

## FEATURES

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## MULTICINE

### MULTICINE APPLICATIONS:

Applications that benefit most from MultiCine include:

- Airborne test environments, where multiple takes are required such as rocket or missile release, release mechanism, etc. significantly reducing the cost of having to land and refuel to offload the image data from the camera after individual takes.
- Entertainment arenas where multiple takes are often required, eliminating the need to offload the image data after each take.
- Manufacturing environments where sampling of the process is required.
- Any environment where multiple takes may be necessary without overwriting the previous shot.

### INTRODUCTION:

The MultiCine feature allows the end-user to divide a camera's DRAM or attached Phantom CineMag's non-volatile memory into memory partitions for multiple short recordings to be stored in DRAM. With MultiCine, you can rapidly record a repetitive test sequence, or even different subjects with unique camera settings configured in each memory segment before downloading the image data to an external storage device, internal flash memory, or a Phantom CineMag.

The MultiCine feature allows the end-user to:

- Specify the number of memory segments, or partitions, a camera's DRAM or attached Phantom CineMag's memory will be evenly divided into.
- Define a unique configuration profile for each of the memory segments.
- Select which memory segment to capture or record image data into.
- Delete the recorded cine, (image data), stored in a specific memory segment, without deleting recorded image data in any of the other memory segments, to free up that memory to perform another capture.

### GENERAL OPERATION:

Phantom cameras will partition its' image memory buffer, (DRAM), or attached Phantom CineMag's memory into equal blocks of memory based on the number of cine segments specified using the MultiCine parameter. Any cine that is in the camera's DRAM will be erased when the camera executes the partitioning process; however, any cine that has been stored within an attached Phantom CineMag will be untouched.

When the memory re-allocation process is completed, the camera will be placed into Preview state, and each of the MultiCine segments will be assigned the capture settings that were set prior to the memory being partitioned. The end-user can change any of the capture parameters and allocate the new setting to all MultiCine recordings or define a unique configuration profile for each of the memory segments.

**MultiCine**

Once the camera is placed into the recording mode image data will be written into the first available block memory until a trigger signal is detected and the post-trigger frame requirements have been met. At that point, the camera will automatically start writing image data into the next empty memory segment and continue this process until all the MultiCine partitions have a cine stored in them.

As soon as all the MultiCine partitions have a cine stored in them the camera will then return to the Preview state.

**HOW TO SPECIFY MULTICINE SETTINGS:**

The following procedure describes the steps necessary to activate the MultiCine feature:

1. Start the PCC (Phantom Camera Control) application.
2. From the Manager Control Panel select the Phantom camera to be defined by moving the mouse over the desired available Phantom camera you wish to control, then double-click the left mouse key.
3. From the Live Control Panel click on Camera Settings.
4. Click the down-arrow to the right of the MultiCine>Partitions entry window, then
5. Select the number of DRAM memory segments desired.
6. In the 'Changing partitions will erase all cines from camera volatile memory, Proceed?' confirmation window:
  - a. Click the OK button to partition the selected Phantom camera's DRAM, alternately
  - b. Click the Cancel button to leave the selected camera's DRAM as is.
7. Define the MultiCine partition parameters:

There are two ways to define all of a Phantom camera's MultiCine partitions with identical capture parameters:

- a. The first method is when the Live Control Panel>Cine Settings>Cine field is set to Preview.
  1. Specify the required Cine Settings, then
  2. Click the Set All button.

Using this method will assign all defined capture parameters to each of the MultiCine partitions.

- b. The second method is to copy the capture parameters of one MultiCine partitions to all other partitions, (when the Live Control Panel>Cine Settings>Cine field is set to anything other than Preview). The following describes the second method, copying the capture parameters from one MultiCine partitions to all other partitions.
  1. After performing Step 1 through 6 described above, click the down-arrow to the right of the Live Control Panel>Cine Settings>Cine field, then
  2. Select the MultiCine partition with the capture parameters to be copied to all other partitions.
  3. Once the selected partition is configured, click the Live Control Panel>Cine Settings>Set All button.
  4. When the Copy? Dialogue window appears, asking the end-user to confirm the copy cine parameters to all other cines in this camera, click OK to proceed or Cancel to disregard.
  5. Click the OK button in the "Parameters copied to All Cines!" informational window.

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### IMPORTANT OPERATION NOTES:

Each partition of the selected Phantom camera's DRAM or attached Phantom CineMag's non-volatile memory will be allocated an equal percentage of the total memory buffer.

Each MultiCine recording can have its own acquisition parameters.

Any cine stored in the camera's DRAM will be erased whenever the camera's memory buffer is re-partitioned.

The MultiCine feature is not available with the Phantom v4.1, v4.2, v5.0, v6.0, or v6.1 camera models.

### Focused

Since 1950, Vision Research has been shooting, designing, and manufacturing high-speed cameras. Our single focus is to invent, build, and support the most advanced cameras possible.



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