



Set the Media Type

Select the type of media that you are using.

See [Media Type on page 85](#) for more information.



Select the Media Sensor

Select the media sensor that is appropriate for the media that you are using.

See [Sensor Type on page 102](#) for more information.



Select the Print Method

Specify if ribbon is being used. Thermal Transfer media requires ribbon for printing while Direct Thermal media does not.

To determine if you need to use ribbon, see [When to Use Ribbon on page 49](#).

See [Print Method on page 85](#) for more information.



Adjust the Print Width

Specify the width of the labels being used.

See [Print Width on page 85](#) for more information.



Set the Maximum Label Length

Set the maximum label length to a value that is at least 1.0 in. (25.4 mm) greater than the actual label length plus the interlabel gap. If you set the value to one that is smaller than the label length, the printer assumes that continuous media is loaded, and the printer cannot calibrate.

See [Maximum Label Length on page 86](#) for more information.

Table 7 • Print Settings (Continued)

| | |
|----------------------------|--|
| <p>Media Type</p> | <p>Select the type of media that you are using.</p> <ul style="list-style-type: none"> • If you select CONTINUOUS, you must include a label length in your label format (^LL if you are using ZPL). • If you select NON-CONTINUOUS for various non-continuous media, the printer feeds media to calculate the label length. <p>See <i>Types of Media</i> on page 47 for more information.</p> <p><i>Accepted values:</i></p> <ul style="list-style-type: none"> • CONTINUOUS • NON-CONTINUOUS <p><i>Related ZPL command(s):</i> ^MN</p> <p><i>SGD command used:</i> none</p> <p><i>Control panel menu item:</i> MEDIA TYPE on page 22</p> <p><i>Printer web page:</i> View and Modify Printer Settings > Media Setup > Media Type</p> |
| <p>Print Method</p> | <p>Specify if ribbon is being used. Thermal Transfer media requires ribbon for printing while Direct Thermal media does not.</p> <p>To determine if you need to use ribbon, see <i>When to Use Ribbon</i> on page 49.</p> <p><i>Accepted values:</i></p> <ul style="list-style-type: none"> • THERMAL TRANS • DIRECT THERMAL <p><i>Related ZPL command(s):</i> ^MT</p> <p><i>SGD command used:</i> none</p> <p><i>Control panel menu item:</i> PRINT METHOD on page 22</p> <p><i>Printer web page:</i> View and Modify Printer Settings > Media Setup > Print Method</p> |
| <p>Print Width</p> | <p>Specify the width of the labels being used.</p> <p> Note • Setting the width too narrow can result in portions of a label format not being printed on the media. Setting the width too wide wastes formatting memory and can cause the printer to print off of the label and onto the platen roller. This setting can affect the horizontal position of the label format if the image was inverted using the ^POI ZPL II command.</p> <p><i>Accepted values:</i> minimum: 2 dots maximum:</p> <ul style="list-style-type: none"> • 203 dpi: 832 dots • 300 dpi: 1248 dots <p><i>Related ZPL command(s):</i> ^PW</p> <p><i>SGD command used:</i> none</p> <p><i>Control panel menu item:</i> PRINT WIDTH on page 22</p> <p><i>Printer web page:</i> View and Modify Printer Settings > Media Setup > Print Width</p> |

Ribbon Overview

Ribbon is a thin film that is coated on one side with wax, resin, or wax resin, which is transferred to the media during the thermal transfer process. The media determines whether you need to use ribbon and how wide the ribbon must be.

When ribbon is used, it must be as wide as or wider than the media being used. If the ribbon is narrower than the media, areas of the printhead are unprotected and subject to premature wear.

When to Use Ribbon

Thermal Transfer media requires ribbon for printing while Direct Thermal media does not. To determine if ribbon must be used with a particular media, perform a media scratch test.

To perform a media scratch test, complete these steps:

1. Scratch the print surface of the media rapidly with your fingernail.
2. Did a black mark appear on the media?

| If a black mark... | Then the media is... |
|------------------------------|--|
| Does not appear on the media | Thermal transfer. A ribbon is required. |
| Appears on the media | Direct thermal. No ribbon is required. |

Coated Side of Ribbon

Ribbon can be wound with the coated side on the inside or outside (Figure 8). This printer can only use ribbon that is coated on the outside. If you are unsure which side of a particular roll of ribbon is coated, perform an adhesive test or a ribbon scratch test to determine which side is coated.

Figure 8 • Ribbon Coated on Outside or Inside



Adhesive Test

If you have labels available, perform the adhesive test to determine which side of a ribbon is coated. This method works well for ribbon that is already installed.

To perform an adhesive test, complete these steps:

1. Peel a label from its liner.
2. Press a corner of the sticky side of the label to the outer surface of the roll of ribbon.
3. Peel the label off of the ribbon.
4. Observe the results. Did flakes or particles of ink from the ribbon adhere to the label?

| If ink from the ribbon... | Then... |
|-----------------------------|--|
| Adhered to the label | The ribbon is coated on the outside and can be used in this printer.  |
| Did not adhere to the label | The ribbon is coated on the inside and cannot be used in this printer. To verify this, repeat the test on the other surface of the roll of ribbon.  |

Ribbon Scratch Test

Perform the ribbon scratch test when labels are unavailable.

To perform a ribbon scratch test, complete these steps:

1. Unroll a short length of ribbon.
2. Place the unrolled section of ribbon on a piece of paper with the outer surface of the ribbon in contact with the paper.
3. Scratch the inner surface of the unrolled ribbon with your fingernail.
4. Lift the ribbon from the paper.
5. Observe the results. Did the ribbon leave a mark on the paper?

| If the ribbon... | Then... |
|-----------------------------------|--|
| Left a mark on the paper | The ribbon is coated on the outside and can be used in this printer.  |
| Did not leave a mark on the paper | The ribbon is coated on the inside and cannot be used in this printer. To verify this, repeat the test on the other surface of the roll of ribbon.  |