Epson L3210 Sublimation Printing & Maintenance SOP

Standard Operating Procedure for Winnerjet Sublimation Inks

Doc ID: SOP-L3210-EN
Applicable Ink: Winnerjet 100ml / 1000ml Refills

Important Notice: The Epson L3210 uses Micro Piezo heat-free printhead technology, making it naturally compatible with dye sublimation inks. **Always use a brand-new printer** that has never been filled with standard desktop inks to prevent ink crystallization and severe clogging.

1. INK REFILL & INITIAL SYSTEM PRIMING

1. **Use a Fresh Machine**: Ensure the printer has never had standard dye or pigment inks loaded.
2. **Mess-Free Refill (Key-Lock Port Fit)**: Uncap the Winnerjet 100ml bottle and align the specialized nozzle with the corresponding color tank inlet (BK / Y / M / C). Press gently into place. Ink fills automatically and stops when the tank is full—no squeezing required.
3. **Initial Charging Cycle**: Close the tank lid, plug in the power, and turn on the machine. Press and hold the **Cancel/Maintenance button** (inverted triangle icon) for ~5 seconds until the power and ink lights flash. The system will prime ink lines for approximately 10–15 minutes.
4. **Nozzle Check Verification**: Load plain paper and execute a **Nozzle Check** via the printer driver utility. Confirm that all four color test patterns are continuous and free of missing segments.

2. DRIVER COLOR SETTINGS (NO CUSTOM ICC REQUIRED)

Winnerjet sublimation ink is balanced to work seamlessly with the Epson OEM driver color algorithm. No third-party ICC profiles are needed:

- **Paper / Media Type**: Select **Epson Matte** or **Premium Presentation Paper Matte**.
- **Print Quality**: Choose **High** (or **Standard** for fast prototyping).
- **Color Management**: Keep the driver setting on **Color Controls** → **EPSON Vivid** (or **Automatic**) for punchy, vibrant heat-pressed colors.
- **Mirror Image (Crucial)**: Under **More Options**, check **Mirror Image** to ensure the transferred graphic appears right-reading after heat pressing.

3. HEAT TRANSFER PARAMETERS REFERENCE

Substrate	Temperature	Time	Pressure & Tips
Polyester Apparel & Pillows	190°C – 200°C (375°F – 390°F)	35 – 45 sec	Medium pressure; lint-roll fabric before pressing.
Coated Ceramic Mugs	180°C – 190°C (360°F – 375°F)	180 – 210 sec	Firm pressure; use mug press or heat wrap.
Mouse Pads / Neoprene	185°C – 195°C (365°F – 385°F)	45 – 55 sec	Medium pressure; pre-press for 5s to remove moisture.
Coated Metal / Chromaluxe	190°C – 200°C (375°F – 390°F)	50 – 60 sec	Medium-firm; peel protective film prior to transfer.

4. ROUTINE MAINTENANCE & ANTI-CLOGGING SCHEDULE

Frequency	Required Action	Purpose & Technical Goal
Every 2–3 Days	Print a 4-color CMYK test patch or purge sheet	Prevents disperse dye solids from drying out at the micro-piezo nozzle tips.
Weekly	Run a driver **Nozzle Check** test	Detects minor dropouts early. Run 1 regular cleaning cycle if needed (avoid >2 consecutive cleanings).
Monthly	Inspect Capping Station & Wiper Blade	Wipe residual ink around the rubber cap seal using a lint-free swab with flushing fluid to maintain airtightness.

Frequency	Required Action	Purpose & Technical Goal
Environment	Maintain 18°C–28°C and 40%–60% RH	Prevents rapid solvent evaporation in dry air and viscosity shifts in cold rooms.

5. QUICK TROUBLESHOOTING

Issue	Probable Cause	Corrective Action
White Streaks / Banding	Dried nozzle tips or micro-bubbles in delivery line.	Let printer rest for 15–30 min to settle bubbles, then run 1 regular head cleaning.
Reddish / Dark Blacks	Excessive heat press time/temp, or over-inking.	Lower heat press temp to 190°C; reduce press duration by 5–10s; select **Epson Matte**.
Pizza Wheel / Roller Marks	Wet transfer paper coating or ink on rollers.	Use fast-dry transfer paper; clean feed rollers with an alcohol pad; turn off High-Speed mode.