



Raleigh

COURTROOM TECHNOLOGY MANUAL

United States Courthouse
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Raleigh, NC 27601
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I. INTRODUCTION

Courtrooms and hearing rooms within the Eastern District of North Carolina are equipped with a variety of technologies to enhance the court's ability to meet the needs of the bar and public. The evidence presentation system allows attorneys, their staff and authorized *pro se* litigants (collectively referred to as "users" or "operators" for the purposes of this manual) to present and display many forms of evidence and testimony to the judge and jury.

This manual depicts the technology available in the courtroom in Raleigh, North Carolina. Please reference the [Appendix](#) for detailed photos of equipment discussed within this manual.

Users with certain versions of adobe may select the 'previous page' button  or press 'alt left arrow' to return to their original location within this document. All other users should scroll up or down to return to their original location within this document.

To view the technology available in the other courthouses in the district, [click here](#).

II. REQUIREMENTS

A. Training

At least ten (10) business days prior to the scheduled proceeding, first time courtroom technology users must contact the Raleigh Clerk's Office at (919) 645-1700 to schedule training. The exact date and time of training is subject to the availability of the courtroom.

B. Testing

At least ten (10) business days prior to the scheduled proceeding, all users who intend to operate the evidence presentation system must contact the Raleigh Clerk's Office at (919) 645-1700 to schedule testing of their hardware and software. The exact date and time of testing is subject to the availability of the courtroom. Users should bring all personal laptops and media (i.e. DVDs, CDs, videotapes) to ensure compatibility with the courtroom equipment. Prior to testing in the courtroom, the user must perform a virus check on all media.

To best utilize time and resources, users are encouraged to combine the training and testing into one session, if possible. Users must also review any case management orders and the judge's preferences located on the Eastern District of North Carolina website for further requirements related to the use of technology in the courtroom.

C. Media Format

All DVD media must meet the following requirements:

Format	Notes
DVD-Video	NTSC, North America Region Code 0 or 1
DVD-RW (VR Format)	NTSC, North America Region Code 0 or 1 Disk must be finalized (closed)
DVD-RW/+RW (Video Format)	NTSC, North America Region Code 0 or 1 Disk must be finalized (closed)
DVD-R/+R (Video Format)	NTSC, North America Region Code 0 or 1 Disk must be finalized (closed)

All electronic evidence must be in the following formats:

Documents and Photographs: .pdf, .jpg, .bmp, .tif, or .gif.

Video and Audio Recordings: .avi, .wmv, .mpg, .mp3, .wma and .wav.

Evidentiary DVDs must be video-certified DVD media. If data DVDs are used instead of video DVDs, unpredictable operations may occur resulting in an unacceptable image or no image at all.

When creating an audio or video DVD, users must complete the final step of finalizing the DVD. Finalizing the DVD will protect it from unintended changes. Further, failure to finalize the DVD may prevent it from operating properly. Users should test the newly created DVD in a stand-alone DVD player prior to testing it in the courtroom since the DVD may play properly on the machine that created it but not on any other device.

D. Real-Time Court Reporting

Real-time court reporting is available upon request and should be arranged in advance by contacting the court reporter, Donna Tomowski, at (919) 645-1700. Real-time court reporting translates the court reporter's stenotype code and electronically delivers the translation to a courtroom recipient's laptop computer for use during a proceeding. The real-time transcript is unedited and uncertified and has not been proofread to correct any computer-generated mistranslated or untranslated stenotype code. Therefore, a real-time transcript is an unofficial transcription and should not be relied upon for the purposes of verbatim citation or testimony, nor should it be used in any way to rebut or contradict the official certified transcript of the proceeding.

III. COURTROOM CONFIGURATION

A. Counsel Tables *(see [photo](#) in appendix)*

Although the courtroom has been equipped to accommodate multi-defendant cases, with advanced notice, the courtroom can be reconfigured to meet the needs of a multi-plaintiff case. The standard configuration for counsel tables is two tables with one set of equipment on the plaintiff/government side and three tables with three sets of equipment on the defendant/defense side.

Each set of equipment includes a:

- ~ Cardioid microphone
- ~ Document camera
- ~ Evidence control panel
- ~ Annotation touch screen monitor
- ~ Evidence display monitor
- ~ Laptop connections for audio and video output
- ~ Electrical power strip attached to each table.

Users may project evidence from their personal laptop onto the monitors by using the video monitor connectors located on the counsel table. If audio is to be presented from the laptop, an audio plug connector must be utilized. Users must test all connections prior to the scheduled proceeding as directed in Section II to ensure that there is no delay in the proceeding due to technical difficulties. If necessary, users should bring their own IT staff for assistance in the courtroom, as clerk's office employees are only authorized to support and maintain court equipment.

To connect the laptop, users must plug the 15-pin VGA video monitor connector located at the counsel table into the video output on the laptop. For audio, the audio plug should be inserted into the output labeled with the headphone icon on the laptop. The laptop resolution must be set to 1024 x 768.

B. Witness Stand *(see [photo](#) in appendix)*

The witness stand is equipped with an adjustable annotation video monitor, an audio speaker and one cardioid microphone. The witness has the ability to annotate or 'mark' the screen as part of the evidence presentation. See Section VI for further information regarding the use of annotation monitors.

C. Jury Box *(see [photo](#) in appendix)*

The jury box is equipped with individual evidence display monitors. The monitors are adjustable so that evidence can be viewed by all jurors from any vantage point. There are also fixed audio speakers installed in the jury box.

IV. SOUND SYSTEM

A. Speakers *(see [photo](#) in appendix)*

The courtroom is equipped with a digital sound system that includes tabletop box speakers located on the judge's bench and the witness stand. The courtroom also has built-in speakers located inside the jury box

B. Microphones

The use of microphones in the courtroom is required. The courtroom is equipped with several different types of microphones and an audio recording device designed to produce a permanent digital audio record of the proceedings. When in use, the recording is continuous.

1. Cardioid Microphones *(see [photo](#) in appendix)*

Cardioid microphones are located on each counsel table and the podium. Cardioid microphones are unidirectional microphones designed to pick up sound from the front of the microphone, with surrounding sounds from the side and back of the microphone minimized. As such, individuals who are speaking must place the microphone at the proper angle and distance in order to clearly carry and capture their voice.

The court's digital sound system is highly sensitive. Individuals seated at the counsel table who wish to conduct a private conversation should always push and hold the mute button on the base of their cardioid microphone. The mute button must be held down for the desired duration of the conversation. When the mute button is engaged, the green LED indicator light on the base of the microphone is off.

2. Handheld and Lapel Microphones *(see [photo](#) in appendix)*

A wireless handheld microphone and wireless lapel microphones are available upon request. The courtroom deputy must have sufficient notice so that the microphones can be tested prior to use.

3. Side-Bar Bench Microphone (see [photo](#) in appendix)

The judge's bench is equipped with a flat boundary microphone used for side-bar conversations with counsel. When at the bench, counsel should be aware of the microphone's location when speaking. During a side-bar conversation, white noise will be played through the speakers at the witness stand and jury box so that the conversation cannot be heard.

C. Assisted Listening Devices (see [photo](#) in appendix)

The courtroom is equipped with infrared assisted listening devices (ALD) to aid hearing impaired individuals and assist interpreters. A request for an ALD should be made to the courtroom deputy prior to use to allow for testing of the equipment. It should be noted that the devices are not compatible with hearing aids.

The ALD delivers sound to the headsets wirelessly via several infrared emitters mounted throughout the courtroom. Headset users should be mindful not to block the infrared signal to the headset and should ensure that the front of the device is in direct line with one of the four emitters in the courtroom. There are two emitters over the door to the left of the judge's bench, one emitter over the door to the right of the judge's bench and one emitter in the back of the courtroom over the window in the right corner.

If the line of sight between the ALD and the emitter breaks, a static noise or beeping sound may emanate from the device. Realigning the body position (i.e. sitting up straight or turning the head) may re-establish the connection. In the unlikely event that the change in position does not correct the situation, the headset user may raise his or her hand to signal for assistance.

1. To turn on the ALD, the user should pull the headset frames open until the indicator light illuminates. When the device is on, an orange light is present and the ALD will remain on as long as the headset is worn. When removed from the head, the ALD will automatically turn off after a period of time.
2. If the ALD is to be used for interpretation, the headset channel should be set to Channel 1. If the ALD is to be used for the hearing impaired, the headset channel should be set to Channel 2.
3. The ALD volume is controlled by the dial on the front of the device.

V. EVIDENCE PRESENTATION SYSTEM

A. Evidence Control Panel *(see [photo](#) in appendix)*

Evidence control boxes are located on each counsel table. The courtroom deputy's desk and the judge's bench have more complex touch panels. The control panel allows the operator to govern how evidence is viewed and heard.

1. The top row has buttons for evidentiary presentation from
Laptop
Document Camera
DVD/VCR
Display Off
Auxiliary Laptop
2. The bottom row of buttons controls where the evidence is displayed. The first button mutes the jury and the second mutes the witness.

B. Document Camera *(see [photo](#) in appendix)*

The courtroom is equipped with document cameras that permit a user to place documents, photographs or three dimensional items (i.e. set of keys) on the camera for projecting onto the monitors.

A document camera is located on each counsel table, although only one camera at a time can display evidence. The document cameras can be controlled by either using the evidence control panel or the manual control buttons on the camera head. **The document camera should be retracted after each use to keep an unobstructed view for the court, counsel, witness and jury.**

1. To begin, the operator should open the document camera by lightly grasping the gray ring in the middle of the extension arm and gently pulling up.
2. The operator can adjust the focus and lighting on the camera by use of the buttons on the camera.
3. When using document camera, the operator must turn the power on the camera by pressing the ON button (power button symbol: ) at the base of the camera.

4. The control buttons for manually adjusting the camera are located on the camera head. To zoom in and out, the operator should roll the gray wheel up and down.
5. When finished with the document camera, the operator should press the POWER OFF button (power button symbol: ) on the *Document Camera Control* screen or at the base of the document camera and then gently pull the ring forward to close it.

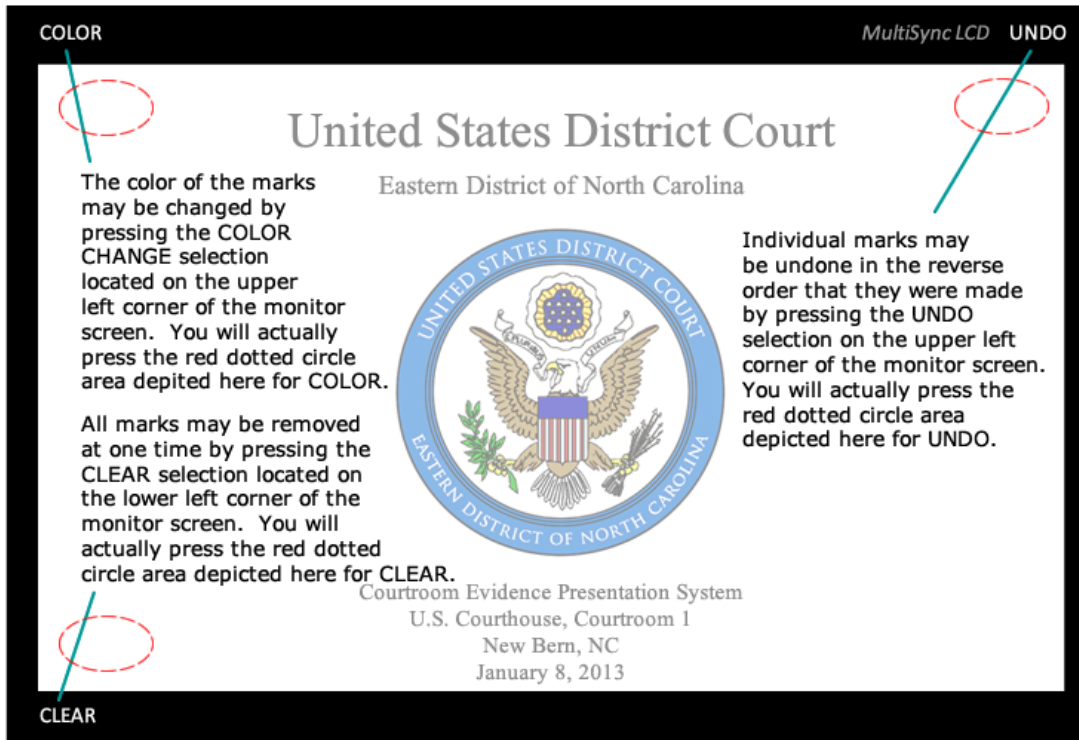
C. DVD and VCR

Users may either employ their own equipment to play a DVD or VCR tape on the monitors in the courtroom or ask the courtroom deputy to perform this function using the court's equipment. If asking the court to perform this function, it is the user's responsibility to monitor the proceeding and to notify the courtroom deputy when the evidence should be started or stopped.

1. Press the button labeled DVD/VCR
2. The *DVD/VCR Controls* screen has the standard commands (i.e. rewind, fast forward) for playing a tape or video.

D. Annotation Monitors

The courtroom is equipped with four (4) annotation touch screen monitors. Two (2) annotation monitors are located on the defendant/defense tables, one (1) annotation monitor is located on the plaintiff/government tables, and there is one (1) annotation monitor on the witness stand. These monitors permit the user to annotate or mark the evidence being displayed on the evidence display monitor with the touch of a finger.



1. **Drawing.** Using a finger, marks can be made directly on the screen to identify or emphasize a portion of evidence. The use of fingernails, pens or other objects will damage the monitor.

VI. APPENDIX

DESCRIPTION	PHOTO
Counsel Table	
Button Panel	
Witness Stand	

Jury Box



Microphones

Cardioid



Handheld and Lapel



Side-Bar Bench



Assisted Listening Devices



Document Camera

