

TM-T20II

Software User's Manual

M00068500 EN

Cautions and Trademarks

Cautions and Trademarks

Cautions

_	No part of this document may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of Seiko Epson Corporation.
_	The contents of this document are subject to change without notice. Please contact us for the latest information.
_	While every precaution has taken in the preparation of this document, Seiko Epson Corporation assumes no responsibility for errors or omissions.
_	Neither is any liability assumed for damages resulting from the use of the information contained herein.
_	Neither Seiko Epson Corporation nor its affiliates shall be liable to the purchaser of this product or third parties for damages, losses, costs, or expenses incurred by the purchaser or third parties as a result of: accident, misuse, or abuse of this product or unauthorized modifications, repairs, or alterations to this product, or (excluding the U.S.) failure to strictly comply with Seiko Epson Corporation's operating and maintenance instructions.
_	Seiko Epson Corporation shall not be liable against any damages or problems arising from the use of any options or any consumable products other than those designated as Original EPSON Products or EPSON Approved Products by Seiko Epson Corporation.

Trademarks

EPSON® and ESC/POS® are registered trademarks of Seiko Epson Corporation in the U.S. and other countries.

MS-DOS®, Microsoft®, Win32®, Windows®, Windows Vista®, Visual Studio®, Visual Basic®, Visual C++®, and Visual C#® are either registered trademarks or trademarks of Microsoft Corporation in the United States and other countries.

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.

Copyright © 2013 Seiko Epson Corporation. All rights reserved.

Cautions and Trademarks

For Safety

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.

A Caution:	Provides information that must be observed to avoid damage to your equipment or a malfunction.
Note:	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-T20II Software & Documents Disc for the product users or development engineers who use the software.

Contents

Contents

Cautions and Trademarks 2 Cautions. 2 Trademarks. 2 ESC/POS Command System. 2	Uninstalling the EpsonNet Simple Viewer 38 Uninstalling the OPOS ADK
For Safety	Using the Printer Driver
Restriction of Use	Printer Driver Access Methods and the Application Range
Overview	Accessing from the Printer Driver's Properties
TM-T20II Software Installer. 6 Drivers and Utilities to be Installed. 6 Support OS. 7 Restrictions on Using Multiple Drivers on the Same System. 7 How to Access the Manuals. 8 Differences Depending on the OS. 9	Accessing from the Application's Print Setting Menu
Viewing the User's Manual	Advanced Method
Installation Installation Types	2 dimensional symbol Printing
	TM-T20II Utility
Manual. 19 Configuring IP Address of the Printer Driver 20 Custom Install. 22 Displaying the Select Software Screen. 22	Overview
Installing the Printer Driver	Current Settings. 61 Details. 61 Operation Check. 63 Storing Logos. 64 Adding a Logo. 67
Update Mode	Paper Reduction Settings
Uninstallation	Automatic Paper Cut Settings

Contents

8
0
0
1
2
3
_
1
5
5
5 5

Overview

This chapter describes the specifications of TM-T20II Software & Documents Disc.

TM-T20II Software Installer

TM-T20II Software Installer allows you to install various drivers and utilities for the TM-T20II printer.

Drivers and Utilities to be Installed

Allows you to check and configure the TM-T20II settings.

Dı	Drivers			
		nced Printer Driver Ver5 ows printer driver. The following versions are provided.		
		Advanced Printer Driver Ver.5.xx		
		s for Unified Point of Service . This is the standard specification of POS market, which defines drivers for olling POS peripheral devices in various operation environments. The following drivers are provided.		
		OPOS ADK		
		OPOS ADK for .NET		
		JavaPOS ADK for Windows		

Utilities

☐ TM-T20II Utility

connected via serial port.

,
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-T20II Utility makes it possible to change the settings of TM-T20II connected to a client computer.
Epson TM Virtual Port Driver This allows you to convert TM-T20II from serial to USB / Ethernet. When your POS application has a serial port of TM-T20II, and you want to connect TM-T20II 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

Support OS

The following lists the supported operating systems for running the TM-T20II drivers and utilities.

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

Restrictions on Using Multiple Drivers on the Same System

TM-T20II 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.

fore TM-T20II driver is installed TM-T20II Software Installer				
	A	В	С	D
Advanced Printer Driver Ver.3	-	-	-	-
Advanced Printer Driver Ver.4.00 to 4.08	-	_*	_*	_*
Advanced Printer Driver Ver 4.09 or 4.17	-	-	-	-
Advanced Printer Driver Ver4.50 to 4.53	-	1	1	1
Advanced Printer Driver Ver4.54 or later	1	1	1	1
OPOS ADK Ver.2.67 former	-	!	-	-

^{*1} 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.

^{*2} The OPOS ADK for .NET, Advanced Printer Driver Ver.5 and the Epson TM Virtual Port Driver cannot be used under Windows 2000.

^{*3} EpsonNet Simple Viewer is not supported.

Before TM-T20II driver is installed	TM-T20II Software Installer			
	A	В	С	D
OPOS ADK Ver.2.68 or later	1	·!	1	-
current OPOS ADK for .NET Ver.1.11.8 former	-	-	!	-
OPOS ADK for .NET Ver.1.11.20 or later	1	1	!	-
JavaPOS ADK Ver.1.11.18 former	-	-	-	!
JavaPOS ADK Ver.1.11.20 or later	1	-	-	!
TM-S1000 Driver	1	1	1	-
TM-S9000/2000 Driver	1	1	1	-
TM-J9000 OPOS ADK	1	1	1	-
TM-J9000 Advanced Printer Driver	1	1	1	-
TM-J9000 Status API	1	1	1	-
TMCOMUSB Ver.2	-	-	-	-
TMCOMUSB Ver.3 and Ver.4. or Epson TM Virtual Port Driver Ver.5 to Ver.7.00	-	/	1	1
Epson TM Virtual Port Driver Ver.7.10a or later	1	1	1	1
Epson InkJet Printer Driver	1	1	1	1

- A: Advanced Printer Driver Ver.5
- B: OPOS ADK Ver.2.7x (TM-T20II)
- C: OPOS ADK for .NET Ver.1.12.x (TM-T20II)
- D: JavaPOS ADK for Windows Ver.1.13.x (TM-T20II)
- ✓ : Supported
- -: Not supported
- *: Can not be installed.
- !: TM-T20II 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 19

☐ 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		
_			
Ч	TM-T20II Utility		
	Except Windows 8:		
	Start - All Programs - EPSON - TM-T20II Software - TM-T20II Utility User's Manual		
	Windows 8:		

Start - All apps - EPSON TM-T20II - EPSON TM-T20II 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	Windows 8 Desktop - Sidebar Settings - Control Panel - Hardware and Sound - Devices and Printers Windows 7 Start - Control Panel - Hardware and Sound - Devices and Printers Right click the printer driver, and select the Printer properties. Windows Vista Start - Control Panel - Hardware and Sound - Printers Right click the printer driver, and select the Properties. Windows XP Start - Control Panel - Printers and Faxes Right click the printer driver, and select the Properties. Windows 2000 Start - Settings - Control Panel - Printers Right click the printer driver, and select the Properties.
Starting the TM-T20II Utility	Windows 8 Start - All apps - EPSON TM-T20II - EPSON TM-T20II Utility Windows 7 Start - All Programs - EPSON - TM-T20II Software - TM-T20II Utility Windows Vista Start - All Programs - EPSON - TM-T20II Software - TM-T20II Utility Windows XP Start - All Programs - EPSON - TM-T20II Software - TM-T20II Utility

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

Viewing the User's Manual

- ☐ Software User's Manual (this manual): Explains about TM-T20II 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-T20II 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-T20II, or to develop or design a printer application for TM-T20II.
- ☐ ESC/POS Quick Reference: Quick Reference is a guide to using ESC/POS command to control the printer.

The following is how to view the manuals.

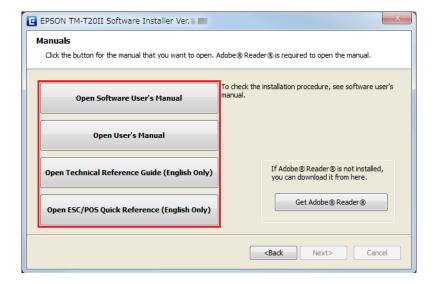
Insert the TM-T20II Software & Documents Disc to the computer. The TM-T20II Software Installer is automatically read and the **EPSON TM-T20II Software Installer** screen appears. Click the **Manuals** button.

When the TM-T20II Software Installer is not automatically read, double click the **TMInstallNavi.exe** icon in the TM-T20II Software & Documents Disc.



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.

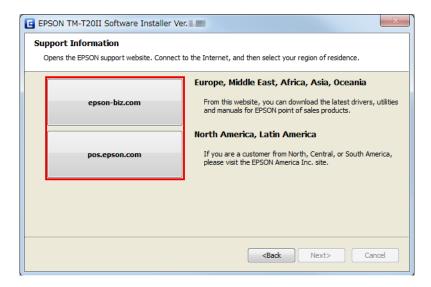
1

Insert the TM-T20II Software & Documents Disc to the computer. The TM-T20II Software Installer is automatically read and the **EPSON TM-T20II Software Installer** screen appears. Click the **Support** button.

When the TM-T20II Software Installer is not automatically read, double click the **TMInstallNavi.exe** icon in the TM-T20II Software & Documents Disc.



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



Installation

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 36



- Install with administrator privileges.
- ☐ Close all running applications before the installation.
- ☐ If your printer is a serial type, and your OS is Windows 2000, you can not install Advanced Printer Driver using the installer. So, refer to, ☐ "Adding a printer to a Windows2000 PC" on page 33 and install Advanced Printer Driver.

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-T20II printer driver and TM-T20II Utility. If you are using an Ethernet EpsonNet Config and EpsonNet Simple Viewer are also installed.
- ☐ Custom Install: ☐ See "Custom Install" on page 22
 You can select printer drivers and utilities you want to install. Select this installation type if you want to install the OPOS driver, OPOS .NET driver, JavaPOS driver, the printer driver manual, and sample programs and tools for developing programs.
- ☐ Update mode: ☐ See "Update Mode" on page 34

 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



- ☐ When installing, connect just one printer to the computer. Do not connect multiple printers.
- Turn off the printer and then start the installation.
- Insert the TM-T20II Software & Documents Disc into the computer. The TM-T20II Software Installer is automatically read and the **EPSON TM-T20II Software Installer** screen appears. Click the **Install Now** button.

Note:

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

When the TM-T20II Software Installer is not automatically read, double click the **TMInstallNavi.exe** icon in the TM-T20II Software & Documents Disc.

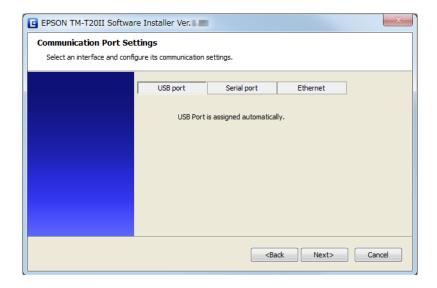


- The **License Agreement** screen appears. Read the content and select the **I accept the terms in the license agreement**. Then click the **Next** button.
- The Select Installation Type screen appears. Click the Easy Install button.



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 5.
USB connection	Click the USB port button, and then click the Next button. Proceed to Step 8.
Ethernet connection	Proceed to Step 6.



Click the **Serial port** button. Configure the communication settings, then click the **Next** button. Proceed to Step 8.

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

Note:

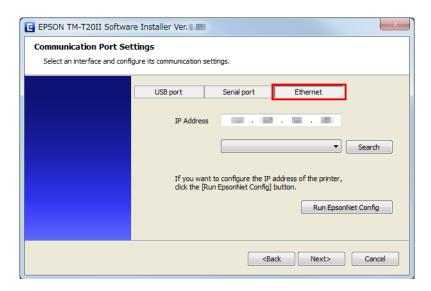
The driver's serial communication setting should be the same as that of the printer.

Click the **Ethernet** button.

When printer is already networked	Proceed to Step 7.
When using Ethernet	Click the Run EpsonNet Config button and configure the printer's network setting using the EpsonNet Config.
	See "Network Address Setting for Ethernet Printer" on page 18
When configuring the network setting after installing the driver.	Proceed to Step 7.

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.

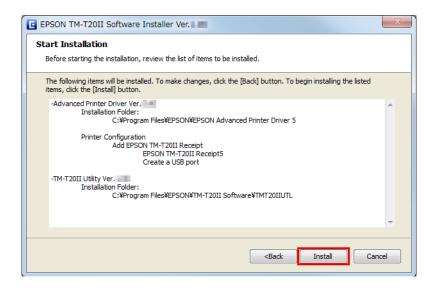


Configure the IP address of the printer on **IP Address** and then click the **Next** button. Proceed to Step 8.

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.

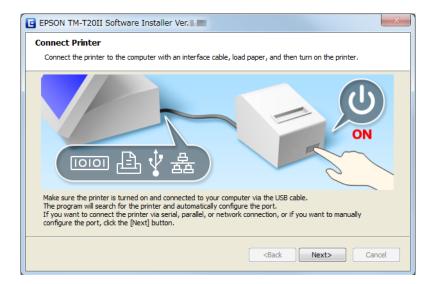
- The Start Installation screen appears. The driver and utility to be installed are listed.
 - ☐ Advanced Printer Driver Ver.5.xx
 - ☐ TM-T20II Utility Ver. x.xx
 - ☐ EpsonNet Config Ver. x.xx (Only for Ethernet connection)
 - ☐ EpsonNet Simple Viewer (Only for Ethernet connection)

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



9

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



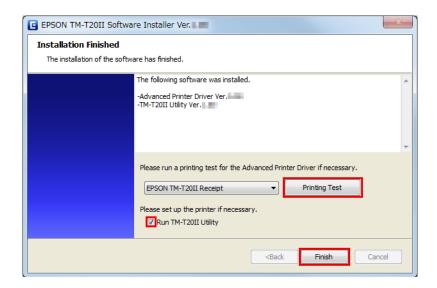
When the USB connection between the computer and printer is established, a pop-up message; **Installing device driver software** appears on the task tray, and the setup is automatically started. Proceed to Step 10 when the setting is finished.

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

10

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

When conducting test print	Click the PrintingTest button. When the test print is finished, click the Finish button to end the installation.
When exiting the installation	Uncheck the Run TM-T20II Utility . Then click the Finish button to end the installation.
When setting the printer using TM-T20II Utility continuously	Check the Run TM-T20II Utility checkbox (the box is checked by default). Click the Finish button to end the installation. The TM-T20II Utility starts to run. See "TM-T20II Utility" on page 55



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 41

Network Address Setting for Ethernet Printer

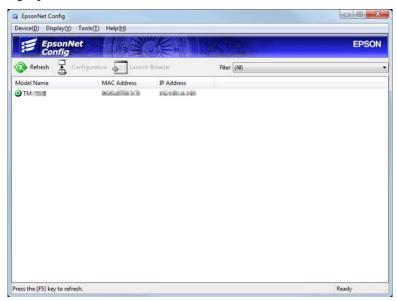
If you are using an Ethernet connection, configure the IP address using the EpsonNet Config.

Start the EpsonNet Config.

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

The **EpsonNet Config** screen appears.

Check that the target printer is listed in the screen.



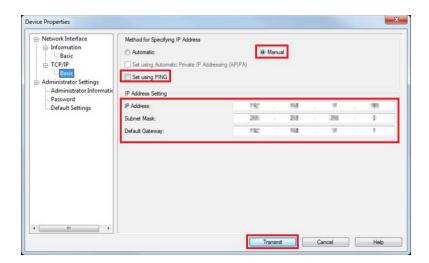
Select the printer you want to configure, then click the **Configuration** button.

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

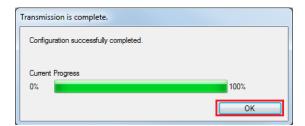
The **Device Properties** screen appears. Select the **Network Interface** - **TCP/IP** - **Basic**.

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.



- The confirmation screen appears. Click the **Yes** button.
- The configured settings are sent to the printer. After approx. 30 seconds, the completion screen appears. Click the **OK** button.



- Confirm the settings on the **EpsonNet Config** screen.
- 9 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.

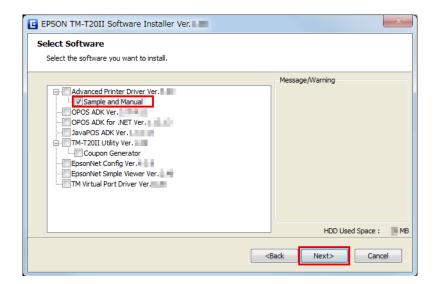
Insert the TM-T20II Software & Documents Disc into the computer. The TM-T20II Software Installer is automatically read and the **EPSON TM-T20II Software Installer** screen appears. Click the **Install Now** button.

When the **TM-T20II Software Installer** is not automatically read, double click the **TMInstallNavi.exe** icon in the TM-T20II Software & Documents Disc.

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

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



- The **Start Installation** screen appears. Click the **Install** button.
- The EPSON APD5 Sample&Manual InstallShield Wizard screen appears, click the Next button.
- The License Agreement screen appears. Read the content and select the I accept the terms in the license agreement. Then click the Next button.
- The **Ready to Install the Program** screen appears. Click the **Install** to install the sample programs and manual of Advanced Printer Driver.
- The InstallShield Wizard Complete screen appears. Click the Finish button.
- 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.

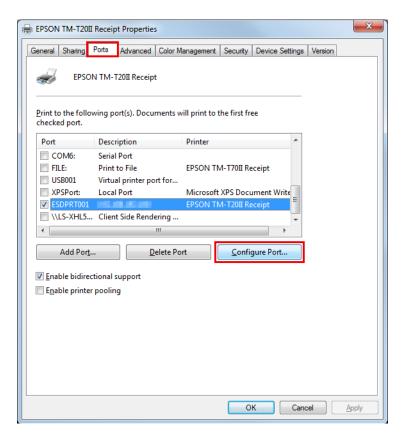
Configuring IP Address of the Printer Driver

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

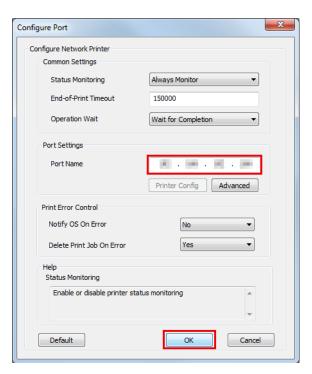
Select from **Start** - **Control Panel** - **Hardware and Sound** and open **Printers** and then right click the target printer driver and select **Properties**.

△ See "Differences Depending on the OS" on page 9

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

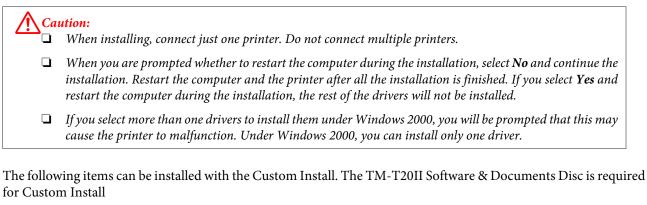


The **Configure Port** screen appears. Set a configure port while referring to the screen and click the **OK** button.



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

Custom Install



Advanced Printer Driver Ver.5	
☐ Sample and Manual	
OPOS ADK	
OPOS ADK for .NET	
JavaPOS ADK	
TM-T20II Utility	
☐ Coupon Generator	
EpsonNet Config	

☐ EpsonNet Simple Viewer

☐ Epson TM Virtual Port Driver

Displaying the Select Software Screen

The TM-T20II 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.



Insert the TM-T20II Software & Documents Disc into the computer. The TM-T20II Software Installer is automatically read and the **EPSON TM-T20II Software Installer** screen appears. Click the **Install Now** button.

Note

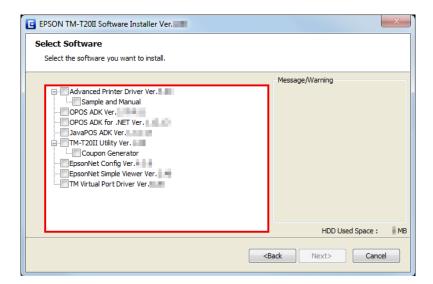
The displayed language can be changed from Select language.

When the TM-T20II Software Installer is not automatically read, double click the **TMInstallNavi.exe** icon in the printer driver CD.

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

- The **Select Installation Type** screen appears. Click the **Custom Install** button.
- 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-T20II 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.

- Insert the TM-T20II Software & Documents Disc into the computer and follow the steps.

 See "Displaying the Select Software Screen" on page 22
- 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.
- The Check Install screen appears. Check the Warning.

Check the computer environment and click **Next** to continue the installation.

Note

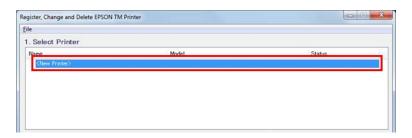
In the Warning, the versions of Epson driver/tool that can coexist with the APD5 are listed.

- The **License Agreement** screen is displayed. After checking the contents and selecting **Agree**, click **Install**.

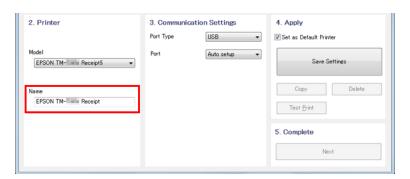
 Installation of Advanced Printer Driver Ver.5 begins.
- The **Printer Registration** screen appears.

 Here, connect the printer to the computer and turn the printer's power on. Click **Next**.
- The Register, Change and Delete EPSON TM Printer screen is displayed.

 From 1. Select Printer, select < New Printer>.

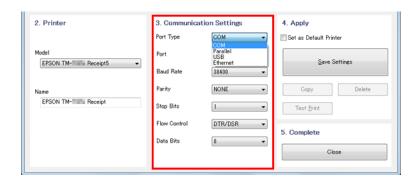


Set the followings from **2. Printer**.



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

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

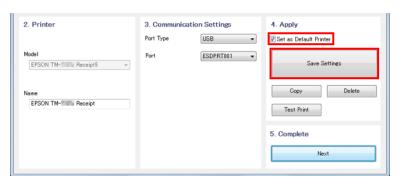


Port type	Item	Description	
СОМ		Communicate with serial port. Set the following communication setting.	
	Port	Specify the number of serial port used for connecting the printer.	
	Baud Rate	Specify the baud rate.	
	Parity	Specify the parity.	
	Stop Bits	Specify the stop bits.	
	Flow Control	Specify the method of data flow between the computer and the printer.	
	Data Bits	Specify the data bits.	
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 18	

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.

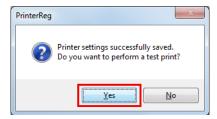
9 Set the followings from **4. Apply** and click **Save Setting**.



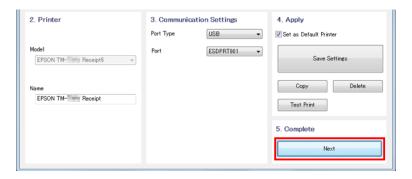
Item	Description
Set as Default Printer	Check when configuring the printer as that normally used from the Windows applications.

When the printer is registered, the screen comes up as shown below.

Click Yes. Test page printing of Windows is carried out.



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



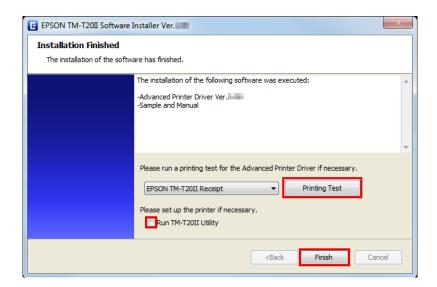
The **Installation Complete** screen appears.

Click **Close** to finish the installation.

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.

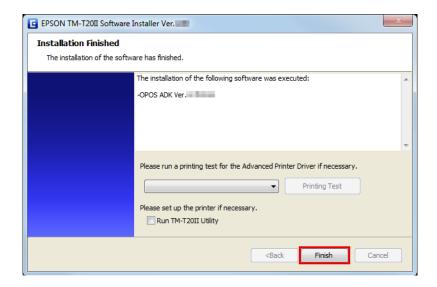
Installing the OPOS ADK

- Insert the TM-T20II Software & Documents Disc into the computer and follow the steps.

 See "Displaying the Select Software Screen" on page 22
- Check the **OPOS ADK Ver. x.xx**. Clear the check box for the items you do not want to install. Click the **Next** button.
- The **Start Installation** screen appears. The driver and utility to be installed are listed. Click the **Install** button to start the installation.
- The **Choose Setup Language** appears. Select your language, and click the **Next** button.
- The EPSON OPOS ADK for TM-T20II Version x.xx xxx appears. Click the Next button.
- 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.
- The **Setup Type** screen appears. Select **Developer** and then click the **Next** button.

 Click the **Browse** button to change the default installation location.
- The **Start Copying Files** screen appears. Click the **Next** button.
- The **Port selection** screen appears. Select the port. Click the **Next** button to start the installation.
- The **InstallShield Wizard Complete** screen appears. Click the **Finish** button.

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.

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.

- Insert the TM-T20II Software & Documents Disc into the computer and follow the steps.

 See "Displaying the Select Software Screen" on page 22
- 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.
- The **Start Installation** screen appears. The driver and utility to be installed are listed. Click the **Install** button to start the installation.
- 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.

- The **Welcome to the InstallShield EPSON OPOS ADK for .NET** screen appears. Click the **Next** button.
- The **License Agreement** screen appears. Read the content and select the **I accept the terms in the license agreement**. Click the **Next** button.
- The **Setup Type** screen appears. Select **Developer** and then click the **Next** button.

Click the **Browse** button to change the default installation location.

- The **Setup Type** screen appears. Select the port and click the **Next** button.
- The **Start Copying Files** screen appears. Click the **Next** button to start the installation.
- The **InstallShield Wizard Complete** screen appears. Click the **Finish** button.
- 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.

Installing the JavaPOS ADK

Note:

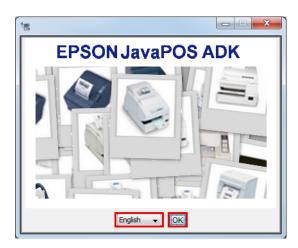
To install the JavaPOS ADK, Java Runtime Environment and Java Advanced Imaging API are required.

Make sure to install the above software before installing JavaPOS ADK.

- Insert the TM-T20II Software & Documents Disc into the computer and follow the steps.

 See "Displaying the Select Software Screen" on page 22
- 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.
- The **Start Installation** screen appears. The driver and utility to be installed are listed. Click the **Install** button to start the installation.

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

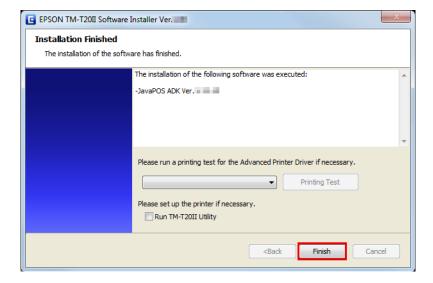


- The **Introduction** screen appears. Click the **Next** button.
- The License Agreement screen appears. Read the content and select the I accept the terms in the License Agreement. Click the Next button.
- The **Choose JVM** screen appears. Click the **Next** button.
- The **Choose Install Set** screen appears. Select **Developer** and then click the **Next** button.
- The **Choose Folder Location** screen appears. Click the **Next** button.
- The **Choose your communication** screen appears. Select the port and click the **Next** button.
- The **Location for jpos.xml** screen appears. Click the **Next** button.
- The **Pre-Installation Summary** screen appears. Click the **Install** button to start the installation.
- 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.

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-T20II Software & Documents Disc.

Easy Install installs TM-T20II Utility for a serial or USB connection, and for an Ethernet it installs TM-T20II Utility, EpsonNet Config and EpsonNet Simple Viewer.

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

- ☐ TM-T20II 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.

- Insert the TM-T20II Software & Documents Disc into the computer and follow the steps.

 See "Displaying the Select Software Screen" on page 22
- 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.
- The **Start Installation** screen appears. The drivers and utilities to be installed are listed. Click the **Install** button to start the installation.

TM-T20II 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.

EpsonNet Config is installed.

The installation is started without displaying any other screens.

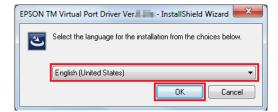
EpsonNet Simple Viewer is installed.

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.



- The Welcome to the EPSON TM Virtual Port Driver Ver. x.xx Setup Wizard screen appears. Click the Next button.
- The License Agreement screen appears. Read the content and select the I accept the terms in the license agreement. Then click the Next button.
- The **Ready to Install the Program** screen appears. Then click the **Install** button.
- When the following screen appears, click the **Restart Later** button.

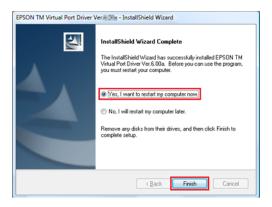
Note:

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

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.

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.

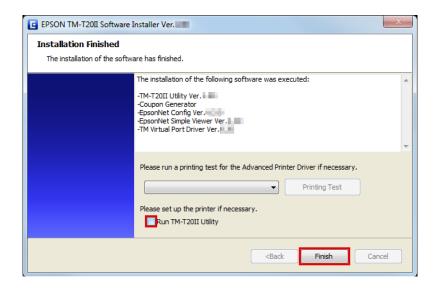
When exiting the installation:

Uncheck the **Run TM-T20II Utility** (the box is unchecked by default). Then click the **Finish** button to end the installation.

When setting the printer using TM-T20II Utility continuously:

Check the **Run TM-T20II Utility** checkbox. Click the **Finish** button to end the installation. The TM-T20II Utility starts to run.

△ See "TM-T20II Utility" on page 55



This is the end of the utility installation.

Adding a printer to a Windows2000 PC

If your printer is a serial type, and your OS is Windows 2000, install Advanced Printer Driver as follows.

- In Windows2000's **Printers**, double click **Add Printer**. The **Add Printer** wizard starts up.
- Follow the instructions shown on the screen. Select Local Printer, and turn off Automatically detect and install my Plug and Play printer..
- 3 Select a COM port to connect the printer.
- Select **Have Disk** then **Browse**, and then select the following INF files on the CD-ROM. root/Windows/Advanced Printer Driver/V5_INF/Driver/EA5INSTMT20II.INF
- Select a driver to install, then install it.
- In Windows2000's **Printers**, the printer's queue is created.

Update Mode



- 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.

Insert the TM-T20II Software & Documents Disc into the computer. The TM-T20II Software Installer is automatically read and the **EPSON TM-T20II Software Installer** screen appears. Click the **Install Now** button.

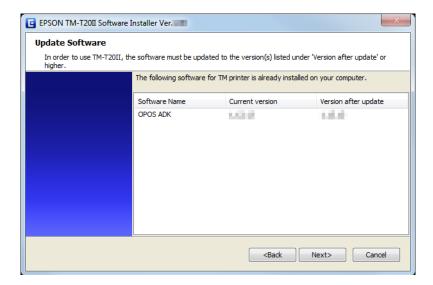
Note:

The displayed language can be changed from Select language.

When the TM-T20II Software Installer is not automatically read, double click the **TMInstallNavi.exe** icon in the TM-T20II Software & Documents Disc.

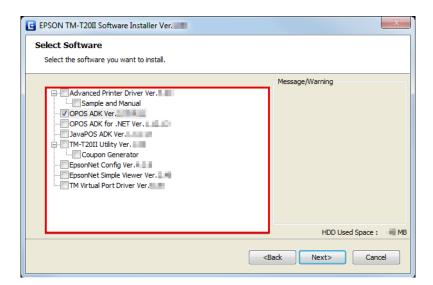
The License Agreement screen appears. Read the content and select the I accept the terms in the license agreement. Then click the Next button.

The **Update Software** screen appears. The system is checked and existing driver and its version are displayed. Click the **Next** button.



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

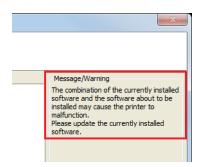


The installer checks the validity of the update or the combination of the drivers. A warning message is displayed if the combination can cause the printer to malfunction. Check the screen for the warning message, and click the **Next** button.

When you click the **Next** button with the warning message displayed, a warning screen appears. Click the **OK** button to proceed to Step 7.

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.



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

Uninstallation

- ☐ Uninstall the printer driver
- ☐ Uninstall the TM-T20II 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**.

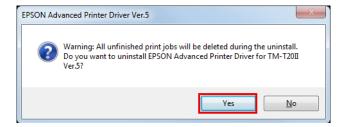
See "Differences Depending on the OS" on page 9

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.

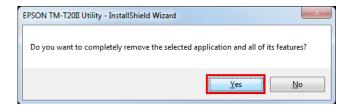
- Select Start Control Panel Uninstall a program EPSON Advanced Printer Driver for TM-T20II Ver.5 and click Uninstall.
- The uninstallation confirmation screen appears. Click the **Yes** button.

The Advanced Printer Driver Ver.5 is uninstalled.



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.



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

Uninstalling the TM-T20II Utility

- Quit all applications running on the computer.
- Select Start Control Panel Uninstall a program EPSON TM-T20II 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.

- The TM-T20II Utility uninstallation confirmation screen appears. Click the **Yes** button.
- The uninstallation of the TM-T20II Utility starts.
- The **Uninstall Complete** screen appears. Click the **Finish** button to finish the uninstallation.

Uninstall the EpsonNet Config

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.

- The EpsonNet Config uninstallation confirmation screen appears. Click the **Yes** button.
- The uninstallation of the EpsonNet Config starts.
- The **Uninstall Complete** screen appears. Click the **Finish** button to finish the uninstallation.

Uninstalling the Epson TM Virtual Port Driver

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.

- The Epson TM Virtual Port Driver uninstallation confirmation screen appears. Click the **Yes** button.
- The uninstallation of the Epson TM Virtual Port Driver starts.
- 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.

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.

The **Uninstall Confirmation** window appears. Click on the **Yes** button. This tool will be uninstalled.

- 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.
- The **Uninstall or change a program** window appears. Double-click on **EpsonNet SDK for Windows**.
- The **Uninstall Confirmation** window appears. click on the **Yes** button. The EpsonNet SDK for Windows will be uninstalled.
- 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

- Quit all applications running on the computer.
- 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.

- The EPSON OPOS ADK uninstallation confirmation screen appears. Click the **Yes** button.
- The **Information** screen appears. Click the **Yes** button.
- The **ADK Selection** screen appears. Click the **Next** button.
- The Confirm Deletion screen appears. Click the Start button.
- 7 The uninstallation of the EPSON OPOS ADK starts.
- 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

Quit all applications running on the computer.

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.

- The EPSON OPOS ADK for .NET uninstallation confirmation screen appears. Click the **Yes** button.
- The uninstallation of the EPSON OPOS ADK for .NET starts.
- The completion screen appears. Click the **Finish** button to complete the uninstallation.

Uninstalling the JavaPOS ADK

- Quit all applications running on the computer.
- 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.

- The **Uninstall Epson JavaPOS ADK** screen appears. Click the **Uninstall** button.
- The uninstallation of the EPSON JavaPOS ADK starts.
- 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

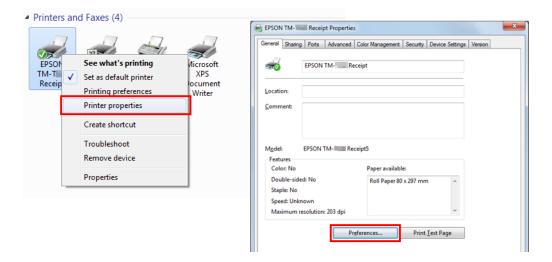
- Accessing the printer driver from the printer driver's Print menu
 The print settings you made on the printer driver are applied to the print settings of the all users configured on the computer. You must have administrative privileges to make the settings.
- ☐ Accessing the printer driver from the 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.

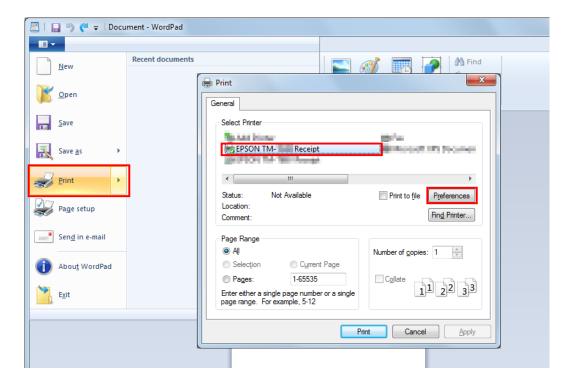
Accessing from the Printer Driver's Print menu



Accessing from the Printer Driver's Properties



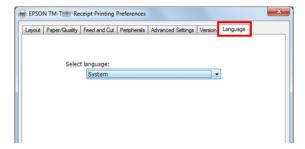
Accessing from the Application's Print Setting Menu



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.

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



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 43

The "Peripheral Device's Action Settings" on page 45

△ "Logo Printing" on page 47

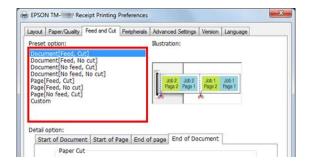
Paper Feed and Cut Setting

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

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

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:

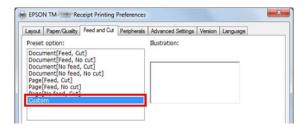
- ☐ Feed: Paper is fed to the auto-cutter's cutting position after printing a document.
- □ No Feed: Paper is not fed after printing a document.

Customization of Paper Feed and Cut

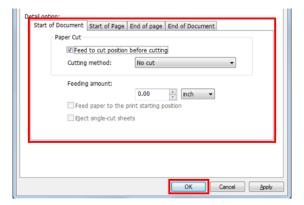
Customization is possible, when no preset function is desired, such as specifying the amount of paper feed and modifying the timing control.

Follow the steps below.

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



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



Settings are described below.

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.



Option buzzer can be operated only with the APD5 utility.

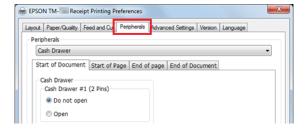
See "Buzzer" on page 46

How to Setup

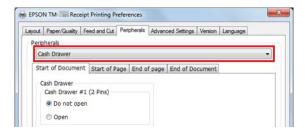
Follow the steps below.



Select Peripherals tab from Printing Preferences.

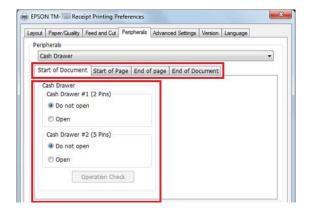


From the **Peripherals** pull down list, select the combination of peripheral device to be connected to the printer.



Select the timing to set the peripheral device settings.

See "Setting of Peripheral Device" on page 46



4

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.

Peripherals	Setting Value	Description
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 47
- ☐ 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 2047×831 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:

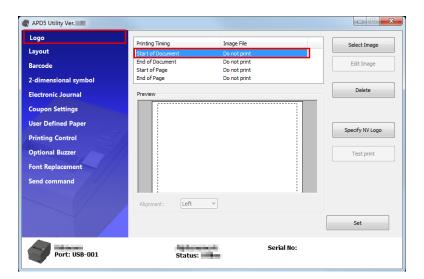
When using a serial interface, it is recommended to register a logo to the printer. For detail, see Advanced Printer Driver Ver.5 Printer Manual.

Follow the steps below to register a logo and print.

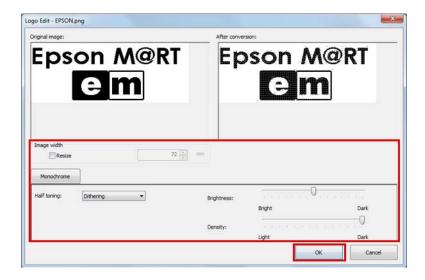
- 1 Launch the APD5 utility.
- 2 Select Logo.

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.



- Click **Select Image** to specify the logo to print.
- 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)

ltem	Description
Half toning	Setup the half-toning type. Select from Dither / Error Diffusion / None .
Brightness	Setup the brightness. Select from 5 levels.
Density	Setup the printing density.

6 Click Set.

The logo is registered to the driver.

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



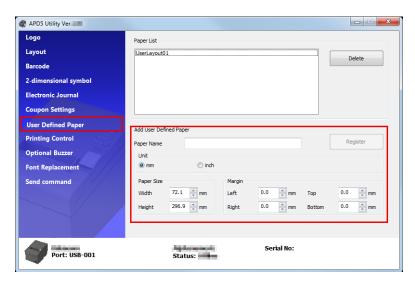
Advanced Method

- ☐ ☐ "User Defined Paper Setting" on page 49
- ☐ 🏂 "Barcode Printing" on page 51
- ☐ ② "2 dimensional symbol Printing" on page 51
- ☐ "Coupon Printing" on page 52
- ☐ "Buzzer Settings" on page 53

User Defined Paper Setting

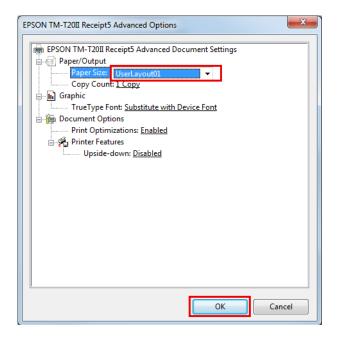
Regular paper size can be printed using the user defined paper setting. It cannot expand/reduce according to the printer's paper width.

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 Preferences - Layout .
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).

- Reopen **Printing Preferences** and select the **Layout** tab. Click **Advanced** and detail document setting of the printer appears.
- From the paper size, select the user defined paper you defined. Click **OK**.



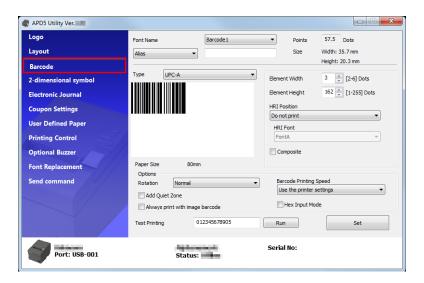
Barcode Printing

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.



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

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



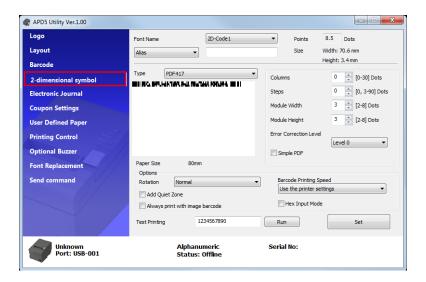
- Specify a barcode font to barcode data using the application.
- Barcode is printed based on the settings of the APD5 utility.

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.

2 dimensional font can be set from **2-dimensional symbol** of the APD5 utility.

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

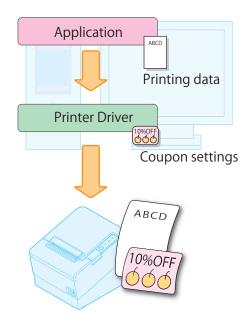


- Specify a 2 dimensional font to 2 dimensional data using the application.
- 2 dimensional symbol is printed based on the settings of the APD5 utility.

Coupon Printing

APD5 provides the coupon printing function.

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



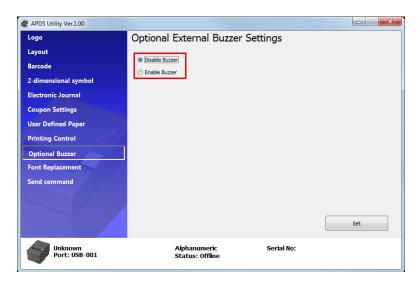
Note:

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

Buzzer Settings

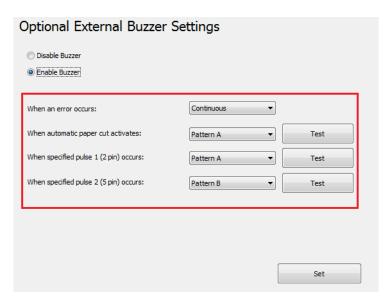
Allows you to configure whether an external optional buzzer is used and the buzzer pattern settings. Configure as follows.

- Click the **Optinal Buzzer** menu.
- 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 optional buzzer sounds and the buzzer pattern.



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

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



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

0	Other Convenient Functions		
Pri	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.		

TM-T20II Utility

This chapter explains how to use the TM-T20II Utility that configures this printer.

Overview



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

TM-T20II Utility provides the following functions.

For general users

Operation Check: See "Operation Check" on page 63
Electronic Journal *1 *2 *3
Storing Logos:

- ☐ Coupon Settings *1 *2 *3
- ☐ Paper Reduction: ☐ See "Paper Reduction Settings" on page 70
- ☐ Automatic Paper Cut: ☐ See "Automatic Paper Cut Settings" on page 71

For printer administrators

- ☐ Printing Control: ☐ See "Printing Control Settings" on page 73
- ☐ Font: ☐ See "Font Settings" on page 75
- ☐ Buzzer Settings: ☐ See "Buzzer Settings" on page 76
- ☐ Communication I/F: ☐ See "Communication I/F Settings" on page 77
- ☐ Setting Backup/Restore: ☐ See "Setting Backup/Restore" on page 80

Starting the TM-T20II Utility

Starting the TM-T20II Utility

Activate the TM-T20II Utility as follows.

^{*1} Cannot be used on Windows 2000.

^{*2} If the coupon driver or Epson TM Virtual Port DriverVer.8 is not installed, this is disabled.

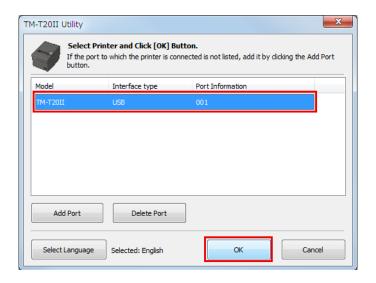
^{*3} For details, refer to the TM-T20II Utility User's Manual.

If you have checked **Run TM-T20II Utility** at Step 10 of Easy Install procedure, start from Step 2.

- Select Start All Programs EPSON TM-T20II Software TM-T20II Utility.
- 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-T20II 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-T20II Utility" on page 57.



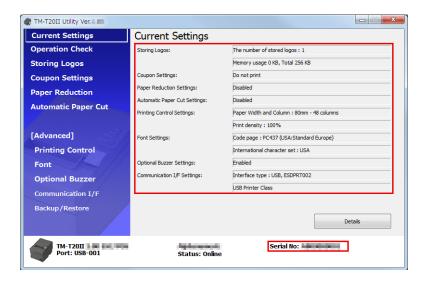
Note:

- ☐ 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-T20II Utility" on page 57
- ☐ To delete a port, select the port and click the **Delete Port** button.
- The TM-T20II 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-T20II Utility, or check the serial number on one of the sides of the printer and the serial number of TM-T20II Utility.

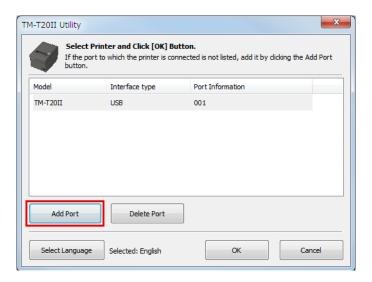
When executing TM-T20II Utility for the first time, it does not boot if the communication with the printer cannot be established. Once the communication is established, the utility can boot using the previous printer setting information even if it is offline.



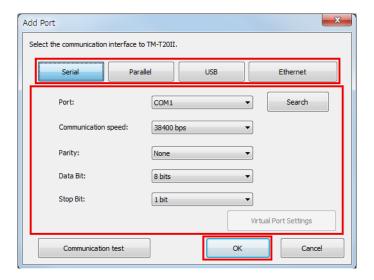
Adding a Communication Port and Starting the TM-T20II Utility

Add a communication port as follows:

- Select Start All Programs EPSON TM-T20II Software TM-T20II Utility.
- The following screen appears. Click the **Add Port** button.



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

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.

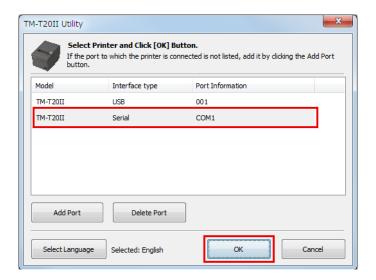
□ Ethernet

Setting	Description
IP Address:	Configures the IP address of the printer you use.
Search	Searches for the TM-T20II 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.

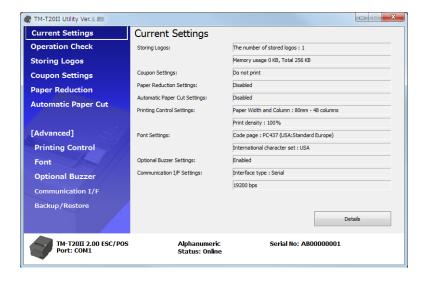
Note:

If no TM-T20II with its IP address configured is displayed even after clicking the \pmb{Search} button, enter the IP address of TM-T20II directly to \pmb{IP} $\pmb{Address}$:

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

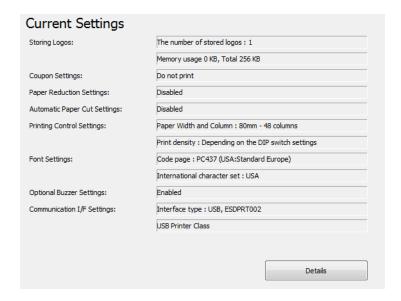


The TM-T20II Utility is started.



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.	
Optional Buzzer Settings:	Displays the buzzer settings.	
Communication I/F:	Displays the communication setting of the port.	
Details	Displays information of interface, and maintenance counters. See "Details" on page 61	

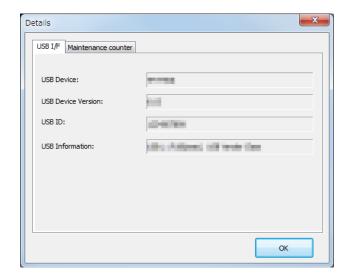
^{*1} If the coupon driver or Epson TM Virtual Port Driver Ver. 8 is not installed, this won't be displayed.

Details

Interface Information

Note

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



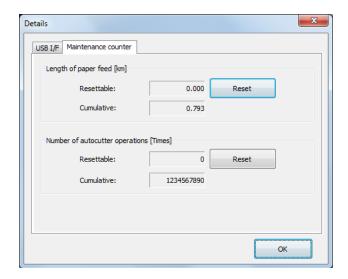
□ USB I/F

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.	

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

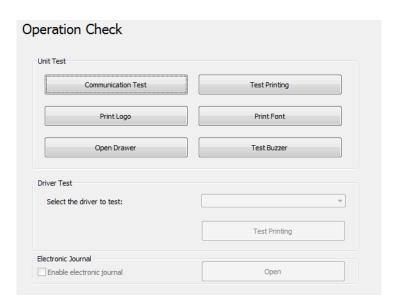
Operation Check

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

Configure as follows.



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.

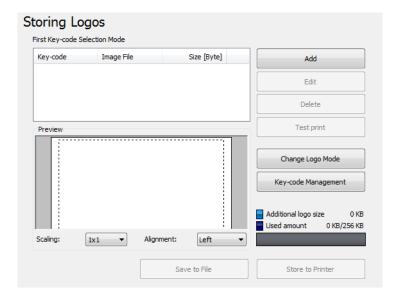
☐ Electronic Journal

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.

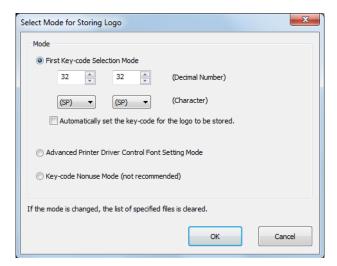
This section describes how to configure logos to be stored on the printer. The utility allows you to print your logo already stored on the printer, but you cannot edit and restore it as a file. When using the OPOS to store your logo, see "Storing Logos" on page 86.



Storing Logos has the following functions.

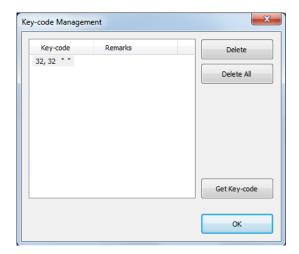
Setting	Description	
Key Code List	Displays the logos registered in the printer and the logos to be added in the printer. The logos registered in the printer have at the beginning of the Key-code.	
Add	Adds logo data on the list.	
Edit	Edits the halftone and brightness settings of the selected logo data.	
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 Select Mode for Storing Logo screen.	
Key-code Management	Displays Key-code Management screen.	
Preview	Displays the logo image to be stored on the printer. Logo images stored on the printer are not displayed.	
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.

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



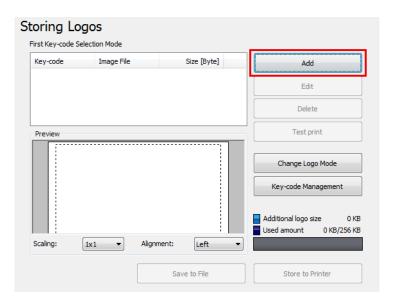
Setting	Description
Get KeyCode	Obtains registered Key-code numbers.

Adding a Logo

Add a logo as follows.

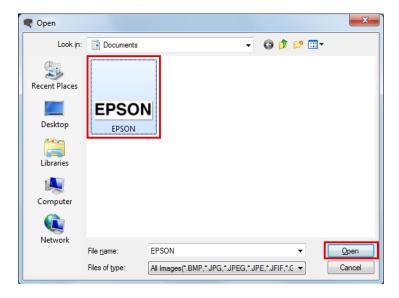


Click the **Add** button.

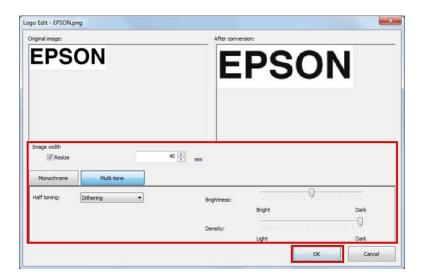


2 Specify the image data to be used as a logo.

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 \mathbf{OK} button and reduce the logo size in the \mathbf{Logo} \mathbf{Edit} screen of step 3.



The **Logo Edit** screen appears. 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.

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.

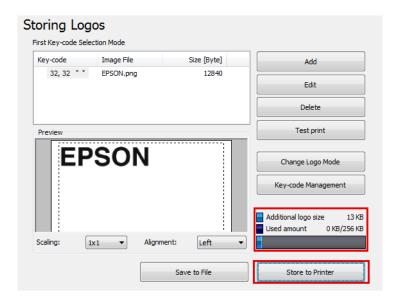
If the logo mode is **First Key-code Selection Mode** and **Automatically set the keycode for the logo to be stored.** is not turned on, the **Key-code Settings** screen is displayed. Set a Key-code and click the **OK** button.

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.

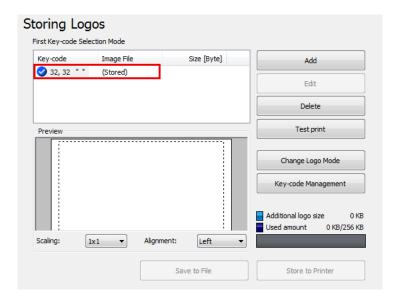


The logo data is added on the list. When storing multiple logo data, repeat Step 1 through 4.

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.



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.

- Prepare all the logo data to add to the printer.
- 2 Delete all the logo already stored on the printer.

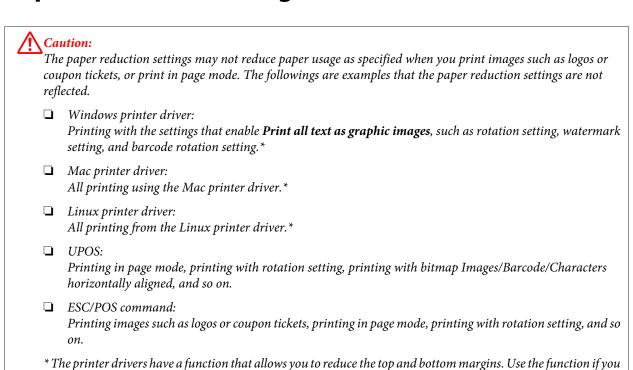
See "Storing Logos" on page 64

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 67

Paper Reduction Settings



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

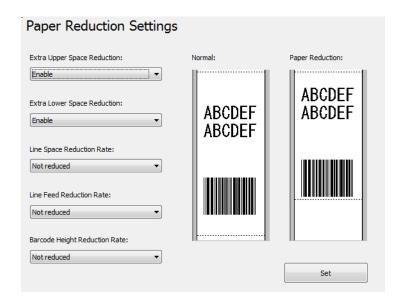
want to save paper. For more details, see the manual of the printer driver.



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.

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

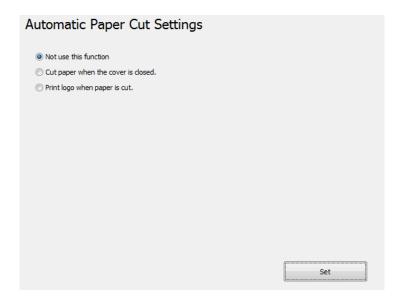
Allows you to configure whether to cut paper and print a logo when the cover is closed.



- ☐ 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-T20II Utility User's Manual.)

Configure as follows.

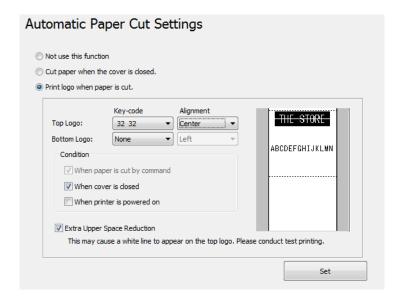
- Click the **Automatic Paper Cut** menu.
- Click the item you want to check.



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. Key-code: Selects the Key-code of the logo to be printed. Alignment: Selects the logo print position.
Bottom Logo	Sets the logo that is printed at the bottom of the paper. Key-code: Selects the Key-code of the logo to be printed. Alignment: Selects the logo print position.
Condition	 Sets the condition for top logo printing. When paper is cut by command: The checkmark cannot be removed from this checkbox. When cover is closed: Sets whether the top logo is printed when the cover is closed. 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 Top Logo is printed.
Extra Upper Space Reduction:	Selects whether to reduce the top margin when printing the logo configured at Top Logo . You can select this function only when Top Logo is selected. 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.

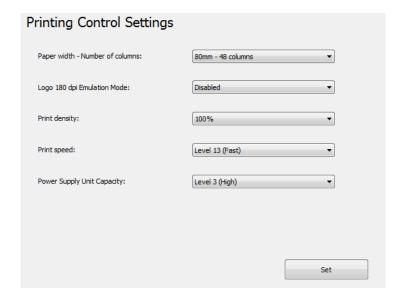
4

Click the $\bf Set$ 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.

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



Setting	Description
Paper width:	Selects the paper width.
Logo 180 dpi Emulation Mode:	Enables or disables Logo 180 dpi Emulation Mode .
	Logo 180 dpi Emulation Mode allows you to print logos created for 180dpi printers on the same position and in the size when using TM-T20. However, Storing Logos (See "Storing Logos" on page 64), allows you to freely adjust the size of logos when adding/editing them. So it is recommended to use Storing Logos when adjusting the size of logos.
Print density:	Selects the print density.
Print speed:	Selects the print speed.
Power Supply Unit Capacity:	Selects the capacity level of the power supply unit connected to the printer.



☐ 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**.

No:	te: You make any of the following settings different from that of the printer driver, the printer driver setting is used.
	Print density
	Print speed
	Paper width

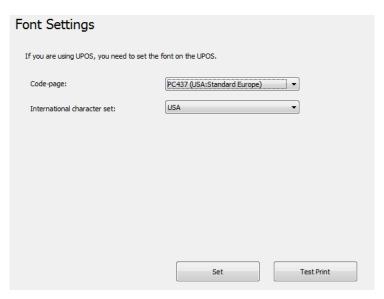
Click the **Set** button. The settings are reflected to the printer.

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.
- $oldsymbol{\Box}$ When using the OPOS ADK, the code page configured in OPOS becomes enabled.
- Click the **Font** menu.
- 2 Configure the following.



Setting	Description
Code-page:	Selects the Code Page of the printer font.
International character set:	Selects an international character set.

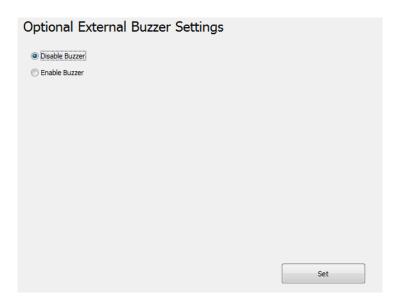
Click the **Set** button. The settings are reflected to the printer.

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

Buzzer Settings

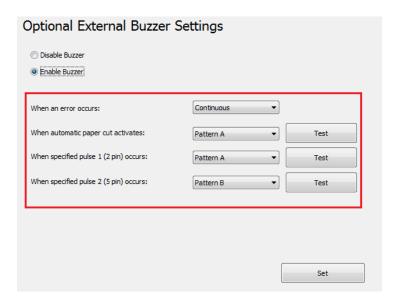
Allows you to configure whether an external optional buzzer is used and the buzzer pattern settings. Configure as follows.

- Click the **Optional Buzzer** menu.
- 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 optional 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.
When specified pulse 1 (2 pin) occurs:	Configure the buzzer setting when the specified pulse is generated.
When specified pulse 2 (5 pin) occurs:	Configure the buzzer setting when the specified pulse is generated.
Buzzer:	Test the buzzer. Select a sound pattern. To test the buzzer sound, click the Test button.

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.

- 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.
- Make the communication settings.

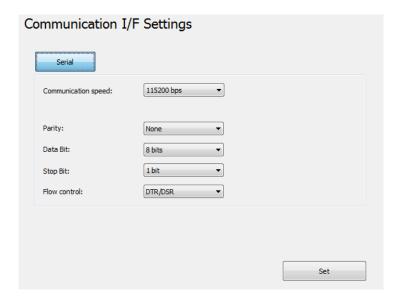
Serial	Configures the serial communication. 🗗 See "Serial" on page 78
USB	Configures the USB communication. 🗗 See "USB" on page 78
Ethernet	Configures the IP address.

3

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

Serial

Configures the serial communication.



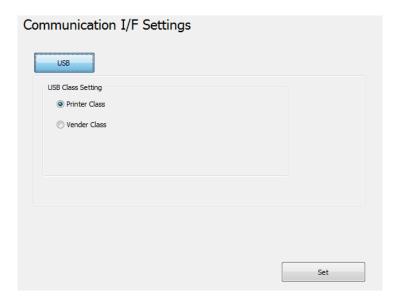
Setting	Description
Communication speed:	Selects the communication speed.
Parity:	Configures the parity.
Data Bit:	Configures the data bit.
Stop Bit:	Configures the stop bit.
Flow control:	Configures the flow control.

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.



- ☐ 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

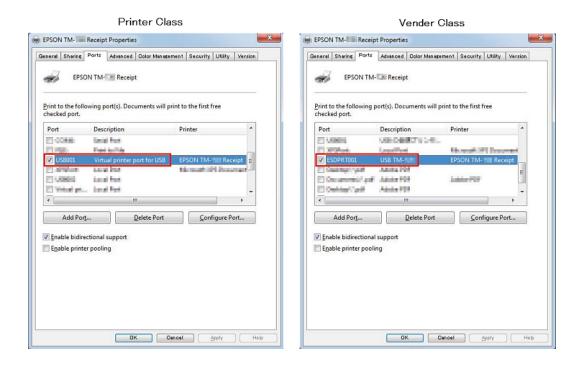
Port: USBxxx

Description: Virtual printer port for USB

Vender Class

Port: ESDPRTxxx

Description: USB TM-T20II



Ethernet

Starts EpsonNet Config, and configures network addresses.



Setting	Description
Advanced settings	Starts EpsonNet Config when the Advanced settings 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.

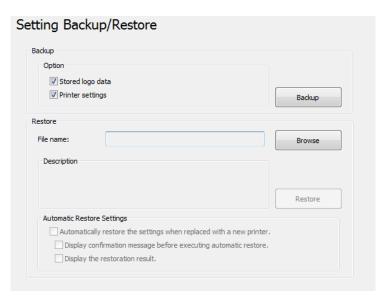


- On the environment with no Advanced Printer Driver, OPOS, OPOS for .NET, or JavaPOS installed, **Automatic Restore Settings** is disabled.
- Automatic Restore Settings cannot be saved or restored. If you want to copy coupon settings on another printer, refer to TM-T20II Utility User's Manual.

Saving the Printer Settings to a File

Save the settings as follows:

- 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. ⑤ See "Logo Store File" on page 69
- ☐ 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.)

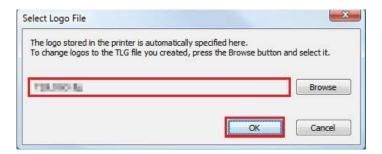
Automatic paper cut setting

Optional buzzer settings

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

If Stored logo data was selected in step 2.	Go to step 4.
If Stored logo data was not selected in step 2.	Go to step 5.

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:

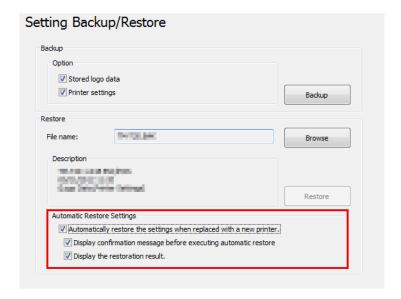
- Click the Backup/Restore.
- Click the **Browse** button, and specify the printer setting file to be restored.



- 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.

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 befor 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-T20II Utility incorporate compression code from the Info-ZIP group.

This is version 2009-Jan-02 of the Info-ZIP license. The definitive version of this document should be available at ftp://ftp.info-zip.org/pub/infozip/license.html indefinitely and a copy at http://www.info-zip.org/pub/infozip/license.html.

Copyright (c) 1990-2009 Info-ZIP. All rights reserved.

For the purposes of this copyright and license, "Info-ZIP" is defined as the following set of individuals: Mark Adler, John Bush, Karl Davis, Harald Denker, Jean-Michel Dubois, Jean-loup Gailly, Hunter Goatley, Ed Gordon, Ian Gorman, Chris Herborth, Dirk Haase, Greg Hartwig, Robert Heath, Jonathan Hudson, Paul Kienitz, David Kirschbaum, Johnny Lee, Onno van der Linden, Igor Mandrichenko, Steve P. Miller, Sergio Monesi, Keith Owens, George Petrov, Greg Roelofs, Kai Uwe Rommel, Steve Salisbury, Dave Smith, Steven M. Schweda, Christian Spieler, Cosmin Truta, Antoine Verheijen, Paul von Behren, Rich Wales, Mike White.

This software is provided "as is," without warranty of any kind, express or implied. In no event shall Info-ZIP or its contributors be held liable for any direct, incidental, special or consequential damages arising out of the use of or inability to use this software.

Permission is granted to anyone to use this software for any purpose, including commercial applications, and to alter it and redistribute it freely, subject to the above disclaimer and the following restrictions:

- 1. Redistributions of source code (in whole or in part) must retain the above copyright notice, definition, disclaimer, and this list of conditions.
- 2. Redistributions in binary form (compiled executables and libraries) must reproduce the above copyright notice, definition, disclaimer, and this list of conditions in documentation and/or other materials provided with the distribution. Additional documentation is not needed for executables where a command line license option provides these and a note regarding this option is in the executable's startup banner. The sole exception to this condition is redistribution of a standard UnZipSFX binary (including SFXWiz) as part of a self-extracting archive; that is permitted without inclusion of this license, as long as the normal SFX banner has not been removed from the binary or disabled.
- 3. Altered versions--including, but not limited to, ports to new operating systems, existing ports with new graphical interfaces, versions with modified or added functionality, and dynamic, shared, or static library versions not from Info-ZIP--must be plainly marked as such and must not be misrepresented as being the original source or, if binaries, compiled from the original source. Such altered versions also must not be misrepresented as being Info-ZIP releases--including, but not limited to, labeling of the altered versions with the names "Info-ZIP" (or any variation thereof, including, but not limited to, different capitalizations), "Pocket UnZip," "WiZ" or "MacZip" without the explicit permission of Info-ZIP. Such altered versions are further prohibited from misrepresentative use of the Zip-Bugs or Info-ZIP e-mail addresses or the Info-ZIP URL(s), such as to imply Info-ZIP will provide support for the altered versions.
- 4. Info-ZIP retains the right to use the names "Info-ZIP," "Zip," "UnZip," "UnZipSFX," "WiZ," "Pocket UnZip," "Pocket Zip," and "MacZip" for its own source and binary releases.

Application Development Information

Application Development Information

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.

Driver

Printer Driver

☐ Install Manual

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.

	Printer Manual
	Printer Specification for TM-T20II
	Status API Manual
UF	Pos
cor effi	is stands for Unified Point of Service . It is the standard specification of POS market, which defines drivers for ntrolling POS peripheral devices in various operation environments. Using the driver, you can develop POS system ciently because you do not need to newly create commands. The following TM-T20II drivers that conform to POS 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.
EPS	SON OPOS ADK
	OPOS Installation Manual

Application Development Information

ES	SC/POS Commands		
	* 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.		
	JavaPOS ADK Installation Guide		
EPSON JavaPOS ADK for Windows			
	Application Development Guide (POSPrinter TM-T20II)		
	User's Reference (SetupPOS)		
	UnifiedPOS Retail Peripheral Architecture*		
	OPOS ADK for .NET Installation Guide		
EPS	SON OPOS ADK for .NET		
	Sample Program Guide		
	UnifiedPOS Retail Peripheral Architecture*		
	Application Development Guide		
	User's Manual		

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.

Refer to the ESC/POS Quick Reference for a simple explanation of the ESC/POS command. A detailed explanation of the ESC/POS command is included in the ESC/POS Application Programming Guide. You can obtain this guide by signing a non-disclosure agreement with Epson.

Storing Logos

Ca	ution: You cannot store UPOS SetBitmap logos and logos configured using TM-T20II Utility in the same printer. When a SetBitmap logo is stored, it overwrites and deletes an existing TM-T20II Utility logo.
The proce	edure to store logos differs by your system configuration as follows.

☐ When using the OPOS and Advanced Printer Driver on the same system

☐ When using the Advanced Printer Driver only Use TM-T20II Utility to store logos.

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-T20II 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/

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.