endoscopy support services, inc. ™

ESS I-Cap ver 1.0x

clear-cut

Image Capture, Catalog, and Report Generation

**3 Fallsview Lane
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www.endoscopy.com**

endoscopy support services, inc. ™
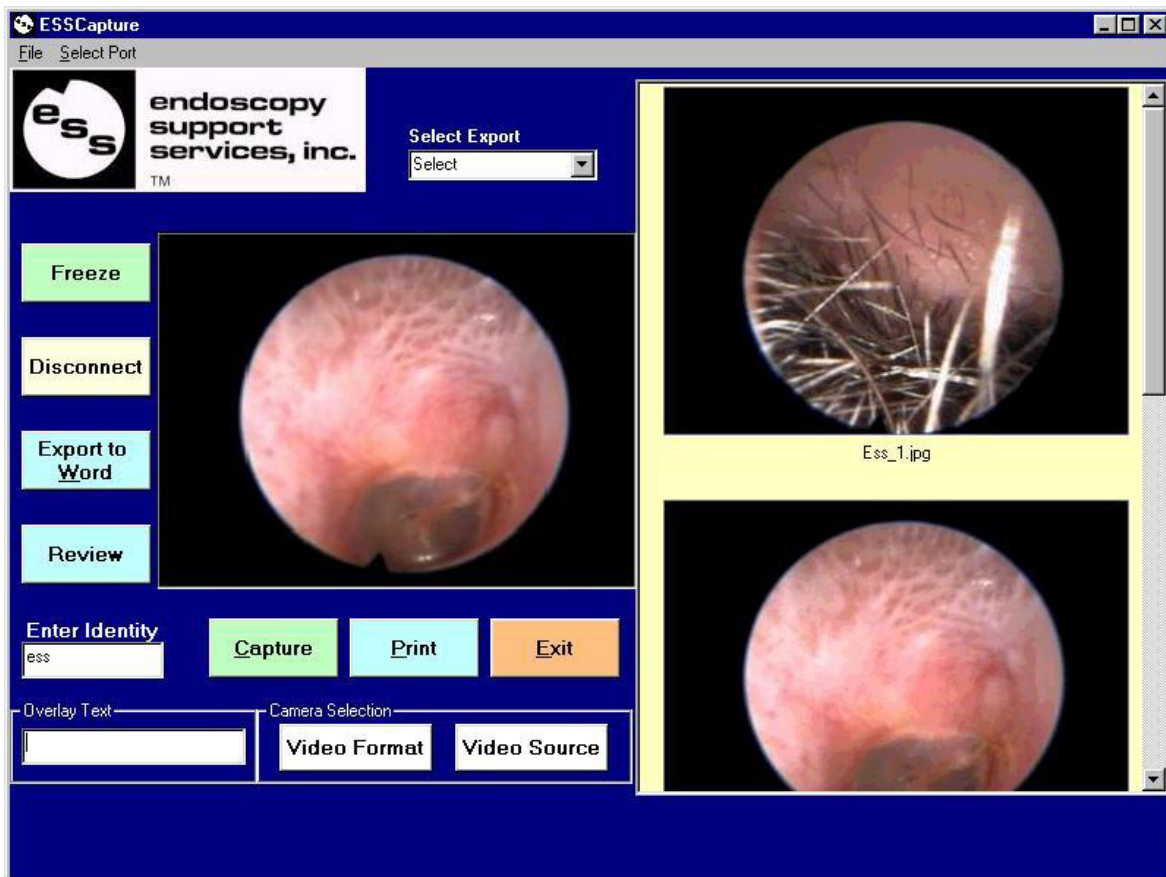
ESS I-cap Program Users Manual

Table of Contents

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System Requirements

• 350 MHz Pentium II (or equivalent)
• 1 Free USB Port
• 64 MB of RAM
• 45 MB of free hard drive space for program
• Video card with 4 MB of video RAM, minimum 800 x
600 resolution at 16-bit hi-color (65,000 colors); Direct
Draw Drivers recommended
• 16-bit stereo sound card and speakers for audio playback
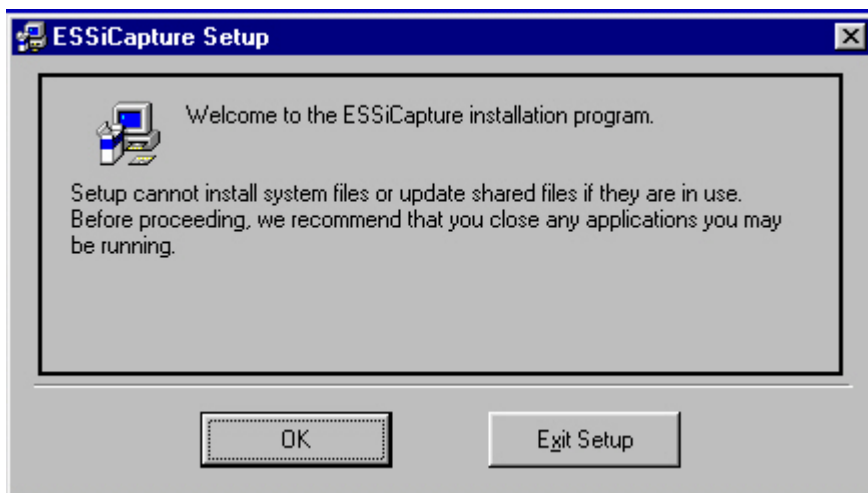• CD-ROM or DVD-ROM drive.

Hardware Installation:

Refer to the user manual of the device you are using to install the hardware correctly.

Belkin.pdf

Click on the link above to open the User manual for the video capture device supplied with this software.
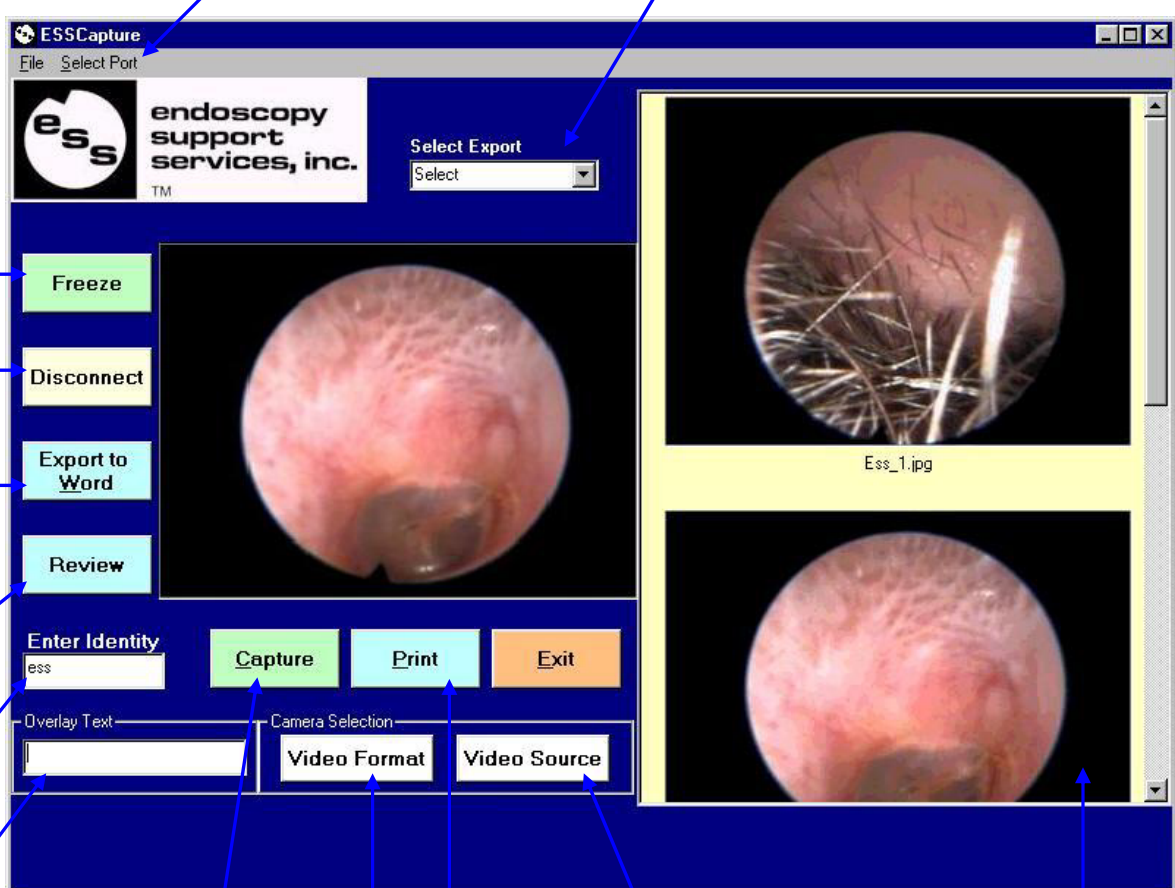
Software installation:
Install the hardware and video drivers before installing the ESS I-cap software.

Click on OK to continue installation, follow on screen instructions and select OK to install the software.

Introduction: ESS I-cap is an easy to use, feature rich program that allows the user to instantly set up and start grabbing images from any camera attached to the system. Images may be acquired either by using a mouse, keyboard or the supplied ESS foot pedal. Once a patient identity has been established … any captured images are saved on you systems hard drive. This directory is cataloged by identity name for easy browsing and image review. Captured images may then be exported to Word for creating reports. The following describes the features in detail as well as the operation of the software.

ESS I-cap Program Main Screen

Port for foot-pedal

Select Export template

Live or Freeze Video

Disconnect or Connect to Camera

Select Images and template and Export to Word

Review allows selection of Identity

Enter Identity to save images

Type in text to overlay on the image

Select to capture images. A foot-pedal may also be used to capture images.

Video parameter selection for source

Select up to 4 images and Print

Select camera

Review Scroll down for images

Video Source
The Video Source Tab / Selecting the Video Source

Upon startup… the Program connects to the default camera installed on the system. If more than one camera is installed on the system you can switch between them by selecting the "Video Source" button on the screen. Next select the appropriate capture device and source from the device list. The video source dialog box is different for each type of capture device and may not look exactly the same as the examples below.
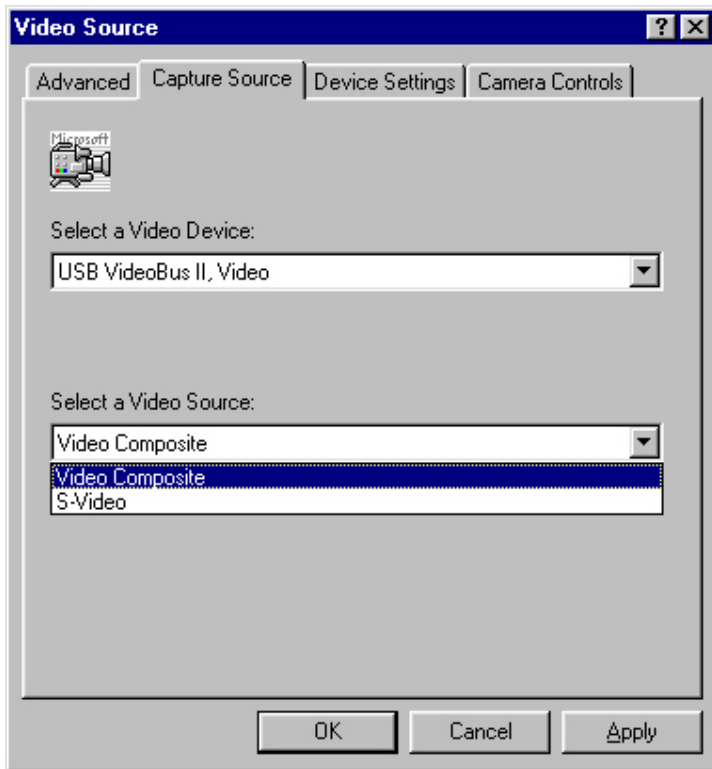
example 1
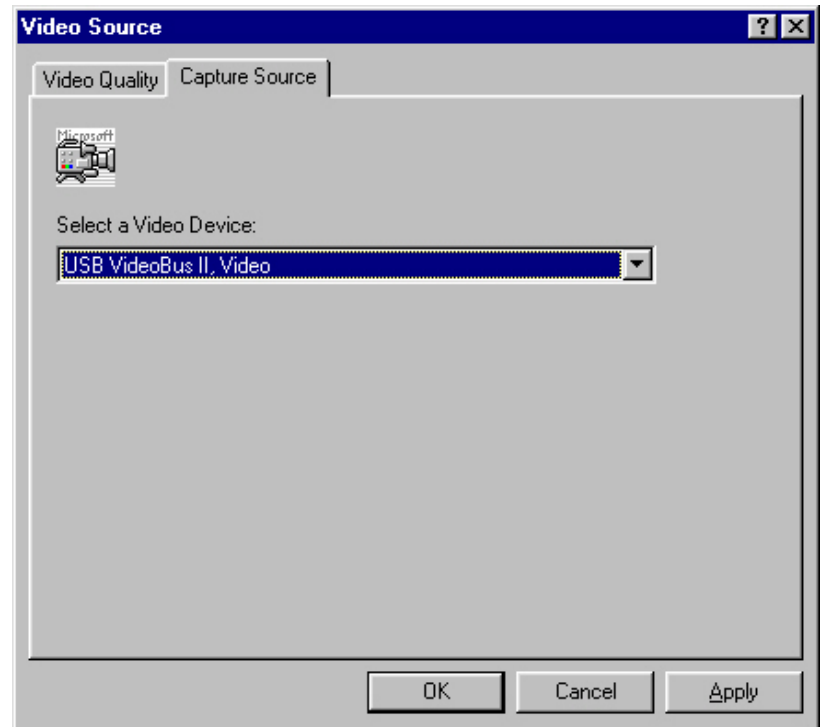
example 2

The video device and source may be changed and the settings applied by selecting "Apply". Once you have applied you selection click "OK" to return to the program. The screen may appear as shown in example 2, if the default Video Device is not the Belkin Videobus II supplied with the software.

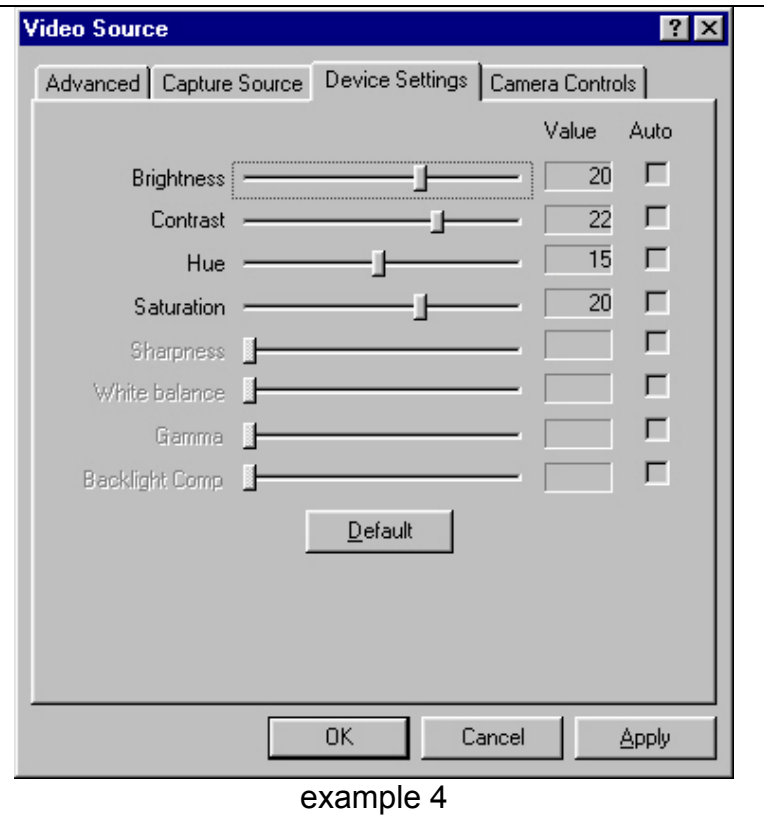## The Advanced Tab

The system supports the following camera formats. NTSC, PAL and SECAM. This setting should match the video-output of the camera connected to the system. To change this setting click the "Advanced" tab on the video source dialog box and select the format from the Video Standard drop down list. As shown in example 3.

example 3

example 4
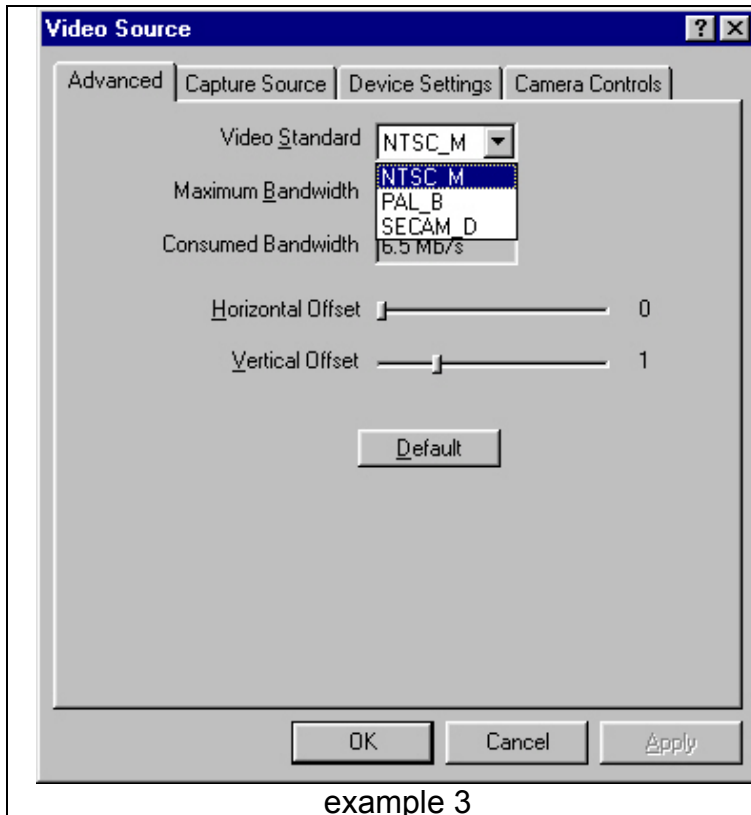
The Device Settings Tab

The "Device Settings" tab allows the user to change the Brightness, Contrast, Hue and Saturation settings of the Video Device. This allows you to adjust for varying light and color conditions.

Video Format
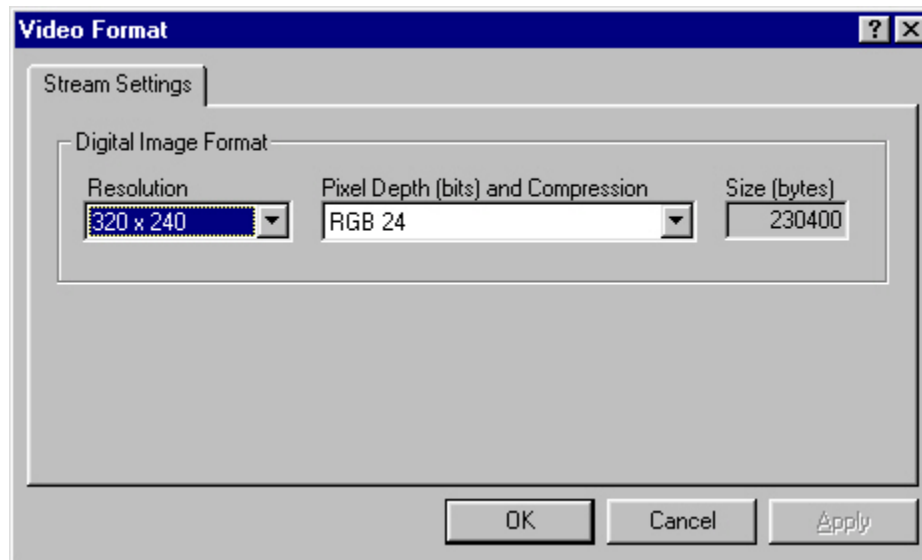
The size and color depth of the image may be changed by selecting Video Format. It is highly recommended that the resolution is set to 320X240 and the depth is set to RGB 24 for best image quality as seen in example 5.

example 5

Capturing an Image

In order to capture the image, an Identity must be entered. Images may be captured either by selecting the capture button or by using the foot-pedal.

As images are captured, the images are added to the picture Review Scroll Down Box on the right side of the screen. Captured pictures can be viewed by scrolling down the Image list.

Exporting pictures to Microsoft Word

The Select Export drop down box displays a list of Export templates. Available templates are any MS Word document that resides on your systems hard drive in the location c:\ESSCapture\Templates. Templates may be created in Microsoft Word and saved as documents to this directory on the hard drive.

Once your template is created and saved to the templates directory… The ESS I-cap program does not allow these default templates to be overwritten. Any reports exported from ESS I-cap must be saved under a different filename in a different location.

1. Select the template you wish to export your images to from the Select Export drop down menu.

Select Export

endo1
endo2
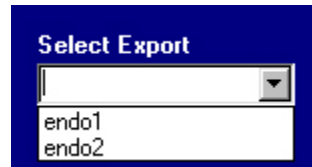
2. Select the images you wish to export from the "Review Scroll Down Box"
    *   Select sequential images by selecting the first image with a mouse click and holding down the "SHIFT" key while selecting the last image.
    *   Select multiple images by selecting the first image and holding down the "CTRL" key while selecting random additional images with a mouse click.

3. Select the Export to Word button. The template is opened up and the images are added to the template. Choose "File" from the Menu, select "Save As", and enter a filename and location for the file with the pictures to be saved. A sample template is shown.

Export to Word

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845-277-1700 • 845-277-7300 FAX

Procedure: ▭   Procedure Date: August 23, 2001

Patient Name: ▭
Sex: ▭   SSN: ▭

Address:
▭

Procedure Findings:
▭

Sample Template with four exported pictures

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Image Review

The images may be reviewed by entering the Identity and depressing the Tab key. This will automatically search for the Identity and display all the images for this Identity in the Review Scroll Down Box.

By selecting

Review

All available identities are displayed in a list (see example 6).

Select an Identity and press the "OK" button to view all images for this Identity.
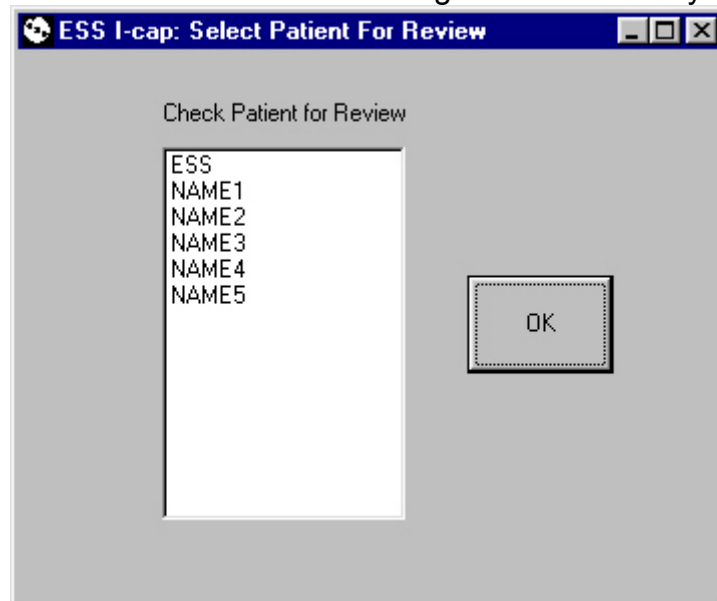

example 6

This will display all the images for that Identity on the Main screen of the program in the Review Scroll Down Box.

Printing Images

Up to 4 selected images may be printed at a time to the default printer.

- Select sequential images by selecting the first image with a mouse click and holding down the "SHIFT" key while selecting the last image.
- Select multiple images by selecting the first image and holding down the "CTRL" key while selecting random additional images with a mouse click.

Select Print.

Print
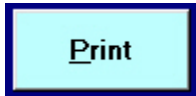
Live or Freeze

Select the "Freeze" button to freeze video and on selection, the video freezes and the button changes to "Live".
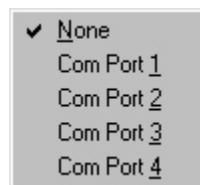
Live ⟶ Freeze

Freeze ⟶ Live
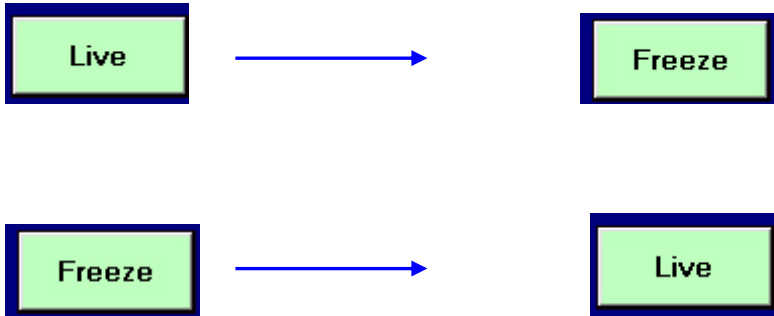
Connecting the Foot Pedal

To connect the foot pedal... Attach the foot pedal to a Serial port.

Selecting a Port for the Foot pedal

Start the program and click on the "Select Port" link from the File menu on the top of the screen. Next assign the port your foot pedal is connected to.

```
✔ None
  Com Port 1
  Com Port 2
  Com Port 3
  Com Port 4
```

NOTES:
- The port settings are changed when you restart the program you may need to assign the port each time you restart the software.
- The Foot pedal may be used to capture images **only** after an Identity is entered.
- Be sure the Port is not in use by another application.
  For example the HotSync application for Palm handheld devices uses the serial port to send data to and from your Palm device. If you are running HotSync on your system your foot pedal will not work.
- If you assign the port to a one already in use by another device it may cause the software to take pictures non-stop until the port is deselected. This will also happen with the HotSync application if you assign the port while running the HotSync application.