

HOW TO 'STEP BY STEP' GUIDE



DTG DIGITAL PRINTER

GETTING OFF TO A GOOD START

Version 1.1

Company Name:

Customer Name:

Machine Model:

Machine Serial no:

Thank you

Thank you for purchasing one of our DTG Digital printers, this document will help you understand the requirements needed to successfully prepare for the installation and running of your new machine.

Please make sure you read and fully understand the details set out in this document, if you have any questions do not hesitate to contact your sales representative.

CONTENTS

Setting up your area, ready for the printer to be installed	3-4
User and Machine safety	5-6
Storage and Handling Ink	6
Operating temperatures	7
Maintenance	8
Pretreatment guidelines and advice	9

SETTING UP THE AREA

1. Your printer should be installed in a clean, dust free environment which is not affected by cold, damp or temperatures that greatly exceed room temperature. In this document we set out the correct operating temperature range which your DTG machine can successfully operate in, outside of these zones the machine may become unusable or damaged.

2. If your printer is a table top version, you will need to have a table that is large and sturdy (as appropriate to the printer you have purchased) and has enough space to move around it. In this document we have detailed the size and weights of your new DTG Printer.

3. You need a computer to run your software on and this should be situated close to the printer. We recommend that your computer is dedicated solely to your printer. The machine comes with a USB lead to the computer.

Minimum Computer Specification

- Genuine Windows 10 (32bit) or above.
- 2GHZ processor minimum, (Dual Core Processor if possible)
- 2GB RAM memory (minimum)
- 320GB hard drive (or More) – minimum of 40gb free space
- Separate Graphics Card recommended
- 4 Empty USB (Minimum)
- Network socket
- Maximum distance between computer and printer 1.8 metres

4. If you are using white ink and pretreatment, you will need to set up a separate area for pre-treatment process.

The pre-treatment for the printing of white ink is very sticky, and airborne particles of the spray can very easily find their way into, and clog up the moving parts of your DTG printer. For this reason, we recommend that you spray the white ink pre-treatment to your garments in a separate room, or at the very least, make up a "spray booth" to contain the spray so that it does not contaminate the printer.

The spray station should be at least 5 metres (15 feet) away from the printer, with forced extraction of the pre-treat vapors.

5. Your heat press should be placed on a table with enough room to allow the press to swing clear of the media base. It will need to be calibrated and you will need a supply of Teflon sheets/baking parchment for curing of the ink and pretreatment. Please contact your sales representative as we hold stocks of the correct papers needed.

Delivery: Please advise us prior to delivery any concerns about the machine installation site e.g. steps, tight turns narrow doorways or road access issues, this will enable the installation team to be able to carry out the delivery and setup of your new DTG machine safely and successfully.

Printer	Length	Width	Height	Weight	Free Standing
QM4	2.4m	2m	1.5m	600kg	Yes
QM8	3m	2m	1.5m	700kg	Yes
M6	1.3m	1.9m	1.3m	170kg	Yes
M2	1m	1.3m	500mm	110kg	No
G4	1.4m	1m	500mm	100kg	No
Viper2	1.3m	800mm	500mm	76kg	No

USER AND MACHINE SAFETY

- It is important you follow all the warnings on the printer.
- Use only the type of power source that is indicated on the printer's label.
- All equipment must be connected to grounded outlets. Do not use the same outlet for any other system such as a copy machine or an air control unit that turns on and off.
- Connect the printer to a power outlet that can easily be seen.
- Make sure you do not let the power cord get damaged and do not connect the unit with a damaged cord.
- If you are using an extension cord make sure the power ampere rate does not exceed the cord ampere rate of the printer.
- Keep any items containing magnetic fields, such as electromagnetic devices, away from your printer.
- Keep the printer away from locations with high humidity, vibrations, debris or dust.
- Leave enough space around the printer for proper ventilation.
- Prevent any sudden shocks to your printer, such as dropping the unit.
- Do not leave the printer near heat sources such as radiators, heat vents, or direct sunlight.
- Be careful when transporting the printer – keep it upright (not on its side or upside down) so you do not spill the ink.
- Always turn the printer off before cleaning the outside of the machine and clean with a damp cloth only.
- Do not spill any liquid on the printer.
- Do not unplug the printer to shut it off. Use the power button instead.
- Do not unplug the printer until the power light is off.
- Do not block any of the printer's vents or insert anything foreign in its slots.
- Do not try to service the printer yourself, except where described in the manual. If you need service, turn the printer off, unplug it and take it to your DTG Dealer or authorized Distributor.

SAFETY INSTRUCTIONS FOR USING THE PRINTER AND HANDLING INK

- Always keep ink and other consumables out of the reach of children.
- Be careful not to spill ink on your skin or in your eyes. If any ink does get on your skin wash it thoroughly with soap and water. If ink gets in your eyes flush them out immediately with water.
- Do not put your hand in the printer or touch the dampers once printing.
- Do not move the printer head by hand; doing so may damage the printer.
- Store the ink in a cool dark place.
- If you store the inks in a cold environment and are ready to use them, bring them to room temperature before you use them.
- Do not lean or place heavy objects on any part of the printer.

Storage and Handling of DTG Ink

All DTG Ink and cleaning solutions will provide excellent results when stored and handled properly.

The following storage and handling practices are required to ensure consistent quality and performance of DTG ink.

Product Storage Guidelines:

It is recommended that DTG ink be stored in a clean, dry area, with temperatures regulated between 10 and 40 degrees Celsius (50 to 104 degrees Fahrenheit).

Storage & Handling for 2/5 litre bottles or small containers:

Store the filled bottles in a clean, dry area. Agitate the ink daily using a mechanical roller system or manually roll or gently shake the bottles. Agitate the ink for 30 seconds each day until the ink is fully mixed with no sediment on the bottom of the bottle.

Roller System Information:

Our recommendations for agitation rate and agitation time are based on laboratory testing on mechanical roller agitation system equipment.

OPERATING TEMPERATURES FOR THE DTG INKS

It is recommended that the unit be kept in an air-conditioned environment, with temperatures no less than 5° Celsius (41°F) and no more than 30° Celsius (86°F) with humidity levels between 40 and 70%.

DTG Textile Inks.

The DTG range of printers have eight channels of colour in it's print head. Each channel passes ink through the print head by way of 180 very fine (< 0.075 mm diameter) nozzles . White Ink, 4 colours are replaced with White Ink. White Ink is a water based titanium dioxide / binder / carrier mix. The titanium dioxide is ground into a fine powder and mixed with other binders to allow it to dry and adhere to the pre-treated fabric.

Titanium dioxide is what gives the ink its bright white properties, and this brightness gives the coloured ink layer a vibrant and rich colour.

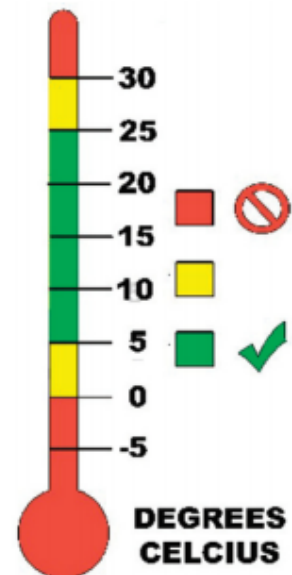
White Ink Properties and Maintenance.

Because of the chemical properties of white ink it requires much more maintenance than the colour inks. Titanium dioxide is a mineral and does not dissolve in liquids. This means that the titanium dioxide will, over a period of time, settle to the bottom of the container (being the ink bottles, ink tubes and / or dampers). Once complete, separation of the titanium dioxide from the binders and other components in the ink cannot be reversed!

Your DTG Printer has a ground breaking WIMS system that keeps the ink "moving" in the ink tubes and dampers, however it is recommended that you follow the maintenance routines on a daily basis before and after production begins.

Keep the ambient temperature of the Printer and the inks between 5 & 25 degrees Celsius, Excessive heat will damage the operational efficiency of the ink and the printer.

Failure to follow the important instructions above, could result in the machine and ink not performing to its optimum level and damage could occur to the machine, ink or ink delivery system including the print head.



When you receive your machine you will find a maintenance routine sticker to remind you of the instructions set out in the installation and training document and will also be fully explained and demonstrated by your DTG Trainer.

Please make sure you know where this sticker is located and that you follow the instructions, We would emphasize that the maintenance routine is mandatory to prevent problems of use.



Perpetual:

- Operating Environment should be dust free, temperature 5°C – 30°C (41°F – 86°F), humidity 40% - 70%
- Store stock inks between 5°C – 30°C (41°F – 86°F)
- Spray white ink pre-treatment in a separate room, or at least 5m (19ft) from the machine, with forced vapour extraction

Daily:

- Perform nozzle check and head clean
- Agitate any stock white ink
- Maintain ink levels between 50% - 75%
- Run a head clean or white ink print

At the end of production (as per user's guide):

- Head clean
- Manually clean edges of print head
- Clean rubber seal of cap in capping station
- Clean wiper blade
- Ensure print head is homed completely to the capping station
- Cover the DTG machine

Weekly, or more frequently after periods of high production:

- Clean encoder strip
- Empty flushing box and waste ink bottle

Monthly, or more frequently after periods of high production:

- Clean drive belt

PRETREATMENT AND SPRAYING HEALTH AND SAFETY GUIDELINES

The following is an extract from the DTG user manual -

Pre-Treat garments away from the printer

The pre-treatment for the printing of white ink is very sticky, and airborne particles of the spray can very easily find their way into, and clog up the moving parts of your DTG printer.

For this reason, we recommend that you spray the white ink pre-treatment to your garments in a separate room, or at the very least, make up a "spray booth" to contain the spray so that it does not contaminate the printer. The spray station should be at least 5 metres (15 feet) away from the printer, with forced extraction of the pre treat vapors.

The following is an extract from the Pre-treatment MSDS sheet -

Eye/Face Protection

Wear safety glasses. Wear coverall chemical splash goggles and face shield when the possibility exists for eye and face contact due to splashing or spraying of the material.

Respirators

Respirators are not needed with proper ventilation. Wear an approved respirator e.g. an organic vapor respirator or a self-breathing apparatus whenever exposure to aerosol, mist, spray, fume or vapor exceed the exposure limit(s) of any chemical substance listed in this MSDS.

Protective Clothing

If there is potential for significant dermal contact wear appropriate impervious clothing and gloves.

As it can be seen from the above information, when using a spray gun with DTG Pre-treatment there are some environmental considerations – both for the best use of the equipment and also for personal welfare.

Please follow these guidelines as closely as possible. If the products are being used in a domestic environment please pay particular attention to environmental conditions – it is not recommended that the spray gun and pre-treatment solution are used in family areas of your home.

Material Safety Data Sheets are available for all of the inks, pretreatments and consumables we provide upon request.