

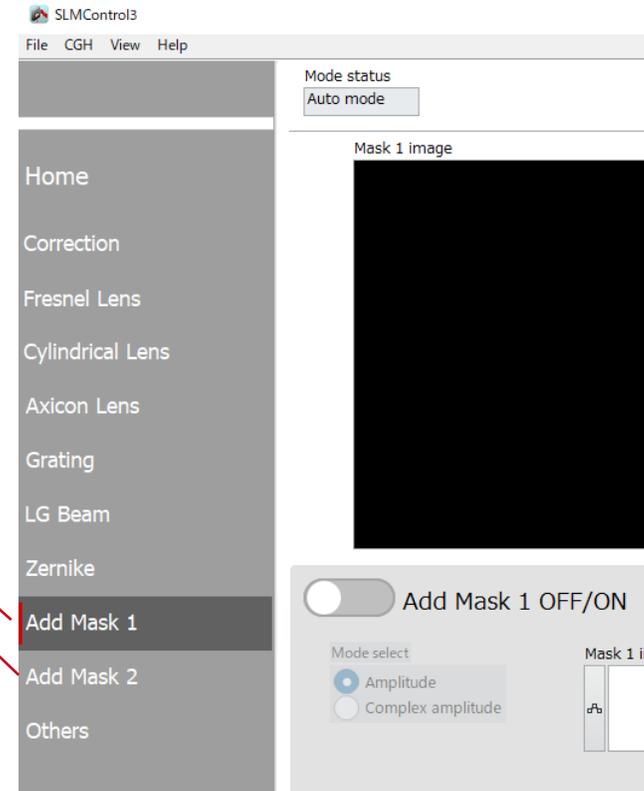
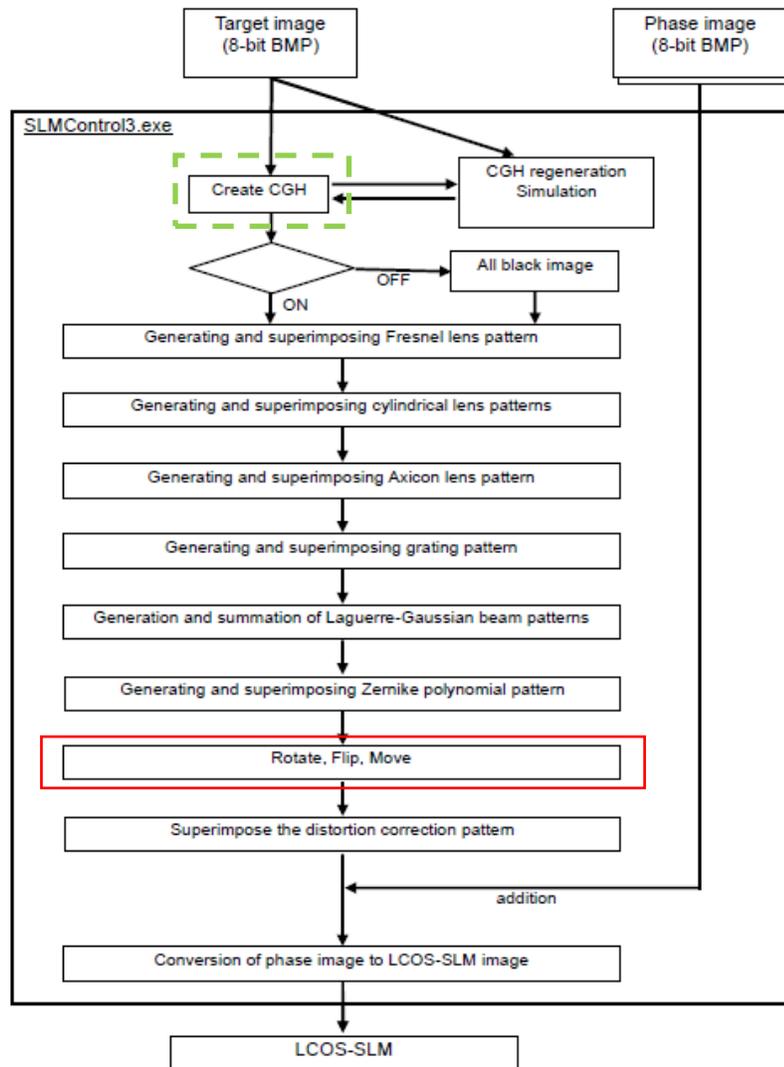
SLMControl3 Application Note

Laser Promotion Division
Hamamatsu Photonics K.K.

22.16. 2020

How to load and control a pre-calculated image file.

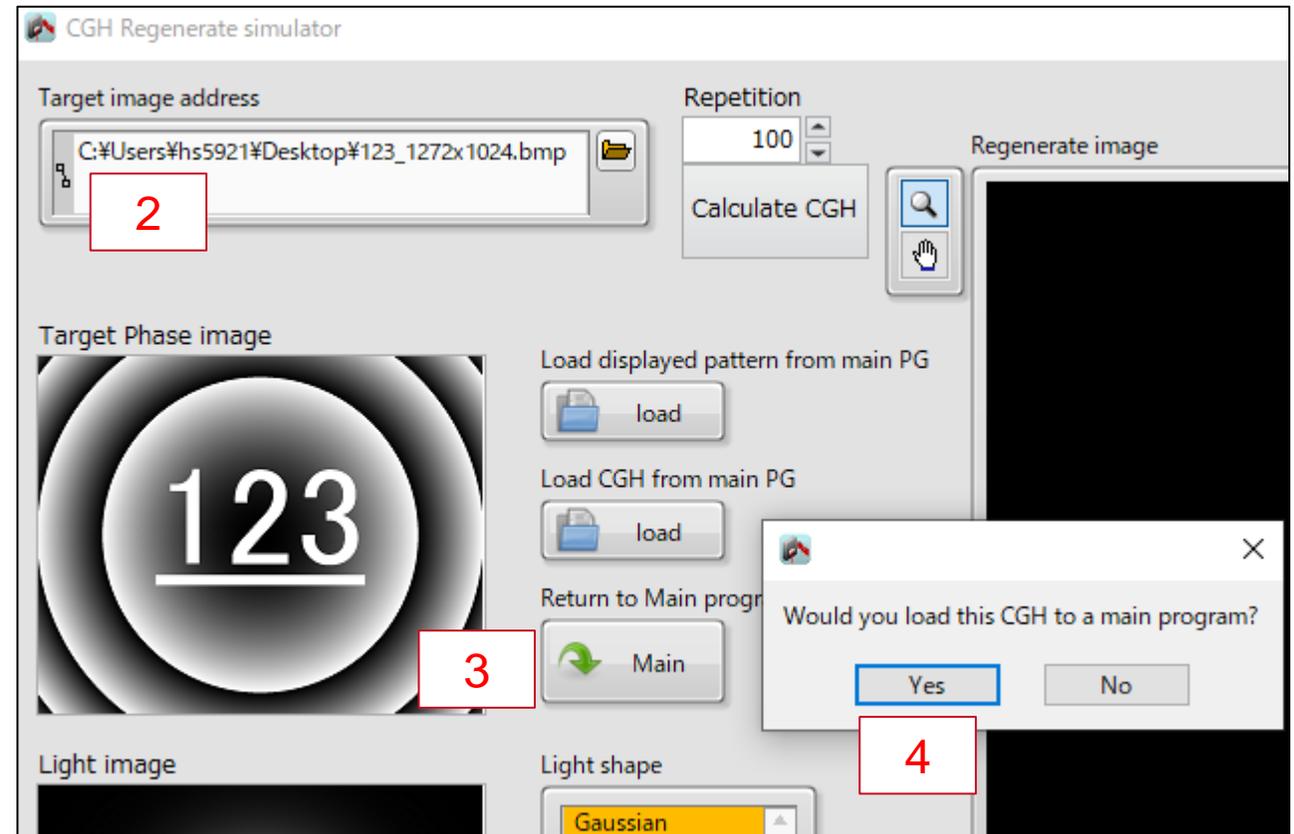
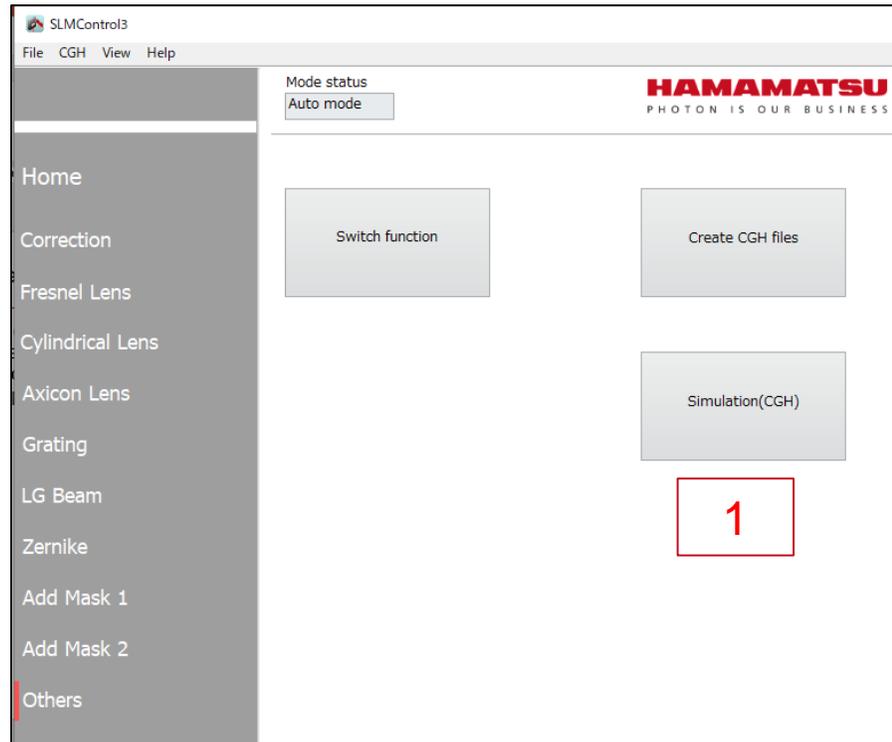
Calculation flow



At the “Add Mask 1 and 2”, the previous procedure such as flip and shift image or so are not apply. This application note show how to load precalculated image to main memory (load to “Create CGH” memory region).

Load the image into the memory of the main program

1. Press “Others→Simulation(CGH)” button
2. Input a BMP file to “Target image address” .
3. Press “Return to Main program” button.
4. Select “Yes” in the pop-up that appears.



Results

The screenshot shows the SLMControl3 software interface. The window title is "SLMControl3" and it has a menu bar with "File", "CGH", "View", and "Help". The interface is divided into several sections:

- Mode status:** "Auto mode".
- LCOS-SLM Type:** "X15213 series".
- Wave length:** "633 nm".
- Correction:** A button labeled "Correction".
- LUT:** A green toggle switch is turned on. A "2pi Signal Level(0-255)" input is set to "197".
- Additional phase:** Buttons for "Fresnel Lens", "Cylindrical Lens", "Axicon Lens", "Grating", "LG Beam", and "Zernike".
- Repetition:** A dropdown menu is set to "100".
- Buttons:** "Calculate CGH" and "Clear Target CGH".
- Target image address for CGH:** A text box containing "C:\Users\hs5921\Desktop\123_1272x1024.bmp".
- Target image for CGH:** A circular image showing the number "123".
- Displayed Image:** A larger circular image showing the number "123" with a phase pattern overlaid.
- Control UIs (highlighted in red dashed box):**
 - X shift:** A slider and input field set to "-300".
 - Y shift:** A slider and input field set to "240".
 - Rotation:** A circular dial and input field set to "45".
 - Flip CGH image:** A dropdown menu with options: "None", "Vertical", "Horizontal", and "Vertical + Horizontal".
 - Shift reset:** A button.

These control UIs are active for the loaded image.

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