brother
at your side

# DIRECT TO FILM TRANSFER

## GUIDE Version 2.0

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HIRSCH SOLUTIONS


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# REQUIREMENTS

**a. COMPUTER SPECS**

i. Windows
1. Windows 10 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
2. CPU: Intel only

**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
- Graphics Lab Basic Reversal Software Ver. 3.4.6.1 (Windows)
- GTX-4 GLB Reversal (macOS)
- GTX pro GLB Reversal (macOS)
(Download at 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# GTX7494685 - Film Roll | 33cm x 100m roll
Part# GTX7494594 - TPU POWDER - WHITE | 1kg box
To order products, visit 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

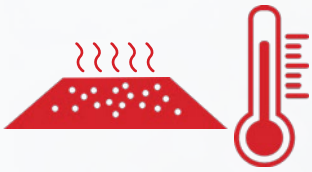
# THE PROCESS

## 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

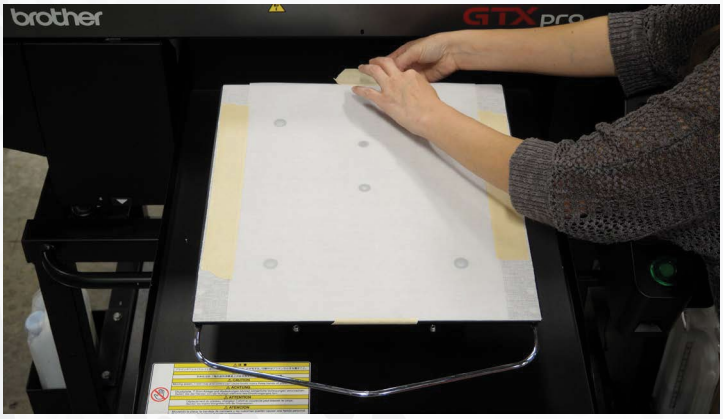
## DETAILS

### 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

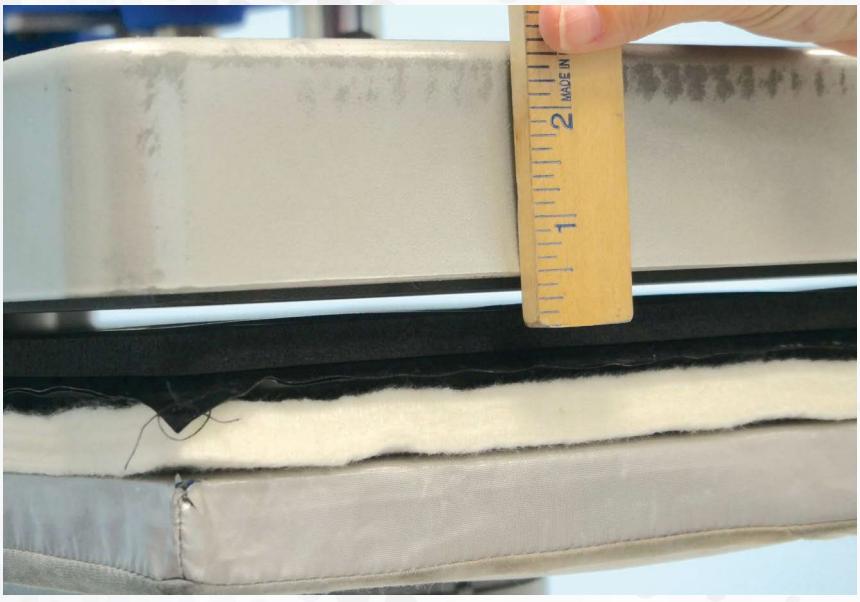
There are two methods that can be followed for this step: the use of heat from the heat press and the use of a conveyor dryer to dry the film and powder.

**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 acheived 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 accidently 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.

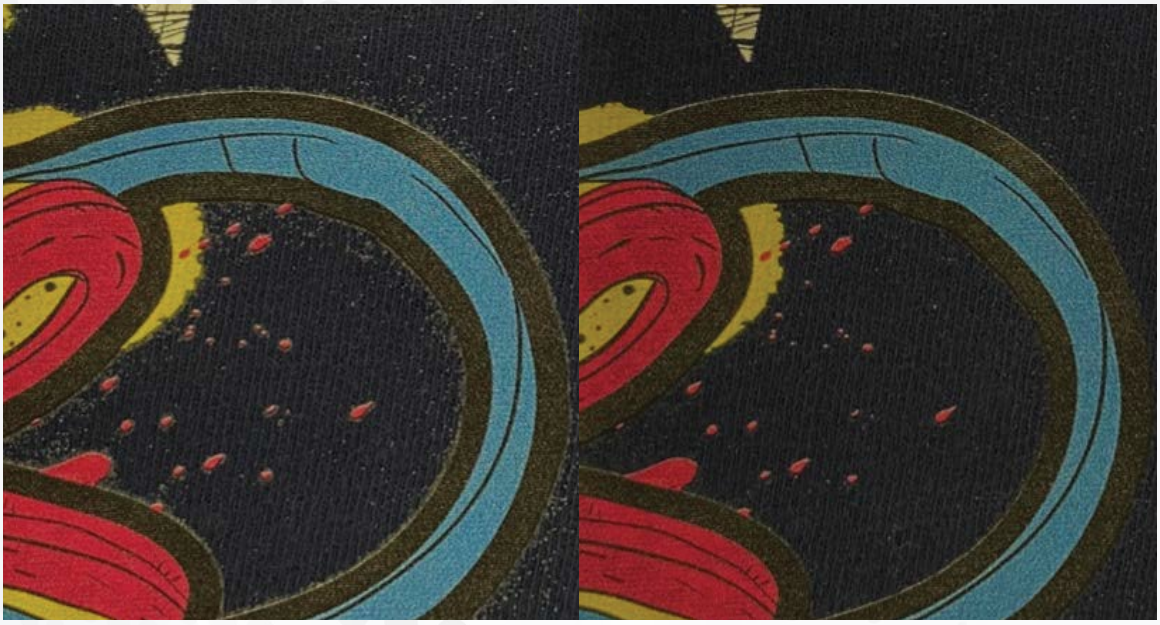
**IMPORTANT:** If the heat is below 320°F when pressing the film to the material, then the ink will not fully transfer to the object. You can repress the film and object at the correct temperature and the ink will separate from the film cleanly.

**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 requirments 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 lastest version of the Print Driver from www.BrotherDTG.com/Support.

## RECOMMENDED PRODUCTS

Part# GTX7494610 - **KODAK DTF Transfer Film Sheets - Film A3+ 100 Sheets**
Part# GTX7494685 - **KODAK DTF Transfer Film Roll - Film Roll 33cm x 100m**
Part# GTX7494594 - **KODAK DTF White Adhesive Powder - TPU POWDER - WHITE 1kg**
To order products, visit 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.

# GLB REVERSAL SOFTWARE

**Windows** - GLB Reversal (for both GTX and GTXpro)

**macOS** - GTX-4 GLB Reversal (for GTX only)
GTX pro GLB Reversal (for GTXpro only)

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

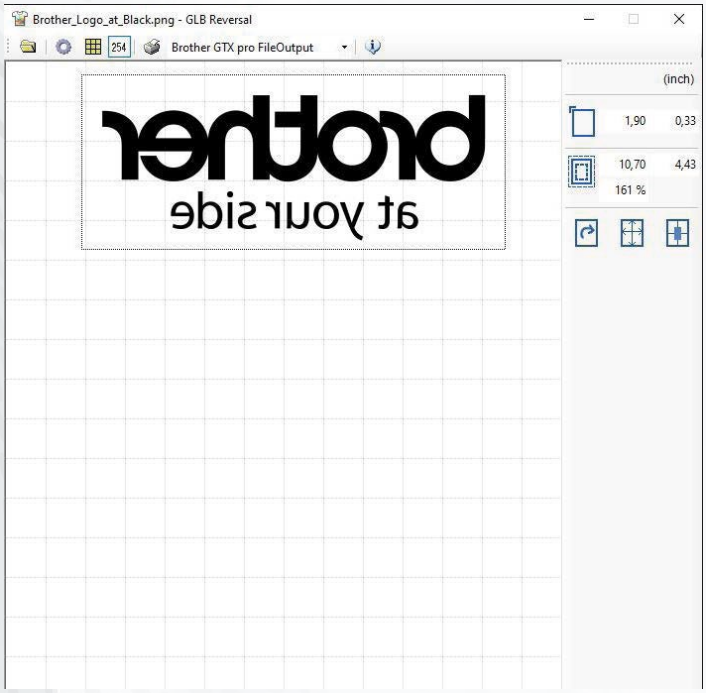
This is a guideline on how to **use** the GLB Reversal software on the GTX and GTXpro printer computer (Windows & macOS). The GLB Reversal software is a solution to **automatically mirror the print data**. This software offers **print settings** which meet DTF requirements of reversed CMYK + White and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

To begin, install the Graphics Lab Basic Reversal software on your computer.

# USING REVERSAL SOFTWARE (WINDOWS)

## ADJUSTING THE SETTINGS

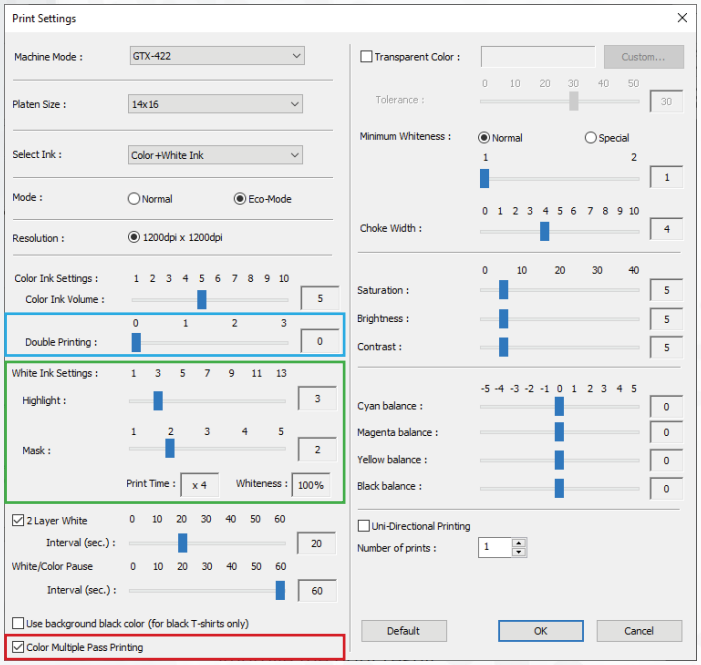
This is an example of the GLB Reversal software for Windows showing the **automatically reversed print data.**




By creating print data or sending the design directly to the printer, the sequence of the print data will be **reversed automatically**. It also mirror images the design as well. This software allows the user to not only 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
2. White

This is an example of the GLB Reversal software showing the **recommended print settings**.




The GLB Reversal software offers several print settings which will optimize individual requirements to achieve high quality DTF printing results.

### 1. Double Printing (CMYK)

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

### 2. 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.

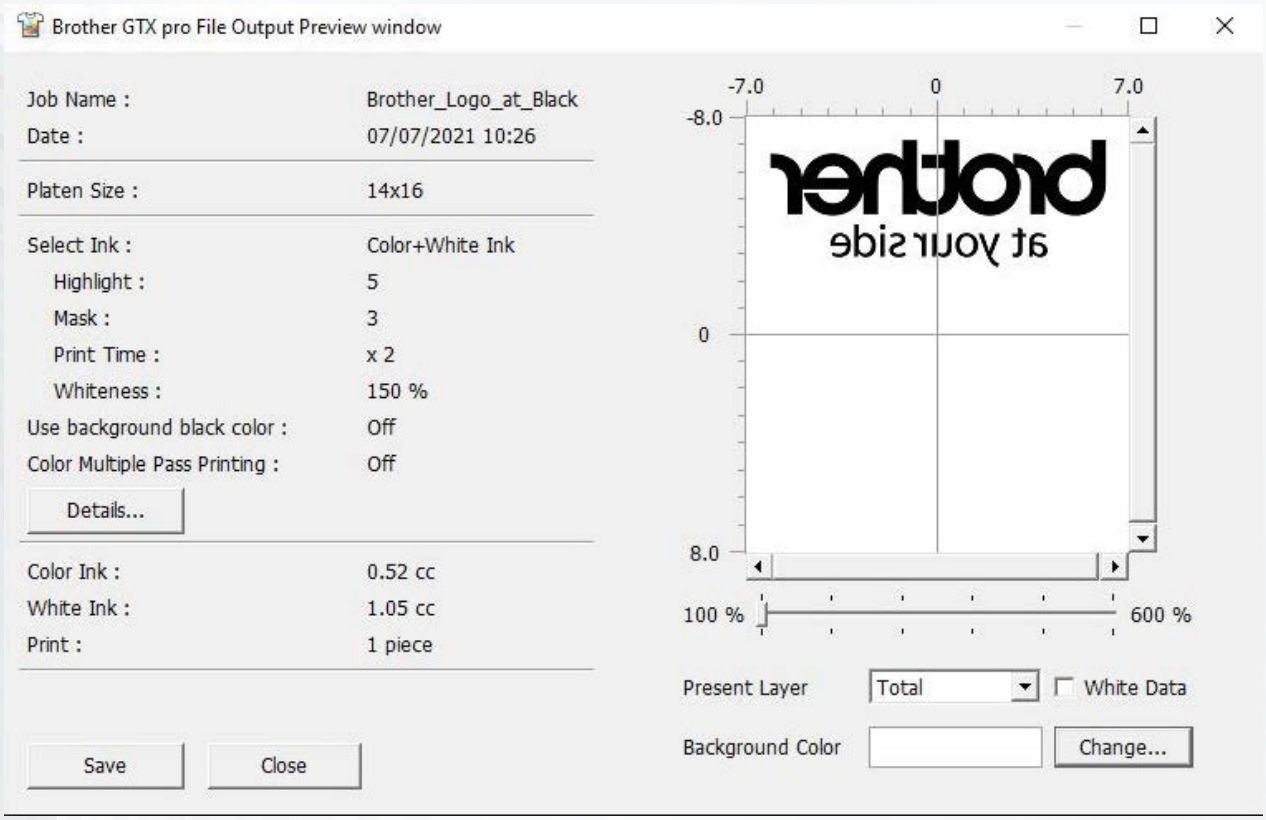
### 3. Color Multiple Pass printing

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

# USING REVERSAL SOFTWARE (WINDOWS)

## FILE VIEWER

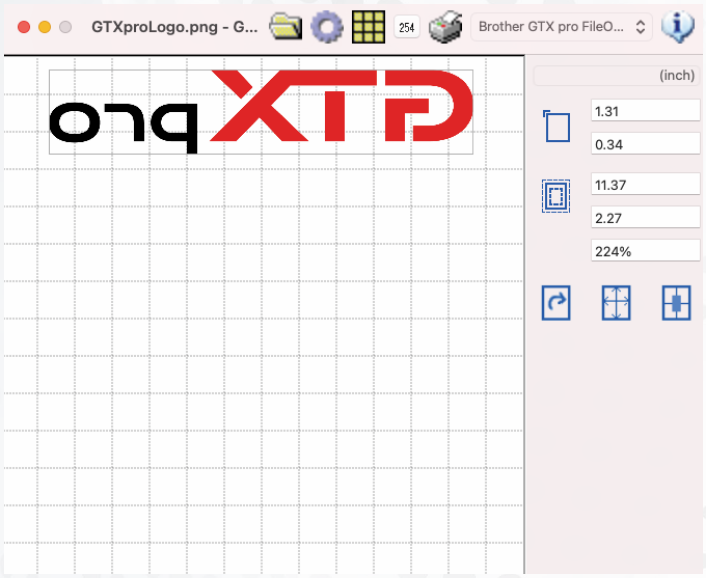
This is an example of the File Viewer output of the **created print file by the GLB Reversal software** on Windows.




# USING REVERSAL SOFTWARE (MAC)

## ADJUSTING THE SETTINGS

This is an example of the GLB Reversal software for macOS showing the **automatically reversed print data.**

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**Reversal print process**

1. CMYK
2. White

# USING REVERSAL SOFTWARE (MAC)

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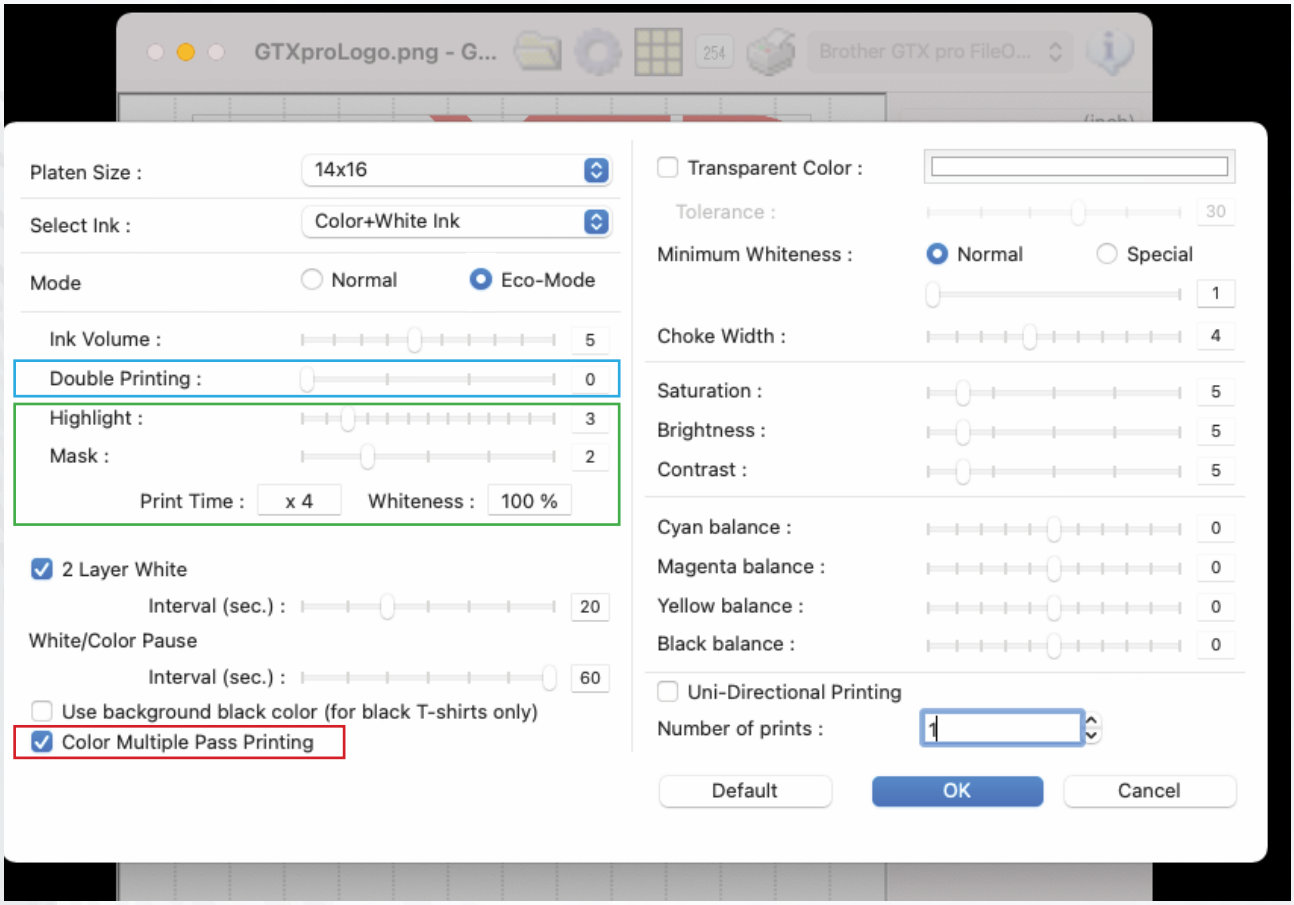


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# USING REVERSAL SOFTWARE (MAC)

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