ROSETTA TECHNOLOGIES

# CERPRINT 3710

## Ceramic Decal Printer

# Software Installation Guide
# &
# User Manual

Version 1.5
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# Welcome!

## Thank you for purchasing a Rosetta Technologies CerPrint 3710 Ceramic Decal Printer.

The CerPrint 3710 is a 34 page-per-minute laser printer engineered for the successful printing of ceramic decals. The toner in the cartridge is specially formulated to produce deep, rich black or blue images at nominal firing temperatures (1,150° to 1,650º Fahrenheit.

The printer has been modified to lay down optimal amounts of ceramic toner when used in combination with CerPrint-approved lamination decal paper.

1. **High-fire** paper, containing a flux that allows firing at temperatures up to 1,650° F.
2. **Plain unfluxed** paper, which is used for "in-glaze" firing at temperatures up to 2,400° F.
3. **Low-fire** paper, containing a flux that allows firing at temperatures as low as 1,100° F.

The Low-fire and High-fire fluxed papers fire to a hard, vitreous, glossy overcoat. The plain unfluxed paper burns off completely, using glaze melt or re-melt to fuse the decal image. CerPrint toners are lead-free, food-safe, and permanent when fired to the proper temperatures, using the recommended food-safe decal media.

In this manual you will find detailed printing instructions and firing schedules. We also recommend that you read the included User's Guide on the Ricoh 3710DN CD, as this covers the installation of the printer, operational specifics, and instructions for loading the drivers from the CD. We also cover downloading and driver installation from the internet in this manual.

This CerPrint 3710 printer kit includes a sample pack of 25 sheets of High-fire ceramic decal donor paper and one pack of 25 sheets of white waterslide paper. The use of this paper requires that you purchase a laminator. They are easily obtained from retailers like Amazon. *We recommend the Scotch Akiles Pro Lam 330, as we have tested it and have been satisfied that it performs well for this process. Other laminators may work, but we have found the Akiles to be very solid and reliable over time.*

We welcome your feedback and suggestions. Please contact us at info@cerprint.com.

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## Examples of Ceramic Decal Print Files

This page shows sample decal designs and text blocks printed on the CerPrint 3710. Pre-firing, your images will look similar to these examples:

After firing to the proper schedule, the printed images finish out with a hard, vitreous, food-safe deep black or blue finish, like this:

**Would you like to see some creative ideas and samples? Check out our Gallery Pages at https://cerprint.com/gallery/**

## What's In the Box?

- One CerPrint 3710 Ceramic Decal Printer
- One Ceramic Decal True Black Toner Cartridge or one True Blue Toner Cartridge
- Sample pack of 25 of high fire decal donor paper and 25 sheets of white waterslide paper
- CD containing drivers and other printer information
- Software Installation Guide & User Manual

**Note: You will need a laminator. We recommend the Scotch Akiles Pro Lam 330 laminator, available from online retailers like Amazon.**

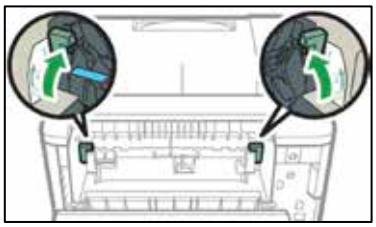
## Before You Begin

**IMPORTANT!**

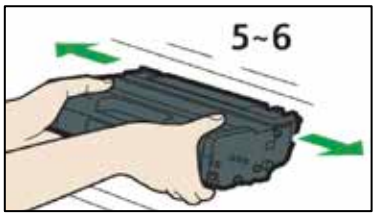
***Please make sure that you have installed either the Windows SP 3710DN PS (Postscript) driver or the Macintosh OS X Ricoh SP 3710DN driver by following the instructions in this user manual. This is critically important, as certain settings can only be used if these drivers are installed.***

Follow the instructions on the bundled CD for unpacking and installing the printer, making sure to perform these two steps:

1. *Open the back door of the printer to access the fuser unit. You will see two green tabs, one on each end of the fuser. Remove the styrofoam pieces that are holding them in the down position and move the levers to the* ***up*** *position. Close the back of the printer.*



2. *Before installing the toner cartridge in the CerPrint 3710, gently shake the cartridge back and forth 5 to 6 times while holding it horizontally. This redistributes toner that may have settled after shipping.'*




Now you are ready to follow the driver installation process for your computer and network environment from these choices:

- Installation for Windows OS via USB
- Installation for Windows OS via Network
- Installation for Macintosh OS X via Network

**Note**: All modes require a live internet connection from a networked PC.

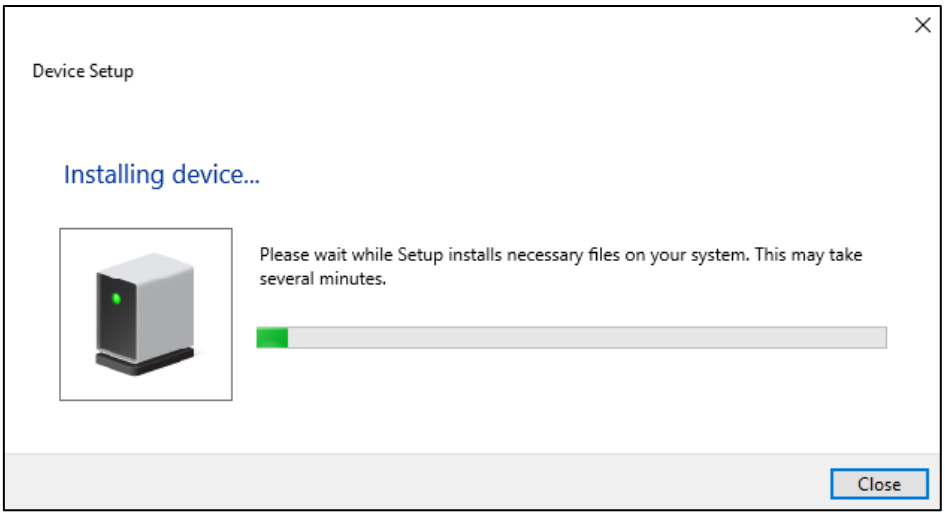
# Installation for Windows OS via USB

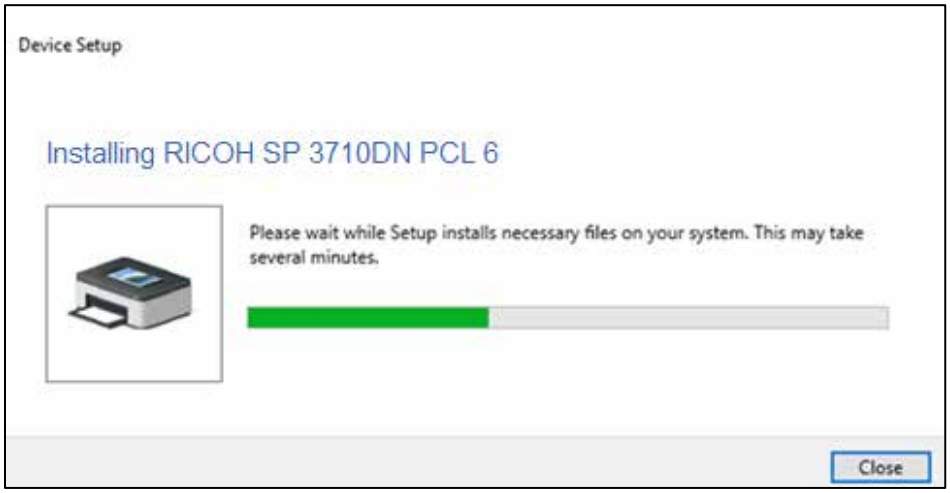
**IMPORTANT!**

**When connecting the CerPrint 3710 to your Windows PC using a USB cable, Microsoft Windows automatically defaults to install the PCL version of the driver first.** This is part of the printer's "Plug and Play" auto installation process after a USB cable has been connected to a PC for the first time. However, You will need the **Postscript (PS) driver** for successful high-quality decal printing.

Follow these directions to download and install the PS driver from the Windows "**Devices and Printers**" Control panel after the auto-install of the PCL version is complete (Steps 1 & 2).

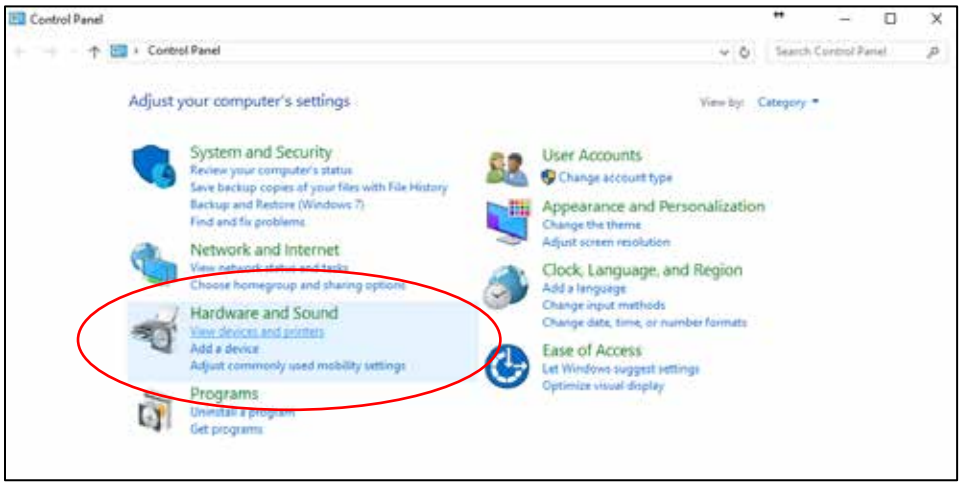
1. Connect the printer via USB to a port on your computer. Turn on the printer.



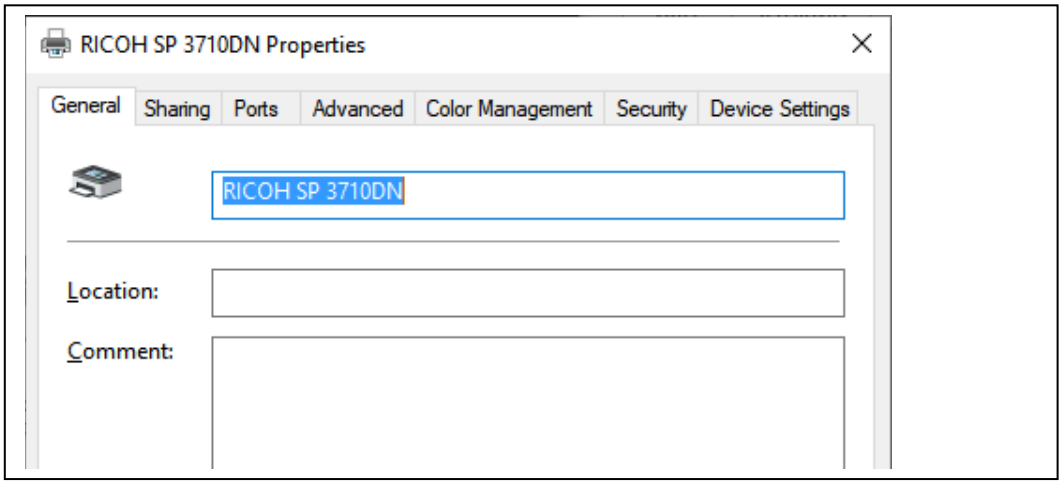

2. Windows will automatically install the PCL version of the printer driver.

3. Once the PCL printer driver has finished installing, open **Devices and Printers** from your PC Control panel (circled).

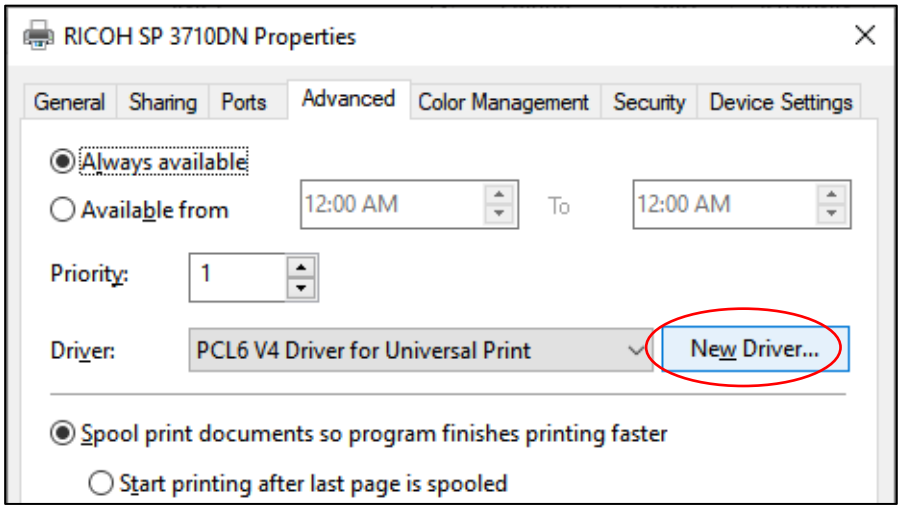



4. Under Printers, select and right-click on the **RICOH SP 3710DN** icon and select **Printer Properties** (circled).

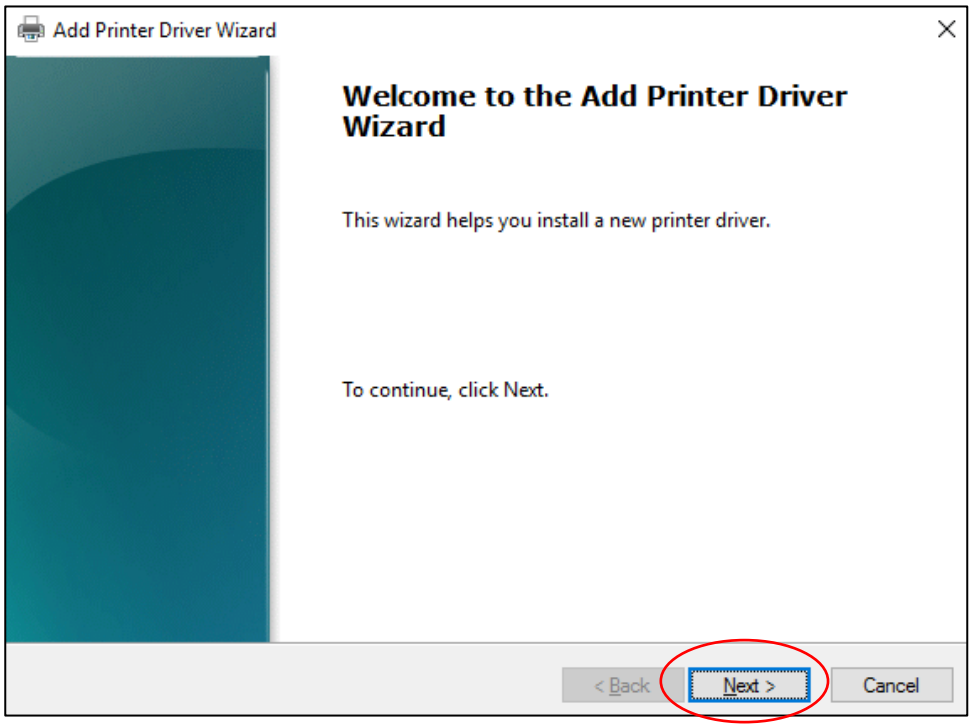
5. In the Printer properties window, choose the **Advanced** tab (circled).



**6.** In the Advanced tab, choose **New Driver** (circled). This screen opens the New Driver Wizard.




**7.** Click **Next** on the "Add Printer Driver Wizard" (circled). You are going to download the latest version of the Postscript driver from the internet.

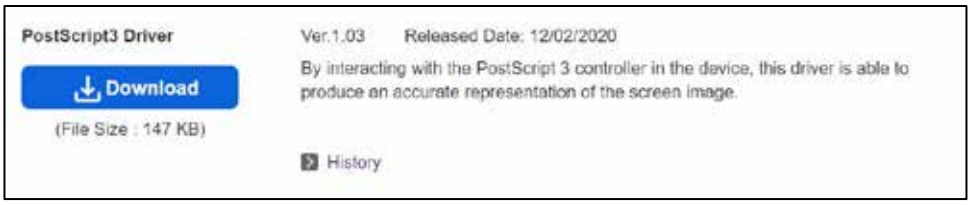


**8.** Using the following link, download the Postscript driver for your version of Windows: https://bit.ly/31aJxzl

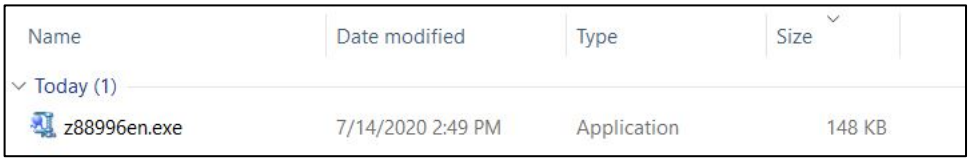
This link will direct you to the Ricoh driver download page for the Ricoh SP 3710DN printer.

**9.** Under "**Your OS,**" select your version of Windows. In this example **Windows 10** is selected.

**10.** Once your proper OS is selected, scroll down to the **Postscript3 Driver** and click on the blue **Download** button.



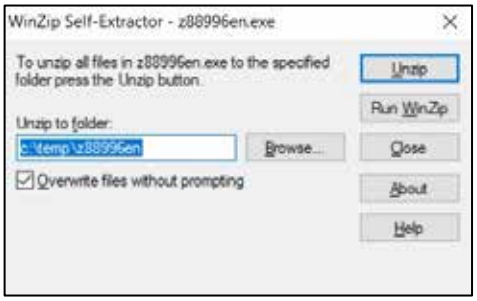

**11.** Once the download is complete, locate the file and run the executable. In this case the file is named "**z88996en.exe**" and was found in the Downloads folder.

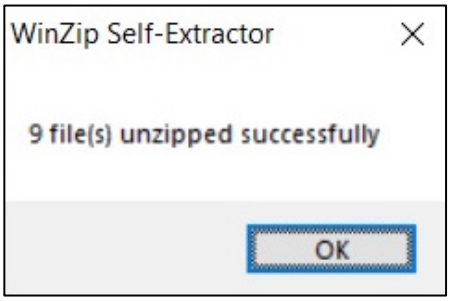


**12.** Double-click on run the downloaded file:

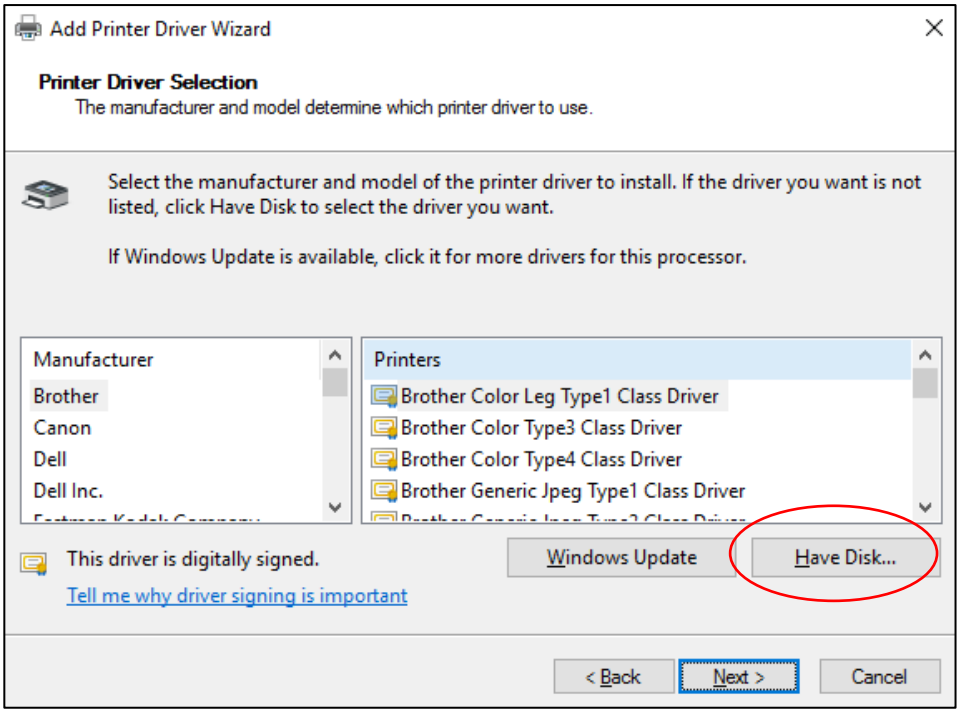
a. The executable will extract the driver. In this example the default location is the "**C:\temp\z88996en**" folder.

b. Click on **Unzip**, and then **OK**.

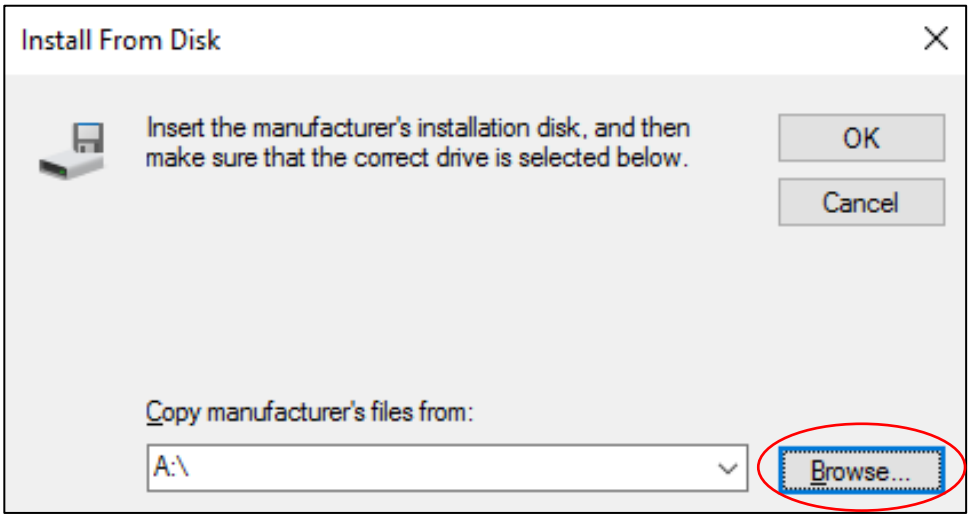



**13.** Go back to the "**Add Printer Driver Wizard**". Click on the **Have Disk...** button on the Printer Driver Wizard (circled).

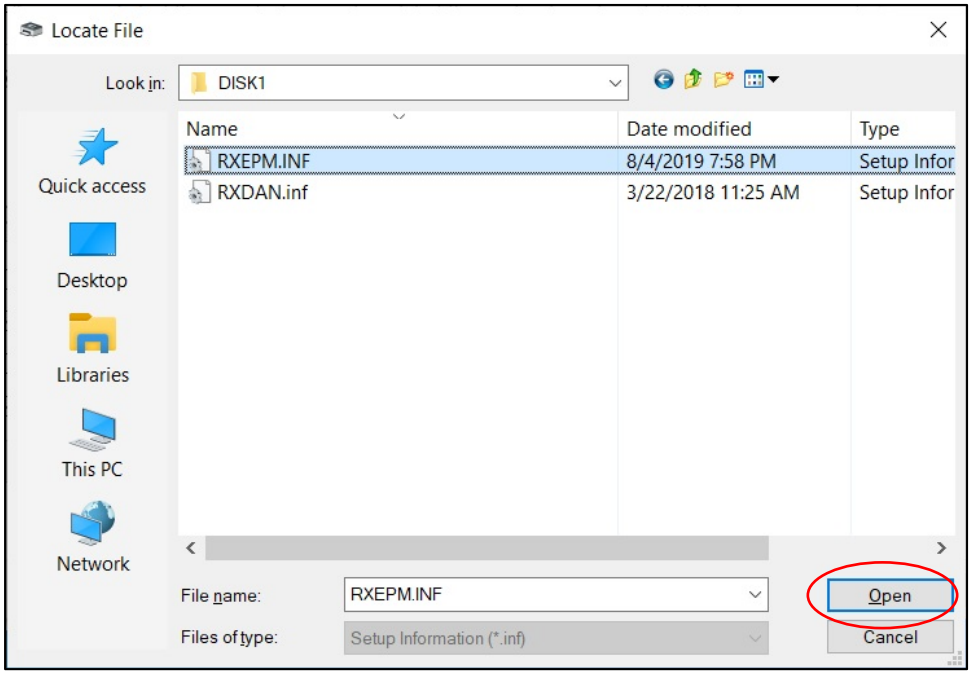


**14.** Click on **Browse...** (circled).

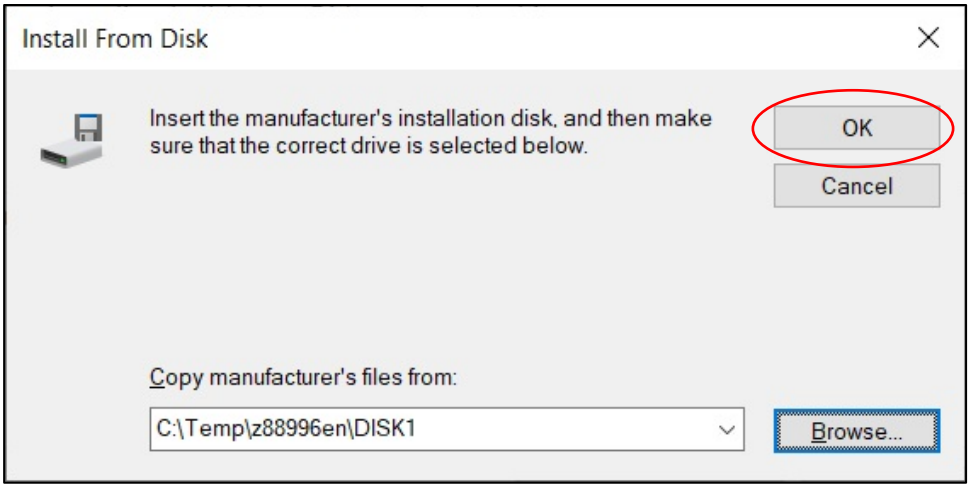



**Note:** The "Have Disk..." soft key in Step 13 and the instruction to "Insert the manufacturer's installation disk" in Steps 14 and 16 are legacy references inside Windows to install drivers from local media. Most computers no longer offer a CD-ROM drive. These steps ensure proper downloading of the latest PS3 driver version from the Ricoh website. Once downloaded, consider the driver installed on your local disk without the aid of a CD and proceed as directed.

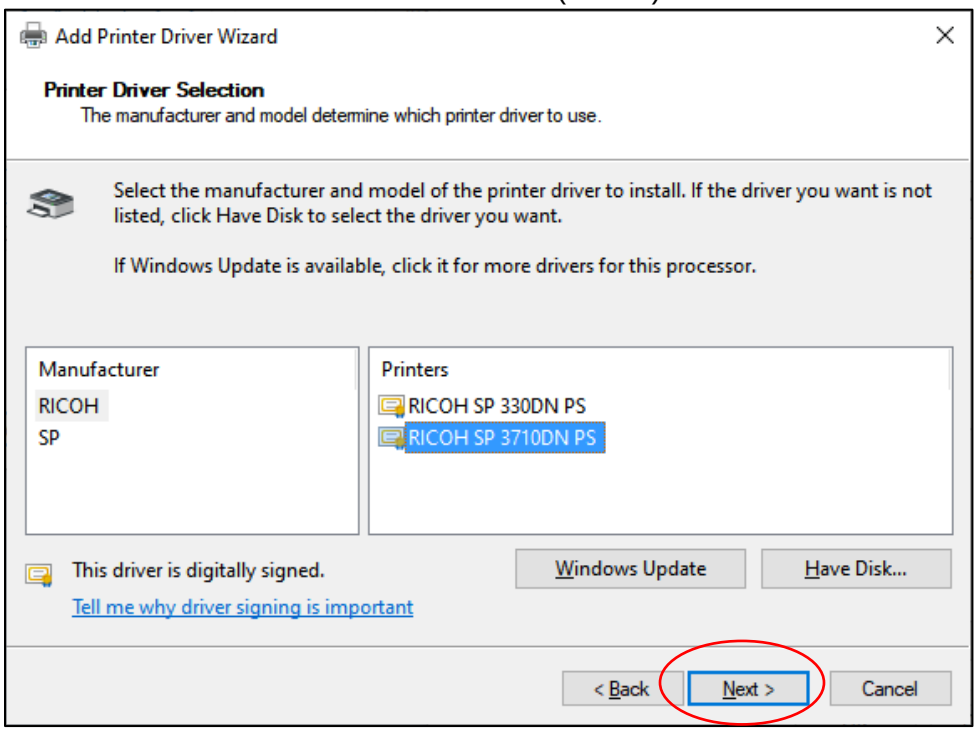
**15.** Navigate to the "**C:\temp\z88996en\Disk1**" folder. Select the **RXEPM.INF** file press **Open** (circled).



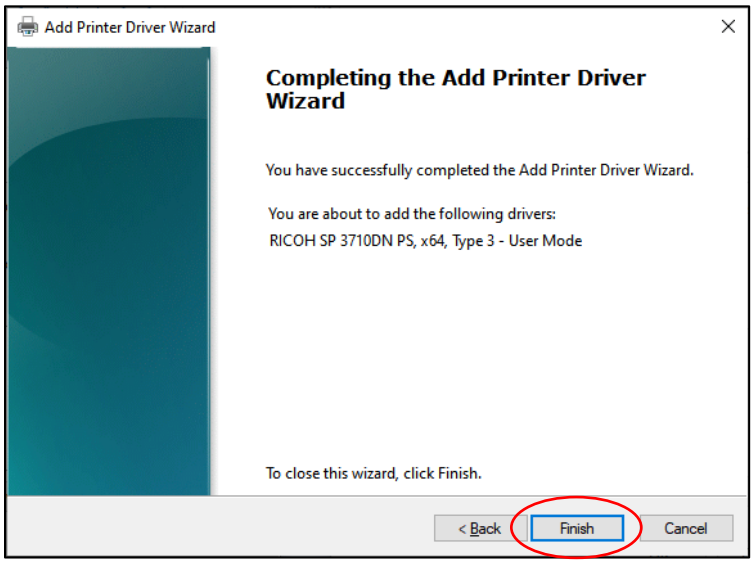
**16.** Click **OK** on the "**Install From Disk**" screen (circled).



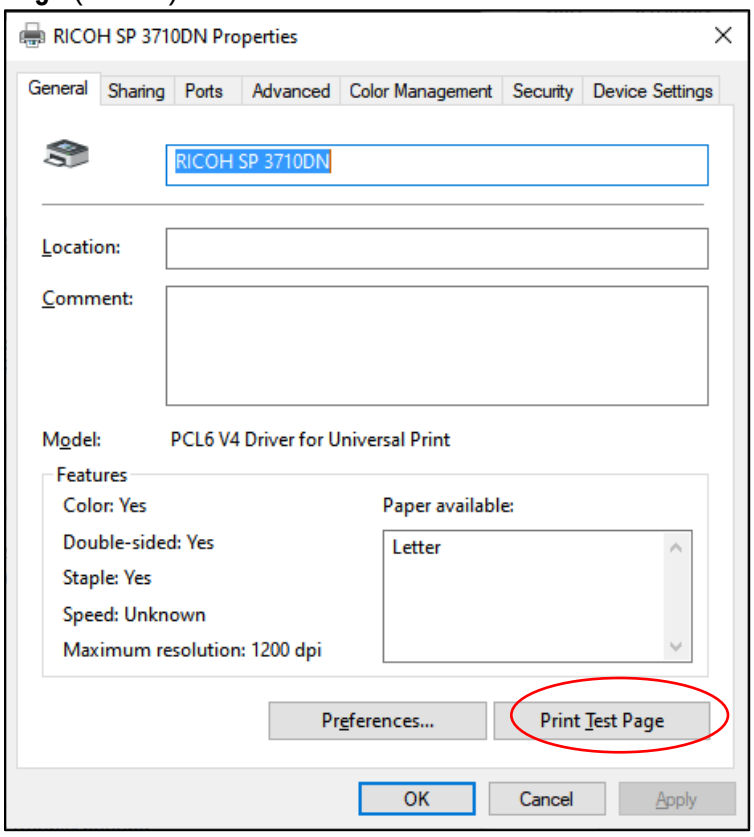

**17.** Select the **Ricoh SP 3710DN PS**. Click **Next** (circled).



**18.** The PS Driver is installed. Follow the prompts and click **Finish** (circled) to close the Add Printer Wizard.



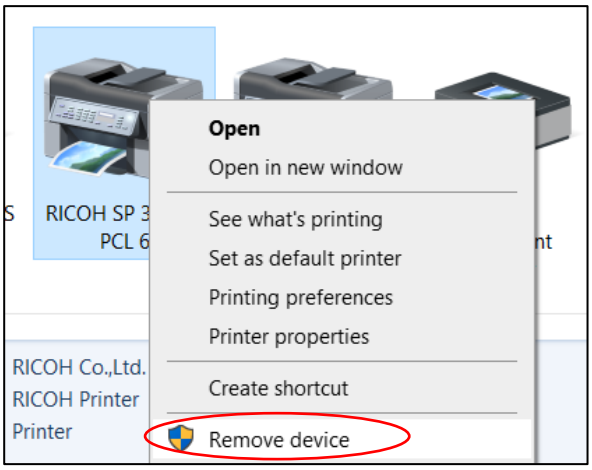

**19.** Once completed, go to the General tab in the PS3 Printer Properties and click **Print Test Page** (circled) to test the PS3 Driver.




If the test page prints successfully, your CerPrint 3710 is now ready for use with the Windows PS3 Driver.

## Troubleshooting Tip:

If the printer driver does not print the test page, remove the device from the **"Devices and Printers"** Control Panel. Select the CerPrint 3710, and right-click **Remove device** (circled).

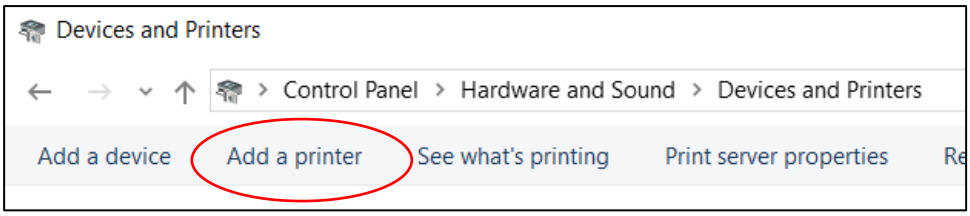



Then attempt this installation process again, ending with the successful printing of a test page.

# Installation for Windows OS via Network

**IMPORTANT!**

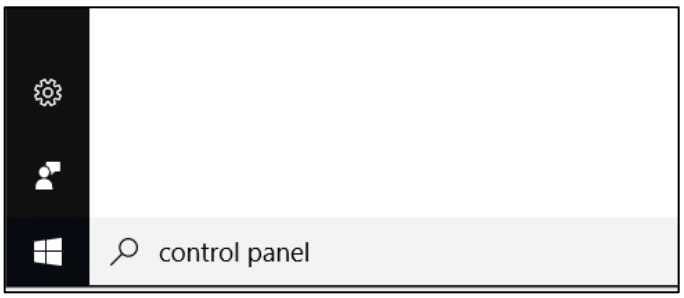
Follow these directions to download and install the PS driver from a network connection. **When connecting a new CerPrint 3710 to your printer via a network cable, Windows will not install a driver.** A printer must be installed manually, and searched for via Windows's **Add a Printer** function. This function can be found under the **Control Panel, Devices and Printers** feature.

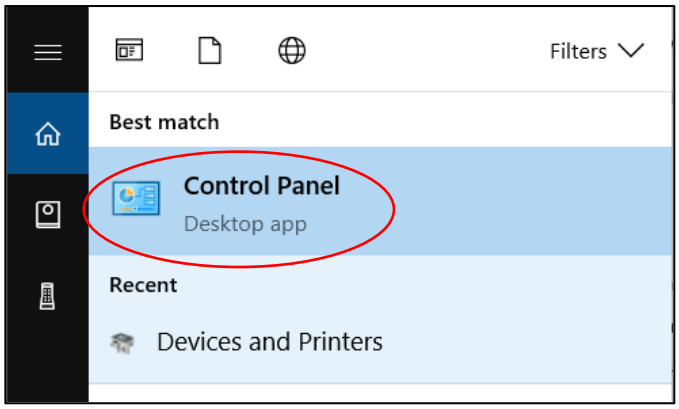



1. Connect the printer via a network cable to your wired network. Turn on the printer.

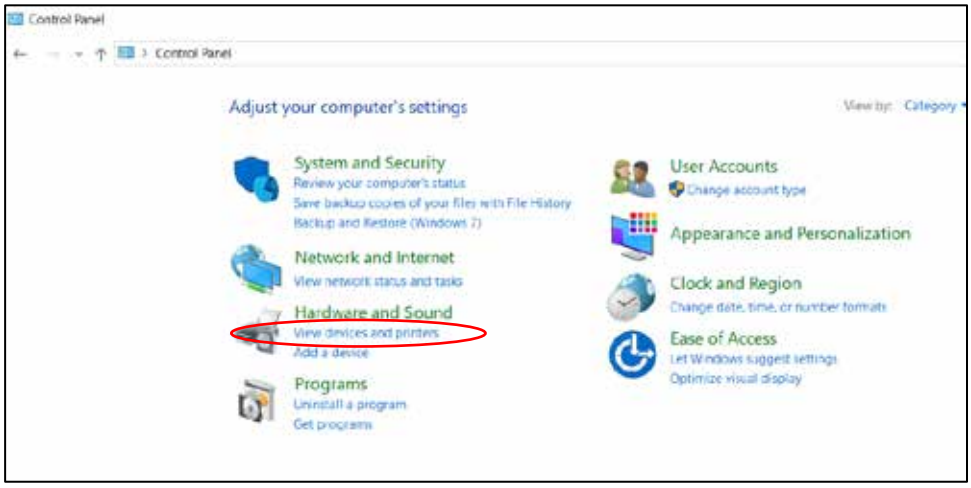
2. Press the **Windows** button on the Keyboard. This should open the Windows Search Bar.

Type "**Control Panel**", and then click on the Control Panel icon (circled). This will open the Windows Feature menu.

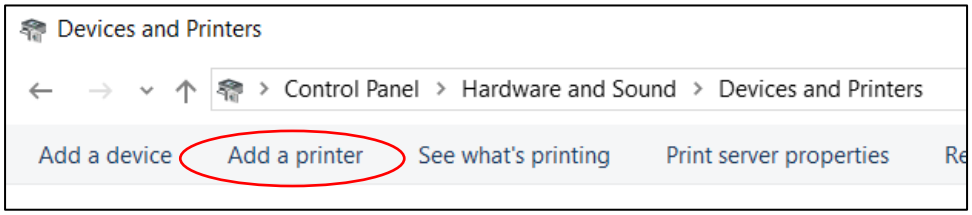


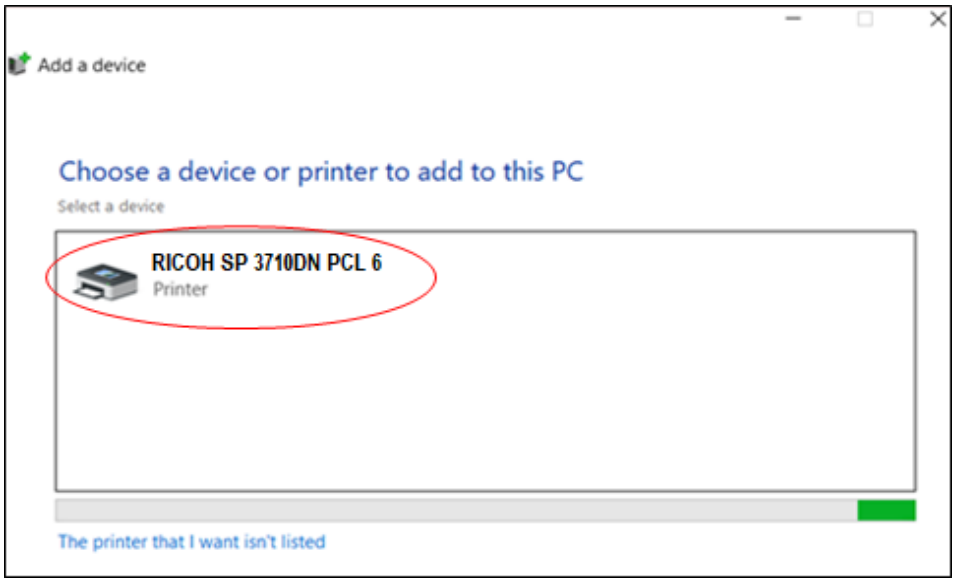
**3.** Click on "**View devices and printers**" (circled) under **Hardware and Sound**.




**4.** Click on **Add a printer** (circled).




**5.** The following window will open, asking you to choose a device to add.
Click on **RICOH SP 3710DN PCL 6** (circled).
At this point Windows will require the printer driver.

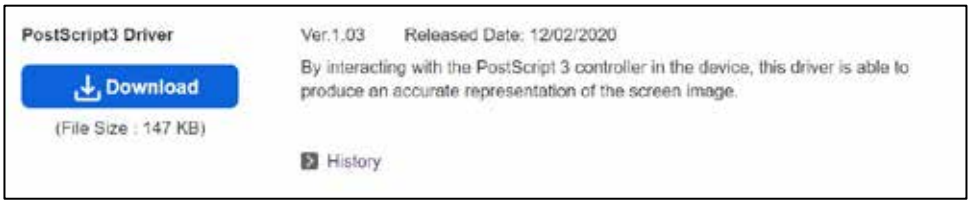


6. Using the following link, download the Postscript driver for your version of Windows: https://bit.ly/31aJxzl

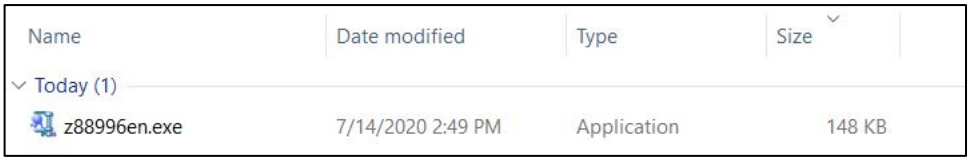
   This link will direct you to the Ricoh driver download page for the Ricoh SP 3710DN printer.

7. Under "**Your OS,**" select your version of Windows. In this example **Windows 10** is selected.

8. Once your proper OS is selected, scroll down to the **Postscript3 Driver** and click on the blue **Download** button.

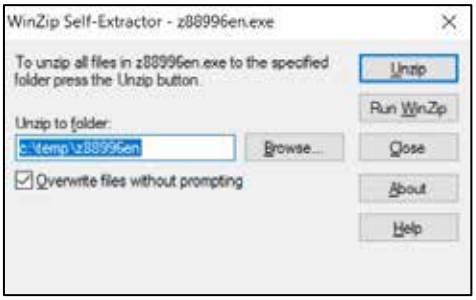


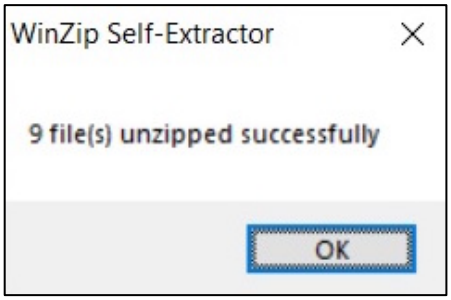

9. Once the download is complete, locate the file and run the executable. In this case the file is named "**z88996en.exe**" and was found in the Downloads folder.



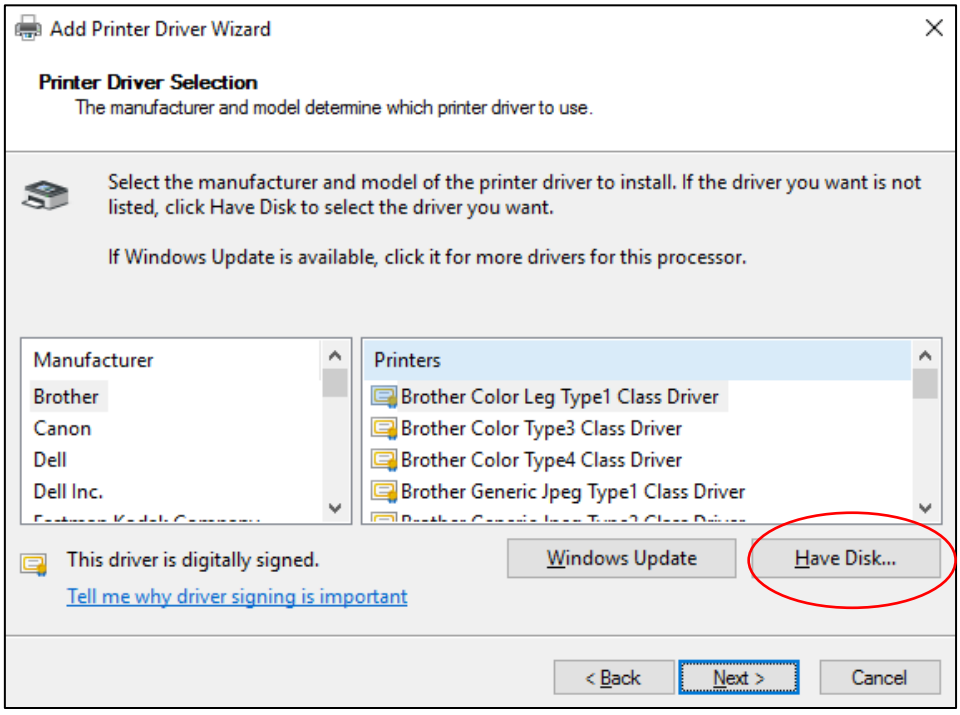

10. Double-click on run the downloaded file:
    a. The executable will extract the driver. In this example the default location is the "**C:\temp\z88996en**" folder.

b. Click on **Unzip**, and then **OK**.

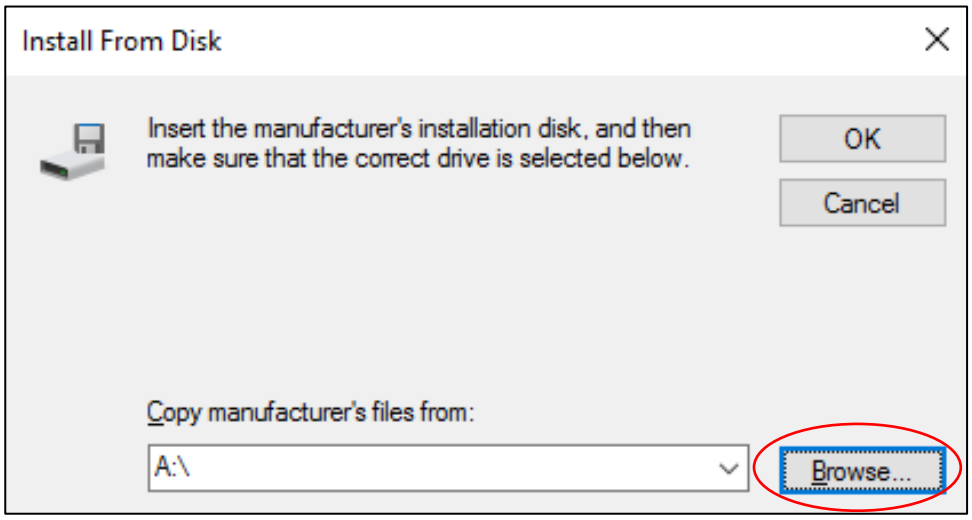



**11.** Go back to the "**Add Printer Driver Wizard**". Click on the **Have Disk...** button on the Printer Driver Wizard (circled).

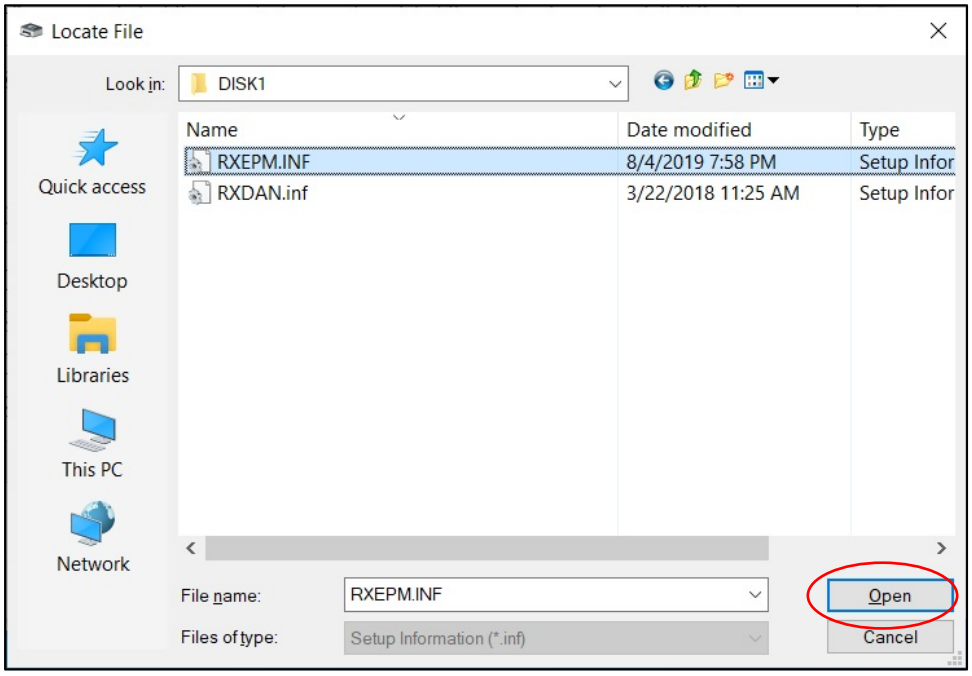


**12.** Click on **Browse...** (circled).

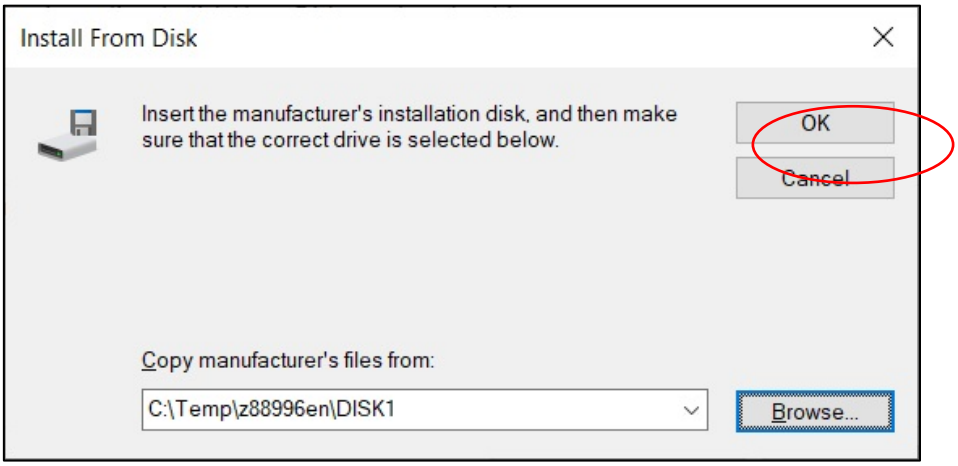



**Note:** The "Have Disk..." soft key in Step 13 and the instruction to "Insert the manufacturer's installation disk" in Steps 14 and 16 are legacy references inside Windows to install drivers from local media. Most computers no longer offer a CD-ROM drive. These steps ensure proper downloading of the latest PS3 driver version from the Ricoh website. Once downloaded, consider the driver installed on your local disk without the aid of a CD and proceed as directed.

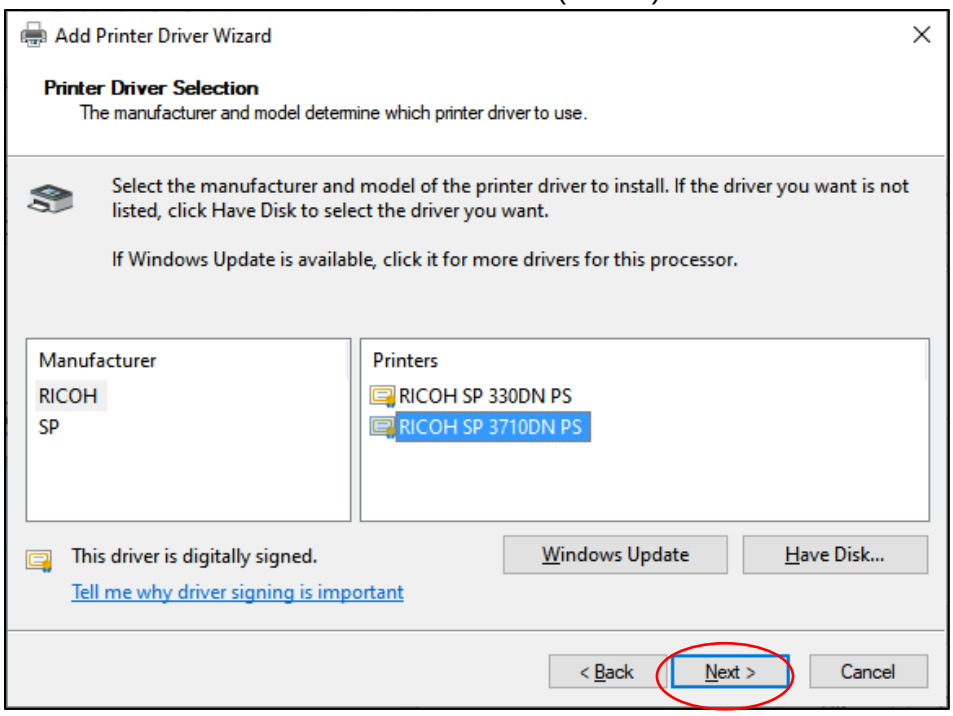
**13.** Navigate to the "**C:\temp\z88996en\Disk1**" folder. Select the **RXEPM.INF** file press **Open** (circled).



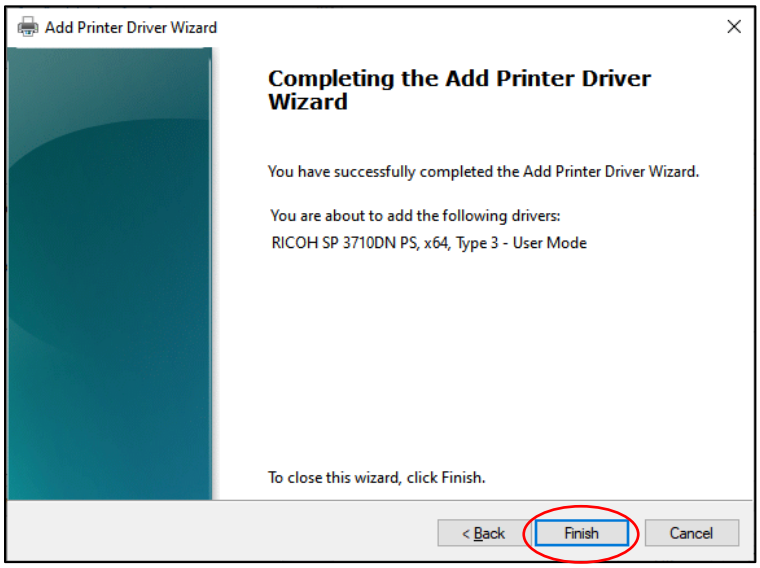
**14.** Click **OK** on the "**Install From Disk**" screen (circled).



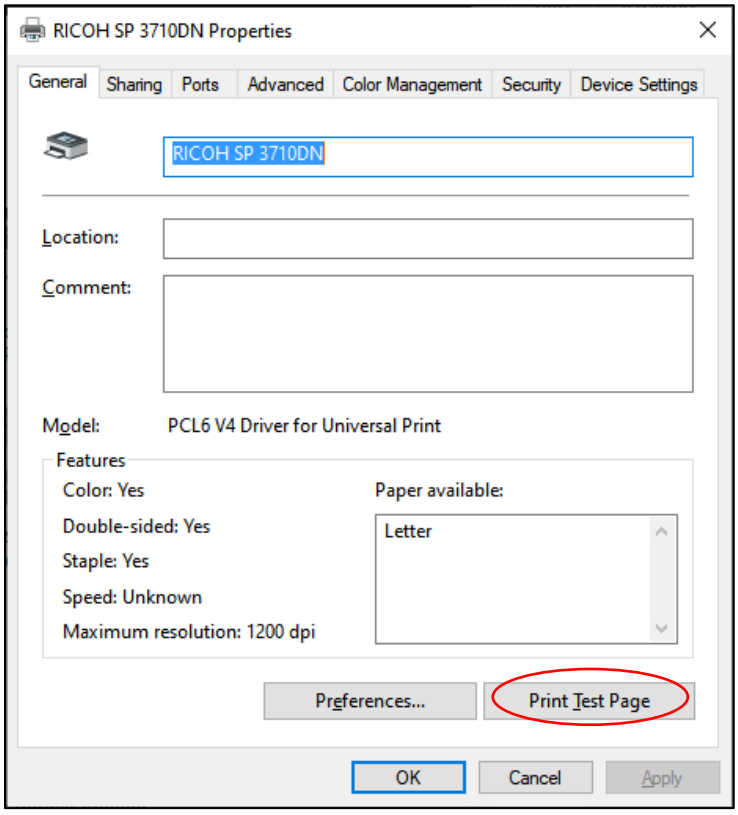

**15.** Select the **Ricoh SP 3710DN PS**. Click **Next** (circled).



**16.** The PS Driver is installed. Follow the prompts and click **Finish** (circled) to close the Add Printer Wizard.



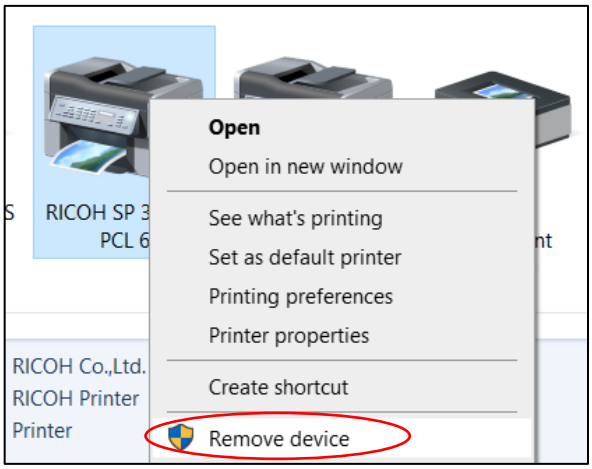

**17.** Once completed, go to the General tab in the PS3 Printer Properties and click **Print Test Page** (circled) to test the PS3 Driver.




If the test page prints successfully, your CerPrint 3710 is now ready for use with the Windows PS3 Driver.

## Troubleshooting Tip:

If the printer driver does not print the test page, remove the device from the **"Devices and Printers"** Control Panel. Select the CerPrint 3710, and right-click **Remove device** (circled).



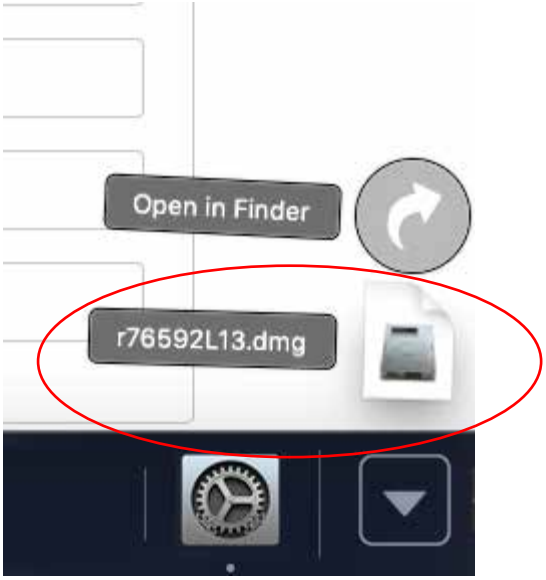

Then attempt this installation process again, ending with the successful printing of a test page.

# Installation for Macintosh OS via Network

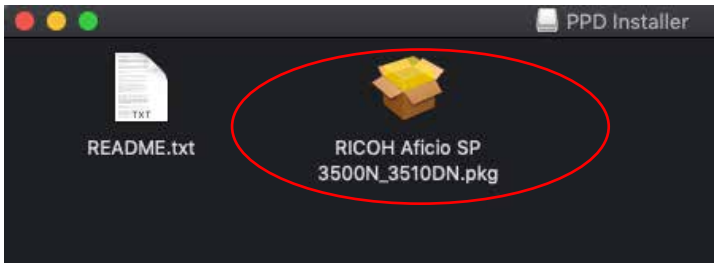
If you are using a Macintosh computer, follow these instructions to install the printer and the Postscript3 driver.

1. Go to the URL below and download the **Mac PS3** installer file for the RICOH **SP 3510DN**. Ricoh **did not** create a PS3 driver for Mac, for the SP 3710. https://bit.ly/3fQ9wkx. Click on the blue **Download** button (circled).

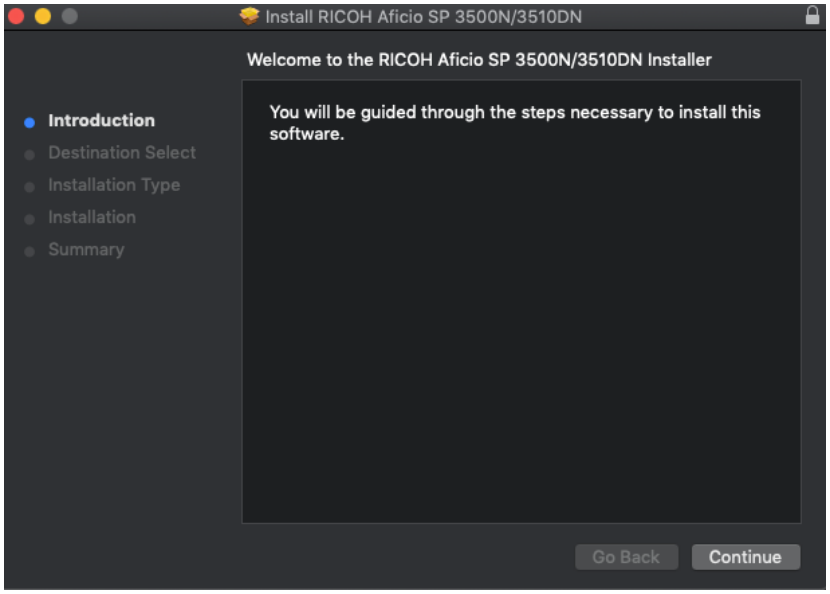
2. Go to your Downloads folder and look for the downloaded "**.dmg**" file (circled). In this example it is " **r76592L13.dmg** ".

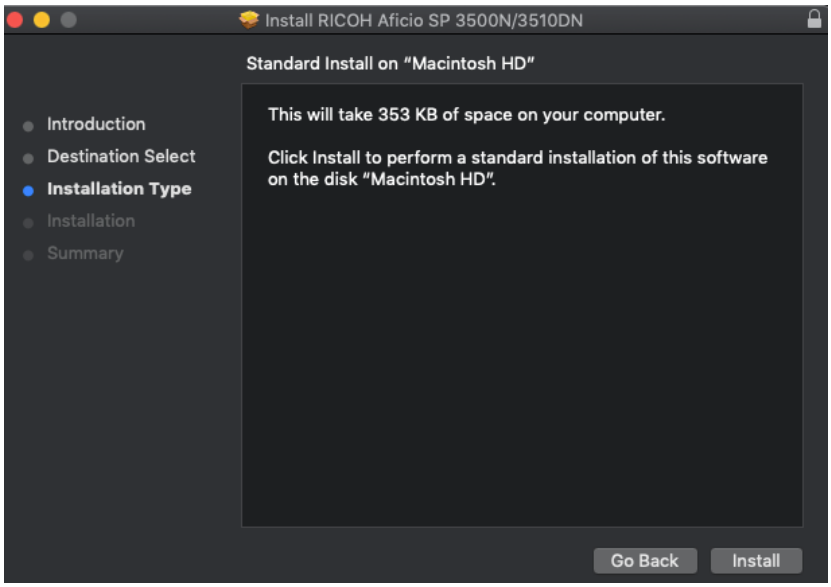


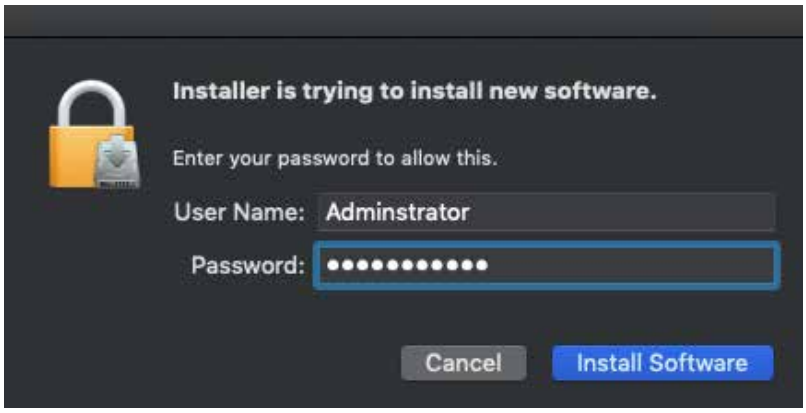
3. Run the file, when the file has run the following will appear.
    a. Double click and run the "**RICOH Aficio SP 3500N_3510DN.pkg**"

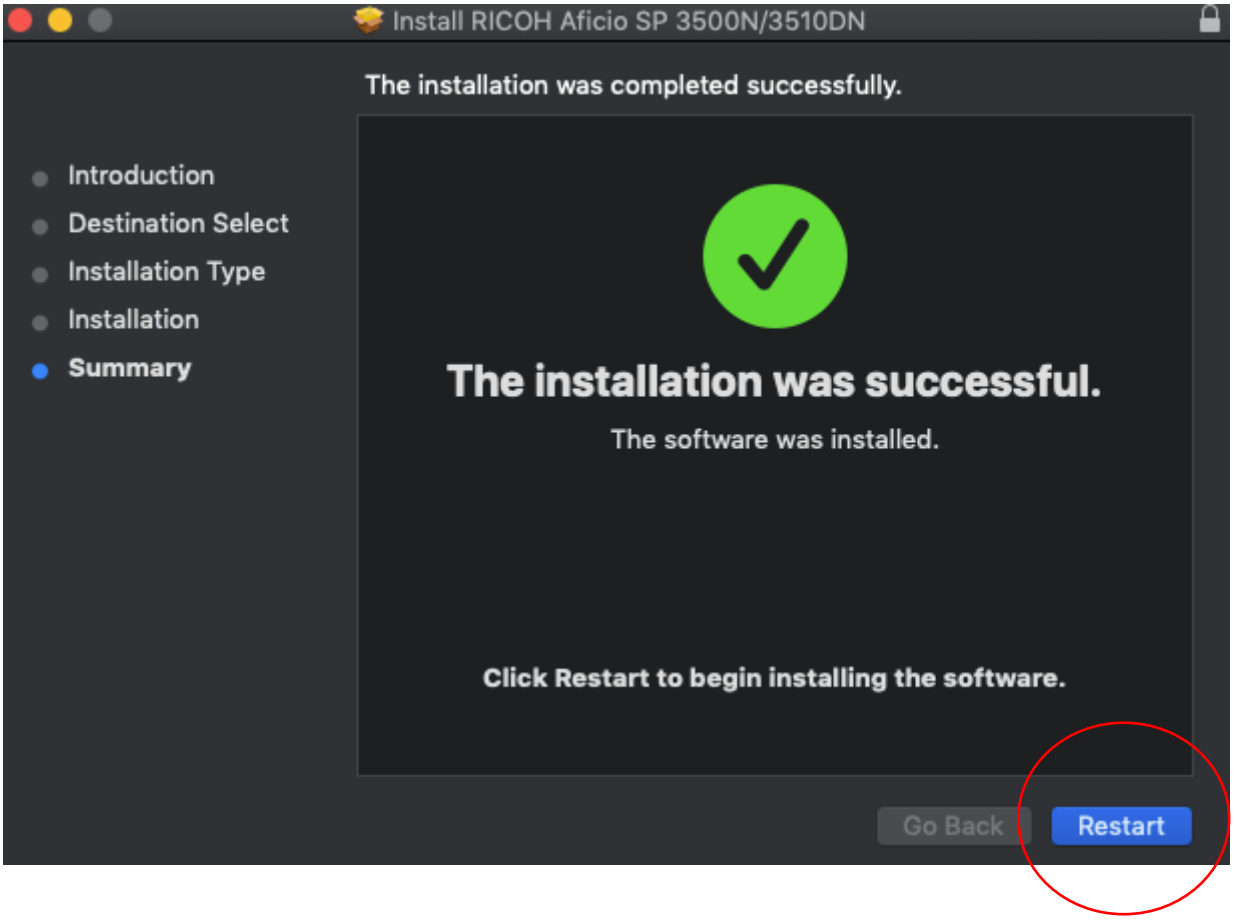



4. Follow the prompts, and restart the computer once completed.

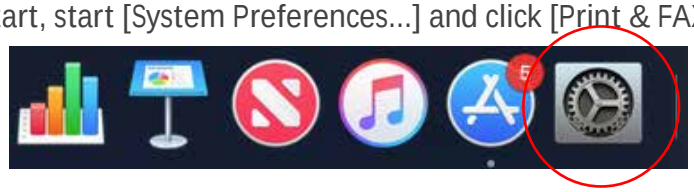



Installer is trying to install new software.
Enter your password to allow this.
User Name: Adminstrator
Password:
Cancel
Install Software

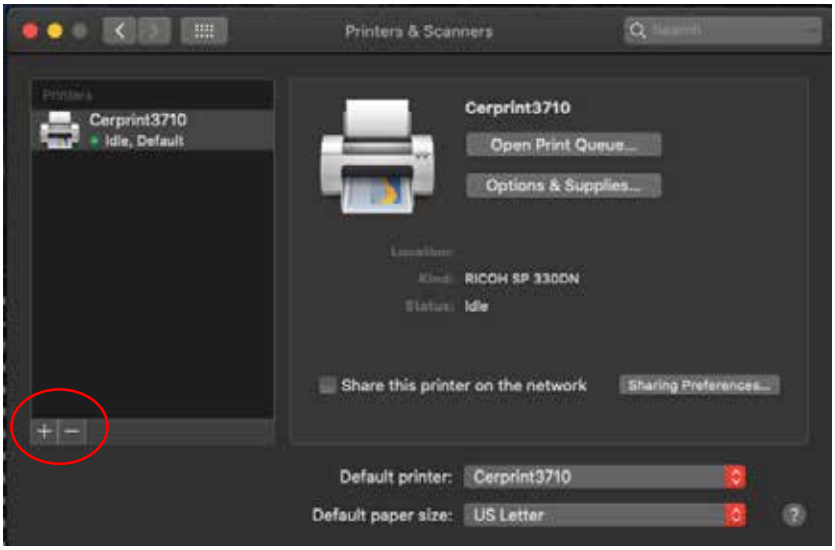

Install RICOH Aficio SP 3500N/3510DN
The installation was completed successfully.
Introduction
Destination Select
Installation Type
Installation
Summary
The installation was successful.
The software was installed.
Click Restart to begin installing the software.
Go Back
Restart

5. After the Restart, start [System Preferences…] and click [Print & FAX].

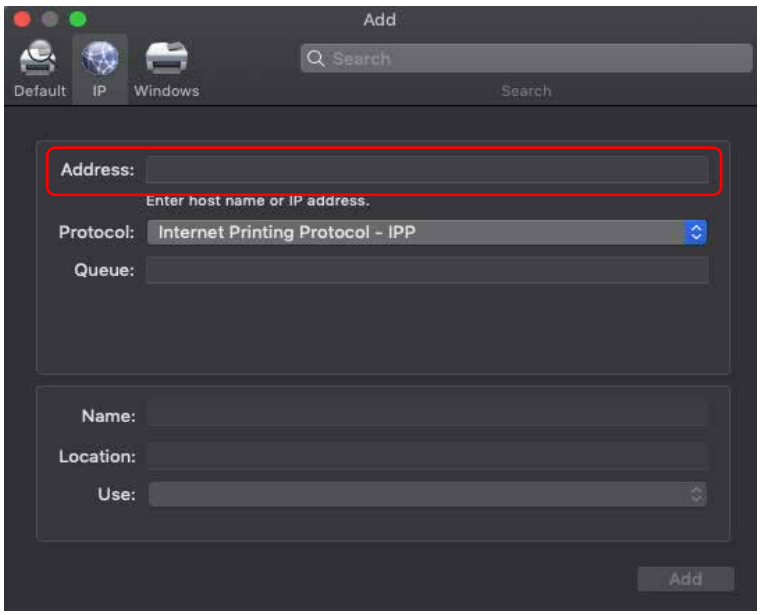


**6.** If your printer is connected via USB, plug the printer into your Mac. The driver will **be automatically added and assigned**.

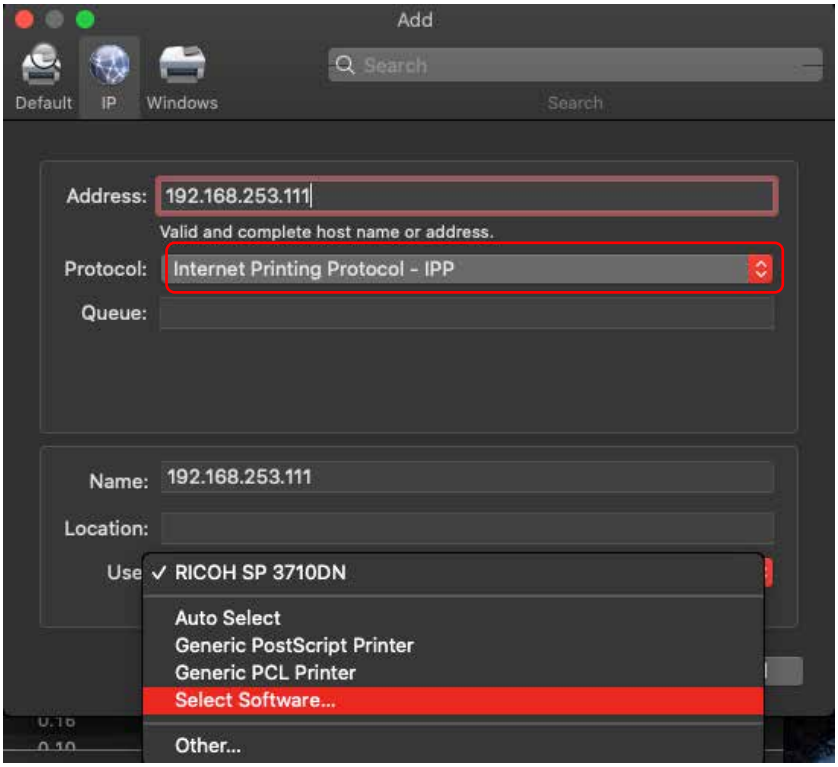
If your printer is networked, Click the **+** or **Add** button (circled).



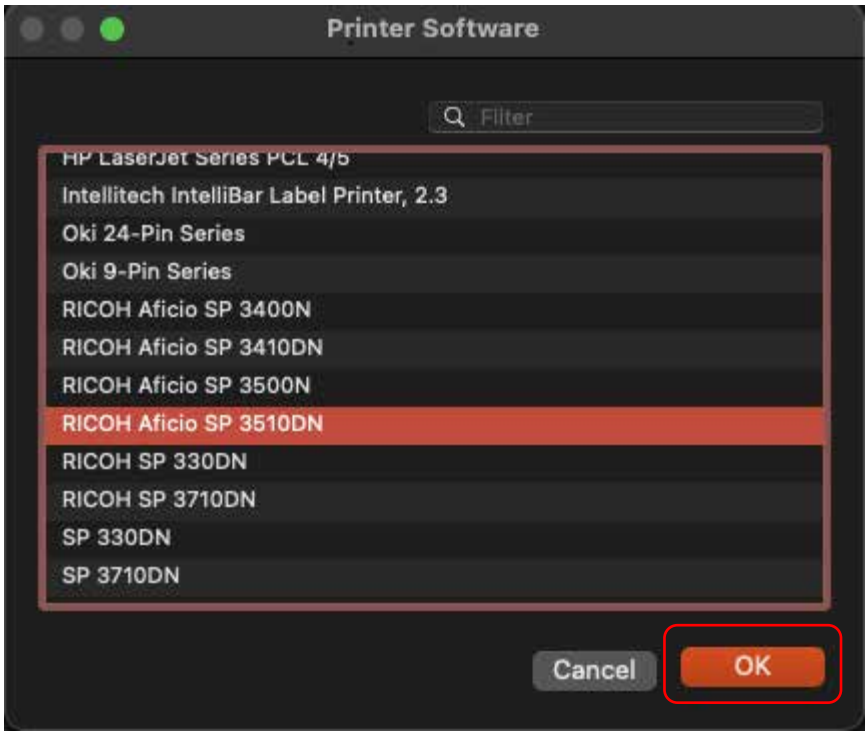
7. Enter the IP address of the printer into the **Address** box (circled).



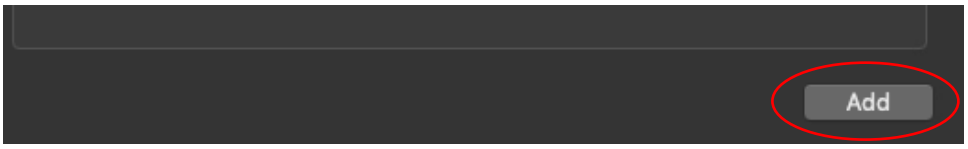

8. Select **IPP** as the Protocol, and **RICOH SP 3710DN** in the "**Use/Select Software**" dialogue box (circled).



Then click OK. (circled)



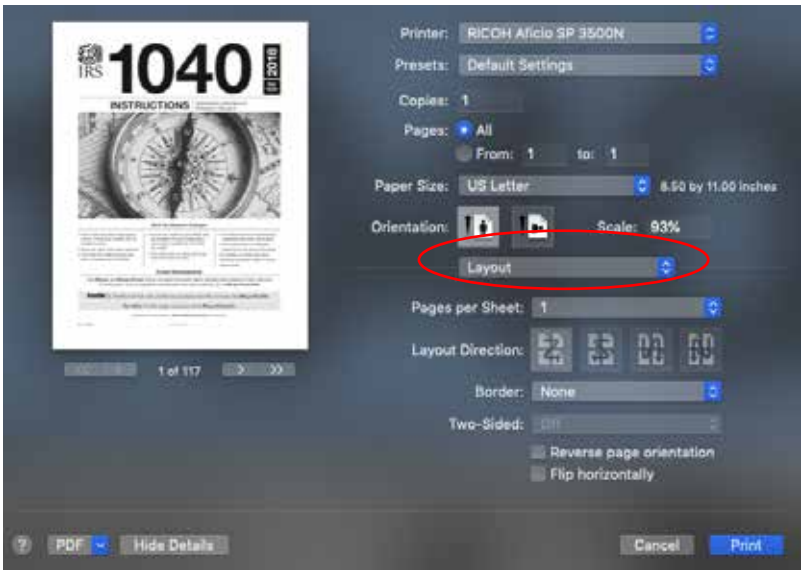

**9.** Click **Add** to finalize the printer configuration (circled).



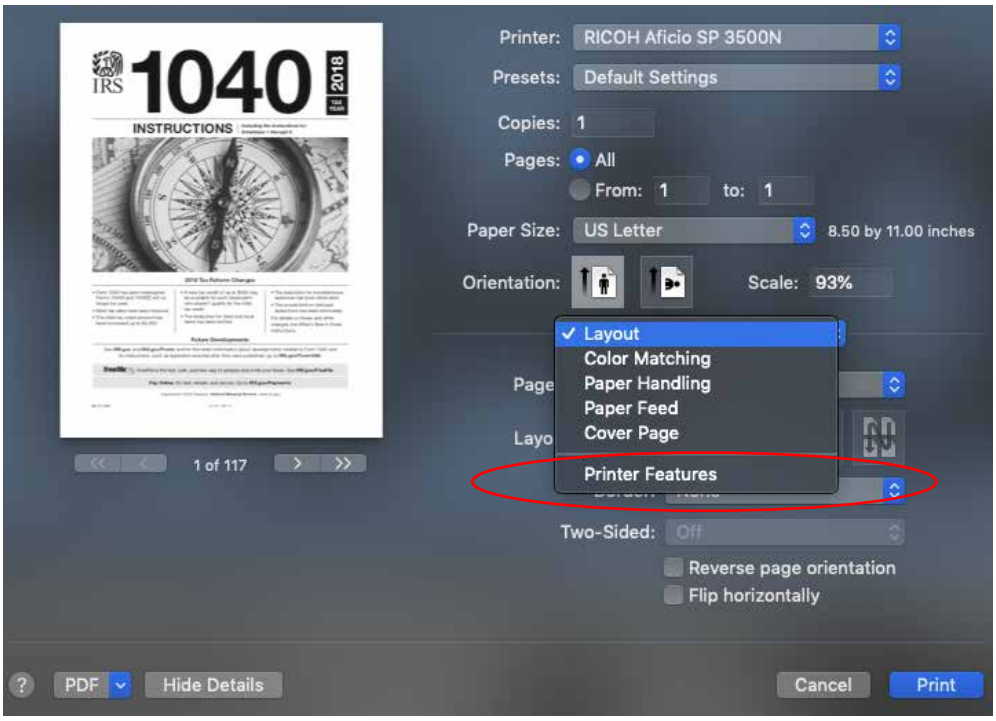

The following parameters will need to be set in the driver every time you open a new file. The settings will remain set until you close the active document.

10. Open an image or PDF you wish to print.

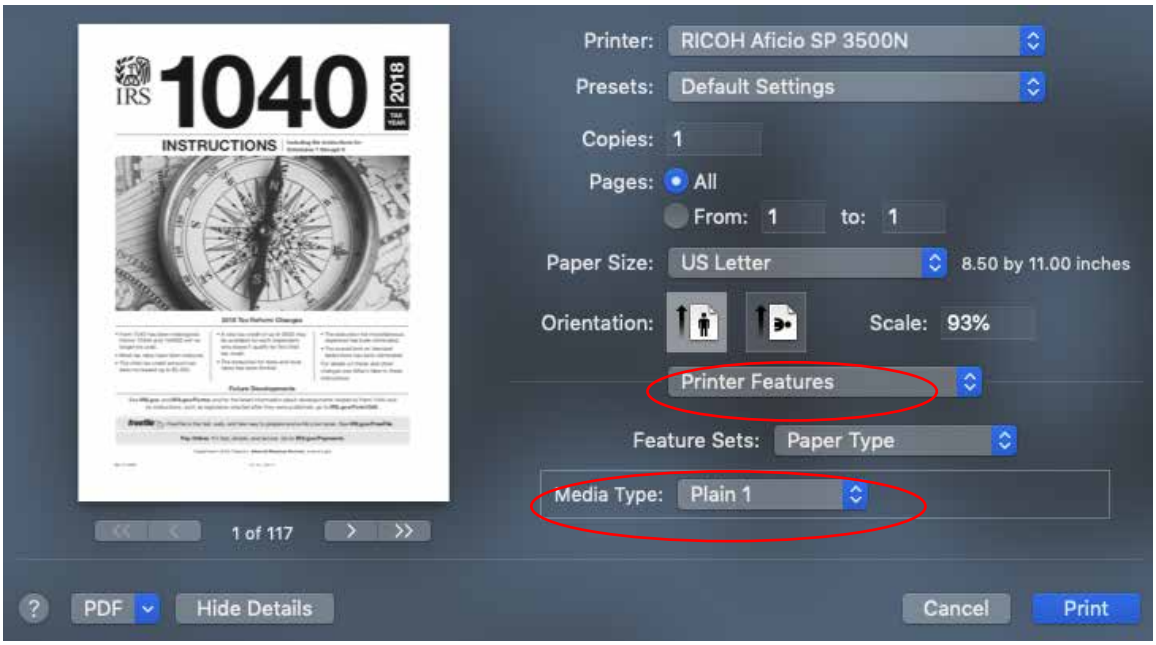
11. Print options/setting will only when a document or image is being printed.
    a. This this sample a PDF was opened, and the print settings are being set to print using recommended settings. Settings can be changed under "**Layout**"



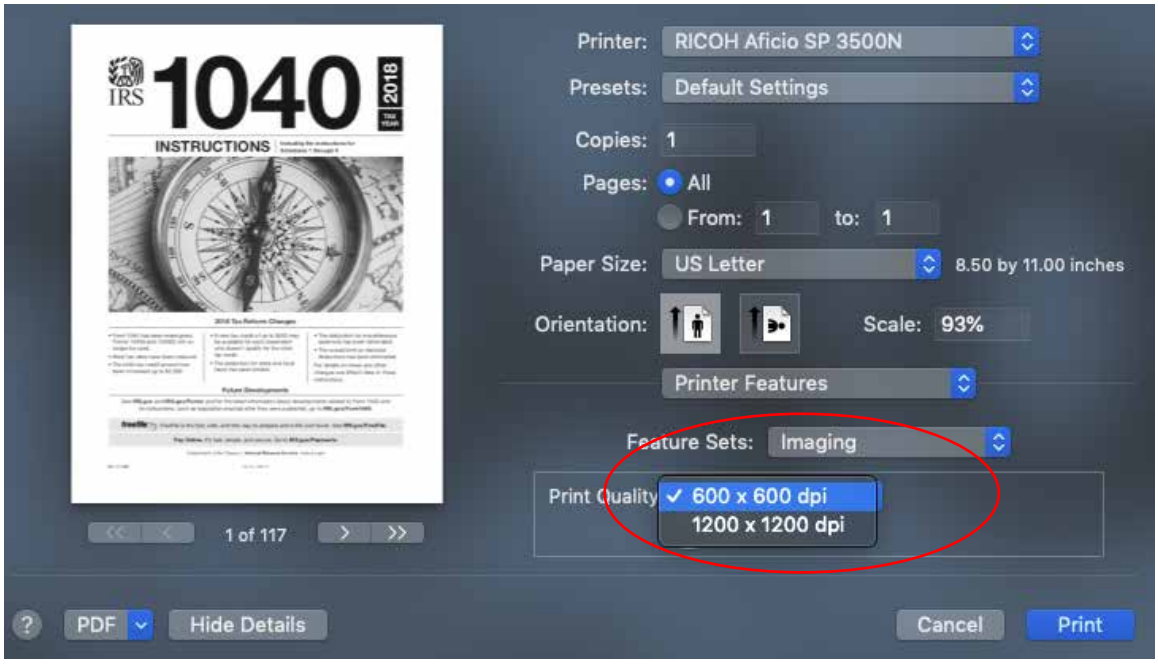

12. Under Layout, **Printer Features will be listed.**



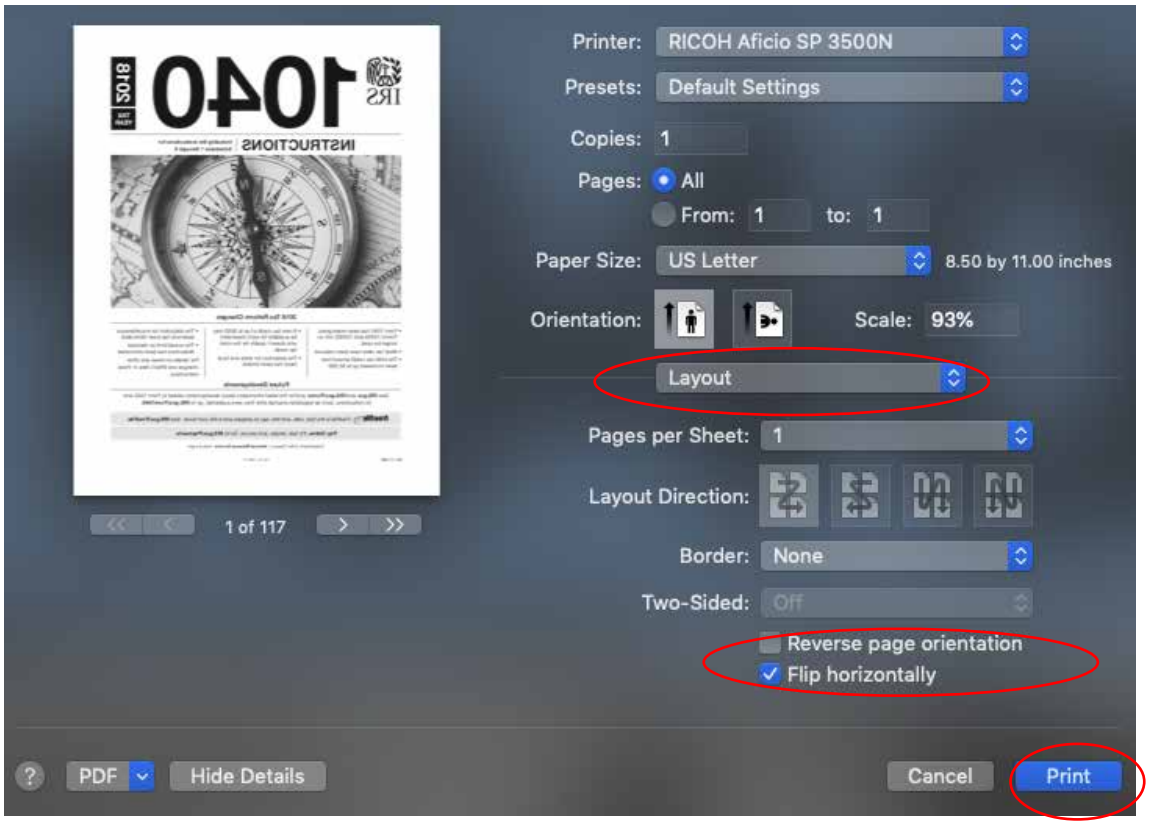
13. **Printer Features - Media Type** must be set to **Plain 1** (If not, 1200 DPI will not be available.)




14. **Printer Features – Imaging** should be to 1200 x 1200 dpi



15. Lastly if needed, the image can be reversed to allow for text to be readable. **This is not a required step**. Pressing **Print** would then print the image to the CerPrint 3710 printer.




### Paper Type

Use this function to select the paper type.

In the [Feature Sets] list, select [Paper Type], and then, in the [Media Type] list, select the paper type you want to use for printing. You should select [Plain 1], as it is the only media setting that will allow 1200x1200 resolution.

### Print Quality

Use this function to select the print quality.

In the [Feature Sets] list, select [Imaging], and then, in the [Print Quality] list, select the print quality.

Select [1200 ª 1200 dpi].

The CerPrint3710 Printer is now ready for use with a Mac computer.

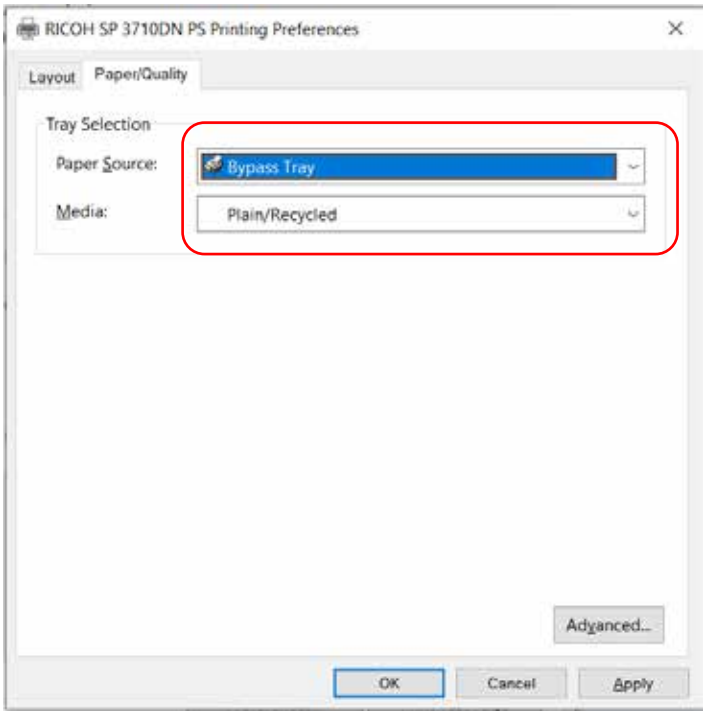
## Setting Up the Driver for Printing

The CerPrint 3710 has several user selectable options at print time.

**No matter which driver you use, we strongly recommend using the Bypass Tray for decal printing**. The Bypass Tray holds up to 50 sheets of media, but we suggest feeding decal paper into the printer one sheet at a time. You can experiment with this, but this selection gives the most consistent results.

The CerPrint 3710 has been pre-programmed to default to the "**Plain**" media type when the Bypass Tray is selected as the paper source in the active printer driver. This applies to both Windows and Macintosh users.

An example of the Windows PCL 6 driver is shown below. If the "**Plain**" paper type does not automatically appear in the *Paper Type* window (circled) when the Bypass Tray is selected, choose it manually.



You will need to set these parameters in the driver every time you open a new file. The settings will remain set until you close the active document.

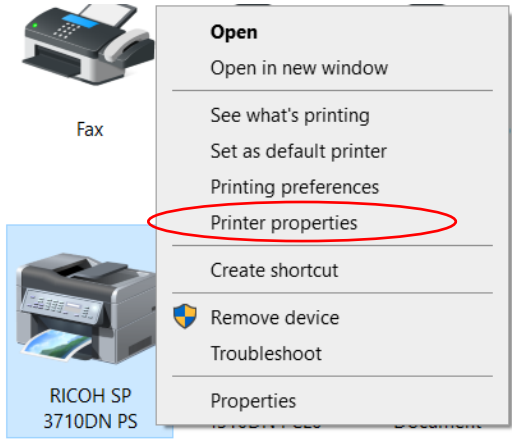
## Disabling Duplex Printing

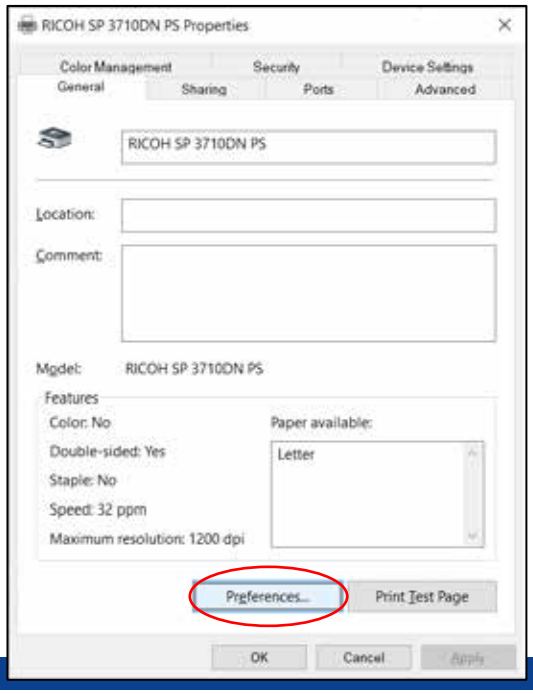
The Ricoh SP 3710DN drivers are pre-programmed to default to duplex printing from the factory as a resource-saving feature. However, this setting should be disabled for decal printing.

The following steps will modify the printer profile to default to single-sided (simplex) printing when using a Windows computer:

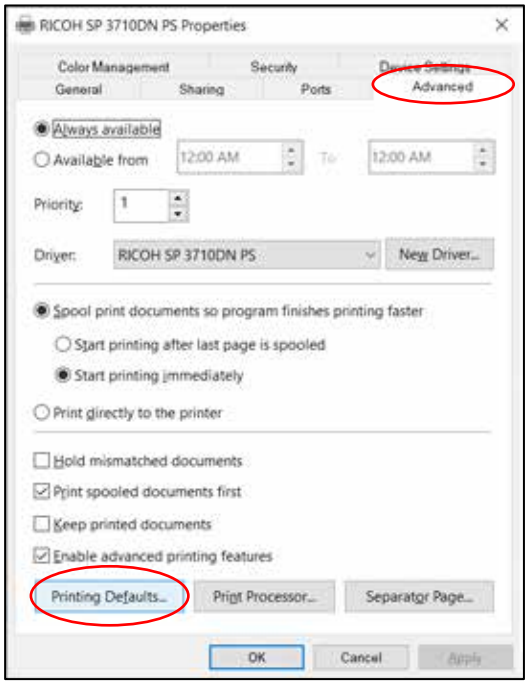
There are two ways to access the setting:

**1a.** Right click on **Printer properties** (circled) then click **Preferences** (circled).

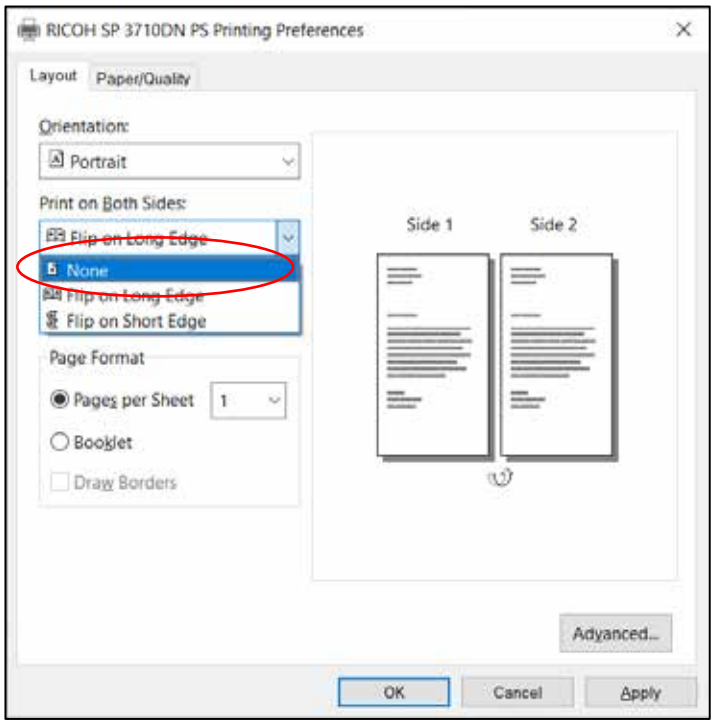


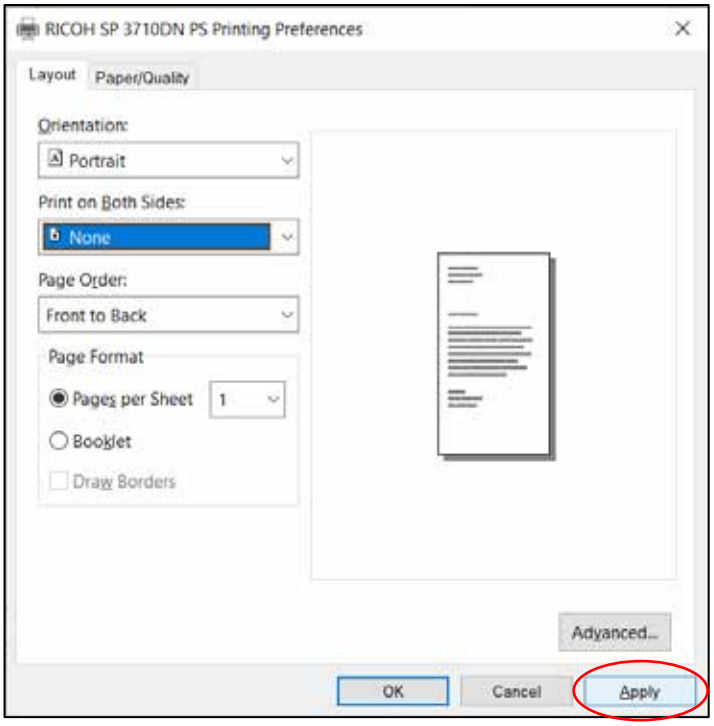

**1b.** Navigate to the **Advanced** tab of Printer Properties (circled), then click **Printing Defaults...** (circled).



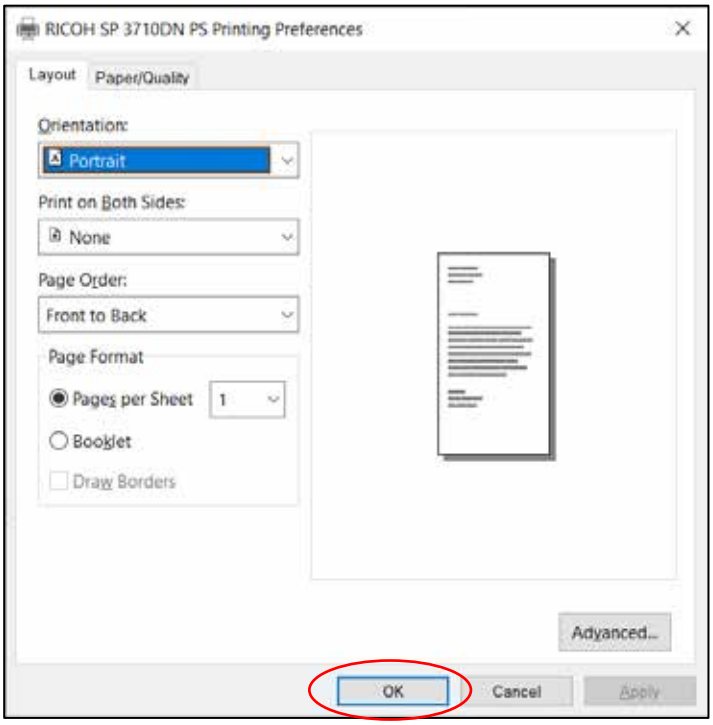
2. Either method should bring you to **Printing Preferences** screen. Select the **Layout** tab. Click on the pull down menu below "**Print on Both Sides**" and select **None** (circled).




3. Click **Apply** (circled).



**4.** Click **OK** (circled).

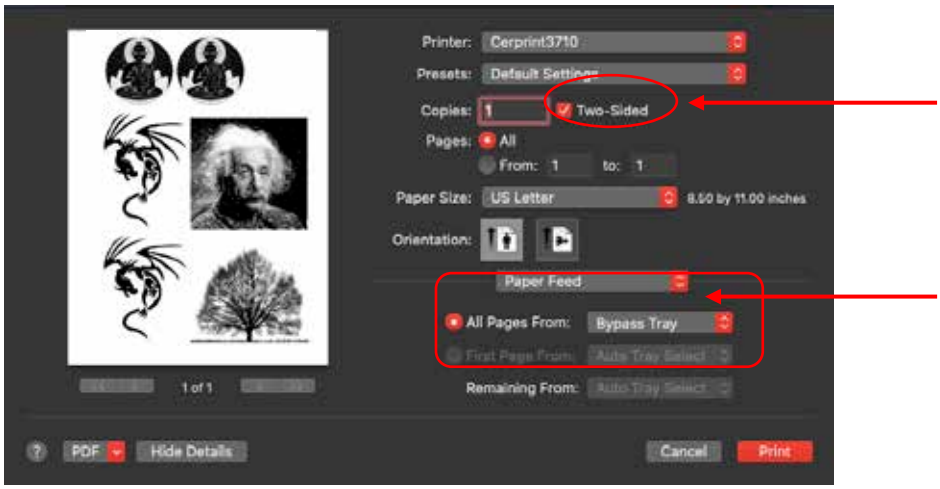



The printer is now configured to print Simplex.

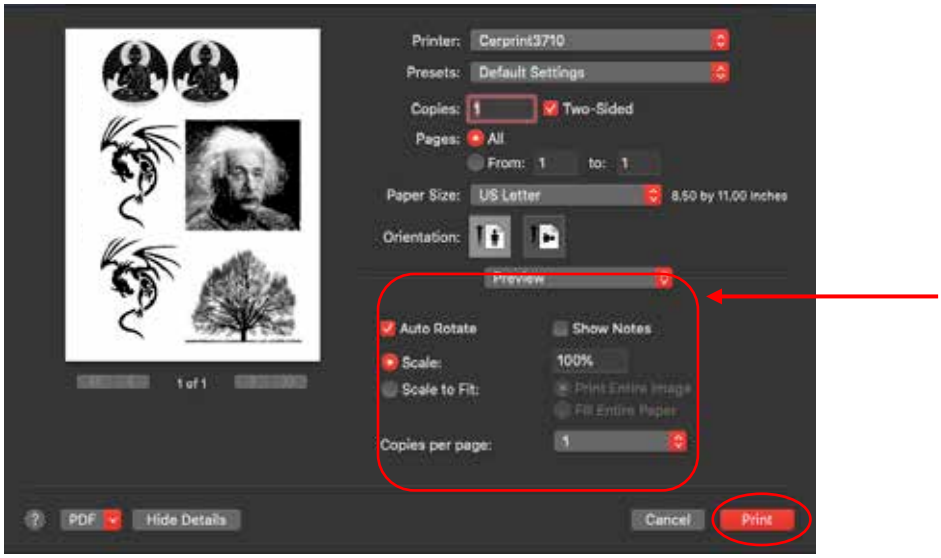
## Printing in a Macintosh Environment

Print options and settings are only displayed when a document or image is ready to be printed.

In this example a document was opened, and the print settings are set to the defaults. Click "**Paper Feed**" (circled) to select All Pages From "Bypass Tray". *Uncheck the **Two-Sided** box (circled, top).* You should only have to do this once; the setting will remain unchecked for future print jobs using the PCL 5e driver.




Some basic settings can be changed in the "**Preview**" mode (circled). Select **Preview** from the drop-down window to access features such as Auto Rotate and Scaling




**Note:** The CerPrint 3710 has been configured to select the correct paper type when printing from the bypass tray.

Pressing **Print** (circled) would then output the image to the CerPrint 3710.

## Before You Start Printing

There are some important points and tips you should understand before you start using your CerPrint 3710:

- This printer has been modified internally to provide optimal print quality using True Black or True Blue Ceramic Toner. To switch colors, open the front cover, remove the installed cartridge and replace with the other color. Please make sure to store cartridges in a lightproof bag or container when not in use. Light will cause the photoconductor in the cartridge to degrade.

- This printer has also been modified to provide reliable paper handling of the tested ceramic decal papers. Other decal papers may not work and might cause troublesome jams in the printer fuser.

- The CerPrint 3710 uses the lamination method to create decals, which involves using a waterslide paper and a donor decal film paper. For more information, see the section on Lamination. You can also use our 1-Step decal paper, but we recommend the lamination method for consistent quality.

- Always feed decal media from the Bypass Tray, one sheet at a time, shiny side up for the white waterslide paper, film side up for the 1-Step decal paper. The printer will automatically select the correct media type (Plain) for proper fusing temperature and speed when printing from a Mac. In Windows, be sure "Plain" is selected as the media type from the drop-down window in the driver.

- Make sure you have disabled duplex printing in Windows (see page 26), or unchecked the "Two-Sided" box in the driver window.

- Make sure that the fuser levers are in "**Page**" mode as opposed to "**Envelope**" mode. To do this, open the back cover of the printer. Inside is the fuser. On both ends you will see a green tab/lever. Both should be placed in the **UP** position, as pictured.

## Decal Media Considerations

Media is an important consideration when printing decals. Some decal papers have a tendency to bubble and actually separate from the backing paper as they go through the fuser of a laser printer. The CerPrint 3710 has been modified especially to work with the lamination decal paper provided.

**Notes:**

- **When using the 1-step decal paper, you will want to print in Mirror mode for any images that contain text or where the orientation of the image is important. This is because the decal will be flipped and applied toner-side down. This function is available under Postscript functions in the driver window. This is not required with the lamination method.**

- **Be careful if you are planning to use other pre-coated decal papers in the CerPrint 3710**. We have not tested other decal media and cannot guarantee that these papers will print successfully. These sheets can jam immediately and ruin the fuser unit due to the decal film melting from the heat of the fuser. If you wish to try this, select a different paper type in the driver, such as *Recycled* before you print. These paper types have been set to use lower fuser temperatures.

**What's our secret to easy, flawless decal making?**

The decal paper we offer has been rigorously tested in the CerPrint 3710. The internal setpoints of the printer have been optimized for decal printing using the ceramic toners both a 1-step decal paper process and a Lamination transfer process.

# Process Steps: An Overview of the Decal Printing Processes

There are two methods for creating ceramic decals with your CerPrint 3710 printer. The first and the one we recommend is called the lamination method. It is commonly used in the ceramic decal field for a couple of reasons. One, the white waterslide paper that the image is printed on has an excellent and consistent surface quality, ensuring excellent image quality page after page. Two, you can make single decals or whole sheet decals. The method is simple, as you will see. We are not "laminating" a decal onto a ceramic piece, we are merely making a decal sheet, using the backing or white waterslide paper and the "donor" paper providing the decal film. The end result of the process is a complete decal, ready to cut, soaked and applied.

The second is using our 1-step decal paper. With this method, you print directly on a prescreened decal sheet, cut, soak and apply. While generally producing good quality decals, the surface of this paper can vary, creating differences in the finished product.

## Lamination Process:

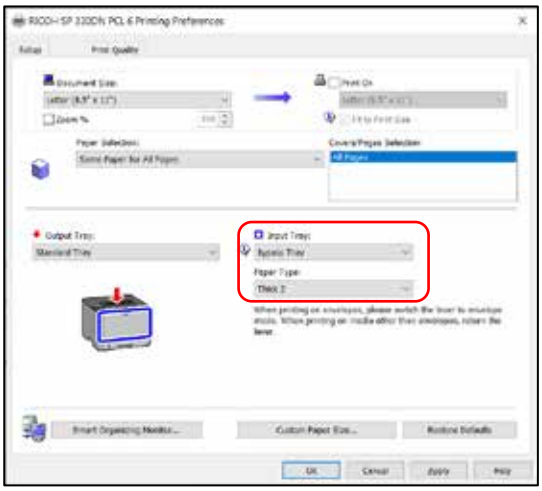
Create an image on your desktop PC using your favorite software application.

**1.** When you are ready to print, open the Bypass Tray by pulling down on the front door tab of the printer (circled, top).

Pull out the center paper support guide and make sure the paper width guides on either side are set to the **8.5-inch position** (middle).

Insert a sheet of white waterslide paper, shiny side up, into the Bypass Tray (bottom).

Select "**Print**" from your application. Remember to select "**Bypass Tray**" and make sure "**Plain**" is the paper source and type in the driver window (circled, below).

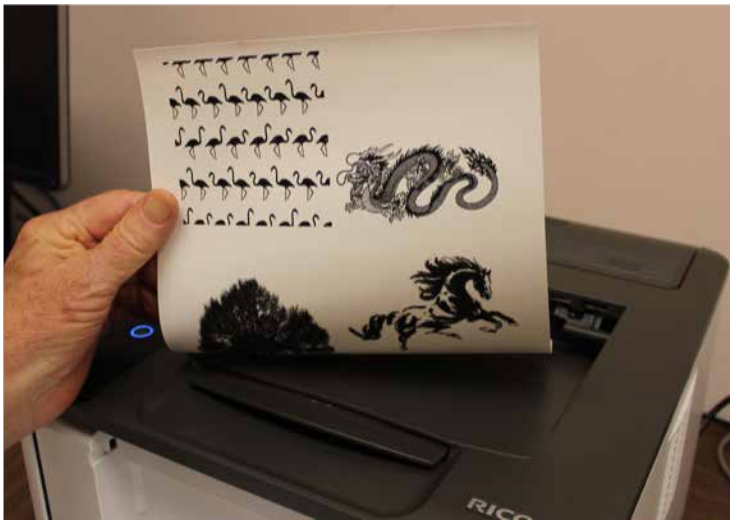


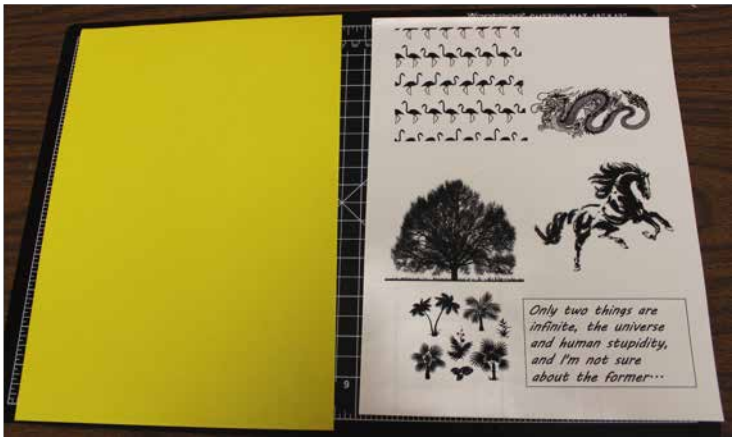
[There will not be a Paper Type selection when using the PCL 5e driver for Macintosh.]

Print your image to the CerPrint 3710.

**2.** Turn on your laminator, press the “5” button (circled). Wait for the **Ready** light to come on.

**3.** After printing your images on the waterslide paper, select which donor paper you want to use, depending on desired firing temperature.



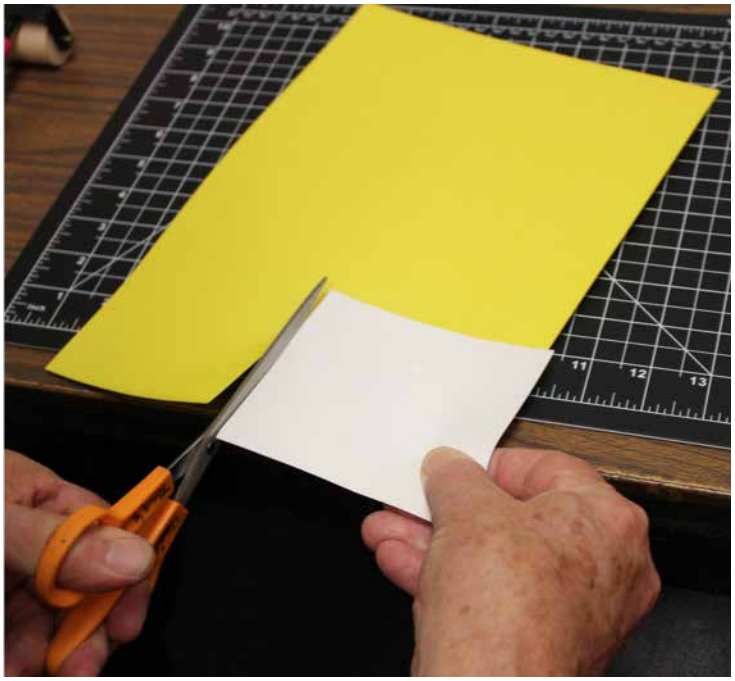


**4.** You can cut out your image(s) first. Be sure to leave some margins.

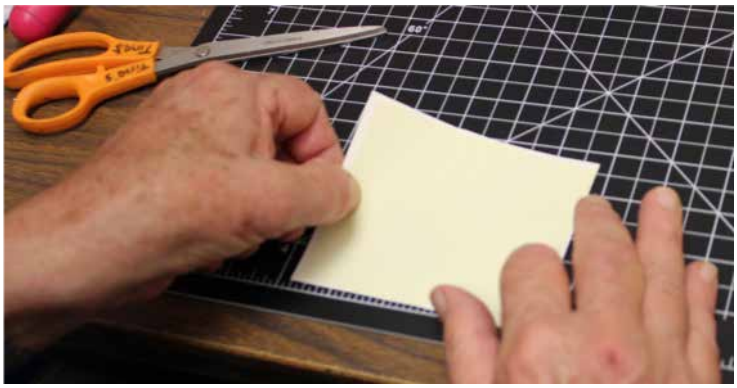
**5.** Cut out a piece of the donor paper that is <u>slightly smaller than the piece of waterslide paper you cut out</u> for your image.

This is important because the donor paper must be positioned completely inside the edges of white waterslide paper, otherwise you will have problems separating them after laminating. This will also avoid jams and contamination in the laminator.

*NOTE: Do not attempt to print on the donor paper! It will jam in the fuser every time.*



**6.** Place the donor paper piece, film side down, against the image side of the waterside paper.

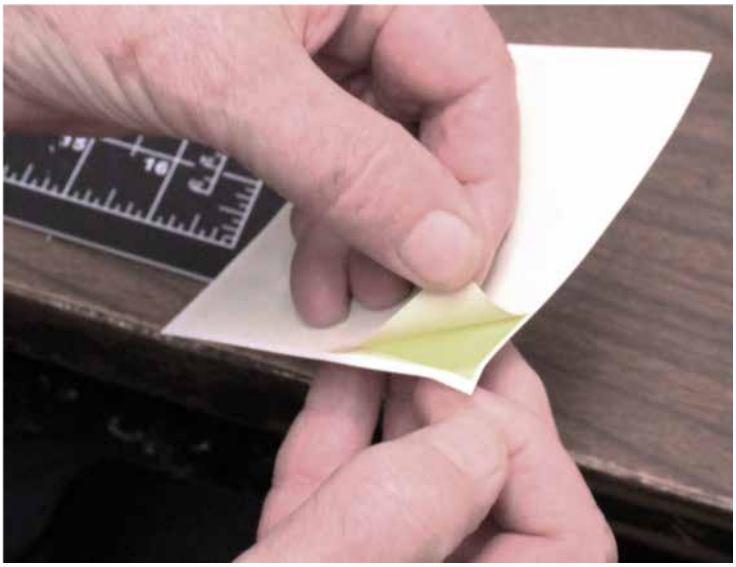


**7.** Holding the two sheets together, run them through the laminator once or twice (we recommend twice).

Insert the sheets into the slot and allow the laminator to grab the decal and let it run through.

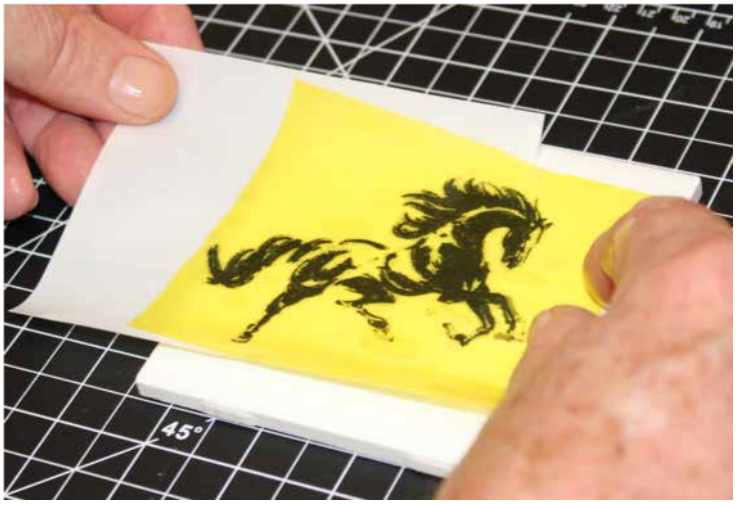
**Reminder:** Make sure your laminator indicates "**Ready**" and that you have pressed the "**5**" button, for 5 mils.

**8.** Peel the two pieces of paper apart. Discard the backing sheet of the donor paper and you have a decal ready for placement on a ceramic, glass, or enamel object.



**9.** Soak the decal in clean water for **2 to 3 minutes**. The decal film should slide easily on the backing paper.

**10.** Carefully slide the decal off the backing paper and onto your piece. You should then position it where you want it to be, using the lubrication from the dissolved dextrin on the back of the film as a positioning aid.



**11.** Using a soft silicone squeegee, start from the middle and gently pull to the edges, squeezing out any water and air bubbles.

**12.** We recommend the use of a soft silicone brayer (pictured) after squeegeeing to ensure complete adhesion of the image and elimination of any residual water or air.

Blot up any excess water with a paper towel. Let the piece dry for six hours or overnight.

You're ready to fire!

Here is a picture of the final result, after firing to 1,550° F.

Alternatively, you can laminate an entire sheet of printed images with a sheet of the appropriate donor paper, then cut the images out after laminating. The warning about keeping the donor paper inside the edges of the white waterslide paper still applies. You may have to cut a strip off the bottom of the donor paper as it is usually A4 paper size. Also, we recommend running it through the laminator twice as the paper is quite thick and acts as a heat sink, cooling the laminator rollers.

## 1-Step Paper:

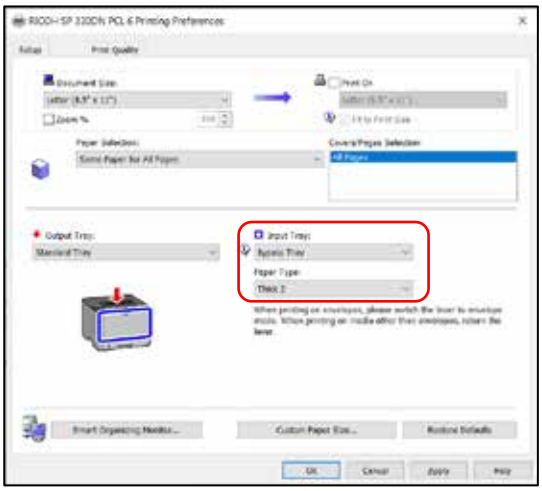
Create an image on your desktop PC using your favorite software application.

**1.** When you are ready to print, open the Bypass Tray by pulling down on the front door tab of the printer (circled, top).

Pull out the center paper support guide and make sure the paper width guides on either side are set to the **8.5-inch position** (middle).

Insert a sheet of the 1-Step decal paper, film side up, into the Bypass Tray (bottom).

Select "**Print**" from your application. Remember to select "**Bypass Tray**" as the paper source and make sure "**Plain**" is the paper type in the driver window (circled, below).

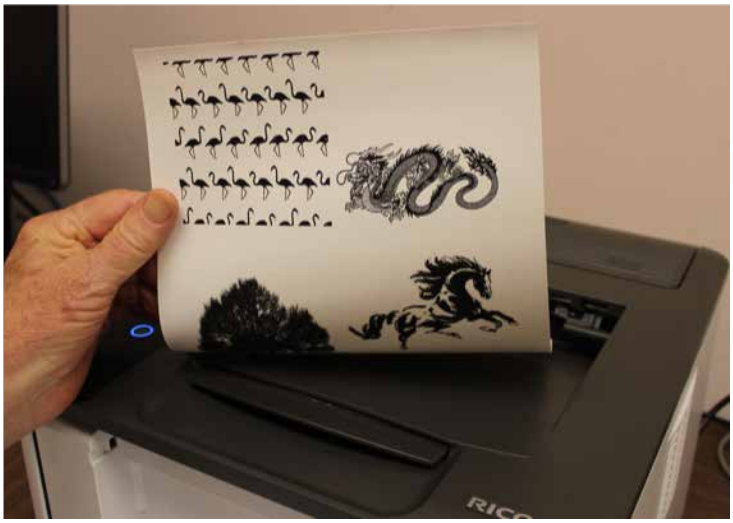


[There will not be a Paper Type selection when using the PCL 5e driver for Macintosh, but it available if you have downloaded the PS driver for Mac. However, the printer has been set internally with "Plain" as the default for the Bypass Tray].

You can also go into the "Advanced" settings in the PS driver and select 1200x1200 dots per inch (dpi) resolution. The printer default is 600x600 dpi.

Print your image to the CerPrint 3710.

2. After printing your images on the decal paper, you are ready to cut and soak your decals.



3. Cut out your image(s) first. Cut as close to the image as you can.

**4.** Soak the decal in clean water for **2 to 3 minutes**. The film should separate easily from the backing paper.

**5.** Place the soaked decal **image-side (toner-side) down** on your piece. Carefully slide the backing paper off the film and discard. You should then position the image where you want it to be.

**6.** Using a soft silicone squeegee, start from the middle and gently pull to the edges, squeezing out any water and air bubbles.

**7.** We recommend the use of a brayer (pictured) after squeegeeing to ensure complete adhesion of the image.

Blot up any excess water with a paper towel. Let the piece dry for six hours or overnight.

You're ready to fire!

# Decal Transfer, Application & Printing Tips

- We recommend cutting your decal as close to the printed image as possible, as there can be a noticeable flux edge after firing when using either of the two fluxed donor papers. We use an articulated Xacto knife, which works well when doing close cuts. An alternative is to cover the entire surface being decorated so no edge is visible. This is not always possible, but is easy for items like tiles and small ceramic shapes.

  There are also a number of inexpensive "silhouette" cutters that will digitally cut the decal for you. The top models can be found with a Google search. They each have their pros and cons and the best one is an individual choice; they all work.

- The unfluxed donor paper will not produce an edge, as it will completely burn off during firing. With unfluxed donor paper, you are relying on the glaze melt or re-melt to fuse your image. However, we only recommend the blue toner for this application, as the black toner will gray out at high temperatures (over 1750F)

- Use fresh, clean water to soak your decal. Some users recommend using distilled water, as salts in local tap water may interfere with the quality of the fired image. This should not be necessary unless you have very high mineral content in your local water.

- It can also be helpful to wet the surface of your object with a solution of Gum Arabic and water prior to applying the decal. Use a sprayer. Gum Arabic is a very helpful aid in reducing the number of firing and transfer defects, and provides more latitude when positioning the decal. Once the decal adheres to the surface it is virtually impossible to move, otherwise.

- Let the decal paper soak thoroughly before removing it from the water. This will make the transfer from the backing paper to the ceramic surface easier. It helps to press down on an edge of the film with your finger while you slide the backing paper off.

- Next, hold the edge of the decal film down with your finger to keep it from moving as you gently squeegee from the center to the edges. Water and air trapped between the surface of the ceramic piece and the decal can result in defects in the fired decal. We recommend the use of a soft, silicon brayer after squeegeeing to further remove any trapped air or water. Roll from the middle to the edges.

- When printing, make sure your decal paper is 8.5 inches wide x 11 inches long (Letter) or A4. You can use different sizes, but you will have to select those from the active printer driver and be sure the Bypass Tray will handle it. Unpredictable results may happen with non-standard paper sizes.

- We recommend the use of the Bypass Tray for feeding waterslide media, as it has the most straight-through paper path. Decal stock is fairly heavy, so the straightest path delivers the best results. This is selected in the driver window on your computer when you select "Print" from your application.

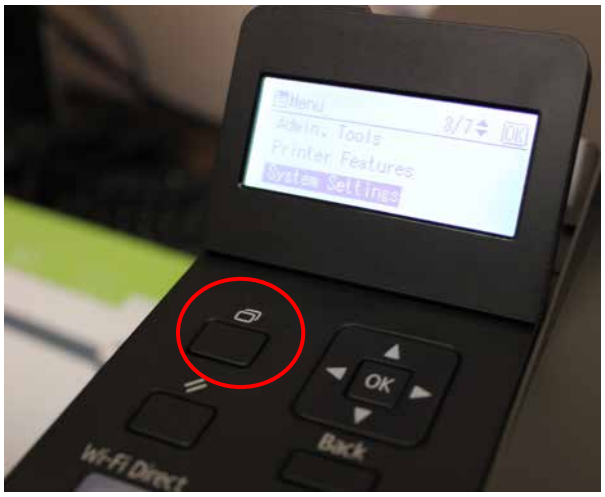
- Check that "**Plain**" appears as the paper type in the Windows driver options before printing. This insures good fusing. [Remember, there will not be a Paper Type selection when using the PCL 5e driver for Macintosh; this is set automatically for you in the CerPrint 3710.]

- Print density in the CerPrint 3710 has been preset by Rosetta Technologies for optimal image quality. However, if the fired images of your transfers are too dark or too light, you can adjust the density manually.

1. Go into the printer menu by pressing the "**Menu"** key just below the LCD on the left on the printer (circled).

2. Using the up and down arrow keys, scroll to "**System Settings**", and press "**OK**".

3. Using the up and down arrow keys, scroll to "**Image Density**", and press "**OK**". The density range can be adjusted on a scale of -3 to +3. Select the desired density level using the up or down arrow keys.




4. Press "**OK**", then press "**Back**" until the main menu appears.

Experimentation is recommended. For additional instruction, please refer to the directions in the Ricoh SP 3710DN User's Guide.

Print density can also be manipulated in the image software application you are using, such as Photoshop.

## Firing Schedules

Below are two sample firing schedules for your reference, but since all kilns are different, feel free to experiment with different times and rates. The black toner will tend to become gray at temperatures above 1,800F. The blue will remain quite blue, but will become lighter if firing to 2,000F or higher.

**Please note that this is a "ramp-hold" firing program and not a cone fire, available on electric kilns that have digital controllers.**

**1,200 Degree Fahrenheit Firing Schedule (for use with fluxed Low-fire paper)**

| Step | Range | Rate | Time |
|---|---|---|---|
| 1 | 70° F to 160° F | 50° F per hour | |
| 2 | HOLD | | 30 minutes |
| 3 | 160° F to 850° F | 250° F per hour | |
| 4 | 850° F to 1,200° F | 350° F per hour | |
| 5 | HOLD | | 30 minutes |
| 6 | OFF | | |

**1,500 Degree Fahrenheit Firing Schedule (for use with fluxed High-fire paper)**

| Step | Range | Rate | Time |
|---|---|---|---|
| 1 | 70° F to 160° F | 50° F per hour | |
| 2 | HOLD | | 30 minutes |
| 3 | 160° F to 850° F | 250° F per hour | |
| 4 | 850° F to 1,500° F | 350° F per hour | |
| 5 | HOLD | | 30 minutes |
| 6 | OFF | | |

These are basic firing programs for a programmable electric kiln. You can change the final temperature according to the melt point of whatever fluxed decal paper you are using. For instance, if you want a more matte finish, reduce the final firing temperature. Both the Low-fire and High-fire donor papers fire to a hard, clear gloss finish at their respective recommended temperatures.

If using the unfluxed paper, you will need to select a final firing temperature that brings your glazed piece back to glaze melt temperature so that the melted glaze will flux the pigments in the toner. Simply change the ending firing temperature in the schedule to correspond with your glaze. You probably don't want the glaze to flow, but you do want it to begin to re-melt.

Experimentation is always recommended. We use inexpensive white porcelain 4" x 4" bathroom tiles for our testing.

# Warranty and Contact Information

## Warranty Coverage

The CerPrint 3710 Ceramic Decal printer comes with a 1 Year Advanced Return Warranty. This warranty offers a "Return to Depot" coverage. Under this program, if Rosetta Technologies Customer Support cannot resolve your problem remotely, we will ask you to send the printer back to us and we will provide a replacement unit. Please retain the packing material your CerPrint 3710 printer came in, as we are not responsible for shipping damage. This Warranty can be extended at the time of purchase to 3 years of coverage. To ensure that your unit is covered, please register your printer with Rosetta Technologies at your earliest convenience, following the instructions in the information packet with the printer you received.

## Warranty Statement

ROSETTA TECHNOLOGIES MAKES ABSOLUTELY NO WARRANTY TO BUYER OR TO ANY END USER WITH RESPECT TO THE EQUIPMENT WHETHER EXPRESS OR IMPLIED. ROSETTA TECHNOLOGIES HEREBY DISCLAIMS ALL WARRANTIES INCLUDING ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ROSETTA TECHNOLOGIES SHALL NOT BE LIABLE FOR PERSONAL INJURY OR PROPERTY DAMAGE, LOSS OF INFORMATION OR DATA, LOSS OF PROFIT OR OTHER INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES ARISING OUT OF THE USE OF OR INABILITY TO USE THE EQUIPMENT, OR FOR ANY DAMAGES (REGARDLESS OF THEIR NATURE) ARISING FROM BREACH OF WARRANTY OR CONTRACT, NEGLIGENCE OR ANY OTHER LEGAL THEORY OR FROM THE CLAIMS OF ANY THIRD PARTY. IN NO EVENT SHALL ROSETTA TECHNOLOGIES' LIABILITY FOR ANY EQUIPMENT EXCEED THE SELLING PRICE OF SUCH EQUIPMENT TO BUYER.

## Contact Information

| | |
|---|---|
| Service and Support: | 800-937-4224 Select Option 2 or |
| CerPrint Technical Help: | 813-864-3418, Rob Hullar<br>rhullar@cerprint.com |
| For Supplies Orders: | 800-937-4224 Option 1 or<br>orders@rosettatechnologies.com |

## Accessories & Supplies

- CerPrint 3710 Black Ceramic Toner Cartridge
- CerPrint 3710 Blue Ceramic Toner Cartridge
- 8.5x11 White Waterslide Paper (lamination method)
- A4 High Fire Decal Donor Paper (lamination method)
- A4 Low Fire Decal Donor Paper (Contains Lead) (lamination method)
- A4 Unfluxed Decal Donor Paper (lamination method)
- 8.5 x 11-inch High-fire Ceramic 1-step Decal Paper, 50 sheets per pack.
- 8.5 x 11-inch Low-fire Ceramic 1-step Decal Paper (Contains Lead), 50 sheets per pack.
- 8.5 x 11-inch Non-fluxed Ceramic 1-step Decal paper, 50 sheets per pack.
- Extended Warranty (post initial warranty) Coverage is available.

**Looking for creative ideas and samples? Check out our Gallery Pages at https://cerprint.com/gallery/**

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