Chapter 3

Playback/Editing

Learn about how to play back and edit photos and videos.
Refer to chapter 6 for editing files on a PC.

Searching and managing files

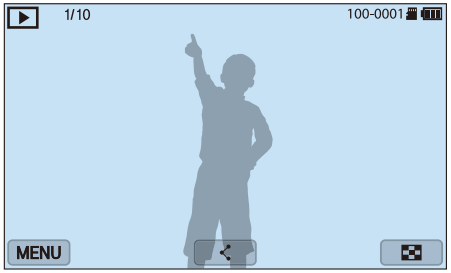
Learn how to view photo and video thumbnails and how to protect or delete files.

If you perform no operations for a while, information and icons on the screen disappear. When you operate the camera again, they will reappear.

Viewing photos

1 Press [▶].

- The most recent file you captured will be displayed.



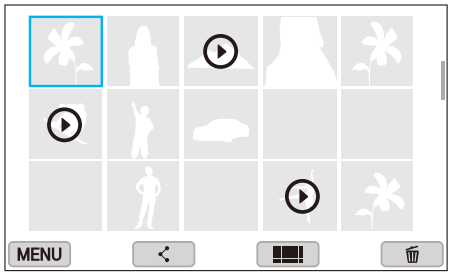
2 Press [⏱/AF] to scroll through files.

- You can also drag the image left or right to move to another file.

You may not be able to edit or play back files that were captured with other cameras, due to unsupported sizes or codecs. Use a computer or another device to edit or play back these files.

Viewing image thumbnails

In order to search for photos and videos you want, convert to the thumbnail view by pressing [⇄] or touching [⊞] in Playback mode. The thumbnail view displays multiple images at a time so that you can easily look through items you wish to find. You can also classify and display files by category, such as date or file type.



In thumbnail view, press [MENU] → [▶] → **View** → an item to select the thumbnail view mode.

Viewing files by category

1 In the thumbnail view, press [MENU] → [▶] → **Filter** → a category.

* Default

Option	Description
All*	View files normally.
Date	View files by the date they were saved.
File Type	View files by the file type.

2 Select a list to open it.

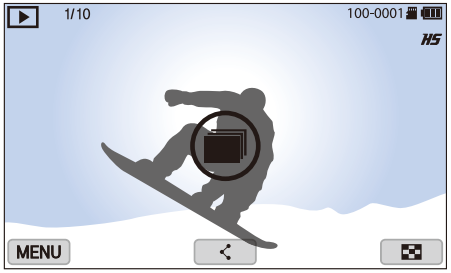
3 Select a file to view it.

Viewing files as a folder

Continuous and burst shots appear as a folder. Selecting a folder will play back all photos automatically. Deleting a folder will delete all photos in the folder.

1 In Playback mode, press [⏱/AF] to move to a desired folder.

- You can also drag the image left or right to move to a desired folder.
- The camera will automatically play back photos in the folder.



2 Press [OK] to open the folder.

- You can also touch the folder on the screen to open the folder.

3 Press [/AF] to move to another file.

- You can also drag the image left or right to move to another file.

4 Press [OK] to return to Playback mode.

- You can also touch to return to Playback mode.

Protecting files

Protect your files from accidental deletion.

1 In Playback mode, scroll to a file.

2 Press [MENU] → → **Protect** → **On**.

You cannot delete or rotate a protected file.

Deleting files

Delete files in Playback mode and secure more space on your memory card. Protected files are not deleted.

Deleting a single file

You can select a single file and delete it.

1 In Playback mode, select a file, and then press [🗑].

2 When the pop-up message appears, select **Yes**.

Deleting multiple files

You can select multiple files and delete them.

1 In Playback mode, press [MENU] → [▶] → **Delete** → **Multiple Delete**.

- Alternatively, in thumbnails view, press [🗑], and then select files to delete.

2 Select files you want to delete by pressing [⏱/AF], and then press [OK].

- Press [OK] again to cancel your selection.

3 Press [🗑].

4 When the pop-up message appears, select **Yes**.

Deleting all files

You can delete all files on the memory card at once.

1 In Playback mode, press [MENU].

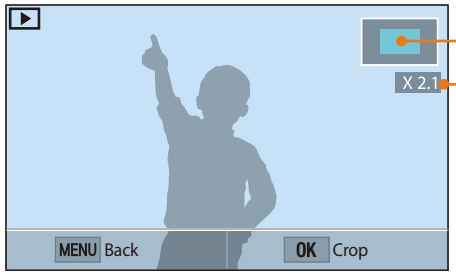
2 Select [▶] → **Delete** → **Delete All**.

3 When the pop-up message appears, select **Yes**.

Viewing photos

Enlarging a photo

You can enlarge photos when viewing them in Playback mode. Pinch your fingers together or spread them apart on the screen to reduce or enlarge a photo. Drag the photo to move the magnified area. You can also use the Trim function to extract the portion of the image displayed on the screen and save it as a new file.



Magnified area

Magnification (The maximum magnification may differ by resolution.)

To	Do this
Move magnified area	Press [DISP/ / / AF].
Crop the enlarged image	Press [OK]. (saved as a new file)
Return to the original image	Press [MENU].

Double-tap an area to enlarge it quickly.

Viewing a slide show

You can view photos in a slide show and apply various effects to the slide show.

1 In Playback mode, press [MENU].

2 Select → **Slide Show Options**.

3 Select a slide show effect option.

- Skip to step 4 to start a slide show with no effects.

* Default

Option	Description
Play Mode	Set whether or not to repeat the slide show. (**One Play***, **Repeat**)
Interval	• Set the interval between photos. (**1 sec***, **3 sec**, **5 sec**, **10 sec**) • Intervals can only be set when the scene change effect is **Off**.
Effect	• Set a scene change effect between photos. • Select **Off** to cancel effects.

4 Press [MENU].

5 Select **Start Slide Show**.

6 View the slide show.

- Press [OK] to pause.
- Press [OK] again to resume.
- Press [MENU] to stop the slide show and return to Playback mode.

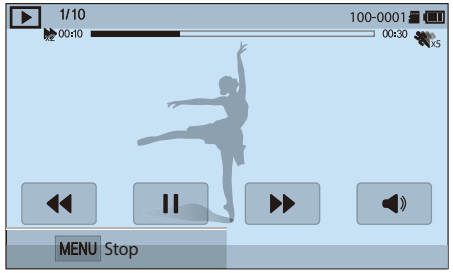
Auto rotating

With Auto Rotate on, the camera automatically rotates photos you have captured vertically so they fit the screen horizontally.

To set auto rotate options,	In Playback mode, press [MENU] → [▶] → **Auto Rotate** → an option.

Playing videos

In Playback mode, you can play a video, capture an image from a video, or crop a video to save as another file.



Icon	Description
⏮⏪	View previous file/Scan backward. (Each time you touch the icon while playing the video, you change the scan speed in this order: 2X, 4X, 8X.)
⏸▶	Pause or resume playback.
⏭⏩	View next file/Scan forward. (Each time you touch the icon while playing the video, you change the scan speed in this order: 2X, 4X, 8X.)
🔊	Adjust the volume or mute the sound.

Scanning backward or forward

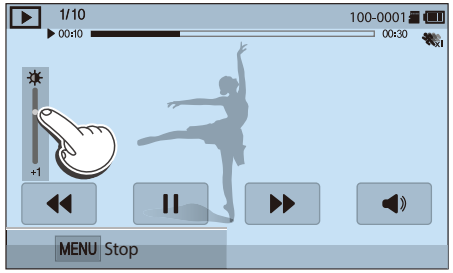
To scan backwards or forwards through a video file while it is playing, use one of the following methods.

- Touch ⏪⏩. Each time you touch the icon, you change the scan speed in this order: 2X, 4X, 8X.
- Press [/AF]. Each time you press the button, you change the scan speed in this order: 2X, 4X, 8X.
- Drag the handles that appear on the progress bar to the left or right. You can change the playback position in the video.
- Drag an area on the screen to the left or right. You can change the playback position in the video.

Adjusting the brightness of a video

Adjust the brightness of a video while playing it.

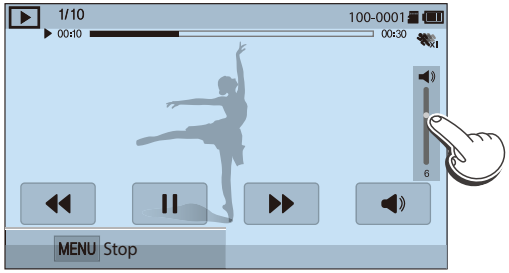
To adjust the brightness of a video,	Touch the left half of the display → drag upward or downward.



Adjusting the volume of a video

Adjust the volume of a video while playing it.

To adjust the volume of a video,	Touch the right half of the display → drag upward or downward.



You can also press [DISP/] to adjust the volume of a video.

Trimming a video during playback

1 In Playback mode, scroll to a video, and then press [MENU].

2 Select **Trim Movie**.

3 Press [OK] or touch ▶ to start playing the video.

4 Press [OK] or touch ❚❚ at the point where you want the trimming to begin.

5 Touch **Start Point**.

6 Press [OK] or touch ▶ to resume playing the video.

7 Press [OK] or touch ❚❚ at the point where you want the trimming to end.

8 Touch **End Point**.

9 Touch **Trim** to trim a video.

- You can adjust the scene to be cropped by dragging the handles that appear on the progress bar.

10 When the pop-up message appears, select **Yes**.

- The original video should be at least 10 seconds long.
- The camera will save the edited video as a new file and leave the original video intact.
- The point where you want the trimming to begin can be selected 2 seconds after playback starts.

Capturing an image during playback

1 While viewing a video, press [OK] or touch ❚❚ at the point where you want to capture an image.

2 Touch **Capture**.

- The resolution of the captured image will be the same as the original video.
- The captured image is saved as a new file.

Editing photos

Edited photos are saved as new files under different file names. Photos captured in some modes cannot be edited with the Image Edit function.

To edit images,	In Playback mode, scroll to a photo, and then press [MENU] → [▶] → **Edit Image** → an option.

- Some images may not be edited with the Image Edit function. In this case, use the supplied image editing software.
- RAW files cannot be edited with the Image Edit function. In this case, use the supplied image editing software.
- The camera will save edited photos as new files.
- When you edit photos, the camera will automatically convert them to a lower resolution. Photos that you rotate or resize manually are not automatically converted to a lower resolution.
- You cannot edit photos while viewing files as a folder. Open the folder and select a photo to edit each photo.

Cropping a photo

1 Touch [✎] → [✂].

2 Drag the corner of the box to adjust the size of the area.

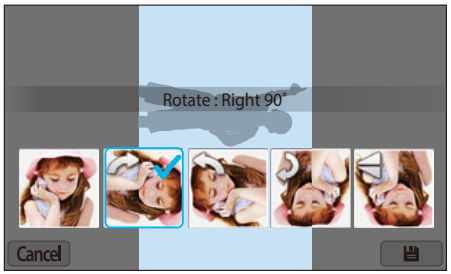
3 Drag the box to move the location of the area.

4 Press [OK] or touch [💾] to save.

Rotating a photo

1 Touch → .

2 Touch an option.



3 Press [OK] or touch to save.

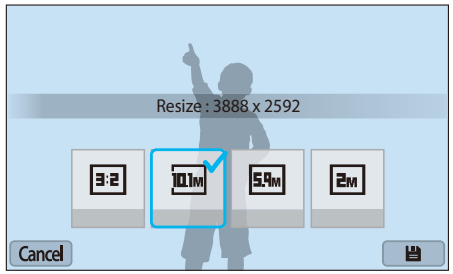
- You can also rotate a photo in Playback mode by pressing [MENU], and then selecting → **Rotate** → a desired option.
- The camera will overwrite the original file.

Resizing photos

Change the size of a photo and save it as a new file.

1 Touch → .

2 Touch an option.



3 Press [OK] or touch to save.

Available resize options differ depending on the original size of the photo.

Adjusting your photos

You can correct captured photos by adjusting the brightness, contrast, or color.

1 Touch .

2 Touch an adjusting option.

- If you selected (Auto adjustment), skip to step 6.

Icon	Description
	Original (Reset to the original image)
	Auto adjustment
	Brightness
	Contrast
	Saturation
	RGB adjustment
	Color Temperature
	Exposure

3 Press [/AF] to adjust the option.

- You can also drag the slider or touch +/- to adjust the option.

4 Press [OK] or touch Done.

5 Touch Done.

6 Press [OK] or touch to save.

Retouching faces

1 Touch → .

2 Press [/AF] to adjust the option.

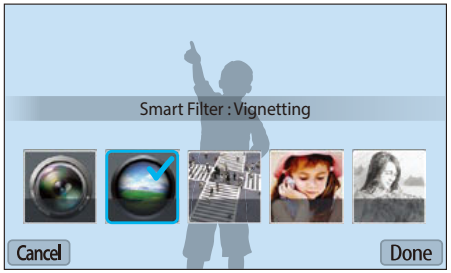
- You can also drag the slider or touch +/- to adjust the option.
- As the number increases, the skin tone becomes brighter and smoother.

3 Press [OK] or touch to save.

Applying Smart Filter effects

Apply special effects to your photos.

1 Touch , and then touch an option.



Option	Description
Off	No effect
Vignetting	Apply the retro-looking colors, high contrast, and strong vignette effect of Lomo cameras.
Miniature	Apply a tilt-shift effect to make the subject appear in miniature.
Soft Focus	Hide facial imperfections or apply dreamy effects.
Sketch	Apply a pen sketch effect.
Fish-eye	Distort close objects to imitate the visual effect of a fisheye lens.
Classic	Apply a black and white effect.
Retro	Apply a sepia tone effect.
Oil Painting	Apply an oil painting effect.
Cartoon	Apply a cartoon effect.
Ink Painting	Apply ink sketching effect.
Cross Filter	Add lines that radiate outward from bright objects to imitate the visual effect of a cross filter.
Zooming Shot	Blur the edges of a photo to emphasize the subjects in the center.

2 Press [OK] or touch Done.

3 Touch to save.

Chapter 4

Wireless network

Learn how to connect to wireless local area networks (WLANs) and use functions.

Connecting to a WLAN and configuring network settings

Learn to connect via an access point (AP) when you are in a range of a WLAN. You can also configure network settings.

Connecting to a WLAN

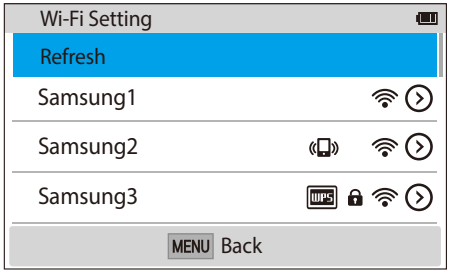
1 On the Mode screen, select **Wi-Fi**.

2 Select , , , , or .

3 Follow the on-screen instructions until the Wi-Fi Setting screen appears.

- In some modes, press [MENU], and then select **Wi-Fi Setting**.
- The camera automatically searches for available AP devices.

4 Select an AP.



- Select **Refresh** to refresh the list of connectable APs.
- Select **Add wireless network** to add an AP manually. The AP name must be in English to add the AP manually.

Icon	Description
	Ad hoc AP
	Secured AP
	WPS AP
	Signal strength
	Press [AF] or touch to open network setting options.

- When you select a secured AP, a pop-up window appears. Enter the required passwords to connect to the WLAN. For information about entering text, refer to "Entering text". (p. 122)
- When a login page appears, refer to "Using the login browser". (p. 120)
- When you select an unsecured AP, the camera will connect to the WLAN.
- If you select a WPS profile supported AP, select → **WPS PIN connection**, and then enter a PIN on the AP device. You can also connect to a WPS profile supported AP by selecting → **WPS button connection** on the camera, and then pushing the **WPS** button on the AP device.
- If a pop-up message about data collection regulations appears, read and agree to it.

Setting network options

1 In the Wi-Fi Setting screen, move to an AP, and then press [AF] or touch ⊙.

2 Select each option, and then enter the required information.

Option	Description
Network Password	Enter the network password.
IP Setting	Set the IP address automatically or manually.

Manually setting the IP address

1 In the Wi-Fi Setting screen, move to an AP, and then press [AF] or touch ⊙.

2 Select **IP Setting** → **Manual**.

3 Select each option, and then enter the required information.

Option	Description
IP	Enter the static IP address.
Subnet Mask	Enter the subnet mask.
Gateway	Enter the gateway.
DNS Server	Enter the DNS address.

Using the login browser

You can enter your login information via the login browser when connecting to some APs, sharing services, or cloud servers.

Icon	Description
⮌	Close the login browser.
←	Move to the previous page.
→	Move to the next page.
✕	Stop loading the page.
⟲	Reload the page.

- You may not be able to select some items depending on the page you connected to. This does not indicate a malfunction.
- The login browser may not close automatically after you log into some pages. If this occurs, close the login browser by touching ⮌, and then proceed with the desired operation.
- It may take longer to load the login page due to the page size or network speed. If this occurs, wait until the login information input window appears.

Network connection tips

- Some Wi-Fi features are not available if you do not insert a memory card.
- The quality of the network connection will be determined by the AP.
- The further the distance between your camera and the AP, the longer it will take to connect to the network.
- If a nearby device is using the same radio frequency signal as your camera, it may interrupt your connection.
- If your AP name is not in English, the camera may not be able to locate the device or the name may appear incorrectly.
- For network settings or a password, contact your network administrator or network service provider.
- If a WLAN requires authentication from the service provider, you may not be able to connect to it. To connect to the WLAN, contact your network service provider.
- Depending on the encryption type, the number of digits in the password may differ.
- A WLAN connection may not be possible in all surroundings.
- The camera may display a WLAN enabled printer on the AP List. You cannot connect to a network via a printer.
- You cannot connect your camera to a network and a TV simultaneously.
- Connecting to a network may incur additional charges. Costs will vary based on the conditions of your contract.
- If you cannot connect to a WLAN, try another AP from the available AP list.
- A login page may appear when you select free WLANs provided by some network service providers. Enter your ID and password to connect to the WLAN. For information about registering or the service, contact the network service providers.
- Be cautious when you enter personal information for an AP connection. Do not enter any payment or credit card information on your camera. The manufacturer is not liable for any problem caused by entering such information.
- Available network connections may differ by country.
- The WLAN feature of your camera must comply with radio transmission laws in your region. To ensure compliance, use the WLAN feature only in the country where you purchased the camera.
- The process for adjusting network settings may differ, depending on network conditions.
- Do not access a network that you are not authorized to use.
- Before you connect to a network, ensure your battery is fully charged.
- You cannot upload or send files captured in some modes.
- Files that you transfer to another device may not be supported by the device. In this case, use a computer to play back the files.

Entering text

Learn how to enter text. The icons in the table let you move the cursor, change the case, etc. Press [DISP/ / / AF] to scroll to a key and press [OK] to enter it. Or, touch a key to enter it.

Icon	Description
◀ ▶	Move the cursor.
⬆	In ABC mode, change the case.
⌫	Delete the last letter.
Cancel	Stop entering text and return to the previous page.
123 @# /ABC	Switch between Symbol mode and ABC mode.
␣	Enter a space.
Done	Save the displayed text.

- You can use only the English alphabets in some modes, regardless of the display language.
- Press [▶] to move to **Done** directly.
- The number of characters you can enter varies depending on the situation.
- The screen may differ depending on the input mode.

Using the NFC Feature (Tag & Go)

Place a smart phone's NFC antenna near the camera's NFC tag to launch the feature for saving photos to a smart phone automatically or the feature for using a smart phone as a remote shutter. You can also transfer files to an NFC-enabled device in Playback mode.

- This feature is supported by NFC-enabled smart phones running Android OS. It is recommended that you use the latest version. This feature is not available for iOS devices.
- You should install Samsung SMART CAMERA App on your phone or device before using this feature. You can download the application from Samsung Apps or the Google Play Store. Samsung SMART CAMERA App is compatible with Samsung camera models manufactured in 2013 or later.
- For devices running Android OS 2.3.3 – 2.3.7, download Samsung SMART CAMERA App from www.samsung.com.
- To read an NFC tag, place the NFC-enabled device near the camera's NFC tag for more than 2 seconds.
- You can set the size for transferred photos by pressing [MENU], and then selecting ⟶ **MobileLink/NFC Image Size** ⟶ an option.
- Do not modify the NFC tag in any way.

Using NFC features in Shooting mode

Launch AutoShare or Remote Viewfinder by reading a tag from an NFC-enabled device. (p. 124, 130) Preset to launch the Wi-Fi function by reading a tag on an NFC-enabled device. (p. 151)

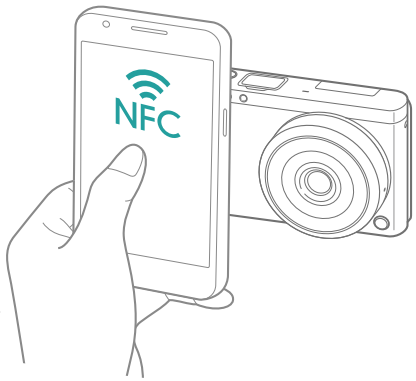
Using NFC features in Playback mode (Photo Beam)

In Playback mode, the camera transfers the current file to the smart phone automatically when you read a tag from an NFC-enabled device.

- To transfer multiple files, select files from the thumbnail view, and then read a tag from an NFC-enabled device.

Using NFC features in Wi-Fi mode

Select MobileLink or Remote Viewfinder from the pop-up window that appears by reading a tag from an NFC-enabled device. (p. 126, 130)



Saving files to a smart phone automatically

The camera connects to a smart phone that supports the AutoShare feature via a WLAN. When you capture a photo with your camera, the photo is saved to a smart phone automatically.

- The AutoShare feature is supported by smart phones or tablets running Android OS or iOS. (Some features may not be supported by some models.) Before using this feature, update the device's firmware to the latest version. If the firmware version is not the most recent, this function may not perform properly.
- You should install Samsung SMART CAMERA App on your phone or device before using this feature. You can download the application from Samsung Apps, the Google Play Store, or the Apple App Store. Samsung SMART CAMERA App is compatible with Samsung camera models manufactured in 2013 or later.
- For devices running Android OS 2.3.3 – 2.3.7, download Samsung SMART CAMERA App from www.samsung.com.
- If you set this function, the setting is maintained even when you change the Shooting mode.
- This feature may not be supported in some modes or may not be available with some shooting options.

1 In Shooting mode, touch [Wi-Fi] → **AutoShare**.

- You can also press [MENU] → [camera] → **AutoShare** → **On**.
- If the pop-up message that prompts you to download the application appears, select **Next**.
- To require PIN verification when connecting the smart phone to the camera, select **Security Settings**. (p. 155)

2 On the smart phone, turn on Samsung SMART CAMERA App.

- For iOS devices, turn on the Wi-Fi feature before turning on the application.
- To start the application automatically on an NFC-enabled smart phone, turn on the function and place the smart phone near the NFC tag (p. 28) on the camera. Verify that the smart phone is connected to your camera, and then skip to step 5.

3 Select the camera from the list and connect the smart phone to the camera.

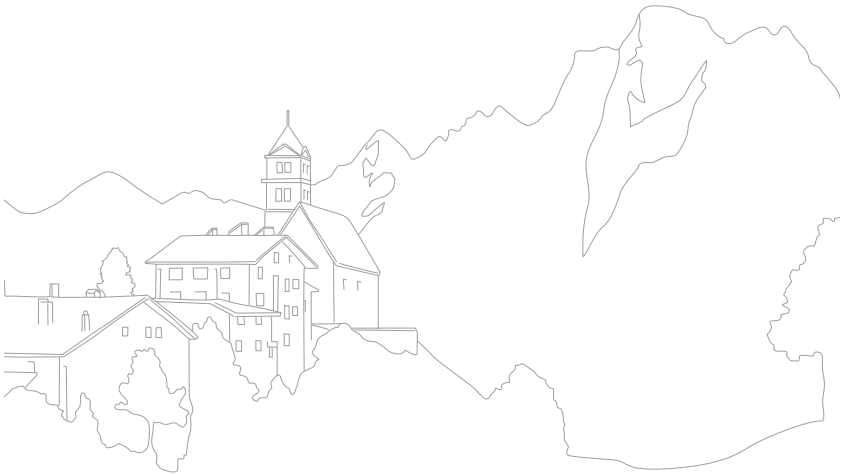
- The smart phone can connect to only one camera at a time.
- If the Wi-Fi Privacy lock is enabled, enter the PIN displayed on the camera to the smart phone.

4 On the camera, allow the smart phone to connect to your camera.

- If the smart phone has been connected to your camera before, it is connected automatically.
- An icon that shows the connection status ( ) will appear on the camera's screen.

5 Capture a photo.

- The captured photo is saved to the camera, and then transferred to the smart phone. If a memory card is not inserted or the memory is full, the captured photo is transferred to the smart phone without being saved to the camera.
- If you recorded a video, it is saved only to the camera.
- The image file captured while recording a video is not saved on the smart phone.
- If the GPS feature is activated on the smart phone, the GPS information will be saved with the captured photo.



Sending photos or videos to a smart phone

The camera connects to a smart phone that supports the MobileLink feature via a WLAN. You can easily send photos or videos to your smart phone.

- The MobileLink feature is supported by smart phones or tablets running Android OS or iOS. (Some features may not be supported by some models.) Before using this feature, update the device's firmware to the latest version. If the firmware version is not the most recent, this function may not perform properly.
- You should install Samsung SMART CAMERA App on your phone or device before using this feature. You can download the application from Samsung Apps, the Google Play Store, or the Apple App Store. Samsung SMART CAMERA App is compatible with Samsung camera models manufactured in 2013 or later.
- For devices running Android OS 2.3.3 – 2.3.7, download Samsung SMART CAMERA App from www.samsung.com.
- When there are no files in the camera memory, you cannot use this feature.
- You can view up to 1,000 recent files and send up to 1,000 files at a time.
- When you send Full HD videos using MobileLink feature, you may not be able to play back files on some devices.
- When using this feature on an iOS device, the device may lose its Wi-Fi connection.
- You cannot send RAW files.
- You can set the size for transferred photos by pressing [MENU], and then selecting → **MobileLink/NFC Image Size** → an option.
- You can also touch → **MobileLink** on the screen in Shooting mode.
- You can also send files in Playback mode by pressing [MENU], and then selecting **Share(Wi-Fi)** → **MobileLink** or by selecting → **MobileLink**.
- The screen turns off if you perform no operations on the camera for 30 seconds.

1 On the Mode screen, select **Wi-Fi**.

2 On the camera, select .

- If the pop-up message that prompts you to download the application appears, select **Next**.
- To require PIN verification when connecting the smart phone to the camera, select **Security Settings**. (p. 155)

3 On the camera, select a sending option.

- If you select **Select Files from Smartphone**, you can use your smart phone to view and share files stored on the camera. The screen turns off if you perform no operations on the smart phone for 30 seconds.
- If you select **Select Files from Camera**, you can select files to send from the camera.

4 On the smart phone, turn on Samsung SMART CAMERA App.

- For iOS devices, turn on the Wi-Fi feature before turning on the application.
- To start the application automatically on an NFC-enabled smart phone, turn on the function and place the smart phone near the NFC tag (p. 28) on the camera. Verify that the smart phone is connected to your camera, and then skip to step 7.

5 Select the camera from the list and connect the smart phone to the camera.

- The smart phone can connect to only one camera at a time.
- If the Wi-Fi Privacy lock is enabled, enter the PIN displayed on the camera to the smart phone.

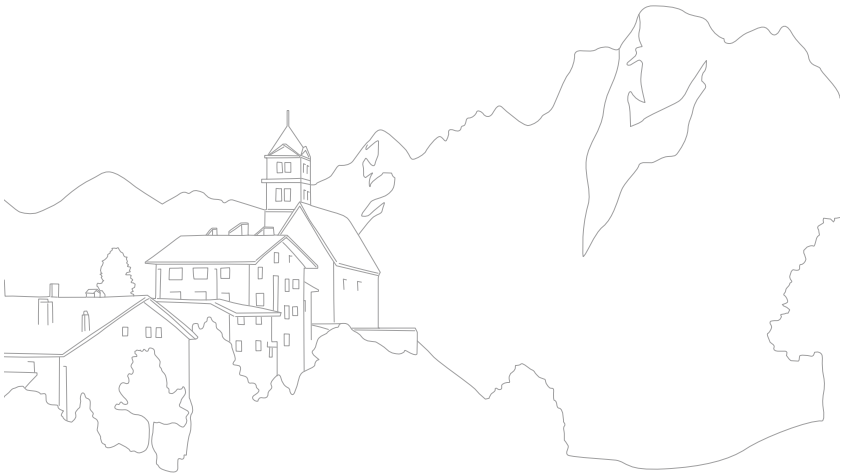
6 On the camera, allow the smart phone to connect to your camera.

- If the smart phone has been connected to your camera before, it is connected automatically.

7 On the smart phone or camera, select files to transfer from the camera.

8 On the smart phone, touch the copy button or on the camera, select **Send**.

- The camera will send the files to the smart phone.



Sending photos or videos to multiple smart phones

The camera connects to a smart phone that supports the Group Share feature via a WLAN. You can easily send photos or videos to multiple smart phones.

- The Group Share feature is supported by smart phones or tablets running Android OS or iOS. (Some features may not be supported by some models.) Before using this feature, update the device's firmware to the latest version. If the firmware version is not the most recent, this function may not perform properly.
- You should install Samsung SMART CAMERA App on your phone or device before using this feature. You can download the application from Samsung Apps, the Google Play Store, or the Apple App Store. Samsung SMART CAMERA App is compatible with Samsung camera models manufactured in 2013 or later.
- For devices running Android OS 2.3.3 – 2.3.7, download Samsung SMART CAMERA App from www.samsung.com.
- When there are no files in the camera memory, you cannot use this feature.
- Transferring files to multiple smart phones may take longer than transferring files to one device.
- When you send Full HD videos using Group Share feature, you may not be able to play back files on some devices.
- When using this feature on an iOS device, the device may lose its Wi-Fi connection.
- You cannot send RAW files.
- You can set the size for transferred photos by pressing [MENU], and then selecting ⟶ **MobileLink/NFC Image Size** ⟶ an option.
- You can also send files in Playback mode by pressing [MENU], and then selecting **Share(Wi-Fi)** ⟶ **Group Share** or by selecting [<] ⟶ **Group Share**.

1 On the Mode screen, select **Wi-Fi**.

2 On the camera, select .

- If the pop-up message that prompts you to download the application appears, select **Next**.
- To require PIN verification when connecting the smart phone to the camera, select **Security Settings**. (p. 155)

3 On the smart phone, turn on Samsung SMART CAMERA App.

- For iOS devices, turn on the Wi-Fi feature before turning on the application.
- To start the application automatically on an NFC-enabled smart phone, turn on the function and place the smart phone near the NFC tag (p. 28) on the camera. Verify that the smart phone is connected to your camera, and then skip to step 6.

4 Touch **Connect** next to the desired smart phone listed on the camera.

- If the smart phone has been connected to your camera before, it is connected automatically.
- You can connect to up to 4 smart phones.
- If the Wi-Fi Privacy lock is enabled, enter the PIN displayed on the camera to the smart phone.

5 Select **Next**.

6 On camera, select files to transfer from the camera.

7 On the camera, select **Send**.

- The camera will send the files to the smart phone.
- When you connect to multiple smart phones, the camera will send the files to all devices at the same time.

Using a smart phone as a remote shutter release

The camera connects to a smart phone that supports the Remote Viewfinder feature via a WLAN. Use the smart phone as a remote shutter release with the Remote Viewfinder feature. The captured photo will display on the smart phone.

- The Remote Viewfinder feature is supported by smart phones or tablets running Android OS or iOS. (Some features may not be supported by some models.) Before using this feature, update the device's firmware to the latest version. If the firmware version is not the most recent, this function may not perform properly.
- You should install Samsung SMART CAMERA App on your phone or device before using this feature. You can download the application from Samsung Apps, the Google Play Store, or the Apple App Store. Samsung SMART CAMERA App is compatible with Samsung camera models manufactured in 2013 or later.
- For devices running Android OS 2.3.3 – 2.3.7, download Samsung SMART CAMERA App from www.samsung.com.
- You can also touch → **Remote Viewfinder** on the screen in Shooting mode.
- Continuously captured photos or videos will not display on the smart phone.

1 On the Mode screen, select **Wi-Fi**.

2 On the camera, select .

- If the pop-up message that prompts you to download the application appears, select **Next**.
- To require PIN verification when connecting the smart phone to the camera, select **Security Settings**. (p. 155)

3 On the smart phone, turn on Samsung SMART CAMERA App.

- For iOS devices, turn on the Wi-Fi feature before turning on the application.
- To start the application automatically on an NFC-enabled smart phone, turn on the function and place the smart phone near the NFC tag (p. 28) on the camera. Verify that the smart phone is connected to your camera, and then skip to step 6.

4 Select the camera from the list and connect the smart phone to the camera.

- The smart phone can connect to only one camera at a time.
- If the Wi-Fi Privacy lock is enabled, enter the PIN displayed on the camera to the smart phone.

5 On the camera, allow the smart phone to connect to your camera.

- If the smart phone has been connected to your camera before, it is connected automatically.

6 On the smart phone, select ⚙ to open the smart panel.

7 On the smart phone, set the shooting options.

- While using this feature, some buttons are not available on your camera.
- With the smart phone, you can operate the camera only by touching the screen.
- Some shooting options are not supported.
- Shooting options that you have set will remain on the camera after the connection with the smart phone has ended.

8 Touch ↩ to return to the shooting screen.

9 On the smart phone, touch and hold 📷 to focus, and then release it to capture the photo.

- Touch 🎥 to record a video and touch ■ to stop a video.
- If the GPS feature is activated on the smart phone, the GPS information will be saved with the captured photo.

- When you use this feature, the ideal distance between the camera and the smart phone may vary, depending on your surroundings.
- The smart phone must be within 7 m of the camera to use this feature.
- It will take some time to capture the photo after you release 📷 on the smart phone.
- If the file save option is set to **Smartphone + Camera**, only photos will be transferred to the smart phone. (Videos and RAW files will not be transferred.)
- If you capture photos continuously when the file save option is set to **Smartphone + Camera**, photos will not be transferred to the smart phone.
- The smart phone's screen will not mirror the camera's display when recording a video.
- The Remote Viewfinder function will deactivate when:
  - there is an incoming call on the smart phone
  - either the camera or the smart phone turns off
  - device loses its connection to the WLAN
  - the Wi-Fi connection is poor or unstable
  - you perform no operations for approximately 3 minutes while connected
  - folder and file number are max values
- The screen turns off if you perform no operations on the camera for 30 seconds.

Using the Baby Monitor

Use the Baby Monitor feature to connect the camera to a smart phone on which the Samsung Home Monitor is installed, and monitor a location.

- The Baby Monitor feature is supported by smart phones that support WVGA (800X480) or higher resolution and run the Android OS or iOS. (Some features may not be supported by some models.) Before using this feature, update the device's firmware to the latest version. If the firmware version is not the most recent, this function may not perform properly.
- You should install the Samsung Home Monitor application on your smart phone before using this feature. You can download the application from Samsung Apps, the Google Play Store, or the Apple App Store.
- Use this feature indoors only.

1 On the Mode screen, select **Wi-Fi**.

2 On the camera, select .

- If the pop-up message that prompts you to download the application appears, select **Next**.

3 On the camera, select an AP from the list, and then position the camera.

- Place the camera in a safe location where children or pets cannot reach it.
- Point the camera lens at the subject.
- We recommend you connect the camera to a power outlet with the AC adapter.

4 On the smart phone, select the AP that the camera is connected to.

- For iOS devices, turn on the Wi-Fi feature before turning on the application.

5 On the smart phone, turn on the Samsung Home Monitor application.

6 Start live video or sound monitoring.

- Watch live video from the camera on your smart phone. During video monitoring, touch the **Sound Monitoring Mode** button on the smart phone to stop the video stream. If the camera detects noise, an alarm will notify you on the smart phone.

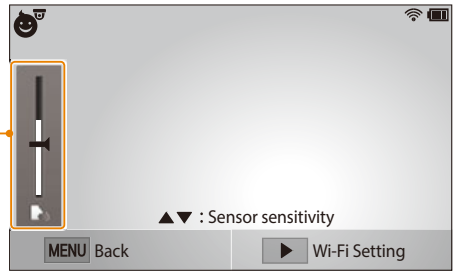
- During live video monitoring via the smart phone, video is not saved on the camera.
- If the monitored location is dark, touch ☀ to turn on the AF-assist light.
- During sound monitoring, alarms will sound on the smart phone if the camera detects noise for a short period at a volume that is higher than the designated level.
- During live video monitoring, alarms will not sound on the smart phone even if the camera detects noise.

7 Touch ✕ to exit the Samsung Home Monitor application.

Adjusting the noise level for alarm activation

You can set the level of noise that will activate an alarm while using sound monitoring. Press [DISP/⇄⊞] to adjust the noise level.

Noise level for alarm activation: When the camera detects noise that exceeds the designated level for a short period, an alarm will sound.



Do not use this feature for illegal purposes.

Using Auto Backup to send photos or videos

You can send photos or videos that you captured with the camera to a PC wirelessly.

Installing the program for Auto Backup on your PC

1 Install i-Launcher on the PC. (p. 161)

2 Connect the camera to the PC with the USB cable.

3 When the Auto Backup program icon appears, click it.

- The Auto Backup program is installed on the PC. Follow the on-screen instructions to complete the installation.

4 Remove the USB cable.

Before installing the program, ensure that the PC is connected to a network.

Sending photos or videos to a PC

1 On the Mode screen, select **Wi-Fi**.

2 Select .

- If the pop-up message that prompts you to download the application appears, select **Next**.
- The camera will automatically attempt to connect to a WLAN via the most recently connected AP device.
- If the camera has not previously been connected to a WLAN, it will search for available AP devices. (p. 118)

3 Select a backup PC.

4 Select **OK**.

- To cancel sending, select **Cancel**.
- You cannot select individual files to backup. This function backs up only new files on the camera.
- The backup's progress will be shown on the PC monitor.
- When the transfer is completed, the camera will turn off automatically in approximately 30 seconds. Select **Cancel** to return to the previous screen and prevent the camera from turning off automatically.
- To turn off your PC automatically after the transfer is complete, select **Shut down PC after backup**.
- To change the backup PC, select **Change PC**.

- When you connect the camera to the WLAN, select the AP that is connected to the PC.
- The camera will search for available access points even if you are connecting to the same access point again.
- If you turn off the camera or remove the battery while sending files, the file transfer will be interrupted.
- While you are using this feature, the shutter control is disabled on your camera.
- You can connect only one camera to the PC at a time for sending files.
- The backup may be canceled due to network conditions.
- When there are no files in the camera memory, you cannot use this feature.
- You must turn off Windows Firewall and any other firewalls before using this feature.
- You can send up to 1,000 recent files.
- On the PC software, the server name must be entered in the Latin alphabet and can contain no more than 48 characters.

Sending photos or videos via email

You can change settings in the email menu and send photos or videos stored on the camera via email.

Changing email settings

In the email menu, you can change settings for storing your information. You can also set or change the email password. For information about entering text, refer to "Entering text". (p. 122)

Storing your information

1 On the Mode screen, select **Wi-Fi**.

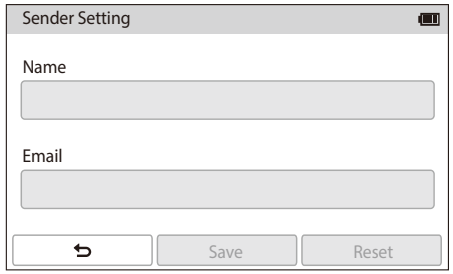
2 Select .

- The camera will automatically attempt to connect to a WLAN via the most recently connected AP device.
- If the camera has not previously been connected to a WLAN, it will search for available AP devices. (p. 118)

3 Press [MENU].

4 Select **Sender Setting**.

5 Select the **Name** box, enter your name, and then touch **Done**.



6 Select the **Email** box, enter your email address, and then touch **Done**.

7 Select **Save** to save your changes.

- To delete your information, select **Reset**.

Setting an email password

1 On the Mode screen, select **Wi-Fi**.

2 Select .

- The camera will automatically attempt to connect to a WLAN via the most recently connected AP device.
- If the camera has not previously been connected to a WLAN, it will search for available AP devices. (p. 118)

3 Press [MENU].

4 Select **Setting Password** → **On**.

- To deactivate the password, select **Off**.

5 When the pop-up appears, select **OK**.

6 Enter a 4-digit password.

7 Enter the password again.

8 When the pop-up appears, select **OK**.

If you lost your password, you can reset it by selecting **Reset** on the password setting screen. When you reset the information, the previously saved user's setting information and email address will be deleted.

Changing the email password

1 On the Mode screen, select **Wi-Fi**.

2 Select .

- The camera will automatically attempt to connect to a WLAN via the most recently connected AP device.
- If the camera has not previously been connected to a WLAN, it will search for available AP devices. (p. 118)

3 Press [MENU].

4 Select **Change Password**.

5 Enter your current 4-digit password.

6 Enter a new 4-digit password.

7 Enter the new password again.

8 When the pop-up appears, select **OK**.

Sending photos or videos via email

You can send photos or videos stored on the camera via email. For information about entering text, refer to "Entering text". (p. 122)

1 On the Mode screen, select **Wi-Fi**.

2 Select .

3 Connect to a WLAN. (p. 118)

4 Select the **Sender** box, enter your email address, and then touch **Done**.

- If you have previously saved your information, it will be inserted automatically. (p. 136)
- To use an address from the list of previous senders, select ⊙ → an address.

5 Select the **Receiver** box, enter an email address, and then touch **Done**.

- To use an address from the list of previous recipients, select ⊙ → an address.
- Select ⊕ to add additional recipients. You can input up to 30 recipients.
- Select ⊗ to delete an address from the list.

6 Select **Next**.

7 Select files to send.

- You can select up to 20 files. The total size must be 7 MB or less.

8 Select **Next**.

9 Select the comment box, enter your comments, and then touch **Done**.

10 Select **Send**.

- The camera will send the email.
- If an email fails to send, a message prompting you to send it again appears.

- Even if a photo appears to have transferred successfully, errors with the recipient's email account may cause the photo to be rejected or recognized as spam.
- You may not be able to send an email if no network connection is available or if your email account settings are incorrect.
- You cannot send an email if the combined file sizes exceed the 7 MB. The maximum resolution of photos you can send is 2M. The maximum resolution of videos you can send is . If the selected photo has a resolution higher than 2M, it will be automatically resized to a lower resolution.
- If you cannot send an email because of firewall or user authentication settings, contact your network administrator or network service provider.
- When there are no files in the camera memory, you cannot use this feature.
- You can also send an email in Playback mode by pressing [MENU], and then selecting **Share(Wi-Fi)** → **Email** or by selecting < → **Email**.

Using photo or video sharing services

Upload your photos or videos to file sharing services. Available sharing services will be displayed on your camera. To upload files to some sharing services, you must visit the website and register before connecting your camera.

Accessing a sharing service

1 On the Mode screen, select **Wi-Fi**.

2 Select .

3 Connect to a WLAN. (p. 118)

4 Select a sharing service.

- If the pop-up message that prompts you to create an account appears, select **OK**.

5 Enter your ID and password to log in.

- For information about entering text, refer to "Entering text". (p. 122)
- If you connected to some sharing services, refer to "Using the login browser". (p. 120)
- To select an ID from the list, select → an ID.
- If you have previously logged in to the sharing service, you may be logged in automatically.

You must have an existing account on the file sharing service to use this feature.

Uploading photos or videos

1 Access the sharing service with your camera.

2 Select files to upload.

- You can select up to 20 files. The total size must be 10 MB or less. (On some sharing services, the total size or number of files may vary.)

3 Select **Upload**.

- The camera will upload photos or videos.
- When an upload fails, a message prompting you to upload it again appears.
- On some sharing services, you can enter your comments by selecting the comment box. For information about entering text, refer to "Entering text". (p. 122)

- You can set an upload folder for Facebook by pressing [MENU], and then selecting **Upload Folder (Facebook)** on the sharing service's list screen.
- You cannot upload files if the file size exceeds the limit. The maximum resolution of photos you can upload is 2M. The maximum resolution of videos you can upload is WEB. If the selected photo has a resolution higher than 2M, it will be automatically resized to a lower resolution. (On some sharing services, the maximum photo resolution may vary.)
- The method of uploading photos or videos may differ depending on the selected sharing service.
- If you cannot access a sharing service because of firewall or user authentication settings, contact your network administrator or network service provider.
- Uploaded photos or videos may be automatically titled with the date they were captured.
- The speed of your internet connection may affect how quickly photos upload or web pages open.
- When there are no files in the camera memory, you cannot use this feature.
- You can also upload photos or videos to file sharing services in Playback mode by pressing [MENU], and then selecting **Share(Wi-Fi)** → a sharing service or by selecting [<] → a sharing service.
- You cannot upload videos to some sharing services.
- When you upload photos to a file sharing service, the photo may be resized to 2M or 1M depending on their policy.

Using Samsung Link to send files

You can upload files from your camera to the Samsung Link online storage or view files on a Samsung Link device connected to the same AP.

Uploading photos to an online storage

1 On the Mode screen, select **Wi-Fi**.

2 Select → **Web storage**.

- If the guide message appears, select **OK**.
- The camera will automatically attempt to connect to a WLAN via the most recently connected AP device.
- If the camera has not previously been connected to a WLAN, it will search for available AP devices. (p. 118)
- To change the size for uploaded photos, press [MENU], and then select **Upload Image Size**.

3 Enter your ID and password, and then select **Login** → **OK**.

- For information about entering text, refer to "Entering text". (p. 122)
- To select an ID from the list, select → an ID.
- If you have previously logged in to the website, you may be logged in automatically.

To use this feature, you must create a Samsung Link account and an account with an affiliated online storage service using your PC. After you have finished creating the accounts, add your online storage account to Samsung Link.

4 Select an online storage service.

- Before you use this feature, you must visit the Samsung Link website with your PC and register an online storage.

5 Select files to upload, and then select **Upload**.

- You cannot upload video files to Samsung Link online storage.
- When there are no files in the camera memory, you cannot use this feature.
- You can upload up to 20 files.
- You can also upload photos in Playback mode by pressing [MENU], and then selecting **Share(Wi-Fi)** → **Samsung Link** or by selecting → **Samsung Link**.

Viewing photos or videos on devices that support Samsung Link

1 On the Mode screen, select **Wi-Fi**.

2 Select → **Nearby devices**.

- The camera will automatically attempt to connect to a WLAN via the most recently connected AP device.
- If the camera has not previously been connected to a WLAN, it will search for available AP devices. (p. 118)
- You can set to allow only selected devices or all devices to connect by pressing [MENU], and then selecting **DLNA Access Control** on the screen.
- A sharing file list is created. Wait until other devices can find your camera.

3 Connect the Samsung Link device to a network, and then turn on the Samsung Link feature.

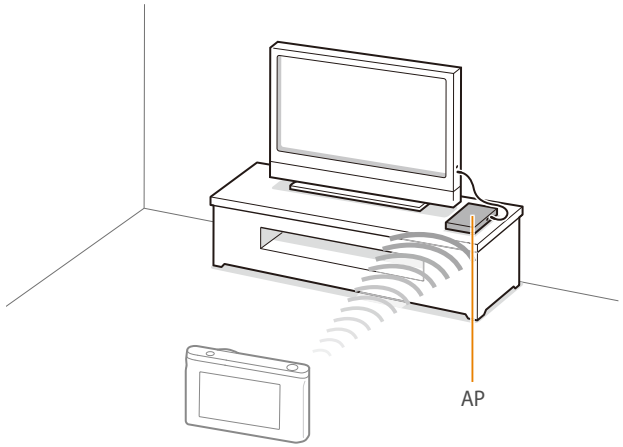
- Refer to your device's user manual for more information.

4 On the camera, allow the Samsung Link device to connect to your camera.

5 On the Samsung Link device, select a camera to connect to.

6 On the Samsung Link device, browse the shared photos or videos.

- For information about searching for the camera and browsing the photos or videos on the Samsung Link device, refer to the device's user manual.
- Videos may not play smoothly depending on the type of Samsung Link device or the network condition.



▲ The camera is connected to a TV that supports Samsung Link via WLAN.

- You can share up to 1,000 recent files.
- On a Samsung Link device, you can view only photos or videos captured with your camera.
- The range of the wireless connection between your camera and a Samsung Link device may vary depending on the specifications of the AP.
- If the camera is connected to 2 Samsung Link devices, playback may be slower.
- Photos or videos will be shared in their original sizes.
- You can use this feature only with devices that support Samsung Link.
- Shared photos or videos will not be stored on the Samsung Link device, but they can be stored in the camera to meet the device's specifications.
- Transferring photos or videos to the Samsung Link device may take some time depending on the network connection, the number of files to be shared, or the sizes of the files.
- If you power off the camera abnormally while viewing photos or videos on a Samsung Link device (for example, by removing the battery), the device considers the camera to still be connected.
- The order of photos or videos on the camera may be different than on the Samsung Link device.
- Depending on the number of photos or videos you want to share, it may take some time to load your photos or videos and complete the initial set-up process.
- While viewing photos or videos on the Samsung Link device, continuously using the device's remote or performing additional operations on the device may prevent this feature from working properly.
- If you reorder or sort files on the camera while viewing them on a Samsung Link device, you must repeat the initial set-up process to update the list of files on the device.
- When there are no files in the camera memory, you cannot use this feature.
- We recommend you use a network cable to connect your Samsung Link device to your AP. This will minimize any video 'Stuttering' you may experience when streaming content.
- To view files on a Samsung Link device using the **Nearby devices** feature, enable multicast mode on your AP.

Chapter 5

Camera settings menu

Learn about the user settings and general settings menu.
You can adjust the settings to better suit your needs and preferences.

User settings

You can set the user environment with these settings.

To set user options,	In Shooting mode, press [MENU] → 🔧 → an option.

Available items and the order of them may differ depending on shooting conditions.

ISO Customizing

ISO Expansion

You can select ISO 100 and 25600.

ISO Step

You can set the size for the ISO sensitivity by either 1/3 or 1 step.

Auto ISO Range

You can set the maximum ISO value under which each EV step is chosen when you set the ISO to **Auto**.

Noise Reduction

Use the Noise Reduction to reduce the visual noise in photos.

* Default

Option	Description
High ISO NR	This function reduces noise that may occur when you set a high ISO sensitivity. (**Off**, **High**, **Normal***, **Low**)
Long Term NR	This function reduces noise when you set the camera for a long exposure. (**Off**, **On***)

Bracket Settings

You can set up the options for each bracketing.

* Default

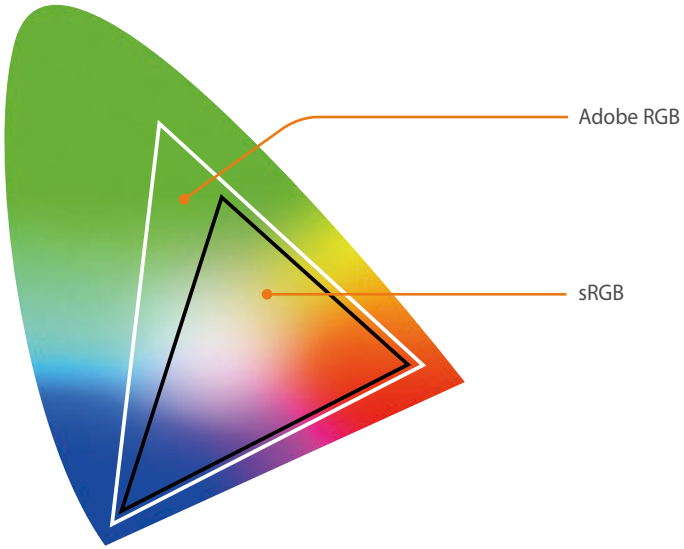
Option	Description
AE Bracket Settings	Set the exposure interval. (**-/+0.3 EV***, **-/+0.7 EV**, **-/+1.0 EV**, **-/+1.3 EV**, **-/+1.7 EV**, **-/+2.0 EV**, **-/+2.3 EV**, **-/+2.7 EV**, **-/+3.0 EV**)
WB Bracket Settings	Adjust the White Balance interval range of the 3 bracketed photos. (**AB-/+3***, **AB-/+2**, **AB-/+1**, **MG-/+3**, **MG-/+2**, **MG-/+1**) For example, AB-/+3 adjusts the Amber value plus or minus three steps. MG-/+3 adjusts the Magenta value the same amount.
P Wiz Bracket Settings	Select 3 Picture Wizard settings the camera uses to capture the 3 bracketed photos.
Depth Bracket Settings	Set the depth interval. (**-/+0.3**, **-/+0.7**, **-/+1.0***, **-/+1.3**, **-/+1.7**, **-/+2.0**, **-/+2.3**, **-/+2.7**, **-/+3.0**)

Color Space

The color space option allows you to select methods for representing colors. Digital imaging devices such as digital cameras, monitors, and printers have their own methods for representing colors, which are called color spaces.

* Default

Option	Description
sRGB*	sRGB (Standard RGB) is an international specification to define the color space created by IEC (International Electrotechnical Commission). It is widely used for creating colors on PC monitors and is also the standard color space for Exif. sRGB is recommended for regular images and images you intend to publish on the Internet.
Adobe RGB	Adobe RGB is used for commercial printing and has a larger color range than sRGB. Its wider range of colors helps you to easily edit photos on a computer. Note that individual programs are generally compatible with a limited number of color spaces.



When the color space is set to Adobe RGB, photos will be saved as "_SAMXXXX.JPG".

Distortion Correct

You can correct lens distortion that might occur from lenses.
This feature is available with lenses that support it.

Touch Operation

Set to enable touch operation in Shooting mode.

* Default

Option	Description
Off	Do not use touch operations in Shooting mode. (You can use touch operations in other situations.)
On*	Use touch operations in Shooting mode.

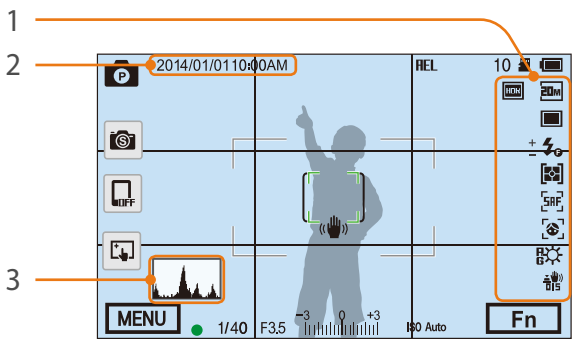
iFn Customizing

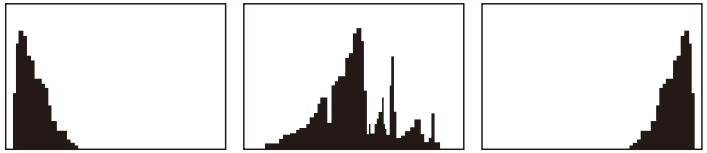
You can select options that can be adjusted when you press [**i-Function**] on an i-Function lens.

Option	Description
Aperture	Set to adjust the aperture value.
Shutter Speed	Set to adjust the shutter speed.
EV	Set to adjust the exposure value.
ISO	Set to adjust ISO sensitivity.
White Balance	Set to adjust the White Balance.

User Display

You can add or remove shooting information from the display.



No.	Description
1	**Icons** Set to display icons on the right in Shooting mode.
2	**Date & Time** Set to display the date and time.
3	**Histogram** Set the histogram on the display on or off. **About histogram** A histogram is a graph that shows the brightness distribution of a photo. A histogram inclined to the left indicates a dark photo. A histogram inclined to the right indicates a bright photo. The height of the graph is related to color information. The graph gets higher if a specific color is more common.  Insufficient exposure Balanced exposure Excessive exposure

Key Mapping

You can change the function assigned to the Custom button or the DIRECT LINK button.

* Default

Button	Function
Custom	Set the Custom button's function. • **Optical Preview***: Execute the Depth of Field Preview function for the current aperture value. (p. 22) • **One Touch WB** (White Balance): Execute the Custom White Balance function. • **One Touch RAW +**: Save a file in the RAW+JPEG format. To save a file in JPEG format, press the button again. • **Reset**: Reset some settings. • **AEL**: Execute the auto exposure lock function. (Half-pressing [**Shutter**] executes the auto focus lock function.) • **AEL Hold**: Keep executing the auto exposure lock function after shooting. (The exposure remains locked even after you capture a photo.)
DIRECT LINK	Set the DIRECT LINK button's function. (**AutoShare**, **MobileLink**, **Remote Viewfinder**, **Group Share**, **Baby Monitor**, **Auto Backup**, **Email**, **SNS & Cloud**, **Samsung Link**)

Live view NFC

In Shooting mode, turn on the NFC feature on an NFC-enabled smart phone and place the smart phone's NFC antenna near the camera's NFC tag to launch AutoShare or Remote Viewfinder. This feature is supported by NFC-enabled smart phones running Android OS. It is recommended that you use the latest version. This feature is not available for iOS devices.

MobileLink/NFC Image Size

Set the size of photos to transfer to a smartphone using the MobileLink or NFC functions.

* Default

Option	Description
Resize to 2M or lower	If a photo's size is larger than 3M, it will be transferred after resizing it to 2M or lower.
Original*	The photo will be transferred in its original size.

Grid Line

Select a guide to help you compose a scene.
(**Off***, **4 X 4**, **3 X 3**, **Cross**, **Diagonal**)

AF Lamp

When shooting in dark places, turn the AF lamp on in order to have a better auto focus. The Auto Focus functions more accurately in dark places when the AF lamp is on.

Auto Self-Shot

Set to turn on the camera and enter Self shot mode automatically when you flip the display upward. In Self shot mode, the timer (3 seconds), one-touch shot, face detection, and beauty face options are automatically activated.

Lens Button Speed Settings

Set the zoom speed for the Power Zoom lens' buttons at either fast, medium, or slow speed. At fast speed, zoom noise increases and can be recorded in videos. This function is available only when you attach the Power Zoom lens using the mount adapter.

Setting

Learn to configure your camera's settings.

To set Setting options,	In Shooting or Playback mode, press [MENU] → ⚙ → an option.

* Default

Item	Description
Sound	• **System Volume**: Set the sound volume or turn all sound off entirely. (**Off**, **Low**, **Medium***, **High**) Even if the system volume is turned off, the camera emits the sound while playing a video or a slide show. • **AF Sound**: Set the sound the camera emits when you half-press the shutter button on or off. (**Off**, **On***) • **Button Sound**: Set the sound the camera emits when you press the buttons or touch the screen on or off. (**Off**, **On***)
Quick View	Set the Quick View time length–the amount of time the camera displays a photo immediately after you capture it. (**Off**, **1 sec***, **3 sec**, **5 sec**, **Hold**)

* Default

Item	Description
Display Adjust	Adjust the display brightness, auto brightness setting, display color, or level gauge. • **Display Brightness**: You can adjust the display brightness manually. • **Auto Brightness**: Turn auto brightness on or off. (**Off**, **On***) • **Display Color**: You can adjust the display color manually. • **Horizontal Calibration**: Calibrate the level gauge. If the level gauge is not level, position the camera on the level surface, and then follow the on-screen instructions. • You cannot access the **Horizontal Calibration** option in Playback mode. • You cannot calibrate the level gauge in portrait orientation.
Auto Display Off	Set the display off time. The display turns off if you do not use the camera for the time you set. (**Off**, **30 sec***, **1 min**, **3 min**, **5 min**, **10 min**)
Auto Power Off	Set power shut off time. The camera shuts off if you do not use it for the time you set. (**Off**, **1 min***, **3 min**, **5 min**, **10 min**, **30 min**) • The camera retains the power-off time setting even if you replace the battery. • Auto Power Off may not work if the camera is connected to a computer or a TV or playing a slide show or a movie.

* Default

Item	Description
Help Guide Display	Set to display help text about menus and functions. (**Off**, **On***) Press [🗑] to hide the help text.
Language	Set a language the camera shows on the display.
Date & Time	Set date, time, date format, time zone and whether to imprint the date on photos. (**Time Zone**, **Date/Time Set**, **Date Type**, **Time Type**, **Imprint**) • The date appears on the lower right side of the photo. • When you print a photo, some printers may not print the date appropriately.
Video Out	Set the video signal output appropriate for your country when connecting the camera to an external video device such as a monitor or HDTV. • **NTSC**: USA, Canada, Japan, Korea, Taiwan, Mexico, etc. • **PAL** (Supports only PAL B, D, G, H, or I): Australia, Austria, Belgium, China, Denmark, Finland, France, Germany, England, Italy, Kuwait, Malaysia, New Zealand, Singapore, Spain, Sweden, Switzerland, Thailand, Norway, etc.
Anynet+ (HDMI-CEC)	When you connect the camera to an HDTV that supports Anynet+ (HDMI-CEC), you can control the play function of the camera with the TV remote control. • **Off**: You cannot control the play function of camera with the TV remote control. • **On***: You can control the play function of camera with the TV remote control.

* Default

Item	Description
HDMI Output	When you connect the camera to an HDTV with an HDMI cable, you can change the resolution of the image. • **NTSC**: **Auto***, **1080i**, **720p**, **480p**, **576p** (activates only when **PAL** is selected) If the connected HDTV does not support the resolution you select, the camera sets the resolution one level lower.
File Number	Set the method of numbering files and folders. • **Reset**: After using the reset function, the next file name is started at 0001. • **Series***: New file numbers continue the existing number sequence, even if you have installed a new memory card, formatted the card, or deleted all photos. • The first folder name is 100PHOTO, if you have selected the sRGB color space and Standard file naming, the first file name is SAM_0001. • File name numbers are increased by 1 from SAM_0001 to SAM_9999. • Folder numbers are increased by 1 from 100PHOTO to 999PHOTO. • The maximum number of files that can be saved in one folder is 9,999. • File numbers are assigned according to DCF (Design rule for Camera File system) specifications. • If you change a file name (for example, on a computer), the camera will not be able to play the file.

* Default

Item	Description
Format	Format the memory card. Formatting deletes all existing files including protected files. (**No***, **Yes**) Errors can occur if you use a memory card formatted by another brand of camera, a memory card reader, or a computer. Please format memory cards in the camera before using them to capture photos.
Device Information	View the firmware version of the body and the lens, Mac address, and network certification number, or update the firmware. • **Firmware Update**: Update the firmware of the camera body or lens. (**Body Firmware**, **Lens Firmware**) • You can update the firmware by connecting the camera to the computer and starting i-Launcher. For more details, refer to page 177. • You cannot run a firmware upgrade without a fully charged battery. Recharge the battery fully before running a firmware upgrade. • If you update the firmware, user settings and values will be reset. (Date, time, language, and video out will not change.) • Do not turn the camera off while the update is in progress.

* Default

Item	Description
Wi-Fi Privacy lock	Set to require a PIN when connecting the camera and a smart phone. • **PIN**: Enter a PIN before connecting. • **None***: Allow a connection without requiring a PIN. • Connections will automatically be made without requiring a PIN when using the NFC function. • PINs are automatically generated and renewed only when you reset the camera settings or update the firmware. • If you have previously connected your camera to a smart phone via a PIN, they will connect automatically.
Reset	Reset the setup menu and shooting options to the factory defaults. (Date, time, language, and video output settings do not change.) (**No***, **Yes**)
Open Source License	View open source licenses.

Chapter 6

Connecting to external devices

Make full use of the camera by connecting it to external devices such as a computer or HDTV.

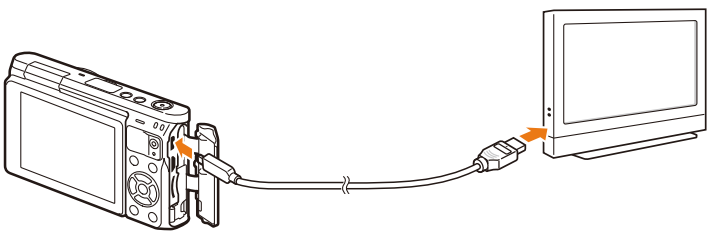
Viewing files on an HDTV

Play back photos or videos by connecting your camera to an HDTV using an optional HDMI cable.

1 In Shooting or Playback mode, press [MENU] → ⚙ → **HDMI Output** → an option. (p. 154)

2 Turn off your camera and HDTV.

3 Connect your camera to your HDTV with the optional HDMI cable.



4 Turn on your HDTV, and then select the HDMI video source.

5 Turn on the camera.

- The camera automatically enters into Playback mode when you connect it to an HDTV.

6 View photos or play videos using the camera buttons.

- When using the HDMI cable, you can connect the camera to an HDTV using the Anynet+(CEC) method.
- The Anynet+(CEC) functions allow you to control connected devices using the TV remote control.
- If the HDTV supports Anynet+(CEC), the TV turns on automatically when used in conjunction with the camera. This feature may not be available on some HDTVs.
- When connected to an HDTV by an HDMI cable, the camera cannot capture a photo or video.
- When connected to an HDTV, some of the camera's playback functions may not be available.
- The length of time after which the camera and an HDTV are connected may vary depending on the memory card that you are using. As the main feature of a memory card is to increase the transfer speed, it is not necessarily true to say that a memory card with a faster transfer speed is also fast in using the HDMI function.

Transferring files to your computer

Transfer files on a memory card to your computer by connecting the camera to the PC.

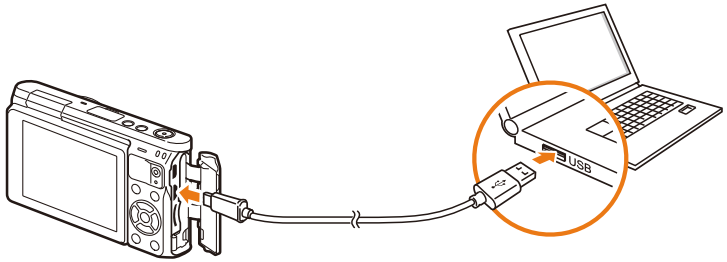
Transferring files to your Windows OS computer

Connecting the camera as a removable disk

You can connect the camera to your computer as a removable disk. Open the removable disk and transfer files to your computer.

1 Turn off the camera.

2 Connect the camera to your computer with the USB cable.



- You must plug the small end of the USB cable into your camera. If the cable is reversed, it may damage your files. The manufacturer is not responsible for any loss of data.
- If you try to plug the USB cable into the HDMI port, the camera may not work properly.

3 Turn on the camera.

- The computer recognizes the camera automatically.

4 On your computer, select **My Computer** → **Removable Disk** → **DCIM** → **100PHOTO**.

5 Select the files you want, and then drag or save them to your computer.

Disconnecting the camera (for Windows XP)

With Windows Vista, Windows 7, and Windows 8, the methods for disconnecting the camera are similar.

1 Ensure that no data is being transferred between the camera and the computer.

- If the status lamp on your camera is blinking, it means the data transfer is in progress. Please wait until the status lamp stops blinking.

2 Click on the tool bar at the bottom right of your computer screen.

3 Click the pop-up message.

4 Click the message box indicating safely removed.

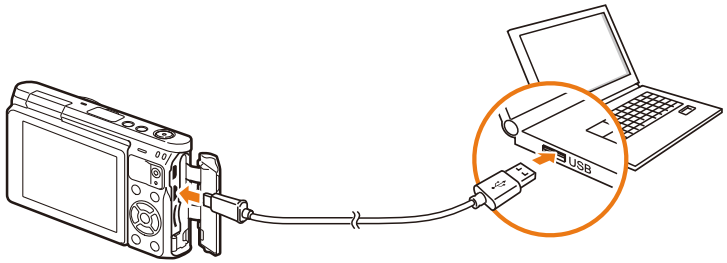
5 Remove the USB cable.

Transferring files to your Mac OS

Mac OS 10.5 or later is supported.

1 Turn off the camera.

2 Connect your camera to a Macintosh computer with the USB cable.



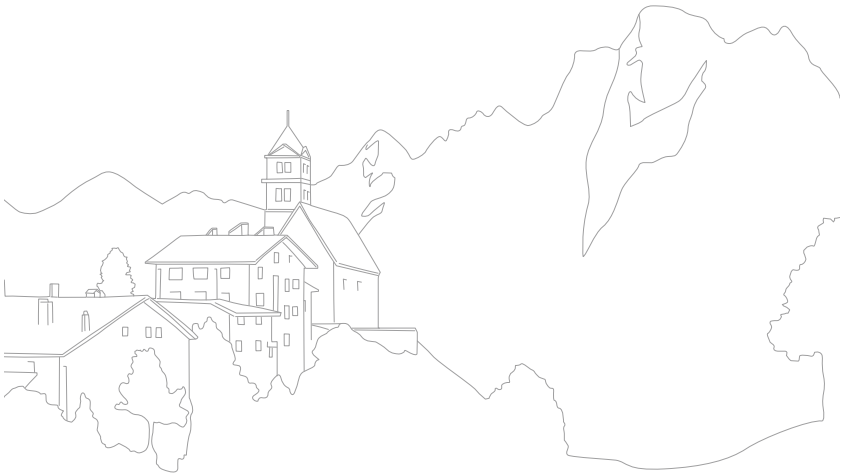
- You must plug the small end of the USB cable into your camera. If the cable is reversed, it may damage your files. The manufacturer is not responsible for any loss of data.
- If you try to plug the USB cable into the HDMI port, the camera may not work properly.

3 Turn on the camera.

- The computer recognizes the camera automatically and displays a removable disk icon.

4 On your computer, open the removable disk.

5 Transfer photos or videos to the Mac OS computer.



Using programs on a PC

You can view and edit files using the provided programs. You can also send the files to a PC wirelessly.

Installing programs from the provided CD

1 Insert the installation CD into your PC.

2 Select a language.

3 Select a program to install.

4 Follow the on-screen instructions.

5 Click **Exit** to complete the installation.

Available programs when using i-Launcher

Item	Description
Firmware Upgrade	You can download the firmware of your camera.
PC Auto Backup	i-Launcher provides a link for downloading the PC Auto Backup program when you connect the camera to a computer. You can send photos or videos that you captured with the camera to a PC wirelessly.

Using i-Launcher

i-Launcher allows you update the firmware of the camera or the lens or provides a link to download the PC Auto Backup program.

Requirements for Windows OS

Item	Requirements
CPU	Intel® Core™ 2 Duo 1.66 GHz or higher/ AMD Athlon X2 Dual-Core 2.2 GHz or higher
RAM	Minimum 512 MB RAM (1 GB or more recommended)
OS*	Windows 7, Windows 8
Hard disk capacity	250 MB or more (1 GB and above recommended)
Others	• CD-ROM drive • 1024X768 pixels, 16-bit color display compatible monitor (1280X1024 pixels, 32-bit color display recommended) • USB 2.0 port • nVIDIA Geforce 7600GT or higher/ ATI X1600 series or higher

* A 32-bit version of i-Launcher will be installed—even on 64-bit editions of Windows 7 and Windows 8.

- The requirements on the following page are recommendations only. i-Launcher may not work properly even when the computer meets the requirements, depending on the condition of your computer.
- If your computer does not meet the requirements, videos may not play correctly.

The manufacturer is not responsible for any damage that results from using unqualified computers such as a computer you assembled yourself.

Requirements for Mac OS

Item	Requirements
OS	Mac OS 10.5 or higher (except PowerPC)
RAM	Minimum 256 MB RAM (512 MB or more recommended)
Hard disk capacity	Minimum 110 MB
Others	USB 2.0 port, CD-ROM drive

Opening i-Launcher

On your computer, select **Start** → **All Programs** → **Samsung** → **i-Launcher** → **Samsung i-Launcher**. Or, click **Applications** → **Samsung** → **i-Launcher** on your Mac OS computer.

Downloading the firmware

From the Samsung i-Launcher screen, click **Firmware Upgrade**. For information about updating the firmware, refer to page 177.

Downloading the PC Auto Backup program

From the Samsung i-Launcher screen, click **PC Auto Backup**. For information about installing the PC Auto Backup program, refer to page 134.

Installing Adobe Photoshop Lightroom

1. Insert Adobe Photoshop Lightroom DVD-ROM into your PC.
2. Select a language.
3. Follow the on-screen instructions.

Using Adobe Photoshop Lightroom

Photos captured by a camera are often transformed to JPEG formats and stored in the memory according to the settings of the camera at the time of shooting. RAW files are not transformed to JPEG formats and are stored in the memory without any changes. With Adobe Photoshop Lightroom, you can calibrate exposures, White Balances, tones, contrasts, and colors of photos. You can also edit JPEG or TIFF files as well as RAW files. For more information, refer to the program guide.

- Depending on your version of Adobe Photoshop Lightroom, you may not be able to open RAW files. In this case, update the program from the Adobe website.
- In Adobe Photoshop Lightroom, an image's brightness, color and other effects may be displayed differently. This occurs because the original camera settings and options applied during image capture are removed, ready for it to be processed in Adobe Photoshop Lightroom.

Chapter 7

Appendix

Get information about error messages, camera maintenance, trouble shooting tips, specifications, and optional accessories.

Error messages

When the following error messages appear, try these remedies.

Error messages	Suggested remedies
Lens is locked	The lens is locked. Rotate the lens counter-clockwise. (p. 48)
Card Error	• Turn off the camera, and then turn it on again. • Remove the memory card and insert it again. • Format the memory card.
Low Battery	Insert a charged battery or recharge the battery.
No Image File	Capture photos or insert a memory card that contains photos.
Device disconnected.	Network connection disconnected while photos are being transferred to supported devices. Re-select a supported device.
File Error	Delete the damaged file or contact a service center.

Error messages	Suggested remedies
Memory Full	Delete unnecessary files or insert a new memory card.
Transfer failed.	• The camera has failed to send e-mails or files to other devices. Try sending again. • Check the network connection and try again.
Unable to capture a photo because folder and file number on the memory card reached the maximum values. Reset the folder number?	File names do not match the DCF standard. Follow the on-screen instructions to reset the folder number.
Error 00	Turn off your camera and remount the lens. If the message still appears, contact a service center.

Maintaining the camera

Cleaning the camera

Camera lens and display

Use a brush to remove dust and wipe the lens gently with a soft cloth.
If any dust remains, apply lens cleaning liquid to a piece of cleaning paper and wipe gently.

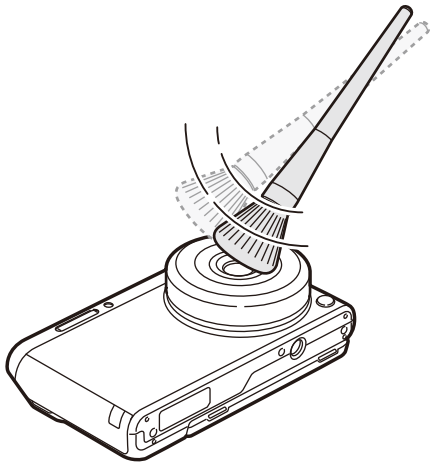


Image sensor

Depending on different shooting conditions, dust may appear in photos because the image sensor is exposed to the external environment. This problem is normal, and the exposure to dust occurs in everyday use of the camera. Avoid contact with the image sensor while using the blower.

Camera body

Wipe gently with a soft, dry cloth.

Never use benzene, thinners, or alcohol to clean the device. These solutions can damage the camera or cause it to malfunction.

Using or storing the camera

Inappropriate places to use or store the camera

- Avoid exposing the camera to very cold or very hot temperatures.
- Avoid using your camera in areas with extremely high humidity, or where the humidity changes drastically.
- Avoid exposing the camera to direct sunlight and storing it in hot, poorly ventilated areas, such as in a car during summer time.
- Protect your camera and the display from impact, rough handling, and excessive vibration to avoid serious damage.
- Avoid using or storing your camera in dusty, dirty, humid, or poorly ventilated areas to prevent damage to moving parts and internal components.
- Do not use your camera near fuels, combustibles, or flammable chemicals. Do not store or carry flammable liquids, gases, or explosive materials in the same compartment as the camera or its accessories.
- Do not store the camera where there are mothballs.

Using on beaches or shores

- Protect your camera from sand and dirt when you use it on beaches or in other similar areas.
- Your camera is not waterproof. Do not handle the battery, adapter, or memory card with wet hands. Operating the camera with wet hands may cause damage to your camera.

Storing for extended period of time

- When you store the camera for an extended period, place it in a sealed container with an absorbent material, such as silica gel.
- Over time, unused batteries will discharge and must be recharged before use.
- The present date and time can be initialized when the camera is turned on after the camera and battery have been separated for a prolonged period.

Using the camera with caution in humid environments

When you transfer the camera from a cold environment to a warm one, condensation can form on the lens or internal components of the camera. In this situation, turn off the camera and wait for at least 1 hour.
If condensation forms on the memory card, remove the memory card from the camera and wait until all moisture has evaporated before reinserting it.

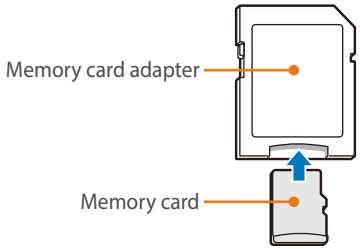
Other cautions

- Do not swing your camera by the strap. This may cause injury to yourself or others or damage to your camera.
- Do not paint your camera, as paint can clog moving parts and prevent proper operation.
- Turn off the camera when not using it.
- Your camera consists of delicate parts. Avoid impacts to the camera.
- Protect the display from external force by keeping it in the case when not in use. Protect the camera from scratches by keeping it away from sand, sharp implements, or loose change.
- Do not use the camera if the screen is cracked or broken. Broken glass or acrylic could cause injury to your hands and face. Take the camera to a Samsung service center to have it repaired.
- Never place cameras, batteries, chargers, or accessories near, on, or in heating devices, such as microwave ovens, stoves, or radiators. Heat can deform or overheat these devices, which can cause a fire or explosion.
- Do not expose the lens to direct sunlight, as this may discolor the image sensor or cause it to malfunction.
- Protect your lens from fingerprints and scratches. Clean your lens with a soft, clean, debris-free lens cloth.
- The camera may turn off if impacted from the outside. This is to protect the memory card. Turn on the camera to use it again.
- While you use the camera, it may heat up. This is normal and should not affect your camera's lifespan or performance.
- When you use the camera in low temperatures, it may take some time to turn on, the color of the display may be changed temporarily, or after-images may appear. These conditions are not malfunctions and they will correct themselves when the camera is returned to milder temperatures.
- Paint or metal on the outside of the camera may cause allergies, itchy skin, eczema, or swelling for people with sensitive skin.
  If you experience any of these symptoms, stop using the camera immediately and consult a doctor.
- Do not insert foreign objects into any of your camera's compartments, slots, or access points. Damage due to improper use may not be covered by your warranty.
- Do not allow unqualified personnel to service the camera or attempt to service the camera yourself. Any damage that results from unqualified service is not covered by your warranty.

About memory card

Supported memory card

This product supports microSD, microSDHC, or microSDXC memory cards.



To read data with a PC or memory card reader, insert the memory card into a memory card adapter.

Memory card capacity

The memory capacity may differ depending on shooting scenes or shooting conditions. These capacities are based on a 2 GB SD card.

Size		Quality						
		Super Fine	Fine	Normal	RAW	RAW + S.Fine	RAW + Fine	RAW + Normal
Photo	20.0M (5472X3648)	160	290	398	55	35	44	48
	10.1M (3888X2592)	288	486	630	-	44	51	53
	5.9M (2976X1984)	435	679	835	-	49	54	56
	2.0M (1728X1152)	831	1,081	1,201	-	56	58	57
	Burst	489	743	899	-	-	-	-
	16.9M (5472X3080)	186	332	450	-	37	46	50
	7.8M (3712X2088)	355	577	730	-	48	52	55
	4.9M (2944X1656)	497	752	908	-	51	55	56
	2.1M (1920X1080)	1,546	2,804	3,847	-	60	62	63
	13.3M (3648X3648)	228	398	529	-	40	48	52
	7.0M (2640X2640)	385	616	771	-	48	53	55
	4.0M (2000X2000)	566	829	981	-	52	56	57
	1.1M (1024X1024)	2,779	4,690	6,085	-	62	63	64

Size		Quality	
		HQ	Normal
Video	1080 30P 1920X1080 (30 fps)	Approx. 17'	Approx. 19' 51"
	720 30P 1280X720 (30 fps)	Approx. 23' 46"	Approx. 29' 38"
	480 30P 640X480 (30 fps)	Approx. 52' 57"	Approx. 69' 43"
	240 WEB For Sharing (30 fps)	-	Approx. 235' 485"

- The figures above are measured without using the zoom function.
- Available recording time may vary if you use the zoom.
- Several videos were recorded in succession to determine the total recording time.
- The maximum recording time is 29 minutes and 59 seconds per file.
- The maximum playback time of For Sharing videos is 30 seconds per file.

Cautions when using memory cards

- Avoid memory cards to very cold or very hot temperatures (below 0 °C/32 °F or above 40 °C/104 °F). Extreme temperatures can cause memory cards to malfunction.
- Insert a memory card in the correct direction. Inserting a memory card in the wrong direction may damage your camera and memory card.
- Do not use memory cards that have been formatted by other cameras or by a computer. Reformat the memory card with your camera.
- Turn off the camera when you insert or remove the memory card.
- Do not remove the memory card or turn off your camera while the lamp is blinking, as this may damage your data.
- When the lifespan of a memory card has expired, you cannot store any more photos on the card. Use a new memory card.
- Do not bend, drop, or subject memory cards to heavy impact or pressure.
- Avoid using or storing memory cards near strong magnetic fields.
- Avoid using or keeping memory cards in areas with high temperature, high humidity, or corrosive substances.

- Prevent memory cards from making contact with liquids, dirt, or foreign substances. If dirty, wipe the memory card clean with a soft cloth before you insert the memory card in your camera.
- Do not allow liquids, dirt, or foreign substances to come in contact with memory cards or the memory card slot. Doing so may cause memory cards or the camera to malfunction.
- When you carry a memory card, use a case to protect the card from electrostatic discharges.
- Transfer important data to other media, such as a hard disk, CD, or DVD.
- When you use the camera for an extended period, the memory card may become warm. This is normal and does not indicate a malfunction.
- Use a memory card that meets the standard requirements.

The manufacturer is not responsible for any loss of data.

About the battery

Use only Samsung-approved batteries.

Battery specifications

Item	Description
Model*	B740AE/B740AC/B740AU/B740AK
Type	Lithium-ion battery
Cell capacity	2,330 mAh
Voltage	3.8 V
Charging time (When the battery is completely discharged)**	Approx. 270 min

* The battery specifications or model may differ depending on your region.
** The figures above are based on when you use the provided USB cable and AC adapter. Charging the battery by connecting it to a computer may take longer.

Personal injury or death can occur if the battery is handled carelessly or improperly. For your safety, follow these instructions for proper battery handling:

- The battery can ignite or explode if not handled properly. If you notice any deformities, cracks, or other abnormalities in the battery, immediately discontinue use of the battery and contact your manufacturer.
- Use only authentic, manufacturer-recommend battery chargers and charge the battery only by the method described in this user manual.
- Do not place the battery near heating devices or expose to excessively warm environments, such as the inside of an enclosed car in the summertime.
- Do not place the battery in a microwave oven.
- Avoid storing or using the battery in hot, humid places, such as spas or shower enclosures.
- Do not rest the device on flammable surfaces, such as bedding, carpets, or electric blankets for a prolonged period.
- When the device is switched on, do not leave it in any confined space for a prolonged period.
- Do not allow battery terminals to come in contact with metallic objects, such as necklaces, coins, keys, or watches.
- Use only authentic, manufacturer-recommended, Lithium-ion replacement batteries.
- Do not disassemble the battery or puncture it with any sharp object.
- Avoid exposing the battery to high pressure or crushing forces.
- Avoid exposing the battery to major impacts, such as dropping it from high places.
- Do not expose the battery to temperatures of 60 °C (140 °F) or above.
- Do not allow the battery to come in contact with moisture or liquids.
- Battery shall not be exposed to excessive heat such as sunshine, fire, or the like.

Disposal guidelines

- Dispose of the battery with care.
- Do not dispose of the battery in a fire.
- Disposal regulations may differ by country or region. Dispose of the battery in accordance with all local and federal regulations.

Guidelines for charging the battery

Charge the battery only by the method described in this user manual.
The battery can ignite or explode if not charged properly.

Battery life

Shooting mode	Average time / Number of photos
Photos	• Approx. 325 min/Approx. 650 photos (When you attach a 9 mm lens and use the internal flash) • Approx. 265 min/Approx. 530 photos (When you attach a 9-27 mm lens and use the external flash)
Videos	Approx. 190 min (Record videos at 1920X1080 resolution and 30 fps.)

- The figures above are based on the CIPA test standards. Your results may differ depending on your actual usage.
- Available shooting time differs depending on background, shooting interval, and use conditions.
- Several videos were recorded in succession to determine the total recording time.

Low battery message

When the battery has fully discharged, the battery icon will turn red and the "**Low Battery**" message will appear.

Notes about using the battery

- Avoid exposing batteries to very cold or very hot temperatures (below 0 °C/32 °F or above 40 °C/104 °F). Extreme temperatures can reduce the charging capacity of your batteries.
- When you use the camera for an extended period, the area around the battery chamber may become warm. This does not affect the normal use of the camera.
- Do not pull the power supply cord to disconnect the plug from the power outlet, as this may cause a fire or electric shock.
- In temperatures below 0 °C/32 °F, battery capacity and battery life may decrease.
- Battery capacity may decrease in low temperatures, but will return to normal in milder temperatures.
- Remove the batteries from your camera when storing it for an extended period. Installed batteries may leak or corrode over time and cause serious damage to your camera. Storing the camera for extended periods with the battery installed causes the battery to discharge. You may not be able to recharge a fully discharged battery.
- When you do not use the camera for an extended period (3 months or more), check the battery and recharge it regularly. If you let the battery discharge continually, its capacity and life may decrease, which can lead to a malfunction, fire, or explosion.

Cautions about using the battery

Protect batteries, chargers, and memory cards from damage.

Prevent batteries from making contact with metal objects, as this can create a connection between the + and – terminals of your battery and lead to temporary or permanent battery damage and may cause a fire or electric shock.

Notes about charging the battery

- If the status lamp is off, ensure that the battery is inserted correctly.
- If the camera is on while charging, the battery may not fully charge. Turn off the camera before charging the battery.
- Do not use your camera when you are charging the battery. This may cause a fire or electric shock.
- Do not pull the power supply cord to disconnect the plug from the power outlet, as this may cause a fire or electric shock.
- Let the battery charge for at least 10 minutes before turning on the camera.
- If you connect the camera to an external power source when the battery is depleted, using high energy-consuming functions will cause the camera to turn off. To use the camera normally, recharge the battery.
- If you reconnect the power cable when the battery is fully charged, the status lamp turns on for approximately 30 minutes.
- Using the flash or recording videos depletes the battery quickly. Charge the battery until the red status lamp turns off.
- If the status lamp blinks in red, reconnect the cable, or remove the battery and insert it again.
- If you charge the battery when the cable is overheated or the temperature is too high, the status lamp may blink in red. Charging will start when the battery cools down.
- Overcharging batteries may shorten battery life. After charging is finished, disconnect the cable from your camera.
- Do not bend or place heavy objects on the AC cable. Doing so may damage the cable.

Notes about charging with a computer connected

- Use only the provided USB cable.
- The battery may not charge when:
  - you use a USB hub
  - other USB devices are connected to your computer
  - you connect the cable to the port on the front side of your computer
  - the USB port of your computer does not support the power output standard (5 V, 500 mA)

Handle and dispose of batteries and chargers with care

- Never dispose of batteries in a fire. Follow all local regulations when you dispose of used batteries.
- Never place batteries or cameras on or in heating devices, such as microwave ovens, stoves, or radiators. Batteries may explode when they are overheated.

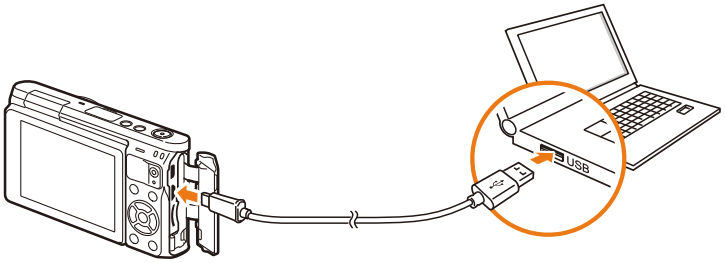
Updating the firmware

Connect the camera to the computer and update the firmware of the camera of the lens.

- You cannot run a firmware upgrade without a fully charged battery. Recharge the battery fully before running a firmware upgrade.
- If you update the firmware, user settings and values will be reset. (Date, time, language, and video out will not change.)
- Do not turn the camera off while the update is in progress.

1 Turn off the camera.

2 Connect your camera to the computer with the USB cable.



- You must plug the small end of the USB cable into your camera. If the cable is reversed, it may damage your files. The manufacturer is not responsible for any loss of data.
- If you try to plug the USB cable into the HDMI port, the camera may not work properly.

3 Turn on the camera.

4 On the computer, select **i-Launcher** → **Firmware Upgrade**.

5 Follow the on-screen instructions to download the firmware to the camera.

- You can download the firmware of the camera or the lens.

6 Turn off the camera when the download completes.

7 Remove the USB cable.

8 Turn on the camera.

9 Press [MENU] → ⚙ → **Device Information** → **Software Update** → **Body Firmware** or **Lens Firmware**.

10 Select **Yes** from a pop-up window on the camera to update the firmware.

Before contacting a service center

If you are having trouble with your device, try these troubleshooting solutions before contacting a service professional.

When you leave your camera at a service center, be sure to also leave the other components that may have contributed to the malfunction, such as the memory card and battery.

Situation	Suggested remedies
Cannot turn on the camera	• Ensure that the battery is inserted. • Ensure that the battery is inserted correctly. • Charge the battery.
The power turns off suddenly	• Charge the battery. • Your camera may be in Auto power off mode or the display turns off automatically. (p. 153) • The camera may be turned off automatically to prevent the memory card from being damaged due to excessive heat. Turn on your camera again.
The camera is losing battery power quickly	• The battery may lose power more quickly in low temperatures (below 0 °C/32 °F). Keep the battery warm by putting it into your pocket. • Using the flash or recording videos depletes the battery quickly. Recharge if needed. • Batteries are consumable parts that must be replaced over time. Get a new battery if the battery life is diminishing quickly.
Cannot capture photos	• There is no space on the memory card. Delete unnecessary files or insert a new card. • Format the memory card. • The memory card is defective. Get a new memory card. • Ensure that the camera is switched on. • Charge the battery. • Ensure that the battery is inserted correctly.
The camera freezes	Remove the battery and insert it again.
The camera heats up	While using the camera, it may heat up. This is normal and should not affect your camera's lifespan or performance.
The flash fires unexpectedly	The flash may fire due to static electricity. The camera is not malfunctioning.
The flash does not work	• The flash option may be set to **Off**. (p. 90) • You cannot use the flash in some modes.
The date and time are incorrect	Set the date and time under the ⚙ menu. (p. 154)
The display or buttons do not work	Remove the battery and insert it again.

Situation	Suggested remedies
The memory card has an error	• Turn off the camera, and then turn it on again. • Remove the memory card, and then insert it again. • Format the memory card. See "Cautions when using memory cards" for more details. (p. 171)
Your TV or computer cannot display photos and videos that are stored on a microSDXC memory card	microSDXC memory cards use the exFAT file system. Ensure that the external device is compatible with the exFAT file system before connecting the camera to the device.
Your computer does not recognize a microSDXC memory card	microSDXC memory cards use the exFAT file system. To use microSDXC memory cards on a Windows XP computer, download and update the exFAT file system driver from the Microsoft website.
Cannot display files	If you change the name of a file, your camera may not play the file (the name of the file should meet the DCF standard). If you encounter this situation, display files on your computer.

Situation	Suggested remedies
The photo is blurry	• Ensure that the focus option you set is suitable for the kind of shot you are capturing. • Use a tripod to prevent your camera from shaking. • Ensure that the lens is clean. If not, clean the lens. (p. 166)
The colors in the photo do not match the actual scene	An incorrect White Balance can create unrealistic color. Select the proper White Balance option to suit the light source. (p. 72)
The photo is too bright or too dark	Your photo is overexposed or underexposed. • Adjust the aperture value or the shutter speed. • Adjust the ISO sensitivity. (p. 71) • Turn the flash off or on. (p. 90) • Adjust the exposure value. (p. 97)
Photos are distorted	This camera can have minute distortion when using a wide-angle lens that enables shooting with a wide angle of view. This is normal, and does not cause malfunction.
Horizontal lines appear on the photo	This may occur when the subject is exposed to a fluorescent or mercury-vapor light source. Select a slow shutter speed or set the shooting mode to Auto.

Situation	Suggested remedies
Playback screen does not appear on the connected external device	• Ensure that HDMI cable is properly connected to the external monitor. • Ensure that the memory card is properly recorded.
Your computer does not recognize your camera	• Ensure that the USB cable is connected correctly. • Ensure that the camera is switched on. • Ensure that you are using a supported operating system.
Your computer disconnects the camera while transferring files	The file transfer may be interrupted by static electricity. Disconnect the USB cable and connect it again.
i-Launcher is not functioning properly	• End i-Launcher and restart the program. • Depending on your computer's specifications and environment, the program may not launch automatically. In this case, click **Start** → **All Programs** → **Samsung** → **i-Launcher** → **Samsung i-Launcher** on your Windows computer. (For Windows 8, open Start screen, and then select **All apps** → **Samsung i-Launcher**.) Or, click **Applications** → **Samsung** → **i-Launcher** on your Mac OS computer.

Situation	Suggested remedies
Auto Focus does not work	• Subject is not in focus. When the subject is outside the AF area, shoot by moving the subject inside the AF area and half-pressing [**Shutter**]. • Subject is too close. Step back from the subject and shoot.
Lens does not work	• Ensure that the lens is properly mounted. • Remove the lens from the camera and remount it.
External flash does not work	Ensure that the external flash is properly mounted on the external flash port.
The date & time settings screen appears when you power on the camera	• Set the date and time again. • This screen appears when the camera's internal power source is completely discharged. Insert a fully charged battery and wait at least 72 hours in power off status for the internal power source to be recharged.

Camera specifications

Image Sensor	
Type	BSI CMOS
Sensor size	13.2 X 8.8 mm
Effective pixels	Approx. 20.5 mega-pixels
Total pixels	Approx. 20.9 mega-pixels
Color filter	RGB primary color filter
Lens Mount	
Type	Samsung NX-M Mount
Available lens	Samsung NX-M Lenses
Image Stabilization	
Type	Lens shift (depends on lens)
Mode	Off/Mode 1/Mode 2
Distortion Correct	
Off/On (depends on lens)	
i-Function	
Supported (depends on lens)	

Display	
Type	TFT LCD with Touch Panel (C-type Touch Control Enabled)
Size	3.0" (Approx. 75.2 mm)
Resolution	HVGA (320X480) 460.8 k dots
Field of view	Approx. 100 %
Angle	Flip up: 180°
User display	Grid Line, Icons, Histogram, Level gauge
Focusing	
Type	Contrast AF
Focusing point	• Selection: 1 point (Free selection) • Multi: Normal 21 points, Close up 35 points • Face detection: Max. 10 faces • Object tracking AF
Mode	Single AF, Continuous AF, Manual Focus, Touch AF & Shutter
AF Assist Lamp	Green LED

Shutter	
Type	Electronic shutter
Speed	• Auto: 1/16,000–30 sec. • Manual: 1/16,000–30 sec. (1/3 EV Step) • Bulb (time limit: 4 min.)
Exposure	
Metering system	TTL 221 (17X13) Block segment
	Metering: Multi, Center-weighted, Spot
	Metering range: EV 0–18 (ISO160 · 9 mm, F3.5)
Compensation	±3 EV (1/3 EV Step)
AE lock	Custom button
ISO equivalent	Auto, 160, 200, 400, 800, 1600, 3200, 6400, 12800 (1 or 1/3 EV Step) * Auto ISO settings are selectable up to ISO 3200. You can select ISO 100 and 25600.
Drive Mode	
Mode	Single, Continuous, Burst (5M only), Timer, Bracket (Auto Exposure, White Balance, Picture Wizard, Depth)
Continuous shooting	• JPEG: 6 fps • Burst (5M): 10, 15, or 30 frames per second • RAW: 6 fps
Bracket shooting	Auto exposure bracketing (±3 EV), White Balance bracketing, Picture Wizard bracketing, Depth bracketing
Self-timer	2–30 sec. (1 second interval)
Shutter release	via Micro USB port (optional)
Flash	
Type	Built-in flash
Mode	Smart Flash, Auto, Auto Red-eye, Fill in, Fill-in Red, 1st Curtain, 2nd Curtain, Off
Guide number	4.9 (based on ISO 160, 24 mm), 4 (based on ISO 100, 24 mm)
Angle of view	24 mm (35 mm film equivalent)
Sync speed	Less than 1/200 sec.
Flash EV	-2–+2 EV (0.5 EV Step)
External flash	Samsung NX mini external flash available (SEF7A) (optional) Guide number: 8 (Based on ISO 160, 24 mm), 7 (Based on ISO 100, 24 mm)
Sync terminal	External flash port

White Balance	
Mode	Auto WB, Daylight, Cloudy, Fluorescent White, Fluorescent NW, Fluorescent Daylight, Tungsten, Flash WB, Custom Set, Color Temperature (Manual)
Micro adjustment	Amber/Blue/Green/Magenta 7 steps respectively
Dynamic Range	
Off/Smart Range+/HDR	
Picture Wizard	
Mode	Standard, Vivid, Portrait, Landscape, Forest, Retro, Cool, Calm, Classic, Custom1, Custom2, Custom3
Parameter	Color, Saturation, Sharpness, Contrast
Shooting	
Mode	Auto, Smart, Program, Aperture Priority, Shutter Priority, Manual
Smart mode	Beauty Face, Best Face, Continuous Shot, Kids Shot, Landscape, Macro, Food, Parties and Indoors, Action Freeze, Rich Tones, Panorama, Waterfall, Silhouette, Sunset, Night, Fireworks, Light Trace
Smart filter	Vignetting, Miniature, Sketch, Fish Eye

Size	• JPEG (3:2): 20.0M (5472X3648), 10.1M (3888X2592), 5.9M (2976X1984), 5.0M (2736X1824) (Burst mode only), 2.0M (1728X1152) • JPEG (16:9): 16.9M (5472X3080), 7.8M (3712X2088), 4.9M (2944X1656), 2.1M (1920X1080) • JPEG (1:1): 13.3M (3648X3648), 7.0M (2640X2640), 4.0M (2000X2000), 1.1M (1024X1024) • RAW: 20.0M (5472X3648)
Quality	Super Fine, Fine, Normal, RAW, RAW + S.Fine, RAW + Fine, RAW + Normal
RAW standard	SRW (ver.3.0.0)
Color space	sRGB, Adobe RGB
Video	
Type	MP4 (H.264)
Format	Movie: H.264, Sound: AAC
Movie AE mode	Program, Aperture Priority, Shutter Priority, Manual
Movie clip	Audio on/off (Shooting time: Max. 29' 59")
Smart filter	Vignetting, Miniature, Sketch, Fish Eye

Size	1920X1080, 1280X720, 640X480, 320X240 (For Sharing)
Frame rate	30 fps
Multi Motion	x0.25 (640X480, 320X240 only), x1, x5, x10, x20
Quality	HQ, Normal
Sound	Mono
Edit	Still image capture, Time trimming
Playback	
Type	Single image, Thumbnails (15/28), Slide show, Movie
Edit	Smart Filter, Crop, Resize, Rotate, Face Retouch, Brightness, Contrast, Auto adjustment, Saturation, RGB adjustment, Color Temperature, Exposure
Smart filter	Vignetting, Miniature, Soft Focus, Sketch, Fish Eye, Classic, Retro, Oil Painting, Cartoon, Ink Painting, Cross Filter, Zooming Shot

Storage	
Media	External memory (optional)*: microSD card (2 GB guaranteed), microSDHC card (up to 32 GB guaranteed), microSDXC card (up to 64 GB guaranteed) * Class 6 and above recommended
File format	RAW (SRW (ver.3.0.0)), JPEG (EXIF 2.3), MP4 (Movie), DCF
Wireless network	
Type	IEEE 802.11b/g/n
Function	AutoShare, Remote Viewfinder, MobileLink, Photo Beam, Auto Backup, Samsung Link, SNS & Cloud, Email, Baby Monitor, Group Share
NFC	
Yes	
Interface	
Digital output	USB 2.0 (micro USB jack)
Video output	• NTSC, PAL (selectable) • HDMI
External release	Yes
DC power input	DC 5.0 V, 0.55 A via micro USB

Power Source	
Type	Rechargeable battery: B740AE/B740AC/B740AU/B740AK (2,330 mAh, 3.8 V) * The battery specifications or model may differ depending on your region.
Dimensions (W X H X D)	
110.4 X 61.9 X 22.5 mm	
Weight	
158 g (without battery and memory card)	
Operating Temperature	
0–40 °C	
Operating Humidity	
5–85 %	
Software	
i-Launcher, Adobe Photoshop Lightroom 5	

* Specifications may change without notice to improve performance.
* Other brands and products names are trademarks of respective owners.

Glossary

AP (Access Point)

An access point is a device that allows wireless devices to connect to a wired network.

Ad-Hoc network

An ad-hoc network is a temporary connection for sharing files or an internet connection and between computers and devices.

AdobeRGB

Adobe RGB is used for commercial printing and has a larger color range than sRGB. Its wider range of colors helps you to easily edit photos on a computer.

AEB (Auto Exposure Bracket)

This feature automatically captures several images at different exposures to help you capture a properly-exposed image.

AEL (Auto Exposure Lock)

These features help you lock the exposure on which you want to calculate the exposure.

AF (Auto Focus)

A system that automatically focuses the camera lens on the subject. Your camera uses the contrast to focus automatically.

AMOLED (Active-matrix organic light-emitting diode)/ LCD (Liquid Crystal Display)

AMOLED is a visual display that is very thin and light, as it does not need backlighting. LCD is a visual display commonly used in consumer electronics. This display needs a separate backlight, such as CCFL or LED, to reproduce colors.

Aperture

The aperture controls the amount of light that reaches the camera's sensor.

Camera shake (Blur)

If the camera is moved while the shutter is open, the entire image may appear blurred. This occurs more often when the shutter speed is slow. Prevent camera shake by raising the sensitivity, using the flash, or using a faster shutter speed. Alternatively, use a tripod or the OIS function to stabilize the camera.

Cloud Computing

Cloud computing is a technology that allows you to store data on remote servers and to use them from a device with internet access.

Color space

The range of colors that the camera can see.

Color temperature

Color Temperature is a measurement in degrees Kelvin (K) that indicates the hue of a specific type of light source. As the color temperature increases, the color of the light source has a more bluish quality. As the color temperature decreases, the color of the light source has a more reddish quality. At 5,500 degrees Kelvin, the color of the light source is similar to the sun at midday.

Composition

Composition in photography means arranging objects in a photo. Usually, abiding by the rule of thirds leads to a good composition.

DCF (Design rule for Camera File system)

A specification to define a file format and file system for digital cameras created by the Japan Electronics and Information Technology Industries Association (JEITA).

Depth of field

The distance between the nearest and farthest points that can be acceptably focused in a photograph. Depth of field varies with lens aperture, focal length, and distance from the camera to the subject. Selecting a smaller aperture, for example, will increase the depth of field and blur the background of a composition.

EV (Exposure Value)

All the combinations of the camera's shutter speed and lens aperture that result in the same exposure.

EV Compensation

This feature allows you to quickly adjust the exposure value measured by the camera, in limited increments, to improve the exposure of your photos.

Exif (Exchangeable Image File Format)

A specification to define an image file format for digital cameras created by the Japan Electronic Industries Development Association (JEIDA).

Exposure

The amount of light allowed to reach the camera's sensor. Exposure is controlled by a combination of the shutter speed, the aperture value, and ISO sensitivity.

Flash

A speed light that helps to create adequate exposure in low-light conditions.

Focal length

The distance from the middle of the lens to its focal point (in millimeters). Longer focal lengths result in narrower angles of view and the subject is magnified. Shorter focal lengths result in wider angles of view.

Histogram

A graphical representation of the brightness of an image. The horizontal axis represents the brightness and the vertical axis represents the number of pixels. High points at the left (too dark) and right (too bright) on the histogram indicate a photo that is improperly exposed.

H.264/MPEG-4

A high-compression video format established by international standard organizations ISO-IEC and ITU-T. This codec is capable of providing good video quality at low bit rates developed by the Joint Video Team (JVT).

Image sensor

The physical part of a digital camera that contains a photosite for each pixel in the image. Each photosite records the brightness of the light that strikes it during an exposure. Common sensor types are CCD (Charge-coupled Device) and CMOS (Complementary Metal Oxide Semiconductor).

IP (Internet protocol) address

An IP address is a unique number that is assigned to every device that is connected to the internet.

ISO sensitivity

The sensitivity of the camera to light, based on the equivalent film speed used in a film camera. At higher ISO sensitivity settings, the camera uses a higher shutter speed, which can reduce blur caused by camera shake and low light. However, images with high sensitivity are more susceptible to noise.

JPEG (Joint Photographic Experts Group)

A lossy method of compression for digital images. JPEG images are compressed to reduce their overall file size with minimal deterioration of the image resolution.

Metering

The metering refers to the way in which the camera measures the quantity of light to set the exposure.

MF (Manual Focus)

A system that manually focuses the camera lens on the subject.
You can use the focus ring to focus on a subject.

MJPEG (Motion JPEG)

A video format which is compressed as a JPEG image.

Noise

Misinterpreted pixels in a digital image that may appear as misplaced or random, bright pixels. Noise usually occurs when photos are shot with a high sensitivity or when a sensitivity is automatically set in a dark place.

NFC (Near Field Communication)

NFC is a set of standards for radio communication at very close proximity. You can use NFC-enabled devices to activate features or exchange data with other devices.

NTSC (National Television System Committee)

A video color encoding standard used most commonly in Japan, North America, the Philippines, South America, South Korea, and Taiwan.

Optical zoom

This is a general zoom which can enlarge images with a lens and does not deteriorate quality of images.

PAL (Phase Alternate Line)

A video color encoding standard used in numerous countries throughout Africa, Asia, Europe, and the Middle East.

Quality

An expression of the rate of compression used in a digital image. Higher quality images have a lower rate of compression, which usually results in a larger file size.

RAW (CCD raw data)

The original, unprocessed data, collected directly from the camera's image sensor. White Balance, contrast, saturation, sharpness, and other data can be manipulated with editing software before the image is compressed into a standard file format.

Resolution

The number of pixels present in a digital image. High resolution images contain more pixels and typically show more detail than low resolution images.

Shutter speed

Shutter speed refers to the amount of time it takes to open and close the shutter, and it is an important factor in the brightness of a photo, as it controls the amount of light which passes through the aperture before it reaches the image sensor. A fast shutter speed allows less time to let light in and the photo becomes darker and more easily freezes subjects in motion.

sRGB (Standard RGB)

International standard of color space established by the IEC (International Electrotechnical Commission). This is defined from color space for PC monitors and is also used as the standard color space for Exif.

Vignetting

A reduction of an image's brightness or saturation at the periphery (outer edges) compared to the center of the image. Vignetting can draw interest to subjects positioned in the center of an image.

White Balance (Color balance)

An adjustment of the intensities of colors (typically the primary colors red, green, and blue), in an image. The goal of adjusting the White Balance, or color balance, is to correctly render the colors in an image.

Wi-Fi

Wi-Fi is a technology that allows electronic devices to exchange data wirelessly over a network.

WPS (Wi-Fi Protected Setup)

WPS is a technology that secures wireless home networks.

Optional accessories

You can purchase the following optional items:

Lens, External flash, Shutter release (micro USB type), Rechargeable battery, Battery charger, Camera bag, Camera case, Memory card, Filter, USB cable, HDMI cable, Strap

- To locate the type, image and availability of accessories, visit the Samsung website.
- Before purchasing accessories, make sure they are compatible with your camera. GPS10 and EM10 are not compatible with this camera.
- Use only Samsung-approved accessories. Samsung is not responsible for damage caused by using another manufacturer's accessories.
- The accessories supplied with each product may be different in type and quantity.

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Correct Disposal of This Product (Waste Electrical & Electronic Equipment)

(Applicable in countries with separate collection systems)

This marking on the product, accessories, or literature indicates that the product and its electronic accessories (e.g. charger, headset, USB cable) should not be disposed of with other household waste at the end of their working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate these items from other types of waste and recycle them responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product or their local government office for details of where and how they can take these items for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract. This product and its electronic accessories should not be mixed with other commercial wastes for disposal.

This product is RoHS compliant.

Correct disposal of batteries in this product

(Applicable in countries with separate collection systems)

This marking on the battery, manual, or packaging indicates that the batteries in this product should not be disposed of with other household waste at the end of their working life. Where marked, the chemical symbols Hg, Cd, or Pb indicate that the battery contains mercury, cadmium, or lead above the reference levels in EC Directive 2006/66. If batteries are not properly disposed of, these substances can cause harm to human health or the environment.

To protect natural resources and to promote material reuse, please separate batteries from other types of waste and recycle them through your local, free battery return system.

CAN ICES-3 (B)/NMB-3(B)

Dispose unwanted electronics through an approved recycler.
To find the nearest recycling location, go to our website:
www.samsung.com/recyclingdirect Or call, (877) 278 - 0799

FCC notice

Caution:
Any changes or modifications in construction of this device which are not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE:
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
- Reorientate, or relocate, the receiving antenna.
- Increase the distance between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC ID: A3LEVNXF2

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC RF Radiation Exposure Statement:
This equipment complies with FCC RF Radiation exposure limits set forth for an uncontrolled environment. This device and its antenna must not be co-located or operating in conjunction with any other antenna or transmitter.

Caution:

Any changes or modifications to the equipment not expressly approved by the party responsible for compliance could void user's authority to operate the equipment.

CAUTION

RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE.
DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS.

This equipment may be operated in all EU countries.
In France, this equipment may only be used indoors.

Declaration of Conformity
Trade Name : Samsung Electronics America, Inc.
Model No. : Samsung EV-NXF2
Responsible Party: Samsung Electronics America, Inc.
Address : 85 Challenger Road, Ridgefield Park, NJ 07660
Telephone No.: 1-800-SAMSUNG (726-7864)
This device complies with Industry Canada License-Exempt RSS standard (S)
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.

Complies with IDA Standards DA100790

Approved by PTA (Year)
PTA
Pakistan Telecom Authority
Model : EV-NXF2
Year of Manufacture : 2014

ICASA
TA-2013/2281
APPROVED

33258/SDPPI/2014
1258

National Telecommunications Commission
NTC
Type Approved
No.: ESD-1408453C

TRC/SS/2014/39

SAMSUNG

Please refer to the warranty that came with your product
or visit our website www.samsung.com for after-sales service or inquiries.

CE 0678