

## Macintosh Display Card 8/24: NTSC Video Encoding

Revised: 6/18/92 Security: Everyone

Macintosh Display Card 8/24: NTSC Video Encoding

Article Created: 5 July 1990 Article Last Reviewed: 9 June 1992 Article Last Updated:

TOPIC -----

I am very interested in getting a decent video signal from Macintosh II systems. I'm interested in Apple's Display Card 8.24 because of the convolution filter that (as far as I know) has no equivalent in third-party products.

Will the Display Card 8.24 ship with a CDEV like the Macintosh II video card utility to step the board down to interlaced NTSC scan rates? If not, how can I get such a utility/application?

Currently, I'm using a Truevision VIDI/O box to do the RGB encoding. Has anyone tried the Truevision product with the Display Card 8/24?

DISCUSSION -----

The Display Cards 8.24 and 8.24 GC do not use software for switching to the NTSC interlaced mode. To put the Display Card 8.24 GC into the NTSC mode, a properly configured cable is all that is required. For more information, search under "NTSC output without converter".

To acquire a color NTSC signal from any Apple Macintosh display card, an RGB-to-NTSC converter will be required.

RasterOps and Truevision both have RGB-to-NTSC converters. RasterOps' Video Expander and Truevision's VIDI/O Box accept the RS-170-A output of the Display Card 8/24 and 8/24 GC and generate a full color NTSC interlaced video signal. Both of these interface boxes also provide S-Video (also known as Y/C component video) output via the standard 4-pin mini-DIN connector. S-Video connections are used by S-VHS, HiBand 8mm, and ED Beta video devices.

## ..TIL05859-Macintosh\_Display\_Card\_8-24-NTSC\_Video\_Encoding\_(TA43998).pdf

Another device for RGB-to-NTSC conversion is ComputerVideo's Video NTSC Encoder. This was designed for the older Macintosh video card; however, it should work with the new display cards when the correct cable is used (see above).

For cable requirements for these interface devices, please check with the appropriate interface manufacturer.

For 8-bit video, Apple's convolution provides one of the finest methods for eliminating the single-pixel flicker that NTSC produces. When using 24-bit color, a different approach is required to address the NTSC flicker issue, since Apple convolution works only to the 8-bit level. Scan converters, like RGB/Videolink 600A, have been used for many years in the professional computer graphics companies to address NTSC flicker.

Scan converters would be used for television broadcast-quality 24-bit images. Scan converters not only convert the RGB signal to NTSC, they also eliminate the flicker associated with horizontal single-pixel lines and provide aspect-ratio conversion, color-bar generation, video transitions, freeze frame, and video mixing.

To locate a vendor's address and phone numbers, use the vendor name as a search string.

Copyright 1990 Apple Computer, Inc.

Tech Info Library Article Number: 5859