

COMMON AUDIOVISUAL FORMATS

INTRODUCTION

One useful way to differentiate audiovisual formats is according to the method by which the format records sound and images. For example, an audiocassette records by encoding a magnetic signal onto metallic shavings glued to a plastic tape. The same is true for video tape. Because these formats are similar in their construction, they have similar storage and handling requirements. This list is organized into 3 large groups based on how they record. They are:

- Magnetic media
- Film
- Grooved media

MAGNETIC MEDIA

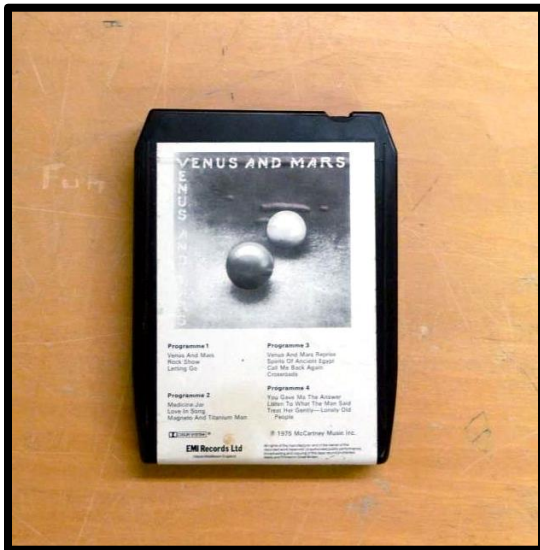
Audio cassette – Standard size (approx. 3.75" x 2.5")



Audio cassette – Microcassette (approx. 2.25" x 1.5")



Audio cassette – 8-track (approx. 4" x 5.25")



Audio tape – Reel-to-reel audio tape (size of reels vary)



Reel-to-reel tape is similar to that found in audiocassettes. Unlike film, reel-to-reel tape does not have holes running along its edges. Most reel-to-reel tape used for field recordings are $\frac{1}{4}$ " in width (as seen above), although 1" and 2" tape was also used, primarily in recording studios.

Video tape – VHS or VideoHomeSystem (approx. 7.5" x 4")



It is important to distinguish between standard VHS and SVHS (or Super VHS) because SVHS will not play properly in a standard VHS player. You can tell the two by the label embossed in the upper right side of the tape.



Video tape – Betacam (size varies)



Betacam comes in three varieties, Betacam, BetacamSP, and DigiBeta. While some players can play multiple types of tapes, many players will not play all three types of beta. Like VHS, the type of tape should be printed somewhere on the tape.



Video tape – ¾" U-matic (approx. 8 5/8" x 5 3/8")



U-matic tapes have a distinctive shape. Notice how the tape narrows slightly toward the head. Hopefully, the tape also contains the U-matic label, like this one. U-matic tapes are also distinctive from VHS and Beta tapes in that they are bulkier than either format.

Video tape – Miniature sizes



Above are three varieties of miniature video tapes, all of which were designed to record in a hand-held video camera. Oftentimes you will need a converter or a video camera that uses the specific tape to play the format. The smaller tapes are 8mm. Hi8 was another popular 8mm magnetic video medium.

MOTION PICTURE FILM

Motion picture film comes mainly in three sizes or gauges: 35 mm, 16 mm, and 8 mm. 16 and 8 mm were most common for home use.

35 mm film



(courtesy of DRs Kulturarvsprojekt)

In photography 35 mm was widely used by amateurs, but for moving images, 35 mm was most commonly used for professionally made films.

16 mm film



16 mm film can come on a variety of spools. It is a very common format and like other types of film has holes running down both edges.

8 mm film



As the name indicates, 8 mm film is narrower than 16 or 35 mm film. One easy way to tell 8mm from 16mm is that it only has holes running along on edge of the film (see below).



GROOVED AUDIO

Wax cylinders and vinyl records are both created from a technology where a sound wave is transformed into an etching onto a surface. These etchings contain peaks and microscopic peaks and valleys that can be played back as sound. While there were many different varieties of grooved formats, wax cylinders, shellac records, and vinyl records were amongst the most common.

Wax cylinders



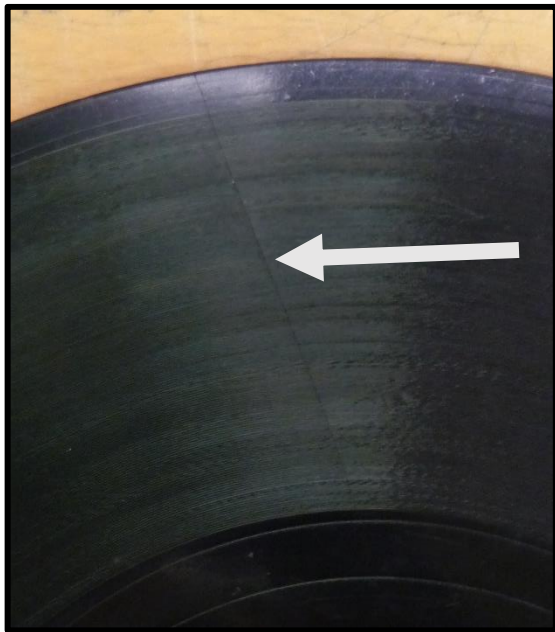
A wax cylinder player spins the cylinder like the drum of a front loading washing machine and a needle travels down the long edge of the cylinder as player spins it. Wax cylinders are fragile and will break if dropped. Because they can be slick, you do not want to handle them with cotton gloves. One acceptable method for handling wax cylinders is to form a V with your index and middle fingers and apply light pressure to the inside of the cylinder (see below).



Shellac records



Shellac records look a lot like vinyl records. One of the primary differences is that shellac records are heavier and more rigid than vinyl records. Because shellac records are rigid, they will break like a dish if dropped. Note the crack in the record below.



Vinyl records



Vinyl records became popular by the 1950s. Unlike their predecessor, the shellac record, vinyl records are somewhat flexible and won't break if you drop them. The main preservation concern with vinyl is scratches.