# United States District Court
# District of New Hampshire

## Litigant's Manual for Courtroom Technology

Courtrooms 2 & 5

July 2001

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# Overview

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.

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 VCR and a *Samsung* Document Camera. The document camera is used to display photos, x-rays, sections of a document, and small objects. All courtrooms are also equipped with light pens for markup of display images, or for the creation of explanatory diagrams or visual aids on a blank "canvas" (the "chalkboard"). Locations which may view PDS images are the judge's bench, witness, jury, counsel tables, deputy's workstation and court reporter.

If you intend to use the PDS for your trial, you must notify the court no later than the final pretrial conference. Earlier is even better. 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 Courtrooms 2 and 5. 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 of the PDS, including how to connect your own computer to the system where appropriate.

# Courtrooms 2 and 5

The technology implemented in Courtrooms 2 and 5 allow litigants to display evidence using a VCR and a *Samsung* Document Camera. The VCR and Document Camera are located at a table in the center of the courtroom. There is also a PDS display on this table with a light pen, as well as a small **Preview Monitor** for the VCR and the Document Camera.

In Courtrooms 2 and 5, the litigant controls all devices from the table. Use the switches on the **Display Source Selector** (**see Figure 2B**) to select either the Document Camera or the VCR as the source for the PDS. The light pens are active all the time so you do not have to worry about turning them on or off. You can turn the jury monitors on and off using a switch attached to the side of the VCR, marked jury.

**Switching between the Document Camera and VCR:**
**Display Source Selector**

Litigants will use the **Display Source Selector** (see **Figure 1**) to switch between the VCR and *Samsung* Document Camera for display of evidence. This special device (under the **Preview Monitor**) is also known as a **scan doubler**. It converts the television signals from the VCR to the RGB signal used by the PDS, as well as switching the output from the devices on the table.

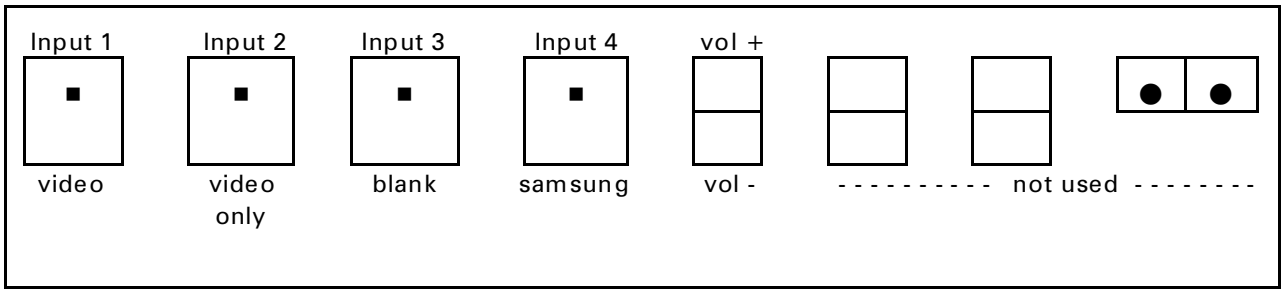


**Figure 1**
**Display Source Selector** Control Panel - *controls what is seen on the PDS monitors*

## Samsung Document Camera

In order to use the *Samsung* Document Camera select Input4/samsung on the **Display Source Selector** (see **Figure 1**).

**Operating Procedure:**

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.

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 2**).

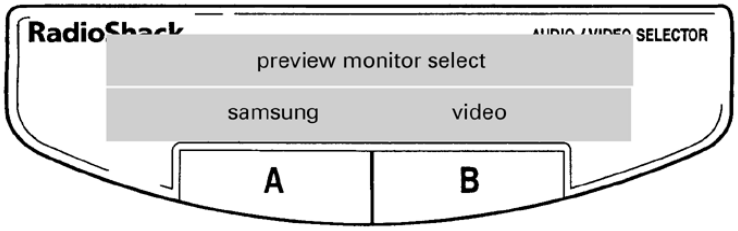


**Figure 2 - Preview Monitor Selector -** *controls what device shows on the preview monitor only*

**Note:** If the small **Preview Monitor** gives you a screenful of multicolored blocks or other garbage, instead of whatever is on the *Samsung* stage, double check the **Preview Monitor Selector** ( see **Figure 2**) and make 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 2**). 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 only need to show a portion of the document at one time, try zooming in to the extreme left and right margins (press the freeze button before you do this). The **Preview Monitor** over scans a little, so if you zoom in "tightly" (all the way to the borders of the screen) on the **Preview Monitor**, you'll have a bit of room at the edges, and have nice display margins when you unfreeze, and show your document on the PDS monitors.

   B. 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 flourescent 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 good sharpness)! 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.

## 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 table with which you may view your tape before showing it in court.

**To play a videotape:**

1. Press Input1/video on the **Display Source Selector** (see **Figure 1**) and press the B/video button on the **Preview Monitor Selector** (see **Figure 2**) 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 video tape 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 1**).

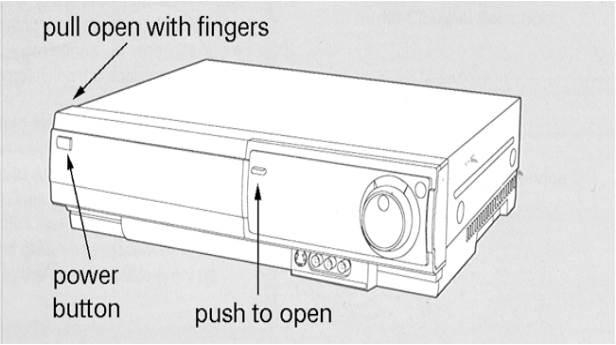


**Figure 3** - *open the VCR with the button or your fingers*

**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**).

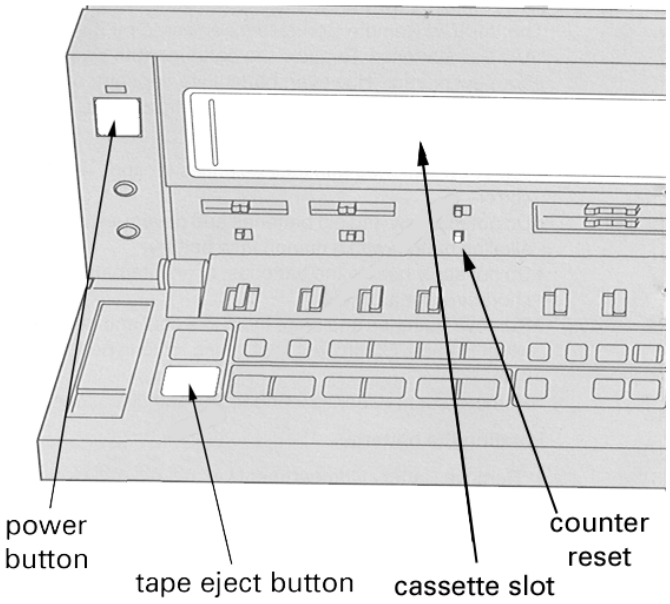


**Figure 4** - *press the counter reset button the zero the counter at any point on the tape*

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.

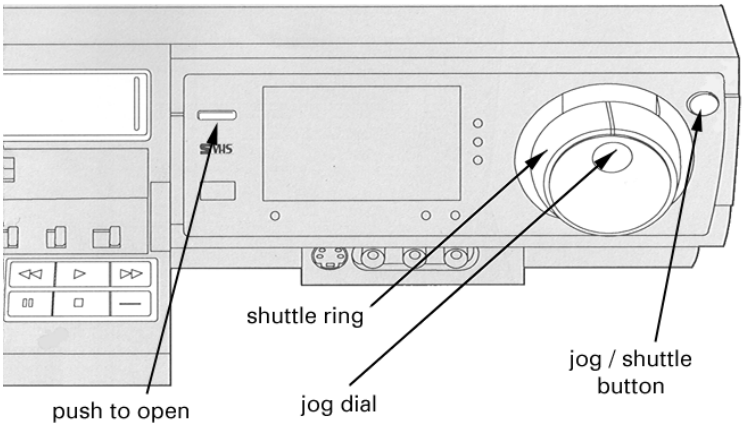


**Figure 5** - *the jog dial and shuttle ring allow very precise positioning of the tape*

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**

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

1. Press the B/video button on the **Preview Monitor Selector** (see **Figure 2**).

   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 1**). 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 video tape 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 1**) to select the VCR when you are ready to present the video tape material.

   F. Press pause/|| to resume playing the tape.

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

**Using Jog dial and Shuttle ring:**

1. Press the B/video button on the **Preview Monitor Selector** (see **Figure 2**).

   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 1**). 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 video tape 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.

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 1**) to select the VCR when you are ready to present the video tape material.

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

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

**Controlling the jury monitors**

The monitors in the jury box must be turned off when evidence not yet admitted is being displayed. The switch that controls the jury monitors is attached to the right side of the VCR marked ON/OFF. It is the litigant's responsibility to be sure that the jury monitors are on when needed.

**Clearing the PDS display**

If you have finished presenting evidence with the Document Camera or the VCR, then press Input 3/blank on the **Display Source Selector** (see **Figure 2B**). This will cause all screens to go black. Otherwise the jury monitors display bright white or video noise, either of which will be unpleasant and distracting.

**Using the light pens**

Light pens are used with the PDS and are installed at the following workstations: judge, witness, 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.

Activation of the light pens is controlled by the same switch (with touch panel) as the PDS and jury monitors in Courtroom 1. Each time the PDS source is changed, the light pens are automatically turned off. To activate them, the litigant must request that the light pens be turned on. Any marks which were previously displayed will still be there. To clear them, see the procedures on using the light pens).

**Remember**: You will have to ask the court to have the light pens activated!

**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.

**Activate the chalkboard:** Ask the case manager to activate the "chalkboard" function. This will remove all background video, leaving you with a solid blue screen. Any light pen marks made before the "chalkboard" is activated will remain on the now blue screen. See above to clear any previous marks.

## 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 after that.

* If the small Preview Monitor gives you a screenful of multicolored blocks or other garbage, instead of whatever is on the *Samsung* stage, double check the Preview Monitor Selector (see Figure 2) and make sure the A/samsung button is depressed. If the display is still unusable, power the *Samsung* Document Camera off and then on.

* If the light pen offset (the difference between where you are drawing and where the lines appear on the monitor) is great, ask the case manager to have the light pen re-calibrated. This is most likely to be a problem if you are NOT using the visual presenter.

* The light pens do not mark well over dark or black images. An x-ray, for example, is an item which does not lend itself to markup with the light pens. While you cannot draw over the x-ray, you may find it satisfactory to use the light pen to make marks in a clear section beside the image to draw attention to a certain feature. Another alternative is to scan the image into a computer and manipulate it with evidence presentation software such as *Trial Director* or *Sanction*.

* 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.