# Automatic Pretreat Sprayer Mister T1

Model No.: E-PT-MT1

### OPERATOR'S MANUAL





## **Safety Instructions**

For Use By Qualified Personnel Only

When using your Heat Press, basic precautions should always be followed, including the following:

#### Read all instructions.

Use the Mister T1 only for its intended use.

Mister-T1 operates with a pre-treatment liquid for fabrics that is designed for being able to print with Direct-to-Garment printer. Cleaning MUST be done only with distilled water! Any other liquids, alcohol or solvent may damage pumps or other components of the machine. Damages caused by unauthorized liquids are excluded from the warranty.

Mister-T1 comes with 12 months warranty. This warranty includes the whole construction of the machine, mechanical parts, electronics, drawer with rails, casing, pumps, electronic valve and pipes. Consumption items such as stainless steel nozzles, seals, and filters are excluded from the warranty.

The set-up and installation of the machine has to be done under supervision of an authorized person. The installation has to be done by 2 or more persons following the instructions of this manual.

#### Caution: unplug the machine prior to any maintenance procedure.

Never pull cord to disconnect the power. Instead, grasp plug and pull to disconnect from power outlet.

Protect the power cord by keeping it away from hot surfaces. Do not allow objects to sit on top of the cord. This could cause damage to the cord and become a fire hazard.

Do not operate pretreatment machine with a damaged cord or if the equipment has been damaged. To prevent risks of injury, please do not disassemble or attempt to repair the heat press by yourself if you are not qualify to do so. Instead, call or take it to a qualified service person for examination and repair. Incorrect assembly or repair could increase the risk of fire, electric shock, or injury to persons when the equipment is used.

If heat press being used by or near children, please make sure that it is supervised. Do not leave equipment unattended while connected. Make sure that the cord is safely secured so it cannot be pulled or tripped over.

To reduce the likelihood of circuit overload, do not operate other high voltage equipment on the same circuit.

The machine should only be used by trained personal after reading and understanding this manual.

Congratulations on your purchase of a Automatic Pretreat Sprayer Mister T1! In order to work professionally with the machine and start production, please make sure you read this manual carefully.

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### **Mister T1 Overview**



#### **Technical Specs**

Model No.: E-PT-MT1

Machine Type: Automatic Pretreat Machine

Machine Size: W22.04" x L31.49" x H23.22"

(560 x 800 x 590mm)

Weight: 77.16lbs (35kgs)

Platen Size: 16" x 20" (40cm x 50cm)

Number of Spray Nozzle: Single Nozzle

Maximum Spray Area: 16" x 20" (40cm x 50cm)

Spray Cycle Time: 3 sec  $\sim$  9 sec, by 1 to 5 speed

Power Supply: Free Voltage (100V~240V 50/60hz)

Power Consumption: 60W

Packing Size: W23.37" x L36.81" x H33.07"

(670 x 935 x 840mm)

Packing Weight: 99.20lbs (45Kgs)

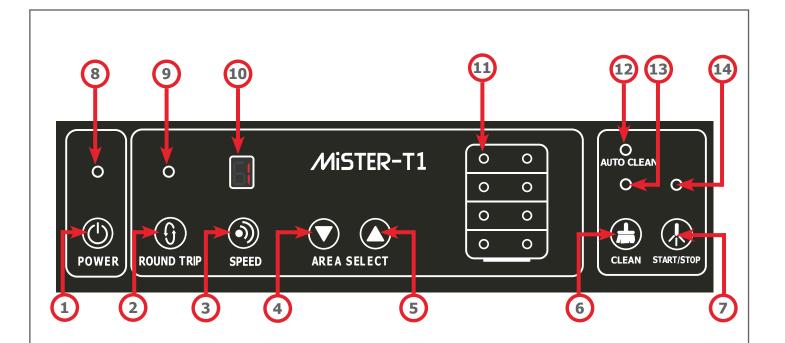
With Minimum Speed : about 50ml Liquid Consumption:

With Maximum Speed: about 10ml

## **Machine Parts Diagram**



## **Navigating the Control Panel**



#### **Understanding the Control Panel**

- 1) POWER ON/OFF BUTTON
- 2) ROUND TRIP BUTTON: Spray pre-coating liquid back and forth when lights are on.
- 3) SPEED BUTTON: 1~5 STEP (1: SPEED LOW / 5: SPEED HIGH)
- 4) AREA SELECT BUTTON: Selects spray area from top to bottom
- 5) AREA DESELECT BUTTON: Deselect spray area from bottom to top.
- 6) NOZZLE CLEANING BUTTON
- 7) START / STOP BUTTON: Spray pre-coating liquid / Stop spray
- 8) POWER LAMP
- 9) ROUND TRIP LAMP: Lights are on when ROUND TRIP mode is running
- 10) SPEED STEP LAMP (Display speed level when normal / Display "D" when door is opened / Display "E" when sensor malfunction)
- 11) AREA SELECT LAMP: Spray pre-coating liquid on area where the LAMP is on
- 12) AUTO CLEAN LAMP: Automatic spray for 1 second in every 4 hours when power is off
- 13) MANUAL CLEAN LAMP: Spray when light is on
- 14) START / STOP LAMP: Spraying when light is on

### **Installation**

#### **Leveling the Machine**

Please ensure the machine is leveled properly to avoid leaking of waste liquid.

To level the machine, turning the machine feet clockwise will decrease the height and turning the feet counter clockwise will increase height.



#### **Assembling the Bottle Holder**

The bottle holder comes with 6 screws which can be found in the accessory box. Assemble the bottle holder similarly to the picture on the right.



#### **Connect the Power Cord**

The power switch and the power connection can be found at the back of the pretreat machine.

#### **Connect Drain Tube & the Waste Tank**

The drain connector is located at the back of the machine.

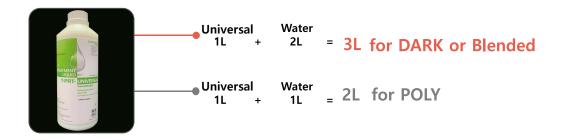
Connect the large tube (drain tube) to the connector on the bottom and then place the other end in an waste tank.





#### **Prepare a bottle with Universal Pretreat Solution**

If using ECOFREEN UNIVERSAL concentrate, mix the liquid and purified water as below



### **Installation**

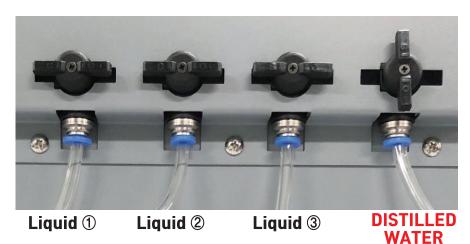
#### **Placing the Filters in The Bottles**

Please put the filters into the bottles for pretreat liquid or water as below.



Please turn the valve clockwise to open the preferred valve to spray the liquid or water.





#### **IMPORTANT**

- The water bottle should be placed in the 4th valve as the picture on the left.
- Only one valve can be open at a time.
- Flush with distilled water after daily use.
- Inlet Filter must stay submerged at all times.

## **Setting Up Your Pretreat Machine**

#### **Turning On Your Pretreat Machine**

1) Turn the Main Power Switch on. The Main Power Switch is at the back of the machine.



\* Please ensure the emergency button on the left side of the machine is not locked. If the emergency button is locked, unlock by turning the button clockwise.



2) Press the POWER BUTTON on the control panel to start the machine (Press and hold for a few seconds)



#### **Setting Spraying Direction**

Press ROUND TRIP BUTTON to set a unidirectional spray or bidirectional spray.
When the round trip light is on,the machine will spray bidirectional. If the light is off, the machine will spray unidirectional.



#### **Setting Spraying Speed**

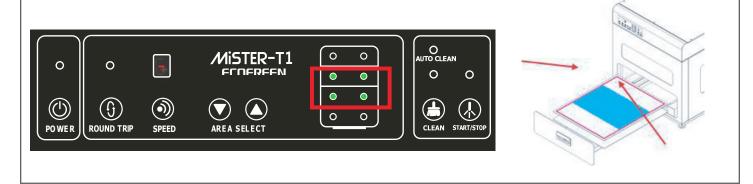
Press SPRAY SPEED BUTTON to change the spray speed. Level 1 - the slowest to apply more liquid on the surface. Level 5 - the fastest to apply less liquid on the surface.



## **Setting Up Your Pretreat Machine**

#### **Setting Spraying Area**

Spray area is divided into 4 sections and only sprays on the selected area AREA SELECT BUTTON to select area from top to bottom and AREA DESELECT BUTTON to deselect area from bottom to top. For example, if you select speed level on 4 and select only center area to be sprayed



#### **Setting Bottle**

Switch the bottles by turning the desired valve in clockwise.

\* Only ONE valve can be open at a time.



#### **Cleaning the Tube and Nozzles**

When you change the bottle to another (to different liquid), please press CLEAN BUTTON.

Please clean the tubes and nozzles with water in valve #4 in order to flush the tubes of the previous liquids before switching to another liquid.

This will prevent any clogs that may occur due to chemical reactions.



Using multiple coating liquids can cause the nozzles to clogged due to chemical reaction.

#### **Start/ Stop Button**

Press the START/STOP BUTTON to start spraying your shirts with pretreat. Press the START/STOP BUTTON again to stop.

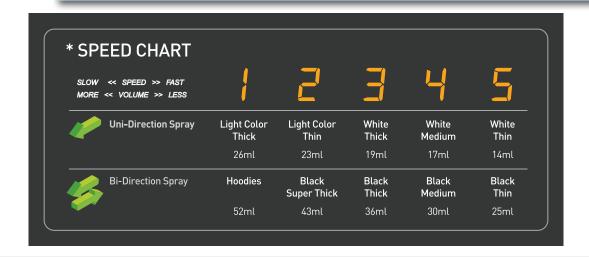


## **Switching Pretreat Solution**

- 1) When switching between pretreat solutions, close the valve by turning the valve in counterclockwise. Then, open the 4th valve which should be filled with water for cleaning.
- 2) Press the "CLEAN" button. Let the machine spray until you see no pretreat solution in the tube (7~10 secs).
- 3) Close the 4th valve (distilled water) and open the preferred valve. Press "CLEAN" button to flush out the water (7~10 secs). Once you see the tubes filled with pretreat solution, press "CLEAN" button again to stop spraying/flushing.



## **Volume Chart**



The above are general guidelines on the speed and setting to use the pretreat your shirts.

Please note that some adjustments may be needed depending on the pretreat solution you use.

If shirts are not dry using the recommended heat press settings, please repress the shirt until it is completely dry before printing.

Not all shirts will be the same, so we highly recommend you do testing on any new shirts you pretreat before going into commercial production.

\* The volume of the pretreat liquid showed on the display is provided for general information purposes only. It does not represent the accurate volume of the liquid.

ECOFREEN/ Joto will have no responsibility for the accuracy of the data and the issue which may arise from using or relying on the information.

### **Pretreatment Guide**

#### **Pretreating a Shirt**

Use the Recommended Spray Volume and Fixation Temperature

- 1. Please prepare all equipment to be turned on. **Turn ON the machine**.
- 2. If pretreatment is already loaded in the tubes, please skip steps 2 & 3. **Ensure that the pretreatment solution is loaded** into the tubes by press the CLEAN button to. This usually takes about  $7 \sim 10$  seconds.
- 3. Once you see the machine spraying the pretreat solution, press clean button again to stop the spraying.
- 4. Prepress your shirts on a heat press for 5 seconds to avoid any wrinkles prior spraying. **Load your shirt**. To avoid the shirt getting caught in the railing, please tuck the sides of the shirts to the platen.
- 5. Set the appropriate volume and spray direction settings.

The spray setting guide can be found on Page 16 & 17 of this manual. Press the START/STOP button to start spraying once you have your shirts and settings set. (Please refer to the page 13 to learn how to operate the machine)

6. **Place the pretreated shirts on the heat press to dry**\*. Place a heat-resistant release sheet, such as Teflon/Silicon sheet between T-shirt and the heat press.

\* To dry the shirt, please use the following settings:

DARK COTTON :  $320^{\circ}F \sim 340^{\circ}F$  ( $160^{\circ}C \sim 170^{\circ}C$ ),  $60 \sim 70$  seconds. BRIGHT COTTON :  $293^{\circ}F \sim 320^{\circ}F$  ( $145^{\circ}C \sim 160^{\circ}C$ ),  $35 \sim 45$  seconds.

POLY: 320F ~340°F (160°C ~170°C), 90 seconds.

The settings above are to be used as a guide. Some adjustment may be necessary. If the shirt is not dry after the recommended time, repress the shirt until dry.

Please Note: Different brands and types of shirts will require different amounts. Start with the recommended amounts on page 17 and adjust accordingly. Some testing may be required for new styles and brands of shirts. It is recommended to keep a record of how much is required for each brand/type of shirt.

### **DTG Pretreatment & Fixation Guidance**

#### Heat Press Setting for Pretreatment

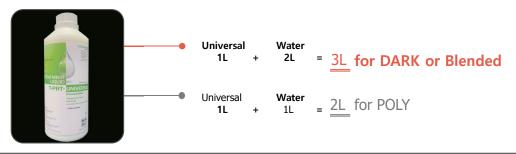
	Bright	Dark	Poly	Blended (Hoodie)
Garment	<b>Bright Cotton</b>	Dark Cotton	Poly	Blended (Hoodie)
Quantity	10-20g	20-35g	30g	50g
Volume Level on Mister T1	Volume Level 10~30	Volume Level 10~20	Volume Level 20	Volume Level 50
Spraying Level on Mister T1	Uni-Direction	Bi-Direction	Bi-Direction	Bi-Direction
Time	35-45 seconds	60-70 seconds	90 seconds	90-120 seconds
Temperature	293-320°F (145-160°C)	320-338°F (160-170°C)	320°F (160°C)	320-338°F (160-170°C)
Pressure	1.0-2.0 Bars 14-29 PSI	7.0-8.0 Bars 101-116 PSI	7.0-8.0 Bars 101-116 PSI	7.0-8.0 Bars 101-116 PSI

#### Ink Heat Press Curing Setting

	Bright	Dark	Poly	Blended (Hoodie)
Time	45-55 seconds	90-100 seconds	90 seconds	90-120 seconds
Temperature	293-320°F (145-160°C)	320-338°F (160-170°C)	320°F (160°C)	320-338°F (160-170°C)
Pressure	0-1.0 Bars 0-14 PSI	0-1.0 Bars 0-14 PSI	0-1.0 Bars 0-14 PSI	0-1.0 Bars 0-14 PSI

Note: The above conditions subject to change depending on the fabric type. Please start with the recommended amounts he liquid above and adjust accordingly.

<sup>\*</sup> Dilution Guide for I-PRETREAT-EUNI-1L



### **Maintenance**

#### **Daily Maintenance**

Press "CLEAN" button to **flush with water and clean the nozzle everyday** at the end of work.

**Never leave the filter exposed to air** to avoid the filter from drying and clogging.

Always put the filter into the pretreat or cleaning water container. (See picture on the right)





#### **Monthly Maintenance**

**Replace the filter every two months** to prevent it from getting clogged resulting in inconsistent spraying.

Please note, running the machine without filter will cause the damage of pump, solenoid valve, nozzle and inconsistent spraying.

The warranty will be void if the machine runs without placing the filter.

**Replace the sponge in capping station every two months** to prevent damaging of the nozzle and clogging it.

#### **IMPORTANT:** Try to keep the main power switch on.

This will enable automatic cleaning program which is purging for seconds by every 4 hours when not in use.



#### **Cleaning The Nozzle**

- 1) Press POWER ON/OFF BUTTON on the control panel to switch off.
- 2) Gently open top lid.



3) Turn the Nozzle Cap Nut to counter-clockwise to loosen and dislocate the nozzle.









Scan the QR CODE for the video!

### **Maintenance**

4) Clean the Nozzle Tip, Cap Nut and Sol Valve using water and wet paper tower.







#### Reference

The nozzles can be cleaned in an ultrasonic cleaner. To clean the nozzle and its parts, please fill distilled water and run it for 6~7 minutes.



#### **Storage**

NEVER LEAVE THE NOZZLES EXPOSED TO AIR.

Remaining pretreat can be dried out and stick to nozzle causing inconsistent spraying or clogging of the nozzle.

5) Assemble the Nozzle Tip and the Nozzle Cap Nut as the picture on the right.

When assembling Nozzle Tip after disconnecting and cleaning the nozzle, Please make sure the Nozzle Tip's alignment. Failure to do this will result in the pretreat not being sprayed properly on the shirt.

#### **Filter Maintenance**

#### **NEVER LEAVE THE FILTER EXPOSED TO AIR.**

Doing so will cause the filter to be clogged.

The filter is a consumable part and will need to be replaced every two months.

If your machine is not spraying liquid, check to see if the filter is clogged. Simply removed the filter from the end of the inlet tube and start spraying.

If spraying occurs after the filter is removed, it means the filter is clogged and you will need to replace it.

### **Maintenance**

#### **Self-Diagnosis: ENGINEERING MODE**

#### **Entering Engineering Mode**

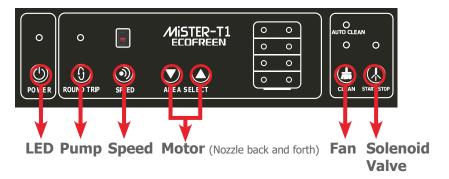
Step 1: Turning on the power switch on the back of the machine

Step 2: Push "Clean" and "Start/Stop" button together while " - " appears on the control panel



#### **Functional Check**

When pushing each button on the control panel, designated part will be running for functional check. Please refer to the picture below for designated part.



## **Troubleshooting**

# 1) I have strike lines on shirt post coating or I have an irregular spraying. What should I do?

Your nozzles or filters might be clogged. Therefore, you will need to clean the nozzles and/ or filters (see maintenance section for instructions on how to clean them) or you may need to replace them.

#### 2) My pump does not have any pressure or the spray is too low.

It could be due to the electronic valve, nozzles or filters being clogged, or the pump may be dirty or faulty. You will need to check the nozzles and filters and make sure they are clean, flush the pump with distilled water or replace it.

#### 3) The waste liquid is not draining properly.

The drain tube may be blocked or bent. Please make sure that the tube is not blocked and is positioned at a lower place.

#### 4) My control panel is not responding.

This could be due to the top cover being open, a loose connection between the display and the electronics or it may be a display failure. To fix that, you will need to check the sensor located at the hinge of the top, make sure there is a connection between the display and the electronics and/or turn off the machine and turn it back on. If that does not work, you may need to replace the display.

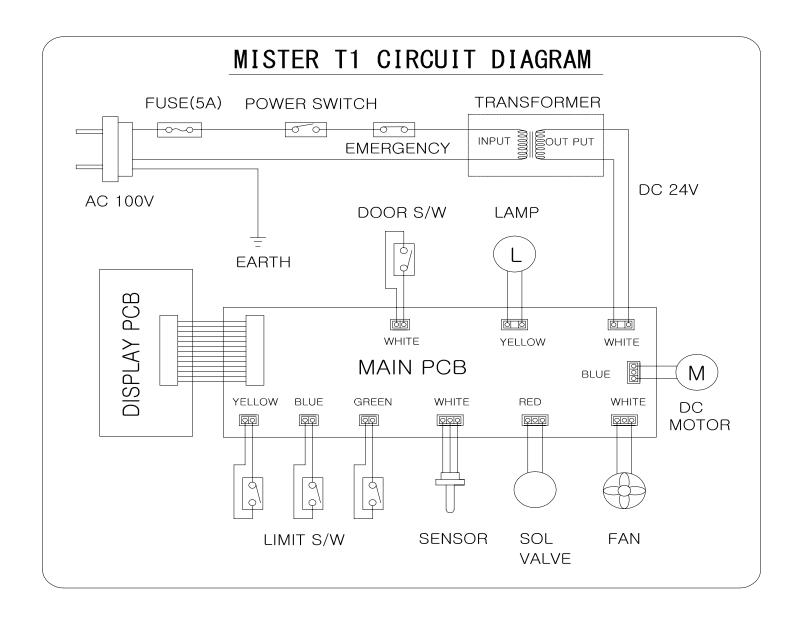
#### 5) My pretreatment machine is not turning on.

This could be due to the emergency button being on, the machine is not connect to an outlet, or that the power switch at the back is turned off. Make sure that the emergency button is off, the machine is plugged and that the power switch in the back is turned on.

#### 6) My pretreatment machine is leaking.

The machine is not levelled properly. Make sure that you adjust the level of the machine so that the front of the machine is higher than the back.

## **Circuit Diagram**



## Warranty

Warranty Terms and Conditions

**MiSTER-T1** has to be operated with a pretreating liquid for fabrics for DTG Printer. Cleaning MUST be done with water only!

Other liquids alcohol or solvent may damage pumps or other components of the machine. Damages caused by unauthorized liquids are excluded from the warranty.

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