





# InkStream Pro-CP Installation and Operation Manual



Seiko Colorpainter 64S, 100S, Oce CS-6060 and HP Designjet 9000s



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## Package Contents

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Item	Quantity	Note
Tray for bottles	2	Each tray holds 4 bottles: 3 are used for inks and 1 for the Flushing Solution (solvent).
Bottles	8	1-liter bottles that will hold the ink.
Cartridge	7	6 cartridges are required for installation and 1 will remain spare. These are permanent cartridges that are designed for long-term operation without removing from printer.
Ink Chip	8	6 Ink Chips are required and 2 are spare. Cartridges arrive with Ink Chips already connected into them.
ChipCharger	1	A USB device that must be connected to your PC. It will recharge the Ink Chips with new data when the printer "empties" it.
USB Cable for ChipCharger	1	
M4 screw	2	These screws are used to attach the nylon ties to the printer.
Nylon tie	2	The ties will be used to organize the ink lines coming from the cartridges.
Magnetic latch	2	You will use these latches in order for the printer to be able to work without the ink covers.
4-way adapter	2	This adapter is used to connect all ink lines from cartridges to the bottle with the Flush.

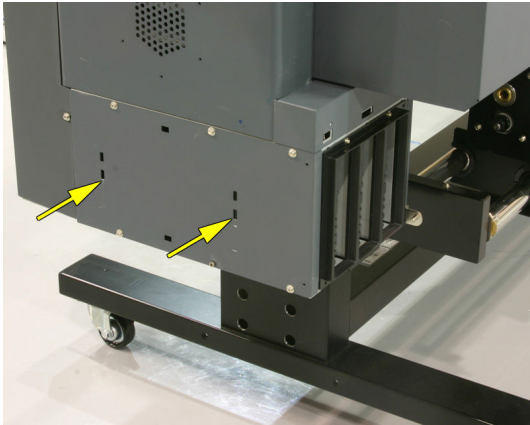
## Before You Begin

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1. Turn on your Seiko printer. Make sure the original cartridges are installed on it. Printer should be able to boot up and go online.
2. Set your printer offline.
3. Press **CANCEL, SHIFT, CANCEL, CANCEL**.
4. It will show MAINTENANCE MODE PASSWORD? Press **SHIFT, up arrow, down arrow, right arrow**.
5. Using the SHIFT key, scroll through screens until you see **SYSTEM**. Press left arrow to go into this menu.
6. Using the down arrow, scroll until you see **SAVE NVRAM**.
7. Press **ENTER** and **ENTER** again to confirm.
8. Set printer online.

## Installing the Trays

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Remove all cartridges from the printer.

Remove the Left and the Right ink covers (the plastic covers over the cartridge area). Each cover is held by 2 brackets. It is enough to remove one of the brackets to be able to take the covers off. We won't use them unless you decide to switch back to one-time cartridges.

Trays are equipped with hooks that allow them to be hung on the side of the Colorpainter.

Hang the trays on both sides of your printer.

Orient the bottles so that the fitting would be turned towards the printer wall. This way the ink lines won't be on your way when filling the bottles with ink.



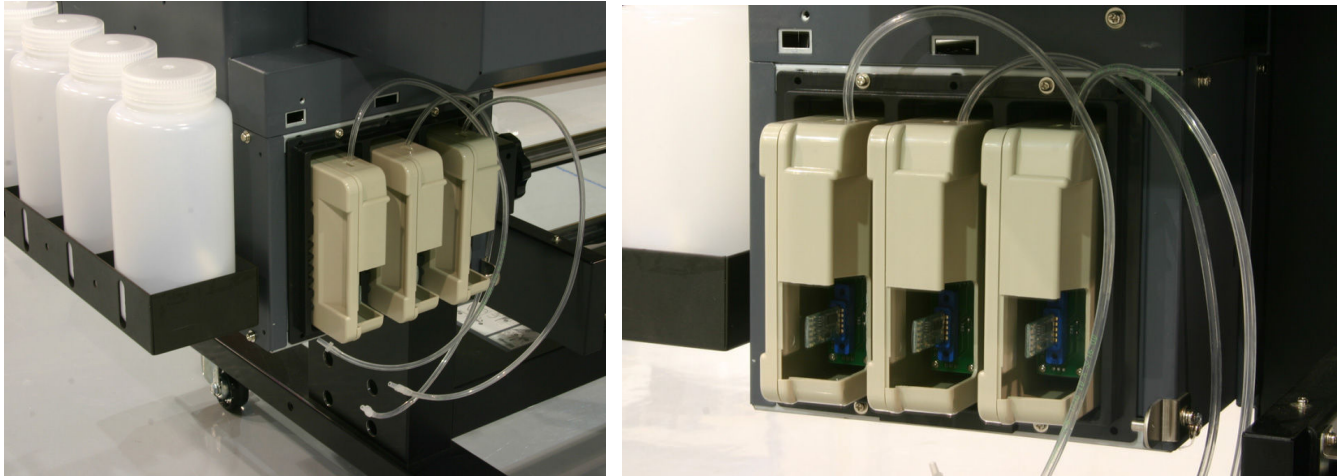
When you are going to pull one of the bottles out of the tray, you must hold down the other bottle(s) or otherwise you may lift the whole tray and the hooks may slide off the printer causing the tray to fall.

## Installing the Cartridges

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6 cartridges of the package will be provisioned for certain colors, while a spare cartridge won't. When needed, you can set up a spare cartridge to work in the color of your choice. Just clip off one of the 6 tabs on the side of it.

Insert the 6 bulk system cartridges fully into the printer.



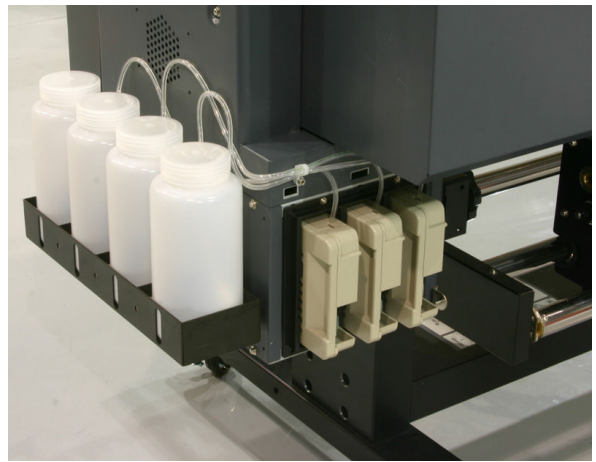
Make sure that the ink chips are fully inserted in the blue connectors inside each cartridge.



Use a nylon tie and an M4 screw to organize the ink lines as shown here. You will have to remove an original screw and replace it with ours.

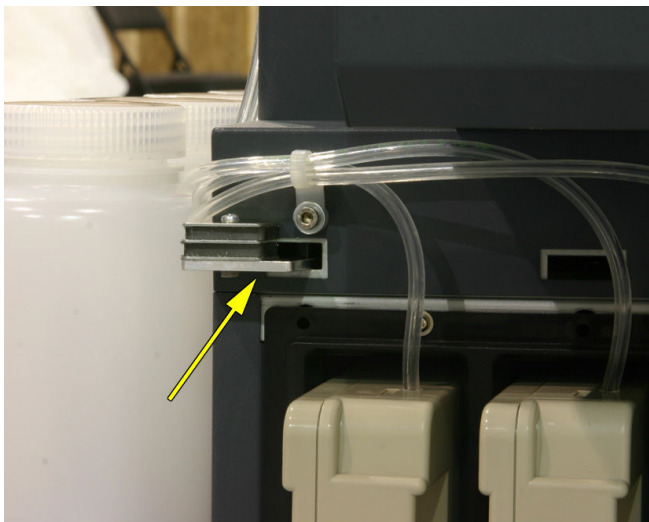
Connect the fittings on the ink lines to the bottles.

Always make sure that the fittings on the ink lines are firmly connected to the fittings on the ink bottles. This is crucial for system operation. A loose connection may cause the air sucking in the ink lines with many unwanted consequences.



## Installing the Magnetic Latches

Install the magnetic latches so that they push on the cover switches (see picture).



Note that the printer will attempt to read the cartridges (i.e. the Ink Chips) when you push on the switches. The printer will see it as closing of the cartridge door.

If the display on the printer says CLOSE L INKCOVER or CLOSE R INKCOVER, it means that one of the sensors is not pushed. Because the location of the switches may differ from printer to printer, we may put a piece of soft tubing on the part of the magnetic latch that pushes on the switch. If it's too long, you can always trim it to a required length.



When both of the magnetic latches are mounted, the printer will immediately read the InkChips. The InkChips have six LEDs on the edge, each of the LEDs indicating the color simulated by the InkChip. When the printer is reading the chips, you should see a light from one of the LEDs on each InkChip for a very short period of time. If one of the chips does not show the light, it means that the cartridge has no contact with the printer. Replace the cartridge with the spare one, transferring the InkChip into it.

If the printer does not recognize one of the InkChips, try to pull out the magnetic latch on the respective side of it and re-inserting it. If printer continues saying CHECK Xx INK, it could be a problem with the InkChip or the chip must be recharged with the new data. See our Troubleshooting section.

Once all cartridges are recognized by the printer, it's time to add some ink.

## Loading the Inks

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You will have to wear the chemical goggles in order to proceed with installation. Protect your eyes from solvents!



Pour some ink into the bottles. Do not top them off any higher than the fitting on them. Make sure to put correct colors in bottles. Left side has Black, Light Magenta and Light Cyan, while the right side has the Yellow, Magenta and Cyan.

Now we must make the printer pump the ink from the bottles and fill the ink lines completely. If we don't do this, we may have a pumping timeout later on, and the printer will show an error and ask for a new cartridge.

Each of the 6 ink pumps can be activated in the maintenance mode.

When printer is offline, press **CANCEL, SHIFT, CANCEL, CANCEL.**

It will show MAINTENANCE MODE PASSWORD? Press **SHIFT, up arrow, down arrow, right arrow.**

Now press SHIFT until you see ACTUATOR. Press the right arrow and then scroll using the down arrow until you see **#ISM1 STOP**. Press ENTER and down arrow until it shows NORMAL. Press ENTER. It will ask NORMAL OK? Press ENTER. Now the pump will turn on and you will see that the ink is coming up from the bottle and filling the ink line.



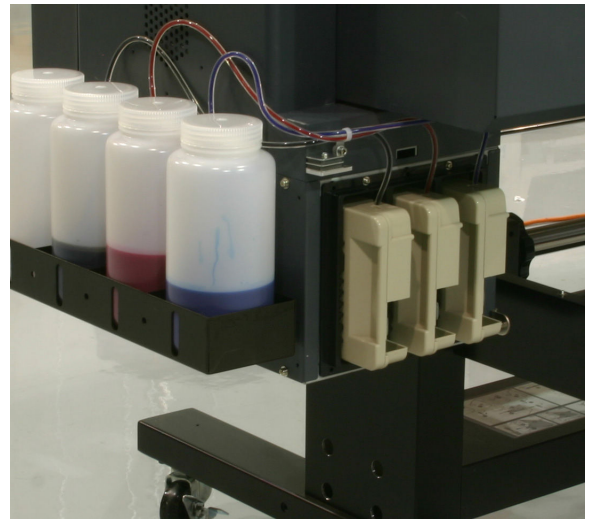
**It should take no more than 20 seconds to fill the ink line completely.**

Once the ink has gone into the cartridge, allow 5 more seconds of pumping and then stop the pump by doing this:

Cursor is on #ISM1. Press ENTER. Press down arrow until you see STOP. Press ENTER – it says STOP OK? – press ENTER again. The pump will stop.

Fill the other 5 colors the same way, through activating ISM2...ISM6 for about 20 seconds each.

You can now exit the maintenance mode by pressing ONLINE twice.



Now you will have to execute approximately 8 to 10 cycles of STRONG CLEANING, to load the ink completely into the printer.

The printer is now ready for operation.

**EXTREMELY IMPORTANT!**

The ink bottles should have enough ink to keep the intake port of the ink filters submerged in the ink at all times. If the level goes below the filter, the printer will suck in the air, which will cause troubles. Always keep an eye on the ink levels and add the ink as needed.

## **Installing the ChipCharger Driver for Windows 2000/XP**

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The driver for ChipCharger will work under Windows 2000 or XP.

1. Look for the sticker at the bottom of the ChipCharger, it contains the login and password for your account.
2. Go to this web site: [www.solventcartridges.com](http://www.solventcartridges.com) and click on Tech Support.
3. Click on the link "InkStream Customers Login Here".
4. Enter your login name and password found on the sticker. Click "Login".
5. On the next screen you will see your company information and information about your printers. On the bottom of the screen you will see the links to Charger Software and ChipCharger USB driver. Download both of them.
6. Unzip the **charger\_driver.zip** file into some folder.

7. Connect the ChipCharger to the USB port using the cable provided.
8. Windows should automatically detect it and ask you to locate the driver for it.
9. Browse into the folder where you unpacked the chip\_driver.zip file and select the file Windows is looking for.
10. If you are asked to reboot, please do so.

## Installing the ChipCharger Software

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1. Run the charger\_setup.exe file you downloaded and install the Charger software.
2. Look for program and run it by going into **Start – All Programs – ChipCharger**.
3. The program should say “**ChipCharger USB device connected**”. If it says that the device is not found and the driver was already installed, please notify your dealer or us and we will replace the USB device.
4. If your firewall is blocking the Internet access of ChipCharger program, please unblock it. Internet connection is required for operation of the software.

## Editing Customer Information

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The web page mentioned above will have an option to edit customer’s information. Click on **My details** link at the left bar on the screen and then click on **[Edit this information]** in the main window.

Please note that entering information about your company is **not mandatory** if you have purchased the bulk system from a dealer. This information is required for warranty and tech support provided directly from Solvent Cartridges.

We recommend changing the password when you are installing the system for the first time. This will make sure that no third party, including your dealer, can access your information.

## Editing Printers

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By the time you have received the bulk system there will be a printer added to your account. If you have more than one printer, or if you have both Seiko (Oce 6060) and JV3 printer, you can register them at the Bulk System Support web page.

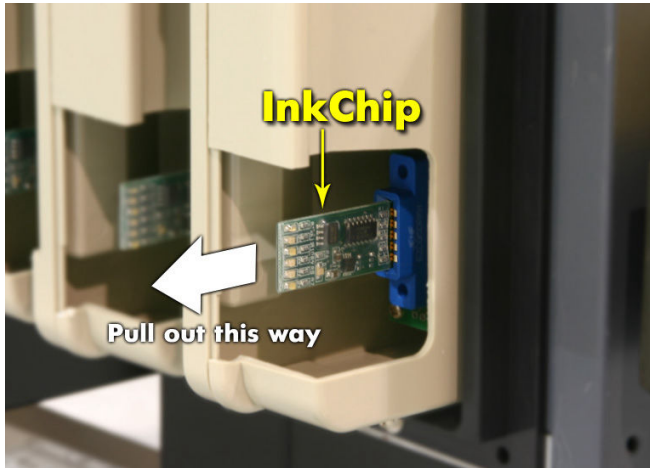
Click on **Add printer** link in the left menu and enter the required information.

Printer Serial Number does not have to be a real serial number; it’s only an identification of a particular printer and you can use any reference name.

Entering a correct region: Europe, America or Asia, is very important because it determines the data that will be transferred into the Ink Chip.

You can also edit the printer information by clicking on **[Edit info]** in the printer list.

The information about your printer will be used by ChipCharger software. There must be at least one printer to be able to recharge Ink Chips.



## Working with InkChips

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InkChip is an electronic circuit board with a micro-controller on it. It has 7 LEDs: a Green one to indicate the power (5V) and 6 LEDs to indicate the color. From top to bottom: Orange or White for Black color; Red for Light Magenta; Blue for Light Cyan; Yellow for Yellow; Red for Magenta and Blue for Cyan. The color sequence top to bottom is the same as on a printer, from left to right.

InkChips are electrostatic-sensitive devices. Make sure to touch the printer metal body before touching the InkChip.

When handling InkChips, avoid touching the gold-plated contacts, which are not insulated. This will extend the life of the chip.

Always insert InkChips into cartridges as shown on the picture, with parts facing towards the cutout.

## Verifying Ink Chips

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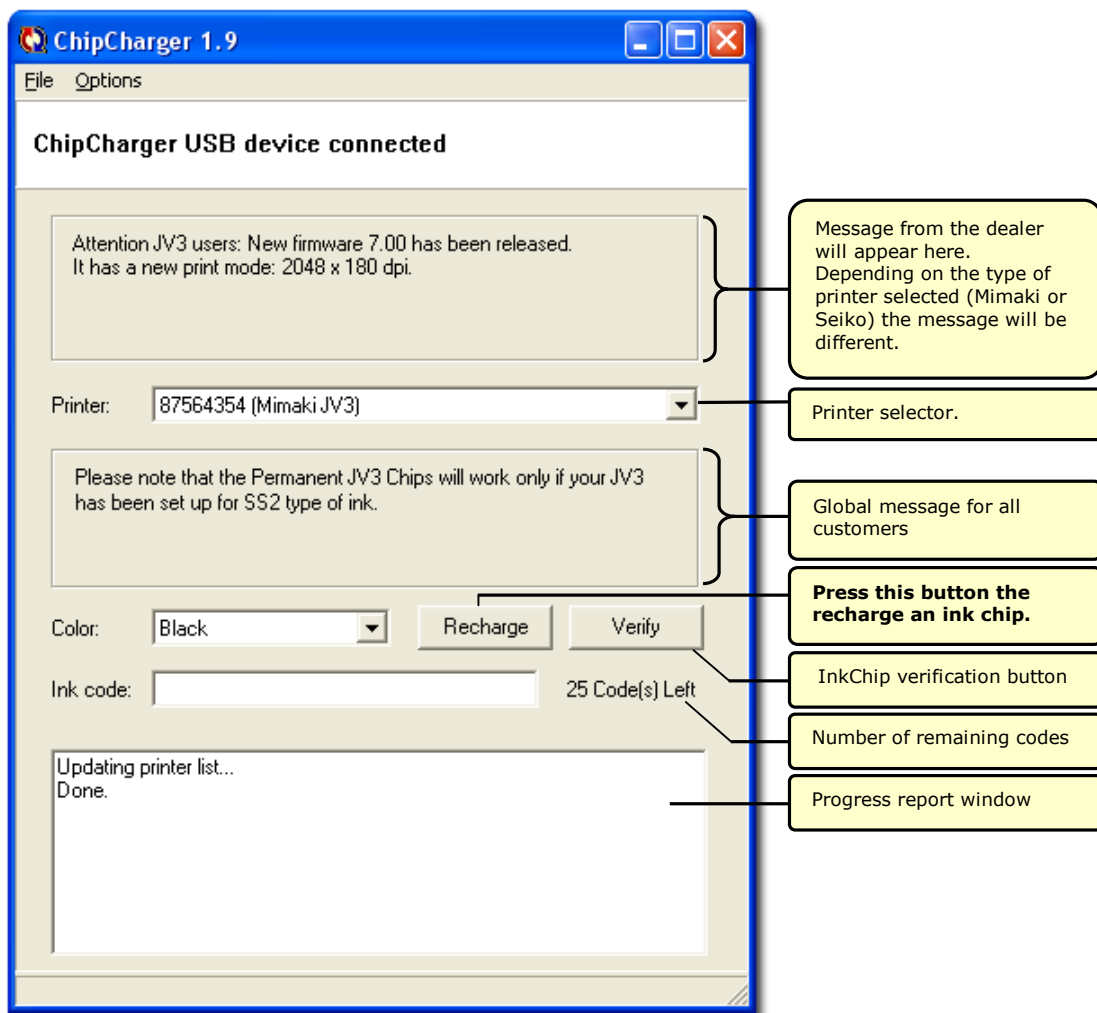
ChipCharger software provides a function to verify if the InkChip is responding with a correct data.

- Pull out the ink chip from a cartridge.
- Insert it into the ChipCharger device as shown on the picture there.
- As soon as the InkChip is inserted, a green LED will light up, indicating presence of the power. Also the LED for the corresponding color will start blinking. This indicates that the micro-controller is running.
- Press **Verify**. If verification was successful it will say "Verification OK" and select the color that was saved on the InkChip.
- Re-install the InkChip back into the cartridge.

## Recharging the Ink Chips

During the normal course of operation the Seiko will be reducing the ink counter from 100% down to 0%. When the level is near zero you will have to recharge a chip.

- Remove the magnetic latch.
- Pull the InkChip out from a printer.
- Insert it in a ChipCharger.
- Make sure that the LED indicating the color is blinking.
- In the ChipCharger window, select the color or press Verify.
- Press Recharge.
- When the software has reported a successful completion of recharging, remove the InkChip and re-install it on a cartridge.
- Install the magnetic latch back in place.
- Verify that the printer is recognizing the chip. If not, please refer to Troubleshooting section of this manual.



## Troubleshooting

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Problem	Solutions
<p>Printer does not recognize the InkChip by showing "Check XX ink"</p>	<p>1. Cycle the switch pushed by the magnetic latch. If the problem does not go away, proceed to step 2.</p> <p>2. Remove and put back in the magnetic latch. <b>Do you see the light come up on the LEDs on the InkChip for a second?</b> Each of the 3 InkChips on either side of the printer will have to light up the LED that represents the color it's programmed with.</p> <p><b>NO</b> – There is a problem with the cartridge. It does not provide a good connection between the Seiko and the InkChip. Replace it with a spare cartridge and transfer the Chip.</p> <p><b>YES</b> – It's a problem with the InkChip. The cartridge is most likely OK. Take a spare InkChip and recharge it with the needed color using a ChipCharger. Install it in place of the problematic one and cycle the switch with the magnetic latch. Did the problem go away? If not, please contact us.</p>
<p>Printer shows "X inkcover is open. Close X inkcover".</p>	<p>Is the magnetic latch installed? If yes, then most likely it does not reach to the switch. There must be a piece of tubing on the end of the latch. If it's too short, it won't be able to push the switch. Slide the tubing off about 2..3 mm in order to increase the length of the piece. Reinstall the magnetic latch on a printer.</p>
<p>Printer shows "Set XX ink".</p>	<p>If all cartridges are installed and you still see this message on the Seiko display after setting the magnetic latch, try unplugging the problematic cartridge and re-inserting it. Cycle the door switch again.</p> <p>If the problem persists, it must be a problem with the cartridge: poor contact between the Seiko and the InkChip. Replace the cartridge but use the same InkChip. If problem continues, change the InkChip, but remember to recharge it before using.</p>

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