

## FEATURES

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# Continuous Recording

## CONTINUOUS RECORDING APPLICATIONS:

Applications that benefit from Continuous Recording include:

- Small arms, projectile, or even blast environments where repetitive testing is required.
- Industrial environments such as packaging, bottling, labeling, etc. where the user wishes to sample the manufacturing process.
- Any environment, manned or unmanned, where repetitive tests are required.

### INTRODUCTION:

The Continuous Recording feature can be used to save cines stored in a Phantom camera's memory buffer to an external storage device, or on the Phantom Control Unit computer automatically. Continuous Recording can be used to record cine files automatically without any user intervention by providing a "hard" or "soft" trigger to the camera. The camera can record a cine, trim and save it to a hard drive and immediately put the camera back into the capture mode readying it for the next trigger, where the cycle will begin again until it is stopped by the user.

For example, suppose the user wants to image a high speed packaging machine process that has intermittent faults. The user can place the camera in continuous recording mode and provide a trigger to the camera each time the machine stops due to the fault. The camera will record the cine, save it to a designated drive, and then return to capture mode waiting for the next machine fault/trigger. This cycle can continue as long as necessary, even 24 hours a day, seven days a week.

Taking advantage of the Continuous Recording feature to immediately auto save the files also provides a good degree of protection from an unexpected loss of power to the camera that would cause a cine stored in volatile camera DRAM to be lost.

### GENERAL OPERATION:

Continuous Recording is a functionality to record into a Phantom camera's memory buffer continuously and auto-save the stored cines. Once the Continuous Recording feature is enabled the camera will be placed into the capture or recording mode, continuously writing image data into the camera's pre-trigger memory buffer. When the camera detects a trigger signal the camera's post trigger buffer will be filled with image data, and the recorded cine will automatically be edited, to a user-defined range of images, and then saved to a user-specified location. Upon completion of the save process the camera will immediately put back into the capture mode readying it for the next trigger, where the cycle will begin again until it is stopped by the user.

If the camera is in MultiCine mode the camera will record sequentially into cine slots. When the camera's memory buffer is full the needed cine RAM slot will only be deleted and captured if it was saved, otherwise there will be a wait time until this action completes. Only one save at a time can be performed from any one camera.

### HOW TO SPECIFY THE CONTINUOUS RECORDING SETTINGS:

The following procedure describes the steps necessary to utilize the Continuous Recording 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. Click the Live Control Panel Tab.
4. Click on the Continuous Recording Selector and define the Continuous Recording parameters:
  - a. Click on the Browse... button.
  - b. In the Save Cine dialogue window:
    - 1) Navigate to the Windows folder the recorded cines are to be saved into.
    - 2) In the File Name field type in the <root\_file\_name><special\_character><single\_digit\_range>, where <root\_file\_name> is the root filename portion of the file or file being created. This root file name portion of the filename will remain the consistent with all files created during the Continuous Recording session. The <special character> portion of the filename is determined by the type of file or files being created. The <single\_digit\_range> portion of the file name specifies the number of digits or file counters that will be appended to the end of the root file name.  
  
For example: contrec@4, where contrec is the root\_file\_name, @ is the special character, and 4 is the number of digits to append to the root name. The result of this example will be as follows; for the first recording the filename will be contrec0001, for the second file, contrec0002, and so on.

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- 3) Select the desired file type from Save As Type drop-down list. It is possible to save the captured images in any of the available formats found in the Save as type pull-down selection list. This includes saving the captured images in various Cine formats, an AVI, Multipage TIFF, MXF, or QuickTime format, or even a series of any one of a host of image formats.
- 4) Specify which images will constitute the saved file by defining the Range of Images to Save fields:
  - a) If you do not wish to edit the file, check, (enable), the No Range (full cine always) enable box.
  - b) If you wish to edit the number of images, eliminating unwanted captured images from the final product, and reduce the file size being saved:
    - i. Disable, uncheck, the No range (full cine always) enable box.
    - ii. Specify the First image, from the Range of images to save, then
    - iii. Enter the Image count, or the number of images from the First image to be saved.
- 5) Specify any desired available Save Options; 16bpp, Advanced Options..., XML header file, etc.
- 6) Click the Save button.
- c. Check, enable the Active enable box.
- d. Apply a trigger to the camera.
5. To record, edit, and save subsequent cines, apply a trigger to the camera.
6. When finished uncheck, disable the Active enable box.

#### 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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