## Camera

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#### Copyrights and rights of portrait

Images and audio recorded with the FOMA terminal are for personal use and may not be used without the consent of the rightful person in accordance with copyright laws. Please note that the use of the likeness or name of other individuals without their consent, defacement or a similar act may infringe on an individual's rights of portrait. Please be aware of copyrights and rights of portrait when making public images and audio recorded with the handset on the Internet or similar media. The recording of images or audio may be restricted at concerts, performances and exhibits even when recorded for personal use. Do not use this handset to send copyrighted images for uses other than those permitted under copyright laws.

Please respect the privacy of others when using a camera-enabled mobile phone to shoot and send images.

## Before using camera

## **Precautions for using camera**

- Fingerprints or oil on the lens may cause the image to be out of focus. In addition, images may blur and rays of light may appear in images when shot near a strong light source. Wipe the lens with a soft cloth before shooting images.
- Shoot when battery level is sufficient. Images may appear dark and distorted when shot with insufficient battery power even while the handset is charging. Do not shoot images while charging.
- Although the cameras are made with high-precision technology, some pixels
  or lines look constantly dark or bright. Further, white lines and other noise may
  appear in images especially when shooting images in dimly lit surroundings.
- The quality of images may deteriorate when shot or saved after the FOMA terminal has been left in a warm location for a long time.
- If the camera lens is exposed to direct sunlight for a long time, the internal color filter may discolor, creating a discoloration of shot images.
- Images shot in shooting conditions which include the sun, a light or other strong light source may appear dark and distorted.
- Direct images shot of the sun may damage the performance of the CCD.
- The FOMA terminal may become warm after shooting still pictures continuously, shooting long moving pictures, or activating the camera for a long time. This is not a malfunction.
- When the AF mode is switched, sounds may be heard from the camera lens. This is not a malfunction.
- The camera lens has built-in the mechanical shutter and ND filter on its front side.
  - The FOMA terminal may sound when using the camera. This is not a malfunction.
  - The front side of camera lens may be closed when the camera is not used. This is not a malfunction.
- Images are blurred when the FOMA terminal moves while shooting images. Hold securely to prevent blurring. Use the ISO sensitivity (High sensitivity) function/Fix camera shake function when shooting still pictures and the Fix camera shake function to prevent camera shake when shooting moving pictures.

- The color and brightness of the subject in images shot with the camera may differ from the actual color and brightness.
- Make sure that your fingers, hair and handset strap do not obscure the camera lens when shooting images.
- Because a larger image size requires more data, movement in the image on the FOMA terminal display may appear slow.
- Indoor fluorescent lighting may create flickering or streaky shading on the screen. This flickering or shading may be reduced by changing the lighting conditions, brightness or adjusting the camera brightness and White balance.
- Picture Light does not illuminate or flash for shooting when the battery level is low.

## Performance while using camera

- Shot still pictures are saved to the [Camera] folder in My picture of Data box, and shot moving pictures are saved to the [Camera] folder in i-motion/Movie of Data box. Data can also be saved to the microSD Card (IPP. 340).
- When activating still pictures shooting, Card reader, Information reader, Shotdeco or Cameraloupe, Picture Light illuminates. Picture Light flashes when activating moving pictures shooting.
- To end the camera mode, close the FOMA terminal or press or cus with the viewfinder display shown in each camera mode.
- In each camera mode, if no operations are performed for approximately 2 minutes with the viewfinder display shown, the camera mode automatically ends and the stand-by display reappears. The camera mode does not end if there are unsaved data, or when the Submenu, Shooting settings screen or scan results screen is shown.

## Shutter sound, shooting start/end sound, completion sound, Focus lock sound, and auto timer sound

- For still pictures shooting, moving pictures shooting, Card reader, Information reader, Shotdeco or Cameraloupe, sounds are enabled regardless of the FOMA terminal settings.
- For the Character reader and Bar code reader, sound volume follows the Phone ring volume. Also, sounds are disabled in the following cases.
  - While the Manner mode is set

- While the Public mode (Drive mode) is set
- While the Phone ring volume is set to [Silent]
- The shutter sound can be changed (127 P. 89). The shutter sound volume cannot be changed.

#### Receiving a call while shooting and performance of alarm

- If the alarm is activated while viewing the still picture preview screen or moving picture shooting screen, the shooting is canceled. After the alarm ends, the camera screen reappears and the shot data can be saved.
- If a call is received while viewing the still picture preview screen or saving the still picture, the Received call screen appears. Then, the call can be received. After the call ends, the camera screen reappears and the shot still picture can be saved.
- If a call is received while shooting moving pictures or displaying the moving picture shooting confirmation menu screen, the Received call screen appears. Then, the call can be received. After the call ends, the moving picture shooting confirmation menu screen appears. Operate according to the screen.

## **Shooting position**

#### **Normal position**

#### Cycloid position





In the Cycloid position, shooting with the sub camera is not available.
 When the sub camera is set in the normal position, it is switched to the main camera if the position is changed to the Cycloid position. When the position is returned to the normal position, the camera is switched back to the sub camera.

#### Still picture mode

When the FOMA terminal is set to the Cycloid position, the image size is switched to the size for the Cycloid position, and still pictures can be shot in the horizontal screen. When returning to the normal position, the size returns to the size for the normal position.

For details on image sizes in each position IPP. 204



#### Moving picture mode

In the Cycloid position, moving pictures can be shot in the horizontal screen. However, the image size does not switch.



-Remaining time -Status display

## Titles

- The shot (saved) still pictures, moving pictures, and business card images, images of Information reader and Deco-mail picture of Shotdeco are automatically titled based on the date and time when they were shot. Example: Shoot at 1:05:07 P.M. on August 24, 2009 → [090824\_130507]
- Still pictures that were continuously shot are labeled in series ([\_01], [\_02] ···) at the end of the title.
- For business card images, [ \_meishi] is added at the end of the title.
- For images of Information reader, [ \_info] is added at the end of the title.
- For details on how to edit the titles IP. 353

## Key operations for shooting screen

Key	Still picture/ Cameraloupe	Moving picture	Bar code reader	Character reader	Card reader/ Information reader	Shotdeco	
Θ	Zoom in*1		-	-	Zoom in <sup>*1, 2</sup>	Zoom in <sup>*1</sup>	
Θ	Zoom out*1		-	-	Zoom out <sup>*1, 2</sup>	Zoom out <sup>*1</sup>	
ī	Shooting settings		Switch Picture Light ON/OFF		_	Switch still/ anime	
	Change shooting mode <sup>*3</sup>	Shoot by scene	Switch to Shoot still picture	_	Switch to Shoot still picture*4	-	
Þ	Switch Chase focus ON/ OFF*5	Common replay mode/ Normal shooting	_	-	_	_	
O	Brightness▲	*1					
$\bigcirc$	Brightness▼*1						

Key	Still picture/ Cameraloupe	Moving picture	Bar code reader	Character reader	Card reader/ Information reader	Shotdeco
€	Switch phone	e⇔SD	-	-	-	-
Ħ	Picture Light		-	-	-	-
	Chase focus <sup>*6</sup>	Focus lock	K			
1	Switch came	ra-mode				
2	Folder list screen of My picture	Folder list screen of i-motion/ Movie	Saved data	Select subject	-	Resize
3	AF mode		Switch AF mode		AF mode	-
4	Auto timer Switch image/ voice		-	Inverse mode	-	-
5	Select size		-	-	-	-
6	Select image	e quality	-	-	_	-
7	Shoot by sce	ene	-	-	-	-
8	ISO sensitivity	Fix camera shake	_	_	_	_
9	White balance	e	-	-	-	-
0	Activate Ope guide	eration	-	_	_	_

- \*1 Keep pressing a key to adjust the zoom or the brightness continuously.
- \*2 Available only for Information reader.
- \*3 Operate only when the AF mode is set to [Face first AF] for the still picture shooting.
- \*4 Available only for Card reader.
- \*5 Available only for shooting still pictures.
- \*6 Available only when Chase focus is set to [ON] for the still picture shooting. The Focus lock can be used when Chase focus is set to [OFF].

## Shooting screen layout

The following icons appear on the display in the camera mode.

 When switched to the Full-screen mode (127 P. 206), icons do not appear.

### Still picture shooting screen





### Moving picture shooting screen



#### Bar code reader screen





## Character reader screen



## Card reader/Information reader screen

## • The screen shown below is for Card reader.





### 1 Focus lock indicator



#### **2** Picture Light indicator



)

#### Image brightness indicator



53

ON

### 4 Auto timer indicator



# Camera

## Shotdeco screen

3 6

#### Shoot by scene indicator Shoot still picture

a ce mai	Normal		Landscape	2	Into the sun
	People	ŝ	Exercise		Food
<b>B</b> *	Night scene	Aa	Character	2	Night + People

#### Shoot moving picture

NORMAL	Normal		Landscape (soft)
	People	2	Landscape (sharp)

#### **6** Continuous mode indicator

25	ON, Manual (for 25 pictures)				
ON, Manual (for 9 pictures)					
ON, Manual (for 6 pictures)					
ON, Manual (for 4 pictures)					
Shotdeco (for 5 pictures)					
b to Shared Multishot (2 to 25 pictures)					
<u>ت</u> ک	Strobophoto				

## 7 Image quality indicator

ΗŪ	HIGH QUALITY	Ē	ECONOMY (only for moving	
F	FINE	E	pictures)	
×	NORMAL			

#### 8 Size indicator Shoot still picture

10M	10M: 2736×3648	VGA	VGA: 480×640
5M	5M: 1944×2592*	QVGA	QVGA: 240×320
ЗМ	3M: 1536×2048*	BLCIF	QCIF: 176×144
Full HD	FullHD: 1080×1920*	PANO RAMA	Panorama: 2560×640
Full	Stand-by: 480×854*		

\* Still pictures can be shot in the Cycloid position. For shooting in the Cycloid position, vertical size and horizontal size are switched.

#### Shoot moving picture

FWUGB	FWVGA: 864×480	<b>D</b> CIF	QCIF: 176×144
VGA	VGA: 640×480	acif	sQCIF: 128×96
<b>U</b> VGA	QVGA: 320×240		

#### Six camera shake indicator

Auto (for still pictures)/ON (for moving pictures)

### ISO sensitivity indicator

Ø

RUTO ISO 3200	Auto(~3200)
150 150	High (up to 12800)
to	100 to 12800(underFullHD)

#### 11 White balance indicator

RUT	0	Auto	55172 27135	Fluorescent	Cloud/Shade
	ŝ	Tungsten	坐	Sunlight	

#### a character 12 C L

12	Shoot	ing mo	de indicator						
	(	•	Egao focus shutter mode						
	Furimuki shutter mode			е					
13	Chase focus indicator								
	:	8	ON						
14	Conti	nuous A	F indicator						
	1	AF	ON						
15	Long	exposu	re indicator						
	Ô	ON (1 s	seconds)	(à	ON (4 seconds)				
	$\overline{\mathbb{Q}}$	ON (2 s	seconds)	(3	ON (8 seconds)				
16	AF me	ode indi	cator						
	AF	Center	AF/Standard		Closeup				
		Face find	rst AF (only for still s)	MF	Manual focus (only for still/ moving pictures)				
17	Effect	indicat	or						
	5	Black & white			Spectrum (only for moving				
	Sepia			pictures)					
	ម្ល៊ិជៈ Sparkling		Ð	Ripple					
	100	Colored	d pencil		Kaleidoscope (L)				
	*	Faded	edges (only for still	۲	Kaleidoscope (S)				

## pictures) E File size limit indicator

٢

M	For mail (short) (500 KB)
Ĩ	For mail (long) (2 MB)

Ś.

Fish-eye

### Switch image/voice indicator

1	66	Image + voice
	6	Image only
		Voice only

#### 2 Common replay mode indicator



#### 2 QR code link number indicator



### 22 Inverse mode indicator



#### Switch still/anime indicator



ø Anime mode

#### Shoot still pic

## Shooting still pictures

- When a still picture is shot, the shutter sounds. After that, a still picture appears on the preview screen.
- If the AF mode is set to [Face first AF], the following shutter modes are available besides the normal shooting.
  - Egao focus shutter mode: Automatically detect the people's smile and shoot a still picture.
  - Furimuki shutter mode: Automatically detect other people's face and shoot a still picture.

## In stand-by, press 🙆.

- In the Custom menu: Select [Camera] > [Shoot still pic].
- The camera can be activated just by setting the handset to the Cycloid position in the stand-by display (2 P. 96).
- Bar code reader/Card reader is automatically activated after detecting a bar code or a business card (IPP. 206).



- Use the zoom (@P. 211) or show the Shooting settings screen (@P. 216).
- To shoot a still picture of yourself: Switch the camera to the sub camera (IPP. 206).

## 2 Press 🖲.

- · Shoot a still picture.
- - Shoot a still picture by pressing 
     even while the Egao focus shutter mode/Furimuki shutter mode is set.
  - · To return to normal shooting, shoot a still picture.

## 🖁 Press 🛈.

- · Save a still picture.
- To delete a still picture and shoot again: Press CLR.

 To send still pictures using high-speed Ir communication (IrSS™ function) (☞P. 320): Press □ > select the sending method > •.

#### When shot with the sub camera

 Still pictures appear on the display inverted (left-right orientation backwards) but are saved as a normal image (correct left-right orientation).

### Submenu operations for still picture shooting screen

#### [Main/sub camera]

• Switch between main and sub camera.

Switch camera-mode]		select the camer	a mode		◙	)
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[Shooting menu]

Farmode]	🕼 P. 213
[ISO sensitivity]	©∂°P. 215
[White balance]	🖅 P. 216
[Picture light] > select the setting >	
[Shoot by scene]	<i>⊠</i> 7P. 216
▶ [Auto timer]	©∂° P. 213
[Continuous mode]	©7 P. 208
[Brightness] > select the setting > •	
[Shoot with frame]	©∂°P. 214
[Effect shot]	🖅 P. 214

#### [Display Data box]

- [Auto switch mode] > select the setting > •
- Set whether to automatically activate Bar code reader/Card reader after detecting a bar code or a business card.

[Chase focus]	@ P. 213
[Continuous AF]	© <b>₽</b> . 214
[Long exposure]	© <b>₽</b> . 214
[Fix camera shake]	ເ∕⁄7₽.215

#### [Camera settings]

[Egao level]

🞯 P. 217

- [Auto save mode] > select the setting >
  - Set whether to save a shot still picture automatically.

🕼 P. 212
©∂°P. 212
©∂°P. 217

[Operation guide]

#### [Main/sub camera]

- In the Cycloid position, switching to the sub camera cannot be performed.
- After switching from the main camera to the sub camera, it may take time for the brightness and tone to appear correctly.

### [Picture light]

- When Picture light is set to [Auto], Picture Light automatically illuminates depending on the surrounding light.
- Picture Light is a supplementary light source for surroundings with low light. The amount of light is less than that of an ordinary camera flash.
- Even if Picture light is set to [OFF], Picture Light illuminates (dims) for the still picture mode and flashes (dims) for moving picture mode.
- When performing close-up shots of printed materials that are mostly white under fluorescent light, the color or shadow of the FOMA terminal may appear in the picture, depending on the angle and whether Picture Light is on or off. This is not a malfunction.

#### [Auto switch mode]

- When the image size is QCIF: 176×144 or Panorama: 2560×640, or Effect shot is set to other than [OFF], Auto switch mode is not available.
- The camera mode is automatically switched at the distance of approximately 10 cm. However, the camera mode may not be automatically switched if a bar code or a business card is displayed small or not displayed in the center of the screen.

### [Auto save mode]

- If the Auto save mode is set to [ON], Edit image, Set screen and other operations are not available immediately after shooting.
- Shot still pictures are automatically saved in the save destination set with Switch phone⇔SD.

#### [Full-screen mode]

 When the image size is QCIF: 176×144 or Panorama: 2560×640, Full-screen mode is not available.

### Submenu operations for still picture preview screen

[Switch phone⇔SD]	©∂°P. 217
[Edit image]	@ P. 321
[Facial treatment]	@P. 323

#### [Set screen]

- [Stand-by display] > select the setting > [Yes]
- [Phonebook] > add to the phonebook
- [Schedule] > save a schedule

#### [Paste loc. Info] > (I) > [Yes]

#### [Normal image]

#### [Save inverted]

#### [Full-screen mode]

#### [Set screen]

Set screen is not available if save destination is set to microSD Card.

#### [Stand-by display]

 Depending on the image size, the display size selection screen may appear. Select a display size.

#### [Phonebook]

 When the image size is 10M: 2736×3648 or 5M: 1944×2592, Phonebook is not available.

#### [Schedule]

- In the displayed schedule save screen, the following contents are pre-installed.
- Date: Shoot date and time of still picture
  Image: Still picture

#### [Save inverted]

 It is not possible to save inverted images when shooting still pictures with a frame (27 P. 214).

## Continuous shooting <Continuous mode>

Shoot multiple still pictures continuously.

- When Continuous mode is set to [ON], automatically shoot still pictures at approximately 0.06 second intervals. When it is set to [Manual], shoot multiple still pictures continuously with shutter operations.
- QVGA: 240×320 and QCIF: 176×144 can be shot combining the Continuous mode and Shoot with frame.
- Available image sizes and maximum number of shots in Continuous mode are as follows.

Stand-by: 480×854	4 shots	QVGA: 240×320	9 shots
VGA: 480×640	6 shots	QCIF: 176×144	25 shots

- When Continuous mode is set to [Strobophoto], shoot five still pictures at approximately 0.13 seconds intervals regardless of the image size and create sixth picture by combining those. Some of the five pictures may not be used for combining.

## 2 Press 🛈.

- The first still picture is shot and the following still pictures are shot automatically.
- In the Manual shooting mode, press 

   until the maximum number of shots for the Continuous mode.
- When continuous shooting is complete, or shooting was canceled by pressing (a), the continuous shooting preview screen appears.
- The combined image appears for Strobophoto. Press (b) to display the continuous shooting preview screen.

## 🖁 Select an image 🕨 💿 🕨 💽.

- · Save an image.
- For Strobophoto: Press (.
- To send a still picture with mail or post it on blog/SNS (☞P. 218): Press ♥ > select the sending method, compose and send a mail/ Deco-mail.
- When the Auto save mode (IGP P. 206) is set to [ON], all still pictures are saved automatically.
- Changing the image size, setting Effect shot or switching cameras cancels the Continuous mode.
- If an incoming call is received or the alarm is activated in the Continuous mode, the still pictures being shot are retained and the Continuous mode is canceled. However, depending on the timing when an incoming call is received or the alarm is activated, the still pictures being shot are discarded, and the still picture shooting screen reappears.
- Closing the FOMA terminal or pressing 
   while shooting in the Continuous mode causes shooting to be interrupted and the camera mode to be ended. In addition, changing the position causes shooting to be interrupted, and returning to the still picture shooting screen.
- If the FOMA terminal is moved when shooting with Strobophoto set, [Failed to shoot still picture] may appear and the shooting may not be available.
- Submenu operations for continuous shooting preview screen

[Save all]	
[Delete all]	
[Save one]	
[Delete one]	

[Paste loc. Info] ) 
 (Yes]

## Shooting panoramic pictures <Panorama>

By importing images continuously while moving the FOMA terminal horizontally, a panoramic picture can be created automatically.

• Panoramic pictures are saved in the size of 2560 (W) × 640 (H).

- The image quality is set to [HIGH QUALITY], the AF mode is set to [Center AF], these settings cannot be changed.
- Shooting panoramic pictures is not available when shooting with the sub camera or when in the Cycloid position. If the sub camera is set or the FOMA terminal is switched to the Cycloid position while displaying the panoramic picture shooting screen, the normal still picture shooting screen appears.

## In the still picture shooting screen, press (ⓐ) ▶ [Select size] ▶ [Panorama(2560×640)].

## 2 Press 🛈.

- After the shooting start sound, panoramic shooting starts. Move the FOMA terminal to either direction of left or right within the range for shooting a panoramic picture (do not move back once moved to one direction). Steady the position of the cross mark which appears in the center at the start of shooting.

Panoramic picture

shooting screen

 For the moving speed of the FOMA terminal, make sure that [100] appears as the moving speed indicator on the lower left of the screen.

 When shooting is almost completed, [<u>M</u>] appears. Even after [<u>M</u>] appears, the combined image is updated by moving the FOMA terminal. However, when [<u>M</u>] appears, further updating is not available. Proceed to step 3.



Panoramic picture shooting screen

#### 1 Cross mark display

Appears in the center of the display considering the position where the shooting is started as an origin. Use this display to check the gap from the origin when moving the camera.

## Moving speed display

Indicates the moving speed of the FOMA terminal.

<u>slow</u>	Too slow
<u>GCOD</u>	Appropriate speed
<u>FAST</u>	Too fast

## Press 💿 to end shooting.

 After the shooting end sound, the imported images are combined, and the preview screen appears.

## Press 🛈.

- Save an image.
- While a panoramic picture is shot, zoom and brightness cannot be adjusted.
- If an incoming call is received or the alarm is activated while a panoramic picture is shot, importing is canceled, and the images being imported up to that point are discarded.
- While a panoramic picture is shot, if no operations are made for approximately 2 minutes, the camera mode automatically ends and the stand-by display reappears. The images imported up to that point are discarded.
- When [193] appears, the image quality may deteriorate. Especially when shooting close subjects, be careful not to display the icon.
- When shooting is continued even after [<u>OK</u>] appears, the parts shot at the beginning and ending may be discarded.

## Shoot movie

## Shooting moving pictures

- Shooting starts after the shooting start sound is heard. However, recording may not begin immediately. Picture Light illuminates while a moving picture is shot (Picture Light flashes when Switch image/voice is set to [Voice only]).
- Shooting stops automatically when the remaining time indicator reads 00:00:00 (The moving picture file size reaches limit during shooting or microSD Card has no available space). Shot moving pictures can be saved/composed mail/played/canceled.
- Use Focus lock when there is a focus error (127 P. 216).

## In the Custom menu, select [Camera] ▶ [Shoot movie].

- Use the zoom (IPP. 211) or show Shooting settings screen (IPP. 216).
- To shoot a moving picture of yourself: Switch the camera to the sub camera (IPP. 210).



## 2 Press •.

• The subject at the center is automatically focused and shot.

## Press to end shooting.

• After the shooting end sound, the moving picture shooting confirmation menu screen appears.

## Select [Save].

- Save a moving picture.
- To send with message (☞ P. 218): Select [Compose message] compose and send a message.
- To play a moving picture: Select [Play].
- To cancel a moving picture: Select [Cancel] > [Yes].
- The remaining time indicator is an approximation. Shooting may continue longer than the remaining time indicated before the start of shooting or may automatically stop before the indicator reads 00:00:00.
- The following actions are taken when the FOMA terminal is closed or the position is changed during the shooting.
  - When the shooting time is approximately 1 second or more: Shooting ends and moving picture shooting confirmation menu screen appears
  - When the shooting time is less than approximately 1 second and the FOMA terminal is closed: Shooting ends and the camera mode ends
  - When the shooting time is less than approximately 1 second and the position is changed: Shooting ends and the moving picture shooting screen appears

However, recording is continued when Switch image/voice is set to [Voice only]. If the FOMA terminal is closed, [Voice recording] appears on the sub display.

 Make sure not to press keys while shooting a moving picture as keypad sounds may be recorded.

## Submenu operations for moving picture shooting screen

- Refer to submenu operations for still picture shooting screen (IPP P. 206) for the following functions.
  - Main/sub camera
- Switch camera-mode
- Shooting menu (AF mode, White balance, Picture light, Shoot by scene, Auto timer, Brightness, Effect shot)
- Display Data box
- Fix camera shake
- Camera settings (Save camera set)
- Select size
   Switch phone⇔SD
- Select image quality
- Operation guide

### [Switch img/voice] > select the setting > •

• Set the image and voice combination.

#### [File size limit] > select the file size > ③

#### [Camera settings]

- [Noise reduction] > select the setting >
  - Set whether to minimize audio noise.
- [Display light time] > select the setting > <i>
  - Set backlight illumination time while shooting.

#### [Common replay mode] > select the setting > •

• Set whether to replay moving pictures on other FOMA terminals.

## [File size limit]

- When sending with i-motion mail, select [For mail (short)] or [For mail (long)]. Record based on the allowable size of mail attachment. Select [For mail (short)] to limit the file size to up to approximately 500 KB. Select [For mail (long)] to limit the file size to up to approximately 2 MB.
- If File size limit is set to [Unrestricted], the maximum recorded size is approximately 5 MB when the save destination is set to the FOMA terminal handset, and the maximum recorded size is unrestricted when the save destination is set to the microSD Card. The maximum recording time is approximately 1 hour (except when Switch image/ voice is set to [Voice only]). When mail is sent from the preview screen before saving, the first 2 MB or less are cut and sent.

- File size changes depending on image size.
- When the Common replay mode is set, the file size is set to [For mail (short)] and cannot be changed.

#### [Noise reduction]

 Noise reduction processes sound to make conversations clearer. Sound quality may vary depending on surrounding noise and tone of the voice.

#### [Display light time]

 Even if set to [Always ON], the backlight illumination time is same as the Display light time for all screens other than the viewfinder.

#### [Common replay mode]

 Image size is set to QCIF: 176×144, image quality to [FINE], file size to [For mail (short)] (500 KB), Fix camera shake to [OFF], Switch image/ voice to [Image + voice], and Effect shot to [OFF]. These settings cannot be changed.

## Changing settings for shooting

 Some settings are not available depending on the image size or for the sub camera.

## Adjusting brightness <Brightness>

Select from five brightness levels.

In the shooting screen, press ().

## Using digital zoom < Zoom>

- In the still picture/moving picture/Information reader/ Shotdeco shooting screen, press  $\bigcirc$ .
  - Alternatively, slide the finger to the left/right on the Optical TOUCH CRUISER (excluding still picture shooting).

### Still picture mode



The previous step to maximum magnification

#### Moving picture mode



· The area affected by zoom depends on the image size.

$\backslash$		Maximum magnification (zoom step)			
$\langle \rangle$	Image size	Normal	Cycloid position		
		Main camera	Sub camera	Main camera	
Shoot still	10M: 2736×3648	Approx. 2.0× (10 steps)	-	-	
picture	5M: 1944×2592	Approx. 1.3× (5 steps)	-	Approx. 1.1× (3 steps)	
	3M: 1536×2048	Approx. 1.7× (7 steps)	-	Approx. 1.3× (5 steps)	
	FullHD: 1080×1920	Approx. 1.7× (7 steps)	-	Approx. 1.3× (5 steps)	
	Stand-by: 480×854	Approx. 7.3× (13 steps)	Actual size (–)	Approx. 5.3× (11 steps)	
	VGA: 480×640	Approx. 11.4× (15 steps)	Actual size (–)	-	
	QVGA: 240×320	Approx. 22.8× (18 steps)	Approx. 4.0× (9 steps)	-	
	QCIF: 176×144	Approx. 14.2× (16 steps)	Approx. 5.4× (12 steps)	_	

$\backslash$		Maximum magnification (zoom step)		
	Image size	Normal position		Cycloid position
		Main camera	Sub camera	Main camera
Shoot still picture	Panorama: 2560×640	Approx. 3.6× (12 steps)	-	-
Shoot moving	FWVGA: 864×480	Approx. 2.6× (10 steps)	-	Approx. 2.6× (10 steps)
picture	VGA: 640×480	Approx. 3.6× (12 steps)	-	Approx. 3.6× (12 steps)
	QVGA: 320×240	Approx. 7.1× (15 steps)*	Approx. 1.5× (5 steps)	Approx. 7.1× (15 steps)*
	QCIF: 176×144	Approx. 7.1× (15 steps)	Approx. 2.7× (11 steps)	Approx. 7.1× (15 steps)
	sQCIF: 128×96	Approx. 7.1× (15 steps)	Approx. 3.7× (14 steps)	Approx. 7.1× (15 steps)

\* When Fix camera shake is set to [OFF]

## Setting image size <Select size>

The larger the image size, the higher the image resolution. As the size increases, the number of images to shoot and amount of recordable time decrease (127 P. 502).

• Each image size of the still pictures is available in the following cases.

10M: 2736×3648	These are ideal sizes for viewing on a PC or
5M: 1944×2592	printing.
3M: 1536×2048	
FullHD: 1080×1920	
	This is the same size as the display on the FOMA terminal. Useful for shooting a still picture to set as the stand-by display.

VGA: 480×640	These are ideal sizes for attaching to i-mode
QVGA: 240×320	mail and sending to the i-mode terminal or PC,
QCIF: 176×144	etc.
Panorama: 2560×640	This is the size for shooting panoramic pictures.

- Available image sizes differ depending on the camera mode, shooting position, and main camera/sub camera.
- For shooting still pictures, set the main/sub camera and the normal/ Cycloid position separately.
- For shooting moving pictures, both cameras are set in the same size. However, when the main camera is set to *FWVGA: 864×480* or *VGA: 640×480* and switched to the sub camera, the image size will be *QCIF:* 176×144.

In the still/moving picture shooting screen, press (ⓐ) ▶ [Select size].

Select the size 
 O.

## Setting image quality <Select image quality>

The better the image quality, the more detailed and clearer the image. As the quality increases, the number of images to shoot and amount of recordable time decrease (IGP P. 502).

HIGH QUALITY	Shoot with high image quality.
FINE	Shoot with fairly high image quality.
NORMAL	Shoot with standard image quality.
ECONOMY (only for moving pictures)	Increase shooting time and shoot.

• For shooting still pictures, set the main/sub camera and the normal/ Cycloid position separately.

- In the still/moving picture shooting screen, press
- Iselect image quality].
- 2 Select the image quality > •.

## Shooting images with Auto timer < Auto timer>

- In the still/moving picture shooting screen, press (ⓐ) ▶ [Shooting menu] ▶ [Auto timer].
- 9 Select the Auto timer time ) .

## 3 Press 💿.

- The Auto timer is activated after the Auto timer sound. After the set time elapses, a picture is automatically shot after the shutter sound or the shooting start sound.
- If a call is received or an alarm is activated while Auto timer is activated, the Auto timer is canceled and the shooting screen reappears.
- When setting the Egao focus shutter mode with Auto timer set, Auto timer is disabled.

## Setting AF mode <AF mode>

Set the AF (auto focus) mode according to the subject.

- For shooting still pictures, the AF mode setting turns to [Face first AF] when the image size is changed.
- Set the following AF mode.

Center AF <sup>*1</sup>	Focus is activated and the subject at the center is
Standard*2	focused.
Face first AF*1	Detect people's faces and adjust the focus. When people's faces are detected, the face detection frame focuses on the subject searching for the face even if the subject moves. When multiple faces are detected, specify the face to adjust the focus.
Closeup	Recommended mode for shooting close subjects (approx. 10 cm).
Manual focus*3	Adjust the focus manually.

- \*1 Available only for still picture shooting.
- \*2 Not available for still picture shooting.
- \*3 Available only for still picture and moving picture shooting.

### Example: Still picture shooting

- In the still picture shooting screen, press 
  [Shooting menu] [AF mode].
- Select the AF mode.
  - Select [Center AF].
  - Select [Face first AF].
    - Detect up to five people's faces. When multiple face detection frames appear, the red face detection frame is focused.
    - To specify the face to adjust the focus, slide the finger to the left/ right on the Optical TOUCH CRUISER.
  - Select [Closeup].
  - ♦ Select [Manual focus] → adjust the focus with ⊙ ▶ ○.
  - The focus adjusting bar appears. Adjust the center line to make it deep blue.



#### Focus adjusting bar

- When [Face first AF] is set, the face detection may not work properly
  depending on the angle of face, the distance to the subject or the
  shooting conditions. Also, the subject other than face and background
  may be detected as face by mistake.
- Change the AF mode in the Egao focus shutter mode/Furimuki shutter mode to return to the Normal shooting.

## Shooting images with Chase focus <Chase focus>

Once the subject is selected, shooting is available even if the subject moves. The focus moves according to the motion of the subject.

• When the image size for still pictures is **QCIF: 176×144** or **Panorama: 2560×640**, Chase focus cannot be set.

## In the still picture shooting screen, press (a) (Chase focus).

## Select the setting ) •.

When Chase focus is set to [ON], press in the still picture shooting screen. Chase focus starts after the subject inside the focus frame is focused (A blue frame appears on the selected subject).
 Press again to cancel Chase focus.

## Shooting images with Continuous AF <Continuous AF>

The inside of the focus frame is continuously focused. Press a shooting key to shoot without focusing. Even if the subject is moving, in-focus picture is shot.

- When the image size for still pictures is *Panorama: 2560×640*, Continuous AF cannot be set.
- 2 Select the setting > •.
- If Continuous AF is not set, a still picture is shot after ending the focus operation.

## Shooting images with Long exposure

### <Long exposure>

Keep the shutter open for a long time to shoot images. Use Long exposure to shoot the active subject such as fireworks, or to shoot in dimly lit place such as night scene.

- When the image size for still pictures is *Panorama: 2560×640*, Long exposure cannot be set.
- In the still picture shooting screen, press (1) I Long exposure].
- 2 Select the time ) .

• Be careful not to cause camera shake while Long exposure is set.

## Shooting still pictures with a frame <Shoot with frame>

Set and shoot still pictures with frames.

- Image sizes available for the shooting still pictures with frames are Stand-by: 480×854, VGA: 480×640, QVGA: 240×320, or QCIF: 176×144.
- When the Continuous mode is set in *Stand-by: 480×854* or *VGA: 480×640*, shooting still pictures with a frame is not available.
- If the image size differs from the frame size, the frame is rotated 90°.
- Use frames downloaded from sites to shoot with frames.
- 2 Select a frame 🕨 🔳.
  - To preview: Select a frame ▶ .
- 🖁 Press 🛈.

## Adding various effects <Effect shot>

Set effects for still pictures and moving pictures to change the color tone and touch.

 When the image size for still pictures is other than QVGA: 240×320 or QCIF: 176×144, Effect shot is not available. Also, when the image size for moving pictures is FWVGA: 864×480 or VGA: 640×480, Effect shot is not available.

#### Effect type

OFF	To remove effects
Black & white	Image contrast is expressed in monotone
Sepia	Image contrast is expressed in sepia color
Sparkling	Bright areas light up
Colored pencil	A colored line is drawn
Faded edges*1	Image edges have a soft, blurred effect
Spectrum*2	Spectrum of motions

Ripple	Adds ripple effect
Kaleidoscope (L)	Adds a kaleidoscope effect with a large pattern
Kaleidoscope (S)	Adds a kaleidoscope effect with a small pattern
Fish-eye	Image is expressed as seen through a fish-eye lens

- \*1 Available only for still picture shooting.
- \*2 Available only for moving picture shooting.
- In the still/moving picture shooting screen, press
   (b) ▶ [Shooting menu] ▶ [Effect shot] ▶ select the type of effect ▶ ●.

## 2 Press 💿.

- Switching to Continuous mode, changing the image size, or switching image and voice cancels Effect shot when Effect shot is set.
- For moving picture shooting, Image quality is automatically set as follows and cannot be changed when Effect shot is set.
  - QVGA: 320×240, QCIF: 176×144: [HIGH QUALITY]
  - sQCIF: 128×96: [FINE]
- For moving picture shooting, when Effect shot is set, Fix camera shake is automatically set to [OFF]. Afterward, when Effect shot is canceled, the Fix camera shake setting before Effect shot is retrieved.

## Shooting in High sensitivity <ISO sensitivity>

In the low-light situation, take clear pictures with less camera shake.

• The lower value of ISO sensitivity is suitable for shooting in the well-lit place, while higher ISO is more suitable for shooting in the dark place (The higher ISO value increases the image noise).

		Shooting conditions	
ISO	100 🗲	3200	→ 12800
sensitivity	Outside on a sunny day	Cloudy and rainy/ indoors	Dark place

- If set to [Auto(~800)], [Auto(~3200)] or [High (up to 12800)], sensitivity is automatically set according to the conditions of the subject. The value of ISO sensitivity is automatically increased within the following range when there is insufficient light.
  - Auto(~800): ISO sensitivity 100 to 800
  - Auto(~3200): ISO sensitivity 100 to 3200
  - High (up to 12800): ISO sensitivity 100 to 12800
- In the still picture shooting screen, press (b) [Shooting menu] [ISO sensitivity].
- 2 Select the setting ▶ .
- ISO sensitivity which can be set differs depending on the image size.

## Shooting while fixing camera shake <Fix camera shake>

- When the image size for still pictures is QVGA: 240×320, QCIF: 176×144 or Panorama: 2560×640, or the image size for moving pictures is FWVGA: 864×480 or VGA: 640×480, Fix camera shake is not available.
- In the still/moving picture shooting screen, press ⓑ ▶ [Fix camera shake].
- 2 Select the setting > •.
- When shooting a still picture, Fix camera shake is activated in a location where a camera shake often occurs, such as dark place.
- When shooting with Fix camera shake ON, shot images may contain noise or become darker depending on the subjects or surrounding light. This is not a malfunction. In such cases, shoot images after setting Fix camera shake to [OFF].
- For shooting still pictures, Fix camera shake is disabled if Continuous mode is set.

## Shooting environment/subject-specific images <Shoot by scene>

Set the camera to shoot with natural colors and focus based on the surroundings and subject.

In the still/moving picture shooting screen, press
 (b) ▶ [Shooting menu] ▶ [Shoot by scene].

## Select the mode O.

- To display the description of mode, select the mode and press (a).
- For shooting still pictures, if Shoot by scene is set, White balance is automatically set to [Auto].
- For shooting moving pictures, if Shoot by scene is set to other than [Normal], White balance is automatically set to [Auto].
- For shooting still pictures, if Shoot by scene is set to [Auto recognition], a mode is automatically switched to [Normal]/[People]/[Night scene]/ [Landscape]/[Character]/[Food]/[Night + People]. The mode may not be selected properly depending on the shooting condition and the subject.

## Adjusting color tone <White balance>

According to the light condition when shooting, adjust the color and shoot.

Auto	Automatically adjust the color tone.
Tungsten	Suitable for shooting under incandescent lamp.
Fluorescent	Suitable for shooting under fluorescent light.
Sunlight	Suitable for shooting outside on sunny days.
Cloud/Shade	Suitable for shooting outside on cloudy days or in the shade.

- In the still/moving picture shooting screen, press (ⓐ) ▶ [Shooting menu] ▶ [White balance].
- Select the type of White balance ) .
- If White balance is set while shooting still pictures, Shoot by scene is automatically set to [Normal].

 If White balance is set to a setting other than [Auto] while shooting moving pictures, Shoot by scene is automatically set to [Normal].

## Shooting with Focus lock <Focus lock>

Use the Focus lock to keep the focus on the subject and change the composition.

- Use Focus lock when there is a focus error.
- The Focus lock sound notifies that focus is locked (excluding shooting moving picture).
- The Focus lock cannot be used in the Egao focus shutter mode/Furimuki shutter mode or while Continuous AF is set.
- In the shooting screen, adjust focus and press 📿 (for 1+ seconds).
  - The focus lock indicator color changes depending on the situation (IP 203).
  - To disable the Focus lock: Press 🕜 (for 1+ seconds).
  - Press to lock/disable when Chase focus is set to [OFF] for the still picture shooting and the shooting other than the still picture.

## Change the composition and press 🖲.

- Do not change the distance to the subject.
- Focus lock is available while a moving picture is shot. Use when the distance to a subject changes while shooting. However, the audio noise may affect shooting when the Focus lock is used.

## Changing settings for shooting collectively <Shooting settings>

Show settings for functions frequently used when shooting and change them collectively.

## In the still/moving picture shooting screen, press 🔳.



For moving pictures

For still pictures

1 Effect shot

- 2 Continuous mode
- AF mode
- 4 Auto timer
- 5 Select size
- 6 Select image quality
- 7 Shoot by scene
- 8 ISO sensitivity
- ☑ White balance
  ☑ Switch phone⇔SD
  ☑ Fix camera shake
  ☑ Picture light
  ☑ Common replay mode
  ☑ Switch img/voice
- y scene 🚯 File size limit
- To change settings: Select an item with ⊕ ▶ .
- Also, use the Optical TOUCH CRUISER.
- To return to the shooting screen: Press .

## Changing camera settings

• For details on changing the shutter sound IPP. 89

## Saving to microSD Card <Switch phone⇔SD>

Save shot images to a microSD Card.

- In the still/moving picture shooting screen, press () ▶ [Switch phone⇔SD].
- 9 Select the save destination ) •.

- The length of moving pictures that can be saved depends on the size of the microSD Card. The maximum length is approximately 1 hour for moving pictures with video.
- When save destination is the microSD Card, still pictures are saved in the [Camerafolder xxx] ("xxx" is the largest number when multiple folders exist), and moving pictures are saved in the [Camerafolder].
- When the number of still pictures or moving pictures saved in the folder exceeds 1,000, a new folder is automatically created, and still pictures or moving pictures are saved in the new folder. The microSD Card used on a PC or other devices cannot be used for saving unless the manager information is updated (ICPP. 350).
- When saving to a microSD Card, images are saved in DCF1.0 (ExifVer.2.2, JPEG) format.
- "DCF" (Design rule for Camera File system) is a standard created mainly by JEITA (Japan Electronics and Information Technology Industries Association) for images from digital cameras and other devices to be shared with related devices. However, DCF standard does not guarantee the entire compatibility of all devices.
- "Exif" is a file format established by JEITA (Japan Electronics and Information Technology Industries Association) for adding supplementary information to the still picture.

## Setting level to detect smile <Egao level>

Detect the following smiles.

Ī	Level 1 (grin)	Grin
I	Level 2	Smile with showing tooth
I	Level 3	Smile in a widemouthed

- Select the setting ) .

## Preventing still/moving picture shooting settings from being retained to return to default settings <Save camera set>

Save the following settings after the camera mode ends and use those same settings later. Prevent the settings from being retained to return to the default settings after the camera mode ends.

### Shooting still Select size, Select image quality, Switch phone⇔SD, Fix camera shake, Shoot by scene, Auto save mode, ISO sensitivity, Egao level, Auto switch mode, Picture light, Chase focus, Continuous AF ● [Select size] and [Select image quality] are retained for both main/sub cameras and normal/Cycloid positions.

 Shooting
 Select size, Select image quality, File size limit, Display light

 moving
 picture
 Switch phone⇔SD, Fix camera shake, Noise reduction,

 picture
 picture light
 Picture light

## In the still/moving picture shooting screen, press [3] [Camera settings] [Save camera set] [OFF].

## Mail/blog function

## Sending still pictures or moving pictures after shooting

After shooting still pictures or moving pictures, attach images to i-mode mail and send from the preview screen. In addition, send still pictures as Deco-mail or post them on blog/SNS.

- Moving pictures are sent as i-motion mail.
- When posting still pictures on blog/SNS, register posting sites in advance (37 P. 150).

## In the still picture preview screen/continuous shooting preview screen, press 🖾.

 In the moving picture shooting confirmation menu screen: Select [Compose message] ▶ proceed to step 3.

## 2 Select the sending method.

- Select [Attach to mail].
  - The shot still picture is attached.
- Select [Insert mail].
  - The shot still picture is inserted in a mail to compose Deco-mail.
- Select [Post] > select a posting site > 1.
  - The shot still picture is attached.
- The shot still pictures are automatically saved.

## Compose and send a mail/Deco-mail.

- When a shot still picture exceeds 2 MB, a confirmation screen asking whether to compress an image for attaching to mail appears. Select [Yes] to compress an image to 2 MB or less and attach.
- When a shot moving picture exceeds 2 MB, a confirmation screen asking whether to cut the file for attaching to mail appears. Select [Yes] to cut and attach the first 2 MB or less.
- Insert mail is not available for the following shot still pictures.
  - The image size is 10M: 2736×3648, 5M: 1944×2592, 3M: 1536×2048, FullHD: 1080×1920, Panorama: 2560×640
  - The image size is Stand-by: 480×854 and the image quality is [HIGH QUALITY], [FINE]
  - The image size is VGA: 480×640, QVGA: 240×320 and the image quality is [HIGH QUALITY]

## Bar code reader

## Using Bar code reader

Use the camera to scan bar codes (JAN/QR codes) for Phone To (AV Phone To), Mail To, Web To, register bookmark, add to phonebook, display text and i-appli To. Copy and paste text, play and save melodies, and view and save images or ToruCa.



• Scan results cannot be saved on microSD Cards.

### JAN code

- JAN code is a type of bar code using vertical bars of varying width to express numbers.
- The code on the right is read as [4942857119022].
- JAN8 and JAN13 can be read.

## QR code

- QR code is a type of two-dimensional code expressing data vertically and horizontally.
- The code on the right is read as [株式会社 NTTドコモ].

## CODE128

- CODE128 is a type of bar code using vertical bars of varying width to express numbers, alphabets, etc.
- Download compatible i- $\alpha$ ppli software to scan CODE128 (127 P. 284).

## Using text from bar codes (JAN/QR codes)

- Use scanned text from bar codes (JAN/QR codes) for functions such as connecting to i-mode or Full Browser, composing mail, making voice/ Videophone calls, composing SMS and running i-αppli.
- Some bar codes cannot be scanned depending on types or sizes.
- Bar codes may not be scanned due to scratches, dirt, damage, poor print quality, lighting conditions or QR code version.
- In the Custom menu, select [Camera]/ [LifeKit] ▶ [Bar code reader].



2 Display bar code (JAN/QR code) to be scanned in the center of the screen ▶ .



- Scan the bar code directly without shooting it on the screen.
- Position the camera 10 cm or more from the bar code (JAN/QR code). Keep aligned and do not move the FOMA terminal or code while scanning.
- When scanning is complete, an end tone is heard and scan results appear.
- To interrupt scanning: Press ./CLR.

#### Split data

 QR code may be split into a multiple set of codes (maximum 16) which can be compiled into one set of data. If split data is scanned, a message appears. The parentheses show remaining codes/total codes.



Select [Yes] to proceed to the next QR code scanning screen. When the next QR code is

shown in the center of the screen, scanning starts automatically. Repeat until all split data is scanned. Scan results appear.

## Use the scanned results.

- When scanned characters and numbers are underlined: Select the scanned text  $\blacktriangleright$  ( ).
  - · Based on the type of scanned text, a screen appears.
- To copy all scanned text: Press .
- Submenu operations for bar code reader screen

[Switch camera-mode] > select the camera mode > •

[Saved data] > select the saved data > •

[Switch AF mode] > select the setting > •

• For details on switching AF mode @P. 213



#### Submenu operations for scan results screen

[Add to phonebook] > add to the phonebook

[Add bookmark] > add to a bookmark

[Copy] > select the start position > (1) > select the end position > (1)

[Save] > select the save destination > •

## Scanning and using images/ToruCa/melodies from QR codes

## Scan QR code.

• In the scan results screen, [Image]/[Melody]/[ToruCa] appears depending on the scanned data.

## Press 💿 🕨 select a usage 🕨 🖲.

- If [Display] is selected when multiple ToruCa are included, only the first ToruCa is acquired.
- When [Save] is selected, images are saved in the [Acquired data] folder in My picture of Data box, melodies are saved in the [Acquired data] folder in Melody of Data box, and ToruCa is saved in [ToruCa] of ToruCa in the Osaifu-Keitai menu.

## Character Reader (OCR)

## Scanning text

Shoot printed data such as URLs, mail addresses, phone numbers and English words, and convert into text to be used by the FOMA terminal.

 Text which can be scanned is shown below. Such as URLs, mail addresses, phone numbers, English words, etc. are automatically distinguished based on the text. Double-byte characters such as kanji and hiragana cannot be scanned.

Single-byte alphabet, single-byte numbers, single-byte symbols [ : / $\tilde{~}$ ]
Single-byte alphabet, single-byte numbers, single-byte symbols [. @ :]

Phone number	Single-byte numbers, single-byte symbols [- + P # *]
	Single-byte alphabet, single-byte numbers, single-byte symbols [- / ? ! @ + * ' ( ) , . &]

• Text may not be scanned correctly due to scratches, dirt, damage, poor print quality, lighting conditions or text size.

## Using scanned text

Data type (URL, mail address, phone number, English word) is automatically distinguished. Use functions such as scanning text, connecting to i-mode or Full Browser, composing mail, making voice/ Videophone calls, composing SMS, searching in dictionaries, adding to the phonebook, and saving bookmarks.

In the Custom menu, select [Camera] [Character reader].



2 Display the text to be scanned in the center of the

## frame ( ) on the screen $\blacktriangleright$ $\odot$ .

- Text near the sides of the frame ( ) may be difficult to scan.
- Adjust the distance so that the bar on the bottom of the screen turns a deep blue.
- · Scan up to approximately 60 characters at one time.
- When multiple lines were scanned: Specify the lines to scan with ①.
  - · Text is scanned one line at a time.

## Press 🛈.

- To edit the scanned result: Press .
- To change the data type of scanned result: Press  $\Theta$ .
  - When the scanned result is phone number, the data type cannot be changed.
- To scan again: Press □ > [Yes].

Camera

## Press (i) b use scanned results.

- · To connect to the site with a URL (Category: URL): Select [Connect i-model/[Connect FB].
- To compose a message with a mail address (Category: Mail): Select [Yes] compose and send a message.
- To use a phone number (Category: Tel).
  - To make a voice call: Press ∠/● [Yes].
  - To make a Videophone call: Press I > [Yes].
  - To compose an SMS: Press D > [Yes] > compose and send an SMS.
- To search for scanned text in dictionary (Category: Word): Select [Yes] > select a dictionary > • + search in dictionary.
- When scanned data is a phone number, parentheses (()) become a hyphen (-). Hyphen (-) is erased for adding to the phonebook or making a call
- When the category of scanned data is URL. http:// is added to the scanned results even if it is missing

## Submenu operations for character reader screen

[Switch camera-mode] > select the camera mode > •

[Select subject] > select a category > •

#### [Switch AF mode] > select the setting > •

#### [Inverse mode] > select the setting > •

Switch the character type to be scanned.

## Submenu operations for scan results screen

#### [Continue] > scan text

· Connect to previously scanned data to make complete text. Scan up to 256 characters

#### [Add] > scan text

 Scan text in up to three sessions and link scanned text into one group.

[Add to phonebook] > add to the phonebook

#### [Add bookmark] > add to a bookmark

#### [Search dictionary] > [Yes] > select a dictionary > • > search in dictionary

• For details on searching for dictionary @P. 369

[Edit] | edit text | •

[Copy all]

[Delete] | [Yes]

### [Add to phonebook]

Scanned data is added to various following items by data type.

[URL]	Memo	[Mail]	Mail address
[Tel]	Phone number	[Word]	Name/Reading

#### Card reader

## Using Card reader

Scan a business card (Japanese/English) with the camera to save to the FOMA terminal handset phonebook.

- The following items can be saved.
  - Name Reading (surname only)
  - Phone/mobile phone/fax number (up to three in total)
  - Mail address (up to three)
- Company/school Department
- Reading of company/school name Title
  - Postal code
- Address
- Memo (saved date, URL and other items) Picture call setting

## In the Custom menu, select [Camera]/ [LifeKit] | [Card reader].



## Display a business card in the center of the screen •.

- The shutter sounds.
- Hold the FOMA terminal securely to fit the entire business card with the frame shown on the display. Make sure that no other objects. especially text-written objects, are displayed on the screen.
- For scanning, the direction of the business card can be either vertical or horizontal on the screen. Keep it vertical or horizontal when scanning.
- The larger the displayed image of the business card is, the clearer the scan result is. However, bringing the camera too close to the business card makes it difficult to adjust the focus. Keep the camera approximately 10 cm away from the business card.

## Press • add to the phonebook.

- The shot card images are automatically saved and the phonebook entry screen appears. Scanned items are entered in the phonebook entry screen.
- · When the total number of saved phone numbers, mobile phone number and fax numbers is four or more or there are four or more saved mail addresses, the three numbers or addresses from the top are saved. [繆]/[曾]/[經] are the icons for phone number type and [四] is for mail address type.
- · The shot card images are set to Picture call. However, the images do not appear when making/receiving a call or in the Redial/Received calls details screen
- Some business cards cannot be scanned or be recognized properly.
- The following business cards cannot be scanned.
  - Business cards with letters written in a language other than Japanese and English
  - Business cards with background images
  - Handwritten business cards and business cards with handwritten-style fonts
  - Business cards with letters written in both vertical and horizontal directions
  - Business cards shown on a display, etc.

- The following business cards cannot be scanned fine.
  - Business cards with light colored text and low contrast
  - Business cards with extremely small characters
  - Business cards with italic fonts
  - Shiny, coated business cards
  - Business cards with a logo or logo-style characters
  - Business cards in which there is no space between characters since they are placed too close to each other
- The reading (pronunciation in kana) may not be saved correctly or added automatically.
- Category of item may not be recognized properly.
- The shot card images are saved to the [Camera] folder in My picture of Data box.

## Submenu operations for card reader screen

### [Switch camera-mode] > select the camera mode > •

[AF mode]

@P. 213

### Information reader

## Using Information reader

Information reader allows to scan information such as store name, phone number, etc. from a magazine, etc. by using the camera, and newly save it to the FOMA terminal handset phonebook.

- The following items can be saved. Mail address (up to three)
  - Store name

- Phone number (up to three)
- Address
- Memo (store hours, closed, URL, directions, and other items)
- Picture call setting

In the Custom menu, select [Camera]/ [LifeKit] ▶ [Information reader].



## 2 Display information in the center of the screen ▶ .

- · The shutter sounds.
- Hold the FOMA terminal securely to fit necessary information in the screen. If the displayed text gets small, display a phone number or address and make its size bigger to scan.
- Display necessary information near the center of the screen.
- Display necessary information in bigger size to scan easily. If the camera gets too close, it causes difficulty in focusing. Move the camera away at least 10 cm from information.

## Press 💿 🕨 add to the phonebook.

- The shot images are automatically saved and the phonebook entry screen appears. Scanned items are entered in the phonebook entry screen.
- When there are four or more saved phone numbers or mail addresses, the three numbers or addresses from the top are saved.
- The shot images are set to Picture call. However, the images do not appear when making/receiving a call or in the Redial/Received calls details screen.

 Some information cannot be scanned or recognized properly depending on the description of magazine, etc.

- The following cannot be scanned
  - Phone number in Chinese numeral

- Scanning does not work well for the following texts.
  - Printed on scabrous paper, etc.
  - Have reading printed beside store name, etc.
  - Include some highlighted texts
- Refer to Card reader for cases other than listed above.
- The shot images are saved to the [Camera] folder in My picture of Data box.

## Submenu operations for information reader screen

 Refer to submenu operations for card reader screen (IPP. 222) for those for information reader screen.

#### Cameraloupe

## Using the FOMA terminal as loupe

## Use the camera to magnify a small text, such a text in a newspaper and others, and view it in the display. Shooting the magnified image as a still picture is also available.

 Display at a magnification of approximately 3.6 times in the normal position, and at approximately 2.6 times in the Cycloid position.

## In the Custom menu, select [Camera] > [Cameraloupe].

- To shoot still pictures: Proceed to step 2 of "Shooting still pictures" on P. 206.
- Change the settings in the same way as in shooting still pictures (P. 211, P. 217).

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#### Shotdeco

## **Creating original Deco-mail picture**

Scan hand written pictures or text as a GIF image to create original Deco-mail pictures or Deco-mail pictograms. The animated GIFs can be created by combining the scanned images.

In the Custom menu, select [Camera] ▶ [Shotdeco].



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- 2 Display an image or a character to be scanned in the red frame of the screen ▶ ●.
  - The shutter sounds.
- 🖁 Press 💽.
  - To change the color of images: Press 1 to 6.
  - To change the highlighted status of images: Press 7.
  - To undo the images: Press 8.
  - To send Deco-mail (☞ P. 128): Press ) compose and send a Deco-mail.

## Submenu operations for Shotdeco shooting screen

[Switch camera-mode] > select the camera mode > •

[Resize] > select the size > •

[Switch still/anime] > select the mode > •

## **Creating animated GIFs**

The animated GIFs can be created by combining maximum five images.

## In the Shotdeco shooting screen, press (a) (Switch still/anime) [Anime].

- Alternatively, press 1.
  - Each time (i) is pressed, modes are switched between the Still picture mode and the Anime mode.

## 2 Display an image or a character to be scanned in the red frame of the screen ▶ .

- The shutter sounds.
- · Shoot up to five images.
- When continuous shooting is complete, or shooting was canceled by pressing (6), the preview screen appears.

## 🖁 Press 💽.

- To check the image after combining: Press .
- To send Deco-mail (☞ P. 128): Press Compose and send Deco-mail.
   Compose and send Deco-mail.
- Even if a ruled notepad, etc. is used, pictures and text are scanned excluding the ruled lines and the white background color (Sometimes the ruled lines are scanned).
- The scanned images are saved to the [Decome-picture] folder in My picture of Data box (Images are saved to the [Decome-pict] folder when the image size is *Emoji: 20×20*).
- When considerable noise is caused by the subjects or shooting place, adjust the brightness to shoot clearly.