

temDM BatchRecording

Installation: The plugins „temDM BatchRecording.gtk“ and „temDM extFrames .gt3“ should be placed in some plugins folder of DigitalMicrograph.

The script „find plugins folders.s“ included in the distribution package will help you to localize such folders. Open „find plugins folders.s“ in DigitalMicrograph and run it by pressing „execute“ or by pressing **ENTER** with holding the **CNTR** key. Read the list of available plugins folders. The first folder in the list is most appropriated for placing the temDM plugins.

Some folders can be hidden in Windows. If you do not see all folders, make them visible in Windows explorer:

Windows 7: „Organize“ tab – „Folders and search options“ – „View“ tab – click „show hidden files, folders and drivers“ checkbox.

Windows 10: „View“ tab – click „hidden items“ checkbox.

Drop the plugins into the chosen Plugins folder.
Restart DigitalMicrograph.

To update the version, just overwrite the plugin of the previous version in the Plugins folder. This is needed to avoid confusion of DigitalMicrograph with loading ambiguous commands.

Alternatively, you can install the script manually in DigitalMicrograph.

Having „extended frames classes.s“ frontmost click: **“File” – “Install script”- “Library”-“OK”**

Having „Strings112.s“ frontmost click: **“File” – “Install script”- “Library”-“OK”**

Having „InLine112.s“ frontmost click: **“File” – “Install script”- “Library”-“OK”**

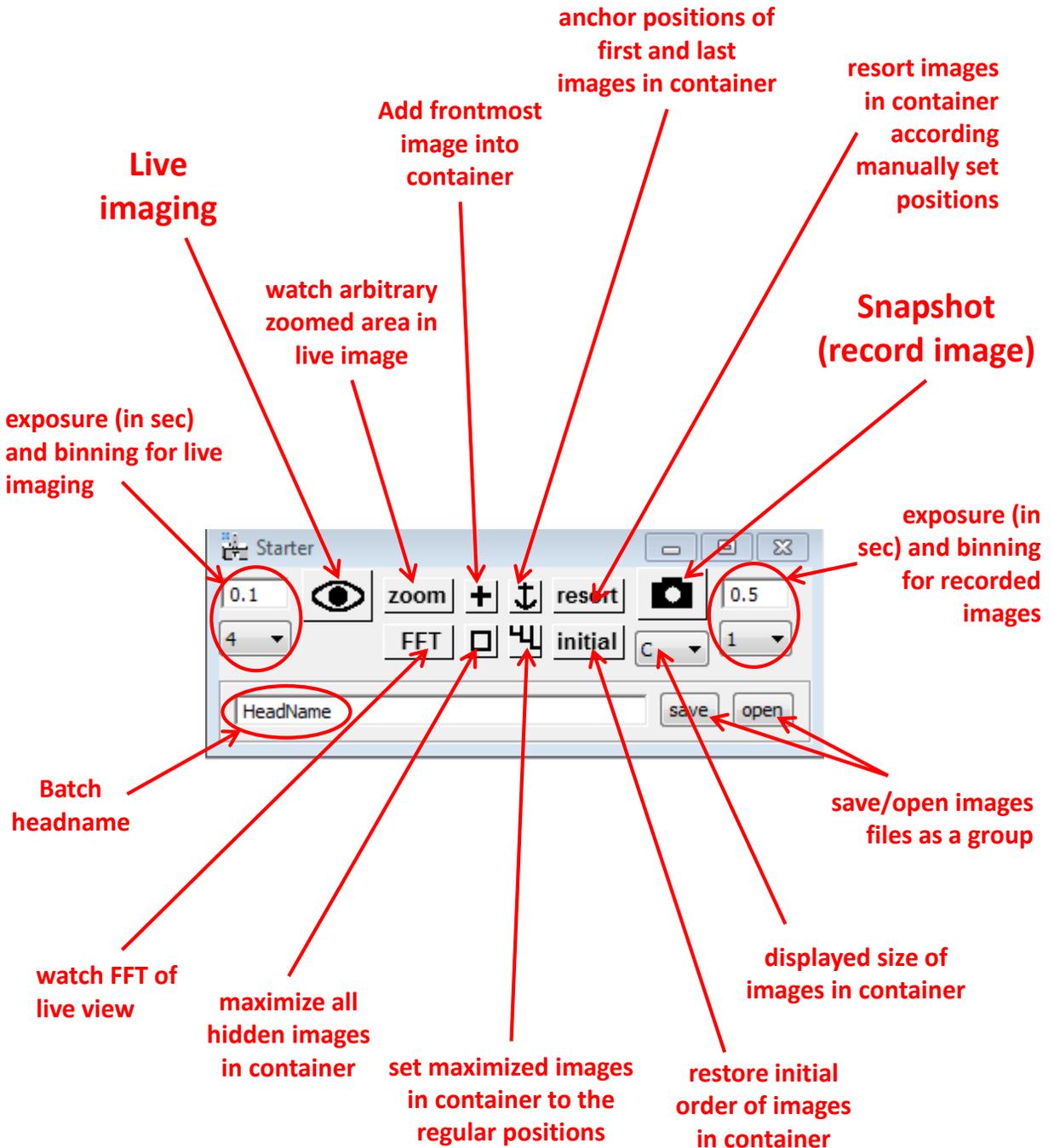
Having „BatchRecording.s“ frontmost click: **“File” – “Install script”- “Menu command”-“OK”**

In this way, you can modify the text of the script.

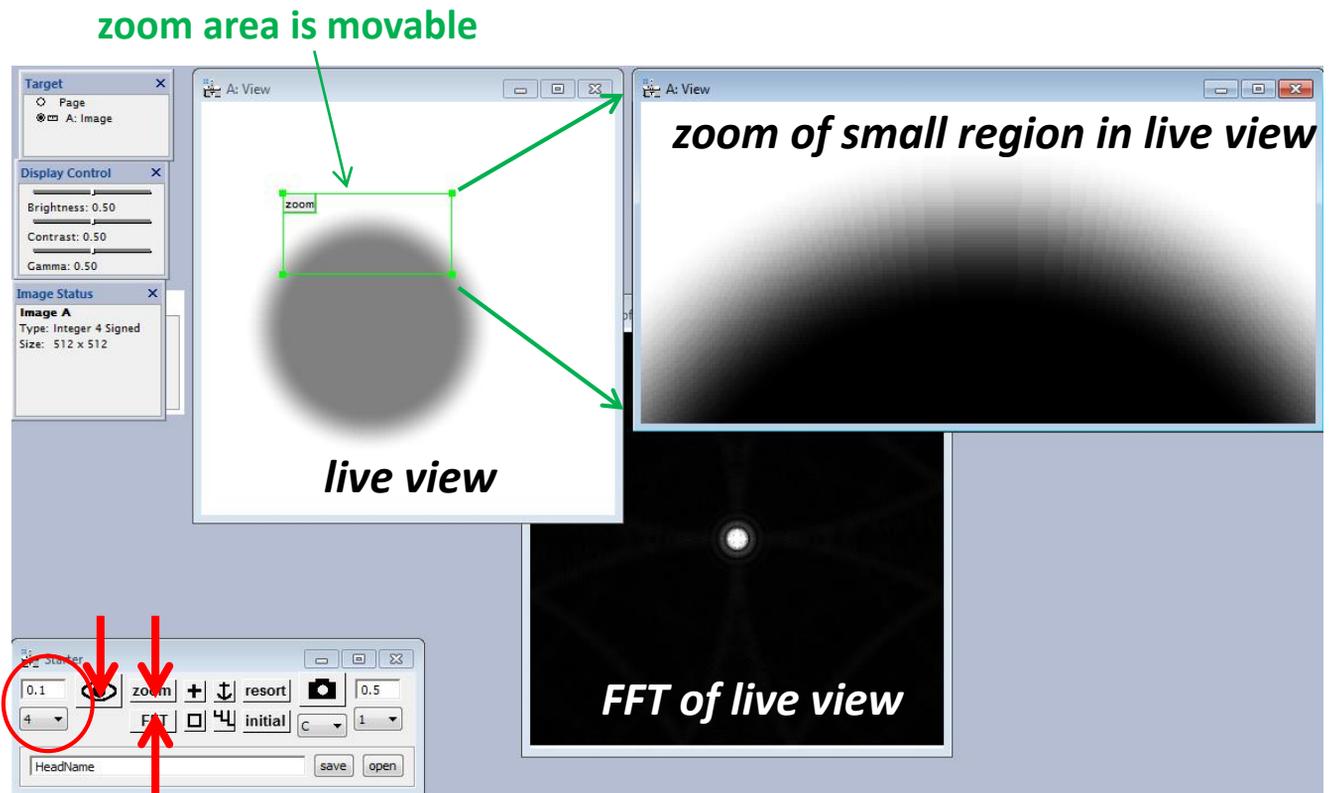
This plugin is primarily aimed for an in-line DigitalMicrograph directly connected with a TEM microscope. However, it is fully functional in an off-line DigitalMicrograph where the plugin „temDM VirtualTEM.gtk “ is installed.

This plugin can be also used in off-line DigitalMicrograph with no connection with a real or virtual microscopes. In this case the buttons for live-search and record images will be disabled and the tool can be used solely for inspecting and sorting images.

Short description

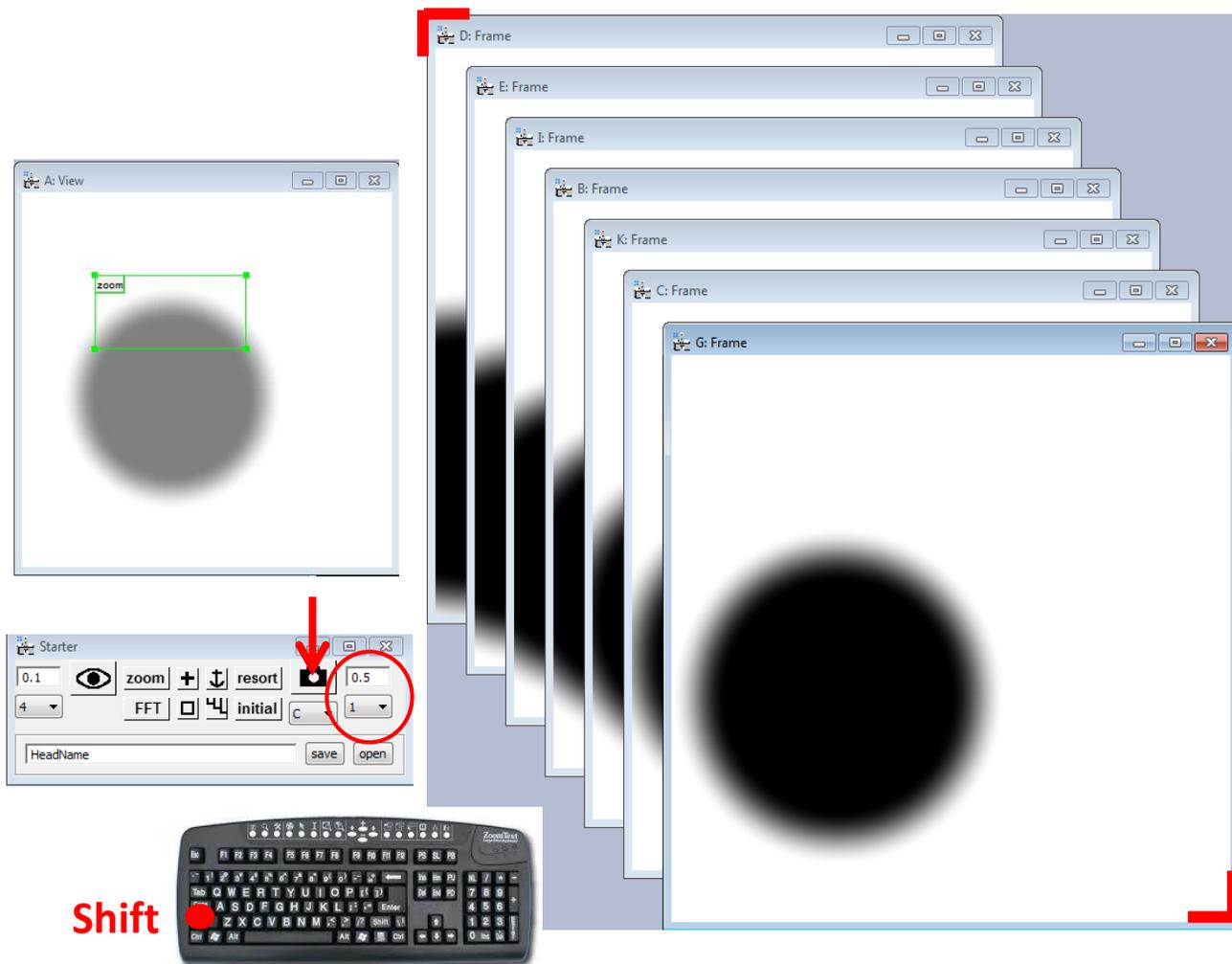


Detailed manual



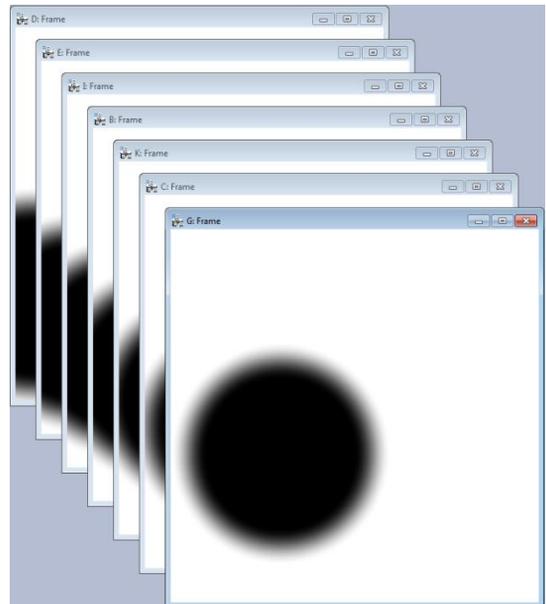
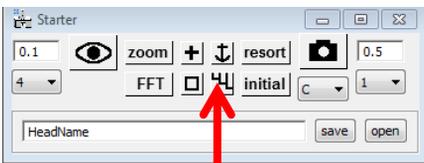
You can easily start “live view” from BatchRecording tool. Acquisition time (in sec) and binning values are from the left from the “eye” button. Two neighboring buttons initiate FFT and zoom of the frontmost window (assumed to be a live image).

Note that if you close these windows and then initiate it again, they appear at the last-set positions with the last-applied display zoom. The tool “remembers” your personal most convenient arrangement of windows.



At the appropriated moments you might click the “camera” button. An instant image will be shot and displayed. Acquisition time (in sec) and binning values are taken from the right from the “camera” button. All shot images are squeezed between two corners marked here by red. This is a kind of an image container. Every consequent image is placed at the most lower-right position while the older images are repositioned in a cascade manner.

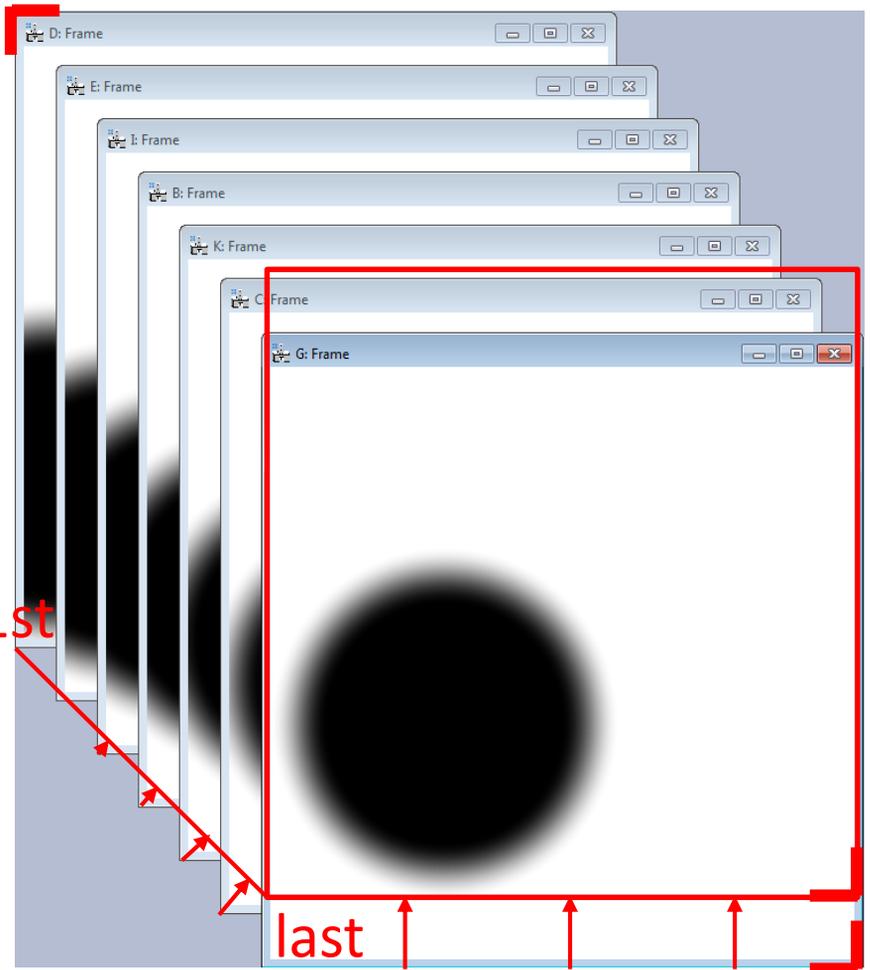
There is a better way to shoot images: just press Shift key when having live view in front (this is equivalent to clicking the “camera” button). Just keep busy with turning the microscope knobs and when you see a good image press Shift !



The image container helps you to keep an order in your shot images. You may move it around, shuffle, zoom et cet. , but when you click the “stack” button all images will land at their native positions in a well ordered stack.

How to position the image container in the best way for your personal convenience?

1st



last

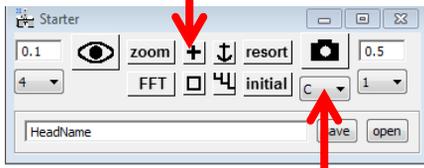


All images in the container are squeezed between the 1st and the last ones. You may change their positions. For instance, drag the last image up and press the “anchor” button. New position of the last image is stored. Then click the “stack” button to reposition all images in between. You may change the position of the 1st image in the same way. But remember that the last image must be always lower and righter than the 1st one ! That is the convention of the tool.

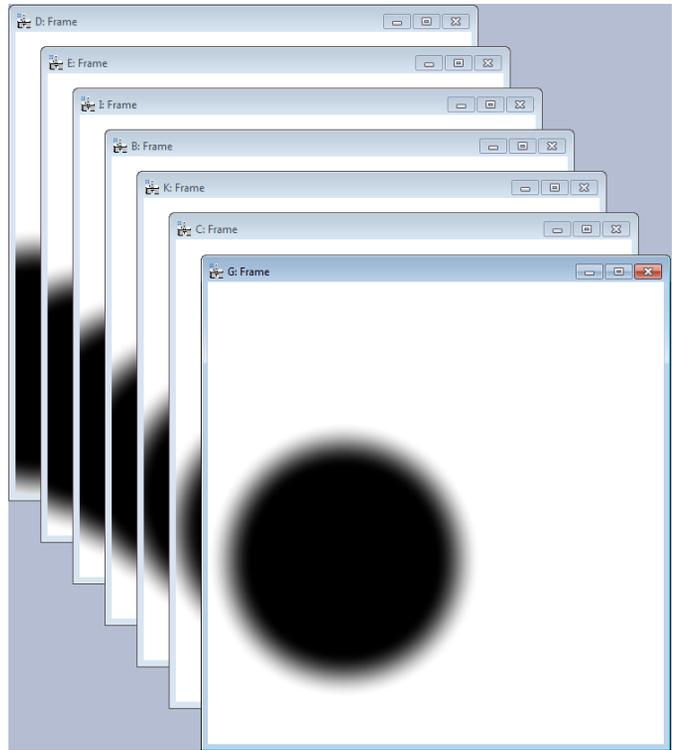
Recording images with “camera” button is not the only way to fill the image container. You might add a frontmost image into the container by clicking “+” button. If you hold CNTR key, all images maximized on the desktop will be added.



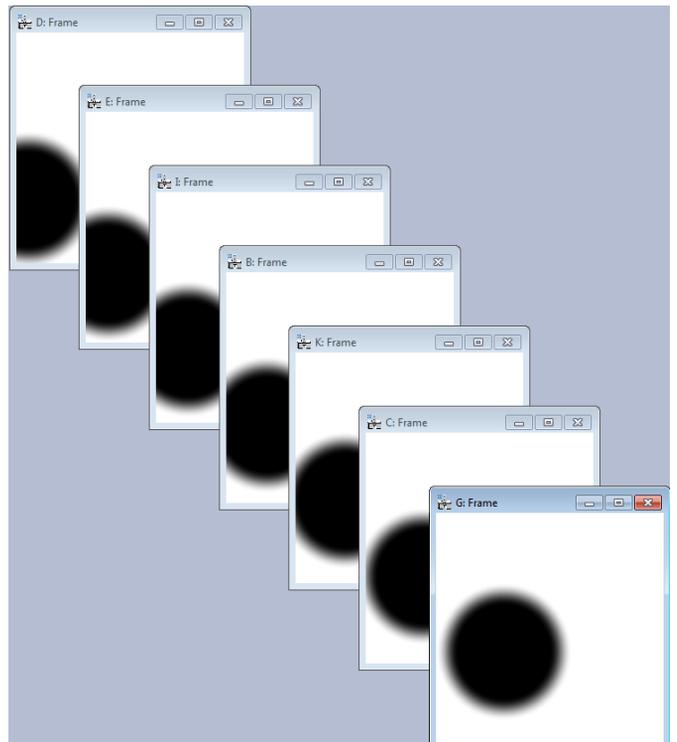
CNTR



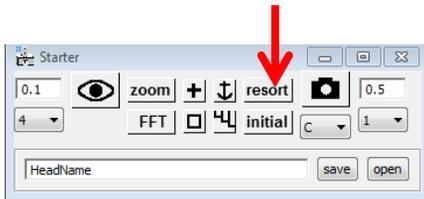
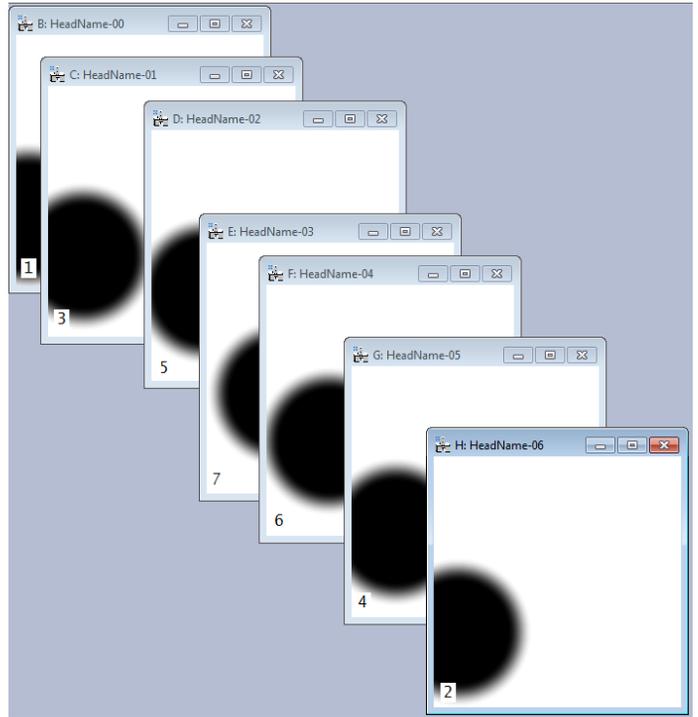
*Why it is good to keep images in the container?
First, they are well ordered there. Second, you can change the display zoom for all images in one click. Just choose one of the four standard sizes in the pop-up menu.*



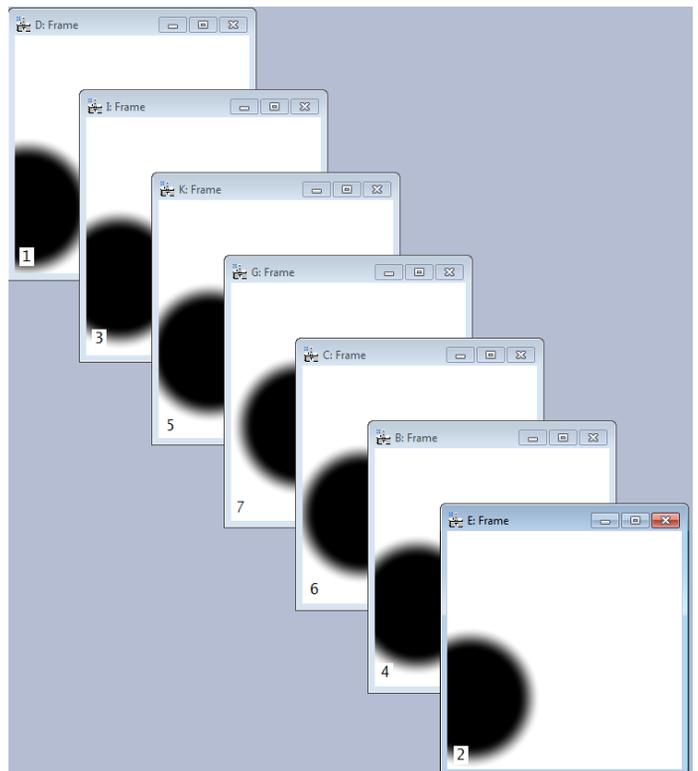
Changing display zoom



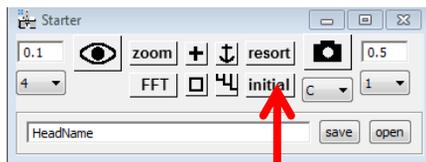
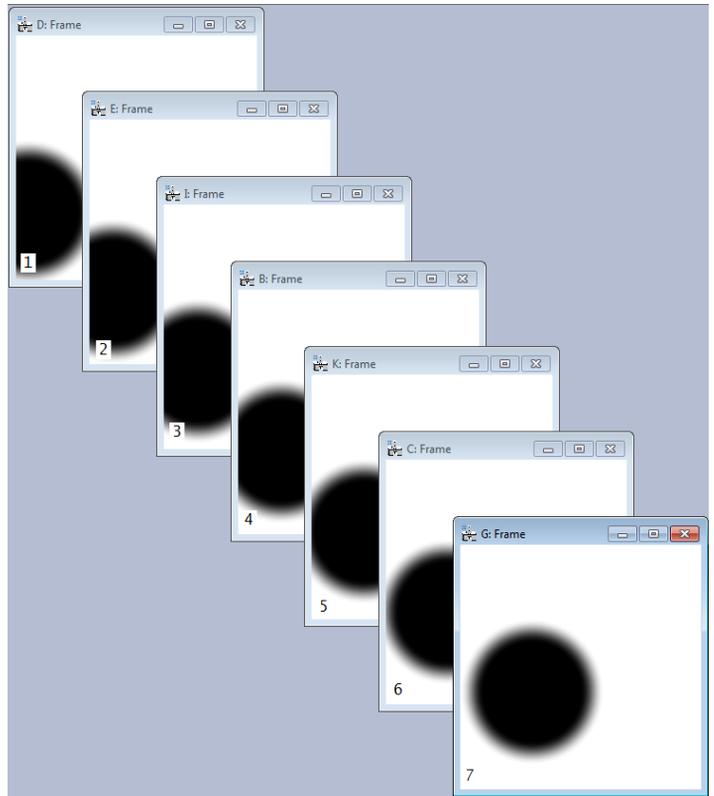
Images in the container are displayed in the sequence they were added. You can change it by manual resorting. Just drag the images you wish to be of the higher rang to the upper-left position. Then press "resort"



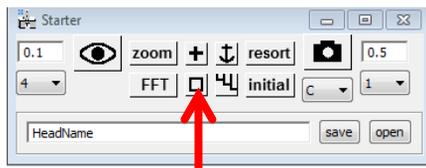
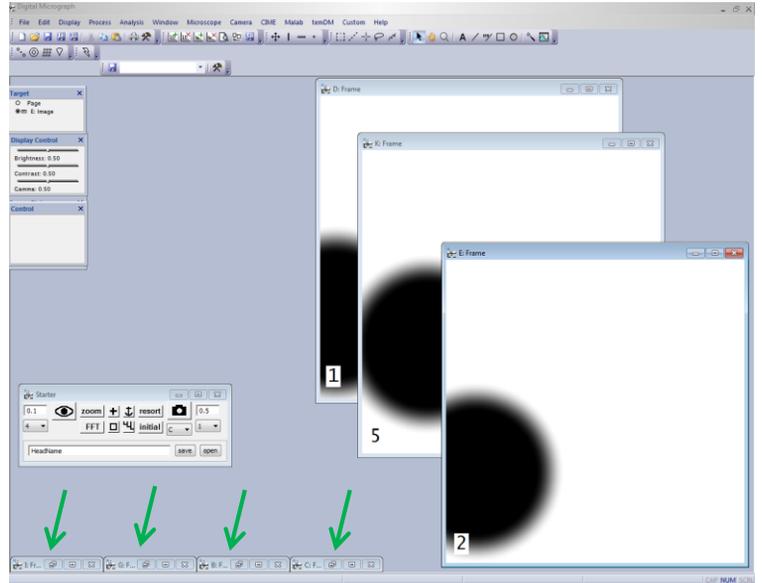
The sequence of images in the container is changed.



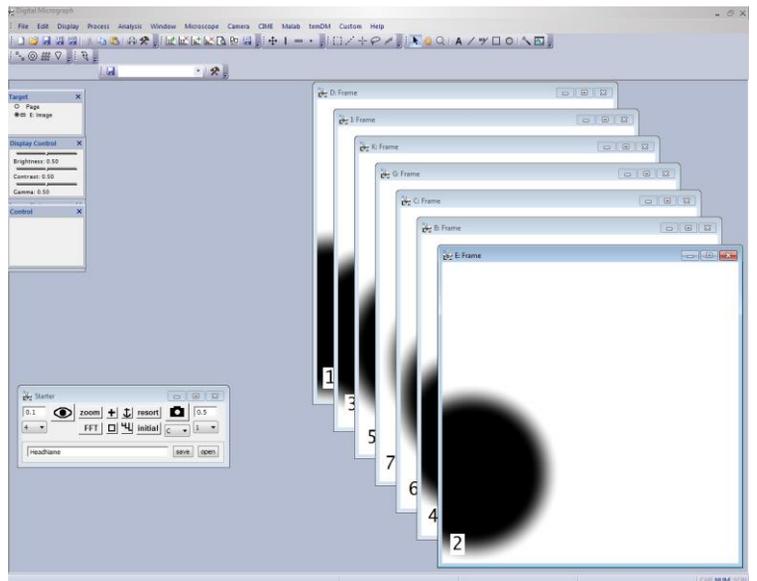
You can anytime restore the initial sequence by clicking "initial".

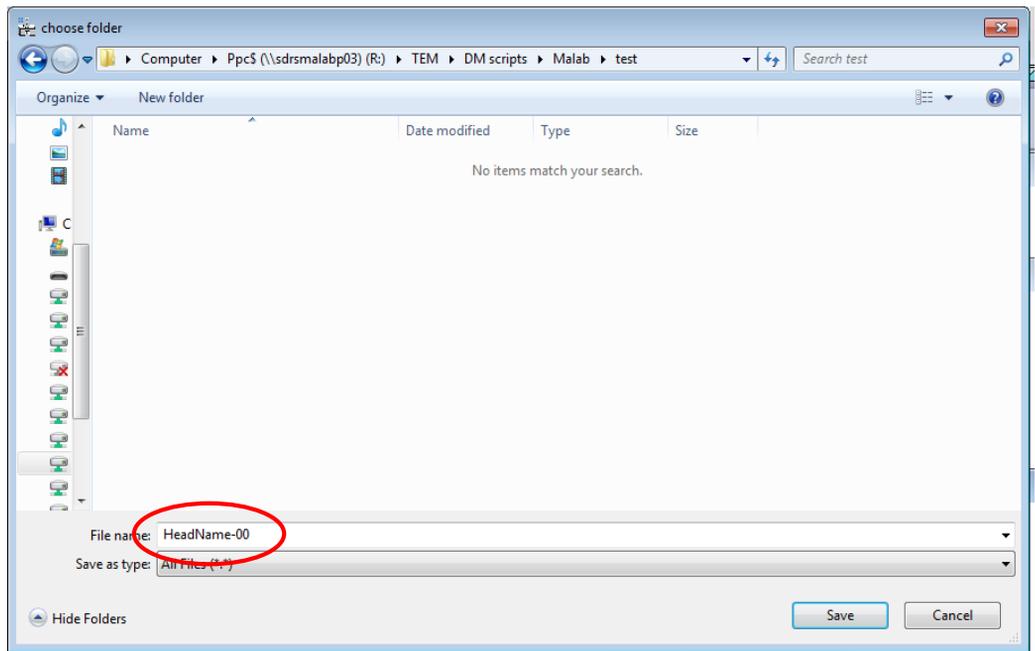


You might wish to hide temporarily some of your images. Just minimize them in the standard way (click “_” at the image right-upper corner).



When necessary, you can maximize all hidden images in the container by one click. Just click the “square” button.





Finally, you can store all images in the container as a package. The file names will be constructed from the batch headname plus the consequent image index in the container. In the similar manner you can open such a batch from the BatchRecording tool.

