Camera

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Mobile Camera

Use handset camera to capture pictures and record movies. Edit pictures and print them via Bluetooth®-compatible printers.

Capturing Pictures & Recording Movie Clips

Select Scene, Multi Shot, etc. (●P.6-3) Record up to one hour per clip (●P.6-9).





Capturing options and corresponding image sizes:

Shooting Mode		Shooting Size	
Still Image	Single shot Night shot	3M (2048×1536) 2M (1600×1200) 1.3M (1280×960) VGA (640×480) Standby (320×240)	
	Multi shot Photo combination Frame shot	Standby (320×240)	
Video	For S! Mail Normal	176×144 128×96	

Printing pictures

Print pictures via Bluetooth[®] (€P.6-12).



Multi Selector Operations

When Camera is activated, Viewfinder appears in Landscape. The operations assigned to vertical scroll keys are set to horizontal scroll keys, and vice versa. Operations are described in Landscape view in this chapter.

Vertical scrolls (horizontal scrolls in Portrait): Horizontal scrolls (vertical scrolls in Portrait):

Mobile Camera Precautions

- Use a dry soft cloth to remove debris from camera lens.
- Avoid camera shake; hold handset steady or put it on a stable place and use Self-timer to prevent objectionable image blur.
- Do not expose handset to devices with static electricity at use of 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 image capture/ save may affect image quality.
- Exposing lens to direct sunlight may affect image color.
- When battery is low, camera may be unavailable.

Camera

For taking still pictures, select Shooting mode: *Normal* to shoot single picture, *Multi shot* or *Photo combination* to shoot multi-shot, *Frame shot* to shoot picture with frame, *Night shot* to shoot in sunset or night situation.

Captured images are saved into *Picture*. Insert Memory Card to save images to *Digital camera*.

Using Display as Viewfinder

When Camera is activated, Viewfinder appears in Landscape.



Still Image Viewfinder



- : Single shot
- 🕞 : Multi shot (6 shots)
- 🕞 : Multi shot (9 shots)
- 💽 : Photo combination
- 🔳 : Frame shot
- *) : Night shot
- 2 Shooting size
 - 2048 : 3M (2048×1536) *
 - 1600 1200 : 2M (1600×1200) *
 - 1280 : 1.3M (1280×960) *
 - 540 : VGA (640×480) *
 - 器: Standby (320×240)
 - *Only when the shooting mode is set to *Single shot* or *Night shot*
- 3 Self-timer
 - 🕑 : Off 🖄 : 3 seconds 🖏 : 5 seconds 🕅 : 10 seconds
- 4 White balance
 - ₩ : Auto 🐹 : Daylight 🗼 : Incandescent 👾 : Fluorescent ▲ : Cloudy
- 6 Focus frame

- 6 Save to
 - Phone or Ask each time
 - 🖻 : Memory card or Digital camera
- Number of remaining shots available

Single Shot







Set shooting methods with $()/\bigcirc$ and ()



Press 📼 or 🔘 (@)



Confirmation window for saving/sending/ registering still image appears only when *Auto Save* is set to *Off*.

 Set Auto Save (●P.12-9) to Off to attach picture to messages after capturing still image (●P.6-13) or set as Wallpaper (●P.6-13).

Shooting Mode

Shooting Mode	Description
Single shot	Capture still image and select size for purpose; attach images to S! Mail, save as Wallpaper, etc.
Multi shot	Press shutter once to capture six or nine sequential images.
Photo combination	Capture sequential images manually. Select Frame to automatically combine images into a composite image.
Frame shot	Capture still image with frame.
Night shot	Capture still image in the dark scene at dusk or night.

Shortcut Key Operations

Press assigned key to change settings. Available shortcuts vary by mode or setting status.

Key	Item	Description		
1 .0	Shooting mode	Single shot, Multi shot (6 shots), Multi shot (9 shots), Photo combination, Frame shot, Night shot		
2 th / _{ABC}	Self-timer	Off, 3 seconds, 5 seconds, 10 seconds		
D+	Quick Play	Phone memory, Memory card, Digital camera		
	Switch to <i>Photo/</i> <i>Video</i>	_		
or 1/+	Zoom	-		
	Brightness	_		

•While using Camera, pressing keys does not make operation tone.

Normal

Captured images are saved to *Picture*. Insert memory Card to save images (VGA images and larger) to Digital camera.

• Even if Memory Card is inserted and save location is set to **Digital camera** folder, setting is changed to Memory card when Standby size images are saved.

(2+ seconds)

- If *Record video* is activated last time, Video Viewfinder appears. Press - (Photo) to switch to Still Image Viewfinder.
- Alternatively, press \bigcirc \rightarrow select *Camera* → Take photo.
- Adjust settings before capturing as required (€P.6-12).

Frame image in Viewfinder

- Press //+ or + to zoom in/out.
- Press () to brighten or darken an image.

3 💻 or 🖲 (@)



Prompt for Saving Still Image

- To redo, press
- ____ or (●) (∞)
- Zoom is not available when an image size is set to 3M
- Using Auto Focus

When AF is set to On. Auto focus is available. the subject at the center of the frame will be automatically focused

Press halfway to focus on the subject. Then press _____ all the way to take a picture.

If using \bigcirc , press \bigcirc to focus and take picture simultaneously.

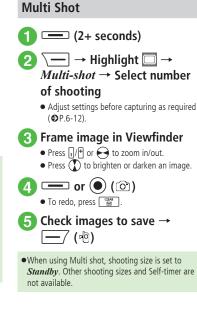
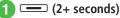


Photo Combination



- ∖ I → Highlight 🗔 →
- Photo combination



Select a frame $\rightarrow \bigcirc$ (OK)

- Adjust settings before capturing as required (€P.6-12).

Frame image in Viewfinder

→ Apply selected frame and press or () ()

- Press 1/+ or 🔶 to zoom in/out.
- Press () to brighten or darken an image.
- 5 Repeat step 4 to capture images $\rightarrow \square$ or \bigcirc (\bigcirc) • To redo, press

6 ____ or ● (♠)

 When using Photo combination, shooting size is set to Standby. Other shooting sizes and Selftimer are not available.

Capturing Still Images with Frame

- (2+ seconds)
- $\overline{)} \rightarrow$ Highlight $\Box \rightarrow$ Frame shot

Select a frame $\rightarrow \bigcirc$ (OK)

 Adjust settings before capturing as required (€P.6-12).

Frame image in Viewfinder

- Press $\left[1/\right]^{+}$ or $\left[+\right]$ to zoom in/out.
- Press () to brighten or darken an image.
- 💶 or () (()) 5 • To redo, press
- 6) 💻 or 🔘 (🔊)

 When using Frame shot, shooting size is set to Standby. Other shooting sizes are not available.

Night Shot



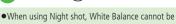
Frame image in Viewfinder

- Press $\left| \cdot \right|^+$ or $\left| \cdot \right|^+$ to zoom in/out.
- Press () to brighten or darken an image.

- or () (()) • To redo, press



set.



6

6-7

Viewing Captured Pictures (Quick Play)

Use Quick Play to view still images.

(2+ seconds)

2 $\square_{\bullet,\bullet}^{\circ}$ \rightarrow View still images with ||/|| or \leftarrow

- Press (Zoom) $\rightarrow 1/1$ to zoom in/out.
- When Memory Card is inserted, press .
 and select *Phone, Memory card* or *Digital camera* to view images.
- Alternatively, check still images from *Data Folder* (OP.10-3).

Advanced

Advanced Settings P.6-12

- Switching Shooting Mode
- Setting Shooting Size
- Setting Self-timer
- Setting White Balance
- Setting Effect (Color Tone)
- Viewing Captured Pictures
- Viewing Capturing Shortcut Key Assignments
- Entering File Name of Captured Still Image
- Setting Captured Still Image as Wallpaper etc.
- Enlarging Captured Still Image
- Deleting Images Opened via Quick Play
- Setting Still Image Opened via Quick Play to Wallpaper etc.
- Playing Quick Play Slide Show
- Viewing Image Details via Quick Play

Settings

- Show or hide Indicators (IPP.12-9)
- Set Auto-focus (IPP.12-9)
- Activate or cancel Auto Save (IPP.12-9)
- Show or hide menu item guidance (
 P.12-9)
- Select Quality (IPP P.12-9)
- Set ISO (
 P.12-9)
- Set Exposure metering (IPP.12-9)
- Set save location (IPP.12-10)

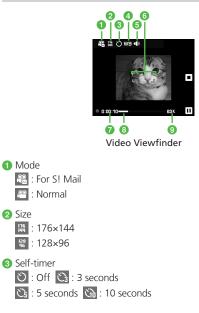
Show or hide Guideline (IPP.12-9)

Set Shutter sound (
P.12-9)

Video Camera

Capture clips easily. Files are saved in 3GP format to *Videos* folder in *Data Folder*. When recording a video to attach or insert into an S! Mail, set Shooting size to *For S! Mail* (�P.6-14).

Using Display as Viewfinder



- 4 White balance
 - 💵 : Auto 🐹 : Daylight
 - 🔆 : Incandescent 👾 : Fluorescent
 - 🖎 : Cloudy
- 5 Sound
 - 🐠 : Sound On 🔌 : Sound Off
- 6 Focus frame
- Elapsed recording time
- 8 Progress bar
- 9 Expected video size/Available recording time
 - •If *Shooting size* is set to *For S! Mail*, the shooting data size appears; if *Normal*, available recording time appears.

Recording Video



Press or ()

to end recording



 Set Auto Save (
P.12-9) to Off to attach the file to messages after recording video (
P.6-14).

Shooting Mode

Shooting Mode	hooting Mode Description		
For S! Mail	Record a short video (up to 295 KB) to attach to a message.		
Normal	Record a long video (up to 1 hour).		

Shortcut Key Operations

Press assigned key to change settings. Available shortcuts vary by mode or setting status.

Key	Item	Description	
1.0	Shooting mode	For S! Mail, Normal	
2 ^{<i>b</i>} / _{ABC}	Self-timer	Off, 3 seconds, 5 seconds, 10 seconds	
3 def	Record sound	Sound On, Sound Off	
	Switch to <i>Camera/</i> <i>Video</i>	_	
or 1/+	Zoom	_	
	Brightness	_	

•While using Video camera, pressing keys does not make operation tone.

6-11

6

Video Mode

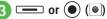
Up to 1 hour per clip can be recorded.

1 📼 (2+ seconds)

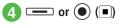
- If *Take photo* is activated last time, Still Image Viewfinder appears. Press (Video) to switch to Video Viewfinder.
- Alternatively, press \bigcirc \rightarrow select *Camera* \rightarrow *Record video*.
- Adjust settings before capturing as required (●P.6-14).

2 Frame image in Viewfinder

- Press $\left| \right|^{+}$ or \bigcirc to zoom in/out.
- Press () to brighten or darken an image.



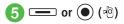
To pause while recording, press (II).
 To resume the recording, press ().





Prompt for Saving Video

 Recording ends. When recordable time has elapsed, recording automatically ends.



•Using Auto Focus

When *AF* is set to *On*, Auto Focus is available, the subject at the center of the frame will be automatically focused (the focus is locked while recording).

Press halfway to focus on the subject. Then press all the way to start recording. If using (), press () to focus and start

recording simultaneously.

Viewing Recorded Video

View captured and saved videos by opening *Videos* folder in *Data Folder* from Viewfinder.

(2+ seconds)

 $\overbrace{\longrightarrow} \rightarrow \text{Highlight} \boxtimes \rightarrow Videos$



Highlight a video with $\bigoplus \rightarrow$ (Play)

Advanced

\. Advanced Settings (137) P.6-14

- Setting Shooting Mode
- Setting Shooting Size
- Setting Self-timer
- Setting White Balance
- Setting Effect (Color Tone)
- Setting Sound Recording
- Viewing Recording Shortcut Key Assignments
- Viewing Recorded Video before Saving
- Entering File Name of Recorded Video

⊀ Settings

- Show or hide Indicators (
 P.12-9)
- Set Auto-focus (P.12-9)
- Activate or cancel Auto Save (P.12-9)
- Show or hide menu item guidance (IPP P.12-9)
- Select Quality (
 P.12-10)
- Set save location (IPP.12-10)

Printing Still Images

Print still images saved on handset by connecting a printer via Bluetooth[®].

For more information about printer operations and paper setting, see printer User Manual.

Printing via Bluetooth®

- Print images with Bluetooth[®] printer.
- Pair Bluetooth[®] printer beforehand.
- $(\bullet) \rightarrow Data \ Folder \rightarrow Select$ a file location
 - \rightarrow Print via Bluetooth
- Check files to print \rightarrow (Print)

Select destination device

 If no device is registered, search and register new device (SP.11-4).



5 Set items as required

To set print size

Print size \rightarrow Select an item to set

To set the number of copies

Number of copies \rightarrow Enter the number of copies (1 to 99) \rightarrow (OK)

To set the number of pages to print per sheet

Page format → Select an item

•When selecting *Duplicate*, select *Pages* per sheet and select a setting (1 to 16 up).

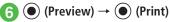
To set whether to print the date or not

Print date \rightarrow Select an item

To set whether to print a border or not

Border \rightarrow Select an item

To set print quality *Print quality* \rightarrow Select an item



**** Advanced Settings

Capturing Still Images

Switching Shooting Mode

In Viewfinder,	\frown \rightarrow	Highlight	□ →	Select
an item				

Setting Shooting Size

In Viewfinder, $\overline{} \rightarrow$ Highlight $\overline{} \rightarrow$ Select an item

Setting Self-timer

In Viewfinder, $\overline{)} \rightarrow$ Highlight $\bigotimes \rightarrow$ Select an item

Setting White Balance

In Viewfinder, $\overline{} \rightarrow$ Highlight WB \rightarrow Select an item

Setting Effect (Color Tone)

In Viewfinder, $\overline{)} \rightarrow$ Highlight $\mathbb{K} \rightarrow$ Select an item

Viewing Captured Pictures

In Viewfinder, $\overline{} \rightarrow$ Highlight $\overline{} \overline{} \overline{} \overline{} \rightarrow$ *Pictures* or *Digital camera* → Select a file

• Digital camera can be selected when Memory Card is inserted

Viewing Capturing Shortcut Key Assignments

In Viewfinder, $\overline{} \rightarrow$ Highlight 📆

Sending Captured Still Images

In Still Image Saved Confirmation window, (\mathbf{x})

To send via message

Via message \rightarrow (\bigcirc P.4-4 S! Mail (2))

 If the captured image size exceeds 300 KB, a window for resizing the image appears after saving the image to *Data Folder*. Resize the image before attaching it (◆P.4-5 Attaching Files).

To send via Bluetooth®

Via Bluetooth → (●P.11-5 Sending One by One 2)

Entering File Name of Captured Still Image

In Still Image Saved Confirmation window, \frown \rightarrow *Rename* \rightarrow Enter file name

Setting Captured Still Image as Wallpaper etc.

In Still Image Saved Confirmation window, $\searrow \rightarrow Set as$

To set image to Wallpaper

 $\begin{array}{c} \textit{Wallpaper} \rightarrow \textit{Use} ~ \fbox{} (\textit{Rotate}) ~ \textit{to adjust} \\ \textit{position as required} \rightarrow \textit{Use} ~ \fbox{} ~ \textit{or} ~ \fbox{} ~ \textit{to adjust size} \\ \textit{as required} \rightarrow \textcircled{} ~ \textcircled{} (\textit{Set}) \end{array}$

To set image to Incoming image

Caller ID \rightarrow Search Phonebook and select an entry (\bigcirc P.2-17) \rightarrow \bigcirc (Set)

Enlarging Captured Still Image

- In Still Image Saved Confirmation window,
- \frown \rightarrow Zoom
- Press 🛛 or 🕂 to zoom in/out.
- Press 🛞 to change a display position.

Sending Still Images Opened via Quick Play

In Viewfinder, $\Box_{\cdot,+}^{p} \rightarrow$ View still images with $\frac{1}{2}/\frac{1}{2}$ or $\bigcirc \rightarrow \bigcirc \rightarrow \bigcirc$ (Send)

To send via message

Via message → (●P.4-4 S! Mail 2)

To send via Bluetooth®

- *Via Bluetooth* \rightarrow (\bigcirc P.11-5 Sending One by One (2)
- When Memory Card is inserted, press . and select *Phone, Memory card* or *Digital camera* to view images.

Deleting Images Opened via Quick Play

In Viewfinder, $\square_{\cdot,+}^{\circ} \rightarrow \text{View still images with}$ $\frac{1}{2}/1$ or $\bigcirc \rightarrow \bigcirc \rightarrow Delete$

 When Memory Card is inserted, press D.^{*}, and select *Phone, Memory card* or *Digital camera* to view images.

Setting Still Image Opened via Quick Play to Wallpaper etc.

In Viewfinder, $\Box_{\cdot,*}^{\circ} \rightarrow View$ still images with f/1 or $\bigcirc \rightarrow \bigcirc \rightarrow \bigcirc$ Set

To set image to Wallpaper

 $\label{eq:Wallpaper} \begin{array}{c} Wallpaper \rightarrow \text{Use} \fbox{} (\text{Rotate}) \text{ to adjust} \\ \text{position as required} \rightarrow \text{Use} \fbox{} \text{ or } \fbox{} \text{ to adjust size} \\ \text{as required} \rightarrow \textcircled{} (\text{Set}) \end{array}$

To set image to incoming image

- **Caller ID** \rightarrow Search the phonebook and select an entry (\bigcirc P.2-17) \rightarrow \bigcirc (Set)
- When Memory Card is inserted, press . and select *Phone, Memory card* or *Digital camera* to view images.

Playing Quick Play Slide Show

In Viewfinder, $\square_{**}^{p} \rightarrow \checkmark \rightarrow Slide Show$

- Press (Stop) during playback to cancel Slide Show.
- When Memory Card is inserted, press ... and select *Phone, Memory card* or *Digital camera* to view images.

Viewing Image Details via Quick Play

In Viewfinder, $\Box_{\cdot,*}^{\circ} \rightarrow \text{View still images with}$ $f/[] \text{ or } \bigcirc \rightarrow \bigcirc \rightarrow Details$

 When Memory Card is inserted, press . and select *Phone, Memory card* or *Digital camera* to view images.

Enlarging Still Images Opened via Quick Play

In Viewfinder, $\square_{\mathbb{C}^{+}} \rightarrow \text{View still images with}$ $\frac{1}{2}/1$ or $\bigcirc \bigcirc (\text{Zoom})$

- Press 🛛 or 🕈 to zoom in/out.
- Press 🛞 to change a display position.
- When Memory Card is inserted, press ... and select *Phone, Memory card* or *Digital camera* to view images.

Recording Videos

Setting Shooting Mode

In Viewfinder, $\overline{} \rightarrow$ Highlight $\mathbb{R} \rightarrow$ Select an item

- When Normal is selected, up to 1 hour video recording is available in Normal.
- When *For S! Mail* is set, *Quality* is automatically set to *Economy*.

Setting Shooting Size

In Viewfinder, $\fbox{\longrightarrow}$ \rightarrow Highlight $\blacksquare \rightarrow$ Select an item

Setting Self-timer

In Viewfinder, \frown → Highlight \circlearrowright → Select an item

Setting White Balance

In Viewfinder, \frown → Highlight \blacksquare → Select an item

Setting Effect (Color Tone)

In Viewfinder, \frown → Highlight \aleph → Select an item

Setting Sound Recording

In Viewfinder, $\frown \rightarrow$ Highlight $\blacksquare \rightarrow$ Select an item

Viewing Recording Shortcut Key Assignments

In Viewfinder, $\overline{} \rightarrow$ Highlight $\overline{\mathbb{C}}$

Sending Recorded Video In Video Saved Confirmation window,

() () ()

To send via message

Via message → (\bigcirc P.4-4 S! Mail (2))

To send via Bluetooth[®] Via Bluetooth \rightarrow (\bigcirc P.11-5 Sending One by One @)

Viewing Recorded Video before Saving

In Video Saved Confirmation window, \frown *Play*

Entering File Name of Recorded Video

→ *Rename* → Enter file name