

Myths & Legends

If you are researching the best way to have your cine film transferred you will find an abundance of people trying to get your business and a wealth of information on the methods they use to transfer your precious memories.

Companies offering transfer services range from one man in his bedroom (who thinks he can make a few pounds), to established companies like ourselves. We have over 25 years experience in this highly specialised field. Websites can be misleading; a one man business can make himself look like a multi national organisation. Our dealers will tell you that we have been in business for many many years and that we continue to offer them a consistently good service coupled with a competitive pricing structure.

Transfer Methods

It can be very confusing when you ask how your cine film will be transferred.

The most basic method used is where old projectors display your film onto a screen, a camera is then mounted beside the projector to capture the resulting images. This sounds perfectly sensible, however, the quality of the result will be affected by many factors.

Firstly the quality of the projector used: Most projectors are bought second-hand and used until they fail.

Secondly and most important, is the question of synchronisation. The PAL TV system we use in this country operates at a refresh rate of 50HZ.. Put simply, the camera produces 50 images per second. It is important the frames per second at which the film is projected is matched to the 50Hz exactly. This requires a speed of either $16 \frac{2}{3}$ second or 25fps. Most projectors run at either 18fps or 24fprs. This inconsistency introduces a flicker to the transfer which is emphasised by the projectors 3 or 4 bladed shutter. This method also requires the transfer to be carried out in a totally light free environment which rarely happens.

At the other end of the Transfer scale is the "Flying Spot" system. This method is used to copy Hollywood Block Busters on to video. In fact this method is not so widespread nowadays as few films are still shot on film. In this method each frame is scanned individually and then digitally combined.. There are only one or two specialist companies using this system. However, it is very expensive and

Sitting in the middle of the scale are Telecine Machines such as those made by Elmo of Japan and more recently Tobin Cinema Systems in America. These machines are designed specifically for the process, have a variable speed control and five bladed shutter to avoid any flicker. The camera unit is built in to the projector and the image is kept within a sealed area and, therefore, not affected by any outside light sources. We use a Tobin Cinema machine for transferring 16mm film.

For 8mm film we are proud to be using the FlashScan HD, designed and built in Germany my MWA Nova. The FlashScan takes transfers to a totally new level and moves away from using modified and so called updated projector technology.

The basis of a stable and precise transfer is a stable and precise movement of the film through the film deck or gate. In the days when cine film was projected the movement of the film was controlled by a toothed wheel/sprockets and a claw that pulled the film through the gate frame by frame. The vast majority of machines built for transferring cine to video and DVD, over the years, have still relied on this technology. Indeed our Tobin 16mm machine uses a robust version of this technology.

The FlashScan HD, after years of development and experience in the transfer of larger formats enables a radically new approach.

Your film is transported by a rubber coated capstan wheel driven by an extremely precise stepper motor that is in turn controlled by a laser which detects the sprocket holes in your film. As the film passes through the gate a flashing light source exposes each frame to a rapid burst of red light, then green and finally blue. All at a speed invisible to the human eye. By using individual bursts of each colour we can achieve superior colour from the dye layers with in your film. The light source is also scatter diffused which helps disguise any minor scratches on the film. Finally the images produced are captured by a camera which has a true native resolution of 1280x720(720p50) The output is then digitized and recorded on to our computer hard drives as large high quality AVi files ready for compression to DVD or BluRay. Should you wish we can also supply you with these files.

The whole process and operation of the machine is controlled by computer.

Who will handle my film?

Some would say that the most important factor when choosing who to trust your films to are the people. Transferring cine film requires a blend of technical skills, artistry and understanding of the customers needs. Don't be fooled by the statistics some people quote. For example.. Some newer companies will tell you they have transferred half a million feet of film. In reality this equates to around 650 hrs of film. Our technicians are working each day and they transfer this much film, and more, every month.

The first step when your film arrives is a visual check of your materials. Next your films are sorted in to any specified running order and one of our technicians will begin the process of inspecting the films and if you have supplied a number of small spools, splicing them in to larger reels on which we will return your films.

Cleaning your film

Most cine film is in surprisingly good condition and only needs dusting with compressed air during the transfer. Other cleaning methods can actually do more harm than good. Several companies offer a cleaning service which involves wiping with swabs soaked in isopropyl alcohol. This will lift the dirt but will also dry the film making it more brittle and if the dirt builds up on the swab it will scratch the film.

What do I do with my film after it's been transferred?

We strongly recommend that you keep your film after the transfer. Box it up and pop it back under the stairs or in the loft. Your DVD or VHS tape could get lost or damaged.