



Specialty Tag Panther unboxing & setup guide

1. Before you start

Have these items ready on your table before opening everything:

- Panther printer
- Power cord / power supply (inside printer box)
- USB cable or Ethernet cable, depending on how you will connect it
- Thermal Ribbon roll
- Tag or label roll
- Roll mount / unwinder that came with the kit
- Flash drive from the kit, if included
- A Windows 10 or 11 computer for BarTender Ultra Lite

2. Unbox the printer

1. Place the box on a stable table and open the top flaps and remove the top packing materials first.
2. Lift the printer out carefully from the side grips or base.
3. Remove all plastic wrap, tape, cardboard spacers, and any foam blocks from outside of the printer.
4. Open the top cover and check inside the printer for any transport tape or internal packing pieces.
5. Set aside the accessory box and confirm you have the ribbon spindles, power supply, cables, and media support parts.

3. Choose where to place the printer

Set the Panther on a flat surface with room:

- behind the printer for the tag stock to feed smoothly
- above the printer so the lid can fully open

4. Connect power, but do not install software yet

1. Plug the power supply into the printer.
2. Plug the power cord into the wall.

3. Leave the USB cable unplugged from the computer for the moment if you are using USB.
4. If you plan to use Ethernet, connect the network cable to the printer now.
5. Turn the printer on once just to confirm it powers up, then leave it idle while you load ribbon and media.

5. Loading the ribbon

Open the printer

1. Release and lift the top cover.
2. Open it fully so you have access to the ribbon path and media path.
3. Locate the **ribbon supply spindle** and the **ribbon rewind spindle**.

Specialty Tag's Panther Printer Help page links directly to the Panther **Loading the Ribbon Video**, and TSC notes the TX Series has **intuitive ribbon loading**. ([Specialty Tag](#))

Install the thermal ribbon

1. Put the **new ribbon roll** on the ribbon supply spindle.
2. Put the **empty take-up core** on the rewind spindle.
3. Pull the ribbon leader across the print path.
4. Attach the ribbon leader to the empty core with the adhesive leader already on the ribbon, or secure it neatly so it catches evenly. Match the yellow side of the spindle to the yellow side in the printer.
5. Turn the rewind spindle by hand a few turns so the ribbon becomes snug and straight.
6. Make sure the ribbon is flat, centered, and not wrinkled.

The TX Series supports ribbons up to **300 meters** long and ribbon widths from **1.6" to 4.3"**. TSC's FAQ also notes that if the **ribbon rewind spindle does not spin**, one cause is that it may not be loaded in the correct direction. ([TSC Printers](#))

Quick ribbon check

Before loading tags, confirm:

- the ribbon moves from the supply side to the rewind side
- the inked side is oriented correctly for thermal transfer use
- the ribbon is centered over the media path
- the rewind core has tension

If the ribbon is loose or crooked now, fix it before you load tags. That will save a lot of frustration later.

6.Loading the tags through the back of the printer

Set up the roll mount / unwinder

1. Assemble or place the roll mount that came with the Panther kit behind the printer.
2. Put the tag roll on the roll mount so it unwinds smoothly toward the rear media opening of the printer.
3. Make sure the roll is stable and can turn freely without dragging.

Specialty Tag's Panther kit includes an **unwinder**, and the Panther Printer Help page includes a **Ribbon Diagram** plus Panther videos for sensor help and calibration. ([Specialty Tag](#))

Feed the tags through the rear of the printer

1. With the top cover still open, locate the rear media slot.
2. Feed the leading edge of the tags **through the back of the printer** and into the internal media path.
3. Slide the tags forward under the media guides and toward the platen/print path.
4. Adjust the guides so they are snug against the tag stock but not squeezing it.
5. Keep the media centered and straight.

7. Position the media sensor

This is one of the most important steps.

1. Look at your tag stock and identify how the printer should detect the next tag:
 - **gap / die-cut**
 - **black mark**
 - **notch**
2. Move the media sensor so it lines up with the sensing feature on your tag stock.
3. For specialty horticultural tags, make sure the sensor is actually reading the correct feature and not sitting in a solid part of the tag.

Specialty Tag provides a Panther video called "**Shinning a Light on your Panther Sensor**" specifically to help users find and align the sensor properly. ([YouTube](#))

8. Close the printer and perform media calibration

1. Close the printer lid firmly.
2. Run a media calibration.
3. Let the printer feed and learn the tag length / sensor position.

Specialty Tag's Panther Printer Help page links to "**Panther Label Calibration**", and TSC's support content says calibration can also be run from **TSC Console → Functions → Printer Configuration → Calibration**. ([YouTube](#))

Troubleshoot: If the print creeps, skips, or lands in the wrong spot

Check these items in order:

1. Reconfirm the tags are centered in the guides.
2. Reconfirm the sensor is lined up correctly.
3. Re-run calibration.
4. Make sure the correct stock size is selected in the driver and in BarTender.
5. Make sure the ribbon is not wrinkled and the roll mount is feeding freely.

Specialty Tag's Panther support resources specifically include a **sensor help video** and a **label calibration video** because sensor position and calibration are common causes of mis-registration. ([Specialty Tag](#))

9. Installing the software and printer driver

Install the Panther printer driver first

For Windows, start from Specialty Tag's **Software Help** page and use **Panther Printer Drivers (Model# TX300/TX310)**. Specialty Tag routes Panther drivers to the **Seagull Scientific** driver page, and the Printer Help page also lists Panther **Printer Driver** support. ([Specialty Tag](#))

Recommended order:

1. Go to **Specialty Tag → Technical Support → Software Help**.
2. Under **BarTender Ultra Lite**, choose **Panther Printer Drivers (Model# TX300/TX310)**.
3. Download and run the driver installer.
4. When prompted, choose the Panther / TX300 or TX310 family printer.
5. Connect the printer by USB when the installer asks or point it to the printer over Ethernet if you are installing as a network printer.
6. Complete the driver install and confirm the printer appears in Windows.

Install BarTender Ultra Lite

Next, install the software from Specialty Tag's **Software Help** page:

1. On the same Software Help page, under **Bartender Ultra Lite**, choose **Panther Bartender Ultra Lite (Model# TX300/TX310)**.
2. Download installer and run the software installation.
3. If prompted, complete registration using Specialty Tag's **Step-By-Step How To Register your Bartender Ultra Lite** resource.
4. Launch BarTender after installation is complete.

10. Designing and printing your first tag

Start with a template instead of building from scratch

The easiest path is to use one of the Panther templates from either:

- the **flash drive** included with the kit, or
- the **Panther Templates (TX300/TX310)** download on Specialty Tag's Software Help page

Specialty Tag states the Panther kit includes a **flash drive loaded with templates**, and the Software Help page provides **Panther Templates** under the TX300/TX310 section. ([Specialty Tag](#))

Open a Panther template in BarTender

1. Insert the flash drive or download the Panther templates from Software Help.
2. Open BarTender Ultra Lite.
3. Choose **Open** and browse to the template file that matches your tag size.
4. Save a working copy under a new file name before editing.

Match the template to the actual stock in the printer

Before editing the design, verify:

- tag width
- tag length
- gap / notch / black mark style
- print orientation
- selected printer = Panther / TX310 driver

If the template size and driver stock size do not match the actual tags loaded in the printer, you can get offset printing even if the printer is calibrated.

Edit the tag design

Typical first edits:

1. Click into the text fields and replace sample copy with your plant or product information.
2. Add or update barcode / QR code fields if your template includes them.
3. Adjust font sizes only after confirming the tag size is correct.
4. Keep critical information away from the very top and bottom edges until you confirm final print position.

Print a single test tag

1. Print **one tag first**.
2. Check:
 - horizontal centering
 - vertical position
 - darkness
 - barcode readability
 - spacing between tags
3. If needed, recalibrate and re-test.

Fine-tune if necessary

If the test tag is close but not perfect:

- adjust the stock size in the driver
- confirm the correct sensor type
- recalibrate
- then adjust print position in software only after the mechanical setup is correct

TSC's support content also notes stock setup and print position can be adjusted from the **Seagull driver**, and speed/density can be changed through **TSC Console** if needed. ([TSC Printers](#))

Best-practice setup order for new Panther customers

This is the exact order I would recommend your team teach:

1. Unbox and remove all packing
2. Place printer and roll mount on desk near computer
3. Connect power
4. Load ribbon
5. Load tags through the rear entry path
6. Align the sensor
7. Calibrate media
8. Install driver
9. Install BarTender Ultra Lite
10. Open Panther template from flash drive or website

11. Confirm stock size and printer selection
12. Print one test tag
13. Fine-tune only if needed

Support resources to include in your customer guide

From **Specialty Tag**:

- **Printer Help → Panther**: Printer Driver, Ribbon Diagram, Printer Manual, Diagnostic Tool, Loading the Ribbon Video, Help Finding the Sensor Video, Label Sensor Calibration Video. ([Specialty Tag](#))
- **Software Help → BarTender Ultra Lite**: Panther BarTender Ultra Lite, Panther Printer Drivers, Panther Templates, BarTender registration instructions. ([Specialty Tag](#))
- **Panther product page**: confirms Panther kit contents and 23 mil positioning. ([Specialty Tag](#))

From **TSC**:

- **TX Series / TX310 product page**: confirms the TX310 is a 300 dpi thermal transfer printer with 300 m ribbon capacity, clamshell loading, standard USB/Ethernet/Serial connectivity, and supported media specs. ([TSC Printers](#))
- **TSC support FAQ**: includes notes on calibration through TSC Console and ribbon rewind troubleshooting. ([TSC Printers](#))

Your Panther is now physically set up, the driver is installed, and BarTender is ready. The quickest path to success is to use a Panther template from the included flash drive or from our Software Help page, print one test tag, and then make small adjustments only after the ribbon, sensor, and media calibration are all confirmed.