

# DIRECT TO FILM TRANSFER

**GUIDE** Version 2.1



# CONTENTS

<b>REQUIREMENTS.....</b>	<b>3</b>
<b>THE PROCESS .....</b>	<b>4-7</b>
<b>ABOUT THE GTX GRAPHICS LAB REVERSAL SETTING .....</b>	<b>8-10</b>

# REQUIREMENTS

## a. COMPUTER SPECS

- i. Windows
  1. Windows 10 and 11 - 64 bit only
  2. CPU with 2 GHz or above
  3. RAM with 4 GB or above
  4. XGA (1024 x 728) or higher
- ii. macOS
  1. macOS BigSur 11 or higher
  2. CPU: Intel and M1 chip

## b. GTX SERIES PRINTER

- i. Must have the following printer driver and firmware or higher
  1. GTX - Driver = Ver. 3.7.0 or later  
Firmware = Ver. 3.700001 GTX
  2. GTXpro/Pro B - Driver = Ver. 1.7.0 or later  
Firmware = Ver. 1.700001 GTXpro
- ii. DTF Software
  - GTX Graphics Lab Ver. 5.0.1 for GTX, GTXpro and GTX600NB  
(Download at [www.BrotherDTG.com/Support](http://www.BrotherDTG.com/Support))

## c. INNOBELLA TEXTILE INKS

Only use Innobella Textile inks

## d. Recommended Film/Adhesive: KODAK DIRECT TO FILM MATERIALS

The direct to film transfer sheets to be printed on.  
Part# GTX7494610 - Film Sheets A3+ | 100 sheets  
Part# 7494685 - Film Roll | 33cm x 100m roll  
Part# 7494693 - Film Roll | 60cm x 100m roll  
Part# GTX7494594 - TPU POWDER - WHITE | 1kg box  
To order products, visit [partnerportal.brother-usa.com](http://partnerportal.brother-usa.com)

## e. EQUIPMENT

Heat Press (pneumatic style recommended) - To cure and apply film to garment  
Conveyor Dryer (optional) - To cure printed direct to film sheets

# THE PROCESS

## OVERVIEW

**STEP 1**

Print on the film



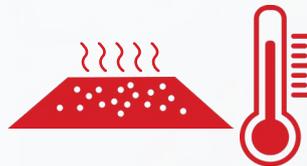
**STEP 2**

Evenly coat the film with powder



**STEP 3**

Dry the film + powder



**STEP 4**

Heat press film to garment and remove film

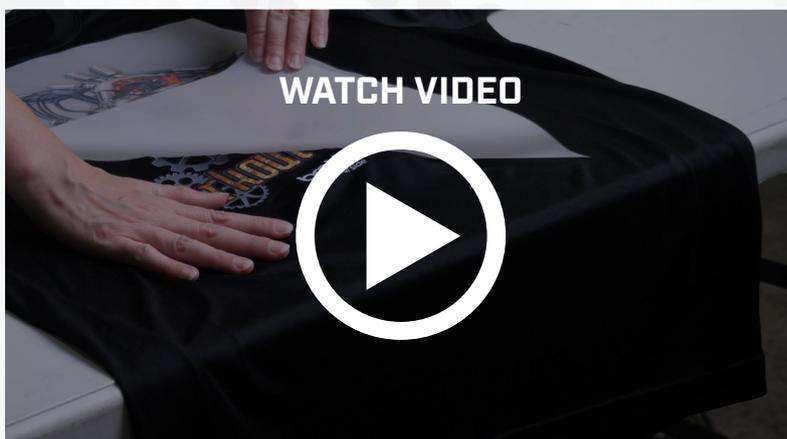


**STEP 5**

Repress the garment



## The Direct To Film Process



# THE PROCESS

## DETAILS

### STEP 1

#### Print on the film

1. **Recommended ink settings:** Ink settings may vary based on the design. Leave color multi-pass turned on for both CMYK and CMYK+W.
  - CMYK only set the ink volume to 5 or 6, double print set to 0 and color multi-pass turned ON.
  - CMYK+White, set the ink volume to 3 or 4 and turn on Eco Mode. Set the highlight anywhere from 3 to 5 and a mask of 1 to 2. Add a minimum whiteness of 1 to 3.
2. **Put film on the platen:** The film will have a shiny side and a matte side. Always print on the matte side. With matte side face up, tape down the film to the platen to keep it from lifting or shifting during the printing process.



**TIP:** Several images can be placed on one sheet and then cut out to be applied to different style garments or objects.

**IMPORTANT:** Avoid setting the ink volume to 6 or higher because colors, including reds and oranges, will puddle when the white ink is applied.

**NOTE ON TRANSPARENT FADES:** Where the CMYK+White film print doesn't do as well is in the transparent fade areas. One other drawback is the white ink takes on a slight grey tint and not an ultra-bright white. When printing an image that fades from solid to transparent, the area will appear slightly choppy.

### STEP 2

#### Evenly coat the film with powder

1. Before working with the adhesive powder, please make sure to wear gloves, an N95 mask and protective eyewear.

2. Place film within a large plastic container to contain excess powder.
3. Use either a salt/pepper shaker, powder sugar shaker or a glitter shaker for convenience.
4. Apply an even coat of powder to the printed film.

**IMPORTANT:** Any residual powder left on the film will transfer to the garment/fabric and does not wash out.

### **STEP 3** Dry the film + powder

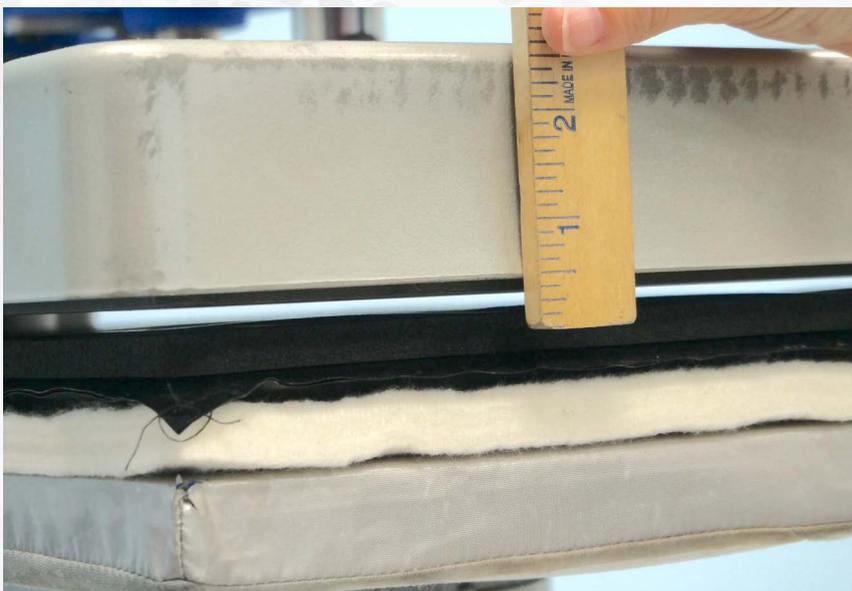
There are two methods that can be followed for this step: the use of heat from the heat press and the use of a conveyor dryer to dry the film and powder.

**Heat Press Method:** When using a heat press, place the printed film and powder so that there is a 1/4 inch gap between the heating plate and the film. The ideal gap can be achieved by using pressing pillows or other objects that are heat resistant to evenly raise the height of the film up to the heating plate. Set the temperature between 284°-302°F and dry for 3-5 minutes. Remove any non-stick cover from the upper heating element to prevent it from making contact with the film.

**Conveyor Dryer Method:** When using a conveyor dryer, dry the printed film and powder between 212° - 248°F for 2 to 3 minutes. When using a Firefly conveyor dryer, make sure convection top and convection bottom are set to 100% and exhaust and cooler are set to 0%. For other forced air dryers, ensure the fans are set to the lowest possible setting to minimize the movement of the paper.

**TIP:** If you have excess powder on the film in the non-printed areas after the film and powder has been cured, you can very carefully buff it off with a small scrap of a t-shirt or an artists paintbrush. Be careful not to accidentally rub off the printed areas as they are delicate.

#### **Heat Press Drying Method [Pneumatic Press, 1/4" Gap]**



## STEP 4

### Heat press film to garment and remove film

1. Prepress garment or object for 2-5 seconds to flatten wrinkles.
2. Flip film to ensure the printed (matte) side is touching the garment or object to be transferred on. Using a heat press, apply film to the garment or object. Set the temperature between 320° - 356°F for 10 to 20 seconds and use medium pressure (40-50 PSI). 356°F for 15 seconds at 45 PSI is a good starting point.
3. Wait for film to cool before removing it from the garment after pressing for best results.

**IMPORTANT:** If the heat is below 320°F when pressing the film to the material, then the ink will not fully transfer to the object. You can repress the film and object at the correct temperature and the ink will separate from the film cleanly.

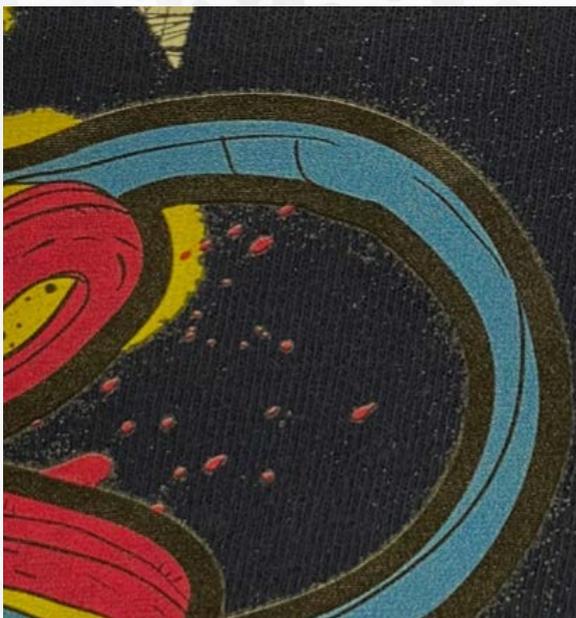
**SPECIAL MATERIALS:** For printing on a hoodie, you cannot place the print transfer over a zipper unless you take the time to cut the zipper area free.

## STEP 5

### Repress the garment

To remove visible powder residue on the shirt, ensure non-stick covers are installed on your heat press and repress the garment after peeling off the transfer. With the film transfer sheet removed, repress the garment at 320°-356°F for 10-20 seconds at medium pressure (40-50 PSI). Also, on materials with medium to deep ridges (i.e. Blue jean, canvas bags, mouse pads, pocket seams) a better bond is created and contours to the fabric ridges if the print is pressed a second time without the film transfer paper covering it.

**Before Repress**



**After Repress**



# PRE-INSTALLATION CHECKLIST

## FIRMWARE

Make sure that the firmware requirements listed on page 3 are met or that the most current firmware is installed on your GTX or GTXpro Series printer.

## DRIVER

Make sure to **download** and **install** the **latest** Printer Driver on your Computer (Windows & macOS).

Download the latest version of the Print Driver from [www.BrotherDTG.com/Support](http://www.BrotherDTG.com/Support).

## RECOMMENDED PRODUCTS

Part# GTX7494610 - **KODAK DTF Transfer Film Sheets - Film A3+ 100 Sheets**

Part# 7494685 - **KODAK DTF Transfer Film Roll - Film Roll 33cm x 100m**

Part# 7494693 - **KODAK DTF Transfer Film Roll - Film Roll 60cm x 100m**

Part# GTX7494594 - **KODAK DTF White Adhesive Powder - TPU POWDER - WHITE 1kg**

To order products, visit [partnerportal.brother-usa.com](http://partnerportal.brother-usa.com)

The **product handling** of the **Transfer Film** and **Adhesive Powder** could be different from brand to brand. Different brands of transfer films could be coated with different chemicals and the composition of their adhesive powder may vary. Therefore, always make sure to **carefully read** the **Instruction Manual** of the product in advance. **Curing times, temperatures** and **hot or cold peel** are among the main features which may vary. Print tests are **highly recommended** to meet the individual requirements and to achieve high quality DTF printing results.

# GTX Graphics Lab Reversal Setting

Here we give an overview of the GTX Graphics Lab 5.0.1 Reversal setting. It will give you the ability to use your **GTX** or **GTXpro Series** and **GTX600NB** printer for Direct to Film (DTF) printing.

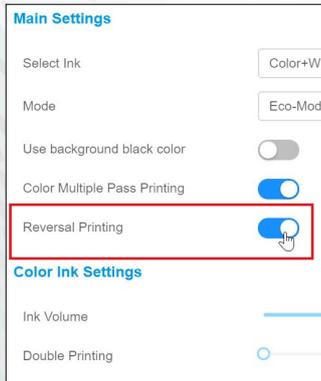
This is a guideline on how to **use** the GTX Graphics Lab 5.0.1 Reversal setting on the GTX, GTXpro and GTX600 printer computer (Windows & macOS). The GTX Graphics Lab 5.0.1 Reversal setting is a solution to **automatically mirror the print data**. GTX Graphics Lab 5.0.1 offers **print settings** which meet DTF requirements of reversed CMYK + White and allows you to print in **one efficient job**.

To begin, install GTX Graphics Lab 5.0.1 on your computer.

# Using GTX Graphics Lab 5.0.1 Reversal Setting

## ADJUSTING THE SETTINGS

Below is an example of the GTX Graphics Lab 5.0.1 showing the toggle checked for **Reversal Printing**. The toggle MUST be checked for Reversal Printing to occur.

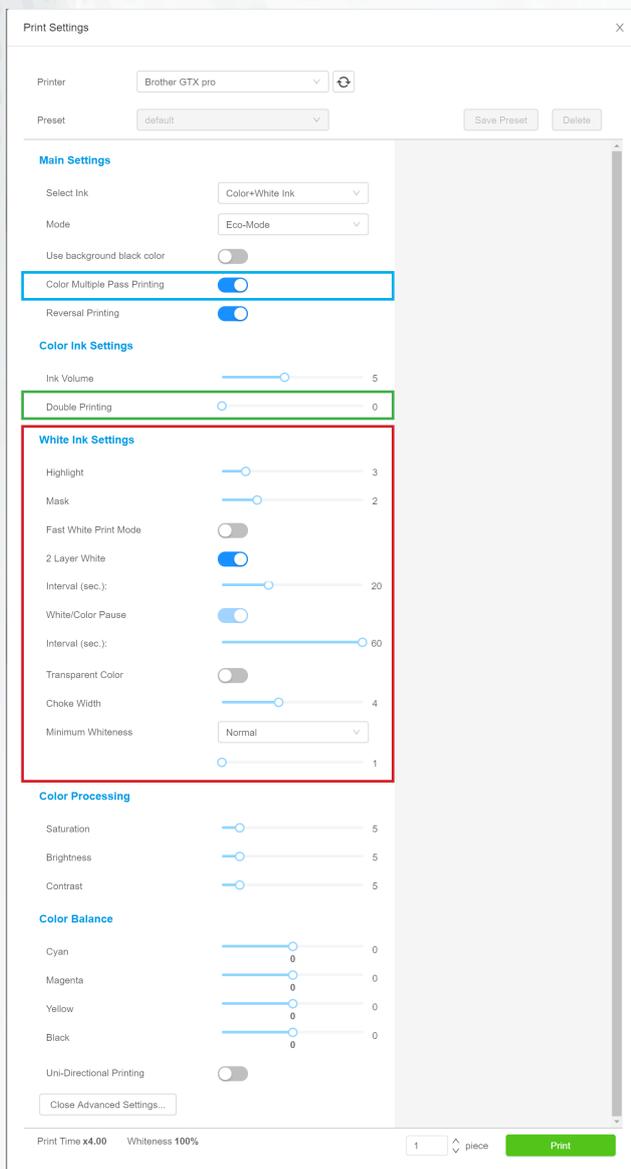


By creating print data or sending the design directly to the printer, the sequence of the print data will be **reversed automatically** while also mirror imaging the design. This setting allows the user not only to control the highlight and mask when printing with white ink, but also allows control of the ink volume along with the white ink settings.

### Reversal print process

1. CMYK layer
2. White layer

Below is an example of the GTX Graphics Lab 5.0.1 Reversal Printing setting showing the **recommended print settings**.



GTX Graphics Lab 5.0.1 offers several print settings which will optimize individual requirements to achieve high quality DTF printing results.

### 1. Color Multiple Pass printing

As to banding issues, activating this setting could solve or improve the print result.

### 2. Double Printing (CMYK)

- 0 – Single Layer
- 1 – Double Layer
- 2 – Double Layer with delay
- 3 – Double Layer with more delay

### 3. White Ink Settings

Because of the limited absorption capacity of the Transfer Film, the amount of White Ink can be set between a minimum of 50% up to 200% maximum.

# Using GTX Graphics Lab 5.0.1 Reversal Setting

## FILE VIEWER

Below is an example of the File Viewer output of the **created print file by GTX Graphics Lab 5.0.1** using the **Reversal Printing** setting.

