# LUMINARIS 200

# **Sublimation Toner Cartridge Instructions**

The Luminaris 200 Sublimation Toner Cartridges are just one of the many cartridge sets that can be used in the Luminaris 200 White Toner Transfer Printer. Operating on the same application principles as standard ink sublimation systems, you must press onto white 100% polyester or sublimation-coated materials for the best results. 50/50 cotton poly blends may also be used for a lighter, vintage appearance. To achieve optimal results, print on white or lighter substrates, as only prints using CMYK ink are supported.

# The Luminaris 200 Sublimation Toner Cartridges boast several advantages tailored for a production environment:

- No risk of clogged heads due to non-use, as commonly seen in ink-based systems.
- Extended expiration period.
- Over 10 times the yield compared to starter ink rated at 350 pages.
- Compatibility with regular, high-quality copy paper, eliminating the need for costly sublimation paper.

#### Instructions for installation of the Luminaris 200 Sublimation Toner Cartridges:

- 1. Open the lid of your Luminaris 200 White Toner Transfer Printer and remove the standard toner cartridges.
  - a. TIP: They should be stored in a cool, dark place and in their original drum covers if possible.
  - b. Never expose the drum to light for more than a few minutes.
  - c. Be careful not to scratch or touch the drum surface or print quality could be severely affected.
- 2. Locate the black toner cartridge and open the box.
  - a. Remove the drum cover from the bottom of the cartridge.
  - b. Install the black toner cartridge into the front slot of your Luminaris 200 White Toner Transfer Printer.
  - c. Refer to the user's manual for your printer for further information regarding cartridge installation.
- 3. Repeat step 2 for the yellow, magenta, and cyan cartridges.
- 4. The cartridges should be installed in the CMYK configuration, where the black is in the front, followed by yellow, magenta and cyan in the rear.



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5. Once all of the cartridges have been installed, close the lid on your Luminaris 200 printer. You are now ready to print.

#### **Suggested Storage Conditions:**

Whenever not in use, be sure to store the Sublimation Toner Cartridges in a dark, safe place. Prolonged exposure to light is detrimental to the OPC drum cylinder. The recommended range for the temp and humidity is 40% RH to 70% RH, temp 59°F to 77°F/ 15°C to 25°C.

#### Before you print with the Luminaris 200 Sublimation Toner Cartridges:

- 1. If printing from the VividRIP software, be sure to import your image into the CMYK queue and mirror print. Under the job tab, select the desired media setting from the media type drop down menu, depending on the graphic being printed.
  - a. For vector graphics or 'cartoon-like' images, choose 'Sublimation Toner Vibrant Colors'.

    This setting allows the prints to press as vividly as possible, as it is not necessary to use the ICC profile. Pressed images will be very vibrant but will have less accurate colors.
  - For graphics like photographs (especially for skintones) which require more accurate color representation, choose 'Sublimation Toner — Accurate Colors'. This selection employs the use of a custom ICC profile which is already integrated into the VividRIP for your convenience. Pressed images will have more accurate colors, but will not be as vibrant.
- 2. If printing photographic type images requiring accurate colors from Photoshop, CorelDraw and other software capable of utilizing standard ICC profiles, a standalone profile must be installed.
  - a. Save the profile to a specific folder on your computer. Navigate to the file, right click and install.
- 3. When printing programs other than the VividRIP software, Color Handling should be set to allow your specific software package to handle colors.
  - a. For example, in Photoshop set to 'Photoshop Manages Colors'.
  - b. Set the print driver to 'No Color Matching' under 'Color Management' and 'High Quality' under 'Job Options'.
  - c. Be sure to mirror print and select the proper ICC profile before printing (if desired).
- 4. When printing black as part of your image, be sure to set the color to 100% K in your design software.
  - a. Printing composite black is not recommended and will not produce rich blacks.
  - b. TIP: Some file formats, such as PNG, cannot reproduce true black because they are saved as RGB images.
  - c. Choose a file format such as PDF or TIFF to preserve a CMYK file format for best results. You can also import your image in the VividRIP software and change the black elements to 100% K.



#### **Printing with the Luminaris 200 Sublimation Toner Cartridges:**

- 1. High quality copy paper is suggested (Inkjet dye sublimation media will not work as well).
  - a. TIP: The printed image may appear light and have imprecise colors. Do not judge the quality of the print until you press the image it will look correct when pressed to the substrate after the sublimation process.
- 2. Cover the transfer with copy paper instead of kraft paper, as the image will sublimate upwards and transfer to it.
  - a. For most applications, press at 380°F / 193°C with low pressure.
  - b. The duration of the press depends on the type and thickness of the substrate used as well as the graphic type, but is usually between 60 120 seconds. Longer press duration increases color density.
  - c. Quickly cool the substrate to stop sublimation process not doing so could result in a ghosting effect or a lighter final result.
  - d. Cleaning solutions or Subli-Clean may be necessary on most hard surfaces to eliminate or mask any residue from the transferred toner.

#### Instructions for suggested press times and peeling method:

#### **Sublimatable Glass**

- 1. Close the press to preheat the lower platen. It is also recommended to warm up the glass substrate as well, for best results.
- 2. Print the image using the Luminaris 200 Sublimation Toner Cartridges. Do not mirror print for
- this application.
   Place a piece of copy paper on the press to protect the bottom plate (if desired).
- 4. Place the substrate on the lower platen of the press (white backer face up).
- 5. Align the printed image to the substrate with the printed image on top (image facing substrate).
- 6. You can tape the media to the substrate or lower platen for additional stability.
- 7. Cover the transfer with copy paper.
- 8. Press at 380°F / 193°C with low pressure for 420 seconds (7 mins).
- 9. Open the press slowly and peel immediately (hot peel).
- Cool substrate as quickly as possible.
   If needed, clean any extra toner residue using a cleaning solution or Subli-Clean during the pressing stage.

#### **Coated Acrylic**

- 1. Close the press to preheat lower platen.
- 2. Print the image using the Luminaris 200 Sublimation Toner Cartridges. Mirror Print.
- 3. Place a piece of copy paper on the press to protect the bottom plate (if desired).
- 4. Place the substrate on the lower platen of the press (coated side face up).



- 5. Align the printed image to the substrate with the printed image on top (image facing substrate). You can tape the media to the substrate or lower plated for additional stability.
- 6. Cover the transfer with copy paper.
- 7. Press at 380°F / 193°C with low pressure for 60 seconds.
- 8. Open the press slowly and peel immediately (hot peel).
- 9. Cool substrate as quickly as possible.
- 10. If needed, clean any extra toner residue using a cleaning solution or Subli-Clean during the pressing stage

#### **Duraluxe Aluminum**

- 1. Close the press to preheat the lower platen.
- 2. Print the image using the Luminaris 200 Sublimation Toner Cartridges. Mirror Print.
- 3. Place a piece of copy paper on the press to protect the bottom plate (if desired).
- 4. Place the substrate on the lower platen of the press (coated side face up). Peel off protective film.
- 5. Align the printed image to the substrate with the printed image on top (image facing substrate). You can tape the paper to the substrate or lower platen for additional stability.
- 6. Cover the transfer with copy paper, and then silicon pad.
- 7. For full color images: Press at 380°F/ 193°C with low pressure for 60-120 seconds, depending on how saturated you want the colors to be.
  - a. For 100% black text only Press at 430°F / 221° C with low pressure for 20 seconds.
  - b. For 100% black images and graphics Press at 430°F / 221°C with low pressure for 60 seconds.
- 8. Open the press slowly and peel immediately (hot peel).
- 9. Cool substrate as quickly as possible.
- 10. If needed, clean any extra toner residue using a cleaning solution or Subli-Clean during the pressing stage.

#### Sublimatable Metals

- 1. Close the press to preheat the lower platen.
- 2. Print the image using the Luminaris 200 Sublimation Toner Cartridges.
- 3. Place a piece of copy paper on the press to protect the bottom plate (if desired).
- 4. Place the substrate on the lower platen of the press (coated side face up). Leave protective film on the substrate.
- 5. Align the printed image to the substrate with the printed image on top (image facing substrate). You can tape the paper to the substrate or lower platen for additional stability.
- 6. Cover the transfer with copy paper and silicon pad.



- 7. For full color images: Press at 380°F/ 193°C with low pressure for 60-120 seconds, depending on how saturated you want the colors to be.
  - a. For 100% black text only Press at 430°F / 221° C with low pressure for 20 seconds.
  - For 100% black images and graphics Press at 430°F / 221°C with low pressure for 60 seconds.
- 8. Open the press slowly and peel immediately (hot peel).
- 9. Cool substrate as quickly as possible.
- 10. If needed or when pressing without the protective film, clean any extra toner residue using a cleaning solution or Subli-Clean during the pressing stage.

#### **Coated Ceramic (Heat Press)**

- 1. Close the press to preheat the lower platen.
- 2. Print the image using the Luminaris 200 Sublimation Toner Cartridges.
- 3. Place a piece of copy paper on the press to protect the bottom plate (if desired).
- 4. Place the substrate on the lower platen of the press (coated side face up). Align the printed image to the substrate with the printed image on top (image facing the substrate). You can tape the paper to the substrate or lower platen for additional stability.
- 5. Cover the transfer with copy paper.
- 6. Press at 380°F / 193°C with low pressure for 150-180 seconds.
- 7. Open the press slowly and peel immediately (hot peel). Dunk into warm water to stop the sublimation process.
- 8. If needed, clean any extra toner residue using a cleaning solution or Subli-Clean during the pressing stage

#### **Sublimatable Metals**

- 1. Print the image using the Luminaris 200 Sublimation Toner Cartridges.
- 2. Trim the image and align it on the mug.
- 3. Use heat resistant tape and hold in place. Be sure not to tape over any part of the image or defects will result.
- 4. Place the mug into the mug press and press at 380°F / 193°C with medium pressure for 150-180 seconds.
- 5. Open the press slowly and peel immediately (hot peel). Dunk into warm water to stop the sublimation process.
- 6. If needed, clean any extra toner residue using a cleaning solution or Subli-Clean during the pressing stage.



#### **Polyester Textiles**

- 1. Close the press to preheat the lower platen.
- 2. Print the image using the Luminaris 200 Sublimation Toner Cartridges. Mirror Print.
- 3. THREAD the shirt or textile onto the lower platen of the press. Failure to thread the textile will cause the image to sublimate through the textile to the other side.
- 4. Align the printed image to the substrate with the printed image on top (image facing the substrate). You can tape the substrate to the printed transfer for additional stability.
- 5. Cover the transfer with copy paper.
- 6. Press at 380°F / 193°C with low pressure for 60-90 seconds for full color images and up to 120 seconds for solid 100% K images (more time yields darker results).
- 7. Open the press slowly, peel immediately and cool the substrate as quickly as possible.
- 8. Cleaning solution or Subli-Clean is NOT to be used on textiles.

### Eliminating polymer residue on hard surfaces:

For hard surfaces, Subli-Clean film can be employed to prevent toner residue transfer during pressing. Subli-Clean is provided in rolls and is placed between the substrate and the printed transfer.

- 1. Cut a piece of Subli-Clean slightly larger than the substrate.
- 2. Place it flat on the substrate, then cover it with the printed transfer sheet.
- 3. Follow the pressing instructions above.
- 4. Once cooled and solidified, Subli-Clean should peel off cleanly.
- 5. Dispose of it after use; do not reuse.
- 6. Not suitable for fabrics or garments—intended only for hard surfaces!
- 7. Enjoy a brighter, glossier image on your substrate.

## **Technical Tips:**

- Substrates may require varying press times and pressures, so testing is recommended.
- Longer press durations result in deeper and denser colors; however, excessive pressing may lead to an overexposed look.
- For textiles, use a threadable heat press to prevent sublimation through the textile.
- To stop sublimation on ceramics, dunk the substrate in water after pressing. For other surfaces, quickly cool the substrate after peeling to maintain color vibrancy.
- Protect heat press plates from overbled images by using copy paper above and below the project and employing upper and lower covers.
- If using tape to secure the image, ensure it doesn't cover any part of the transfer for consistent results. Heat-resistant tape is recommended.

