

# USING ABSOLUTE BLACK INKS FOR MAKING SCREEN POSITIVES ON THE EPSON STYLUS PRO 3800 & 3880

The following instructions explain how the i2i Absolute Black ink for making screen positives is installed on an Epson Stylus Pro 3800 or 3880. The Absolute Black ink can be installed in one or multiple cartridges on the printer, can be used alongside full color inks for regular color printing, or can be used in combination with our Absolute Clear inks for the non-active channels on a dedicated screen positive printing machine. The choice of which combination of inks to use is not discussed in these instructions. If you need guidance on the best combination of inks to use for your application, then please refer to the 'Absolute Black buying guide' on our website, or call 847-827-0747.

If you intend to use the Absolute Black inks in every channel of your machine, or in combination with the Absolute Clear inks, then it is best to turn off the 'Auto Nozzle Check' feature on your printer. The auto nozzle check only works with normal full color inks. To turn off the auto nozzle check, go to the menu on the printer display and select 'Printer Set Up' and then 'Auto Nozzle Check'. Set the auto nozzle check to off.

The Absolute Black inks, Absolute Clear inks, and Cave Paint Elite Enhanced full color pigment inks are supplied in bulk bottles for use with our refillable cartridges for the Epson Pro 3880 or 3880, and the installation method is explained below.

## **INSTALLING REFILLABLE CARTRIDGES**

Refillable cartridges are designed for use with bulk inks supplied in bottles, and offer considerable savings over single use pre-filled cartridges. Refillable cartridges can be purchased individually, but are generally supplied in starter kits that include an initial supply of ink. Ink2image refillable cartridges are simple to install, easy to use, and will provide you with many hours of trouble free and lower cost printing. However, the successful use of the system is dependent on how accurately you follow this guide during installation. Please read these instructions and familiarize yourself with the system components before you start the installation. Please also remember that you are now about to start working with bulk ink instead of sealed cartridges. During installation, protect the area around your printer in case of ink spillage and wear the disposable gloves included with the kit. Have a roll of paper towel handy. Remember, accidents can happen!

### **SYSTEM COMPONENTS**

- 1. 9 x Refillable cartridges with bridge chips.
- 2. 9 x Syringes.
- 3. 9 x Syringe needles.
- 4. 2 x Tapered syringe end adaptor (1 spare).
- 5. Instruction CD or printed instructions.
- 6. Pair of gloves.



### **IMPORTANT WARNING**

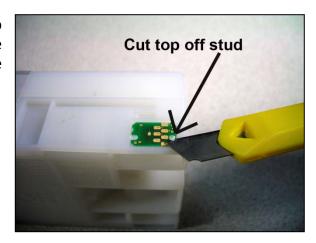
The Ink2image refillable cartridges for the Epson Pro 3800 or 3880 require the use of a set of chips from original cartridges to operate correctly. These chips are placed below the Ink2image bridge chips that are supplied with the refillable cartridges. Removal of the chips from the original cartridges and installation on the Ink2image cartridges is simple and is fully explained in these instructions. However, installing the Ink2image cartridges in a printer without original chips installed, or without the Ink2image bridge chips installed, can result in damage to the printer. Ink2image will not accept responsibility for any damage caused to a printer by installing refillable cartridges without original chips and bridge chips installed.

### STEP 1 – INSTALLING CHIPS FROM ORIGINAL CARTRIDGES

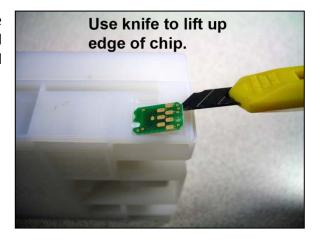
As mentioned above, the Ink2image refillable cartridges for the Epson Pro 3880 or 3880 require that each cartridge is fitted with a chip from an original cartridge. The original chips are coded differently for each color and it is very important that correct color chip is fitted to the correct color In2image cartridge. We strongly recommend that you work through this process color by color, removing the chip from the original cartridge and installing it on the corresponding Ink2image cartridge one at a time, so that no mix up can occur. The Ink2image bridge chip that comes with each refillable cartridge is also coded differently per color, so it is important that you install the correct color bridge chip on the correct color cartridge. If you do mix up the Ink2image bridge chips, then the cartridge color is written on each chip i.e. PK for Photo Black, Y for Yellow etc. You can use original chips from empty cartridges without issue. Unlike other types of bulk feed device for the Epson Pro 3800 or 3880, the Ink2image system works fine with fully depleted cartridge chips.

IMPORTANT NOTE If you are going to use chips from original cartridges that are currently installed in your printer i.e. an original cartridge has just run empty on the machine and you are going to remove the chip from it and install it on an Ink2image cartridge, always close the cartridge bay lid after removing the cartridge and before installing the Ink2image cartridge. This will not harm your printer and you can open the cartridge bay lid again when you are ready to install the Ink2image cartridge. This process of closing the cartridge bay door each time after removing a cartridge or cartridges is important in making the Ink2image bridge chips read the ink levels correctly.

To remove the chip from an original cartridge, use a sharp knife to cut off the top of the plastic stud just in front of the gold chip contacts as in this picture. Try to avoid touching the gold contacts with the knife when doing this.



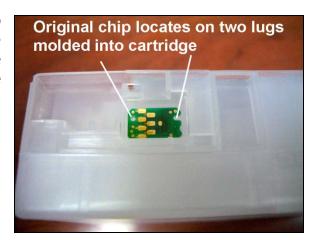
Once you have trimmed off the top of the plastic stud, use the knife to lift up the edge of the chip. The chip can now be pulled off the original cartridge. Try to avoid touching the gold contacts on the chip when handling it.



Take the refillable cartridge that corresponds to the color of the original chip you have just removed, and remove the bridge chip from the cartridge. Removing the bridge chip is very simple – simply use a small screw driver to lever up the plastic at the end of the bridge chip as in this picture. Once you have levered up the end of the plastic, the bridge chip can be completely removed from the cartridge.



Take the original chip and place it into the recess in the top surface of the refillable cartridges as in this picture. The bottom surface of the recess has two lugs molded in that line up with the two holes in the original chip, so that it can be located correctly.



Now take the bridge chip and gently push it down on top of the original chip. The bridge chip will snap into place flush with the top surface of the cartridge, as in this picture. The bridge chip has spring loaded pins that line up with the gold contacts on the original chip below. Repeat this process of removing original chips and installing them beneath the bridge chips for on any of the other colors you are going to install at this time.



Before you fill the cartridges with ink, check which ink set up below best describes your application and follow the instructions accordingly. The instructions for filling the cartridges are after this section.

# Installing refillable cartridges on a brand new printer that has never been used with inks before, or on a printer that has been flushed with cleaning fluid.

Simply fill and install all the refillable cartridges in the printer and follow the instructions on the display. The machine should automatically perform an 'initial fill' routine immediately after installing the cartridges to fill the ink system with inks. If the printer does not automatically start this fill process then see the 'Running an initial fill routine' below. When the machine has finished the initial fill routine, perform a manual nozzle check print on plain paper using the driver software utility to check that all jets are firing on the print heads you intend to use for printing. If you are installing Absolute Black in the black channel only and Absolute Clear in all the other channels, then the nozzle check print will show the black print head only – this is fine. If the nozzle check print shows that some jets are not firing then perform manual cleaning cycles (not auto cleaning) and nozzle check prints until you get a good print. You are now ready to start printing.

Installing a refillable cartridge and Absolute Black ink in the black channel only on a printer that has Epson original black ink installed, and is going to be used alongside Epson original inks, Absolute Clear inks, or Cave Paint Elite Enhanced color inks in pre-filled single use cartridges.

The Absolute Black ink is mixable with the original Epson black pigment ink (Photo Black or Matte Black) but we recommend purging the ink through to the print head to eliminate any strange printing effect that can be caused by a mixture of the two inks. This can easily be done by running an 'initial fill' routine on the printer. Unfortunately, Epson printers do not have a built in routine to purge ink through the black channel only so running the 'initial fill' routine will purge through all the channels on the machine. Because of this, all the cartridges installed on the machine will need at least 25% ink remaining in them (excluding the black cartridge that you are about to change). You will also need at least 25% capacity left in the maintenance tank. Install the refillable cartridge filled with Absolute Black ink in the black channel, and original Epson cartridges, Absolute Clear cartridges, or Cave Paint Elite Enhanced pigment ink cartridges in the other channels. Run the initial fill routine (see below for details) and then perform a manual nozzle check print on plain paper using the driver software utility to check that all jets are firing on the print heads you intend to use for printing. If you are installing Absolute Black in the black channel only and Absolute Clear in all the other channels, then the nozzle check print will show the black print head only – this is fine. If the nozzle check print shows that some jets are not firing then perform manual cleaning cycles (not auto cleaning) and nozzle check prints until you get a good print. You are now ready to start printing.

# Installing refillable cartridges using Absolute Clear inks, or Cave Paint Elite Enhanced color inks on a printer that has the Epson original ink installed.

Simply fill and install the refillable cartridges as the existing cartridges run empty. Both the Absolute Clear ink and the Cave Paint Elite Enhanced inks are freely mixable with the Epson original inks, so no cleaning or purging is required.

# Installing refillable cartridges and Absolute Black ink in every channel on a printer that is using Epson original pigment inks.

We strongly recommend that a printer running existing Epson inks should be flushed out before installing the Absolute Black ink in every channel on the machine. Failure to do so can result in bad printed output or nozzle clogging. Ink2image supplies Dead Head cleaning fluid in bulk for use in refillable cartridges for this purpose.

We recommend that you purchase an additional empty set of refillable cartridges to dedicate as cleaning cartridges. To flush out a printer and install the Absolute Black inks in every channel, you will need at least 50% capacity left in the maintenance tank. To flush the machine, fill a set of refillable cartridges with cleaning fluid and install the cartridges in every channel. Run the initial fill routine and then ideally leave the printer to 'soak' overnight if possible to allow the cleaning fluid to dissolve any dried ink deposits in the ink system. Install a set of refillable cartridges filled with Absolute Black ink. Run another initial fill routine and then perform a manual nozzle check print on plain paper using the driver software utility to check that all jets are firing. If the nozzle check print shows that some jets are not firing then perform manual cleaning cycles (not auto cleaning) and nozzle check prints until you get a good print. You are now ready to start printing.

### **RUNNING AN INITIAL FILL ROUTINE**

There are two ways of performing an initial fill routine on the Epson Pro 3800 and 3880 – one quick and the other more time consuming. Both require that the maintenance tank on your machine has at least 25% capacity remaining. The quickest method is to purchase the Epson Service program which then enables you to set an 'initial fill' routine that will automatically fill the printer with ink or cleaning fluid. The service program can be downloaded for a small fee from <a href="www.2manuals.com">www.2manuals.com</a>. Simply go to this website and enter your printer make and model in the search box and this will take you to all downloads for the printer. Service manuals are also available that show you how to disassemble and repair your printer if you are technically minded. If you decide to get the service program, then use this to quickly fill your machine with ink or cleaning fluid.

The more time consuming method of filling your printer with ink or cleaning fluid is to run three 'power' cleanings from the maintenance menu on the printer control panel. This should ensure that any new inks or cleaning fluid will travel from the cartridges through to the print head. A way to check is to make a full color print on scrap paper after running the three power cleans. If you are filling the printer with cleaning fluid then printed output should be relatively colorless. If you are filling the printer with Absolute Black in every channel then the printed output should be all black inks with no color showing. If this is not the case then one further power clean should be sufficient.

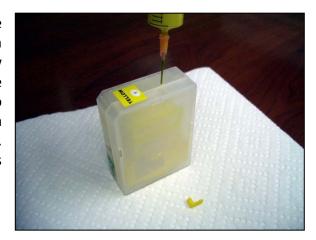
### STEP 2 – FILLING THE CARTRIDGES WITH INK

Filling the refillable cartridges is very simple, and is done by injecting ink or cleaning fluid through the ink fill hole on each cartridge using the syringes with needles fitted that are supplied with the kit. The first time you fill a cartridge, there are two additional steps that need to be performed before installing it in the printer (see step 3). If you have purchased the refillable cartridges for use as cleaning cartridges, then you would simply fill them all with Ink2image Dead Head cleaning fluid instead of ink following the instructions below.

Before filling a cartridge, make sure that the cartridge has an orange plug fitted over the air port. This is very important as it will stop any ink from getting into the air pressurization system on the printer. You should always fit the orange plug over the air port every time you remove a cartridge from the printer for refilling.



Place the cartridge on some paper towel with the ink fill hole upwards as in this picture, and remove the rubber bung from the ink fill hole. Using a clean syringe with needle fitted, draw up a syringe full of ink from the correct color ink bottle. Double check that you are using the correct color ink corresponding to the color of the cartridge — filling the wrong color ink into a cartridge will mean that the cartridge has to be replaced. Gently inject the ink into the cartridge until the syringe is empty, as in this picture.



Refill the syringe and continue injecting ink into the cartridge until the cartridge is full. It will take nearly three complete syringes full of ink to fill the cartridge. Use paper towel to wipe any ink from the surface of the cartridge, and return any ink in the syringe back to the correct color bottle.



After filling the cartridge, make sure you insert the rubber bung back into the ink fill hole.



#### STEP 3 – REMOVING AIR FROM THE CARTRIDGES

This step is only necessary when filling a cartridge for the first time. When you refill a cartridge, you simply need to perform step 2 only.

Place the cartridge in its side, as in this picture. Take a clean syringe needle and pierce a hole in the clear plastic film covering the ink exit port. DO NOT PUSH THE NEEDLE INTO THE CARTRIDGE – you are simply using the needle as a tool to make a small hole in the film.



Remove the orange rubber plug from the air port. Take the syringe you used to fill the cartridges with ink, remove the needle, and push a tapered end adaptor onto the end of the syringe. Gently push the tip of the tapered adaptor through the hole in the film and into the rubber seal in the ink exit port. Now pull on the syringe plunger to extract air from the cartridge until you get a flow of ink into the syringe, as in this picture. Remove the syringe and adaptor from the cartridge, and return any ink in the syringe to the appropriate color ink bottle.



Replace the orange rubber plug over the air port before moving the cartridge. You can now top up the cartridge with ink again as in step 2 above, if you wish. Wash out the syringe and adaptor using water under a faucet. The cartridge is now ready for use. Repeat steps 1, 2, and 3 with any cartridges you want to fill and use at this time.



### **INSTALLING AND USING THE CARTRIDGES**

You install and use the cartridges in the machine just like normal cartridges. Just remember to remove the orange rubber plug from the air hole before attempting to install the cartridge in the printer. As mentioned above, whenever you remove a cartridge or cartridges from the printer for refilling, always close the cartridge bay door after you have removed the cartridges. This ensures that the chips will read correctly when you reinstall the cartridge or cartridges. The bridge chips on the refillable cartridges show as permanently full on the printers display. The best way to use the refillable cartridges is to regularly open the cartridge door on the printer to visually check the ink levels in the cartridges – the transparent design makes it very easy to check inks levels.

Every time you install a refilled cartridge or cartridges in the printer, it is advisable to perform a nozzle check print on scrap paper to ensure that all the printer jets are firing. This is not normally necessary but it is a good habit to get into in case some air has got into the print head during refilling. If you do need to perform any head cleaning, we recommend using the manual clean and manual nozzle check functions in the driver utilities, as opposed to the auto nozzle check function. We find the auto nozzle check does not work as well as the manual functions, and just wastes ink!

The refillable cartridges will eventually wear out and need replacing. We have refilled cartridges dozens of times without issue, and the useable life of the cartridge is dependent on how well the rubber seal on the ink exit/filling hole holds up. There two ways of telling if a cartridge needs replacing.

Firstly, after refilling, shake the cartridge with the ink filling hole downwards over some paper towel to see if any ink leaks from the hole. Ink dripping from the cartridge means that the seal is damaged and the cartridge needs replacing. Secondly, periodically inspect the area in the machine where the cartridges plug in (a flash light helps with this). This picture shows what the machine normally looks like. If you see excessive ink running down the white plate where the cartridge connects, then this is a good sign that the cartridge needs replacing.



Replacement cartridges can be purchased from Ink2image or through the reseller where you purchased the cartridge kit. When you get a replacement cartridge, it will come with a new bridge chip so you need to remove the original chip from the worn cartridge and install it along with the new bridge chip on the replacement. To do this, you can unclip and remove the old bridge chip by lifting up edge with a screw driver, as shown in step 1. Once you have removed the bridge chip, you can remove the original chip from the old cartridge (a pair of tweezers will help). You then install the original chip and new bridge chip as in step 1 above.

If you require technical assistance or support with your Ink2image refillable cartridge kit, please initially contact the store or dealer where the system was purchased. All Ink2image dealers are well trained in the operation of the system and can help with most problems. Alternatively, contact Ink2image technical support on 1-800-443-9508 or at inquiries@ink2image.com.

### 30 DAY GUARANTEE TO REPLACE DEFECTIVE PARTS

Ink2image guarantees all parts are defect-free for a period of 30 days from the date that you receive your new Ink2image refillable cartridge system. If you have received a defective part, please initially contact the retailer or dealer from where the system was purchased.

### DISCLAIMER

Because Ink2image refillable cartridges are self installed by the user, Ink2image is not responsible for any damages to your printer, whether they are or are not related to the Ink2image refillable cartridge system. Please contact the store or dealer where the printer was purchased, or the printer manufacturer for any problems or questions related to the printer and its operation.

If the Customer chooses to use ink in the system from another manufacturer other than Ink2image, and is not satisfied with the ink, or it clogs the printer or the bulk feed system, it will be the Customers responsibility to pay for the parts to repair the system and restore it to normal usage. We can only guarantee that the Ink2image refillable cartridge system will deliver Ink2image ink just as well as a normal ink cartridge. We will not accept returns of used systems, or systems filled with third party ink that the customer later decides does not meet their specific needs.