EPSON
EXCEED YOUR VISION

TM-P20

Software User's Manual

M00083001 EN

Cautions and Trademarks

Cautions

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ESC/POS Command System

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

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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.

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-P20 Software & Documents Disc for the product users or development engineers who use the software.

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Overview

TM-P20 provides the various drivers and utilities for Windows operating systems and smart devices.

You can install the drivers and utilities for Windows using TM-P20 Software & Documents Disc. For the installation, see "Installation" on page 13.
For the provided drivers and utilities for Windows, see "Drivers and Utilities to be Installed" on page 6.

The following driver (SDK) and utility are provided for smart devices.

- ePOS-Print SDK
  ePOS-Print SDK is a Software Development Kit (SDK) for developers creating applications that can print from EPSON TM printers. For details, see "ePOS-Print SDK" on page 67.

- Epson TM Utility
  A wizard guides you through connecting an iOS or Android device to your printer. You can also check and change the printer's settings. For details, see "Epson TM Utility" on page 64.

TM-P20 Software & Documents Disc

This chapter describes how to use the TM-P20 Software & Documents Disc.

TM-P20 Software Installer

TM-P20 Software Installer allows you to install various drivers and utilities for the TM-P20 to Windows PC.

Drivers and Utilities to be Installed

Drivers

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

Utilities

- TM-P20 Utility
  A utility for checking and changing various printer settings. Use this utility to:
  - Check the current settings
  - Test operation
  - Store logos
  - Set paper saving
  - Set printing control
  - Set communication interfaces
  - Save / restore settings

TM-P20 Software & Documents Disc

- EpsonNet Config
  A network setting tool for Epson network products. In the case of this printer, you can use this tool to check and/or set network parameters by connecting the Wi-Fi model to a computer for setup via the USB interface.

- Epson Monitoring Tool
  Use to check a list of status for the Epson printers connected to the network. You can also update certificates for multiple printers used for WPA-Enterprise in a batch.

- Epson TM Bluetooth Connector
  Use to pair a Bluetooth printer and associate the generated Bluetooth port with that used by the driver and applications.

- Epson Deployment Tool
  Use to make network and printer settings simultaneously, via USB. Allows you to make settings efficiently at the time of introducing TM printers for the first time, or when configuring multiple TM printers at the same time.

- Epson TM Virtual Port Driver
  This is a serial / parallel-USB / Ethernet change driver for accessing a USB / Ethernet interface from a POS application as virtual serial/parallel ports. You can use the USB / Ethernet-connected printer from the application as though the printer is serial printer. Because the tool performs the conversion automatically, you do not need to change the application's ESC/POS commands that controls the printer connected via serial / parallel port.

Support OS

The following lists the supported operating systems for running the TM-P20 drivers and utilities.

- Windows 8.1 (32 bit / 64 bit [*1])
- 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 Server 2012 R2(64 bit [*1])
- 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 [*2]
- Windows Embedded POSReady 2009 [*2]

[*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] Epson Monitoring Tool is not supported.

TM-P20 Software & Documents Disc

Restrictions on Using Multiple Drivers on the Same System

TM-P20 Software Installer may not install the driver, or if the driver can be installed, the combination of the existing driver and the newly installed driver may not be supported. Refer to the following table.

Before TM-P20 driver is installed	TM-P20 Software Installer			
	A	B	C	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 Ver.4.50 to 4.53	-	✓	✓	✓
Advanced Printer Driver Ver.4.54 or later	✓	✓	✓	✓
OPOS ADK Ver.2.67 former	-	!	-	-
OPOS ADK Ver.2.68 or later	✓	!	✓	-
OPOS ADK for .NET Ver.1.11.8 former	-	-	!	-
OPOS ADK for .NET Ver.1.11.20 or later	✓	✓	!	-
JavaPOS ADK Ver.1.11.18 former	-	-	-	!
JavaPOS ADK Ver.1.11.20 or later	✓	-	-	!
TM-S1000 Driver	✓	✓	✓	-
TM-S9000/2000 Driver	✓	✓	✓	-
TM-J9000 OPOS ADK	✓	✓	✓	-
TM-J9000 Advanced Printer Driver	✓	✓	✓	-
TM-J9000 Status API	✓	✓	✓	-
TMCOMUSB Ver.2	-	-	-	-
TMCOMUSB Ver.3 and Ver.4. or Epson TM Virtual Port Driver Ver.5 to Ver.7.00	-	✓	✓	✓
Epson TM Virtual Port Driver Ver.7.10a or later	✓	✓	✓	✓
Epson InkJet Printer Driver	✓	✓	✓	✓

TM-P20 Software & Documents Disc

A : Advanced Printer Driver Ver.5.x
B : OPOS ADK Ver.2.7x (TM-P20)
C : OPOS ADK for .NET Ver.1.12.x (TM-P20)
D : JavaPOS ADK for Windows Ver.1.13 (TM-P20)
✓ : Supported
- : Not supported
* : Can not be installed.
! : TM-P20 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 8/8.1) - **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 Ver.5 Manual" on page 30

❏ OPOS ADK
Start - **All Programs** / **All apps**(Windows 8/8.1) - **OPOS** - **Manual**

❏ OPOS ADK for .NET
Start - **All Programs** / **All apps**(Windows 8/8.1) - **EPSON OPOS for .NET** - **Manual**

❏ JavaPOS ADK for Windows
Start - **All Programs** / **All apps**(Windows 8/8.1) - **Epson JavaPOS ADK** - **Documentation**

❏ TM-P20 Utility
Except Windows 8/8.1:
Start - **All Programs** - **EPSON** - **TM-P20 Software** - **TM-P20 Utility User's Manual**
Windows 8/8.1:
Start - **All apps** - **EPSON TM-P20** - **EPSON TM-P20 Utility User's Manual**

❏ Epson Monitoring Tool
Start - **All Programs** / **All apps**(Windows 8/8.1) - **Epson** - **Epson Monitoring Tool** - **Epson Monitoring Tool 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.

TM-P20 Software & Documents Disc

Item	Description
Confirmation and setting of the printer driver	Windows 8/8.1 **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**.
Starting the TM-P20 Utility	Windows 8/8.1 **Start** - **All apps** - **EPSON TM-P20** - **EPSON TM-P20 Utility** Windows 7 **Start** - **All Programs** - **EPSON** - **TM-P20 Software** - **TM-P20 Utility** Windows Vista **Start** - **All Programs** - **EPSON** - **TM-P20 Software** - **TM-P20 Utility** Windows XP **Start** - **All Programs** - **EPSON** - **TM-P20 Software** - **TM-P20 Utility**
Uninstall a program	Windows 8/8.1 **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**

Viewing the User's Manual

❏ Software User's Manual (this manual):
Explains about TM-P20 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-P20 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-P20, or to develop or design a printer application for TM-P20.

The following is how to view the manuals.

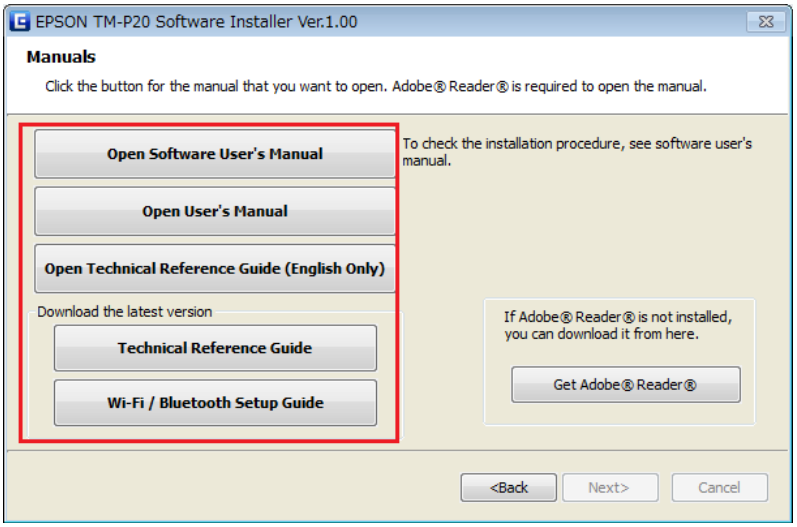
TM-P20 Software & Documents Disc

1 Insert the TM-P20 Software & Documents Disc to the computer. The TM-P20 Software Installer is automatically read and the **EPSON TM-P20 Software Installer** screen appears. Click the **Manuals** button.

When the TM-P20 Software Installer is not automatically read, double click the **TMInstallNavi.exe** icon in the TM-P20 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.

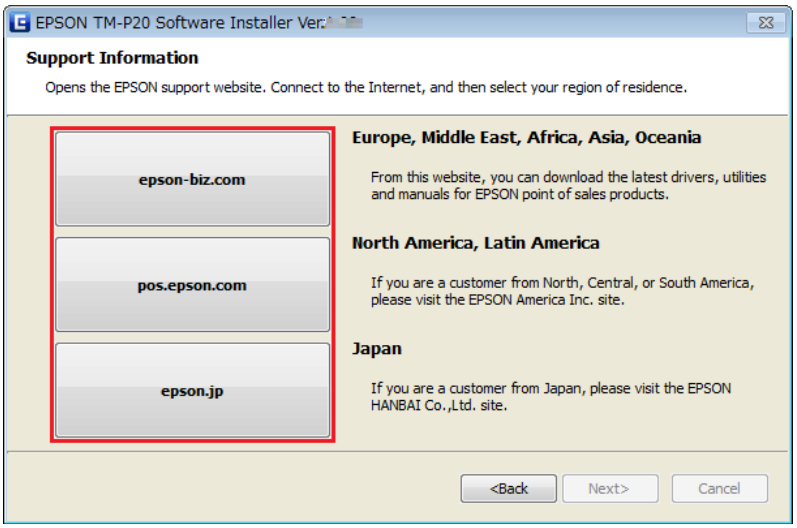
TM-P20 Software & Documents Disc

1 Insert the TM-P20 Software & Documents Disc to the computer. The TM-P20 Software Installer is automatically read and the **EPSON TM-P20 Software Installer** screen appears. Click the **Support** button.

When the TM-P20 Software Installer is not automatically read, double click the **TMInstallNavi.exe** icon in the TM-P20 Software & Documents Disc.



2 The **Support Information** screen appears. Click the button of your area. The Website of Epson support 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 48

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

Installation Types

You can select the installation type from the following.

- Easy Install: See "Easy Install" on page 13
  This is a standard installation, which installs the TM-P20 printer driver and TM-P20 Utility. If you are using a Wi-Fi network connection, EpsonNet Config and Epson Monitoring Tool are also installed. If you are using a Bluetooth connection, Epson TM Bluetooth Connector is also installed.

- Custom Install: See "Custom Install" on page 31
  You can select printer drivers and utilities you want to install. Select this installation type if you want to install the OPOS driver, JavaPOS driver, the printer driver manual, sample programs, and tools for developing programs.

- Update mode: See "Update Mode" on page 46
  If the printer driver and/or UPOS is already installed, the driver version is displayed and you can select whether to update the driver or not.

Easy Install

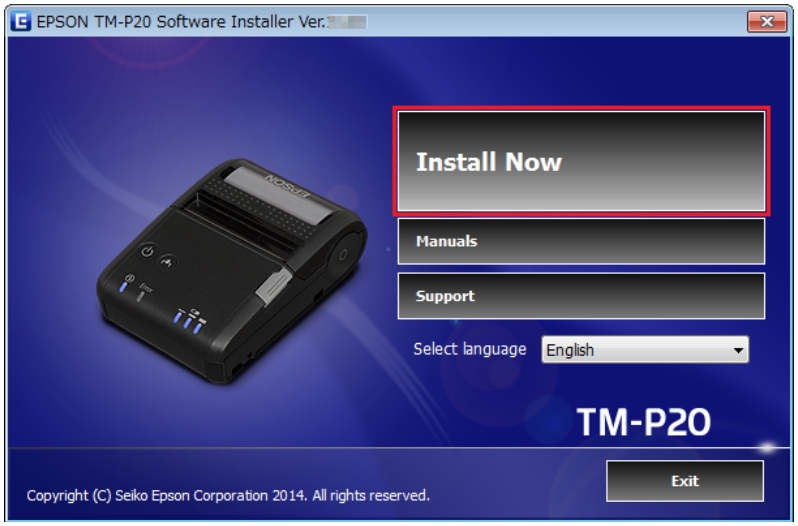
Caution:
- *When installing, connect just one printer to the computer. Do not connect multiple printers.*
- *Turn off the printer and then start the installation.*

1 Insert the TM-P20 Software & Documents Disc into the computer. The TM-P20 Software Installer is automatically read and the **EPSON TM-P20 Software Installer** screen appears. Click the **Install Now** button.

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

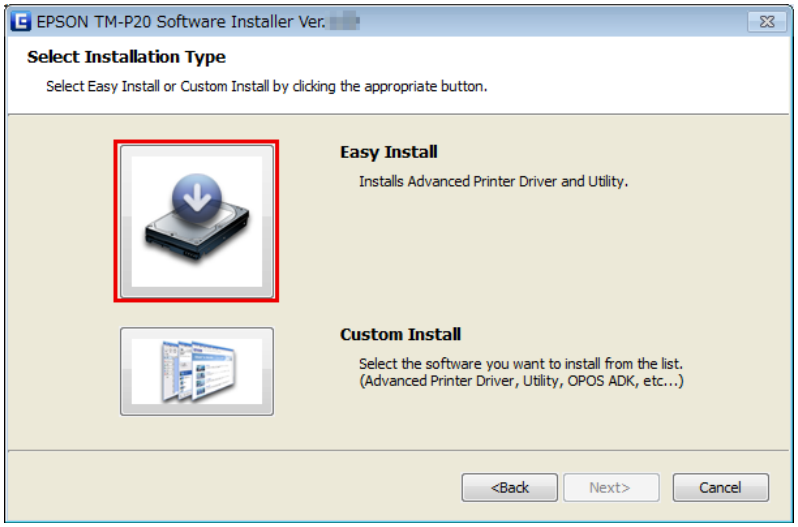
Installation

When the TM-P20 Software Installer is not automatically read, double click the **TMInstallNavi.exe** icon in the TM-P20 Software & Documents Disc.

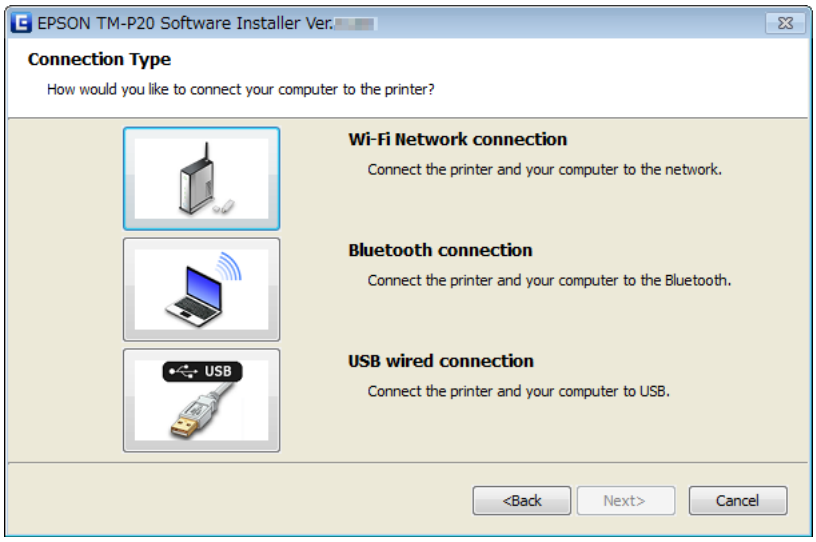


2 The **License Agreement** screen appears. Read the content and select the **I accept the terms in the license agreement**. Then click the **Next** button.

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



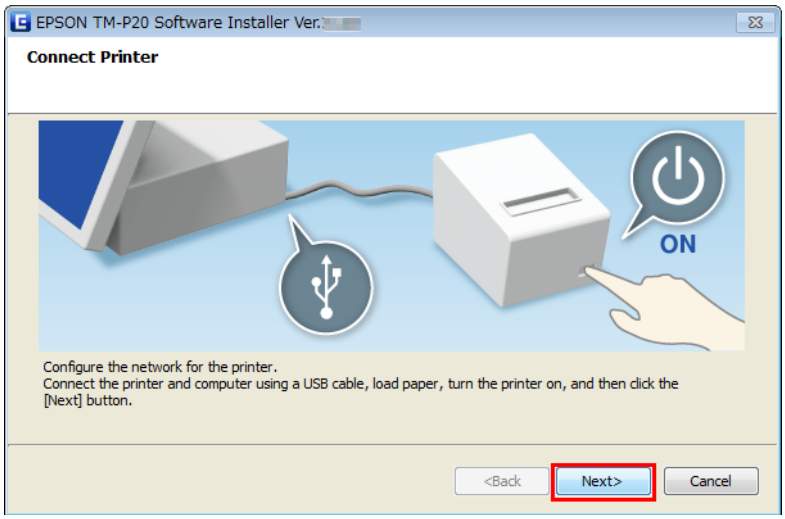
4 The **Connection Type** screen appears. Click the type of the connection and proceed to the step for each connection described below.



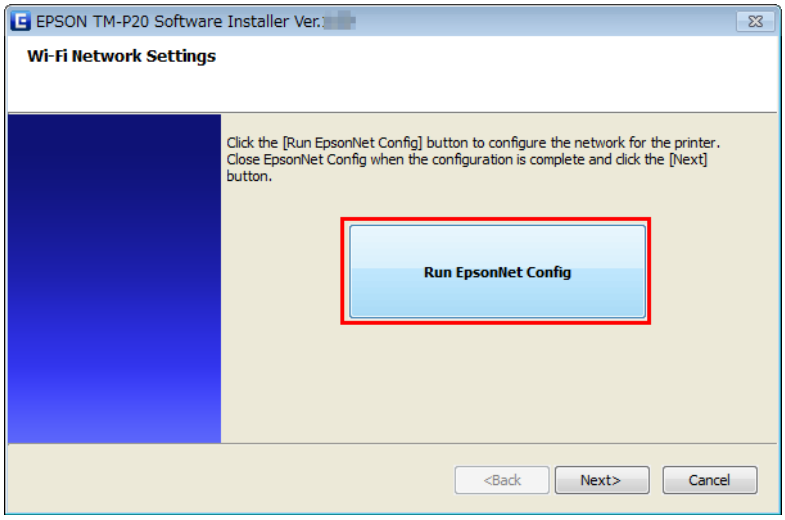
Wi-Fi Network connection	Click the Wi-Fi button, and make settings using EpsonNet Config. Proceed to "Wi-Fi Network Connection Setting" on page 15.
Bluetooth connection	Click the Bluetooth button, and make settings using TM Bluetooth Connector. Proceed to "Bluetooth Connection Setting" on page 24.
USB wired connection	Click the USB port button to install driver and utility. Proceed to "USB Wired Connection Setting" on page 28

Wi-Fi Network Connection Setting

1 After step 4 in "Easy Install" on page 13, connect the printer and computer using a USB cable, load paper, and then turn on the printer, and then click the **Next** button on TM-P20 Software Installer screen.

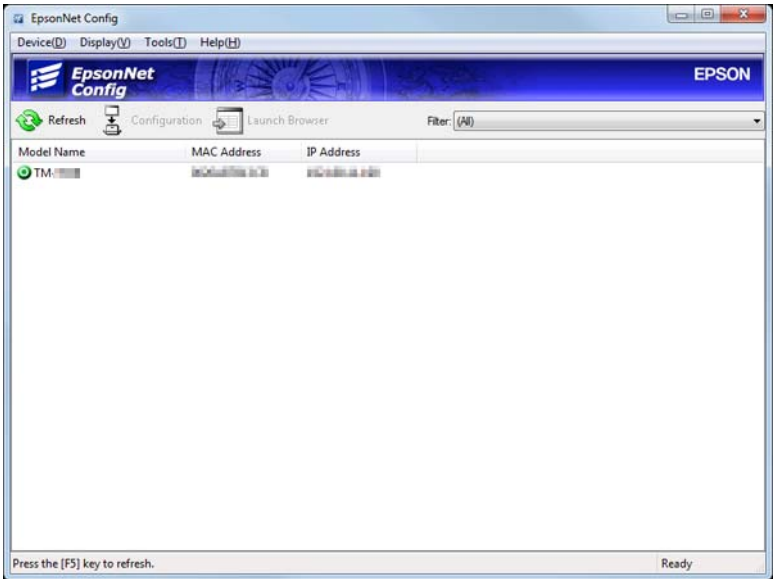


2 Click the **Run EpsonNet Config** button to configure the network for the printer.
Install EpsonNet Config by following the instructions on the screen if it is not installed.



3 From the “Filter” pull-down list of the EpsonNet Config, select **All** or **USB-connected devices**.

Make sure that "TM Printer" appears on the screen.
If the "TM Printer" does not appear, click the **Refresh** button.



Caution:
If the "TM Printer" is not displayed in the EpsonNet Config, refer the followings:

- ❏ *If the computer and printer are connected via a USB hub, connect them directly.*
- ❏ *Confirm that the “EPSON USB Controller for TM-/BA/EU Printers” pop-up window appears at the bottom right of the screen.*
- ❏ *Press the Feed button to finish printing, and the self-test mode terminates.*
- ❏ *Use EpsonNet Config ver.4.5.3 or later.*

Note:
The followings are the default settings. Change the settings for your environment if required.

Wireless setting

- ❏ *SSID: EPSON_Printer*
- ❏ *Network mode: Infrastructure*
- ❏ *Security level: WPA2 personal*
- ❏ *Security key: EpsonNet*

TCP/IP setting

- ❏ *IP address: Automatic DHCP*

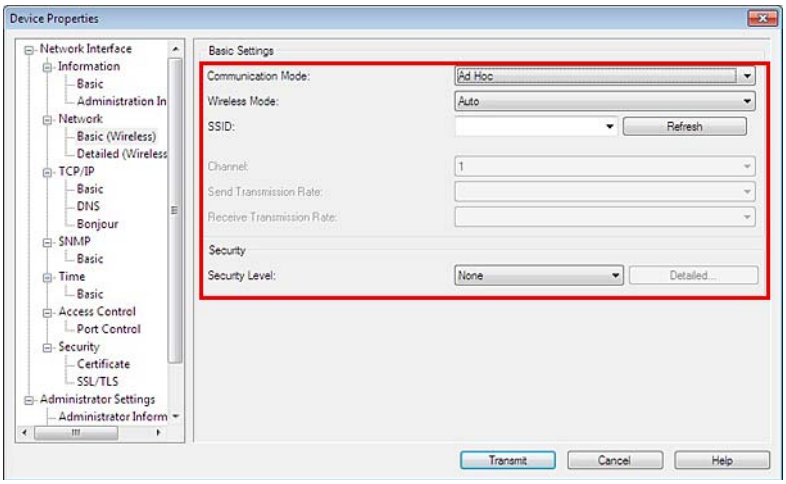
4 Select the printer you want to configure, then click the **Configuration** button.

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

6 Set the Wi-Fi network connection.

If the communication mode is Ad Hoc.	Proceed to Step 7.
If the communication mode is Infrastructure.	Proceed to Step 8.

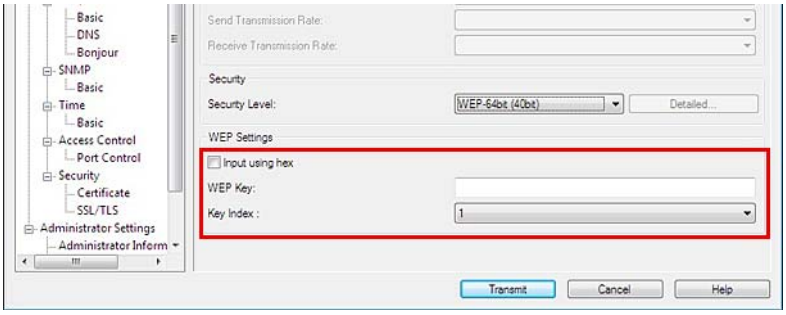
7 When the communication mode is Ad Hoc, the Wi-Fi network settings are as follows. When finished configuring the settings, go to step 9.



Setting	Description
Communication Mode:	Select **Ad Hoc**.
SSID:	Set the SSID. The maximum is 32 alphanumeric characters.
Channel:	Select the channel.
Transmission Rate:	Select the transmission rate.

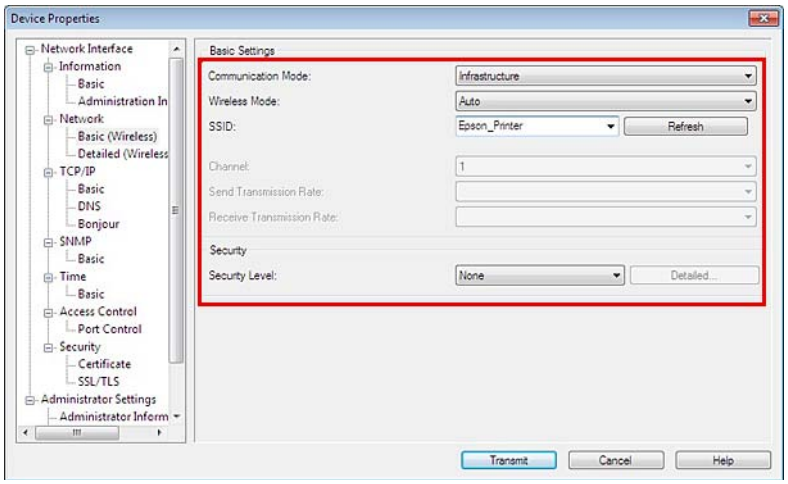
Setting	Description
Security Level:	Select the security level.

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



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

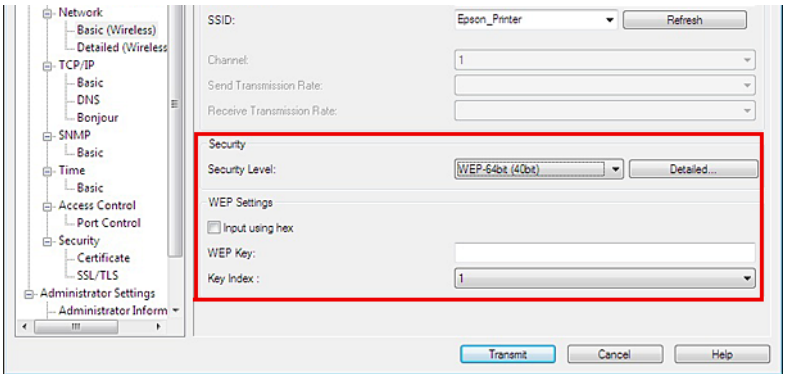
8 When the communication mode is Infrastructure, the Wi-Fi network settings are as follows. When finished configuring the settings, go to step 9.



Setting	Description
Communication Mode:	Select **Infrastructure**.
SSID:	Set the SSID. The maximum is 32 alphanumeric characters.

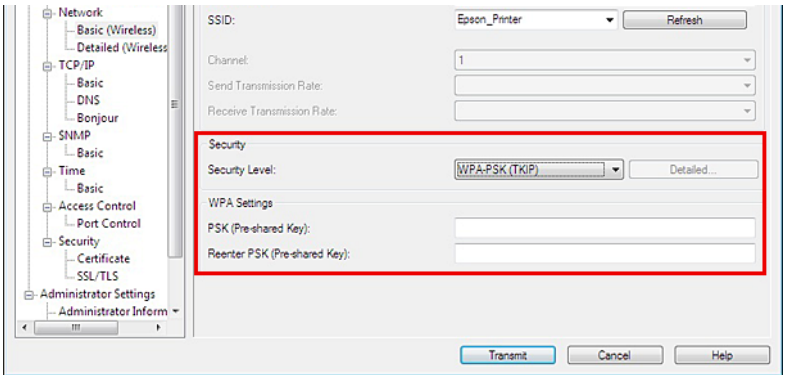
Setting	Description
Transmission Rate:	Select the transmission rate.
Security Level:	Select the security level.

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



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

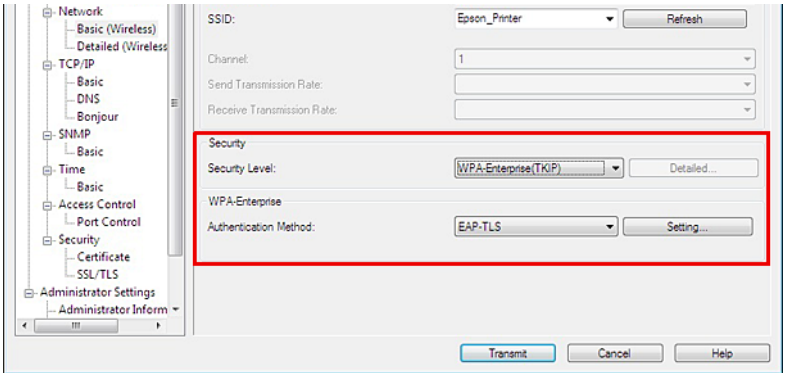
If the Security Level is **WPA-PSK(TKIP)** or **WPA-PSK(AES)**:



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

Setting	Description
Reenter PSK (Pre-shared Key):	Input the Pre-shared Key again.

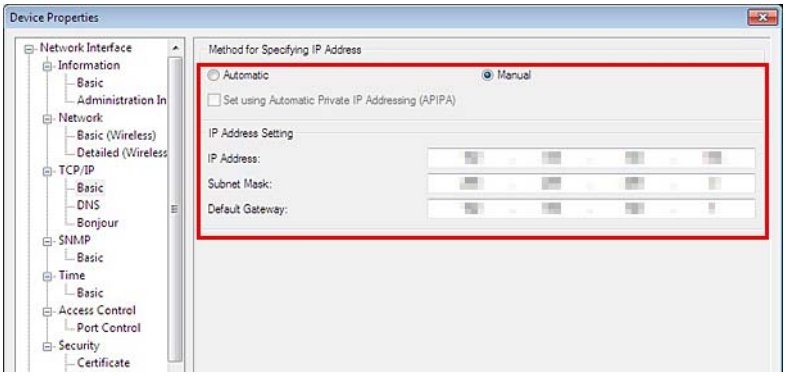
If the Security Level is **WPA-Enterprise (TKIP)** or **WPA-Enterprise(AES)**:



Setting	Description
Authentification Method:	Specify the authentification method.

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

10 Set the IP Address, the Subnet Mask and the Default Gateway.



Setting	Description
Automatic/Manual	Select **Manual**.
IP Address	Set the IP Address.
Subnet Mask	Set the Subnet Mask.
Default Gateway	Set the Default Gateway.

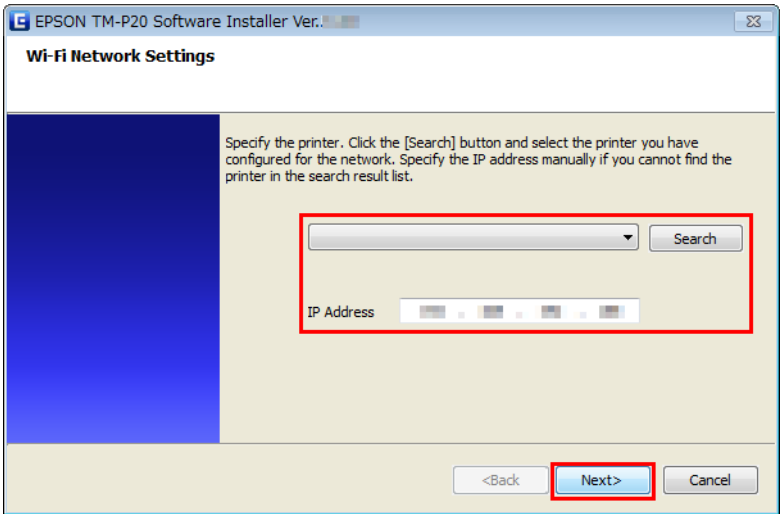
11 After setting the TCP/IP, click the **Transmit** button.
The settings are applied to the printer and the printer automatically restarts.

> ***Note:***
> *The network communication has not been activated yet.*

12 Disconnect the USB cable.

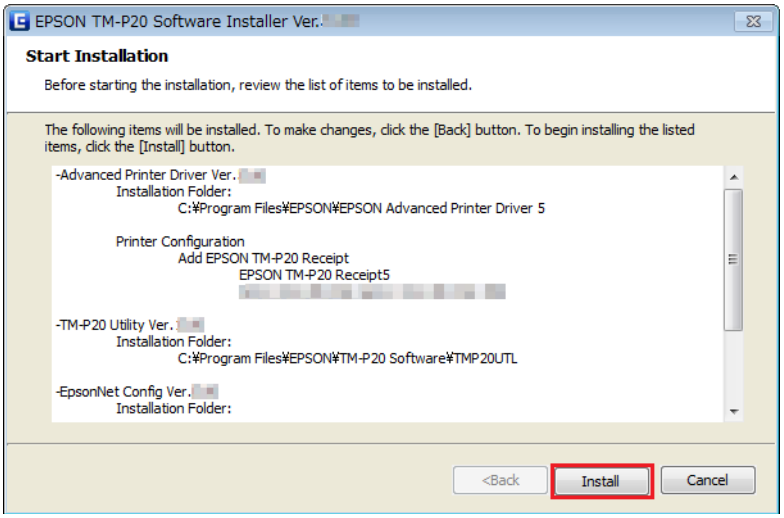
13 Turn off the printer, and then turn it back on. The network communication will be activated.

14 Return to the Software Installer screen and specify the printer that you have configured, and then click the **Next** button.



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

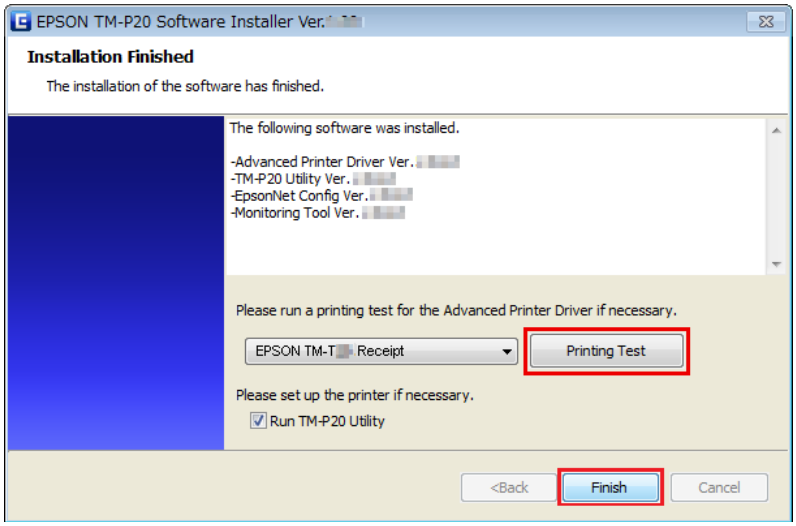
Click the **Install** button to start the installation.



Follow the on-screen instruction to install driver and utility.

16 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.
When exiting the installation	Uncheck the **Run TM-P20 Utility**. Then click the **Finish** button to end the installation.
When setting the printer using TM-P20 Utility continuously	Check the **Run TM-P20 Utility** checkbox (the box is checked by default). Click the **Finish** button to end the installation. The TM-P20 Utility starts to run. See "TM-P20 Utility" on page 61



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 54

Confirming the Settings

The settings of the printer can be confirmed with one of the following methods.

Caution:
Avoid using these methods during data transmission.

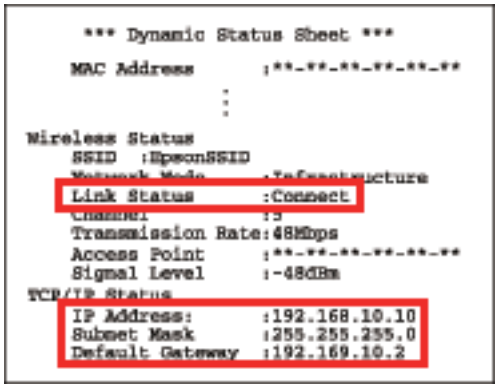
With Dynamic Status Sheet

1 Make sure that no USB cable is connected.

2 With the roll paper cover open, keep pressing the Feed button until the buzzer sounds.

3 Close the roll paper cover. Dynamic Status Sheet is printed.

4 Confirm that "Link Status" value is "Connect" and that "TCP/IP Status" is properly set.

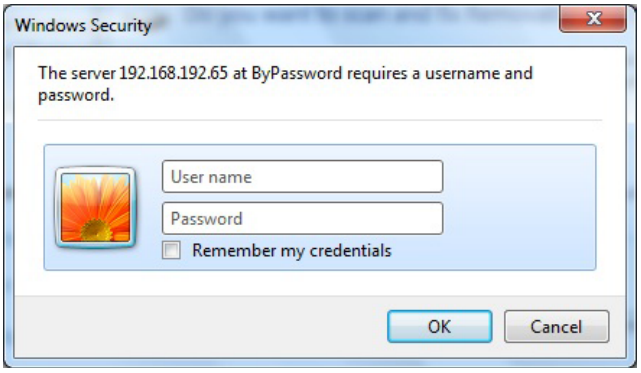


With EpsonNet Config (Web Version)

1 From a computer on the same network with the printer, start a Web browser and enter the printer IP address in the address bar.

2 If the printer is properly connected to the network, the window to enter a user name and password appears.

3 Enter a user name and password. The both defaults are “epson”. EpsonNet Config (Web Version) starts up.

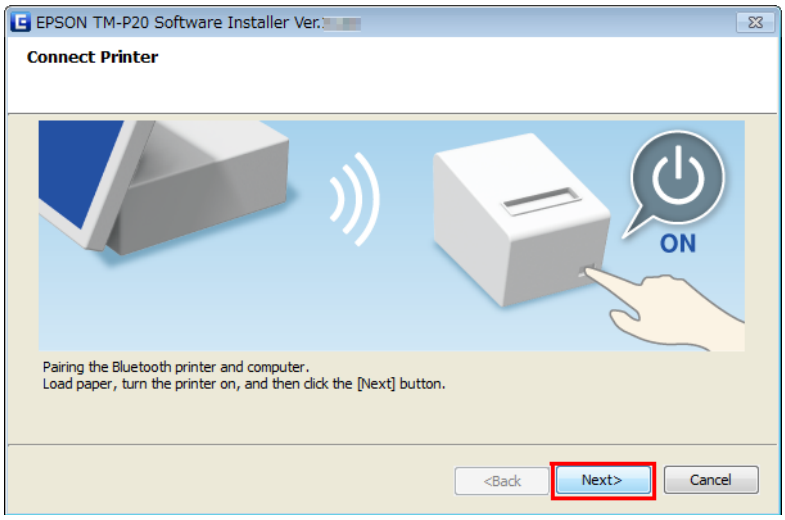


4 Confirm the settings from “Basic information” or “TCP/IP”.

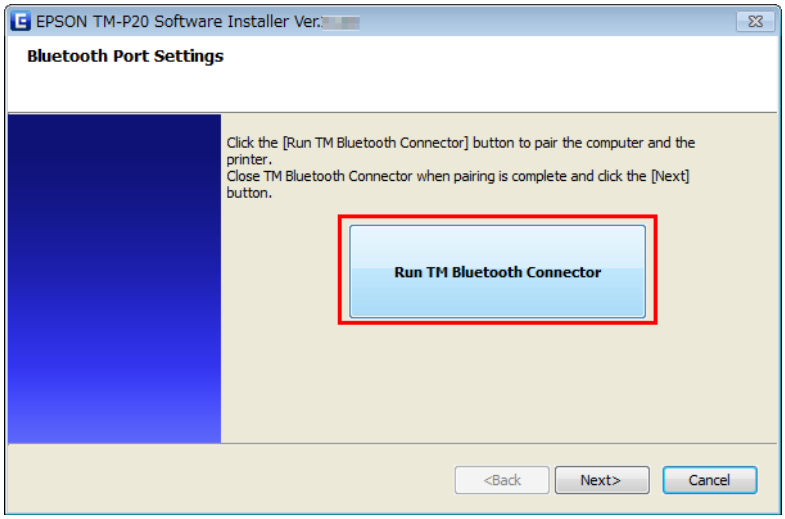


Bluetooth Connection Setting

1 After step 4 in "Easy Install" on page 13, load paper, turn on the printer, and then click the **Next** button on TM-P20 Sofware Installer screen.

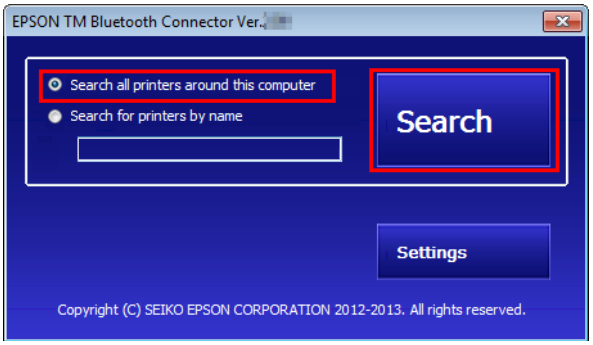


2 Click the **Run TM Bluetooth Connector** button to pair the computer and the printer. Epson TM Bluetooth connector installation starts if it is not installed.



3 Follow the on-screen instruction to install Epson TM Bluetooth Connector. After the installation, Epson TM Bluetooth Connector starts.

4 Select **Search all printers around this computer** and click **Search**.



Caution:

*If "ERROR " is displayed after you clicked **Search** on TM Bluetooth Connector, check the followings.*

- ❏ *The Bluetooth adapter is available.*
- ❏ *Bluetooth is ON in the Windows settings.*

If the device is not displayed on TM Bluetooth Connector, check the followings.

- ❏ *The printer power source is 10 m or less away from the computer power source.*
- ❏ *There is no other wireless device, such as a microwave oven and cordless telephone, that can interfere with the Bluetooth printer.*
- ❏ *The printer and the computer are in the same room.*
- ❏ *The TM Bluetooth Connector search time is not set short.*
- ❏ *The printer to be detected is not communicating with any computer.*

Note:

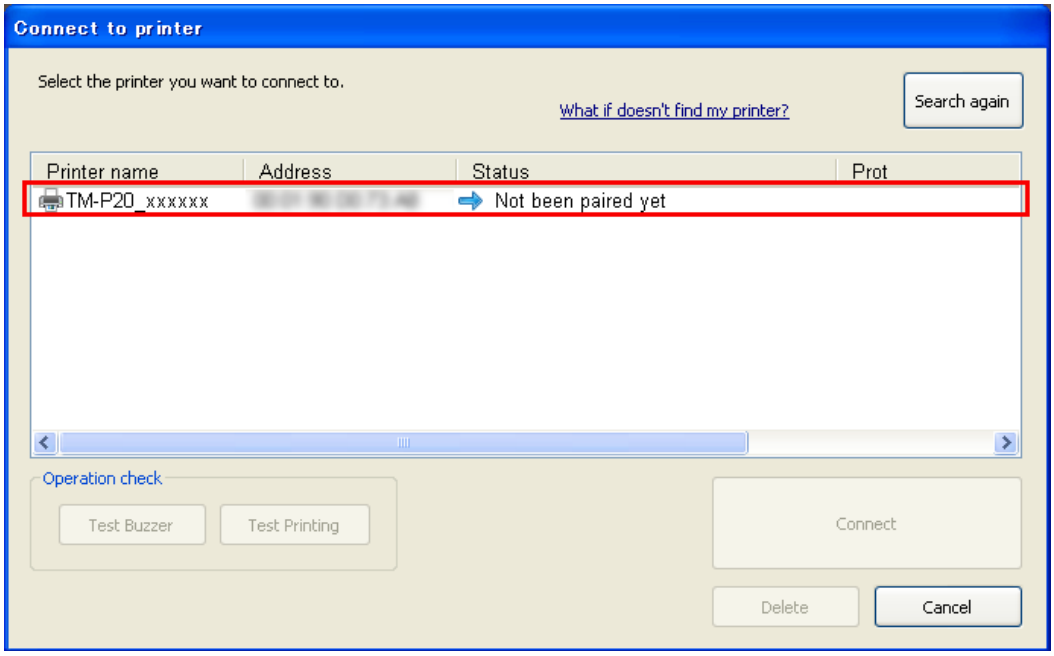
*If the printer has not detected after clicking the **Search** button, check the manufacturer of the Bluetooth software.*

*1. Open the **Control Panel**.*

*2. In the search box on the Control Panel, enter "Bluetooth", and then click **Change Bluetooth settings**.*

*3. In the Bluetooth Settings dialog box, click the **Hardware** tab, and then search for the Microsoft Bluetooth Enumerator. If it is not found, the Bluetooth software cannot detect the EPSON Bluetooth printer, and you may not be able to connect to the computer.*

5 Select the printer to be paired (Not been paired yet) and click **Connect**.



6 If the window to enter a passkey appears, enter a passkey and click **OK**.
Initial passkey: 0000

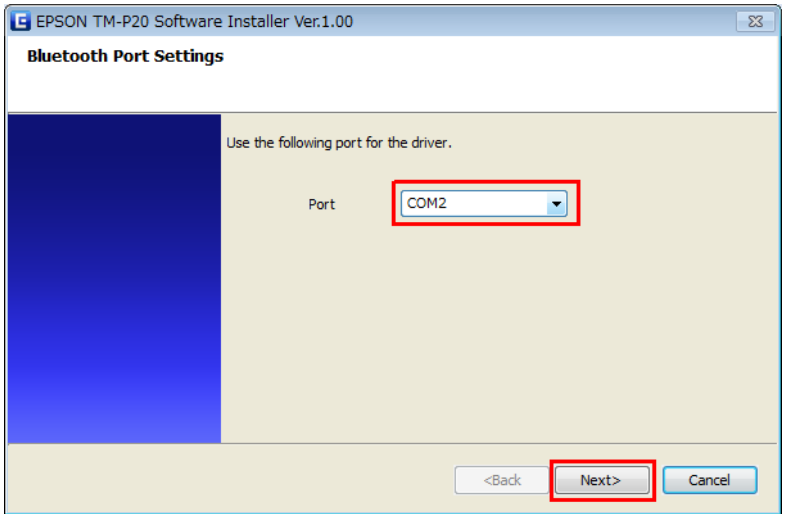
7 The "Assign port" window appears. Select the port to be used from the pull-down list and click **OK**.

8 The "Connection complete" window appears. Click **Test Buzzer** or **Test Printing** to check operation.
The printer buzzer sounds or printing starts.

> ***Caution:***
> *If TM Bluetooth Connector Status is " x" after pairing, check the followings.*
>
> - ❏ *The printer power source is 10 m or less away from the computer power source.*
> - ❏ *There is no other wireless device, such as a microwave oven and cordless telephone, that can interfere with the Bluetooth printer.*
> - ❏ *The printer and the computer are in the same room.*
> - ❏ *The TM Bluetooth Connector search time is not set short.*
> - ❏ *The printer to be detected is not communicating with any computer.*
>
> *If TM Bluetooth Connector Status is " Not been paired yet", check the following.*
>
> - ❏ *The printer is not paired. Perform pairing again.*

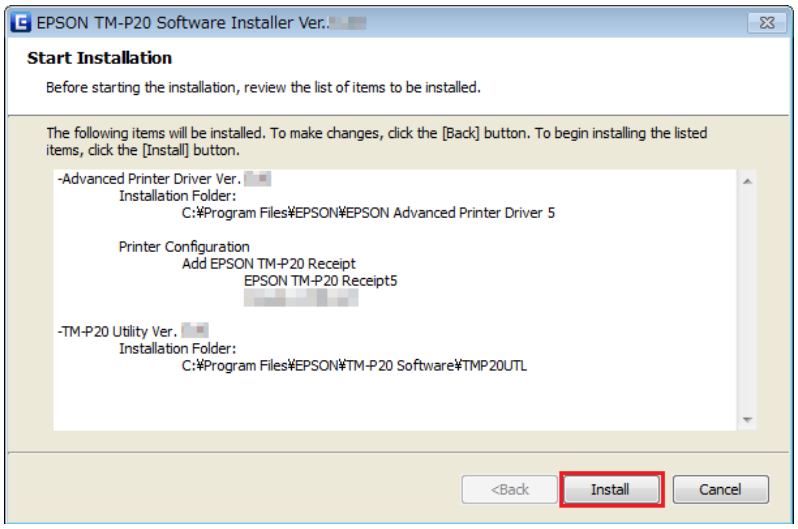
9 Click the "**x**" button of TM Bluetooth Connector to exit.

10 Return to the Software Installer screen and select the assigned port for the printer driver on the screen, and then click the **Next** button.



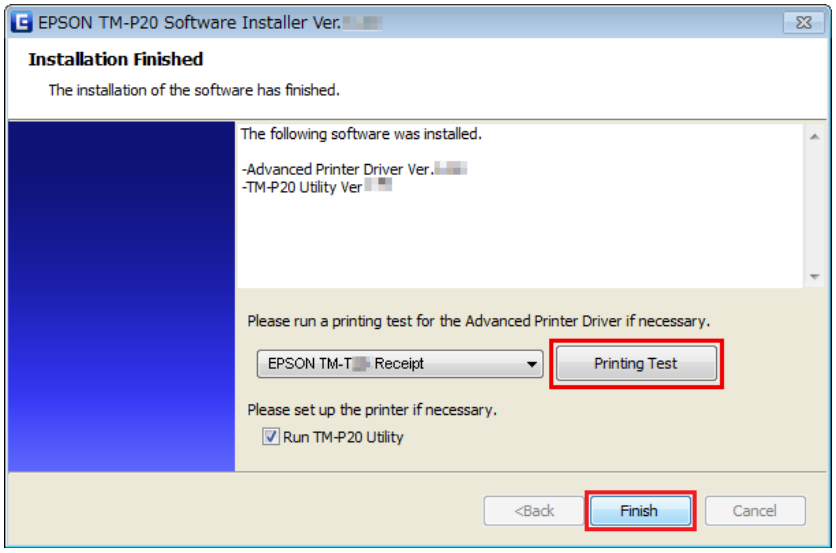
11 The Start Installation screen appears. The driver and utility to be installed are listed.

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



12 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.
When exiting the installation	Uncheck the **Run TM-P20 Utility**. Then click the **Finish** button to end the installation.
When setting the printer using TM-P20 Utility continuously	Check the **Run TM-P20 Utility** checkbox (the box is checked by default). Click the **Finish** button to end the installation. The TM-P20 Utility starts to run. ☞ See "TM-P20 Utility" on page 61

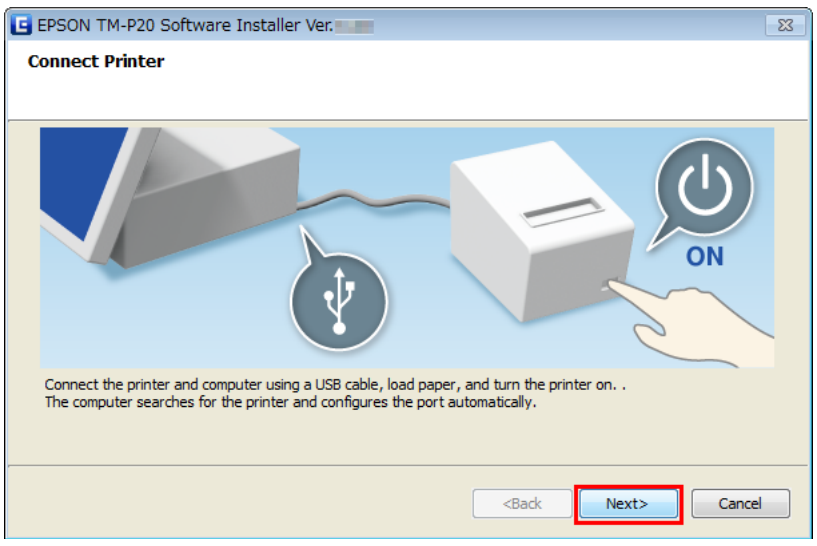


This is the end of the printer driver installation. For information on how to print using the printer driver.
See "Using the Printer Driver" on page 54

USB Wired Connection Setting

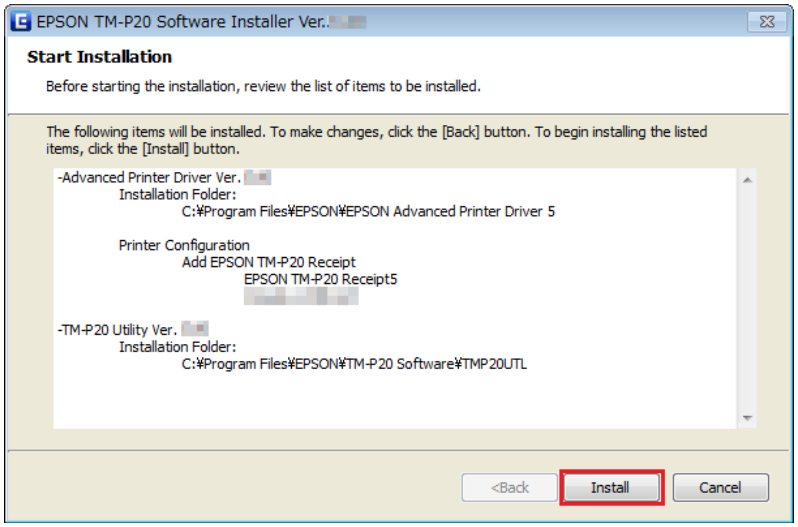
1 After step 4 in "Easy Install" on page 13, connect the printer and computer using a USB cable, load paper, and then turn the printer on. Click the **Next** button.

> ***Note:***
> *The windows may not switch after clicking the **Next** button while the computer is searching the printer.*



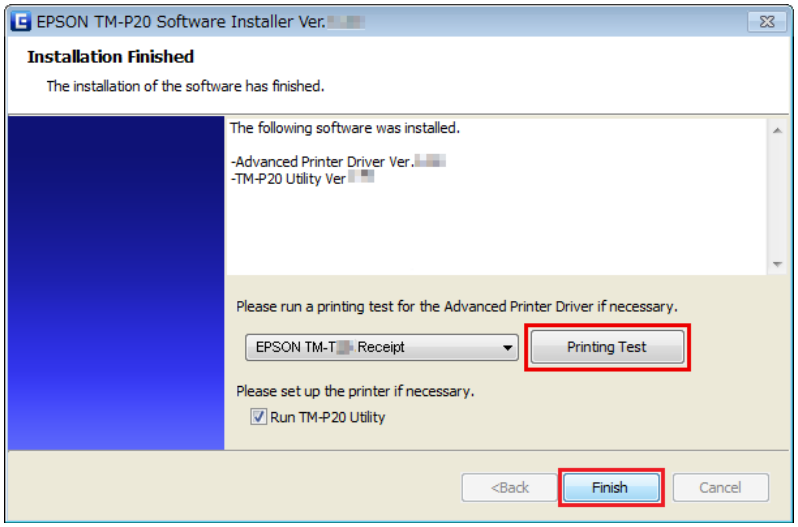
2 The Start Installation screen appears. The driver and utility to be installed are listed.

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



3 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.
When exiting the installation	Uncheck the **Run TM-P20 Utility**. Then click the **Finish** button to end the installation.
When setting the printer using TM-P20 Utility continuously	Check the **Run TM-P20 Utility** checkbox (the box is checked by default). Click the **Finish** button to end the installation. The TM-P20 Utility starts to run. ☞ See "TM-P20 Utility" on page 61



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 54

Installing Advanced Printer Driver Ver.5 Manual

The Easy Install does not install the Advanced Printer Driver manual.

To see the manual, install it separately.

1. Insert the TM-P20 Software & Documents Disc into the computer. The TM-P20 Software Installer is automatically read and the **EPSON TM-P20 Software Installer** screen appears. Click the **Install Now** button.

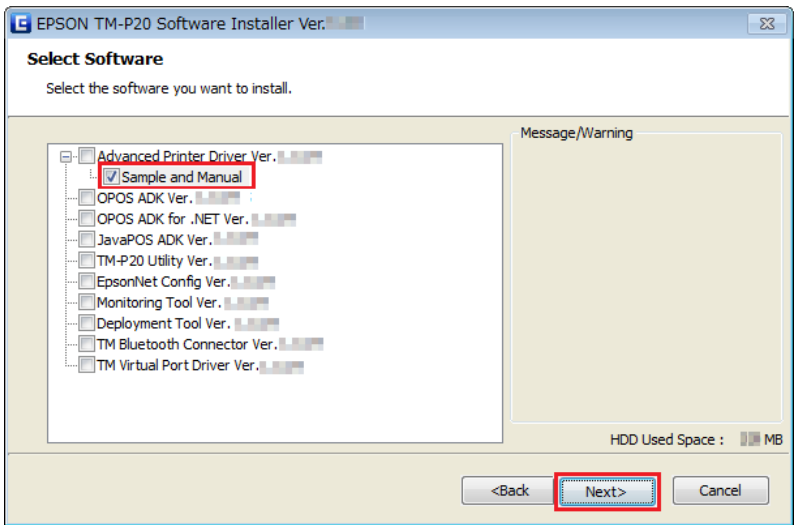
   When the **TM-P20 Software Installer** is not automatically read, double click the **TMInstallNavi.exe** icon in the TM-P20 Software & Documents Disc.

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

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

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

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



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

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

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

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

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

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

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

Custom Install

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

The following items can be installed with the Custom Install. The TM-P20 Software & Documents Disc is required for Custom Install.

- Advanced Printer Driver Ver.5
  - Sample and Manual
- OPOS ADK
- OPOS ADK for .NET
- JavaPOS ADK
- TM-P20 Utility
- EpsonNet Config
- Epson Monitoring Tool
- Epson Deployment Tool
- Epson TM Bluetooth Connector
- Epson TM Virtual Port Driver

Displaying the Select Software Screen

The TM-P20 Software & Documents Disc is required for Custom Install. You can select items you want to install in **Select Software** screen. Follow the steps below to display the **Select Software** screen.

1 Insert the TM-P20 Software & Documents Disc into the computer. The TM-P20 Software Installer is automatically read and the **EPSON TM-P20 Software Installer** screen appears. Click the **Install Now** button.

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

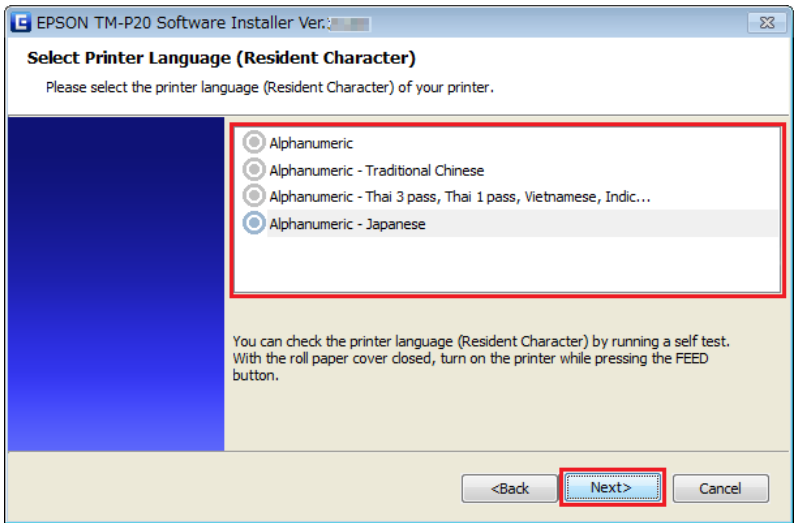
When the TM-P20 Software Installer is not automatically read, double click the **TMInstallNavi.exe** icon in the printer driver CD.

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

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

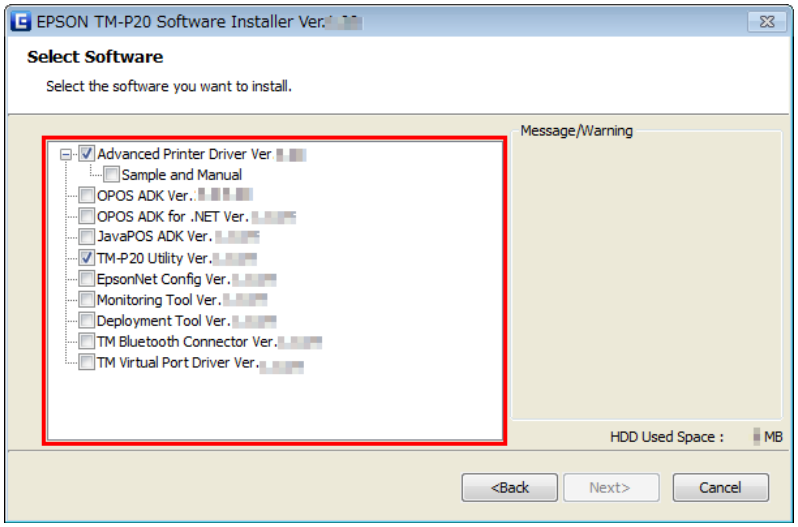
4 The **Select Printer Language (Resident Character)** screen appears. Select the language of your printer and click the **Next** button.

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



5 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-P20 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

Follow the steps below to execute the printer driver installation.

1. Insert the TM-P20 Software & Documents Disc into the computer and follow the steps.
☞ See "Displaying the Select Software Screen" on page 31

2. Select the **Advanced Printer Driver Ver.5 .xx**. Clear the check box for the items you do not want to install. Click the **Next** button.

3. The **Check Install** screen appears. Check the **Warning**.

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

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

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

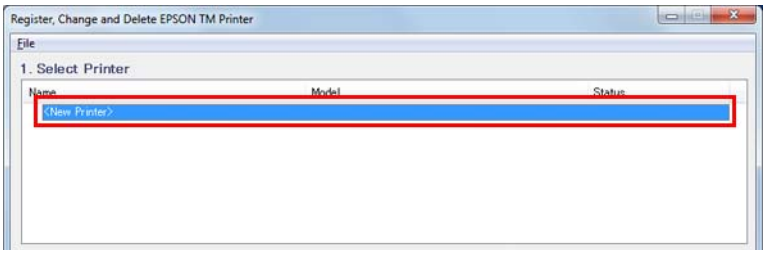
   Installation of Advanced Printer Driver Ver.5 begins.

5. The **Printer Registration** screen appears.

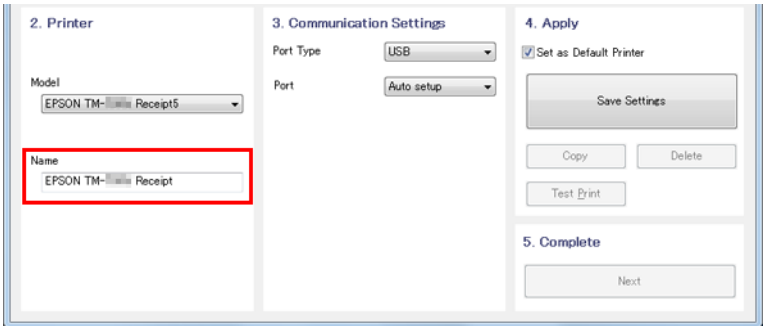
   Here, connect the printer to the computer and turn the printer's power on. Click **Next**.

6. The **Register, Change and Delete EPSON TM Printer** screen is displayed.

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

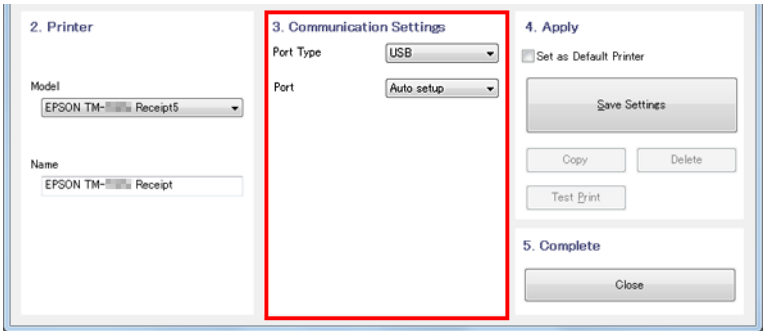


7 Set the followings from **2. Printer**.



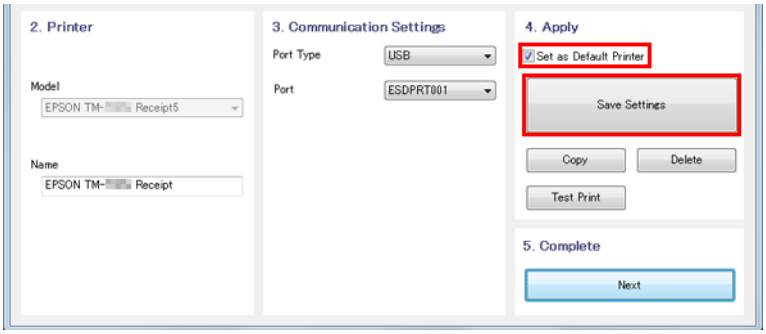
Item	Description
Name	Specify the printer driver name. Do not use Unicode/2-byte characters for the name.

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



Port type	Item	Description
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.
Bluetooth		Communicate with Bluetooth port. Set the following communication setting.
	Port	Specify the Bluetooth port used for connecting the printer. Usually, no setting is required.

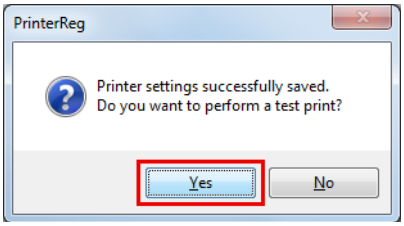
9 Set the followings from **4. Apply** and click **Save Setting**.



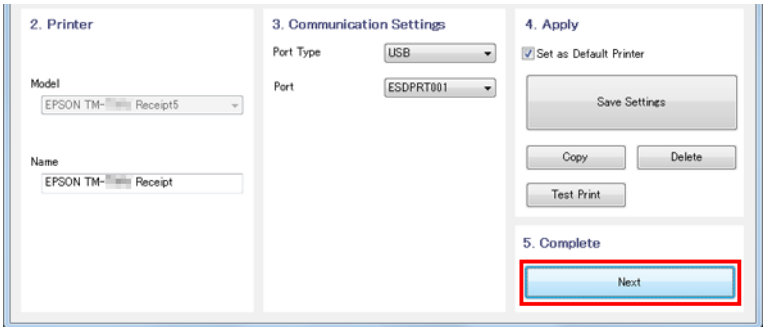
Item	Description
Set as Default Printer	Check when configuring the printer as that normally used from the Windows applications.

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

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



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



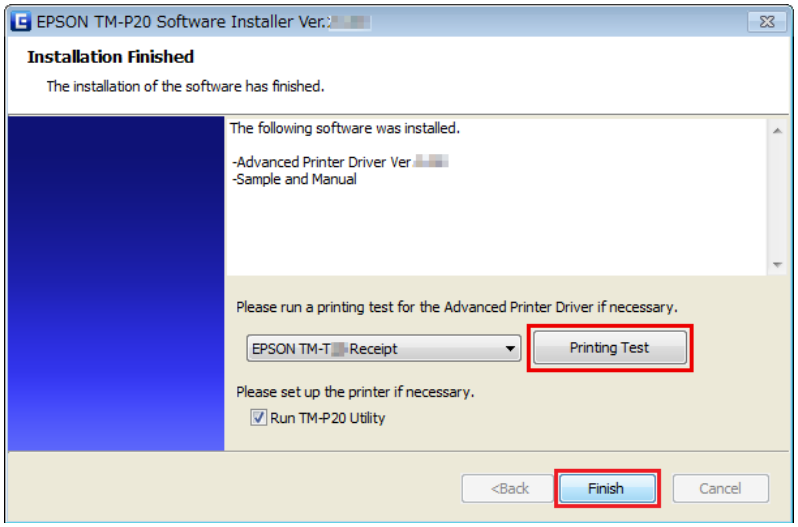
12 The **Installation Complete** screen appears.

Click **Close** to finish the installation.

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

When conducting test print:

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



This is the end of the printer driver installation.

Installing the OPOS ADK

1. Insert the TM-P20 Software & Documents Disc into the computer and follow the steps.
See "Displaying the Select Software Screen" on page 31

2. Check the **OPOS ADK Ver.x.xx**. Clear the check box for the items you do not want to install. Click the **Next** button.

3. The **Start Installation** screen appears. The driver and utility to be installed are listed. Click the **Install** button to start the installation.

4. The **Choose Setup Language** appears. Select your language, and click the **Next** button.

5. The **EPSON OPOS ADK for TM-P20 Version x.xx xxx** appears. Click the **Next** button.

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

7. The **Select Registry File** screen appears. Click the **Next** button.

8. The **Setup Type** screen appears. Select **Developer** and then click the **Next** button.

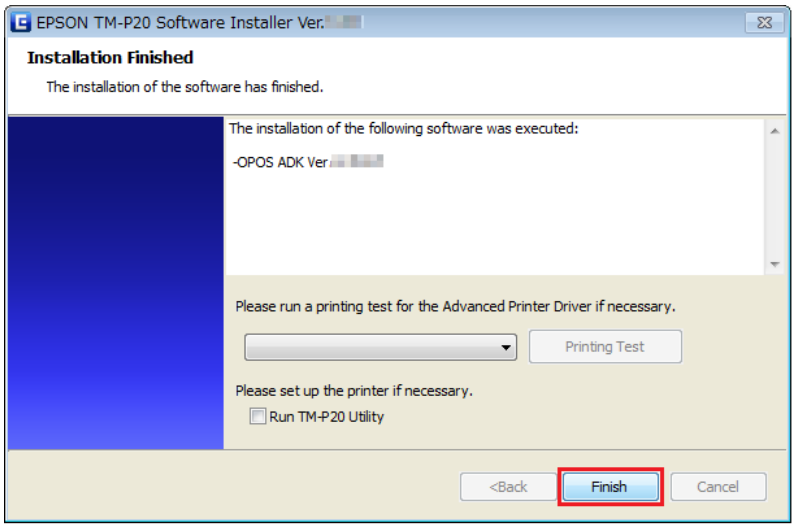
   Click the **Browse** button to change the default installation location.

9. The **Start Copying Files** screen appears. Click the **Next** button.

10. The **Port selection** screen appears. Select the port. Click the **Next** button to start the installation.

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

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



This is the end of the OPOS ADK installation.

Installing the OPOS ADK for .NET

Note:
To install the OPOS ADK for .NET, Microsoft .NET Framework and Microsoft POS for .NET are required.

Install Microsoft .NET Framework and Microsoft POS for .NET Ver.1.11 beforehand.

1 Insert the TM-P20 Software & Documents Disc into the computer and follow the steps.
See "Displaying the Select Software Screen" on page 31

2 Select the **OPOS ADK for .NET Ver.x.xx.x**. Clear the check box for the items you do not want to install. Click the **Next** button.

3 The **Start Installation** screen appears. The driver and utility to be installed are listed. Click the **Install** button to start the installation.

4 Install the EPSON OPOS ADK for .NET.

The **EPSON OPOS ADK for .NET x.xx.x - InstallShield Wizard** screen appears.

Select the language, and then click the **Next** button.

5 The **Welcome to the InstallShield EPSON OPOS ADK for .NET** screen appears. Click the **Next** button.

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

7 The **Setup Type** screen appears. Select **Developer** and then click the **Next** button.

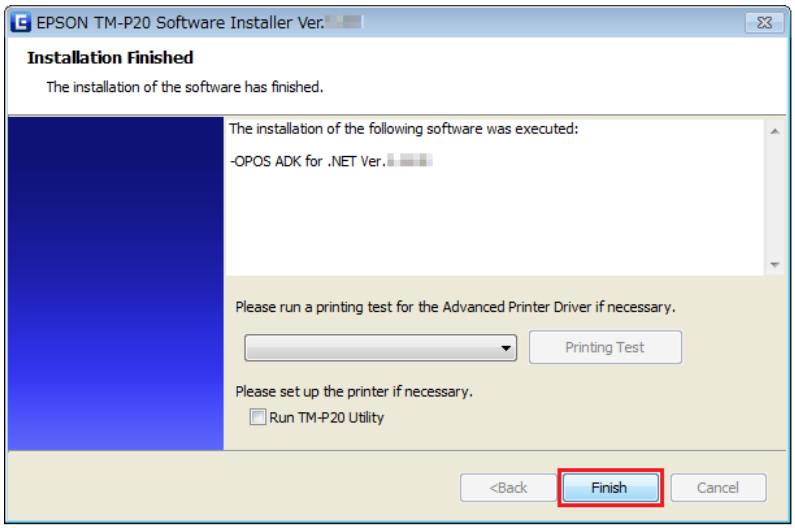
Click the **Browse** button to change the default installation location.

8 The **Setup Type** screen appears. Select the port and click the **Next** button.

9 The **Start Copying Files** screen appears. Click the **Next** button to start the installation.

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

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



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

Installing the JavaPOS ADK

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

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

1 Insert the TM-P20 Software & Documents Disc into the computer and follow the steps.
See "Displaying the Select Software Screen" on page 31

2 Select the **JavaPOS ADK Ver.x.xx.x**. Clear the check box for the items you do not want to install. Click the **Next** button.

3 The **Start Installation** screen appears. The driver and utility to be installed are listed. Click the **Install** button to start the installation.

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



5 The **Introduction** screen appears. Click the **Next** button.

6 The **License Agreement** screen appears. Read the content and select the **I accept the terms in the License Agreement**. Click the **Next** button.

7 The **Choose JVM** screen appears. Click the **Next** button.

8 The **Choose Install Set** screen appears. Select **Developer** and then click the **Next** button.

9 The **Choose Folder Location** screen appears. Click the **Next** button.

10 The **Choose your communication** screen appears. Select the port and click the **Next** button.

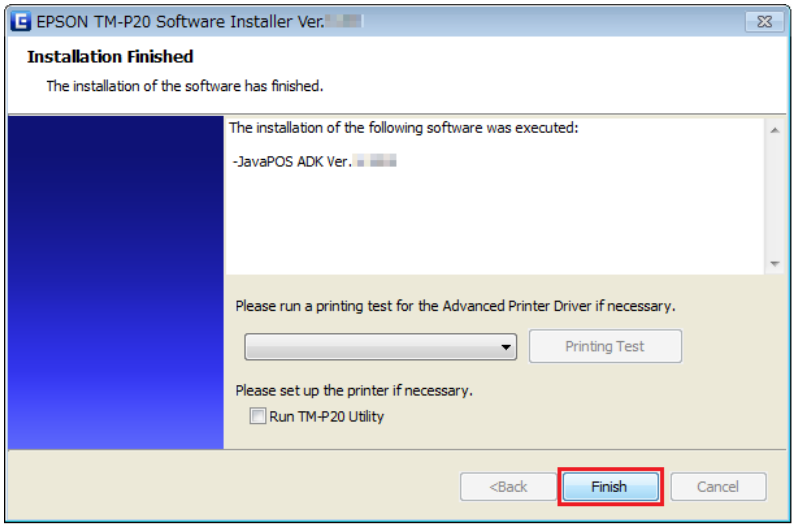
11 The **Location for jpos.xml** screen appears. Click the **Next** button.

12 The **Pre-Installation Summary** screen appears. Click the **Install** button to start the installation.

13 The **Installation Complete** screen appears. Click the **Done** button.

If a message to ask you to restart the computer appears, select **No, I will restart my system myself**.

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.

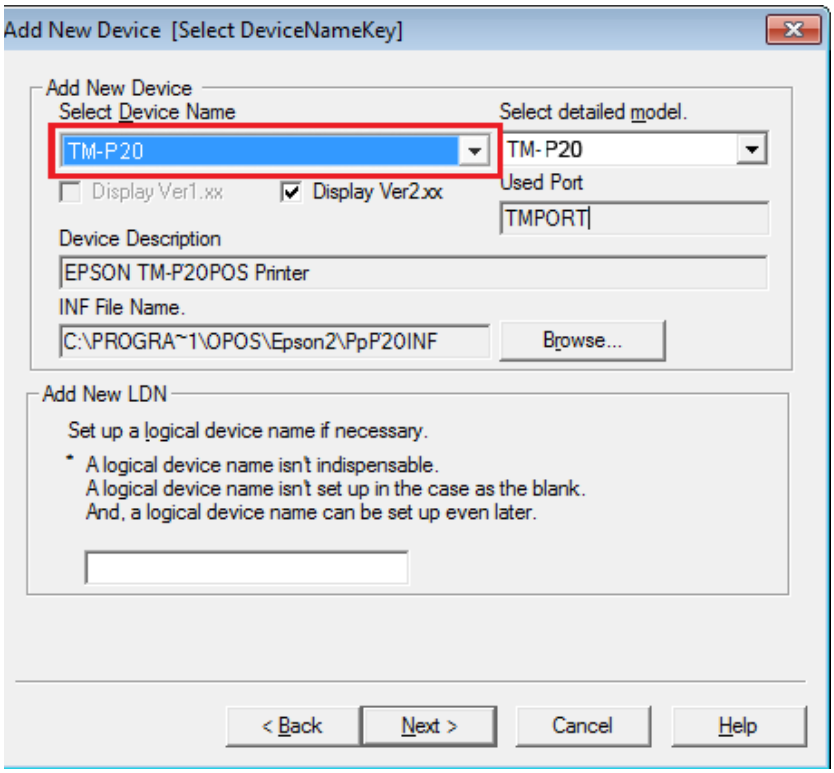
Register a Printer Using SetupPOS

After installing UPOS, register a printer using SetupPOS.

Follow the steps below. (The following explanation takes OPOS ADK as an example.)

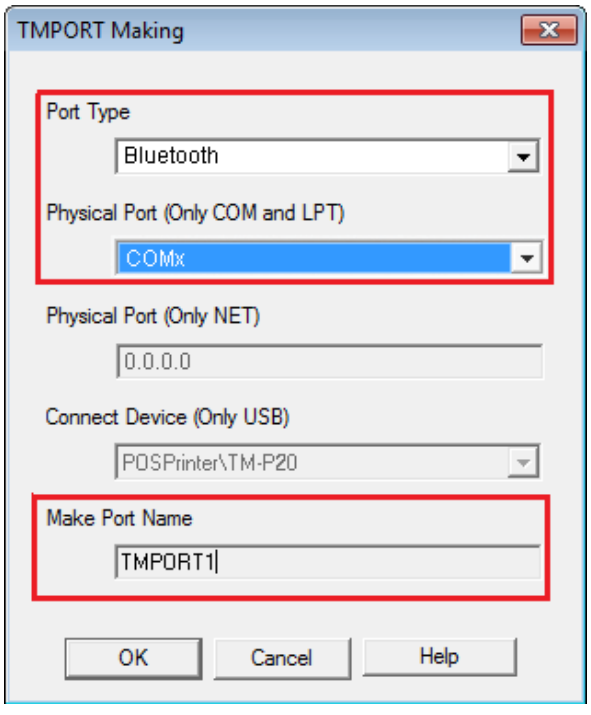
1 Right-click **POSPrinter** at the left side of the window and select **Add New Device...**.
The "Add New Device [Select DeviceNameKey]" window appears.

2 From the "Select Device Name" pull-down list, select the printer type to be used. Click **Next**.



3 Click **Make Port**.

4 The "TMPORT Making" window appears. Select "Port Type" and "Physical Port (Only COM and LPT)". For Bluetooth connection, select **Bluetooth** for Port Type and **COMx** for Physical Port.



The port name to be newly added is displayed in “Make Port Name”. Remember this port name.

5 Click **OK.** The screen returns to the "Add New Device [Communication Settings]" window.

6 Click **Finish**. The printer is added.

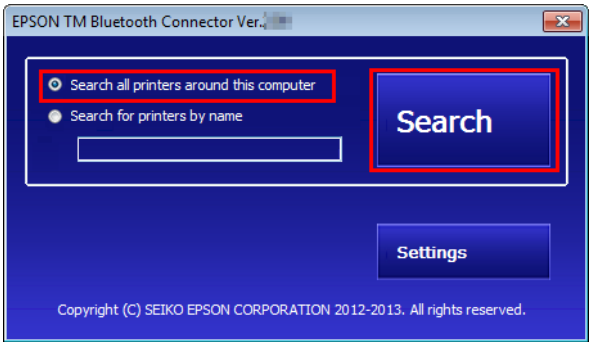
> ***Note:***
> *To use Bluetooth with UPOS, you need to associate the port using Epson TM Bluetooth Connector. For details, see "Using TM Bluetooth Connector for Paring" on page 42.*

Using TM Bluetooth Connector for Paring

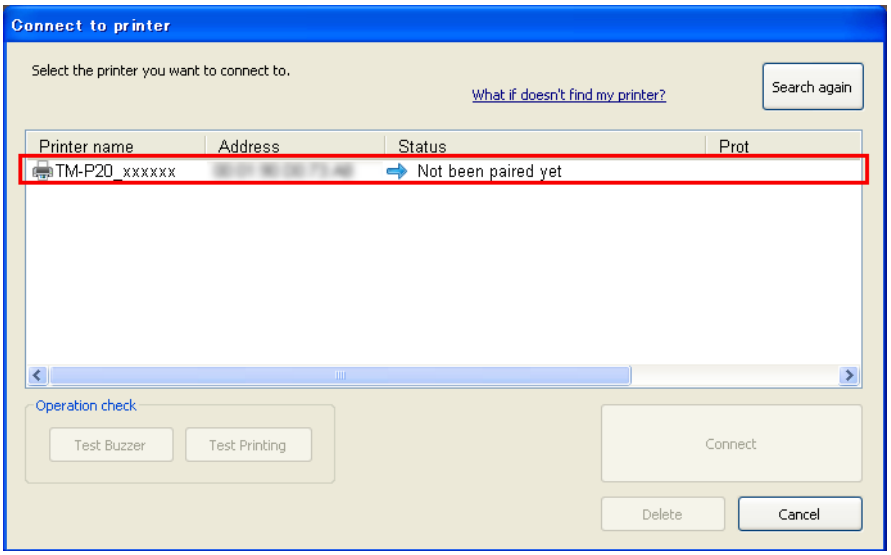
1 Follow the steps below to execute the utility installation.

2 Turn on the printer.

3 Select **Search all printers around this computer** and click **Search**.

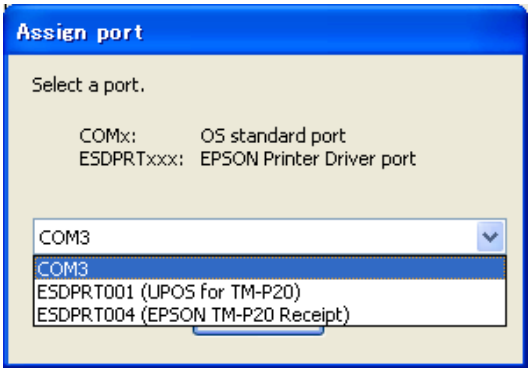


4 Select the printer to be paired (Not been paired yet) and click **Connect**.



5 If the window to enter a passkey appears, enter a passkey and click **OK**.

6 The Assign port window appears. Select the port to be used from the pull-down list and click **OK**.



- ❏ If started from the APD installer, port setting automatically starts without displaying the "Assign port" window.
- ❏ APD print queue : ESDPRTxxx (TM-P20: Queue name)
- ❏ UPOS : ESDPRTxxx (UPOS for TM-P20)
- ❏ ESC/POS command : Displayed virtual COM port (e.g. COM4)

7 The Connection complete window appears. Click **Test Buzzer** or **Test Printing** to check operation. The printer buzzer sounds or printing starts.

8 Click **Back to Main** to return to the main window.

9 Click the "x" button of TM Bluetooth Connector to exit.

Installing the Utility

The utility can also be installed with Easy Install on the TM-P20 Software & Documents Disc.

Easy Install installs TM-P20 Utility for a USB connection. For a Wi-Fi network connection, it installs TM-P20 Utility, EpsonNet Config, Epson Monitoring Tool, and TM Bluetooth Connector. For a Bluetooth connection, it installs Epson TM Bluetooth Connector.

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

- ❏ TM-P20 Utility Ver.x.xx
- ❏ EpsonNet Config Ver.x.xx
- ❏ Epson Monitoring Tool Ver.x.xx
- ❏ Epson Deployment Tool Ver.x.xx
- ❏ Epson TM Bluetooth Connector Ver.x.xx
- ❏ Epson TM Virtual Port Driver Ver.x.xx

Installation

Follow the steps below to execute the utility installation.

1. Insert the TM-P20 Software & Documents Disc into the computer and follow the steps.
See "Displaying the Select Software Screen" on page 31

2. Select the utilities you want to install from the list. Clear the check box for the items you do not want to install. Click the **Next** button.

3. The **Start Installation** screen appears. The drivers and utilities to be installed are listed. Click the **Install** button to start the installation.

   Follow the on-screen instruction of each utilities to install.

4. TM-P20 Utility is installed.

5. EpsonNet Config is installed.

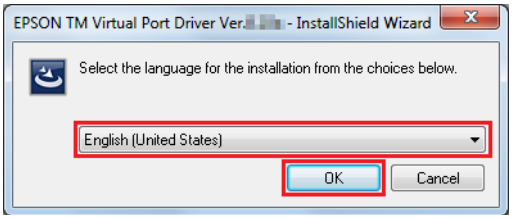
6. Epson Monitoring Tool is installed.
The windows of language selection, License Agreement, and registering in the Windows Firewall exceptions are displayed. Follow the on-screen instructions to install.

7. Epson Deployment Tool is installed.
The windows of License Agreement and registering in the Windows Firewall exceptions are displayed. Follow the on-screen instructions to install.

8. Epson TM Bluetooth Connector is installed.

9. 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.

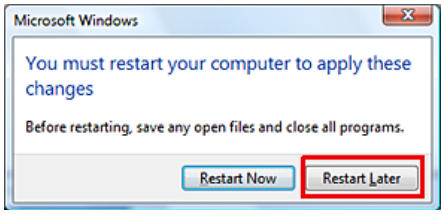


10. The **Welcome to the EPSON TM Virtual Port Driver Ver.x.xx Setup Wizard** screen appears. Click the **Next** button.

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

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

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

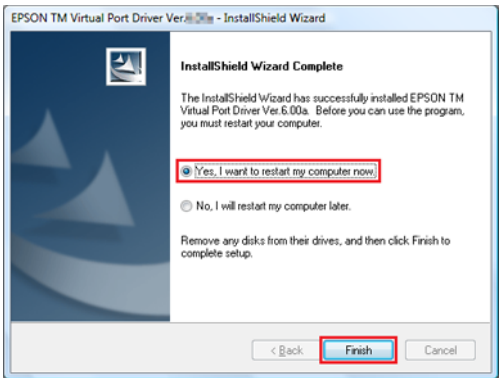


> ***Note:***
> *If you restart your PC at this point, the installation process may not be completely performed. Be sure to select the* ***Restart Later*** *button.*

14 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****.*

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

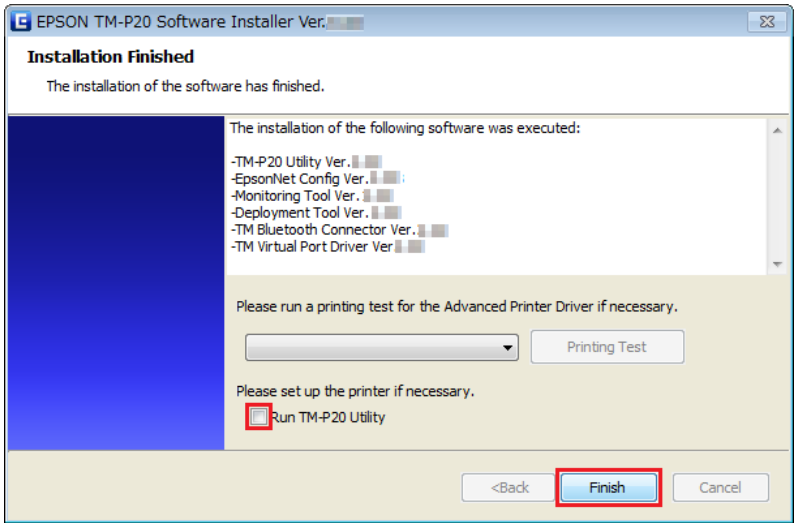
When exiting the installation:

Uncheck the **Run TM-P20 Utility** (the box is unchecked by default). Then click the **Finish** button to end the installation.

When setting the printer using TM-P20 Utility continuously:

Check the **Run TM-P20 Utility** checkbox. Click the **Finish** button to end the installation. The TM-P20 Utility starts to run.

See "TM-P20 Utility" on page 61



This is the end of the utility installation.

Update Mode

Caution:

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

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

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

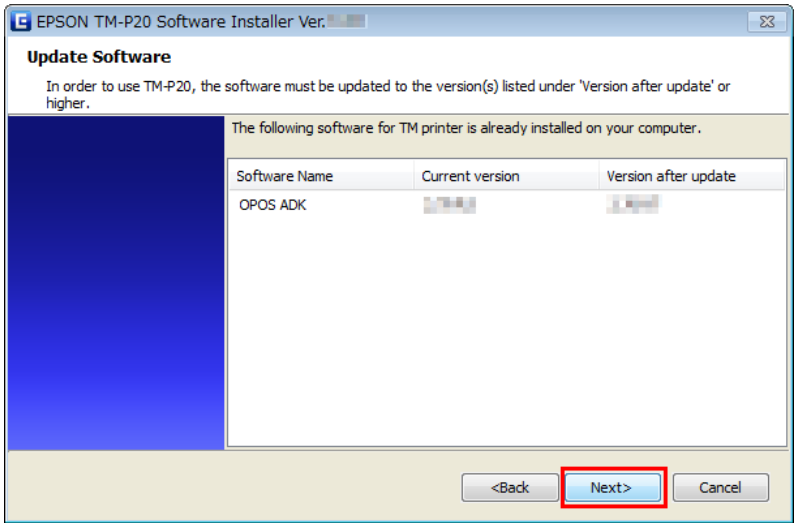
1 Insert the TM-P20 Software & Documents Disc into the computer. The TM-P20 Software Installer is automatically read and the **EPSON TM-P20 Software Installer** screen appears. Click the **Install Now** button.

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

When the TM-P20 Software Installer is not automatically read, double click the **TMInstallNavi.exe** icon in the TM-P20 Software & Documents Disc.

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

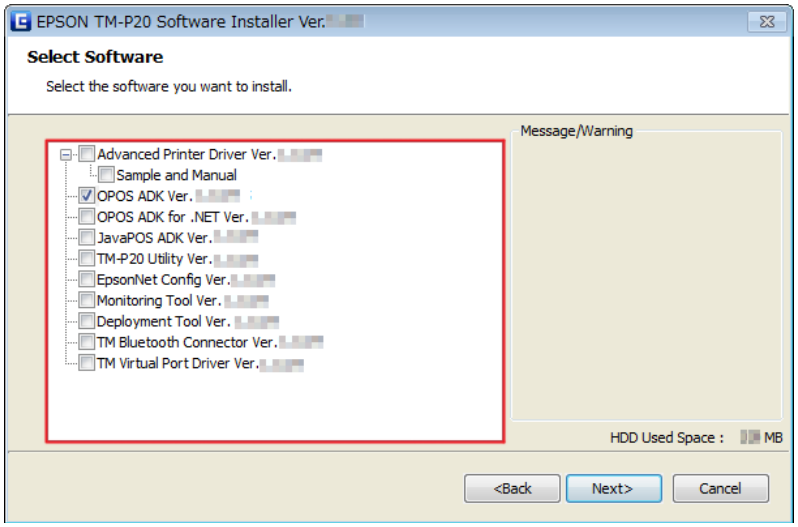
3 The **Update Software** screen appears. The system is checked and existing driver and its version are displayed. Click the **Next** button.



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

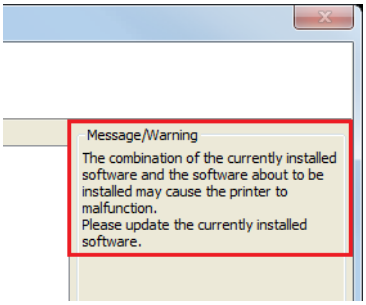
5 The **Select Software** screen appears. Check the checkbox for the drivers and utilities you want to install and uncheck the checkbox for those you do not need.

Items that require updating are automatically selected.



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

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



7 The **Start Installation** screen appears. Check that the listed items to be installed are correct, and click the **Install** button.

8 When the installation is finished, the **Installation Finished** screen appears. Click the **Finish** button to end the installation.

Uninstallation

- ❏ Uninstall the printer driver
- ❏ Uninstall the TM-P20 Utility
- ❏ Uninstall the EpsonNet Config
- ❏ Uninstall the Epson TM Virtual Port Driver
- ❏ Uninstall the Epson Monitoring Tool
- ❏ Uninstall the Epson Deployment Tool
- ❏ Uninstall the Epson TM Bluetooth Connector
- ❏ Uninstall the OPOS ADK
- ❏ Uninstall the OPOS ADK for .NET
- ❏ Uninstall the JavaPOS ADK

Uninstalling the Windows Printer Driver

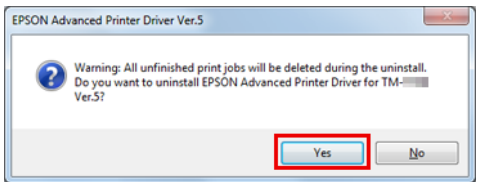
> ***Caution:***
> *Do not delete the printer driver in **Start** - **Control Panel** - **Hardware and Sound** - **Printers**.*
> *See "Differences Depending on the OS" on page 9*
>
> *Even though the icon (the printer driver) disappears from the screen, the printer driver is not uninstalled.*

1. Quit all applications running on the computer.

2. Select **Start** - **Control Panel** - **Uninstall a program** - **EPSON Advanced Printer Driver for TM-P20 Ver.5** and click **Uninstall**.

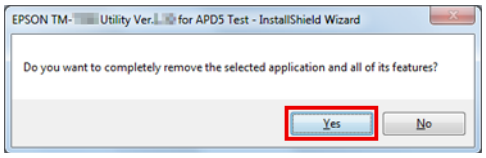
3. The uninstallation confirmation screen appears. Click the **Yes** button.

   The Advanced Printer Driver Ver.5 is uninstalled.



4. The uninstallation confirmation screen for model specific utility is displayed. Click **Yes** when not using the model specific utility with other drivers and applications. Click **No** when not uninstalling.

   The Advanced Printer Driver Ver.5 utility is uninstalled.



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

Uninstalling the TM-P20 Utility

1. Quit all applications running on the computer.

2. Select **Start** - **Control Panel** - **Uninstall a program** - **EPSON TM-P20 Utility**. Click **Uninstall**.

   For information of the differences in screen selections based on the OS versions.
   See "Differences Depending on the OS" on page 9

   When the **User Account Control** screen appears, click the **Continue** button.

3. The TM-P20 Utility uninstallation confirmation screen appears. Click the **Yes** button.

4 The uninstallation of the TM-P20 Utility starts.

5 The **Uninstall Complete** screen appears. Click the **Finish** button to finish the uninstallation.

Uninstall the EpsonNet Config

1 Select **Start** - **Control Panel** - **Uninstall a program** - **EpsonNet Config**. Click **Uninstall**.

For information of the differences in screen selections based on the OS versions.
See "Differences Depending on the OS" on page 9

When the **User Account Control** screen appears, click the **Continue** button.

2 The EpsonNet Config uninstallation confirmation screen appears. Click the **Yes** button.

3 The uninstallation of the EpsonNet Config starts.

4 The **Uninstall Complete** screen appears. Click the **Finish** button to finish the uninstallation.

Uninstalling the Epson TM Virtual Port Driver

1 Select **Start** - **Control Panel** - **Uninstall a program** - **EPSON TM Virtual Port Driver**. Click **Uninstall**.

For information of the differences in screen selections based on the OS versions.
See "Differences Depending on the OS" on page 9

When the **User Account Control** screen appears, click the **Continue** button.

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

3 The uninstallation of the Epson TM Virtual Port Driver starts.

4 When uninstallation is complete, the window automatically closes.

Uninstalling the Epson Monitoring Tool

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

1 Select **Start** - **Control Panel** - **Uninstall a program** - **Epson Monitoring Tool**. Click **Uninstall**.

For information of the differences in screen selections based on the OS versions.
See "Differences Depending on the OS" on page 9

When the **User Account Control** screen appears, click the **Continue** button.

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

3 The **Uninstall Complete** window appears. click on the **Finish** button.

Uninstalling the Epson Deployment Tool

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

1 Select **Start** - **Control Panel** - **Uninstall a program** - **Epson Deployment Tool**. Click **Uninstall**.

For information of the differences in screen selections based on the OS versions.
See "Differences Depending on the OS" on page 9

When the **User Account Control** screen appears, click the **Continue** button.

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

3 The **Uninstall Complete** window appears. click on the **Finish** button.

Uninstalling the Epson TM Bluetooth Connector

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

1 Select **Start** - **Control Panel** - **Uninstall a program** - **Epson TM Bluetooth Connector**. Click **Uninstall**.

For information of the differences in screen selections based on the OS versions.
See "Differences Depending on the OS" on page 9

When the **User Account Control** screen appears, click the **Continue** button.

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

3 The **Uninstall Complete** window appears. click on the **Finish** button.

Uninstalling the OPOS ADK

1 Quit all applications running on the computer.

2 Select **Start** - **Control Panel** - **Uninstall a program** - **EPSON OPOS ADK Version x.xx**. Click **Uninstall**.

For information of the differences in screen selections based on the OS versions.
See "Differences Depending on the OS" on page 9

When the **User Account Control** screen appears, click the **Continue** button.

3 The EPSON OPOS ADK uninstallation confirmation screen appears. Click the **Yes** button.

4 The **Information** screen appears. Click the **Yes** button.

5 The **ADK Selection** screen appears. Click the **Next** button.

6 The **Confirm Deletion** screen appears. Click the **Start** button.

7 The uninstallation of the EPSON OPOS ADK starts.

8 The **Uninstall Complete** screen appears. Click the **Finish** button.

When **Yes, I want to restart my computer now.** is selected, the computer will restart.

Uninstalling the OPOS ADK for .NET

1 Quit all applications running on the computer.

2 Select **Start** - **Control Panel** - **Uninstall a program** - **EPSON OPOS ADK for .NET x.x.x**. Click **Uninstall**.

For information of the differences in screen selections based on the OS versions.
See "Differences Depending on the OS" on page 9

When the **User Account Control** screen appears, click the **Continue** button.

3 The EPSON OPOS ADK for .NET uninstallation confirmation screen appears. Click the **Yes** button.

4 The uninstallation of the EPSON OPOS ADK for .NET starts.

5 The completion screen appears. Click the **Finish** button to complete the uninstallation.

Uninstalling the JavaPOS ADK

1 Quit all applications running on the computer.

2 Select **Start** - **Control Panel** - **Uninstall a program** - **EPSON JavaPOS ADK**. Click **Uninstall**.

For information of the differences in screen selections based on the OS versions.
See "Differences Depending on the OS" on page 9

When the **User Account Control** screen appears, click the **Continue** button.

3 The **Uninstall Epson JavaPOS ADK** screen appears. Click the **Uninstall** button.

4 The uninstallation of the EPSON JavaPOS ADK starts.

5 The completion screen appears. Click the **Done** button to finish the uninstallation.

Using the Printer Driver

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

Printer Driver Access Methods and the Application Range

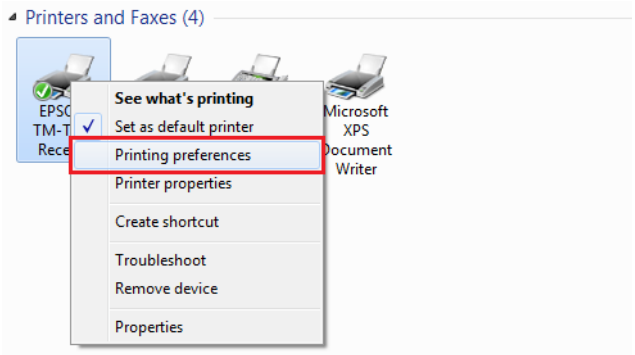
Depending on how you access the printer driver, the application range of the settings you make on the printer driver varies.

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

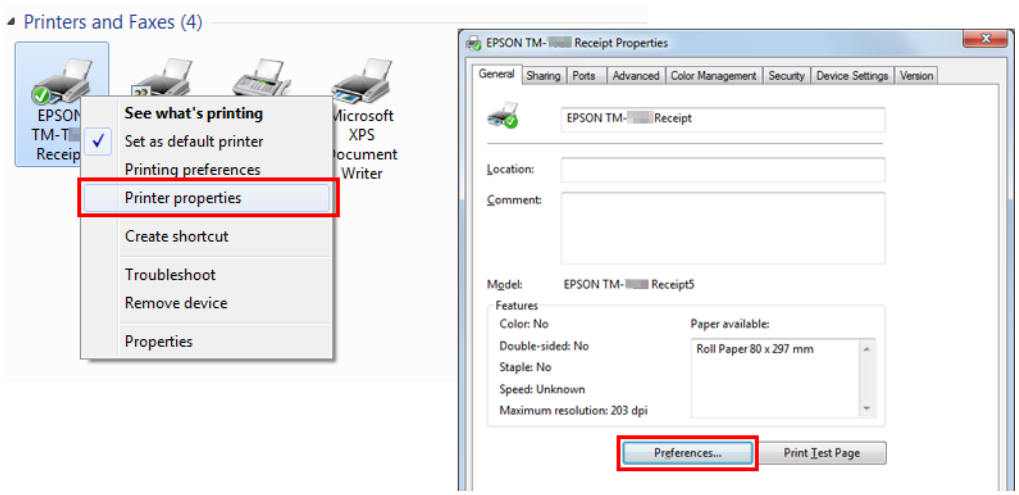
- Accessing the printer driver from the printer driver's Properties
  The print settings you made on the printer driver are applied to your print settings only. They are not applied to the settings of other users. This method is recommended.

- Accessing the printer driver from the application's print setting menu
  The print settings you made on the application are applied to the application only. The settings are canceled when you quit the application. When you start the application again, the print settings configured in the printer driver's properties are applied.

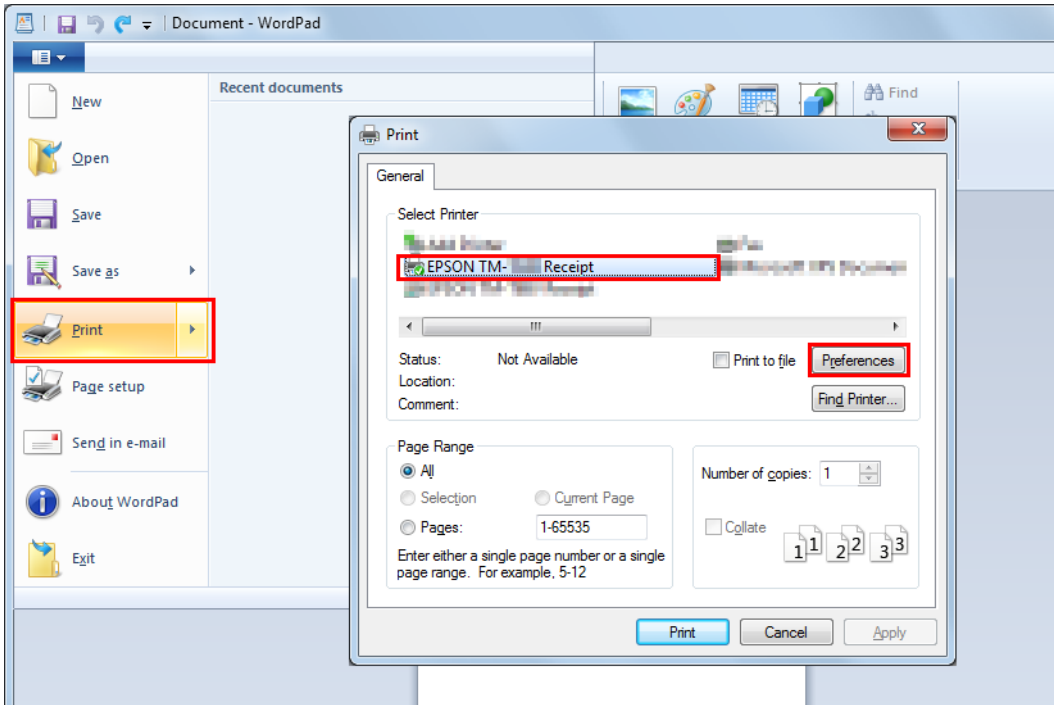
Accessing from the Printer Driver's Print menu



Accessing from the Printer Driver's Properties



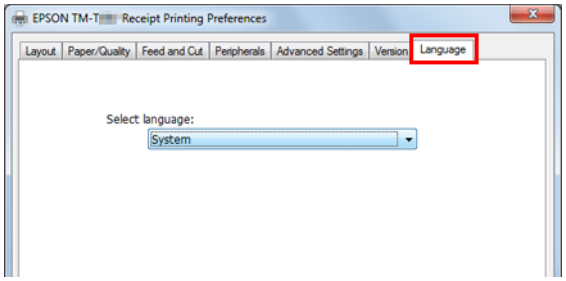
Accessing from the Application's Print Setting Menu



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.

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



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

The languages that can be selected are shown below.

Selectable languages			
Chinese-Hong Kong	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 56

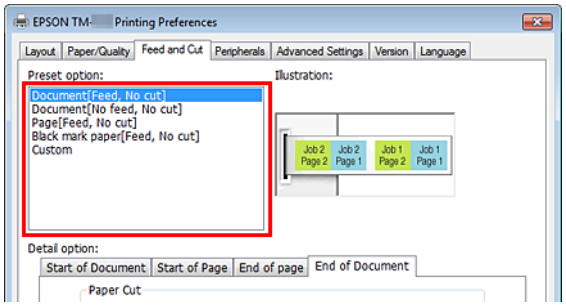
Paper Feed and Cut Setting

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

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

2 Select a cut and paper feed method displayed in the **Preset option** list and click **OK**.

Select using the illustration of paper feed and cut displayed in **Illustration** for your reference.



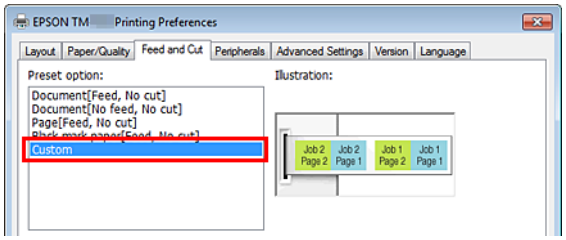
> ***Note:***
> *No Feed: Paper is not fed after printing a document.*

Customization of Paper Feed and Cut

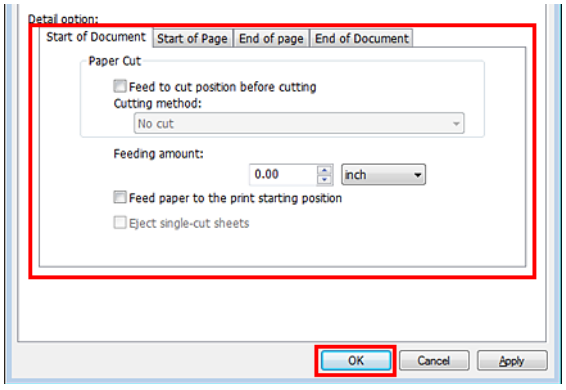
Customization is possible, when no preset function is desired, such as specifying the amount of paper feed and modifying the timing control.

Follow the steps below.

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



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



Settings are described below.

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.
	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

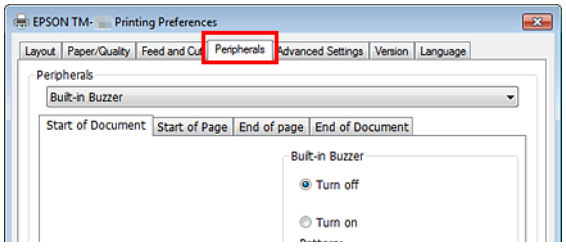
It sets peripheral device's actions such as the buzzer.

> ***Caution***
> *Option buzzer can be operated only with the APD5 utility.*
> *See "Buzzer" on page 59*

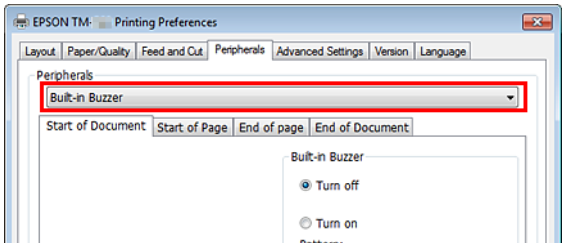
How to Setup

Follow the steps below.

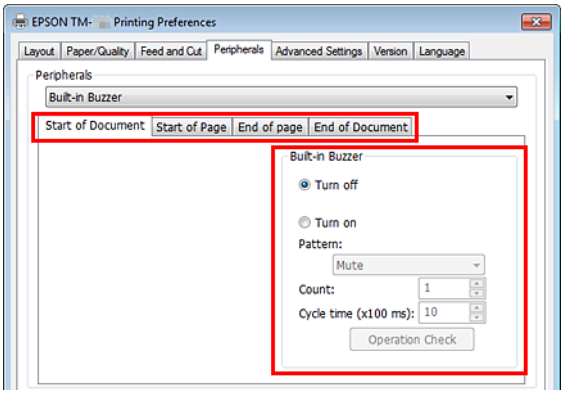
1 Select **Peripherals** tab from Printing Preferences.



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



3 Select the timing to set the peripheral device settings.
See "Setting of Peripheral Device" on page 59



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

Setting of Peripheral Device

Settings may be different depending on peripheral devices.

Buzzer

Settings of buzzer are described below.

Peripherals	Setting Value	Description
Built-in Buzzer	Turn off	Built-in buzzer does not sound.
	Turn on	Built-in buzzer sounds.

Advanced Method

The printer driver also provides the following useful functions.

See the Advanced Printer Driver Ver.5 settings guide for details on using each function.

- ❏ Specifying a paper name and paper size
- ❏ Printing using the Barcode font
- ❏ Printing using a 2D-Code
- ❏ Setting an external optional buzzer
- ❏ Printing by registering a logo to the printer
- ❏ Sending commands
- ❏ Printing a device font in a .NET environment

- ❏ Printing start position settings
- ❏ Printing the 80 mm width layout with 58 mm width
- ❏ Setting an alias name to a font
- ❏ Creating an emulation font
- ❏ Replacing the function of a device font
- ❏ Printing control settings

TM-P20 Utility

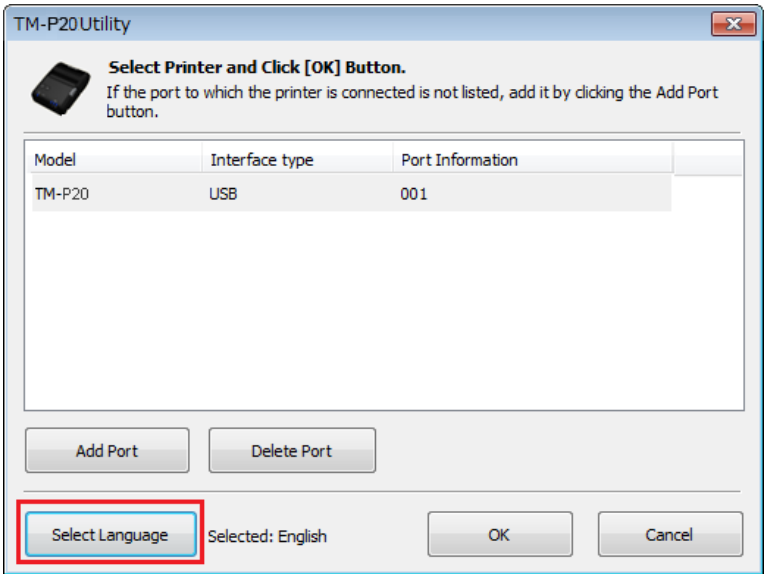
This chapter explains how to use the TM-P20 Utility that configures this printer.

> ⚠ ***Caution:***
> *While saving the settings, do not turn off the printer or terminate the connection with the printer.*

Changing the Display Language

You can select from 24 display languages for the TM-P20 Utility. Selecting the language that is easiest for you to understand will help you correctly configure the settings in the TM-P20 Utility. The language that initially appears is set based on the language information in your operating system.

1 Start the TM-P20 Utility, and then click the **Select Language** button.



2 Select the language that you want to use from the pull-down list, and then click the **OK** button.

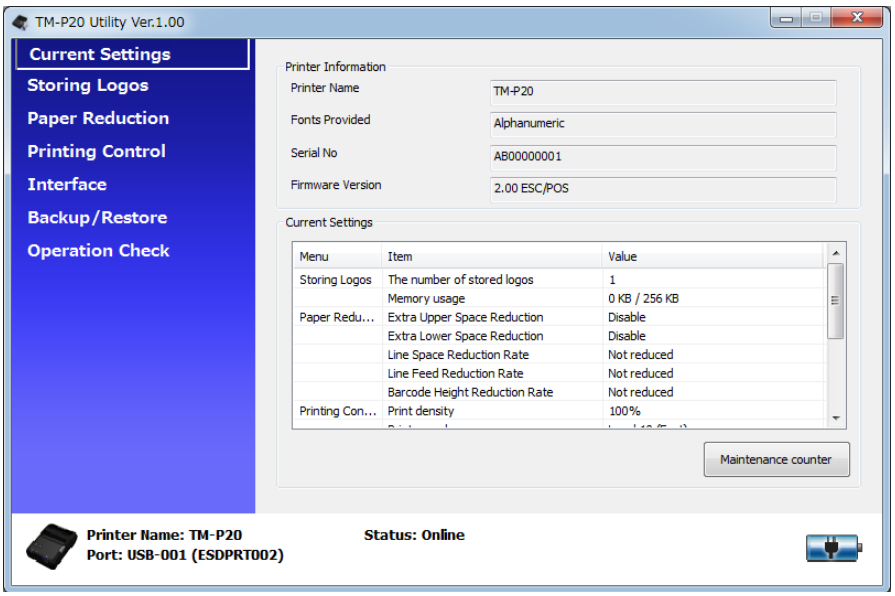
The languages that can be selected are shown below.

Selectable languages			
Chinese-Hong Kong	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

Function Summary

TM-P20 Utility provides the following functions.

For details on using each function, see the TM-P20 Utility User's Manual.



Item	Description
Current Settings	Displays the setting content for the printer that is currently connected.
Storing Logos *1	Configures the logos to be stored on the printer.
Paper Reduction *2	Configures printing that reduces margins or line-spacing.
Printing Control	Configure print control options such as the paper width, print density, and print speed for the printer.
Interface *3	This utility allows you to make printer communication settings.
Backup/Restore	Allows you to save the printer settings to a file and to restore the stored settings to the printer.

TM-P20 Utility

Item	Description
Operation Check	Allows you to check the printer operation and communication between the printer and the driver.

*1 The utility allows you to print your logo already stored on the printer, but you cannot edit and restore it as a file.

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

- Windows printer driver: When printing TrueType fonts, specifying reduced printing, specifying "horizontal" print direction, specifying flip vertical, specifying barcode rotation and so on.

- UPOS: Printing in page mode, printing with rotation setting, printing with bitmap Images/Barcode/Characters horizontally aligned, and so on.

- ESC/POS command: Printing images such as logos or coupon tickets, printing in page mode, printing with rotation setting, and so on.

*3 This utility does not setup the ports on the computer. Therefore, the utility may not be able to communicate with the printer when trying to setup the printer. In this situation, change the printer driver settings or any other necessary settings on the computer so that they match the settings made on the printer.

Epson TM Utility

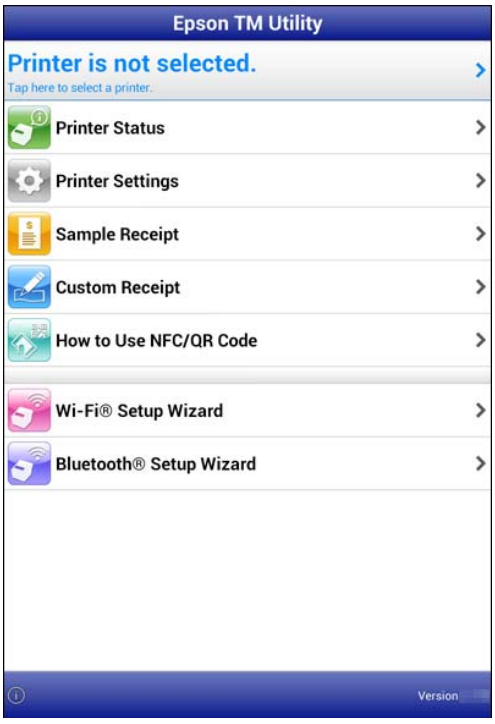
You can download the Epson TM Utility for free from the App Store or from Google Play.
A wizard guides you through connecting an iOS or Android device to your printer. You can also check and change the printer's settings from the iOS or Android device.
It also comes with the following demo print functions.

- ❏ Printing sample receipts
- ❏ Printing customized receipts
- ❏ Displaying the printer status
- ❏ Selecting printers using an NFC or QR code

Search for "Epson TM Utility" in the App Store or Google Play, and then install the application with the following icon.



Epson TM Utility provides the following functions.



Epson TM Utility

Item	Description
Printer Status	Check the printer's status (cover open or closed, paper availability, drawer open or closed, and amount of battery remaining).
Printer Settings	Check or change the registered logo, print control (paper width, print density, print speed, and so on) settings and so on.
Sample Receipts	Print sample receipts.
Custom Receipts	Print receipts with the following custom settings. ❏ Printing a logo ❏ Printing a barcode ❏ Automatic cutting settings ❏ Drawer settings
How to Use NFC/QR Code *1	Print demonstration using an NFC or QR code. ❏ Quick pairing by NFC/QR code This allows you to read an NFC tag built into a printer or a QR code with the camera on a smart device which then triggers an operation and connects the smart device to the printer. ❏ Easy print by NFC/QR code This allows you to read an NFC tag built into a printer or a QR code with the camera on a smart device which then triggers an operation and prints.
Wi-Fi Setup Wizard	A wizard guides you through making network settings for Wi-Fi models.
Bluetooth Setup Wizard	A wizard guides you through connecting to Bluetooth models.

*1 Not all devices support NFC.

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

This is an Windows driver (APD = EPSON Advanced Printer Driver) which allows you to control POS operations, such as printing logos and barcodes, controlling paper cutting function and cash drawer. See this manual for more details about the printer driver. The driver includes Status API which allows you to monitor the printer status, and to send the ESC/POS commands.
See the following manuals and sample programs provided with EPSON Advanced Printer Driver Ver.5 for further details on using the driver and how to develop an application using the Status API functions.

- ❏ Install Manual
- ❏ Printer Manual
- ❏ Printer Specification for TM-P20
- ❏ Status API Manual

UPOS

This stands for **Unified Point of Service**. It is the standard specification of POS market, which defines drivers for controlling POS peripheral devices in various operation environments. Using the driver, you can develop POS system efficiently because you do not need to newly create commands. The following TM-P20 drivers that conform to UPOS are provided. Use one of them in accordance with your system environment.

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

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

EPSON OPOS ADK

- ❏ OPOS Installation Manual

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

EPSON OPOS ADK for .NET

- ❏ OPOS ADK for .NET Installation Guide
- ❏ UnifiedPOS Retail Peripheral Architecture*
- ❏ User's Reference (SetupPOS)
- ❏ Application Development Guide (POSPrinter TM-P20)

EPSON JavaPOS ADK for Windows

- ❏ JavaPOS ADK Installation Guide

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

ePOS-Print SDK

ePOS-Print SDK is a Software Development Kit (SDK) for developers creating applications that can print from EPSON TM printers. Applications can be developed using the API provided by the ePOS-Print SDK. The following SDK is provided. Use the kit that best suits the type of application being developed.

- ❏ ePOS-Print SDK for iOS
  Use this to develop applications that print from iOS devices.
- ❏ ePOS-Print SDK for Android
  Use this to develop applications that print from Android devices.
- ❏ ePOS-Print SDK for Windows store application
  Use this to develop Windows store applications that print from Windows 8.1 devices.
  * Windows RT (ARM) is not supported.
- ❏ ePOS-Print SDK for JavaScript
  Use this to develop Web applications.

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

- ❏ ePOS-Print SDK for iOS
  - ❏ User's Manual
  - ❏ Application Development Environment - Setup Guide
  - ❏ Sample Programs

- ePOS-Print SDK for Android
  - User's Manual
  - Application Development Environment - Setup Guide
  - Sample Programs
- ePOS-Print SDK for Windows store application
  - User's Manual
  - Application Development Environment - Setup Guide
  - Sample Programs
- ePOS-Print SDK for JavaScript
  - User's Manual
  - Sample Programs

ESC/POS Commands

The ESC/POS command is the printer command system developed by EPSON. This allows you to directly control the all functions of the printer. Using the commands with the driver, you can use a function that is not provided by the driver.
Compared to using the drivers, using the commands is difficult because you need to have knowledge about the detailed printer specifications and how to combine the commands.

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

Storing Logos

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

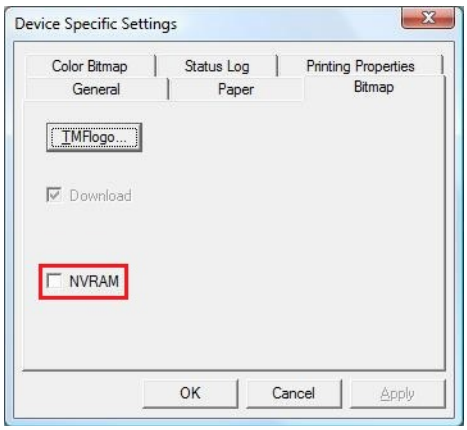
For Windows PC

When using the Advanced Printer Driver only

Use TM-P20 Utility to store logos.

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

❏ 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-P20 Utility to store logos in the printer.

For iOS/Android

Use TM Utility for iOS/Android to store logos.

Download

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

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

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

Select the product name from the "Select any product" pull-down menu.