
KODAK EASYSHARE MAX Camera / Z990



Extended user guide

www.kodak.com

For help with your camera:

www.kodak.com/go/Z990support

Kodak

Eastman Kodak Company
Rochester, New York 14650

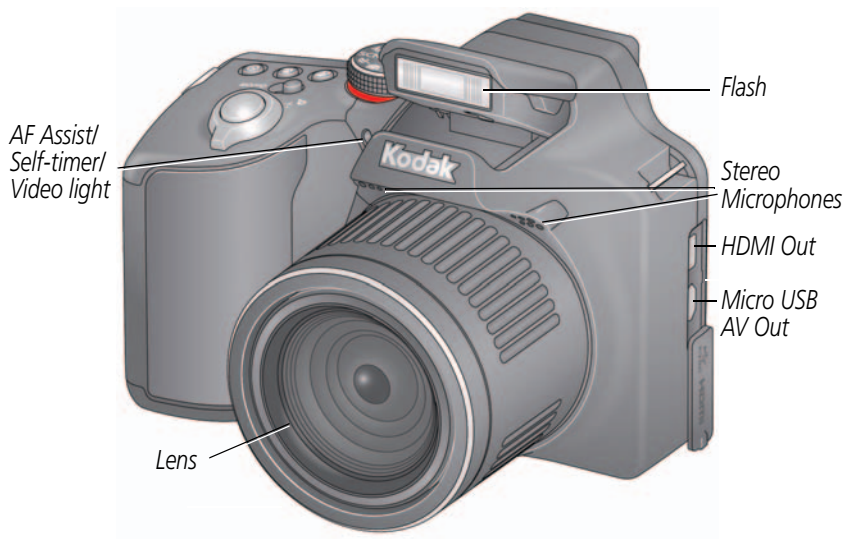
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All screen images are simulated.

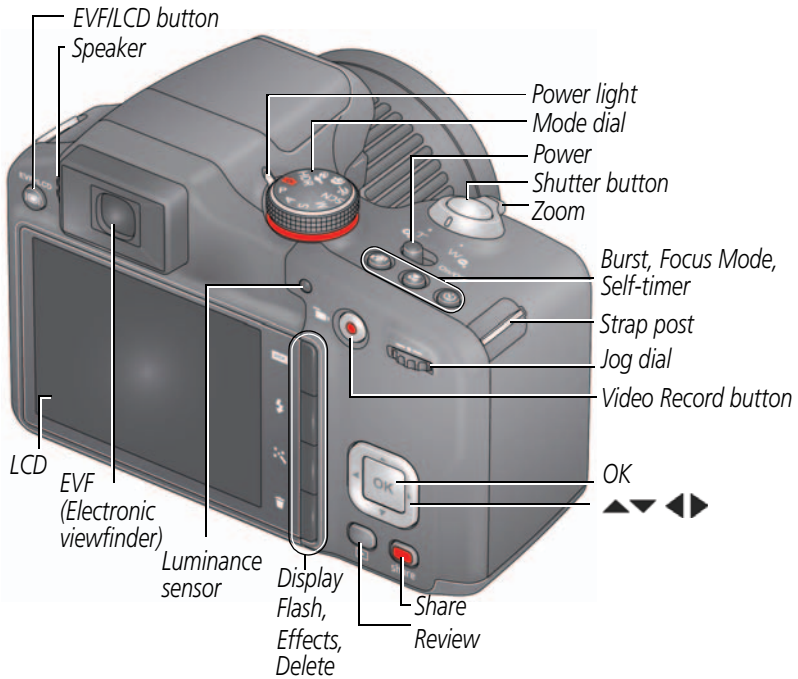
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Front view



Back view



Bottom view

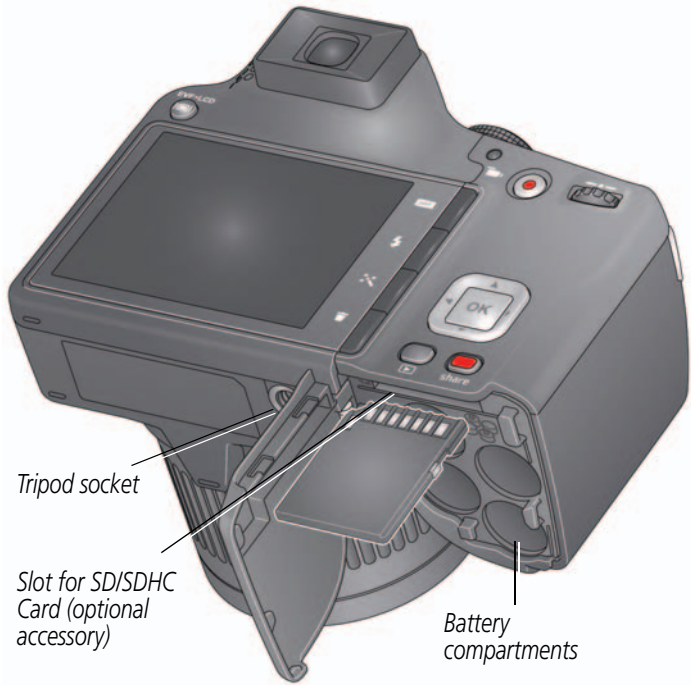


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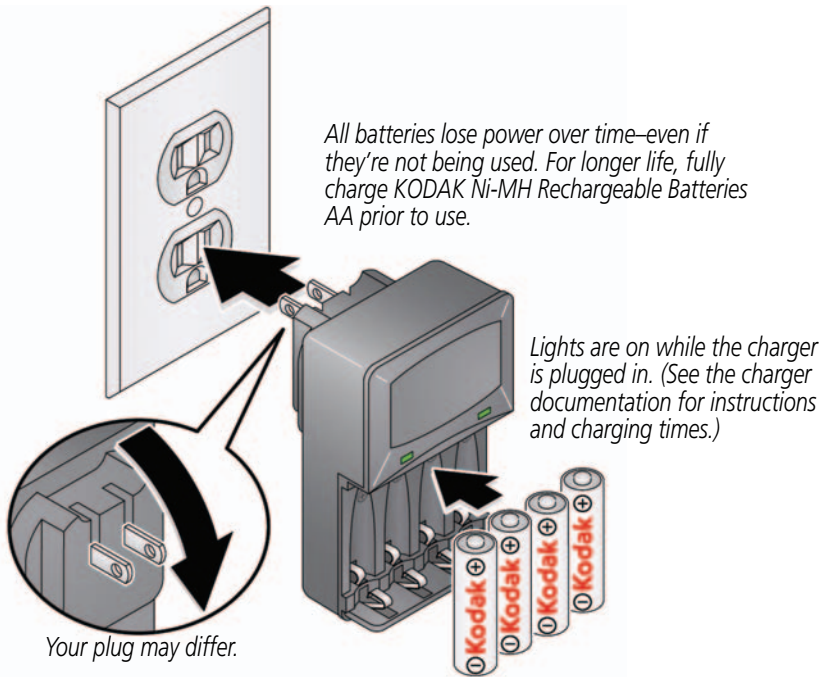
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1

Setting up your camera

Charging the rechargeable batteries



Watch the battery level

[See page 9](#)

Extend battery life

[See page 66](#)

Purchase extra batteries

www.kodak.com/go/accessories

Loading the batteries



Watch the battery level

[See page 9](#)

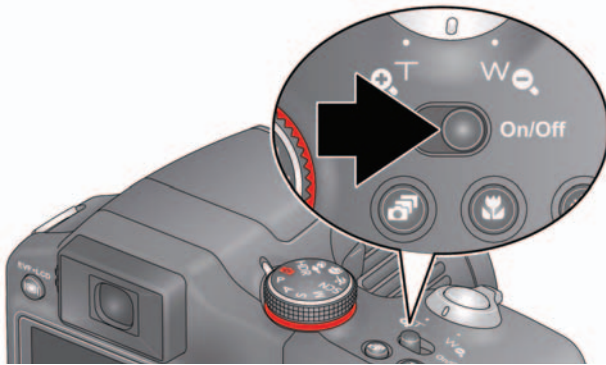
Extend battery life

[See page 66](#)

Purchase extra batteries

www.kodak.com/go/accessories

Turning on the camera



Setting the language and date/time



Language:

▲▼ to change.

OK to accept.

Date/Time:

At the prompt, press OK.

◀▶ to change current field.

▲▼ for previous/next field.

OK to accept.

Sharing Destinations:

You can tell the camera which sharing sites to offer when it's time to share pictures/videos.

▲▼ to highlight a site.

OK to check/uncheck the site.

NOTE: To change language in the future, use the Settings menu (see page 51).

Storing pictures on an accessory SD/SDHC Card

Your camera has internal memory. We recommend purchasing a SD or SDHC Card (Class 4 or higher) to conveniently store more pictures/videos.

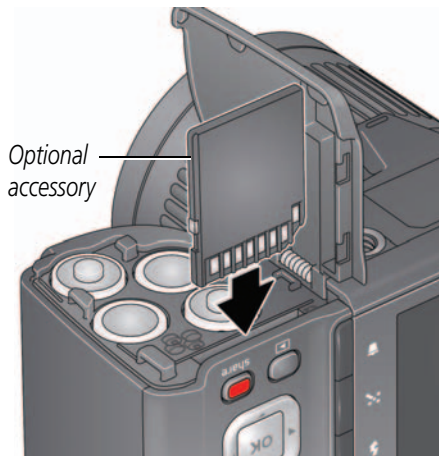


CAUTION:

A card can only be inserted one way; forcing it may cause damage. Inserting or removing a card while the camera is on may damage the pictures, the card, or the camera.

① Turn off the camera, then open the door.

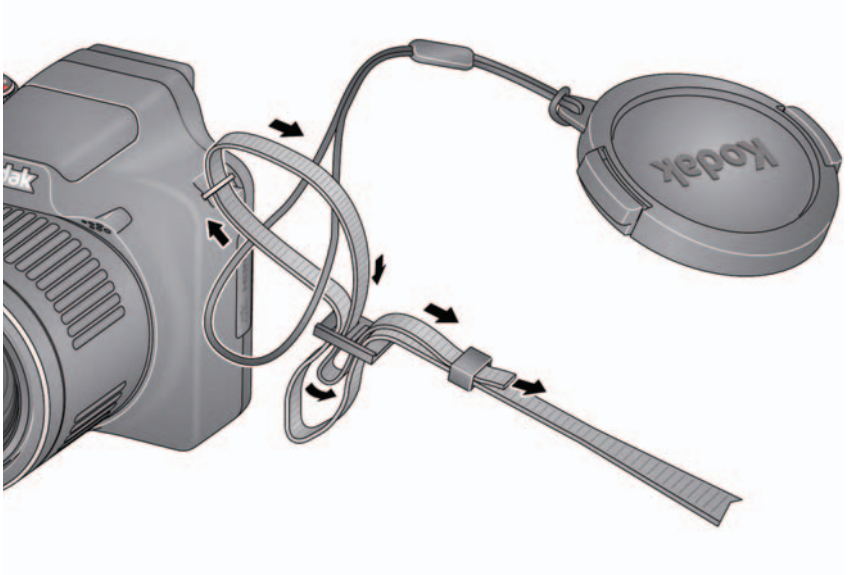
② Insert a card until it clicks. To remove a card, press and release it.



IMPORTANT: When you turn on the camera, it checks to see if a card is inserted. If so, new pictures/videos are stored on the card. If no card is inserted, new pictures/videos are stored in the camera's internal memory. If pictures/videos are detected in internal memory and a card is inserted, the camera prompts you to move the pictures to the card (and erase those in internal memory).

Purchase cards www.kodak.com/go/accessories


Attaching the strap



2

Taking pictures/videos

Taking pictures in Smart Capture mode

- 1 Turn the Mode dial to Smart Capture .
- 2 Use the LCD or EVF to compose the picture. Press the EVF/LCD button and use the electronic viewfinder to conserve battery power and improve visibility outdoors.

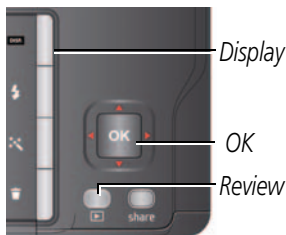


- 3 Press the Shutter button **halfway** to focus and set exposure. Framing marks indicate the camera focus area. If the camera is not focusing on the desired subject, release the Shutter button and recompose the scene.
- 4 Press the Shutter button **completely down**. The new picture is briefly displayed. If you don't like it, press the Delete button, then follow the prompts. (To delete a picture later, see page 30.) To take a picture while recording a video, see page 10.

IMPORTANT: Press the Share button to share anytime. To learn more, see page 28.



Other picture-taking features



- To view available tools, press the Display button **DISP.** Press **◀▶** to choose a tool, then press OK.
- To review, tag, and edit pictures and videos, press the Review button **▶** (see [page 28](#)).
- To change camera settings, [see page 50](#).
- If it's hard to see the LCD, you can adjust the brightness ([see page 51](#)).

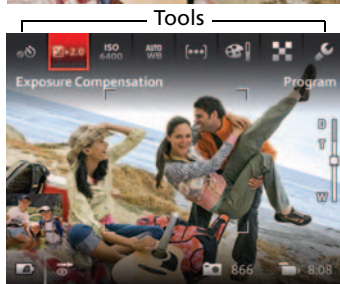
Your camera, the way you want it

Sometimes, you want to see everything available! (Other times, you want everything out of your way.) Press the Display button **DISP.** to change between Clean view and Tools view.

Clean view



*Tools view
(Tools vary by
camera mode.)*



Note: If you're in a PASM mode, Liveview Histogram and Framing Grid view are also available.*

* To enable Liveview Histogram and/or Framing Grid, [see page 51](#).

Using Tools to choose actions, preferences

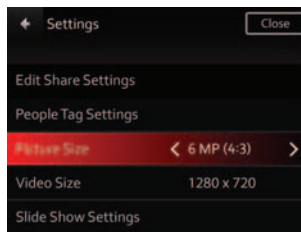
- 1 In Liveview, press ▲▼ to move between Tools and the most recent picture.

or

- 1 In Review, press ▲▼ to move between Tools and Previous/Next.
- 2 Press ◀▶ to choose a tool, then press **OK**.
Press ◀▶ to change a tool's setting, then press **OK**.

Note: If you chose 🛠, press ▲▼ to choose a setting, then press **OK**.

Some settings can be chosen using ◀▶.



Understanding the picture-taking icons



Watch the battery level

Don't miss out on great pictures and videos—keep your batteries fully charged.

Full	
Three quarters	
Half	
Critical	
AC Power	


Charge the batteries [See page 1](#)

Purchase extra batteries www.kodak.com/go/accessories

Taking a video

The camera is always ready to take a video—just press the Video Record button!



- 1 Use the LCD or EVF to compose the video.
- 2 To start recording, press and release the Video Record button . To stop recording, press and release the button again.

The first frame of the new video and the play button are displayed for a few seconds.

- To play/pause the video, press the OK button.
- If you don't like the video, press the Delete button, then follow the prompts. (To delete a video later, [see page 30](#).)

NOTE: Longer recording times may raise camera temperature ([see page 56](#)).

Take a picture while recording a video

While recording a video, press the Shutter button completely down.

The camera takes a picture and continues recording video until you press the Video Record button again. The picture size matches the video size. (For example, if the Video Size is set to 1920 x 1080, the picture size is also 1920 x 1080.)

Using the zoom

Use optical zoom to get up to 30X closer to your subject.



- 1 Use the LCD or EVF to frame your subject. (For focus distances, see [Specifications, page 61](#).)
- 2 Press Telephoto (T) to zoom in. Press Wide Angle (W) to zoom out.
- 3 Take the picture or video.

NOTE: To get a focused picture every time, use the framing marks ([page 6](#)).

Using digital zoom

Digital zoom is not available in Smart Capture mode.

NOTE: You may notice decreased image quality when using digital zoom.

Using the flash

Use the flash when you take pictures at night, indoors, or outdoors in heavy shadows. Flash settings are limited in some capture modes.



Press the Flash button repeatedly to scroll through flash modes.





The current flash mode appears on the LCD or EVF.

Flash modes		The flash fires
Auto		When the lighting conditions require it.
Fill		Every time you take a picture, regardless of the lighting conditions. Use when the subject is in shadow or is "backlit" (when the light is behind the subject). In low light, hold the camera steady or use a tripod. NOTE: Not available in Smart Capture mode.
Red-eye Reduction		A preflash fires, shrinking the eye pupil, before the picture is taken.
Off		Never.

Using different modes



Choose the mode that best suits your subjects and surroundings.

Capture mode	For
 Smart Capture	Excellent image quality and ease of use. <ul style="list-style-type: none"> ■ Faces are detected. ■ The scene is analyzed for other content and for lighting. ■ KODAK PERFECT TOUCH Technology is applied, for better pictures.
P Program A Aperture Priority S Shutter Priority M Manual	More control over your camera and pictures. (See page 19 .)
SCN Scene	A suite of features that let you take pictures in unique environments, but with point-and-shoot simplicity. (See page 15 .)
 Sport	Subjects that are in motion. Shutter speed is fast.
 Portrait	Full-frame portraits of people.
 Creative	A suite of advanced, artistic features. (See page 17 .)
HDR High Dynamic Range	High-contrast scenes. The camera takes and merges 3 pictures to produce one of high dynamic range, accommodating light levels from bright sunlight to faint starlight. Resolution is set at 12 MP. Best for stationary subjects. Hold the camera steady. (See page 14 .)

Using HDR mode

Use HDR (high dynamic range) mode to capture high-contrast scenes—those with both bright highlights and dark shadows. (Example: The bark of a shaded tree against a bright sky.)

- 1 Turn the Mode dial to HDR.

Resolution is set at 12 MP

- 2 Compose the picture. Important tips:

- Hold the camera steady or use a tripod—the camera will be taking multiple pictures.
- For best results, photograph stationary subjects.
- Avoid fluorescent lights, which may produce horizontal bands.

- 3 Press the Shutter button halfway down, then completely down.

The camera takes 3 pictures, then combines them into 1, with shadows and highlights at their best exposure.

- 4 When finished, turn the Mode dial to another mode.

Using SCN (Scene) modes


- 1 Turn the Mode dial to SCN (Scene).
- 2 Press ◀▶ and ▲▼ to read Scene mode descriptions.
- 3 Press OK to choose the Scene mode that you've highlighted.

SCN mode	For
Landscape	Distant scenes.
Flower	Close range. Use available light instead of flash, if possible.
Sunset	Subjects at dusk.
Backlight	Subjects that are in shadow or "backlit."
Candle Light	Subjects illuminated by candle light.
Children	Action pictures of children in bright light.
Bright	Bright beach or snow scenes.
Fireworks	Fireworks. For best results, place the camera on a steady surface or tripod.
Self-Portrait	Close-ups of yourself. Assures proper focus and minimizes red eye.
Night Portrait	Reduces red eye of people in night scenes or low-light conditions.
Night Landscape	Distant scenery at night. Flash does not fire.
Stage	People on a lit stage. Fast shutter speed, high ISO. Flash and sounds are off. (Flash setting can be changed.)
High ISO	People indoors, in low-light scenes.
Panorama R-L, L-R	"Stitching" 2 or 3 pictures into 1 panoramic scene. (See page 16 .)





Using Panorama in SCN mode

Use panorama to “stitch” up to 3 pictures into a panoramic scene.



IMPORTANT: *In Panorama SCN mode, you take 2 or 3 pictures which the camera “stitches” together in a panorama. In Automatic Panorama mode—found in Creative mode  (see page 18)—you “sweep” the camera in a continuous arc. The camera then creates a panorama.*

NOTE: For best results, use a tripod. Only the panoramic picture is saved; individual pictures are not. (Exposure and white balance are set with the first picture. The flash is set to Off.)

- 1 Turn the Mode dial to SCN.
- 2 Press     to choose Panorama Left-Right or Panorama Right-Left (depending on the direction you want to pan), then press OK.
- 3 Take the first picture.
After a quickview, the LCD displays the liveview and an “overlay” from the first picture.
- 4 Compose the second picture. Make the overlay from the first picture cover the same portion in the new picture.
- 5 If you are taking/stitching only 2 pictures, press OK to stitch them together.
After you take 3 pictures, the pictures are automatically stitched together.

Take
2 or 3
pictures.




Get 1
panoramic
picture.



NOTE: To use the self-timer 10-second or 2-second setting, see page 21.

Using Creative modes






- 1 Turn the Mode dial to Creative mode .
- 2 Press ◀▶ and ▲▼ to read Creative mode descriptions.
- 3 Press OK to choose the Creative mode that you've highlighted.

Creative mode	For
Night Scene Long Exposure	For night photos that contain moving objects. Gives the impression of motion. Resolution is set at 12 MP.
Dramatic	Highly saturated, vibrant color. The camera takes and merges 2 pictures to produce one of rich tone and detail. Resolution is set at 12 MP.
Intelligent Portrait Mode	Close-ups of faces. The camera takes multiple pictures, then chooses the one with the best focus, most smiles, and most eyes open. Resolution is set at 12 MP.
Photo Booth	Taking 4 pictures and combining them into single strip, like a vintage photobooth. For best results, place the camera on a tripod or steady surface.
Automatic Panorama (See page 18.)	Press and hold the Shutter button while vertically or horizontally panning a scene (Left to Right, Right to Left, Bottom to Top, and Top to Bottom). The camera "stitches" the pictures together.

Using Automatic Panorama in Creative mode

Pan up to 180 degrees horizontally or up to 120 degrees vertically. The camera takes several pictures, then “stitches” them into a single, wide image.

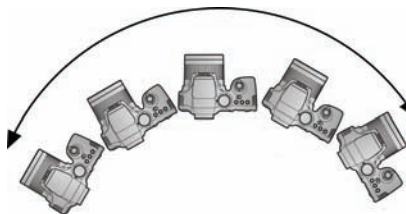
Choose the direction of panning

- 1 Turn the Mode dial to Creative mode .
- 2 Press  and  to highlight Automatic Panorama, then press OK.
- 3 The default panning direction is Left-to-Right. To change it:
 - Press  to highlight the Automatic Panorama icon, then press OK.
 - Press  for Right-to-Left, Bottom-to-Top, or Top-to-Bottom. Then press OK.

Take the picture

For best results, set the lens to wide angle (no zoom). Choose stationary subjects.

- 1 At your starting point, press the Shutter button halfway down to focus and set the exposure, then press completely down **and hold it**.
- 2 Keeping the Shutter button pressed, slowly pan or tilt in the direction you selected.



- Cover the entire sweep in about 5 seconds.
- If you pan or tilt too quickly or too slowly, the LCD displays an error.
- Experiment until you get the timing right.

- 3 Release the Shutter button when the LCD displays “Processing.”

The camera automatically stops recording images when a certain number of pixels is reached. This equates to approximately 180 degrees horizontally or 120 degrees vertically. (You might capture more or less, depending on scene content.)

NOTE: If the scene contains an uninterrupted expanse of similar pixels—such as a plain, white wall—the camera may interpret this as the same group of pixels and abbreviate the wall in the final image.

- 4 When finished, turn the Mode dial to another mode.

P, A, S, and M modes

Use these modes when you want more control over your camera and pictures.



Mode	When to use	Press Jog dial to control
P	Program mode offers the ease of auto shooting with full access to all menu options. The camera automatically sets the shutter speed and aperture (f-stop) based on the scene lighting.	Exposure compensation (how much light enters the camera), flash compensation, and ISO speed
A	Aperture Priority mode controls depth of field (the range of sharpness). The aperture setting may be affected by optical zoom.	Aperture, exposure compensation, flash compensation, and ISO speed
S	Shutter Priority mode controls shutter speed. The camera automatically sets the aperture for proper exposure. (To prevent blur, use a tripod for slow shutter speeds.)	Shutter speed, exposure compensation, and flash compensation
M	Manual mode offers a high level of control. (To prevent blur, use a tripod for slow shutter speeds.)	Aperture, shutter speed, flash compensation, and ISO speed

NOTE: Settings you change in P, A, S, or M modes apply only to pictures taken in those modes. The settings, including Flash, are maintained for P, A, S, and M modes—even when you change modes or turn off the camera. Use Reset Camera (see page 51) to reset P, A, S, or M modes to their default settings.

Changing P, A, S, or M mode settings

PASM modes control the aperture (f-number, also known as f-stop), shutter speed, exposure compensation, flash compensation, and ISO.

- 1 Turn the Mode dial to P, A, S, or M.
- 2 Press the Display button **DISP.**
- 3 Turn the Jog dial **◀▶** to choose a setting, then press it to edit the setting.
Turn the Jog dial **◀▶** to change a setting, then press it to save it.



ISO—adjust the camera’s sensitivity to light. Higher ISO indicates greater sensitivity.

NOTE: A higher ISO may produce unwanted “noise” in a picture.

Flash Compensation—adjust flash brightness.

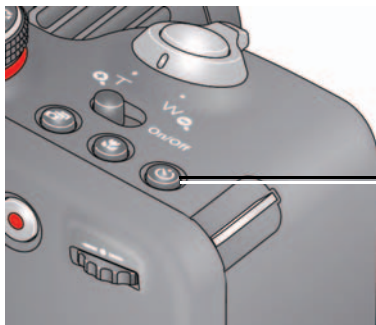
Exposure Compensation—adjust the exposure. If the scene is too light, decrease the setting; if it’s too dark, increase the setting.


Shutter speed—control how long the shutter stays open. (Use a tripod for slow shutter speeds.)

Aperture—(also known as f-stop) control the size of the lens opening, which determines the depth of field.

- Smaller aperture numbers indicate a larger lens opening; good for low-light.
- Larger aperture numbers indicate a smaller lens opening; keeps the main subject sharp; good for landscapes and well-lit conditions.


Using the Self-timer button




Press the Self-timer button  repeatedly to scroll through self-timer modes. The current self-timer mode appears on the LCD or EVF.

Use the self-timer when you want to be included in a picture, or to ensure a steady Shutter button press. Place the camera on a tripod or flat surface.

- 1 Press the Self-timer button until the desired self-timer icon is displayed on the LCD.

10 seconds—  A picture is taken after a 10-second delay (so you have time to get into the scene).

2 seconds—  A picture is taken after a 2-second delay (for a steady, shutter release on a tripod).

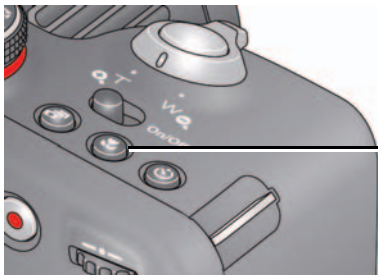
2 shot—  The first picture is taken after a 10-second delay. A second picture is taken 8 seconds later.

- 2 Press the Shutter button **halfway** to focus and set exposure, then **completely down** to take the pictures.

The camera takes the picture(s) after the delay.

Use the same procedure to take a 2- or 10-second self-timer video, but press the Shutter button **completely down**.




Using the Focus button



Press the Focus button  repeatedly to scroll through focus modes. The current focus mode appears on the LCD or EVF.

IMPORTANT: Focus mode availability varies by picture-taking mode.

- 1 Press the Focus button until the desired focus icon is displayed on the LCD.

Mode	For	
Normal AF	No icon	Normal picture taking.
Infinity AF		Distant scenery or for taking pictures through a window. (Turn off the flash when taking pictures through glass. See page 12.)
Macro AF		Subjects that are 10–80 cm (3.9–31.5 in.) from the lens.
Super Macro AF		Subjects that are 1–20 cm (0.4–7.9 in.) from the lens.
Manual Focus	MF	The focus icon shows the direction and distance of the focus (to infinity). Press ◀▶ to magnify the central area of focus. During magnification, press ◀▶ to adjust focal length.


- 2 Press the Shutter button **halfway** to focus and set exposure, then **completely down** to take the picture.


Using focus/exposure zones


Focus/Exposure Zone settings let you decide what portion of your subject receives focus and exposure priority.


1 Turn the Mode dial to P, A, S, or M. Set the focus to Auto, Macro, or Super Macro.



IMPORTANT: *The camera must be in P, A, S, or M mode while in Auto, Macro, or Super Macro focus mode (see page 22).*

2 If the toolbar is not displayed at the top of the LCD, press the Display button .

3 Press  to choose More Tools , then press OK.

4 Press  to choose Focus/Exposure Zone, then press OK.


5 Press  to choose a zone, then press OK.

- **Face Priority:** Faces are given focus/exposure priority.
- **Multi-zone:** Several zones are evaluated to give an even picture focus.
- **Center:** A small area centered in the LCD is given focus/exposure priority.
- **Selectable:** Press   to choose the priority focus/exposure zone.

The camera enters the Focus/Exposure Zone setting that you chose.

Using the Burst button



Press the Burst button  repeatedly to scroll through burst modes. The current burst mode appears on the LCD or EVF.

- 1 Press the Burst button until the desired burst icon is displayed on the LCD.

Burst mode	Available in	When you press and hold the Shutter button
Endless Burst	P, A, S, M, and Smart Capture	Take pictures until there is no more storage space. (Burst rate varies by mode, picture quality, and picture size. Burst rate slows down after 10 pictures are in the burst buffer.)
High Speed Burst L	P, A, S, M	Take up to 4 pictures @ approximately 4 fps (frames per second).(Picture size varies by mode.)
	Smart Capture	Take up to 3 pictures @ approximately 2 fps. (Picture size varies by mode.)
High Speed Burst H	P, A, S, M	Take up to 4 pictures @ approximately 9 fps. (Picture size varies by mode.)
High Speed HD Burst	P, A, S, M	Take up to 20 pictures @ approximately 60 fps. (Picture size is 1920 x 1080 pixels.)

- 2 Press the Shutter button **halfway** to focus and set exposure, then **press and hold it completely down** to take the pictures.

The camera stops taking pictures when you release the Shutter button, when the pictures are taken, or when there is no more storage space.



NOTE: The flash is disabled in Burst modes. During quickview, you can delete all pictures in the burst series. Burst is unavailable in Portrait, Night Portrait, Night Landscape, Backlight, Fireworks, and Panorama modes, and when taking pictures in the RAW format.

Using the Effects button

To take pictures/videos using different effects:



Effects

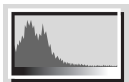
- 1 Press the Effects button .
- 2 Press  to choose a film effect.

Each effect shows an example of what your picture/videos will look like.

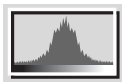
Using the histogram to view picture brightness

Use the histogram to evaluate the distribution of light before or after you take a picture. Optimal exposure is achieved when the peak is in the middle of the histogram. The flash may affect a picture's light and shadow.

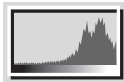
In P, A, S, M modes, press the Display button **DISP.** until the Histogram appears.



Dark picture



Balanced picture



Bright picture

Using exposure compensation to adjust brightness

In P, A, S, and Panorama modes, you can adjust exposure compensation before you take a picture to make your pictures darker or lighter. Only the first picture in Panorama mode can be adjusted—that adjustment is applied to the remaining pictures. (For more about the Jog dial and Exposure Compensation, [see page 20](#).)

- 1 Turn the Jog dial ◀▶ to choose Exposure Compensation, then press it to edit the setting. Turn the Jog dial ◀▶ to change the setting, then press it to save it.
An exposure compensation level is shown on the LCD or EVF, and the image gets darker or lighter.
- 2 Take the picture when you are satisfied with the exposure compensation level.

Using exposure compensation with exposure bracketing

You can use exposure compensation in conjunction with exposure bracketing to get the best exposure.




If the exposure compensation is set to:	And if the exposure bracketing interval is set to:	Then the exposures taken are:
0.0	0.3 steps	-0.3, 0.0, +0.3
+1.0		+0.7, +1.0, +1.3
-1.0		-1.3, -1.0, -0.7

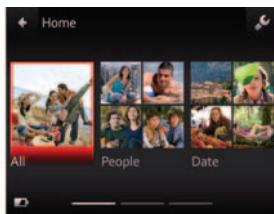
3

Reviewing and editing

Reviewing pictures/videos



- 1 Press the Review  button to enter/exit Review.
- 2 Press   to choose All, People, Date, Keywords, or Videos, then press **OK**.



Use   to access Keywords and Videos.

- 3 If you chose People, Date, or Keywords, highlight a name, date, or keyword, then press **OK**.

You can also review pictures/videos by pressing:

- **OK** in Liveview, when the most recent picture is highlight (bottom left of the LCD), or
-  during Quickview, while reviewing a new picture

IMPORTANT: Press the Share button to share anytime.



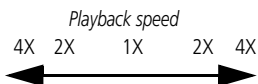
Other things you can do in Review

- Press ◀▶ to see previous/next picture/video.
- Press *OK* to play videos.
- Press **DISP.** to show/hide tools.
- Press 🗑️ to delete pictures/videos.




Playing a video

When a video is displayed, the Play button is offered. Press OK to play the video. During playback:



- To play/pause the video, press the OK button.
- To fast forward/rewind, press ◀▶ while the video is playing. To change the speed, press ◀▶ again. To return to 1X speed, press the OK button.
- To forward/rewind one frame at a time, press ◀▶ while the video is paused.

Deleting pictures/videos

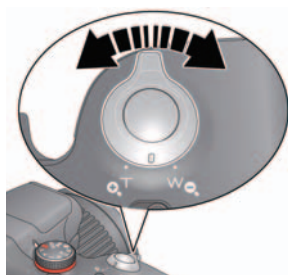
- 1 Press the Review button .
- 2 Press ◀▶ to choose a stack of pictures (All, or sorted by People, Date, Keywords, or Videos), then press OK.
If you chose All, People, Date, or Keywords, press ◀▶ to find a picture/video to delete. (If you chose Videos, thumbnails are displayed.)
- 3 Press the Delete button, then ▲▼ to choose Picture/Video or All, then press OK.
To delete other pictures, press ◀▶ and repeat this step. When finished, press ▲ to choose Exit, then press OK.






To return to picture-taking mode, press the Shutter button halfway down.

Viewing pictures/videos in different ways



Magnifying a picture

You can magnify a picture while in review.







- 1 Press the Review button , then locate a picture.
- 2 Press Telephoto (T) to magnify 2X–8X.
- 3 Press     to view other parts of a picture.
 - Press OK to return to 1X.

Viewing as thumbnails

- 1 Press the Review button .
- 2 Press   to choose a stack of pictures (All, or sorted by People, Date, Keywords, or Videos), then press OK.

If you chose All, People, Date, or Keywords, a single-up picture is shown. (If you chose Videos, multi-up is already displayed.)

- 3 Press the Display button  until tools appear at the top of the LCD.
- 4 Press  and  to choose Multi-up , then press OK.




Thumbnails are shown.

To select multiple pictures/videos, [see page 40](#).

To return to picture-taking mode, press the Shutter button halfway down.

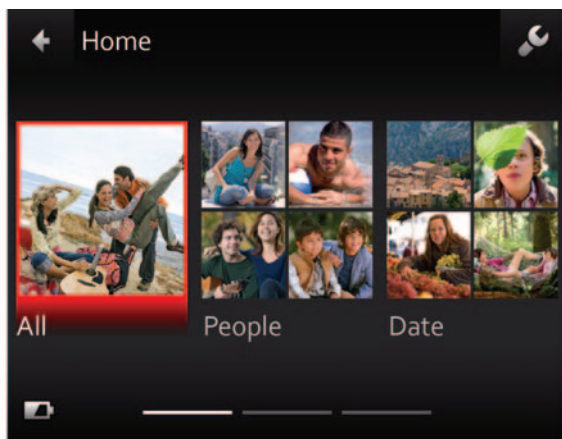
A smarter way to find and enjoy your pictures

Tag pictures—by people or keywords—to make them easy to find, later. For example, the camera can find all pictures that contain “Mary” or “Dad’s 60th Birthday.” (See [Tagging people, page 46](#) or [Tagging with keywords, page 48](#).)

- 1 Press the Review button .
- 2 Press   to see All pictures/videos or those sorted by Date, People, Keywords or Videos.

If you chose All, People, Date, or Keywords, a single-up picture is shown. (If you chose Videos, thumbnails are displayed.) If you press OK while a video is highlighted, the video plays.)

To return to picture-taking mode, press the Shutter button halfway down.



Use   to access Keywords and Videos.

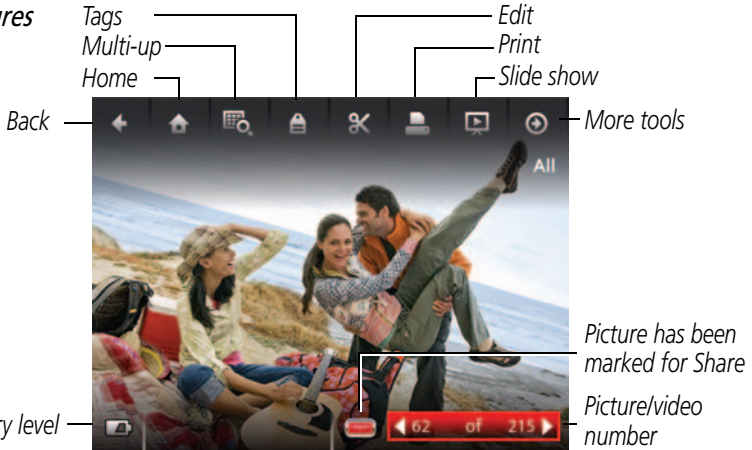
Tip: For best results, make sure the camera date/time is current ([see page 51](#)).

Understanding the review icons

Videos
















Pictures



Cropping a picture

















You can crop a picture so that only the desired portion of the picture remains.

- 1 Press the Review button .
- 2 Press   to choose a stack of pictures (All, or sorted by People, Date, or Keywords), then press OK.
A single-up picture is shown. Press   to choose a different picture.
- 3 Press the Display button  until tools appear at the top of the LCD.
- 4 Press  and   to choose Edit , then press OK.
- 5 Press   to choose Crop , then press OK.
- 6 Follow the prompts to crop the picture.

To return to picture-taking mode, press the Shutter button halfway down.












Using the RAW Develop feature

In P, A, S, M, Sport, Portrait, and SCN modes, you can take pictures as the RAW file type. A RAW file is not compressed, offers greater dynamic range, and contains more color information. The RAW Develop feature lets you develop, edit (picture size, quality, exposure compensation, color mode, sharpness, and white balance), and save RAW files as a Fine, Standard, or Basic jpeg. (The original RAW file is preserved.) You can edit RAW files in KODAK EASYSHARE Software.

- 1 Press the Review button .
- 2 Press   to choose a stack of pictures (All, or sorted by People, Date, or Keywords), then press OK.
A single-up picture is shown. Press   to choose a different picture.
- 3 Press the Display button  until tools appear at the top of the LCD.
- 4 Press  and   to choose Edit , then press OK.
- 5 Press   to choose RAW File Develop, then press OK.
- 6 Press   to choose options and to make adjustments in Picture Quality, Color Mode, File Type, Sharpness, Exposure Compensation, White Balance, or Contrast.
- 7 When finished, press   to choose Develop RAW File, then press OK.












Adding a border to a picture

You can enhance a picture by adding a border.

- 1 Press the Review button , then     to locate a picture.
 - 2 Press the Effects button .
 - 3 Press   to choose Borders, then press OK.
 - 4 Press   to choose a border style, then press OK.
 - 5 Press  to choose Cancel or Apply, then follow the prompts.
- To return to picture-taking mode, press the Shutter button halfway down.


























Using photo effects to change a picture's tint

You can enhance a picture by tinting it.

- 1 Press the Review button , then     to locate a picture.
 - 2 Press the Effects button .
 - 3 Press   to choose Tint, then press OK.
 - 4 Press   to choose a tint effect, then press OK.
 - 5 Press  to choose Cancel or Apply, then follow the prompts.
- To return to picture-taking mode, press the Shutter button halfway down.

Trimming a video























You can remove the start or end from a video, saving only the desired portion.

- 1 Press the Review button .
- 2 Press   to choose Videos, then press OK.
Thumbnails are displayed.
- 3 Press  and   to choose Select Images, then press OK.
- 4 Press  and   to choose a video, then press OK.
- 5 Press  and   to choose the Edit icon .
- 6 Press   to choose Trim , then press OK.
- 7 Press  to choose the Start trim mark , then press OK. Press   to move the Start position. When you're satisfied, press OK to lock it.
Press  to choose the End trim mark , then press OK. Press   to move the End position. When you're satisfied, press OK to lock it.
- 8 Press  to choose Done, then press the OK button. Follow the prompts to Save as New, Cancel, or Replace Original.

To return to picture-taking mode, press the Shutter button halfway down.

Making a picture from a video

You can choose a single frame from a video, then make a picture suitable for a 4 x 6-inch (10 x 15 cm) print.















- 1 Press the Review button .
- 2 Press   to choose Videos, then press OK.
Thumbnails are displayed.
- 3 Press  and   to choose Select Images, then press OK.
- 4 Press  and   to choose a video, then press OK.
- 5 Press  and   to choose the Edit icon .
- 6 Press   to choose Make Picture , then press the OK button.
- 7 Press   to play/pause the video, or to forward/rewind frame-by-frame.
- 8 When you reach the desired frame, press  and   to choose Make Picture , then press OK

The picture is created. (The original video is saved.)

To return to picture-taking mode, press the Shutter button halfway down.

Making an action print from a video

From a video, you can make a 9-up picture, suitable for a 4 x 6-inch (10 x 15 cm) print.

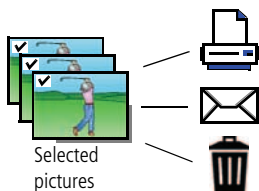
- 1 Press the Review button .
- 2 Press   to choose Videos, then press OK.
Thumbnails are displayed.
- 3 Press  and   to choose Select Images, then press OK.
- 4 Press  and   to choose a video, then press OK.
- 5 Press  and   to choose the Edit icon .
- 6 Choose Action Print , then press OK.












A 9-up picture is created.

To return to picture-taking mode, press the Shutter button halfway down.

Selecting multiple pictures/videos

Use the multi-select feature when you have two or more pictures to print, share, delete, protect/unprotect, tag with keyword, etc. Multi-select is only available in thumbnail view (see [page 31](#)).

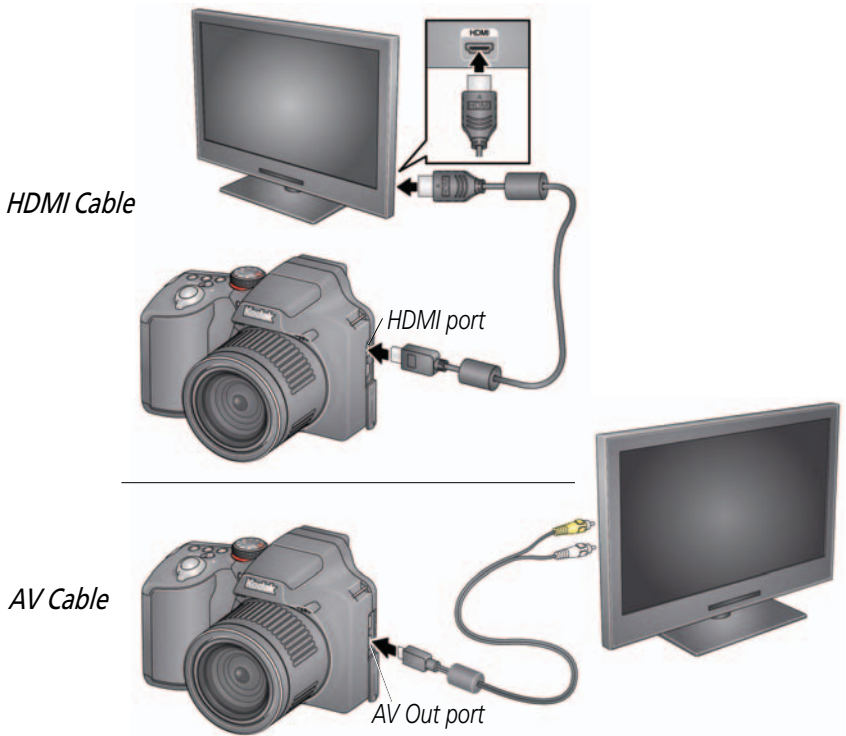


- 1 Press the Review button .
- 2 Press   to choose a stack of pictures (All, or sorted by People, Date, Keywords, or Videos), then press OK.
- 3 If you chose All, People, Date, or Keywords, a single-up picture is shown. Press  and  to choose Multi-up , then press OK. (If you chose Videos, multi-up is already displayed.)
- 4 Press  and  to choose Select Images, then press OK.
- 5 Press    to choose a picture/video. Press OK to select it.
A check mark appears on the picture. (Press OK again to remove a check mark.) Repeat this step to select other pictures/videos.
- 6 You can now share, delete, choose a tool, etc. and apply it to the selected pictures/videos.

NOTE: You can also share multiple pictures/videos using the Share button ([see page 44](#)).

Displaying pictures/videos on a television

You can display pictures/videos on a television, computer monitor, or any device equipped with a composite video input. To connect the camera directly to a television, use a composite cable (may be sold separately). Use the camera controls to navigate through pictures/videos on the television. If you have an HD television, use an HDMI cable (may be sold separately) and get the richest playback experience.









Purchase cables www.kodak.com/go/accessories

Creating a slide show

Use Slide Show to display your pictures/videos on the LCD. You can play all pictures/videos, or select pictures to include in the slide show.

Make a slide show that you can save






- 1 Press the Review button . Select pictures (see [page 40](#)). If you choose no pictures, all are shown in the slide show.
- 2 Press the Display button  until tools appear at the top of the LCD.
- 3 Press  and  to choose Multimedia Slide Show, then press OK.
- 4 Press   to choose Preview Slide Show, then press OK.

Each picture/video is displayed once. To interrupt the slide show, press OK. After the slide show plays, you may save or modify it.

Adding a date stamp

You can add a stamp—showing the date taken—to a picture.

NOTE: Once a date stamp is applied, it cannot be removed on the camera.

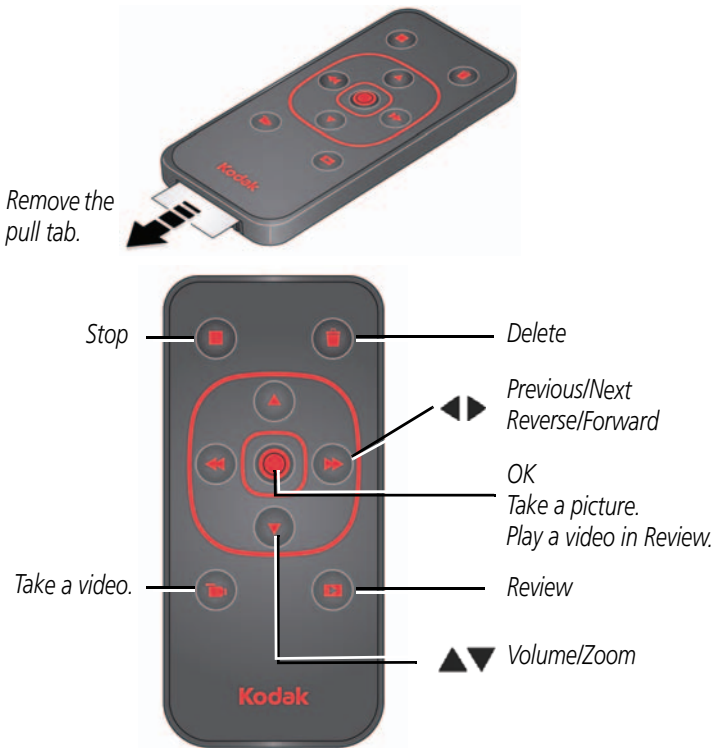
- 1 Press the Review button .
- 2 Press  to choose a stack of pictures (All, or sorted by People, Date, Keywords, or Videos), then press OK.
- 3 Press  and  to choose the Edit icon .then choose Date Stamp.

Follow the prompts to add the datetime to the picture.

To return to picture-taking mode, press the Shutter button halfway down.

Using the optional remote control

Use the optional remote control to start/stop recording and to review videos and pictures. Go to www.kodak.com/go/accessories.



Take a picture: Press the OK button.

Take a video: Press the Video button to start/stop recording.

4

Sharing pictures/videos

Sharing through email and social networks

It's never been easier to share pictures on your favorite social networking sites. As new sites become available, they'll be offered when you connect the camera to a networked computer.

IMPORTANT: *To use the sharing and social networking features, you must install the KODAK Share Button App. (See page 53)*

- 1 Press the Share button to share anytime:

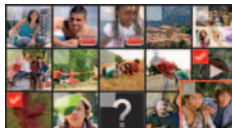
In Liveview



In Quickview

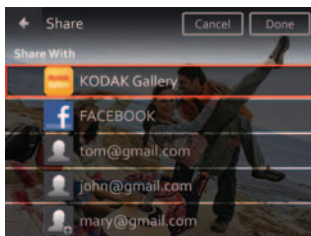


In Review



Most recent picture/video

- 2 Press ▲▼ and OK to choose social networking sites or email addresses.













- 3 Press ▲ to choose Done, then press OK.

When you transfer these pictures/videos to your computer, they are sent to the sharing destinations you chose.

Choose which social networking sites to display on your camera

You can show/hide networking sites on your camera so that only your favorite sites appear.















- 1 Press the Review button .
- 2 Press the Display button  until tools appear at the top of the LCD.
- 3 Press    to choose Settings , then press the OK button.
- 4 Press   to choose Edit Share Settings, then press OK.
- 5 Press   to choose Websites, then press OK.
- 6 Press OK to check/uncheck each social networking site.

When you are in Review and press the Share button, your chosen sites appear.

To return to picture-taking mode, press the Shutter button halfway down.

Manage email addresses and KODAK PULSE Digital Frames

You can add, edit, or delete email addresses and KODAK PULSE Digital Frames on your camera. (To use the keyboard, see [page 48](#).)

- 1 Press the Review button .
- 2 Press the Display button  until tools appear at the top of the LCD.
- 3 Press    to choose Settings , then press the OK button.
- 4 Press   to choose Edit Share Settings, then press OK.
- 5 Press   to choose Edit People, Websites, Title/Subject, or Message (to include when you share pictures). The keyboard appears when you need to type. See [page 48](#).
- 6 When finished, press     to choose Done or Next, then press OK.














Tagging pictures



Tag pictures to make them easy to find, later. You can tag pictures in 2 ways:

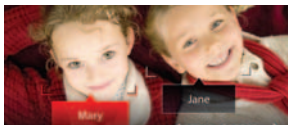
- **People**, and then find all pictures of “Mary.”
- **Keywords**, and then find all pictures from “Dad’s 60th Birthday.”

Tagging people

When you tag faces, you’re helping your camera to recognize people by name. Then it matches names and faces in pictures you’ve taken—and those you take in the future!

- 1 Press the Review button .
- 2 Press   to choose a stack of pictures (All, or sorted by People, Date, or Keywords), then press OK.
A single-up picture is shown. Press   to choose a different picture.
- 3 Press the Display button  until tools appear at the top of the LCD.
- 4 Press   to choose Tags , then press the OK button.
- 5 Press   to choose Tag People, then press OK.
- 6 Press   to choose an existing name or Enter New Name to add a new one (see [page 48](#)), then press OK.

If more than one face is detected, a name or question mark is assigned to each detected face. To resolve an incorrect name or a question mark, press   to select a face, then press OK.


















- 7 If prompted to Update People Tags, press   to choose Yes, then press OK.
Other pictures are scanned and updated with the name(s) you applied here. Press   to add names to other pictures. When finished, press   to choose Done, then press OK.

Need to update a name?

If you meet a new friend—James—but you already have pictures tagged with your old friend, James, you can:

- Tag the new James with “James Smith” and/or
- Update the old James to “James Monroe”


















Here’s how:

- 1 Press the Review button .
- 2 Press    to choose Settings , then press the OK button.
- 3 Press   to choose People Tag Settings (or Keyword Tag for videos), then press OK.
- 4 Press   to choose Modify Names List, then press OK.
- 5 Press   to choose the name you want to modify, then press OK. (The keyboard appears when you need to type. [See page 48.](#))
- 6 Edit the name, press   to choose OK, then press OK. (If prompted to Update People Tags, press   to choose Yes, then press OK.)

NOTE: You can have up to 20 names.






Tagging with keywords

Tag pictures to make them easy to find, later.

- 1 Press the Review button .
- 2 Press   to choose a stack of pictures (All, or sorted by People, Date, or Keywords), then press OK.
A single-up picture is shown. Press   to choose a different picture.
- 3 Press the Display button  until tools appear at the top of the LCD.
- 4 Press   to choose Tags , then press the OK button.
- 5 Press   to choose Keyword Tag, then press OK.
- 6 Press   to choose a tag (or  and  to add a tag using the "+" sign), then press OK.
- 7 Press  and  to choose Done, then press OK.













Using the keyboard

The keyboard appears when you need to type.

- 1 Press     to choose a letter, then press OK.
- 2 When finished, press  to choose Done, then press OK.

Marking pictures/videos as favorites

Mark pictures as favorites to make them easy to find, later.

- 1 Press the Review button .
- 2 Press   to choose a stack of pictures (All, or sorted by People, Date, Keywords, or Videos), then press OK.
- 3 Press the Display button  until tools appear at the top of the LCD.
- 4 Press  to choose Tags , then press OK.
- 5 Press  and   to choose Keyword Tag, then press OK.
- 6 Press   to choose Favorite, then press OK.
- 7 Press  to choose Done, then press OK.








5



Doing more with your camera

Changing settings

You can change settings to get the best results from your camera.

NOTE: Some modes offer limited settings. Some settings remain until you change them; others, until you change modes or turn off the camera.


- 1 In liveview or review mode, press the Display button  until tools appear at the top of the LCD.
- 2 Press    to choose Settings , then press the OK button.
- 3 Press   to choose a setting, then press OK.

NOTE: Some settings let you press   to change a setting.

- 4 When finished with a setting, press OK.

Setting	More information
Share Button Settings Choose what is displayed when the Share button is pressed.	Show or hide: <ul style="list-style-type: none">■ Individual social networking sites■ E-mail addresses (all or none)■ KODAK PULSE Digital Frames (all or none)
People Tag Settings Maintain names and faces.	Update People Tags —Matches recently tagged people with other pictures that may include these people. Modify Names List —Edit or delete existing names.
Picture or Video Size Choose a picture or video resolution.	See Specifications, starting on page 61 .

Setting	More information
<p>LCD Brightness Choose LCD brightness during picture/video capture. (During Review, the LCD is set to High Power.)</p>	<p>High Power—Brighter LCD; uses more battery power. Power Save—Dimmer LCD; uses less power. Auto—LCD brightness is automatically adjusted according to environment.</p>
<p>UI Display In a PASM mode, show a histogram and/or a framing grid.</p>	<p>Liveview Histogram (On/Off) Capture Framing Grid (On/Off)</p>
<p>Video Out Choose the regional setting that lets you connect the camera to a television or other external device.</p>	<p>NTSC—Used in North America and Japan; most common format. PAL—Used in Europe and China.</p>
<p>Sound Volume Choose volume.</p>	<p>High Medium Low Mute</p>
<p>Slide Show Settings Set your slide show preferences.</p>	<p>Transitions Loops Intervals</p>
<p>AF Control (Still) Choose an auto-focus setting.</p>	<p>Continuous AF—Because the camera is always focusing, there is no need to press the Shutter button halfway down to focus. Single AF—Focuses when the Shutter button is pressed halfway down. (This setting uses less battery power.)</p>
<p>Date & Time</p>	<p>Set date and time.</p>
<p>Language</p>	<p>Choose your language.</p>
<p>Reset All Camera Settings</p>	<p>Reset settings to their default.</p>

Setting	More information
Computer Connection Choose which application is downloaded or launched when you connect the camera to the computer.	KODAK Software Other Application (APPLE iPHOTO, etc.) IMPORTANT: <i>To use the social networking features, you must install the KODAK Share Button App (see page 53).</i>
Safe Mode In Safe mode, pictures/videos cannot be deleted or modified.	On Off
Format  CAUTION: Formatting deletes all pictures/videos, including those that are protected. Removing a card during formatting may damage the card.	Memory Card —Deletes everything on the card; formats the card. Cancel —Exits without making a change. Internal Memory —Deletes everything in internal memory including email addresses and keyword tags; formats the internal memory.
About	View camera information.

6 Install software

Install software, transfer pictures, and share

Install KODAK Software—so it's easy to transfer and share pictures and videos.

IMPORTANT: *To use the sharing and social networking features, you must install the KODAK Share Button App.*

Make sure the computer is connected to the Internet. When you connect the camera to the computer, the KODAK Camera Setup App automatically runs. Follow the prompts to install the KODAK Share Button App.



- 1 Turn off the camera.
- 2 Use the KODAK Camera USB Cable, Micro B / 5-Pin to connect the camera to the computer. Use only the cable included with this camera.
- 3 Turn on the camera.
- 4 After the software is installed, follow the prompts to transfer pictures and videos to your computer.

NOTE: If the app does not run, find it here and launch it:

- WINDOWS OS: in My Computer
- MAC OS: on your Desktop

NOTE: You can also use a card reader to transfer pictures/videos.

Download KODAK Software later www.kodak.com/go/camerasw

Get Software help www.kodak.com/go/support

See How-To videos www.kodak.com/go/Z990demos

Printing pictures

Direct printing with a KODAK All-in-One Printer

IMPORTANT: To print using PICTBRIDGE Technology, you must change the Computer Connection setting (in the Settings menu) to Other Application (see page 52).

You need a camera, a PICTBRIDGE enabled Printer, and a USB cable.

Connecting the camera to a KODAK All-in-One Printer

- 1 Turn off the camera and printer.
- 2 Use the KODAK Camera USB Cable, Micro B / 5-Pin (included with the camera) to connect the camera to the printer.

Printing from a KODAK All-in-One Printer

- 1 Turn on the printer. Turn on the camera.

The PictBridge logo is displayed, followed by the current picture and menu. (If no pictures are found, a message is displayed.) If the menu turns off, press any button to redisplay it.

- 2 Choose a printing option, then press OK.

Current Picture—Press ◀▶ to choose a picture.

Tagged Pictures—If your printer is capable, print pictures that you marked for printing.

Index Print—Print thumbnails of all pictures. (This option requires one or more sheets of paper.)

All Pictures—Print all pictures in internal memory or on a card.

NOTE: During direct printing, pictures are not permanently transferred or saved to the printer. To transfer pictures to your computer, see page 53.

Purchase cables, accessories www.kodak.com/go/accessories

Ordering prints online









KODAK Gallery (www.kodakgallery.com) makes it easy to:

- Upload your pictures.
- Edit, enhance, and add borders to your pictures.
- Store pictures, and share them with family and friends.
- Have prints, photo greeting cards, frames, and albums delivered to your door.

Printing from an optional SD or SDHC Card

- Automatically print tagged pictures when you insert your card into a printer. See your printer user's guide for details.
- Make prints at a KODAK Picture Kiosk. Go to www.kodak.com/go/picturemaker.
- Take the card to your local photo retailer for professional printing.

Marking pictures for print

- 1 Press the Review button .
- 2 Press   to choose a stack of pictures (All, or sorted by People, Date, or Keywords). Press OK until you see a single-up picture or press OK to choose multiple pictures.
- 3 Press the Display button  until tools appear at the top of the LCD.
- 4 Press  and  to choose Print, then press the OK button.
- 5 Press   to choose the number of copies, then press OK.

The pictures are printed when you transfer them to your computer.;

7

Troubleshooting

Camera problems

Status	Solution
Camera does not turn on, off; buttons do not function	<ul style="list-style-type: none"> ■ Charge rechargeable batteries (see page 1). ■ Remove then reinsert or replace batteries.
Camera freezes up when a card is inserted or removed.	<ul style="list-style-type: none"> ■ Turn the camera off, then back on. Make sure the camera is turned off before inserting or removing a card.
LCD is too dark.	<ul style="list-style-type: none"> ■ Adjust the LCD Brightness setting (see page 51).
In Review, a blue or black screen is displayed instead of a picture	<ul style="list-style-type: none"> ■ Transfer the picture to the computer (see page 53), then format the card or internal memory. ■ Take another picture.
In Review, you do not see a picture (or the expected picture) on the LCD	<ul style="list-style-type: none"> ■ Format the card in the camera (see page 52) <p>Caution: Formatting a card deletes all pictures and videos, including protected files.</p>
Pictures remaining number does not decrease after taking a picture	<ul style="list-style-type: none"> ■ Continue taking pictures. The camera is operating normally. (The camera estimates the number of pictures remaining after each picture is taken, based on picture size and content.)
Camera displays a High Temperature error	<ul style="list-style-type: none"> ■ If camera temperature rises to a certain level, a high temperature error (Video recording will stop in 5 seconds) appears. Turn the camera off as soon as possible and let it cool down. The camera cannot capture more videos until it has cooled down. (Captured videos are not lost.)

Status	Solution
Flash does not fire	<ul style="list-style-type: none"> ■ Check the flash setting, and change as needed (see page 12). NOTE: The flash does not fire in all modes.
Memory card is almost or entirely full	<ul style="list-style-type: none"> ■ Transfer the pictures to the computer (see page 53). ■ Delete pictures from the card (see page 30) or insert a new card.
The Reset Camera feature did not take effect.	<ul style="list-style-type: none"> ■ After using the Reset Camera feature (see page 51), turn the camera off and then on again.
Battery life is short	<ul style="list-style-type: none"> ■ Make sure the correct battery type is installed (see page 65). ■ Charge the batteries (see page 1). Watch the battery level (see page 9). ■ Use a power-saving LCD Brightness setting (see page 51).
Shutter button does not work.	<ul style="list-style-type: none"> ■ Turn on the camera (see page 3). ■ Transfer pictures to the computer (see page 53), delete pictures from the camera (see page 30), or insert a card with available memory (see page 4).
Memory card not recognized or camera freezes with card	<ul style="list-style-type: none"> ■ Card may be corrupted. Format the card in the camera (see page 52). Caution: Formatting a card deletes all pictures and videos, including protected files. ■ Use another memory card. Only SD or SDHC Cards are supported.
Pictures on card (or in internal memory) are corrupted	<ul style="list-style-type: none"> ■ Retake pictures. ■ Do not remove card while the camera is on. ■ Keep rechargeable batteries charged. ■ Transfer pictures to the computer (see page 53), then format the card or internal memory (see page 52). Caution: Formatting a card deletes all pictures and videos, including protected files.

Computer/connectivity problems

Status	Solution
Slide Show does not run on an external video device	<ul style="list-style-type: none">■ Adjust the camera Video Out setting to NTSC or PAL (see page 51).■ Make sure the external device settings are correct. (See the device's user guide.)
Computer does not communicate with the camera	<ul style="list-style-type: none">■ Turn off the camera, then turn it back on.■ Make sure the batteries are charged and installed correctly (see page 1).■ Make sure the KODAK Camera USB Cable, U-8 is connected to the camera and the computer (see page 53). Then turn on the camera.■ See KODAK Software Help at www.kodak.com/go/camerasw.

Picture quality problems

Status	Solution
Picture is not clear	<ul style="list-style-type: none">■ To automatically set exposure and focus, press the Shutter button halfway. When the framing marks turn green, press the Shutter button completely down to take the picture.■ Clean the lens (see page 63).■ Make sure the camera is not in Macro mode (see page 22).■ Place the camera on a flat, steady surface or use a tripod (especially in high-zoom settings or in low light).■ Use a larger picture size (see page 50).■ If you're manually adjusting the ISO speed, realize that high ISO setting may cause grainy pictures.

Status	Solution
Picture is too dark	<ul style="list-style-type: none"> ■ Reposition the camera for more available light. ■ Use Fill flash (see page 12) or change your position so light is not behind the subject. ■ Move so that the distance between you and the subject is within the effective flash range. (See Camera Specifications, starting on page 61.) ■ To automatically set exposure and focus, press the Shutter button halfway. When the framing marks turn green, press the Shutter button completely down to take the picture. ■ In Program mode, adjust the Exposure Compensation (see page 19).
Picture is too light	<ul style="list-style-type: none"> ■ Reposition the camera to reduce the amount of available light. ■ Turn the flash off (see page 12). ■ Move so that the distance between you and the subject is within the effective flash range. (See Camera Specifications, starting on page 61.) ■ To automatically set exposure and focus, press the Shutter button halfway. When the framing marks turn green, press the Shutter button completely down to take the picture. ■ In Program mode, adjust the Exposure Compensation (see page 19).
Pictures that have KODAK PERFECT TOUCH Technology applied (twice) are of lower image quality.	<ul style="list-style-type: none"> ■ If PERFECT TOUCH Technology has been applied to a picture on the camera, do not apply it again when the picture is on the computer (or on a KODAK Picture Kiosk). <p>NOTE: PERFECT TOUCH Technology is automatically applied to Pictures taken in Smart Capture mode.</p>

Direct printing (PICTBRIDGE enabled printer) problems

Status	Solution
Cannot find the desired picture	<ul style="list-style-type: none"> ■ Use the Direct printing menu to change the image storage location.

Status	Solution
The Direct printing menu interface turns off	<ul style="list-style-type: none">■ Press any camera button to redisplay the menu.
Cannot print pictures	<ul style="list-style-type: none">■ Make sure there is a connection between the camera and the printer (see page 54).■ Make sure the printer and the camera have power.
Camera or printer displays an error message	<ul style="list-style-type: none">■ Follow the prompts to resolve the issue.

Getting help on the Web

Get support for your product (FAQs, troubleshooting information, etc.)	www.kodak.com/go/Z990support
Purchase camera accessories	www.kodak.com/go/accessories
Download the latest camera firmware	www.kodak.com/go/Z990downloads
Register your camera	www.kodak.com/go/register
Chat, email, write, or phone Kodak (Chat not available in all languages)	www.kodak.com/go/contact

8

Appendix


Specifications

CCD—1/2.3-type CMOS

Effective pixels—12 MP (4000 x 3000)

LCD—3.0 in. (7.6 cm) LCD; 460K dots; 60 fps; 4:3 aspect ratio

Viewfinder—Electronic

Image storage—Optional SD/SDHC Card  (The SD logo is a trademark of the SD Card Association.) Maximum supported card size: 32 GB

Internal storage capacity—128 MB internal memory (>60 MB available for image storage. 1 MB equals one million bytes.)

Taking lens—30X optical zoom; f/2.8–f/5.6; 35 mm equivalent: 28–840 mm

Digital zoom—5X continuous

Focus system—TTL-AF (through-the-lens auto focus); Multi-Zone, Center-Zone, Selectable Zone. Working range:

0.6 m (2 ft)–infinity @ wide, normal

3.0 m (9.8 ft)–infinity @ telephoto, normal

0.1–.8 m (0.3–2.6 ft) @ wide, Macro mode

1.8–3.5 m (5.9–11.5 ft) @ telephoto, Macro mode

0.01–0.2 m (0.03–0.7 ft) @ telephoto, Super Macro mode

Auto focus control—Continuous and Single AF

Face detection—Yes

Face recognition—Yes

Shutter speed—1/2–1/2000 seconds

Long time exposure—1/2000–16 seconds

ISO speed—Smart Capture: Auto 125–3200

P mode: Auto 125–1600; Manual 125–6400

A,S,M modes: Auto (with Flash Auto) 125–400; Manual 125–6400

Focus/Exposure Zone—TTL-AE; Face Priority, Multi-Zone, Center, Selectable

Exposure compensation—+/-2.0 EV with 1/3 EV step

White Balance—Auto, Daylight, Tungsten, Fluorescent, Open Shade

Electronic Flash—Auto flash; Auto, Fill, Red Eye, Off; Guide No. 9.0 (m) @ ISO 100; working range in Smart Capture mode: 0.5–8.9 m (1.6–29.2 ft) @ wide; 1.8–4.4 m (5.9–14.4 ft) @ telephoto

Self-timer mode—2 seconds, 10 seconds, 2 picture timer

Burst modes—See [page 24](#)

Capture modes—Smart Capture, PASM modes (Program, Aperture Priority, Shutter Priority, Manual Exposure), Scene modes, Sport, Portrait, Creative modes, HDR, Video (see [page 13](#))

Image file format—

Still: EXIF 2.3 (JPEG compression); file organization DCF

Video: MP4, CODEC H.264

Picture size—12 MP (4:3): 4000 x 3000 pixels

10.7 MP (3:2): 4000 x 2664 pixels

9 MP (16:9): 4000 x 2256 pixels

6 MP (4:3): 2832 x 2128 pixels

3 MP (4:3): 2048 x 1536 pixels

Picture quality—JPEG Fine 1:3.2, JPEG Normal 1:5.3, JPEG Basic 1:6.5

Video size—

HD1080p: 1920 x 1080 @ 30 fps

HD720p: 1280 x 720 @ 30 fps

VGA (iPad compatible): 640 x 480 @ 30 fps

WVGA (iPad compatible): 640 x 352 @ 30 fps

Recording limit —

HD1080p: < 29 min. or < 4GB

HD720p: < 29 min. or < 4GB

VGA (iPad compatible): < 4GB

WVGA (iPad compatible): < 4GB

Color modes—Vivid Color, Full Color, Basic Color, Black & White, Sepia

Film effects—None, KODACOLOR, KODACHROME, EKTACHROME, T-MAX, TRI-X, Sepia

Sharpness modes—Sharp, Normal, Soft

Communication with computer—USB 2.0 high speed (PIMA 15740 protocol); via KODAK Camera USB Cable, Micro B / 5-Pin; HDMI, type D (for television)

Microphone—Stereo

Speaker—Mono

PICTBRIDGE support—Yes

Power—(4) KODAK Rechargeable Digital Camera AA Batteries

Tripod mount—1/4 inch

Size—124.1 x 87.3 x 95.2 mm (4.9 x 3.4 x 3.7 in.) @ power off

Weight—593 g (21 oz) with batteries and card

Operating temperature—0–40° C (32–104° F)

Care and maintenance

- If you suspect water has gotten inside the camera, remove the batteries and card. Allow all components to air-dry for at least 24 hours before using the camera.
- Blow gently on the lens or LCD to remove dust and dirt. Wipe gently with a soft, lint-free cloth or an untreated lens-cleaning tissue. Do not use cleaning solutions unless designed specifically for camera lenses. Do not allow chemicals, such as suntan lotion, to contact painted surfaces.

- Service agreements may be available in your country. Contact a dealer of KODAK Products for more information.
- For digital camera disposal or recycling information, contact your local authorities. In the US, go to the Electronics Industry Alliance site at www.eiae.org or go to www.kodak.com/go/support.

Upgrading your software and firmware

We occasionally update KODAK Software and firmware (the software that runs on the camera). For instructions on installing the latest version, go to www.kodak.com/go/Z990downloads.

Storage capacities

The LCD displays the approximate number of pictures (or minutes/seconds of video) remaining. Actual storage capacity varies depending on subject composition, card size, and other factors. You may be able to store more or fewer pictures and videos.

Important safety instructions



CAUTION:

Do not disassemble this product; there are no user-serviceable parts inside. Refer servicing to qualified service personnel. KODAK AC Adapters and Battery Chargers are intended for indoor use only. The use of controls, adjustments, or procedures other than those specified herein may result in exposure to shock and/or electrical or mechanical hazards. If the LCD breaks, do not touch the glass or liquid. Contact Kodak customer support.

- The use of an accessory that is not recommended by Kodak may cause fire, electric shock, or injury. For approved accessories, go to www.kodak/go/accessories.
- Use only a USB-certified computer equipped with a current-limiting motherboard. Contact your computer manufacturer if you have questions.

- If using this product in an airplane, observe all instructions of the airline.
- When removing the batteries, allow them to cool; they may be hot.
- Follow all warnings and instructions supplied by the battery manufacturer.
- Use only batteries approved for this product to avoid risk of explosion.
- Keep batteries out of the reach of children.
- Do not allow batteries to touch metal objects, including coins. Otherwise, a battery may short circuit, discharge energy, become hot, or leak.
- Do not disassemble, install backward, or expose batteries to liquid, moisture, fire, or extreme temperature.
- Remove the batteries when the product is stored for an extended period of time. In the unlikely event that battery fluid leaks inside the product, contact Kodak customer support.
- In the unlikely event that battery fluid leaks onto your skin, wash immediately with water and contact your local health provider. For additional health-related information, contact your local Kodak customer support.
- Go to www.kodak.com/go/reach for information about the presence of substances included on the candidate list according to article 59(1) of Regulation (EC) No. 1907/2006 (REACH).
- Dispose of batteries according to local and national regulations. Go to www.kodak.com/go/kes.
- Do not charge non-rechargeable batteries. For more information on batteries, go to www.kodak.com/go/batterychart.

Battery replacement, battery life

KODAK Rechargeable Digital Camera AA Batteries: 500 pictures per charge. Battery life per CIPA testing method. (Approximate number of pictures in Smart Capture mode, using an SD Card.) Actual life may vary based on usage.

Extending battery life

- Use a power-saving LCD Brightness setting (see page 51).
- Dirt on the battery contacts can affect battery life. Wipe the contacts with a pencil eraser before loading batteries in the camera.
- Battery performance is reduced at temperatures below 41° F (5° C). When using your camera in cold weather, carry spare batteries and keep them warm. Do not discard cold batteries that do not work; when they return to room temperature, they may be usable.

Limited warranty

Kodak warrants its digital cameras and accessories (excluding batteries) to be free from malfunctions and defects in both materials and workmanship for the warranty period specified on your KODAK Product packaging. Retain the original dated sales receipt. Proof of purchase date is required with any request for warranty repair.

Limited warranty coverage

Warranty service is only available from within the country where the Products were originally purchased. You may be required to ship Products, at your expense, to the authorized service facility for the country where the Products were purchased. Kodak will repair or replace Products if they fail to function properly during the warranty period, subject to any conditions and/or limitations stated herein. Warranty service will include all labor as well as any necessary adjustments and/or replacement parts. If Kodak is unable to repair or replace a Product, Kodak will, at its option, refund the purchase price paid for the Product provided the Product has been returned to Kodak along with proof of the purchase price paid. Repair, replacement, or refund of the purchase price are the sole remedies under the warranty. If replacement parts are used in making repairs, those parts may be remanufactured, or may contain remanufactured materials. If it is necessary to replace the entire Product, it may be replaced with a remanufactured Product. Remanufactured Products, parts and materials are warranted for the remaining warranty term of the original Product, or 90 days after the date of repair or replacement, whichever is longer.

Limitations

This warranty does not cover circumstances beyond Kodak's control. This warranty does not apply when failure is due to shipping damage, accident, alteration, modification, unauthorized service, misuse, abuse, use with incompatible accessories or attachments (such as third party ink or ink tanks), failure to follow Kodak's operation, maintenance or repacking instructions, failure to use items supplied by Kodak (such as adapters and cables), or claims made after the duration of this warranty. Kodak makes no other express or implied warranty for this product. In the event that the exclusion of any implied warranty is ineffective under the law, the duration of the implied warranty will be the length of the express warranty period specified on your Kodak product packaging. The option of repair, replacement, or refund is Kodak's only obligation. Kodak will not be responsible for any special, consequential or incidental damages resulting from the sale, purchase, or use of this product regardless of the cause. Liability for any special, consequential or incidental damages (including but not limited to loss of revenue or profit, downtime costs, loss of the use of the equipment, cost of substitute equipment, facilities or services, or claims of your customers for such damages resulting from the purchase, use, or failure of the Product), regardless of cause or for breach of any written or implied warranty is expressly disclaimed. The limitations and exclusions of liability set forth herein apply to both Kodak and its suppliers.

Your rights

Some states or jurisdictions do not allow exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. Some states or jurisdictions do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. This warranty gives you specific rights, and you may have other rights which vary from state to state or by jurisdiction.

Outside the United States and Canada

In countries other than the United States and Canada, the terms and conditions of this warranty may be different. Unless a specific Kodak warranty is communicated to the purchaser in writing by a Kodak company, no warranty or liability exists beyond any minimum requirements imposed by law, even though defect, damage, or loss may

be by negligence or other act.

Regulatory compliance

FCC compliance and advisory

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 or 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: 1) reorient or relocate the receiving antenna; 2) increase the separation between the equipment and the receiver; 3) connect the equipment to an outlet on a circuit different from that to which the receiver is connected; 4) consult the dealer or an experienced radio/TV technician for additional suggestions. Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. Where shielded interface cables have been provided with the product or specified additional components or accessories elsewhere defined to be used with the installation of the product, they must be used in order to ensure compliance with FCC regulation. The KODAK High Performance USB AC Adapter K20-AM 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.

Waste Electrical and Electronic Equipment/Battery disposal



In Europe: For human/environmental protection, it is your responsibility to dispose of this equipment and batteries at a collection facility established for this purpose (separate from municipal waste.) For more information, contact your retailer, collection facility, or appropriate local authorities; or go to www.kodak.com/go/recycle. Product weight: 593 g (21 oz) with batteries



Canadian DOC statement

DOC Class B Compliance—This Class B digital apparatus complies with Canadian ICES-003.

Observation des normes-Classe B—Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

CE

Hereby, Eastman Kodak Company declares that this KODAK Product is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

Australian C-Tick



N137

VCCI Class B ITE

この装置は、クラスB情報技術装置です。この装置は、家庭環境で使用することを目的としていますが、この装置がラジオやテレビジョン受信機に近接して使用されると、受信障害を引き起こすことがあります。

取扱説明書に従って正しい取り扱いをして下さい。

VCCI-B

Korean Class B ITE

B급 기기
(가정용 방송통신기기)

이 기기는 가정용(B급)으로 전자파적합등록을
한 기기로서 주로 가정에서 사용하는 것을 목적
으로 하며, 모든 지역에서 사용할 수 있습니다.

Russian GOST-R



Eastman Kodak Company
Rochester, NY 14650

Фотокамера изготовлена в Китае; остальные элементы -
АЮ-40 в соответствии с маркировкой.

China RoHS

环保使用期限 (EPUP)

在中国大陆, 该值表示产品中存在的任何危险物质不得释放, 以免危及人身健康、财产或环境的时间期限 (以年计)。该值根据操作说明中所规定的产品正常使用而定。

有毒有害物质或元素名称及含量标识表						
部件名称	有毒有害物质或元素					
	铅	汞	镉	六价铬	多溴联苯	多溴二苯醚
数码相机电路板元件	×	○	○	○	○	○
充电电池	×	○	○	○	○	○
电池充电器电路板元件	×	○	○	○	○	○

○: 表示该有毒有害物质在该部件所有均质材料中的含量均在SJ/T 11363-2006规定的限量要求以下。
×: 表示该有毒有害物质至少在该部件的某一均质材料中的含量超出SJ/T 11363-2006规定的限量要求。



USB 数据线

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