This part explains the changes incorporated in the Dimâge EX Operating Environment Version 2. (firmware)
Please read it in conjunction with the User’s Manual supplied with the camera.
1. A NEW DIGITAL MAGNIFICATION FUNCTION

After extending the optical zoom (telephoto) to 115mm, release the right button and then press it again to select digital magnification. Press the right button once to increase the magnification of the live image on the LCD monitor. The full size (2.0X) image is 672 pixels (horizontal) x 504 pixels (vertical) (1/4 size (2.2X) image of 288 pixels (horizontal) x 216 pixels (vertical)).

Press the left button once to decrease the digital magnification of the image. After decreasing magnification to the minimum size image of 1344 pixels (horizontal) x 1008 pixels (vertical) (1/4 size image of 640 pixels (horizontal) x 480 pixels (vertical)), press the left button once to re-select the optical zoom (telephoto).

A magnifying glass icon $\mathcal{P}$ appears at the top-right of the REC screen when digital magnification is selected.

<table>
<thead>
<tr>
<th>Trimming area (displayed area) with digital magnification</th>
<th>Magnification for digitally magnified area. Figures in brackets are for 1/4 size.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Full size</strong></td>
<td><strong>1/4 size</strong></td>
</tr>
<tr>
<td>Width (pixels)</td>
<td>Height (pixels)</td>
</tr>
<tr>
<td>1344</td>
<td>1008</td>
</tr>
<tr>
<td>1120</td>
<td>840</td>
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<tr>
<td>1024</td>
<td>768</td>
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<tr>
<td>960</td>
<td>720</td>
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<td>896</td>
<td>672</td>
</tr>
<tr>
<td>768</td>
<td>576</td>
</tr>
<tr>
<td>672</td>
<td>504</td>
</tr>
</tbody>
</table>

• The digital magnification function operates only when the LCD monitor is switched ON. When digital magnification has been selected it is cleared by pressing the LCD monitor ON/OFF button on the lens unit to switch the monitor OFF.
• Digital magnification cannot be used when the wide-angle 1500 lens unit is fitted.
• When the PLAY or REVIEW mode is selected while digital magnification is selected, selecting the REC mode again clears digital magnification.
• Motion in digitally magnified live images is slightly jerky with digital magnification selected, however this has no effect on image quality.
• Images recorded from the digitally magnified area are trimmed in the vertical and horizontal directions as shown above (they are not reconstructed to 1344x1008 pixels), and appear as smaller images when displayed on the PC monitor screen or when printed.
2. INCREASED BURST RATE

(see User's Manual P52)

The burst rate is increased when [Fast] or [Medium] is selected with Menu Button → [Media Settings] → [Burst] → Edit soft key → [Burst Settings] → [Burst Rate].

- [Fast] Approximately 3.5 frames per second
- New: Approximately 7.5 frames per second
- [Medium] Approximately 2.5 frames per second
- New: Approximately 3.7 frames per second

The burst rate when [Slow] is selected (approximately 1.2 frames per second) has not changed.

3. SMOOTHER MOTION IN LIVE IMAGES

The refresh rate (the time required to rewrite one frame on the LCD monitor) when reviewing live images has been increased by approximately 33%, thus improving the smoothness of motion.

- Motion in digitally magnified live images is slightly jerky with digital magnification selected. However, this has no effect on image quality.

4. THE INTERNAL FLASH MAY BE SWITCHED ON/OFF

The internal flash may be switched ON/OFF by selecting Menu Button → [Preferences] → [Capture] → Edit soft key → [Capture] [Internal Flash]

This function allows the internal flash to be switched OFF when using the external flash unit FL-EX1 (available separately).

- [On] Internal flash operates
- [Off] Internal flash does not operate

- Setting this function to disable the internal flash does not disable the pre-flash for use in reducing red-eye and the AF flash assistance used for focusing.
5. A FLASH BRACKETING FUNCTION HAS BEEN ADDED

By changing the flash illumination in steps the exposure for the background not reached by the flash remains unchanged, while the exposure for the subject illuminated by the flash is bracketed. The exposure for the subject is bracketed from ‘optimum’ → ‘under exposed’ → ‘over exposed’.

1. Display the menu screen using the menu button, highlight [Photo Script] → [Flash Bracketing] and press the Edit soft key.

2. Highlight the bracketing adjustment increment required, and press the Select soft key.

3. Wait until the flash is charged, and then press the shutter button to take the photograph.

4. Repeat step 3. above twice.
   - This differs from the Bracketing (see P56 of the User’s Manual) in that the shutter is pressed three times for each series of three exposures.
   - When flash bracketing is selected, the numbers at the right of the overlay bar indicate whether the next photograph is the 1st, 2nd, or 3rd of the three frames.
   - Use flash bracketing only after checking that the BUSY lamp is extinguished. Flash bracketing will not operate correctly if photography is begun while this BUSY lamp is lit (blinking).
6. CUSTOM SETTINGS FOR WHITE BALANCE HAS BEEN ADDED
(see User's Manual P55)

In addition to the preset white balance the Dimâge EX allows custom setting of white balance in accordance with the user's own white balance sample.

1. Display the menu screen using the menu button, highlight [Photo Script] → [White Balance], and press the Edit soft key.

2. Highlight [Custom].

3. Point the lens towards the white balance sample and press the Select soft key.
   - The custom white balance is set.
   - Ensure that the white balance sample is large enough to fill the viewfinder.
   - After the custom white balance is set the screen returns to the condition in step 1. above. Press the End soft key to return to the initial (live image) screen.
   - A custom white balance once set is maintained until another white balance is selected, or the camera power supply is switched OFF. Switching the camera power supply OFF clears the custom white balance.
7. IMPROVED CUSTOM SCRIPT FUNCTION

(see User's Manual P102)

A script prepared by the user is run as described below.

Shutter Speed Setting
The manual exposure mode is selected from the menu and the desired shutter speed is set (the f-stop cannot be changed) using a script. Shutter speed can be set up to 2 seconds at maximum.

Changing ISO Sensitivity
Automatic gain control operates to amplify the signal when the subject is dark and the signal level is low. Note that gain is normally fixed However, it may be altered with the script. Please note that the noise in the signal may increase as the gain is increased.

Flash Compensation
The flash illumination may be controlled for exposure compensation using a script. This compensation differs from the exposure compensation in which the brightness of the whole image is increased. The areas of the image not illuminated by the flash remain unchanged, only the exposure for the subject illuminated by the flash is compensated.

Selectable Metering
In addition to the normal 25-segment Metering, Center Weighted Average Metering and Spot Metering may be selected with the script to suit the application or purpose.

AE Lock Selectable
A script may be used to select whether lightly pressing the shutter button is to lock or not lock (focus lock only) AE.

Manual White Balance Adjustment
White balance may be manually adjusted for red, blue, and green using a script. This function allows fine setting of white balance as necessary to suit photographic requirements.

Manual Focus
Focus may be adjusted with the cross-hairs keys (right and left) using a script. The focus may be checked on the LCD monitor for live images (this is not possible in the viewfinder). Manual focusing is not possible when digital magnification is selected.
• If you are interested in preparing your own scripts, download the Digita Script Software Development Kit from http://www.flashpnt.com/.  
• The content of some scripts may result in problems with operation of the camera after the script has been run.  
• Minolta takes no responsibility for the results of running a custom script, and is not liable for compensation for losses (e.g. loss of image data) incurred as a result of running such a script.

8. THE BracketING INCREMENTS HAS BEEN CHANGED

(see User’s Manual P56)

Steps used with flash bracketing with normal light were 1/2 of EV steps, however this has been changed to 1/3 of EV steps in Version 2.