# Camera

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# **Before Using Camera**

931P features approximately 8.1 Mega Pixel CMOS Auto-focus Camera capable of capturing still images and videos.

## Image File Formats

Still images/videos are saved to Data Folder.

Image Type	File Format	Save Location
Still images	JPEG (.jpg)	Camera folder in Pictures folder
Videos	MPEG-4 (.3gp), ASF (.asf)	Camera folder in Videos folder

● To save to microSD Card (Storage setting: C P.6-11)

### Notes

- Remove dust/debris from lens cover with a soft cloth.
- Handset movement may blur images especially in dark places; hold handset firmly.
- Capturing/saving images immediately after handset has been left in a hot place may affect image quality.
- Exposing lens to direct sunlight may affect image quality.
- While Camera is active, Photo light illuminates/flashes. When Inside Camera is used, Notification Light/Charging Indicator flashes. Illuminating/flashing cannot be turned off.

#### Shutter Click

Shutter click sounds at fixed volume even in Manner Mode.

• To change shutter click sound: 17P.6-11

# Inside & Outside Camera

Use Inside or Outside Camera. Still images can also be captured with handset closed (ඌP.6-7). With Outside Camera, auto focus (ඌP.6-13) and image stabilizer (ඌP.6-11) are available.

Change settings by using either function menus or key operations.



#### Note

- Camera is not available when battery is low.
- Incoming calls, Alarm and low battery cancel Camera. Captured images/ recorded videos are retained. Save data when Camera restarts.
- When left in Viewfinder for three minutes, Camera is canceled and previous window returns.

#### **Camera Display Indicators**

- Images shown below are for reference only.
- Picture Viewfinder



0



	Item	Description	Operation
0	Photo mode (🗁 P.6-10)	🗈 Intelligent Auto 💿 Normal 💷 Scene 🖾 My original set.	Press and hold $\square$ [ $\square$ ] $\rightarrow$ Select a mode
		<ul> <li>For Scene/My original set., indicators may vary depending on setting.</li> </ul>	(→ For Scene/My original set., select an item)
0	CHG Camera-mode	🗖 Camera mode 🔲 Video Camera mode 🎴 / 🖉 / 🦉 Action mode (Auto/	[Video/Cont./Camera]
		Auto bracket/Manual) (Cont. shooting set.: 17P.6-8)	<ul> <li>Toggle Action mode (</li></ul>
8	Storage setting	Phone D microSD Card	9
4	No. of frames	Show number of remaining frames	—
6	Img. stabilizer	Correct camera shake	( <b>Ľ</b> ₹P.6-11)
6	Flash setting (Still image)	🛃 Auto 💈 Forced ON 🞇 Always light ON 🔞 Forced OFF	8
	Photo light setting (Action/Video)	🞆 ON 🔜 OFF	
0	Key Guidance	Show key operation guidance	_
8	Top indicator	Indicate vertical direction	_
9	Focus Guide	Adjust focus automatically	
Ð	Zoom bar	Indicate zoom level (17 P.6-9)	Image: State of the state o
			<ul> <li>Long press: continuous zoom</li> </ul>
Ð	Image size*	Show image size (	(1) → Select a size
Ð	Image quality*	N Normal F Fine SF Super fine	$\bigcirc$ $\rightarrow$ Select a mode
B	High sensitiv.*	ON 🚮 OFF	$\bigcirc$ → Select ON/OFF
Ø	Brightness*	Adjust brightness (Level -3 to +3)	$(4) \rightarrow \text{Select a level}$
Ð	White balance*	🔚 Auto  勝 Fine 💽 Cloudy 🗼 Light bulb 🔘 Fluorescent light	$(5) \rightarrow$ Select a mode
Ð	Scene*	🔊 Portrait 🛛 🐔 Sports 🛛 🐼 Food 🔼 Scenery	$\bigcirc$ $\rightarrow$ Select a scene
		Night mode 🕅 Backlight 📝 Character 👪 Snow	
-	[*/	Sunsel Y Pel	💌 . Colort o mode
<b>U</b>	Focus" (L#P.6-13)	Face Detection Ar Auto Close-up Landscape	$\bigcirc \rightarrow$ Select a mode
e	Auto timer	( <i>L</i> <b>≇</b> 7.6-8)	$\checkmark$ $\rightarrow$ loggle UN/UFF
B	Memory capacity bar	Indicate memory status (appears in red when memory is full)	—
Ø	File size setting	Mail restrict'n(S) 🔛 Long time	( <b>Ľ</b> ≇P.6-11)
0	Movie type set	Record video with/without audio	( <b>⊆</b> ₽.6-11)
2	Recordable time	Indicate recordable time	—

\* Alternatively,  $\square[\square] \rightarrow \square$  to highlight an item  $\rightarrow \square$  to select a setting

# **Pictures/Videos**

- Confirm battery strength (PP.1-11) and memory (PP.6-11) before recording. When battery is low, video cannot be recorded.
- Captured images and videos are automatically saved to Data Folder. To select save location each time, turn *Auto save set* to *OFF* (2 P.6-11).

#### Note

- When using Inside Camera, mirror image appears on Viewfinder. Captured images appear correctly.
- For activating Camera/capturing images by 🗟, press firmly.

# Capturing Still Images (Camera Mode)

1 Press or press and hold ■ to activate Camera

# 2 Frame subject

- To toggle Inside/Outside Camera: 🖍
- 3 [Record], or to capture the image

Shutter click sounds at fixed volume. Image is automatically saved.

 When Focus is set to Auto or Face Detection, Outside Camera automatically focuses on subject before capturing image.



**Picture Viewfinder** 

**c** to exit Δ

Return to Standby.

# Capturing Self-portraits with Outside Camera

In Horizontal Open Position, use External Display to frame self-portraits.

In Picture Viewfinder (Horizontal Open Position),



1

■10:10É

Viewfinder switches to External Display.



**2** Frame subject  $\rightarrow \blacksquare$ 

Captured image is saved to Data Folder, and Viewfinder returns to Internal Display.

● Press I halfway → I to lock focus (Auto Focus Lock: 1 P.6-13)

#### Functions Available in External Viewfinder

- $\bullet$  Zoom in and out:  $\fbox{\ } \blacktriangle$  (Press and hold for continuous zoom)
- Toggle flash on/off: (8)
- Toggle Camera (Inside/Outside): 줃

Press keys other than above to switch to Internal Display

# **6** Camera

## **Capturing Still Images with Handset Closed**

While handset is closed, use External Display as Viewfinder.

1 With handset closed, press and hold ₪ Camera activates.



**2** Frame subject  $\rightarrow \blacksquare$ 

Image is automatically saved.

- Press 🗟 halfway → 🗟 to lock focus (Auto Focus Lock: 🖙 P.6-13)
- **3** Press and hold (MULTI) to exit

#### Functions Available in External Viewfinder

- Zoom in or out: 🗹 🛦 (Press and hold for continuous zoom)
- Toggle flash on/off: [](MULTI)

#### Note

- If message appears on External Display upon activating Camera, open and close handset to re-activate Camera.
- When Picture Viewfinder is active on Internal Display, closing handset may capture still image on External Viewfinder.

#### **Continuous Shooting**

Capture a succession of up to 20 still images automatically with a single press.

In Picture Viewfinder,  $\Box$  [Video]  $\rightarrow$   $\Box$  [Cont.]

Appears (Indicators vary by Action mode).

- To set Continuous Shooting: 17P.6-11
- **2** Frame subject  $\rightarrow \bigcirc$  [Record],  $\bigcirc$  or  $\bowtie$

Images are automatically saved.

- When *Focus* is set to *Auto*, Outside Camera automatically focuses on subject before capturing image.
- To stop shooting halfway: (7)78-

## **Recording Videos (Video Camera Mode)**

1 Press and hold 
to activate Video Camera

• To toggle Inside/Outside Camera: 🖉

# [Record], ① or I to start recording

Tone sounds.

 When *Focus* is set to *Auto*, Outside Camera automatically focuses on subject before recording begins. During recording, auto focus functions regardless of Focus setting.



#### Video Viewfinder

4 (Stop], (O) or (b) to end recording

Tone sounds.

Video is automatically saved.

- Recording stops automatically at maximum recording time.
- 5 🗩 to exit

Return to Standby.

#### Note

● Alternatively, 🖸 → 🖸 [Video] to activate Video Camera

# **Functions Available while Shooting**

From Car

Camera mode: Action mode: Video camera mode: Press and hold

#### Auto Timer

- > **[Menu]**  $\rightarrow$  *Auto timer*  $\rightarrow$  *ON*  $\rightarrow$  Enter time (seconds)  $\rightarrow$ 
  - [Record], ① or  $\blacksquare$  (→ For video, [Stop], ① or  $\blacksquare$ )
- Auto timer tone sounds. After set period of time, shutter is released and recording starts.
- When Auto timer is active, (D)[Quit] or me to return to Viewfinder without canceling Auto timer.
- Auto timer is not available when *Cont. shooting set.* is set to *Manual*.

#### Zoom

- > I (zoom in) or I (zoom out) to adjust zoom → I (Record),
   I or I
- Press and hold 🔯 for continuous zoom.
- Zoom is available during video recording.
- Zoom is disabled when *Image size* is set as follows:
  - · Inside Camera: VGA, HVGA Wide or QVGA (individual mode)
- Zoom may change image quality.

2

 Maximum zoom levels for individual image size are as follows. Maximum zoom levels in Horizontal Open Position are indicated in () if different from those in Normal Position.

Camera mode	Size	Zoom level	Max. level (approx.)
Outside Camera			
Camera	anna 8M	21 levels	2.6 times
(High	6M Wide	21 levels	2.6 times
sensitiv.:	5M	21 levels	2.6 times
OFF)	× III B 3M	21 levels	2.6 times
	* EFF 2M Wide	21 levels	2.6 times
	×1600 2M	21 levels	2.6 times
	, ₩₽₽ Stand-by	21 levels	2.6 times
	× HID VGA	21 levels	2.6 times
	× ≝∎ QVGA	31 levels	5.1 times
	x <sup>™</sup> E QCIF	31 levels	8.5 times
	∗ 띎 Sub-QCIF	31 levels	12.8 times
Camera	1200 ×1600 2M	21 levels	2.6 times
(High	x ∰ Stand-by	21 levels	2.6 times
sensitiv.: ON)		21 levels	2.6 times
	× ≝En QVGA	31 levels	5.1 times
	x 111 QCIF	31 levels	8.5 times
	、語 Sub-QCIF	31 levels	12.8 times
Continuous	× ≝∰ VGA	21 levels	2.6 times
shooting	, ≝B QVGA	31 levels	5.1 times
	, ₩ QCIF	31 levels	8.5 times
	、語 Sub-QCIF	31 levels	12.8 times

Camera mode	Size	Zoom level	Max. level (approx.)
Video camera	× 440 VGA	21 levels	1.9 times
(Img.	. 睅 HVGA Wide	21 levels	1.9 times
stabilizer:	x 郌 QVGA	31 levels	2.9 (3.8) times
Auto)	x 🙀 QCIF	31 levels	5.2 (6.4) times
	x 📴 Sub-QCIF	31 levels	7.2 (9.6) times
Video camera	× HED VGA	21 levels	2.6 times
(Img.	🗴 🏪 HVGA Wide	21 levels	2.6 times
stabilizer:	x 靶 QVGA	31 levels	3.8 (5.1) times
OFF)	x 👯 QCIF	31 levels	7.0 (8.5) times
	x ≝ Sub-QCIF	31 levels	9.6 (12.8) times
Inside Camera			
Camera/	× 440 VGA	1 level	1.0 time
Continuous	x ≝B QVGA	1 level	1.0 time
shooting	x 📊 QCIF	6 levels	1.6 times
	x 틢 Sub-QCIF	21 levels	2.1 times
Video camera	× HED VGA	1 level	1.0 time
	* 🔛 HVGA Wide	1 level	1.0 time
	× 뢘 QVGA	1 level	1.0 time
	x 114 QCIF	6 levels	1.9 (1.6) times
	、 唱 Sub-QCIF	21 levels	2.8 (2.1) times

#### Use Flash/Photo Light

Select a Flash/Photo Light setting for Outside Camera.

>In Picture Viewfinder, ∑[Menu] → Flash setting → Select an item (See below)

Item	Operation/Description
Auto	Flash goes off automatically in low-light situations.
Forced ON	Flash always goes off when capturing images.
Always light ON	Photo Light illuminates.
Forced OFF	Flash/Photo Light is disabled.

- > In Continuous Shooting/Video Viewfinder,  $\textcircled{P}[Menu] \rightarrow Photo \ light \ set. \rightarrow ON$  or OFF
- Flash/Photo light is not available when battery is low.
- When Camera is ended or changed to Inside Camera while a setting other than *Forced OFF* is set, Flash setting is changed to *Auto* next time Camera activates or Outside Camera is used. When *Forced OFF* is set, setting remains.
- Even if Forced OFF (Flash setting) or OFF (Photo light set.) is set, Photo light illuminates or flashes when Camera is active or during shooting.
- When Photo mode is set to Intelligent Auto, Forced ON cannot be set.
- When using flash, maintain an appropriate distance from subject of 40 to 100 cm.
- When image is captured at close range, image may turn white as a result of poor exposure.

#### Set Photo Mode According to Scene

> [Menu] → Photo mode → Select an item (See below)

ltem	Operation/Description
Intelligent	Automatically switch Photo mode according to occasion
Auto	(in Camera mode)
	<ul> <li>Indicator is animated when mode changes (Example: Close-up).</li> </ul>
	Mode does not change after Auto Focus Lock. Cancel
	Auto Focus Lock.
Normal	Capture an image in normal mode
Scene	Adjust brightness and color tone according to scene
	> Select an item
My original	( <b>Ľ</b> ≇P.6-12)
set.	

#### Functions Available in Viewfinder

- Change settings before initiating image capture. Some functions are changeable with simple key operations (2 P.6-5).
- Some operations are not available depending on Photo mode, image size or Photo mode.
- > **Second Second Sec**

Item	Operation/Description
Inside camera/ Outside camera	Switch Inside/Outside Camera
CHG camera- mode	> Camera mode, Video camera mode, Action mode or Bar code reader
Folder jump	Open storage folder
Photo mode	(⊆Above)

ltem	Operation/Description
Image size	> Select a size
File size setting	Select <i>Mail restrict'n(S)</i> for S! Mail attachments or <i>Long time</i> for long-time recording
Image quality	<ul> <li>Select an item</li> <li>In Video camera mode, this function is available only when <i>File size setting</i> is set to <i>Long time</i>.</li> </ul>
Camera settings	<ul> <li>&gt; Select an item</li> <li>Brightness → </li> <li>White balance: Adjust color tone</li> <li>Color mode set: Select a color mode</li> <li>Focus: CPP.6-13</li> <li>Img. stabilizer: Minimize camera shake automatically</li> <li>Shoot with frame: Add frame to image</li> <li>Shutter sound: Select a shutter click sound</li> <li>Flicker correction: Minimize flicker while shooting near fluorescent light</li> </ul>
Storage setting	<ul> <li>&gt; Select an item</li> <li>• Store in → Phone or microSD</li> <li>• Auto save set → ON or OFF</li> </ul>
High sensitiv.	>ON or OFF
Flash setting/ Photo light set.	Set whether to use Flash/Photo light (CFP.6-10)
Auto timer	( <b>Ľ</b> ₹P.6-8)

Item	Operation/Description
Cont.	> Select an item
shooting set.	• Action mode: Manual captures one picture at a
	time. Auto bracket captures nine different still
	images automatically.
	<ul> <li>Shot interval: Select an interval when</li> </ul>
	Action mode is set to Auto.
	<ul> <li>Shot number: Set number of images to be</li> </ul>
	captured when <i>Action mode</i> is set to <i>Auto</i> or
	Manual. Details are as follows:
	VGA (480×640): 4
	QVGA (240×320): 5 to 10
	QCIF (144×176): 5 to 20
	Sub-QCIF (96×128): 5 to 20
Movie type	>Normal or Video
set	
Display size	Select Viewfinder size
	>Actual size or Fit in display
Attach S!Mail	> YES or NO
mode	<ul> <li>Image size, File size setting and Image quality are set</li> </ul>
	as follows (respectively): QCIF, Mail restrict'n(S),
	Normal
lcon	Show/hide display indicators
	>ON or OFF
Memory	View memory information
Status	

Save as Original Setting > Press and hold  $\boxdot \rightarrow$  Photo mode MyOriginal  $\rightarrow$  Follow the steps (See below)

Item	Operation/Description		
Save setting	> Highlight a setting $\rightarrow$ ( $\bigcirc$ [Save] ( $\rightarrow$ YES) $\rightarrow$ Edit title		
Open setting	> Select a setting		
Edit title	> Highlight a setting $\rightarrow \square$ [Edit] $\rightarrow$ Edit title		
View detail	>Highlight a setting → [Detail]		
Delete setting	> Highlight a setting $\rightarrow$ <b>(Delete)</b> $\rightarrow$ <b>YES</b>		

#### Functions Available after Shooting

- Available only when *Auto save set* (
- Some operations are not available depending on camera mode or image size.
- > **[Menu]**  $\rightarrow$  Select an item (See below)

Item	Operation/Description
Play	Play back recorded video
Save	Save still image/video
Store all/ animat'n	> Save or Mirror save → <new></new>
Mirror save	Save mirror image
Attach to S! Mail	Send file via S! Mail > Create a message ( from Step 2 on P.13-4)
Set display	Set as wallpaper, Phone Book image, etc. > Select an item
Change frame*	> Select a frame $\rightarrow \bigcirc$ [Set] $\rightarrow \bigcirc$ [Save]
Store in	>Phone or microSD
Mirror display/ Normal display	Switch Mirror/Normal display
Display size	Set image size in Viewfinder > Actual size or Fit in display
lcon	Show/hide display indicators > ON or OFF
Cancel	Discard image to return to Viewfinder
* Available only	when shooting with frame

# 6 Camera

# **Focus Functions (Outside Camera)**

# **Changing Focus Settings**

<Default> Camera mode: Face Detection Video camera/Action mode: Auto

#### Select a focus setting according to occasion. Focus on Individual scenes automatically.

- Face Detection (Camera mode only): For portraits
- Auto: Auto detection
- Close-up: For nearby objects
- Landscape: For distant landscapes
- 1 In Picture/Video Viewfinder, 💽
- 2  $\Box$  to select a setting  $\rightarrow \bigcirc$

#### **Face Detection**

- Detect up to five faces within 2.5 meters.
- Show yellow Focus Guide when a face is detected.
- Automatically focus on one face when more than one is detected (Focus guide turns yellow once focus is on the face.).
- Faces may not be detected in following conditions:
  - · Face is tilted.
  - $\cdot\,$  A part of face is covered by glasses, hat, mask or shadow.
  - · Face is too small, big or dark for screen.
  - $\cdot\,$  Face is at edge of screen.
- Shoot with Auto focus if detection fails.

# Auto Focus Lock

Bring focus on subject at center of display automatically. Lock focus on subject, and recompose your picture.

- 📘 In Picture/Video Viewfinder, 🞑, 🛞 or 層 halfway
  - ① When in focus, handset sounds.
  - 2 Focus Guide turns green, and focus is locked.
  - When out of focus, Focus Guide turns red.
  - To cancel focus locked by (\_\_\_) or (★):
  - $\bullet$  To cancel focus locked by  $\ensuremath{\textcircled{B}}$  : Release finger from  $\ensuremath{\textcircled{B}}$
- 2 Determine composition
- Capture image in selected camera mode (Camera mode: □ P.6-6/Action mode: □ P.6-7/Video camera mode: □ P.6-8)
  - In Step 1, press 圖 halfway to lock focus, then press 圖 firmly to shoot.

# **Viewing Saved Images**

#### Main Menu 🕨 Camera

1 Open Pictures Pictures

> Open Videos *Videos*

**2** Se

**G** Camera

- 2 Select a folder
- **3** Select a file



**Example: Pictures** 

- Open Pictures Saved on microSD Card >After selecting *Pictures* in Step 1, [microSD] → Select a folder
- Open Videos Saved on microSD Card > After selecting *Videos* in Step 1, (台)[microSD] → Select a folder
- Check Still Images in Picture Viewfinder
- >In Picture Viewfinder, 😇 [Folder]
- To return to Picture Viewfinder:



●Editing Still Images (ピアP.9-12)