

United States District Court  
District of New Hampshire

Litigant's Manual for Courtroom Technology  
Courtroom 2

September 2003

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## Overview

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The US District Court, District of New Hampshire, launched a program several years ago to provide state-of-the-art technology for evidence presentation in the courtrooms. A key goal was to provide systems that are both sophisticated and flexible. The result of this effort is a choice of evidence presentation technologies to satisfy the different levels of requirements the litigants may have.

The evidence presentation systems are available in all of the trial courtrooms at the US District Court, except Courtroom 3. There are different configurations of the evidence presentation systems in the four courtrooms so you must know which methods you want to use to be sure that the correct courtroom is available for you, both for practice and for trial.

Courtroom 2 has the following functionality: Presentation Display System (PDS), Samsung document camera, VCR, DVD Player, and touch panel annotation system.

The evidence presentation system, officially called Presentation Display System (PDS), is a video “network” through which litigants may display evidence. All four courtrooms have been equipped for litigants to display images using a Samsung document camera, VCR and a DVD player. The document camera is used to display photos, x-rays, sections of a document, and small objects. All courtrooms are also equipped with annotation for markup of display images, or for the creation of explanatory diagrams or visual aids on a blank “canvas” (the “blackboard”). Locations, which can view PDS images, are the judge’s bench, witness, jury, counsel tables, deputy’s workstation, and the court reporter.

If you intend to use the PDS for your trial, you must notify the court no later than the final pretrial conference. Plan for practice time in the courtroom in which you will have trial well in advance of the trial date. Practice time should be scheduled through the appropriate case manager at the court.

This guide is an operational manual for the PDS in Courtroom 2. It does not give you information or advice on how to prepare a case for electronic display of evidence. This guide provides the instructions on how to run each of the components in courtroom 2, including how to connect your own computer to the system where appropriate.

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# I.

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## **COURTROOM 2 TECHNOLOGY**

The technology implemented in **COURTROOM 2** allows litigants to display evidence using a Samsung document camera, VCR, and DVD player. The document camera, VCR, and DVD player are located on the PDS table to the right of the front counsel table. There is a PDS (presentation display system) monitor at the table to allow you to view the PDS. The monitor located on this table is a touch panel monitor equipped with annotation capability. Each counsel table is also equipped with a touch panel monitor having annotation capability.

The document camera, VCR, and DVD player is selected by the litigant using a switch at the PDS table called the **Display Source Selector** (see **Figure 2**). The jury monitors are enabled with a switch at the PDS table. The litigant is responsible for turning the jury monitors on or off.

### **Switching between the Samsung Document Camera, VCR and DVD:**

Litigants will use the **Display Source Selector** (see **Figure 2**) to switch between the Samsung Document Camera, VCR, and DVD for display of evidence. This device converts the signals into the appropriate format to be displayed.

Five options are available:

- VCR – This displays a videotape in the VCR with sound.
- VCR Mute – This displays a videotape in the VCR *without* sound.
- DVD – This displays a DVD in the DVD player with sound.
- DVD Mute – This displays a DVD in the DVD player *without* sound.
- Samsung – This displays anything on the document camera.

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## II.

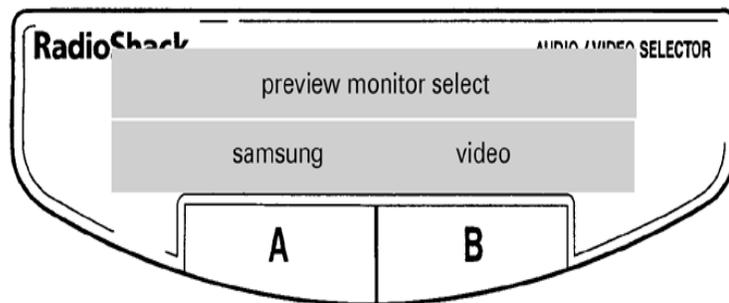
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### SAMSUNG DOCUMENT CAMERA

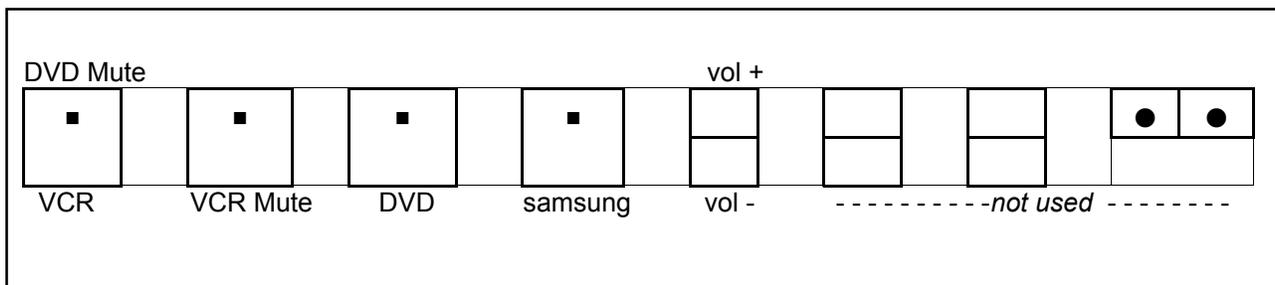
In order to use the Samsung document camera, counsel needs to request the lectern be the source. Activate the document camera by selecting **Input4/samsung** on the **Display Source Selector** (see **Figure 2**).

#### **Basic Operation:**

1. Touch the green **power** button, near the red lamp, to power this unit **on**. The red lamp will turn green.
2. Touch the **lamp** button once to power **on** the upper lights.
  - A. Touch the **lamp** button a second time to power **off** the upper lights, and power **on** the base lamp.
  - B. Touching the **lamp** button a third time powers all the lights **off**.
3. Touch the **mode** button to power **on** the green light next to **XGA**.



**Figure 1 - Preview Monitor Selector** - controls which device displays on the preview monitor *only*. This does **not** control display capability to the rest of the courtroom. The control panel at Judge's bench does that.



**Figure 2**

**Display Source Selector** control panel - *controls what is seen on the PDS monitors*

4. Switch **on** the small **Preview Monitor** to the left of the Samsung document camera and make sure the **A/samsung** button is depressed on the **Preview Monitor Selector** (see **Figure 1**).

**Note:** If the small **Preview Monitor** gives you a screen of multicolored blocks or other distortion, instead of the object on the Samsung stage, double check the **Preview Monitor Selector** (see **Figure 1**) and be sure the **A/samsung** button is depressed. If the display is still unusable, power the Samsung Document Camera **off** and then **on**.

### **Displaying Printed Materials/Objects**

1. Press the **A/samsung** button on the **Preview Monitor Selector** (see **Figure 1**). This will show whatever is on the stage of the video presenter. Press the **freeze** button (The **freeze** button only effects the PDS display, not the **Preview Monitor**).
2. Place the document/object on the stage (the flat display surface), face up. While observing the image on the **Preview Monitor**, adjust the **zoom** buttons to obtain the optimum size.
3. Use the **focus** buttons for focusing the image to maximum sharpness.
4. Before changing documents, touch the **freeze** button. Use the image on the **Preview Monitor** to help you position the document. Touch the **freeze** button a second time when the new document is in place to **unfreeze** the display.

**Please note:** The Samsung can display a readable image of a full-page view of an 8½” x 11” document, but you probably won’t want to subject a jury to text that small! There are two ways you can handle this:

- A. If you really need to show the entire page, press the **freeze** button, and zoom in, very tightly, on the *top* and *bottom* margins this time (while viewing on the **Preview Monitor**). You will zoom in so that the top and bottom lines of your document text are slightly off the screen of the **Preview Monitor**. Now, press the **full/scroll** button, the last button on the right end of the Samsung control panel. When you **unfreeze**, you will be displaying, on the PDS, the upper two-thirds of your document. You can scroll the view around or up and down by using the arrow keys, arranged in a circle just to the left of the **full/scroll** button. This scrolling, unlike manually moving the document around on the stage, will be very smooth, not the jerky and dizzying effect you see on the **Preview Monitor** (or on the PDS if you forget to use the **freeze** button before you move your exhibit). If you touch any control other than the arrow keys, the Samsung will exit **full/scroll**, and return to its normal display mode.

## Transparencies/X-Rays

To start, **freeze** the main display, and use the small **Preview Monitor** to help set this up - press the **A/samsung** button on the **Preview Monitor Selector**.

1. Touch **lamp** to turn the base lights **on** (see *Operating Procedure* above).
2. Set the **nega/posi** button to the negative mode.
3. Use the **tone** button to get the best image.

## Control Panel Features

**lamp** - There are two built-in light systems for viewing. Materials such as printed material and 3-D objects use the upper lights, and transparencies use the base lights. When the **lamp** button is pressed first, the upper fluorescent lamps light. Pressed a second time, the upper lights go out and the base light comes **on**, illuminating the translucent stage. To turn all lamps **off**, press the **lamp** button a third time.

Use the upper lights to obtain a clearer image with better color, especially when the stage is not sufficiently illuminated by room lights or if a 3-d object is to be viewed.

**nega/posi** - This function is used to display negative film as positive images and vice-versa. The normal position is **Positive**. Pressing the **nega/posi** will switch to the **Negative** display mode (and **NEGATIVE** will display briefly on the monitor). Press it again, and you will return to Positive display mode (and **POSITIVE** will display briefly on the monitor).

**tone** - Try this to get the best image quality. It alternates between **NATURAL** color and an **ENHANCED** mode. Try both to see which gives you the best image.

**zoom** - Pressing **T** (on the remote) or **up arrow** button enlarges the image. Pressing **W** (on the remote) or **down arrow** reduces the image.

**focus** - The two buttons marked **focus** are the focus controls.

The Samsung doesn't have an Auto **focus** mode, but its lens has a very deep "depth of field" (this means you don't have to try hard to get a clear, sharp image)! Once focused, you shouldn't have to change it. If you continue to adjust the **focus** once the image is sharp, you might find that the **focus** control behaves like a "micro-zoom" control, slightly enlarging or reducing the image.

**iris** - a.k.a. the "Brightness" and "Contrast" control. You should only need to adjust this for very light or dark documents, or possibly for 3-d objects. Adjust while watching the monitor for the best image.

**awc** - This is to calibrate the display color balance. Does your white document look pink or purple? Is that orange object displaying yellow? Place a plain white piece of paper on the base and touch this button. The screen will display **white balance** momentarily, and then your document should look better (more natural). You might also need to do this if you switch from room lights to one of the Samsung's built-in lamps.

**int/ext** - The normal display mode is **INTERNAL**. This will display whatever is on the Samsung stage. Press this button once and **EXTERNAL** will be displayed briefly on the PDS monitor. Normally, there is nothing connected to the external hookup. Press it again to return to **INTERNAL** display mode.

**full/scroll** - This button activates the smooth, digital scrolling display mode. Use the arrow keys just to the left of the **full/scroll** button to control the display.

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## III.

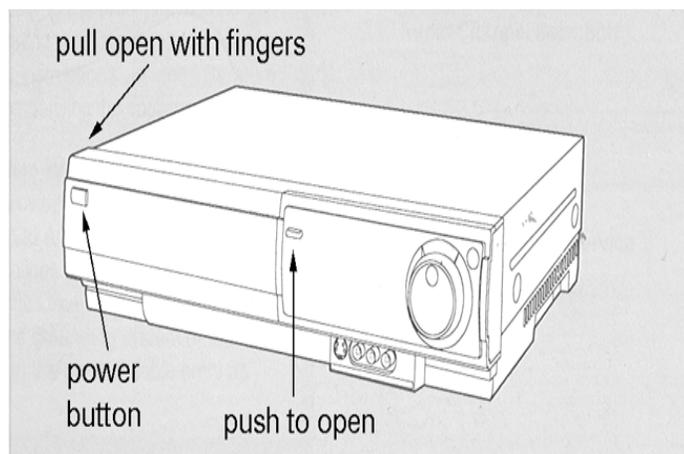
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### VCR

The VCR offers the usual features for playing videotapes. Use the appropriate buttons inside the front panel or on the remote. The VCR is also equipped with a jog dial for frame-by-frame playback as well as a shuttle ring for slow-motion playback. See the sections below for instructions on using these features on the VCR. There is a small television (the **Preview Monitor**) located at the lectern with which you may view your tape before showing it in court.

#### Play videotape:

1. Press **Input1/video** on the **Display Source Selector** (see **Figure 2**) and press the **B/video** button on the **Preview Monitor Selector** (see **Figure 1**) to select the VCR.
2. Open the front panel (either press the **push to open** button, or open the panel with your fingers) to expose the tape slot and the VCR controls (see **Figure 3**). Insert tape into the VCR. The VCR will power on automatically. If the videotape safety tab has been broken, the tape will automatically start playing. Otherwise, you must press **play/>** on the VCR or the remote control.
3. Use either the controls inside the front panel of the VCR or the remote control to select other functions, except for volume.
4. Volume is adjusted by pressing the **vol+** or **vol-** buttons on the **Display Source Selector** (see **Figure 2**).

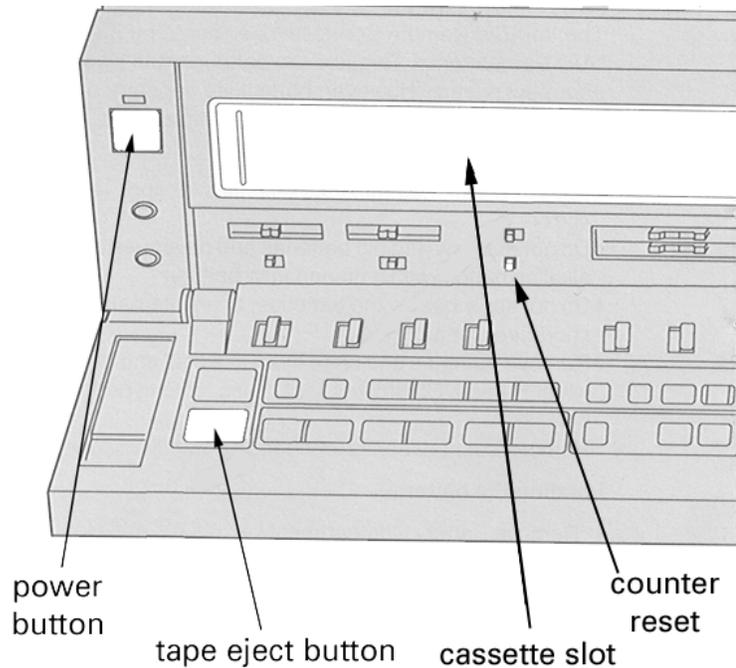


**Figure 3** - open the VCR with the button or your fingers

#### Unedited tapes:

It is preferred, although not required, that litigants have available an edited video for playback during any court proceeding. If such edited version is not available, the following features should assist you in presenting the unedited tape.

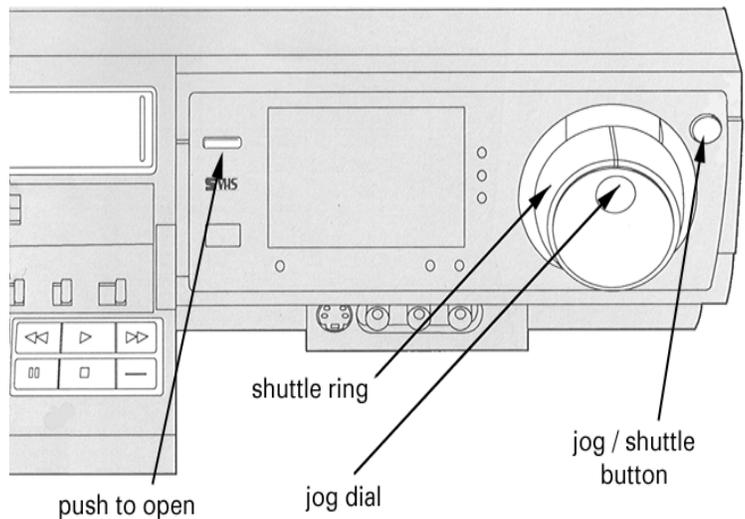
Real-time tape counter The VCR is equipped with a real-time tape counter that shows the running time in hours, minutes, and seconds. You can easily determine how long the tape has been running, where objectionable material is located, or how much time is left on the tape. When a tape is inserted, the counter will reset to **00:00:00**. There is also a **counter reset** button to reset the tape counter to zero at any time (see **Figure 4**).



Headphones to monitor audio If you want to verify the audio in addition to using the counter, e.g., to be sure exactly when to resume viewing, there are headphones attached to the **Preview Monitor** for your use. The volume control buttons are on the top of the **Preview Monitor**.

**Video Editing Examples**

Jog Dial and Shuttle Ring These controls allow you to vary the forward and backward playing speed, and to advance or retreat the tape a frame at a time (see **Figure 5**). Not just for editing, these controls can also be used during a presentation to break a video segment into sequential frames, or to advance slowly to a single freeze-frame image.



**Figure 4** - *press the counter reset button the zero the counter at any point on the tape*

**Figure 5** - *the jog dial and shuttle ring allow very precise positioning of the tape*

### Using the keys on the VCR or the remote:

1. Press the **B/video** button on the **Preview Monitor Selector** (see **Figure 1**).
  - A. Press **pause/||** on the VCR or on the remote to temporarily stop playback. The VCR displays a still image.
  - B. Press Input **3/blank** on the **Display Source Selector** (see **Figure 2**). This will cause all screens to go blank, except the small **Preview Monitor**.

**Note:** You can also select **Input 4/samsung**. While the document camera is displaying, the videotape will not be seen or heard on the PDS.
  - C. Press **pause/||** again or **play/>**, to resume playback of the video. Then press and hold **fast forward/>>** or **rewind/<<** to speed to the predetermined time on the tape. If you “tap” (press and release quickly) **fast forward/>>** or **rewind/<<** while the tape is playing, the tape will play continuously at the higher speed until you press **play/>** to resume normal playing.
  - D. Press **pause/||** to again stop the tape. The VCR displays a still image.
  - E. Press **Input 1/video** on the **Display Source Selector** (see **Figure 2**) to select the VCR when you are ready to present the videotape material.
  - F. Press **pause/||** to resume playing the tape.
2. Press the **A/samsung** button on the **Preview Monitor Selector** (see **Figure 1**) when you are finished editing the tape. This will allow the **Preview Monitor Selector** to be used with the document camera.

### Jog dial and Shuttle ring:

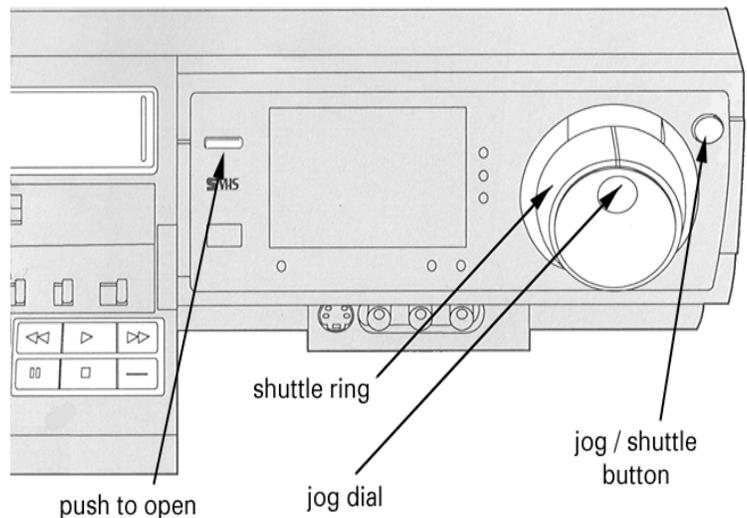
1. Press the **B/video** button on the **Preview Monitor Selector** (see **Figure 1**).
  - A. Press **pause/||** on the VCR or on the remote to temporarily stop playback.
  - B. Press Input **3/blank** on the **Display Source Selector** (see **Figure 2**). This will cause all screens to go blank, except the small **Preview Monitor**.

**Note:** You can also select **Input 4/samsung**. While the document camera is displaying, the videotape will not be seen or heard on the PDS.

C. Press the **jog/shuttle button** (see **Figure 5**). The button will light, and the VCR displays a still image.

D. Rotate **shuttle ring** (see **Figure 5**) backwards or forwards. The playback speed varies in the forward and backward directions depending on how much, and which direction you rotate the **shuttle ring**.

E. When you are near the point on the tape you want to start from, rotate the **shuttle ring** to the center position (the ring will “click” softly when in the center position). The VCR displays a still image again.



**Figure 5** - the jog dial and shuttle ring allow very precise positioning of the tape

F. You can precisely locate your starting point by rotating the **jog dial** (see **Figure 5**) with your fingertip. Move it back and forth to move the tape frame by frame.

G. When you have located your starting point, press the **jog/shuttle button** again. The light goes off, and playback stops.

H. Press **Input 1/video** on the **Display Source Selector** (see **Figure 2**) to select the VCR when you are ready to present the videotape material.

I. Press **play/>** to begin playing the tape.

2. Press the **A/samsung** button on the **Preview Monitor Selector** (see **Figure 1**) when you are finished editing the tape. This will allow the **Preview Monitor Selector** to be used with the document camera.

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## IV.

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### **DVD PLAYER**

**NOTE:** If you want to play a DVD *without* sound, you'll need to turn on the VCR in addition to turning on the DVD player. Be sure the channel of the VCR is A1.

1. Turn on power to the DVD Player.
2. Press the **open/close** button to open the DVD slot.
3. Insert the DVD into the ejected slot.
4. Press the **open/close** button to close the DVD slot.
5. Select **Input 3/DVD** on the **Display Source Selector** (See **Figure 2**) and press the **B/Video** button on the **Preview Monitor Selector** (See **Figure 1**). If you want to play a DVD *without* sound, select **Input 1/DVD Mute**.

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## V.

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### **ANNOTATION SYSTEM (LIGHT PENS)**

Light pens are used with the PDS and are installed at the following workstations: judge, witness, PDS Table, and counsel tables. The light pen is a black tube with a single button on the side of the barrel (about the size and shape of a large felt marking pen), and is attached to the side of the monitor when not in use.

#### **Instructions for use of light pens:**

**Draw:** Press and hold the tip against the screen while drawing. Keeping the pen close to perpendicular to the screen will insure the greatest success.

**Erase:** Holding the light pen away from the screen, press and release the barrel button. This will erase the most recently added mark. Continue to press and release to erase marks made on the screen, newest to oldest. This can be done from any location, so it's best not to handle the light pen at your location, if you aren't the current user

**Clear all marks:** Holding the light pen near the screen, press and hold the barrel button until all marks are gone.

**Change The Color:** Press and hold the barrel button while tapping the point to the screen.

Alternately, you can press and hold the barrel button while tapping the point with a finger of your free hand (the light pen doesn't have to be pointed at the screen for this function). Each tap (of the point of the light pen) will select a different color. The color will be displayed as a box in the lower right corner of the screen.

These procedures are also posted at each location.

To activate the "blackboard" turn the Samsung document camera off. This will provide a solid white screen to draw on. Any light pen marks made before the "blackboard" feature is activated will remain on the screen. See above to clear any previous marks.

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## **VI.**

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### **BARCODE READERS**

The only time the bar code reader will be used is when a litigant is presenting evidence from an application on the court computer. The application uses bar codes to provide an efficient means for retrieving exhibits.

Follow the necessary procedures to start the PDS and the workstation. There are no buttons on the bar code reader. Swipe the point across the bar code. The system acknowledges receipt of the code by issuing two quick beeps. If you do not hear them, swipe the bar code again. It may take a few tries to get accustomed to the pace of the swipe at which the system most consistently receives the bar code.

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## VII.

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### TROUBLESHOOTING

**Important note:** It is highly recommended that you schedule time in the courtroom to test the features you intend to use, including the features in the software you intend to use. The more complex your presentation, the earlier you should be testing in the courtroom. This is the best way to understand how your presentation will look to the court and jury and to ensure that you have chosen the system features, which are most effective for your case.

\* Should the Samsung document camera display become unstable, or if the buttons or the display freeze (and you didn't press the **freeze** button), power the unit **off** for a few seconds (touch the **power** button), then back **on**. Everything should return to normal.

\* If the small **Preview Monitor** gives you a screen of multicolored blocks or other unexpected distortion, double check the **Preview Monitor Selector** (see **Figure 1**) and make sure the **A/samsung** button is depressed. If the display is still unusable, power the Samsung document camera **off** and then **on**.

\* An 8 ½" x 11" document displayed in full-page mode on the visual presenter could be difficult to read. See *Displaying Printed Material/Objects*, item 4 in the Samsung document camera section of this manual for ideas.

\* Documents displayed from evidence presentation software have some limitations when displayed on the jury monitors. We have discovered that some image enhancements/enlargements do not display clearly, while others do.