### AlphaPaint

### R. Shamms Mortier

What is older than the hills and twice as overgrown with time? Give up? Why it's ToasterPaint, of course. The new ToasterPaint (that comes with the 4.0 software and which may actually be out when you read this) promises to be a hundred times better than the older version. But my advance scouts tell me that the competition, AlphaPaint from InnoVision Technology, is the better of the two. As I'm writing this there is no copy of ToasterPaint 4.0 in my personal hands, so all I can attest to is the power and versatility of AlphaPaint, which I will now elaborate on.

## "A" is for Alpha

There are two main types of paint programs for computers. One might be described as DTP software, meant for desktop publishing and printed or slide copy as the final target. The second, of which AlphaPaint is a prime example, has output targeted to video. AlphaPaint was designed to replace the painting program, ToasterPaint, that comes with the NewTek Video Toaster, a miraculous all around video tool originally developed on and for the Amiga.

What makes video paint programs really different from their DTP cousins is that often the images designed with them are meant to be combined with a live video feed, so that there are areas within the video graphic that have to be "told" to allow the video signal to show through, areas that are designed to be transparent. These areas can differ from the other areas of the graphic in either a "hard-edged" or a "soft-edged" fashion. The whole graphic can even be designed to be transparent to differing levels for the video feed. It is common for a paint program these days to be known as a "32 bit" paint program. This means that there are 24 bitplanes (over 16,000,000 million colors) for painting and an 8 bitplane (256 levels of grayscale or "luma" information) "Alpha channel". The Video Toaster is a video tool, so it accepts Alpha channel information. The "Alpha" in "AlphaPaint" tells us immediately that we can work on and manipulate a full Alpha channel in addition to the other attributes of the 24 bit paint program. All of the graphics that are generated by AlphaPaint, both the 24 bit color program and the additional Alpha channel, appear on the Toaster's DV1 screen, the same screen used to address video effects. This is a marriage made in digital heaven.

When creating the design of the Alpha channel, full black is 100% transparent and full white is 100% opaque. Anything in between has a varying degree of transparency,.. the more "black" the more transparent. You can design an Alpha channel graphic with any paint program that outputs a gray level picture. The advantage of working with AlphaPaint when doing this is that you can see the results of your work (how it addresses the video signal) immediately. Creating soft-edged graphics that blend seamlessly with the video signal has never been so easy, and because AlphaPaint's Alpha channel is open to all of the extensive painting tools that the 24 bit part of the painting program contains, Alpha channel painting has never before been possible at this high professional level.

## A Palette Like No Other

One of the most unique features of AlphaPaint is its palette. Not only does it contain wells for user selectable colors, but a range of specific fills. Usually, you have to enter a separate part of a paint program in order to access

gradient ranged fills or radial fills, but AlphaPaint makes everything accessible from one palette. In addition to colors, the AlphaPaint palette has wells dedicated to various color gradient fills (over 200) making the use of separate gradient requesters unnecessary. It may take a little getting used to for the experienced user, but in the end the application of color spreads and radial fills accessed in this manner leads to easier and faster operation. All of the colors in any of the fills may be changed to user specifications, and the whole business reminds me of how a similar feat is accomplished in another InnoVision product: Broadcast Titler.

AlphaPaint brings true 24-bit plus Alpha Channel painting to the Toaster user, avoiding the pitfalls of ToasterPaint. With AlphaPaint, you paint directly on the composite Toaster screen, so what you see is absolutely what you get. Save/Load paths are remembered, and large (even screen size) brushes don't choke the system. Though there is a limited brush manipulation list at this time ("negative, oil paint, and sharpen/blur), Innovision is in the process of developing a separate disk of additional manipulation tools. Most numeric input is aided by the use of sliders, with numeric values displayed next to the slide bar. Multiple undo and redo functions also distinguish AlphaPaint from ToasterPaint. There is even a special "panic" MacroKey (F1) that can be accessed at any time to reset all but the palette settings. A Wealth of Pens and Brushes

AlphaPaint allows the electronic artist to write to the screen in two ways. The first is called "pen mode", and it allows you to paint with a brush up to 64 pixels wide, which beats the ToasterPaint record by a long shot. The unique ways that AlphaPaint alters standard pen mode interactions includes allowing the user to adjust the pen size and the "feathering" (the blending of the stroke's edges into the background) with a variety of interactive sliders on the main menu. In addition, any pen can be rotated interactively for even more variety. Pens also respond to variable transparency settings in real time, giving you instant feedback (especially useful in Alpha channel work). Multiple undo/redo operations assure you of getting just the effect that's needed without any punishment exacted for exploring and experimenting. A user variable zoom mode aids the drawing process, allowing you to get as close as necessary to retouch any anomalies.

As "Pen Mode" is selected with a pen shaped icon, so "Brush Mode" is incorporated by a brush shaped one. Every detail of making the program's operation more intuitive has been incorporated by InnoVision. Brush mode is used when you import a brush from storage or need to use a selected area of the screen as a painting element. Any brush can be targeted for an outline, shadow, or glow, in addition to feathering the edge so that it sits softly upon the background. Future versions of the program will have expanded effects libraries for altering brushes. Sensitive Font Control and Manipulation

This is another area in which AlphaPaint excels. No other paint program on the Amiga addresses fonts with the options included in this first release of AlphaPaint, though it's reported that ToasterPaint 4 will also address some of these operations. To begin with, AlphaPaint can accept three of the most useful Toaster font file formats: Toaster Fonts, ColorFonts, and PostScript. Toaster Fonts come in banks and were the fonts included with the Toaster. They are not

nearly as adjustable and resizable as PostScript fonts. ColorFonts constitute a registered Amiga font family that come already filled with various textures, from gold to marble to clouds and fire. Toaster 3.0 added an extensive library of PostScript fonts which are resizable and look good at any size. AlphaPaint allows the use of any of these options. It really shines when PostScript fonts are chosen however, because it allows the user to wrap PostScripted text in adjustable oval/circular arrangements, a admittedly terrifying challenge to accomplish by hand. A full preview of the circular action is presented in a dedicated preview area of the font requester, as well as a "rotation adjustment" control. If you need to justify your purchase of this software, this attribute alone may be reason enough.

## And Much More

Video artists are often called upon to enclose graphics in a linear frame in order to accentuate visibility against a busy background. AlphaPaint goes one better by adding a beveled appearance to a graphic frame (the frame size is adjustable via a slider) and adding adjustable glows as well. Both of these options are unique to AlphaPaint alone. There is also an "Onion Skin" option that allows the user to see a ghosted image of the buffer screen so that "painting thru" to another image can be accomplished with the expected results.

# A Winner for Toaster Painters

The software comes with a thick indexed thirty chapter manual in loose leaf three-ring binder format, making it easy to read and work through. There are 14 deep tutorials, a reference section, and a thorough index (hooray!). I have used AlphaPaint in the creation of a series of screens for an instructional video, and find new uses for it every day. NBC, a stronghold of Amiga graphics and animation facilities, has ordered a shipment of AlphaPaint packages for its production department, and the other networks and broadcasting outlets that are Toasted are expected to follow suit. Like all InnoVision's wares, a dedicated work through of the manual should allow most users to store it away, relying instead upon their intuitive use of the software from that point forward. The software includes support for a graphics tablet by addressing such issues as pen pressure and other options. Instead of running away from ToasterPaint towards other wares to create needed graphics screens for the Toaster, AlphaPaint allows the Toaster user to remain within the Toaster environment while creating high quality professional results. I highly recommend this software as a replacement for ToasterPaint.

AlphaPaint MSLP: \$699.95 Innovision Technology 1933 Davis Street / Suite 238 San Leandro, CA 94577 (510) 638-0800

Captions to Figures:

Figure 1. This composite picture shows some of AlphaPaint's image processing powers.

Figure 2. As far as manipulating blocks of type, AlphaPaint is a very strong tool.

Figure 3. AlphaPaint can treat imported graphic brushes in a variety of ways.

Figure 4. Here are just a few of the fill effects found in AlphaPaint's palette requester.

Figure 5. An overview showing AlphaPaint's Palette and Font menu.

Figure 6. The Brush and Play menus.

Figure 7. The Main menu, gateway to AlphaPaint's tool hierarchy.