
Rimage® 480i Printer™ User Guide



R I M A G E™

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- Unit serial number and software version.
- Functional and technical description of the problem.
- Exact error message received.

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- Product specifications
- Troubleshooting tips and FAQs
- The latest documents
- Printing tips
- Current firmware and driver downloads

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Introduction

This manual provides the information needed to operate the Rimage 480i Printer, identify the parts, and configure the Rimage 480i printing preferences. To set up and install your Rimage 480i Printer, refer to the *Rimage 480i QuickStart Guide*.

Operating System requirements

The Rimage 480i Printer runs **only** on Windows 2000 Professional and Windows XP Professional and Home editions. It requires one USB port.

Media requirements

You must use discs that are coated with a surface that is designed for ink-jet printing. The media that is in Rimage Media Kits™ is designed for optimum use in the Rimage 480i printer.

Ink requirements

The printer will work only with the following printer cartridges.

Description	Rimage Part #
Black	RB1
Color	RC1
Photo	RP1

The following cartridge combinations are supported.

Left Position	Right Position
Color	Black
Color	Photo
Color	No cartridge
No cartridge	Black

Warning!

- Ink may be harmful if swallowed.
- Avoid contact with eyes.
- Ink contains nitrites. If ingested, seek immediate medical attention.
- Keep out of reach of children.
- Refilling ink cartridges may result in damage to the cartridge or printer.
- Rimage ink cartridges are not licensed for modification.

 **Important** You can use only authentic Rimage ink cartridges in the Rimage 480i printer.

Rimage 480i Printer specifications

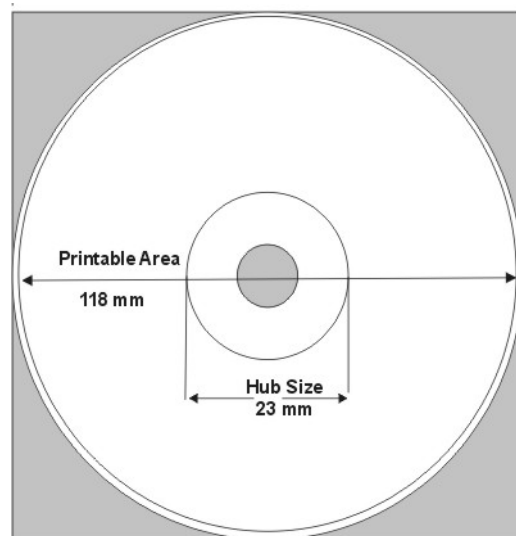
Print technology	Thermal inkjet printing	
Print resolution	Up to 4800 dpi	
Print driver	Microsoft Windows® 2000 Professional Service Pack 4 or XP Professional Service Pack 2	
Color spectrum	16.7 million	
Droplet size	3 pico-liters	
Pixel density	5.76 million pixels per square inch	
Media types	Standard inkjet printable surface 120 mm CD-R/DVD-R	
Power	100 – 240 VAC, 1.0 A, 50-60 Hz, auto-ranging	
Physical size	Height – 6.00" (15.2 cm) Width – 15.75" (40 cm)	Depth – 15.00" (38.1 cm) Weight 14 lb (6.35 kg)
Interface	USB 1.1	

Label design requirements

The 480i printer ships with the CD Designer™ label-editing program, which you can use to design your labels.

If you have another software application that you prefer, you can create the label image and print directly to the printer. If you create a Windows bitmap (.bmp) file, you can insert it into CD Designer to create a label that prints with the Rimage software. To create a label with another software application, use the following criteria when creating a label:

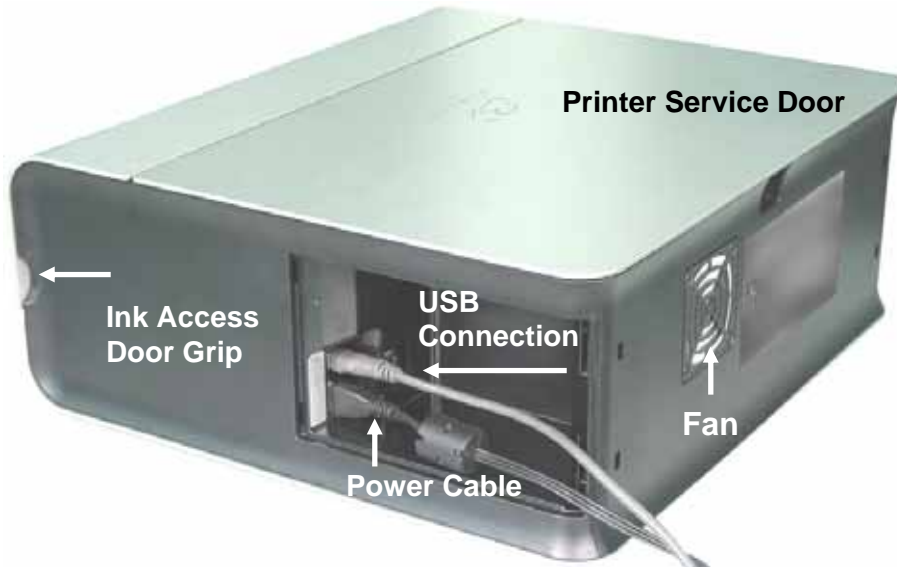
- **Color Depth** – Save the artwork for the label with the color set to at least 256 colors; a higher color setting is recommended.
- **DPI** – Use pictures or logos set to 300 DPI (Dots Per Inch).
- **Label Design Size** – A full size disc is 120mm (4.723"). The hole is 15mm (0.59"). The printable area and hub sizes vary depending on the disc manufacturer.
- **Media** – The media that is in Rimage Media Kits™ has a hub area of 23 mm and a printable area of 118 mm. Most labels print well with the print settings set to 24 mm and 118 mm. To eliminate the white areas that may appear at the center and edge of the disc, you may want to try settings of 23 mm and 119 mm.
- For more information about Rimage Media Kits™ – convenient packages of inkjet-printable discs and ink cartridges, all guaranteed by Rimage – contact Rimage at 800-445-8288.



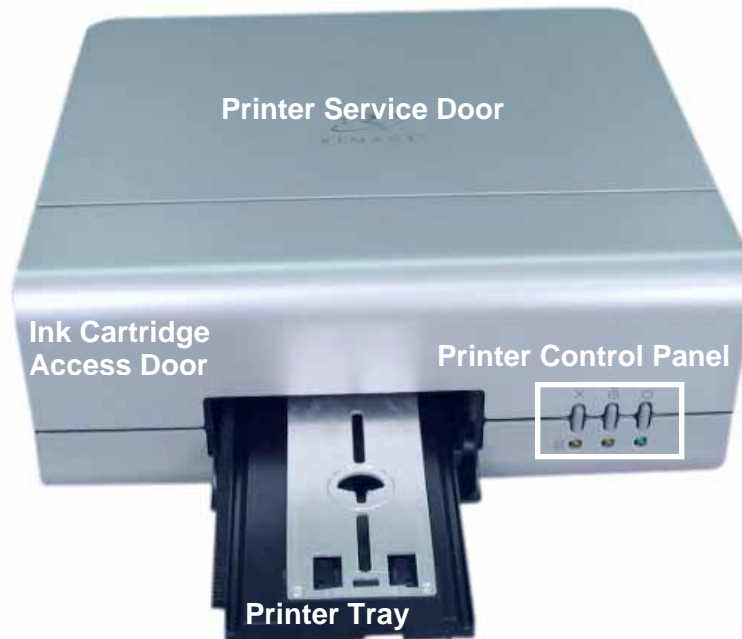
Identify the parts of the Rimage 480i Printer

This section describes the Rimage 480i Printer hardware and its features. The Rimage 480i Printer has some major parts that you need to know to operate and maintain the printer. These features are shown in the Front and Side views.

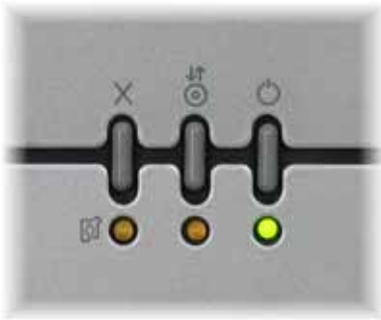
Side view



Front view







Printer control panel



The Rimage 480i Printer control panel has three buttons and three LEDs to indicate certain conditions. The table below explains each of these buttons.

LED: Light-emitting diode. A type of diode that emits light when current passes through it.

Image	Name	Functionality
	Cancel	When you press the Cancel button, it provides limited functionality to cancel printing.
	Ink Cartridge Status	The amber LED flashes when there is a hardware issue such as the ink cartridges are incorrectly installed. The amber LED is on continuously when an ink cartridge is low on ink. To check the ink cartridge status, refer to the Checking the ink levels procedure on page 15.
	Tray	The Tray button is used to move the printer tray in and out and to load a disc for manual printing or checking alignments. The tray LED lights briefly when the button is pushed. A tray movement error causes the tray LED to flash.
	Power	When you press the Power button, the power turns off or on. The green Power LED is on when there is power to the printer. The Power LED flashes when the printer is printing or in an error state.

Operate the Rimage 480i Printer

This chapter provides the information that you need to use and maintain your Rimage 480i Printer.

Powering up the printer

The printer can be in either the ON state (Power LED on) or the sleeping state (Power LED off). Press the **Power** button to bring the printer out of the sleep state and into the ON state.

Accessing the Power and USB Cables

To access the power and USB cables, you must remove the Cable Access Door as shown.



Opening the Printer Service Door

To open the Printer Service Door, press the tab and lift the door as shown.



Changing ink cartridges

Use this procedure to change the ink cartridges on your Rimage 480i Printer.

! **Important** You must use the appropriate ink cartridges in one of the configurations as stated on page 1 in this document.

1. Lift the Ink Cartridge Access Door. The ink cartridge carriage moves to an accessible position on the carriage guide.

Note: You must wait until the cartridges are resting and uncapped before proceeding.



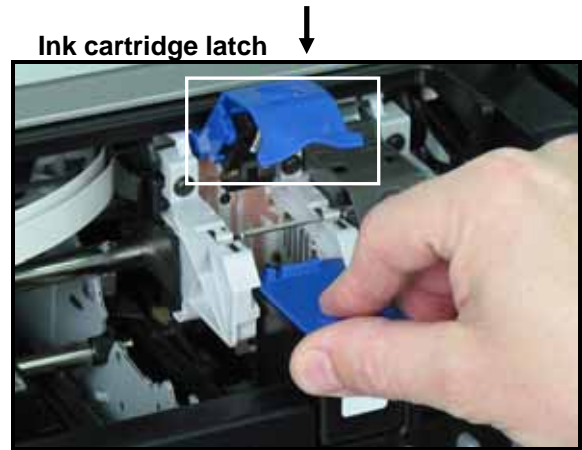
2. Lift the ink cartridge latch to the open position.
3. If an ink cartridge is already installed, slide the ink cartridge out of the ink cartridge cradle.
4. Remove a new ink cartridge from its packaging and carefully remove the protective tape that covers the ink nozzles.

ⓘ **Important** Do not touch the nozzles or the copper contacts on the ink cartridges. If you touch these parts, clogs, ink failure, and poor electrical connections are likely to occur. Do not remove the copper strips.

5. Hold the ink cartridge so that the copper strip is on the bottom and facing toward the printer and slide the ink cartridge into the cradle.
6. Push down on the ink cartridge latch until it snaps closed.
7. Close the Ink Cartridge Access Door. The Ink Cartridge Status light flashes for a few seconds and then stops flashing.


🔧 **Note:** If the ink cartridge is not securely seated in the cradle, the printer will not recognize the ink cartridge. The printer may not reset properly or you may receive an “invalid ink cartridge” message. If this happens:


- a. Remove the cartridge and firmly reinsert it.
 - b. Make sure you are using the appropriate cartridge. Acceptable cartridges are listed in the [Ink requirements](#) section on page 1.
 - c. If the problem persists, replace the cartridge.
8. Using the [Aligning the ink cartridges](#) procedure on page 12, align the ink cartridges.



Placing a disc on the printer tray

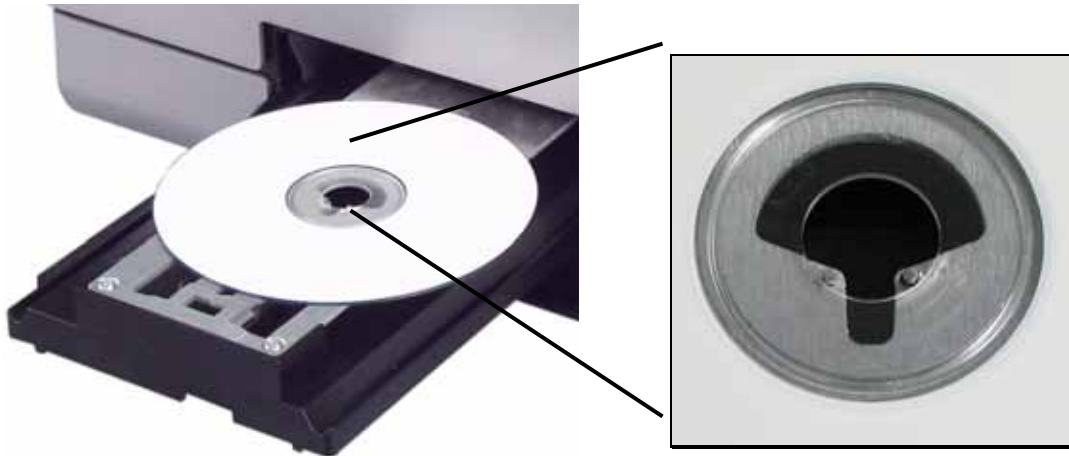
To avoid scratching or damaging the recording surface of the disc, it is important to properly place the disc on the printer tray. Use this procedure to properly place the disc on the printer tray.


 **Note:** If you select **Print** from your software application, the printer tray opens automatically.

1. To open the printer tray, press . The printer tray opens.



2. Carefully place the disc on the printer tray, aligning the hole in the disc with the small pins on the printer tray.



3. To close the printer tray, press . The printer tray closes. You are ready to use the appropriate software application to print your disc label!

Changing the fan filter

The fan filter is a consumable item, so you will need to change it after 20 printer cartridges. Use this procedure to change the fan filter.


1. With a small screwdriver, gently pull on the fan grating. The protective grating and fan filter should come off of the fan housing easily.



2. Gently pull the fan filter housing away from the back of the Rimage 480i.
3. Remove the white filter material.
4. Replace the filter with part number 304219-001.
5. Gently press the fan filter housing into place on the back of the Rimage 480i until it snaps into place.

Setting up your printing preferences

Printing Preferences allows you to set up and run your Rimage 2000i to produce the best possible label on your discs.

 **Tip** For additional information about these features, access the online help in Printing Preferences.

Through Printing Preferences, you can:

[Set the print quality](#)

[Adjust the ink volume used](#)

[Change or enable masking](#)

[Center the image on the disc](#)

[Check the ink levels](#)

[Add, edit, or delete a watermark](#)

[Set up color options](#)

[Align the ink cartridges](#)

[Clean the ink cartridge nozzles](#)

Navigating to Printing Preferences


You must access the *Disc Color Printer 480i Printing Preferences* window to set up your printing preferences. Use this procedure to navigate to the *Disc Color Printer 480i Printing Preferences* window.

1. From the Windows **Start** menu, select **Settings|Printers** in Windows 2000 or select **Printers and Faxes** in Windows XP.
2. Right-click on the *Disc Color Printer 480i* and select **Printing Preferences** from the drop-down menu. The *Disc Color Printer 480i Printing Preferences* window opens.

Setting the print quality

Use this procedure to change the print quality for your images, if necessary.


1. [Navigate to Printing Preferences.](#)
2. Select the *Disc/Quality* tab.
3. In the *Disc Options* box, select the appropriate **Type** from the drop-down list.
4. In the *Print Quality* box, select the desired print quality. When you select a print quality, the following information about the quality displays:
 - Black render dpi
 - Color input dpi
 - Color output
5. When you have made the desired choices, select **Apply**.
6. To close the Preferences window, select **OK**.

 **Tip** For additional information about these features access the online help in Printing Preferences.


Adding, editing, or deleting a watermark

This functionality allows you to create a new watermark or edit a currently existing watermark that you can print on your disc. You can also delete a current watermark that you created from this tab.

1. Navigate to Printing Preferences.
2. Select the *Effects* tab.
3. From the Watermarks drop-down list, select the desired watermark.
4. If desired, edit the watermark or create a new watermark.
 - a. Select **Edit**. The *Watermark Details* window opens.
 - b. To delete a watermark, highlight the desired watermark and select **Delete**.

 **Note:** You can delete only watermarks that you or another user has created. You cannot delete any of the default watermarks.

- c. To create a new watermark, select **New**. “Untitled” displays in the *Current Watermarks* field.
 - d. Enter or change information in one or more of the following fields to create your customized watermark:
 - Watermark Message – Enter the desired message.
 - Message Angle – Select the appropriate radio button to provide the desired angle. If you select the Angle radio button, you can set the angle.
 - Options – Select the *Justified Across Page* radio button to center and justify the text.
 - Font Attributes – Select the desired font attributes from the drop-down lists.
 - e. Select **OK**. The *Watermark Details* window closes.
5. If you want the watermark to print only on the first disc, select the **First Page Only** checkbox.
 6. When you have made the desired choices, select **Apply**.
 7. To close the Preferences window, select **OK**.

 **Tip** For additional information about these features access the online help in Printing Preferences.

Adjusting the ink volume used

This functionality allows you to adjust the amount of ink that is used.

1. Navigate to Printing Preferences.
2. Select the *Basics* tab.
3. Select **Advanced Features**. The *Advanced Features* window opens.
4. With the *Ink Volume* and *Dry Time* sliders, you can increase or decrease the desired ink volume and drying time.


 **Note:** Do not select the *Low Memory* checkbox; leave it unchecked.

5. Select **OK**. The *Advanced Features* window closes.
6. Select **Apply**.
7. To close the Preferences window, select **OK**.

Setting up color options

This functionality allows you to toggle between color and grayscale printing, select the type of color space your labels require, and adjust some color attributes.

1. Navigate to Printing Preferences.
2. Select the *Color* tab.
3. Turn *Print in Grayscale* on or off.
 - a. In the *Color Options* box, select or clear the **Print in Grayscale** checkbox.
 - b. If you selected the checkbox, select the appropriate radio button for your print type.
4. To adjust color attributes, move the **Saturation**, **Brightness**, and/or **Color Tone** slider to the desired position.
5. If necessary, select the appropriate **Color Space** from the drop-down list.
6. When you have made the desired choices, select **Apply**.
7. To close the Preferences window, select **OK**.

 **Tip** For additional information about these features access the online help in Printing Preferences.

Changing or enabling masking

This functionality allows you to adjust the non-printable area, or mask, settings for standard CD/DVD 120 mm media. This allows you to print a rectangular or square image without the edges overlapping the disc edges. If you print on areas of the disc where the surface is not suitable for printing, the ink can smear or run.


1. Navigate to Printing Preferences.
2. Select the *Mask Settings* tab.
3. To enable mask settings, select the **Enable Masking** checkbox.
4. Change the mask settings as desired.
5. When you have made the desired choices, select **Apply**.

 **Note:** Select **Default** to return mask settings to the factory settings.

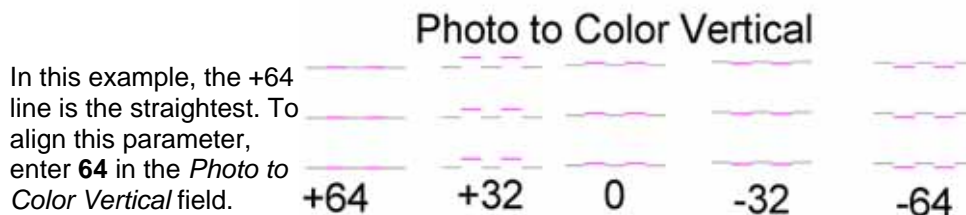
6. To close the Preferences window, select **OK**.

Aligning the ink cartridges

For optimal print quality and maximum printing speed, use this procedure to align the ink cartridges.

1. Navigate to Printing Preferences.
2. Load a disc in the printer.
 - a. To open the printer tray, press . The printer tray opens.
 - b. Place a 120 mm white disc on the tray.
3. Check the ink cartridge alignment.
 - a. On the Disc Color Printer 480i Printing Preferences window, select the **Service** tab.
 - b. Select **Align Cartridges**. The Align Cartridges for Disc Color Printer 480i dialog box opens.
 - c. Select **Reset**. When the Rimage 2000i has reset the ink cartridges, the buttons on the Align Cartridges for Disc Color Printer 480i dialog box are enabled.
 - d. Select **Print Pattern**. The alignment pattern prints on the disc. The tray opens to display the disc.
 - e. Examine the disc with the print pattern. You will see up to four groups of lines on the disc. These groups of lines correspond to the Parameters listed in the Align Cartridges for Disc Color Printer 480i dialog box. Each group of lines is numbered.

4. Adjust the cartridge alignment.



- a. Enter the number that corresponds to the straightest line for the following groups:

Color / Black Ink Cartridge Parameters

- Black to Color
- Black to Color Vertical
- Black Bidirectional (Bidi) Alignment
- Color Bidi Alignment

Color / Photo Ink Cartridge Parameters


- Photo to Color
- Photo to Color Vertical
- Photo Bidi Alignment
- Color Bidi Alignment

 **Notes:**

- If you have only the color ink cartridge loaded, the Color Bidi Alignment is the only parameter that you can adjust.
- If you have only the black ink cartridge loaded, the Black Bidi Alignment is the only parameter that you can adjust.
- If you enter a negative number, you must enter the minus (-) sign. If you enter a positive number, enter only the number itself.


- b. Select **Save**. The *Disc Color Printer 480i – 480UIDLL* progress box displays with the progress of the alignment.
- c. Select **OK** to close the *Align Cartridges for Disc Color Printer 480i* dialog box.


5. Select **OK** to close the Disc Color Printer 480i Printing Preferences window.

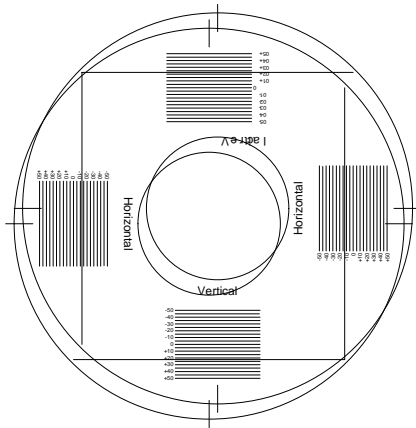
6. To close the printer tray, press . The printer tray closes.


Centering the image on the disc

The Rimage 2000i provides two ways to center the image on the disc. You can use the *Auto Centering* method or the *Manual Centering* method. This process describes both processes. The Auto Centering method is accurate to within +/- 0.5 mm. You can improve the centering position accuracy with the manual centering adjustment to better than +/- 0.2 mm. For optimal print quality, use this procedure to center the image on the disc.

 **Tip:** For additional information about these features, access the online help in Printing Preferences.


 **Tip:** Use the *Center Image* functionality only if the printed image is not centered on the disc. Image centering is set at the time of manufacture and usually does not need to be recalibrated in the field.





1. Navigate to Printing Preferences.
2. Load a disc in the printer.
 - a. To open the printer tray, press . The printer tray opens.
 - b. Place a 120 mm white disc on the tray.
3. Select **Center Image**. The *Centering Margins for Disc Color Printer 480i* dialog box displays.
4. Center the image.
 - To Auto Center the image, select **Center Image**. The Rimage 2000i automatically centers the image.

- To manually center the image, follow steps a - e below.
 - a. Select **Print Test**. The Rimage 2000i prints a test pattern on the disc and opens the tray.
 - b. Rotate the disc approximately 180°.
 - c. Select **Print Test**. The Rimage 2000i prints a test pattern on the disc and opens the tray.
 - d. Examine the disc and enter centering values.
 - i. Look at where each long line crosses the set of index lines.
 - ii. Enter the correction values.
 - In the *Vertical correction* field, enter the index value where the long line crosses the index line in the Vertical group.
 - In the *Horizontal correction* field, enter the index value where the long line crosses the index line in the Horizontal group.

 **Note:** Each line has a value of 5 units. The Horizontal value for the image displayed is approximately -12. You must enter negative numbers with a minus sign (-).

4. Select **Adjust**. The Rimage 2000i centers the image according to the information that you entered.
5. Select **OK** to close the *Centering Margins for Disc Color Printer 480i* dialog box.
6. Select **OK** to close the *Disc Color Printer 480i Printing Preferences* window.
7. To close the printer tray, press . The printer tray closes.

 **Tip:** For additional information about these features, access the online help in Printing Preferences.

 **Tip:** If the cartridge has been unwrapped and setting out, clean the cartridges before you print.


Cleaning the ink cartridge nozzles

This functionality allows you to clean or open the ink cartridge nozzles. The nozzles may become clogged from dried ink causing poor print because one or more nozzles are not spraying the appropriate quantity of ink.

1. Navigate to Printing Preferences.
2. Select the *Services* tab.
3. Select **Clean Cartridges**. The *Cleaning Cartridges* window opens.
4. Select **Light** to clean the ink cartridge nozzles with the least amount of ink. The status field at the bottom of the *Cleaning Cartridges* window displays a message when the cleaning is complete.
5. Print a test disc after cleaning the ink cartridge nozzles. If print quality is still poor, you can use this process and, in step 4, select **Medium** or **Heavy** to clean the ink cartridge nozzles.

Checking the ink levels

This functionality allows you to check the level of ink in the cartridges.


 **Tip:** If you remove the ink cartridges and reinsert them, the system resets to show that the cartridges are full, regardless of the actual fill status.


1. Navigate to Printing Preferences.
2. Select the *Service* tab.
3. Select **Check Ink Level**. Information displays in the *Printer Status* field.
4. To close the Preferences window, select **OK**.

Learn More


Safety information


This manual and the indications on the product allow proper and safe operation. The indication marks below help protect you and other persons from injury, and equipment from damage.

 **Warning!** Ignoring this symbol failing to take or avoid a specific action could result in physical harm to the user or the hardware.



 **Caution:** Ignoring this symbol could result in loss of data or incorrect operation of the hardware.

To ensure safety, please read the precautions in the User Guide and familiarize yourself with their meaning before using the equipment.

 **Warning!** For continued protection against risk of fire, replace the fuse only with same type and rating. An authorized technician should perform all service procedures.

 **Warning!** Ink may be harmful if swallowed. Avoid contact with eyes. Ink contains nitrites. If ingested, seek immediate medical attention. Keep out of reach of children.

Compliance testing

Model: Disc Color Printer 480i	
Product ID: CDPR4	
Notice for USA	
	<p>Tested to Comply with FCC Standards FOR HOME OR OFFICE USE.</p> <p>This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. Pursuant to Part 15.21 of the FCC Rules, any changes or modification to this equipment not expressly approved by Rimage Corporation may cause harmful interference, and void your authority to operate this equipment.</p> <p>NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:</p> <ul style="list-style-type: none"> • Reorient or relocate the receiving antenna. • Increase the separation between the equipment and receiver. • Connect the equipment into an outlet on a circuit different from that to which the receiver is connected. • Consult the dealer or an experienced radio/TV technician for help. • This product complies with <u>UL 60950 3rd Edition</u>.
Notice for Canada	
<p>This Class B digital apparatus complies with Canadian <u>ICES-003</u>. Cet appareil numérique de la classe B est conforme a la norme <u>NMB-003</u> du Canada.</p> <p>This product complies with <u>CAN/CSA-C22.2 No. 60950-00 3rd Edition</u>.</p>	
Notice for Europe	
	<p>This product is in conformity with the EMC Directive (89/336/EEC) and the Low-Voltage Directive (73/23/EEC) through compliance with the following European standards: EN 55022: 1998 + Amd 1: 2000 Class B Limit; EN 55024: 1998; EN 61000-3-2:2000; EN 61000-3-3:1995 + Amd 1: 2001; EN 60950: 2000. The CE mark has been affixed in accordance with the CE Marking Directive 93/68/EEC.</p>