

Federation of Victorian Film Societies Inc

INFORMATION SHEET 07 Version 4

THE DVD SOCIETY

With the introduction of the DVD into the marketplace and the availability of “moderately priced” video projectors of reasonable quality, DVDs have come of age in the film society world. Projectors are now bright enough and of reasonable quality to give a good image on a big screen. A 4 - 5 metre wide image is quite achievable from most good video projectors.

Many diehard film fanatics state they like the sound, feel and smell of celluloid travelling through the projector. That may be so, but the DVD enthusiast answers with their desire to show good “art-house” films, generally not now available on 16mm, in the manner intended by the director - ie on a large screen, in the correct ratio and with stereo or Dolby 5+1 sound when originally released that way.

That is not to say DVDs are perfect reproduction in every case. While film has the tendency to colour-fade, to get scratched, collect dirt on the image and become unstable in the gate (image jitter due to sprocket damage) DVDs can sometimes be difficult to play (if poorly manufactured), they have a regional marketing restriction and are liable to damage through surface scratches or fingerprints.

Rather than just create lines on the image, a dirty or damaged DVD may skip or cease playing altogether. Because the majority of DVDs are copied from an original 35mm (usually) film, there are flaws that can be introduced in the copy process. A poorly copied DVD may have bad colour reproduction or show video “artefacts” (ie lines or interference). The occurrence of poor DVDs from the regular distributors is rare however. It is generally only the “Pirate” copies that apart from being illegal, are often poorly made.

Even 16mm film can suffer from poor manufacture. They are generally copied from the cinema released 35mm film and may suffer from colour or brightness loss in the reduction to 16mm film and have only a mono soundtrack.

The sound reproduction from DVDs is generally excellent. When the original multi-track soundtrack of the cinema-released movie is combined into the one mono soundtrack of the typical 16mm film the correct sound balance may be lost. When reproduced for DVD release the 2 or 6 channels of Dolby sound are retained in digital format, ensuring excellent reproduction.

Apart from perceived quality of picture and sound, the major reason some film societies have moved to DVD is the improved availability of titles. Virtually all films released in cinemas in Australia are available very soon after, on DVD, while only the most popular may be released in 16mm. The introduction of the ACOFS scheme for paying screening rights to the distributors at reasonable rates has made DVD projection both legal and easier.

New equipment is coming out every day and prices are dropping rapidly, so specific recommendations on hardware will be out of date almost immediately.

The DVD Player

The more expensive players don't seem to play any better or more reliably than the cheap \$50 ones, although they do have more features. Just ensure it will play DVDs from all regions and provide the outputs you need such as digital 5+1 audio and S-Video. S-Video is now being superseded by the newer digital HDMI format connection. A separate video output is useful if you require a monitor, and separate stereo audio outputs are necessary if you intend to attach wireless headphones or stereo amp. If you wish to play CDs you will have to play these in a DVD player, because if you are using a 5+1 speaker system, you will be using a digital audio connection and you will not be able to connect a CD player which does not usually have such an output. Blu-ray players are now becoming inexpensive, and will generally play standard DVDs, but their output is generally HDMI (digital) and better suited to connecting to a high definition Video projector.

Another feasible option is a standard DVD player with "upscaling", which means the DVD signal is upgraded to be nearly equivalent to the 1080 full high definition standard. Output will be HDMI and is suited to a high definition projector.

The Audio

The minimum (Although adequate) audio system would be a cheap stereo amp feeding 2 main speakers (but don't forget to "downmix" the 5+1 sound to stereo in the player). It is much preferred to have a central "speech channel" as well, in which case a full 5+1 Dolby system can be justified. \$300 for the "receiver" and another \$800 for 5 speakers and subwoofer should be possible. Many movies don't make use of the rear "surround sound" speakers although the DVDs are marked as "5+1" Dolby. You could easily omit the two rear speakers without significant loss – especially if it is necessary to set the speakers out every screening and have cables strung out across doorways.

The Projector

The video projector is the most expensive component - yet the one which is dropping in price the fastest – and is the most critical component.

- Resolution. There are many "native" resolutions on offer, SVGA (800x600), HD (1280x720), SXGA (1280x1024), but the greater resolution you can get, the better. The full High Definition system is 1080, either i (Interlaced) or p (progressive). Get a 1080p if you can afford one. In September 2011 a suitable unit might cost you under \$1,800.
- Ratio. Many movies are in widescreen (1.88:1) or at least 16:9. Most DVDs assume 16:9, so ensure the projector handles 16:9 at high quality. The "standard" ratio movie image is 4:3. High Definition will provide you with the full 16:9 image.
- True high definition is 1920 x 1080 pixels, which is widescreen with 16:9 aspect ratio. This can be either interlaced or progressive scan, (1080i or 1080p respectively). Interlaced is an older technology to match existing systems. Always use 1920 x 1080p if possible.
- A high resolution projector will achieve best results with a high definition player (Blu-ray) and HDMI cable. Blu-ray players are often capable of "upscaling" and a normal DVD played on such a setup should give a resolution much better than even an SXGA system. High definition equipment is, not surprisingly, more expensive than lower resolution, although the gap is narrowing.
- Digital projectors used in commercial cinemas are often quoted as 2K or 4K resolution, the latter resulting in an image of similar quality to 35mm film, but the cost would be prohibitive for most film societies.

- Brightness. Depends on your desired screen size and whether you intend to screen outdoors. As most film societies screen in a darkened room 1,200 ANSI Lumens should be enough for most situations.
- Contrast. The greater the better, especially when there is ambient light around, but 1500:1 should be adequate for most situations.
- Lamp cost and life. Some are expensive, but life-spans are often up to 2,000 hours or more. Some projectors have an “economy” setting which will prolong the lamp life, if you don’t need full brightness.
- LCD or DLP?. Each has its own drawbacks. LCD (Liquid Crystal Display) can suffer the so-called “flyscreen” effect of small gaps between the pixels, but the use of multi-LCD panels has reduced this. DLP (Digital Light Processing) projectors can have a different problem – a flicker effect – caused by the colour wheel running at 2 x speed but most now run at a preferred 4 x speed, which minimises the problem.
- Inputs. Should have S-Video as a minimum, although this format is now obsolete, being replaced by the digital HDMI. Component video may be better but takes longer to set up each time, with greater possibility of error. High definition systems will use HDMI. (High Definition Media Interface)
- Noise. Check that the fan noise is low.
- Placement. Most projectors are designed for projecting from the centre of the room so don’t expect to be able to project from your old projection box unless you pay more for a longer lens. Even so, having the operator in the audience has the advantage that he can always get the focus and sound right – Correct?
- Running cost. This may involve regular cleaning to remove dust from the optical path and the rare cost of replacing a globe. (May be \$300 - \$800). However, over the lifetime of 2’000 hours for a typical globe, this represents a running cost of under 50c per hour and almost 1’000 screenings – a “lifetime” for most film societies.

A reasonable budget for a projector capable of filling a 4 metre wide screen might be \$2000 depending on resolution and brightness.

Australian copyright law states that no DVD may be screened in public unless the copyright owner has given permission. For DVDs owned by a film society, prior permission should be sought from the copyright owner (usually the Australian distributor marked on the DVD cover) and an appropriate fee paid. This screening rights agreement specifically excludes DVDs hired from a retail DVD store. Some DVD libraries such as Roadshow and the NTLC at the NFSA include the cost of the ‘Non-theatrical’ screening rights in the rental fee without needing to pay an extra rights fee. ACMI is not one of these libraries however.

One or Two (or more) DVD players?

In the days of 16mm film projection members often used two projectors to make reel changes efficient and unnoticed. With DVD projection, there is no need to change “reels” part way through a movie, but there may be good reason to have a second player anyway.

- Every so often a DVD may not play in a given player. This may be due to poor manufacture, tolerance limits or just too many scratches. A second player (of a different make) may be able to screen that DVD without problems.
- If the society wishes to play short films (yes, some are available on DVD) as we used to with 16mm films, it is more professional to have the second DVD cued ready to play on the second player, rather than wait for (or worse, watch) the extended run-in with advertising and copyright warning, and then the menu that appears on most DVDs.

- With a second player at your disposal it is then easy to run trailers of upcoming features, again with no delay when changing to the second (or third) player.

There are implications though. Having a second player means there is a need to switch between players (sound and video), cue the second DVD on a small screen, and switch the monitor between the players. A recommendation for the small screen is a bargain priced colour LCD monitor from a car DVD setup, at around \$150.

Note that many video projectors require placing relatively close to the screen and may need to be in the centre of the room, level with the bottom of the screen. This probably means that the DVD players and the operator need to be there also. The implication is that the operator will therefore be in darkness, the monitor will need to be shielded from view or turned off once the movie starts, cables will need to be run across the floor and the amplifier will need to be either alongside the projector or somewhere where the volume can be remotely controlled yet cabling to all the speakers is minimised. The seating behind the operator may be obstructed also.

The one big advantage with the operator being in the room with the audience is that there is no need for anyone to keep running back to the projection box to say “fix the focus” or “check the volume” etc

Blu-ray

Many, but not all, film titles are becoming available on the higher resolution Blu-ray disks, but they are generally up to 30% more expensive, if available. But never fear because many Blu-ray players (also later DVD players) are capable of “upscaling” , ie playing a normal DVD and producing a signal compatible with your high definition projector, with an excellent result – although not as good as true high definition.

With so much equipment needing to be connected together for every screening the possibility of overlooking something is quite high. Film societies have solved the problem by installing all players, monitor and changeover switches into a plastic “storage” box where they are carted away and stored between screenings, permanently connected. All that is needed to set up is to connect the projector, amplifier, speakers and power.

Many film societies now screen regularly from DVDs and their wealth of knowledge and ideas is increasing continuously. If you need to talk to one of them please contact the secretary at admin@fvfs.org.au

