

Camera & Imaging



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Capturing Image, Recording Video & Editing

Use handset camera to capture images and record movies.

Capturing Images & Recording Video Clips

Select Scene, Multi Shot, etc. to capture image/video (P.7-3).

Record up to an hour per clip (P.7-9).



Editing Images

Editing images, etc. (P.7-11).



Note

- Use a dry soft cloth to remove debris from camera lens cover.
- Avoid camera shake; hold handset steady or put it on something stable place and use Self-timer to prevent objectionable image blur.
- Do not expose handset to devices with static electricity when using camera.
- Camera employs high precision technology, however, some pixels may seem brighter or darker than others.
- Leaving handset in a hot place for an extended period before capturing/saving image may affect image quality.
- Exposing lens to direct sunlight may affect image color.
- When battery is low, camera may be unavailable.

Variety of Capturing Mode

Choose applicable mode; Multi shot, Scene, Panorama shot etc., according to conditions (P.7-3).



Creating Flash®

Use Still Image in Data Folder to create Flash® (P.7-12).

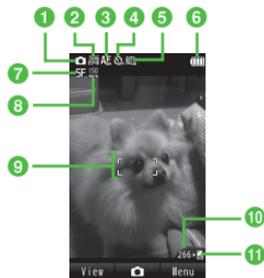


Camera

For capturing still images, select Shooting mode: **Normal** to shoot single image and **Multi shot** or **Photo combi** to shoot multi-shot.

Captured images are saved to Pictures. Insert Memory Card to save images to Digital camera.

Using Display as Viewfinder



Still Image Viewfinder

1	<p>Shooting mode</p> <ul style="list-style-type: none"> : Normal : Scene : Multi shot : Photo combi : Panorama shot 	2	<p>Size (the size varies for Panorama shot)</p> <ul style="list-style-type: none"> : 3.1 M (1536x2048)³ : Wide 2.4 M (1232x2048)³ : 2 M (1200x1600)³ : Wide 1.5 M (960x1600)³ : Wide 1.0 M (768x1280)³ : 0.3 M (480x640)³ : Wallpaper (240x400) : Mail (240x320)
	<p>Scene</p> <ul style="list-style-type: none"> : Auto¹ : Portrait¹ : Landscape¹ : Sports¹ : Night¹ : Sunset¹ 	3	<p>Focus</p> <ul style="list-style-type: none"> : AF On : Macro : AF Off
	<p>Number of capture</p> <ul style="list-style-type: none"> : 6/9 Images (six images)¹ : 6/9 Images (nine images)¹ 	4	<p>Timer</p> <ul style="list-style-type: none"> : Off : 3 sec. : 5 sec. : 10 sec.
	<p>Speed</p> <ul style="list-style-type: none"> : Speed (Fast)² : Speed (Normal)² : Speed (Slow)² : Speed (Manual)² 	5	<p>White balance</p> <ul style="list-style-type: none"> : Auto : Daylight : Incandescent : Fluorescent : Cloudy
		6	<p>Battery level</p>
		7	<p>Quality</p> <ul style="list-style-type: none"> : Superfine : Fine : Normal

8	ISO  : Auto  : 100  : 200  : 400
9	Focus frame  : Matrix  : Center-weight  : Spot
10	Number of remaining available shots
11	Save to  : Phone or Always ask  : Memory Card prior or Digital camera prior

¹Shown between shooting mode and shooting size.

²Shown between Size and Focus.

³Only when the shooting mode is set to **Normal** or **Scene**.

- Pressing  shows or hides icons and current settings.

Shooting Mode	Description
Normal	Capture still image and select size for purpose; attach images to S! Mail, save as Wallpaper, etc.
Scene	Suitable for capturing still images of night scenes and landscapes.
Multi shot	Press shutter once to capture six or nine sequential images.
Photo combi	Capture sequential images manually. Select Frame to automatically combine the images into one image.
Panorama shot	Ideal for landscapes. Capture up to six images to automatically composite them into a single panoramic image.

Single Shot



Press 



Set Shooting Mode
and press  (Back)



Press  ()



Save automatically or
manually depending on
Auto save settings (➔P.14-24)

- Adjusting size and brightness are available for still images.
- Attach captured image to message (➔P.7-13).
- Captured images are saved to Pictures. Insert Memory Card and set save location to Digital Camera folder to save images to Digital camera.
- When **Focus** is set to **AF On**, Auto Focus is available; subject in the center of AF frame is automatically focused on (white). Press  () to focus on. Frame turns green when image is in focus.

Normal

- 1 → *Camera* → *Camera*
 - Adjust settings before capturing as required (☞P.7-13).
 - 2 **Frame image in Viewfinder**
 - Use / / to zoom in/out.
 - Use to adjust brightness.
- 
- 3 ()
 - When **Focus** is set to **AF On**, a subject is automatically focused on.
 - Images are saved automatically.
 - Set **Auto save** to **Off** to save manually (☞P.14-21).

Scene

- 1 → *Camera* → *Camera*
- 2 → *Scene*
- 3 *Scene* → Select a scene → (Back)
 - Adjust settings before capturing as required (☞P.7-13).
 - Macro, ISO, Exposure metering and Effect are not available for Scene.
 - To close the menu, press (Back).
- 4 **Frame image in Viewfinder**
 - Use / / to zoom in/out.
 - Use to adjust brightness.
- 5 ()
 - When **Focus** is set to **AF On**, a subject is automatically focused on.
 - Images are saved automatically.
 - Set **Auto save** to **Off** to save manually (☞P.14-21).

Multi Shot

- 1 → *Camera* → *Camera*
 - 2 → *Multi shot*
 - 3 *Number of capture* → Select image count
 - 4 *Speed* → *Fast, Normal, Slow or Manual* → (Back)
 - Adjust settings before capturing as required (☞P.7-13).
 - Face Link is not available for Multi shot.
 - To close the menu, press (Back).
 - 5 **Frame image in Viewfinder**
 - Use / / to zoom in/out.
 - Use to adjust brightness.
 - 6 ()
 - Images are saved automatically when capturing of images is over.
 - Set **Auto save** to **Off** to save manually (☞P.14-21).
 - If **Speed** is set to **Manual**, repeat 6. Press (Stop) and save the images. To redo, press .
- When **Auto save** is **Off**, all images captured using Multi shot appear. After 6, select images to save → Press (Save).

Photo Combination

- 1  → *Camera* → *Camera*
- 2  → *Photo combi*
- 3 *Style* → **Select a style**
 - Adjust settings before capturing as required (☞P.7-13).
 - Face Link is not available for Photo Combination.
 - To close the menu, press  (Back).
- 4 **Frame image in Viewfinder** → **Apply selected frame and press**  ()
 - Use  /  /  to zoom in/out.
 - Use  to adjust brightness.
- 5 **Repeat 4 to capture images**
 - To redo, press .
 - Images are saved automatically when capturing images ends.
 - Set *Auto save* to *Off* to save manually (☞P.14-21).

Panorama Shot

- 1  → *Camera* → *Camera*
- 2  → *Panorama shot*
 - Viewfinder appears in Landscape.
 - Adjust settings before capturing as required (☞P.7-13).
 - Face Link is not available for Panorama shot.
 - To close the menu, press  (Back).
- 3 **Frame image in Viewfinder**
 - Use  /  /  to zoom in/out in Landscape view.
 - Use  to adjust brightness in Landscape view
- 4  ()
- 5 **Move handset to capture an image (vertically or horizontally) → Adjust small white border inside big black border to automatically capture image**
- 6 **Repeat 5 to capture range**
 - To create panorama image while capturing images, press  (Stop).
 - To redo, press .
 - Alternatively, capturing six images automatically ends capturing.

- Set *Auto save* to *Off* to save manually (☞P.14-21).
- Panorama images are created and saved automatically. Depending on the number of images to be captured, processing may take time.

- Move handset slowly to capture panoramic image.
- Panorama is ideal for capturing landscapes. Stand at least ten meters from subject. If too close panoramic image creation may fail.
- Low light or high contrast may hinder panoramic image creation.

Viewing Captured Images (Quick Play)

1  → *Camera* → *Camera* → 
(View)

2  to view Image

- With Memory Card inserted, *Memory card prior* or *Digital camera prior* is selectable.
- Saved media files are shown. Edit save location settings to switch between Phone/Memory Card (➔P.14-21).
- Alternatively, open still image from Data Folder (➔P.12-3).

Advanced

 **Advanced Settings** (🔍 P.7-13)

- Setting Captured Still Image as Wallpaper etc.
- Playing Quick Play Image Slide Show

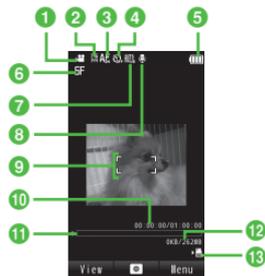
Settings

- Select Quality (🔍 P.14-20)
- Set ISO (🔍 P.14-20)
- Set Exposure Metering (🔍 P.14-20)
- Select Effect (🔍 P.14-20)
- Activate/Cancel Auto Save (🔍 P.14-21)
- Set Save Location When Memory Card is Inserted (🔍 P.14-21)
- Show/Hide Guideline (🔍 P.14-21)
- Set Face Link Display (🔍 P.14-21)
- Set Shutter Sound (🔍 P.14-21)
- Set Timer Sound (🔍 P.14-21)

Video

Record clips easily. Files are saved in 3GP format to Video folder in Data Folder. When recording a video to attach or insert into an S! Mail, set Shooting size to **S! Mail** (P.7-13).

Using Display as Viewfinder



Video Viewfinder

1	Mode 📷 : Video
2	Size 📺 : QVGA (320×240)* 📺 : QCIF (176×144) 📺 : SQCIF (128×96) 📺 : S! Mail (176×144) 📺 : S! Mail (128×96)
3	Focus 📷 : AF On 📷 : Macro 📷 : AF Off
4	Timer 🕒 : Off 🕒 : 3 sec. 🕒 : 5 sec. 🕒 : 10 sec.
5	Battery level
6	Quality 📺 : Superfine 📺 : Fine 📺 : Normal
7	White balance 📷 : Auto 📷 : Daylight 📷 : Incandescent 📷 : Fluorescent 📷 : Cloudy

8	Sound 🔊 : On 🔇 : Off
9	Focus frame
10	Elapsed recording time/Available recording time • If Size is set to S! Mail , only the elapsed recording time appears.
11	Progress bar
12	Expected video size/Available memory at the time you started the shooting • If Size is set to S! Mail , the shooting data size/available shooting size appear.
13	Save to 📱 : Phone 💾 : Memory Card prior

*Only for Landscape view

- Pressing shows or hides icons/the current settings.
- If recorded video size is too big or memory is insufficient, recording ends before maximum recording time is reached.

Shooting Mode	Description
Video	Record video suitable for attaching to S! Mail or saving to handset.

Recording Video



Press 



Set Shooting Mode
and press  (Back)



Press  ()



Save automatically or
manually depending on
Auto save settings (P.14-24)

- Adjusting size and brightness are available for video.
- Attach recorded video to message (P.7-13).
- When **Focus** is set to **AF On**, Auto Focus is available; automatically focusing a subject at the center of AF frame (white) (the focus is locked while recording a video).
- If video file is encoded beyond 15 FPS, it may not be played properly.

Video Mode

Record up to an hour for one clip.

- 1 → **Camera** → **Video camera**
 - Adjust settings before capturing as required (☞ P.7-14).
- 2 **Frame image in Viewfinder**
 - Use / / to zoom in/out.
 - Use to adjust brightness.
- 3 ()
 - To pause while recording, press (Pause). To resume the recording, press (Resume).
- 4 (**Stop**)
 - When **Focus** is set to **AF On**, a subject is automatically focused on.
 - Video is saved automatically. When recordable time has elapsed, recording automatically ends.
 - Set **Auto save** to **Off** to save manually (☞ P.14-21).

Viewing Recorded Video (Quick Play)

- 1 → **Camera** → **Video camera** → (**View**)
- 2 to highlight video → (**Play**)
 - Alternatively, check video from Data Folder (☞ P.12-3).

Advanced

- Advanced Settings** (☞ P.7-14)
 - Using Recorded Video as Ringtone
- Settings**
 - Select Quality (☞ P.14-21)
 - Set Effect (☞ P.14-21)
 - Set Sound Recording (☞ P.14-21)
 - Activate/Cancel Auto Save (☞ P.14-21)
 - Set Save Location (☞ P.14-21)
 - Show/Hide Guideline (☞ P.14-21)
 - Set Shutter Sound (☞ P.14-21)
 - Set Timer Sound (☞ P.14-21)

Editing Still Images

Set image brightness, size and effect.

- 1 → **Data Folder** → **Select a folder**
- 2 **Select a file**
 - If confirmation appears, select **OK**.
- 3 → **Edit** → **Image editor**
- 4 **Edit image**
 - **To Set Effects on Image**
 → **Effect** → **Filter, Style** or **Warp** → Select an effect → Select preview image → (OK)
 - For some effects, adjust the effect level.
 - **To Adjust an Image Automatically**
 → **Adjust** → **Auto level**
 - **To Adjust an Image**
 → **Adjust** → **Brightness, Contrast** or **Color** → Adjust image → (OK)
 - **To Resize an Image**
 → **Transform** → **Resize** → Select a size
 - After selecting **Customize**, enter **Width** and **Height**, press (OK).
 - **To Rotate an Image**
 → **Transform** → **Rotate** → () / () → (OK)
 - **To Flip an Image**
 → **Transform** → **Flip** → () / () → (OK)

■ To Crop an Image

- **Transform** → **Crop** →  to move crop frame to the position →  (Size) →  to adjust its size →  (OK)
- To undo, press  (Undo).

5  (Save) → Yes → Enter file name

Photo Library

Photo Album

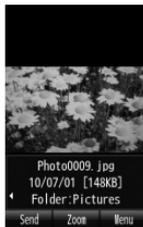
View JPEG still images in handset or Memory Card.

1  → **Camera** → **Photo album**



2 Select a folder

3  to view file

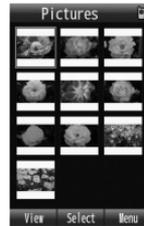


- Some files may not appear.
- Press  (Zoom) to enlarge image. To go back to normal view, press  (OK) / .

Creating Flash®

Use a still image in Data Folder to create Flash® image. Attach created Flash® image to sent via message.

1  → **Camera** → **Dynamic effect**



- With Memory Card inserted, select a file from Pictures or Digital camera folder.

2 Select file → Create Flash®

■ To Add Frame to Image

-  (Frame) → Select frame type → Select a frame (→  (Done) /  (OK)

■ To Add Icon to Image

-  (Icon) → (to add icon,  → **Insert** →) Select icon → Adjust the position →  (OK)

■ To Add Balloon to Image

-  (Balloon) → (to add balloon,  → **Insert** →) **Template/Preset** → Select balloon → Adjust the position (if **Template** is selected, enter text → Adjust the position) →  (OK)

■ To Restore Currently Edited Image

 (Reset) → *Yes*

3 (Save) → Enter name

- To delete frame added to image, select a file →  (Frame) → *None*.
- To delete icon, select file → Select  (Icon) →  → *Delete* → Use  to highlight icon →  (Delete).
- To delete balloon, select file → Select  (Balloon) →  → *Delete* → Use  to highlight icon →  (Delete).
- To create Flash® using an image in Data Folder, highlight an image →  → *Edit* → *Dynamic effect* and perform the same operations.

Advanced

Advanced Settings P.7-15

- Switching Folder
- Setting Opened Still Image as Wallpaper, etc.
- Sending Opened Still Image
- Editing Opened Still Image
- Saving Tag Information
- Deleting Opened File

Advanced Settings

Capturing Still Images/Recording Video

Setting Capture Method

In Viewfinder, 

■ To Set Capturing Size

Size → Select item

■ To Set Macro

Focus → *Macro*

■ To Set Time

Timer → Select item

■ To Set White Balance

White balance → Select item

■ To Set Effect (Color Tone)

Settings → *Effect* → Select item

■ To Set Sound Recording

Settings → *Sound recording* → *On* or *Off*

- Recording setting is only for Video.

Sending Captured Still Images/Recorded Video

After capturing, 

- For video, after recording,  → *Send*.
 - To operate above, set *Auto save* to *Off* or *On* (*Preview manual*) (ⓍP.14-21).
- #### ■ To Send via Message
- Via message* → (ⓍP.4-4 S! Mail 2)
- #### ■ To Send via Infrared
- Via infrared* (ⓍP.13-3)

Capturing Still Images

Setting Captured Still Image as Wallpaper etc.

After capturing still image,  → *Set as*

- To operate above, set *Auto save* to *Off* or *On* (*Preview manual*) (ⓍP.14-21).
- #### ■ To Set Image to Wallpaper
- Wallpaper* → Operate the following as required:
 (Rotate) several time to adjust directions
Or
 /  to adjust size →  (Set)
- #### ■ To Set Image to Incoming Image
- Caller ID* → Search and select Phone Book entry (ⓍP.2-14) →  (Set)
- #### ■ To Set Image to Alternative Picture
- Still image* →  (Set)
- ### Editing Face Link
- After capturing still image,  → *Edit face link*
→ Search and select entry (ⓍP.2-14)
 - Before capturing, set *Face link display* to *On*.

Recording Videos

Viewing Recorded Video before Saving

After recording video, (Play)

- To operate the above, set *Auto save* to *Off* (⊕P.14-21).

Using Recorded Video as Ringtone

After recording video, → *Set as*

- To operate the above, set *Auto save* to *Off* (⊕P.14-21).

■ To Set Video to Voice Ringtone

Voice ringtone

■ To Set Video to Video Ringtone

Video ringtone

■ To Set Video to Caller Ringtone

Caller ringtone → Search and select Phone Book entry (⊕P.2-14)

Quick Play

Editing/Setting/Sending Still image

→ *Camera* → *Camera* → (View) → to view still image

■ To Send Still Image

(Send)

- To Send via Message
Via message → (⊕P.4-4 S! Mail ②)
- To Send via Infrared
Via infrared (⊕P.13-3)

■ To Use Quick Play Still Image as Wallpaper, etc.

→ *Set as*

- To Set Image as Wallpaper
Wallpaper → Operate the following as required: (Rotate) several time to adjust directions
Or
 / to adjust size → (Set)
- To Set Image as Incoming Image
Caller ID → Search and select Phone Book entry (⊕P.2-14) → (Set)
- To Set Image as Alternative Picture
Still image → (Set)

■ To Edit Still Image

→ *Edit* → *Image editor* → (⊕P.7-11 Editing Still Images ④)

■ To View Still Image Details

→ *Details*

■ To Delete Still Image

Highlight image → → *Delete* → *Yes*

Editing/Setting/Sending Video

→ *Camera* → *Video camera* → (View) → to view video

■ To Send Video

→ *Send*

- To Send via Message
Via message → (⊕P.4-4 S! Mail ②)
- To Send via Infrared
Via infrared (⊕P.13-3)

■ To Set Video as Ringtone

→ *Set as*

- To Set Video as Voice Ringtone
Voice ringtone
- To Set Video as Video Ringtone
Video ringtone
- To Set Video as Caller Ringtone
Caller ringtone → Search and select Phone Book entry (⊕P.2-14)

■ To View Video Details

→ *Details*

■ To Delete Video

- To Delete a Image
Highlight video → → *Delete* → *Selected* → *Yes*

- To Delete Multiple Images
 → **Delete** → **Multiple** → Check videos →
 (Delete) → **Yes**
- To Delete All Images
 → **Delete** → **All** → Enter Phone Password
 →  (OK) → **Yes**

Playing Quick Play Image Slide Show

-  → **Camera** → **Camera** →  (View) →  → **Slide show**
- Press  (Pause) during playback to pause Slide show. Press  (Restart) to replay Slide show.
- Press  (Stop) to cancel Slide show.

Exiting Quick Play

-  during Quick Play

Photo Library

Changing Still Image Display

-  → **Camera** → **Photo album** →  (Category)
 → **Folder/Month/Date/Tags/Faces**

Switching Folder

-  → **Camera** → **Photo album** →  →
Memory switch → **Phone+Memory card/Phone/
 Memory card/Digital camera**
- When Memory Card inserted, **Phone+Memory
 card/Phone/Memory card** are selectable.

Setting Opened Still Image as Wallpaper, etc.

-  → **Camera** → **Photo album** → Select a file
 location → Select a file →  → **Set as**
- **To Set Image to Wallpaper**
Wallpaper → Operate the following as required:
 (Rotate) several times as required to adjust
 directions
 Or
 /  to adjust size →  (Set)
- **To Set Image to Incoming Image**
Caller ID → Search and select Phone Book
 entry (➤P.2-14) →  (Set)
- **To Set Image to Alternative Picture**
Still image →  (Set)

Sending Opened Still Image

-  → **Camera** → **Photo album** → Select a file
 location →  to view image →  (Send)
- **To Send via Message**
Via message → (➤P.4-4 S! Mail 2)
- **To Send via Infrared**
Via infrared (➤P.13-3)

Editing Opened Still Image

-  → **Camera** → **Photo album** → Select a file
 location →  to view image →  → **Edit** →
Image editor → (➤P.7-11 Editing Still Images 4)

Saving Tag Information

-  → **Camera** → **Photo album** → Select file
 location →  to view image →  → **Manage
 tags**
- **To Save Existent Tag**
 Select tag
- **To Save New Tag**
 (New) → Enter tag name →  (OK) →
 Select new tag

Deleting Opened File

-  → **Camera** → **Photo album** →  to view
 image → Select a file →  → **Delete** → **Yes**

Adding Icon after Adjusting

→ **Camera** → **Dynamic effect** → Select file → (Icon) → Select icon →

■ To Zoom in/out

Zoom → to adjust size → (OK) → Adjust position → (OK)

■ To Rotate Icon

Rotate → to adjust angle → (OK) → Adjust position → (OK)

■ To Reverse Icon

Reverse → → (OK) → Adjust position → (OK)

■ To Transparentize Icon

Transparency → to adjust transparency → (OK) → Adjust position → (OK)

Editing Text on Balloon

→ **Camera** → **Dynamic effect** → Select file → (Balloon) → **Template** → Enter text →

■ To Change Text Size

Font size → to adjust size → (OK) → Adjust position → (OK)

■ To Change Text Color

Font color → to highlight text color → (OK) → Adjust position → (OK)

■ To Assign Motion

Action text → to highlight action → (OK) → Adjust position → (OK)

■ To Reserve Balloon

Reverse → → (OK) → Adjust position → (OK)

■ To Edit Text

Edit text → Edit text → (OK) → Adjust position → (OK)

Editing Placed Icon

Place icon (P.7-12) → (Icon) → to highlight icon → (Edit)

■ To Adjust Position

Adjust position → Adjust position → (OK) → (Done)

■ To Zoom in/out

Zoom → to adjust size → (OK) → (Done)

■ To Rotate Icon

Rotate → to adjust direction → (OK) → (Done)

■ To Reverse Icon

Reverse → → (OK) → (Done)

■ To Transparentize Icon

Transparency → to adjust transparency → (OK) → (Done)

Editing Placed Balloon

Place balloon (P.7-12) → (Balloon) → to highlight Balloon → (Edit)

■ To Edit Text

Edit text → Edit text → (Done)

■ To Change Balloon Type

Balloon type → Select Balloon → (Done)

■ To Adjust Position

Adjust position → To adjust position → (OK) → (Done)

■ To Change Text size

Font size → to adjust size → (OK) → (Done)

■ To Change Text Color

Font color → to highlight text color → (OK) → (Done)

■ To Assign Motion

Action text → to highlight action → (OK) → (Done)

■ To Reserve Balloon

Reverse → → (OK) → (Done)

Previewing Flash®

In Create Flash® window, (Preview)