

Courtroom Technology

Attorney Reference Guide



Lansing District Judge's Courtroom



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Introduction

In a continuing effort to keep pace with the latest technology, the United States District Court for the Western District of Michigan has installed an electronic evidence presentation system in the Lansing division courtroom. This is one of the most technologically advanced courtrooms in the United States as many of the features of this equipment are not commonly found in other courtrooms.

The new evidence presentation system will allow for the display of evidence throughout the courtroom on various monitors located at the bench, the witness stand, the evidence presentation cart, the jury box, the counsel tables and the gallery. This innovative technology will eliminate the cumbersome process of handling paper evidence.

This guide does not provide a complete training package. Attorneys planning to use the equipment for a court proceeding are encouraged to contact court staff in advance to inquire about training. Practice sessions and testing of the equipment must occur prior to the day of a scheduled court proceeding, as the courtroom and court staff will not be available on the day of the proceeding.¹

This guide will better your understanding of the new technology. However, the guide does not include all possible ways in which the system might be used as it is limited only by your imagination.

¹To register for training on this evidence presentation system, please visit our website: www.miwd.uscourts.gov and click on Courtroom Technology



FOREWORD

The electronic evidence presentation system in the Lansing courtroom includes the following components:

- ❖ A mobile evidence presentation cart equipped with an evidence camera, annotation monitor, microphone, control panel, VCR, and auxiliary connections for connecting a laptop and audio/visual equipment such as a compact disk player, cassette player and video camera. The cart is designed for use as the central staging area for evidence presentation in the courtroom. It is customarily placed next to the lectern, but can also be placed in the rear of the well of the courtroom where it can be operated by an evidence technician.
- ❖ Two annotation monitors (one located on the evidence presentation cart and the other on the witness stand) allow counsel and witnesses to make notes on a displayed exhibit -- a concept that football fans might attribute to John Madden.
- ❖ Two evidence cameras (one located on the evidence presentation cart and the other on the witness stand) allow for the display of evidence throughout the courtroom.
- ❖ A mobile and height adjustable lectern that is wheelchair accessible.
- ❖ Two counsel tables equipped with two monitors, two microphones and connections for a laptop and audio/visual equipment such as a compact disk player, cassette player, video camera, or VCR.
- ❖ A side camera for projecting demonstrative exhibits throughout the courtroom, such as a foam board positioned on a tripod easel.
- ❖ A 50-inch retractable plasma screen for viewing by the jury.
- ❖ Additional items such as infrared headphones for use by translators and the hearing impaired, cordless microphones, and a color video printer which allows one to preserve a hard copy of an image displayed on the monitors.
- ❖ Realtime court reporting.
- ❖ Telephone and video conferencing.

The pages that follow describe in detail the specific features of each component.

It is very important to keep in mind while reviewing this guide that you will need to make arrangements with the court staff, well in advance of the proceeding as to which components you intend to use. To assist you, a checklist has been provided at the conclusion of this guide.



I. System Components

A) Evidence Presentation Cart



The evidence presentation cart is mobile and is equipped with:

- 1) Evidence Camera
- 2) Annotation Monitor
- 3) Microphone
- 4) Control Panel
- 5) VCR
- 6) Auxiliary Connections

1) Evidence Camera (commonly called ELMO)



In the above example, the evidence camera is displaying a bullet with a ruler placed beside it. The image is displayed on the annotation monitor.



To Use the Evidence Camera:

- (1) Turn on the evidence camera by pressing the "POWER" button.
- (2) Turn on the lamps, as needed.
- (3) Place the object face up on the evidence camera platform.
- (4) Adjust the zoom/focus to obtain the optimum size and clarity.
- (5) Press the "Communicator" button on the control panel.

If You are Showing Transparencies or Slide Film, also:

- (6) Press the "LAMP" button until the base lamp is on.
- (7) Press and hold the column lock button (located in the middle of the camera arm); then set the camera head to its lowest position.
- (8) Press the "NEGA/POS!" conversion button.

a) Evidence Camera Platform



Evidence is placed face up on the evidence camera platform. On the front of the platform is a control panel for adjusting the view of the object. Further explanation of the control panel follows. Also, the camera head may be turned to view an object which is too large to place on the platform. For example, a large object could be placed on a tripod easel behind the platform and the camera head turned to view the object. A

The evidence camera has some limitations. For instance, the camera does not project the full page of an 8-1/2 x 11 inch document in portrait format ("portrait format" meaning the page is taller than it is wide). Also, the average text size in a letter is not large enough for clear viewing. For this reason, the Court suggests digitizing documents.

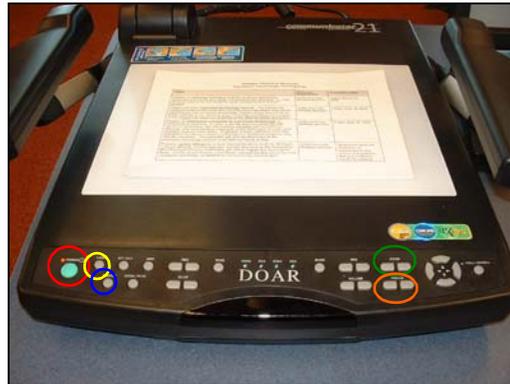


b) Evidence Camera Lamps



The lamps on the evidence camera platform are activated by the “LAMP” button on the control panel. Pressing the button once turns on the upper lamps, pressing again turns the upper lamps off and the base lamp on, and pressing a third time turns all lamps off. The upper lamps work

c) Evidence Camera Control Panel



- 1) POWER (red circle) - Turns power on or off.
- 2) LAMP (yellow circle) - Turns the lamps on or off as described above.
- 3) FREEZE (blue circle) - Captures the image displayed on the monitors. This allows a piece of evidence to be removed from the platform without removing the display from the monitors.
- 4) ZOOM (green circle) - Controls the size of an object projected on the screen. The left zoom button will zoom out (wide view), and the right zoom button will zoom in (telescopic view). *This is the most important control for counsel to practice before a court proceeding.*
- 5) FOCUS (orange circle) - Adjusts the focus.

A hand-held remote control is available for use with the evidence camera.



2) Annotation Monitor



The annotation monitor can be used to make notes on the screen (a concept football fans might attribute to John Madden). The notes on the annotation monitor are done with your finger. **NO INSTRUMENT OF ANY KIND MAY BE USED ON THE ANNOTATION MONITOR, AS IT WILL SCRATCH THE SCREEN.**

Touching the **top right corner** of the screen **ERASES** the annotations **ONE AT A TIME**, beginning with the most recent.

Touching the **lower right corner** of the screen **ERASES ALL** annotations.

Touching the **lower left corner** of the screen allows color selection (yellow, black, red and green). The swatch that appears on the screen is the active color and it changes as the corner is touched.



SETUP MENU

Pointers
Line Style
Color Palette
Brightness
Background
Hardware Setup
Help

Touching the **top middle portion** of the screen drops down a "Setup Menu," pictured to the left. The only items that may be changed are "Pointers" and "Line Styles." When the desired pointer or line style is selected, touch "Exit Setup Menu."



3) Microphone

The base of the microphone has a privacy mute button. Press and hold to mute the microphone.

The Court also have available for use wireless hand-held microphones, and wireless lapel microphones

4) Control Panel



The control panel is used to select the video source of the images shown on the monitors. Only the buttons located within the circled area can be controlled by counsel. The Court controls all other features.

a) Evidence Cart Controls



- ◆ “Communicator” - This button is used to select the evidence camera as the video source.
- ◆ “Lectern VCR” - This button is used to select the VCR inside the evidence cart as the video source.
- ◆ “Lectern AUX” - This button is used to select the auxiliary connection as the video source. For instance, it would be used when a laptop is connected at the evidence cart.

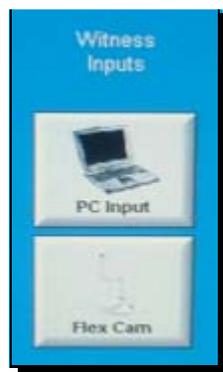


b) Local Camera



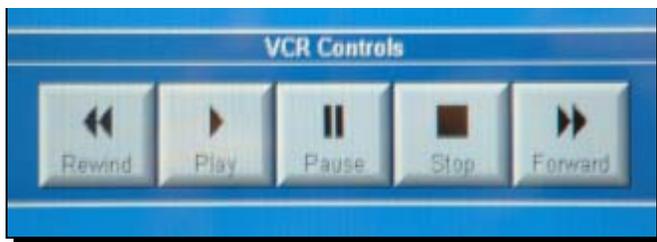
The “side camera” button controls a camera which is located near the ceiling above the jury box. It is primarily used for displaying demonstrative exhibits that might be placed in front of the jury box or by the witness stand. When “side camera” is selected as the video source, a second screen appears on the control panel, which controls the side camera, i.e., PAN/TILT/ZOOM/FOCUS.

c) Witness Inputs



- ◆ “PC Input” - This button is used to select the witness stand as the video source, for example, when an individual’s laptop has been connected at the witness stand.
- ◆ “Flex Cam” - This button is used to select the evidence camera located at the witness stand as the video source.

d) VCR Controls



These buttons control the VCR, when “Lectern VCR” has been selected as a source.



Video Conferencing and Teleconferencing. Also included on the control panel are buttons for selection of video conferencing and teleconferencing. The video conference feature allows the Court to conduct hearings and to take testimony from a remote site, displaying the image of the witness on the monitors in the courtroom. The teleconferencing feature allows the Court to conduct a proceeding by telephone from the courtroom.

Both types of conference will be arranged by court staff. Counsel planning to present video or audio testimony should consult the Notes to the 1996 amendment to the Federal Rules of Civil Procedure for a discussion of circumstances in which such testimony may be allowed. The Rules of Criminal Procedure do not have a similar provision.

5) VCR



The VCR is stored within the evidence presentation cart, behind the door directly below the control panel.

To Use the VCR:

On the VCR -

- (1) Turn the power on.
- (2) Insert the tape.

On the control panel -

- (3) Press the "Lectern VCR" button under the heading "Evidence Cart."
- (4) Use the "VCR Controls" on the control panel to control the viewing of the tape.

On the VCR -

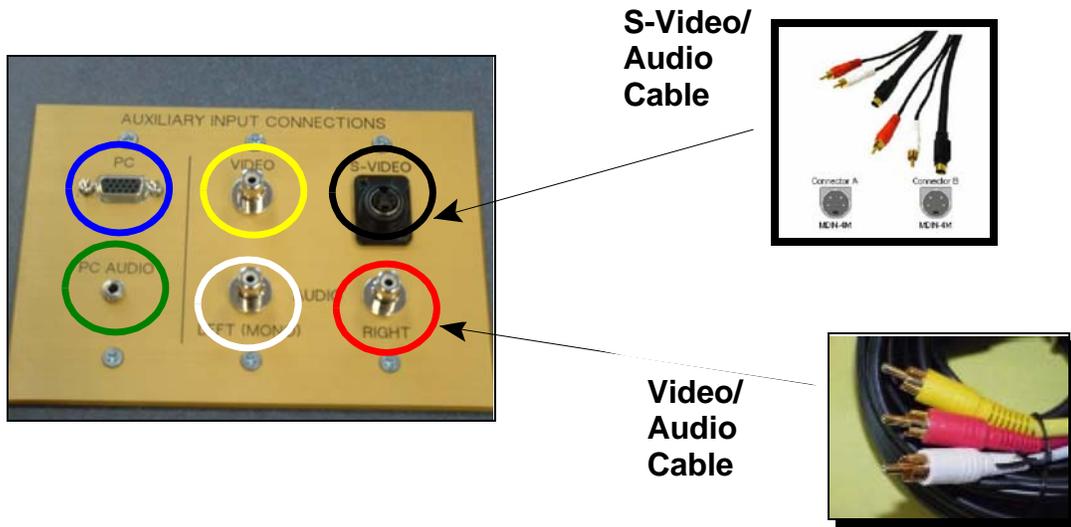
- (5) Eject the tape when finished.

DO NOT USE THE CONTROLS ON THE VCR ITSELF - EXCEPT FOR TURNING THE POWER ON/OFF AND EJECTING THE TAPE.

The Court recommends editing of VCR tapes prior to a court proceeding because the VCR is limited in its ability to immediately "play" at the desired selection when using the "Forward" and "Rewind" buttons. Also, the VCR counter is inconsistent. It can, therefore, be difficult to locate a specific selection on the tape, such as an objection, or the beginning of a particular question or answer in a deposition. An alternative method of displaying this type of evidence is to digitize the evidence.



6) **Auxiliary Connections** (located on the surface of the evidence presentation cart)



- a) PC (blue circle) - Used to connect a laptop to the evidence presentation cart.
- b) PC AUDIO (green circle) - Used if PC presentation includes sounds.
- c) VIDEO (yellow circle) - Used to connect such things as a video camera, or VCR.
- d) AUDIO (left/white circle and right/red circle) - Used to connect audio from such things as a compact disk player, cassette player, video camera, VCR, or DVD player.
- e) S-VIDEO (black circle) - Used to connect such things as a video camera, VCR, or DVD player.

The Court has available the cables needed to connect a laptop to the evidence presentation cart.

The Court does not provide laptops.



B) Counsel Tables



Each counsel table is equipped with:

- 1) Two Monitors
- 2) Two Microphones
- 3) PC Connection
- 4) Auxiliary Connections
- 5) Internet Access, Upon Request
- 6) Realtime Court Reporting Connection

1) Monitors

These monitors display the currently-selected source (counsel selects the source from the control panel at the evidence cart or the Court selects it from a control panel on the bench). Sources may come from the evidence cameras, the VCR, a laptop, an auxiliary connection at either the evidence presentation cart or the counsel tables, the side camera in the courtroom, or a video conference call.

2) Microphones

On the base of the microphone is a privacy mute button. Press and hold to mute the microphone.

3) PC Connection

Each counsel table has one laptop connection for evidence presentation, two connections for realtime court reporting, and additional connections for personal use of a laptop during the proceeding. The Court does not provide laptops. Keep in mind, if you wish to present evidence and receive realtime court reporting at the same time, you will need to bring two laptops. For compatibility with the system, the laptop video settings should be 1024 x 768 pixels or lower and the monitor refresh rate needs to be set to 60 hertz.

To Connect a Laptop to the Evidence Presentation System:

- (1) The laptop must be off when connecting it to the system.
- (2) Bring the cable up from the underside of the counsel table, through the hole on the surface of the table.
- (3) Connect the cable to the laptop.
- (4) Turn on your laptop.
- (5) Ask the Court to select the laptop as the video source. See warning on next page.



WARNING: *When the Court selects a laptop as the video source, anything currently displayed on that laptop will be displayed immediately on all courtroom monitors. If the evidence to be displayed is stored on opposing counsel's laptop, you must make the request with opposing counsel BEFORE asking the Court to select that video source.*

4) Auxiliary Connections

Auxiliary connections are available at the counsel tables for connecting such things as a compact disk player, cassette player, video camera, or VCR.

5) Internet Access

Although Congress does not authorize financing of Internet access at counsel tables, access is available, using a telephone line and laptop modum, at counsel's expense. Considerable lead time is needed to coordinate this with the Court and the telephone company.

6) Realtime Court Reporting

Realtime court reporting is available at the counsel tables. Realtime court reporting is the instantaneous translation and display of live proceedings utilizing computer-aided transcription. The realtime rough draft or any portion of it is not an official transcript and may not be filed in a case. The unedited draft is not intended to be used in subsequent proceedings for impeachment or for any other purpose, including further distribution.

To Arrange for Realtime Court Reporting:

- a) Provide your own laptop equipped with viewer annotation (receiver) software. This software must be compatible with "Case CATalyst," which is the software used by the court reporter. One such software is "CaseView." To learn more about viewer annotation software, refer to the following website: www.stenograph.com.
- b) Your laptop and viewer software should be tested with the court reporter in advance of the court proceeding.
- c) Be prepared to give the court reporter a list of names and terms unique to your case.
- d) To arrange for realtime court reporting, or for additional information, contact Cathy Kennedy at (616) 732-2757 or send an email to: courttech@miwd.uscourts.gov.



C) Lectern



The lectern is mobile and height-adjustable. It is equipped with work space and a microphone. The lectern can be repositioned. For example, it may be turned to face jurors during jury selection, opening statements and closing arguments.

The lectern has a motorized height-adjustment feature. The control is located on the right-hand side of the countertop surface. NEVER lower the lectern all the way to the floor - always leave at least a ½ inch gap from the bottom of the lectern and the floor.

The lectern is wheelchair accessible. The distance from the lectern's surface area to the floor ranges from 29 inches to 38 inches. The width is 31 ½ inches.

D) Witness Stand



The witness stand is equipped with:

- 1) Annotation Monitor
- 2) Evidence Camera
- 3) Microphone
- 4) PC Connection
- 5) Auxiliary Connections



1) Annotation Monitor

The annotation monitor on the witness stand operates in the same manner as the one on the evidence presentation cart. See page 8.

2) Evidence Camera

The evidence camera located on the witness stand is different from the one on the evidence presentation cart. This camera is much smaller and has a flexible “neck” that may be maneuvered up, down and around, and it has a focus feature near its head that allows for manual focusing. This evidence camera is used to display 3-D objects, documents and photographs.

This evidence camera has the same limitations as the larger evidence camera located on the evidence cart. See page 6.

3) Microphone

On the base of the microphone is a privacy mute button. Press and hold to mute the microphone.

4) PC Connection

One connection is available at the witness stand for connecting a laptop for the purpose of presenting evidence. For example, an expert witness might use his or her laptop to display evidence while testifying.

5) Auxiliary Connections

Auxiliary connections are available at the witness stand for connecting such things as a compact disk player, cassette player, video camera, or VCR.



E) Jury Box



There is a 50" retractable plasma screen in front of the jury box. It is lowered and activated by the Court.



F) The Gallery



Two monitors are located on the sides of the gallery to allow spectators to see the evidence that is being presented during a court proceeding.



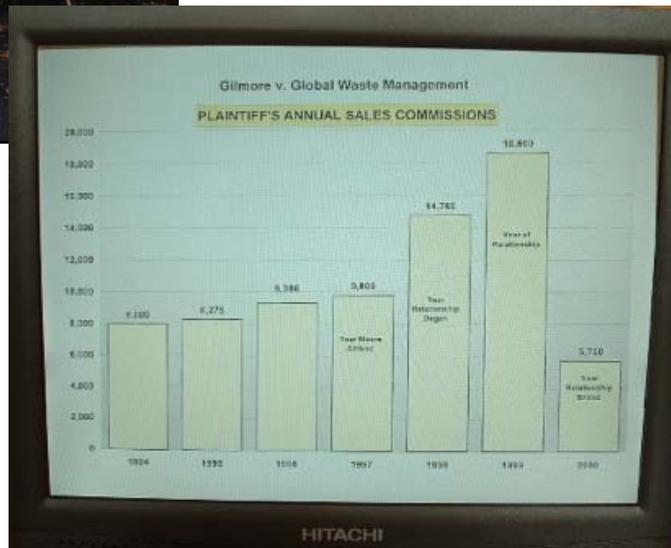
G) Additional Equipment

1) Side Camera

A side camera is located near the ceiling above the jury box. It is primarily used for displaying demonstrative exhibits placed on a tripod easel in front of the jury box or by the witness stand. (Two tripod easels are available for your use.) The side camera is preset to view: (1) a location near the jury box, and (2) a location near the witness stand. In advance of the court proceeding, court staff will change these settings upon request.



Tripod easel set up by the witness stand with demonstrative evidence displayed.



Side camera projection of evidence as it is displayed on all courtroom monitors.

Use of the side camera should be tested in advance, as small text and photos may need to be enlarged for better viewing. Also, the evidence camera may have a better resolution for focusing on large demonstrative exhibits.



2) Listening System



There is a personal listening system installed in the courtroom to improve public access to court proceedings. Clarity of courtroom proceedings is improved by bringing audio directly to the ears of a hearing impaired juror, legal counsel, witness, or courtroom observer. The system can also be used for interpreting purposes in the courtroom. Upon request, court staff will provide the headset and receiver. The receiver can be clipped to a belt, hand held, or placed on the table. Once the headset or ear buds are in place, turn the unit on using the side dial and adjust the volume to a comfortable level.

3) Cordless Microphones



Two cordless hand-held microphones, and two cordless lapel microphones are available.

The Court will require counsel to use a cordless microphone if counsel cannot be heard during a court proceeding.



4) Color Video Printer



A color video printer is available in the courtroom. If counsel would like to preserve a displayed image for admission into evidence - for example, a certain picture frame from a bank surveillance tape or an exhibit with annotations added using the annotation monitor - counsel may request that the Court print the image.

The printed images do not have a long shelf life. Therefore, if the image needs to be preserved for a lengthy period of time, i.e., several years, counsel should take the printed image offsite and have it reproduced.



II. Evidence Presentation Software

To make effective use of the evidence presentation system, counsel may want to consider purchasing a presentation software package. The Court does not endorse any particular software package, but offers the following information for your reference.

A. Publishing/Graphic Software

This type of software package is sometimes referred to as a slide show presentation. It is used to illustrate and augment presentations such as opening and closing statements. "PowerPoint," "Harvard Graphics" and "Corel Presentations" are some of the most common examples of publishing/graphic software.

The courtroom is equipped to allow this type of presentation to be run from a laptop, which you will need to supply. The presentation can be run from the evidence presentation cart, counsel tables, or the witness stand and may be operated by counsel or counsel's support staff.

Microsoft PowerPoint (www.microsoft.com/office/powerpoint)

Harvard Graphics (www.harvardgraphics.com)

Corel Presentations (www.lgta.org/pres7)

B. Evidence Presentation Software

Evidence presentation software is designed to facilitate the organization and presentation of evidence in the courtroom. With this software it is possible to quickly locate and display exhibits, to project side-by-side views of exhibits, to annotate exhibits on-screen, and perform other functions which may enhance and expedite evidence presentation. Some of the most commonly used evidence presentation systems are:

Trial Director (www.indatacorp.com)

Trial Max (www.trialmax.com)

Trial Pro (www.ideaview.com)

Verdict Systems Sanctions (www.verdictsystems.com)

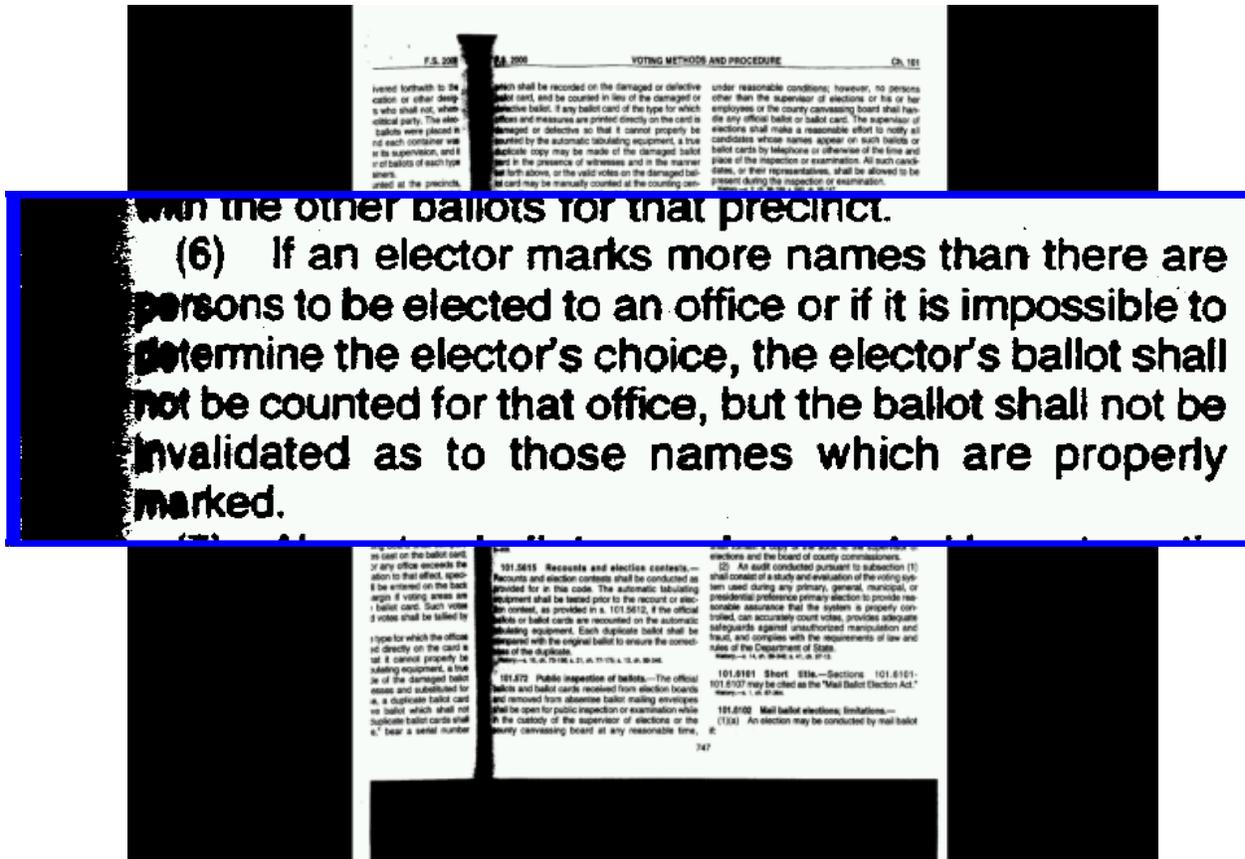
Visionary (www.visionarylegaltechnologies.com)

The following pages contain examples of evidence presentation software.



Examples of evidence displayed with evidence presentation software

The following are examples of exhibits which demonstrate the magnification capabilities of evidence presentation software which allows the user to zoom in on details of an exhibit.



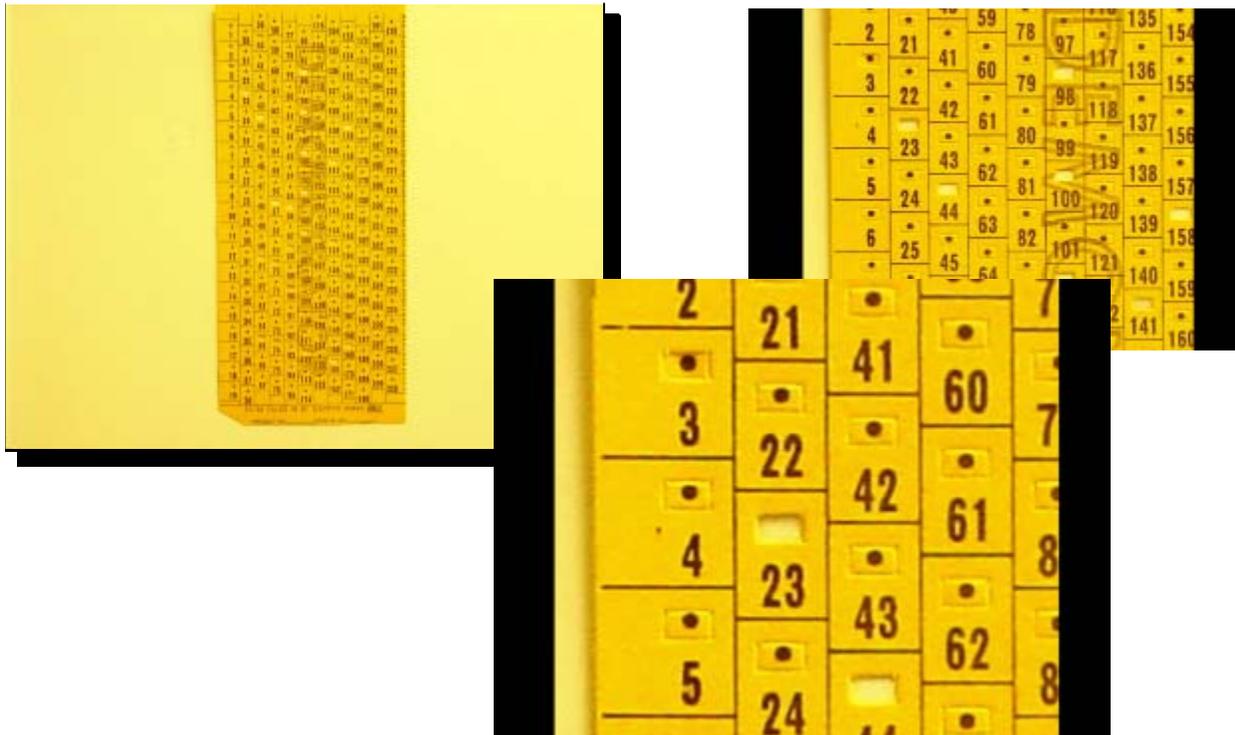
1. A page of a book with pertinent language "pulled out" for viewing.



2. A newspaper article, with a portion enlarged and displayed side-by-side to allow facial recognition in the photograph.



3. Three views of the same voter "punch card" demonstrating the degrees of zoom-in capabilities.





III. Training/Contact Information

Please contact Cathy Kennedy with any questions about the system and for information about general training sessions.

Cathy Kennedy	Phone:	(616) 732-2757
	Email:	courttech@miwd.uscourts.gov



IV. Reminders

- ◆ Consider early in a case ways in which electronic evidence might be used during hearings or at trial so that evidence can be gathered in a manner appropriate for use with the evidence presentation system.
- ◆ Advise the Court in advance when you wish to use the evidence presentation system so the specific components can be set up on the day of the court proceeding . Refer to the checklist attached.
- ◆ Testing your evidence presentation in advance of a court proceeding is highly recommended. All testing or practice sessions must occur prior to the day of the proceeding, as the courtroom and court staff will not be available for that purpose on the day of the proceeding.
- ◆ Keep in mind that electronic equipment, including your own laptop, can sometimes malfunction. It is highly recommended you have a backup plan.
- ◆ The Court takes photographs of all witnesses at jury trials. During jury deliberations, these photographs are given to the jury along with trial exhibits. At counsel's request, the photographs are also available on a floppy disk prior to closing arguments. In order to include witnesses whose testimony is presented by deposition, a disk containing digitized still images of such witnesses should be supplied by counsel. The Court will transfer these images to the complete list of witnesses.
- ◆ Once a video source is selected, evidence at that source is immediately displayed on all monitors throughout the courtroom. Objections to the admission of evidence must be resolved before the evidence appears on the jury and gallery monitors. Although the Judge has the ability to "black out" the image on those monitors should an image be presented prematurely, it is preferred that evidence not be displayed until it has been admitted.

Evidence Presentation System Checklist
(For Use Prior to Contacting the Court)

Components I may wish to use:

Evidence Presentation Cart

- Location of Cart in the Courtroom
 - At Lectern
 - Rear Well of Courtroom
- Evidence Camera
 - Wide Angle Lens
- Annotation Monitor
- VCR
- Laptop Connection
- Auxiliary Connections

Counsel Tables

- Laptop Connection
- Auxiliary Connections
- Internet Access
- Realtime Court Reporting Connection

Witness Stand

- Evidence Camera
- Laptop Connection
- Auxiliary Connections

Additional Equipment

- Listening System
- Cordless Microphones
 - Hand-held
 - Lapel
- Side Camera (Tripod Easels)
- Color Video Printer
- Video Conferencing
- Telephone Conferencing

Personal equipment I may wish to bring into the courtroom:

- Laptop(s) How many? _____
- Compact Disc Player
- Cassette Player
- Video Camera
- VCR
- DVD Player
- Other Audio Visual Equipment _____
- Connecting Cables (confirm which cables are already provided by the court)



Checklist Contact: Cathy Kennedy
Phone:(616) 732-2757 ❖ Email: courttech@miwd.uscourts.gov