DIGIVIEW

GOLD

Hardware Manual

NEWTEK

INCORPORATED

DIGI-VIEW GOLD
Hardware Manual
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Digi-View hardware by Tim Jenison
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Introduction

What is Digi-View Gold? Digi-View Gold is a combination of hardware and software that enables you to transfer very high quality color or monochrome images from a video camera to your Amiga computer. You can use Digi-View Gold to manipulate such images in a variety of ways. Once you have the image the way you like, it can be stored on disk, transferred to other programs, or even sent around the world to another Amiga using a modem.

Color images are captured using a color separation process which produces near photographic quality images on your Amiga screen. A color filter wheel (included with Digi-View Gold) is mounted in front of the video camera lens. Three pictures are taken, one through each of the red, green, and blue filters, during which time the subject must be stationary. The Digi-View 4.0 software then combines the separate color images into a lifelike, full color display in any of the Amiga's screen resolution modes.

Digi-View Gold is a powerful, easy to use system for bringing video images into your Amiga for a variety of applications. Digi-View Gold's image capture and processing capabilities make it an essential part of a complete Amiga graphics system. This manual will tell you how to set up your Digi-View Gold system, take you through some tutorials, and give you thorough information about the tools included in Digi-View Gold.

We hope you'll get a lot of use from your Digi-View Gold. Please write to us at NewTek and tell us what you're doing with Digi-View Gold; we'd like to hear from you — feedback from our users helps us create better products.

How To Use This Manual

If you are totally unfamiliar with the Amiga, we recommend that you read the Amiga User's Manual before using Digi-View Gold. If you're familiar with the Amiga, you should find Digi-View Gold quite easy to use. Generally, this manual assumes some familiarity with computers and the Amiga in particular.

If you're like most users, you want to get started right away. Read through the Getting Started section to find out how to install the Digi-View Gold hardware. Once you've done that, familiarize yourself with the Digi-View 4.0 software by reading the software manual. The Digitizing Tips in the Using Digi-View Gold section of the hardware manual is to help you get better quality images. Most of the controls in Digi-View Gold have obvious functions, so some experimentation will show you how they work.

If you want to approach Digi-View Gold more systematically, the manual is arranged so that you can work through it for a complete course in Digi-View Gold. The tutorial will guide you through the digitizing process, showing you the powerful features available in Digi-View Gold so you can achieve the best possible results.

Getting Started

Equipment Included
Your Digi-View Gold system consists of the following items:
Digi-View Gold hardware (the small black unit)
Color filter wheel (divided into clear, red, green, and blue quarters)
Color filter mounting bracket
Digi-View 4.0 software on one (1) 3.5" disk
Digi-View 4.0 software manual
Digi-View Gold hardware manual
Warranty card

Other equipment that you'll need:

Amiga computer with at least 512K of memory and 1 disk drive

Video camera (black & white recommended, but a color camera or camcorder may be used)

Fluorescent Lighting (you may use incandescent lighting with a color camera, but fluorescent is better)

Coaxial video cable (for connecting Digi-View Gold to the video camera; the cable must have an RCA jack for connecting to Digi-View Gold)

Standard F/F RS-232 gender changer (for Amiga 1000 only)

Recommended Equipment

The following equipment is not necessary to use Digi-View Gold but would make digitizing easier, faster, or better.

Digi-Droid (motorized filter wheel for Digi-View Gold)

Copy stand for your video camera (NewTek sells the CS-1L; see appendix A)

Base-Band Distribution Amp (so you can have Digi-View Gold and the monitor plugged into the camera at the same time)

NewTek offers a high-quality video camera, a copy stand, and the Digi-Droid automated filter wheel for sale; see Appendix A for details. Each of these items are discussed in greater detail in the following sections on hardware installation.

Hardware Installation

When you have all of the equipment ready, make sure that the power is off to your Amiga and to your video camera and then plug the Digi-View Gold unit into the parallel port. If you have a printer hooked up to your Amiga, it's probably plugged into this port, so you will either need to unplug it or use an RS-232 serial switchbox to hook both up at the same time. (NOTE:You must use a Female/Female RS-232 gender changer between the parallel port and Digi-View Gold if you have an Amiga 1000.) After Digi-View Gold is properly installed on the parallel port, plug one end of a coaxial video cable into the "Video In" jack on the Digi-View Gold unit, and plug the other end of the cable into the "output" jack on the video camera (you may need an adapter if the camera has a BNC jack instead of an RCA jack). The Digi-View Gold unit uses a standard RCA jack, as do most consumer cameras. Appropriate cables and adapters may be found at an electronics supply store, such as Radio Shack. Make sure you use video cable, not audio cable. Although the RCA jacks are the same on both cables, the video cable is made with 75-ohm coaxial cable, which is necessary for good video resolution.

Attach the color filter wheel to the video camera using the mounting bracket supplied. Most cameras have screw holes in the casing for a tripod mount, which you can use for the mounting bracket. Depending on the camera you're using, you may have to be more innovative in how you attach the mounting bracket — perhaps using tape or velcro. In any case, make sure that the color filter wheel is mounted such that the red, green, and blue filters can be positioned fully in front of the camera lens. Use the hole in the bracket that puts the filter as close as possible to the camera lens without actually touching the lens. Make sure the filter is clean by wiping it with a soft cotton cloth.
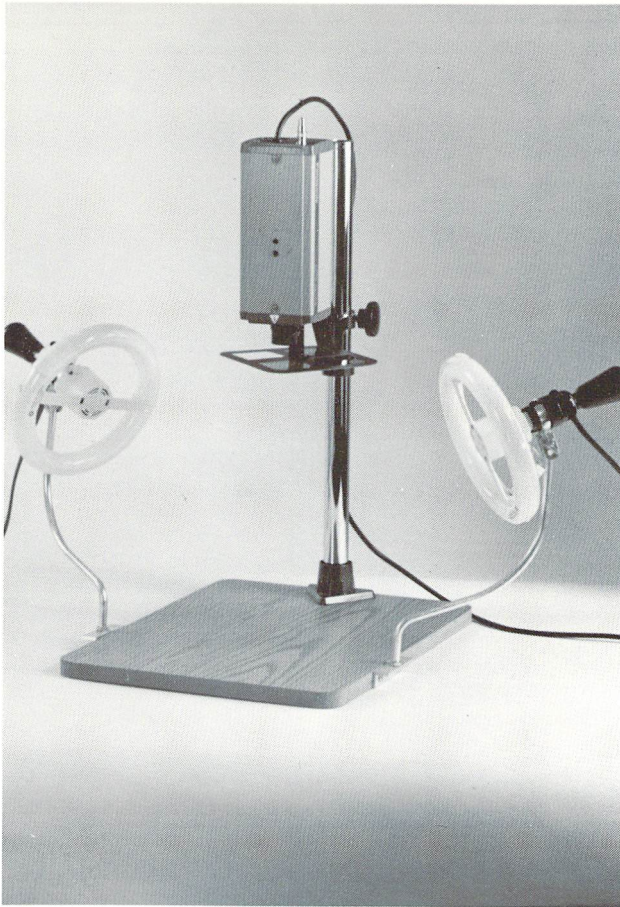
Camera Set-up

Set up the video camera so that it's pointing at the object you want to digitize and that the object is well-lit.

> **Note on Lighting**
> You must use fluorescent lighting with Digi-View Gold if you use a black and white camera. Fluorescent lighting will give you even, glare-free illumination and does not produce any infrared light which will affect color accuracy. There are several kinds of fluorescent lighting that attach directly to the light sockets of the CS-1L copy stand (see photo), or any other incandescent light socket. A good bet is a **General Electric FC8T9-CW** or equivalent. This is an 8 inch diameter circular, cool white fluorescent bulb and should be readily available at local hardware stores.
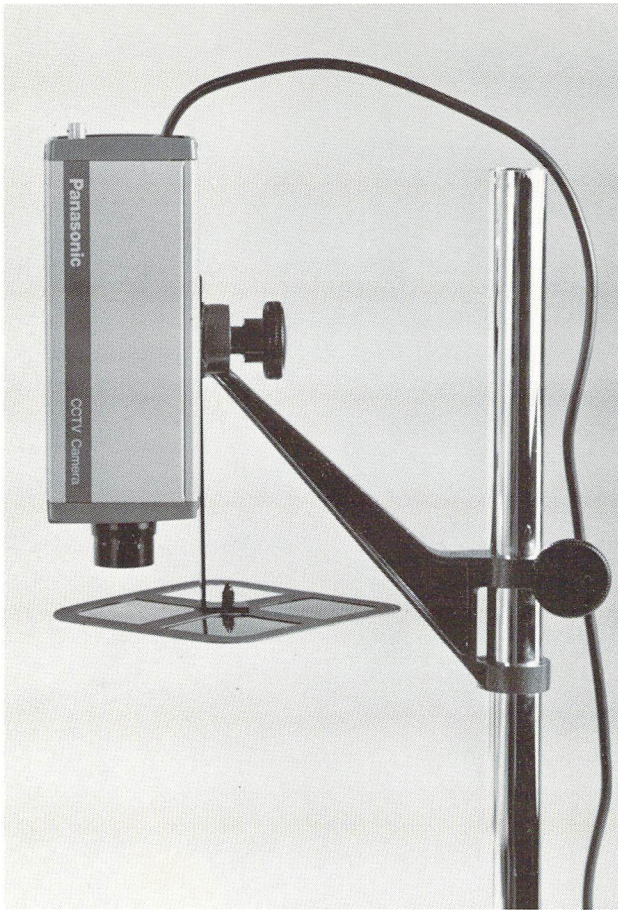
A tripod or a copy stand is very useful for this, though the innovative user can find ways to prop up the camera without one. After you've tried propping up the camera a few times, you'll see why a tripod or a copy stand is much handier. (NewTek sells a copy stand for use with Digi-View; see Appendix A.) In any case, make sure your video camera is securely placed where it won't be subject to vibration during the digitizing process, and there is plenty of light on the subject. The filter wheel should be positioned securely in front of the camera lens, so that it can be rotated *without moving the camera!* (See photo for an illustration of a camera set-up using a Panasonic WV-1410 camera and NewTek's CS-1L copy stand.)

Before you digitize, you must focus the video camera on a subject. This subject can be a photograph, a painting, or an object. It's possible, though time consuming, to adjust the position and focus of the camera by repeatedly digitizing and viewing the image using the Digi-View Gold software. A more efficient approach is to watch the live video from the camera while adjusting it.
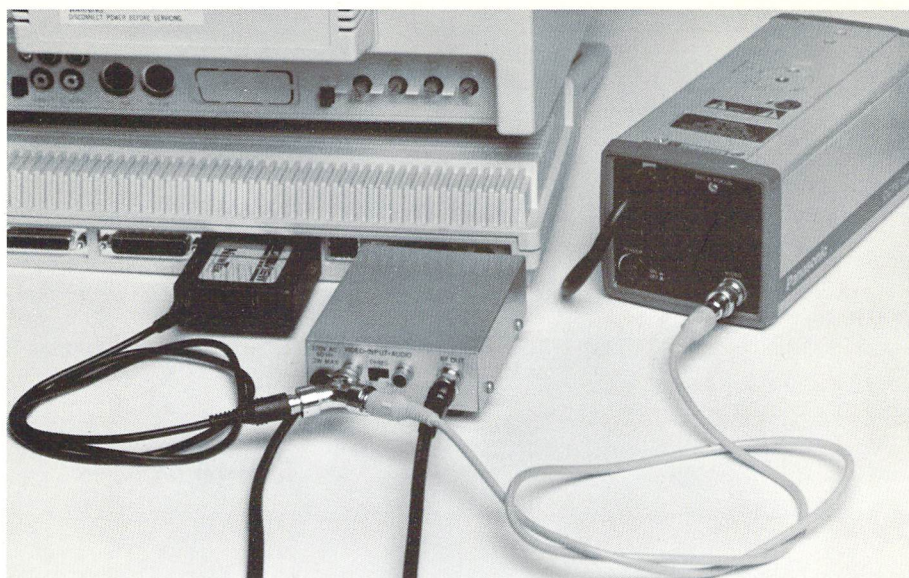
On the Amiga 1084 monitor, plug the video cable into the jack marked CVBS/L on the back of the monitor. Make sure the button next to that jack (marked CVBS/LCA) is pushed in. Then open the front panel on the monitor and push in the button marked "CVBS/RGB". You should see the video signal from the camera on your monitor (make sure the camera is turned on). To switch back to Digi-View Gold unplug the video cable from the back of the monitor and plug it into the Digi-View Gold unit, then push the switch on the front panel of the monitor (putting the switch into "RGB" mode). This should restore the Digi-View Gold picture to the monitor. If you are digitizing similar subjects, you may not need to readjust the camera between digitizing.
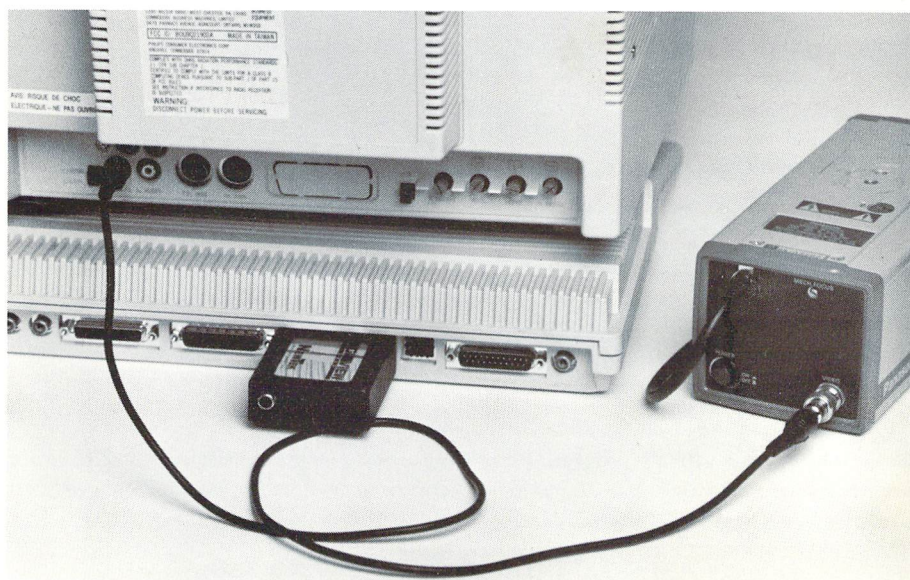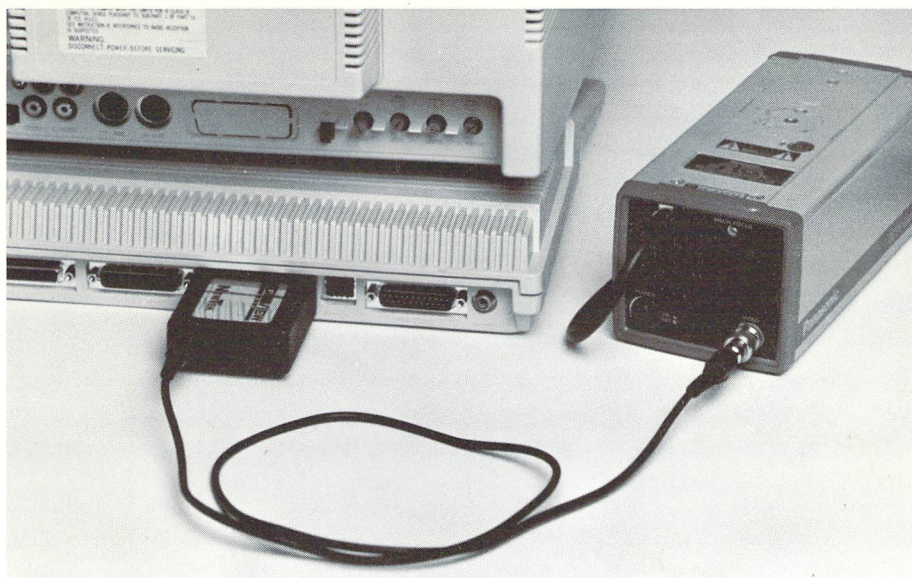
Some cameras (such as the Panasonic WV-1410) have a small screwdriver adjustment on the rear panel marked "mech focus". Turning this screw slides the image tube inside the camera nearer to or farther from the lens. This gives you the capability to focus much closer than using the lens ring alone. For example, let's say you want to digitize a wallet-size photograph. While watching the live monitor, move the camera toward the photo until it is large enough to fill the screen. It should look very fuzzy at this point. Now use a small screwdriver to adjust the mechanical focus until the image is sharp. If you're using a camcorder, there may be a macro lens feature which will let you focus on a very close subject.

You should always use your lens cap or a piece of black paper on top of the filter wheel when the camera is not in use, or you may damage the tube. Permanent images may become engraved on it in this fashion.

If you have a color camera and a video processor, use the video processor to turn off the color information from the camera for better digitizing results.

Monitor Set-up

It's important to set up your monitor correctly; this ensures that your digitized images look right on other monitors. Turn up the Brightness control until you see a "black" area on the screen as a bright gray (any video image will do for this adjustment, as long as there's black in the picture). Then turn down the Brightness control until the "grayness" just disappears. Your monitor is now set properly. The contrast control should be adjusted according to room lighting for the best picture.

Digi-Droid Set-up

If you have a Digi-Droid motorized filter wheel, follow the directions included with Digi-Droid to set up your system. Use the Digi-Droid filter wheel instead of the filter wheel provided with Digi-View Gold. The Digi-Droid plugs into the second mouse port on your Amiga, and Digi-View's software recognizes the presence of Digi-Droid. When your Digi-Droid is plugged in and you start up the Digi-View Gold software, Digi–View Gold will use the Digi-Droid to automatically turn the filter wheel when you digitize, making the digitizing process fast, easy, and automatic. More information on Digi-Droid is in the Reference section under the Digitize and Controls menus.

Software Installation

Please read the software manual for installation and description information.

Tutorial

Experience is an important factor in getting high quality digitized images. In other words, the best way to learn Digi-View 4.0 is by doing, so this tutorial will take you through digitizing and adjusting a picture. First, we'll go through the digitizing process, then we'll explore each of the various controls available in Digi–View 4.0, starting with the Camera controls, then the Color controls and finally the Palette controls. Finally, we'll review Digi-View Gold's input and output capabilities. For purposes of this Tutorial, we'll assume you have a basic Amiga system, a Panasonic WV-1410 camera, and our CS-1 copy stand (other configurations should be similar enough for the purposes of this Tutorial). If you have any trouble at any part during this Tutorial, you may want to refer to section on troubleshooting at the end of this manual.

Digitizing

First, let's look at the Test Image #1 on your Digi-View Gold disk. This will be the object of your tutorial — to get an image as close as possible to this sample. Make sure your hardware and software are installed as described in the Getting Started section. Start your Amiga and your Digi-View 4.0 software as described in the Software Installation procedure of the software manual. When you get to the opening Digi-View 4.0 screen, use the default settings and click in the "Ok" box, and Digi-View Gold will come up on your screen in a few seconds. If your video camera is not turned on and the cable plugged into your Digi-View Gold unit, you'll see a requester that says "No Video Signal Present". Click "Cancel" and you'll see a blank screen; if you press the right mouse button, the Digi-View Gold menus should appear at the top of the screen. If you do get this requester, make sure your Digi-View Gold is properly plugged in, the camera is plugged into the Digi–View Gold and turned on, and the lens cap is off.

Pull down Load from the Project menu . The Load Requester will appear, showing all of the files on the Digi-View Gold disk, The bar to the right of the file names may be moved by clicking on it and dragging it to reveal more names. Click on the file named "Test Image #1". The file name will appear in the file window. Click on Load and the file will appear on the screen in a few moments. This is the "target" for our Tutorial; by the time we're finished, you'll have an image that looks just like that on the screen.

Take the Digi-View Gold box and place it sideways in front of your video camera. (We'll use this box as our test subject as we go through the various controls that Digi-View Gold offers.) Plug the video cable from the camera into your monitor (or whatever set-up you're using to view the picture) so that you can see the live

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video output from the camera. (See the directions under Monitor Set-up for viewing the image on your Amiga monitor.) If you're using our CS-1 copy stand and Panasonic WV1410 camera, adjust the copy stand so that the camera is about 18" from the Digi-View Gold box. Orient the box so that the title on the front of the box is on the left-hand side of your monitor, the box just barely fills the entire picture top and bottom, and you can see the NewTek logo on the right-hand edge of your screen (this means that the top of the box is missing on the left-hand side of the screen). We've filled the entire screen with the box so that we don't get any of the background in the picture.

Now adjust the camera focus so that the letters are clear and sharp. If you are using the Panasonic WV1410 camera, you may need to adjust the Mech Focus screw on the back of the camera to bring the image into focus. Once the focus is correct, it's time to check the lighting. Is the picture very dark or have dim areas? Are there any bright spots? If so, you need to adjust the lighting. Move your lights back and forth and tilt them at different angles, observing the effects on the picture. You'll see the bright and dark spots move as you adjust the lights. Adjust the lights so that there are no bright "washed out" spots in the picture, and the dark areas are eliminated (or kept to the very corners of the image). See the section on Using Digi-View Gold for more information about lighting.

You should now have the Digi-View Gold box properly framed, focussed, and lit. If you're satisfied that is the case, take the video cable that comes from the camera and unplug it from your monitor and into the Digi–View Gold unit. Switch the monitor back to your computer's output (the Digi-View Gold screen), where you should see your mouse pointer. Now let's digitize the image. Position the red filter in front of the camera lens (make sure that only red is in front of the lens). Now pull down Red from the Digitize menu and watch as the red component of the picture is digitized. Be careful not to move the Digi-View Gold box or the camera during this process. You'll notice that the mouse pointer becomes a "WAIT" sign while digitizing is going on. When the pointer reappears, you're ready to digitize the green component of the picture. Move the green filter in front of the camera lens and select Green from the Digitize menu. When that's finished, put the blue filter in front of the lens and select Blue from the Digitize menu. Finally, when the blue component is digitized, select Display from the Controls menu, and the full 4096 color picture will be displayed on the screen. (NOTE: if you have a Digi-Droid installed, instead of the above procedure simply pull down Auto from the Digitize menu, and the picture will be automatically digitized and displayed.)

The image you have at this point may need some adjustment. If you're using a color camera, the image may look somewhat jaggy. See the Camera Adjustments section below for better results.

Camera Adjustments

Go to the Controls menu and pull down Camera. The Camera controls will appear. These settings affect the position and size of the video image received from the camera, as well as the time it takes to scan an image. If you're using a color camera, select the slow scan and redigitize the image. You'll see a marked improvement in the image quality. If you have some wavy lines in the image, use the Tracking and/or Width control to eliminate them. Digitize Red (no need to digitize all colors just to adjust the Tracking control), repeating until you have moved the wavy lines off of the image.

The width control will stretch out or compress the image; moving the control to the right stretches the image, moving it to the left compresses it. The Position control moves the image area on the screen. Experiment with these controls to center the image of the Digi-View Gold box on the screen.

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Using the Color Controls

These controls are the heart of Digi-View Gold, giving you the power to manipulate the image in a variety of ways. First of all, we'll use the controls to get a sharp image with colors true to the original; then we'll try some of the special effects possible.

Pull down Color from the Control menu and the color controls will appear. You'll notice that along the top are 7 buttons: Line Art, B/W (black & white), 32 (for any number of colors from 2 to 32; see the Palette Controls), Hbrite (for 64 color display), 4096 (standard number of colors in HAM mode), and 4096+ (NewTek's Enhanced HAM mode) and Dynamic (Improved HiRes and HAM modes). See the software manual for further explanation of these modes. The 4096+ button is highlighted as the default setting. Click on 4096, then click Display. The cursor will say "WAIT", and then you'll notice a line running down the screen. Watch particularly the left hand edge where the letters are; you can see them becoming fuzzier as the line passes down the screen. Now call up the Color controls again. When adjusting these controls, it's a good idea to do all of your adjustments while in "4096" mode, since Digi-View Gold reprocesses the information faster this way. When you've got the colors where you want them, switch to "4096+" and re-display for the best results.

For this tutorial, the most important controls are the eight sliders that take up most of the color controls: Brightness, Contrast, Saturation, Red, Green, Blue, Sharpness and Noise Reduction. The red, green and blue sliders will adjust the hue of the image. Try each one of these sliders individually to see their effect, by setting the slider to plus or minus 10 and then clicking Display. You'll note that while most of those adjustments make the colors of the image move further away from the colors of the Digi-View Gold box, there is one that gets you closer. Set that slider and than adjust the other two color sliders, one at a time, to see if you get any closer to the Digi-View Gold box colors. This trial-and-error process will get you the most exact color, and you'll also begin to develop your eye for colors and what adjustments give you the desired results.

If the colors don't look bright enough, try boosting the saturation control, which will give you more intense shades of the colors onscreen. The sharpness control, when raised slightly, will make the letters on the image appear more crisp. If, on the other hand, you want a smoother appearance to the image, you would lower the sharpness control.

Using the Palette Controls

The Palette controls allow you to match the colors used in an image to a pre-existing picture. When you're working with other Amiga programs that use 32 or fewer colors, you may want digitize a series of pictures in the same palette. Or perhaps you want to use fewer colors in a picture than 32, to allow for some "extra" colors for titles. Or you may want to take up much less space on disk by saving an image in only 16 colors instead of 4096. The palette controls allow all of these options.

For the purposes of this tutorial, we'll remap the image we've digitized into 16 colors. Leave the settings in the color controls where they were at the end of the last tutorial. Click on "32" in the Mode section of the color controls, then click on "Palette" at the bottom of the color controls. This takes you to the Palette controls (you can also bring up the Palette controls using the Controls menu). You'll see a slider at the lower left of your screen that says "32 colors"; as you move it, notice that the number of colors changes to the right, and above a marker moves on the palette. Move the slider to "16". The default setting is "Make New Palette", so Digi–View Gold will construct the best palette it can to represent the image in only 16 colors. If you choose

"Freeze Palette", Digi-View Gold will use the palette shown to create the image. Click on "display", and in a moment you'll see the image displayed in 16 colors. You'll notice that Digi-View Gold uses a technique called "dithering" (mixing pixels of different colors) to produce the impression of more than 16 colors.

Input and Output

Now that you have a final image, it's time to save the image on a disk so that you can use it again. Go to the Project menu and pull down Save. A requester will appear. Clicking on "Devices" will list all the disk drives and other devices such as "DF0:" or "RAM:" regardless of the name of the disk in them. Click on the drive you wish to save the file on. Type the name you want to use for the file and then click OK. The picture will be saved under the name you've given. Later on, you can recall that image in another program such as Digi-Paint 3. See the software manual for more information about saving different file types.

Using Digi-View Gold

Tips On Digitizing

Lighting: The best lighting set-up for digitizing with Digi-View Gold is fluorescent lights on the CS-1L copy stand. There are several varieties of fluorescent lights that will plug directly into the light sockets on the CS-1L, and should be available at your local hardware store. When digitizing 3-D objects, you will sometimes need more light. If you use too much however, you may get distorted colors or see blue or yellow patches in the image. If you don't use enough light your image may turn out grainy. Always position your lighting to reduce the effects of glare on your image.

Motion: It is very important that both the camera and the object remain motionless during the digitizing process. Wavy lines or an out of focus look are a sure sign that something has moved. Make sure that the camera is fastened securely to its tripod or copy stand and be careful not to bump the camera when turning the filter wheel. The use of Digi-Droid greatly reduces the chances of motion affecting your image. NOTE: you can check to see if your digitizing set-up is moving during the digitizing process by half-way filling a glass with water and setting it where your subject usually rests. Watch carefully for any ripples caused by people walking by, etc.

Grain: Some cameras produce grainier pictures than others. Lowering the Sharpness control will reduce the grain. This is also useful in the 4096 color mode to reduce the "confetti". When using the 32 color mode, however, it's usually a good idea to RAISE the Sharpness control. Try setting it at about 36. This increases the dithering and smooths out the bands of color that sometimes appear in images with 32 or fewer colors. Low light conditions can also give your image a grainy look. In this case use the Slow Scan mode for better results.

Fewer than 32 colors: If you are digitizing a picture into 32 colors or less, try to have a background behind the subject that has as few colors as possible. This ensures that Digi-View Gold will use the best colors for the subject of the picture, and not "use up" too many colors in the duplication of a background. For instance, unless you really want a picture frame as part of your digitized picture, take the snapshot out of the frame before digitizing or adjust the camera so the frame is not in the image.

Random Sync: Some inexpensive black & white security cameras may produce what is called "random sync" or "random interlace". You can't really tell by looking at a live monitor whether you're getting 2:1 interlace or random sync. Unfortunately, Digi-View Gold and random sync just don't get along. Digi-View Gold will go ahead and digitize random sync video, but the result will exhibit a wavy or jagged quality throughout the entire picture, most apparent in horizontal lines or edges.

If you're in doubt about your camera's sync, plug it in and digitize a picture. If you get "the jaggies", it's probably random sync. Don't give up hope, though. Some cameras, such as the Panasonic WV-1410 have a switch inside to change from random sync to 2:1 interlace.

A problem related to the random sync jaggies can occur when a camera does have 2:1 interlace but does not meet the RS-170 standards. Using such a camera, you may get a narrow vertical stripe of jaggies in an otherwise normal picture. Use the Tracking control to correct this (as described in the software manual).

Special Effects

You can get some very interesting effects with Digi-View Gold by disregarding the advice about how to get the best picture. Play with the Color Control settings. Moving some of the sliders to maximum creates strange special effects. For instance, moving the Contrast slider to the top in black & white mode gives you either pure black or pure white, with no gray. In 32 color mode, you'll get only 8 colors.

Experiment with other variations. Try using the wrong color filters, or filters of other colors than provided. Change the subject instead of the filter between shots. Move the camera or the subject during the scan. Instant modern art!

One interesting special effect was discovered by an enterprising user. 3-D pictures can be made by using the Red and Blue digitizing functions at slightly different camera angles. The resulting image is then viewed through standard 3-D glasses or by looking through the red and blue sections of the color filter. If you want to try 3-D pictures, here's the procedure:

Aim the camera at some three dimensional object. Remove the filter wheel or select the clear filter. Use Blue Digitize, move the camera three or four inches to the right (keeping it squarely aimed at the object), and select Red Digitize. Use the Color Control to raise the Red and Blue sliders to maximum. You may also have to lower the Brightness slightly. Select 4096 display. View the resulting image with the blue filter over your left eye and the red filter over your right eye.

Applications

Digi-View Gold is the perfect way to create "rough sketches" of artwork. If you're having trouble getting a starting point for a work of art, digitize an object and import it into your paint program. If you're making a piece of commercial art for a client, you may find it useful to digitize a package or a group of objects for an ad layout. Then with an appropriate paint program such as Digi-Paint 3 (the 4096 color paint program from NewTek), you can add titles or other embellishments.

Thank you for purchasing Digi-View! The Amiga offers the potential for a new world of applications for digitized pictures. We know you'll find many new uses for Digi-View Gold and we hope you'll take the time to write to us and let us know how you're using our products. Enjoy!

Troubleshooting Questions and Answers

I am using the Panasonic WV-1410 camera, but I still seem to get the random sync jaggies. The WV-1410 has a random sync / 2:1 interlace switch which the factory presets to random sync. To make your WV-1410 2:1 interlace, simply remove the bottom cover (fastened with one screw at the front of the camera and one at the back) and flip the dip switch located on the left circuit board close to the video output jack from LL to INT. NOTE: ALWAYS UNPLUG YOUR CAMERA BEFORE OPENING IT !

I see a herringbone-type interference pattern in my digitized images. What causes this? The cause of this is usually a ground-loop. A ground-loop can occur when more than one of the components in your computer system are plugged into your house current with a grounded (three prong) plug. The computer is the only component that should be grounded, all other components, especially the camera, should be un-grounded by using a 3 to 2 prong adaptor on their power cords.

My Digi-View Gold images become stretched as they are digitized from left to right across the screen. For example, a circular object ends up looking like an egg on its side. What's wrong? This is usually a sign of problems in your parallel port. Specifically, the problem is in the 8520 CIA chip that controls the port. This chip is socketed for easy removal and can be replaced by any authorized Amiga dealer for about $20.00. NOTE: Your printer may function normally with a defective 8520, but a complex peripheral like Digi-View Gold will alert you to any problems right away.

Appendix A: Optional Equipment

NewTek sells several products that make digitizing with Digi-View easier and more professional. For more information about these products and NewTek Demo Reels, NewTek Times and "The Cool Friends of NewTek Club" write to us at : 115 W. Crane Street; Topeka, KS; 66603 or for orders only call (800) 843-8934, 9-6 central time Monday thru Friday.

Panasonic WV-1410 Camera: This camera features very high resolution (more than 550 lines), a durable vidicon tube which resists burn-in, and a mechanical focus adjustment for a full range of macro focusing. Convenient mounting holes for the filter wheel bracket and our CS-1L copy stand make this camera the most complete solution for digitizing needs. Lens and all necessary cables included. **$279.95**

CS-1L Copy Stand: The best way to mount your camera for digitizing flat subjects (like photographs). Our CS-1L copy stand gives you 2 fully adjustable lights holders and vertical mount with adjustable brackets for your camera. Set-up is easy and adjustments are a snap. **$74.95**

Digi-Droid: Automate your Digi-View system with Digi-Droid. This special computer controlled motor and filter wheel combination automatically drives your filter wheel while you capture the red, green and blue images. **$79.95**

Digi-Paint 3: The best-selling Amiga paint program. Digi-Paint 3 takes full advantage of the Amiga's HAM (Hold-And-Modify) mode giving you more advanced features than any other, including: Anti-aliased texture mapping, variable transparency, anti-aliased fonts, ARexx support and Super Bitmaps with Auto-Scrolling. AMIGAWORLD says,"Competitors may want to head back to the drawing board, because Digi–Paint 3 is hard to beat!". **$99.95**

One way to monitor the live video from your camera for easy focusing is with the Radio Shack (#15-1103) 1 X 3 Baseband Distribution Amp and the Amiga monitor. Plug the video camera into the video input jack on the amp and plug the monitor and the Digi-View into one video output jack each. Then simply switch the monitor between composite (to view the live video) and RGB (to see the digitized image).

Appendix B: Customer Service

You've just become one of the most important people in the world, a NewTek customer. Our technical support staff is on hand to answer your questions and assist you in any way possible. You may write or call us on our toll free help line. When you write please include your daytime phone number and the best hours to reach you. If appropriate please send an image on disk or a printout to illustrate your problem. When calling it's helpful if you're at your Amiga with Digi-View running. Our technician will try to duplicate the problem and give you an answer on the spot.

We'd like to hear from you even if you don't have any questions. Send us examples of your work and let us know how you're using Digi-View. We have dozens of Digi-View success stories posted in our office building. We look forward to hearing from you.

NewTek Digi-View Tech Support
115 West Crane Street
Topeka KS 66603

(800) 736-7617 Monday-Friday 8 a.m. - 7 p.m. Central Time

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant, to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.

- Increase the separation between the equipment and receiver.

- Connect the equipment into an outlet on a circut different from that to which the receiver is connected.

- Consult the dealer or an experienced radio, TV technician for help.

CAUTION: CHANGES OR MODIFICATIONS NOT EXPRESSLY APPROVED BY THE PARTY RESPONSIBLE FOR COMPLIANCE COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

NewTek
215 Southeast 8th st
Topeka KS 66603

ATTN: TECH SUPPORT

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