

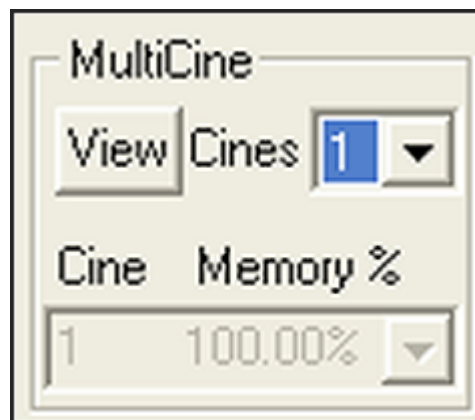


MultiCine

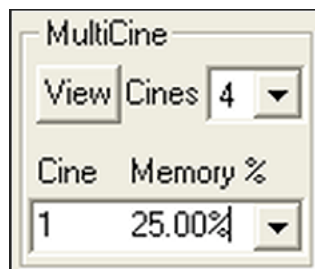
Divide camera memory into segments so you can take multiple movies without downloading

The MultiCine feature of Phantom cameras allows you to divide the camera's high-speed memory into segments. You can then shoot a separate cine into each segment. This can be useful if you want to take multiple shots of a fast event back-to-back without the need to overwrite previous shots, or if you want to take multiple shots and evaluate each one before saving. This capability is available on all Phantom cameras with Ethernet interfaces with the exception of the Phantom V4.2.

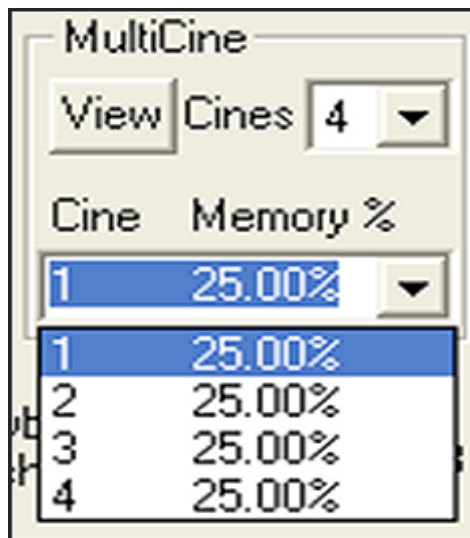
From the *Options* menu in the *Setup and Recording* screen, go to the *MultiCine* panel. This panel allows you to choose the number of segments to divide the camera DRAM into, and the percentage of memory dedicated to each segment.



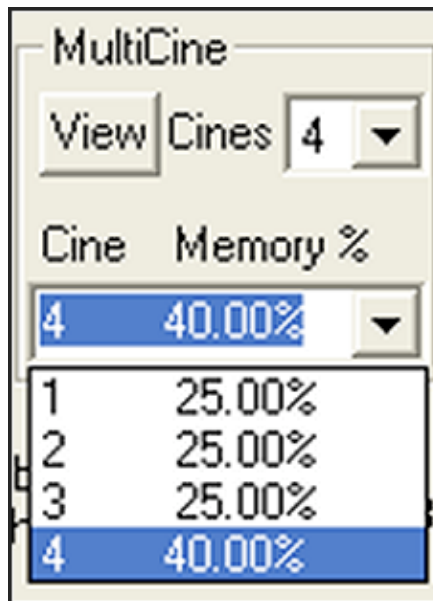
For illustrative purposes, let's create four memory segments. Use the *Cines* pulldown menu to choose 4.



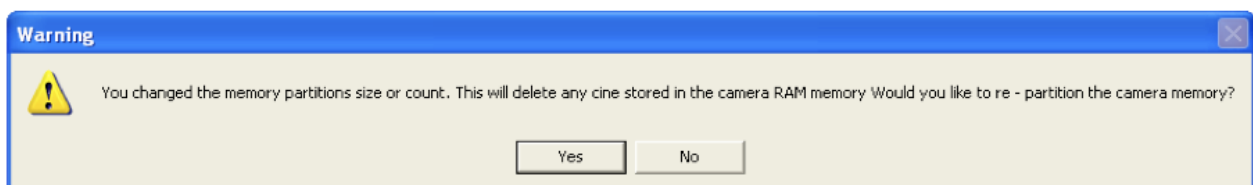
When you pull down the *Memory %* menu, you can now see that the DRAM has been automatically and evenly distributed among the 4 segments specified in the *Cines* pulldown menu.



To adjust the memory distribution of the four segments, simply edit the *Memory %* pulldown menu to reflect the amount of DRAM needed for each cine. In this case, let's change the last cine to 40%.

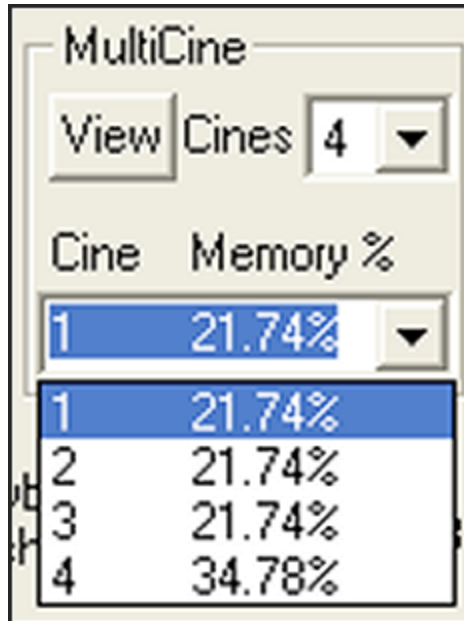


Once you click on the *Update* button at the top of the *Options* window, the Phantom software will ask you to confirm the change in memory partitions. Click *Yes*.



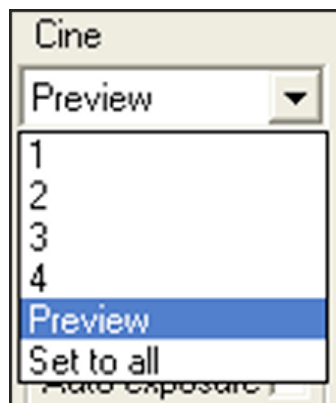
The software will then redistribute the remaining memory partitions evenly to once again equal 100%, while keeping you edited changes.

You may notice that the redistributed numbers do not exactly reflect your changes. This is because the software may adjust the numbers slightly to ensure the maximum use of memory, while trying to keep your settings.

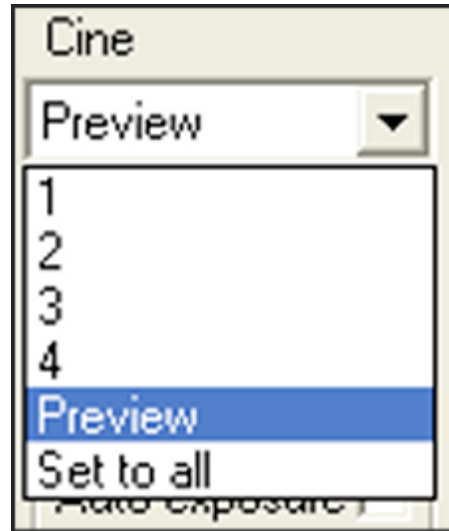


Click the *OK* button in the *Options* window and it will close. At this point you should set a global/initial resolution, frame rate and exposure you want to use when shooting your multiple cines.

In the *Setup and Recording* window, you will find the *Cine* pulldown menu. This menu is used to make setup changes to each cine segment. To perform adjustments that will take effect across all cines, you must first set the cine pulldown menu to *Preview*.



Note: if you wish to perform a Black Reference or Current Session Reference prior to shooting your cines, it should be done at the maximum resolution you plan to use and with the Cine menu set to *Preview*. You cannot apply a separate BR or CSR to different memory segments.



Once you've made your global/initial settings and have done a BR or CSR, set the pulldown menu to *Set to all* to apply the settings from *Preview* to all the memory segments. The menu will immediately default back to *Preview*.



If you want the resolution, frame rate or exposure to differ from cine to cine, simply select the cine you wish to change from the pulldown menu and make your changes. Click on the *Update* button to apply the changes. You can modify another segment by repeating this process.

Once you have set up the parameters for all cines and being shooting, these settings MUST NOT BE CHANGED between cines. Adjusting settings once you've begun to shoot multiple cines will result in unstable images.

At this point you can use the *View* button in the *MultiCine* window for a detailed accounting of all the cine settings on a single page. A file is created and opened using the Notebook application of Windows and can be saved as a text (.txt) file for future reference. The information in the file includes:

- If the segment is available or has already been used
- The resolution, rate, and exposure of the images to be stored in the segment
- If EDR has been enabled (1) or not (0)
- The amount of frame delay defined in the External Sync field
- The amount of Post Trigger frames to be captured
- The total number of images stored in the memory segment
- The auto exposure parameters and if it is enabled (1) or disabled (0)
- The number of recorded images
- The number of the first image recorded

When you are ready to shoot your cines, place the camera in Capture mode, then trigger. You can view the current state of the camera in the lower left corner of the *Setup and Recording* screen.

Preview Recording cine 1... Waiting for Trigger

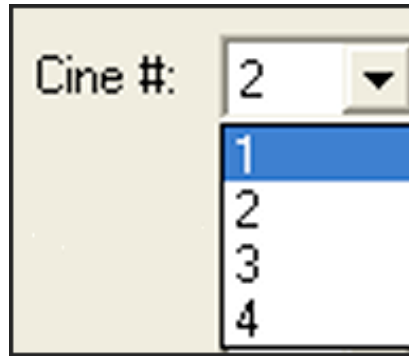
Once the first segment is triggered the camera will return to “waiting for trigger” mode until the second cine is triggered. You do not have to click on *Capture* for subsequent cines, they will immediately begin recording. Simply trigger each cine until all have been recorded.

Preview Recording cine 2... Waiting for Trigger

Preview Recording cine 3... Waiting for Trigger

Preview Recording cine 4... Waiting for Trigger

You now have four separate cines, one in each segment. To view each cine use the *Cine#* pulldown menu found in the *Playback* screen.



To save your cine(s), use the *Save* button found on the bottom right of the *View Cine* window. Or, with the *View Cine* window closed, select *File > Save As ...* from the Phantom software menus. The Phantom software will save the cine currently selected in the *Cine #* menu, or you can choose to save all cines currently in the camera memory.

