

# CERPRINT 330

## **High Iron Ceramic Decal Printer**



## Software Installation Guide & User Manual

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### Welcome!

#### Thank you for purchasing a Rosetta Technologies CerPrint 330 High Iron Ceramic Decal Printer.

The CerPrint 330 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, iron red fired images at nominal firing temperatures (1,150° to 1,600° Fahrenheit. At higher temperatures, images will tend toward sepia in tone.)



The printer has been modified to lay down optimal amounts of ceramic toner when used in combination with CerPrint-approved decal paper. The toner and printer have also been designed to use a simple <u>lamination</u> process for creating decals. In this process, images are printed on a plain, white waterslide paper using the CerPrint 330. Then, a sheet of "donor" paper is laid over the printed decal image and run through an inexpensive laminator, like the ones that Scotch sells (see page 3). The film from the donor paper is transferred to the white waterslide paper in the laminator to create the decal. From there, the image is handled just like any other one-step decal paper. That is, cut it out, soak it, and then place the decal film on the ceramic, glass, or enamel object to be fired.

There are three different donor papers available:

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

The Low-fire and High-fire fluxed donor 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 330DN CD, as this covers the installation of the printer, operational specifics, and instructions for loading the drivers from the CD. We cover downloading and driver installation from the internet in this manual.

This CerPrint 330 printer kit includes a sample pack of 25 sheets of High-fire donor paper, plus 25 sheets of the plain white waterslide paper to get you started.

We welcome your feedback and suggestions. Please contact us at <u>info@cerprint.com</u>. *This product was developed by Rosetta Technologies, Inc. and Enduring Images with all rights reserved.* 

#### **Examples of Ceramic Decal Print Files**

This page shows sample decal designs and text blocks printed on the CerPrint 330. Pre-firing, your images will look similar to these black-and-white examples:



After firing to the proper schedule, the black-and-white images printed with high iron toner come out with a food-safe, deep red finish, like this:



Would you like to see some creative ideas and samples? Check out our Gallery Pages at http://www.rosettatechnologies.com/rosetta-products/ceramic-decal-printers/cerprint-3500-gallery

#### What's In the Box?

- One CerPrint 330 Ceramic Decal Printer
- One Ceramic Decal High Iron Toner Cartridge
- Sample pack of 25 sheets of High-fire ceramic decal donor paper and 25 sheets of white waterslide decal printing paper
- CD containing drivers and other printer information
- Software Installation Guide & User Manual

The CerPrint 330 printer package does <u>not</u> include a laminator. There are many thermal laminators available commercially. We have tested several for use with the CerPrint 330, and endorse the **Scotch Thermal Laminator TL906**. It delivers consistent results for media up to 9" wide in a compact, easy-to-use design.



#### **Before You Begin**

#### **IMPORTANT!**

Please make sure that you have installed either the Windows SP 330 PS (<u>Postscript</u>) driver or the Macintosh OS X Ricoh SP 330DN 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:

- 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 330, 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 330 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 <u>after the auto-install of the PCL version is complete (Steps 1 & 2)</u>.

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

		Х
Device Setup		
Installing device		
[]		
	Please wait while Setup installs necessary files on your system. This may take several minutes.	
•		
	Close	2

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).



 Under Printers, select and right-click on the RICOH SP 330DN icon and select Printer Properties (circled).



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

RICOH	H SP 330DN PCL 6 Properties	×
	Sharing Ports Advanced Color Management Security Accessories	
8	RICOH SP 330DN PCL 6	
Locatio	on:	
Comme		
Hadal	RICOH SP 330DN PCL 6	

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

RICOH SP 330DN PCL 6 Properties	>
General Sharing Ports Advanced Color Management Security Accessories Advanced Options Paper Size Settings	
Always available	
O Availa <u>b</u> le from 12:00 AM ♀ To 12:00 AM ♀	
Priorit <u>y</u> : 1	
Driver: RICOH SP 330N PCL 6 Vew Driver	
Spool print documents so program finishes printing faster	
○ Start printing after last page is spooled	
Start printing immediately	
O Print <u>d</u> irectly to the printer	
☐ <u>H</u> old mismatched documents	
In int snooled documents first	

**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.

🖶 Add Printer Driver Wizard		×
	Welcome to the Add Printer Driver Wizard	
	This wizard helps you install a new printer driver.	
	To continue, click ivext.	
	< Back	el

8. Using the following link, download the Postscript driver for your version of Windows: <u>https://bit.ly/3fQ9wkx</u>

This link will direct you to the Ricoh driver download page for the Ricoh SP 330DN printer.

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

SP 330DN		
Important Notice Important		
Your OS		
Microsoft Windows 10 (64-bit)		9 10a
	✤ Choose other OS	I

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

PostScript3 Driver	Ver.1.03 Released Date: 12/02/2020	
J Download	By interacting with the PostScript 3 controller in the device, this driver is able to produce an accurate representation of the screen image.	
(File Size : 147 KB)		
	History	

**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.

Name	Date modified	Туре	Size
✓ Today (1) ✓ Ioday (2000) ✓ Z88996en.exe	7/14/2020 2:49 PM	Application	148 KB

- 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.

WinZip Self-Extractor - z88996en.exe	×	WinZip Self-Extractor X
To unzip all files in z88996en.exe to the specified folder press the Unzip button. Unzip to folder:  C:\temp\z88996en  D Qverwrite files without prompting	Unzip Run <u>W</u> inZip Qlose <u>A</u> bout	9 file(s) unzipped successfully
	<u>H</u> elp	ОК

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

🖶 Add	Printer Driver Wizard		Х
<b>Printe</b> Th	r Driver Selection e manufacturer and model det	ermine which printer driver to use.	
<b>3</b>	Select the manufacturer a listed, click Have Disk to s If Windows Update is avai	nd model of the printer driver to install. If the driver you want is no elect the driver you want. lable, click it for more drivers for this processor.	ot
Manufa Brother Canon Dell Dell Inc Footback Thi Tel	acturer r 	Printers         Brother Color Leg Type1 Class Driver         Brother Color Type3 Class Driver         Brother Color Type4 Class Driver         Brother Generic Jpeg Type1 Class Driver         Brother Generic Jpeg Type1 Class Driver         Deather Generic Jpeg Type1 Class Driver         Windows Update         Have Disk         Mportant	~
		< Back Next > Cancel	

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

Install Fro	om Disk	×
	Insert the manufacturer's installation disk, and then make sure that the correct drive is selected below.	OK Cancel
	<u>C</u> opy manufacturer's files from: A:\	✓ Browse

**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).

🍣 Locate File				×
Look <u>i</u> n:	📜 DISK1	~	∕ 🧿 🥬 📂 🛄 ▼	
<b>_</b>	Name	~	Date modified	Туре
	RXEPM.INF		8/4/2019 7:58 PM	Setup Infor
Quick access Desktop Libraries This PC	S RXDAN.inf		3/22/2018 11:25 AM	Setup Infor
Naturali	<			>
NetWORK	File <u>n</u> ame:	RXEPM.INF	(	<u>O</u> pen
	Files of type:	Setup Information (*.inf)	~	Cancel

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

Install Fro	m Disk	×
<pre></pre>	Insert the manufacturer's installation disk, and then make sure that the correct drive is selected below.	OK Cancel
	<u>C</u> opy manufacturer's files from: C:\Temp\z88996en\DISK1 ✓	<u>B</u> rowse

17. Select the Ricoh SP 330DN PS. Click Next (circled).

🖶 Add	Printer Driver Wizard			×
Printe The	r Driver Selection e manufacturer and model dete	rmine which print	er driver to use.	
	Select the manufacturer a is not listed, click Have Di If Windows Update is avai	nd model of th sk to select the ilable, click it fo	e printer driver to install. I driver you want. r more drivers for this pro	f the driver you want
Manuf RICOH	acturer I	Printers RICOH SP	330DN PS 3710DN PS	
C Th <u>Te</u>	is driver is digitally signed. Il me why driver signing is ir	mportant	<u>W</u> indows Update	<u>H</u> ave Disk
			< <u>B</u> ack <u>N</u> ext>	Cancel

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

🖶 Add Printer Driver Wizard		Х
	Completing the Add Printer Driver Wizard	
	You have successfully completed the Add Printer Driver Wizard. You are about to add the following drivers: RICOH SP 330DN PS, x64, Type 3 - User Mode	
	To close this wizard, click Finish.	
	< Back Finish Cance	I

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

naring Ports	Advanced	Color Management					
			Security	Accessories	Advanced Options	Paper Size Settings	
RICOH SP	330DN PS						
RICOH SP 3	30DN PCL 6						
2	D	aner available					
sided: Yes	Г			^			
lo							
2 ppm							
	200 44			~			
	RICOH SP 3	RICOH SP 330DN PCL 6	RICOH SP 330DN PCL 6 Paper available: ided: Yes o 2 ppm a resolution: 1200 dpi	RICOH SP 330DN PCL 6 Paper available: ided: Yes o 2 ppm a resolution: 1200 dpi	RICOH SP 330DN PCL 6 Paper available: ided: Yes o 2 ppm a resolution: 1200 dpi	RICOH SP 330DN PCL 6 Paper available: ided: Yes o 2 ppm conscisuous 1200 dei	RICOH SP 330DN PCL 6 Paper available: ided: Yes o 2 ppm

If the test page prints successfully, your CerPrint 330 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 330, 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 330 to your printer via a network cable, Windows will <u>not</u> 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.



- 💷 Control Panel → ✓ ↑ 🖾 > Control Panel ← Adjust your computer's settings View by: Category System and Security <u>8</u> User Accounts Review your computer's status Change account type Save backup copies of your files with File History Backup and Restore (Windows 7) Appearance and Personalization Network and Internet View network status and tasks Clock and Region Change date, time, or number formats Hardware and Sound View devices and printers Ease of Access Let Windows suggest settings Optimize visual display Programs Uninstall a program Get programs
- 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 330DN PCL6** (circled).


At this point Windows will require the printer driver.

6. Using the following link, download the Postscript driver for your version of Windows: <u>https://bit.ly/2Ws8JPt</u>

This link will direct you to the Ricoh driver download page for the Ricoh SP 330DN 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 **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 "**z88998L15.exe**" and was found in the Downloads folder.

Name	Date modified	Туре	Size
✓ Today (1)			
🔩 z88996en.exe	7/14/2020 2:49 PM	Application	148 KB

- **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.

WinZip Self-Extractor - z88996en.exe	×	WinZip Self-Extractor X
To unzip all files in z88996en.exe to the specified folder press the Unzip button. Unzip to folder:           E:\temp\z88996en         Browse           Overwrite files without prompting	Unzip Run WinZip Qlose About	9 file(s) unzipped successfully
	<u>H</u> elp	ОК

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

🖶 Add Printer Driver Wizard	×
Printer Driver Selection The manufacturer and model detem	nine which printer driver to use.
Select the manufacturer and listed, click Have Disk to sele If Windows Update is availab	I model of the printer driver to install. If the driver you want is not ect the driver you want. ble, click it for more drivers for this processor.
Manufacturer Brother Canon Dell Dell Inc.	Printers       A         Image: Brother Color Leg Type1 Class Driver       Image: Brother Color Type3 Class Driver         Image: Brother Color Type4 Class Driver       Image: Brother Generic Jpeg Type1 Class Driver         Image: Brother Generic Jpeg Type1 Class Driver       Image: Brother Generic Jpeg Type1 Class Driver         Image: Brother Generic Jpeg Type1 Class Driver       Image: Brother Generic Jpeg Type1 Class Driver         Image: Brother Generic Jpeg Type1 Class Driver       Image: Brother Generic Jpeg Type1 Class Driver         Image: Brother Generic Jpeg Type1 Class Driver       Image: Brother Generic Jpeg Type1 Class Driver         Image: Brother Generic Jpeg Type1 Class Driver       Image: Brother Generic Jpeg Type1 Class Driver         Image: Brother Generic Jpeg Type1 Class Driver       Image: Brother Generic Jpeg Type1 Class Driver         Image: Brother Generic Jpeg Type1 Class Driver       Image: Brother Generic Jpeg Type1 Class Driver         Image: Brother Generic Jpeg Type1 Class Driver       Image: Brother Generic Jpeg Type1 Class Driver         Image: Brother Generic Jpeg Type1 Class Driver       Image: Brother Generic Jpeg Type1 Class Driver         Image: Brother Generic Jpeg Type1 Class Driver       Image: Brother Generic Jpeg Type1 Class Driver         Image: Brother Generic Jpeg Type1 Class Driver       Image: Brother Generic Jpeg Type1 Class Driver         Image: Brother Generic Jpeg Type1 Class Driver       Image Type1 Class Driver
	< <u>B</u> ack <u>Next</u> > Cancel

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



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

Locate File				×
Look <u>i</u> n:	📜 DISK1	×	∕ 🧿 🌶 📂 🛄 ▾	
1	Name	~	Date modified	Туре
	RXEPM.INF		8/4/2019 7:58 PM	Setup Infor
Quick access Desktop Libraries This PC	RXDAN.inf		3/22/2018 11:25 AM	Setup Infor
	<			>
INETWORK	File <u>n</u> ame:	RXEPM.INF	~ (	<u>O</u> pen
	Files of type:	Setup Information (*.inf)	$\sim$	Cancel

**Note:** The "Have Disk..." soft key in Step 11 and the instruction to "Insert the manufacturer's installation disk" in Steps 12 and 14 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.

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



15. Select the Ricoh SP 330DN PS. Click Next (circled).

🖶 Add Printer Driver Wizard			×
Printer Driver Selection The manufacturer and model dete	ermine which printe	er driver to use.	
Select the manufacturer a is not listed, click Have Di If Windows Update is ava	nd model of the sk to select the ilable, click it fo	e printer driver to install. I driver you want. r more drivers for this pro	f the driver you want cessor.
Manufacturer RICOH	Printers	330DN PS 3710DN PS	
This driver is digitally signed. <u>Tell me why driver signing is in</u>	mportant	<u>W</u> indows Update	<u>H</u> ave Disk
		< <u>B</u> ack <u>N</u> ext>	Cancel

**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.

ieneral	Sharin	g Ports	Advanced	Color Management	Security	Accessories	Advanced Options	Paper Size Settings	
3		RICOH SP	330DN PS						
Locatio	n:								
<u>C</u> omme	ent:								
M <u>o</u> del:	I	RICOH SP	330DN PCL 6						
Featur	es								
Color	: NO		ſ	aper available:		_			
Doub	le-side	d: Yes				^			
Stapl	e: No								
Spee	d: 32 pj	pm							
Maxi	mum re	solution: 1	200 dpi			$\checkmark$			
					_	_			
			Pr <u>e</u> fere	nces Print	Test Page				

If the test page prints successfully, your CerPrint 330 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 330, 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.

 Go to the URL below and download the Mac PCL 5e installer file for the RICOH SP 330DN. 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 "r88123L15.dmg".



**3.** Double-click the icon to expand the .dmg file. The following will appear:



Double-click and run the SP\_330\_3710\_P\_PCL5.pkg (circled).

**4.** Follow the prompts and enter your password as the computer progresses through the installation process. Several screens are shown. Press **Close** once completed (circled).





5. After the installation is complete, open System Preferences (circled, top) and then click Printers & Scanners (circled, bottom).



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

	Printers & Scanr	ners	Q Search
Printers Cerprint330 • Idle, Last Used		Cerprint330 Open Print Queue Options & Supplie	e 25
		RICOH SP 330DN Idle	
(+ -)	Share this printe	r on the network	Sharing Preferences
	Default printer: Default paper size:	Last Printer Used US Letter	<ul><li>○</li><li>○</li></ul>

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

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

		Add	
😤 🎡	<b></b>	Q Search	
Default IP W	/indows		
Address:			
	Enter host name or IF	address.	
Protocol:	Internet Printing	Protocol - IPP	$\mathbf{c}$
Queue:			
Name			
Name.			
Location:			
Use:			

8. Select IPP as the Protocol, and RICOH SP 330DN in the "Use" dialogue box (circled).

				Add	
			<b></b>	Q Search	
Def	ault	IP	Windows		
	Ac	ldress	: 192.168.253.12		
			Valid and complete h	host name or address.	
	Pro	otocol	: Internet Printing	g Protocol – IPP 😒	
	(	Queue	:		
		Name	e: 192.168.253.12		
	Lo	cation	1:		
		Use	✓ RICOH SP 330D	N	
			Auto Select		
			Generic PostScr	ript Printer	
			Select Software		
			Other		

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



The CerPrint330 Printer is now ready for use with a Macintosh computer.

## **Setting Up the Driver for Printing**

The CerPrint 330 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 waterslide paper into the printer <u>one</u> <u>sheet at a time</u>. You can experiment with this, but this selection gives the most consistent results.



The CerPrint 330 has been pre-programmed to default to the "**Thick 2**" 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 "Thick 2" paper type does not automatically appear in the *Paper Type* window (circled) when the Bypass Tray is selected, choose it manually.

ancon	SP 330DN PCL 6 Printing Pre	ferences		
Setup	Print Quality			
	Oocument Size:		🚔 🗌 Print On	
Lett	er (8.5" x 11")	$\sim$	Letter (8.5" x 11	") ~
Z	oom %	100 🜲	🖓 🖂 Fit to Print Size	e
	Paper Selection:		Covers/Pages Select	tion:
	Same Paper for All Pages		✓ All Pages	
<ul> <li>Out</li> <li>Standa</li> </ul>	put Tray: ard Tray	~ (3	Dinput Tray:	-
<ul> <li>Out</li> <li>Standa</li> </ul>	put Tray: ard Tray	~ (Q	Input Tray: Bypass Tray Paper Type: Thick 2 When printing on renvelopes, please swi mode. When printing on media other th lever.	ten the lever to envelope nan envelopes, return the
• Out, Standz	put Tray: ard Tray		Input Tray: Bypass Tray Paper Type: Thick 2 When printing on envelopes, please swi mode. When printing on media other th lever. Custom Paper Size	ten the lever to envelope han envelopes, return the Restore Defaults

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 330DN 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).



Color Manage	ment	Security	Device Settings
General	Sharing	Ports	Advanced
S RI	COH SP 330DN I	PS	
ocation:			
omment:			
l <u>o</u> del: RIC	COH SP 330DN P	S	
Features		Paper availab	le:
Color: No			^
Color: No Double-sided:	Yes	Letter	
Color: No Double-sided: Staple: No	Yes	Letter	
Color: No Double-sided: Staple: No Speed: 32 ppn	Yes	Letter	
Color: No Double-sided: Staple: No Speed: 32 ppn Maximum reso	Yes 1 Jution: 1200 dpi	Letter	
Color: No Double-sided: Staple: No Speed: 32 ppn Maximum reso	Yes 1 Iution: 1200 dpi	Letter	, in the second s
Color: No Double-sided: Staple: No Speed: 32 ppn Maximum resc	Yes Iulution: 1200 dpi	Letter	Print <u>I</u> est Page

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

🖶 RICOH SP 3	30DN PS Prop	erties			×
Color Ma	nagement	Sec	urity	Device S	ettings
General	Sha	ring	Ports	Ad	vanced
Always and Always a	vailable from 12:0	0 AM	To	12:00 AM	*
Priorit <u>y</u> :	1				
Driver:	RICOH SP 330	DN PS		∨ Ne <u>w</u>	Driver
Start printing immediately     Print <u>d</u> irectly to the printer					
☐ <u>H</u> old mismatched documents					
✓ Print spooled documents first					
<u>Keep printed documents</u>					
Enable advanced printing features					
Printing D	Printing Defaults Print Processor Separator Page				
		ОК	C	ancel	Apply

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).

RICOH SP 330DN PS Printing Prefere	ences X
Layout Paper/Quality	
Qrientation:	
	Ad <u>v</u> anced
(	OK Cancel Apply

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.

	Printer: Cerprint330 0 Presets: Default Settings 0 Copies: 1 Two-Sided Pages: All Selected Page in Sidebar From: 1 to: 1 Paper Size: US Letter 0 8.50 by 11.00 inches Orientation: 1
Paper Feed All Pages From: Bypass Tray First Page From: Auto Tray Select Remaining From: Auto Tray Select Carcel Dist	Paper Feed

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

	Printer: Cerpri Presets: Defaul Copies: 1 Pages: All Selec From Paper Size: US Let	nt330 I Settings I I Two-Sided ted Page in Sidebar I to: 1 ter ♀ 8.50	e e
E AL	Orientation:	iew O	•
1 of 242 > >>	Scale:	100%	
	Scale to Fit:		
	Copies per page:	1 0	
? PDF 🔽 Hide Details		Cancel	Print

Note: <u>There is no "Thick 2" paper setting in Macintosh PCL 5e driver</u>. However, the CerPrint 330 has been pre-programmed to default to this media type when the Bypass Tray is selected.

Pressing **Print** (circled) would then output the image to the CerPrint 330.

## **Before You Start Printing**

There are some important points and tips you should understand before you start using your CerPrint 330:

- This printer has been modified internally to provide optimal print quality using High Iron Ceramic Toner. We have changed the fuser temperature of the printer for optimal printing and fusing of the white waterslide decal paper.
- This printer has also been modified to provide reliable paper handling of the approved white waterslide decal paper. Other decal papers may not work and might cause troublesome jams in the printer fuser.
- Always feed waterslide media from the Bypass Tray, one sheet at a time, shiny side up. The printer will automatically select the correct media type (Thick 2) for proper fusing temperature and speed when printing from a Mac. In Windows, be sure "Thick 2" is selected as the media type from the drop down window in the driver. The next point is important as <u>the printer will not let you select *Thick 2* if printing on both sides of the paper is selected.
  </u>
- Make sure you have disabled duplex printing in Windows (see page 26), or unchecked the "Two-Sided" box in the PCL 5e driver (see page 29).
- 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.
- Do not use the "donor" papers directly in the CerPrint 330 printer. They will cause jams and contaminate the fuser. The donor sheets are only to be used



during the lamination process. Use only the plain white waterslide paper provided or obtained from Rosetta Technologies or Enduring Images to print images with the CerPrint 330.

#### **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 330 has been modified especially to work with the white waterslide paper provided.

#### Notes:

- **Do not print directly on the donor paper**, as it will cause a jam in the fuser. Use only the white waterslide paper approved for use by Rosetta Technologies.
- **Do not print in mirror image mode** as you do with many pre-coated papers, since the image naturally will be in the right orientation.
- Be careful if you are planning to use pre-coated papers in the CerPrint 330. 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 *Plain* or *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 white waterslide paper included with your printer will not stick to the fuser roller. This is because it does <u>not</u> have a decal film surface; it is used strictly for receiving the high iron ceramic toner image. This is where our unique post-printing lamination process comes into play.

The white waterslide paper is basically the same paper used as the substrate for making decal papers. The paper is very consistent as to quality and surface smoothness, so your decal prints will always be consistent.

The white waterslide paper has a thin coating of dextrin on one side, the shinier side you will print on. When you're ready to print your image, simply place a sheet of the white waterslide paper, <u>shiny side up in the Bypass Tray</u>, as shown at right.



## **Process Steps: An Overview of the Decal Printing Process**

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

 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, <u>shiny side</u> <u>up</u>, into the Bypass Tray (bottom).

Select "**Print**" from your application. Remember to select "**Bypass Tray**" and make sure "**Thick 2**" is the paper source and type in the driver window (circled, below).



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

Print your image to the CerPrint 330.

Turn on your laminator, press the "5" button (circled).
 Wait for the Ready light to come on.









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





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



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

 Place the donor paper piece, <u>film</u> <u>side down</u>, against the image side of the waterside paper.





 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 millimeters.





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.





 Soak the decal in clean water for 2 to 3 minutes.



**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 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!



Here is a picture of the final result, after firing to 1,600° F.



Alternatively, if you print a whole sheet of decal images, you can laminate the entire sheet 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. Also, we still recommend running it through the laminator twice.

## **Decal Transfer, Application & Printing Tips**

We recommend <u>cutting your decal as close to the printed image as possible</u>, 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 <u>cover the entire surface being decorated so no edge is visible</u>. 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.
- 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 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.
- 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. Slide the film with your image off the white waterslide paper and onto your piece, <u>image side down</u>.
- Hold the edge of the decal down with your finger to keep it from moving as you squeegee. Water and air trapped between the surface of the ceramic piece and the decal can result in defects.
- When printing, make sure your waterslide paper is 8.5 inches wide x 11 inches long (Letter). 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 "**Thick 2**" appears as the paper type in the Windows driver options before printing. This insures good fusing. [Remember, there will <u>not</u> be a Paper Type selection when using the PCL 5e driver for Macintosh; this is set automatically for you in the CerPrint 330.]
- Print density in the CerPrint 330 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.
  - Go into the printer menu by pressing the "Menu" key just below the LCD on the left on the printer (circled).
  - Using the up and down arrow keys, scroll to "System Settings", and press "OK".
  - 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 330DN 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 high iron toner will tend to become more of a sepia color the higher you fire, but will be still be rich and dark up to 1,650° F.

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

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		

1.200 De	gree Fahrenheit F	iring Schedule	(for use with	fluxed Low-	-fire naper)
1,200 DC		ining Juneuule		HUNCU LUW	

#### 1,600 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 1,600° 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 donor 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 iron oxide 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 remelt. 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 330 High Iron 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 330 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: CerPrint Technical Help:	800-937-4224 Select Option 2 or 813-864-3418, Rob Hullar <u>rhullar@cerprint.com</u>
For Supplies Orders:	800-937-4224 Option 1 or orders@rosettatechnologies.com

#### **Accessories & Supplies**

- High Iron CerPrint 330 Toner Cartridge
- 8.5 x 11-inch white waterslide printing paper, 50 sheet packs (PN)
- 8.5 x 11-inch High-fire Ceramic Decal Donor Paper, 50 sheets per pack.
- 8.5 x 11-inch Low-fire Ceramic Decal Donor Paper, 50 sheets per pack.
- 8.5 x 11-inch Non-fluxed Ceramic Decal donor 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 http://www.rosettatechnologies.com/rosetta-products/ceramic-decal-printers/cerprint-3500-gallery



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