

PP2512UV/KM1024

Installation Manual v1.0




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 ***Before read this manual, please reading User Manual carefully firstly. It will help you building a overall concept of the machine, and make you on the road quickly.***

Chapter 1 Safety Introduction

This chapter introduces the important safety information. Please read and understand the safety information carefully before operating the printer.

1.1 Safety Information

FLORA printer uses the following chemical substances

- All kinds of printing media
- UV Ink
- Cleaning liquid (UV Flush)

1.1.1 Solvent and Ink Properties

- Solvent and Ink are flammable.
- Eye contact with the ink and solvent will break the cornea and weaken the eyesight.
- Contact lens should not be worn when operating printer or when there is no proper ventilation.
- Wear safety glasses and gloves while flushing print heads, ink tube or moving the ink bottles or containers.
- Solvent and ink can be irritating to eyes, throat and skin. Inhaling the ink fumes would result in swoon or other symptoms.
- Solvent vapors are heavier than air and may flow and gather in low spot.



This caution symbol represents danger. If this sign is ignored it may lead to serious injury or damage to the printer.

Danger of Fire and Explosion

Open flames, heat energy or spark around the printer can trigger fire and explosion.



- No smoking, pilot lights, open flames, stoves, heaters or halogen lights should be turned on within 5m distance from any edge of the printer.
- No portable spark-producing equipment (static, electrical or Mechanical) within 5m distance from any edge of the printer.

1.1.2 Anti-ultraviolet radiation



- Wear UV protection glasses and gloves when operating the machine and avoid being too closer to UV lights.
- When doing maintenance task or being close to the flatbed machine, UV lights must be shut off or close all UV protection doors.

1.1.3 Proper Ventilation and Exhaust System



- The vacuum exhaust system must be functioning before the printer operates.
- Do not ignore this safety warning sign to avoid accumulation of flammable fumes in the area.

1.1.4 Ink and solvent spillage, a potential risk of Fire and explosion



- Store ink and solvent in proper cabinet for flammable liquid storage.
- Keep ink and solvent containers tightly closed at all times. If a container has sign of damage/leakage, fix or replace it immediately.
- Clean ink or solvent spillages as soon as possible.
- Only use dry powder, or carbon dioxide type of fire extinguishers.

1.1.5 High voltage may shock people or trigger a fire



- If there's no emergency power switch which can shut down all the power, do not connect the printer to main-power supply.
- When the machine's power is on, do not open the back cover of machine, or avoid touching electrical parts.
- The printer or other equipments should be grounded, according to the local safety electrical connection regulation. The ground voltage should be less than 3 V.
- Set the machine on smooth ceramic tile or cement ground
- Use specified anti-static floor mat to minimize harmful static build-up.

1.1.6 Printing media rolls are bulky and very heavy



- Wear hand and foot safety protection gear when loading, unloading and handling media to avoid serious body injuries.
- Use proper heavy duty handling equipment if available.

1.2 Fireproofing

Ink and solvent should be clearly labeled and stored in a specific area for flammable liquid and should be in accordance with local regulations of fireproof and safety standard. Ensure that the specified fire extinguisher is always available near the storage area and should be cleared from any obstacle in case of emergency.

1.3 Exhaust System

The printing area should be equipped with sufficient exhaust system. The exhaust should be installed in such a way build up of fumes is minimized. Best location for the exhaust should be at lowest level, this way the fumes build-up is minimized. Solvent fumes are heavier than air, so fumes build-up concentrates on the lower level of the room.



Electrical installations inside the printing area must be in accordance with local Electrical Safety Regulation

1.4 Handling Precautions

1.4.1 Power Supply

1. Install the printer near an easily accessible electrical outlet.
2. Do not provide power to the printer through the same power line as for other noise generating devices such as motors.
3. Use a power supply matched with the printer specification.
4. Connect the power cable directly to an electrical outlet. Do not plug several devices into one electrical outlet.

1.4.2 Printer

1. Do not place anything on top of the printer.
2. Do not rest your elbows on the printer.
3. Open and close the top cover gently from the front of the printer with both hands.
4. Before connecting or disconnecting the interface connector, turn the printer OFF.
5. Do not clean the surface of the cover with benzene or paint thinner. The coating may come off or deteriorate. Wipe the cover with a soft cloth, if the cover is very dirty, use a cloth moistened with a neutral detergent.
6. Do not touch the ink jet head surface.

1.4.3 Regular Inspection and Maintenance

The following regular inspection and maintenance must be performed in terms of characteristics of the UV-curable ink:

1. Clean the carriage unit and the flat table conveyor surface every day.
2. Make sure that the carriage covers are always replaced.
3. Perform ink supply circuit and print head cleaning when leaving the printer for a long time (2 weeks or more with no power).
4. Perform head cleaning after leaving the printer idle for a long time.
5. Shut off the UV lamp whenever the printer is not in use.

1.4.4 Consumables

1. Always use the recommended consumables (printing media, ink, ink filters). Failure to follow this instruction may cause poor printing quality and breakdown.
2. Do not use ink past the expiration date as this may cause a print head breakdown and poor printing quality.
3. Put a used ink bottle into a plastic bag and dispose of it as an industrial waste. Observe local regulations for disposal of waste ink bottles.
4. Avoid spilling ink into your skin or clothes. Wash any ink off immediately with soapy water.
5. Check the waste ink container everyday so as not to permit waste ink to leak from your printer.
6. If the waste ink container is being installed or removed, spread a stain preventing sheet so as not to stain the floor with spilled ink.
7. Store ink in a dark and cool place. Never store the ink in high temperatures or direct sunlight, doing so may cause the ink to deteriorate.

Chapter 2 Installation preparation

This section provides the necessary information to install and operate the printer. Familiarize yourself with the basic of the printer before reading Section 2.

2.1 Operating Conditions

This section describes the operating conditions for the printer.

2.2 Installation Space

There must be sufficient space around the printer for the replacement of frequently used parts, for the output of the printed media and for ventilation. In addition, maintenance space, shown below, is required to repair the printer or replace components.

2.3 Environment Conditions

2.3.1 Operating temperature and humidity levels

The printer should be used within the temperature and humidity ranges as shown below;

Temperature: 20 °C to 30 °C

Humidity: 30% to 70%

- ✚ To obtain better print quality, use the printer within temperature of 20 °C to 25 °C.
- ✚ When the operating temperature is lower than 20 °C or higher than 40° C, printing speed is reduced to two-thirds of normal print speed to maintain good print quality.

2.3.2 Places where the printer must not be installed

Do not install the printer in the following places:

- ✚ A location near a fire
- ✚ Places exposed to direct sunlight
- ✚ Places subject to vibration
- ✚ Places with excessive dust
- ✚ Places subject to extreme changes in temperature or humidity
- ✚ Places near an air conditioner or a heater
- ✚ Places where the printer may get wet
- ✚ Places near a diazo copier that may generate ammonia gas
- ✚ Places with poor ventilation
- ✚ Unstable place

2.4 Consumables

2.4.1 Available Media Types

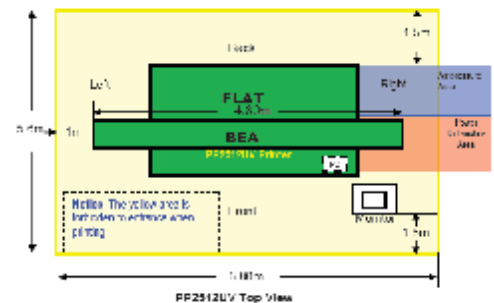
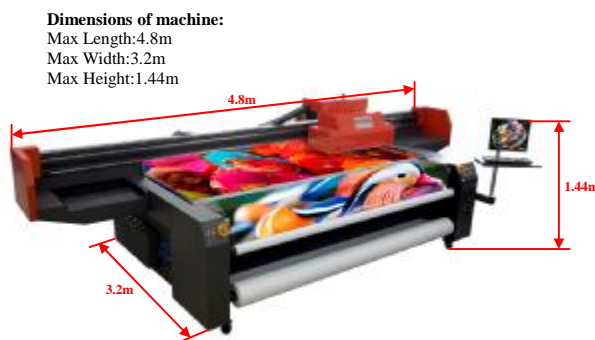
The following types of media are available:

- ü Paper /Advertising banner /PVC/ Glass Sheets
- ü Ceramics/ Steel Sheets/ Acrylic Boards
- ü KT Boards/ PVC Boards/ Foam Boards

Chapter 3 Pre-Installation

3.1 Pre-Installation Requirement

- Ø The minimum working area should be 680 cm x 560 cm, this includes the space for the operator to move around the machine conveniently and safely.



- Ø Prepare the necessary AC plug on the power cord attached to the machine. Please see the Technical Specification table for the power requirements.

Power specification:

- Rated voltage: 220VAC (±5%)
- Rated current: 35A
- Input power frequency: 50/60HZ
- Phase: Single-phase

- Ø If the PC is not supplied with the machine, customer must meet the minimum PC specification requirement to be used in this machine.

- ü Intel Core 2 Duo, Pentium IV 2 GHz, 2G RAM, 250G Hard disk
- ü DVD Drive,
- ü USB Port for Hardware Key and USB cable
- ü Windows XP Professional Service Pack 2/Windows 7 32 bit.
- ü LCD monitor

- Ø Safety signs must be available within the working area.
- Ø Exhaust System must be provided for the solvent and Ink fumes. Please note that fumes are heavier than air so it is most likely the concentration happens at the lower level of the room.
- Ø Lightings should be sufficient enough.
- Ø Flammable Storage Cabinet for the Ink and flushing solution stock is highly recommended to secure them very well.
- Ø Waste Container should be available for ink and flushing liquid waste as well as ink/solvent contaminated cloth inside the Printing area.
- Ø Waste disposal should be in accordance with your local laws governing Hazardous Waste Disposal

3.2 Pre-Installation

Once the machine is placed and all spare parts are checked, start doing the following pre-installation activities.

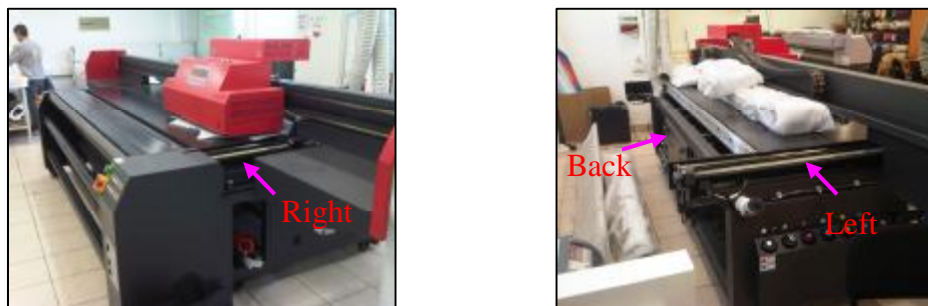
3.2.1 Install all the machine's parts back to the position.

- Ø Dismount the Anti-crash blocker to right.



F *The pack position is only for fix and avoid the carriage shaking during transportation,so when installation,it must been moved to working position.*

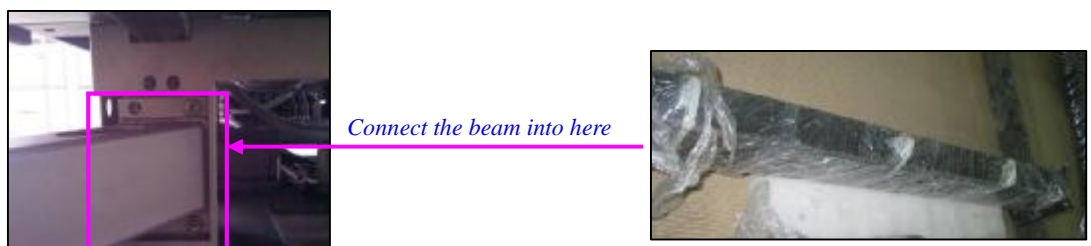
- Ø Install the Left,Right&Back cover plate back to machine.(Only for roll to roll model machine)



F *Because the width of roll to roll model machine is too big to fit the packing container,so in factory the cover plate been disassembled.*

- Ø Install Monitor bracket and Monitor.

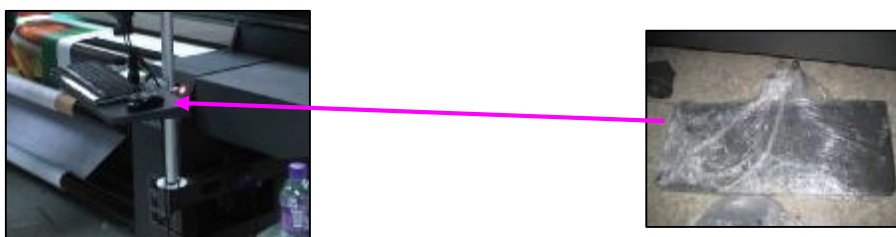
Step1. Install the main beam.



Step2. Install the vertical bracket.



Step3. Install the keyboard tray.



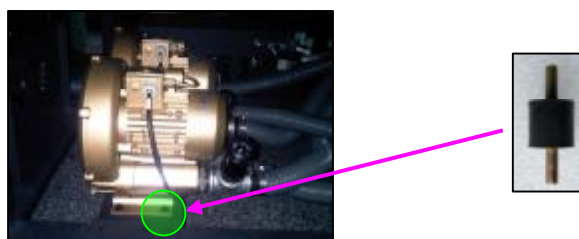
Step4. Install monitor.



Ø Install platform fan damping plastic screw.

Step1. Remove all the fastening screw firstly.

Step2. Put the damping screw under the fan then tighten them.



F The function of damping screw is to decrease the shaking and noise of fan. Because it's easy to broken during transportation, so it need to been installed on working place. Genernally, it been packed along with the computer beam, find it firstly.

Ø Fix the footed screw and adjust the level of machine.

There have four footed screw in four corner of machine. Fix them to the ground and adjust the level of whole machine.



Footed screw

3.2.2 Connect electricity power and compressed air.

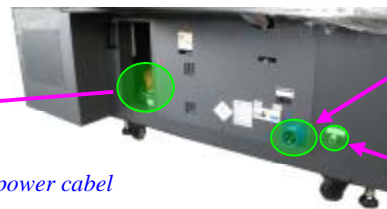
Ø Connect machine's power plug, compressed air tube and USB cable.



USB cable

Main power cabel

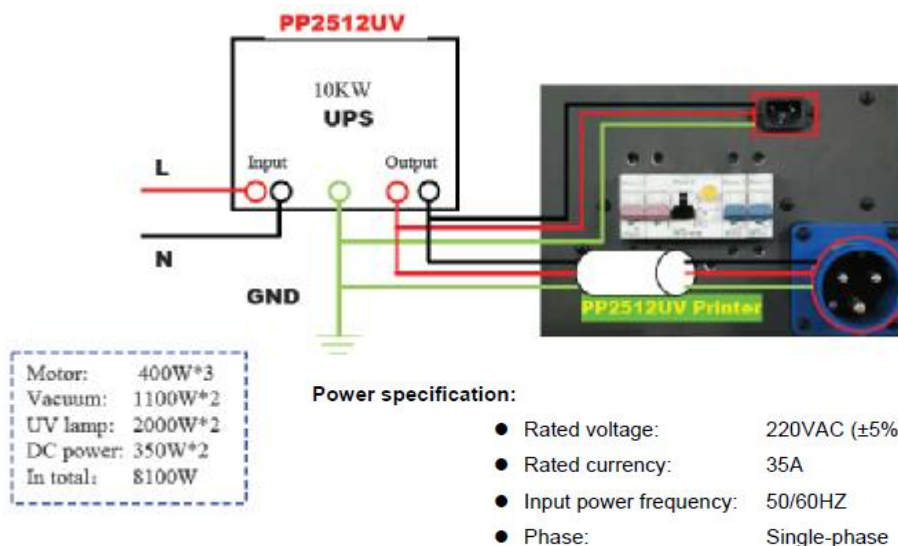
Compressed air



Main power inlet side.

Compressed air inlet

Step1. Connect power electricity.



F For operation safty and stability, enough power UPS is strongly suggested.

Step2. Connect compressed air.

A compressor is necessary to supply air for PP2512UV machine.

Technical specifications:

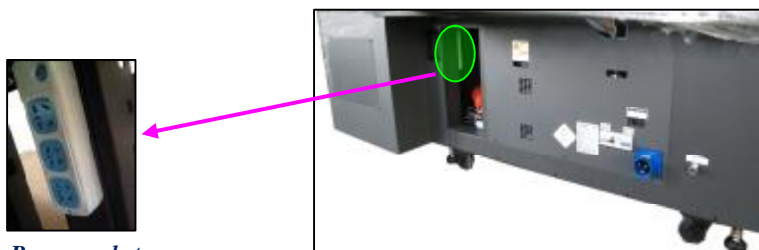
- Power: <5.5KW
- Air flow: 0.6m³/min
- Pressure: > 8kpf
- Capacity of gas tank: 20L ~ 50L



3.2.3 Set computer.

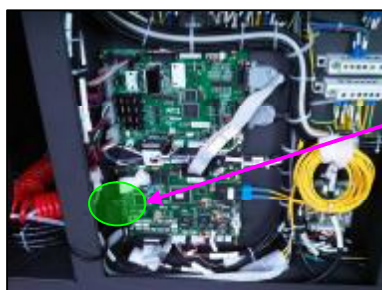
- Ø Connect all the cable of PC.

The power cable of PC and Monitor can insert to the socket in machine's socket.



Power socket

- Ø Insert USB cable to USB board



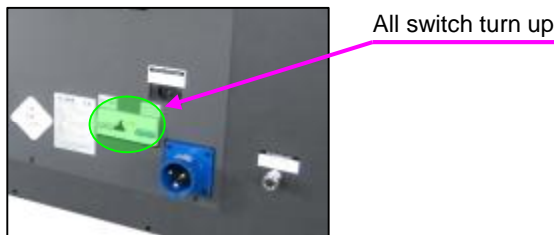
USB Port in USB board

F *Another side insert to the USB Port of PC.*

Chapter 4 Software-Installation

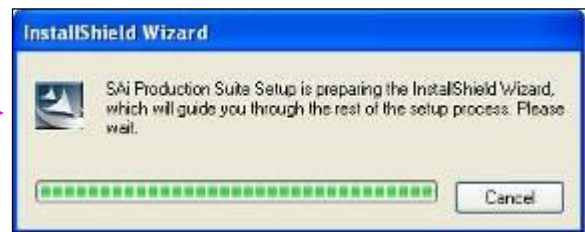
4.1 Installation of Photoprint 6.1V2

- 1) Turn-on the Main Power to give power to the PC and Monitor.



F You will hear the alarm of buzzer after few seconds. It's because of the ink haven't been loaded yet. Don't care about it, after ink been loaded the sound will missing.

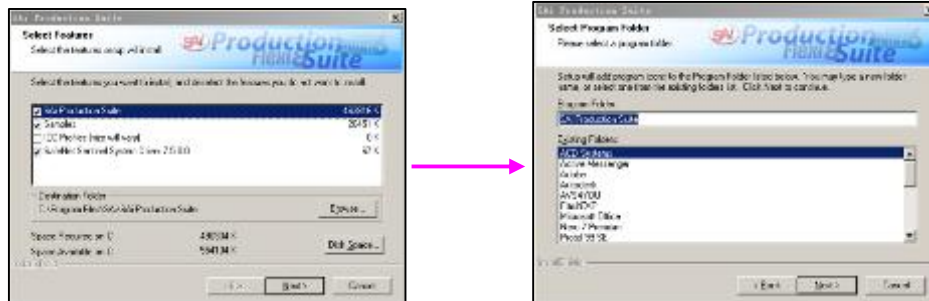
- 2) Insert the CD supplied with the machine with label Photo Print 6.1V2 for the necessary installation.
- 3) The screen will prompt you with **【Choose Setup Language】** window; Select which language you will use. Then click **“OK”**. Then with Starting **【InstallShield Wizard....】**



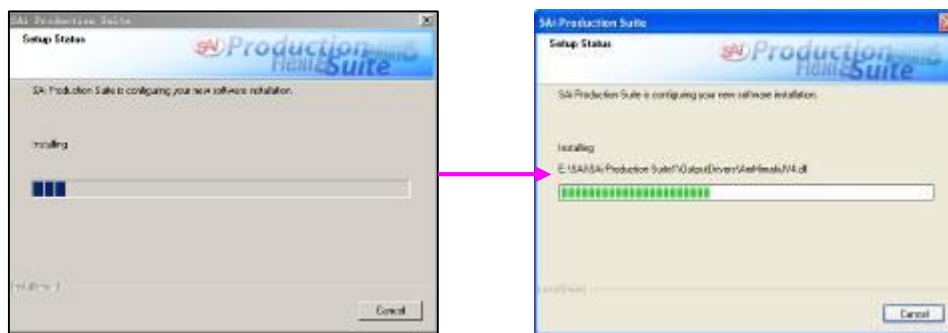
- 4) The Application Installer Setup will now prepare the Install Shield for the setup process, then click **“Next”**. You will get a window for **【License Agreement】**, please choose **“I accept the terms of the license agreement”**



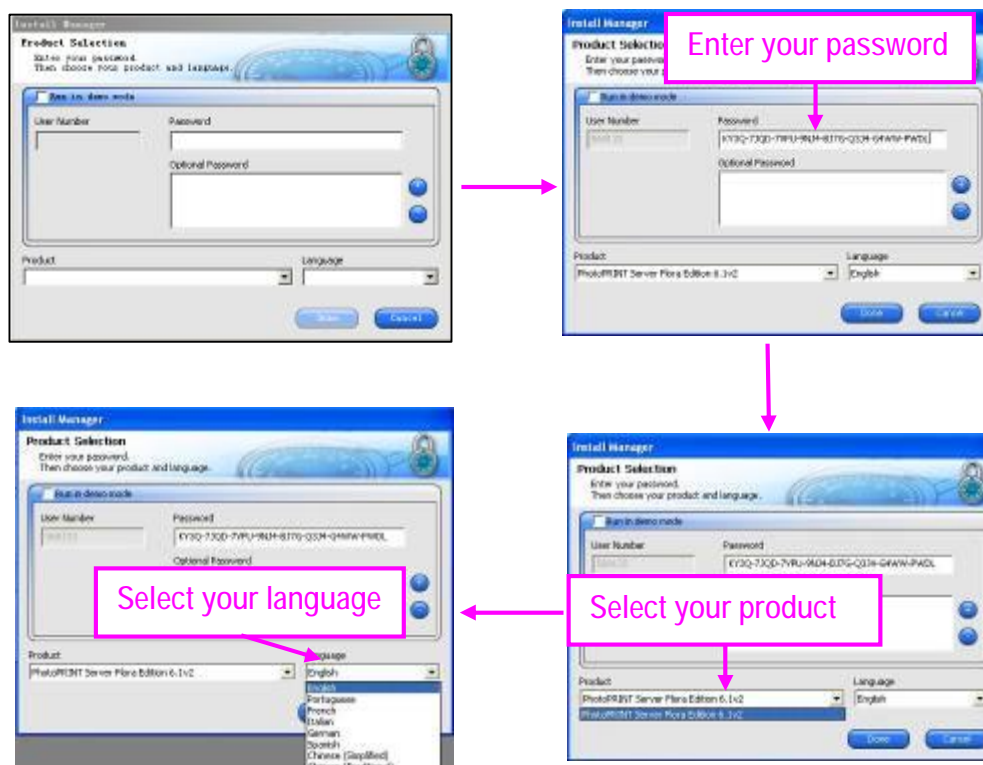
- 5) Click “Next” , then **【Select Features】** and the **【Select Program Folder】** screen window will show up.



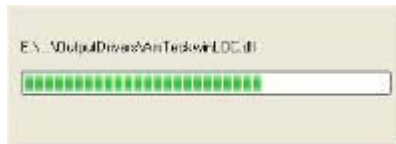
- 6) Then you will get a window for **【Setup Status】** , wait it finish.



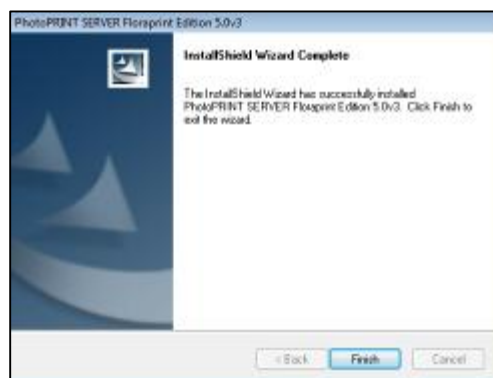
- 7) The **【Product Selection】** window will comes in after that. Please enter password which you can find from the dongle. And then choose “PhotoPRINT SERVER Flora Edition 6.1v2” from product



- 8) Tick the “Install to desktop” selection on **【Install Manager】** window. Then click “OK”.
- 9) **【Start Copying Files】** window will appear. Click “Next”.
- 10) Click “Next”, software files will now start to install.



- 11) Click “Finish” after completing the successful installation.

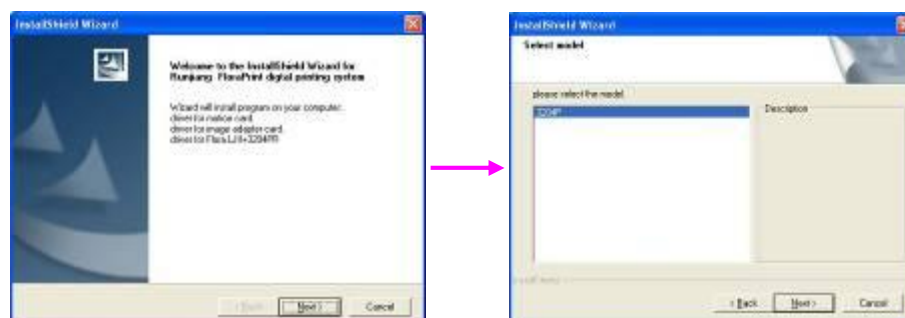


4.2 Install Flora driver

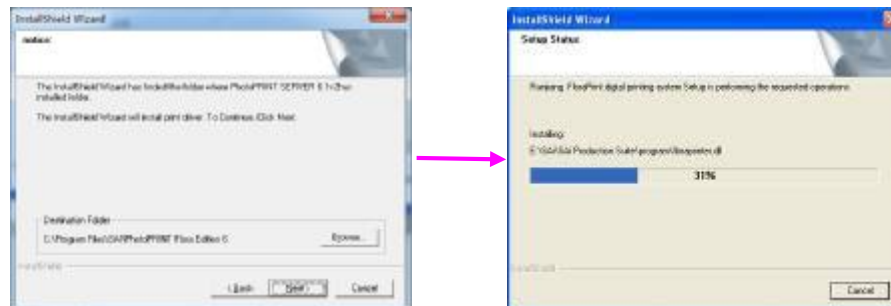
- 1) Insert the FloraPrint Driver. From the list of Folder under Print Driver, select corresponding machine model (eg: Flora_PPKMUV_1024) folder. Then double-click the setup file;
- 2) Files will be extracted and later on **【Welcome】** window will appear. Click “Next”, coming with **【choose setup language】** window, select you language then click “Next”;



- 3) Click “Next” when **【Welcome】** window. Then, **【Select Model】** window will appear. Choose the particular model of the machine you are about to install, then click “Next”;



- 4) The software will now start to detect the specified destination folder, Click “Next” to initiate the installation process;

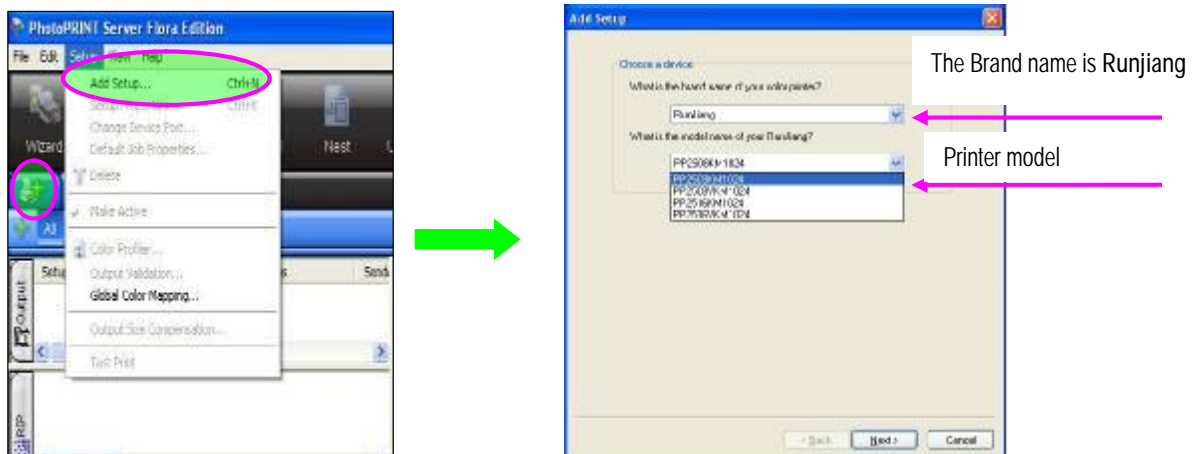


- 5) Click “Finish” after the successful installation and restart your computer;



4.3 Add setup

- 1) Find the PhotoPrint 6.1 on the desktop and double click to open;
- 2) If it is the first time your install, it will prompt you to add your setup, or you can click “Add Setup...” from “Setup” menu;

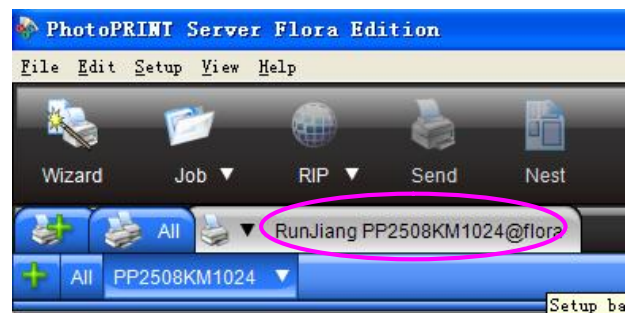
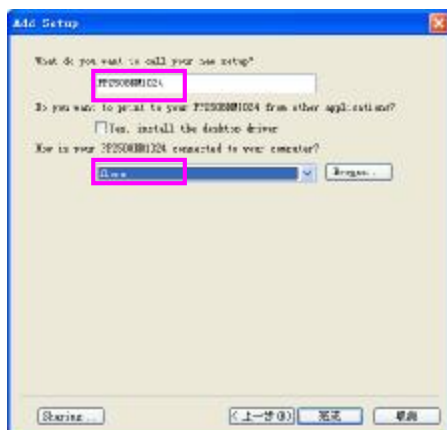


& Please look at below table to select the correct printer model for your machine:

Model	Color number	Print head arrange
PP2508KM1024	CMYK/CMYKLCM/CMYKWW/CMYKLCMWW	Only one row head
PP2508VKM1024	CMYK/CMYKLCM/CMYK V W/CMYKLCM V W	Only one row head
PP2516KM1024	CMYK/CMYKLCM/CMYKWW/CMYKLCMWW	Two row head
PP2516VKM1024	CMYK/CMYKLCM/CMYK V W/CMYKLCM V W	Two row head

F W:White V:Varnish

3) Click “Finish” after the final process. Then you can find the device



If the setup is successful the installed device or printer will be shown on the Photoprint GUI.

Chapter 5 Function checking

5.1 Movement function checking

- Ø Checking X axis movement.
- Ø Checking if carriage can normally move up and down.
- Ø Checking if automatically height detecting is normally.
- Ø Checking if Y axis movement is normally.

F *Reference User Manual for the function and operation.*

5.2 Carriage default height checking

- Ø Move carriage to right side of platform.



- Ø Click Down button make carriage down to limit.



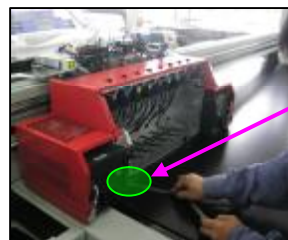
- Ø Click Up button make carriage Up,during the process of moving,press the Z-axis limit switch make carriage stop.
- Ø Click Down button again,then the carriage height detecting sensor will touch the platform.

& *These steps is simulate the automatically detect height,to get the actually when printing .*

- Ø Using feeler gauge to detect the gap between carriage and platform. The suggest standards is between 1.5mm~2mm.



Feeler gauge

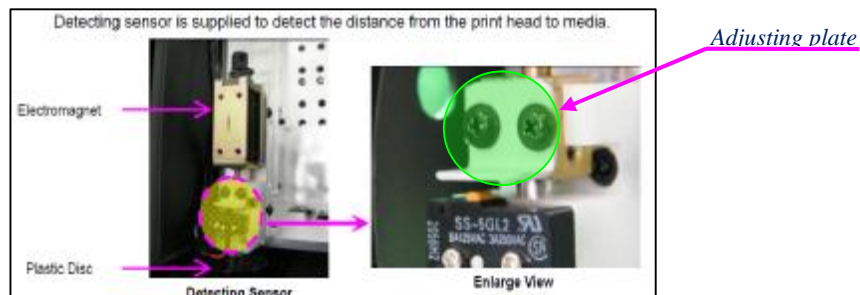


Detect the gap

F *If the gap is too small,the carriage will be easy to crash media.If the gap is too big,the printing quality will reducing.*

Ø Adjust the gap.

Step1 Loose the screw of adjusting plate and adjust the vertical direction position of the plate.

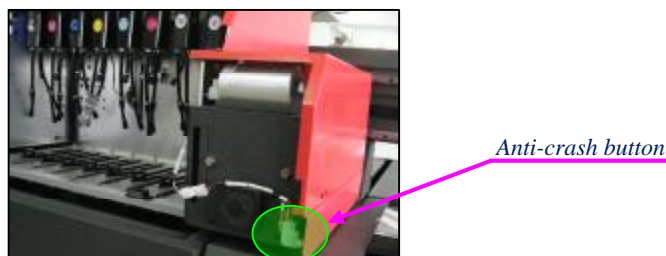


Step2. If you want to increase the gap,move the plate up.If you want to make the gap smaller,move the plate down.

Step3. Repeat above steps until you getting the value you wanted

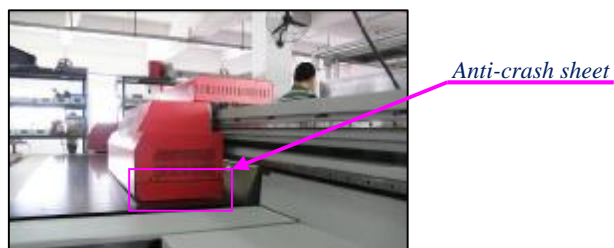
5.3 Anti-crash function checking

Ø During the carriage is moving,press the anti-crash button to check if whole movement system can stop.



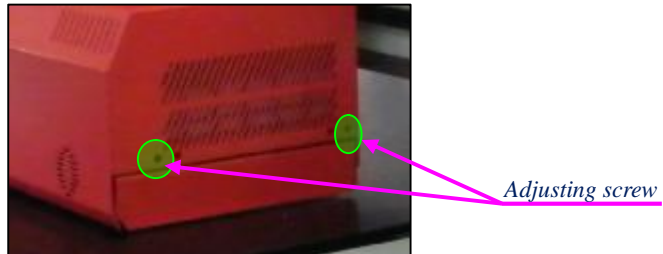
5.4 Anti-crash sheet checking.

Ø Checking the gap between two side anti-crash sheet.It should be a little smaller than carriage gap.



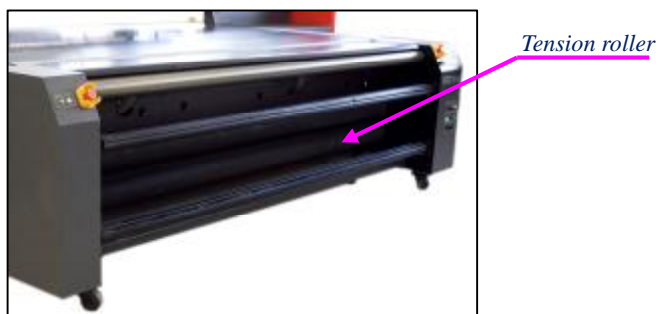
F Even the gap already been adjusted in factory,but the shaking of transportation may Cause the sheet loosen.So Checking the gap is needed.

- Ø Loose below screw to adjust the sheet.



5.5 Roll to Roll function checking(Roll to Roll model only)

- Ø Check if the tension roller can lift up normally.



- Ø Check if the receiving roller and feeding roller working normally.



Chapter 6 Print head installation

6.1 Install print heads

- Ø Unpacking the Print head.
 - 2 Open the package, and then take out the anti plastic bag.
 - 2 Open the anti-static plastic bag and remove the head.
 - 2 Remove the Print head bubble plastic bag.



Note:

-  The head is pre-loaded with ink analog to prevent drying of the nozzles during transportation.
-  The head is also equipped with a cap to protect the nozzle surface and prevent drying of the ink analog.

- Ø Remove the tube on the two side of print head.



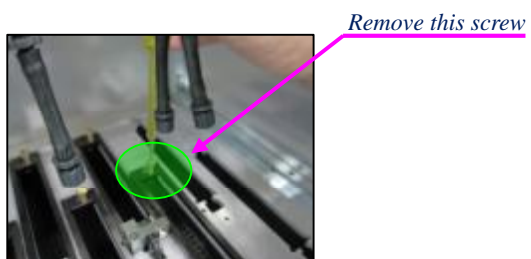
- Ø Install the ink tube to print head.
 - 2 Take the ink tube out from tube box.
 - 2 Insert the tube to print head.



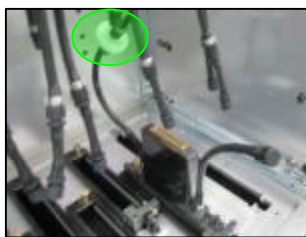
F Notice the installation position of the two ink tube, don't mixing.

Ø Install print head to carriage plate.

Step1. Remove the print head mounting screws from carriage plate.

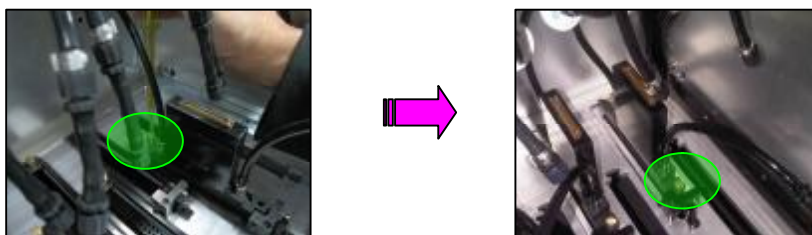


Step2. Put the print head to the mounting base.



F Ink filter in the back side.

Step3. Fix the back and front screw.



6.2 Clean print head with flush.

- Ø Loose the cap of the front and back tube.
- Ø Suck flush with syringe,then insert the needle to back tube.One hand hold the syringe,one hand hold the front tube aiming to waste ink tray.Jet the flush for cleaning the ink tube.



- Ø Cover the front ink tube cap back,keep jetting,then all the ink will go through nozzles.



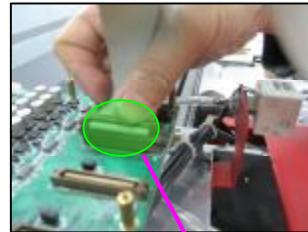
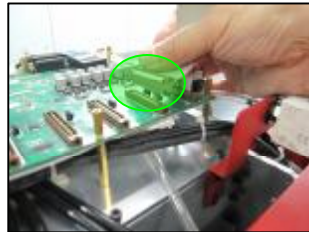
F *Control the jetting power,don't using too much power.*

- Ø Connecting the ink tube back.



6.3 Connecting data cable.

- Ø Insert the data cable to carriage board side.



- Ø Step2. Insert the data cable to print head side.



F *Connector have direction and must match with each other.*

- Ø Connect all print head one by one, check all the tube and cable connecting. Make sure no loose and mistake.



Chapter 7 Load ink

7.1 Loading ink

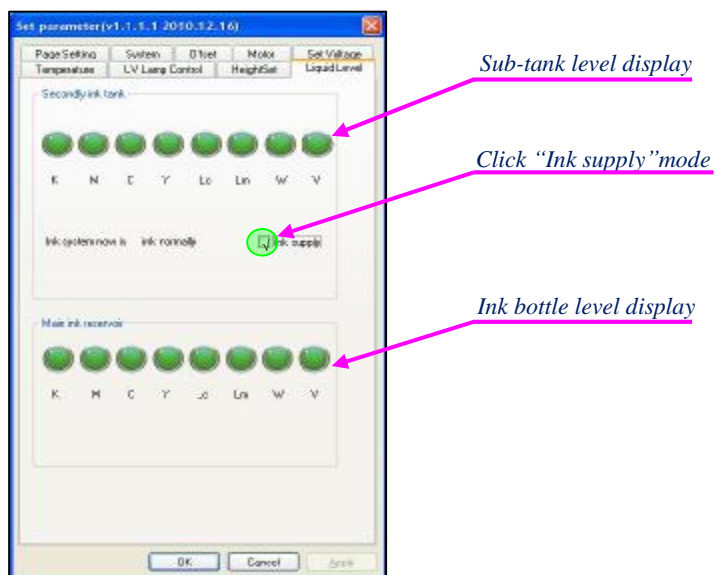
Ø Turn all the air valve to negative position.



Ø Shake ink bottle for couple of seconds, then pull ink to ink bottle.



Ø Select "ink supply" in tag "Liquid Level".



Ø Waiting until all lamp is on.

Ø Adjust the negative regulator to setting the negative value between -3.3~-4.5

7.2 Ink bleeding

- Ø Turn the air valve to positive position.
- Ø Open the front ink bleeding cap, then press ink prime button until can't see the flush and air bubble.



Lose this cap.

- Ø Turn the air valve back to negative position, tighten the cap.
- Ø Do above items every printhead one by one.

F

- a. When do ink bleeding, the tube position should lower than carriage button plate.
- b. Press ink prime button every 3~5 seconds then stop 2~3 seconds.

Chapter 8 Align the print head.

8.1 Test print tool bar

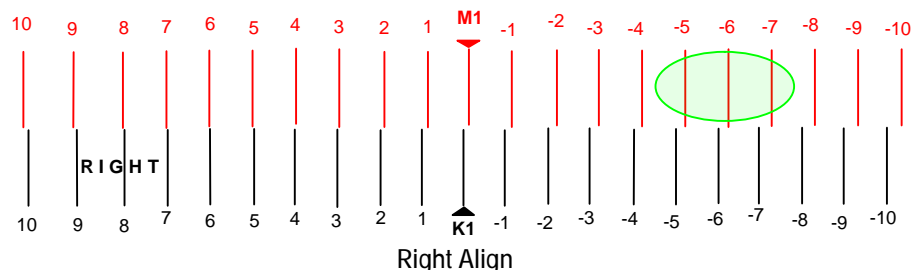
Using the RTZ Driver software, move the Print head Carriage from left to right, then to home position. Check if the Y-axis and Z-axis Servo Motor are also working by clicking the appropriate arrow head below.



8.2 Set parameter

This section will describe the necessity to calibrate the Voltage and Temperature settings for each print head.

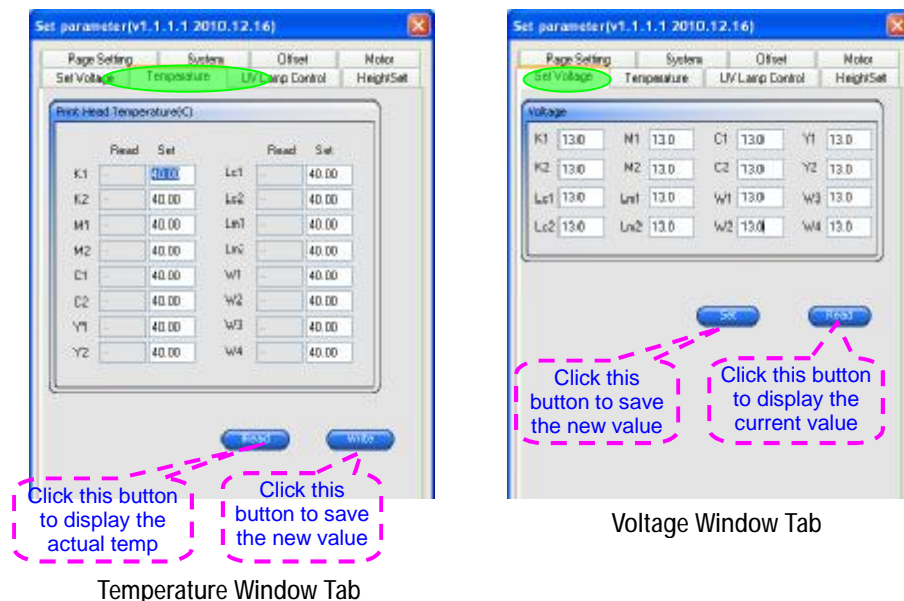
- Ø By looking on the Right or X Align printed samples in section 4.9.2.3 or section 4.9.2.4 respectively you can determine what need to be done to get a better print quality.
- Ø First you need to see the magnified printed sample for each print head. Let's take the illustration sample below.



- Ø Assuming the green shaded area will be view over a magnifying lens at least 40X (100X magnification is better) the vertical lines are actually a group of dots pre arranged according to print head nozzle design. For the case of Konica head it should look like below.



- Ø Sometimes getting the best dot print quality is a painful process so it needs patience. All you can do is play with temperature and voltage settings.
- Ø The recommended Voltage setting range is controlled by Flora driver software so there's no chance you set the voltage beyond the recommended range. While the recommended temperature setting is 40-45°C in most cases ink manufacturers have their recommended temperature settings.
- Ø When changing the Voltage and Temperature settings click setting icon on the Test Printer tab.



Note: The actual reading for both Voltage and Temperature will appear only when the **Read Button** is click.

- Ø To change the temperature setting simply over write the existing value with your desired value then click Write button. While for Voltage you need to click the Set button to update the Voltage setting to your desired value.
- Ø Other factors than can influence print quality are:
 - ✚ Room Temperature
 - ✚ Humidity
 - ✚ Ink Viscosity
 - ✚ Negative Pressure Settings
 - ✚ Carriage Printing Speed

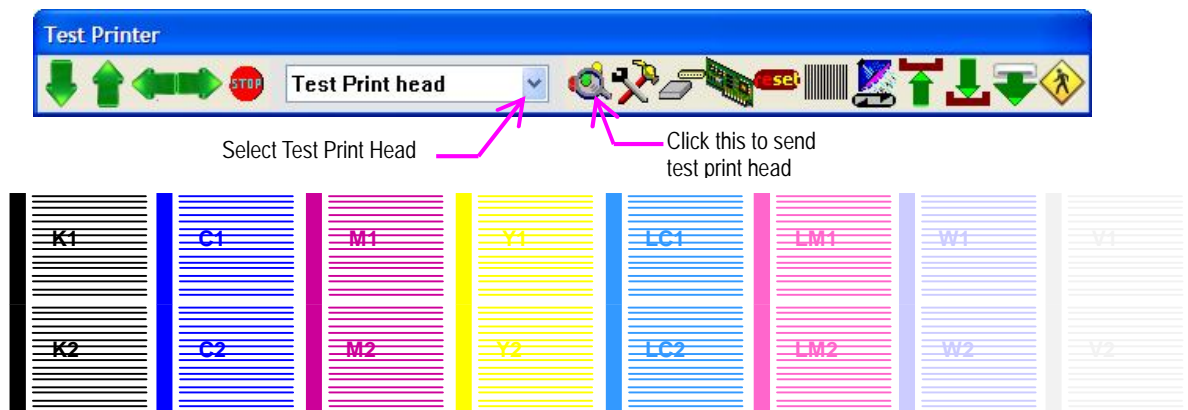
Note:

In most difficult cases playing with Uni-direction and at slower speed can help improve the print quality significantly.

8.3 Print head alignment

This is to describe the proper procedure in aligning the Print heads. Before alignment ensure the nozzle test is perfect!

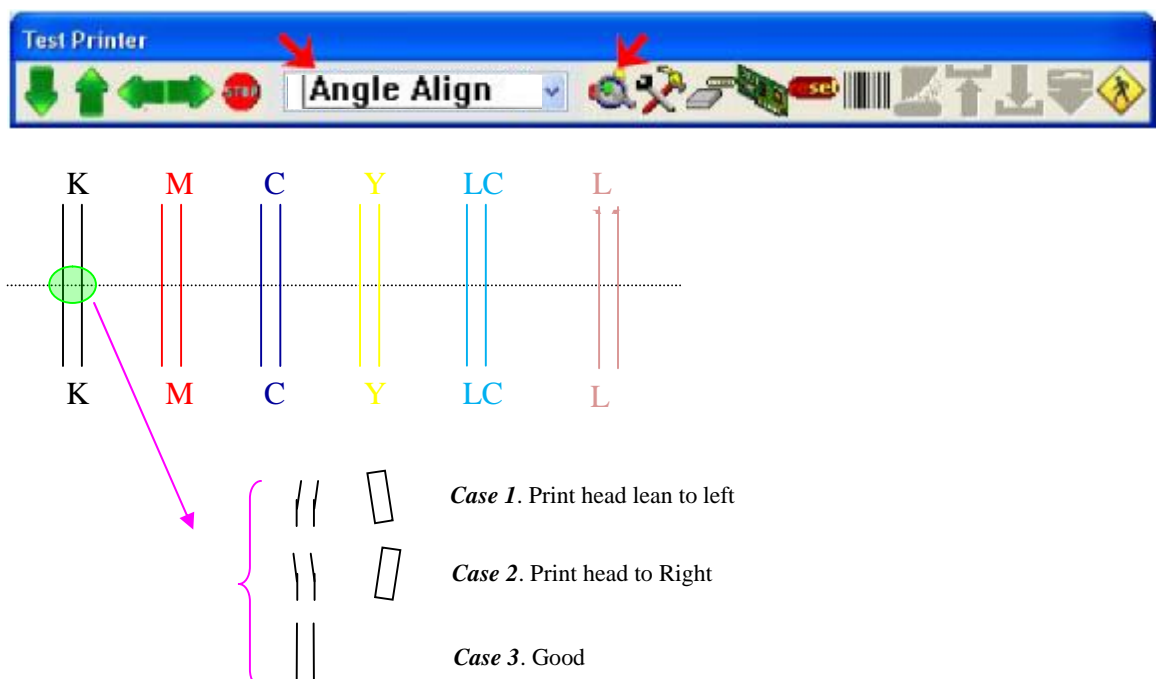
- Ø Perform Ink Prime by activating the toggle switch. Do ink bleeding one print head at time to remove air bubbles trapped inside the print head.
- Ø Perform auto clean for print heads thru maintenance switch on the control panel or from the Flora driver GUI.
- Ø Send Test Print head to see if all print heads prints a shown below;



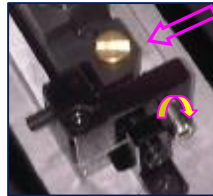
Note: Above is an Illustration of Nozzle Test Print, only three colors are shown due to space constraint, Yellow, White and Varnish print heads must print the same result..

8.3.1 Angle Alignment (V-Align)

Because the Konica 1024 head is very long, so it's very necessary for align the print head to vertical.



- Ø If in case1, adjust the vertical adjusting screw by clockwise to move the front part of print head to left.



- Ø If in case2, adjust the vertical adjusting screw by counter-clockwise to move the front part of print head to right.



8.3.2 Mechanical Alignment (Y-Align)

- Ø On Flora driver GUI, click Test Print button and on the Test Printer tab select Y-align then click "Test print" button. The result should look as shown below.



Select Y-Align

Click this to send test print head

- Ø Noticed there are sets of horizontal lines for K1 and K2. For the purpose of identifying sets of horizontal lines, K1 horizontal lines are colored pink, and the K2 is black though in actual print they are all printed black.
- Ø The first sets of horizontal lines is a K1 single broken line and K2 solid line, ignore the first 4 sets, select the rightmost set (with more horizontal lines) to get more accurate alignment. First you must align K1 to K2. The gap between K1 and K2 horizontal lines must be the same as the spacing between all K1 or K2 horizontal lines. Please see Illustrations below.



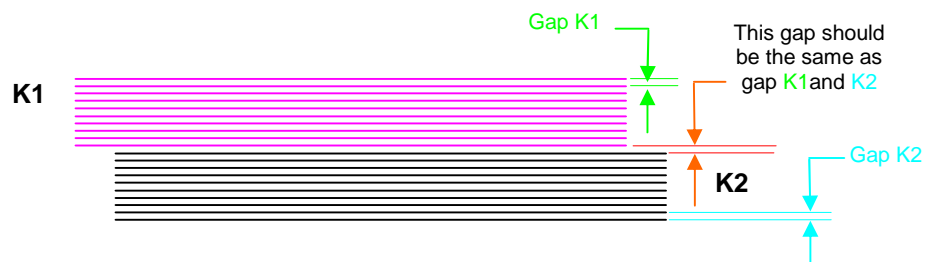
Printed sample

K1 ----- K2
K1 and K2 Y-align first set of Horizontal lines

This set of line is for info only



Printed sample



- Ø Once K1 and K2 print heads are aligned, tighten the two fixation screws properly. Do Y-align to other print heads in such a way C1, M1, Y1, W1, Lm1, Lc1 and V1 will be aligned to K1 and C2, M2, Y2, W2, Lm2, Lc2 and V2 should align to K2. This is applicable to PP2512VKMUV model only.

Note: For PP2512KMUV the V1 will be replaced by W3 while the V2 will be replaced by W4 print heads when doing Y-align.

- Ø Below shows how to do Y-alignment of the print head



Illustration for M&Y Printheads Y Align



Illustration for C&M printheads Y Align



Illustration for W print heads Y Align

- Ø Please take note W3 and W4 print heads Y-align are using different color just for the sake of making the illustration easier to understand.
- Ø Again due to space constraint not all print heads Y-align are shown above, however for those other print heads you can follow the same steps.

Note:

Once the Y-alignment is completed, make sure you tighten the two fixation screws for each print head.

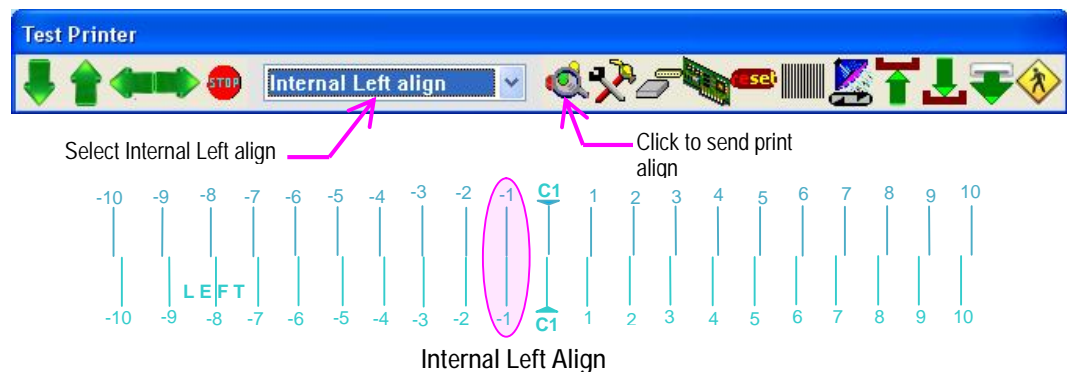
- F** After finish Y alignment ,go back to check V alignment again.Because during adjusting Y alignment may affect V alignment.So,repeated to checking Y alignment and V alignment until all printhead's Y and V alignment is good.

8.3.3 Internal Alignment

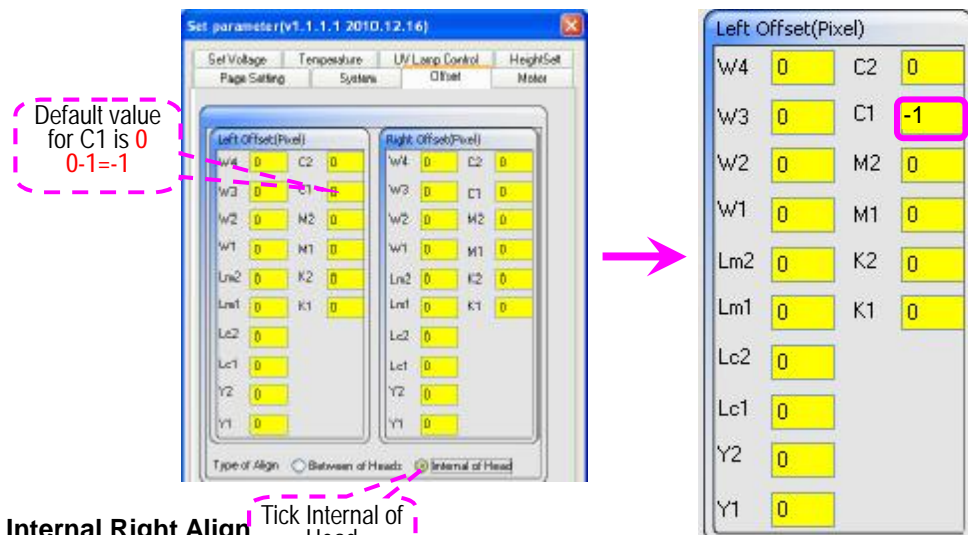
Internal align is necessary for Konica heads because the Konica 512 head nozzles are made wherein the 512 nozzles are divided into 2 parallel rows of 256 nozzles. Due to some uncontrollable manufacturing errors (tolerances) perfect alignment is not guaranteed. The print head internal align is required for both printing directions

Internal Left Align

- Ø On the printer tab select Internal Left Align option then click send print as shown below. Further below shows how the print out should look like, the Illustration shows the C1 alignment happen at **-1** (in-circled).

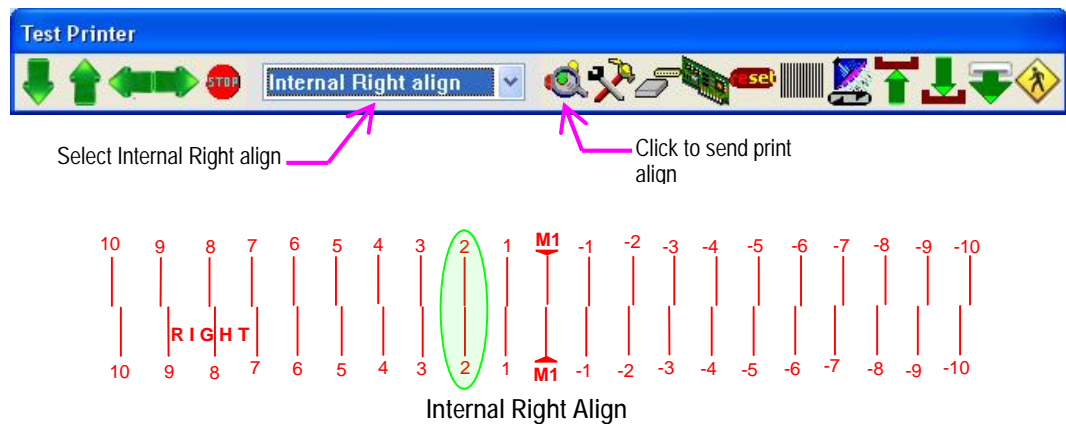


- Ø On the Photoprint Job Properties click Driver Option >click advance button> offset button > tick the Internal of head and add the -1 mathematically on the Left table for C1 box as shown below.
- Ø You can also navigate thru Test Printer Tab by clicking the settings icon as shown in the lower left of Illustration.

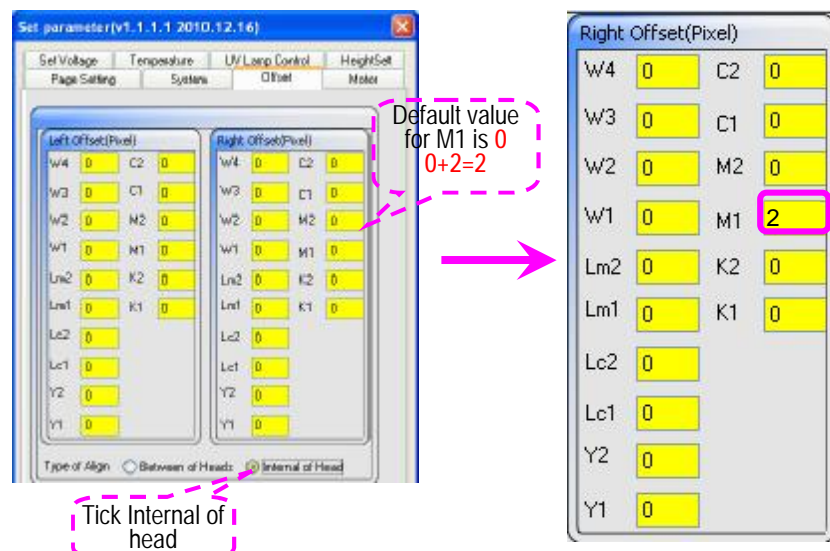


Internal Right Align

- Ø On the printer tab select Internal Right Align option then click send print as shown below. Further below shows how the print out should look like, the Illustration shows the M1 alignment happen at 2 (in-circled).



- Ø On the Photoprint Job Properties click Driver Option >click Advance button> Offset button > tick the Internal of Head and add the 2 mathematically on the Right table for M1 box as shown below.
- Ø You can also navigate thru Test Printer Tab by clicking the settings icon as shown in the lower left in Illustration below.



- Ø Follow the same steps when doing Internal of head alignment for other print heads not shown in the Illustration above.

8.3.4 Right Align

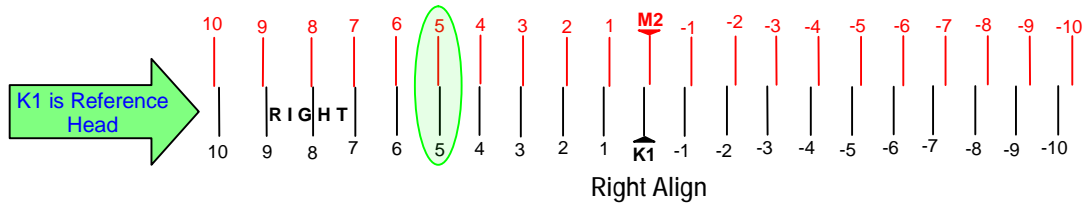
There are 16 print heads in 8 colors in total. As they are fixed in different physical position, it is necessary to do Right Alignment for secondary colors, or the secondary color will be fuzzy and the output picture will be rough. Here this machine takes K1 as the base to align the other print heads.

- Ø On the printer tab select Right align option then click send print as shown below. Further below shows how the print out should look like, the Illustration shows the M2 alignment happen at 5 (in-circled). Please note that this time K1 is the reference print head in aligning all other print heads.



Select Right align

Click to send print align



- Ø On the Photoprint Job Properties click Driver Option > click Advance button > Offset button > tick the Between of Heads and add the 5 mathematically on the Right table for M2 box as shown below.

Ø

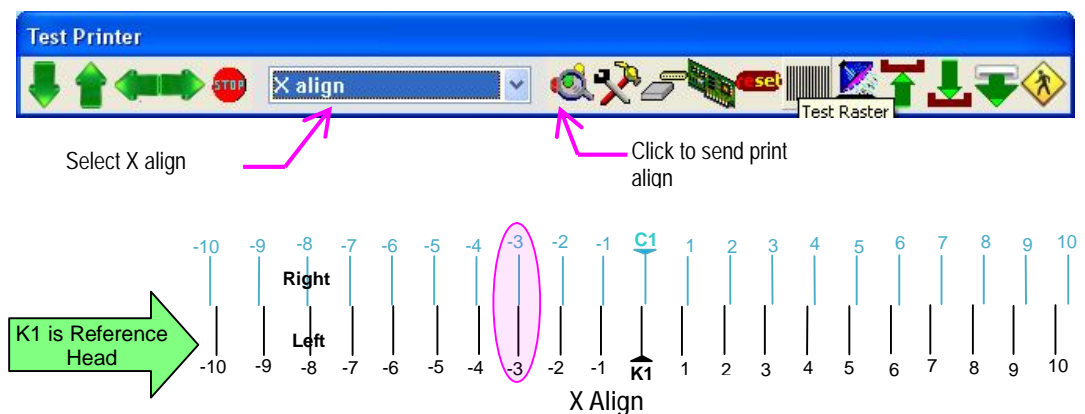
Default value of C1 is 1361
 $1361+5=1366$

Right Offset(Pixel)			
W4	6799	C2	2267
W3	6345	C1	1810
W2	5891	M2	1366
W1	5438	M1	906
Lm2	4984	K2	453
Lm1	4532	K1	0
Lc2	4077		
Lc1	3620		
Y2	3171		
Y1	2716		

8.3.5 Print head X Align

X alignment is very necessary for Bi-direction print mode. If this alignment is not good, the output image will be rough and fuzzy because of dislocation output coming from double directions.

- Ø On the printer tab select X align option then click send print as shown below. Further below shows how the print out should look like. The illustration shows the C1 alignment happen at -3 (in-circled). Please note that this time K1 is the reference print head in aligning all other print heads.



- Ø On the Photoprint Job Properties click Driver Option > click Advance button > Offset button > tick the Between of Heads and add the -3 mathematically on the Left table for C1 box as shown below.



- Ø All the other colors are will be aligned in the same way.

8.3.5 Step Align

- Ø On the printer tab select Step Align option then click send print as shown below. Further below shows how the print out should look like. The Illustration shows three different scenarios.
- Ø The broken line was colored pink for the purpose of better understanding, the horizontal lines are printed black in actual output. When you do step align the first pass will print broken lines while the second pass will print the solid lines.



Figure 1 –Insufficient Feeding Step

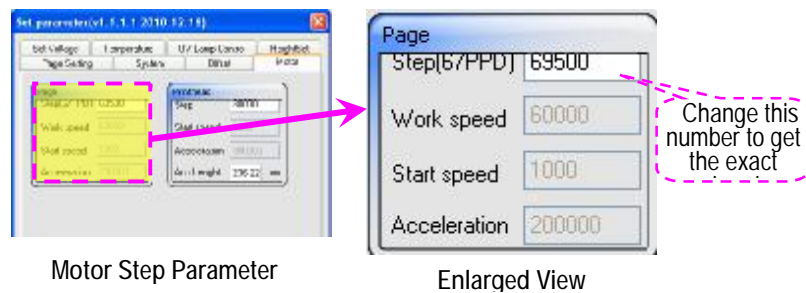
- Ø Figure 1 shows the motor step value when the test was sent is higher than exact value so we need to increase, by trial and error method you can get the correct value.

Figure 2 –Excessive Feeding Step

- Ø Figure 2 shows the motor step value when the test was sent is lower than exact value so we need to decrease, by trial and error method you can get the correct value.

Fig. 3 – Correct Media Feeding Step

- Ø Figure 3 shows the motor step has exact value so no need for any changes. To determine the exact motor step value setting, you need to bring the broken and solid lines closer until you can see one single line only.
- Ø Below is the table where you can find the Step Parameter setting.



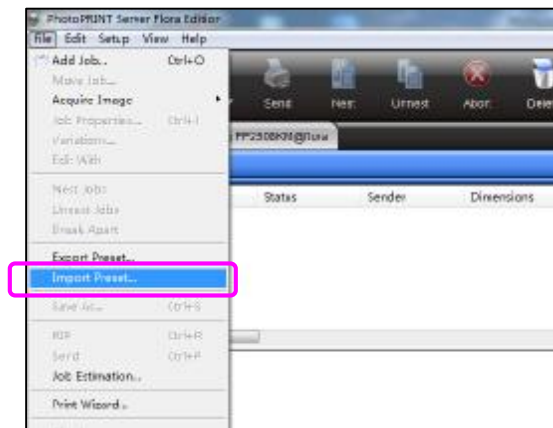
F Roll to Roll the step is different as table step,so it need do additional.

Chapter 9 Printing Test

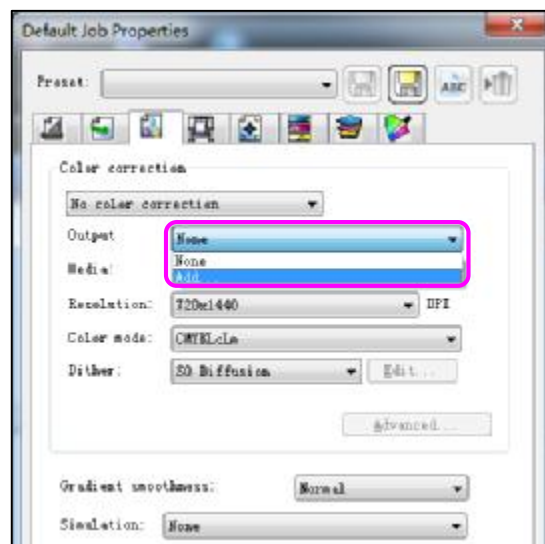
9.1 Load ICC profile

There have two way to load ICC Profile in Photoprint:

Method 1. Load “.pdf” format ICC packed file from File menu.



Method 2. Load “.icc” format file from Tag Color Management.



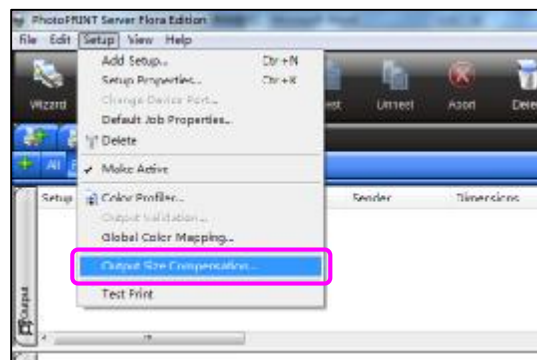
9.2 Printing Test.

Load some picture and check the quality, color.

F *If the output is not so good, go back to check parameter setting, alignment, etc.*

9.3 Outsize compensation.

Ø Printing a big size job, then go to *Setup* menu, click *Output Size Compensation*.



Ø Input the job size and actual output size to do compensation, then Select enable output size compensation.

