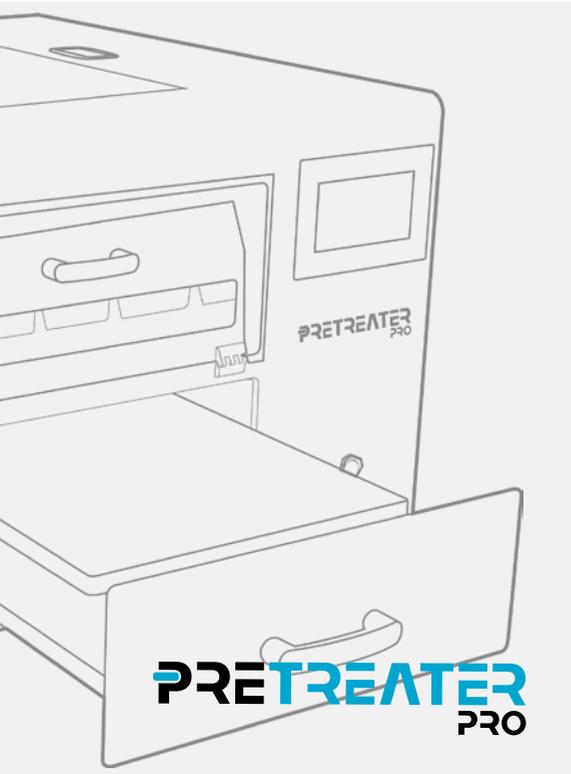


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DTG PRINTERS



QUICK USER GUIDE

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Basic PreTreater Pro functions

Pretreating procedure with PreTreater Pro

1. Select your preferences for the **spray area** and the **liquid amount per ml**.
2. Load the garment on the **drawer plate**.
3. Start Single step or Production mode spraying procedure.

Select your preferences for the spray area and the liquid amount per ml



Note:

Ensure that you have selected the pretreatment liquid you want to use. You can check this, from the **Home** screen, on the **Tanks** page. In case another pretreatment liquid is used, check under the topic: **Tank Selection** on **page 14** for instructions, how to switch between liquids.

STEP 1

- 1 On the **Home** screen, tap on **Edit**.



Fig.1: Edit spraying area.

STEP 2

Edit the spray area. There are two spraying selection modes. You can use your preferred method, by switching between **Grid Edit** and **Linear Edit**.



Fig.2: Spraying selection modes.

Grid Edit:

Tap on the Grid Edit button.

STEP 1

Select the direction you want the garment to have, on the drawer plate. You can rotate it **180°**, by pressing the icon. Ω



Fig.3: Garment orientation.

STEP 2

The entire spray area (**41x60cm / 16x23.6in**) has been divided into 4 columns and 4 rows (**4x4=16 boxes**). Specifically, select the boxes in the **Grid Box** selection area that you want to enable.



Fig.4: Grid box.

STEP 3

Select the liquid spraying amount per **ml**, for the max spray area (**41x60cm / 16x23.6in**), from the slide bar. Tap on the **Calculate** button, to check the actual liquid amount sprayed on the selected area.



Fig.5: Selecting spraying amount.

When finished, tap on the **Confirm** button.

Linear Edit:

Tap on the Linear Edit button.

STEP 1

Select the direction you want the garment to have, on the drawer plate. You can rotate it **180°**, by pressing the icon. 



Fig.6: Garment orientation.

STEP 2

Select the nozzles you want to enable. You are able to choose from **1** up to all **4 nozzles**. The nozzles spray, exactly as shown on the screen, in the **Nozzle Carriage Chamber**.

e.g. If you select the second nozzle from the left on the screen, the same nozzle will spray in the **Nozzle Carriage Chamber**.



Fig.7: Nozzle selection.

STEP 3

Select the **Spray Length** by changing the value with the **+/-** buttons.

Select the distance from the top, by changing the **Neck Offset** value with the **+/-** buttons.



Fig.8: Linear edit spraying area.

STEP 4

Select the liquid spraying amount per **ml**, for the max spray area (**41x60cm / 16x23.6in**), from the slide bar. Tap on the **Calculate** button, to check the actual liquid amount sprayed on the selected area.

When finished, tap on the **Confirm** button.

Save custom presets.

On the **Home** screen, you can save your job preference, by holding for **3 seconds** on any of the ten custom job preset buttons.



Fig.9: Saving custom presets.

Garment loading on drawer plate

STEP 1

Open the drawer and place the garment on the plate, in the direction of the **preselected** position, as in **Step 1** on page 2 and 4.



Fig.10: Loading garment.

STEP 2

Place the garment on the platen. Make sure that the garment is flat.

STEP 3

- Carefully tuck in/ position, any excess textile, below the platen.
- Close the drawer.



Fig.11: Closing the drawer.



Tip:

In humid environment, it is often beneficial to pre-press the shirt (using the protection paper as a barrier from the press) for 5 to 10 seconds prior to applying the pretreatment. This removes some of the water that is naturally trapped in the fibers.

Start single step or production mode spraying

Single Step Spraying:

To spray the garment, either press the **Blue** button on the front side of the PreTreater Pro, or activate the **Spray** option on the **Home** screen.



Fig.12: Single step spraying.

Production Mode:

Production Mode allows you to start the spraying procedure, as soon as, the drawer is closed, without pressing a button. Activate the **Production Mode** on the **Home** screen to start the automatic spraying function, once the drawer is closed.



Fig.13: Enable production mode.



Tip:

If drawer is closed, when enabling the **Production Mode**, open and close the drawer to start spraying procedure.

- When spraying finishes, open the drawer and take out the garment.
- Once you have finished spraying your last garment, before closing the drawer, deactivate the **Production Mode** on the **Home** screen.



Fig.14: Disable production mode.



Tip:

- For best image quality, drying the pretreated garment in a t-shirt press (using the Polyprint protection paper as a barrier from the press) is preferred.
- Dry the pretreated garment in a T-shirt press, at **160°C**, for **30 seconds**, under high pressure (**4-5bars**) or with another drying device. Using the press will matte down any fabric fibers, as well as, dry the pretreated garment, resulting in a smooth printing surface, that will help increase image quality.

Liquid Installation

STEP 1

- Open the **Tank Access Cover** to gain access to the **Tank Storage Compartment**.



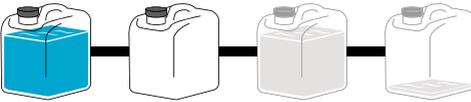
Fig.15: Tank Storage Compartment.

STEP 2

There are **4 empty tanks** in the slots **L1, L2, CL, and MT**. You can fill the empty tanks or directly use a new pretreatment tank in its place.

STEP 3

Tanks that you need to refill/replace in **blue** below.



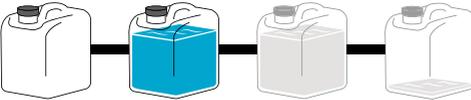
L1

L2

CL

MT

OR



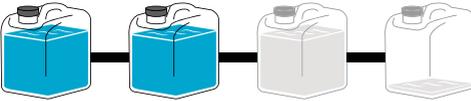
L1

L2

CL

MT

OR



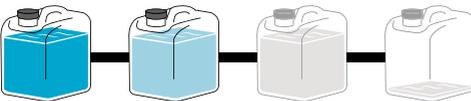
L1

L2

CL

MT

OR



L1

L2

CL

MT

Option 1: Using 1 Pretreatment Liquid (L1 or L2) and Distilled water in the (CL) Tank.

Option 2: Using 2 of the same type Pretreatment Liquids (L1 +L2) to double your capacity and Distilled water in the (CL) Tank.

Option 3: Using 2 different Pretreatment Liquids (L1 / L2) and Distilled water in the (CL) Tank.



Caution:

Shake the new tanks/bottles with the pretreatment well, before using them inside the machine.

STEP 4

- Fill/Replace **Tank L1** or/and **L2** with the pretreatment liquid you are going to use.
- In case of the usage of 2 pretreatment liquids, fill/replace both **Tanks L1** and **L2** with the according pretreatment liquid.
- Fill the **Tank CL** with distilled water.

Tank Filling Procedure

STEP 1

- Take the **Tank** out of the **slot**.

STEP 2

- Open the **cap** of the **Tank**.

Note:

- You can use the **Tank Access Cover** as extra workspace.

STEP 3

- Take the **tubes** out of the **Tank**.



Fig16: Removing tubes from tank.

STEP 4

Shake the **pretreatment bottles** well, before filling the tanks.



Fig.17: Shaking Pretreatment bottles.

STEP 5

Fill the tank with the pretreatment liquid. Ensure that it's with the same pretreatment liquid type.



Fig.18: Filling the tank.

STEP 6

Put the tubes inside the tank and close the cap. Ensure they are in place and properly sealed.



Fig.19: Sealing the tank.

STEP 7

- Put the **tank back into** the slot.

STEP 8

- Close the **Tank Access Cover**.

**Caution:**

Before closing the **Tank Access Cover**, ensure that all the tubes are inside the tanks and that the caps are in place and properly sealed.

Tank Replacement

STEP 1

- Take the **Tank** out of the **slot**.

STEP 2

- Open the **cap** of the **Tank**.

**Note:**

- You can use the **Tank Access Cover** for extra workspace.

STEP 3

- Take the **tubes** out of the **Tank**.



Fig.20: Removing tubes from tank.

STEP 4

Shake the **pretreatment bottles** well, before replacing the tanks.



Fig.21: Shaking Pretreatment bottles.

STEP 5

Put the **tubes** inside the new tank and close the **cap**. Ensure they are in place and properly **sealed**.



Fig.22: Sealing the tank.

STEP 6

Put the **new tank** inside the slot.



Fig.23: Placing the tank into the slot.

STEP 7

Close the **Tank Access Cover**.

**Caution:**

Before closing the **Tank Access Cover**, ensure that all tubes are inside the tanks and that the caps are in place and properly sealed.

Tank Selection

On the **Home** screen tap on the **Menu** button. Select **Tanks**.



Fig.24: Selecting the tanks page on the screen.

In this **Tank Selection** screen, you can check, which tank you have, currently, selected.

If you wish to select a different tank to spray, tap on that tank you want, and press **Confirm**. PreTreater Pro will automatically switch to your preferred tank.



Fig.25: Selecting the preferred tank.

**Note:**

You can, also, tap on the **CL Tank**, to manually perform the shutdown maintenance.

**Caution:**

Choosing **CL** will clean, only the basic line to the nozzles, and will not bring the machine into a shipping state. For further instructions, check the topic: **Transporting PreTreater Pro** on **page 23**.

Pretreatment Benefits

Applying the right amount of pretreatment solution is necessary to obtain bright colors with wash endurance.

A pretreatment machine is recommended, to ensure consistent quality and to keep the environment clear from dust, fumes, gas, mist, vapors, and spray that is present, while using a spray gun.

Equipment needed for proper pretreatment solution application:

- **PreTreater Pro**
- **Heat press**
- **Polyprint Protection Paper**

Pretreatment on dark-colored and black garments

For dark garments, the application of a pretreatment layer is vital for the colors to adhere to it, be visible and not soak into the fabric. Apart from that, you can choose between different pretreatment solutions, that each suit your needs.

**Tip:**

You can opt for a pretreatment solution, such as P5001, that leads to superior print quality, by increasing the ink's vibrancy and sharpness. On the other hand, you can opt for a solution, like P5003, that enhances the wash endurance of your prints, alongside their quality.

Polycoating on light-colored garments

As far as white and light-colored garments go, pretreatment application is not essential, as you can print directly on the garment and have a really good print quality. Nonetheless, by the use of a pre-coating solution, such as Polycoating, you can achieve exceptionally vivid prints and at the same time, boost the wash resistance of your fabrics. Also, the Polycoating solution gives you the opportunity to print on tricky fabrics, such as polyester. Polyester is a synthetic fiber that is hydrophobic, meaning that it repels water-based inks that are used in DTG. A pre-coating solution, such as Polycoating, stabilizes the ink on the surface of the garment and stops the bleeding of inks through the polyester fibers.

Pretreatment Heat Press Settings

To dry the pretreatment, use the following settings on the heat press with pressure 4-5 bars.

Pretreatment	Temperature	Time
Poly-coating	160°C	30sec
DuPont 5003	160°C	30sec
DuPont 5001	160°C	30sec

Maintenance Schedule

Maintenance Schedule	
Daily Liquid Check	<ul style="list-style-type: none"> • Check the Tanks for enough Pre-treatment liquid and Water • Empty the Maintenance Tank
Daily Wake Up	<ul style="list-style-type: none"> • Place the 4 nozzles on the Nozzle Carriage • Initiate PreTreater Pro • Liquid Charge
Daily Shutdown	<ul style="list-style-type: none"> • Flush the main tube with distilled water • Remove the 4 nozzles from the Nozzle Carriage • Place the 4 nozzles in the ultrasonic device
Monthly Maintenance	<ul style="list-style-type: none"> • Check and clean the L1, L2 tank filters • Clean the Liquid Collecting Mat
Two Month Maintenance	<ul style="list-style-type: none"> • Check and clean the Nozzle Filter • Clean the Waste Collector
Long Inactivity-Storage Condition	<ul style="list-style-type: none"> • Flush all the tubes with distilled water • Shutdown PreTreater Pro • Remove the 4 nozzles from the Nozzle Carriage • Place the 4 nozzles in the ultrasonic device • Clean the Waste Collector • Empty all the Tanks

Daily Liquid Check

1. Open the **Tank Storage Compartment Cover**.
2. Check the liquid level in the **L1, L2, CL** tanks and if needed, follow the instructions on **page 08**, to refill / replace them.
3. Empty the Maintenance tank.

Daily Wake Up Procedure

STEP 1

1. Open the **Nozzle Access Cover**.
2. Take the 4 nozzles out of the ultrasonic device and insert the nozzles inside the blue nozzle holder.
3. Position the black gasket inside the blue nozzle holder and push it in place to tighten.

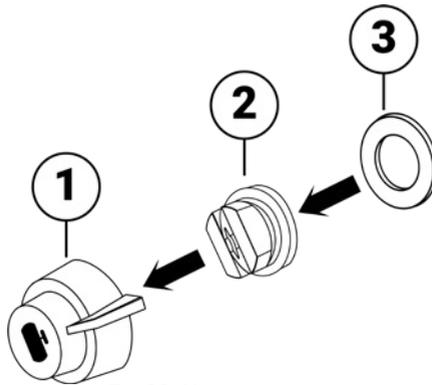


Fig.26: Nozzle assembly.

STEP 2

Attach the nozzle assembly to the **Nozzle Carriage** and turn it **90 degrees** counterclockwise, to lock it in position.

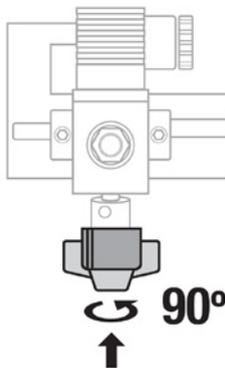


Fig.27: Nozzle installation.

STEP 3

To initiate the machine, tap the screen.



Fig.28: Touch screen.

STEP 4

Select the tank you want to use follow the instructions of **Tank Selection** on page 14.

Daily Shutdown Procedure

STEP 1

1. Tap on the **Menu** button.
2. Tap the **Shutdown** button.

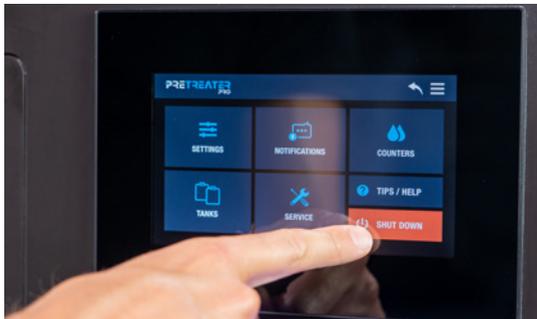


Fig.29: Pressing Shutdown button.

STEP 2

To flush the main tube with distilled water, select **YES** on the screen that appears.

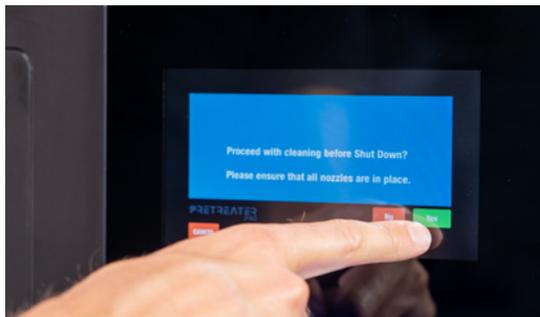


Fig.30: Pressing YES to proceed with cleaning before shutdown.

STEP 3

Remove the 4 nozzles from the **Nozzle Carriage** and disassemble them.

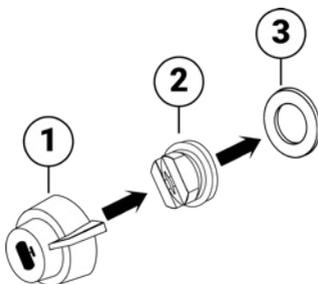


Fig.31: Nozzle assembly.

STEP 4

Place the 4 nozzles into the ultrasonic device and start the cleaning process for 1 min.



Fig.32: Ultrasonic device.

**Note:**

You can, also, tap on the **CL Tank**, to manually perform the shutdown maintenance.

Monthly Maintenance

Check and clean the L1, L2 tank filters

1. The two filters are located in the **Tank Compartment**.
2. Unscrew the filter cap to remove them.
3. Clean them with water.
4. Reposition them. Make sure they are, in their initial place.

**Note:**

There is no need to empty the tubes from liquid to do this procedure.

Clean the Liquid Collecting Mat

1. Open the **Nozzle Access Cover**.
2. Remove the **Liquid Collecting Mat**.
3. Clean it with water.
4. Reposition it. Make sure it is, in its initial place.

Two Month Maintenance

Check and clean the Nozzle Filter

The 3rd filter (nozzle filter) is located in the **Nozzle Carriage Chamber**. To clean it, you need to, firstly, discharge the liquid from the main tube. To do that, you have to bring the machine to service condition. For further instructions, check the topic: **Service Condition** in the **Operational Manual** that can be found in the **USB Polyprint Key**.

When PreTreater Pro is in service condition, you can safely remove the filter cap and take it out to be cleaned.

Clean the Waste Collector

STEP 1

Power Off the machine, from the **Main Power** switch before cleaning the **Waste Collector**.

STEP 2

Open the **Nozzle Carriage Cover** and pull it outwards.

STEP 3

Remove the screws holding the left metal cover and pull it out.

STEP 4

Remove the top plastic cover of the **Isolation Chamber**.

STEP 5

Clean the **Waste Collector** with paper or a towel.

STEP 6

Place back, into initial position, the top plastic cover of the **Isolation Chamber**.

STEP 7

Place the screws back on the left metal cover and tighten it into place.

STEP 8

Move the **Nozzle Carriage** back to **Home** position and close the **Nozzle Carriage Cover**.

Long Inactivity Maintenance

Storage Condition

1. Empty the **L1, L2** Tanks from the pretreatment liquid.
2. Fill the **L1, L2** Tanks with distilled water.
3. Check that the **CL** Tank is full of / contains distilled water.
4. On the **Home** screen, tap on the **Menu** button,
5. Select **Tanks**.
6. Perform a **Liquid Change**, by selecting **L1, L2, CL**, one-by-one, in any order. This will flush all the lines with distilled water.
7. Go back and in the **main Menu** screen, tap on **Service**.
8. Set the **Initial Charge** Flag to **ON**.
9. Tap on the **back icon** and select the **Shutdown** button.
10. Click **Yes** to flush with distilled water the main line and nozzles.
11. When finished, PreTreater Pro will Shutdown. Close the **main switch** at the back of the machine and remove the **power cable**.
12. Remove the 4 nozzles from the **Nozzle Carriage**.
13. Place the 4 nozzles in the ultrasonic device.
14. Clean the **Waste Collector**, as described on **page 22**.
15. Empty all **Tanks** from liquids and place them back, empty. Place the tubes back into the **Tanks** and seal the caps.

**Note:**

When the machine has been maintained for **Long Inactivity Storage Condition**, there is no need to follow up with the maintenance schedule.

**Note:**

To restore PreTreater Pro after the **Long Inactivity- Storage Condition** state, follow the instructions in the **Installation Guide** page 5.

Transporting PreTreater Pro

Perform the Maintenance **Long Inactivity Storage Condition**. For further information check the topic: **Maintenance>Long Inactivity> Storage Condition**.

1. Lock the **Nozzle Carriage** in position with a tire up.
2. Ensure that the **Tanks** are empty.
3. Place tape to all covers to keep them properly secured into place.

Moving PreTreater Pro to another location



Caution:

Before moving the machine to another location/position, ensure that the tank caps are in place and sealed, so liquid cannot spill out. Do not tilt PreTreater Pro while the liquid tanks are full or inside the machine and the waste collector is not properly cleaned.

1. Lock the **Nozzle Carriage** in position with a tire up.
2. Place tape to all covers to keep them properly secured into place.
3. Do not tilt the machine. If you need to tilt it, you must bring the machine to the **Storage Condition**. For further information check the topic: **Transporting PreTreater Pro**.

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