

Product Guide



TX300P-1800 MkII

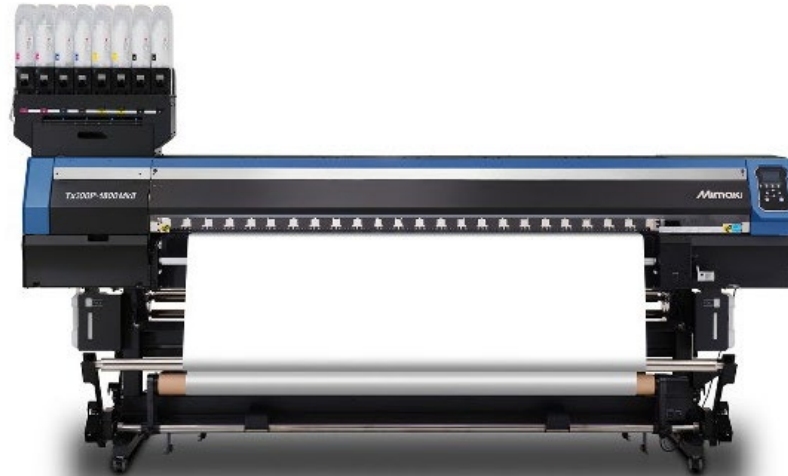


Distributed by:



National Sales & Support
866-Ink-Jets itnh.com
(465) (5387)

“Direct to Fabric” or “Paper Transfer” on 1 unit



TA Business Solution Group
Feb 6th, 2020
V0.4

The information in this document is subject to change without notice

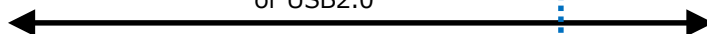
System configuration



〈PC〉



〈Connection〉
Ethernet 1000BASE-T
or USB2.0



System configuration



1. Main unit
2. Vacuum platen
3. RIP
 - RL6 Plus (Bundled)
 - TxLink4 (Optional)

Ink type

Acid dye (Ac400) : C,M,Y,K,BI,R,Or,Lk
Reactive dye (Rc400) : C,M,Y,K,BI,R,Or,Lk
Textile pigment (TP400) : C,M,Y,K,BI,R,Lk
Direct Dye-sub (Sb420) : BI,M,Y,K,Lbl,Lm
Paper Transfer Dye-sub(Sb411) : BI,M,Y,K,Lbl,Lm
Disperse dye (Dd400) : C,M,Y,K,R,Gray,Violet,Pink

*Supply: 2 litter ink pack only

Option

- Mist catch unit
- Small relay box
- 1-inch holder unit
- Slip sheet holder unit
- TxLink3 Professional/Standard

Recommended spec

CPU : Core i7 4.2GHz or more
Memory : 16GB
storage : 500GB SSD x 2*
Network : Ethernet 1000BASE-T (direct connection)*
Optical disk drive : DVD-ROM
Windows10 Pro 64bit
Monitor : 1920x1200

*Required : If specifications are not met, some print modes can possibly not work

〈Design software〉



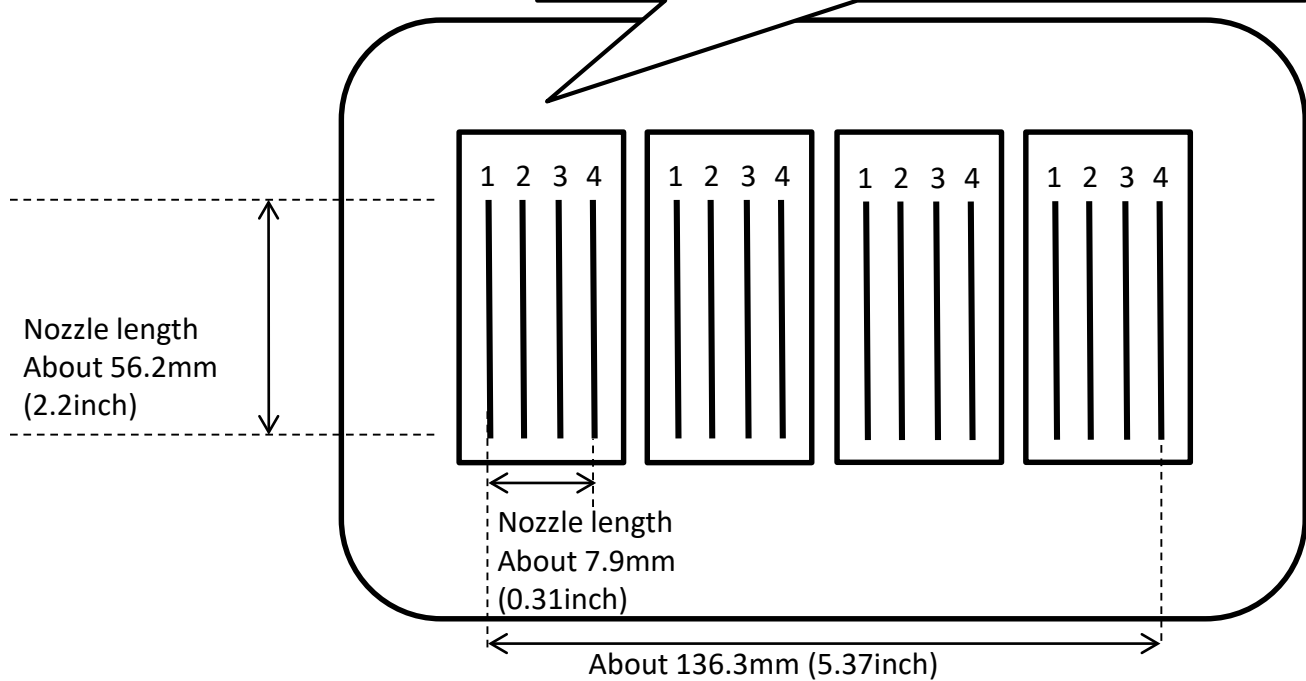
PS,EPS,TIFF,BMP,JPEG,PDF, etc.
TL3 also supports PNG.

Please use network cable of category6(CAT6).
Connection by relaying router is not supported.
When using Ethernet, please build-out printer
and RIP PC in the same network.

Print head configuration



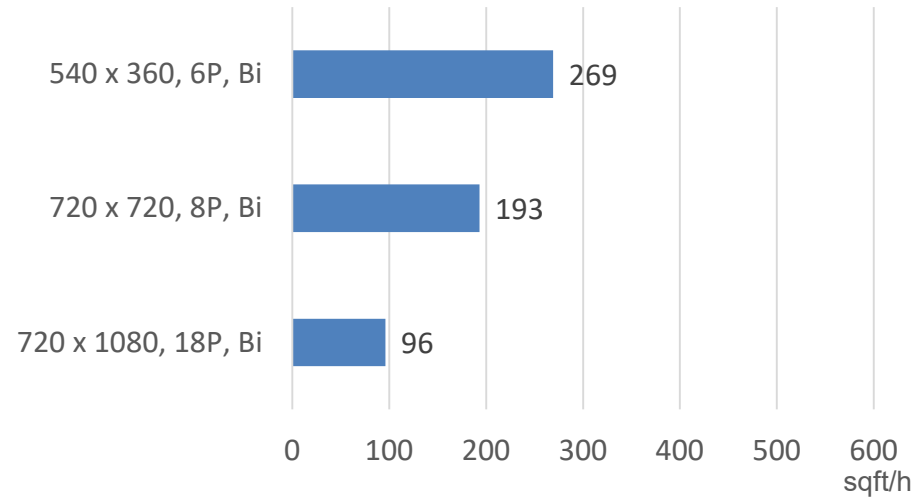
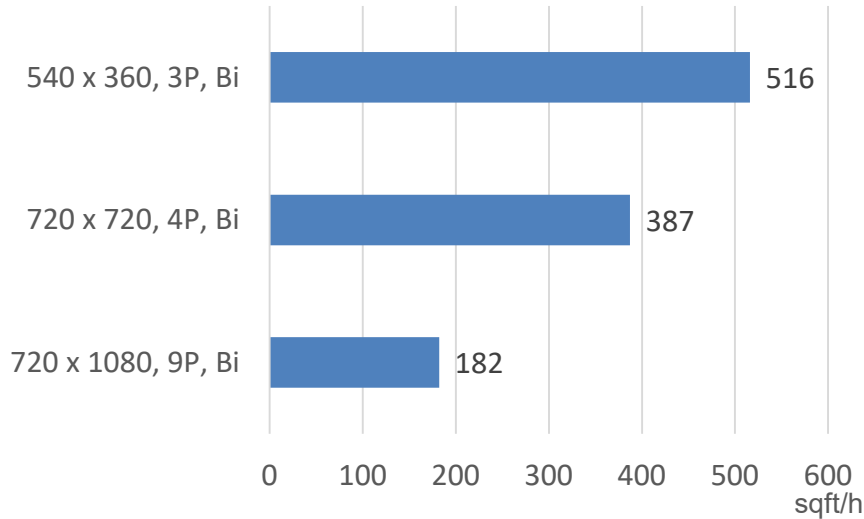
1 head : 800 nozzles (200 nozzles x 4 rows)
4 heads : Total of 3200 nozzles



Ink set configuration & Print speed



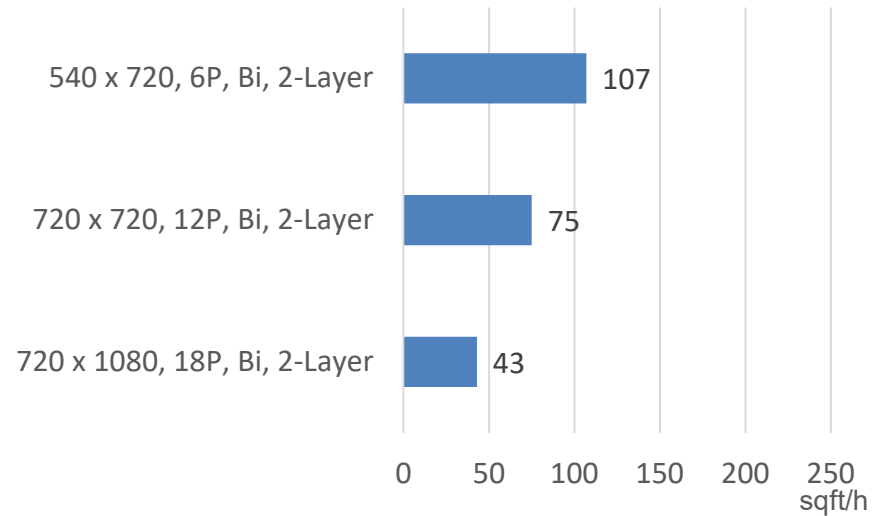
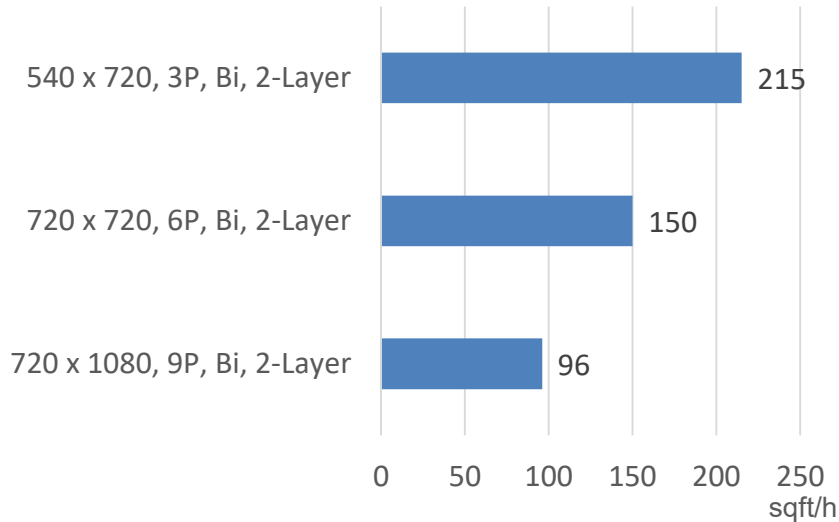
Sb420 (Direct Dye-sub)



Ink set configuration & Print speed



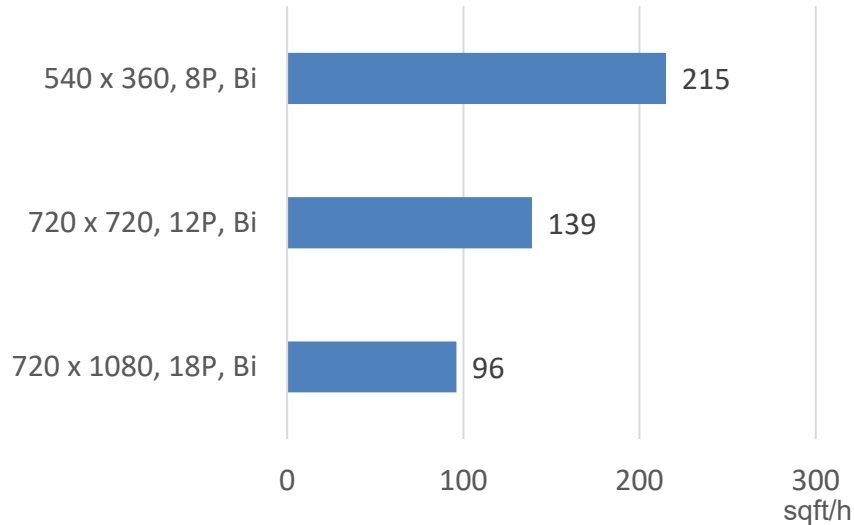
Tp400 (Textile Pigment)



Ink set configuration & Print speed



Rc400/Ac400 (Reactive dye / Acid dye)



Dd400 (High energy Disperse Dye)



Ink set configuration & Print speed (Dual Ink set)



Sb411 & Tp400



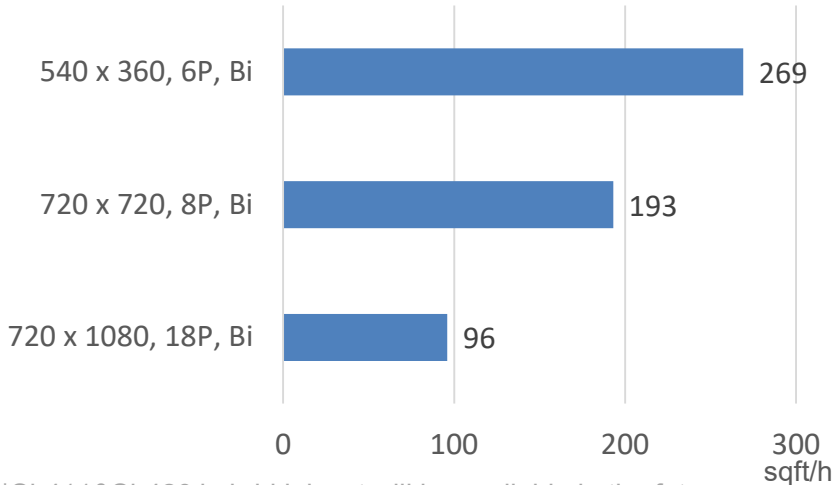
Sb411 & Sb420



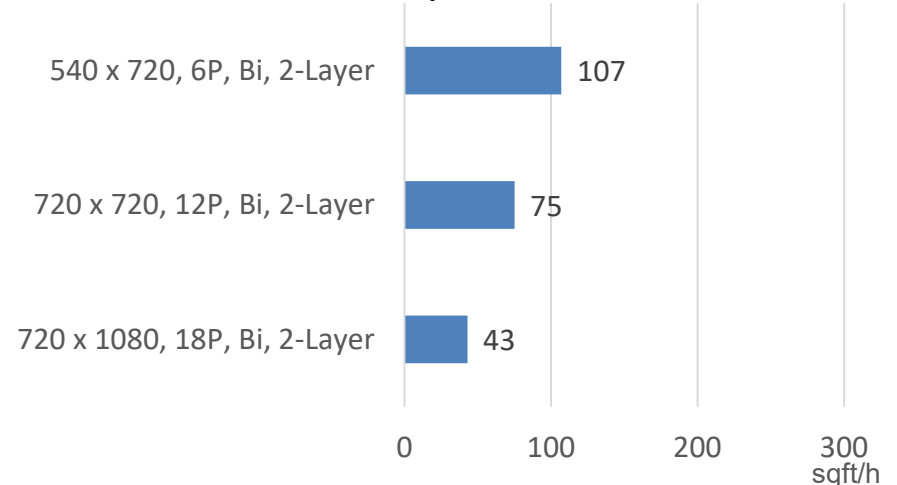
Sb420 & Tp400



Sb411 / Sb420



Tp400

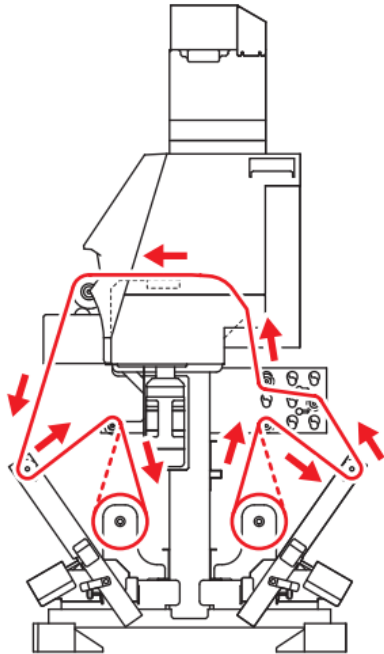
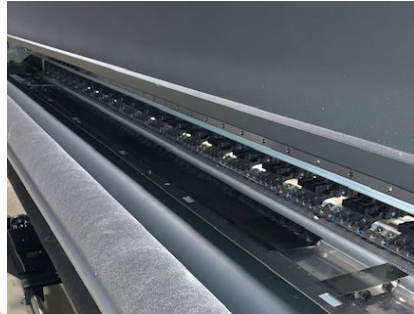


*Sb411&Sb420 hybrid ink set will be available in the future.



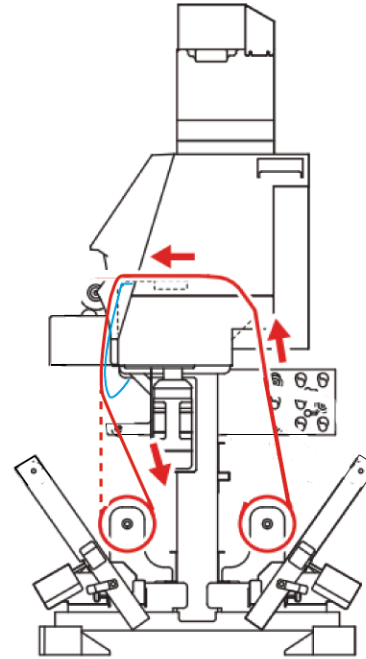
Direct to Fabric

Ditch platen



Paper

Vacuum platen



Ink Types



Ink type	Name	Features	Application	Textile
Acid dye	Ac400	<ul style="list-style-type: none"> • Produces vivid colors on protein fibers and synthetic protein fibers such as nylon. 	Apparel	Silk, Nylon*, Wool, Leather, etc.
Reactive dye	Rc400	<ul style="list-style-type: none"> • Produces vivid colors on natural fibers. • Also dyes silk and rayon with the right pre-treatment. 	Apparel, Home furnishings	Cotton, Hemp, Silk, Rayon, etc.
Textile pigment	TP400	<ul style="list-style-type: none"> • Steaming and washing processes are not required. • Simple post-printing process of heat fixing only. 	Home furnishings, Apparel	Cotton, Hemp, etc.
Disperse dye	Dd400	<ul style="list-style-type: none"> • High energy disperse dye. High UV fastness. • Steaming and washing process are required. 	Industrial textile, Home furnishings, High-grade apparel	Polyester, Acrylic, Acetate
Dye Sublimation (Direct to fabric)	Sb420	<ul style="list-style-type: none"> • Direct print to textile. Good penetration. • No transfer paper cost. 	Soft signage (Flag)	Polyester
Dye Sublimation (Paper transfer)	Sb411	<ul style="list-style-type: none"> • Paper transfer. Supports stretchy & thin fabrics. • No pre-treatment required on fabric. 	Active wear	Polyester

*Ac400 can print on nylon but the application needs to be indoor use for it's lower UV resistance.

Fiber Type and Ink Type



Fiber Type	Reactive Ink (Rc400)	Acid Ink (Ac400)	Pigment Ink (Tp400)	Disperse Ink (Dd400)
Cotton, Linen, Ramie, & Jute	⊙		⊙	
Hemp & Bamboo	⊙		⊙	
Rayon & Lyocell	⊙		⊙	
Wool, Cashmere, Alpaca, & Angora	⊙	⊙	▲	
Silk	⊙	⊙	▲	
Nylon	⊙	⊙	▲	▲
Polyester			▲	⊙
Synthetic/Cellulose Blends (Poly/Cotton)			▲	▲
Tri-acetate & Acrylic			▲	⊙

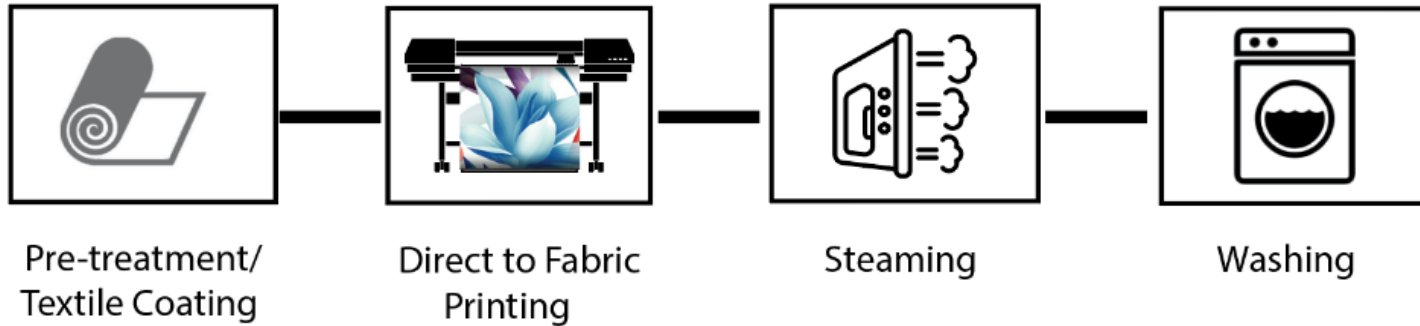
⊙ Compatible

▲ Possible

Printing process



Ac400/Rc400/Dd400*



*The finishing of Dd400 can be heat press instead of steaming.
However, the UV fastness can be lower by using heat press.

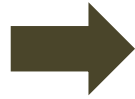
Printing process



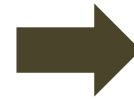
Tp400



(Optional)
Pre-treatment
Fabric



Print Direct to
fabric



Heat Set
Fabric

The pre-treatment will improve the scratch resistance and density of the color but not necessary unlike acid/reactive inks.

Printing process



Sb420



Pre-treatment
Fabric



Print Direct to
fabric



Heat Set
Fabric

Printing process



Sb411



Print on
Transfer paper



Heat Set on Fabric



TP400 fastness test result (non-pretreated textile)

Item	Test method	Textile	Non-pretreated textile							
		Color	Black		Cyan		Magenta		Yellow	
		Ink	TP400	TP250	TP400	TP250	TP400	TP250	TP400	TP250
Abrasion	JIS L 0849 II	Dry	2-3	3	3	3	3	3-4	3	3
		Wet	2-3	2-3	2-3	2-3	2-3	2-3	2-3	3
Washing	JIS L0844 A-2		4	4	4-5	4	4-5	4	4	4

TP400 fastness test result (pretreated textile)

Item	Test method	Textile	Pretreated textile							
		Color	Black		Cyan		Magenta		Yellow	
		Ink	TP400	TP250	TP400	TP250	TP400	TP250	TP400	TP250
Abrasion	JIS L 0849 II	Dry	4	4-5	3	3-4	3-4	4	4	4
		Wet	2-3	2	2-3	2	2-3	2	3	2
Washing	JIS L0844 A-2		4-5	4	4-5	4	4-5	4	4	4

*Fastness may vary depending on print conditions (ink volume) and textile (material).

*Fastness test is recommended before start production based on actual usage.

Ac400 Technical Data



Test Method		Black	Cyan	Magenta	Yellow	Light Black	Red	Blue	Orange
Light Fastness ISO-105B02		6+	3	3-4	6	5-6	3-4	3-4	4-5
Washing ISO-105 C06	Discoloration	4-5	4-5	4-5	4-5	4-5	4	4-5	4-5
	Cotton	4-5	4	4-5	5	5	5	4-5	5
	Nylon	4	4-5	5	4-5	4-5	4-5	4-5	5
Dry Cleaning ISO-105 D01	Discoloration	5	5	5	5	5	5	5	5
	Cotton	5	4-5	5	5	5	4-5	5	5
	Nylon	5	4-5	4-5	5	4-5	5	5	5
Sweat (Acid) ISO 105 E04	Discoloration	5	5	5	5	5	5	5	5
	Cotton	4-5	4-5	4-5	5	5	4-5	4-5	4-5
	Nylon	4-5	4-5	3	4-5	5	3	4	4
Sweat (Alkaline) ISO 105 E04	Discoloration	5	5	5	5	5	5	5	5
	Cotton	4-5	4	4	4-5	5	4	4-5	4-5
	Nylon	4-5	4-5	3	4-5	5	3-Feb	4	4
Water ISO 105 E01	Discoloration	5	5	5	5	5	5	5	5
	Cotton	4-5	5	4	4-5	5-Apr	5-Apr	5-Apr	5-Apr
	Nylon	4-5	5	2-3	5-Apr	5	3	4	5-Apr
Abrasion ISO-105 X12	Dry	3-4	5-Apr	4	4	5-Apr	4	4	4
	Wet	4-5	5-Apr	4	5-Apr	5-Apr	5-Apr	4	5-Apr
Free formaldehyde (Acetylacetone method) JIS L 1041		Less than 0.05	Less than 0.05	Less than 0.05	Less than 0.05	Less than 0.05	Less than 0.05	Less than 0.05	Less than 0.05

*Fastness may vary depending on print conditions (ink volume) and textile (material).

*Fastness test is recommended before start production based on actual usage.

Rc400 Technical Data



		K	C	M	Y	LK	R	BL	OR
Light fastness JIS L 0842		4	4-5	3-4	6	3	4	5	4
Washing JIS L 0844	Discoloration	4-5	4	4-5	4-5	4-5	4-5	4-5	4-5
	Pollution (Cotton)	5	4-5	5	5	5	5	5	5
A-2	Pollution (Silk)	5	5	5	5	5	5	5	5
Sweat (Acid) JIS L 0848	Discoloration	5	5	5	5	5	5	5	5
	Pollution (Cotton)	5	5	5	5	5	5	5	5
	Pollution (Silk)	5	5	5	5	5	5	5	5
Sweat (Alkaline) JIS L 0848	Discoloration	5	5	5	5	5	5	5	5
	Pollution (Cotton)	5	5	5	5	5	5	5	5
	Pollution (Silk)	5	5	5	5	5	5	5	5
Water JIS L 0846	Discoloration	5	5	5	5	5	5	5	5
	Pollution (Cotton)	5	5	5	5	5	5	5	5
	Pollution (Silk)	5	5	5	5	5	5	5	5
Abrasion JIS L 0849 II	Dry	5	4-5	4-5	4-5	5	4-5	5	4-5
	Wet	2-3	2-3	2-3	3-4	3-4	2-3	3	2-3
Hot pressing JIS L 0850 (Dry)	Discoloration	5	5	5	5	5	5	5	5
	Pollution	4-5	5	5	5	5	5	5	5
Hot pressing JIS L 0850 (Moisturized)	Pollution	5	5	5	5	5	5	5	5
	Discoloration	4-5	5	5	5	5	5	5	5
Chlorinated Water (20mg/L) ISO-105 E03	Discoloration	4-5	2-3	4	4-5	4-5	4-5	3	4-5
Free formaldehyde JIS L 1041		≤0.05	≤0.05	≤0.05	≤0.05	≤0.05	≤0.05	≤0.05	≤0.05

*Fastness may vary depending on print conditions (ink volume) and textile (material).

*Fastness test is recommended before start production based on actual usage.

Sb420 Technical Data



Test items	Test Method	Ink		Sb420	Sb420	Sb420	Sb420
		Color		DK	M	BL	Y
Light Fastness	JIS L 0842			4	4-5	3-4	6
	ISO-105 B02			4	4-5	4-5	6
Washing	JIS L 0844 A-2	Discoloration		4-5	4-5	4-5	4-5
		Pollution	Cotton	4-5	4-5	4-5	4-5
			Silk	4	4-5	4	4
Dry Cleaning	JIS L 0860 A-1	Discoloration		5	4-5	5	5
		Pollution		5	5	4-5	5
Sweat	JIS L 0848	Discoloration(Acid)		5	5	5	5
		Pollution (Acid)	Cotton	4	4-5	4-5	4-5
			Silk	3-4	4-5	4	4-5
		Discoloration(Alkaline)		5	5	5	5
		Pollution (Alkaline)	Cotton	4	4-5	4-5	4-5
Silk	3-4		4-5	4	4-5		
Water	JIS L 0846	Discoloration		5	5	5	5
		Pollution	Cotton	4	4-5	4-5	4-5
			Silk	3-4	4-5	4	4-5
Abrasion	JIS L 0849 II	Dry		3	3	4	4
		Wet		2	2-3	2-3	3
Sublimation	JIS L 0854	Discoloration		4-5	4-5	4-5	4-5
		Pollution	Cotton	3	3-4	4	4
			Polyester	2-3	3	3-4	3
Chlorinated water	JIS L 0854 A	Discoloration		4	4-5	4	4-5

*Fastness may vary depending on print conditions (ink volume) and textile (material).

*Fastness test is recommended before start production based on actual usage.

Dd400 Technical Data



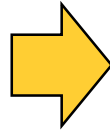
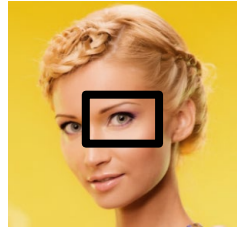
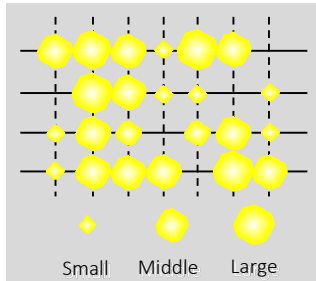
Test items	Test Method	Ink		Disperse dye ink Dd400			
		Color		K	C	M	Y
Light fastness	JIS L 0842			5-6	6	5-6	6
Washing	JIS L 0844 A-2	Discoloration		5	4-5	4-5	5
		Pollution	Cotton	4-5	5	5	5
			Silk	4-5	5	5	5
Dry Cleaning	JIS L 0860 A-1	Discoloration		5	5	5	5
		Pollution		5	5	5	5
Sweat	JIS L 0848	Discoloration (Acid)		5	5	5	5
		Pollution (Acid)	Cotton	5	5	5	5
			Silk	4-5	4-5	4-5	5
		Discoloration (Alkaline)		5	5	5	5
		Pollution (Alkaline)	Cotton	5	5	5	5
Silk	4-5		4-5	4-5	5		
Water	JIS L 0846	Discoloration		5	5	5	5
		Pollution	Cotton	5	5	5	5
			Silk	4-5	4-5	4-5	5
Abrasion	JIS L 0849 III	Dry		5	5	5	5
		Wet		5	5	4-5	5
Sublimation	JIS L 0854	Discoloration		5	5	5	5
		Pollution	Cotton	5	5	5	4-5
			Polyester	5	5	5	5

*Fastness may vary depending on print conditions (ink volume) and textile (material).

*Fastness test is recommended before start production based on actual usage.



- **Grainy appearance reduction system**
 - It selects the 3 optimum drop sizes, depending on print mode



Fixed dots

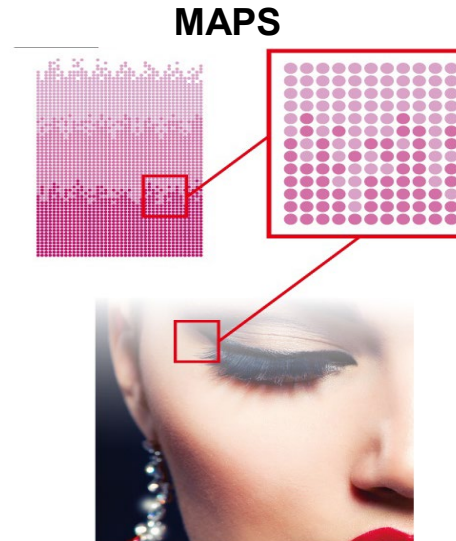
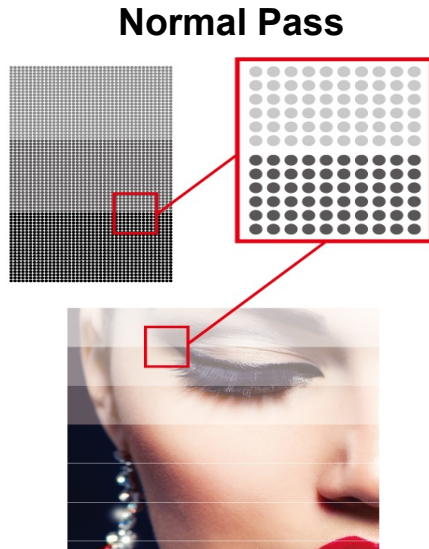


Variable dots





- **Advanced pass system can massively improve output quality**
 - MAPS4 works in the higher pass modes of each resolution
 - Dispersing ink dots in optimal order between passes
 - Masking large color area and bi-di stripes



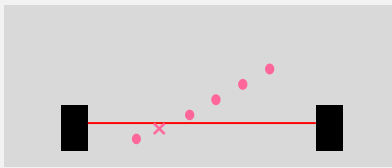


- **Automatic maintenance for non-stop printing**
 - Continuous unattended operation by interlocking the NCU and NRS
 - Requires less checking time and less media waste, compared to competitors

NCU (Nozzle Check Unit)

Automatically detects nozzle clogging. When clogging is found, the nozzles are automatically cleaned.

Infrared light detects missing ink droplet(s)



NRS (Nozzle recovery system)

When the clogged nozzle is not resolved by cleaning, the defective nozzle is substituted by working nozzles automatically.

2 ways of NRS

- Manual input by operator: Max. 10 nozzles per 1 nozzle line.
- Automatic input by NCU: Max. 16 nozzles per 1 nozzle line.

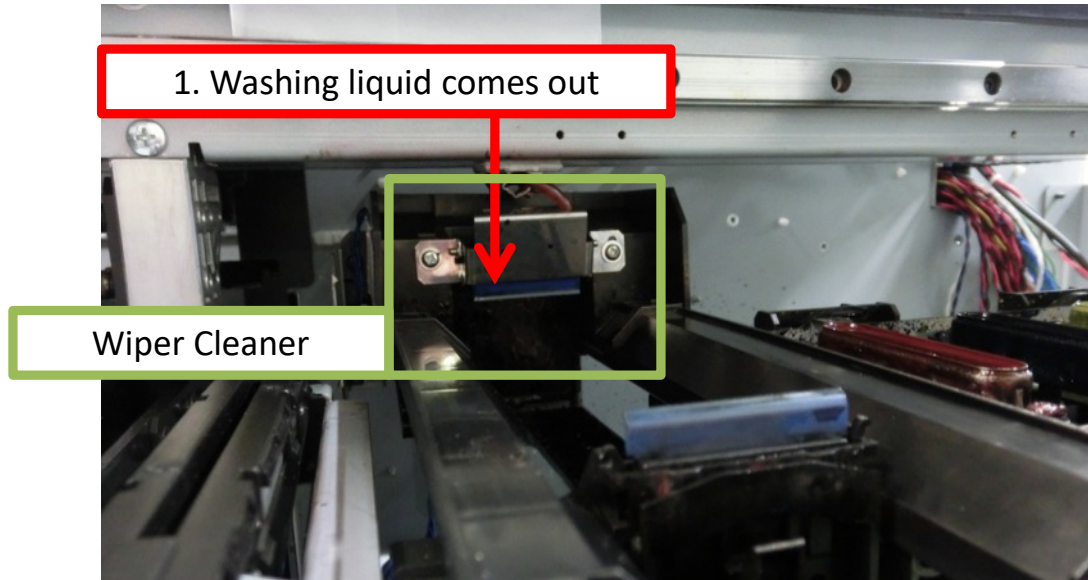


- More production with MBIS (Mimaki Bulk Ink System)
 - Less down-time by continuous printing
 - Large 2L ink pack saves running cost
 - Installed onto the printer for more working space
- UISS (Uninterrupted Ink Supply System)
 - In 4 color ink set, when the ink runs out from one pack, ink is automatically supplied from the other pack for the continuous operation
 - *UISS works only in 4 color ink set.
- Non-Stop ink replacement
 - Less down-time by ink changes during production (4C ink set)
 - *The function is not available in 8 color ink set.

Core Technologies – Automatic Wiper Cleaning



- The ink on the wiper is automatically removed after cleaning
 - Less and easier daily maintenance, because the wiper is cleaned automatically
 - Since the ink on the wiper is removed, it keeps the nozzle surface clean and supports a stable firing of the ink

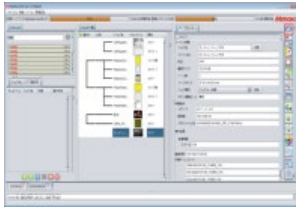




RIP Software



【Intuitive Operation】



1

The main information is in one screen. The status of printer, the progress of ripping, the status of job can be checked at a glance. Nesting or composition of job are displayed visually.



2

The visual icons on the right side of the screen allows for the easy and quick setting of the print condition.



3

Frequently used setting can be registered as “My Favorite”. Up to 30 settings can be registered.

【Useful functions】

- Color chart creation
The color charts of RGB/CMYK/Spot color can be created easily
- Step & Repeat function
- Print finish time calculation
- Ink amount calculation
- Print progress display
- Automatic arrangement function
- Profile batch printing
The best profile can be found easily when trying to print on media which has never been used before.
- Web update function



1. New features

- a. PDF data with transparent effect is faithfully represented by rendering system
- b. 16bti rendering improves gradation
- c. Improvement work rate by parallel RIP printing
- d. Step & Repeat is applicable to EPS/PDF file format

2. Variable printing function specialized in apparel use

- a. Logo outline, coloring, Arch shape options
- b. Converting payer number, player's name data to variable data for production of team uniform
- c. Defining variable data as a csv file

3. Improved usability

- a. Automatic image arrangement, Alignment, media length option printing
- b. Realtime preview by Step & Repeat
- c. Header/ footer printing of customer data and saving the data to job record

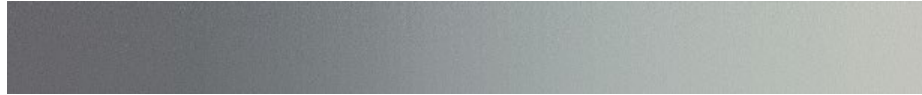
TxLink4 New Features – 16 bit Rendering (for Raster data & PDF)



TxLink3 (8 bit)



TxLink4 (16 bit)



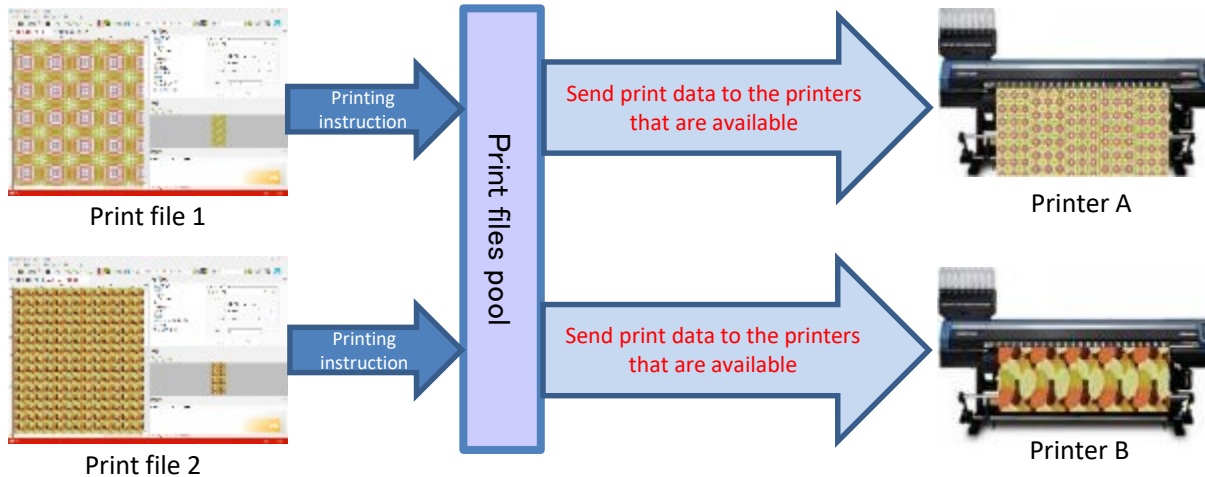
No.	Vector/Raster	Format	rendering	notes
1	Raster data	TIFF	16bit	Gray, Lab color spae:8bit
2		PSD	16bit	
3		JPEG	16bit	Gray, Lab color spae:8bit
4		PNG	16bit	Gray, Lab color spae:8bit
5		BMP	16bit	Gray, Lab color spae:8bit
6	Vector data	EPS	8bit	Gradation is not improved
7		PS	8bit	Gradation is not improved
8		PDF	8bit / 16bit	Default: 16bit TxLink3 capability mode: 8bit

The color may change from TxLink3 due to upgrading to 16 bit rendering.

TxLink4 New Features – Printer Pool



Load balancing: Automatically send print files to the printers that are on standby



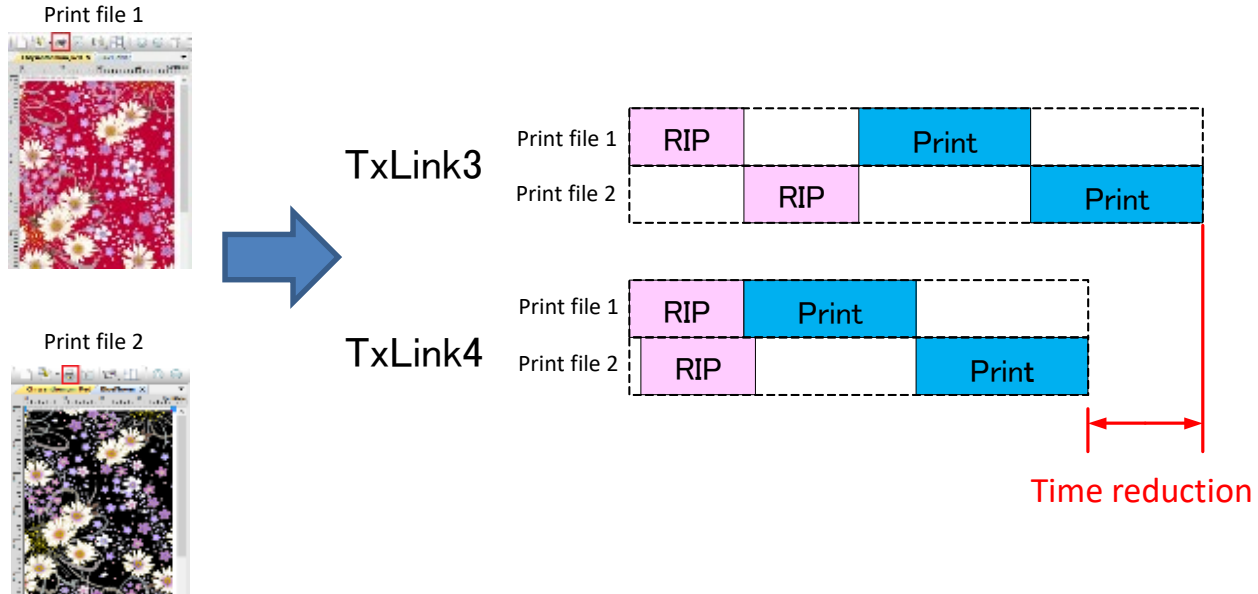
Notes:

1. Need to purchase additional printer license per printer.
2. The printers need to be the same model and ink sets.

TxLink4 New Features – Parallel RIP



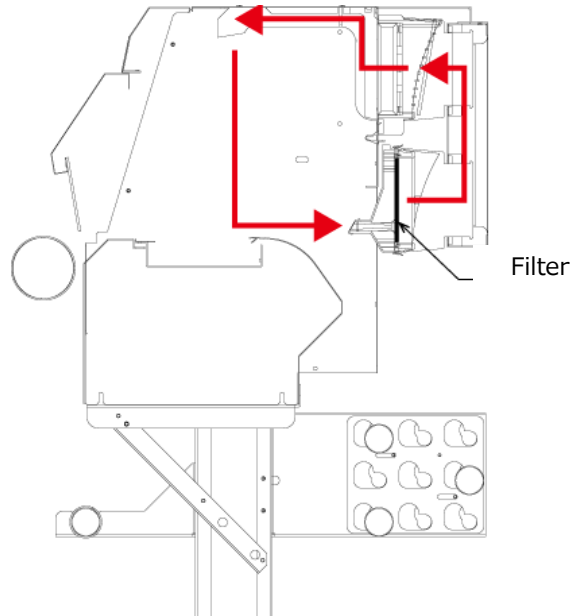
Up to 8 print files can be processed at the same time *Additional license needs to be purchased.



Option – Mist Catch Unit



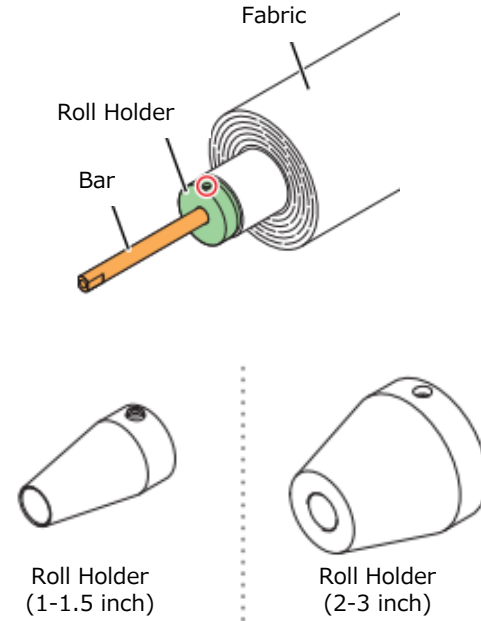
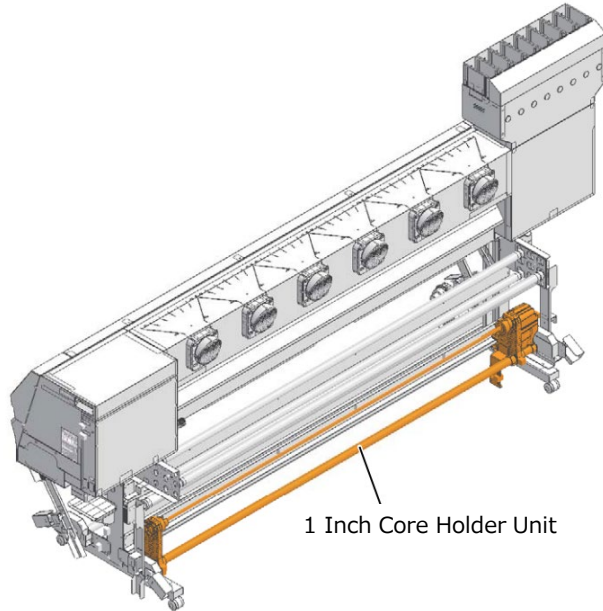
- Circulate air inside printer and remove ink mist generated during printing by filter
- Prevent from discharging ink mist from printer



Option – 1 Inch Core Holder Unit



- This option holds 1 inch, 1.5 inch, 2 inch, and 3 inch paper core

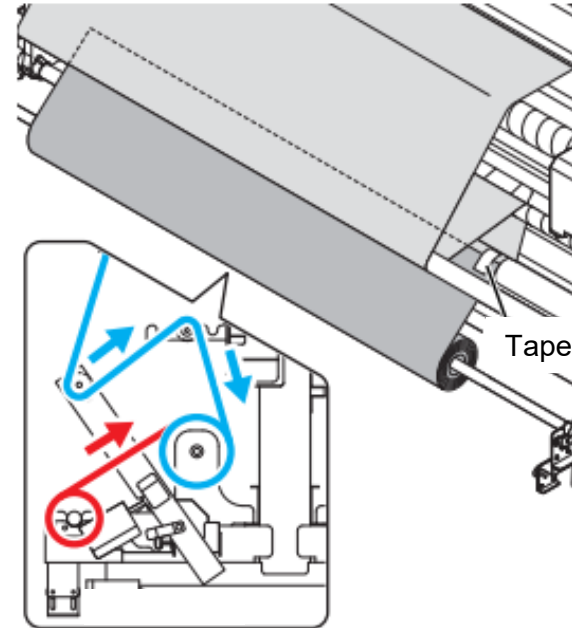
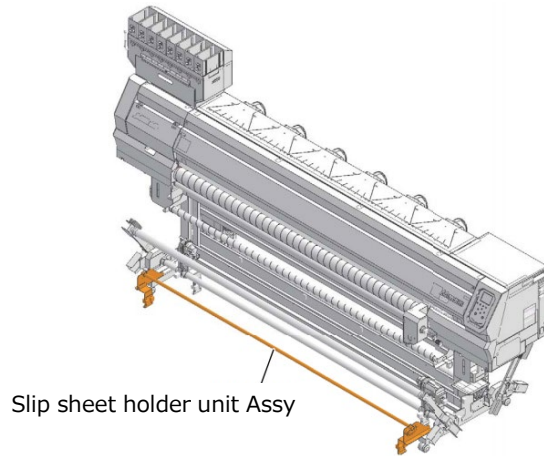


- The media can be only set in the middle when using this option.
- The max media width/weight differs depending on the diameter of the core - 1inch:1,850mm (75lbs) / 1.5 inch:1,930mm (75lbs)

Option – Slip Sheet Holder Unit



- The paper is taken up together with fabric to avoid blocking when printing with high ink volume

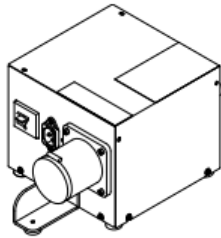


- The use of slip sheet with long media may cause skew.
- If skew occurred, please reset media or slip sheet.

Option – Small Relay Box

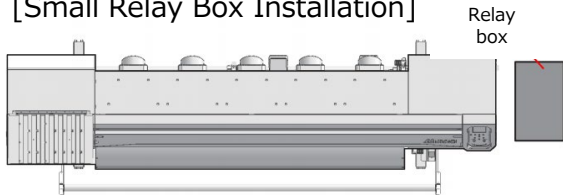


- Please use relay box when using 3rd party external dryer
- Relay box stops power supply when printer stops



Synchronize power supply to external heater and printer by connection this relay box

[Small Relay Box Installation]



- Please install on floor beside printer's operation panel

[Specifications]

Items	Specifications	Remarks
Power requirements	Single-phase AC100-120V/12A AC200-240V/8A	Depend on heaters
Power consumption	1440VA / 1920VA or less in total	Depend on heaters
Heater power allowance	1440VA / 1920VA or less in total	
Compatible heater type	Electric type heater with use of resistor or lamp	Heater must be turned on/off in power supply side
Installation environment	Conforms to printer specs.	
Weight	10kg or less	Exclude options
Dimensions	190(W)×280(D)×160(H) mm	Exclude options

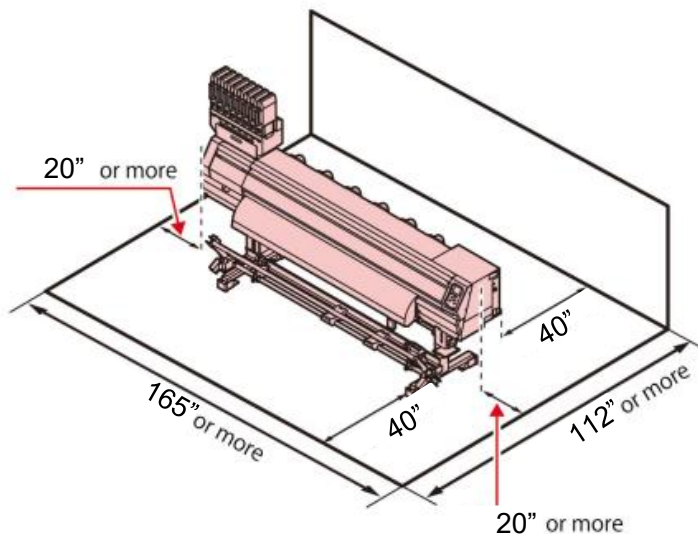
- Connection of relay box and external heater must be carried out by qualified electrical engineers
- External heater must be turned on/off by power supply (Other means such as software control is not supported)
- Do not use the heater which does not meet required specifications to avoid malfunctions and fire
- Mandate the use of relay box to prevent fire from touching heater and media when printer stopped

Crate specifications & Installation Environment



- Crate specification

Width	Depth	Height	Weight	Manpower
130" (3,305mm)	29.5" (750mm)	46.2" (1,175mm)	lbs (Kg)	4 people



1. Do not install on the weak surface floor.
2. Make sure to use in a ventilated environment.
 - Environmental temperature: 20°C-30°C
 - Quality assurance temperature: 20°C-25°C
 - Humidity: 35-65%Rh (no condensation)
 - Temperature gradient: $\pm 10^{\circ}\text{C/h}$ or less
 - Dust: Equivalent to office environment
3. Do not install on carpets, etc because those are easy to be charged, and it can effect the image quality.
4. Ink odor generates. Please use the machine in a well-ventilated environment.
5. Do not install in the place where using a photograph fixer or the place with acid steam like acetic acid, hydrochloric acid.

Specifications



Printhead	On-demand piezo head (4 print heads, in-line alignment)
Print resolution	360 dpi, 540 dpi, 720 dpi, 1080 dpi (Supported resolution depends on ink type)
Drop size	Minimum 6pl, Maximum 24pl (Varies depend on ink type)
Head height	Manual adjustment (2.0mm~7.0mm) *Standard:3mm
Ink type	Sublimation dye ink : Sb411/Sb420 , Disperse dye ink : Dd400 , Textile pigment ink : TP400 , Reactive dye ink : Rc400 , Acid dye ink : Ac400
Ink capacity	2L ink pack
Core diameter	2-inch / 3-inch * Needs 1-inch holder unit when loading 1-inch core
Max. media width	1,920mm (Max print width : 1,920mm) / 1-inch core: 1,850mm (Maximum print width : 1,850mm)
Media thickness	1.0mm or less
Media type	Transfer paper or woven fabric
Roll weight	40kg or less/ 34kg or less when 1-inch holder unit is used with 1,800mm width *Maximum weight after printing
Dimensions(Printer)	126" x 38" x 73" / 3,200mm(W) x 965mm(D) x 1,857mm(H)
Weight(Printer)	562 lbs (TBD) *This is the weight of the previous model - TX300P-1800.
Weight(Packing)	Kg (TBD)
Power supply	Single phase (AC100~120V/200~240V ±10%)×1 50/60Hz±1Hz
Interface	For print data: USB 2.0 Hi-speed / Ethernet 1000BASE-T For e-mail: Ethernet 10BASE-T / 100BASE-TX / 1000BASE-T
Safety standard	VCCI Class A / FCC Class A / UL60950-1ETL / CE Marking(EMC, Low voltage, Machinery) CB report / RoHS / REACH / EnergyStar / RCM