TOSHIBA TEC Barcode Printer Drivers for macOS

This documentation is for users of TOSHIBA TEC barcode printers with macOS systems.
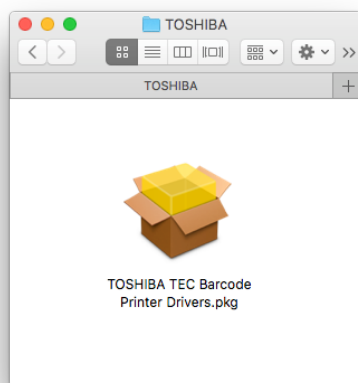
Installation

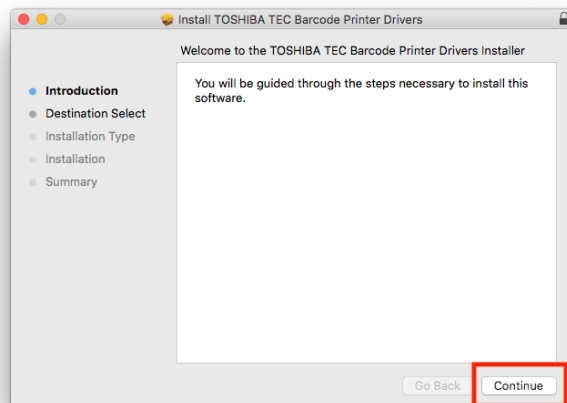### System Requirements

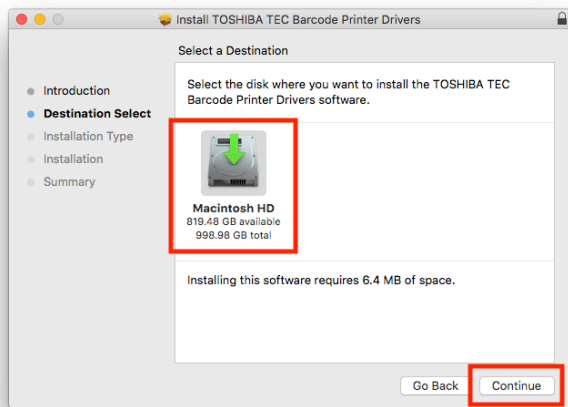- 64-bit Mac running at least macOS 10.15

Procedure

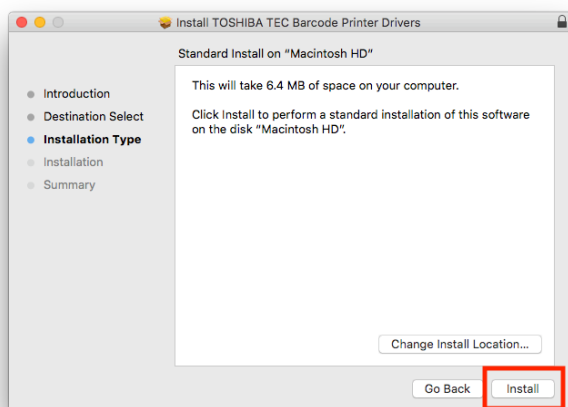1. Open the "TOSHIBA TEC Barcode Printer Drivers.pkg" file by double-clicking on it.

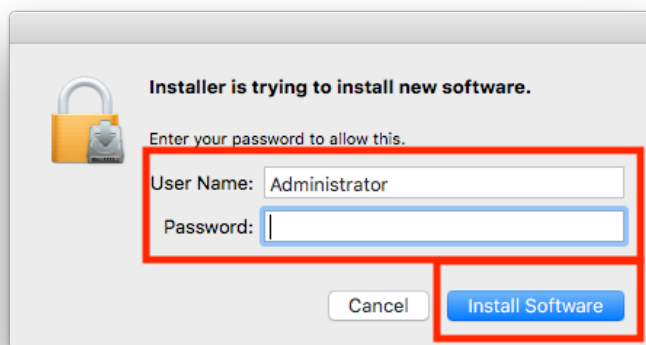2. Click on "Continue"

3. Choose the destination to install the drivers. If you have more than one system on your Mac, choose the system that is currently running.
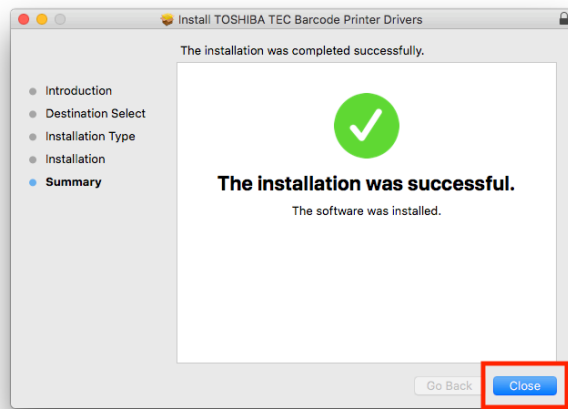
4. Click on "Install"

5. You will be prompted to provide the username and password of a user with administrative privileges. Enter these details and click "Install Software"

6. Once the installation has finished, click "Close"

Setting up the TOSHIBA TEC Barcode Printer

Setting up printers using a USB connection

Connect your TOSHIBA TEC Barcode Printer to your Mac system using a USB cable. The printer should become available within a few moments.

Setting up printers using a network connection

1. Set up your TOSHIBA TEC Barcode Printer's network settings according to the instructions supplied with your printer.
2. Open System Preferences. This icon should be in your dock, otherwise, click the "Apple" menu in the top-left corner of your screen, and choose "System Preferences..."
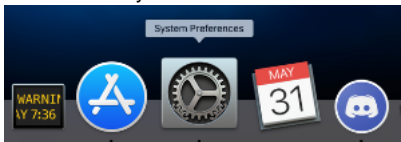
3. Click on "Printers & Scanners". This icon may be in a different position on your system, and on older versions of macOS, it may be called "Printers & Faxes"
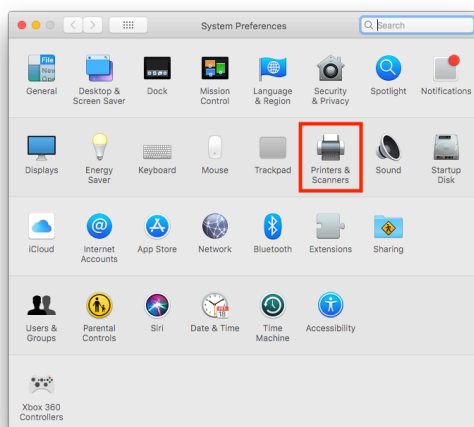
4. Click the "+" button on the left-hand side of the interface.
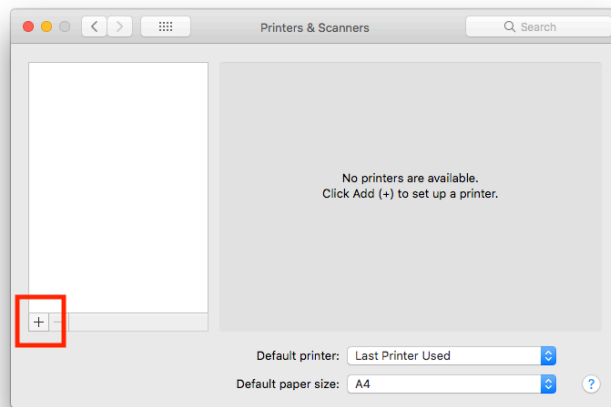
5. On the toolbar, choose "IP".
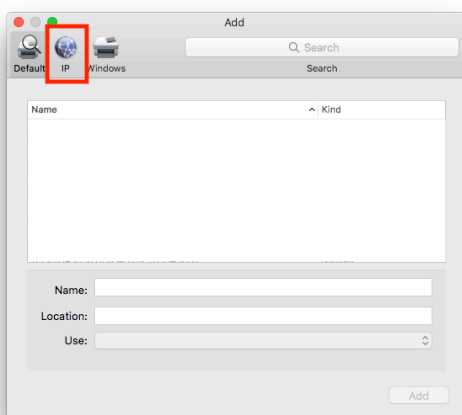
6. In the **Address** field, specify the IP address or hostname of the printer.

   By default, the "HP Jetdirect - Socket" protocol uses port 9100. If this port is different to the one configured in your TOSHIBA TEC Barcode Printer, after the IP address, type a colon (:) followed by the port number. As an example:

   ```
   192.168.0.5:5000
   ```

   If your printer supports IPv6, the entire IPv6 address must be enclosed in square brackets, and if the port is not 9100, it must be supplied outside the square brackets, e.g.

   ```
   [2001::1ae3:34]:5000
   ```
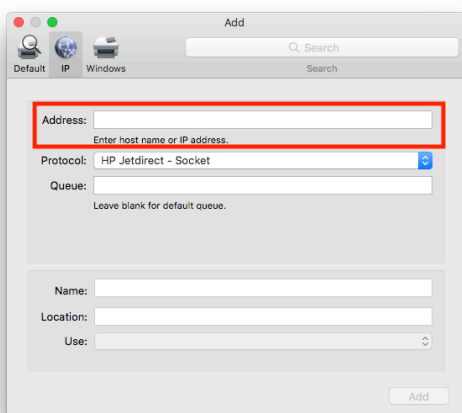

7. The **Protocol** should be set to "HP Jetdirect - Socket", and the **Queue** field should be left blank.

8. Enter a name for the printer in the **Name** field. This is how the printer will be referred to on your Mac, and if the printer is shared, this is the name that other users on your network will see.

   Location is an optional field that should describe the physical location of the printer. If the printer is shared, this helps other users know where the printer can be found so they can collect their printed documents or choose the printer closest to them.
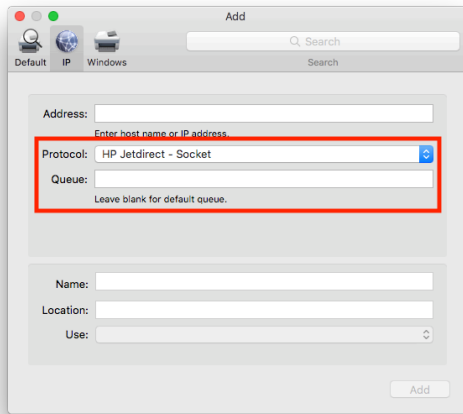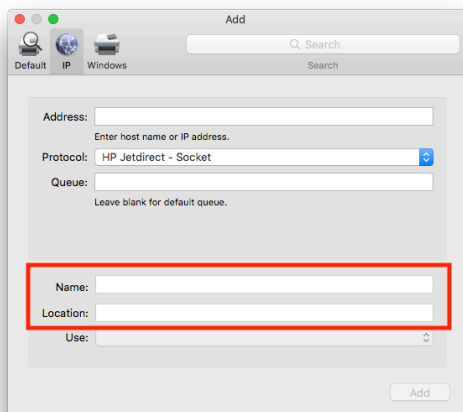

9. In some circumstances, your Mac may be able to choose the appropriate TOSHIBA driver to use automatically. If the driver that has been chosen matches the printer you are trying to set up, skip to step 11. However, the wrong driver is selected, or a non-TOSHIBA driver is chosen (e.g. "Generic Postscript Driver"), open the pop-up menu and choose "Select Software...".
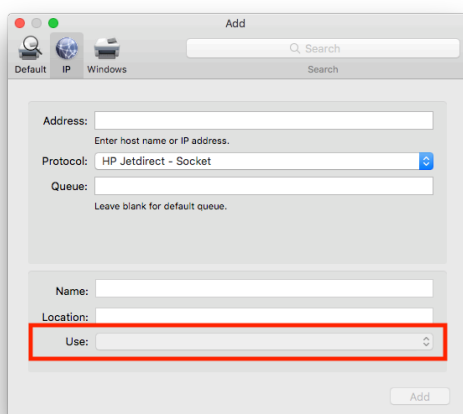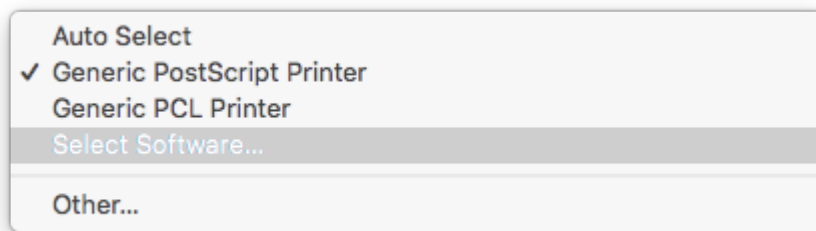
10. In the list of drivers available on your system, scroll down to "TOSHIBA" or filter the drivers using the text field in the top-right corner. Choose the driver that matches the model of your TOSHIBA TEC Barcode Printer.
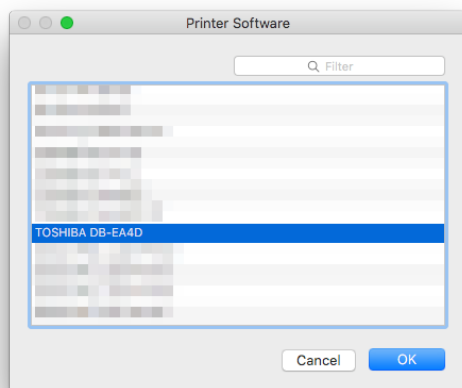
11. If your TOSHIBA TEC Barcode Printer supports optional modules (such as a cutter module), you will be prompted to specify which modules are installed. Each model is different. If you are not sure which modules are installed, you can choose the default settings for now, and then change these settings at a later time. Click "OK" to continue.
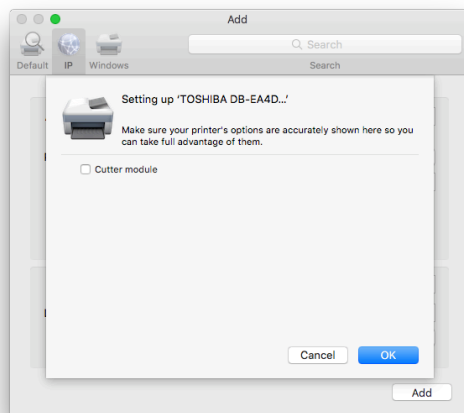
12. Your TOSHIBA TEC Barcode Printer is now ready to use!
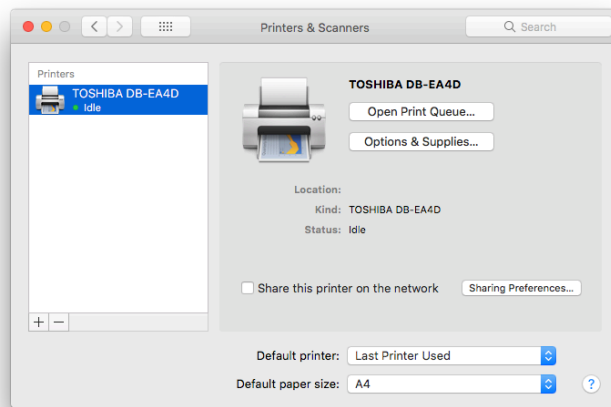
Printing Documents

Printing from desktop applications

Different applications on macOS will have different options for how the document should appear when printed, however, there are printer-related options that can also be adjusted.

1. When your document is ready to print, open the "File" menu and select "Print". Alternatively, use the P shortcut.
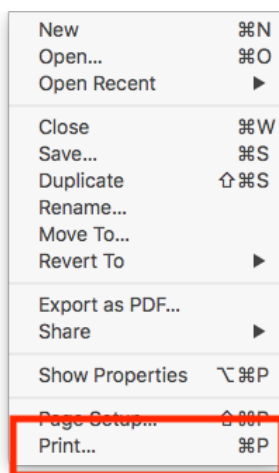
2. Different versions of macOS may have a different print dialog layout. If you wish to change the settings for the print job, click "Show Details". In some circumstances, the dialog may show the details by default, in which case, skip to step 3.
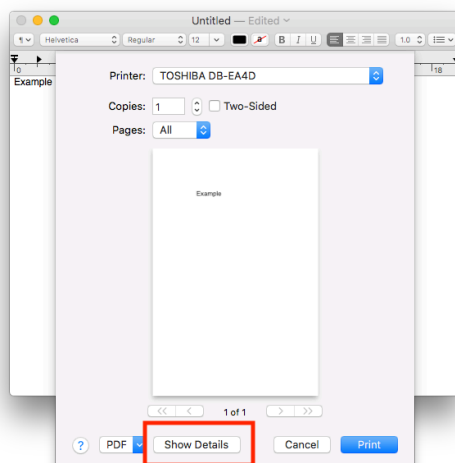
3. The top part of the dialog (highlighted in green) are settings controlled by macOS. The bottom part of the dialog (highlighted in red)

are settings controlled by both the application as well as the printer driver. To change printer driver settings (such as print speed), click on the popup menu in this area and select "Printer Features".
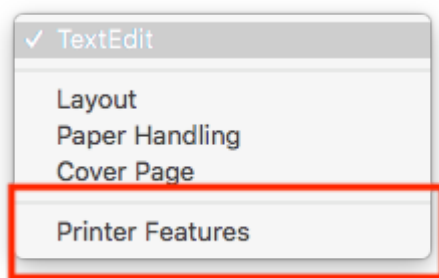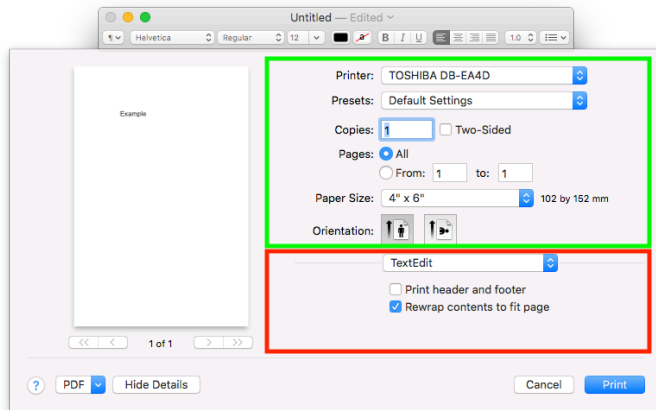
4. Some printer models have more configurable settings than others, in which case, they may be separated out into additional sections within the "Printer Features" area. Once you have selected your desired settings, click "Print" to print your document.
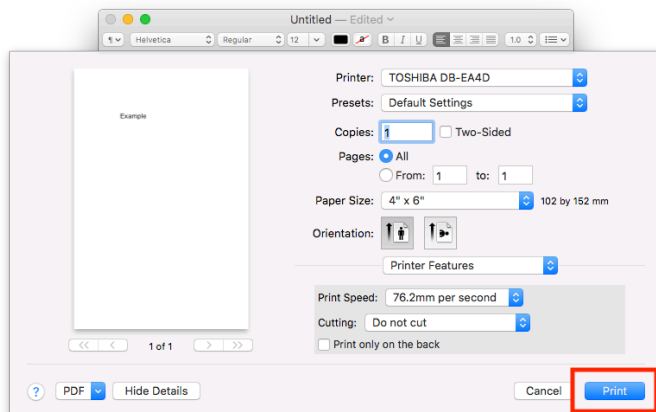
Some applications on macOS are not designed to print on small media such as labels, and do not have configurable margins. This is beyond the control of the TOSHIBA TEC Barcode Printer Drivers. In this case, you can format your document on a larger page size and save document as a PDF. The built-in Preview application (the default viewer for PDF files) can then be used to adjust the margins of the page before printing. To do this, open the PDF in Preview, select the region of the document that you would like to print on a smaller label, and in the Tools menu, select "Crop" (alternatively, use the K shortcut). The cropped region can now be printed on the smaller page size.

Printing from the command line

Advanced users of macOS who are familiar with the command line can utilise the following information. Many file types (such as PDF) can be printed directly from the command line using the `lp` command line utility supplied by CUPS. This is convenient especially for scripting. The command line utility is invoked using the following format:

```
lp -d <printer> -o <options> file.pdf
```

Options are specified using a space-separated list of settings in the form `key=value`. Since the options are separated by space, the entire argument must be quoted. Option names and values do not contain spaces. For example:

```
lp -d TEC_B_EX4T1 -o "PrintSpeed=6 PrintMethod=DirectThermal StripLabel=True" file.pdf
```

The options available for printing from the command line vary between TPCL models and the DB-EA4D model.

TPCL Models

The following options are defined for all TPCL models (default values are underlined):

Option name	Values	Description
BackfeedAdjustment	-9.5 .. -0.5, <u>None</u>, 0.5 .. 9.5	Adjusts the amount of backfeed, specified in millimetres (in intervals of 0.5mm only). Positive numbers indicate forward adjustments. To specify a custom adjustment, use the value "Custom.x" where x is a measurement in millimeters.
CommandCharacters	<u>Readable</u>	The TPCL data sent to the printer will use the readable characters, curly brackets and pipe (ASCII values 7Bh, 7Ch, and 7Dh): This is useful if print data is captured, it can be read more easily within a text editor.
	Unreadable	The TPCL data sent to the printer will use the unreadable characters, NUL, ESC and LF (ASCII values 00h, 1Bh, 0Ah). These characters have no visual representation and are unlikely to occur normally within the print data. This is useful if the print data does not need to be captured for any reason or the readable command characters are used in text.
Compression	None	Bitmap data is sent to the printer uncompressed.
	<u>Auto</u>	Bitmap data will be compressed only if the compressed size is smaller than the uncompressed size. In certain circumstances, compression methods may result in an increase in size rather than a decrease.
	TOPIX	TOPIX compression is used to send bitmap data to the printer. This compression method is best suited to bitmaps where each row is similar to the previous one.
CutInterval	<u>None</u>, 1	**All models supporting cutter modules** If this value is set to "1" then the printer will cut every label. In order to specify a custom cut interval, use the value "Custom.x" where x is the number of labels to issue before cutting. **BV400 models only** If a Partial or Linerless cutter is installed, ensure that the relevant option is chosen in the "Installable Options", or specify "CutModule=Partial" or "CutModule=Linerless" in addition to this setting to ensure that the correct command is produced.

CutStripAdjustment	-9.5 .. -0.5, <u>None</u>, 0.5 .. 9.5	Adjusts the value for the cut or strip position, specified in millimetres (in intervals of 0.5mm only). Positive numbers indicate forward adjustments. To specify a custom adjustment, use the value "Custom.x" where x is a measurement in millimetres.
DocumentType	<u>TextBarcode</u>, Graphics	This determines the best way to convert the document to monochrome. If the document contains only text and barcodes, use "TextBarcode". This will ensure crisp, clean lines when the document contains bitmaps of text or barcodes. Documents that contain graphic representations of text and barcodes should also print nicely with this setting. If the document contains graphics (such as a logo), choose "Graphics". This will attempt to emulate shades of grey when printing the document. This can sometimes produce "fuzzy edges" when printing images of barcodes because the edges of the barcode bars may not fall exactly on a pixel boundary, causing the edges to be considered "grey", so in that case, use "TextBarcode" instead.
FeedAdjustment	-9.5 .. -0.5, <u>None</u>, 0.5 .. 9.5	Adjusts the starting print position, specified in millimetres (in intervals of 0.5mm only). Positive numbers indicate forward adjustments. To specify a custom adjustment, use the value "Custom.x" where x is a measurement in millimetres.
ImageDarkness	Lightest, Lighter, Light, <u>Normal</u>, Dark, Darker, Darkest	For "TextBarcode" documents (see DocumentType), this determines what shades of grey should be converted to white, and what shades should be converted to black. If 0% grey is black, and 100% grey is white, then the thresholds for "TextBarcode" mode are: Lightest - 12.5% Lighter - 25.0% Light - 37.5% Normal - 50.0% Dark - 62.5% Darker - 75.0% Darkest - 87.5% When DocumentType is set to "Graphics", this setting adjusts the curve of brightness (similar to a gamma curve). When printing logos, first try printing at "Normal". If some light colours are missing, try "Dark", "Darker" or "Darkest". If some colours are printed as black or very dark, try "Light", "Lighter" or "Lightest".
LabelGap	<u>2.0</u> .. 10.0	Specifies the the size of the gap between labels in millimetres (in intervals of 1.0mm only). To specify a custom adjustment, use the value "Custom.x" where x is a measurement in millimetres.
PageSize	1x1.FullBleed .. 4x4.FullBleed, <u>4x6.FullBleed</u>	Specifies the size of the label. If the source document is of a different size to the size specified by this option, it is automatically scaled to fit (up or down).

	Custom.WxHin
	
	Custom.WxHcm
	
	Custom.WxHmm
		If the label size is not specified directly by the PPD, the page size can be specified using the format shown. For example, a label that is 5.2in wide by 2.3in in height can be selected using:
		
		`-o PageSize=Custom.5.2x2.3in`
		
		Other supported units of measurements are centimetres (cm) and millimetres (mm). If no units are provided, the numbers provided are assumed to be represented as 72dpi.
		
		In some situations, custom page size information may not be honoured by the `lp` command. In such circumstances, supplying the following additional option may fix the issue, but will result in the document being automatically scaled to fit the destination page size:
		
		`-o fit-to-page`

PrintMethod	DirectThermal	Labels are printed using direct thermal. This is the default value for models that do not support thermal transfer.
	DirectThermalHeadUp	Labels are printed using direct thermal (head-up) where supported. If the head-up mechanism is not provided, this behaves the same as DirectThermal.
	ThermalTransfer	Uses thermal transfer to print the label. This is the default value for models that support thermal transfer.
	ThermalTransferRibbonSaving	Uses thermal transfer with ribbon saving enabled.
PrintSpeed	3, 5, 6, 8, 10, 12, 14	Sets the speed to print the document (in inches per second). Not all print speeds are available for all models, and some print speeds may not be used with certain resolutions or in conjunction with other options.
Sensor	None	Do not use a sensor to determine label boundaries.
	Reflective	Use the reflective sensor to detect black marks on the label substrate.
	Transmissive	Use the transmissive sensor to detect the gaps between the labels.
StripLabel	False	Labels are not stripped
	True	Labels are stripped (requires a model with a stripper module).
ToneAdjustmentDirectThermal	None	Do not make any adjustments to the print density for direct thermal print jobs.
	B-EX4 series -20, -19, ..., -1, -0, 0, 1, ..., 9, 10 **B-EX6 series** -20, -19, ..., -1, -0, 0, 1, ..., 19, 20 **All other models** -10, -9, ..., -1, -0, 0, 1, ..., 9, 10	Adjust the print density for thermal transfer print jobs. Negative values will decrease the print density, resulting in a lighter image, whereas positive values will increase the print density, darkening the overall printed image. Please be aware that this value is added against any preconfigured print density in the printer's firmware. If the result falls outside of the allowable range (which depends on both print speed and print resolution), it is automatically adjusted to the nearest suitable value.
ToneAdjustmentThermalTransfer	None	Do not make any adjustments to the print density for thermal transfer print jobs.

	B-EX4 series	These values have the same meaning as the **ToneAdjustmentDirectThermal** setting but instead apply only to thermal transfer print jobs rather that direct thermal print jobs.
	-20, -19, ..., -1, -0, 0, 1, ..., 9, 10	
	B-EX6 series	
	-20, -19, ..., -1, -0, 0, 1, ..., 19, 20	
	All other models	
	-10, -9, ..., -1, -0, 0, 1, ..., 9, 10	

DB-EA4D Series

The DB-EA4D series supports a different set of options to TPCL models (default values are underlined):

Option name	Values	Description
CuttingMode	<u>None</u>	Cutting is disabled
	EveryPage	Cut after every page
	EndOfDocument	Cut after all pages
Duplex	<u>None</u>	Use only one print head. All pages will be printed on the front side of the media only (unless the `PrintOnBackOnly` option is set to true).
	DuplexNoTumble	Print using both print heads. The front print head will print the first page, and the back print head will print the second page. The pages will not be tumbled, meaning that both the front and back will be upright when the label is flipped over on its longest side.
	DuplexTumble	Print on both sides, putting page 1 on the front, and page 2 on the back (and page 3 on the front of the next label, etc.)
PrintOnBackOnly	True, <u>False</u>	When this option is enabled for single-sided print jobs (i.e. `Duplex` is set to `None`), this causes the print job to print only on the back.
PrintSpeed	<u>3</u>, 4, 5, 6	Sets the print speed for the print job. Higher print speeds typically reduce print quality.