onsumer Quality

Consumer quality video output can be achieved by using a low cost converter box (cost: approximately $300 - $700), available from many manufacturers, or directly from the composite or S-Video output of a video card. In almost all cases, a QuickTime movie, slide show, or MacroMind Director movie can be recorded in real time to VHS, S-VHS, or Hi8 tape. The output quality of the converter boxes or video cards is sufficient for titling home videos and other projects --- for personal use.

Industrial Quality

Industrial quality video output is achieved with a low cost scan converter, such as the Mediator from VideoLogic, the 9101 from Chromatek, etc. (cost: approximately $1,500 - $4,000). Some converters are able to switch between underscan and overscan, have flicker elimination and other features. These converters produce a medium quality signal most appropriate for industrial productions. A primary draw back of these units is that, in most cases, they can not be synchronized or timed with the other video gear. The composite or S-Video output of TrueVision's NuVista cards can be considered industrial quality. The signal is analog encoded, but the encoder (which is built onto the card), has no flicker elimination, comb or notch filters, nor image enhancing circuitry. The composite and S-Video outputs of the NuVista cards do NOT produce a broadcast quality signal.

Broadcast Quality

A broadcast quality signal can be achieved in two ways. One is to take the RGB output of a NuVista, Intelligent Resources Video Explorer, or similar card and feed it through an encoder. The driver of the video card should be set to interlaced. Encoders convert the analog RGB signal digitally into a composite, S-Video, and, in some cases, a component video signal. Most encoders have image enhancing circuitry and filters built in, but they lack flicker elimination and the ability to resize the output video. Therefore, graphics and animations must be produced carefully to conform to the necessary screen dimensions. Encoders are priced between $2,000 and $10,000 and it is fair to say, you get what you pay for. Several companies, including Faroudja, manufacture encoders which output excellent broadcast

quality signals.

The other method is to use a scan down converter, a device which will accept interlaced and non-interlaced RGB signals from a video card. Most scan down converters have built-in image filtering techniques, enhancing circuitry, flicker elimination, and the ability to switch from underscan to overscan. Some high end models allow the user to resize and position the image anywhere on the video screen, or zoom into a graphic and enlarge a section of it to full video screen. Scan down converters can produce the finest video picture in composite, S-Video, or component output. Again, you get what you pay for, and prices range from $10,000 to $25,000.