

Michigan Trial Court Standards for Courtroom Technology (4/20)

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Section 1: Standards for Digital Video and Audio Recording

Chapter 1: Governing Authority

These standards and guidelines are established to ensure that courts purchase, maintain, and operate recording systems that are designed to meet the special requirements of courtroom recording. They include standards for: 1) governance, 2) equipment and technology, and 3) operating and monitoring the recording of proceedings.

NOTE: As a result of technological limitations during the COVID-19 crisis and other similar emergency situations, guidance provided to ensure courts conduct remote proceedings supersedes these standards where courts are unable to comply. To accommodate COVID-19 crisis specifically, these standards shall be complied with to the best of a court's ability pursuant to [Administrative Orders 2020-2 and 2020-6](#). To the extent courts are unable to meet the technology standards as required by MCR 8.108 and MCR 8.109, during the period covered by AO 2020-2 and 2020-6, courts are allowed to use remote participation tools that meet the requirements as established in those orders (i.e., enable confidential communication between client and party, etc.).

Requirements which may be especially challenging for court to comply with are:

- Recording equipment and technology standards, specifically the requirements for:
 - 1) Reliability and Security: redundancy to ensure that a recording is captured in the event of failure of a storage device (see Chapter 2, item G); to mitigate this, courts should make copies of the recording immediately following the hearing,
 - 2) Integration: the ability of a system to be integrated with other PC-based utilities and importing recordings from external sources (see Chapter 2, item H), and
 - 3) Videoconferencing: direct feed into the recording system (see Chapter 3, item C,6).
- Storage standards, specifically the requirements for Storage: backup (see Chapter 2, item D).

A. Recording Equipment and Technology

Trial courts are authorized to use audio and video recording equipment for making a record of court proceedings. If a trial court uses audio or video recording equipment for making the record of court proceedings, it shall use only recording equipment that meets the standards as published by the State Court Administrative Office or analog equipment that the State Court Administrative Office has approved for use. MCR 8.109(A). Control and care of recording media is governed by Component 24 of the *Michigan Trial Court Case File Management Standards*.

B. Operation of Equipment

Trial courts that use audio or video recording equipment, whether digital or analog, must adhere to the audio and video recording operating standards published by the State Court

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Administrative Office pursuant to MCR 8.109(B). Only reporters, recorders, voice writers, or operators certified pursuant to MCR 8.108(G)(1) may operate a court's audio recording system. A person operating a court's digital video court recording system need not be certified pursuant to MCR 8.108, but must comply with these standards.

Components 23 and 24 of the *Michigan Trial Court Case File Management Standards* must also be adhered to. Section 3, Chapter 8 and Section 4 of the *Manual for Court Reporters and Recorders* outlines procedures for operating audio recording equipment, logging the proceedings, and marking exhibits. Chapter 3 of these standards outlines procedures for operating video recording equipment, logging the proceedings, and marking exhibits.

C. Transcription and Delivery of the Record

Digital recording enables the courts to establish a transcript management system that efficiently and effectively manages the life cycle of transcripts from initiation of the transcript request through the electronic or paper distribution and filing of the transcript. Courts should establish clear responsibility and procedures to manage the transcription production process. See also Components 23 and 24 of the *Michigan Trial Court Case File Management Standards*.

D. Records Management

All records associated with the recording of court proceedings, regardless of format, belong to the court, must remain in the physical possession of the court, and are subject to access in accordance with MCR 8.119(H). MCR 8.108(C) and (D) govern the maintenance and storage of records created by a court reporter, court recorder, or electronic operator. Records associated with the recording of court proceedings are defined in MCR 8.119(F) and include the recordings, log notes, jury seating charts, and all other records such as tapes, backup tapes, discs, and any other medium used or created in the making of a record of proceedings and kept pursuant to MCR 8.108. See also Components 23 and 24 of the *Michigan Trial Court Case File Management Standards*.

E. Access to Records

Access to records defined in MCR 8.119(F) is governed by MCR 8.119(H)(2)(b) and must be regulated by policy and procedures established through local administrative order. Model LAO 8 must be used as the basis of this policy.

F. Scope

The term "judge" applies to district court magistrate and referee.

Chapter 2: Recording Equipment and Technology Standards

A. Components

Digital systems record a court proceeding and store the recording in a single digital file. These systems generally incorporate three types of components:

- Dedicated hardware -- workstations, servers, disk and tape drives, etc. that are dedicated to the system.
- Proprietary hardware -- video and sound-processing equipment (video capture cards, mixers, voice processors) is often developed by the vendor and often cannot be replaced with off-the-shelf components.
- Proprietary software -- the software used to operate the system will have many proprietary components, but may also accomplish some of its functions through generally available utilities and programs. The customer may be able to select certain components, based on which functions of the system are desired.

B. System Design

Systems vary widely in design. Some operate on a standalone personal computer (PC), while others take advantage of the benefits of network technology. Other systems may use digital components as additions to videocassette-based system architecture. Courts should consider the benefits of each approach, as well as the vulnerabilities and costs of each design.

To guarantee that a court will be able to choose from many system vendors, and to ensure that a system is able to grow and take advantage of new technologies, the system must adopt an open-architecture design. This approach enables different vendors to supply different parts of the overall system. As such, device interfaces must conform to industry standards.

Required:

- **Open architecture:** A system must use an open-architecture approach, using devices with standard interfaces.
- **Compatibility with peripherals:** A system must support standard peripheral devices used in transcription, such as foot pedals and headphones, using industry-standard interfaces.

C. Video Recording

The core function of digital recording systems is to convert the audio and video signals from the various microphones and cameras into a digital format and store it as a computer file.

Some systems allow multichannel sound recording (as many as four), which allows the voices of individual speakers to be isolated on playback. This improves the chances that an accurate transcript will be made when two or more people are speaking at the same time.

Required:

Audio/video recording: A system must record the audio and video of a court's proceedings and store the recording in a digital format with a continuous time stamp.

Optional:

Record playback: Some systems are capable of playing back a portion of the recording while continuing to record.

D. Storage

Digital recording systems create a computer file, usually on the computer's hard drive. However, the permanent (archive) file is created by copying the file on the hard drive to some other, often external, medium or by simultaneously recording the audio and video signals to a standard videocassette tape. This may be done manually or automatically by the system. These digital media fall into two categories: magnetic and optical. Examples of magnetic storage media are floppy disks, DAT tapes, and JAZ drives. Optical media include compact disks and DVDs. Some optical media can be written to only once, but read many times (WORM), while others can be rewritten (RW). Magnetic media can be rewritten.

Required

Recording format: A system must store the converted audio and video signals in an open, publicly available (nonproprietary) digital format. Examples include WAV, M-JPEG, MPEG I, and MPEG II. Lossy compression algorithms (in which the decompressed file does not contain all the information present in the original file) are permitted if they do not detract from the playback quality of the file or inhibit the creation of a complete, true, and correct transcript.

Long-term backup: A system must create a backup of the files (and annotations database if applicable) for disaster recovery.

Long-term storage medium: A system must archive the permanent copy of the digital recording on a widely available, industry-accepted medium that can be stored separately from the system. Both magnetic and optical media are allowed, but a DAS/NAS/SAN digital storage system is recommended due to its durability, redundancy capability, and more advanced technology.

The long-term storage location must be kept at a separate physical location from the long-term backup location. The files maintained at the two separate locations must be retained for the same amount of time in accordance with the *General Records Retention and Disposal Schedule #16 – Michigan Trial Courts*.

Optional

Find and restore: Some systems provide a means of tracking and locating material that has been moved to long-term storage. (See “Organization” in Appendix A of this chapter.)

E. Playback and Transcription

After recording and storage, the digital files will need to be transferred to the transcriptionist. In many cases, only part of a day’s proceedings will need to be transferred. Systems must be able to replay a recording so that the court can create a transcript of the proceedings. Most systems provide a separate software utility designed to play back the recording.

Required

Nonproprietary transfer medium: Any medium used to transfer the digital recordings to transcriptionists must be a widely available, industry-accepted medium (e.g., CD, JAZ, DAT, etc.) so they can replay the recording on readily available equipment.

Access: A system must be able to access a digital recording using rewind, fast forward, search by timestamp, and other direct access methods to enable a system operator to quickly find passages of interest.

Playback quality: A system must play the recording back at a sufficient quality level to enable the preparation of a complete, true, and correct transcript. Playback quality will be determined by the customer.

Voice isolation: A system must be able to isolate the voices of speakers who speak simultaneously.

Separate volume controls: A system must provide separate volume controls for each channel.

Optional

Selection of material: A system may have the ability to identify recorded material that needs to be sent to the transcriptionist, or the user may develop a process to extract this information. (See “Organization” in Appendix A of this chapter.)

Peripherals: Some vendors may supply transcriptionists with the peripheral devices (e.g., CD-ROM or DVD drive, foot pedal, etc.) necessary to produce the transcript.

File Transfer Protocol (FTP): A system may allow transfer of digital files via FTP from a DAS/NAS/SAN as needed.

F. Annotations

Many systems include an integrated note-taking utility, which allows the system operator to take notes that are tied to time stamps marking particular sections of the recording. Although an integrated note-taking utility can enhance the efficiency of a digital recording system, it is not central to its functioning and is therefore not required. However, if a system includes such a utility, it must permit the editing of the notes after they have been taken.

Required

Editing annotations: An integrated note-taking utility must allow notes to be changed after they have been made, either through system functionality or by exporting, editing in a different program, and importing them back into the system.

Optional

Session setup: The system may provide utilities useful in preparing to record a session, such as entering the date and time, courtroom, judge, and case number for the case about to be recorded.

Customization: This is the ability to make configuration choices that will affect the use of the system by all users, as well as to make changes to the interface that are specific to each session.

Multiple annotators: Some systems provide a utility that allows users other than the court recorder to take notes and link them by time stamp to the recording.

Search annotations: This is the ability to search through the annotations to find specific material to play back.

Highlight current tag: Some systems may highlight the annotations corresponding to the audio/video as it is played back.

G. Reliability and Security

Because court recording is mission critical, equipment used in performing this function must be reliable. Systems need to provide operators with various forms of information that indicate that the system is functioning properly.

Because digital recording systems rely on PCs, security becomes an issue. Courts should rely on their existing computer security policies and apply them to digital recording systems.

Required

Live channel indicators: A system must continuously monitor all microphones and cameras and provide at least visual indication that each is picking up a signal. An audible alarm, in addition to a visual indicator, is desirable.

Confidence monitoring: A system must continuously monitor the storage medium and provide at least visual indication to the operator that the signal is being recorded.

Redundancy: To ensure that the recording is captured in the event of failure of a storage device, a system must store the signal to two separate storage devices simultaneously. One may be used as the emergency backup.

Audio pause indicator: A system must periodically produce an audible alarm when the system has been put in pause or mute mode, such as during an off-the-record bench conference, to alert the operator to resume normal operation when the conference has ended.

Optional

Security and privileges: The system may be configured to allow different levels of access to different users.

Identify edited files: The system may allow the user to determine whether audio/video or text files (if the system contains a note-taking utility) have been edited or otherwise changed since they were created. The system may also be able to indicate whether copies of files are identical to original files created by the system.

H. Integration

The ability of a system to be integrated with other PC-based utilities will protect courts in the event that the system becomes unusable, obsolete, or no longer supported by the vendor. The degree of integration also presents opportunities to use a digital recording system more effectively by incorporating audio or audio/video recordings from depositions, other hearings, etc.

Required

Accessibility of data by nonsystem utilities: Because the storage format must be nonproprietary, it follows that the files must be able to be read by nonsystem software utilities.

Optional

Importing recordings from an external source: This is the ability of a system to integrate nonsystem recordings into the digital system. This accommodates recordings of testimony or other records created using a different system.

Importing case data: Some systems may allow the user to import case information (case name, number, parties, etc.) into the recording system, avoiding the need for manual entry of the information.

I. Administration

Digital recording systems often provide a number of tools that make using the system easier.

Optional

User setup: A system may include utilities to allow users to identify themselves on the system (e.g., user names and passwords).

Management reports: A system may provide utilities that generate basic reports on the status and content of the system files (and annotations database if applicable), which is useful in identifying frequency and patterns of use, needs for training, and storage capacity planning.

Appendix A

Factors When Considering a Purchase

Organization

- How will the files created by the system be stored: by case? by day?
- How will the court track the location of files?
- How will files be named?
- How does the digital video system support these operational processes?

User interface

- How intuitive and accessible is the system's interface?
- How much training will be required to use the system?

Sufficient field length

- Does the system allow sufficient space in the data fields to store the necessary information?

On-line capacity

- How much data can be stored on the system's local drive? How many cases/days does this represent?

Off-line storage

- What storage medium options are available for backing up the local data?
- How efficient is the storage medium (how much data can you store on a given disk, tape, etc.)?

Duplication speed

- How long does the system's tape duplicator take to transfer a given file to an analog tape?

Maintenance functions

- Can users perform tasks necessary to maintain the system (defining network settings and disk structures, correcting interfaces, rebuilding databases, etc.), or must the vendor perform them?

Vendor Support

- Will the vendor provide a free analysis of the components needed to provide the level of functionality the court desires, prior to the sale?
- Will the vendor install the system, including network interfaces, and test it?
- Will the vendor train court staff on the operation and maintenance of the system?
- What type of support will the vendor provide after installation?
- Does the purchase or maintenance agreement include any future upgrades?

Appendix B

Checklist for Compliance with Standards; Form SCAO 56

Chapter 3: Operating and Monitoring Procedures

A. Administrative Responsibilities

To effectively capture, preserve, and produce a record of court proceeding, court administrators and judicial leadership should establish and manage the digital recording program by applying these standards and by adopting courtroom practices that ensure all persons responsible for setting up, operating, and monitoring the recording equipment and all participants in and out of the courtroom fulfill their responsibilities. This includes making sure everyone involved complies with the equipment and technology standards, preserves the recording as required by these standards, and produces and distributes the transcripts as required by law and court rule. In addition, administration should determine what signage will be used throughout the court facility and ensure that operators are using the signage appropriately in the courtroom.

B. Authorized Operator

1. Digital Audio Equipment Operator

Only reporters, recorders, or voice writers certified pursuant to MCR 8.108(G)(1) may record proceedings held in Michigan. An operator holding a CEO certification under MCR 8.108 (G)(7)(b) may also record proceedings.

Required operating and monitoring procedures for digital audio equipment are outlined in the *Manual for Court Reporters and Recorders*, Section 3, Chapter 8 and Section 4.

2. Digital Video Equipment Operator

a. Authority, Conduct, and Qualifications

Any person operating a court's digital video court recording system must comply with these standards. The operator need not be certified pursuant to MCR 8.108. Operating and monitoring procedures for digital video equipment are outlined in this chapter.

The video operator shall comply with all statutes and court rules and is subject to the court's code of conduct for court employees.

In general, the video operator should possess a broad understanding of court procedures and principles, familiarity with legal terminology, specific knowledge related to the digital audio recording equipment, and awareness of courtroom decorum.

b. Responsibilities

In general, the video operator is responsible for:

- assisting in microphone placement,
- monitoring the recording (not the source) through headphones to ensure the proceedings are being recorded properly,
- taking and maintaining log notes and relevant lists of attorneys' names and addresses, witnesses, exhibits, and other information to assist with transcription,
- playing back recorded court proceedings as directed by the judge, and
- ensuring that the recording is properly stored and archived at the court.

In addition to the logging and monitoring procedures in this chapter, the court should make clear to the video operator any other procedures expected, such as marking of exhibits and swearing in of witnesses in the courtroom, maintaining evidence, and making entries into the court's case management system for such things as the start and end time of each hearing, all appearances, court orders, and next hearing dates.

c. Training

The video operator must receive initial hands-on start-up training and follow-up training from the digital recording vendors and court staff on start-up procedures and advanced features of the system.

The video operator should also be trained by court personnel on courtroom procedures and storage responsibilities, including: 1) logging procedures; and 2) basic training on microphone use and placement, equipment set-up, operation and maintenance, failure recovery, troubleshooting, backup and restore procedures, and routine inspection procedures.

In some courts, the video operator may also be responsible for transcript processing and should be trained as such.

C. Setup and Testing

The video operator assigned to the courtroom is responsible for observing the following procedures and performing the associated setup and testing tasks. Whether this is done at the beginning of the day or before each proceeding depends on the scheduling practices of the court and local practices.

1. Supplying the Courtroom

Make sure that all necessary supplies for producing a recording, making log notes, marking exhibits, and preserving the record are available and accessible. Supplies could include headphones, the court calendar and docket, pens, pencils, legal pads, blank appearance sheets and witness and exhibit lists, and compact disks for archiving.

2. Posting Signs

Make sure signs are prominently posted that provide notice to all attendees and participants that conversations occurring in the courtroom may be recorded at any time.

3. Instructing Attorneys

The operator or judge shall give written instructions to each attorney in each proceeding to be held in the courtroom that day. When observed, the instructions ensure that the audio recording of the proceedings is clear and legible. See Appendix A of this chapter for a checklist.

4. Testing the Equipment

- a. Test the recording and log notes software for their operating functions.
- b. Test the recording quality of each microphone and the wiring by speaking into each microphone and listening to the recorded result on each audio channel. Problems can be caused by the microphones not being plugged into the proper channels or equipment, or not being set on the record mode. Report any problems so that they can be fixed before the day's proceedings.
- c. If default settings are used, check whether the system has been set back to the appropriate default setting and, in particular, that the setting accurately identifies the name of the judge presiding in that courtroom over the recorded proceeding.

5. Arranging Microphones

- a. Check the microphone and camera placement for each courtroom according to type of case and the flow and movement of the participants.
- b. Assign a foreign-language interpreter's microphone to a separate channel.

- c. Jury voir dire requires flexible placement of microphones. Use of wireless microphones is recommended for optimum flexibility.

6. Videoconferencing

If videoconferencing technology is being used, it should be fed directly into the recording system. If this feature is not available, move a microphone to a position near the speaker through which the video conferencing dialogue will be emitted.

7. Telephonic Participation

If a party is participating in a proceeding through telephonic means in accordance with MCR 2.004, feed the telephone conversation into the courtroom through a speaker box. Place the microphone next to the speaker.

8. Making Arrangements with Judge

Determine how the judge wants to be notified or interrupted by the operator during the court proceeding in the event the record of the proceedings is not being captured.

D. Operating the Equipment

The operator must operate the equipment as directed by the judge and in accordance with these standards. A verbatim record must be recorded pursuant to law and Michigan court rules, and conversations may be muted or not recorded only as authorized by these standards. Logging and monitoring procedures are outlined in item G (see page 18).

1. Off-the-Record Discussions and Sidebar or Bench Conferences

The recording should be stopped for off-the-record discussions only at the direction of the judge and only for as long as the judge directs. Sidebar or bench conferences are part of the official record and must be recorded unless the judge orders otherwise.

2. Confidential Communications

All conversations of attorneys and parties that occur in the courtroom are to be recorded. Microphones should be equipped with mute buttons to permit attorneys and parties to communicate confidentially. The judge should notify all participants of the mute feature at the start of a proceeding (see item F, page 17).

E. Shutdown Routine

Storing and archiving the recording at the court must be done in compliance with Components 23 and 24 of the *Michigan Trial Court Case File Management Standards* and local court practices.

1. Backup the day's recordings to the court's network. If the system does not enable this, backup the day's recordings onto a compact disk (CD).
2. Label the recordings to enable their retrieval during the retention period.
3. Reset the system to the appropriate default setting for the next day's proceedings.
4. Shut down the court recording system.

F. Courtroom Checklist for Judge

The judge shall, at the start of each proceeding:

1. Verify with the operator that the system has been tested and is operating.
2. Advise participants that the court proceeding is being electronically recorded.
3. Advise participants to speak loudly and clearly.
4. State each case by name, number, and type of proceeding each time a case is called.
5. Advise all participants to properly identify themselves when making their appearance at the beginning of each proceeding and to spell their names for the record.
6. Advise attorneys to give their appearances at the start of each day of a continuous, multiday trial.
7. Advise attorneys to take necessary precautions (i.e. cover the microphone or use the mute button) when they wish to consult with clients during the hearing.
8. Mention that coughing or sneezing near a microphone will adversely affect the recording.
9. Advise attorneys to speak into a microphone, and monitor this during the proceeding.

10. Advise participants that only one person should speak at a time and remind them, as necessary, to discourage overlapping questions and answers or colloquy.
11. Advise speakers not to wander around the courtroom unless wireless microphones are used.
12. Conduct on-the-record bench conferences at the bench conference microphone.
13. Leave the bench microphone turned on while in session except for off-the-record discussion.
14. Clarify any nonverbal occurrences such as “witness nodded head,” indicating a yes response.
15. Address jurors by name or number for proper identification during voir dire.

G. Logging and Monitoring Procedures

The video operator must produce the clearest possible recording of proceedings and must keep a written (handwritten, typed, or system-generated) log of events in the proceeding. In general, log notes serve three purposes: 1) to locate a specific proceeding, 2) to locate a specific portion of the proceeding, and 3) to aid the transcriber in preparing the transcript. See Appendix B of this chapter for a list of entries that should be made into the log notes to aid transcription of the record.

1. Logging

a. Minimum Content

For all court proceedings, the log notes must contain:

1) Names

Log the full name of the judge, case caption, case number, and the names and spellings of the parties and attorneys present. When possible, the operator should ask the attorneys to supply a list of names and terms before the court session.

2) Time

Log notes must allow the video operator and transcriber to identify the beginning and end time of each proceeding. The digital recording software should ideally be able to automatically insert into the system the beginning and end time, along with any time that the recording is paused, started, or stopped. In court sessions where proceedings overlap, the video operator will need to be particularly diligent

at logging start and stop times and may not be able to rely on the software to do so.

3) Spelling and Unusual Names and Terminology

To assist transcription and playback, log notes should include the spelling of uncommon words, proper nouns, or unusual phrases or jargon.

4) For Trials and Evidentiary Hearings

When trials and evidentiary hearings are held, log notes must also contain:

- a) The name of each witness.
- b) The beginning of each type of examination (e.g. direct examination, cross-examination, redirect examination, recross examination, opening statement, closing argument, rebuttal).
- c) Exhibits (clearly mark the exhibit number and describe the evidence admitted).
- d) Any other information that would assist transcription. Commonly used abbreviations may be useful.

b. Identifying Speakers by Channel

Because speakers may move to and speak from multiple microphones during the proceeding, the video operator may need to develop a code to ensure that the log notes contain and the transcriber can identify who is speaking on any one channel at any one time. Some video systems do this automatically.

A standard setup for channel allocation could serve as a useful guide for transcribers in the majority of cases. For example:

- Channel 1: Judge/Jury/Bench or Well
- Channel 2: Witness
- Channel 3: Defendant
- Channel 4: Plaintiff

When a jury trial is being held, the term “voir dire” should be entered into the log notes at the beginning of voir dire.

c. Language Interpreters

Log notes on when the interpreter is interpreting and the identity of the speaker whose words are being interpreted are particularly important.

d. Abbreviations

Abbreviations are acceptable for commonly understood standard terms; (e.g. “def” for “defendant”).

e. Telephonic Participation

Enter a log note at which time the telephone conversation begins, and identify the person(s) involved in the call.

f. Audiotape and Videotape Sources

Attorneys may on occasion play audiotaped or videotaped materials during the course of the proceedings. In such instances, follow these procedures.

- 1) If the playback of the audiotape or videotape is to be recorded:
 - a) Enter a log note on the log "videotape (*or audiotape*) of (*whatever it is*) played in court."
 - b) Move a microphone to a position near the speaker through which the recorded material will be played.
 - c) Log as much as possible to help the transcriber with speaker and content identification.
 - d) Enter a log note at which time the playback of the audiotape or videotape concludes.
- 2) If the playback of the audiotape or videotape is not to be recorded:
 - a) Enter a log note describing the material played back off-the-record and turn the recording equipment off.
 - b) When the playback of the audiotape or videotape is completed, make certain that the recording equipment is turned back on and resume.

g. In-Court Playback of Testimony

When asked to play back testimony or some other portion of the proceedings document the start and end time in the log notes (the time will be entered automatically). See item G.3. on page 22 for further details.

2. Monitoring

a. Using Headphones

To ensure that the proceedings are being adequately and intelligibly recorded, using headphones the video operator must monitor what is being recorded onto the audio channels, not what is being said into the microphones. This is known as “confidence monitoring.” The system should provide at least visual indication to the operator that the signal is being recorded.

b. Interrupting Proceedings

The video operator should strive for an unobtrusive presence. Because an interruption may not be desirable at a critical point in testimony, the video operator must use best judgment in interrupting proceedings. Interruptions should be made only as necessary and in accordance with protocols established with the judge. Situations where it may be necessary to interrupt proceedings are to request:

- The correct spelling of names or technical or unfamiliar names.
- That a party move closer to the microphone.
- That the person stop tapping a microphone or shuffling papers too close to it.
- That a nonverbal response be made audible.
- That a party slow down his or her speech pattern.

The video operator must interrupt the proceeding and notify the judge when a record is not being made, such as technical failure of the equipment or the speaker’s words are inaudible for reasons including:

- The audio level of the recording is not adequate.
- The parties are speaking too softly or too rapidly.
- The parties are talking simultaneously over each other.
- Excessive shuffling of papers.

- A microphone remains muted.
- Excessive gallery or extraneous noise.

c. Sidebar or Bench Conferences

Sidebar or bench conferences are often whispered; therefore, it is important to monitor the volume and to ensure that the recording equipment is picking up each speaker. If a conference is off-the-record, the operator should make certain to record the judge announcing that it is off-the-record and resume recording when the conference is over.

d. Jury Voir Dire

Video operators may need to be particularly vigilant with asking potential jurors to speak up.

3. In-Court Playback of Testimony

There are a number of circumstances where the operator may be asked to play back testimony or some other portion of the recording. The recording system should support immediate resumption after playback, with no interruption in the proceedings. However, some systems do not have playback capabilities (cannot playback and still record the proceeding in the courtroom).

The operator's goal should be to locate and play back requested portions of testimony as quickly as possible. When a request is made to play back a certain portion of the proceedings from a digital recording, the procedures are to:

- Note the request in the log notes (the time will be entered automatically).
- Change the panel from the recording screen to the playback screen.
- Find the requested portion and listen through the headset to make sure you have the appropriate portion requested.
- Play the requested portion.
- Note on the log that playback was concluded (the time will be entered automatically).
- Change the panel back to the recording screen and continue with the proceedings.

Appendix A

Checklist of Responsibilities for Attorneys and Participants in the Courtroom

1. Inform your clients of the recording method and take necessary precautions to protect disclosure of confidential communications during proceedings.
2. When speaking for the first time, identify yourself for the record. Spell your name and state whom you represent.
3. Provide the video operator with the correct spellings of unusual or technical names and words used by you or your witnesses.
4. Do not move the microphones.
5. Always remain within arm's reach of a microphone. If you approach the bench, wait until you are within arm's reach of a microphone before speaking again.
6. For the benefit of the written record, try to avoid speaking while witnesses or other counsel are speaking. Only one person should speak at a time.
7. Address jurors by name or number for proper identification during voir dire.
8. Avoid "uh-huh," head nods, and gestures. Solicit verbal responses from all witnesses.
9. Avoid shuffling papers or making other noises when people are talking. If you have a cold, move away from the microphone before coughing or sneezing.
10. Use the mute button while consulting with your client or making any statements that you do not want recorded. Be sure the mute button is off and the microphone is on before proceeding.
11. When at a bench conference, avoid blocking the microphone with documents. Speak one at a time into the sidebar microphone.
12. On days where there are multiple cases set for hearing, hold discussions outside the courtroom or at least away from microphones.

Appendix B

Recommended Log Note Entries for Proceedings Requiring Transcription

- a. Date
- b. Courthouse
- c. Courtroom
- d. Reporter
- e. Case number
- f. Case name
- g. Judge
- h. Attorneys (contact information)
- i. Type of hearing
- j. Opening statement
- k. Witness name
- l. Witness called
- m. Witness excused
- n. Objections
- o. Court's ruling on objection
- p. Addresses
- q. Key words (spellings)
- r. Proper nouns (spellings)
- s. Exhibits
- t. Recess
- u. Court resumes
- v. Direct examination
- w. Redirect examination
- x. Cross examination
- y. Recross examination
- z. Rebuttal
- aa. Surrebuttal
- bb. Voir Dire
- cc. Judge
- dd. On the record
- ee. Off the record
- ff. Commence judge's ruling
- gg. Closing argument
- hh. Jury instructions
- ii. Verdict
- jj. Request for playback of testimony
- kk. Playback
- ll. Bench conference
- mm. Bench conference begins
- nn. Bench conference ends

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These standards and guidelines are established to: 1) ensure consistency in videoconferencing practices and procedures throughout the state of Michigan; 2) improve service to the public, other agencies, and the judiciary; and 3) improve the performance and efficiency of videoconferencing in the courts.

Videoconferencing (or two-way interactive video technology) is defined as interactive technology that sends video, voice, and data signals over a transmission circuit so that two or more individuals or groups can communicate with each other simultaneously using video codecs, monitors, cameras, audio microphones, and audio speakers.

A. Types of Court Proceedings Authorized to Use Videoconferencing

Trial courts are authorized to use videoconferencing technology pursuant to MCR 2.004, MCR 2.407, MCR 3.210(A)(4), MCR 3.215(D)(3), MCR 3.705, MCR 3.708, MCR 3.804, MCR 3.904, MCR 4.101, MCR 4.202, MCR 4.304, MCR 4.401, MCR 5.140, MCR 6.006, and MCR 6.901. For a list of *Authorized Uses for Videoconferencing*, see Appendix A.

1. Civil and Domestic Relations Proceedings

As authorized by MCR 2.407(B)(1) and subject to these standards, trial courts may, at the request of any participant, or sua sponte, allow and determine the manner and extent of the use of videoconferencing technology by any participant in any court-scheduled civil and domestic relations proceeding.

2. Civil Infraction Actions

As authorized by MCR 4.101(F) and subject to MCR 2.407 and these standards, trial courts may use videoconferencing technology to conduct the proceedings outlined in MCR 4.101(F).

3. Consent and Release Hearing under Adoption Code

As authorized and conditioned by MCR 3.804 and subject to MCR 2.407 and these standards, trial courts may use videoconferencing technology to conduct consent and release hearing under the Adoption Code.

4. Criminal Proceedings

As authorized and conditioned by MCR 6.006 and MCR 6.901 and subject to these standards, trial courts may use videoconferencing technology to conduct the proceedings outlined in MCR 6.006 and MCR 6.901.

5. Juvenile Proceedings

As authorized and conditioned by MCR 3.904 and subject to these standards, trial courts may use videoconferencing technology to conduct the proceedings outlined in MCR 3.904.

6. Personal Protection Proceedings

As authorized and conditioned by MCR 3.705(B) and MCR 3.708(D) and (H) and subject to MCR 2.407 and these standards, trial courts may use videoconferencing technology to conduct the proceedings outlined in MCR 3.705(B) and MCR 3.708(D) and (H).

7. Probate Court and Ancillary Circuit Court Proceedings

As authorized and conditioned by MCR 5.140 and subject to MCR 2.407 and these standards, trial courts may use videoconferencing technology to conduct the proceedings outlined in MCR 5.140.

8. Summary Proceedings

As authorized by MCR 4.201(F), MCR 4.202(H), and MCR 4.304(A) and subject to MCR 2.407 and these standards, trial courts may use videoconferencing technology to conduct the proceedings outlined in MCR 4.201(F), MCR 4.202(H), and MCR 4.304(A).

B. Provisions for Participation

1. A judicial officer presiding by videoconferencing must be in a courthouse as required by Supreme Court Administrative Order 2012-7, unless otherwise authorized by local administrative order.
2. Participants shall be able to see, hear, and communicate with each other.
3. Participants shall be able to see, hear, and otherwise observe any physical evidence or exhibits presented during the proceeding.

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4. In criminal and delinquency matters, counsel for a defendant/juvenile shall have the option to be physically present with the client at the remote location, and the facilities at the remote location shall be able to accommodate counsel's participation in the proceeding from the remote location.
5. In criminal and delinquency matters, if a defendant/juvenile and counsel are not in each other's physical presence, they shall be able to have private, confidential communication during the proceeding.
6. If applicable, there shall be a means by which documents can be transmitted between the courtroom and the remote location.

C. Verbatim Recordings

All proceedings at which videoconferencing technology is used must be recorded verbatim by the court with the exception of hearings that are not required by law to be recorded.

D. Criteria for Determining Use

In all but personal protection, juvenile, and criminal cases, in determining whether to permit the use of videoconferencing technology and the manner of proceeding with videoconferencing, the court shall consider:

1. The capabilities of the court's videoconferencing equipment.
2. Whether any undue prejudice would result.
3. The convenience of the parties and the proposed witness, and the cost of producing the witness in person in relation to the importance of the offered testimony.
4. Whether the procedure would allow for full and effective cross-examination, especially when the cross-examination would involve documents or other exhibits.
5. Whether the dignity, solemnity, and decorum of the courtroom would tend to impress upon the witness the duty to testify truthfully.
6. Whether a physical liberty or other fundamental interest is at stake in the proceeding.
7. Whether the court is satisfied that it can sufficiently control the proceedings at the remote location so as to effectively extend the courtroom to the remote location.

8. Whether the use of videoconferencing technology presents the person at a remote location in a diminished or distorted sense that negatively reflects upon the individual at the remote location to persons present in the courtroom.
9. Whether the use of videoconferencing technology diminishes or detracts from the dignity, solemnity, and formality of the proceeding and undermines the integrity, fairness, or effectiveness of the proceeding.
10. Whether the person appearing by videoconferencing technology presents a significant security risk to transport and be present physically in the courtroom.
11. Whether the parties or witness(es) have waived personal appearance or stipulated to videoconferencing.
12. The proximity of the videoconferencing request date to the proposed appearance date.
13. Any other factors that the court may determine to be of relevance to the proceeding.

E. Request for and Objection to Videoconferencing

1. Request

A participant who requests the use of videoconferencing technology in all but a personal protection, juvenile, or criminal case shall ensure that the equipment available at the remote location meets these standards. The participant must provide the court with the videoconference dialing information and the participant's contact information in advance of the court date.

2. Objection

If an objection is made to the use of videoconferencing technology in all but a personal protection, juvenile or criminal case, the court shall consider the factors in MCR 2.407(C) in making its ruling.

Appendix A - List of Authorized Uses for Videoconferencing

Court Proceedings: Videoconferencing means the use of interactive technology that sends video, voice, and data signals over a transmission circuit so that two or more individuals can communicate with each other simultaneously.

Adoption Consent and Release (MCR 3.804[B]) – **Except for a consent hearing involving an Indian child pursuant to MCL 712B.13**, circuit courts may use videoconferencing at a consent or release hearing under the Adoption Code.

Adult Guardianship (MCR 5.140[A] and [C]) – Probate and circuit courts may use videoconferencing in a proceeding concerning guardianship upon request of any participant or sua sponte **except, if the subject of the petition wants to be physically present, the court must allow the individual to be present.**

Civil (MCR 2.407) – Courts may use videoconferencing at the request of any participant or upon the court’s own motion in the following proceedings between the courtroom and any location:

- All court-scheduled civil proceedings

Child Protective (MCR 2.004) – Circuit courts may use videoconferencing at the request of any incarcerated party in the following proceedings:

- Any court-scheduled child protective proceeding involving the party’s minor children as it relates to custody, foster-care placement, guardianship, and termination of parental rights

Child Protective (MCR 3.904[B][1]) – **Except as conditioned below**, circuit courts may allow the use of videoconferencing by any participant as defined in MCR 2.407(A)(1) in any proceeding:

- (MCR 3.904[B][2][a]) – **As long as the respondent is either present in the courtroom or has waived the right to be present, on motion of either party showing good cause**, the court may use videoconferencing to take testimony in the following proceedings:
 - Removal hearings under MCR 3.967
 - Evidentiary hearings
- (MCR 3.904[B][2][b]) – **As long as the respondent is either present in the courtroom or has waived the right to be present, on motion of either party showing good cause**

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and with the consent of the parties, the court may use videoconferencing to take testimony in the following proceedings:

- Termination of parental rights proceedings under MCR 3.977
- Trials

Civil Infraction (MCR 4.101[F]) – In accordance with MCR 2.407, district courts may allow the use of videoconferencing in a contested civil infraction action by any participant as defined in MCR 2.407(A)(1).

Conservatorship (MCR 5.140[A] and [C]) – Probate and circuit courts may use videoconferencing in a proceeding concerning conservatorship upon request of any participant or sua sponte **except, if the subject of the petition wants to be physically present, the court must allow the individual to be present.**

Criminal (MCR 6.006[A], MCR 6.901[C]) – District and circuit courts may use videoconferencing in the following proceedings between the courtroom and a prison, jail, or other location:

- Arraignment (including bench warrant arraignments)
- Probable cause conference
- Pretrial conference
- Plea
- Sentencing for misdemeanor offenses
- Show cause hearing
- Waiver and adjournment of extradition
- Waiver and adjournment of preliminary examination
- Referral for forensic determination of competency

Criminal (MCR 6.006[B], MCR 6.901[C]) – **As long as the defendant is in the courtroom or has waived the right to be present in the courtroom and on motion of either party**, district courts may use videoconferencing to take testimony from an expert witness in the following proceeding:

- Preliminary examination

Criminal (MCR 6.006[B], MCR 6.901[C]) – **As long as the defendant is in the courtroom or has waived the right to be present in the courtroom and upon showing of good cause**, district courts may use videoconferencing to take testimony from any person (other than an expert witness) at another location in the following proceeding:

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- Preliminary examination

Criminal (MCR 6.006[C], MCR 6.901[C]) – **As long as the defendant is in the courtroom or has waived the right to be present in the courtroom and upon showing of good cause,** district and circuit courts may use videoconferencing to take testimony from a person at another location in the following proceedings:

- Evidentiary hearing
- Competency hearing
- Sentencing
- Probation revocation
- Sentence revocation that does not involve adjudication of guilt, such as youthful trainee status

Criminal (MCR 6.006[C], MCR 6.901[C]) – With the consent of both parties, district and circuit courts may use videoconferencing in the following proceeding:

- Trial

Delinquency, Designated, and Minor Personal Protection Violation (MCR 2.004) – Circuit courts may use videoconferencing at the request of any incarcerated party in the following proceedings:

- Any court-scheduled juvenile proceeding involving the party's minor children, as it relates to custody and foster-care placement

Delinquency, Designated, and Minor Personal Protection Violation (MCR 3.904[A][1]) – Circuit courts may use videoconferencing in the following proceedings between the courtroom and a facility:

- Preliminary hearing under 3.935(A)(1)
- Preliminary examination under MCR 3.953 and MCR 3.985
- Postdispositional progress review
- Dispositional hearing where the court does not order a more restrictive placement or more restrictive treatment

Delinquency, Designated, and Minor Personal Protection Violation (MCR 3.904[A][2]) – **Except for a trial,** as long as the juvenile is either present in the courtroom or has waived the right to be present, on motion of either party showing good cause, circuit courts may use videoconferencing to take testimony from an expert witness or a person at another location in any delinquency, designated, or personal protection violation proceeding under subchapter 3.900.

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Delinquency, Designated, and Minor Personal Protection Violation (MCR 3.904[A][2]) – With the consent of the parties, circuit courts may use videoconferencing in the following proceeding:

- Trial

Domestic Relations (MCR 2.004, MCR 3.210[A][4] and MCR 3.215[D][3]) – Circuit courts may use videoconferencing at the request of any participant or upon the court’s own motion in the following proceedings:

- All court-scheduled domestic relations proceedings
- Referee hearings

Mental Health (MCR 5.140[A] and [B]) – Probate and circuit courts may use videoconferencing in a mental health proceeding upon request of any participant or sua sponte **except, if the subject of the petition wants to be physically present, the court must allow the individual to be present unless the court excludes or waives the physical presence of the subject pursuant to MCL 330.1455.** This exception does not apply to individuals hospitalized as a result of a finding of not guilty by reason by insanity.

Minor Guardianship (MCR 2.004, MCR 5.404[B]) – **Except for consent hearings under the Michigan Indian Family Preservation Act,** courts may use videoconferencing at the request of any incarcerated party in the following proceedings:

- Any court-scheduled minor guardianship proceeding involving the party’s minor children

Minor Guardianship (MCR 5.140[A] and [C], MCR 5.404[B]) – **Except for consent hearings under the Michigan Indian Family Preservation Act,** probate and circuit courts may use videoconferencing in a proceeding concerning minor guardianship upon request of any participant or sua sponte **except, if the subject of the petition 14 years of age or older wants to be physically present, the court must allow the individual to be present.**

Personal Protection (MCR 3.705[B]) – In accordance with MCR 2.407, circuit courts may allow the use of videoconferencing in the following proceedings by any participant as defined in MCR 2.407(A)(1):

- Hearing to issue personal protection order

Personal Protection (MCR 3.708[D]) – **As long as the adult respondent is either present in the courtroom or has waived the right to be present, on motion of either party,** circuit courts

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may use videoconferencing to take testimony from an expert witness in the following proceeding:

- Contempt proceeding for violation of personal protection order

Personal Protection (MCR 3.708[D]) – **As long as the adult respondent is either present in the courtroom or has waived the right to be present, on motion of either party and upon a showing of good cause,** circuit courts may use videoconferencing to take testimony from any person at another location in the following proceeding:

- Contempt proceeding for violation of personal protection order

Personal Protection (MCR 3.708[H][2]) – **As long as the adult respondent is either present in the courtroom or has waived the right to be present, on motion of either party and with the consent of the parties,** circuit courts may use videoconferencing to take testimony from an expert witness in the following proceeding:

- Violation hearing

Personal Protection (MCR 3.708[H][2]) – **As long as the adult respondent is either present in the courtroom or has waived the right to be present, on motion of either party and with the consent of the parties, upon a showing of good cause,** circuit courts may use videoconferencing to take testimony from any person at another location in the following proceeding:

- Violation hearing

Probate (Estate and Trust) (MCR 5.140[A]) – Probate courts may use videoconferencing in a proceeding concerning an estate or a trust upon request of any participant or sua sponte.

Protected Individual (MCR 5.140[A] and [C]) – Probate and circuit courts may use videoconferencing in a proceeding concerning a protected individual upon request of any participant or sua sponte **except, if the subject of the petition wants to be physically present, the court must allow the individual to be present.**

Summary Proceedings (MCR 4.201[F], MCR 4.202[H], MCR 4.304[A]) – In accordance with MCR 2.407, district courts may allow the use of videoconferencing in summary proceedings by any participant as defined in MCR 2.407(A)(1).

Chapter 2: Equipment and Technology Standards

A. Components

The components of a videoconferencing system include a screen or monitor, coder-decoder software, camera, MIC array, and remote control. Judicial Information Systems (JIS) has outfitted most trial courts with Polycom™ for their videoconferencing needs. See Appendix A of this chapter for visuals of the Polycom HDX videoconferencing equipment.

B. Performance Features

1. Open standards video technology must be capable of high-definition, full-motion video (Skype does not meet this standard).
2. Equipment must be capable of 30 fps (frames per second). Resolution quality is at the discretion of the court, but a preferred video quality is 4CIF or better.
3. Either over the air or direct in-line court recording may be used.
4. Video and sound quality must be sufficient to allow participants to observe the demeanor and nonverbal communications of other participants. Sound quality must be sufficient to clearly hear what is taking place in the courtroom to the same extent as if the participant was present in the courtroom.
5. Courtroom camera(s) must have the ability to deliver various views of the courtroom so that remote participants can observe persons and activities taking place in the courtroom during the proceedings.
6. Parties and counsel at remote locations must be able to mute the microphone system at that location so that they may have private, confidential communication.

C. Interface with Court Recording System

Videoconferencing equipment should be fed directly into the recording system, but if this feature is not available, move a microphone to a position near the speaker through which the videoconferencing dialogue will be emitted.

D. Maintenance Renewal

Renewal of maintenance coverage is highly recommended to enable software updates, maintain statewide compatibility, and facilitate timely repair of components.

Appendix A: Polycom HDX Series System Components

Components of the Polycom HDX Series Codec bundle include:



Key buttons on the remote control include:



Chapter 3: Testing Procedures and Scheduling Remote Participants

Because there is no single universal videoconferencing equipment throughout the state, operating procedures vary. However, for courts that use the Polycom™ installed by Judicial Information Systems, a *How-to-Use Reference* that can be kept with the equipment is available in Appendix A of this chapter.

A. System Testing

Video systems should be tested both in advance of court proceedings and whenever there is a problem connecting, hearing or being heard, or seeing or being seen during a video call. Test units are available for testing at all times and are configured to answer automatically.

1. Basic Calling

To test the video system for basic calling connectivity go to the *Courts Directory* (Home Screen > Directory > Favorites). Near the top of the *Courts Directory* should be two test units: *Test 4000 HOJ* and *Test 8000JE*. Place a call to either unit. If a connection is made, the device has network connectivity.

2. Calling Michigan Department of Corrections

To test the video system for connectivity to Michigan Department of Corrections (MDOC) facilities go to the *Courts Directory* (Home Screen > Directory > Favorites). Near the top of the *Courts Directory* should be an MDOC *Test Bellamy Creek* entry. Place a test call to the unit. This test unit should be used only after successful testing with the Test 4000 HOJ or Test 8000 JE video units. If a connection is made, the device has been properly registered in the MDOC video firewall.

B. Troubleshooting

1. Identifying Errors Using the Call Status Indicator

The call status indicator appears as a small circle in the lower left part of the screen when making a call. Quarter BLUE means the network path is being negotiated. Half YELLOW means the far end has been reached but no one has answered the call. GREEN means the call has successfully connected.

If the status indicator fails to move from quarter blue to half yellow, it could mean that the remote video unit is turned off, the dialing string is incorrect, or there is an issue with the network (local, Internet, or far site).

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2. Dialing String Errors

A common cause of connection errors is an incorrect dialing string. This can happen either with manual calls or using an inbound call from the *Recent Calls* log. Use the *Courts Directory* to make calls to avoid this problem. IPs using 192.x.x.x, 10.x.x.x, or 172.x.x.x are private and cannot be reached via the Internet.

C. Scheduling Remote Participants

1. Michigan Department of Corrections

All video calls involving MDOC inmates should be scheduled to MDOC Central WRIT. Scheduling can be done by the court or prosecutor (with the court's authority). MDOC facility video units are listed in the *Courts Directory*. MDOC support can be obtained from:

Rachel Johnson, Michigan Department of Corrections
517-780-6463 (office)
517-388-2256 (cell)
JohnsonR39@michigan.gov

2. Michigan State Police and Local Jails

Scheduling procedures for MSP forensic expert court appearances and inmate appearances from the local jail are locally determined. The MSP forensic labs video units are listed in the *Courts Directory*.

D. Videoconferencing Support Contacts

For courts that use the Polycom™ installed by Judicial Information Systems, support is available, including operations training, video testing, network trouble-shooting, maintenance renewal, and other video-related support.

Jim Ewing, Judicial Information Systems, Video Specialist
313-515-3334
jebc1@jebc.onmicrosoft.com

Appendix A: Polycom HDX Series System Operations

The Michigan Supreme Court maintains a directory of more than 700 video systems including local courts, local jails, MDOC prisons, MSP forensic labs, state of Michigan community health facilities, and county youth homes. The directory is loaded into each court's video system at time of install. Updated directories are e-mailed out periodically for the local court and IT staff to import the new directory into its video system.

Placing a Call Using Courts Directory

1. Go to the home screen.
- 2a. Select the *Directory* icon using the arrow keys and *Select* button.
- 2b. Select *Favorites* from the directory options list.
- 2c. Highlight the desired video system entry.
3. Press the *Call* button.

Notes:

- Test units are listed at the top of the directory.
- Other video systems are placed within the folders.
- Test units and jails are generally set to auto answer.
- Courts are generally set to manual answer, requiring someone on the far end to accept the call.



Hanging Up a Call

1. Press the *Hang Up* button.

Notes:

- Calls that are not hung up remain active even if the monitor is turned off.
- Most units were set at time of install to automatically disconnect the call after six hours.



Placing a Call Manually

Sometimes a court needs to call a video system not listed in the directory. To do so the court needs to have the dialing string of the remote video system.

1. Go to the home screen.
2. Select the *Place a Call* icon using the arrow keys and *Select* button.
3. Clear the dialing string field with the backspace if needed.
4. Enter the dialing string using the numbers keypad.
4. Press the *Call* button.

Notes:

- Dialing strings can take the following formats:
 - IP Address Only (e.g. 75.41.109.236)
 - Two-Part Dialing Strings (IP and Extension)
- Two-part dialing strings can be called using either of two formats:
 - Extension@IP Address (e.g. 135@12.232.9.10)
 - IP Address##Extension (e.g. 12.232.9.10##135)
- The keypad button above the number 1 brings up a soft keypad for inputting the @ sign.
- The # symbol is below the number 9 key.



Controlling Audio/Sound

Control the sound you are hearing from the call:

1. Press the volume control using the + and – ends of the *Volume* button.

Mute your MIC so you cannot be heard by the far end:

2. Press the *Mute* button.

Notes:

- The video system MIC is highly sensitive so be sure to mute if you don't want the far end to hear a sidebar conversation.
- The lights on the MIC array will be green if your MIC is muted.
- The lights on the MIC are red if your MIC is muted.
- The MIC symbol on the screen shows if near and/or far MICs are muted.



Controlling the Camera

The camera has PTZ (pan, tilt, zoom) capability, allowing different views of the court room.

1. Manual Camera Control
 - Pan (left and right) and tilt (up and down) are controlled by the arrow buttons.
 - Zoom is controlled by the *Zoom* button.
2. Camera Presets
 - Manual control can be time consuming so presets are the recommended approach to change camera views.
 - To store a preset, move the camera manually to the desired view and then press and hold a numeric key #X until the monitor displays *Preset #X Stored*.
 - To move between camera presets just press and release the numeric key and the camera will move to the saved view.



Notes:

- Typical presets set at time of install are: Judge's Bench 0, Wide Angle 1, Attorneys 2.
- The *Far* and *Near* buttons above and below the arrows set whether you are controlling your camera or the far end camera (if that is enabled).

Changing Monitor Display Layouts

There are several display layouts that can be used during a point-to-point video call. The recommended display layout is Far End Large and Near End Small.

- Near End Camera Only – Full Screen
- Far End Camera Only – Full Screen
- Far and Near End – 50 /50 split
- Far End Camera Large and Near End Small
- Near End Large Camera and Far End Small

To change display layout press and release the *Display* button to scroll through the various options.



Display PC or Tablet Content

- The screen of a PC or tablet can be shown on the monitor.
- Windows PCs, iPads, or Android devices can be used.
- When connected, whatever is on the PC or tablet's display will appear on the monitor.
- In a video call, the far end monitor will also show the content.
- To display content, connect the 25' People + Content cable provided at time of install to the PC or tablet. (The cable is commonly found coiled behind the TV.)
- The cable interface connectors for the PC or tablet are VGA (video) and 3.5mm (headset audio).
- For a Polycom HDX 6000, content is immediately displayed after the cable is connected to the PC or tablet.
- For a Polycom HDX 7000, the content source type must be selected. Connect the cable to the PC or tablet and press the *Content* button. Next use the arrow button to highlight the *Laptop* icon and press the *Select* button.



Chapter 4: Videoconferencing Participation by Attorneys and Witnesses

A. Available Options

There are a few options available to attorneys, witnesses, and others who want to participate in a court proceeding through videoconferencing. The following describes these options and some factors to consider in choosing an appropriate method.

1. Remote participants can use the H.323 standard for audio-visual communication sessions that are used in courtrooms. In general, most Polycom™ or Tandberg videoconferencing systems will be able to call courtroom video systems if they are configured for IP videoconferencing and can make calls over the Internet. Attorneys and expert witnesses who will commonly be interacting with the court via video may want to consider their own dedicated video system.
2. Polycom™ offers applications for Windows PCs, iPads, iPhones, and Android devices. The Apple and Android apps are free and can be found by searching for “Polycom Realpresence” in iTunes or the Marketplace. Polycom™ Realpresence desktop software for Windows PCs is available as a 30-day free trial at <http://www.polycom.com/content/www/en/forms/realpresence-desktop-trial.html>.

Use of Skype is not authorized for videoconferencing participation with the courts.

B. Video Call Considerations

1. Internet Speed

Most home Internet services will work fine for video calls. However, to improve quality and to avoid potential additional charges on monthly mobile device bills, a remote participant should be on a WiFi link rather than a mobile device data plan.

2. Video Lighting, Sound, and Etiquette

To produce a quality video call, use a room with even lighting. If possible, avoid bright windows on one side, back lighting, and florescent lighting. Use diffused lighting if possible.

To produce a quality video call, make the call from a quiet place. Test the microphone and speaker controls before making the call. Place the mobile device so the camera is eye-level and steady. Do not hold a tablet by hand or place it on a desk looking up at the face.

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C. Testing Connectivity

After configuring a system or installing an appropriate video application, the remote participant should make a test call to the court test unit at 75.41.109.236. The test unit is available at all times and answers automatically. A successful call will confirm that a unit has been set up properly.

A second test call should be scheduled and made with the court before the proceeding. This call should be from the remote user to the courtroom because firewall restrictions will likely prevent the court from making the call. The dialing string convention is the “IP address##extension” format and can be provided by the local court.