Using manual exposure mode

You can choose the aperture value and shutter speed in manual exposure mode.

To adjust values in manual exposure mode:

1. Set the mode dial to M.
2. Press (OK) and use 4-way control to adjust aperture value and shutter speed.
3. Press shutter to capture an image.

Using aperture priority mode

Aperture priority is often used when shooting static subjects or emphasizing the depth of field. In general, use a smaller aperture if a greater depth of field is needed.

To adjust values in aperture priority mode:

1. Set the mode dial to Av.
2. Press (OK) and use 4-way control to adjust aperture value.
3. Press shutter to capture an image.

Using shutter priority mode

Shutter priority is often used when shooting moving subjects. In general, use a shorter shutter speed to catch a fast-moving object.

To adjust values in shutter priority mode:

1. Set the mode dial to Tv.
2. Press (OK) and use 4-way control to adjust shutter speed.
3. Press shutter to capture an image.

Using zoom framing assistant

When composing telephotographs, pressing the zoom framing assistant button at the left side of the camera body may help you better flash back the image at a wide angle so that the subject can be kept in center easily.

Shooting movies

You can record video with this camera. Set the movie settings before you start recording a video.

> • The camera will automatically stop recording when the storage capacity is full.
>
> • Video recording begins with continuous AF. You may set Q Key for use with AE/AF-Lock.

To record the video clip:

1. Press ● to start recording.
2. Use the zoom lever to zoom in/out on the subject.
3. Press ● to stop recording.

Using PIV function

During video recording, you can capture an image by pressing the shutter (the ⏬ icon appearing on the screen shows that you have taken one picture).
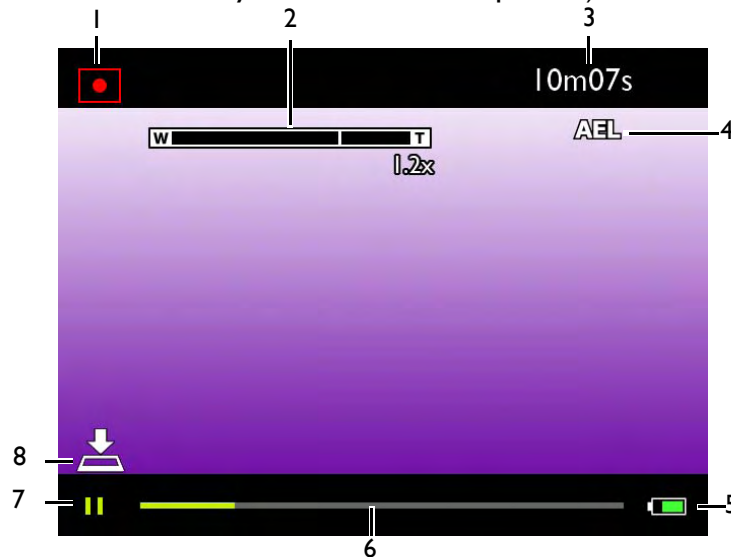
No.	Item	Description
1	Recording Indicator	Indicates that the camera is in recording mode.
2	Zoom Indicator/Zoom Ratio	Displays zoom.
3	Elapsed Time	Indicates time elapsed since recording begins.
4	AE/AF Lock	Indicates AE/AF Lock is enabled.
5	Battery	Battery level.
6	Recording Bar	Indicates recording progress in available capacity.
7	Pause	Indicates recording is paused.
8	Shutter Indicator (PIV)	Indicates shutter is available while recording in progress

Recording Indicator

This icon blinks until the recording session ends. When pause recording, this icon stops blinking.

Elapsed Time

Displays time elapsed since the recording begins.

Shutter indicator (PIV)

GH680 series is capable of storing still images by fully pressing the shutter button while shooting movies. Numbers of photos can be stored while movie is recording vary from video resolutions. If the maximum number of photos is not reached, the icon is displayed and photo taking is available. Otherwise, the icon will NOT be displayed and photo taking is unavailable.

- Please note that the movie keeps recording even though the icon disappears.
- The feature PIV is applicable to video resolutions of 720p and VGA.
- The resolution of PIV picture is the same as the setting in the Resolution menu.

Pause

When press OK to pause / resume the recording, the icon ▯▯ appears/disappears at the bottom left.

Recording Bar

Displays the progress of current recording in available capacity based the storage media volume size.

Using the capture menu

Resolution

Icon	Description	Icon	Description
20M	20 megapixels (5152 x 3864)	2M	2 megapixels (1600 x 1200)
14M	14 megapixels (4288 x 3216)	VGA	VGA (640 x 480)
10M	10 megapixels (3264 x 2448)	3:2	3:2 16 megapixels (4288 x 2858)
8M	8 megapixels (2304 x 1728)	9M 16:9	16:9 9 megapixels (3968 x 2232)
5M	5 megapixels (2592 x 1944)	2M 16:9	16:9 2 megapixels (1920 x1080)
3M	3 megapixels (2048 x 1536)	1:1	1:1 14 megapixels (2992 x 2992)

To select resolution:

1. Press MENU > 📷 > **Resolution**.
2. Use 4-way control to enter the submenu and select an option.
3. Press OK to confirm setting.

✏️ Available resolutions vary from each mode.

Quality

Icon	Description
▓	Super Fine
▓	Fine
▓	Normal

To set image quality:

1. Press MENU > 📷 > **Quality**.
2. Use 4-way control to enter the submenu and select an option.
3. Press OK to confirm setting.

Digital zoom

While digital zoom interpolates the result back up to the pixel dimensions of the original, wise zoom reduces the resolution to maintain the image quality.

To select zoom control:

1. Press MENU > 📷 > **Digital Zoom**.
2. Use 4-way control to enter the submenu and select from **Digital Zoom** or **Wise Zoom**.
3. Press OK to confirm setting.

AF assist lamp

This function emits amber light allowing the camera to focus easily when half press the shutter button.

To enable AF Assist Lamp:

1. Press MENU > 📷 > **AF Assist Lamp**.
2. Use 4-way control to enter the submenu and select from **Auto** or **Off**.
3. Press 🆗 to confirm setting.

Date stamp

Imprints the date when a picture was taken on the picture itself.

To set the date stamp:

1. Press MENU > 📷 > **Date Stamp.**
2. Use 4-way control to enter the submenu and select an option.
3. Press 🆗 to confirm setting.

Instant review

To enable Instant Review:

1. Press MENU > 📷 > Instant Review.
2. Use 4-way control to enter the submenu and select an option.
3. Press 🆗 to confirm setting.

Motion detection

To enable Motion Detection:

1. Press MENU > 📷 > **Motion Detection**.
2. Use 4-way control to enter the submenu and select an option.
3. Press 🆗 to confirm setting.

> • If **Motion Detection** is enabled and a moving object is detected, the **Motion Detection** icon is turned to yellow.
>
> • This feature is not available when the flash fires or in some shooting modes.

Q key

This feature helps to set up a shortcut for quick access to a certain function including **AF area, ISO, MWB, Color Mode, Metering, Quality, Resolution, Movie Options, AE-L, AF-L**, and **AE-L&AF-L**.

To setup **Q key**:

1. Press MENU > 📷 > **Q key**.
2. Use 4-way control to enter the submenu and select an option.
3. Press 🆗 to confirm setting

Playback mode

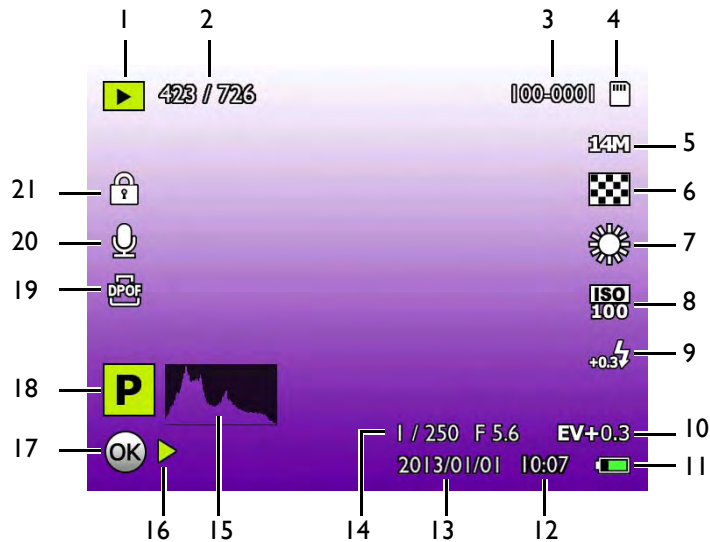Press ▶ to switch to **Playback** mode.

If the camera is turned off, you can directly switch to Playback mode by pressing and holding ▶ .

Viewing still images

No.	Item	Description
1	Playback mode	Indicates that the camera is in playback mode.
2	File no./Total no.	File number / total number of files on the memory card.
3	File Folder/File Index	File folder number / file number in the folder.
4	Storage media	Storage media type.
5	Image Size	Resolution setting.
6	Quality	Indicates the image quality.
7	White Balance	White balance setting used the image.
8	ISO	Image ISO value.
9	Flash EV	Image flash exposure value.
10	EV	Image exposure value.
11	Battery	Battery level.
12	Time	Image taken time.
13	Date	Image taken date.
14	Shutter Speed & Aperture	Shutter speed and aperture used with the image.
15	Histogram	Graphical representation of tonal distribution in the image.
16	Play Hint	Indicates the file as a voice memo, a movie, or a panorama.
17	OK	Indicates to press the button to play the file on the hint.
18	Scene mode	Indicates the mode the file taken with.
19	DPOF	Indicates the file is marked for printing.
20	Voice memo	Indicates this file has a voice memo or the file is an audio file.
21	Protect	Indicates the file is protected from alteration.

Viewing videos
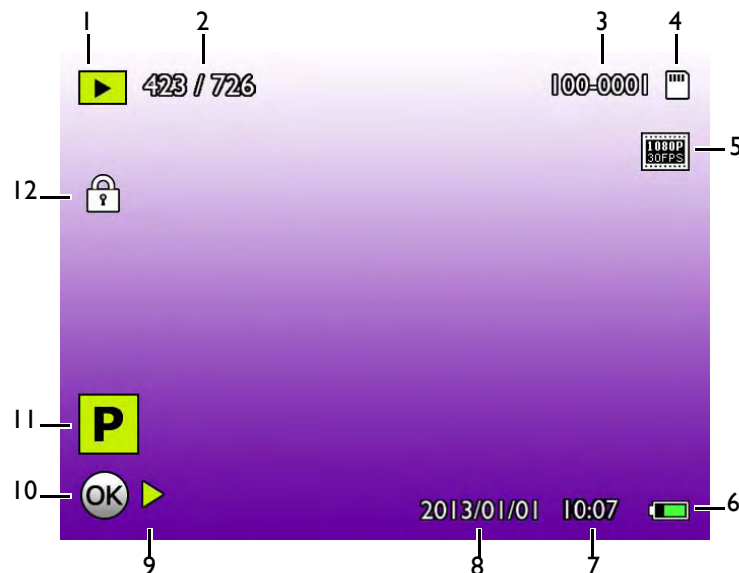
No.	Item	Description
1	Playback mode	Indicates that the camera is in **Playback** mode.
2	File no./Total no.	File number / total number of files on the memory card.
3	File Folder/File Index	File folder number / file number in the folder.
4	Storage media	Storage media type.
5	Video Quality	Video resolution setting.
6	Battery	Battery level.
7	Time	File taken time.
8	Date	File taken date.
9	Play Hint	Indicates the file as a voice memo, a movie, or a panorama.
10	OK	Indicates to press the button to play the file on the hint.
11	Scene mode	Indicates the mode the file taken with.
12	Protect	Indicates the file is protected from alteration.

Options for playback and editing

When the camera is in **Playback** mode, use 4-way control to view the next/previous recorded files. You can also select any of the following options.

Enlarging an image

Magnifies an image, so more details can be seen.

To enlarge an image:

1. Press ▶ to switch to **Playback** mode.
2. Use 4-way control to select the image you want to enlarge.
3. Slide the **Zoom** lever to 🔍T to zoom-in or W🔳 to zoom-out on a captured image.
4. Use 4-way control to move to the area you want to view.

Trimming

Crops part of an image file and saves it as another new file.

To trim an image:

1. Press ▶ to switch to **Playback** mode.
2. Use 4-way control to select the image you want to trim.
3. Slide the **Zoom** lever to ⊕T to zoom-in or W⊞ to zoom-out on a captured image.
4. In zoom mode, use the **Zoom** lever to adjust the zoom ratio.
5. Use 4-way control to locate the area you want to trim.
6. Press **MENU** and use 4-way control to select and confirm to save the image file.

Rotating an image

Changes the orientation of an image at each 90 degrees clockwise.

To rotate an image:

1. Press ▶ to switch to **Playback** mode.
2. Use 4-way control to select the image you want to enlarge.
3. Press **MENU**.
4. Use 4-way control to select **Rotate Image** and press ⊛.
5. Use 4-way control to select desired rotated photo you want to keep.
6. Press ⊛ to save the image file.

Viewing multiple files at a time

Shows up to 9 files at a time on the screen.

To view multiple files:

1. Press ▶ to switch to **Playback** mode.
2. Slide the **Zoom** lever to ⊕T. In this mode, maximum 9 files (shown in thumbnails) are displayed on the screen. Use 4-way control to select a file and press ⊛ to view it in its normal viewing size.

If there are more than 9 thumbnails, a scroll bar appears on the screen.

Playing back video clips

View recorded video clips in the playback mode.

To view a video clip:

1. Press ▶ to switch to **Playback** mode.
2. Use 4-way control to select the video clip you want to view.
3. Press 🆗 to start playing the video clip.
4. Use 4-way control to stop, pause, or resume the video clip.

- During video playback, use 4-way control to fast forward or rewind.
- While pausing video playback, use 4-way control to view the video frame by frame. Press 4-way control to fast forward or rewind for one frame. Press and hold 4-way control to fast forward or rewind frame by frame continuously.

Adjusting the playback volume

Increases or decreases the volume of a video clip, audio clip, or voice memo during playback.

To adjust the playback volume:

1. Press ▶ to switch to **Playback** mode.
2. Use 4-way control to select a video clip, audio clip, or voice memo that you want to play.
3. Press 🆗 to start playing.
4. Use the **Zoom** lever to increase or decrease the volume.

The volume can only be set during playback, but not during rewind, fast forward, or pause.

Deleting files

Deletes selected or all files..

To delete a single file:

1. Press ▶ to switch to **Playback** mode.
2. Press **MENU**.
3. Use 4-way control to select **Delete** > **Single** and press 🆗.
4. Use 4-way control to select and confirm the file that you want to delete.
5. Repeat steps 2~4 to delete other files.

In capture mode, press 🗑 to delete that last recorded file.

To delete selected files:

1. Press ▶ to switch to **Playback** mode.
2. Press **MENU**.
3. Use 4-way control to select **Delete** > **Select** and press ⓞⓚ.
4. The images are displayed in thumbnail view.
5. Use 4-way control and **MENU** to select and mark the files that you want to delete. A 🗑 icon appears on the marked files.
6. Press ⓞⓚ. A confirmation message appears on the screen. Use 4-way control to select **Yes** and press ⓞⓚ to confirm.

To delete all files:

1. Press ▶ to switch to **Playback** mode.
2. Use 4-way control to select **Delete** > **All** and press ⓞⓚ.
3. A confirmation message appears on the screen. Use 4-way control to select **Yes** and press ⓞⓚ to confirm.

Slide show

Sets the time interval for presenting a series of captured image and video files (first frame only).

To play a slide show:

1. Press ▶ to switch to **Playback** mode.
2. Press **MENU**.
3. Use 4-way control to select **Single** and press ⓞⓚ.
4. Use 4-way control to select **Interval** and **Repeat**.
5. Select **Start** and press ⓞⓚ to play the slide show.

🖊 To pause the slide show, press ⓞⓚ. Press ⓞⓚ again to resume playback. To stop the slide show, press ⓧ.

Protecting files

Prevents selected files from accidental removal.

To protect a single file:

1. Press ▶ to switch to **Playback** mode.
2. Press **MENU**.
3. Use 4-way control to select **Protect** > **Single** and press ⓞⓚ.
4. Use 4-way control to select and confirm the file that you want to lock.
5. Repeat steps 2~4 to delete other files.

🖊 • A 🔒 icon appears on the protected file.

• To unlock a protected file, select **Unlock**.

To protect multiple files:

1. Press ▶ to switch to **Playback** mode.
2. Press **MENU**.
3. Use 4-way control to select **Protect** > **Select** and press ⊙.
4. The images are displayed in thumbnail view.
5. Use 4-way control and **MENU** to select and mark the files that you want to delete. A 🗄 icon appears on the marked files.
6. Press ⊙. A confirmation message appears on the screen. Use 4-way control to select **Yes** and press ⊙ to confirm.

✏ If the 🗄 icon does not appear on the thumbnail images, this indicates the files are not protected.

To protect all files:

1. Press ▶ to switch to **Playback** mode.
2. Press **MENU**.
3. Use 4-way control to select **Protect** > **Lock All** and press ⊙.
4. The images are displayed in thumbnail view.
5. A confirmation message appears on the screen. Use 4-way control to select **Yes** and press ⊙ to confirm.

✏ You can remove the protection anytime by following the same procedure as shown above. Note that in Step 3 select **Unlock All** to unlock all files.

Voice memo

Inserts a voice annotation to an image file.

To record a voice memo:

1. Press ▶ to switch to **Playback** mode.
2. Use 4-way control to select the image you want to add a voice memo.
3. Press **MENU**.
4. Use 4-way control to select **Voice Memo** and press ⊙.
5. A confirmation message appears on the screen. Use 4-way control to select **Start** and press ⊙ to start voice recording.
6. During recording, press ⊙ to stop recording

✏ • The maximum audio recording time is 30 seconds.

• An 🎤 icon appears on the file that is attached with voice memo.

To play a voice memo:

1. Press ▶ to switch to **Playback** mode.
2. Use 4-way control to select the image with a voice memo.
3. Press ⊙ to play the voice memo.
4. Press ⊙ to stop the playback.

✏ Use the zoom lever to adjust playback volume.

Resizing

Changes an image file to a smaller size, and overwrites the image file or saves it as another new file.

To resize an image:

1. Press ▶ to switch to **Playback** mode.
2. Use 4-way control to select the image you want to resize.
3. Press MENU.
4. Use 4-way control to select **Resize** and press ⊙.
5. Use 4-way control to select the target image size to which you want to resize and press ⊙.
6. A confirmation message appears on the screen. Use 4-way control to select **Save as** and press ⊙ to confirm the change and save the image file.

> • This function is only applicable to photos with 4:3 aspect ratio.
>
> • The resize image is saved as a new file.

DPOF

The Digital Print Order Format (DPOF) setting allows you to select images on the memory card for printing and specify the number of print copies in advance using the camera. This is extremely convenient for sending the images to a photo developing service or for printing on a direct print function compatible printer.

To set up DPOF:

1. Press ▶ to switch to **Playback** mode.
2. Press MENU.
3. Use 4-way control to select **DPOF** and press ⊙.
4. Use 4-way control to select **Single** or **All** and press ⊙.
5. Use 4-way control to select the files that you want to mark for printing (if **Single** selected) and specify the number of copies.
6. Press ⊙ to set the DPOF setting.

> To view the selected file in full screen display, slide the Zoom lever to W ▦. To switch back to thumbnail display, slide the Zoom lever to 🔍T.

To reset DPOF:

1. Press ▶ to switch to **Playback** mode.
2. Press MENU.
3. Use 4-way control to select **DPOF** and press ⊙.
4. Use 4-way control to select **Reset** and press ⊙.
5. A confirmation message appears on the screen. Use 4-way control to select **Yes** and press ⊙ to confirm DPOF resetting.

Copy

Copies files between internal memory and memory card.

> This feature is only available if an unlocked memory card is inserted into the camera.

To copy selected files:

1. Press ▶ to switch to **Playback** mode.
2. Press **MENU**.
3. Use 4-way control to select **Copy** and press ⊙.
4. Choose the copy method, and press ⊙.
   - **Copy to Card**: copy files stored in camera into the memory card.
   - **Copy to Camera**: copy files stored in the memory card into the camera's internal memory.
5. Use 4-way control to select **Selected Images** and press ⊙.
6. Use 4-way control to select the file you want to copy and mark or unmark the file for copying. Once marking is done, press ⊙.
7. Use 4-way control to select **Yes** and press ⊙.
8. A confirmation message appears on the screen. Use 4-way control to select **Yes** and press ⊙.

✏️ To view the selected file in full screen display, slide the Zoom lever to W🔳. To switch back to thumbnail display, slide the Zoom lever to Q T.

To copy all files:

1. Press ▶ to switch to **Playback** mode.
2. Press **MENU**.
3. Use 4-way control to select **Copy** and press ⊙.
4. Choose the copy method, and press ⊙.
   - **Copy to Card**: copy files stored in camera into the memory card.
   - **Copy to Camera**: copy files stored in the memory card into the camera's internal memory.
5. Use 4-way control to select **All Images** and press ⊙.
6. A confirmation message appears on the screen. Use 4-way control to select **Yes** and press ⊙.

Startup Image

Sets your favorite image as the startup image on LCD screen when turning on the camera.

To set startup image:

1. Press ▶ to switch to **Playback** mode.
2. Press **MENU**.
3. Use 4-way control to select **Startup** and press ⊙.
4. Use 4-way control to choose the photo and press ⊙.
   - **Default**: use the default image as the startup image.
   - **My Photos**: pick one of your captured photos in the camera as the startup image.
   - **Off**: skip selection and return to **Playback** mode.

Other settings

Press MENU > ⚙ and then select an option.

Option	Submenu	Description
Display	[Hide Info]	Turns on or off information on LCD screen.
	[Electronic Level]	Turns on or off for electrical leveling assistance of composition.
	[Histogram]	Turns on or off for graphic display of tonal distribution.
	[Guide Line]	Turns on or off to assist photo composition.
	[Movie Frame]	Turns on or off to assist video composition.
Sounds	[Silent]	Sets system sound on or off.
	[Startup]	Sets startup sound on or off.
	[Shutter]	Sets shutter sound on or off.
	[Sys. Volume]	Adjusts system sound volume.
Power Saving	[10 sec.]	For power conservation, the camera automatically enters the standby mode after it has been idle for a period of time. (Press any key to resume.)
	[30 sec.]	
	[1 min.]	
	[3 min.]	
	[Off]	The camera remains on when idle.
LCD Brightness	[Auto]	The LCD brightness is automatically set based on the surrounding environment.
	[High]	The LCD brightness is increased.
	[Normal]	The LCD brightness remains at the default value.
Date & Time	Sets the date and time.	
Language	Selects a language for display menus and other information.	
Create Folder	[Serial]	Entitles created folders in serial numbers
	[Monthly]	Entitles created folders by months
	[Daily]	Entitles created folders by days
File no. Reset	[Yes]	Resets file number counting.
	[Cancel]	
Format	[Yes]	Formats the memory card.
	[Cancel]	
Auto Rotation	[On]	Switches orientation automatically when rotating the LCD display.
	[Off]	Disables auto-rotation feature.
TV Setting	[NTSC]	Sets output television encoding system
	[PAL]	
Remote Control	[On]	Enables IR receiver.
	[Off]	Disables IR receiver.

Option	Submenu	Description
Reset All	Yes	Resets the entire menu and button operation settings to initial defaults except settings of **Date & Time**, **Language**, **TV**, and Manual White Balance
	Cancel	
Firmware		Disclose firmware version

Accessory: remote control (GH680F/GH688F only)

- Remove the insulation spacer at the bottom back of the remote control before first using.
- Enable the camera IR receiver:
  Switch the power lever by the mode dial to **ON**.
  Press ▶ to switch to **Playback** mode.

  Press **MENU** > ⚙ and use 4-way control to select **Remote Control** and press ㉮.
  Use 4-way control to select **On** and press ㉮.
- Please keep the remote control in line of sight to the camera IR receiver for optimal reception.

Remote Control Buttons	Preview	Playback
	Capture	N/A
	Start/Stop recording	N/A
	N/A	Previous image/Rewind video
	N/A	Next image/Forward video
	Zoom In	Enlarge image
	Zoom Out	Shrink image/Thumbnail view
	N/A	Start/Stop playback
	Set preview mode to playback mode	Set playback mode to preview mode

Accessory: lens hood

Using lens shades with your camera can effectively prevent stray light and thus enhance image clarity and color restoration. Your camera comes with a lens shade, and you may apply it to the camera with petals forward or backward for photography or temporary placement.

Applying the lens shade to your camera does not interfere with the usage of the lens cover on the camera.

Connection to the camera

Wired connection

Connecting the camera to a TV set

You can play files in your camera on TV using an AV cable.

> • Before connecting the camera to TV, set the **TV Out** setting to match the TV's video output format. For details on changing the input source of the TV, refer to the TV's user's menu.
>
> • Some TV sets may not recognize the video format (1080p, 30fps). Please check the user manual that came with the TV set for more assistance.

To connect the camera to TV using AV cable:

1. Open the USB/AV port cover.
2. Connect the TV set and camera.
   - Connect the end of the smaller plug of an AV cable to the USB/AV port of the camera.
   - Connect the yellow video plug and the white audio plug of the AV cable to a video-input jack and an audio-input jack (left channel) on your TV set.
3. Turn on the TV set, and then switch the input source of the TV set to "AV".
4. Turn on the camera.
5. Follow the on-screen instructions to operate the camera via the TV set.

Connecting the camera to a computer

You can connect the camera to a desktop or a laptop to transfer, view, print, or edit files.

To connect the camera to a computer:

1. Open the USB/AV port cover.
2. Connect the end of the smaller plug of the USB cable to the USB/AV port of the camera.
3. Turn on the camera.
4. Connect the other end of the USB cable to an available USB port on your computer.
5. On your computer, a removable disk icon appears. Click this icon to access the files in your camera.

> When connecting the camera to a computer, please use the original accessory of the USB cable to avoid possible system conflicts and damage to the camera.

Connecting the camera to a printer

In addition to printing images via a computer's printer or a photo center, you can choose to print using a PictBridge-compatible printer.

Printing with PictBridge

You can directly print images by connecting your camera to a PictBridge-compatible printer without 1 computer.

To print images from a PictBridge-compatible printer:

1. Open the USB/AV port cover.

2. Connect the end of the smaller plug of the USB cable to the USB/AV port of the camera.

3. Connect the other end of the USB cable to an available USB port on your printer.

4. Turn on the printer. Wait for a while until it finishes starting up and is ready to print.

5. Turn on the camera.

6. On the camera, use 4-way control to select from **Print One**, **Print All**, **Print Index**, and **DPOF**. Press ⊙ to launch the copy setting.

    • **Print One**: to print one image.
    • **Print Select**: to print selected images.
    • **Print All**: to print all images at a time.
    • **DPOF**: to print only the images with DPOF tag.

. .

To set the printing settings on **Print One**:	1. Use 4-way control to select **Print One** and press ⊙. The images are displayed in thumbnail view.
	2. Use 4-way control to select the file that you want to mark for printing and to specify the number of copies.
	3. Press ⊙ to enter the copy settings.
	4. Use 4-way control to select **Paper Size** and **Quality**.
	5. After all settings are completed, use 4-way control to select **Print** and press ⊙ to start printing
To set the printing settings on **Print Select**:	1. Use 4-way control to select **Print Select** and press ⊙. The images are displayed in thumbnail view.
	2. Use 4-way control to select the files that you want to mark for printing and to specify the number of copies.
	3. Press ⊙ to enter the copy settings.
	4. Use 4-way control to select **Paper Size** and **Quality**.
	5. After all settings are completed, use 4-way control to select **Print** and press ⊙ to start printing
To set the printing settings on **Print All**:	1. Use 4-way control to select **Print All** and press ⊙. The images are displayed in thumbnail view.
	2. All images are marked for printing and the number of printing copies is automatically set to 1.
	3. Use 4-way control to view the files and adjust the number of copies.
	4. Press ⊙ to enter the copy settings
	5. Use 4-way control to select **Paper Size** and **Quality**.
	6. After all settings are completed, use 4-way control to select **Print** and press ⊙ to start printing

• To view the selected image in full screen display, slide the Zoom lever to W⊞. To switch back to thumbnail display, slide the Zoom lever to ⊙T.

• The maximum number of copies is 99.

To print all files with DPOF tag:

1. Use 4-way control to select **DPOF** and press ⊛.
2. Use 4-way control to view the files and adjust the number of copies.
3. Use 4-way control to select **Paper Size** and **Quality**.
4. After all settings are completed, use 4-way control to select **Print** and press ⊛ to start printing

• The above procedure may vary depending on the printer type you are using.

• If you connect the camera to your printer while the printer is still starting up, the camera will be automatically turned off.

• Failure to follow the above procedure will make the camera show an error message. Please disconnect the camera and the camera will be automatically turned off.

Wireless connection (GH680F/GH688F only)

To smart devices

Follow the steps below to establish a direct connection between the camera and your smart device.f

1. Download the app "BenQ Camera" to your smart device from the application store to engage the connection between the camera and your smart device.
2. On the camera, switch the power lever by the mode dial to **Wi-Fi**, and the Wi-Fi main menu of the camera is prompted on the LCD screen.

3. Use 4-way control and press ⓞⓚ key to select **Smart Device**. The camera will be standing by for connection to your smart device.

4. On your smart device, use Wi-Fi settings to search for the SSID of the camera as displayed on the LCD screen. The SSID comes without any password by default. (You may skip this step if with Android.)

5. Tap on the icon of the app "BenQ Camera", and the app should prompt a message of connection in progress.

6. On the camera, use 4-way control and press ⓞⓚ key to confirm the connection request from your smart device. Now your camera is set for wireless connection with your smart device.

Using your smart device as a remote controller

On your smart device, tap **Smart Control** or the icon [📱] to use your smart device as a remote controller of the camera.
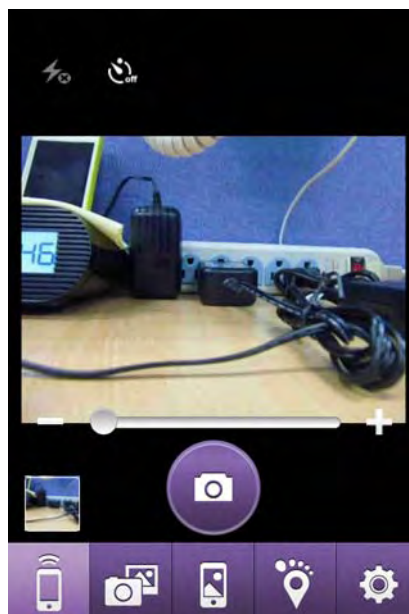
1. Flash (enabled only when the flash on the camera opened)
2. Timer

   Tap to select desired timer and tap on the icon to begin counting down to shot.

3. Zoom Bar

   Tap and drag left or right for zoom in and out.

4. Shutter

   Tap to take a photo or use with .

5. Previous Photo Taken

   Tap to download the last taken photo stored in the camera to your smart device. A message of storing the photo to your smart device will be prompted.

You may set instant preview after taking a photo by tapping the icon >**Smart Control**>**Instant preview** to enable.

Using your smart device as a photo viewer

On your smart device, tap **View photo in camera** or the icon to use your smart device as a photo viewer of the camera.
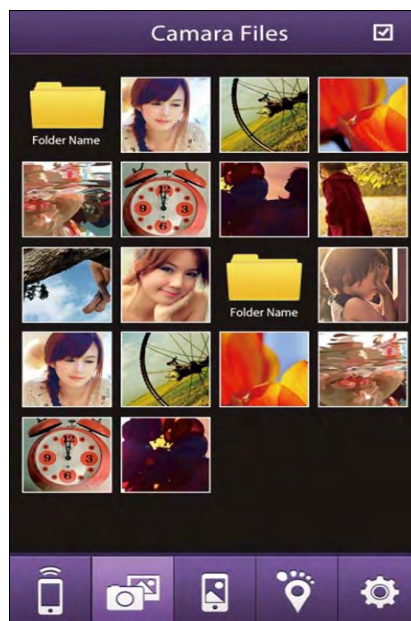
- For viewing one photo, tap the photo and the photo will begin to be downloaded from the camera to your smart device.

- For viewing multiple photos at time, first tap and then pick desired photos. Tap

   to download photos from the camera to your smart device. You should see progress bar for photos downloading and waiting to be downloaded.

Once downloaded, you should see **View Photo** by the icon of the photo. Press **View Photo** to view in large format.

You may share downloaded photos at your smart device by tapping [ ], and follow prompted options on your smart device for further procedures.

Using your smart device as a GPS logger

On your smart device, tap **GPS recorder** or the icon [ ] to use your smart device as a GPS recorder of the camera.
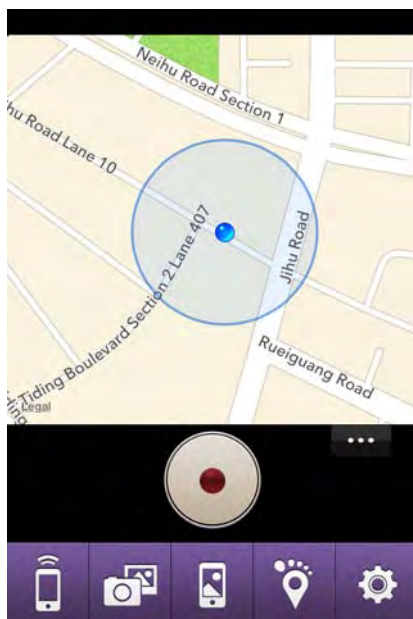
Tap the icon [ ] to begin GPS data logging.

Tap the icon [ ] for **Sending all GPS logs to the camera** or **Clean all GPS logs**.

• You may set GPS mode as **Walk**, **Bike**, **Drive**, or **Manually** by tapping the icon [ ] >**GPS**>**Walk** to select.

• You may also send GPS logs to the desired e-mail address by tapping the icon [ ]>**GPS**>**Send GPX to email** to input e-mail account > **Send**.

To your camera

Only by having completed your BenQ Cloud account setup, will you be able to experience the complete Wi-Fi enjoyment at this camera.

Becoming a member of BenQ Cloud

1. Use the browser to log onto cloud.benq.com, and click **Signup Now.**

   You may also log onto BenQ Cloud by scanning the QR code below.

2. Fill up all the required information by the order and the direction of arrows.
3. Tick **Privacy Policy**.
4. Click **New Member**.

5. Click **More Space**.

6. Enter your coupon code as printed on the product key sheet, and click **More space.**

Now you have 5GB of storage space at BenQ Cloud free of charge for **2 years**. A notice of your service extension on BenQ Cloud will be issued before the expiration date.

Tethering social network service settings with BenQ Cloud
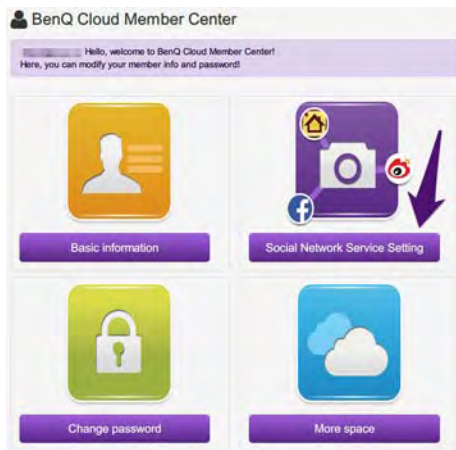
1. When logged on to cloud.benq.com, click **Social Network Service Setting**.
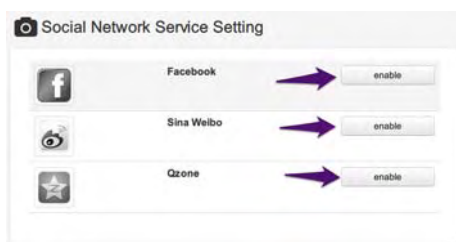
2. Click **enable** of your desired social network service.
3. You will be directed to the web page of the desired social network service to authorize BenQ Cloud and the service to be tethered together.
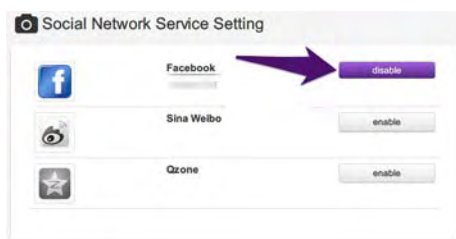
4. Once authorized, you should see the desired social network service being colored.

💡 Click **disable** and **OK** if you wish to untether BenQ cloud and the service.

Photo sharing via BenQ Cloud over Wi-Fi on your camera

Switch the power lever by the mode dial to **Wi-Fi**, and the Wi-Fi main menu of the camera is prompted on the LCD screen.
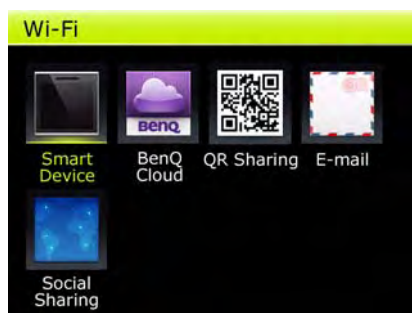
- Use 4-way control and press 🆗 key to select desired option.
- For **Smart Device**, please refer to Wireless connection (GH680F/GH688F only).

✏️ • You will be prompted to confirm the current status of wireless connection.

• You will be asked to enter your BenQ Cloud ID and password. Tick **Remember** to save time on re-entering ID and password.

• To share on
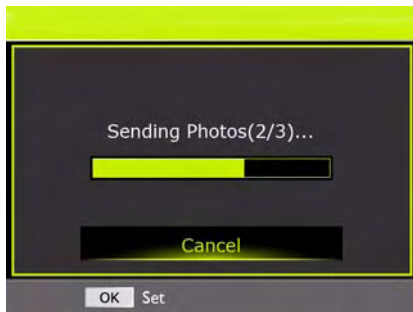
1. Once selected **BenQ Cloud,** you will be directed to the browse mode to select photos your wish to share.
2. Use 4-way control and press MENU to select photos. Press OK when done.

3. A progress bar will be displayed for current delivery status.

4. Once all of selected photos have seen sent to **BenQ Cloud**, and a status message is prompted on the LCD screen.
5. Press OK to go back to browse mode.

• To share with
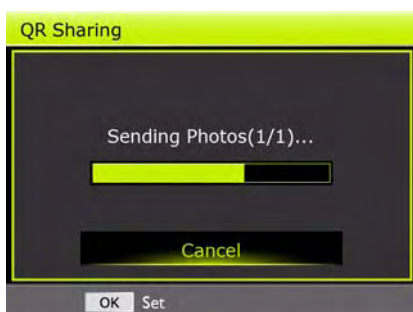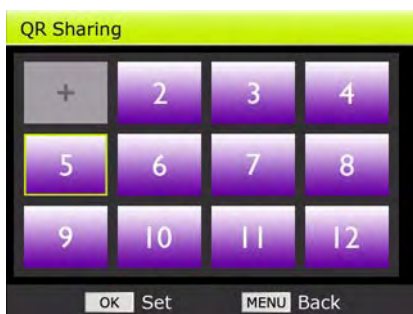
1. Once selected **QR Sharing,** you will be directed to the browse mode to select photos your wish to share.
2. Use 4-way control and press MENU to select photos. Press OK when done. Selected photos will be sent to **BenQ Cloud** to link up to the QR sharing service.

3. A progress bar will be displayed for current delivery status.

4. After selected photo sent to **BenQ Cloud**, a QR code valid for 24 hours will be generated on the LCD screen. Now you can share the QR code to people with smart devices scanning for it to get the photo you wish to share with them.
5. Press ⊙ to go back to browse mode.

• To share on

1. Once selected **E-mail,** you will be directed to entered e-mail addresses in the fields of the sender and the recipients.
2. Every entered address will be saved in the history automatically. Press ▼ to use addresses in the history. Press ⊞ to add a field for the next recipient, and press ⊠ to remove unwanted recipients. Press ⊙ to go to browse mode to select photos to email with, or press MENU to go back to the Wi-Fi main menu.

3. Use 4-way control and press MENU to select photos. Press ⊙ when done and an email attached with selected photos is on its way to the recipients.

4. A status message of delivery is prompted on the LCD screen. Press ⊙ to go back to browse mode.

• To share on

1. Once selected **Social Sharing,** you will be directed to further select which of social networks to share photos with.

2. After selected you desired social network service, you will be directed to the browse mode to select photos to share with.

3. Use 4-way control and press MENU to select photos. Press ⊙.

4. A progress bar will be displayed for current delivery status.

5. A status message of delivery is prompted on the LCD screen. Press ⊙ to go back to browse mode.

Of your camera network settings

To configure your camera network settings, on your camera, switch the Power lever by the mode dial to **Wi-Fi**, and the Wi-Fi main menu of the camera is prompted on the LCD screen.
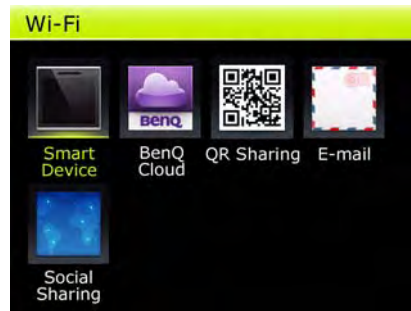
If pressed MENU, you shall see listed items including **Wi-Fi ID**, **Q Key, Send Image Resolution**, **Network, MAC address**, and **Logout Benq Cloud** (exposed only when logged onto BenQ Cloud) in the **Wi-Fi Menu**.

Use 4-way control and press 🆗 key to select desired item, or press MENU to leave **Wi-Fi Menu**.

Wi-Fi ID

Wi-Fi ID is used for recognition when using smart devices to directly connect to the camera.

To configure **Wi-Fi ID**, use 4-way control and press 🆗 to enter **Wi-Fi ID**.

Next, the SSID of the camera is displayed, and the SSID password can be changed at this time by pressing 🆗. A virtual keyboard will appear. Use 4-way control and press 🆗 key to select a desired character at a time. press **DONE** when password changing completed or press MENU to go back to previous menu.

- Default SSID of the camera is "BenQ_Model Name_MAC address".
- The MAC Address is six pairs of hexadecimal digits separated by colons in transmission order (e.g. 01:23:45:67:89:AB). The character A ~ F is in capital.

Q key

Q Key is a convenience when a short cut is needed to reach a certain function when switched the power lever to **Wi-Fi** and browsing photos in the camera,

To configure **Q Key**, use 4-way control and press 🆗 to enter **Q Key.** Next, use 4-way control and press 🆗 to select desire function from **Smart Device** (Default), **BenQ Cloud**, **QR Sharing**, **E-mail**, **Weibo**, **QQ**, or **Facebook** to assign to **Q Key.**

Send image resolution

Use 4-way control and press 🆗 to enter **Send Image Resolution.**

Choices of image resolution will be prompted as Original, 5M, 2M, PC, and VGA. Use 4-way control and press 🆗 to select.

Actual size of photos varies from formats.

Network

Use 4-way control and press ⊙ key to enter **Network**

A list of SSIDs will be listed in **Wi-Fi Network Select** if available. Use 4-way control and press ⊙ key to scroll and select **Refresh** for more SSIDs, your desired SSID, **Add network**, or **WPS button connection**.

• Refresh

Once selected, a progress bar of network searching is prompted on the LCD screen

When finished searching, you will be directed back to **Wi-Fi Network Select**.

• Add network

Once selected, the **Add network** menu appears on LCD screen with items including **SSID**, **Security**, and **Network Password**.

To add a network, at first, selected **SSID**, a virtual keyboard will appear. Use 4-way control and press ⊙ key to select a desired character at a time. press **DONE** when completed or press MENU to go back to previous menu.

Next, selected **Security**, use 4-way control to scroll and select and press ⊙ key to scroll and select wireless security measures from Open, WEP, WPA, WPA2, TKIP, AES, EAP, 802.1x, LEAP, WPA-PSK, RADIUS, WPA(Enterprise), WPA(Personal), WPA2 Mixed, or CCMP.

Finally, select **Network Password**, again, a virtual keyboard will appear. Use 4-way control and press ⊙ key to select a desired character at a time. press Q key to connect to the network or press MENU to go back to previous menu.

• WPS button connection
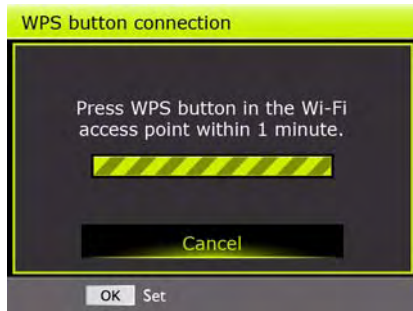
Once selected, a message is prompted on the LCD screen to notify you to press the WPS button on your wireless access point.

A warning message of connection time out will be prompted on the LCD screen if failed to initialize connection in one minute.

MAC address

Use 4-way control and press ⊙ key to enter **MAC Address.**
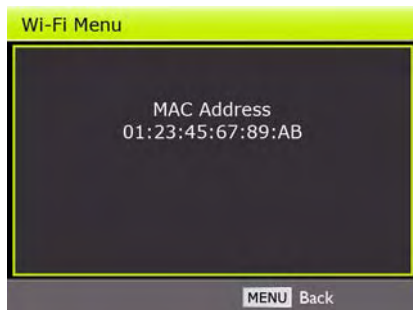
The MAC Address of this camera is prompted on the LCD screen. Press MENU to go back to Wi-Fi Menu.

Logout BenQ Cloud

Use 4-way control and press ⊙ key to enter **Logout BenQ Cloud.**

Logout BenQ Cloud is available when having logged onto BenQ Cloud.

A status message to confirm logging out is prompted on the LCD screen. Use 4-way control and press ⊙ key to confirm.

After logged out, Logout BenQ Cloud will be hidden from Wi-Fi Menu.

Specifications

Sensor	Sony 20 Mega Pixels, 1/2.3 inch CCD
Zoom	Optical: 35X Digital: Up to 8X (Preview) / Up to 10X (Playback) Wise: Up to 3X
Lens	f = 4.62 (W) ~ 152.48 (T) mm F= 3.0 (W) ~ 5.9 (T) (f = 25 ~ 875 mm, 35 mm equivalent)
Focus Range	Normal: W = 30 cm ~ Infinity; T = 200 cm ~ Infinity Macro: W = 1 cm ~ 200 cm; T = 150 cm ~ Infinity
LCD	3.0" 460k pixels Swivel LCD
Image Resolution	20M/ 14M / 10M / 8M /5M / 3M / VGA / 9M(16:9) / 2M(16:9) / 2992*2992(1:1)
Movie Mode	1280 x 720 / 640 x 480 with 30fps / 15fps Continuous recording with sound
Shutter Speed	Auto: 1/2000 ~ 1 sec. Manual mode: 1/2000 ~ 15 sec.
White Balance	Auto / Daylight / Cloudy / Tungsten / Fluorescent_1 / Fluorescent_2 / Manual
Exposure	-2.0 ~ +2.0 EV (1/3EV step)
ISO	Auto, 100, 200, 400, 800, 1600, 3200, 6400
Flash	Auto Flash / Red-eye Reduction / Forced On / Slow Sync / Forced Off
Drive mode	Off / 10 sec. / 2 sec. / 10+2 sec.
Power Source	CIPA approximately 400 (based on bundled Li-ion battery)
Storage Type	Built-in approx. TBC (+-5%) SD (up to 4GB) / SDHC (up to 32GB) / SDXC (> 64GB)
File Format	Still Image: JPEG (EXIF 2.3 compatible); DCF compatible; Support DPOF Video: AVI Audio: WAV Sound: Stereo sound
Dimensions / Weight	132.2 x 98.2 x 91.1 mm 510 g (w/o battery & SD card) (TBC)
Interface	Digital output: USB 2.0 compatible Audio / Video output (NTSC/PAL) PictBridge compatible

Accessories	• **Standard:**
	  - USB Cable
	  - Quick Guide
	  - Neck Strap
	  - Li-ion Battery
	  - Lens Cover
	  - Lens Strap
	  - USB Adapter**:**
	  - Pouch
	  - Remote Control (GH680F exclusive)

• Available accessories depend on the actual items shipped and may vary from the list above.

• All information, designs, and specifications are subject to change without prior notice.

Troubleshooting and service information

If your camera cannot operate normally, see the frequently encountered problems and solutions listed below. If the problem persists, contact your nearest service center or technical support.

Problem	Cause	Solution
The camera cannot power up.	There is no battery or the battery is not inserted correctly.	Insert the battery correctly.
	The battery has no power.	Replace the battery.
	Battery type might be wrong.	Use correct battery type.
The battery power is draining quickly.	Battery type setting on the camera might be wrong.	Select the correct battery type setting on the camera.
	The external temperature is extremely low.	--
	Many shots are being captured in dark places, requiring a flash.	--
The battery or camera is warm.	The camera or flash was used continuously over a long period of time.	--
The LCD screen is black.	The lens cover is on.	Remove the lens cover.
No image is displayed on the screen and the camera beeped four times.	The lens cover is on.	Remove the lens cover.
I cannot adjust the flash mode.	The flash is closed.	Open the flash.
The flash does not fire.	The camera flash is turned off.	Set the flash to Auto Flash.
	The light source is sufficient.	--
Even though the flash fired, the image is dark.	The distance to the subject is greater than the flash's effective range.	Get closer to the subject and shoot.
The image is too bright or too dark.	The exposure is excessive or inadequate.	Reset exposure compensation.
I cannot format a memory card.	The memory card is write-protected.	Remove the write protection.
	End of the memory card life.	Insert a new memory card.
I cannot download images from the camera to my computer.	The free space on the hard drive of your computer is insufficient.	Ensure there is enough space in your hard drive capable of loading images equal to or greater than the size of the memory card in the camera.
	There is no power being supplied to the camera.	Replace the battery.

Problem	Cause	Solution
The camera does not shoot even when pressing the shutter.	The battery is running low.	Replace the battery.
	The camera is not in Capture mode.	Switch to Capture mode.
	The shutter was not pressed all the way down.	Press the shutter all the way down.
	The internal memory or memory card runs out of space.	Insert a new card or delete unwanted files.
	The flash is recharging.	Wait until the flash mode icon, indicated on the screen, stops flashing.
	The camera does not recognize the memory card.	Format the memory card before the initial use or before using with another camera.
I cannot print images with PictBridge-complian t printers.	The camera is connected to the printer when the camera is powered off.	Connect the camera to the printer, turn on the camera, and then select **Printer**.

Technical support

For technical assistance, free driver updates, product information, and news releases, visit our website:

http://www.BenQ.com