Clip Input Using a Spirit DataCine System

Summary

About Clip Input Using a Spirit DataCine

A Spirit DataCine system is a high-speed film scanning device that uses a HiPPI (High-Performance Parallel Interface) data transport interface, allowing for efficient film-to-tape scanning. Using a HiPPI connection provides for transfer speed of up to 100 MB per second using a 32-bit cable and 200 MB per second using a 64-bit cable. Most Spirit DataCine systems support all current SD and HD video standards.

xxx running on Tezro and Onyx workstations allows you to input images scanned using a Spirit DataCine system. The native RGB image scanning and processing method used in Spirit DataCine applications preserves the colour information in film images, eliminating the need for YUV-to-RGB conversion.

Workflow for inputting clips from a Spirit DataCine system:

1. Make sure all hardware devices involved in the clip input process are properly set up and configured. See "Setting Up Hardware for Spirit DataCine Input" on page 2, v1 and the Spirit DataCine system documentation.
2. Edit the software initialisation configuration file to ensure the proper devices and settings are initialized on application start-up. See "Configuring Software for Spirit DataCine Input" on page 2, v1.
3. Input clips. See "Inputting Clips From a Spirit DataCine" on page 2, v1.

Setting Up Hardware for Spirit DataCine Input

To input from a Spirit DataCine film scanner you need the following hardware setup:

- An SGI (XIO) or PCI HiPPI card (or a compatible card with a serial HiPPI interface) must be installed in your system.
- An FY6315 data output card must be installed in the Spirit DataCine system.
- Your xxx workstation and the Spirit DataCine system must be linked through a HiPPI connection between a SGI (XIO) or PCI HiPPI card and an FY6315 data output card.
- The scan rate of the Spirit DataCine system must be set between four and six frames per second. The rate at which xxx can process the incoming images depends on various factors, such as available memory and the number of storage devices. If the Spirit DataCine detects that the rate is too fast and frames are being dropped, it aborts the scanning process. You may need to experiment to determine the best scan rate.

Configuring Software for Spirit DataCine Input

You must edit the software configuration initialization file to enable the HiPPI device and specify the timecode format.

To enable a HiPPI device:

1. In a UNIX shell or Linux terminal, type **`dlcfg`** to open the software configuration initialization file in a text editor.
2. Scroll down to the SPIRIT DATACINE section and uncomment the SpiritHippiDev keyword.
3. Specify the timecode format using the SpiritDefaultTCMode keyword.

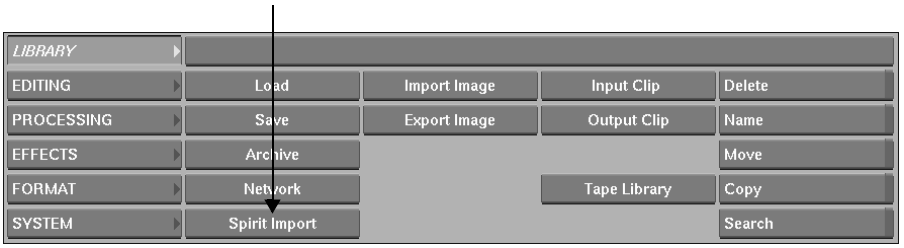
NOTE: Contact Customer Support for the most recent information on setting up your Spirit DataCine clip input.

Inputting Clips From a Spirit DataCine

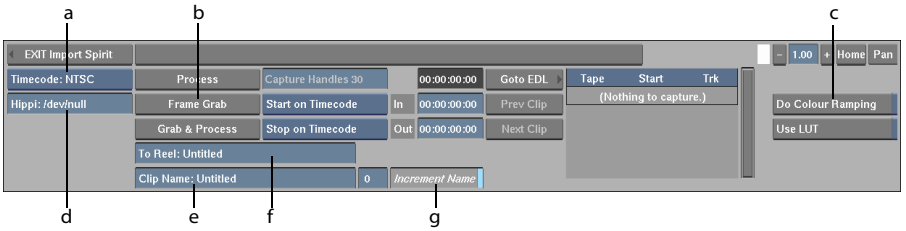
You can capture a single frame, a single clip, or multiple clips. You can input clips manually, by specifying the in and out points, or by using an EDL.

To prepare for input:

1. In the Library menu, click Spirit Import.



The Spirit Import menu appears.



a) Timecode Format box
b) Frame Grab button
c) Do Colour Ramping button
d) HiPPI Device box
e) Clip Name field
f) To Reel field
g) Increment Name button

2. If needed, change the HiPPI device by clicking the HiPPI Device box and selecting a new one from the file browser. The default is set based on the SpiritHippiDev keyword in the SPIRIT DATACINE section of the software configuration initialization file.

   NOTE: If the selected HiPPI device is not correct, the Frame Grab button is disabled.

3. From the Timecode Format box, specify the frame code mode of the film being scanned. The timecode format must also be correctly set on the Spirit DataCine.

4. Enter a name for the reel in the To Reel field. When using an EDL, this defaults to the EDL name (without the extension).

   A reel will be automatically created in the clip library for the clips you are importing.

   NOTE: If you enter the name of a reel that already exists in the current clip library, the clips will be saved to that reel.

5. If you want, enter a name for the clip in the Clip Name field. When the Increment Name button is enabled, a number is appended to the name, and subsequent clips are given a sequential number. You can specify the initial number in the field to the left of the Increment Name button.

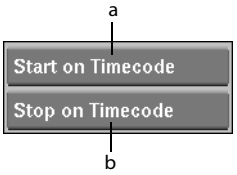
6. You may want to use an existing LUT or build a LUT to apply when converting the DPX images from the Spirit DataCine (which may be in 10-bit logarithmic format, for instance) into **xxx** clips. See Chapter 1, “Colour Management with LUTs,” on page 1, v1.

7. If you are not using a LUT, specify whether you want to use Colour Ramping. The Do Colour Ramping button provides two options for controlling how 8- and 10-bit images are converted to 12-bit images. For both methods, the eight or ten available bits of information are copied to the eight or ten most significant bits of the 12-bit image. The option controls which information is copied to the remaining four or two least significant bits of the 12-bit image.

   • When Do Colour Ramping is enabled, the four most significant bits of an 8-bit image are copied, or the two most significant bits of a 10-bit image are copied. This can result in brighter colours.

   • When Do Colour Ramping is disabled, zeros are copied. Disable colour ramping if you are working on logarithmic images.

8. Optional: Change the way the import is started and stopped using the Start and Stop Import Method boxes.



a) Start Import Method box b) Stop Import Method box

Use the Start Import Method box to select a start method.

Select:	To:
Start on Timecode	Start importing images when the start timecode is reached.
Start on Pen	Start importing images as soon as they are received (after the Frame Grab button has been clicked).

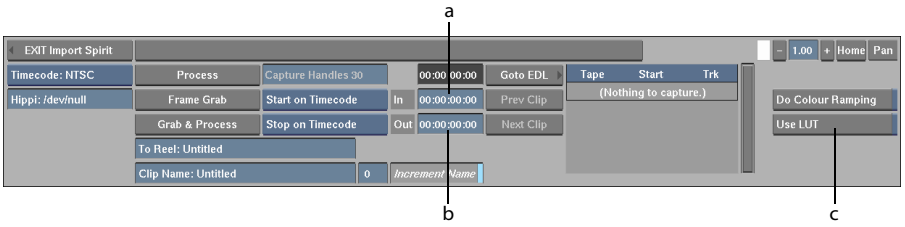
Use the Stop Import Method box to select a stop method.

Select:	To:
Stop on Timecode	Stop importing images when the end timecode is reached.
Stop on Pen	Stop importing images when the pen is pressed.
Stop After Frames	Stop importing images after a specified number of frames. When this option is selected, an additional field appears where you enter the number of frames. The end-timecode is updated to reflect the number of frames in this field.

To input images, perform the following procedure for either manual or EDL input.

To input images manually:

1. Enter the start and end timecodes for the clip.



a) Start Timecode field b) End Timecode field c) Use LUT button

2. Click Frame Grab.

   A message informs you that **xxx** is ready to receive images from the scanner.

3. Start the scanning process on the Spirit DataCine at least a few frames before the start timecode.

4. When the clip has been imported, stop the scanning process on the Spirit DataCine.

5. If you want to build a LUT, enable Use LUT and then click Create LUT.

   The last imported image is loaded into the LUT Editor. See “General Workflow for LUTs” on page 4, v1.

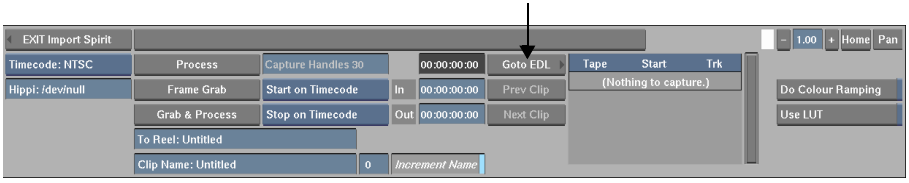
6. Click Process.

   The clip is processed and saved to the clip library.

7. Repeat steps 1 to 6 to input remaining clips.

To input images using an EDL:

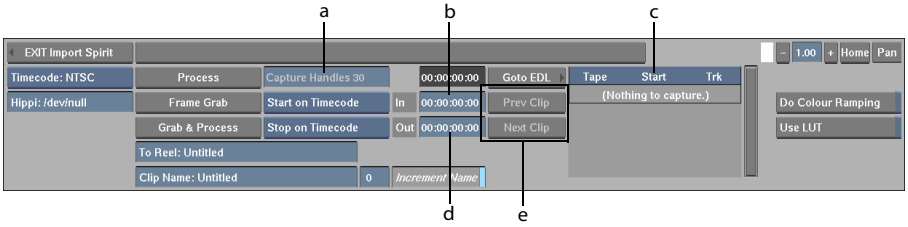
1. In the Spirit Import menu, click Go to EDL.



2. In the EDL module, click Load to load the EDL. See “Importing EDLs” on page 426, v1.

3. Exit the EDL module.

Any tapes in the selected EDL appear in the Tape list.



a) Capture Handles field
b) Start Timecode field
c) Tape list
d) End Timecode field
e) Previous and Next Clip buttons

The current clip is the first clip in the first tape of the Tape list. The start and end timecodes of the current clip appear in the corresponding fields.

You can use the Previous Clip and Next Clip buttons to select the previous or next clip on the tape. To use a different tape, select it in the Tape list.

4. Change the number of capture handles, if necessary. Handles are added to both the beginning and the end of the clip. The start and end timecodes are updated to reflect the addition of handles.

5. Click Frame Grab.

   A message informs you that **xxx** is ready to receive images from the scanner.

6. Start the scanning process on the Spirit DataCine at least a few frames before the start timecode.

7. When the clip has been imported, stop the scanning process on the Spirit DataCine.

8. If you want to build a LUT, enable Use LUT, then click Create LUT.

   The last imported image is loaded into the LUT Editor. See “General Workflow for LUTs” on page 4, v1.

9. Click Process.

   The clip is processed and saved to the clip library.

10. When the clip has been processed, use the Previous and Next buttons to select another clip in the EDL or click another tape to select it.

11. Repeat this procedure to import the next clip.

NOTE: As an alternative to using the Frame Grab and Process buttons in the previous two procedures, you can perform these two commands in one step using the Grab & Process button. Do not use this button if you want to build a LUT.