

Universal 700mL Cartridge

Ink Fill and Use Instructions for Epson™ 7700/9700, 7890/9890, 7900/9000, P6000/P8000, and P7000/P9000 Printers



The instructions below describe how to fill and use professional Universal 700mL Cartridges. Filling and using these cartridges is easy as long as you are prepared before you begin and follow the instructions *carefully*. Color managed workflows are not discussed here, nor are instructions for using Piezography inks. Ink supplies, icc profiles, and ink information pages are available at www.inkjetmall.com and Piezography instructions are available at www.piezography.com and community.inkjetmall.com

Background Information to Read Before Beginning:

Cartridges are sold individually, as sets and with ink bottles. Each universal cartridge comes kitted with a separate chip for a specific printer/ink-channel. Refer to the item description to know what is included with the specific item you purchased.

1. Before beginning, make sure to have the following items on hand:

- Ink bottle(s), which can be ordered from www.inkjetmall.com.
- Empty refillable cartridge(s). **Each cartridge must have a fill hole plug attached at the back.**
- **Cartridge chips.** Because these cartridges are “Universal” they arrive chip-less. Each order of a universal cartridge for a specific printer/ink combo comes packaged together with its correct chip. This chip is in a small envelope and is marked with the printer model and ink channel. The chip must be placed onto the cartridge before the cartridge goes into the printer. (instructions on this below).
- Funnel(s) for filling and refilling cartridges with ink.
- A pair of thin rubber gloves to wear when filling or refilling cartridges.
- A slip-tip syringe and priming tip needed for eliminating air from the cartridges and for priming the cartridges with ink before installing them into the printer.
- A table or work surface large enough to hold cartridges and ink bottles. If you wish, cover the table with newspapers or a plastic sheet to protect it from ink spills.
- Work near a sink for easy cleanup.
- A roll of paper towels.
- A bottle of SimpleGreen or other cleaner that is good at cleaning up ink spills.
- Printer: before you begin, verify all positions in the nozzle check pattern are fully printing and your printer is in perfect working order. Fix any printing related problems before proceeding.
- For printers/chips that are older than the SureColor P-series, a chip resetter is needed when a cartridge reads empty to make it read full again- but is NOT necessary when installing new cartridges. Chip resetters are available thru Inkjetmall.
- The chips that come with SureColor P-Series printers are one-time-use only and are sold marked with a special series numbers (1,2,3 etc). These one-time-chips are thrown out after use and a second series chip (series #2 and so-on) is then bought and placed on the cartridge when you re-fill it. It is very important to remember what series chip you have so the next chip you order from www.inkjetmall.com is a different series. So if you start with series #1 Light Cyan (LC) chip for example, you will purchase series #2 LC chip a few weeks before it is time to refill and re-chip your cartridge.
- Clear tape or some other tape that adheres to plastic.

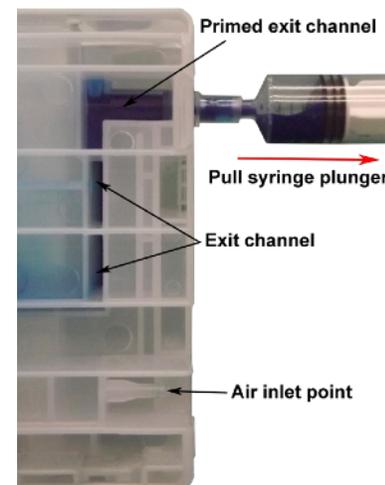
2. Treating and avoiding ink spills:

- If ink spills, wipe it up as quickly as possible. Blot ink with paper towels, then spray glass cleaner and wipe with a paper towel.
- Ink spilled on clothing or other fabric, on carpets or porous surfaces like wood or unglazed ceramic tiles will likely cause permanent stains. Keep this in mind as you choose the workspace area and clothing you wear.
- If you spill ink on the outside of a cartridge during filling, wipe it off with a paper towel, rather than rinsing, to avoid getting water in the cartridge.
- If you spill ink on your skin it will temporarily stain. Clean ink off with water and an abrasive soap, such as “Lava” soap or with regular soap using a rough sponge. Thin rubber gloves are recommended when filling ink cartridges.

Procedure for Filling & Priming Cartridges (approx 40mins):

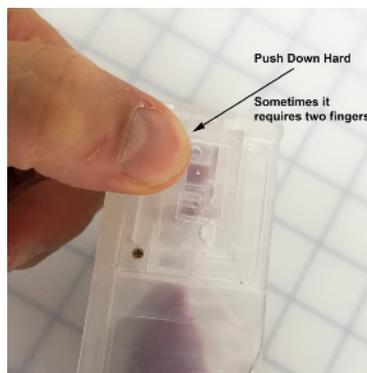
1. Please refer to the photos above to familiarize yourself with the cartridge parts before filling. If filling cartridges for the first time, unwrap and inspect them for damage. Contact Inkjetmall if you suspect that a cartridge is damaged. *Also, make sure a plug is in the fill hole at the back of the cartridge. If not, please check inside the cartridge wrapping before you discard it.*
2. Place an ink bottle and cartridge on your work surface. Do not open the ink yet. For Piezography ink, make sure to follow the ink shade placement chart <https://piezography.com/technical-support/> when filling and refilling cartridges. **Proper shade placement is NECESSARY for correct output.** Make sure to write the ink color or shade directly on the back of the cartridge after filling so you don't accidentally miss-install your ink!
3. Put on your gloves. Remove the orange plug from the air inlet port of the cartridge. Place cartridge vertically (ink outlet down, fill hole up) and remove the silicone plug from the filling hole on back/top (**refer to photos on top of page 1**). Select the correct bottle of ink for the cartridge, and shake it gently. Unscrew the top, and open bottle by removing the silicone plug or cutting around the foil seal. *The silicone plug can be hard to remove. A scrap of paper between thumb and forefinger can help you get a grip on it.*
4. At this point make sure you have good light in your work area and that the cartridge label is facing away from you. This way you can see the ink as it flows into the cartridge. It's also good to be sitting down for this procedure.
5. Insert the fill funnel into the cartridge fill hole. Support the funnel and the cartridge with one hand. Pour ink with the other hand slowly into the funnel.

6. *We normally recommend that you pour the ink into the cartridge until the ink level is just below the fill hole (1/2 centimeter or so). This will give you a good 700mL+ of ink in the cartridge. However if you are only wishing to fill this cartridge with 350mL of ink, pour the entire 350mL bottle of ink into the cartridge at this point. Filling with less than 700mL will require more priming to remove the air and will also require the correct chip (350mL chip) or extreme vigilance on the part of the user so as to not run the ink cartridge dry. Filling with 700mL of ink and using a 350mL chip is safe however.*
7. Remove the funnel and insert the fill plug back into the fill hole. This should be firmly pressed into the fill hole so it is totally inserted. This ensures that no pressurized air leaks out of the cartridge when in operation.
8. Now place the cartridge vertically (fill hole down, outlet up). The cartridge label should still be facing away from you. You will see a lot of residual air bubbles flow to the top of the cartridge. Take a syringe and place a slip-tip priming end on it.
9. Now insert the syringe into the cartridge ink outlet (top left of the cartridge) and angle the cartridge about 10 degrees to the left. Draw the syringe up. You will see a lot of ink/foam come out. *If this is a cartridge with only 350mL of ink in it you may need to do a full draw of the syringe, then push the plunger back down over a sink, and do another just to prime the air out and get ink flowing.*
10. Once you see ink flowing take your priming syringe out and eject the excess ink back into your ink bottle.
11. Rotate the cartridge by 180 degrees (ink outlet bottom, fill hole top). Then 180 degrees again and then angled 10degrees to the left. This procedure loosens any remaining air that was clinging to the internal ink back and gets it ready to prime out of the cartridge. Insert the priming syringe again and pull a bit of ink out. (Not as much as before.) This will remove any remaining air that was inside of the ink cartridge.
12. **Write the ink color/shade on the back of your cartridge above the fill plug in Sharpie. This is important to remember to do!**
13. Repeat the above steps for the remaining cartridges. After filling a cartridge with ink, the funnel can be rinsed with water, air dried and used for later refilling. If the funnel stains and can't be cleaned to a "new" condition, this will not contaminate your inks. However, introducing even small amounts of ink from one *color* bottle into another *color* bottle **will** contaminate your inks, so be careful of this. *If you are filling piezography cartridges a single syringe can be used as long as you fill from lightest shade to darkest shade and do not eject priming ink back into the ink bottles but instead eject it into a sink or waste bottle.*
14. **Now continue on to the cartridge chip procedure.**



Attach a chip to the Universal 700mL Cartridge (required!):

1. As described above there are two types of chips: resettable x900 chips and one-time SC-P chips. The resettable chips are for the 7900/9900 style printers. The one-time chips are for the SC-P (SureColor) printers. *This document will first describe how to place the chip onto the cartridge and then will go into detail on resetting the x900 chips and then go into detail on organizing and ordering the one-time SC-P chips.*
2. For the cartridge in front of you that is sharpie-marked with its shade/color, find the correct chip and place it in front of the cartridge. (For example, Light Cyan ink cartridge will have the LC chip). *If you have Piezography shades in your cartridge and are confused about what chips to place on, please look at the link in Piezography Setup & Instructions below to find the channel placements. Mark the channels on your cartridge for reference and then place the correct chip next to each cartridge.*
3. Make sure that you are in a static free area. Increasing humidity can help and even wearing an antistatic wrist strap can also help. Any static that sparks the chip can short it out and cause it not to work. Make sure you hands and work area are also clean!
4. Remove the chip from its envelope.
5. Place the cartridge so that the label is right-side up with its arrow pointing towards the front (chip base plate) of the cartridge.
6. Take your thumb and firmly press the edge of the chip base plate down (see photo). You will hear a snap as the chip baseplate is locked into place.
7. Take your chip and place the front groove onto the baseplate groove post (see photo) and the back hole over the baseplate hole post.
8. Tape over the back of the chip to secure it in place on the cartridge. *Although this is not necessary for good functionality it ensures that chip does not fly off when you agitate the ink cartridge in weeks and months to come.*



Inserting and Removing Universal Cartridges:

1. At Inkjetmall we recommend that you make sure the printer is powered off before removing or inserting cartridges. This ensures no static spark or other electrical interference between the chip and chip sensor contacts in the printer when you are moving the cartridge. To remove cartridges, first open the ink bay doors (when the power is on), then turn the power off and then remove the cartridges.

Resetting x900 chips (only after use!):

The chip resetter has a guide that fits snugly around the sides and front of the cartridge to easily align resetter pins and chip contacts. Fit the resetter guide over the chip end of the cartridge, then gently press the resetter against the cartridge chip. The resetter light will flash red several times then turn solid green to indicate the reset is complete. If the light turns solid red, then either the reset was not successful, resetter and chip were not properly aligned or the chip is damaged- in this case, try resetting again. You can't "over-reset" a chip, but occasionally if resetter pins and chip contacts aren't correctly aligned it can short out the chip. More info on debugging this workflow is available at community.inkjetmall.com. Video of our chip resetting is available at www.youtube.com/user/Inkjetmall

NOTE: Chips are fragile, sensitive to electrical shock, and can short out. We recommend resetting and reusing them whenever possible, but suggest having a set of replacement chips on hand if needed. New chips can be attached in place of the old chips by following instructions on page 4. Replacement chips can be purchased from www.inkjetmall.com

Re-ordering SC-P One Time chips in North America:

Because the SC-P printers are locked-down in the North American market you must use one-time-only chips in these printers. Each chip comes with a specific series marking (eg: LC #1, LC #2, etc). Mark the cartridge with the series that you are installing onto the printer (use a sharpie). When it comes time to order a new chip (do this when the cartridge gets to 1/3 full on the printer's control panel) **you must call us at 1-802-478-0800**. We will verify your purchases and then send you the correct (next) chip in the series. *We do not have series #2 (etc) chips available online at the time of this writing.*

NOTE #1: When these one-time chips are ready to be replaced your printer may not say "ink cartridge empty replace cartridge" but instead may say "ink cartridge cannot be recognized." It's useful to turn the printer off and reboot it to ensure that this was not just a temporary chip contact issue. If the issue persists you know it's time to switch the chips.

NOTE #2: Epson is always working to defeat the third-party inkjet cartridge market. It is not inconceivable that Epson will update the firmware of the SC-P printers to lock out these chips in the future. We recommend that you NEVER let Epson update the firmware on your printer. When downloading the driver from Epson download the *driver only* and not any "Combo" options. The combo option forces you to agree to auto Epson firmware upgrades and this could lock your printer out until new chips are engineered for the new firmware. If you want to update the firmware please ask about the most recent firmware at community.inkjetmall.com and we will verify if it works with your chips or not.

PIEZOGRAPHY SETUP & INSTRUCTIONS

For full documentation on how to install Piezography for every printer please go to <https://piezography.com/technical-support/> and look for your printer model.

TROUBLESHOOTING & HELPFUL INFORMATION

- * **Use the printer on a regular basis for best function.** To keep ink moving thru the internal ink system—and the head moist—print a small image or do a few cleaning cycles at least once a week if the printer is not used regularly. It's NOT good to leave pigment ink installed in a printer that will not be used for an extended time- it's best to install flush carts and flush ink for safe storage if your printer will sit unused for a month or more (see below for additional information on flushing and storing your printer).
- * **Long term storage of printer:** We do NOT recommend letting a printer sit unused with pigment inks installed. If you plan to not use a printer for an extended period of time, it's best to remove ink cartridges, install a set of flush cartridges and flush ink from the print head by doing an Initial Fill cycle, before turning it off for safe storage. Store unused cartridges by sealing air vent holes with plugs or electrical tape, then place cartridges upright in a sealed plastic bag to keep avoid drying. Always shake cartridges and OPEN air vent holes before reinstalling into the printer.
- * **Pigment ink settles if not regularly agitated.** To keep pigment ink printing at full density, shake cartridges every 1-2 weeks to keep the pigment in suspension. If a printer is not used for a few weeks or more, shake the ink cartridges, wait about 10 minutes, then do several Cleaning Cycles or one Initial Fill Cycle. This will purge settled ink from the printer's internal ink

lines and fill with ink from the shaken cartridges. It is NOT good to leave pigment ink installed in a printer that will sit unused for an extended time.

* For the best results, monitor and maintain humidity levels between 40-60% in the printing area. Both low and high humidity can cause problems with the printer, ink and paper.

Question: My printer does not recognize one or more cartridges.

Answer: Remove the ink cover switch and all cartridges and turn the printer off for at least five minutes. The printer will indicate “NO cartridges” after turning back on, reinstall all carts so they snap snugly into place, and put the ink cover switch back in. If you still have cartridges that are not recognized, you could have a shorted cartridge chip. Replacement chips can be found at shop.inkjetmall.com. If this is a common thing, we suggest you put your printer on a power conditioner.

Question: When I print there are large blobs of ink on my page.

Answer: Keeping the printer clean is crucial to the function and print quality. If the capping station has waste ink and dust build up, that gets transferred to the bottom of the print head, which can cause ink to drip or smear on the paper as well as clogging and mis-firing nozzles. Keeping the capping station and wiper blade clean will help keep the print head clean and working well. Please follow cleaning instructions titled “Printer Cleaning and Preventative Maintenance” on our Tech Support Forum, in the Articles> section. Tip: doing a google search for “Print Head Cleaning Tips” will also bring this article up.

Question: I have filled the cartridges with ink but no ink comes out when I try to print.

Answer: Re-prime your cartridges and run a power cleaning on your printer (heavy). Let sit for a few minutes and then do a single channel cleaning (normal). Then do a nozzle check. If you still have problems, this could be a more fundamental issue with your dampers, head, or cleaning assembly (ink vacuum motor).

Question: When I print there are lines on the paper.

Answer: Lines on the paper are often caused by missing or mis-firing nozzles (called “banding”), but mis-alignment can also cause lines in the print. Print a nozzle check to make sure all positions are fully and correctly printing. If there are missing or mis-firing nozzles do a head cleaning to correct for this. If the lines are widely spaced and vertical (perpendicular to the print head) this indicates a head alignment issue. Go through the head alignment procedure from the printer’s control panel.

If you continue having problems or have additional questions, please refer to our Inkjetmall Support Forum at <https://community.inkjetmall.com>

Warranty, Support, & Return Policies:

INSTRUCTIONS AND TECHNICAL SUPPORT POLICY

We provide free technical support for our products provided that you have read the instructions. It is your responsibility to read the instructions for your product. We urge you to read these instructions ahead of time and we provide them in the instructions tab of those of our products which require careful attention. You can read these instructions by either viewing or printing the pdf and web pages that we provide in the Instructions Tab of an item. Although we ship our items with instructions or a link to the latest instructions, please take the time to make sure that you have and are familiar with the instructions before you apply for technical support.

RETURN POLICIES

Although we value you as our customer, we cannot accept returns on opened merchandise because you tried it and didn't like it or because you ordered the wrong thing and didn't notice before you opened it. Please read the product information on our web site carefully and be sure you are ordering the product you want; check again before opening. InkjetMall will accept authorized returns on unopened merchandise for 15 days from receipt for a full refund on the merchandise only, less a 15% restocking fee. Returned merchandise must be in sellable condition in its original packaging. Authorized returns must be received within 15 days of an RMA being issued and will not be accepted after that. The customer must call customer service to return the product and we issue an RMA number to the customer and we advise the customer as follows: When returning your order to the address listed on the packing list, which came with the original shipment, please be sure to return all items that came with the order so that you will receive proper credit. When shipping the order back to us via UPS, DHL or FedEx please be sure to obtain a tracking number and insure the package in case it is lost in transit! The tracking number will allow you trace the package in case it is lost and will permit you to file a claim with UPS, DHL or FedEx. If you ship the order back to us via the Post Office, be sure to request Delivery Confirmation and insure the package. The customer is responsible for the return shipping cost and the order Shipping and Handling is not refundable.

DEFECTIVE MERCHANDISE AND WARRANTIES POLICY

For any merchandise that was manufactured by and purchased directly from InkjetMall, which is defective in workmanship or material and for which you make a claim within thirty (30) days after receipt of the merchandise, we will elect to either repair, replace, or refund the purchase price. When making such a claim, you must submit both the original packing slip and the defective merchandise itself, unless these conditions are waived by us in writing. This paragraph constitutes our sole obligation as to the merchandise, and you acknowledge that this paragraph sets forth your exclusive remedy for any breach of warranty or other duty related to the merchandise or quality thereof. Any refund for merchandise shall not include shipping and handling or replacement fees.

All defective merchandise not manufactured by InkjetMall is warranted by the manufacturer, not by InkjetMall. Returns are subject to approval by the manufacturer. Shipping charges on defective merchandise are not refundable!!

If you believe your merchandise was defectively manufactured, please call our Customer Service department. Some items may require technical support to ascertain if you are using them correctly or if you are using them with incompatible products. If it is determined that the merchandise is defective, you will be issued an RMA#. The customer must call customer service to return the product and we issue an RMA number to the customer and we advise the customer as follows: All returned items are subject to inspection for use and damage before credit is issued. You may incur additional charges if product is returned in damaged condition. When returning your order to the address listed on the packing list, which came with the original shipment, please be sure to return all items that came with the order so that you will receive proper credit. When shipping the order back to us via UPS, DHL or FedEx please be sure to obtain a tracking number and insure the package in case it is lost in transit! The tracking number will allow you trace the package in case it is lost and will permit you to file a claim with UPS, DHL or FedEx. If you ship the order back to us via the Post Office, be sure to request Delivery Confirmation and insure the package.

DISCLAIMER, EXCLUSION OF WARRANTIES

EXCEPT AS EXPRESSLY PROVIDED IN THIS AGREEMENT, WE MAKE NO OTHER WARRANTIES, EXPRESS OR IMPLIED, OR ARISING BY CUSTOM OR TRADE USAGE AND, SPECIFICALLY, MAKE NO WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE AND ANY WARRANTIES, CONDITIONS, REPRESENTATIONS, INDEMNITIES AND GUARANTEES WITH RESPECT TO THE MERCHANDISE ARE HEREBY SUPERSEDED, EXCLUDED AND DISCLAIMED. THE EXPRESS WARRANTY CONTAINED IN PARAGRAPH 1 HEREIN CONSTITUTES THE SOLE AND EXCLUSIVE WARRANTY MADE BY US AND IS IN LIEU OF ALL OTHER WARRANTIES. IN NO EVENT SHALL WE BE LIABLE FOR ANY CONSEQUENTIAL, INDIRECT, SPECIAL, PUNITIVE OR INCIDENTAL DAMAGES OR LOST PROFITS, EVEN IF WE WERE ADVISED OF THE POSSIBILITY OF THE SAME IN ADVANCE. OUR AGGREGATE LIABILITY IN ANY EVENT IS LIMITED TO THE AMOUNT ACTUALLY PAID BY YOU.

RETURN PROCEDURES:

- InkjetMall will only accept authorized returns.
- All returns must have a Return Merchandise Authorization (RMA) number.
- RMA numbers are only available through Customer Service.
- Please call 888-426-6323 to receive an RMA number.
- No returns will be accepted without an RMA# on the box or label.
- InkjetMall will refund the full amount of the merchandise less a 15% restocking fee on unopened, sealed merchandise only, returned within 15 days of receipt.
- Shipping costs will be the responsibility of the customer.
- No credit will be given until the merchandise has been returned.
- Credits will be processed within 7-10 business days from date of receipt.
- Returns must be made to the address given by your support representative.