

Concerning the DMC-L1K Firmware Update

The following functions have been added or changed starting with firmware version 2.0. Read along with the operating instructions for the camera.

A multiple exposure function has been incorporated.

A multiple exposure function has been added to the menu for taking pictures. Using this function, you can achieve the kind of effect that is obtained when an image is exposed two or three times.

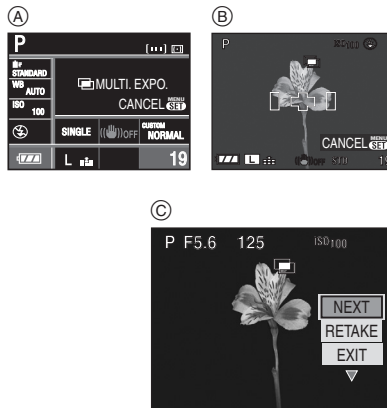
- When you use the Live View function, you can take pictures while checking the composition of the overall photos.
- When you take pictures using the viewfinder, you can check the composition using the review images.
- If the intervals between taking pictures are long, check the setting for power save mode, and ensure that the power will not turn off before you finish taking pictures.

1 Press [MENU/SET], use ▲/▼ to select [MULTI. EXPO.] and then press ►.



2 Decide on the composition, and take the first picture.

- After taking the picture, press the shutter button halfway down to take the next picture.
- Use the command dial (⌚) or ▲/▼ to select [NEXT], [RETAKE] or [EXIT]. One of the following operations will be performed when [MENU/SET] is pressed.
 - [NEXT]: Advance to the next picture.
 - [RETAKE]: Return to the first picture.
 - [EXIT]: Record the image of the first picture, and finish the multiple exposure picture-taking session.

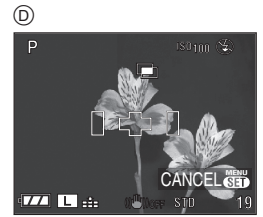


- (A): When taking pictures using the viewfinder
- (B): When taking pictures using the Live View function
- (C): After the first picture has been taken

3 Decide on the composition, and take the second picture.

- After taking the picture, the first and second pictures taken will be superimposed over each other and displayed.
- After taking the picture, press the shutter button halfway down to take the next picture.
- Use the command dial (⌚) or ▲/▼ to select [NEXT], [RETAKE] or [EXIT]. One of the following operations will be performed when [MENU/SET] is pressed.
 - [NEXT]: Advance to the next picture.
 - [RETAKE]: Return to the second picture.
 - [EXIT]: Record images up to the second picture taken, and finish the multiple exposure picture-taking session.

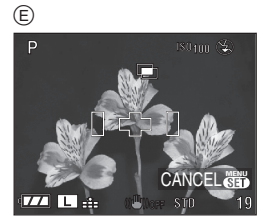
(D): When taking pictures using the Live View function



4 Decide on the composition, and take the third picture.

- After taking the picture, the images of the first, second and third pictures taken will be superimposed over one another and displayed.
- Use the command dial (⌚) or ▲/▼ to select [RETAKE] and then press [MENU/SET] to return to taking the third picture.

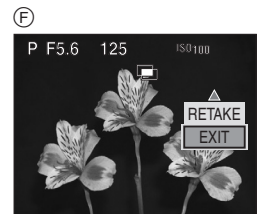
(E): When taking pictures using the Live View function



5 Use the command dial (⌚) or ▼ to select [EXIT] and then press [MENU/SET].

- You can also press the shutter button halfway to finish.
- The images up to the third picture taken are recorded, and the multiple exposure picture-taking session will be completed.





(F): After the third picture has been taken



- Compensate the exposure to match the subject so that all the superimposed exposure effects will be just right.
- The recording information displayed for pictures taken with multiple exposures is the recording information for the last picture taken.
- If [MENU/SET] is pressed while taking pictures, the photographed images are recorded, and the multiple exposure picture-taking session will be completed.
- We recommend setting the [O.I.S.] switch on the lens to [OFF] and using a tripod if taking pictures with multiple exposures.
- The multiple exposure setting is released at the following times:
 - When the power has been turned off (including power save mode)
 - When the card has been changed
 - When the USB connection cable has been connected to the camera
- Some functions have restrictions. You will not be able to use the following functions:
 - Burst mode
 - Auto bracket mode
 - Extended optical zoom
 - Digital zoom
 - etc.

[MODE3] (panning mode) has been incorporated for image stabilization (camera shake correction).

[MODE3] has been added to [OIS MODE] on the menu for taking pictures.

Item	Effect
[MODE1] ()	Camera shake is corrected at all times in the mode for taking pictures. It enables you to take pictures with stability after deciding on the composition using the telephoto function.
[MODE2] ()	Camera shake is corrected when the shutter button is pressed. The resulting correction is more effective.
[MODE3] ()	Camera shake is corrected for up/down movements. This mode is ideal for panning (a method of taking pictures which involves turning the camera to track the movements of a subject which continues to move in a fixed direction). 



It is more difficult to achieve the effects of panning in the following situations:

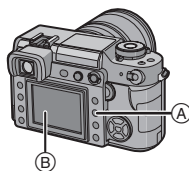
- In brightly lit places such as in broad daylight on a summer's day
- When the shutter speed is faster than 1/100
- When the subject is moving slowly and the speed at which the camera is turned is too slow (to make it look like the background is flowing by)
- When the camera cannot track the movements of the subject closely
- It is recommended that you take pictures using the viewfinder.

A low-angle mode that makes it easier to see what is on the LCD screen during Live View picture-taking at a low angle has been incorporated.

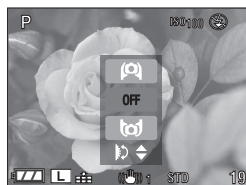
Along with the high-angle mode that makes it easier to see what is on the LCD monitor screen when taking pictures from high positions, is a new low-angle mode function that similarly makes it easier to see what is on the LCD monitor screen when taking pictures from low positions.

1 Hold down [DISPLAY] for one second.

- Ⓐ: [DISPLAY] button
- Ⓑ: LCD monitor





2 Select the mode using the command dial () or ▲/▼.

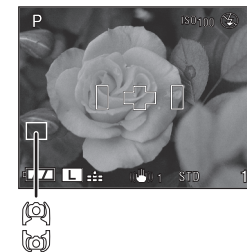




3 Press the shutter button halfway to enter the setting.

- The setting can also be entered by pressing [MENU/SET].

() : High-angle mode

() : Low-angle mode



Item	Description of setting
() : High angle	This makes it easier to see what is on the LCD monitor screen when taking pictures from high positions. It comes in handy when there are people in front of you and you cannot get close to the subject. (In this mode, however, it is hard to see what is on the display if you look at it straight on.)
() : Low angle	This makes it easier to see what is on the LCD monitor screen when taking pictures from low positions. It comes in handy when taking pictures of flowers that are blossoming close to the ground or taking pictures at the eye level of children or pets. (In this mode, however, it is hard to see what is on the display if you look at it straight on.)
[OFF]	This returns the LCD monitor screen to its normal brightness.

To release the high-angle mode or low-angle mode

Hold down [DISPLAY] again for one second. This causes the screen in step 2 to be displayed. Now select the [OFF] setting to release the high-angle mode or low-angle mode.



- The high-angle mode or low-angle mode is released when the power is turned off (including power save mode).
- In the high-angle mode or low-angle mode, the brightness of the image displayed on the LCD monitor is adjusted. Depending on the subject, the image may appear to be somewhat different from actuality, but the image recorded remains unaffected.
- When sunlight or other strong light is reflected onto the LCD monitor so that it is hard to see what is on the screen, you might not be able to gauge the effect of the high-angle mode or low-angle mode. At times like this, it is recommended that you block out the sunlight with your hand to use the mode.
- The high-angle mode or low-angle mode will not work in the following situations:
 - In the playback mode
 - While menu screens are displayed

It is easier to set the aperture when you have mounted a lens without an aperture ring.

In addition to pressing [FUNC.1] and turning the command dial, the following operation can now be used to set the aperture when using a lens without an aperture ring in the aperture-priority AE mode [A] or manual exposure mode [M].

Aperture-priority AE mode [A]

- Take either of the steps below to set the aperture:
 - Turn the command dial (⌚) (when [DIREC. EX. COMP.] has been set to [OFF]).
 - Press [FUNC.1], and turn the command dial (⌚) (when [DIREC. EX. COMP.] has been set to [ON]).
- Press ▲/▼.

Manual exposure mode [M]

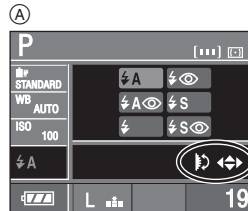
- Turn the command dial (⌚) to set the aperture.

You can now use the cursor buttons to set the white balance (WB), change the colour temperature or set the ISO sensitivity or flash. There is no longer any time restriction before the settings are entered.

The operation for the function used to set the following with direct buttons has been changed.

- | | |
|--|-------------------|
| • Exposure compensation | • Flash |
| • Flash fine adjustment | • White balance |
| • Colour temperature | • ISO sensitivity |
| • Frequently used functions [FUNCTION] | • External flash |

Ⓐ: Example: When setting the flash



- There are now two ways to select settings: besides operating

⌚ (command dial), it is now possible to select them using ⬆️⬇️⬇️⬆️ (▲/▼/◀️/▶️).

- There is no longer any time restriction before the settings are entered so that you can perform the settings and check what you have set at your leisure.

Concerning the white balance settings

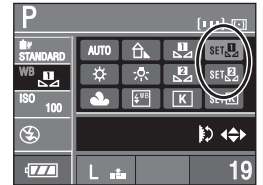
The steps taken to perform the white balance setting, colour temperature setting and white balance fine adjustment setting have been changed as follows.

■ To perform the white balance setting

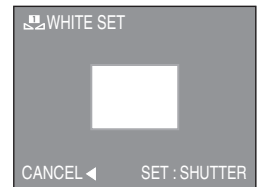
A new white balance setting can be selected when [SET_{WB}1] or [SET_{WB}2] is selected.

1 Press [WB].

2 Select [SET_{WB}1] or [SET_{WB}2] using the command dial (⌚) or ▲/▼/◀️/▶️, and press [WB].



3 Point the camera at a sheet of white paper or any other white object, ensure that only the white object appears inside the frame at the screen centre, and press the shutter button all the way.



- The white balance cannot be set in the multiple exposure mode.

■ To set the colour temperature

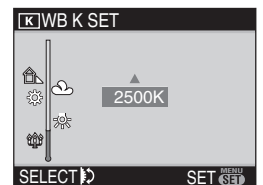
A new colour temperature setting can be selected when [SET_K] is selected.

1 Press [WB].

2 Select [SET_K] using the command dial (⌚) or ▲/▼/◀️/▶️, and press [WB].



3 Select the colour temperature using the command dial (⌚) or ▲/▼, and press [MENU/SET].



■ To finely adjust the white balance

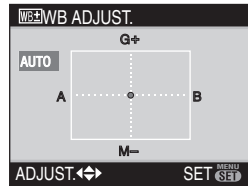
The white balance can now be adjusted finely by selecting the white balance and pressing [MENU/SET].

1 Press [WB].

2 Select the white balance that matches the picture-taking conditions using the command dial (⌚) or ▲/▼/◀/▶, and press [MENU/SET].



3 Finely adjust the white balance using ▲/▼/◀/▶, and press [MENU/SET].



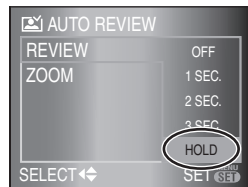
- Fine adjustments can be performed for the white balance items separately. (They cannot be finely performed at [SET1], [SET2] or [SET3].)

A mode with no time restrictions has been added to auto review.

The [AUTO REVIEW] function on the setup menu has been changed as follows. In addition, the auto review setting now takes effect even during the simultaneous recording of RAW files.

[HOLD]: After a picture is taken, the image remains displayed. Playback zooming and moving the zoom position are now possible during auto review.

- When [HOLD] has been selected, the zoom time setting is cancelled.
- When [HOLD] has been selected, press the shutter button halfway to release the auto review.



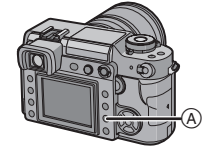
During playback zooming, it has now become possible to move back to the preceding images or move forward to the next images while the image is still zoomed.

The display images can now be selected while maintaining the same zoom magnification and zoom position of the playback zoom.

1 Press [Z] (aperture stopping down button) during playback zoom.

- The zoom position is now locked.

A: [Z] button



2 Move to the next or previous image using ◀/▶.

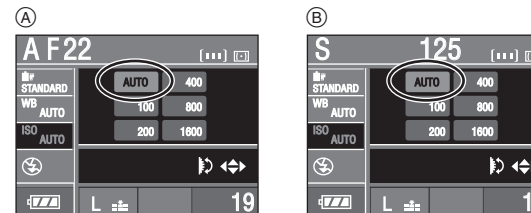
- ◀: To move to the previous image.
- ▶: To move to the next image.

- To release the lock status, press [Z] again.



- The zoom position held in the lock status is released when the power is turned off (including power save mode).
- When the following images are displayed in the lock status, the zoom position will return to the centre. Press [Z] to release the lock, and then move the zoom position.
 - Images with different aspect ratios
 - Images with different numbers of recorded pixels
 - Images with a different rotation direction (when [ROTATE DISP.] is set to [ON])

It has now become possible to select [AUTO] for the ISO sensitivity in the aperture-priority AE mode [A] and shutter speed-priority AE mode [S].



A: In the aperture-priority AE mode [A]

B: In the shutter speed-priority AE mode [S]

Checking the firmware version

[VERSION DISP.] has been added to the setup menu items.

Ver. [VERSION DISP.]: This enables the firmware versions of the camera and lens to be checked.

- [-. -] is displayed as the lens firmware when the lens is not mounted.

