

## Motion Pictures: A Technology Timeline

- 1896** The Eastman Kodak Company develops the first motion picture film designed for projection.
- 1903** The American Mutoscope and Biograph Company, the most popular film company in America, switches to the 35mm format.
- 1912** Pathe introduces 28mm safety film for home use. The elegant Pathe Kok 28mm projector comes in a case about the size of a sewing machine or a mailbox, and features a built-in dynamo so it can be run in homes without electrical wiring. Flammable 35mm film cannot be run in the projector.
- 1920** Two-strip Technicolor process introduced for 35mm film.
- 1922** Pathe introduces 9.5mm film for the amateur filmmaker in Europe.
- 1923** Kodak introduces 16mm film and cameras in June. The Cine-Kodak outfit, which includes camera, projector, splicer, tripod, and screen, sells to consumers for \$335—just a little more than a Ford touring car.
- 1927** “The Jazz Singer,” featuring Al Jolson singing and talking with a musical score, becomes one of the biggest box office draws in history.
- 1928** Kodak releases 16mm Kodacolor, a lenticular color format in which black-and-white film embedded with tiny, light-refracting ridges is exposed and projected through a special three-color filter, resulting in a full-color image. German manufacturer Agfa follows with the release of a similar lenticular color product, Agfacolor, in 1932.
- 1930** The short-lived but cunning Kodel 1/4x16mm format exposes four images on each frame of 16mm film. The Kemco 1/4x16mm camera was marketed along with a dual projector that could show both 1/4x16mm and 16mm films. Marketed as a money-saver, the format never takes off.
- 1932** Kodak introduces 8mm film, sold as 16mm film in 25-foot cartridges that were exposed down both sides, then slit and spliced end-to-end in processing to make 50-foot reels of 8mm for projection. Other companies manufacture their own 8mm film stocks in single-strand, 50-foot reels (aka “straight 8”), but are not as successful.
- 1935** Kodak develops Kodachrome, the first full-color film emulsion.
- 1938** Pathe markets 9.5mm sound film, cameras, and projectors.

- 1950** (Early '50s) Commercial film producers in North America and Europe make the switch from nitrate to safety film stocks final, although nitrate continued to be used in parts of Asia and elsewhere, depending on cost and availability of safety film.
- 1978** Polaroid markets Polavision, an instant-developing 8mm film format. Sales of Polavision cameras and cartridges (which must be played in a special, TV-like viewer) are ruinously slow, in part because of the format's many technical restrictions outweighed the convenience of seeing film instantly.
- 1976** Sony releases Betamax, the first consumer video format. Rival format VHS quickly follows, and dominates the consumer market when Sony is reluctant to license the Betamax technology to other manufacturers.
- 2005** Kodak announces that it will discontinue production of Kodachrome film in the Super8 format.
- 2006** Kodak replaces Kodachrome film with Ektachrome in the Super8 format. They are continuing to produce several different types of Super8 film. Both color and black and white stock.
- 2011** The last reels of Kodak Super 8 Kodachrome are processed.