

Using Videotape to Record Evidence

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Introduction

The use of videotape to record and present evidence in North American courts is on the rise. Its increased use is due to advances in modern technology which have decreased the cost and reduced the size of video equipment.

In criminal courts, videotapes have been tendered to show views of crime scenes, sobriety tests of impaired drivers, re-enactments of crimes, confessions, identification line-ups, psychiatric interviews, depositions of essential witnesses, experiments, and the actual commission of such crimes as drug trafficking, murder conspiracy, bribery, theft, robbery, assault, gambling, and mischief.

Civil courts have also admitted videotapes in evidence. Depositions of witnesses, day-in-the-life documentaries of disabled plaintiffs, surveillance of suspected malingering plaintiffs, "views" by land, sea, and air, reconstructions, re-enactments, demonstrations, tests, experiments and even wills have all been presented on videotape in civil trials.

This article reviews the steps which can be taken to prevent an objection being raised to a videotape on the grounds of distortion.

Admissibility and Weight

In most states and provinces, the admission of videotape is governed by the same rules that apply to photographs and motion picture films. The admissibility of videotape depends upon its:

1. relevancy and materiality to the issues in the case;
2. accuracy in truly representing the facts;
3. fairness and absence of any intention to mislead;
4. verification on oath by a person capable to do so.

Who is called to authenticate a videotape goes to the issue of its weight, not admissibility. The more direct a connection the witness has to the videotape, the more weight afforded that witness's testimony.

The authenticating witness need not be the video camera operator, but should be (a) a person present at the time the videotape was recorded (e.g. eye-witness), (b) a person qualified to state that the representation is accurate, or (c) an expert witness.

In addition, the probative value of the videotape's contents must outweigh its prejudicial effect otherwise it may be excluded even though relevant. If the videotape tendered is of little probative value and would only serve to inflame the mind of the jury, the trial judge may, in his discretion, exclude it.

Objections to Admission

Various objections can be made to the admission of a videotape in evidence. Most are based on the grounds of distortion. To assist the evidence photographer in identifying the sources of distortion the following list has been prepared. It is followed by a discussion of aids to overcoming objections.

EDITING DISTORTION - if, due to editing, a videotape's contents lack continuity, or its sequence and chronology has been disrupted, then an objection could be raised to its admission on the grounds that it is confusing and not truly representative of any fact relevant to the issues. In addition, some judges prefer to see unedited videotapes and often suspect that the material removed during editing is not favorable to the party that excised it.

TAPE SPEED DISTORTION - where motion or rate of motion is a relevant issue, the speed at which the action is shown can be crucial. The videotape should be shown at the same speed at which it was recorded. Switching back and forth between tape speeds can be confusing to the trier of fact. For example, playing a videotape back at a faster speed might indicate a mob scene when in truth there was lawful picketing. Playing one back at a slower speed, might affect the perceived spontaneity of movements of an individual and the issue of the deliberateness of his action.

Both fast-motion and slow-motion videotapes distort the "reality of time" and introduce an element which is neither accurate nor true.

SOUNDTRACK DISTORTION - if the audio portion of a videotape (soundtrack) is distorted and unclear, then it won't contain an accurate recording of the sound at the scene. The videotape's dialogue or narration must not be garbled, or indistinct and the background (random) noise level on the tape should be minimal. In the courtroom, the video monitor's volume control should be adjusted to produce the same decibel level as sounds actually recorded.

COLOR DISTORTION - if color is one of the critical issues in a case, a substantial departure of the color reproduction from the original color value will affect the videotape's admissibility. A videotape will be excluded if its color is so unrealistic as to create a false and misleading impression of the matters it depicts. Slight or inconsequential deviations from true color values affect the weight, not admissibility, of a videotape.

Inaccuracy in the color of a videotape could occur if (a) the light used to illuminate an object or scene is not full spectrum; (b) the video camera's white balance control is not properly set; (c) the playback monitor's color controls (e.g. tint and saturation) are not properly adjusted.

When recording outdoors do so during daylight hours (10 am - 4 pm) and avoid dawn or dusk. When recording indoors use as artificial light source whose color temperature is 5000 degrees Kelvin - quartz/halogen t.v. lights.

If only tungsten or fluorescent lighting is available, then use the appropriate filter to prevent a yellowish or bluish tinge, calibrate the video camera and test it using a color checker or grey card. Manual adjustment of the white balance may be necessary. Adjust the iris (aperture) control on the cameras to control the brightness of the recorded image and avoid over or under-exposure which can cause a loss of highlight or shadow detail.

OPTICAL DISTORTION - lenses are not optically perfect and can distort, exaggerate and in other ways misrepresent the matters which they depict. It is not the presence or absence of optical distortion that determines the admissibility of the videotape. But rather, the extent to which the

non-distortive features shown have probative value to some disputable issue in the case.

For example, if the issue is whether a plaintiff can walk at all, a telephoto shot of him walking would be admissible. If the issue is how far (and fast) a plaintiff can walk, a shot of him walking toward the camera would give no estimate of distance, due to compression of objects the viewer would need to use for reference. A shot showing that plaintiff walking horizontal to the plane of the camera (i.e. across the screen) would give an accurate estimate of the distance he travelled.

Whenever possible use the camera lens in the "normal mode" and avoid excessive zooming.

Aids to Overcoming Objections

TIME-DATE CODE GENERATOR - records the time (H:M:S) and date (Y:M:D) on a videotape, electronically. The information appears as a numerical display on the playback monitor's screen, usually at the bottom on both the left and right sides.

This display permits the detection of an editing. A constant, orderly uninterrupted, sequential changing of the numerals in the minutes and seconds portion of the display indicates that the tape has not been edited. If the timing sequence changes abruptly because of missing numerals, it is likely that some portion of the videotape has been edited out.

The inclusion of a digital timer in the picture also forestalls an allegation that the videotape is not being shown at the proper tape speed (i.e. that the rate of motion of objects depicted in the tape is faster or slower than when recorded. Since the timer operates in real time, changes in videotape speed may be detected by comparing a time change in the display with a similar length of time as measured by a courtroom clock or wrist watch.

The numerical display also acts as a counter and provides a means to locate objections, obtain rulings and exclude inadmissible testimony during replay.

COLOR BARS, PATCHES AND TEST CARDS - placing a Kodak Neutral Test Card, Gray Scale and Color Patches, or a Macbeth Color-Checker prominently in a scene, so that it receives the same illumination as the subject being recorded, provides useful information on the accuracy of color reproduction in the videotape.

The neutral test card in the courtroom can be compared with its appearance in the videotape (e.g. its hue, saturation) to detect any color cast or tint in the videotape.

The gray scale permits a visual evaluation of exposure. A well-exposed videotape will show differentiation between the ten successive patches of the gray scale. Under or over-exposure result in the darker or lighter patches, respectively being indistinguishable from each other indicating that the videotape is lacking in either shadow or highlight detail.

During playback in the courtroom, the color patches or color-checker used to indicate color balance can be compared with their appearance in the videotape to ascertain the faithfulness of color reproduction.

Recording a set of "color bars" at the beginning of the videotape, permits proper adjustment of the color controls on the monitor used to show the videotape.

MEASURING DEVICES - placing a measuring device, (e.g. ruler, yardstick, metre stick, tape measure or surveyors' rod) in the scene being recorded permits a determination of the size of objects depicted therein and their distance

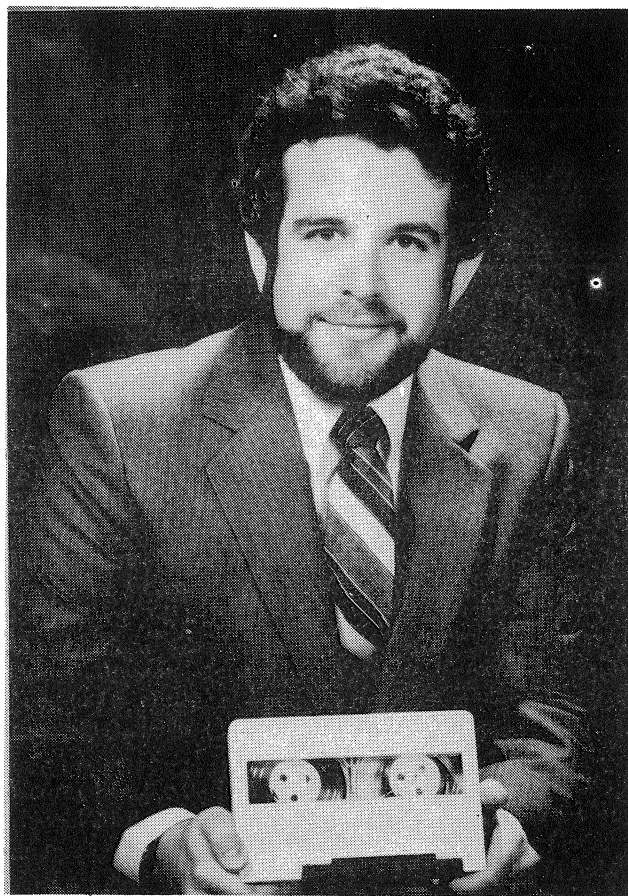
from one another. The measurement scale should be plainly visible to the camera.

SOUND MIXER and VU METER - the audio systems on most videotape recorders have an automatic gain control (AGC) which automatically adjusts the sound level. Manual adjustment is also possible and by carefully monitoring the volume unit (VU) meter, a camera operator or sound technician can making a test recording to find the best sound level.

Off-camera microphones, such as table-base or lapel mikes, provide better "pick-up" than on-camera boom mikes. If there are many sound sources, multiple microphones should be employed. When using two or more microphones, connect them to a sound mixer to electronically separate overlapping voices, eliminate distortion and reduce background noises.

Summary

The potential for using videotape to present evidence is virtually unlimited. New, portable, easy to operate videotape recording equipment makes using videotape attractive to the evidence photographer who wishes to expand on his services. Videotape, like motion picture film, can reproduce both sound and motion, but its major advantage is on-the-spot playback, and instant replay.



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The author is a Canadian lawyer and a member of the Bar on the Province of British Columbia. He is currently writing a book on videotape and photographic evidence which is scheduled for publication in the fall of 1985. For more information, write Project EVIDEO, P.O. Box 40, Stn. "A", Vancouver, B.C. CANADA V6C 2L8 or call (604) 688-0970

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SUPERIMPOSITION

Jean-Francois Bellemare, director of photography and graphic arts for the Quebec Police Force, brings us a piece on the "Use of Photographic Superimposition in identification of Skeletal Remains. This interesting article deals with mistaken identification and how superimposition matched the right name and remains.

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VIDEOTAPE

Atty. Elliott Goldstein of British Columbia details the correct use of Videotape to record evidence. The counselor lists many do's and don'ts concerning the use of this new tool to the evidence photographer.

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CERTIFICATION

EPIC begins another chapter in its history with the initiation of a certification program for civil and forensic photographers. Details of the certification program and the requirements for obtaining the status are contained in this edition of *The Journal*.

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On the Cover....

The reflection of member Michael Venetti is seen in the broken reflective surface of an automobile headlamp during junkyard exercise at the recent Dallas Seminar. Photograph was taken by EPIC President Robert F. Jennings.

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