



**PLQ-50/PLQ-50CS/PLQ-50M/  
PLQ-50CSM/PLQ-50CSK**

# **User's Guide**

---

---

## **Copyrights and Trademarks**

No part of this publication 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 information contained herein is designed only for use with this Epson printer. Epson is not responsible for any use of this information as applied to other printers.

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 for 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.

EPSON is a registered trademark, EPSON EXCEED YOUR VISION, EXCEED YOUR VISION, ESC/P, and ESC/P2 are trademarks of Seiko Epson Corporation.

Microsoft®, Windows®, Windows Server®, and Windows Vista® are registered trademarks of Microsoft Corporation in the United States and/or other countries.

IBM® is a registered trademark of International Business Machines Corporation.

*General Notice: Other product names used herein are for identification purposes only and may be trademarks of their respective owners. Epson disclaims any and all rights in those marks.*

The contents of this manual and the specifications of this product are subject to change without notice.

© 2020 Seiko Epson Corporation

---

## Contents

### **Getting to Know Your Printer**

---

Features. . . . .	6
-------------------	---

### **About This Manual**

---

Where to Find Information . . . . .	7
Descriptions Used in this Manual. . . . .	7
Operating System Versions. . . . .	7

### **Important Instructions**

---

Safety Instructions. . . . .	9
Warnings, Cautions, and Notes. . . . .	9
Hot Parts Caution Symbol. . . . .	9
Important Safety Instructions. . . . .	9
For Users in Russia, Belarus, and Kazakhstan. . . . .	13
Restrictions on Copying. . . . .	14
When using the USB hub (for USB hub models only). . . . .	14

### **Chapter 1 Printer Basics**

---

Printer Parts. . . . .	15
Control Panel. . . . .	17
Control Panel Buttons and Lights. . . . .	17
Guide to the LCD Screens. . . . .	18
Consumable information. . . . .	20
Genuine Epson ribbon cartridge. . . . .	20

### **Chapter 2 Paper Handling**

---

Acceptable Paper Condition. . . . .	22
Loading Passbooks. . . . .	23
Loading Single Sheets. . . . .	24

Loading ID Card. . . . .	25
--------------------------	----

### **Chapter 3 Printer Software**

---

About Your Printer Software. . . . .	27
Using the Printer Driver. . . . .	27
Accessing the printer driver from Windows applications. . . . .	28
Accessing the printer driver from the Start menu. . . . .	30
Changing the printer driver settings. . . . .	32
Printer Driver Settings Overview. . . . .	34
Print settings. . . . .	34
Uninstalling the Printer Software. . . . .	36
Uninstalling the printer driver and EPSON Status Monitor 3. . . . .	36

### **Chapter 4 Maintenance**

---

Replacing the Ribbon Cartridge. . . . .	39
Replacing the ribbon cartridge. . . . .	39
Cleaning the Printer. . . . .	45
Cleaning the Scanner Glass (for Scanning Models Only). . . . .	46
Transporting the Printer. . . . .	47

### **Chapter 5 Troubleshooting**

---

Diagnosing the Problem. . . . .	49
Printing Your Printer's Current Settings. . . . .	49
LCD Model. . . . .	49
Models Without LCD Screens. . . . .	50
Checking Messages on the LCD Screen or Error Indicators. . . . .	51
Problems and Solutions. . . . .	53
Power Supply. . . . .	53
Printing. . . . .	53
Scanning. . . . .	57
Paper Handling. . . . .	57
Clearing a Paper Jam. . . . .	58
Printing a Self Test. . . . .	60

**Chapter 6 Where To Get Help**

---

Technical Support Web Site. . . . .	62
Contacting Customer Support. . . . .	62
Before Contacting Epson. . . . .	62
Help for Users in Europe. . . . .	63
Help for Users in Singapore. . . . .	63
Help for Users in Thailand. . . . .	63
Help for Users in Vietnam. . . . .	63
Help for Users in Indonesia. . . . .	64
Help for Users in Malaysia. . . . .	66
Help for Users in India. . . . .	66
Help for Users in the Philippines. . . . .	67

**Chapter 7 Product Information**

---

Printer Specifications. . . . .	68
System Requirements. . . . .	68
Mechanical. . . . .	68
Electronic. . . . .	71
Electrical. . . . .	74
Environmental. . . . .	75
Paper/Media. . . . .	75
Magnetic stripe reader/writer (Magnetic stripe reading and writing models only). . . . .	82
Scanner Specifications (Scanning Models Only). . . . .	92
General. . . . .	92
Scannable Area. . . . .	93
USB Hub Specification (USB hub models only). . . . .	94
Standards and Approvals. . . . .	94
Safety approvals. . . . .	94

---

## Getting to Know Your Printer

---

### Features

Your EPSON PLQ-50/PLQ-50CS/PLQ-50M/PLQ-50CSM/PLQ-50CSK 24-pin flatbed dot matrix printer provides high-quality printing and superior performance in a compact design. Its features include:

- ❑ PLQ-50M and PLQ-50CSM can also read and write magnetic stripes. These models are referred to as magnetic stripes reading and writing models in this manual.
- ❑ PLQ-50CS, PLQ-50CSM and PLQ-50CSK have scanning capability. These models are referred to as scanning models in this manual.
- ❑ PLQ-50, PLQ-50CS, PLQ-50M, and PLQ-50CSM have LCD screen which displays printer status and guidance messages. These models are referred to as LCD models in this manual.
- ❑ PLQ-50CSM has two USB Hub connectors and can connect multiple USB devices. This model is referred to as USB Hub model in this manual.
- ❑ The ability to handle a wide range of paper types, including passbook, single sheets, multipart forms with one original and up to six copies, and ID card (scanner models only).

---

## About This Manual

---

### Where to Find Information

The following manuals are supplied with your Epson printer.

**Start Here (paper manual)**

Provides information on setting up the printer and installing the software.

**User's Guide (this manual)**

Provides overall information and instructions on using the printer.

---

### Descriptions Used in this Manual

- Screenshots of the printer software screens are from Windows 10 unless otherwise specified. The content displayed on the screens varies depending on the model and situation.
- Screenshots of the printer LCD screens on LCD models are subject to change without notice. The contents may vary depending on the product.
- Illustrations of the printer used in this manual are examples only. Although there may be slight differences depending on the model, the method of operation is basically the same unless stated.

---

### Operating System Versions

Regarding the operating systems, the explanations in this manual are mainly for Windows users and terms such as "Windows 10", "Windows 8.1", "Windows 8", "Windows 7", "Windows Vista", "Windows XP", "Windows Server 2019", "Windows Server 2016", "Windows Server 2012 R2", "Windows Server 2012", "Windows Server 2008 R2", "Windows Server 2008", "Windows Server 2003 R2", and "Windows Server 2003" refer to the following operating system. Additionally, "Windows" is used to refer to all versions.

- Microsoft® Windows® 10 operating system
- Microsoft® Windows® 8.1 operating system
- Microsoft® Windows® 8 operating system

- Microsoft® Windows® 7 operating system
- Microsoft® Windows Vista® operating system
- Microsoft® Windows® XP operating system
- Microsoft® Windows® XP Professional x64 Edition operating system
- Microsoft® Windows Server® 2019 operating system
- Microsoft® Windows Server® 2016 operating system
- Microsoft® Windows Server® 2012 R2 operating system
- Microsoft® Windows Server® 2012 operating system
- Microsoft® Windows Server® 2008 R2 operating system
- Microsoft® Windows Server® 2008 operating system
- Microsoft® Windows Server® 2003 R2 operating system
- Microsoft® Windows Server® 2003 operating system



---

## Important Instructions

---

### Safety Instructions

#### Warnings, Cautions, and Notes

**Warnings**

*must be followed carefully to avoid bodily injury.*

**Cautions**

*must be observed to avoid damage to your equipment.*

**Notes**

*contain important information and useful tips on the operation of your printer.*

#### Hot Parts Caution Symbol



This symbol is placed on the print head and other parts to indicate that they may be hot. Never touch those parts just after the printer has been used. Let them cool for a few minutes before touching them.

#### Important Safety Instructions

Read all of these safety instructions before using the printer. In addition, follow all warnings and instructions marked on the printer itself.

Some of the symbols used on your product are to ensure safety and proper use of the product. Visit the following Web site to learn the meaning of the symbols.

<http://support.epson.net/symbols>

#### When setting up the printer

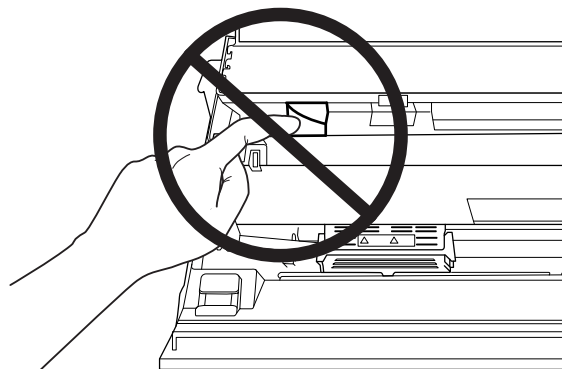
- Do not place the printer on an unstable surface or near a radiator or heat source.
- Place the printer on a flat, stable surface. The printer will not operate properly if it is tilted or placed at an angle.

- ❑ Do not place this product on a soft, unstable surface like a bed or a sofa, or a small, enclosed area, as this restricts ventilation.
- ❑ Do not block or cover the slots and openings in the printer's cabinet, and do not insert objects through the slots.
- ❑ Leave adequate room around the printer for easy operation and maintenance.
- ❑ When connecting this product to a computer or other device with a cable, ensure the correct orientation of the connectors. Each connector has only one correct orientation. Inserting a connector in the wrong orientation may damage both devices connected by the cable.
- ❑ Use only the type of power source indicated on the printer's label. If you are not sure of the power supply specifications in your area, contact your local power company or consult your dealer.
- ❑ Connect all equipment to properly grounded electrical outlets. Avoid using outlets on the same circuit as photocopiers or air control systems that regularly switch on and off.
- ❑ Do not use a damaged or frayed power cord.
- ❑ The power cord should be placed to avoid abrasions, cuts, fraying, crimping, kinking, and other damage.
- ❑ If you use an extension cord with the printer, make sure the total ampere rating of all devices plugged into the extension cord does not exceed the cord's ampere rating. Also, make sure the total ampere of all devices plugged into the electrical outlet does not exceed the electrical outlet's ampere rating.
- ❑ Use only the power cord that comes with this product. Use of another cord may result in fire or electric shock.
- ❑ This product's power cord is for use with this product only. Use with other equipment may result in fire or electric shock.
- ❑ Be sure the AC power cord meets the relevant local safety standards.
- ❑ Avoid using or storing the printer in places subject to rapid changes in temperature and humidity. Also keep it away from direct sunlight, strong light, heat sources, or excessive moisture or dust.
- ❑ Avoid places subject to shocks and vibrations.
- ❑ Place the printer near a wall outlet where you can easily unplug the power cord.
- ❑ Keep the entire computer system away from potential sources of electromagnetic interference, such as loudspeakers or the base units of cordless telephones.

- ❑ Avoid electrical outlets controlled by wall switches or automatic timers. An interruption in power can erase information in the memory of your printer or computer. Also avoid outlets on the same circuit as large motors or other appliances that can cause voltage fluctuations.
- ❑ Use a grounded power outlet; do not use an adapter plug.
- ❑ If you plan to use a printer stand, follow these guidelines:
  - Use a stand that can support at least twice the weight of the printer.
  - Never use a stand that tilts the printer. The printer should always be kept level.
  - Position your printer's power cord and interface cable so they do not interfere with paper feeding. If possible, secure the cables to a leg of the printer stand.
- ❑ Do not place near the CRT display which emits strong electromagnetic wave.

### ***When maintaining the printer***

- ❑ Unplug the printer before cleaning it, and always clean it with a piece of damp cloth only.
- ❑ Do not spill liquid onto the printer.
- ❑ Do not attempt to service the printer yourself except as specifically explained in this guide.
- ❑ Unplug the printer and refer servicing to qualified service personnel under the following conditions:
  - i. If the power cord or plug is damaged.
  - ii. If liquid has entered the printer.
  - iii. If the printer has been dropped or the cabinet damaged.
  - iv. If the printer does not operate normally or exhibits a distinct change in performance.
- ❑ Do not use aerosol blowers which contain flammable gas inside or around this product. Doing so may cause fire.
- ❑ Adjust only those controls that are covered by the operating instructions.
- ❑ Do not touch the white cable inside the printer.



### ***When loading paper***

- Use passbooks and paper that have more than 60% reflectance.
- When you use a passbook, set **Passbook** mode to **On** and set **Binding** mode to the method for the passbook's binding in the default setting mode.
- Do not load passbooks that are creased or have ripped seam.
- Do not use a passbook that has any metallic parts such as staplers or metal clips.
- Do not use a passbook with sticky parts such as stamps or seals.
- Do not use a passbook that has any pages smaller than the cover page.
- Do not print on the front or back cover of a passbook. Printing can be done only when the passbook is opened.
- When you use paper that is shorter than 110.0 mm, set the paper eject direction to front. The factory set default is front. Please access <http://www.epson.com> for information.
- Do not insert paper that is curled or has been folded into the slot when you load it.
- Do not punch holes in the area from 25.0 to 40.0 mm from the left edge of paper.
- Always use the printer with the ribbon cartridge installed. Otherwise, paper jam may occur.

### ***When operating the printer***

- Avoid using or storing the printer in places subject to rapid changes in temperature and humidity. Keep it away from direct sunlight, strong light, heat sources or excessive moisture or dust.
- Adjust only those controls that are covered in the user documentation. Improper adjustment of other controls may result in damage requiring extensive repair by a qualified technician.
- Whenever you turn off the printer, wait at least five seconds before turning it back on; otherwise, you may damage the printer.
- Do not turn off the printer while it is printing the self test. Always press the **Offline** button to stop printing and then turn off the printer.
- Do not reconnect the power cord to an electrical outlet that has the wrong voltage for your printer.
- Never replace the print head yourself; you may damage the printer. Also, other parts of the printer must be checked when the print head is replaced.
- You need to move the print head by hand to replace the ribbon cartridge. If you have just used the printer, the print head may be hot; let it cool for a few minutes before touching it.

- ❑ If ink gets on your skin, wash it off with soap and water. If it gets in your eyes, flush them immediately with water.
- ❑ If you plan to use the printer in Germany, observe the following:  
To provide adequate short-circuit protection and over-current protection for this printer, the building installation must be protected by a 16-amp circuit breaker.  
Beim Anschluss des Druckers an die Stromversorgung muss sichergestellt werden, dass die Gebäudeinstallation mit einer 16-A-Sicherung abgesichert ist.

### **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.

### **For Users in Russia, Belarus, and Kazakhstan**

#### **Customer information**

The model complies with the Technical regulation of Customs Union "About the safety of low voltage equipment" (TP TC 004/2011); with the Technical regulation of Customs Union "On Electromagnetic Compatibility of Technical Devices" (TP TC 020/2011)

#### **Manufacturer: SEIKO EPSON CORPORATION**

Address: 3-5, Owa 3-chome, Suwa-shi, Nagano-ken 392-8502 Japan  
Telephone: 81-266-52-3131

#### **Official representative in CIS countries:**

LLC "EPSON CIS"

Address: Moscow, 129110, ul. Schepkina, 42, Bldg. 2a, Fl. 3 Business Center Chaika Plaza  
Telephone: +7 (495) 777-0355/56  
web: <http://www.epson.ru/>  
email: [info\\_CIS@epson.ru](mailto:info_CIS@epson.ru)

#### **EPSON EUROPE B.V. MOSCOW REPRESENTATIVE OFFICE**

Address: Moscow, 129110, ul. Schepkina, 42, Bldg. 2a, Fl. 3 Business Center Chaika Plaza  
Telephone: +7 (495) 777-0355/56  
web: <http://www.epson.ru/>

**Production month and year:** Labeled on the product with 8 numbers: YYYY.MM.DD

**Country of production:** Labeled on the product



---

## **Restrictions on Copying**

Observe the following restrictions to ensure responsible and legal use of your product.  
Copying of the following items is prohibited by law:

- Bank bills, coins, government-issued marketable securities, government bond securities, and municipal securities
- Unused postage stamps, pre-stamped postcards, and other official postal items bearing valid postage
- Government-issued revenue stamps, and securities issued according to legal Procedure

Exercise caution when copying the following items:

- Private marketable securities (stock certificates, negotiable notes, checks, etc.), monthly passes, concession tickets, etc.
- Passports, driver's licenses, warrants of fitness, road passes, food stamps, tickets, etc.

**Note:**

*Copying these items may also be prohibited by law.*

*Responsible use of copyrighted materials*

*Products can be misused by improperly copying copyrighted materials. Unless acting on the advice of a knowledgeable attorney, be responsible and respectful by obtaining the permission of the copyright holder before copying published material.*

---

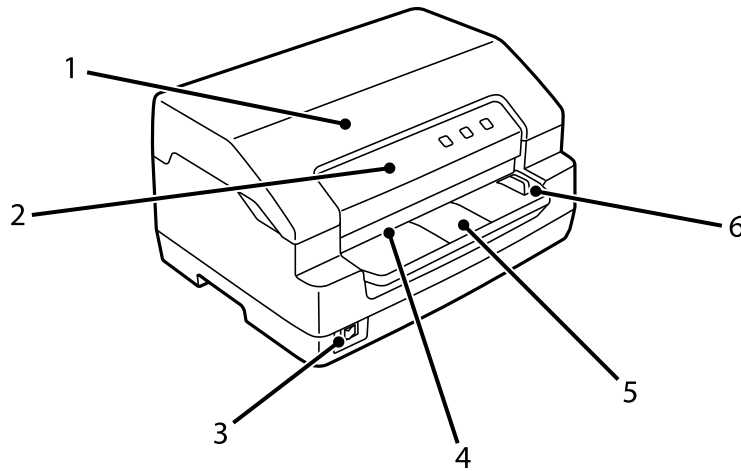
## **When using the USB hub (for USB hub models only)**

- Do not connect multiple printers to each other.
- The USB hub only supports bus power, and therefore cannot exceed more than 500 mA of power consumption. If this is exceeded, a warning is sent to the host computer and the host computer turns off the connection for all ports.

## Chapter 1

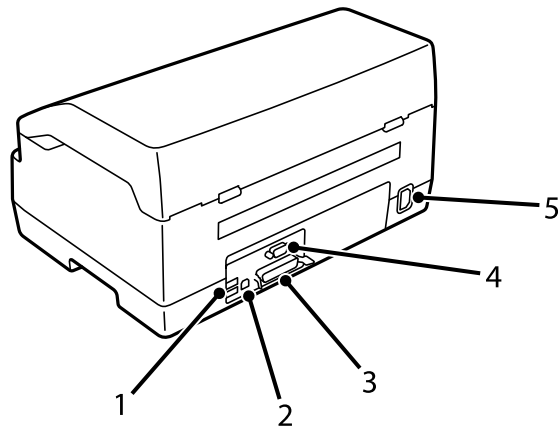
### Printer Basics

#### Printer Parts

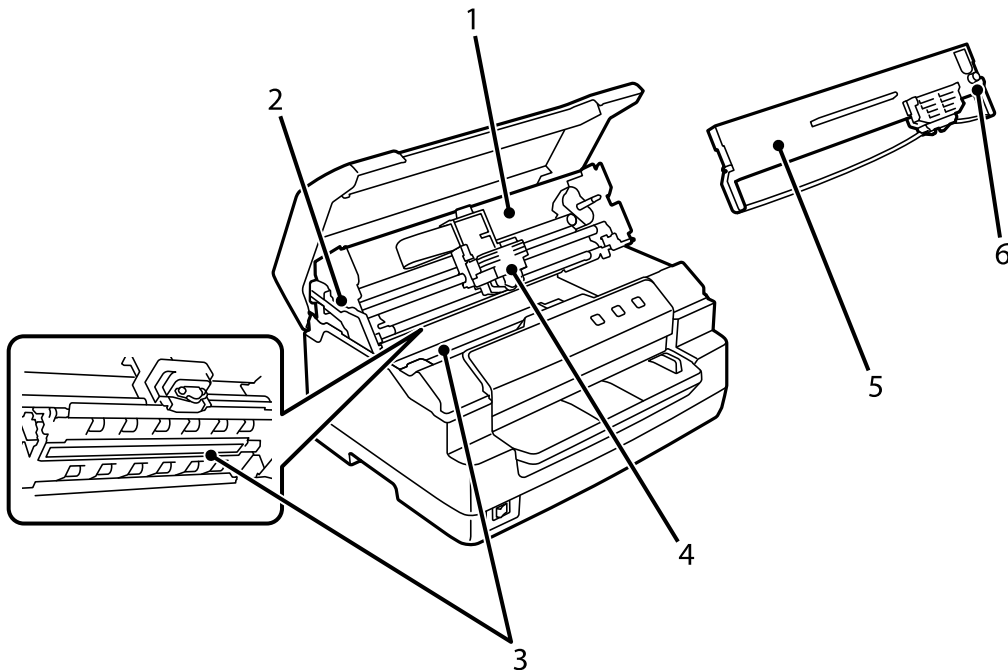


1	printer cover	Open this when replacing ribbon cartridge or removing jammed paper.
2	control panel	The printer's operation panel.
3	power switch	Turn the printer on or off.
4	front slot	Loads the paper or the passbook. On scanner models, you can also load originals or ID cards you want to scan.
5	ID card guide	Load ID cards here (scanning models only)

6	scanner edge guide	Insert your document to the left of this guide (scanning models only)
---	--------------------	---



1	USB hub port	Two USB type A ports for PC peripherals. Only available on USB hub models.
2	USB port	Connects a USB cable.
3	parallel interface connector	Connects the parallel interface cable.
4	serial interface connector	Connects the serial interface cable.
5	AC inlet	Connects the power cable.

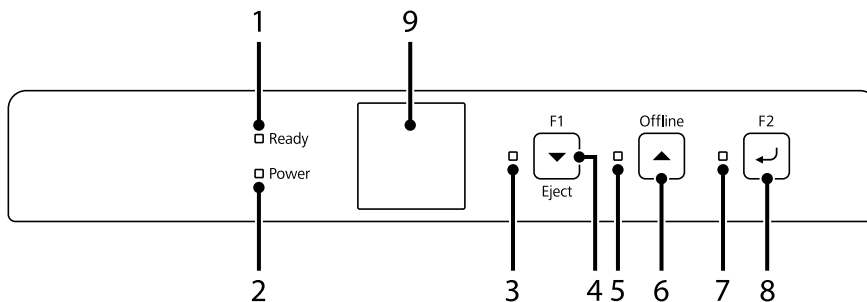




1	upper mechanism	The unit that prints on paper.
2	release lever	Releases the upper mechanism to make it easier to remove paper when the paper is jammed.
3	scanner unit	Scanning device available only on the scanner models. The PLQ-50CSK only has the lower side.
4	print head	Prints on paper.
5	ribbon cartridge	Contains ink ribbon.
6	ribbon-tightening knob	Turn this to remove any slack in the ribbon.

## Control Panel

### Control Panel Buttons and Lights



### Factory Default Setting

The explanation below is based on the factory default settings and the buttons and the lights functions may vary from the explanations below depending on the printer settings implemented to your printer.

1	<b>Ready</b> light (Orange)	On when output data is in buffer, or is being printed. Flashes when an error has occurred during a printing operation.
2	<b>Power</b> light (Blue)	On when the power is turned on.
3	<b>F1/Eject</b> light (Orange)	On when the serial interface is selected to use.
4	<b>F1/Eject</b> button	No function is assigned when printing using the serial interface connection. Ejects paper when printer is offline and printing using USB interface connection.

5	<b>Offline</b> light (Orange)	On when the printer is offline.
6	<b>Offline</b> button	Alternates the printer activity between offline and online.
7	<b>F2</b> light (Orange)	On when the USB interface is selected to use.
8	<b>F2</b> button	No function is assigned.
9	LCD screen (available only on the LCD models)	Displays printer status and messages. For the typical screen displays shown, see "Guide to the LCD Screens" on page 18.

## Guide to the LCD Screens

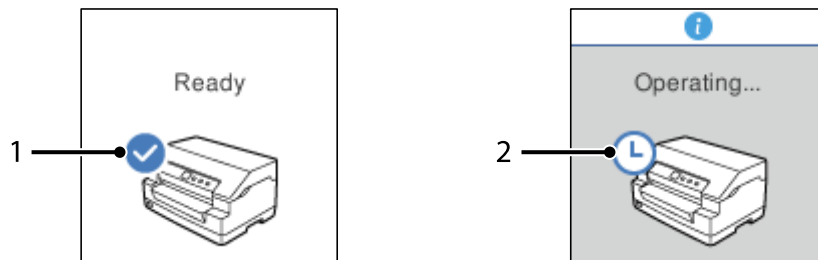
This section provides an overview of menus and controls for the LCD screens.

**Note:**

The LCD screen is available only on the LCD models.

### Status Information Screen

Printer displays the current printer status. The examples are shown below.

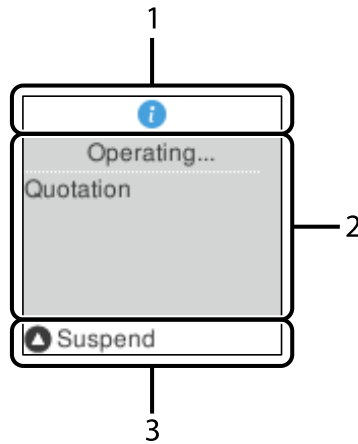


1	The printer is ready to print.
2	The printer is busy. Wait for a while till the printer becomes ready.

### Job Information Screen

Your printer can display job information when it receives print jobs in Windows. You can enter a short note in the printer driver as a **Driver Note** which allows you to identify the print job. See "Printer Driver Settings Overview" on page 34.

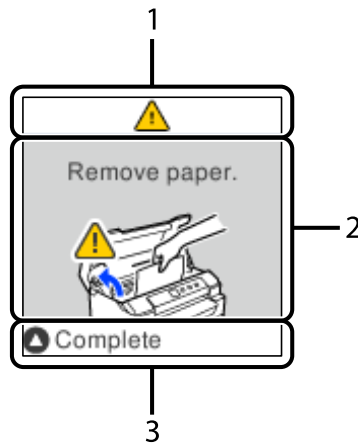
The information or message displayed may differ depending on the print data sent from the Windows application.



1	The information icon indicates that information is available.
2	Displays the <b>Driver Note</b> entered in the printer driver.
3	Displays available buttons and controls.

### **Error Display Screen**

The printer displays the error status when an error has occurred. The following is an example.



1	An error has occurred.
2	Displays error information.
3	Displays available buttons and instructions.

**Note:**

Follow the onscreen instructions to recover from the error.

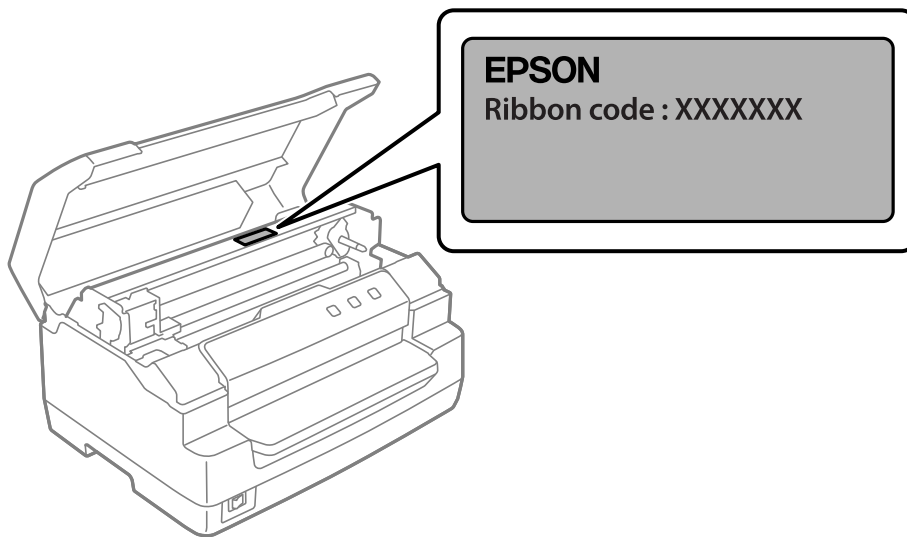
---

## Consumable information

### Genuine Epson ribbon cartridge

When printing becomes faint, you need to replace the ribbon cartridge. Genuine Epson ribbon cartridges are designed and manufactured to work properly with your Epson printer. They ensure proper operation and long life of the print head and other printer parts. Other products not manufactured by Epson may cause damage to your printer, which is not covered by Epson's warranties.

The model number for the genuine Epson ribbon cartridges for your printer is printed on the label inside the printer.



See “Replacing the ribbon cartridge” on page 39 for the instruction on replacing the ribbon cartridge.

## Chapter 2

# ***Paper Handling***

---

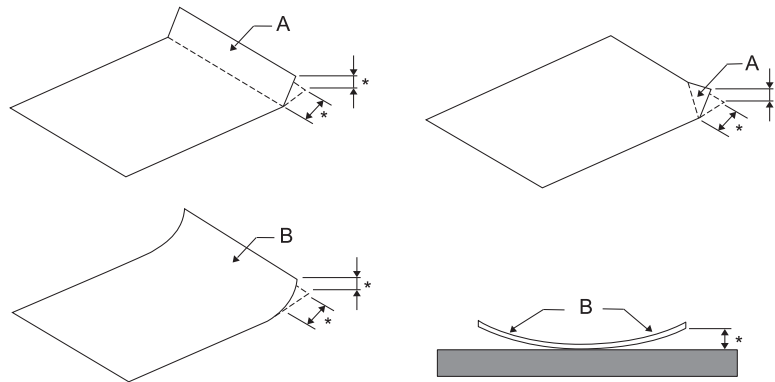
## Acceptable Paper Condition



**Caution:**

- ❑ Do not use paper that is folded, creased, curled, torn, stained, or stamped. Use the paper that meets the paper specifications. See “Paper/Media” on page 75 for more detailed information.
- ❑ Illustrations below describe the condition of paper that can be used and cannot be used with the printer. Make sure to use the paper that is acceptable for use with the printer.

*Acceptable*



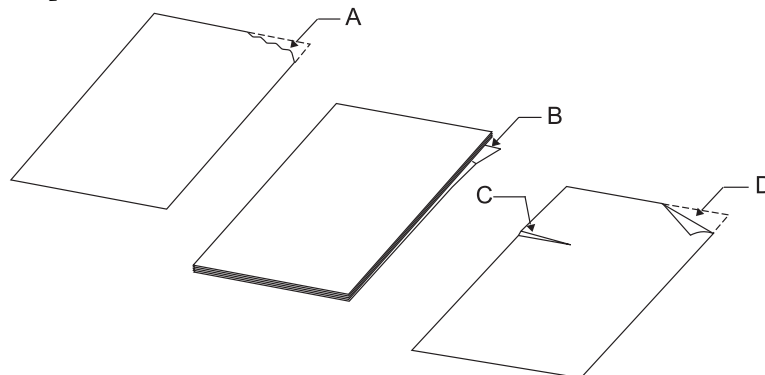
A: *Folded*

B: *Curled*

\*: *3 mm or less*

*Insert paper after flattening the fold or curl.*

*Not Acceptable*



A: *Torn*

B: *Curled*

C: *Creased*

D: *Folded*

---

## Loading Passbooks

**Caution:**

*Always use the printer with the ribbon cartridge installed. Otherwise, paper jam may occur.*

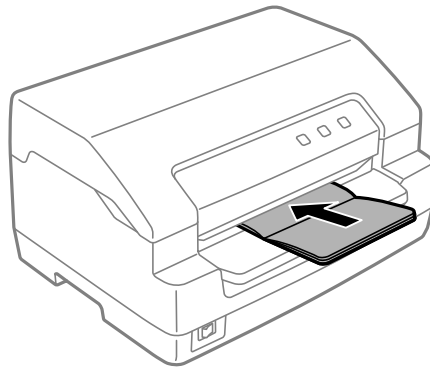
You can load vertical-fold and horizontal-fold passbooks. Follow the steps shown below to load passbooks.

1. Turn on the printer.
2. Open your passbook to the page to be printed.

**Note:**

*Make sure that you press any bulging parts of the folded passbook down to 0.6 mm or less before inserting it into the front slot. For information on the thickness of passbooks you can print, see "Paper/Media" on page 75.*

3. Insert the passbook into the front slot with the printable side face up and the magnetic stripe facing away from the printer until the top part of it reaches the roller inside. The printer loads it automatically to the correct position and the passbook is ready to be printed.



**Caution:**

- When you use a passbook, set **Passbook** mode to *On* and set **Binding** mode to the method for the passbook's binding in the default setting mode.
- Use a passbook that has more than 60% reflectance.
- Do not load passbooks that are creased or have ripped seam.
- Do not use a passbook that has any metallic parts such as staplers or metal clips.
- Do not use a passbook with sticky parts such as stamps or seals.
- Do not use a passbook that has any pages smaller than the cover page.
- Do not print on the front or back cover of a passbook. Printing can be done only when the passbook is opened.
- Always close the printer cover before printing. The printer does not print when the printer cover is open.
- When printing a vertical passbook in **USD** mode and **HSD** mode, the difference in thickness between the right page and the left page should be within 1 mm. If the difference in thickness is more than 1 mm, the print results may be blurred.

---

## Loading Single Sheets

**Caution:**

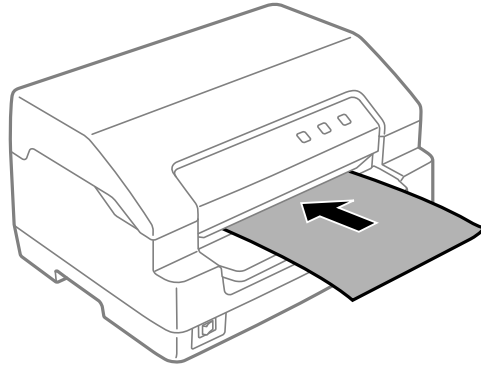
*Always use the printer with the ribbon cartridge installed. Otherwise, paper jam may occur.*

You can load single sheets and carbonless single sheet multipart forms up to 7 parts (one original and six copies). Follow these steps to load single sheets.

1. Turn on the printer.



2. Insert a single sheet into the front slot with the printable side face up until the top part of the paper reaches the roller inside. The printer loads the paper automatically to the correct position and the paper is ready to be printed.

**Note:**

- Use paper that has more than 60% reflectance.
- Do not load paper that is curled or has been folded.
- Do not punch holes in the area from 25.0 to 40.0 mm from the left edge of paper.
- When you use paper that is shorter than 110.0 mm, set the paper eject direction to front. The factory set default is front. Please access <http://www.epson.com> for information.
- When you print a multipart form that is glued at the top, load the glued part first.
- Be sure your multipart forms do not exceed 0.53 mm (0.021 inch) in thickness.
- Always close the printer cover before printing. The printer does not print when the printer cover is open.

---

## Loading ID Card

**Caution:**

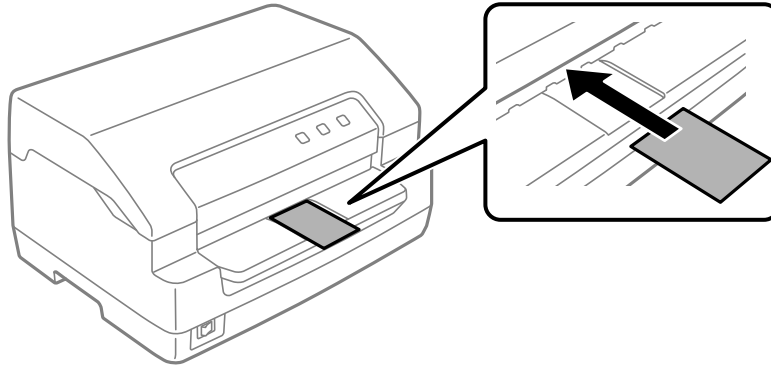
Always use the printer with the ribbon cartridge installed. Otherwise, paper jam may occur.

**Note:**

- Scanning is only available for scanning models.
- Use the ID card for scanning only. It cannot be used for printing, magnetic stripe reading and writing.

You can load ID card. Follow these steps to load ID card.

1. Turn on the printer.
2. Insert an ID card as shown below until the top part of the ID card reaches the roller inside. When using horizontal ID cards, insert them with the top facing to the right. When using vertical ID cards, insert them from the top.



**Note:**

- Laminated ID cards are supported but embossed ID cards are not supported.*
- Always close the printer cover before scanning. The printer does not scan when the printer cover is open.*
- When scanning, insert the card with the scanning side face down. When scanning both sides, the first page should be inserted face down.*

## Chapter 3

# Printer Software

---

## About Your Printer Software

---

**Note:**

*When using the printer connected over a USB interface, you can print using the Epson software on a Windows computer. When using the printer over another connection, contact your administrator.*

The Epson software includes the printer driver software and EPSON Status Monitor 3.

The printer driver is software that allows your computer to control the printer. You need to install the printer driver so your Windows software applications can take full advantage of the printer's capabilities.

When installing the printer driver, you can also install EPSON Status Monitor 3 along with other utilities from the software disc.

**Note:**

- Before proceeding, make sure you have installed the printer driver on your computer.*
- The on-screen displays on the following pages may differ depending on the version of Windows OS.*

## Using the Printer Driver

---

You can access the printer driver from your Windows applications or from the Start menu.

Screens and procedures that appear in this manual are mostly from Windows 10 unless otherwise specified.

- When you access the printer driver from a Windows application, any settings you make apply only to the application you are using. See "Accessing the printer driver from Windows applications" on page 28 for more information.
- When you access the printer driver from the Start menu, the printer driver settings you make apply to all your applications. See "Accessing the printer driver from the Start menu" on page 30 for more information.

See "Changing the printer driver settings" on page 32 to check and change printer driver settings.

**Note:**

While many Windows applications override the settings made with the printer driver, some do not, so you must verify that the printer driver settings match your requirements.

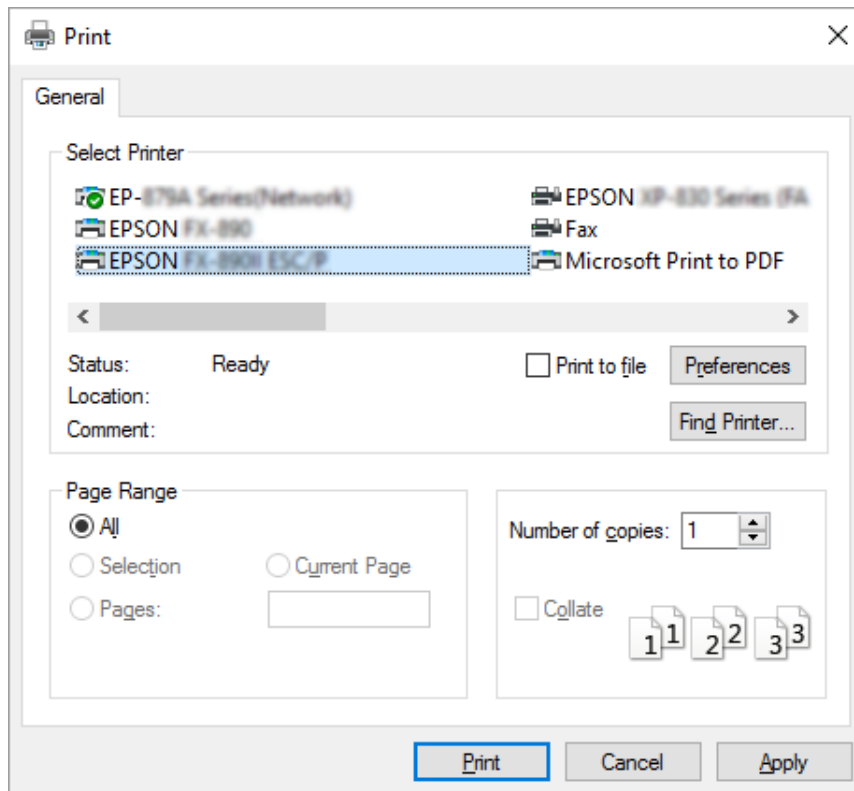
## Accessing the printer driver from Windows applications

Follow these steps to access the printer driver from a Windows application:

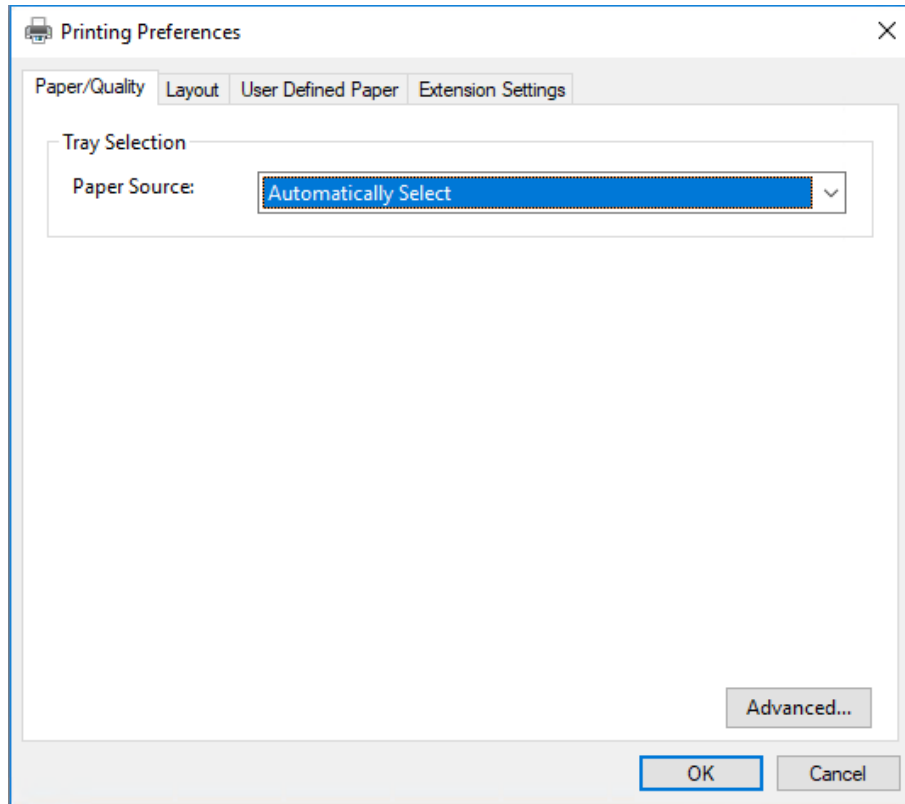
**Note:**

The screen shots used in this procedure are from the Windows 10 operating system. The content on the screen may vary depending on your computer's environment.

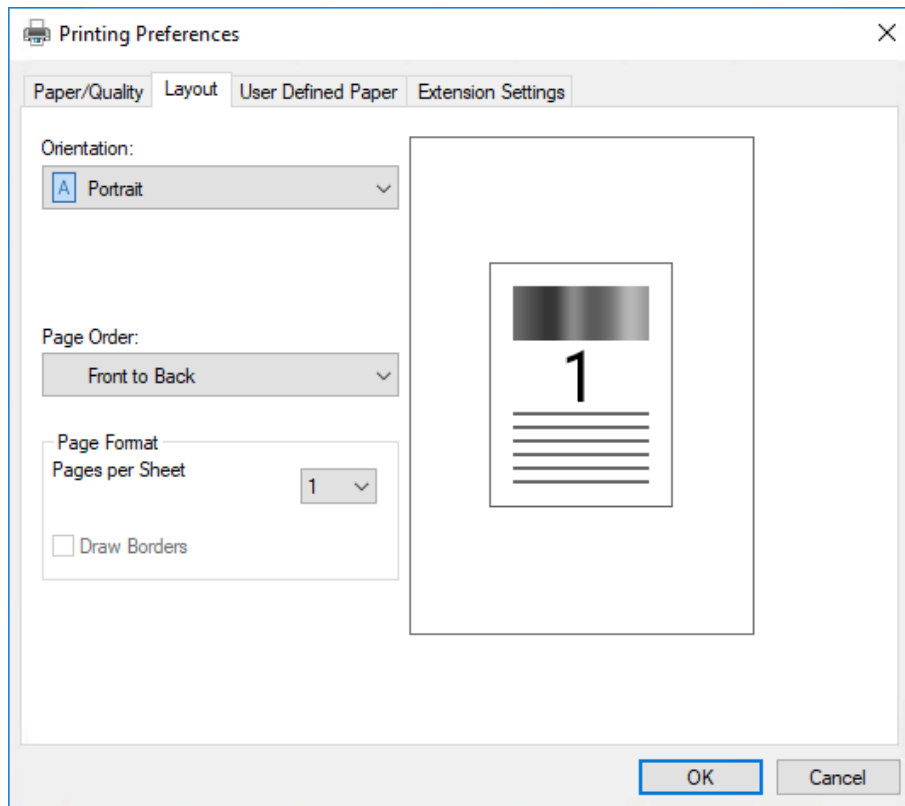
1. Select **Print** from the File menu of your application software. Make sure that your printer is selected in the Select Printer of **Print** dialog box.



2. Click **Preferences**. The **Printing Preferences** window appears, and you see the **Paper/Quality**, **Layout**, **User Defined Paper**, and **Extension Settings** menus. These menus contain the printer driver settings.



- To view a menu, click the corresponding tab at the top of the window. See “Changing the printer driver settings” on page 32 to change the settings.



## Accessing the printer driver from the Start menu

Follow these steps to access the printer driver from the Start menu:

### Note:

*The screen shots used in this procedure are from the Windows 10 operating system. The content on the screen may vary depending on your computer's environment.*

- For Windows 10/Windows Server 2019/Windows Server 2016:  
Click on the **Start** button, and then select **Windows System > Control Panel > View devices and printers** in **Hardware and Sound**.

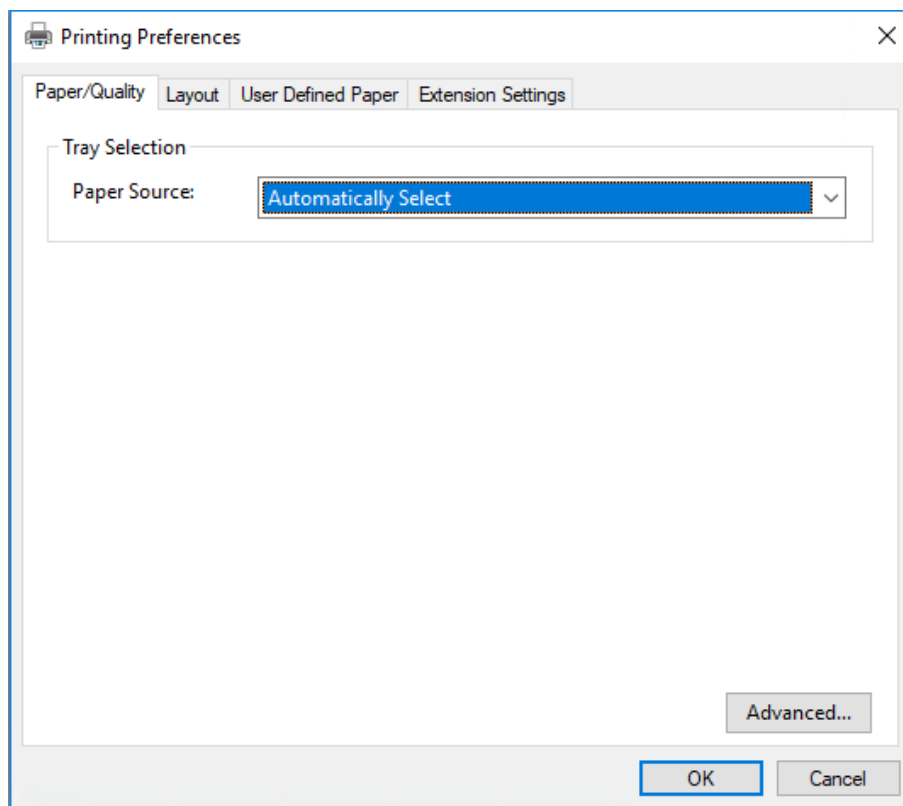
For Windows 8.1/Windows 8/Windows Server 2012 R2/Windows Server 2012:  
Click **Desktop** on the **Start** screen, move the cursor to the top-right corner of the screen, click **Settings**, and then click **Control Panel**. Next, click **View devices and printers** from the **Hardware and Sound** category.

For Windows 7/Windows Server 2008 R2:  
Click **Start**, and click **Devices and Printers**.

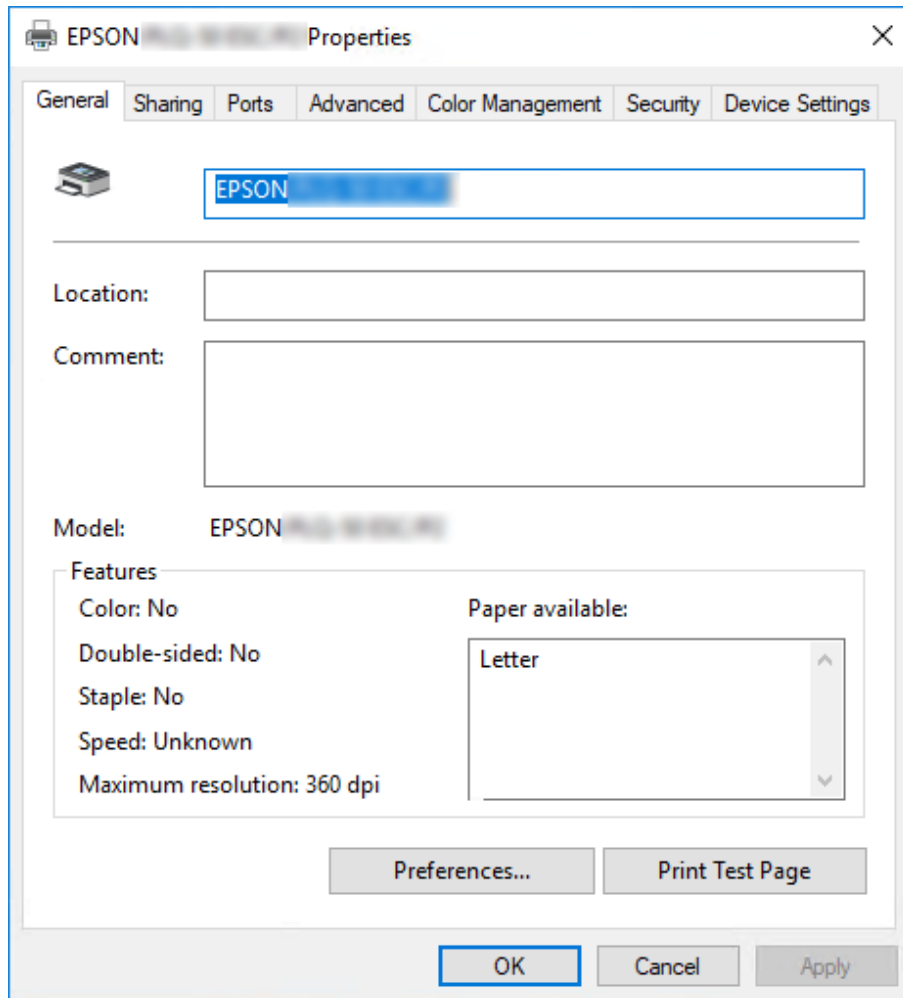
For Windows Vista/Windows Server 2008:  
Click **Start**, click **Control Panel**, click **Hardware and Sound**, and then click **Printers**.

For Windows XP/Windows Server 2003 R2/Windows Server 2003:  
Click **Start**, and click **Printers and Faxes**.

2. Right-click your printer icon, and click **Printing Preferences**. The screen displays the **Paper/Quality**, **Layout**, **User Defined Paper** and **Extension Settings** menus. These menu display the printer driver settings.



When you click **Printer properties** in the menu displayed by right-clicking the printer icon, the **Properties** window appears, which includes menus used to make the printer driver settings.



- To view a menu, click the corresponding tab at the top of the window. See “Printer Driver Settings Overview” on page 34 for more information.

## ***Changing the printer driver settings***

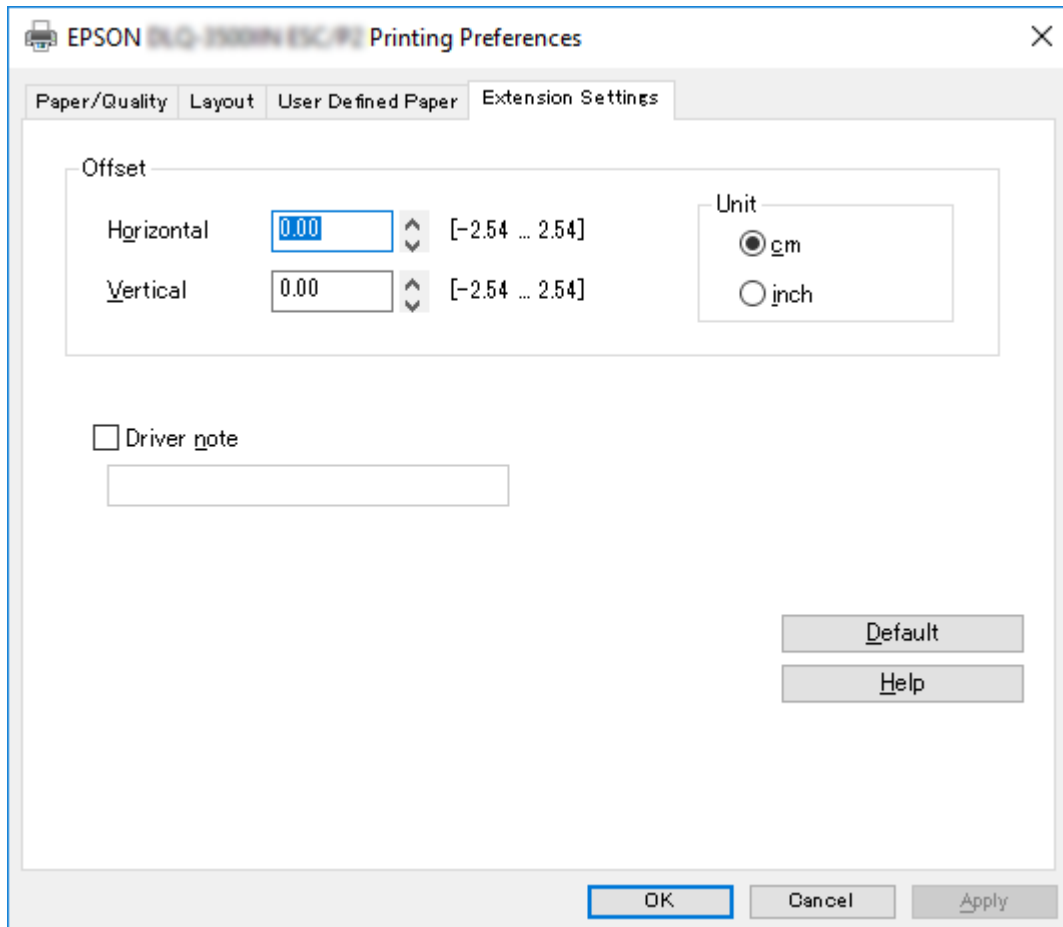
Your printer driver has two menus from which you can change the printer driver settings; **Layout**, **Paper/Quality**. You can also change settings on the Utility menu in the printer software. For an overview of the available settings, see “Printer Driver Settings Overview” on page 34.



**Note:**

For Windows XP/Windows Server 2003 R2/Windows Server 2003, you can also view online help by right-clicking items in the driver and selecting **What's this?**

Click the **Help** button on the Printer Driver screen.



When you finish making your printer driver settings, click **OK** to apply the settings, or click **Cancel** to cancel your changes.

Once you have checked your printer driver settings and changed them if necessary, you are ready to print.

## Printer Driver Settings Overview

The following tables show the Windows printer driver settings. Note that not every setting is available in all versions of Windows. For more details, see **Help** for the printer driver.

### Print settings

Settings	Explanations
Orientation	Select <b>Portrait</b> or <b>Landscape</b> .
Page Order <sup>*1</sup>	Select whether to print from front to back or back to front.
Pages per Sheet <sup>*1</sup>	Select the number of pages that you want to print onto a single page.
Draw Borders <sup>*1</sup>	Select to print a border around the pages.
Paper Source	Select the paper source you want to use.
User Defined Paper	If your paper is not included in the Paper Size drop-down list, you can add the size to the list. For more details, see <b>Help</b> for the printer driver.
Offset	This setting allows you to offset the image on the page. That is, you can adjust the position of the printed image. If the offset you specify moves a portion of the image out of the printer's printable area, that portion will not be printed.
Driver Note <sup>*2</sup>	You can add short notes to the printing data to help you identify the print job.
Paper Size	Select the size of the paper you want to use. If you do not see your paper size, use the scroll bar to scroll through the list. If your paper size is not included in the list, see "Definition of Custom Paper Size" on page 35 for instructions.
Copy Count <sup>*1</sup>	Select the number of copies you want to print. When you select more than one, this check box is displayed and you can select whether to collate the copies.
Graphic - Print Quality	Select the printing resolution you want. The higher the resolution you select, the more detailed your printout will be; however, increasing the resolution slows printing.
Advanced Printing Features <sup>*1</sup>	Select <b>Enable</b> or <b>Disable</b> for the metafile Spooling.
Pages per Sheet Layout <sup>*1</sup>	Select the layout direction for the pages you want to print.
Halftoning	Select the type of halftoning to use when printing graphics. To let the printer determine the best halftone quality, use <b>Auto Select</b> .
Print Optimizations <sup>*1</sup>	Select <b>Disable</b> when the printer does not use the device fonts and select <b>Enable</b> when the printer uses the device fonts.

Settings	Explanations
Print Speed	This setting allows you to select print speed. When <b>Standard</b> is selected, prints in standard printing mode. When <b>High Speed</b> is selected, prints in high speed printing mode.
Print Direction	This setting allows you to select bidirectional printing. Selecting the <b>Printer Setting</b> will use the setting stored in the printer. Selecting <b>Bidirectional</b> will print in bidirectional printing mode. Selecting <b>Unidirectional</b> will print in unidirectional printing mode.  Make sure that <b>Bi-D</b> is selected as the <b>Print Direction</b> setting stored in the printer. Otherwise this setting is ignored by the printer.
Top Margin Priority	Select which setting for the print start position is to be used; driver setting or printer setting. For more details, see <b>Help</b> for the printer driver.
Printer Font Setting	Select a character table group to use. You can select one of three character table groups, <b>Standard</b> , <b>Expanded</b> , and <b>None</b> (Bit Image printing).  When <b>Standard</b> or <b>Expanded</b> is selected, the printer uses the device fonts. <b>Expanded</b> includes more fonts than <b>Standard</b> .  When <b>None</b> is selected, the printer uses bit map images instead of the device fonts.  For details on the fonts which are included in each table, see "Electronic" on page 71.
Packet mode	Ordinarily, there is no need to change this setting. If you change the printer's Packet mode settings, change this setting to match. If the printer and printer driver settings are different, you may not be able to print correctly. For more details, see <b>Help</b> for the printer driver.

\*1 For details, see Windows help.

\*2 LCD models only.

### **Definition of Custom Paper Size**

If your paper is not included in the Paper Size drop-down list, you can add the size to the list.

1. For Windows 10/Windows Server 2019/Windows Server 2016:  
Click on the **Start** button, and then select **Windows System > Control Panel > View devices and printers** in **Hardware and Sound**.

For Windows 8.1/Windows 8/Windows Server 2012 R2/Windows Server 2012:  
Click **Desktop** on the Start screen, move the cursor to the top-right corner of the screen, click **Settings**, and then click **Control Panel**. Next, click **View devices and printers** from the **Hardware and Sound** category.

For Windows 7/Windows Server 2008 R2:  
Click **Start**, and click **Devices and Printers**.

For Windows Vista/Windows Server 2008:  
Click **Start**, click **Control Panel**, click **Hardware and Sound**, and then click **Printers**.

For Windows XP/Windows Server 2003 R2/Windows Server 2003:  
Click **Start**, and click **Printers and Faxes**.

2. Right click your printer icon, and click **Printing Preferences**.
3. Select the **User Defined Paper** menu.
4. Enter the paper size in the Paper Size fields.
5. Click **Apply** and then click **OK**.

**Note:**

*For more details, see Help for the printer driver.*

---

## **Uninstalling the Printer Software**

When you wish to reinstall or upgrade the printer driver, uninstall the printer driver that has been installed already.

**Note:**

*When uninstalling EPSON Status Monitor 3 from a multi-user Windows XP/Windows Server 2003 R2/Windows Server 2003 environment, remove the shortcut icon from all clients before uninstalling. You can remove the icon by clearing the Shortcut Icon check box in the **Monitoring Preferences** dialog box.*

## **Uninstalling the printer driver and EPSON Status Monitor 3**

1. Turn off the printer.
2. Quit all running applications.
3. Open **Control Panel**:
  - Windows 10/Windows Server 2019/Windows Server 2016

Click on the **Start** button, and then select **Windows System > Control Panel**.

- Windows 8.1/Windows 8/Windows Server 2012 R2/Windows Server 2012

Select **Desktop > Settings > Control Panel**.

- Windows 7/Windows Vista/Windows XP/Windows Server 2008 R2/Windows Server 2008/  
Windows Server 2003 R2/Windows Server 2003

Click the start button and select **Control Panel**.

4. Open **Uninstall a program** (or **Add or Remove Programs**):

- Windows 10/Windows 8.1/Windows 8/Windows 7/Windows Vista/Windows Server 2019/  
Windows Server 2016/Windows Server 2012 R2/Windows Server 2012/Windows Server 2008  
R2/Windows Server 2008

Select **Uninstall a program** in **Programs**.

- Windows XP/Windows Server 2003 R2/Windows Server 2003

Click **Add or Remove Programs**.

5. Select the software you want to uninstall.

6. Uninstall the software:

- Windows 10/Windows 8.1/Windows 8/Windows 7/Windows Vista/Windows Server 2019/  
Windows Server 2016/Windows Server 2012 R2/Windows Server 2012/Windows Server 2008  
R2/Windows Server 2008

Click **Uninstall/Change** or **Uninstall**.

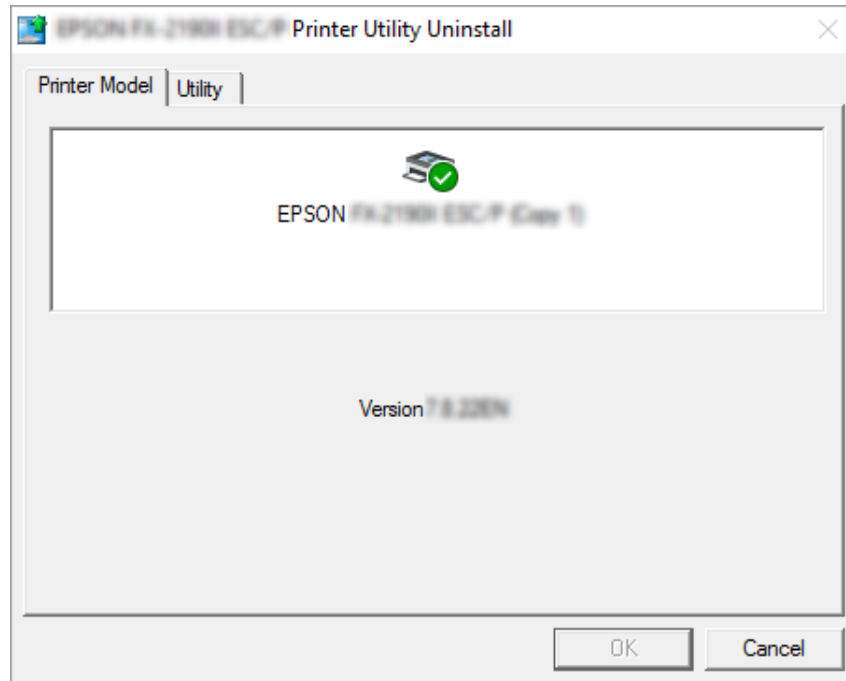
- Windows XP/Windows Server 2003 R2/Windows Server 2003

Click **Change/Remove** or **Remove**.

**Note:**

*If the **User Account Control** window is displayed, click **Continue**.*

7. Click the **Printer Model** tab, select the icon of the printer you want to uninstall, then click **OK**.



**Note:**

Make sure that nothing is selected in the Printer Model tab. Open **Utility** tab and select **EPSON Status Monitor 3 (for EPSON XXXXXX ESC/P)** and click **OK**. You can uninstall only the EPSON Status Monitor 3.

8. Follow the on-screen instructions.

## Chapter 4

# Maintenance

## Replacing the Ribbon Cartridge

### Replacing the ribbon cartridge

Follow these steps to install or replace the ribbon cartridge:

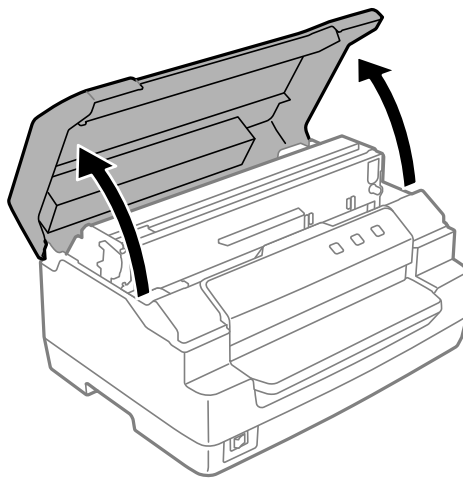


**Warning:**

*If you have just used the printer, the print head may be hot; let it cool for a few minutes before replacing the ribbon cartridge.*

1. Make sure the printer is turned on.
2. Hold both sides of the printer cover and move it upward to open it.

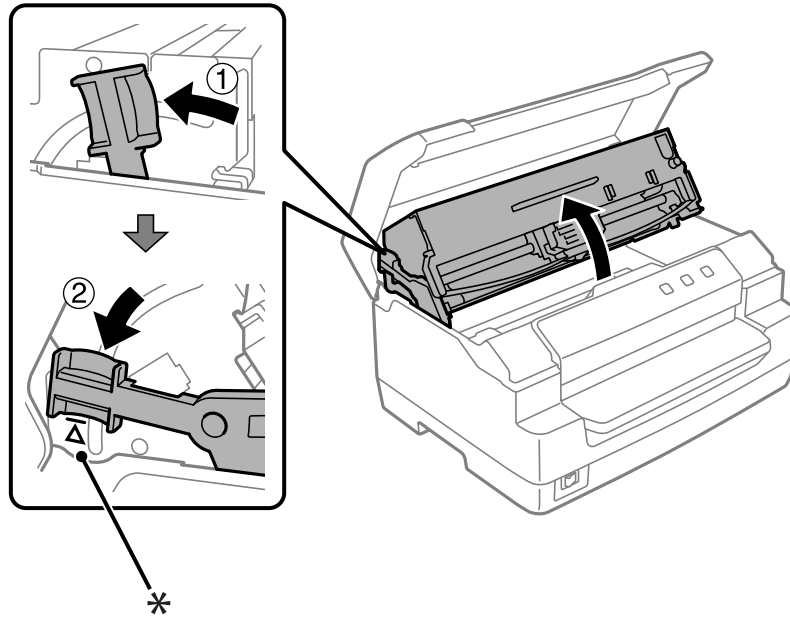
The print head moves to the ribbon cartridge replacement position.



3. Turn the printer off.
4. Push the release lever to move the upper mechanism up. Make sure that you push the lever to the guide mark until it clicks and locks into place.

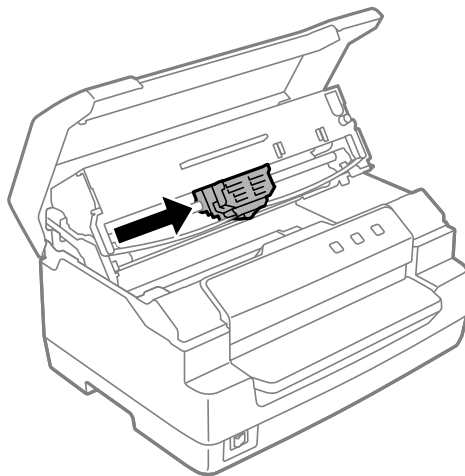
**Note:**

*If the upper mechanism is not locked, it may drop down while you are replacing the ribbon.*



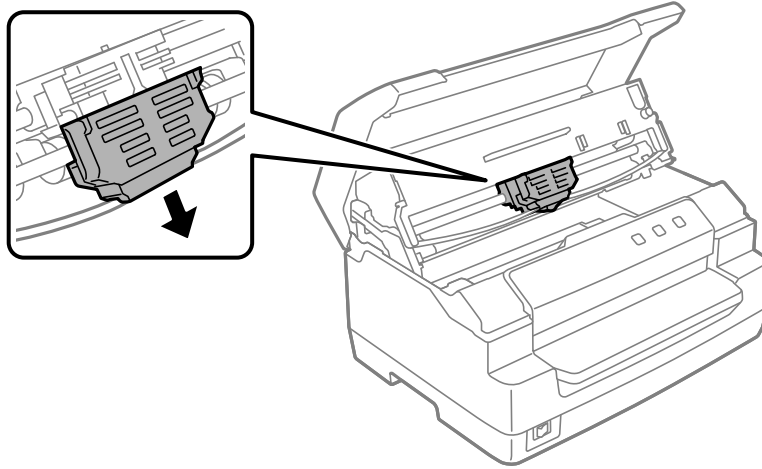
\*: Guide mark

5. Make sure that the print head is in the middle of the printer.

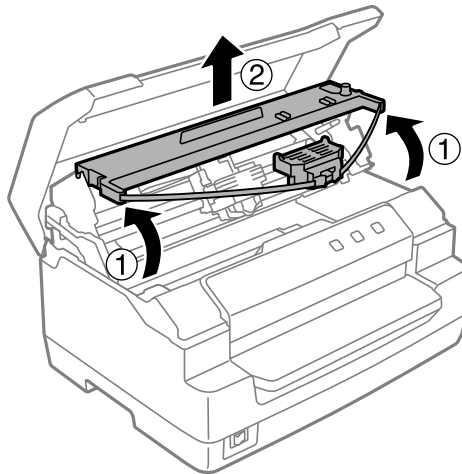





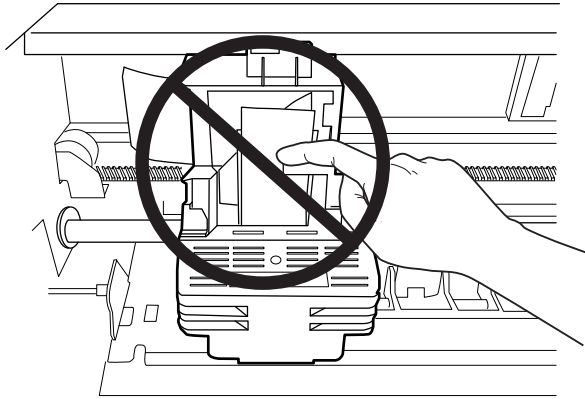
6. Hold both sides of the ribbon guide and pull it down until it is out of the print head.



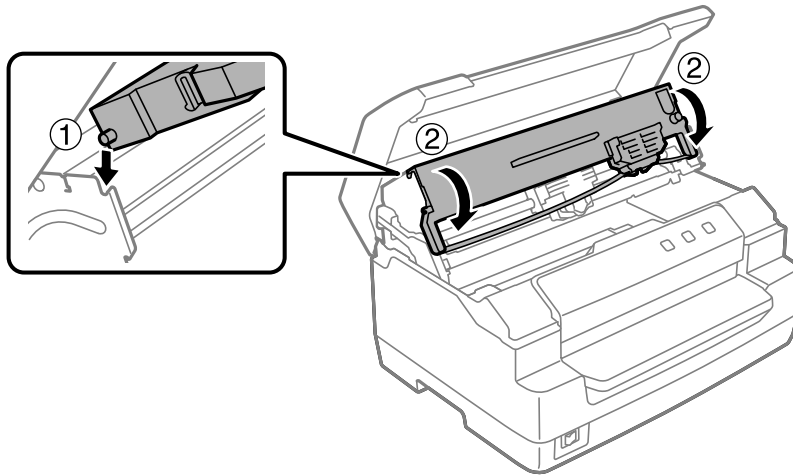
7. Hold both sides of the ribbon cartridge with both hands and rotate it on the plastic hooks. Then pull it up until it is out of the printer.



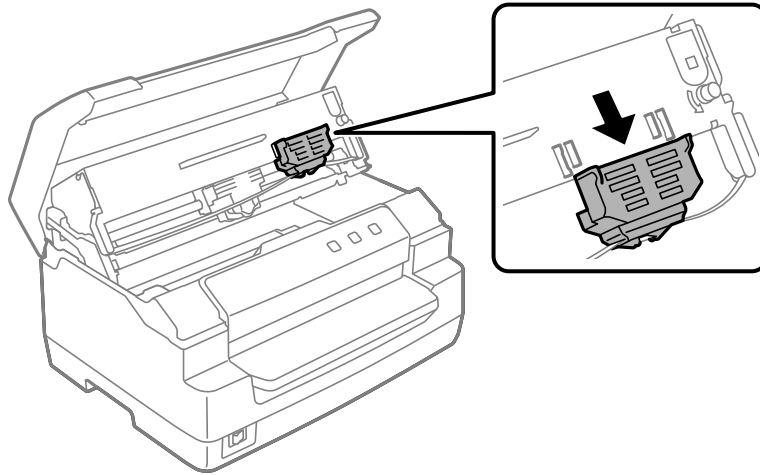
-  **Caution:**  
*Do not touch the white cable inside the printer.*



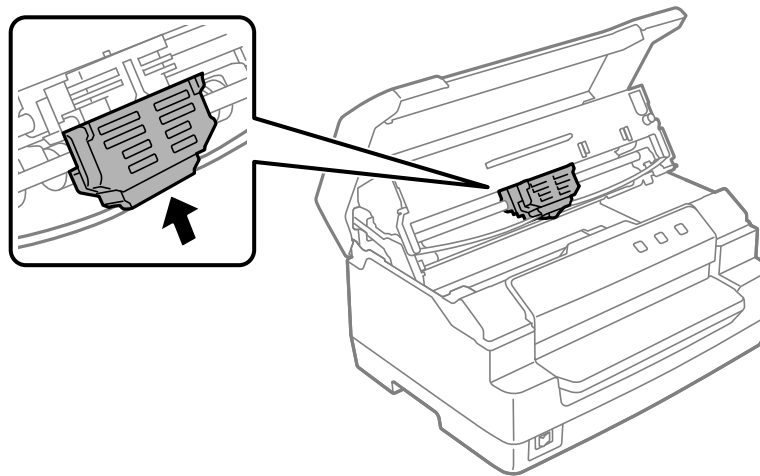
8. Remove the new ribbon cartridge from the package.
9. Place the plastic hooks on the ribbon cartridge into the slots of the printer. Then press the cartridge until it clicks into place.



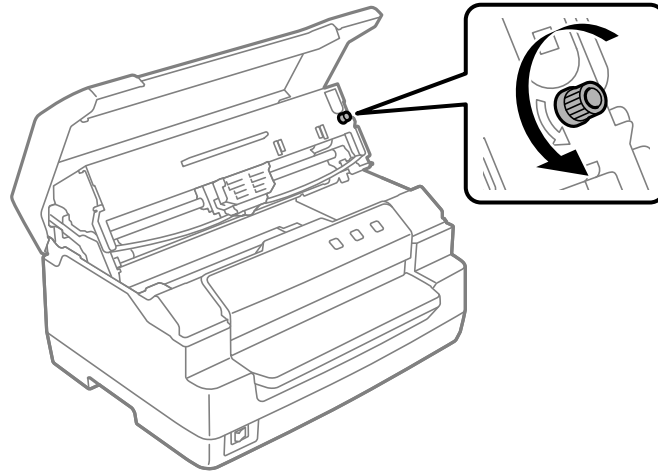
10. Hold both sides of the ribbon guide and pull it down until it is out of the cartridge.



11. Put the ribbon guide at the bottom of the print head and push it up until it clicks.

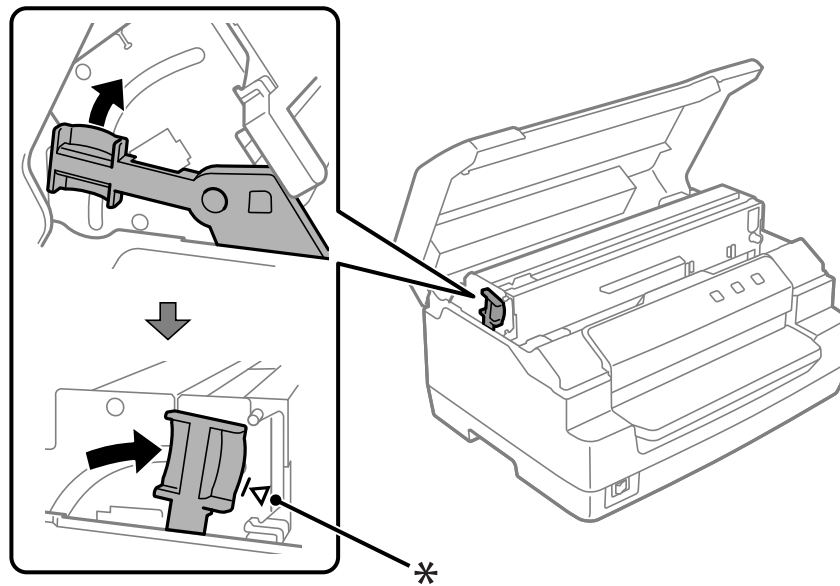


- Turn the ribbon-tightening knob to help feed the ribbon into place.



**⚠ Caution:**  
*The ribbon should not be twisted or creased.*

- Pull the release lever back to move the upper mechanism to its original position. Make sure that you pull the lever to the guide mark until it clicks and locks into place.



\*: Guide mark

**Caution:**

*Make sure that you move the upper mechanism by pulling the release lever. Do not pull the mechanism by hand. It may damage the printer.*

14. Close the printer cover.

---

## **Cleaning the Printer**

To keep your printer operating at its best, you should clean it thoroughly several times a year.

Follow these steps to clean your printer:

1. Make sure there is no paper loaded in the printer, and then turn off the printer.
2. Hold both sides of the printer cover and move it upward to open it.
3. Push the release lever to move the upper mechanism up. Make sure that you push the lever to the guide mark until it clicks and locks into place.

**Note:**

*If the upper mechanism is not locked, it may drop down while you are cleaning the printer.*

4. Use a soft brush to carefully brush away all dust and dirt from the outer case.
5. If the outer case is still dirty or dusty, clean them with a soft, clean cloth dampened with a mild detergent dissolved in water. Keep the printer cover closed to prevent water from getting inside the printer and be careful not to get water in the front slot.

**Caution:**

- Never use alcohols or thinners to clean the printer; these chemicals can damage the printer components as well as the case.*
- Be careful not to get water onto the printer mechanism or electronic components.*
- Do not use a hard or abrasive brush.*
- Do not spray the inside of the printer with lubricants; unsuitable lubricants can damage the printer mechanism. Contact an Epson dealer if you think lubrication is needed.*

## Cleaning the Scanner Glass (for Scanning Models Only)

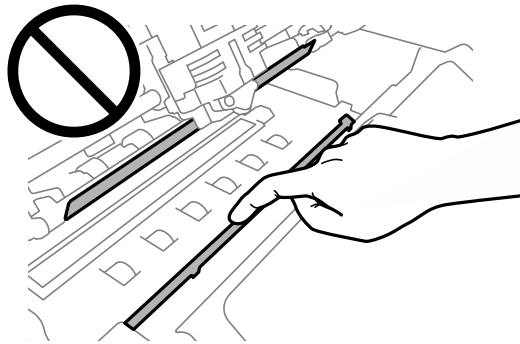
To keep your scanner operating at its best, you should clean it periodically (every three months).

Follow these steps to clean your printer:



**Caution:**

- Be careful not to injure your hand on parts inside the printer.
- Do not press the glass surface of the scanner with any force.
- Be careful not to scratch or damage the glass surface of the scanner, and do not use a hard or abrasive brush to clean it. A damaged glass surface can decrease the scan quality.
- Do not touch the thin plastic strips inside the printer.



- Never use alcohol, thinner, or corrosive solvent to clean the scanner. These chemicals can damage the scanner components.
  - Be careful not to spill liquid into the scanner mechanism or electronic components. This could permanently damage the mechanism and circuitry.
  - Do not spray lubricants inside the scanner.
1. Make sure there is no paper loaded in the printer, and then turn off the printer.
  2. Hold both sides of the printer cover and move it upward to open it.
  3. Push the release lever to move the upper mechanism up. Make sure that you push the lever to the guide mark until it clicks and locks into place.

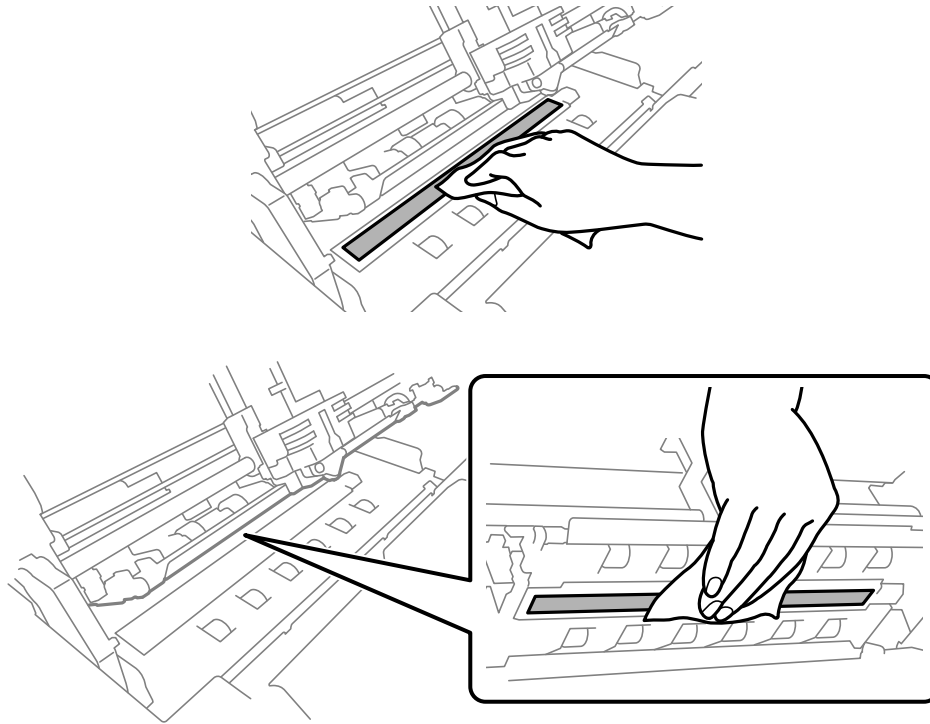
**Note:**

*If the upper mechanism is not locked, it may drop down while you are cleaning the printer.*

4. Use a soft, dry, lint-free cloth to carefully wipe away all dirt from the surface of the glass on the upper and lower sides.

**Note:**

*The PLQ-50CSK has scanner glass only on the lower side.*



---

## Transporting the Printer

If you need to transport your printer for some distance, carefully repack it using the original box and packing materials.

Follow these steps to repack the printer in its original packing materials:



**Warning:**

*You need to move the print head by hand to remove the ribbon cartridge. If you have just used the printer, the print head may be hot; let it cool for a few minutes before touching it.*

1. Remove any paper loaded in the printer.
2. Turn off the printer.

3. Unplug the power cord from the electrical outlet; then disconnect the interface cable from the printer.
4. Make sure that the print head is not hot. Then remove the ribbon cartridge as described in “Replacing the ribbon cartridge” on page 39.
5. Make sure that the printer cover is closed.
6. Repack the printer, ribbon cartridge, and power cord (if necessary) in their original packing materials and place them in the printer's original box.



## Chapter 5

# Troubleshooting

---

## Diagnosing the Problem

---

Troubleshooting printer problems is best handled in two easy steps; first diagnose the problem, then apply likely solutions until the problem is fixed.

The information you need to diagnose and solve most common problems is provided by the printer's control panel, or by printing a self-test. Refer to the appropriate section below.

If you have a specific problem relating to print quality, a printout problem not related to print quality, or a paper feeding problem, or if the printer does not print at all, refer to the appropriate section in this chapter.

To solve a problem, you may need to cancel printing.

## Printing Your Printer's Current Settings

---

It is also useful to know your printer's current setting status, especially the printer mode that your printer is operating in to identify the problem.

Follow these steps to enter the printer default setting mode to print the printer's current default settings:

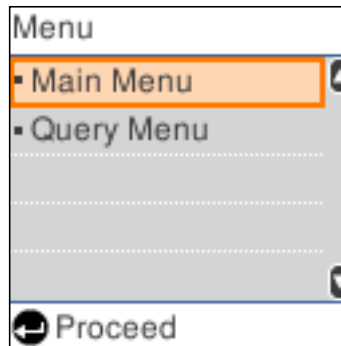
**Note:**

- Prepare an A4 size sheet of paper before entering the default setting mode.*
- You need to load a new sheet of paper each time the printer ejects a printed sheet from the front slot.*
- Always close the printer cover before printing. The printer does not print when the printer cover is open.*

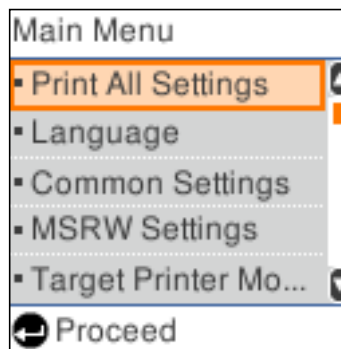
## LCD Model

Follow the steps below if your printer has an LCD screen on the control panel.

1. Turn off the printer.
2. Turn on the printer while holding the **F1/Eject** and **F2** buttons on the control panel. The **Menu** screen is displayed.



3. If the **Main Menu** is not selected, use the **F1/Eject** or **Offline** button to select **Main Menu**, and then press the **F2** button to display the **Main Menu** screen.



4. If **Print All Settings** is not selected, use the **F1/Eject** or **Offline** button to select **Print All Settings**, insert a sheet of A4 paper into the front slot, and then press the **F2** button to print the printer's current settings.

The setting that is currently selected for each item is underlined.

5. Turn off the printer to exit the default setting mode.

## ***Models Without LCD Screens***

If your printer does not have LCD screen on the control panel, follow the instructions below.

1. Turn off the printer.



**Caution:**

*Whenever you turn off the printer, wait at least five seconds before turning it back on; otherwise you may damage the printer.*

2. Turn on the printer while holding the **F1/Eject** and **F2** buttons on the control panel.
3. When the **Ready** light turns on, insert a sheet of A4 paper into the front slot. The printer prints the version number, and depending on the location, the language selection for the default settings menu. The selected language is underlined. Select the language by pressing the **F1/Eject** button. Press the **F2** button to set the language.
4. The printer prints a message asking if you want to print the current settings. Press the **F2** button to start printing. The setting that is currently selected for each item is underlined.
5. Turn off the printer to exit the default setting mode.

---

## Checking Messages on the LCD Screen or Error Indicators

You can identify common printer problems by checking the messages on the LCD screen or using the lights on the control panel. If your printer stops working and an error message is displayed, or if one or more control panel lights are on or flashing or the printer beeps, use the following table to diagnose and fix the problem. If you cannot fix your problem using this table, see “Problems and Solutions” on page 53.

**Note:**

*The printer beeps once if you press a control panel button when the corresponding function is not available.*

Messages		Problems and Solutions
State of Lights	Beep pattern	
Load paper.		<ul style="list-style-type: none"> <li><input type="checkbox"/> There is no paper loaded in the slot. Load a paper into the front slot.</li> <li><input type="checkbox"/> Paper is not loaded correctly. Remove the paper and reload it correctly. See “Loading Passbooks” on page 23 or “Loading Single Sheets” on page 24.</li> </ul>
<ul style="list-style-type: none"> <li><input type="radio"/> Power</li> <li><input type="radio"/> Ready</li> <li><input type="radio"/> Offline</li> </ul>	<p style="text-align: center;">■■■</p>	

Messages		Problems and Solutions
State of Lights	Beep pattern	
Remove paper.		<ul style="list-style-type: none"> <li><input type="checkbox"/> Paper is not fully ejected. Press the <b>F1/Eject</b> button to eject paper or see "Clearing a Paper Jam" on page 58 for instructions on ejecting paper.</li> <li><input type="checkbox"/> Paper is jammed in the printer. Clear the paper jam, see "Clearing a Paper Jam" on page 58 or press the <b>Offline</b> button to clear the error.</li> <li><input type="checkbox"/> The paper size setting may not match the size of the paper you are using. Check if they match.</li> </ul>
<ul style="list-style-type: none"> <li><input type="radio"/> Power</li> <li><input style="border: 1px solid black; border-radius: 50%;" type="radio"/> Ready</li> <li><input type="radio"/> Offline</li> </ul>	•••••	
Printer error		There can be a variety of causes. It can also be due to your application software. Contact your administrator for help.
<ul style="list-style-type: none"> <li><input type="radio"/> Power</li> <li><input style="border: 1px solid black; border-radius: 50%;" type="radio"/> Ready</li> </ul>	•••••	
Close the printer cover.		The printer cover is open. Stop the operation and close the printer cover.
<ul style="list-style-type: none"> <li><input type="radio"/> Power</li> <li><input type="radio"/> Offline</li> </ul>	••••• or —	
Printing stops due to overheating of the print head. Wait till the head cools.		The print head is overheated. Wait for a few minutes; the printer resumes printing automatically once the print head cools.
<ul style="list-style-type: none"> <li><input type="radio"/> Power</li> <li><input style="border: 1px solid black; border-radius: 50%;" type="radio"/> Offline</li> </ul>	—	
Printer error. Contact Epson Support. Non-printing features are available.		An unknown printer error has occurred. Turn off the printer and leave it off for several minutes; then turn on the printer again. If the error recurs, contact your dealer.
<ul style="list-style-type: none"> <li><input type="radio"/> Power</li> <li><input style="border: 1px solid black; border-radius: 50%;" type="radio"/> Ready</li> <li><input style="border: 1px solid black; border-radius: 50%;" type="radio"/> F1/Eject</li> <li><input style="border: 1px solid black; border-radius: 50%;" type="radio"/> Offline</li> <li><input style="border: 1px solid black; border-radius: 50%;" type="radio"/> F2</li> </ul>	■ ■ ■ ■ ■ ■ ■ ■ ■ ■	

○ = on, ◌ = flashing

■ ■ ■ = short series of beeps (three beeps)

• • • • • = long series of beeps (five beeps)

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ = short series of beeps (five beeps x2)

## Problems and Solutions

Most problems you may encounter while operating your printer have simple solutions.

You can check the operation of your printer using the self test. See "Printing a Self Test" on page 60. If the self test works properly the problem probably lies in the computer, the application software, or the interface cable. If the self test does not work, contact your dealer or a qualified service person for assistance.

## Power Supply

### Power is not being supplied

<b>The lights come on briefly and then go off. The lights stay off even when the power is turned on again.</b>	
<b>Cause</b>	<b>What to do</b>
The voltage ratings of the printer and electrical outlet may not match.	Check that the printer's voltage rating matches the voltage of your electrical outlet. If the voltages do not match, unplug the printer and contact your dealer immediately. Do not reconnect the power cord to an electrical outlet.
<b>The printer does not work and the control panel lights are off even when you turn on the printer.</b>	
<b>Cause</b>	<b>What to do</b>
The power cord is not properly plugged into the electrical outlet or your printer.	Turn off the printer, and make sure the power cord is firmly plugged into the electrical outlet and the printer, if necessary. Then turn on the printer.
The electrical outlet does not work.	Use a different outlet.

## Printing

### Printing or printout quality problems

<b>The printer is on but it doesn't print.</b>	
<b>Cause</b>	<b>What to do</b>
The interface cable is broken or twisted.	Check that the interface cable is not broken or twisted. If you have another interface cable, replace the cable and check whether the printer works correctly.

The printer is not connected directly to your computer.	When you use a printer changer, printer buffer, or a extension cable, the printer does not print correctly due to the combination of these devices. Make sure that the printer works correctly when it is connected to your computer without these devices.
The printer driver is not installed correctly.	Check that the printer driver is installed properly. If necessary, reinstall the printer driver.
Paper is jammed or the ribbon or guard mechanism is stuck.	Turn the printer off, open the printer cover and remove the jammed paper or things that are stuck. To eject the jammed paper, see "Clearing a Paper Jam" on page 58.
The printer is hung-up (stopping in abnormal situations).	Turn the printer off and wait for a while. Then, turn the printer on again, and start printing.
The cable used in the WNI4915 mode is not the one shipped with the printer.	Ensure that the correct dedicated cable is always used.
<b>The printer does not print when the computer sends data.</b>	
<b>Cause</b>	<b>What to do</b>
The printer is paused.	Press the <b>Offline</b> button to turn off the <b>Power</b> light.
The interface cable is not plugged in securely.	Check that both ends of the cable between the printer and the computer are plugged in securely. If the cable is connected correctly, run a self-test as described in "Printing a Self Test" on page 60.
Your interface cable does not meet the printer and/or computer specifications.	Use an interface cable that meets the requirements of both the printer and computer. See "Electronic" on page 71 and your computer documentation.
Your software is not properly set up for your printer.	Select your printer from the Windows desktop or in your application. If necessary, install or reinstall the printer driver software.
<b>The printer makes noise, but nothing prints or printing stops abruptly.</b>	
<b>Cause</b>	<b>What to do</b>
The ribbon has too much slack, the ribbon has come loose, or the ribbon cartridge is not installed properly.	Remove any slack in the ribbon by turning the ribbon-tightening knob, or reinstall the ribbon cartridge as described in the section under "Replacing the ribbon cartridge" on page 39.
<b>The printout is pale.</b>	
<b>Cause</b>	<b>What to do</b>
The ribbon is worn out.	Replace the ribbon cartridge as described in "Replacing the ribbon cartridge" on page 39.
<b>The printout is faint.</b>	

<b>Cause</b>	<b>What to do</b>
The ribbon is worn out.	Replace the ribbon cartridge as described in "Replacing the ribbon cartridge" on page 39.
<b>Part of the printout is missing, or dots are missing in random positions.</b>	
<b>Cause</b>	<b>What to do</b>
The ribbon has too much slack, the ribbon has come loose, or the ribbon cartridge is not installed properly.	Remove any slack in the ribbon by turning the ribbon-tightening knob, or reinstall the ribbon cartridge as described in "Replacing the ribbon cartridge" on page 39.
The ribbon is worn out.	Replace the ribbon cartridge as described in "Replacing the ribbon cartridge" on page 39.
<b>Lines of dots are missing in the printout.</b>	
<b>Cause</b>	<b>What to do</b>
The print head is damaged.	Print the current settings in the default setting mode and check the pin condition. See "Printing Your Printer's Current Settings" on page 49 to see how to print them.  If some pins are broken, stop printing and contact your dealer to have the print head replaced.
<b>Caution:</b> Never replace the print head yourself; you may damage the printer. Also, other parts of the printer must be checked when the print head is replaced.	
<b>All the text is printed on the same line.</b>	
<b>Cause</b>	<b>What to do</b>
No line feed command is sent at the end of each line of text.	Set the <b>Auto Line Feed</b> setting to <b>On</b> in the default setting mode so that the printer automatically adds a line feed code to each carriage return. Contact your administrator for help.
<b>The printout has extra blank lines between lines of text.</b>	
<b>Cause</b>	<b>What to do</b>
Two line feed commands are being sent at the end of each line of text, because the printer's auto line feed setting is on.	Set the <b>Auto Line Feed</b> setting to <b>Off</b> in the default setting mode. Contact your administrator for help.
The line space setting in your application software is incorrect.	Adjust the line space setting in your application software.
<b>The printer prints strange symbols, incorrect fonts, or other inappropriate characters.</b>	
<b>Cause</b>	<b>What to do</b>

Your printer and computer are not communicating correctly.	Make sure that you use the correct interface cable and that the communications protocol is correct. See "Electronic" on page 71 and your computer documentation.
The wrong character table is selected in your software.	Select the correct character table using your software or the default setting mode. The character table setting in your software overrides settings made in the default setting mode. Contact your administrator for help.
The printer you want to use is not selected in your software.	Choose the correct printer from the Windows desktop or in your application before printing.
Your application software is not configured correctly for your printer.	Make sure that your application software is configured correctly for your printer. See your application documentation. If necessary, install or reinstall the printer driver software.
Software settings override settings you make using the default setting mode or the control panel buttons.	Use your application software to select the font.
<b>Vertical printed lines are not aligned.</b>	
<b>Cause</b>	<b>What to do</b>
Bidirectional printing, which is the printer's standard printing mode, is out of alignment.	Use the printer's bidirectional adjustment mode to correct this problem. Contact your administrator for help.

### **Printing position problems**

<b>Your printing appears too high or low on the page.</b>	
<b>Cause</b>	<b>What to do</b>
The paper size setting in your application software or printer driver does not match the size of the paper you are using.	Check the paper size setting in your application or printer driver.
The top margin or top-of-form position setting is incorrect.	Check and adjust the margin or top-of-form position settings in your application software. For information about recommended printable area, refer to the "Paper/Media" on page 75.  You can also adjust the top-of-form position using the Micro Adjust function. However, settings made in Windows applications override settings made in the Micro Adjust mode. Contact your administrator for help.
The printer driver settings you want to use are not selected in your software.	Choose the correct printer driver setting from the Windows desktop or in your application before printing.



## Scanning

### Scan quality problem

<b>Scanned image have streaks or it is dirty.</b>	
<b>Cause</b>	<b>What to do</b>
Glass surface of the scanner is dirty.	<p>Clean it with a soft dry lint-free cloth.</p> <p>If the glass surface is stained with grease or some other hard-to-remove material, use a small amount of glass cleaner with a soft cloth to remove it. Wipe off all remaining liquid. See "Cleaning the Scanner Glass (for Scanning Models Only)" on page 46 for details.</p>

## Paper Handling

### Paper loading or feeding problems

<b>The printer does not load single-sheet paper or does not feed it properly.</b>	
<b>Cause</b>	<b>What to do</b>
Single-sheet paper is not loaded properly.	See "Loading Single Sheets" on page 24 for instructions on loading single-sheet paper.
Paper is creased, old, too thin, or too thick.	See the "Paper/Media" on page 75 for information about the printable paper and use new, clean sheets of paper.
<b>The printer does not fully eject a single sheet.</b>	
<b>Cause</b>	<b>What to do</b>
Paper is too long.	When the printer is in the PR2 mode, see "Clearing a Paper Jam" on page 58 for instructions on ejecting paper. When you are in the WNI4915 or EPSON Mode, press the <b>F1/Eject</b> button. When you are in IBM4722 mode, press the <b>Offline</b> button and then the <b>F1/Eject</b> button. Make sure the page length of your paper is within the range specified for single-sheet paper in "Paper/Media" on page 75. Also check and adjust the paper size setting in your application or printer driver. Contact your administrator for help.
<b>The printer does not load passbook or does not feed it properly.</b>	
<b>Cause</b>	<b>What to do</b>

Passbook is not loaded properly.

See "Loading Passbooks" on page 23 for instructions on loading passbooks.

## Clearing a Paper Jam

If paper is not automatically ejected in the situations noted below, a paper jam may have occurred inside the printer.

- When anything except for PR2 is selected as the Software or Software2 while Dual is selected as the I/F Mode in Olivetti Mode, press the **Offline** button and then the **F1/Eject** button.
- Press the **F1/Eject** button in EPSON Mode.
- When Dual is selected as the I/F Mode in Wincor Nixdorf Mode or IBM Mode, press the **Offline** button and then the **F1/Eject** button.

Follow the steps noted below to clear the paper jam.



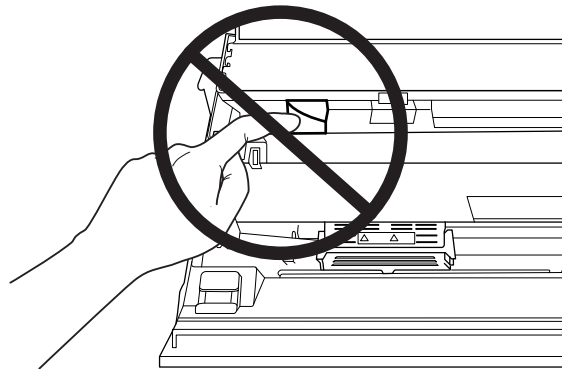
**Warning:**

*If you have just used the printer, the print head may be hot; let it cool for a few minutes before touching it.*



**Caution:**

*Do not touch the white cable inside the printer.*



1. Turn off the printer.



**Caution:**

*Whenever you turn off the printer, wait at least five seconds before turning it back on; otherwise you may damage the printer.*

- Open the cover and press the release lever to move the upper mechanism. Then hold the jammed paper with both hands and pull it out of the printer. If you can clear the paper jam, move the upper mechanism to its original position by pulling the release lever and then close the printer cover. If it is difficult to do so, go to the next step.

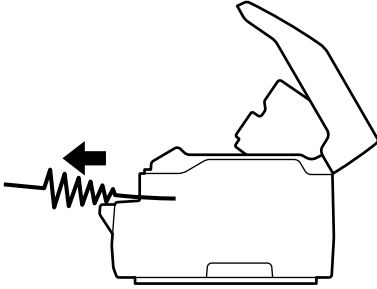
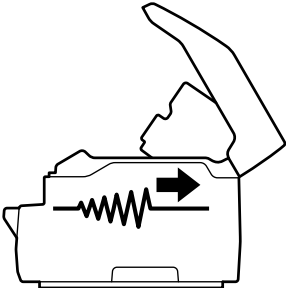


**Caution:**

*Make sure that you move the upper mechanism by pulling the release lever. Do not pull the mechanism by hand. It may damage the printer.*

- Turn on the printer while pressing the **F1/Eject** button. The printer is in the paper removing mode and ready to start feed operations. See the table below to find out how the **F1/Eject** and **Offline** buttons work in this mode and execute the appropriate operation.

Paper removing mode operation

Situation	Button	Operation
Paper jams when feeding paper	<b>F1/Eject</b>	Press to feed paper to the front a few lines every time you press the button. Hold for a few seconds to eject paper to the front. 
Paper jams when ejecting paper to the front	<b>Offline</b>	Press to feed paper to the back a few lines every time you press the button. Hold for a few seconds to eject paper to the rear. 

If you can clear the paper jam, turn off the printer, move the upper mechanism to its original position by pulling the release lever, and then close the printer cover to finish the operation. If you cannot clear the paper jam with this function, stop the operation and contact your administrator.



**Caution:**

*Make sure that you move the upper mechanism by pulling the release lever. Do not pull the mechanism by hand. It may damage the printer.*

---

## Printing a Self Test

Running the printer's self test helps you determine whether the printer or the computer is causing the problem:

- If the self test results are satisfactory, the printer is working properly and the problem is probably caused by your printer driver settings, application settings, computer, or interface cable. (Be sure to use a shielded interface cable.)
- If the self test does not print properly, there is a problem with the printer. See "Problems and Solutions" on page 53 for possible causes and solutions to the problem.

**Note:**

- Prepare an A4 size sheet of paper before entering the self-test printing mode.*
- Always close the printer cover before printing. The printer does not print when the printer cover is open.*

Follow these steps to perform a self test:

1. Turn off the printer.



**Caution:**

*Whenever you turn off the printer, wait at least five seconds before turning it back on; otherwise you may damage the printer.*

2. Turn on the printer while holding the **F2** button. Then press the **F1/Eject** and **F2** button while the **F1/Eject**, **Offline**, and **F2** lights are flashing.

Self test screens are only displayed on LCD models. Follow the on-screen instructions.

3. When the **Ready** light turns on, insert a sheet of A4 paper into the front slot.

- The printer prints the self-test pattern in the font selected in the default setting mode.

```

Font
!"#$%&'()*+,-./0123456789:;<=>?@ABCDEFGHIJKLMNPQRSTUWXYZ[\]^_`abdefghijklmnopqrstuvwxyz{|}~"
!"#$%&'()*+,-./0123456789:;<=>?@ABCDEFGHIJKLMNPQRSTUWXYZ[\]^_`abdefghijklmnopqrstuvwxyz{|}~"
!"#$%&'()*+,-./0123456789:;<=>?@ABCDEFGHIJKLMNPQRSTUWXYZ[\]^_`abdefghijklmnopqrstuvwxyz{|}~"
:
:
:
    
```

**Note:**

To stop the self-test temporarily, press the **Offline** button. To resume the test, press the **Offline** button again.



**Caution:**

Do not turn off the printer while it is printing the self-test. Always press the **Offline** button to pause printing. Then turn off the printer.

## Chapter 6

# Where To Get Help

---

## Technical Support Web Site

---

If you need further help, visit the Epson support website shown below. Select your country or region and go to the support section of your local Epson website. The latest drivers, FAQs, manuals, or other downloadables are also available from the site.

<http://support.epson.net/>

<http://www.epson.eu/Support> (Europe)

If your Epson product is not operating properly and you cannot solve the problem, contact Epson support services for assistance.

---

## Contacting Customer Support

### Before Contacting Epson

If your Epson product is not operating properly and you cannot solve the problem using the troubleshooting information in your product documentation, contact customer support services for assistance. If customer support for your area is not listed below, contact the dealer where you purchased your product.

Epson support will be able to help you much more quickly if you give them the following information:

- Product serial number  
(The serial number label is usually on the back of the product.)
- Product model
- Product software version  
(Click **About**, **Version Info**, or similar button in the product software.)
- Brand and model of your computer
- Your computer operating system name and version

- ❑ Names and versions of the software applications you normally use with your product

## ***Help for Users in Europe***

Check your **Pan-European Warranty Document** for information on how to contact Epson Customer support.

## ***Help for Users in Singapore***

Sources of information, support, and services available from Epson Singapore are:

### ***World Wide Web (<http://www.epson.com.sg>)***

Information on product specifications, drivers for download, Frequently Asked Questions (FAQ), Sales Enquiries, and Technical Support via e-mail are available.

## ***Help for Users in Thailand***

Contact for information, support, and services are:

### ***World Wide Web (<http://www.epson.co.th>)***

Information on product specifications, drivers for download, Frequently Asked Questions (FAQ), and e-mail are available.

## ***Help for Users in Vietnam***

Contacts for information, support, and services are:

### ***Epson Service Center***

65 Truong Dinh Street, District 1, Hochiminh City, Vietnam.  
Phone(Ho Chi Minh City): 84-8-3823-9239, 84-8-3825-6234

29 Tue Tinh, Quan Hai Ba Trung, Hanoi City, Vietnam.  
Phone(Hanoi City): 84-4-3978-4785, 84-4-3978-4775

## Help for Users in Indonesia

Contacts for information, support, and services are:

### World Wide Web

<http://www.epson.co.id>

- Information on product specifications, drivers for download
- Frequently Asked Questions (FAQ), Sales Enquiries, questions through e-mail

### Epson Hotline

Phone: +62-1500-766

Fax: +62-21-808-66-799

Our Hotline team can help you with the following over the phone or fax:

- Sales enquiries and product information
- Technical support

### Epson Service Center

Province	Company Name	Address	Phone E-mail
DKI JAKARTA	ESS JAKARTA MANGGADUA	Ruko Mall Mangga Dua No. 48 Jl. Arteri Mangga Dua, Jakarta Utara - DKI JAKARTA	(+6221) 62301104 jkt-admin@epson-indonesia.co. id
NORTH SUMATERA	ESC MEDAN	Jl. Bambu 2 Komplek Graha Niaga Nomor A-4, Medan - North Sumatera	(+6222) 4207033 bdg-admin@epson-indonesia.c o.id
DI YOGYAKARTA	ESC YOGYAKARTA	YAP Square, Block A No. 6 Jl. C Simanjutak Yogyakarta - DIY	(+62274) 581065 ygy-admin@epson-indonesia.co .id
EAST JAWA	ESC SURABAYA	Hitech Mall Lt. 2 Block A No. 24 Jl. Kusuma Bangsa No. 116 - 118 Surabaya - JATIM	(+6231) 5355035 sby-admin@epson-indonesia.co .id



SOUTH SULAWESI	ESC MAKASSAR	Jl. Cendrawasih NO. 3A, kunjung mae, mariso, MAKASSAR - SULSEL 90125	(+62411) 8911071 mksr-admin@epson-indonesia.co.id
WEST KALIMANTAN	ESC PONTIANAK	Komp. A yani Sentra Bisnis G33, Jl. Ahmad Yani - Pontianak Kalimantan Barat	(+62561) 735507 / 767049 pontianak-admin@epson-indonesia.co.id
RIAU	ESC PEKANBARU	Jl. Tuanku Tambusai No.459A Pekanbaru Riau	(+62761) 8524695 pkb-admin@epson-indonesia.co.id
DKI JAKARTA	ESS JAKARTA SUDIRMAN	Wisma Keiai Lt. 1 Jl. Jenderal Sudirman Kav.3 Jakarta Pusat - DKI JAKARTA 10220	(+6221) 5724335 ess@epson-indonesia.co.id
EAST JAWA	ESS SURABAYA	Ruko Surya Inti Jl. Jawa No 2-4 Kav. 29 Surabaya - Jawa Timur	(+6231) 5014949 esssby@epson-indonesia.co.id
BANTEN	ESS SERPONG	Ruko Mall WTC Matahari No. 953, Serpong-Banten	(+6221) 53167051 / 53167052 esstag@epson-indonesia.co.id
CENTRAL JAWA	ESS SEMARANG	Komplek Ruko Metro Plaza Block C20 Jl. MT Haryono No 970 Semarang - JAWA TENGAH	(+6224) 8313807 / 8417935 esssmg@epson-indonesia.co.id
EAST KALIMANTAN	ESC SAMARINDA	Jl. KH. Wahid Hasyim (M. Yamin) Kelurahan Sempaja Selatan Kecamatan Samarinda UTARA - SAMARINDA - KALTIM	(+62541) 7272904 escsmd@epson-indonesia.co.id
SOUTH SUMATERA	ESC PALEMBANG	Jl. H.M Rasyid Nawawi No. 249 Kelurahan 9 Ilir Palembang Sumatera Selatan	(+62711) 311330 escplg@epson-indonesia.co.id
EAST JAVA	ESC JEMBER	Jl. Panglima Besar Sudirman Ruko no. 1D Jember-Jawa Timur (Depan Balai Penelitian & Pengolahan Kakao)	(+62331) 488373 / 486468 jmr-admin@epson-indonesia.co.id
NORTH SULAWESI	ESC MANADO	Tekno Megamall Lt LG 11 TK 21, Kawasan Megamas Boulevard, Jl Piere Tendean, Manado - SULUT 95111	(+62431) 8890996 MND-ADMIN@EPSON-INDONESIA.CO.ID

For other cities not listed here, call the Hot Line: 08071137766.

## **Help for Users in Malaysia**

Contacts for information, support, and services are:

### **World Wide Web (<http://www.epson.com.my>)**

- Information on product specifications, drivers for download
- Frequently Asked Questions (FAQ), Sales Enquiries, questions through e-mail

### **Epson Call Center**

Phone: +60 1800-8-17349

- Sales enquiries and product information
- Product usage questions or problems
- Enquiries on repair services and warranty

### **Head Office**

Phone: 603-56288288

Fax: 603-5628 8388/603-5621 2088

## **Help for Users in India**

Contacts for information, support, and services are:

### **World Wide Web (<http://www.epson.co.in>)**

Information on product specifications, drivers for download, and products enquiry are available.

### **Helpline**

- Service, product information, and ordering consumables (BSNL Lines)

Toll-free number: 18004250011

Accessible 9am to 6pm, Monday through Saturday (Except public holidays)

- Service (CDMA & Mobile Users)

Toll-free number: 186030001600

Accessible 9am to 6pm, Monday through Saturday (Except public holidays)

### ***Help for Users in the Philippines***

To obtain technical support as well as other after sales services, users are welcome to contact the Epson Philippines Corporation.

### ***World Wide Web (<http://www.epson.com.ph>)***

Information on product specifications, drivers for download, Frequently Asked Questions (FAQ), and E-mail Enquiries are available.

## Chapter 7

### Product Information

### Printer Specifications

#### System Requirements

Windows 10 (32-bit, 64-bit)/Windows 8.1 (32-bit, 64-bit)/Windows 8 (32-bit, 64-bit)/Windows 7 (32-bit, 64-bit)/Windows Vista (32-bit, 64-bit)/Windows XP SP3 or later (32-bit)/Windows XP Professional x64 Edition SP2 or later/Windows Server 2019/Windows Server 2016/Windows Server 2012 R2/Windows Server 2012/Windows Server 2008 R2/Windows Server 2008/Windows Server 2003 R2/Windows Server 2003 SP2 or later

#### Mechanical

Printing method:	24-pin impact dot matrix	
Printing speed:	PR2:	
	Ultra speed draft	630 cps at 10 cpi
	High speed draft	560 cps at 10 cpi
	Draft	420 cps at 10 cpi
	NLQ	210 cps at 10 cpi
	LQ	140 cps at 10 cpi
	ESC/P2 + ESC/MC:	
	Ultra speed draft	630 cps at 10 cpi
	High speed draft	560 cps at 10 cpi
	Draft	420 cps at 10 cpi
	LQ	140 cps at 10 cpi

Printing direction:	Bidirectional logic seeking for text and graphics printing. Uni-directional text or graphics printing can be selected using software commands.	
Line spacing:	1/6 inch	
	PR2: Programmable in increments of 1/240 inch or 1/216 inch	
	WNI4915, ESC/P2, ESC/P2+ESC/MC: Programmable in increments of 1/360 inch	
	IBM4722, IBM PPDS: Programmable in increments of 1/216 or 1/180 inch	
Printable columns:	94 columns (at 10 cpi)	
Resolution:	Maximum 360 × 180 dpi (letter quality)	
Paper feed methods:	Friction (front)	
Reliability:	Total print volume	7 million lines (except print head)
	Print head life	600 million strokes/wire
	MSRW Head	7 hundred thousand strokes (Magnetic stripes reading and writing models only.)
Dimensions and weight:	Width	384 mm (15.1 inches)
	Depth	280 mm (11.0 inches)
	Height	203 mm (8.0 inches)

	Weight	approx. 7.9 kg (17.4 lb) (PLQ-50)
		approx. 8.9 kg (19.6 lb) (PLQ-50M)
		approx. 8.1 kg (17.9 lb) (PLQ-50CS)
		approx. 9.1 kg (20.1 lb) (PLQ-50CSM)
		approx. 8.0 kg (17.6 lb) (PLQ-50CSK)
Ribbon:	Black ribbon cartridge	S015339
	Ribbon life	approx. 5 million characters (LQ, 10 cpi, 48 dots/character)
		approx. 10 million characters (Draft, 10 cpi, 24 dots/character)
Acoustic noise:		
Printing on A4 paper	PLQ-50/PLQ-50CS/ PLQ-50CSK	Approx. 55 dB (A) (ISO 7779 pattern)
	PLQ-50M/PLQ-50CSM	Approx. 58 dB (A) (ISO 7779 pattern)
Printing on passbook	PLQ-50/PLQ-50CS/ PLQ-50CSK	Approx. 52 dB (A) (ISO 7779 pattern)
	PLQ-50M/PLQ-50CSM	Approx. 55 dB (A) (ISO 7779 pattern)

## Electronic

Interfaces: Three built-in interface slots;  
Bidirectional, 8-bit, parallel interface with IEEE 1284 nibble mode support,  
USB (ver 2.0) interface,  
EIA-232D Serial interface

Buffer: 128KB

Fonts: PR2 emulation

### Bitmap fonts:

EPSON Super Draft 10 cpi, proportional  
EPSON Draft 10 cpi, proportional  
EPSON Roman 10, 12, 15 cpi, proportional  
EPSON Sans Serif 10 cpi, proportional  
EPSON OCR-B 10 cpi

### Scalable fonts:

Not supported

### Bar code fonts:

EAN-13, EAN-8, Interleaved 2 of 5, UPC-A, UPC-E, Code 39, Coda  
bar (NW-7), Industrial 2 of 5

WNI4915, ESC/P2, IBM PPDS, ESC/P2+ESC/MC emulations

### Bitmap fonts:

EPSON Draft 10, 12, 15 cpi  
EPSON Roman 10, 12, 15 cpi, proportional  
EPSON Sans Serif 10, 12, 15 cpi, proportional  
EPSON Courier 10, 12, 15 cpi  
EPSON Prestige 10, 12 cpi  
EPSON Script 10 cpi  
EPSON OCR-B 10 cpi  
EPSON Orator 10 cpi  
EPSON Orator-S 10 cpi  
EPSON Script C proportional

## Scalable fonts:

EPSON Roman 10.5 pt., 8-32 pt. (every 2 pt.)  
 EPSON Sans Serif 10.5 pt., 8-32 pt. (every 2 pt.)  
 EPSON Roman T 10.5 pt., 8-32 pt. (every 2 pt.)  
 EPSON Sans Serif H 10.5 pt., 8-32 pt. (every 2 pt.)

## Bar code fonts:

EAN-13, EAN-8, Interleaved 2 of 5, UPC-A, UPC-E, Code 39, Code 128, POSTNET

## IBM4722 emulation

## Bitmap fonts:

EPSON Draft 10 cpi  
 EPSON Roman 10, 12, 15 cpi  
 EPSON Sans Serif 10, 12, 15 cpi  
 EPSON Courier 10, 12, 15 cpi  
 EPSON Prestige 10, 12 cpi  
 EPSON OCR-B 10 cpi

## Scalable fonts:

Not supported

## Bar code fonts:

Not supported

## Character tables:

## PR2 emulation

## ASCII

## (Olivetti)

## 22 graphics character tables:

International, Germany, Portugal, Spain 1, Denmark/Norway, France, Italy, Sweden/Finland, Switzerland, Great Britain, USA  
 ASCII, Greece, Israel, Spain 2, USSR, Yugoslavia, Olivetti TCV 370, Canada, SDC, Turkey, Arabic, CIBC



(ISO) 9 graphics character tables:  
 ISO 8859-1 Latin 1, ISO 8859-9 Latin 5, ISO 8859-2 Latin 2, ISO 8859-5 Cyrillic, ISO 8859-15, ISO 8859-6 Latin Arabic, ISO 8859-7 Greek, ISO 8859-8 Hebrew, OLI-UNIX

(PC) 19 graphics character tables:  
 PC-437 International, PC-220 Spain 2, PC-865 Nordic, PC-Denmark/Norway, PC-Denmark OPE, PC-860 Portugal, PC-863 Canadian French, PC-850 Latin 1, PC-858 Latin Euro, PC-857 Turkish Latin 5, PC-852 Latin 2, PC-851 Greek, PC-210 Greek, PC-855 Cyrillic, PC-862 Israel, PC-864 Arabic, PC-866 Cyrillic, PC-1252 PC-WIN Latin 1, PC-1250 PC-WIN Latin 2

#### WNI4915 emulation

ASCII One Italic and 8 graphics character tables:  
 Italic table,  
 PC 437 (US, Standard Europe), PC 850 (Multilingual), ISO 8859-2, ISO 8859-5, ISO 8859-7, ISO 8859-8, ISO 8859-9, ISO 8859-15

#### IBM4722 emulation

ASCII 35 graphics character tables:  
 CP 437 (Standard), CP808 (Russian), CP813 (Greek), CP819 (Latin 1), CP850 (US Multilingual), CP851 (Greek), CP852 (Latin 2), CP855 (Cyrillic 1), CP857 (Turkish Latin 5), CP858 (Multilingual), CP860 (Portuguese), CP862 (Hebrew), CP863 (Canadian French), CP864 (Arabic), CP865 (Nordic), CP866 (Russian :Cyrillic 2), CP867 (Hebrew), CP869 (Greek), CP872 (Cyrillic 1), CP874 (Thai with TIS extended), CP876 (OCR A), CP877 (OCR B), CP912 (Latin 2), CP913 (Latin 3), CP915 (Cyrillic), CP916 (Hebrew), CP920 (Latin 5 :Turkey), CP923 (Latin 9 :Latin 1 with Euro), CP1161 (Thai), CP1250 (Latin 2), CP1251 (Cyrillic), CP1252 (Latin 1), CP1253 (Greek), CP1254 (Turkish), CP1257 (Baltic Rim)

#### ESC/P2, IBM PPDS, and ESC/P2+ESC/MC emulations

ASCII (Expanded European model only) One italic and 39 graphics character tables:  
 Italic table, PC437 (US, Standard Europe), PC850 (Multilingual), PC437 Greek, PC853 (Turkish), PC855 (Cyrillic), PC852 (East Europe), PC857 (Turkish), PC866 (Russian), PC869 (Greek), MAZOWIA (Poland), Code MJK (CSFR), ISO 8859-7 (Latin/Greek), ISO Latin 1T (Turkish), Bulgaria (Bulgarian), PC 774 (LST 1283:1993), Estonia (Estonia), ISO 8859-2, PC 866 LAT. (Latvian), PC 866 UKR (Ukraine), PC860 (Portuguese), PC861 (Icelandic), PC865 (Nordic), PC864 (Arabic), PC APTEC (Arabic), PC 708 (Arabic), PC 720 (Arabic), PCAR864 (Arabic), PC863 (Canadian-French), BRASCII, Abicomp, Roman 8, ISO Latin 1, PC858, ISO 8859-15, PC771 (Lithuania), PC437 Slovenia, PC MC, PC1250, PC1251, KZ 1048

Character sets: 14 international character sets and one legal character set:  
 USA, France, Germany, UK, Denmark I, Sweden, Italy, Spain I, Japan, Norway, Denmark II, Spain II, Latin America, Korea, Legal

## Electrical

	<b>100 - 240 V Model</b>	<b>220 - 240 V Model</b>
Rated voltage range	AC 100 - 240 V	AC 220 - 240 V
Input voltage range	AC 90 - 264 V	AC 165-264 V
Rated frequency range	50 - 60 Hz	
Input frequency range	49.5 - 60.5 Hz	
Rated current	2.0 - 1.0 A (maximum 5.0 - 1.9 A depending on the character type)	1.0 A (maximum 2.6 A depending on the character type)

	100 - 240 V Model	220 - 240 V Model
Power consumption (USB connection)	AC 100 - 120 V: Approx. 78 W (ISO/IEC 10561 letter pattern) Approx. 16.2 W in ready mode Approx. 0.7 W in sleep mode * 0.1 W in power-off  AC 220 - 240 V: Approx. 78 W (ISO/IEC 10561 letter pattern) Approx. 16.3 W in ready mode Approx. 0.8 W in sleep mode * 0.1 W in power-off	Approx. 77 W (ISO/IEC 10561 letter pattern) Approx. 16.6 W in ready mode Approx. 0.8 W in sleep mode * 0.1 W in power-off

\* When the configured time passes in the following condition, the printer enters sleep mode.

- not error.
- There is no data in input buffer.

**Note:**

*Check the label on the back of the printer for the voltage of your printer.*

## Environmental

	Temperature	Humidity (without condensation)
Operation (passbook, plain paper, recycled paper, and multipart forms)	5 to 38 °C (41 to 100.4°F)	10 to 85 % RH
Storage	-30 to 60 °C (-22 to 140 °F)	0 to 85 % RH

## Paper/Media

### Available Paper

**Note:**

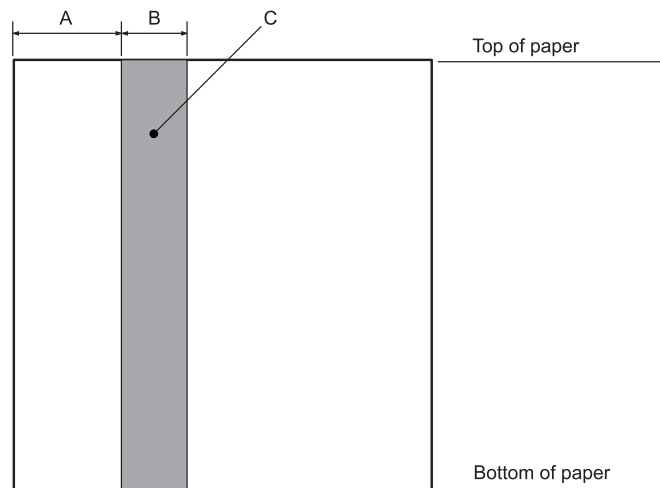
- Use passbooks, plain paper, recycled paper, and multipart forms under the temperature and humidity conditions described below:

Temperature: 5 to 38 °C (41 to 100.4 °F)

Humidity: 10 to 85 % RH

- Use passbooks and paper that have more than 60% reflectance.

- Do not load passbooks that are creased or have ripped seams.
- Do not use a passbook that has metallic parts such as staplers or metal clips.
- Do not use a passbook with sticky parts such as stamps or seals.
- Do not use a passbook that has any pages smaller than the cover page.
- Do not print on the front or back cover of a passbook. Printing can be done only when the passbook is opened.
- When you use paper that is shorter than 110.0 mm, set the paper eject direction to front. The factory set default is front. Please access <http://www.epson.com> for information.
- Do not load paper that is curled, folded, or crumpled.
- Do not punch holes in the area from 25.0 to 40.0 mm from the left edge of paper. See the illustration below.



A 25.0 mm

B 15.0 mm

C Do not punch holes in this area.

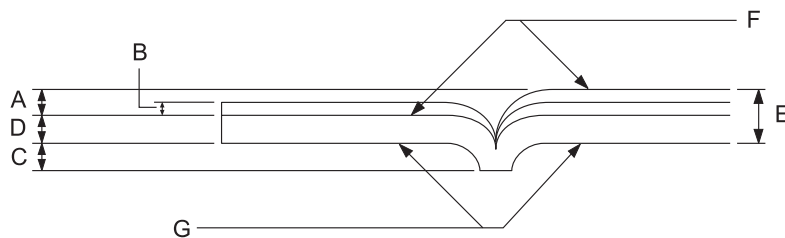
- When using the printer driver, the minimum achievable top and bottom margins are 1.0 mm (0.04 inch) and 9.0 mm (0.36 inch) respectively.

*Passbook*

	<b>Horizontal-fold</b>	<b>Vertical-fold</b>
--	------------------------	----------------------

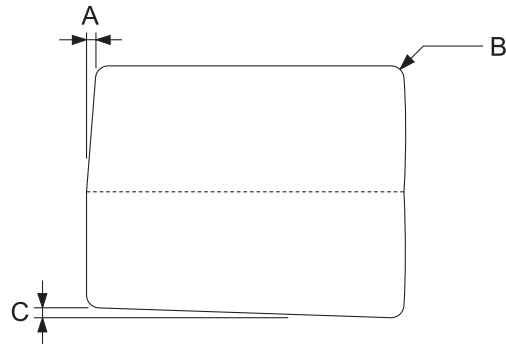
		Minimum	Maximum	Minimum	Maximum
Width	(mm) (inch)	110 4.33	241.3 9.5	110 4.33	241.3 9.5
Length	(mm) (inch)	127 5.0	220 8.66	85 3.35	220 8.66
Thickness of cover page	(mm) (inch)	0.2 0.008	0.5 0.025	0.2 0.008	0.5 0.02
Thickness of each page	(mm) (inch)	0.1 0.004	0.15 0.006	0.1 0.004	0.15 0.006
Weight	(g/m <sup>2</sup> ) (lb)	95 25	116 31	95 25	116 31
Quality	Plain paper				

Thickness of passbook



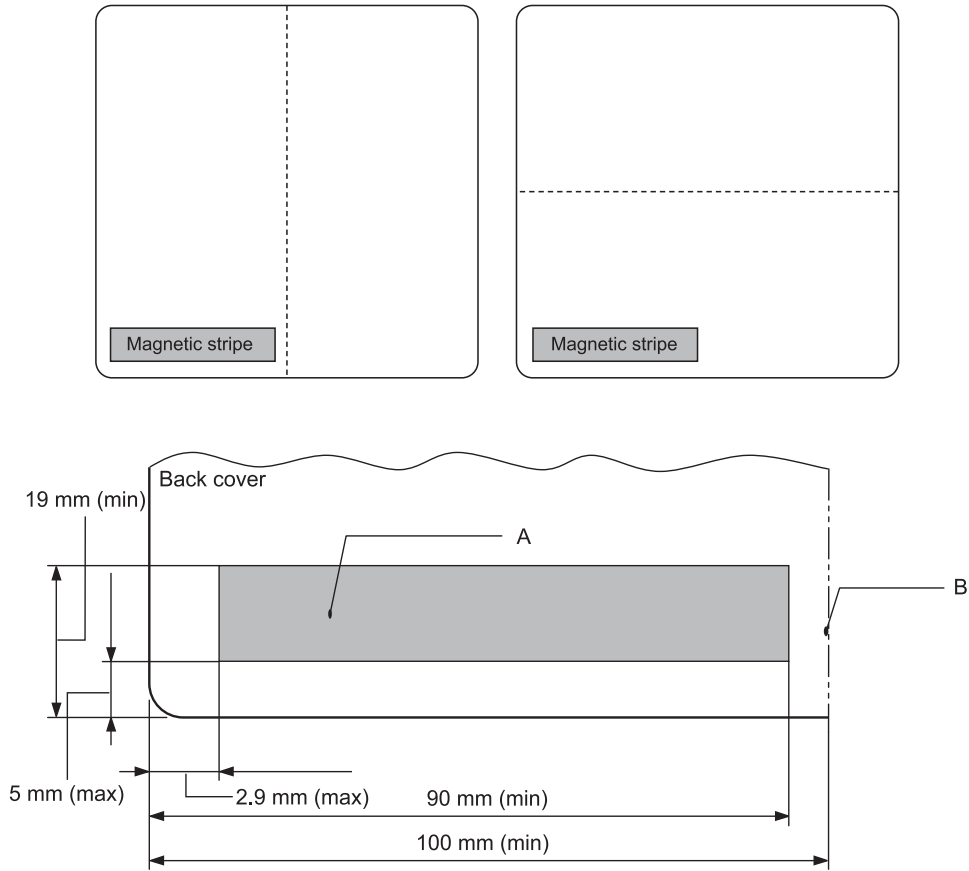
- A Less than 1.5 mm
- B 0.1 ~ 0.15 mm
- C Less than 0.6 mm
- D 0.2 ~ 0.5 mm
- E Less than 2.0 mm
- F printable side
- G Do not print on this side.

*Degree of passbook*



- A    Less than 0.3 mm
- B    R2 ~ 5 mm
- C    Less than 0.3 mm

*Magnetic stripe position*



- A Magnetic stripe minimum area
- B Seam or Right edge

*Single sheets*

		Front Ejection		Rear Ejection	
		Minimum	Maximum	Minimum	Maximum
Width	(mm) (inch)	65 2.6	245 9.6	65 2.6	245 9.6
Length	(mm) (inch)	67 2.64	297/(450)* 11.69/(17.72)*	142 5.59	297/(450)* 11.69/(17.72)*

Thickness	(mm) (inch)	0.065 0.0025	0.19 0.0074	0.065 0.0025	0.19 0.0074
Weight	(g/m <sup>2</sup> ) (lb)	52 14	157 42	52 14	157 42
Quality	Plain paper and recycled paper				

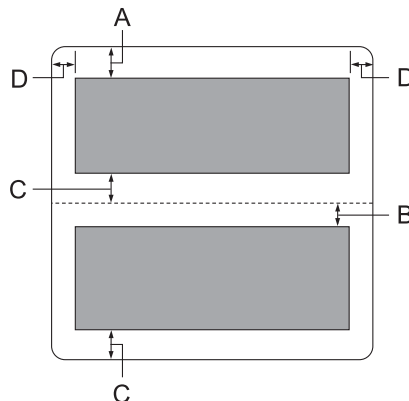
\* Figures in ( ) are the maximum possible lengths.

### Single-sheet multipart forms

		Front Ejection		Rear Ejection	
		Minimum	Maximum	Minimum	Maximum
Width	(mm) (inch)	65 2.6	245 9.6	65 2.6	245 9.6
Length	(mm) (inch)	67 2.64	297 11.69	142 5.59	297 11.69
Copies	1 original + 6 copies				
Total thickness	(mm) (inch)	0.12 0.0047	0.53 0.021	0.12 0.0047	0.53 0.021
Weight per sheet of multipart	(g/m <sup>2</sup> ) (lb)	40 12	58 15	40 12	58 15
Quality	Carbonless multipart forms with a line of glue at the top side or along one side of the form				

### Recommended printable area

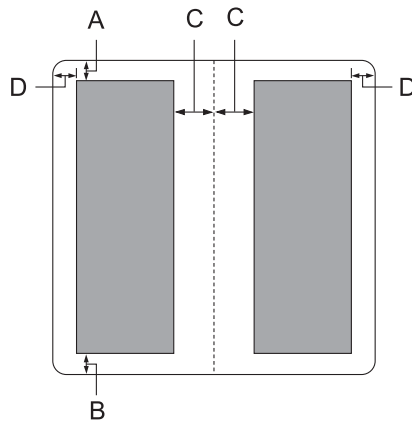
#### Passbooks (horizontal-fold)



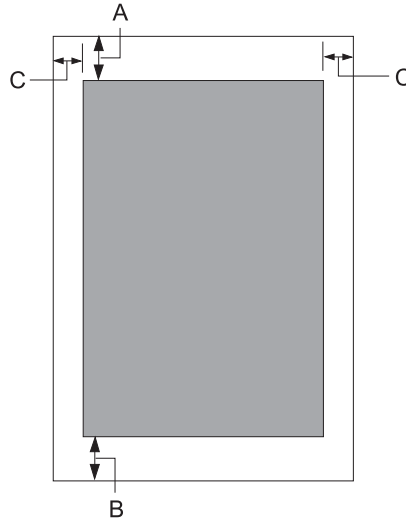


- A The minimum top margin of the upper page is 1.0 mm (0.04 inch).
- B The minimum top margin of the lower page is 4.7 mm (0.19 inch).
- C The minimum bottom margins of the upper and lower pages are 5.0 mm (0.2 inch).
- D The minimum left and right margins are 3.0 mm (0.12 inch).  
\*Minimum of 2.54 mm (0.1 inch) for WNI4915 emulation.

*Passbooks (vertical-fold)*



- A The minimum top margin is 1.0 mm (0.04 inch).
- B The minimum bottom margin is 5.0 mm (0.2 inch).
- C The minimum left and right margins inside the printable areas are 3.8 mm (0.15 inch).
- D The minimum left and right margins outside the printable areas are 3.0 mm (0.12 inch).  
\*Minimum of 2.54 mm (0.1 inch) for WNI4915 emulation.

*Single sheets (including multipart forms)*

- A The minimum top margin is 1.0 mm (0.04 inch).
- B The minimum bottom margin is 3.1 mm (0.12 inch).
- C The minimum left and right margins are 3 mm (0.12 inch).  
\*Minimum of 2.54 mm (0.1 inch) for WNI4915 emulation.

***Magnetic stripe reader/writer (Magnetic stripe reading and writing models only)***

The horizontal magnetic stripe reader/writer is used to read and write data on the magnetic stripe on bank passbooks. See the following specifications of this device for details.

**Note:**

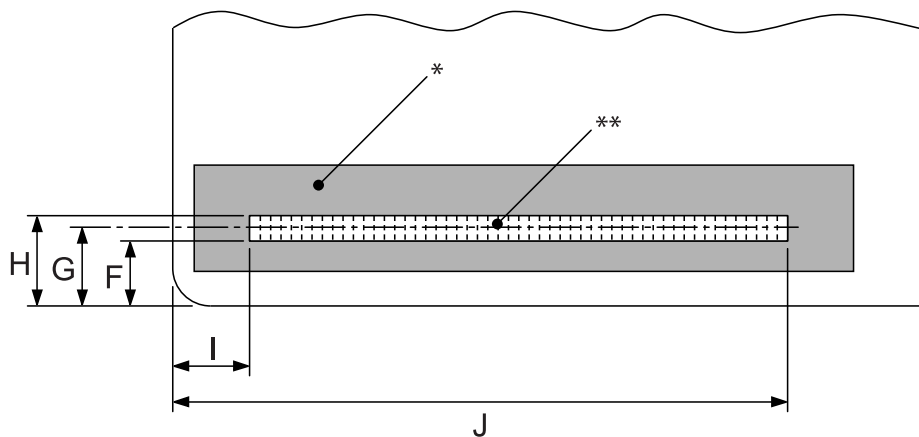
*The magnetic stripe reader and writer is installed only horizontally.*

Recording code	BCD Binary Coded decimal, 4 data bits, 1 VRC parity control bit
Recordable characters	column 3 of the ASCII table

Recordable formats	IBM3604, DIN/ISO, ISO7811, IBM4746, ANSI, HT-2751-CIZ, ISO8484
Recorded track width	9.7 mm
Read track width	1.1 mm
Speed of medium	340 mm/second
Number of retries	1 or 3
Field duplication	YES or NO

**Recordable area**

Back Cover:



\*: Magnetic stripe area

\*\* : Recordable area

	<b>F (max)</b>	<b>G</b>	<b>H (min)</b>	<b>I</b>	<b>J (max)</b>
<b>DIN/ISO, ANSI</b>	12.5	13.9	15.5	9.5	85
<b>IBM3604</b>	8.9	10.4	11.9	10.4	81.3
<b>ISO7811</b>	8.9	10.4	11.9	14.8	—
<b>IBM4746</b>	8.9	10.4	11.9	9.8	—
<b>ISO8484</b>	12.5	13.9	15.3	9.5	85

	<b>F (max)</b>	<b>G</b>	<b>H (min)</b>	<b>I</b>	<b>J (max)</b>
<b>HT-2751-CIZ</b>	7.4	8.8	10.2	12.6	—

## **Recordable formats specification**

### *PR2 emulation and ESC/P2+ESC/MC mode*

	<b>DIN/ISO, ISO8484</b>	<b>IBM3604</b>	<b>ANSI</b>
<b>Bit density</b>	210 bpi ± 5%	210 bpi ± 5%	210 bpi ± 5%
<b>Recording direction</b>	Left to Right	Left to Right	Left to Right
<b>Preamble</b>	20 bits	20 bits	20 bits
<b>SOM (Start sentinel)</b>	D	B	B
<b>Recordable characters</b>	0-9, A, B, C, D, E	0-9, A, B, D, E	0-9, A, B, C, D, E
<b>EOM (End sentinel)</b>	F	F or C	F
<b>LRC Parity</b>	even	even	even
<b>Postamble</b>	20 bits	20 bits	20 bits
<b>Maximum number of recordable characters (1 block)</b>	105 characters	105 characters	105 characters
<b>Maximum number of recordable characters (2 block)</b>	45 characters	45 characters	45 characters
<b>Number of separator</b>	60 bits	120 bits	60 bits
<b>Center of vertical position</b>	13.9 mm	10.4 mm	13.9 mm
<b>Horizontal start position (from the left edge)</b>	9.5 mm	10.4 mm	9.5 mm

	<b>ISO7811</b>	<b>IBM4746</b>	<b>HT-2751-CIZ</b>
<b>Bit density</b>	75 bpi ± 5%	210 bpi ± 5%	105 bpi ± 5%
<b>Recording direction</b>	Left to Right	Left to Right	Right to Left
<b>Preamble</b>	20 bits	20 bits	55 bits
<b>SOM (Start sentinel)</b>	B	BA	F

	<b>ISO7811</b>	<b>IBM4746</b>	<b>HT-2751-CIZ</b>
<b>Recordable characters</b>	0-9, A, D, E	0-9, D	0-9
<b>EOM (End sentinel)</b>	F	F or C	F
<b>LRC Parity</b>	even	even	odd
<b>Postamble</b>	20 bits	20 bits	40 bits
<b>Maximum number of recordable characters (1 block)</b>	37 characters	105 characters	60 characters
<b>Maximum number of recordable characters (2 block)</b>	23 characters	45 characters	27 characters
<b>Number of separator</b>	120 bits	120 bits	10 bits
<b>Center of vertical position</b>	10.4 mm	10.4 mm	8.8 mm
<b>Horizontal start position (from the left edge)</b>	14.8 mm	9.8 mm	12.6 mm

### *WNI4915 emulation*

	<b>DIN</b>	<b>IBM1</b>	<b>IBM2</b>
<b>Bit density</b>	210 bpi ± 5%	210 bpi ± 5%	210 bpi ± 5%
<b>Recording direction</b>	Left to Right	Left to Right	Left to Right
<b>Preamble</b>	61 bits	61 bits	61 bits
<b>SOM (Start sentinel)</b>	D	B	B
<b>Recordable characters</b>	0-9, A, B, C, D, E	0-9, A, B, D, E	0-9, A, B, D, E
<b>EOM (End sentinel)</b>	F	C	F
<b>LRC Parity</b>	even	even	even
<b>Postamble</b>	64 bits	154 bits	154 bits
<b>Maximum number of recordable characters (1 block)</b>	—	—	—
<b>Maximum number of recordable characters (2 block)</b>	45 characters	36 characters	36 characters

	<b>DIN</b>	<b>IBM1</b>	<b>IBM2</b>
<b>Number of separator</b>	60 bits	60 bits	60 bits
<b>Center of vertical position</b>	14.0 mm	11.0 mm	11.0 mm
<b>Horizontal start position (from the left edge)</b>	14.8 mm	14.8 mm	14.8 mm

	<b>105 characters</b>	<b>ISO7811</b>
<b>Bit density</b>	210 bpi ± 5%	75 bpi ± 5%
<b>Recording direction</b>	Left to Right	Left to Right
<b>Preamble</b>	61 bits	21 bits
<b>SOM (Start sentinel)</b>	D	B
<b>Recordable characters</b>	0-9, A, B, C, D, E	0-9, A, E
<b>EOM (End sentinel)</b>	F	F
<b>LRC Parity</b>	even	even
<b>Postamble</b>	64 bits	24 bits
<b>Maximum number of recordable characters (1 block)</b>	105 characters	35 characters
<b>Maximum number of recordable characters (2 block)</b>	—	—
<b>Number of separator</b>	—	—
<b>Center of vertical position</b>	14.0 mm	14.0 mm
<b>Horizontal start position (from the left edge)</b>	14.8 mm	14.8 mm

### **Character conversion table**

#### *PR2 emulation and ESC/P2+ESC/MC mode*

<b>Crt</b>	<b>ASCII</b>	<b>Line code</b>	<b>Function</b>		<b>Recording codes</b>				
			<b>DIN/ISO, ISO8484</b>	<b>IBM3604</b>	<b>VRC</b>	<b>BIT4</b>	<b>BIT3</b>	<b>BIT2</b>	<b>BIT1</b>

0	0	30H	crt	crt	1	0	0	0	0
1	1	31H	crt	crt	0	0	0	0	1
2	2	32H	crt	crt	0	0	0	1	0
3	3	33H	crt	crt	1	0	0	1	1
4	4	34H	crt	crt	0	0	1	0	0
5	5	35H	crt	crt	1	0	1	0	1
6	6	36H	crt	crt	1	0	1	1	0
7	7	37H	crt	crt	0	0	1	1	1
8	8	38H	crt	crt	0	1	0	0	0
9	9	39H	crt	crt	1	1	0	0	1
A	:	3AH	crt	crt	1	1	0	1	0
B	;	3BH		SOM	0	1	0	1	1
			crt	crt					
C	<	3CH		EOM	1	1	1	0	0
			crt	—					
D	=	3DH	SOM		0	1	1	0	1
			crt	crt					
E	>	3EH	crt	crt	0	1	1	1	0
F	?	3FH	EOM	EOM	1	1	1	1	1

\* crt means character.

Crt	ASCII	Line code	Function		Recording codes				
			ANSI	ISO7811	VRC	BIT4	BIT3	BIT2	BIT1
0	0	30H	crt	crt	1	0	0	0	0
1	1	31H	crt	crt	0	0	0	0	1
2	2	32H	crt	crt	0	0	0	1	0
3	3	33H	crt	crt	1	0	0	1	1
4	4	34H	crt	crt	0	0	1	0	0

5	5	35H	crt	crt	1	0	1	0	1
6	6	36H	crt	crt	1	0	1	1	0
7	7	37H	crt	crt	0	0	1	1	1
8	8	38H	crt	crt	0	1	0	0	0
9	9	39H	crt	crt	1	1	0	0	1
A	:	3AH	crt	crt	1	1	0	1	0
B	;	3BH	SOM	SOM	0	1	0	1	1
			crt	—					
C	<	3CH			1	1	1	0	0
			crt	—					
D	=	3DH	crt	crt	0	1	1	0	1
E	>	3EH	crt	crt	0	1	1	1	0
F	?	3FH	EOM	EOM	1	1	1	1	1

\* crt means character.

Crt	ASCII	Line code	Function		Recording codes				
			IBM4746	HT-2751-CIZ	VRC	BIT4	BIT3	BIT2	BIT1
0	0	30H	crt	crt	1	0	0	0	0
1	1	31H	crt	crt	0	0	0	0	1
2	2	32H	crt	crt	0	0	0	1	0
3	3	33H	crt	crt	1	0	0	1	1
4	4	34H	crt	crt	0	0	1	0	0
5	5	35H	crt	crt	1	0	1	0	1
6	6	36H	crt	crt	1	0	1	1	0
7	7	37H	crt	crt	0	0	1	1	1
8	8	38H	crt	crt	0	1	0	0	0
9	9	39H	crt	crt	1	1	0	0	1



A	:	3AH	SOM		1	1	0	1	0
			—	—					
B	;	3BH	SOM		0	1	0	1	1
			—	—					
C	<	3CH	EOM		1	1	1	0	0
			—	—					
D	=	3DH	crt	—	0	1	1	0	1
E	>	3EH	—	—	0	1	1	1	0
F	?	3FH		SOM	1	1	1	1	1
			EOM	EOM					

\* crt means character.

### WNI4915 emulation

Crt	ASCII	Line code	Function			Recording codes				
			DIN	IBM1	IBM2	VRC	BIT4	BIT3	BIT2	BIT1
0	0	30H	crt	crt	crt	1	0	0	0	0
1	1	31H	crt	crt	crt	0	0	0	0	1
2	2	32H	crt	crt	crt	0	0	0	1	0
3	3	33H	crt	crt	crt	1	0	0	1	1
4	4	34H	crt	crt	crt	0	0	1	0	0
5	5	35H	crt	crt	crt	1	0	1	0	1
6	6	36H	crt	crt	crt	1	0	1	1	0
7	7	37H	crt	crt	crt	0	0	1	1	1
8	8	38H	crt	crt	crt	0	1	0	0	0
9	9	39H	crt	crt	crt	1	1	0	0	1
A	:	3AH	crt	crt	crt	1	1	0	1	0

B	;	3BH		SOM	SOM	0	1	0	1	1
			crt	crt	crt					
C	<	3CH	SOM	EOM		1	1	1	0	0
			crt	—	—					
D	=	3DH	crt	crt	crt	0	1	1	0	1
E	>	3EH	crt	crt	crt	0	1	1	1	0
F	?	3FH	EOM	—	EOM	1	1	1	1	1

\* crt means character.

Crt	ASCII	Line code	Function		Recording codes				
			105 characters	ISO7811	VRC	BIT4	BIT3	BIT2	BIT1
0	0	30H	crt	crt	1	0	0	0	0
1	1	31H	crt	crt	0	0	0	0	1
2	2	32H	crt	crt	0	0	0	1	0
3	3	33H	crt	crt	1	0	0	1	1
4	4	34H	crt	crt	0	0	1	0	0
5	5	35H	crt	crt	1	0	1	0	1
6	6	36H	crt	crt	1	0	1	1	0
7	7	37H	crt	crt	0	0	1	1	1
8	8	38H	crt	crt	0	1	0	0	0
9	9	39H	crt	crt	1	1	0	0	1
A	:	3AH	crt	crt	1	1	0	1	0
B	;	3BH	crt	SOM	0	1	0	1	1
				—					
C	<	3CH	SOM		1	1	1	0	0
			crt	—					
D	=	3DH	crt	—	0	1	1	0	1
E	>	3EH	crt	crt	0	1	1	1	0

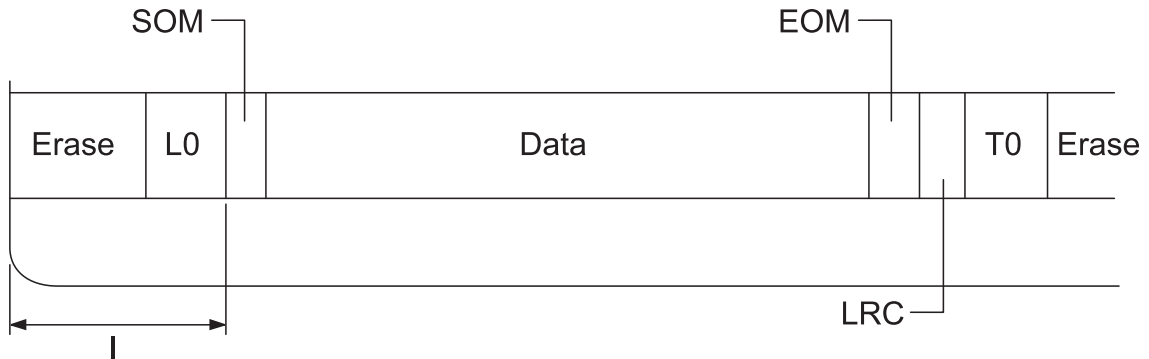
F	?	3FH	EOM	EOM	1	1	1	1	1
---	---	-----	-----	-----	---	---	---	---	---

\* crt means character.

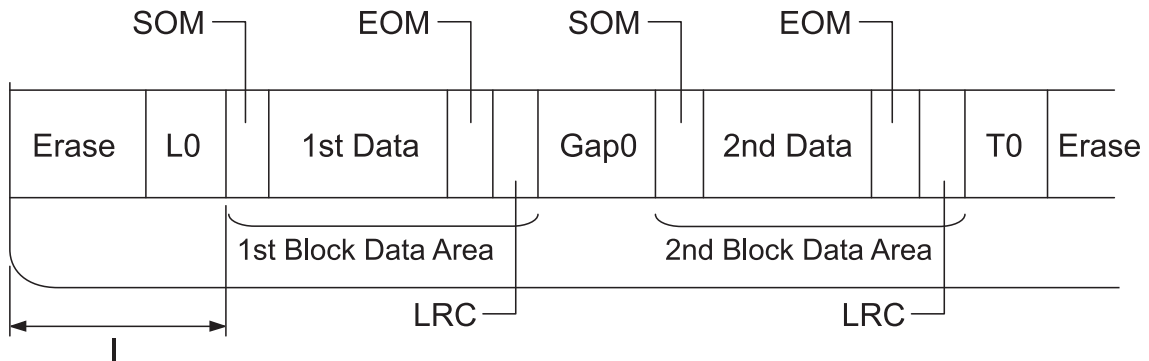
### Recording layout of magnetic stripe

DIN/ISO, IBM3604, ANSI, ISO7811, IBM4746, and ISO8484

#### 1 block format



#### 2 block format

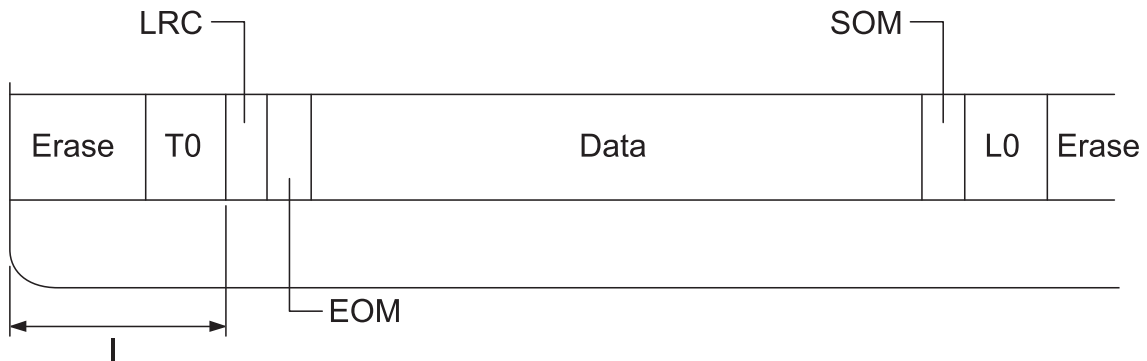


#### Direction of bit pattern

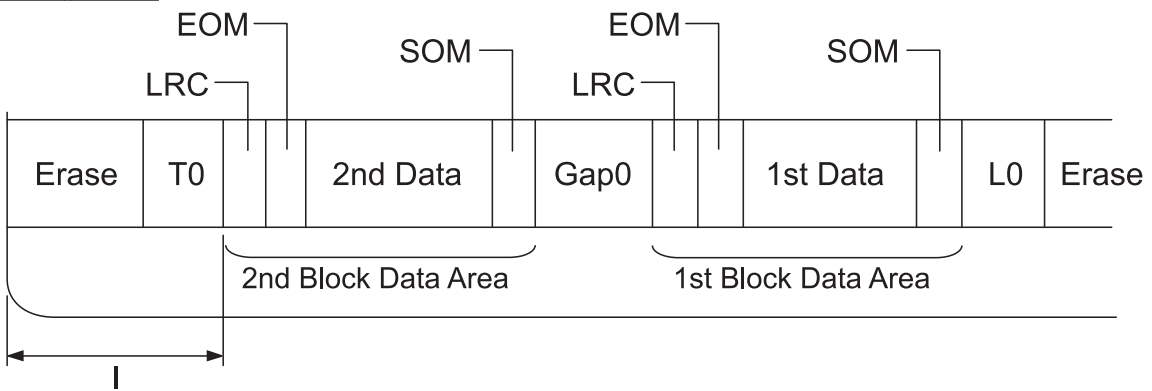


HT-2751-CIZ

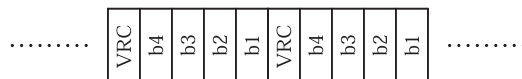
1 block format



2 block format



Direction of bit pattern



**Scanner Specifications (Scanning Models Only)**

**General**

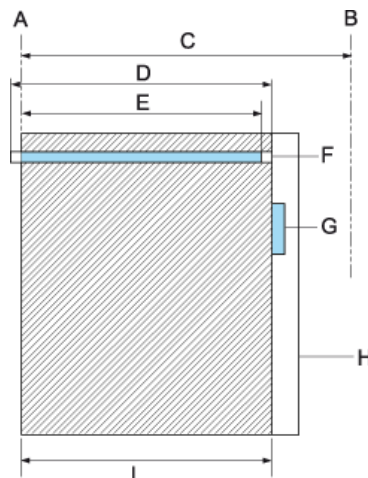
Scanner Type	Document Feed
Scan Method	Moving paper and fixed scan head
Photoelectric device	CIS

Maximum effective pixels	5,100 pixels (600 dpi)
Document size	Max: 215.9 x 355.6 mm (8.5 x 14.0 inches) Min: 65.0 x 67.0 mm (2.6 x 2.6 inches)
Output resolution	600 dpi/300 dpi/200 dpi (Hardware)
Light source	LED (Red, Green, Blue)
Scan life	2 hundred thousand scanning

## Scannable Area

### Note:

- ❑ When scanning, insert the paper with the left edge aligned with the left side of the slot.
- ❑ You can scan paper up to 216 mm (8.5 inch) wide.
- ❑ The area to the right of the scanner edge guide cannot be scanned.



- A Left edge of paper path
- B Right edge of paper path
- C 245 mm
- D Scannable area (219.38 mm)

E	Scan enabled pixel area (216 mm)
F	CIS
G	scanner edge guide
H	paper
I	scanning area

---

### **USB Hub Specification (USB hub models only)**

Interface Type	Universal Serial Bus Specification Revision 2.0
Electrical Standard	Full Speed mode (12 Mbits per second) and Hi-Speed mode (480 Mbits per second) of Universal Serial Bus Specification Revision 2.0
Connector Type	Two Type A ports
Power Supply	Bus power (maximum 100mA for each port)

---

### **Standards and Approvals**



**Warning:**

- This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.*
- The connection of a non-shielded printer interface cable to this printer will invalidate the EMC standards of this device.*
- You are cautioned that changes or modifications not expressly approved by Seiko Epson Corporation could void your authority to operate the equipment.*

### **Safety approvals**

Safety

IEC/EN62368-1

EMC

EN55032 (CISPR pub.32) class A

**For users in U.S. and Canada**

Safety

UL60950-1

CAN/CSA-C22.2 No. 60950-1

EMC

FCC Part 15 Subpart B Class A

CAN/CSA-CEI/IEC 22.2 CISPR pub.32 class A

**Note:**

- ❑ *This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.*
- ❑ *This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.*

**For users in Europe**

The following models are CE marked and in compliance with all the applicable EU Directives. For further details, visit the following website to access the full declaration of conformities containing reference to the Directives and harmonized standards used to declare conformity.

<https://www.epson.eu/conformity>

PB51A

