

● movie production process

Theatrical films are generally shot on 35mm negative and supplied to theaters as 35mm positive release prints.

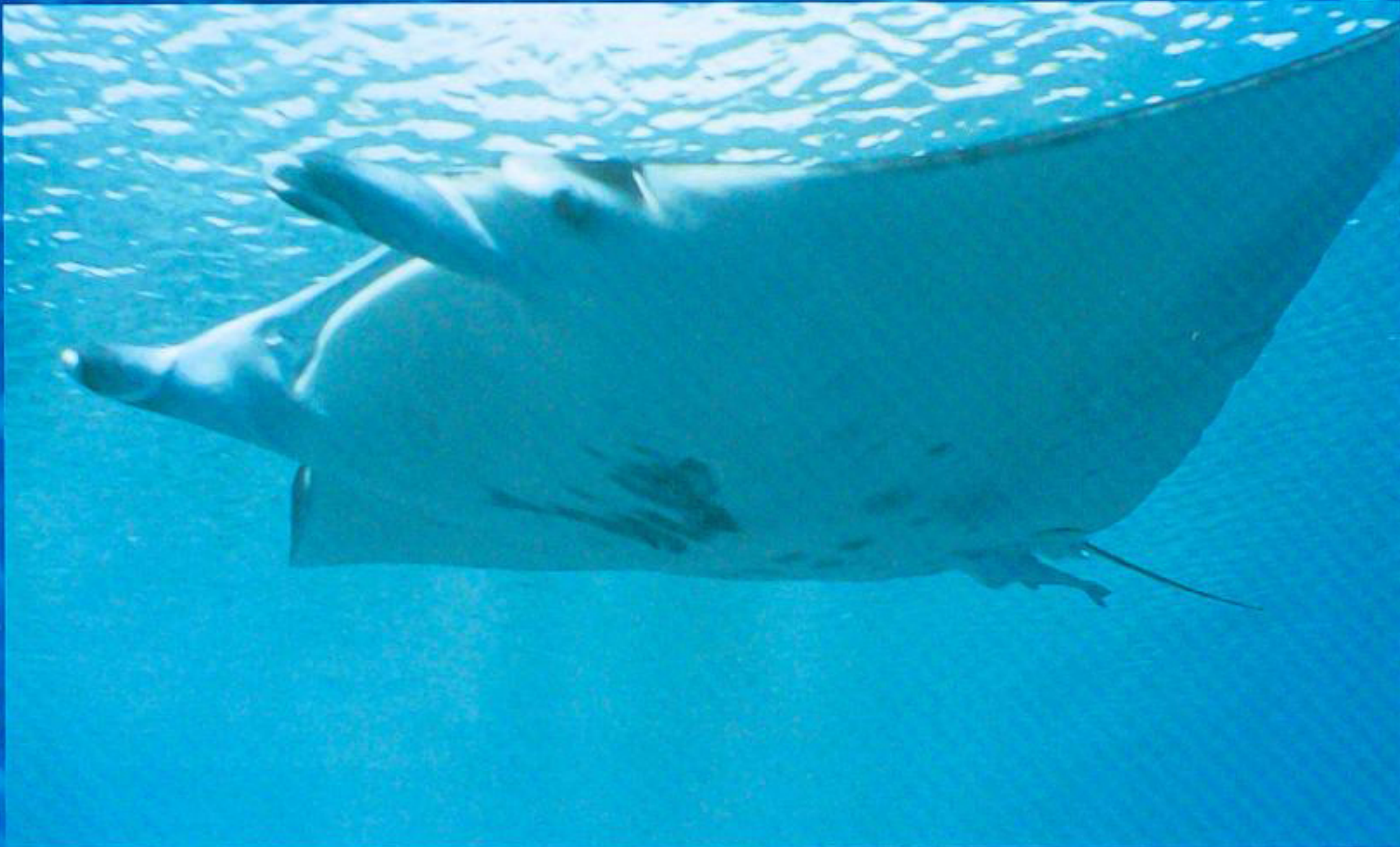
There are two types of filming formats for American movies: flat negative (aspect ratio of 1:1.33 for screen projection = television standard), and compressed negative (anamorphic process, also known as scope, which expands and restores the left and right sides for theatrical projection, aspect ratio 1:2.35) that uses an anamorphic lens to compress the left and right sides.

Films intended for widescreen theatrical projection (aspect ratio 1:1.85 in the United States, 1:1.66 in Europe) are shot on a flat negative, with masks added to the top and bottom of the image either during interpositive or internegative production or before theatrical projection.

Interpositive is the direct conversion of the final edited camera negative into a close-contact positive, while internegative is the duplication of the negative to negative. During this process, a color timer (the person listed in the credits) sets the exposure and adjusts the color (tests the print quality). High-quality film is used, and it is required to express minute details and be adaptable to next-generation materials. This is the original master source of the film, the soul of the film, and a treasure to the film company. It is strictly managed and stored by the development lab or production company to prevent scratches and dust from getting on it, and is never released to the public.

A duplicate negative converted from an interpositive, or a negative duplicated from an internegative using reversal film, is called a CRI (Color Reversal Intermediate), and serves as the master for mass-produced theatrical release prints. For foreign films released in Japan, as a rule, if the number of prints is small, the actual release print is imported and the subtitles are physically punched onto the film (impress subtitles), while for large quantities, a CRI is borrowed and the subtitles are photographically burned into the film (superimposed subtitles). The release prints shown in theaters are converted and duplicated several times from the camera negative, so they are fourth-generation or later, and degradation of image quality is unavoidable.

To produce film audio, magnetic recording is made onto 35mm cine tape, a metal-coated film made from standard film with sprockets (feed holes). The cine tape is then converted into a film-specific optical soundtrack that is mounted next to the image on the print. On the film set, the cinematograph and sound recorder are synchronized using a clapperboard, and when recording simultaneously, the joints of the clapperboard mark the image and sound. Cine tape has sprockets, which sound tape does not have, making it easier to synchronize the image and sound.



● Compatible with high-definition

Previously, masters for television and video (LD) were telecined (equipment that converts photographic images on film into electronic video signals) from interpositives or materials from the generation after internegative, mainly release prints. Because the master was duplicated multiple times, the deterioration of image quality in commercially available video software, which was about the seventh generation, was noticeable. Starting with "Frantic" (1988), D2 composite digital was introduced, allowing digital duplication, and the deterioration was significantly reduced. In recent major American productions, an interpositive was created from the original negative in a television frame for television and video, separate from the theatrical version, and then telecined with D2 to produce high-quality images.

I started seeing old laserdiscs and videos.

High-definition materials, which have about five times the number of image elements as current televisions, require even finer detail and contour expression. To approach the quality of the cinema, even higher quality materials are required, and camera negatives have issues with color timing (color correction), so one ends up with interpositives or internegatives, but since they are generally kept secret, it is difficult to borrow them except in special cases. It is common practice in the global film industry for CRI to lend them abroad.

High-definition LD audio is also available.

The MUSE disc is completed.

Hi-Vision LD accurately captures the information content of film, without losing the details in the dark areas of film with a wide latitude (gradation), and without crushing the brightness of the bright areas, faithfully reproducing colors, color variations and depth, and clear primary colors. It also has the advantage of not being subject to distortion caused by the transmission system used in satellite broadcasting.

Scope or Widescreen on conventional television

When the video is played back, there are black areas at the top and bottom, so of the 525 scan lines, only about 300 are used for Scope and about 370 for American Wide, meaning that the details are buried in the scan lines, which is a disadvantage of widescreen software. High definition allows for about 850 scan lines for Scope and about 1080 for American Wide, which increases the vertical and horizontal resolution by an order of magnitude.

● A new way to enjoy movie software

High definition, with its high amount of information, has changed the way we enjoy movies and created new possibilities. It's not just the sharpness that's remarkable, but also the overall calmness of the image, the sense of perspective, the subtle color reproduction and balance, and the crispness and definition of the credit titles and Japanese subtitles.

In "Atlantis," the underwater world was

projected onto the theater's magnificent screen through a scope. When viewed on a conventional TV, it looked no different from other underwater programs, and there was no point in bringing a large 35mm camera underwater. Only with high-definition laserdisc can it be shown to its full potential at home. It also takes a step closer, with a wide, horizontal screen for viewing.

Let's get as much as possible.

Tropical seas, icy seas, and deep blue oceans are mysterious worlds where countless water bubbles sparkle like diamonds. When you become a fish and dive deep underwater, the fish will come close to you to be photographed and communicate with you. The fish's bodies are as natural and smooth as if you could touch them, with delicate colors, graceful movements, and expressions that are just like your neighbors.

High-definition movie laserdisc will bring about an ecstasy that can only be experienced in high definition.