

# Wasp

## BARCODE TECHNOLOGIES

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### Which is better Thermal Transfer or Direct Transfer printing?

Internal User - 2017-04-10 - in [Printers](#)

This article applies to all Wasp Printers

You do not need to use a ribbon with Direct Thermal paper. Ribbons should only be used with Thermal Transfer paper, but Thermal Transfer is actually the least expensive way to go, in the long run, because your printer's print head lasts a lot longer with Thermal Transfer than with Direct Thermal. The print head is the most expensive component in the printer, so the convenience of using Direct Thermal paper (no ribbon required) is actually expensive in terms of the life of the printer. Another issue is that Direct Transfer paper is heat-sensitive, so it can darken with exposure to sunlight or heat where Thermal Transfer will not. With Thermal Transfer, it's the ribbon that's heated by the print head - the paper itself is not heat-sensitive.

We recommend you use the printer in Thermal Transfer mode. Install the ribbon and set the printer driver to the TT setting (instead of DT). You can adjust the driver's darkness setting to a value between 0 and 15 to suit the use of Thermal Transfer paper with the ribbon installed. Start at about 3. That setting must be readjusted upward (more heat, shorter head life) if you later decide to switch to Direct Thermal.

A properly adjusted Thermal Transfer printer will produce sharper labels than a Direct Transfer printer will. You might try different types of Thermal Transfer paper. Some of them have a shinier surface (glossy) than others - these seem to produce the "sharpest" labels.

There are three types of ribbon you can choose from:

Wax: Least expensive, least durable - best for labels that will not suffer any wear

Wax/Resin: A best value, durable impression that can tolerate handling, rubbing of cartons against each other during shipment, etc.

Resin: Most expensive, but highly resistant to wear when printed to paper and even impervious to caustic gasses when printed on polyester film labels - true resin ribbon is a must for poly labels.