run TM-T88V Utility** at Step 10 of Easy Install procedure, start from Step 2.

**1** Select **Start - All Programs - EPSON - TM-T88V Software - TM-T88V Utility**.

**2** The following screen appears. Select the printer to use and click the **OK** button.

If you wish to change the language that appears in the TM-T88V Utility, click the **Select Language** button.

If the printer is not displayed, click the **Add Port** button. Then go to the following section; [See “Adding a Communication Port and Starting the TM-T88V Utility” on page 65.](#)



**Note:**

- Click the **Add Port** button when you want to newly configure a port of the printer.  
[See “Adding a Communication Port and Starting the TM-T88V Utility” on page 65](#)
- To delete a port, select the port and click the **Delete Port** button.

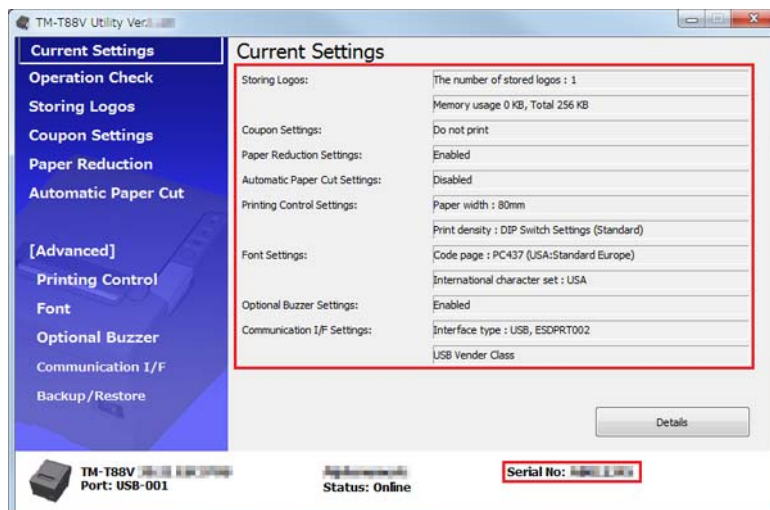
**3** The TM-T88V Utility is started. When the communication with the printer is established, the printer settings obtained from the printer are displayed in the **Printer settings** screen.

To recognize the connected printer when connected via USB, run the **Test Printing** after running TM-T88V Utility, or check the serial number on one of the sides of the printer and the serial number of TM-T88V Utility.

When executing TM-T88V Utility for the first time, it does not boot if the communication with the printer cannot be established. Once the communication is established, the utility can boot using the previous printer setting information even if it is offline.



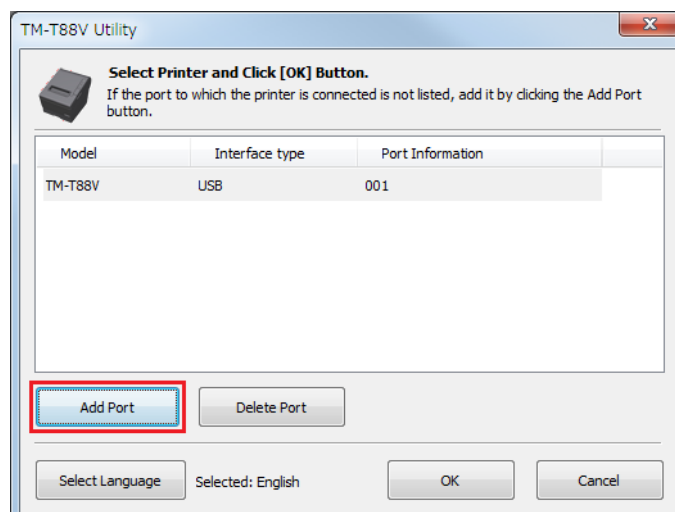
## TM-T88V Utility



## Adding a Communication Port and Starting the TM-T88V Utility

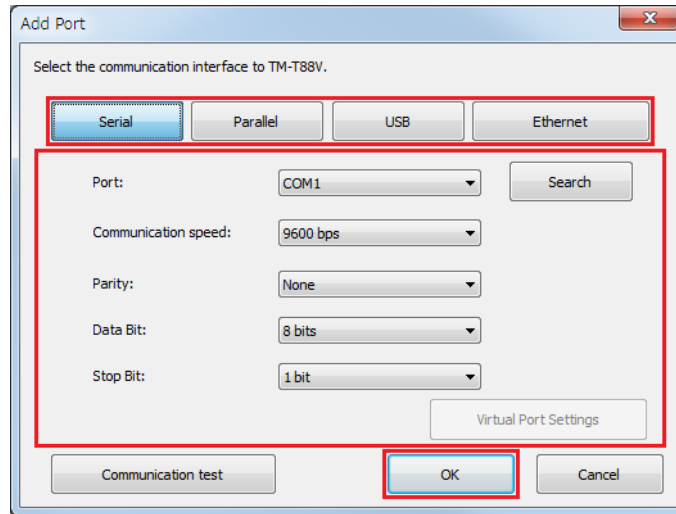
Add a communication port as follows:

- 1 Select **Start - All Programs - EPSON - TM-T88V Software - TM-T88V Utility**.
- 2 The following screen appears. Click the **Add Port** button.



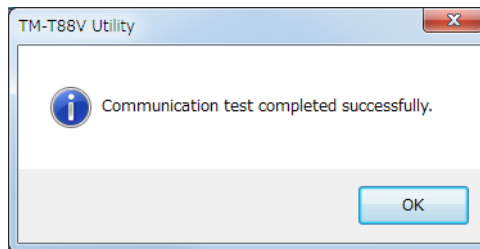
### TM-T88V Utility

**3** The **Add Port** screen appears. Configure the port to be added. Then, click the **OK** button.



**Note:**

- ❑ If the communication with the port failed, an error message appears. In such case, you cannot add the port. Make sure the printer is connected properly and check your communication settings.
- ❑ Clicking the **Communication test** button displays the communication result on the screen. It does not conduct a test print.



❑ Serial

Setting	Description
Port:	Selects the serial port of the computer you use.
Search:	Searches for available serial ports.
Communication speed:	Configures the communication speed.
Parity:	Configures the parity.
Data Bit:	Configures the bit length.
Stop Bit:	Configures the stop bit.
Virtual Port Settings	Starts the Virtual Port Settings tool. For details, see the manual for the Virtual Port Settings tool.
Communication test	Runs a communication test.

❑ Parallel

### TM-T88V Utility

Setting	Description
Port:	Selects the parallel port of the computer you use.
Search:	Searches for available parallel ports.
Virtual Port Settings	Starts the Virtual Port Settings tool. For details, see the manual for the Virtual Port Settings tool.
Communication test	Runs a communication test.

USB

Setting	Description
Port:	Selects the USB port you use.
Search	Searches for the available USB port(s).
Communication test	Runs a communication test.

**Note:**

*If connected via USB, printers cannot be added under the environment where both Printer Class printers and Vendor Class printers exist. In such a case, first turn off the existing printers, and then start the utility.*

Ethernet

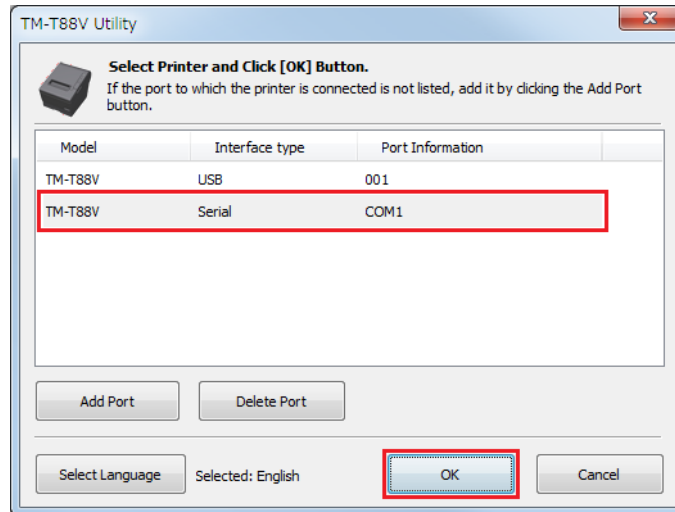
Setting	Description
IP Address:	Configures the IP address of the printer you use.
Search	Searches for the TM-T88V printers on the network and displays their IP addresses.
Advanced settings (EpsonNet Config)	Activates the EpsonNet Config. Make the network settings of the printer using the EpsonNet Config.
Communication test	Runs a communication test.

**Note:**

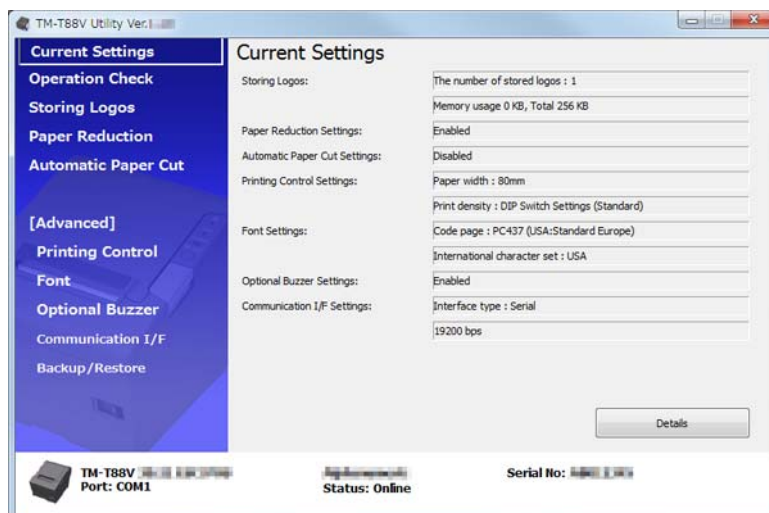
*If no TM-T88V with its IP address configured is displayed even after clicking the **Search** button, enter the IP address of TM-T88V directly to **IP Address**.*

## TM-T88V Utility

- 4 The following screen appears again. Select the added port and click the **OK** button.



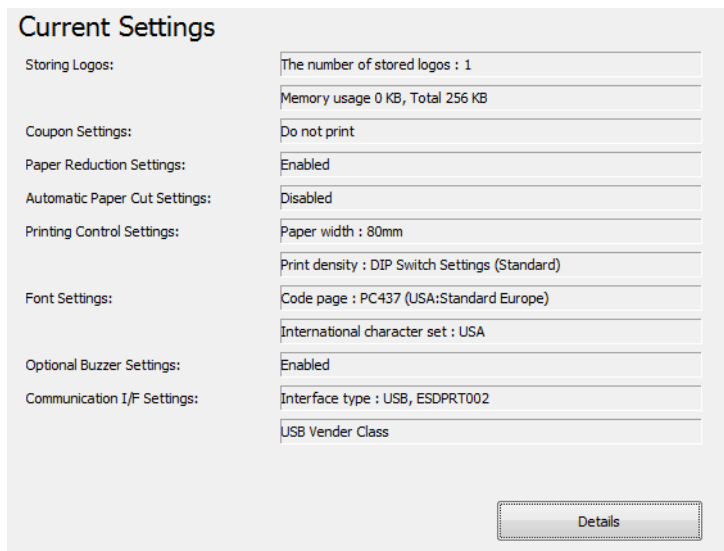
- 5 The TM-T88V Utility is started.



## TM-T88V Utility

# Current Settings

Allows you to check the printer settings and the maintenance counter.



Setting	Description
Storing Logos:	Displays the number of stored logos and their sizes.
Coupon Settings: *1	Displays the coupon settings.
Paper Reduction Settings:	Displays the paper reduction Enable/Disable setting.
Automatic Paper Cut Settings:	Displays the settings of the automatic paper cut function.
Printing Control Settings:	Displays the paper width and the print density settings.
Font Settings:	Displays code page of the printer font, and international character set.
Buzzer Settings:	Displays the buzzer settings.
Communication I/F:	Displays the communication setting of the port.
Details	Displays information of interface, and maintenance counters. <a href="#">🔗</a> See "Details" on page 69

\*1 If the coupon driver or Epson TM Virtual Port Driver Ver. 8 is not installed, this won't be displayed.

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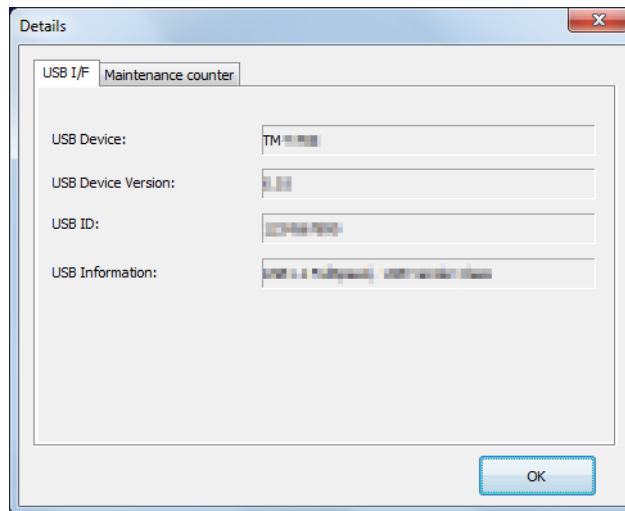
## Details

### Interface Information

**Note:**

When a serial or parallel connection is used, interface information does not appear; only the maintenance counter appears.

### TM-T88V Utility



USB I/F

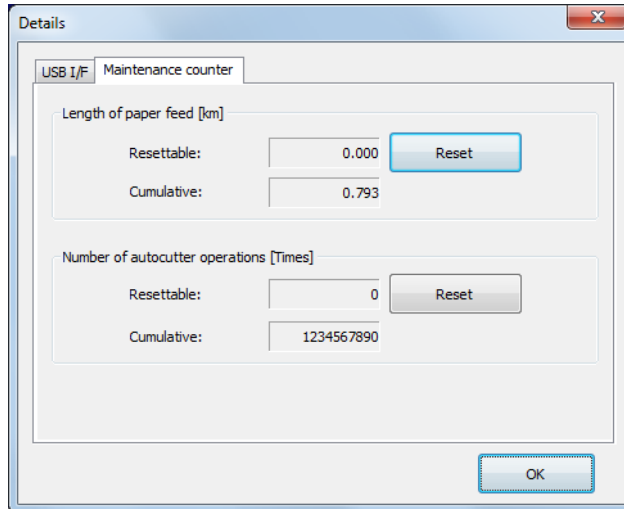
Setting	Description
USB Device:	Displays the product name.
USB Device Version:	Displays the product version.
USB ID:	Displays the serial number.
USB Information:	Displays the character string configured to the interface for identification purpose.

Ethernet I/F

Setting	Description
Ethernet I/F:	Displays the product name.
MAC address:	Displays the MAC address setting of the interface.
Hardware version:	Displays the hardware version of the interface.
Software version:	Displays the software version of the interface.

## TM-T88V Utility

### Maintenance counter



Allows you to check the following counters and to reset some of them.

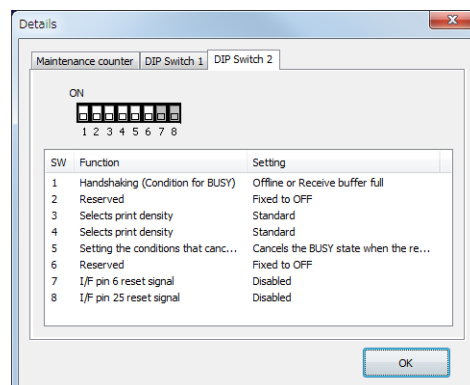
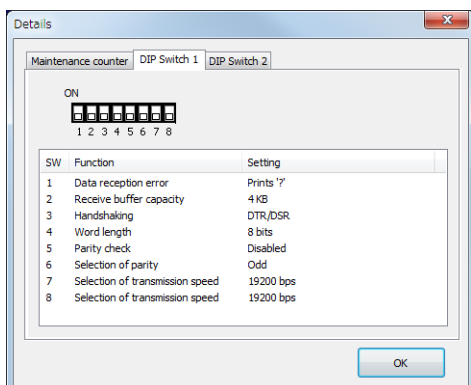
The cumulative counter cannot be reset.

- Length of paper feed [km]
- Number of autocutter operations Times

### DIP Switch 1, 2

Allows you to check DIP Switch 1 and 2 settings obtained from the printer.

The images of the dip switches whose setting could not be obtained are grayed out. DIP Switch 2-7 and 2-8 images are always grayed out because their settings cannot be obtained from the printer. When the printer is offline, the settings previously obtained from the printer are displayed.



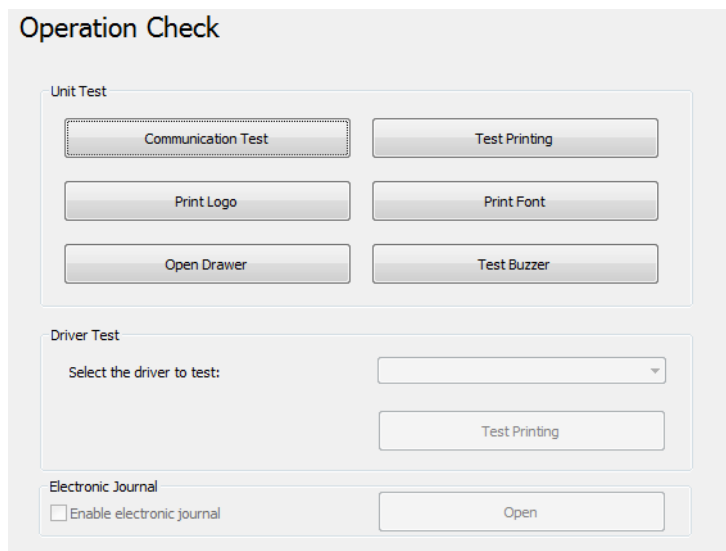
## Operation Check

Allows you to check the printer operation and communication between the printer and the driver.

Configure as follows.

## TM-T88V Utility

- 1 Click the **Operation Check** menu.
- 2 Click the button of the item you want to check.



You can check the followings.

### ❑ Unit Test

Setting	Description
Communication Test	Checks if the communication between the computer and the printer is normal.
Test Printing	Makes a test print. To see if the printer prints correctly.
Print Logo	Prints the logo stored on the printer.
Print Font	Prints the fonts installed on the printer.
Open Drawer	Opens the drawer connected to the printer.
Test Buzzer	Sounds an external optional buzzer that is connected to the printer.

### ❑ Driver Test

Setting	Description
Select the driver to test	Selects the driver you want to check.
Test Printing	Makes a test print. To see if the printer prints correctly.

**Note:**  
For Windows 2000, the Test Printing is not available.

### ❑ Electronic Journal



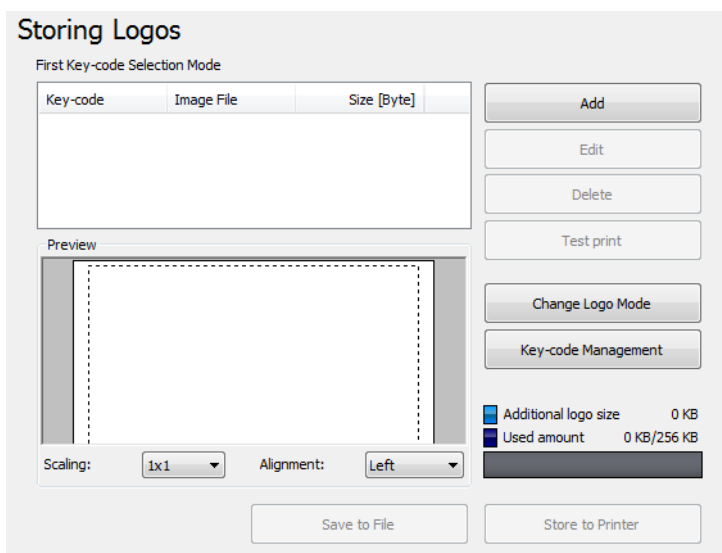
### TM-T88V Utility

Setting	Description
Enable electronic journal	Sets electronic journal Enable/Disable. (This is activated when ticked)
Open	Displays the electronic journal screen.

## Storing Logos

Allows you to configure the logos to be stored on the printer.

This section describes how to configure logos to be stored on the printer. The utility allows you to print your logo already stored on the printer, but you cannot edit and restore it as a file. When using the OPOS to store your logo, see [“Storing Logos” on page 95](#).



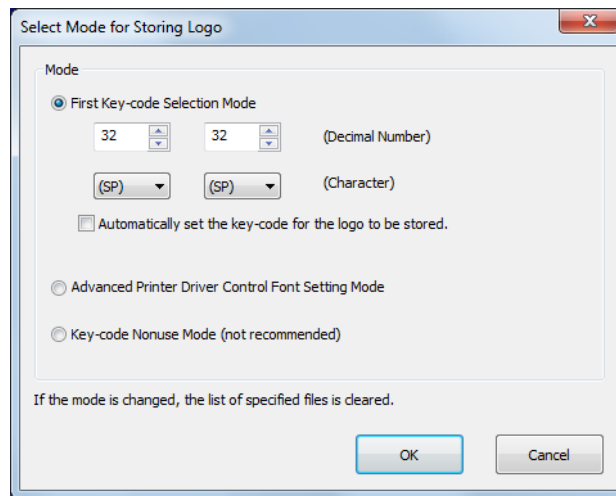
**Storing Logos** has the following functions.

Setting	Description
Key Code List	Displays the logos registered in the printer and the logos to be added in the printer. The logos registered in the printer have <input checked="" type="checkbox"/> at the beginning of the Key-code.
Add	Adds logo data on the list.
Edit	Edits the halftone and brightness settings of the selected logo data.
Delete	Deletes the selected logo data from the list or deletes logos stored on the printer.
Test print	Prints the selected logos.
Change Logo Mode	Displays <b>Select Mode for Storing Logo</b> screen.
Key-code Management	Displays <b>Key-code Management</b> screen.
Preview	Displays the logo image to be stored on the printer. Logo images stored on the printer are not displayed.

**TM-T88V Utility**

Setting	Description
Logo Indicator	Indicator: Registerable memory size in the printer for logos Additional logo data: Size of logos displayed on the list Used amount: Size of registered logos
Save to File	Saves the configured logo data as a file to store it to the printer. The data can also be stored as a bmp file.
Store to Printer	Stores the configured logo data to the printer.

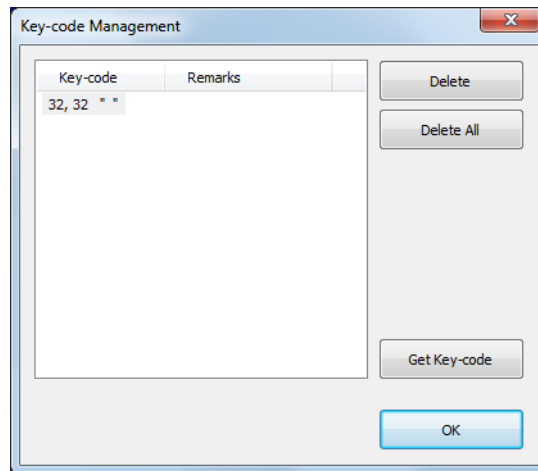
**Select Mode for Storing Logo** has the following functions. The current setting is displayed below **Storing Logos**.



Setting	Description
First Key-code Selection Mode	Specifies the logo identifying code.
Automatically set the key-code for the logo to be stored.	If this is turned on, automatically sets Key-codes to the logos to be registered. If turned off, sets Key-codes when adding or editing logos.
Advanced Printer Driver Control Font Setting Mode	The Advanced Printer Driver allows you to assign a control font (h to l) to your logo instead of using a key code.
Key-code Nonuse Mode (not recommended)	Not recommended.

## TM-T88V Utility

**Key-code Management** has the following functions. You can check the Key-code of the logo stored in the printer, or delete the logos.

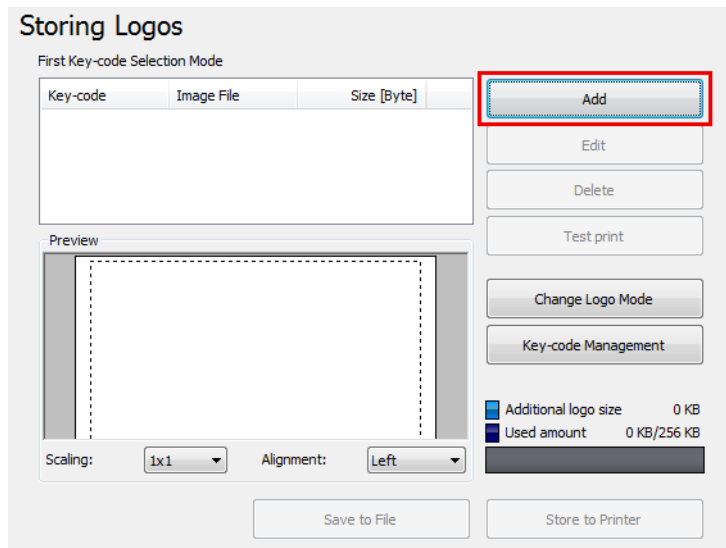


Setting	Description
Get KeyCode	Obtains registered Key-code numbers.

## Adding a Logo

Add a logo as follows.

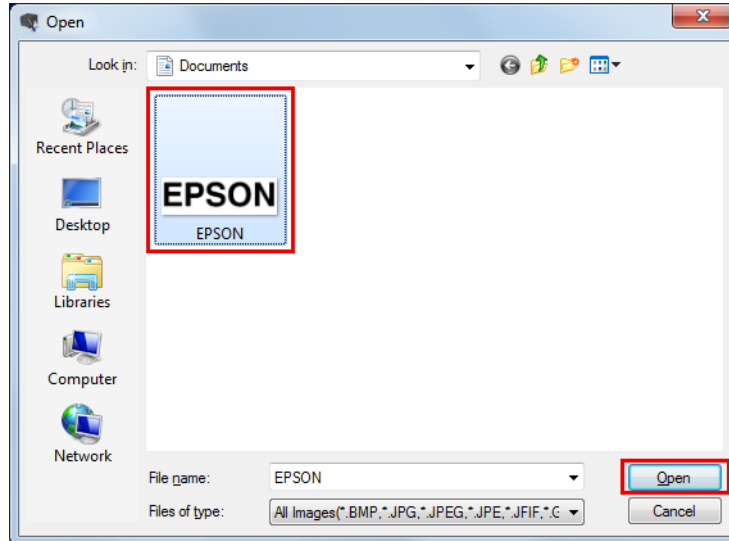
- 1 Click the **Add** button.



**TM-T88V Utility**

**2** Specify the image data to be used as a logo.

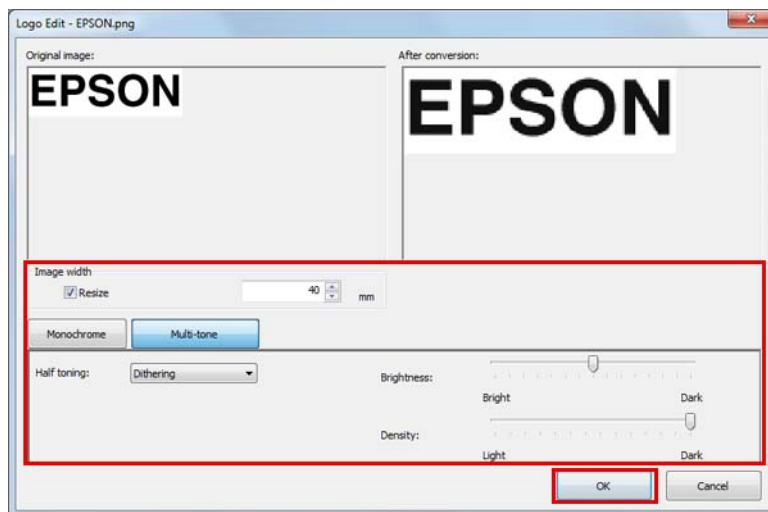
A file size of 2047 (W) x 831 (H) pixels (dots) or less can be specified, and the format can be bmp, jpeg, gif, or png. If the logo width is greater than the paper width, a warning message will appear. Click the **OK** button and reduce the logo size in the **Logo Edit** screen of step 3.



**3** The **Logo Edit** screen appears. Click the **Monochrome** or **Multi-tone** button to select the format of the image to be printed.

The **Multi-tone** button does not appear when the mode for storing logo is set to **Key-code Nonuse Mode (not recommended)**. Colors are reduced to 2 colors with **Monochrome** selected and to 16 colors (shades) in grayscale with **Multi-tone** selected.

**4** Edit the logo image while checking the image previewed on the upper portion of the screen. When finished, click the **OK** button.



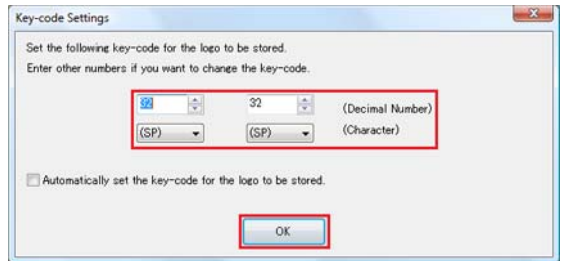
You can edit the followings.

**TM-T88V Utility**

Setting	Description
Image width	Specifies the width to which the image is resized (in mm).
Resize	Specifies whether or not the image is resized. If the image width is greater than the paper width and resizing is not specified, the part of the image that exceeds the paper width will be cut off.
Half toning	Configures the halftone setting of the image.
Brightness	Configures the brightness of the image.
Density	Configures the printing concentration.

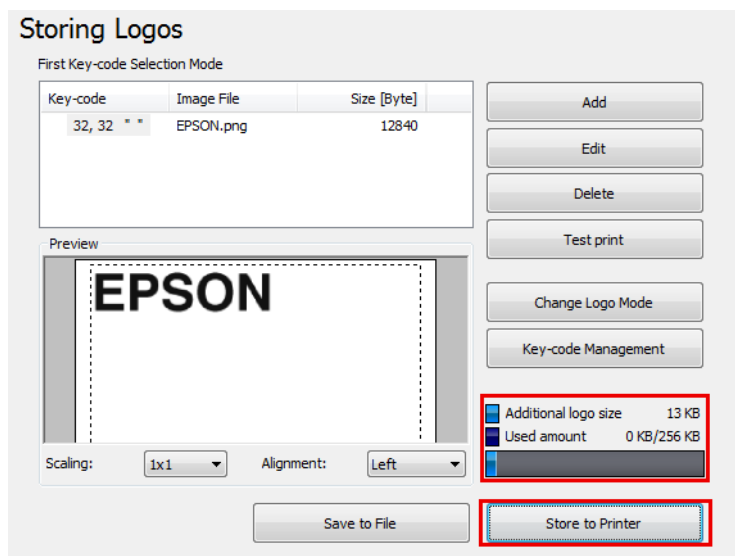
**5** If the logo mode is **First Key-code Selection Mode** and **Automatically set the keycode for the logo to be stored.** is not turned on, the **Key-code Settings** screen is displayed. Set a Key-code and click the **OK** button.

If the logo mode other than **First Key-code Selection Mode** is selected or **Automatically set the keycode for the logo to be stored.** is turned on, the **Key-code Settings** screen is not displayed.



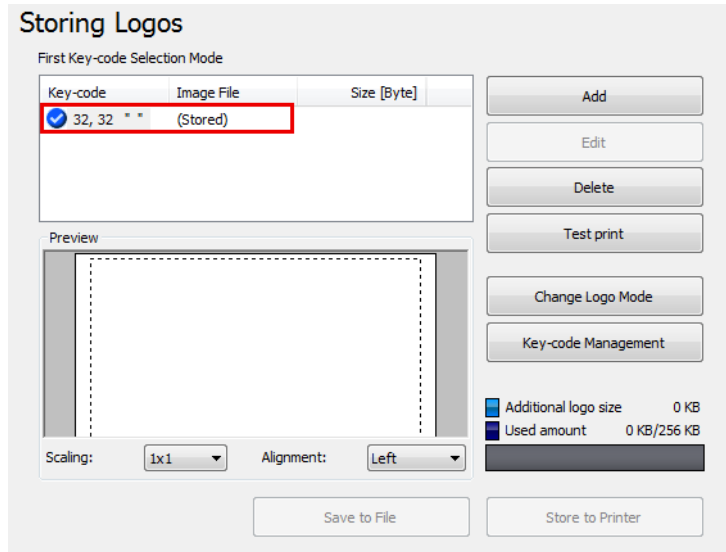
**6** The logo data is added on the list. When storing multiple logo data, repeat Step 1 through 5.

**7** After storing all the logo data to be added to the printer, check the indicator on the right side of the screen to see if the data size is acceptable to be stored on the printer, and then click the **Store to Printer** button.



**TM-T88V Utility**

- 8 The logo data is stored to the printer. The logo data are also saved in the logo store file (TLG file). This file is used when creating the printer setting file.



**Logo Store File**

Because the logo store file (TLG file) is automatically saved when adding logos to the printer, the logo store file only contains the logo data last added to the printer. When saving multiple logo data in the printer setting file, add all the logo data to the printer altogether at once. When saving the data already stored on the printer, follow the procedure below.

- 1 Prepare all the logo data to add to the printer.
- 2 Delete all the logo already stored on the printer.  
 ↗ See “Storing Logos” on page 73
- 3 Store all the logos and add them to the printer altogether at once. In this way, the logo store file (TLG file) containing all the logo data is created.  
 ↗ See “Adding a Logo” on page 75

# Paper Reduction Settings



**Caution:**

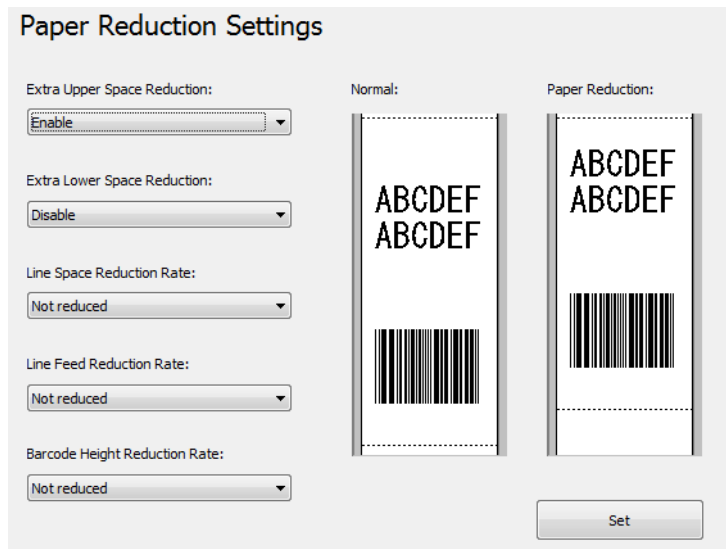
The paper reduction settings may not reduce paper usage as specified when you print images such as logos or coupon tickets, or print in page mode. The followings are examples that the paper reduction settings are not reflected.

- Windows printer driver:  
Printing with the settings that enable **Print all text as graphic images**, such as rotation setting, watermark setting, and barcode rotation setting.\*
- Mac printer driver:  
All printing using the Mac printer driver.\*
- Linux printer driver:  
All printing from the Linux printer driver.\*
- UPOS:  
Printing in page mode, printing with rotation setting, printing with bitmap Images/Barcode/Characters horizontally aligned, and so on.
- ESC/POS command:  
Printing images such as logos or coupon tickets, printing in page mode, printing with rotation setting, and so on.

\*The printer drivers have a function that allows you to reduce the top and bottom margins. Use the function if you want to save paper. For more details, see the manual of the printer driver.

Allows you to configure the paper reduction settings. Configure as follows.

- 1** Click the **Paper Reduction** menu.
- 2** Configure the following items referring to the preview on the right portion of the screen.



**Note:**

Settings other than **Extra Upper Space Reduction** and **Extra Lower Space Reduction** are disabled due to the Advanced Printer Driver being in graphics mode.

### TM-T88V Utility

Setting	Description
Extra Upper Space Reduction	Selects whether to reduce the upper margin or not. Enable this to cut out the extra upper margin that is created before the first print data is printed.
Extra Lower Space Reduction	Selects whether to reduce the lower margin or not. Enable this to cut out the lower margin that is created from the time the last line is printed until the paper is automatically cut.
Line Space Reduction Rate	Selects a reduction ratio of line spacing during printing. The minimum pitch is two dots. If reduction results in a line spacing of less than 2 dots, the line spacing will be reset to 2 dots.
Line Feed Reduction Rate	Selects a reduction ratio of line spacing of blank lines. This setting is ignored for the portion set to be cut out by the Extra Upper Space Reduction setting. When you advance the paper by inserting line feeds in order to cut the paper manually, you may not be able to advance the paper until the last line reaches the cut position because of this reduction setting.
Barcode Height Reduction Rate	Selects a reduction ratio of barcode height. The barcode height cannot be reduced to less than 30-dots height. This setting can cause the barcode size to fall outside the barcode standards.

- 3 Click the **Set** button. The settings are reflected to the printer.

## Automatic Paper Cut Settings

Allows you to configure whether to cut paper and print a logo when the cover is closed.



**Caution:**

- If you set a logo here, the logo will be printed when you print coupons too.
- If you don't want to print the logo on coupons, set the logo printing during auto cut in coupon printing. (For details, refer to the TM-T88V Utility User's Manual.)

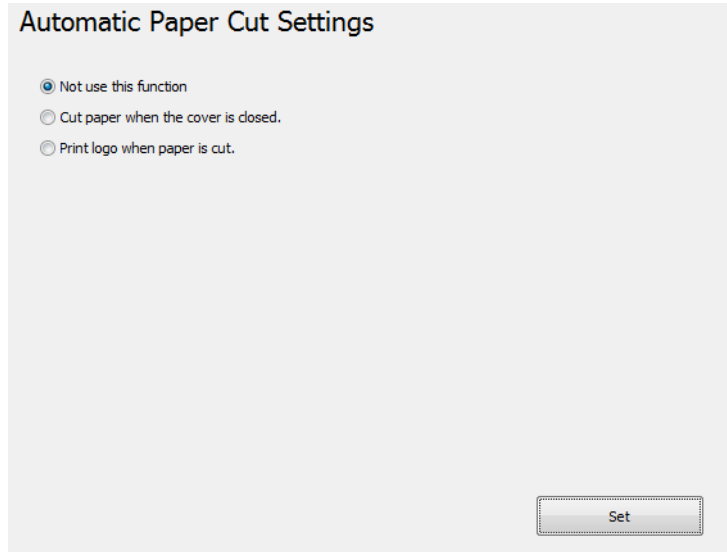
Configure as follows.

- 1 Click the **Automatic Paper Cut** menu.



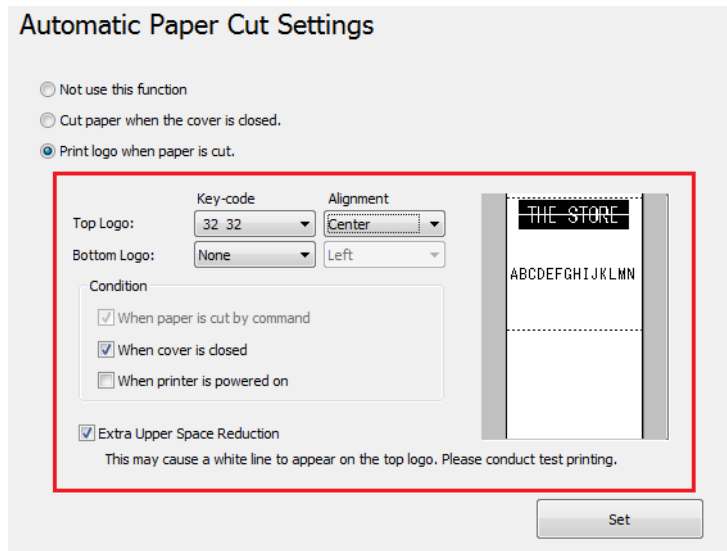
**TM-T88V Utility**

**2** Click the item you want to check.



Not use this function	Disables the automatic paper cut function. Go to Step 4.
Cut paper when the cover is closed.	Executes automatic paper cut when the cover is closed. Go to Step 4.
Print logo when paper is cut.	Prints the logo when executing the automatic paper cut. Go to Step 3.

**3** Configure the **Print logo when paper is cut.**



Setting	Description
Top Logo	Sets the logo that is printed at the top of the paper. <ul style="list-style-type: none"> <li><input type="checkbox"/> Key-code: Selects the Key-code of the logo to be printed.</li> <li><input type="checkbox"/> Alignment: Selects the logo print position.</li> </ul>

### TM-T88V Utility

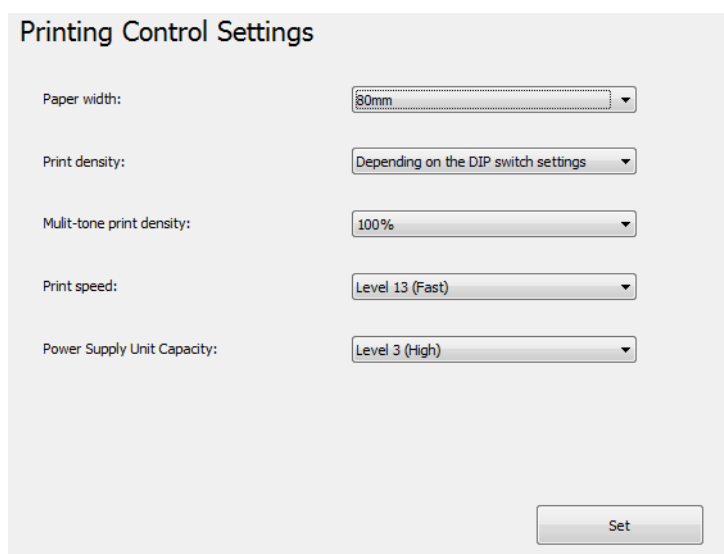
Setting	Description
Bottom Logo	<p>Sets the logo that is printed at the bottom of the paper.</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Key-code: Selects the Key-code of the logo to be printed.</li> <li><input type="checkbox"/> Alignment: Selects the logo print position.</li> </ul>
Condition	<p>Sets the condition for top logo printing.</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> When paper is cut by command: The checkmark cannot be removed from this checkbox.</li> <li><input type="checkbox"/> When cover is closed: Sets whether the top logo is printed when the cover is closed.</li> <li><input type="checkbox"/> When printer is powered on: When you select this, the printer is reset every time the printer setting is changed, paper is automatically cut and <b>Top Logo</b> is printed.</li> </ul>
Extra Upper Space Reduction:	<p>Selects whether to reduce the top margin when printing the logo configured at <b>Top Logo</b>. You can select this function only when <b>Top Logo</b> is selected.</p> <p>Selecting this may cause a white line to appear on the logo (13 mm away from the top of the logo). Make sure to conduct a test print to see if the print result is acceptable for you.</p>

**4** Click the **Set** button. The settings are reflected to the printer.

## Printing Control Settings

Allows you to configure the printing control settings of the printer. Configure as follows.

- 1** Click the **Printing Control** menu.
- 2** Configure the following printing control items.



## TM-T88V Utility

Setting	Description
Paper width:	Selects the paper width.
Print density:	Selects the print density.
Multi-tone print density:	Selects the multi-tone print density level.
Print speed:	Selects the print speed.
Power Supply Unit Capacity:	Selects the capacity level of the power supply unit connected to the printer.

### **Caution**

- When you change the paper width*  
When changing the paper width from 80 mm to 58 mm, attach the Roll Paper Guide to the printer. Changing the paper width from 58 mm to 80 mm may produce unexpected printout results. Make sure you test print after changing the width.
- If a power-related trouble occurs, such as a sudden power shutoff during printing, lower the **Power Supply Unit Capacity** level. If the trouble still occurs, lower the **Print speed**.*

### **Note:**

*If you make any of the following settings different from that of the printer driver, the printer driver setting is used.*

- Paper width*
- Print density*
- Print speed*

**3**

Click the **Set** button. The settings are reflected to the printer.

## Font Settings

Allows you to configure the printer font and international character set. Configure as follows.

### **Note:**

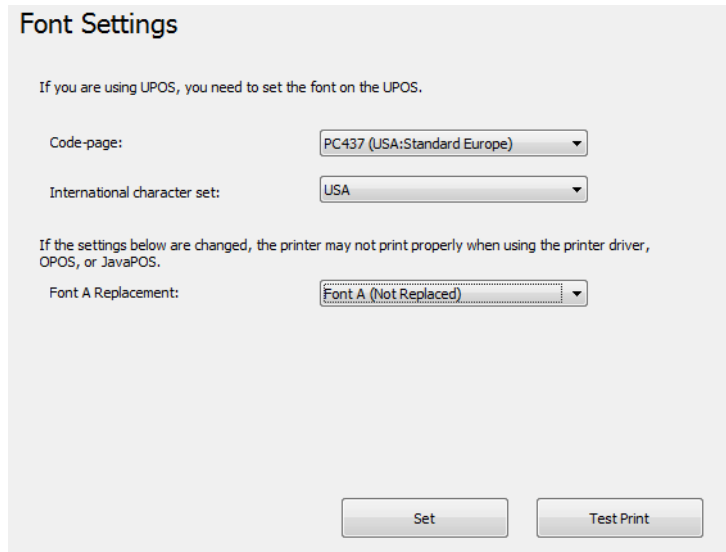
- When using the Advanced Printer Driver Ver. 5.xx, **Code-page:** and **International character set:** settings become disabled.*
- When using the OPOS ADK, the code page configured in OPOS becomes enabled.*

**1**

Click the **Font** menu.

## TM-T88V Utility

**2** Configure the following.



Setting	Description
Code-page:	Selects the Code Page of the printer font.
International character set:	Selects an international character set.
Font A Replacement:	Font A can be replaced with Font B. When the paper width is changed, this enables the layout to be maintained without making changes in your application.

**3** Click the **Set** button. The settings are reflected to the printer.

Click the **Test print** button to print the configured printer font pattern.

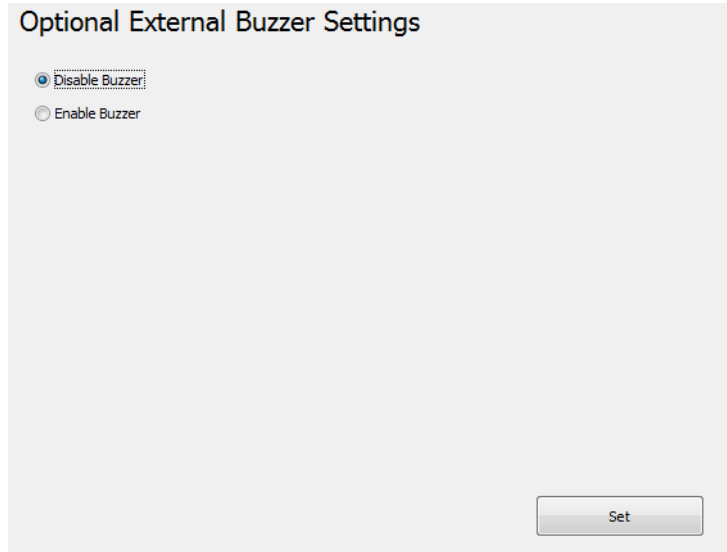
## Optional Buzzer

Allows you to configure whether an external optional buzzer is used and the buzzer pattern settings. Configure as follows.

**1** Click the **Optional Buzzer** menu.

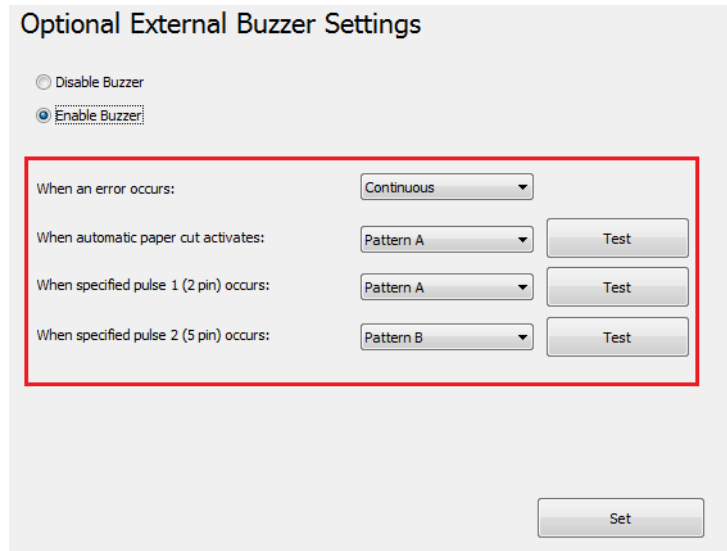
**TM-T88V Utility**

**2** Select whether or not the buzzer is used.



Disable Buzzer	Do not use the external buzzer. Go to step 4.
Enable Buzzer	Use the external buzzer. Go to step 3.

**3** Specify when the external buzzer sounds and the buzzer pattern.



Setting	Description
When an error occurs:	Configure the buzzer setting when an error occurs.
When automatic paper cut activates:	Configure the buzzer setting when automatic paper cutting takes place. To test the buzzer sound, click the <b>Test</b> button.
When specified pulse 1 (2 pin) occurs:	Configure the buzzer setting when the specified pulse is generated. To test the buzzer sound, click the <b>Test</b> button.

### TM-T88V Utility

Setting	Description
When specified pulse 2 (5 pin) occurs:	Configure the buzzer setting when the specified pulse is generated. To test the buzzer sound, click the <b>Test</b> button.

- 4 Click the **Set** button. The settings are reflected in the printer.

## Communication I/F Settings

This utility allows you to make printer communication settings. The port setting of the computer is not made, so making the printer settings may cause a communication error with the printer. In such case, change the printer driver settings or any other necessary settings on the computer so that they match with the settings made on the printer.

- 1 Click the **Communication I/F** menu. The type of port currently used for communicating with the printer is automatically detected and displayed on the **Communication I/F Settings** screen.
- 2 Make the communication settings.

Serial	Configures the serial communication. <a href="#">↗</a> See <b>"Serial" on page 86</b>
USB	Configures the USB communication. <a href="#">↗</a> See <b>"USB" on page 87</b>
Ethernet	Configures the IP address. <a href="#">↗</a> See <b>"Ethernet" on page 89</b>

- 3 Click the **Set** button. The settings are reflected to the printer.

---

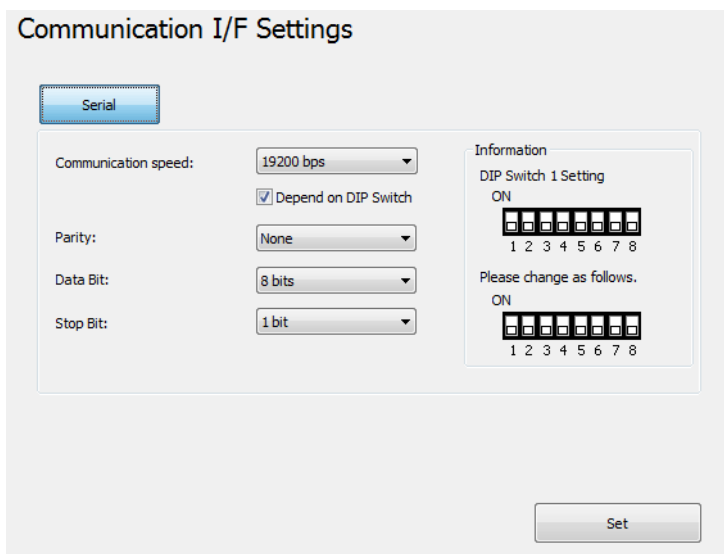
### Serial

Configures the serial communication.

- When the Communication speed is 38400 bps or lower  
Referring to the preview on the right of the screen, change the DIP switch setting on the printer. Turn off the printer power when changing DIP switch settings.

### TM-T88V Utility

- ❑ When the Communication speed is 38400 bps or higher  
Turn off the printer power. After turning on the printer DIP switches 1 - 7 and 1 - 8, turn the printer back on. Then start TM-T88V Utility.



Setting	Description
Communication speed:	Selects the communication speed.
Depend on DIP Switch	Selects which communication speed setting to use between DIP switch setting and memory switch setting. Place a checkmark to use the DIP switch setting. Deselect it to use the memory switch setting.
Parity:	Configures the parity.
Data Bit:	Configures the data bit.
Stop Bit:	Configures the stop bit.

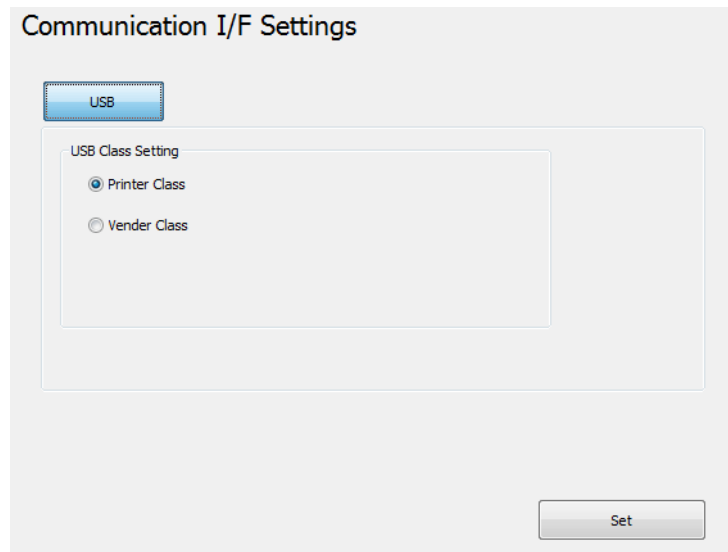
## USB

Configures the USB class.

**Note:**

- ❑ When using the UPOS or Advanced Printer Driver Ver. 3.04, select **Vender Class**.
- ❑ When you do not need to use the **Printer Class**, using **Vender Class** is recommended.
- ❑ To change to **Printer Class**, the Built-in USB and USB Plus Power must have been installed.

## TM-T88V Utility



- Printer Class: Configures the printer to the printer class.
- Vender Class: Configures the printer to the vender class.

If you change the USB class from **Vender Class** to **Printer Class**, the printer becomes a Printer Class device. The computer detects the printer as a new Printer Class device and creates a new port.

Using the newly created port, you can print but cannot use the EPSON Status API. The existing port still allows you to both print and use the EPSON Status API, so you can delete the newly created queue and use the existing queue instead.

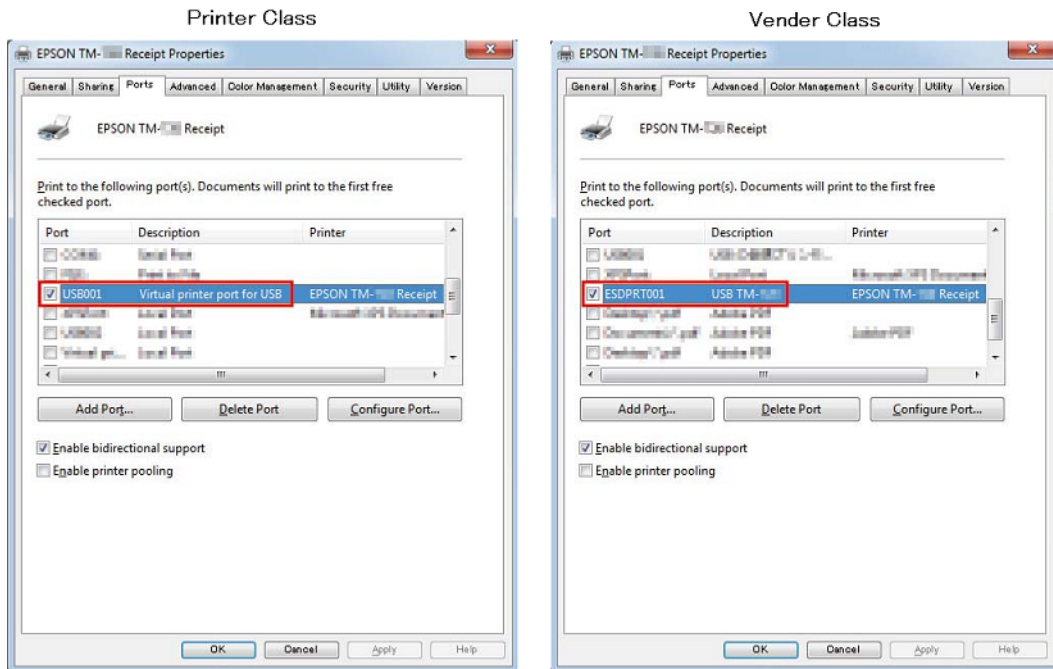
### How to distinguish the EPSON Status API available port

Select **Properties - Ports** and check the **Port** and **Description**.

- Printer Class
  - Port: USBxxx
  - Description: Virtual printer port for USB
- Vender Class
  - Port: ESDPRTxxx
  - Description: USB TM-T88V

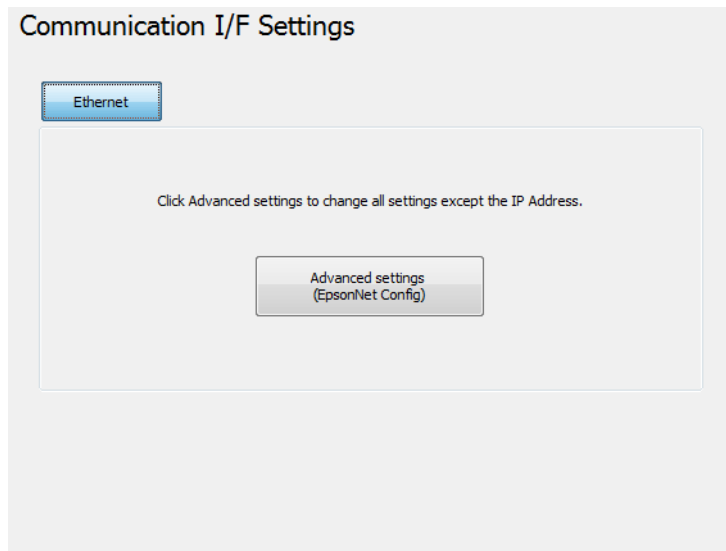


### TM-T88V Utility



## Ethernet

Starts EpsonNet Config, and configures network addresses.



Setting	Description
Advanced settings	Starts EpsonNet Config when the <b>Advanced settings</b> button is clicked.

## Setting Backup/Restore

Allows you to save the printer settings to a file and to restore the stored settings to the printer.

**TM-T88V Utility**



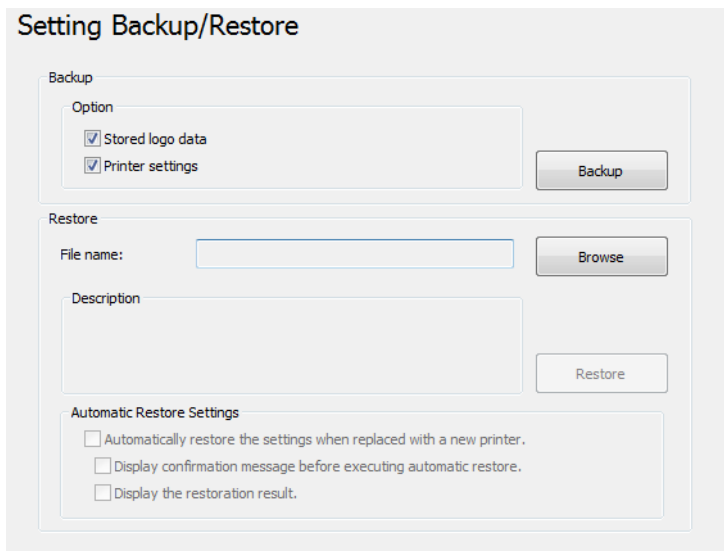
**Caution:**

- On the environment with no Advanced Printer Driver, OPOS, OPOS for .NET, or JavaPOS installed, **Automatic Restore Settings** is disabled.
- Automatic Restore Settings cannot be saved or restored. If you want to copy coupon settings on another printer, refer to TM-T88V Utility User's Manual.

## Saving the Printer Settings to a File

Save the settings as follows:

- 1** Click the **Backup/Restore** menu.
- 2** Select the setting items to be saved as a file from the **Option**.



- Stored logo data:** Saves the logo data stored on the printer. In this step, data is not acquired from the printer, but the data in the logo store file (TLG file) is saved. See **“Logo Store File”** on page 78
- Printer settings:** Saves all the set values of the printer.

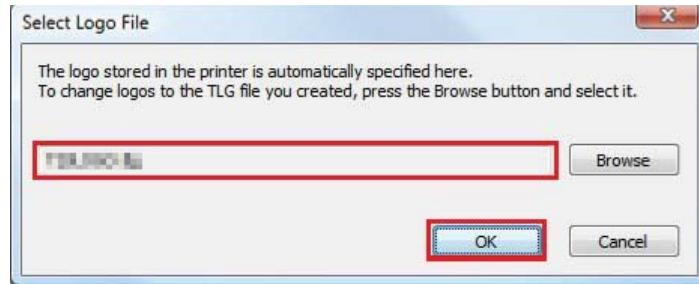
Paper reduction settings  
 Font settings (font replacement, code page, and international character set settings)  
 Print control settings (paper width, print speed, density, etc.)  
 Automatic paper cut setting  
 Optional buzzer settings

- 3** Click the **Backup** button. A backup confirmation message will appear. Click the **Yes** button.

If <b>Stored logo data</b> was selected in step 2.	Go to step 4.
If <b>Stored logo data</b> was not selected in step 2.	Go to step 5.

### TM-T88V Utility

- 4 The **Select Logo File** screen appears. The most recently saved logo filename will appear. Click the **OK** button.  
If you wish to change the file to be saved, click the **Browse** button.



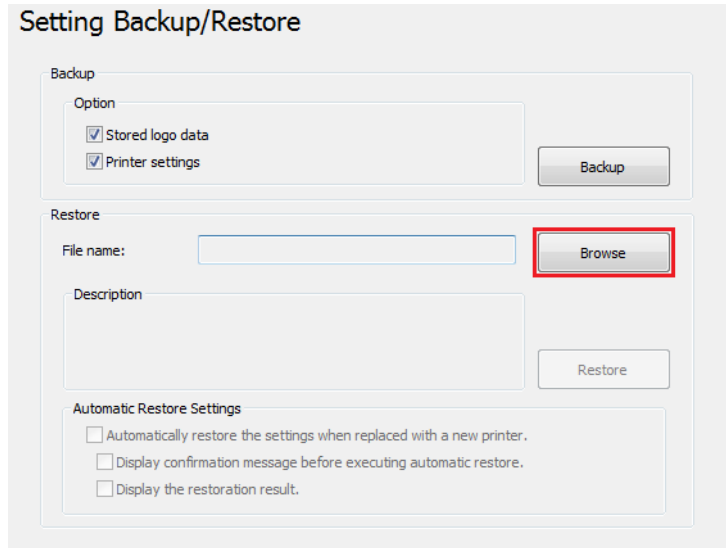
- 5 Specify the filename and backup location in the next screen and save the file.

---

## Restore the Settings to the Printer

Restore the settings as follows:

- 1 Click the **Backup/Restore**.
- 2 Click the **Browse** button, and specify the printer setting file to be restored.

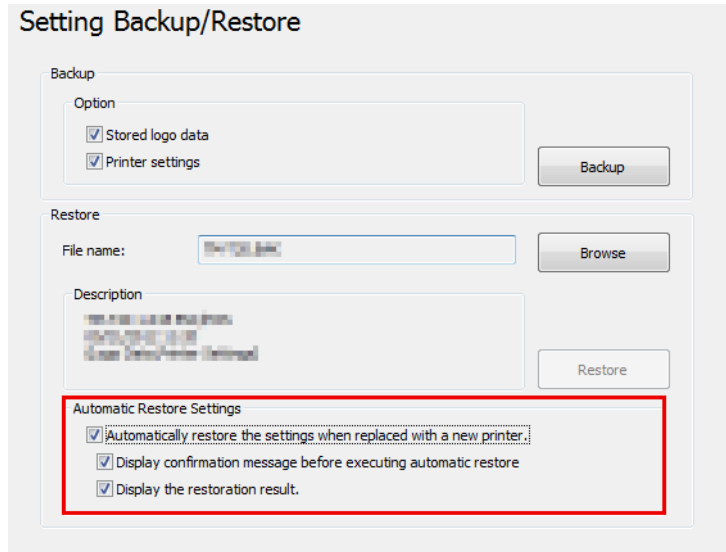


- 3 Click the **Restore** button. A restore confirmation message will appear. Click the **Yes** button.
- 4 If the restore is successful, a success message is displayed.

**TM-T88V Utility**

**Automatic Restore Settings**

Configures the automatic restore settings.



Setting	Description
Automatically restore the settings when replaced with a new printer.	To have printer settings automatically restored using the previously created backup file when the printer fails and is replaced with a new printer.
Display confirmation message before executing automatic restore	To display the confirmation message asking if you want to restore the settings before execution of automatic restoration.
Display the restoration result.	To display the success/failure result on the screen when automatic restore is executed.

**Acknowledgements**

TM-T88V Utility incorporate compression code from the Info-ZIP group.

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## TM-T88V Utility

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# Application Development Information

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This chapter explains how to control this printer and gives information useful for printer application development.

## How to Control the Printer

The printer is controlled by the drivers or ESC/POS commands.

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### Driver

#### Printer Driver

This is an Windows driver (APD = EPSON Advanced Printer Driver) which allows you to control POS operations, such as printing logos and barcodes, controlling paper cutting function and cash drawer. See this manual for more details about the printer driver. The driver includes Status API which allows you to monitor the printer status, and to send the ESC/POS commands.

See the following manuals and sample programs provided with EPSON Advanced Printer Driver Ver.5 for further details on using the driver and how to develop an application using the Status API functions.

- Install Manual
- Printer Manual
- Printer Specification for TM-T88V
- Status API Manual

#### UPOS

This stands for **Unified Point of Service**. It is the standard specification of POS market, which defines drivers for controlling POS peripheral devices in various operation environments. Using the driver, you can develop POS system efficiently because you do not need to newly create commands. The following TM-T88V drivers that conform to UPOS are provided. Use one of them in accordance with your system environment.

- EPSON OPOS ADK  
Suitable for an application that operates the printer under 32-bit version of Windows.
- EPSON OPOS ADK for .NET  
Suitable for an application that operates the printer under Windows .NET environment.
- EPSON JavaPOS ADK for Windows  
Suitable for an application that operates the printer under Windows Java environment.

See the following document for the information about how to create an environment and develop an application.

EPSON OPOS ADK

- OPOS Installation Manual

## Application Development Information

- User's Manual
- Application Development Guide
- UnifiedPOS Retail Peripheral Architecture\*
- Sample Program Guide

### EPSON OPOS ADK for .NET

- OPOS ADK for .NET Installation Guide
- UnifiedPOS Retail Peripheral Architecture\*
- User's Reference (SetupPOS)
- Application Development Guide (POSPrinter TM-T88V)

### EPSON JavaPOS ADK for Windows

- JavaPOS ADK Installation Guide

\* This guide describes general information on how to control printers using the OPOS ADK (in the chapter **POS Printer** and **Appendix-A**). It does not describe Epson's specific functions.

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## ESC/POS Commands

The ESC/POS command is the printer command system developed by EPSON. This allows you to directly control the all functions of the printer. Using the commands with the driver, you can use a function that is not provided by the driver.

Compared to using the drivers, using the commands is difficult because you need to have knowledge about the detailed printer specifications and how to combine the commands.

In order to use the ESC/POS commands, you must sign our non-disclosure contract and get ESC/POS application programming guide. For more details, please contact your dealer.

## Storing Logos



### **Caution:**

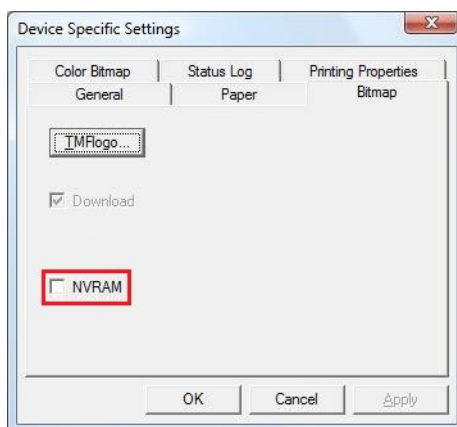
- You cannot store UPOS SetBitmap logos and logos configured using TM-T88V Utility in the same printer.
- When a SetBitmap logo is stored, it overwrites and deletes an existing TM-T88V Utility logo.

The procedure to store logos differs by your system configuration as follows.

- When using the Advanced Printer Driver only  
Use TM-T88V Utility to store logos.
- When using the OPOS and Advanced Printer Driver on the same system

## Application Development Information

- ❑ OPOS setting  
Using the OPOS SetupPOS, select **Bitmap** tab on the **Device Specific Settings** screen, and uncheck the checkbox for **NVRAM**.



- ❑ Storing logos in the printer  
Use TM-T88V Utility to store logos in the printer.

## Download

Drivers, utilities, and manuals can be downloaded from one of the following URLs.

For customers in North America, go to the following web site:  
<http://www.epsonexpert.com/> and follow the on-screen instructions.

For customers in other countries, go to the following web site:  
<https://download.epson-biz.com/?service=pos>

Select the product name from the "Select any product" pulldown menu.