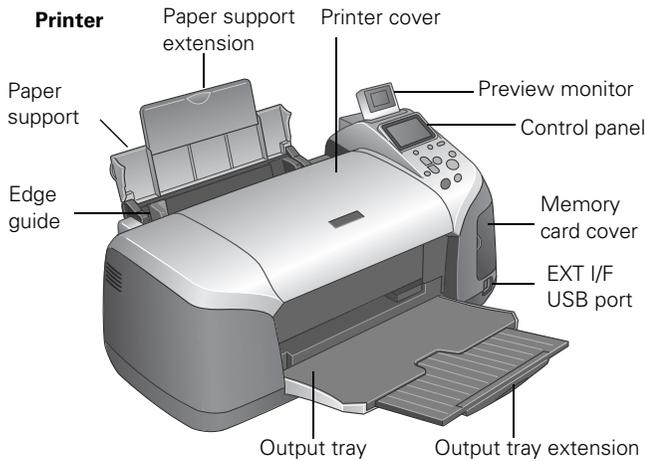
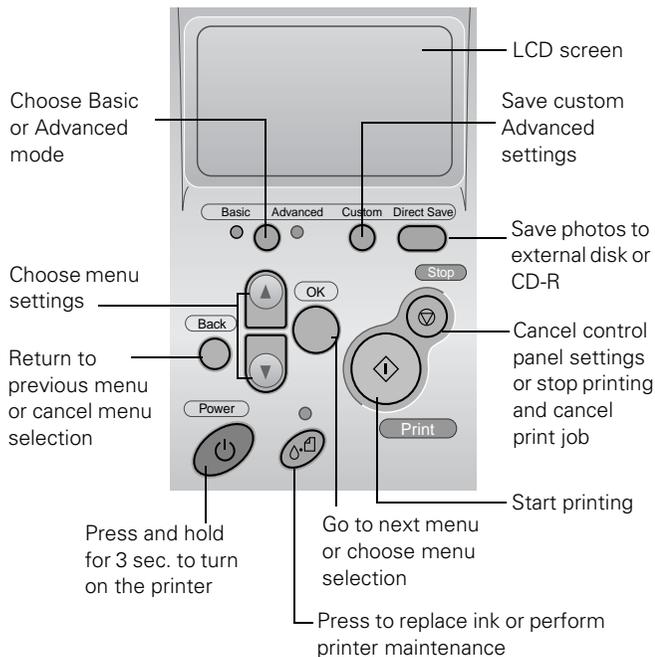


## Printer Parts



### Control Panel



## Accessories

### Ink Cartridges

Cartridge	Part number
Black	T048120
Magenta	T048320
Cyan	T048220
Yellow	T048420
Light Magenta	T048620
Light Cyan	T048520

## EPSON Papers

When printing from your computer using the Epson® printer driver, you can choose from any of the following Epson papers. When printing without a computer, select one of the papers marked with an asterisk (\*). See page 3 for information about paper settings. The printer also works with plain paper.

Paper name	Size	Part number
Epson Premium Bright White Paper	Letter (8.5 x 11 inches)	S041586
Epson Photo Quality Ink Jet Paper	Letter (8.5 x 11 inches)	S041062
	A4 (8.3 x 11.7 inches)	S041061
	Legal (8.5 x 14 inches)	S041067
Epson Photo Quality Ink Jet Cards	A6 (4.1 x 5.8 inches)	S041054
Epson Photo Paper	Panoramic (8.3 x 23 inches)	S041145
Epson Glossy Photo Paper	Borderless 4 x 6 inches, non-perforated*	S041458
	4 x 6 inches, perforated edges	S041134/ S041671
	Letter (8.5 x 11 inches)*	S041141/ S041649/ S041272/ S041271
Epson ColorLife® Photo Paper	Letter (8.5 x 11 inches)*	S041500
Epson Matte Paper Heavyweight	Borderless 8 x 10 inches*	S041467
	Letter (8.5 x 11 inches)*	S041257
Epson Double-Sided Matte Paper	Letter (8.5 x 11 inches)	S041568
Epson Premium Glossy Photo Paper	Letter (8.5 x 11 inches)*	S041286/ S041667
	Borderless 4 x 6 inches*	S041682
	Borderless 5 x 7 inches*	S041464
	Borderless 8 x 10 inches*	S041465
Epson Premium Semigloss Photo Paper	Letter (8.5 x 11 inches)*	S041331
Epson Premium Luster Photo Paper	Letter (8.5 x 11 inches)*	S041405
Epson Photo Quality Self Adhesive Sheets	A4 (8.3 x 11.7 inches)	S041106
Epson Ink Jet Transparencies	Letter (8.5 x 11 inches)	S041064
Epson Iron-On Transfer Paper	Letter (8.5 x 11 inches)*	S041153
Epson Glossy Photo Greeting Card Kit	Letter (8.5 x 11 inches), perforated edges*	S041606
Epson Photo Stickers® Kit (CD-ROM/paper)	A6 (4.1 x 5.8 inches)	S041144-KIT
Epson Photo Stickers (refill)	A6 (4.1 x 5.8 inches)*	S041144
Epson Semigloss Scrapbook Photo Paper	Letter	SCR1001
PremierArt™ Matte Scrapbook Photo Paper for Epson	Letter	SCR1002

## Printer Specifications

### Printing

Nozzle configuration	540 nozzles (90 each: black, cyan, magenta, yellow, light cyan, light magenta)
Print direction	Bidirectional with logic seeking
Control code	ESC/P Raster, EPSON Remote command
Input buffer	64KB

### Mechanical

Paper capacity	120 sheets of 24 lb (90 g/m <sup>2</sup> ) paper
Dimensions	
Storage	Width: 19.6 inches (498 mm) Depth: 10.4 inches (264 mm) Height: 8.9 inches (225 mm)
Printing	Width: 19.6 inches (498 mm) Depth: 18.7 inches (476 mm) Height: 11.4 inches (289 mm)
Weight	13.2 lb (6.0 kg) without ink cartridges

### Electrical

Specification	120 V Model	220–240 V Model
Input voltage *	99 to 132 V	198 to 264 V
Rated frequency	50 to 60 Hz	
Input frequency	49.5 to 60.5 Hz	
Rated current	0.4 A	0.2 A
Power consumption	Approx. 13 W (ISO10561 Letter Pattern) Approx. 3 W in standby mode	

\* Check the label on the back of the printer for your printer's voltage.

### Environmental

#### Temperature

Operation	50 to 95 °F (10 to 35 °C)
Storage*	–4 to 104 °F (–20 to 40 °C) 1 month at 104 °F (40 °C)
Transit*	–4 to 140 °F (–20 to 60 °C) 120 hours at 140 °F (60 °C)

#### Humidity (without condensation)

Operation	20 to 80% RH
Storage*	5 to 85% RH

\*Stored in shipping container

## Safety Approvals

Safety standards	UL 60950, CSA No. 60950
EMI	FCC part 15 subpart B class B CSA C108.8 Class B

## Ink Cartridges

Specification	Black ink cartridge	Color ink cartridge
Color(s)	Black	Cyan, Magenta, Yellow, Light Cyan, Light Magenta
Ink yield*	450 pages at 5% coverage; 630 pages at 3.5% coverage	430 pages at 5% coverage each color
Cartridge life	2 years from production date (if unopened) (within 6 months after opening package, at 77 °F [25 °C])	
Storage temperature	–4 to 104 °F (–20 to 40 °C) 1 month at 104 °F (40 °C)	
Transit temperature	–22 to 122 °F (–30 to 50 °C) 1 month at 104 °F (40 °C) 10 days at 122 °F (50 °C)	
Freezing temperature**	3.2 °F (–16 °C)	
Dimensions	0.5 × 2.9 × 2.2 inches (W × D × H) 12.7 × 73.5 × 55.3 mm (W × D × H)	

\* The figure given is based on continuous printing after ink replacement. Cartridge yields will vary with images printed, print settings, paper types, and frequency of use.

\*\* Ink thaws and is usable after approximately 3 hours at 77 °F (25 °C).

**Caution:** Epson recommends the use of original Epson ink cartridges only. Products not manufactured by Epson may cause damage to your printer and will not be covered by Epson's warranties.

Do not use an ink cartridge if the date on the cartridge has expired.

Do not refill ink cartridges. The printer calculates the amount of ink remaining using an IC chip on the ink cartridge, so even if the cartridge is refilled, the IC chip will report that it is empty.

## Selecting the Media or Paper Type Setting

When printing from your computer, select the following Paper Type/Media Type settings in the driver software.

*Media Type settings supported by printer driver software*

Paper	Media Type setting
Plain paper sheets or envelopes Epson Iron-On Transfer Paper	Plain paper
Epson Premium Bright White Paper	Bright White Paper
Epson Photo Quality Ink Jet Paper Epson Photo Quality Ink Jet Cards Epson Photo Quality Self Adhesive Sheets	Photo Quality Ink Jet Paper
Epson Matte Paper Heavyweight Epson Double-Sided Matte Paper PremierArt Matte Scrapbook Photo Paper for Epson	Matte Paper - Heavyweight
Epson Photo Paper	Photo Paper
Epson Glossy Photo Paper Epson Photo Quality Glossy Paper Epson Glossy Photo Greeting Cards	Glossy Photo Paper
Epson Premium Glossy Photo Paper Epson Photo Stickers	Premium Glossy Photo Paper
Epson Premium Luster Photo Paper	Premium Luster Photo Paper
Epson Premium Semigloss Photo Paper Epson Semigloss Scrapbook Photo Paper	Premium Semigloss Photo Paper
Epson Ink Jet Transparencies	Ink Jet Transparencies
Epson ColorLife Photo Paper	ColorLife Photo Paper

When printing without a computer (in stand-alone mode), select the following Paper Type settings from the printer's control panel.

*Paper Type settings supported in stand-alone mode*

Paper	Paper Type setting
Plain paper Epson Photo Quality Ink Jet Paper Epson Premium Bright White Paper	Plain
Epson Photo Paper Epson Glossy Photo Paper	Glossy Photo
Epson Premium Glossy Photo Paper	Prem.Glossy
Epson Premium Semigloss Photo Paper Epson Semigloss Scrapbook Photo Paper	Semigloss
Epson Premium Luster Photo Paper	Prem.Luster
Epson Matte Paper Heavyweight PremierArt Matte Scrapbook Photo Paper for Epson	Matte
Epson ColorLife Photo Paper	ColorLife
Epson Glossy Photo Greeting Cards	Greeting
Epson Iron-On Transfer Paper	Iron-on

## Media Loading Guidelines

- See page 1 for a list of Epson papers that can be used with this printer.
- Load paper short edge first, even when printing landscape-oriented pictures.
- Always handle sheets by the edges, and don't touch the printable surface.
- Be sure to load the printable (whiter) side of the media face up in the sheet feeder.
- Do not load paper higher than the arrow mark on the left edge guide. (Some papers should be loaded just one sheet at a time. Make sure you check any instructions included with the paper.)
- In addition to the **Media Type** (or **Paper Type**) setting, remember to select the correct **Paper Size** for your media.
- If the package includes protective sheets between the sheets of media, be sure to remove the protective sheets before printing.
- Some special media have a cut corner that you need to position in the upper right when loading.

**Note:** Since the quality of any particular brand or type of paper may be changed by the manufacturer at any time, Epson cannot attest to the quality of any non-Epson brand or type of paper. Always test samples of paper stock before purchasing large quantities or printing large jobs.

Poor quality paper may reduce print quality and cause paper jams and other problems. If you encounter problems, switch to a higher grade of paper.

Do not load curled or folded paper.

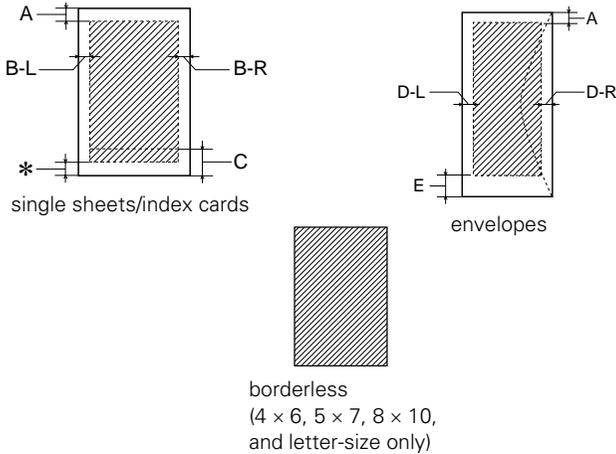
Use papers under these conditions:

Temperature: 59 to 77 °F (15 to 25 °C)  
Humidity: 40 to 60% RH

Store printouts on Photo Quality Glossy Film and Self Adhesive Sheets under these conditions:

Temperature: 59 to 86 °F (15 to 30 °C)  
Humidity: 20 to 60% RH

**Printable area**



- A: The minimum top margin is 0.12 inch (3.0 mm).
- B-L: The minimum left margin is 0.12 inch (3.0 mm)
- B-R: The minimum right margin is 0.12 inch (3.0 mm)
- C: The minimum bottom margin is 0.12 inch (3.0 mm)
- D-L: The minimum left margin for envelopes is 0.12 inch (3.0 mm)
- D-R: The minimum right margin for envelopes is 0.12 inch (3.0 mm)
- E: The minimum bottom margin for envelopes is 0.55 inch (14 mm)
- \*\* When printing with the borderless setting, print quality may decline in the top and bottom areas of the printout, or the area may be smeared.

**Borderless Photos**

BorderFree™ printing is available for a variety of paper types and sizes, whether you're printing from your computer or in stand-alone mode.

When printing from your computer, BorderFree printing supports the following paper types and sizes:

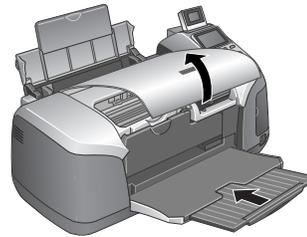
Paper name	Letter size	4 x 6	5 x 7	8 x 10
Epson Photo Paper	yes	—	—	—
Epson Glossy Photo Paper	yes	yes	—	—
Epson Premium Glossy Photo Paper	yes	yes	yes	yes
Epson Premium Semigloss Photo Paper	yes	—	—	—
Epson Premium Luster Photo Paper	yes	—	—	—
Epson Matte Paper Heavyweight	yes	—	—	yes

**Loading CDs and DVDs**

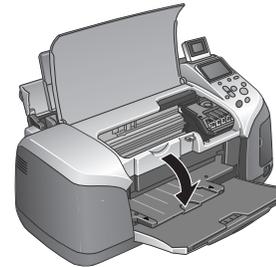
Follow these steps to load CDs and DVDs in your printer.

**Caution:** If you don't insert the CD/DVD tray correctly, you may damage the printer or tray.

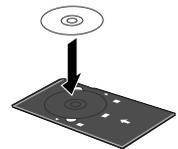
1. Lift the printer lid and push in the output tray extension.



2. Lower the CD/DVD tray guide.



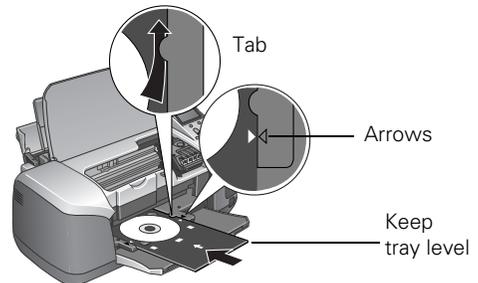
3. Place the CD or DVD on the tray with the white or printable side face-up, making sure the disc lies flat in the tray.



4. Insert the tray carefully, making sure it is level, not tilted up or down.

Push the tray under the tab and the two rollers.

Don't push in the tray too far; line up the arrows exactly.



See *Printer Basics* for more information on printing CDs and DVDs.

## Printing Without a Computer

Your Epson Stylus Photo R320 printer can print photos stored:

- On a memory card
- In a digital camera
- On a USB data storage device, such as a CD-R drive, thumb drive, or an Iomega® Zip® drive
- On a Bluetooth®-enabled device with the optional Bluetooth Photo Print adapter

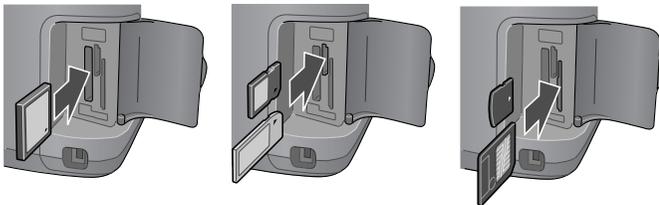
However your photos are stored, make sure the image files meet these requirements:

- JPEG files or uncompressed Tiff files only
- The file storage device complies with DCF (Design rule for Camera File systems) Version 1.0
- Resolutions ranging from 160 × 160 to 4600 × 4600 pixels
- No more than 999 images (although you may have additional images on your card or storage device, the printer can read only the first 999)

## Inserting a Memory Card

Your printer works with many types of memory cards. Follow these guidelines to insert your memory card:

1. Make sure the printer is turned on, open the memory card cover, then insert the memory card into the appropriate slot, as shown:



CompactFlash™  
or Microdrive™  
(left)

Memory Stick®,  
SD (Secure Digital), or  
MMC (MultiMediaCard)  
(middle)

SmartMedia™ or  
xD Picture Card  
(right)

2. Close the memory card door.

After a moment, the printer reads and counts the number of images on your card. When it's done, your images are available for preview and printing.

**Note:** Insert just one card at a time. The printer can't read multiple cards at once.

## Removing a Memory Card

When you're finished printing from a memory card, make sure the light below the card slot is not flashing before you remove it.

**Caution:** Do not eject a card while the processing light is flashing, or you may lose data on the card.

To remove a card, pull the card straight out of the slot.

## Connecting a Digital Camera or External Storage Device

If you have one of the following devices, you can connect it directly to your printer using a USB cable:

- Digital camera with PictBridge or USB DP (Direct Print) support
- USB CD/DVD burners and drives (see <http://support.epson.com> for a list of compatible drives); USB 2.0 (high-speed) drives are recommended
- 100 or 250MB Iomega Zip drive, AC or USB powered
- Memory cards with a commercially available USB adapter (such as the MicroTech ZiO!™).
- MO (Magneto-Optical) drives

**Note:** If you're not sure about your camera or drive, you can try connecting it. If it's not compatible, you'll see a screen saying that the connected device cannot be used. Epson cannot guarantee the compatibility of any cameras or drives.

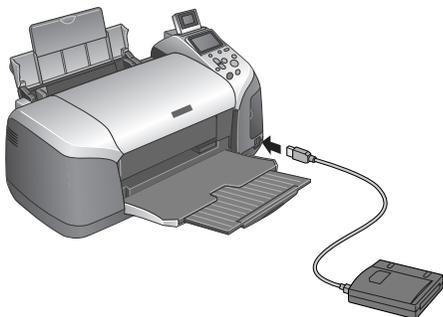
**Caution:** If you are using a Zip disk, it must be formatted as a FAT16 disk. Also, if you insert a Macintosh disk into a Zip drive attached to the printer, it automatically formats it, so be sure to use a disk that is empty or not formatted, or one containing data you don't mind losing. (You will be prompted before any data is erased.)

**Tip:** When you connect a CD drive, you may also be able to print photos from Picture CDs that you get from your photo lab.

When you connect a digital camera or storage device, the printer treats it like a memory card.

Follow these steps to connect a digital camera or external storage device:

1. Remove any memory cards from the printer. (If you leave a card in the printer, images will be read from the card instead of your camera or external storage device.)
2. Connect the USB cable from your camera or data storage device to the EXT I/F USB port on the front of the printer. Some digital cameras require a special USB cable; if so, be sure to use the one that came with the camera.



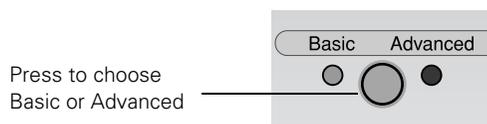
3. Turn on the printer and your camera or data storage device. After a moment, the printer reads and counts the number of images on your device. When it's done, you see a screen similar to this on the printer's control panel and your images are available for printing:



**Note:** If you've backed up your images on Zip disk, CD, or another storage device, they're stored in folders (001, 002, etc.). Use the  $\Delta$  and  $\nabla$  buttons on the printer's control panel to highlight the folder you want to open, then press **OK** to open it.

## Choosing Basic or Advanced Mode

You can select Basic mode to quickly create 4 × 6-inch photo prints using Epson Premium Glossy Photo Paper. Advanced mode lets you print with any paper type and size that is available for the printer, and lets you change quality settings and make other adjustments to your photos. You can also use Advanced mode to perform maintenance functions from your printer's control panel.



## Selecting Photos for Printing

Before selecting the photos you want to print, make sure you have inserted your memory card or connected your camera or external device to the printer. See page 5.

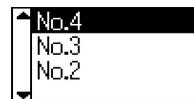
- If your camera supports DPOF or PictBridge, you can use your camera to select the photos you want to print and the number of copies.
- You can use the preview monitor to easily select your photos.

Once you know which photos are available for printing, you can select a single photo, a set of photos, a range of photos, or all the photos.

## Selecting One Photo

You can select a photo, then print one or more copies of it on a page using a variety of layouts. With the Copies option, you can print up to 100 copies of your selected layout.

1. Highlight **Select Photo**, then press **OK**.
2. In the Select Photo menu, use the  $\Delta$  and  $\nabla$  buttons to highlight the number of the photo you want to print, then press **OK** to select it.



3. If you want to print more than one copy of this photo, highlight **Copies** and press **OK**, then use the  $\Delta$  and  $\nabla$  buttons to select the desired number of copies and press **OK**.
4. Continue with "Printing the Selected Photos" on page 7 to finish laying out your photos and setting up your print job.

## Selecting a Set of Photos

You can select two or more photos, then print them as a group using a variety of layouts. If you've selected more photos than can fit on a page, the printer automatically prints additional pages, using the same layout.

1. Highlight **Select Photo**, then press **OK**.

**Note:** If you want to print all your photos, select **All**. To print a range of photos, see page 7.

2. Use the  $\Delta$  button to highlight **Individual**, then press **OK**. The preview monitor displays the first photo on your card.
3. Use the  $\Delta$  and  $\nabla$  buttons to select the photo you want to print, then press **OK**.

4. If you want to print more than one copy of this photo, use the  $\Delta$  and  $\nabla$  buttons to select the desired number of copies, then press OK.
5. Repeat steps 3 and 4 for each additional photo you want to print.
6. When you're done, press Back.
7. To view a list of your selected photos, highlight Copies and press OK. Press Back when you're done viewing the list.

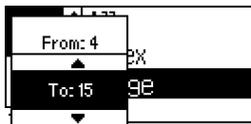
**Note:** If you made a mistake and selected the wrong photo, you can remove it from the list of selected photos. Simply change its number of copies to zero; see step 4.

8. Continue with "Printing the Selected Photos" to finish laying out your photos and setting up your print job.

### Selecting a Range of Photos

You can select a range or sequence of photos to print, for example, photos 4 through 15.

1. Highlight Select Photo, then press OK.
2. Highlight Range, then press OK.
3. Choose a starting photo under the From: option using the  $\Delta$  and  $\nabla$  buttons. (Hold down either button to scroll quickly through the photo numbers.)
4. Press OK.



5. Choose an ending photo under the To: option using the  $\Delta$  and  $\nabla$  buttons.
6. Press OK. The range appears on the right side of the LCD.
7. If you want to print more than one copy of this range, highlight Copies and press OK, then use the  $\Delta$  and  $\nabla$  buttons to select the desired number of copies and press OK.
8. Continue with "Printing the Selected Photos" to finish laying out your photos and setting up your print job.

### Printing the Selected Photos

Once you've selected your photos, follow these steps to start printing:

1. Load your paper in the printer.
2. Press the  $\Delta$  and  $\nabla$  buttons to highlight Paper Type, then press OK to enter the Paper Type menu.
3. Highlight the type of paper you've loaded, then press OK. (If you're not sure about the paper type, see the table on page 3.)

**Note:** It's important to select the correct Paper Type setting for the paper you're using, or the print quality may not be what you expect.

4. Enter the Paper Size menu, then select the size of the paper you've loaded.
5. In the Layout menu, select one of the following:

- Prints one photo per sheet, borderless; fits the photo lengthwise on the paper.
- Prints one photo per sheet, with borders around the edges.
- Prints a photo on the top half of the sheet.
- Prints two photos per sheet.
- Prints four photos per sheet.
- Prints eight photos per sheet.
- Prints 20 photos per sheet; the photo number and date are also printed with each photo. (Good for printing larger-size index prints.)
- Prints an index of your photos. 80 photos are printed on letter-size paper.
- Prints a CD/DVD jewel case insert with one photo on one side of the insert.
- Prints a CD/DVD jewel case insert with twenty-four photos; twelve on each side of the insert.

**Note:** If you don't see the entire image in your prints, check to make sure the Fit to Frame and Crop options are Off. See *Printer Basics* for more information.

6. If you've selected a single photo, index, range, or all photos for printing, you can print multiple sheets of your selected layout. Enter the Copies menu, then select from 1 to 100 copies.

If you've selected a set of photos for printing, or if you're using DPOF or PictBridge, the number of copies is automatically determined (it's displayed as Pages next to the Copies setting); you cannot change this setting.

7. If you like, you can make further changes before printing.
8. Press the  Print button. Your print job begins printing.

**Note:** To cancel a print job while printing, press the  Stop button.

Keep your pictures and unused paper away from high temperatures and humidity and out of direct sunlight.

## Additional Stand-alone Features

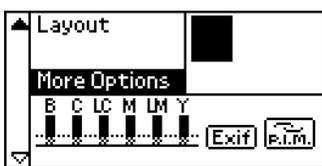
See *Printer Basics* for information on other features that are available when printing without a computer:

- cropping, adjusting, and enhancing photos
- using a CD-R drive or Zip drive to back up photos from a memory card
- Printing from a Bluetooth-enabled device with the optional Bluetooth adapter.

## Testing the Printer

You can run a printer check to determine whether a problem comes from the printer itself or some other source.

1. Make sure both the printer and computer are turned off. Then disconnect the USB cable from the printer.
2. Make sure letter-size or larger paper is loaded in the printer.
3. Turn on the printer.
4. Press the  Maintenance button.
5. Press the  button to highlight **More Options**, then press OK.

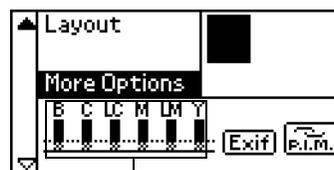


6. Use the  or  button to highlight Nozzle Check, then press OK.
7. Press OK to print the nozzle check.
8. The printer prints a page showing a nozzle check pattern. (If the pattern has gaps, you need to clean the print head; see page 10.)
  - If the check page printed, the problem probably lies in your memory card, software settings, interface cable, or computer, or your software may not be installed correctly.

- If the check page did not print, you may have a problem with your printer. Try the suggestions in *Printer Basics*.
9. After examining the check page, remember to turn off the printer and reconnect its cable to your computer.

## Replacing an Ink Cartridge

You can check the status of the ink cartridges by looking at the icons on the control panel. Press the  button to scroll down to **More Options**.



Ink cartridge levels

The level of ink shown on the icons indicates the approximate amount of ink remaining. If an ink cartridge is low, the red  error light flashes. This is a good time to make sure you have a new cartridge. If an ink cartridge is empty, the red  error light remains on and you see a message on the display telling you that the cartridge needs to be replaced.

**Caution:** You cannot print if any ink cartridge is empty. Leave the empty cartridge installed in the printer until you have obtained a replacement, otherwise the ink remaining in the print head nozzles may dry out. To ensure good results, use genuine Epson ink cartridges and do not refill them. Other products may cause damage to your printer not covered by Epson's warranty.

When an installed cartridge is more than six months old, you may need to replace it if printouts don't look their best. If the quality doesn't improve after cleaning and aligning the print head, you can replace the cartridge even if the  error light is off.

Use these Epson ink cartridges within six months of installing them and before the expiration date on the package:

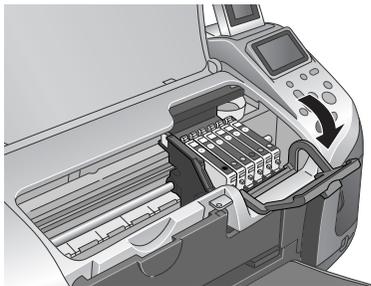
Cartridge	Part Number
Black	T048120
Magenta	T048320
Cyan	T048220
Yellow	T048420
Light Magenta	T048620
Light Cyan	T048520

When you need new ink cartridges, contact your dealer or call the Epson Store at (800) 873-7766 or visit [www.epsonstore.com](http://www.epsonstore.com) (U.S. sales only). In Canada, please call (800) 463-7766 for dealer referral.

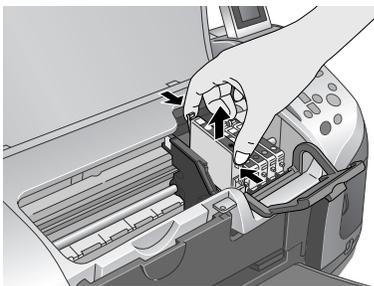
## Removing and Installing Ink Cartridges

Be sure you have a new ink cartridge before you begin. Once you start the ink cartridge replacement procedure, you must complete all the steps in one session.

1. Make sure the printer is turned on and not printing, then open the printer cover.
2. Do one of the following:
  - ❑ If the red  error light is on (cartridge is empty), press the  maintenance button.
  - ❑ If the red  error light is flashing (cartridge is low), press the  maintenance button. You see **Ink Cartridge Replacement** highlighted in the Advanced Settings menu. Press OK.
  - ❑ If the  error light is off, press the  button to choose **More Options**, then press OK. Press the  button to select **Ink Cartridge Replacement**.
3. When you see a message on the display telling you that ink cartridge replacement will begin, press OK. The print head moves to the replacement position.
4. Open the cartridge cover.



5. Press in the tab on the back of the cartridge and lift the cartridge out of the printer. Dispose of it carefully.



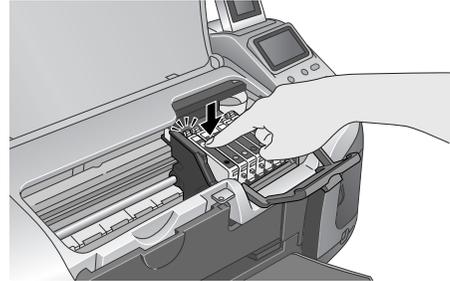
**Warning:** Keep ink cartridges out of the reach of children and do not drink the ink.

If ink gets on your hands, wash them thoroughly with soap and water. If ink gets in your eyes, flush them thoroughly with water.

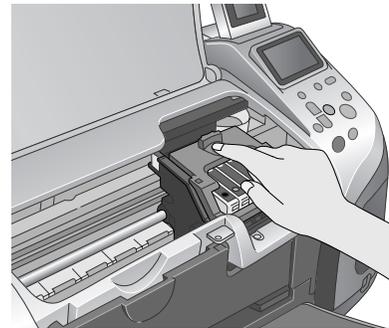
6. Unwrap the new ink cartridge.

**Caution:** Don't touch the green circuit board or remove any labels.

7. Lower the cartridge into the holder, with the green circuit board facing the front. Then gently push the cartridge down until it clicks into place.



8. If you need to replace another ink cartridge, repeat steps 5 through 7 before continuing with step 9.
9. Close the ink cartridge cover.



10. Press OK and close the printer cover.

The printer begins charging the ink delivery system.

11. When you see a message that charging is complete (after about a minute), press OK to finish.

## Cleaning the Print Head

If your printouts are unexpectedly light or faint, or dots or lines are missing from the image, you may need to clean the print head. This unclogs the nozzles so they can deliver ink properly. Print head cleaning uses ink, so clean it only if quality declines.

You can clean the print head either from the printer's control panel or using your printer software. To clean using the printer software, the printer must be connected directly to your computer (not over a network); see your on-screen *Reference Guide* for details.

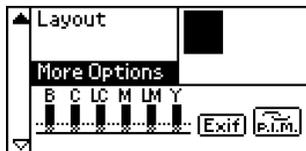
**Caution:** When you don't turn on your printer for a long time, the print quality can decline, so turn it on at least once a month to maintain good print quality.

Follow these steps to clean the print head from the printer's control panel:

1. Make sure the printer is turned on but not printing, and the red error light is off.

If the red light is flashing or on, you may need to replace the ink cartridge; see page 8 for details.

2. Press the  button to highlight **More Options**, then press OK.



3. Use the  or  button to highlight **Head Cleaning**, then press OK.
4. To begin cleaning, press OK.

While cleaning, the printer makes noise and you see a progress bar on the control panel display. Cleaning takes about 30 seconds.

**Caution:** Do not turn off the printer or interrupt the cleaning process.

5. When the cleaning is done, run a nozzle check to confirm the print head nozzles are clean.

Make sure letter-size plain paper is loaded in the printer, then press **Stop**. The nozzle check pattern prints.

6. Examine the nozzle check pattern you printed. Each staggered horizontal and straight vertical line should be complete, with no gaps in the dot pattern, as shown below:



- If your printout looks okay, you're done. Press **OK** to finish.
- If any dots are missing (as shown below), press **Stop** to clean the print head again.



If you don't see any improvement after cleaning three or four times, check the solutions in *Printer Basics*. You can also turn the printer off and wait overnight—this allows any dried ink to soften—and then try cleaning the print head again.

## Aligning the Print Head

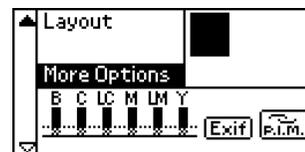
If your printouts contain misaligned vertical lines or horizontal banding, you may need to align the print head.

You can align the print head either from the printer's control panel or using your printer software. To align the print head from the printer software, the printer must be connected directly to your computer (not over a network); see your on-screen *Reference Guide* for details.

**Note:** For the best results, load letter-size Epson Photo Quality Ink Jet Paper in the printer whenever you check the print head alignment.

Follow these steps to align the print head using the control panel:

1. Make sure the printer is turned on but not printing, and letter-size paper is loaded.
2. Press the  button to highlight **More Options**, then press OK.



3. Press the  or  button until **Print Head Alignment** is highlighted, then press OK.
4. Press OK to print the alignment pattern.

5. Once the pattern is done printing, examine the first row or set of lines (marked #1). Select the line (1-15) in which all the vertical dots are best aligned. You may need to use a magnifying glass.
6. Use the  $\Delta$  and  $\nabla$  buttons to select the number of that line (1-15), then press OK.
7. Repeat step 6 to select the best line for sets #2, #3, and #4.
8. When you're finished, press OK.

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## Transporting the Printer

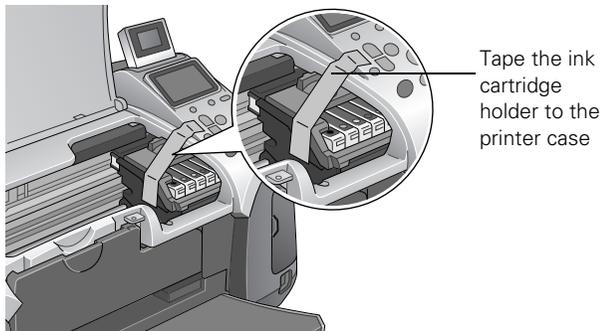
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If you move your printer some distance, you need to prepare it for transportation in its original box or one of a similar size.

**Caution:** To avoid damage, always leave the ink cartridges installed when transporting the printer.

Follow these steps:

1. Turn on the printer, wait until the print head locks in the far right position, then turn off the printer.
2. Unplug the power cord from the electrical outlet. Then disconnect the printer cable from the printer.
3. Remove any memory cards from the printer and close the memory card cover.
4. Remove any paper from the printer, push down the paper support extension, and close the paper support.
5. Open the printer cover. Secure the ink cartridge holder to the printer with tape as shown, then close the printer cover.



6. Make sure the CD/DVD tray guide is closed, then push in the output tray extension and close the tray.
7. Repack the printer and its attachments in the original box using the protective materials that came with them. See your *Start Here* sheet.

Keep the printer level as you transport it.

After transporting the printer, remove the tape securing the print head and test your printer. If you notice a decline in print quality, clean the print head (see page 10); if output is misaligned, align the print head (see page 10).

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## Related Documentation

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CPD-18375	Epson Stylus Photo R320 <i>Printer Basics</i>
CPD-18377	Epson Stylus Photo R320 <i>Start Here</i>
CPD-18506	Epson Stylus Photo R320 <i>Quick Reference</i> guide
CPD-18376	Epson Stylus Photo R320 CD-ROM with electronic <i>Reference Guide</i>

