



GTX Printer Setup

OVERVIEW

Once the printer has been delivered and is on the stand; the next step is for the technician to arrive and begin setup of the printer. Be certain to have the starter kit onhand for the technician to be able to begin going over items; such as, how to load the ink cartridges during this time. The accessory box for the printer will also need to be onhand as it contains part of the initial consumables and print heads for the install process. The tech will need to install all these items before they can load ink into the printer.

During this process, once the printer has all its consumables and the print heads loaded into the printer, the technician will be going over calibration via the GTX **Maintenance Tool** to ensure that the printer is dialed in with proper settings such as alignment of the white and color layers. They will also check to ensure that the printer has the latest version of the firmware, and the computer is loaded with the latest printer driver. Once the driver is installed on your computer, the tech will be able to go over tools such as FileViewer, the Maintenance Tool, and the Firmware Update Tool. One of the test prints the technician, will perform during this process, requires one of the garments from the starter kit. It is imperative that the distilled water is onsite for the technician to be able to create pretreat for this test print.

Other functions the technician should perform are to include the initial retrieval of log data; setting up the LAN connection for the printer. The printer comes standard with a USB cable so if you plan to use the printer's network functionality you will need to have this already installed and waiting for the technician to connect to the printer. They should also go over the installation of the driver and where to retrieve the latest driver from the GT support webpage.

KEY LEARNING OBJECTIVES:

- ☑ Prepping the printer for ink initialization
- ☑ Installing the accessories & Consumables
- ☑ How to load the ink
- ☑ Testing the printer after initialized
- ☑ Test prints and calibrations
- ☑ Finalizing additional setup features

ADDITIONAL DOCUMENTATION:

GTX Quick Setup Guide

Daily White Agitation Process Video

Loading the Ink

Loading Cartridges

CR Speed Adjustment Video

Video for How to Set the V-Rating for GTX

White/Color Alignment Video

Log Data Retrieval Video

Version: 1.0 | Rev: 4/26/19

Head Firing Adjustments Video

Platen Rolling Adjustments Video

GTX Instruction Manual for Windows

GTX Instruction Manual for Mac

Schedule for White Ink Circulation

Timestamp for the Nozzle Check

Updating the Firmware Video

<u>Updating and Uninstalling the Print Driver Video</u>

PREPPING THE UNIT:

Prepping the unit must be done before all the accessory items are installed into the unit. We will cover the core of these items in this section. These items include removing any cardboard, tape, or bindings around or inside the unit to prepare the unit for accessory installation.

- We will cover removing cardboard and inserts.
- We will cover removing tape from areas that need to be accessed.
- We will cover removing binding material inside the printer.

INSTALLING THE ACCESSORIES:

Once a unit is prepped and all binding materials are removed; the accessories can be installed. These accessories include the platen back cover, power cable, cable clamp, locking pin, waste tank, and platen.

- What is purpose of the waste tank?
- Installing the Waste Tank.
- How to install the cable clamp.
- How to install the power cord.
- How to store the locking pin and when to use it.
- Installing the adult platen.
- How to install the platen back cover.

INSTALLING THE CONSUMABLES:

After the accessories are installed, we can now load the consumables into the printer. These consumables include the cleaning solution, flushing foam and receivers, fan filters, wiper cleaners.

- What are the consumable part numbers?
- What is cleaning solution?
- How to load the cleaning solution.
- Where do I check for expirations?
- What are the fan filters and assemblies?
- How to install the fan filters and assemblies.
- What are the purpose of the flushing foams?
- Installing the flushing foams and their receivers.
- What are the purpose of wiper cleaners?
- How to install the wiper cleaners.
- Where can I find the expiration date for the cleaning solution?
- Where can I find it on the wiper cleaner?
- What do the dates mean?

INSTALLING THE PRINT HEADS:

Here we will explain how to unpack the print heads and install them into the printer. The technician will need these on site to perform this task. This is a delicate task that should be performed with an ESD strap as well as practice performing the exchange. The print head is what will jet the ink onto the substrate, so it should be handled with care as mishandling the head can result in damaging it. Any initial print heads installed into a printer must be installed by a certified technician.

- What are the print heads?
- How to unpack the print heads.
- Prepping the heads and tubes for the installation.
- How to install the print heads.

WHITE INK AGITATION:

In this section we will discuss the white ink agitation process. We will cover the what, why, and when about the process. White ink agitation is part of the daily process for using the printer and must be understood and handled properly or it can result in the white ink not being vibrant.

- The reason behind agitating the white ink.
- What do I do for the daily agitation process?
- What do I do for the Initial agitation process?
- What happens if I do not agitate the ink?
- If not using the printer do I need to agitate the ink?

LOADING THE INK FROM POUCH TO PRINTER:

We will discuss how to unpack, handle, and load the pouches into their cartridge holders and install them into the printer. We will also touch on white ink agitation when receiving ink for the first time. For a CMYK only setup we will list out the steps that need to be taken if the printer is to be setup in that manner as well.

- What is GTX-4 ink and why it is important to use only this ink?
- How to unpack the ink pouches.
- How to handle the ink pouches.
- Properly loading a pouch in the cartridge to prevent issues.
- Initial agitation of the white ink.
- How to load the ink from pouch to printer.
- What do I need to do for a CMYK only printer setup?
- What is an expiration date?
- Where can find it?
- Where can I find MSDS information?

INITIALIZING THE INK:

After print heads are installed into the printer and the ink cartridges have been loaded into the ink bay; the technician will be able to start the ink loading process. These processes will vary depending upon a CMYK or CMYK+W setup. We will go over what can be expected during this process. Due to the time the process will take, the technician may move to another piece of equipment or begin setting up the driver on your computer.

- We will go over a CMYK+W initialization via the control panel.
- How to use White Ink Pause Mode (CMYK Only) initialized via the control panel.
- How much time will each process take?

What items can be covered while the ink loads?

PRINTING NOZZLE CHECKS:

Once a technician has loaded ink into the printer or even as a part of normal operating procedure; we will want to print nozzle checks to ensure the print heads are in good condition. Nozzle checks are also known as test prints or pin checks. They can help you determine if there are additional actions that need to be taken at install or in day to day operations.

- The items you will need to print out nozzle checks.
- What are nozzle checks?
- How do I print out a nozzle check?
- What is the difference in a good nozzle check and a bad nozzle check?
- What should I do if I have missing nozzles?
- What should I do if I have other issues with the test print?

"BROTHER GTX-4 TOOLS" OVERVIEW:

In this section, we will discuss the **Brother GTX-4 Tools** and where to find them at. There are a few tools that are needed to install the printer. These same tools can be used to perform other functions such as updates, troubleshooting, and settings for the printer. These tools can be utilized not only by the technician but at the end user level as well.

- What are the Brother GTX-4 Tools?
- Where can I find them?
- What are the basic functionalities of each tool?

UPDATING THE PRINTER FIRMWARE:

Under the **GTX-4 Tools** there are items such as the **GTX-4 Firmware Update** tool. When a new firmware is released enhancing or adding features to the printer; you can download the firmware file and use this tool to update the printer. We will go over how to perform the operation and use this tool.

- Where can I go to check for a new firmware?
- What do I do with the firmware once I have it?
- How to use the tool with the firmware with the tool.

USING THE "GTX-4 USEFUL TOOLS":

Another tool under the **GTX-4 Tools** is the **GTX-4 Useful Tools**. These tools pull up in html format and have links that open to a specified file that can be used to aid in setup calibration or the use of the printer with a graphics software. We will go over how to access the tool as well as the multiple files listed in it. Some of these files are needed later in the setup process while others are there to help with color matching and troubleshooting.

- How do I access the GTX-4 Useful Tools?
- What is the list of files for inside the Useful Tools?
- What is each file used for?

WHAT IS THE "FILEVIEWER":

FileViewer is a tool that is used to open any file created through the **FileOutput** option of the printer when choosing to print a file. It opens the locked ARX4 format of files that are specific to this printer to be able to preview what the file will look like.

- How does the FileViewer work?
- What are the File Viewer's automated functions?
- Previewing an .ARX4 file in **FileViewer**.
- Other information that can be viewed.

USING THE "GTX-4 MAINTENANCE TOOL":

The **GTX-4 Maintenance Tool** allows you configure settings and calibrate the printer when needed. The technician at the time of installation will use this tool to ensure the printer is setup properly. The tool can also be used during troubleshooting and calibrate certain settings that you may wish to later change. For example, perhaps you started the installation with a USB cable; however, you now want to proceed and connect via a LAN connection to a networked computer. This tool will allow you to do that.

- What is the GTX-4 Maintenance Tool?
- What all functions are currently available with the tool?
- What are the overviews of these functions?

EXECUTING THE "CR SPEED ADJUSTMENT":

When setting up the printer after the nozzle checks and before going into the PC to start the **GTX-4 Maintenance Tool** you will need to perform a (carriage) **CR Speed Adjustment**. The Speed Adjustment is used to help the X axis determine the passing speed of the Carriage during printing. It also determines CR braking or stopping at each side of the platen.

- What is a Carriage Speed Adjustment?
- How to perform the **CR Speed Adjustment**.
- When do I need to perform this adjustment?

SETTING THE "V-RATING":

The **V-Rating setting**, short for Voltage Rating Settings, is the settings that are made for voltage to be supplied to the print heads. Each print head has a different voltage rating based off the electric current needed for the head to fire a certain size range of picolitre droplet. We will go over how to set this voltage.

- What is the voltage rating?
- Where can I find the voltage rating to set for a print head?
- Walk through for how to enter these settings using the tool.
- When do I use this tool?

PERFORMING THE "HEAD FIRING ADJUSTMENTS":

Head Firing Adjustments are to be performed after the **CR Speed Adjustment** and **V-Rating** upon installation or the exchange of a part such as a print head. These adjustments use specific channels for alignment purpose considering a specific head to substrate gap. We will discuss what the tool is and how to use it.

- What is a **Head Firing Adjustment**?
- How to perform the Adjustment.
- What is needed to perform the adjustment?

- How to perform the CMYK side firing adjustment.
- How to perform the White side firing adjustment.
- When do I perform the adjustment?

PERFORMING THE "PLATEN ROLLING ADJUSTMENT":

The **Platen Rolling Adjustment** requires that all the previous adjustments and settings were made before it can be performed. This setting controls the firing adjustment versus the platen step out. We will cover what the adjustment is, how to perform it, and when it should be performed.

- What is the Platen Rolling Adjustment?
- How to perform the adjustment.
- What materials are needed to perform the adjustment?
- When do I perform the adjustment?

SETTING THE "WHITE/COLOR ALIGNMENT":

With all other firing adjustments made the **White/Color Alignment** is the last in the series of mandatory settings and calibrations that must be performed at setup when using the CMYK+W printer configuration. This process is used to align the white under base layer and CMYK layer that adheres to the top of the white ink. We will cover how to perform the adjustment and what the adjustment does. We will also explain when to perform the setting outside of the setup process.

- What is the White/Color Alignment adjustment?
- How do I perform the adjustment?
- What materials are needed to perform the adjustment?
- When do I perform the adjustment?

HOW TO SETUP A LAN CONNECTION:

The printer will come with a USB cable in the starter kit; however, if you so choose, the printer can be setup by the technician via a **LAN Connection** instead. You will be required to supply the LAN cable if you choose to go this route. When setup by a **LAN Connection** the printer can accept both static and dynamic IP addresses. A static address is preferred but not mandatory. In this section we will cover how to establish a **LAN Connection**.

- What is a LAN Connection?
- What is required to make a LAN Connection?
- How do we setup a **LAN Connection** with a PC?
- How do we setup a LAN Connection with the Mac® OS?

THE PURPOSE OF "LOG DATA RETRIEVAL":

Here we will go over how to retrieve the log data from your printer. This can be done in two different ways. One method is via the computer by using the **GTX-4 Maintenance Tool**. The other is by using a FAT32 formatted USB thumb drive to retrieve it from the control panel. We will go over both methods here and explain what the log data is needed for.

- What is the log data?
- When will I need to perform this process?
- How to retrieve the log data with a computer.
- How to retrieve the log data with a USB thumb drive.

SETTING THE "TIMESTAMP FOR THE NOZZLE CHECK":

In this section, we will go over how to perform the operation for setting the **Timestamp for the Nozzle Check**. This operation is important for keeping records and gives a date for when something may have changed with a nozzle check as well as it can be a quick way to check your firmware version. Your computer needs to be connected to the internet and have the time updated on it for this feature to work properly.

- What is difference between a standard nozzle check and timestamp versions?
- How to do I perform this operation?
- What is needed to perform the operation properly?
- What will happen if my computer does not have the proper time on it?

SETTING THE "SCHEDULE FOR WHITE INK CIRCULATION":

The **Schedule for the White Ink Circulation** is an important feature because utilizing it properly can reduce waste ink which helps save on running cost of the printer. This function allows for you to automate the timing of the sequence it will perform the function by putting it on a schedule.

- What will happen if I do not set the schedule and run this with a default setting?
- How to perform entering the schedule with the **GTX-4 Maintenance Tool**.
- What does setting the schedule change?

FOR ADDITIONAL TECHNICAL SUPPORT INFORMATION:

GTX Support Videos
GTX Drivers/Firmware