DIGITAL DIRECTIONS

Sue and Jack Drafahl

Agfa Forte Film Recorder

Editor's Note: Sue and Jack Drafahl operate a full-service commercial photo lab just outside Portland, Oregon. Services include aerial photography, studio and location photography, audio visual productions, computer graphics and stock photography. They are contributing editors to Petersen's Photographic, and specialize in photo lab procedures, as well as film and equipment testing on land and under water.

WHEN WE started our business almost 20 years ago, lecture slides and audio-visual productions played a very large role. We mainly made special effects, text slides, and bar and pie charts. Each slide required far too much time and effort, but our clients always went away satisfied.

That all changed about 10 years ago when the PC arrived on the scene and replaced many of the optical processes we had used before. We started with an APPLE II, and created our own software that would streak titles across the screen. The results were crude, but effective at the time. We were so impressed with the potential in what we could offer our clients, that we tried a variety of film recorders, each a step up in quality, until we found a film recorder that surpassed anything we could do in the lab—the Agfa Forte.

Our PC computer performs wonders with bookkeeping and word processing, but now its job description has grown to include the making of speaker support materials. Working in conjunction with our Agfa Forte, the computer now enables us to create lecture slides for talks and special effect slides for audio-visual presentations, and serves as a medium for creating a variety of image manipulations.

We now have the ability to type a slide directly into the computer, and send the image out to the film
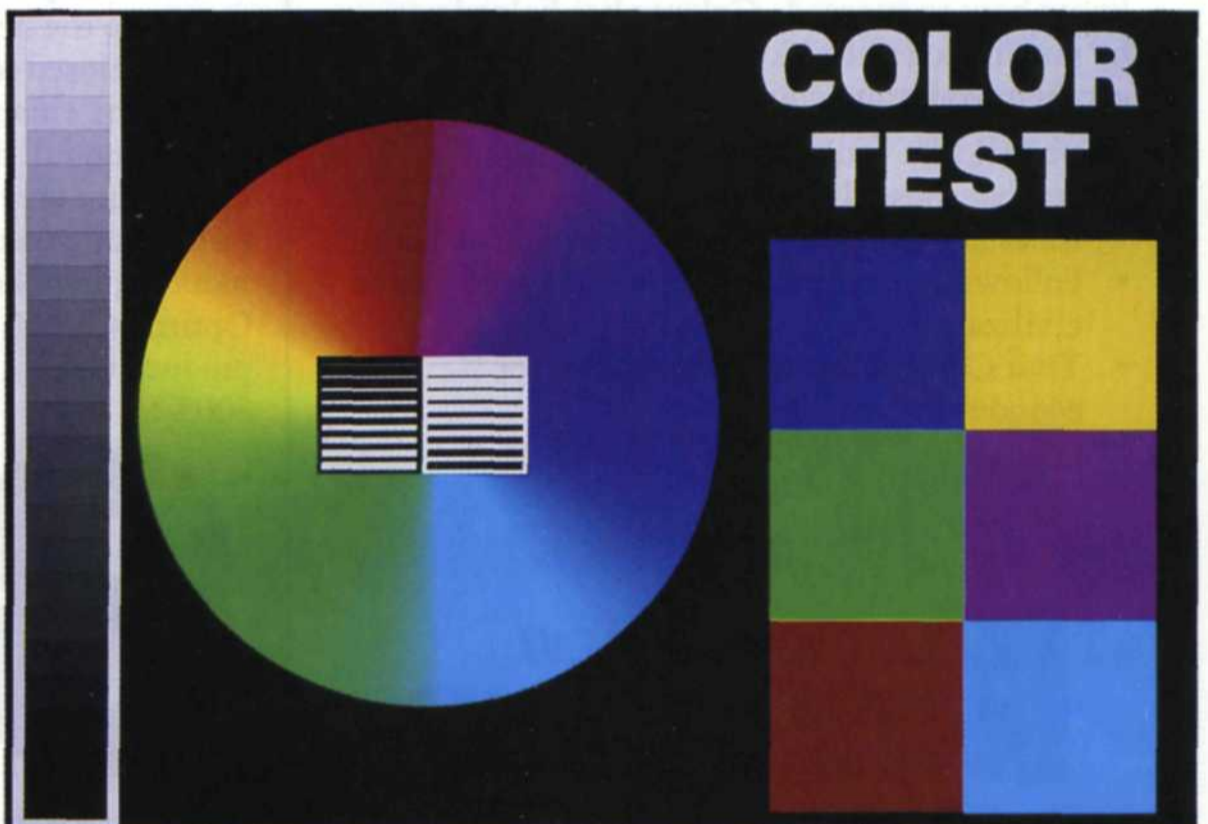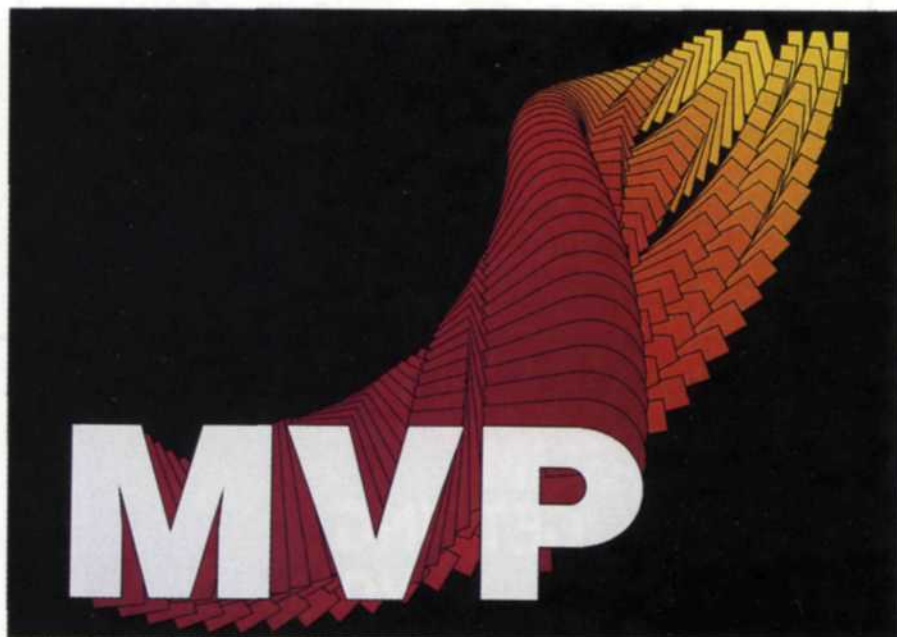
Imaged with Impresario

Imaged with SuperPrint

Imaged with McLain Image Assist

Imaged with Image-In

Imaged with Agfa Conductor

Imaged with Freedom of Press

Agfa Forte

Imaged with Stringray

The Forte Film Recorder
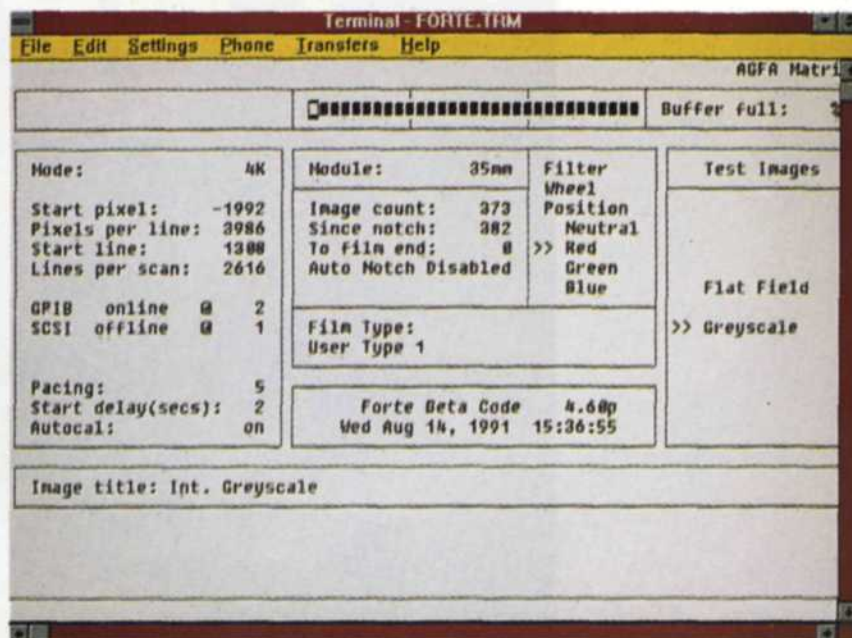
Forte Control Menu

Agfa Forte

recorder. Special effects that would take days to create manually now can be activated at the press of a key. With today's software programs and a high resolution film recorder, you merely type in a word and tell it to zoom in a specific direction. Presto! You have a zoomed image! You can fade the image to black, change its color or break it into parts for audio-visual productions. Best of all, you can see the results instantly on the screen before anything is ever sent to the film recorder.

Agfa's Forte Film Recorder

The Forte is Afga's top of the line professional recorder, producing 2k, 4k, and 8k resolution 35mm slides as well as 4x5 and 8x10 transparencies. The 165-pound unit stands on its own four wheels allowing easy movement, and its compact size fits into any computer environment. On the front of the unit you will find an on/off switch, power light, busy light, and an alert light in case any problems occur.

The various film modules are inserted into the sloping top of the unit. Modules include a standard 35mm module, 100 foot bulk load pin-register module, a standard 4x5 module, a high resolution 4x5 module, and an 8x10 module. Each module registers in two slots and locks into position, so that images are in exactly the same place each time.

On the back of the unit you will find an electrical connection for the IBM and its compatible through an IEEE-488 GPIB connector. Macintosh computers send data to the Forte via an SCSI interface. Status, image control and diagnostics are controlled through an RS-232 interface that connects to a VT-100 monitor or to a terminal setup on your computer.

A variety of adjustable internal controls are available, so you can set up your specific application the way you want it through this terminal control. Data can be sent to the Forte using three basic methods. The Macintosh sends its data directly through a SCSI found on the Mac and the Forte film recorder. IBMs and their clones use a special rasterizing card from Agfa called the

The unit can output 24 bit color graphics and takes about 50 seconds to image a standard business graphic slide.

MVP-Star card, which processes the vector and raster data and then sends it to the Forte over the GPIB cable. Finally, third-party software and hardware vendors can directly send raster images over the GPIB cable using a special GPIB card in your computer.

Total Control

The best part of the Forte is its versatility. If you want to start using it, simply plug it in, turn it on and the defaults make it a no-hassle film recorder. If you are like us and like to stir up the pot, then this is your machine. Using the VT-100 or terminal control, you can select a variety of films and formats. If the film you want is not there, you can edit one of the user labeled film tables and set up your own parameters. So far we have set up and used film tables for Kodalith (negative and positive), Kodak Ektar 25, Agfa Ultra 50, Fuji Velvia 50, Kodak Tmax 100, Kodak Gold 100, Kodak Ektar 100 and Kodak Ektachrome 100X, with several more planned by the time this article appears.

The controls possible for each film you set up are overall brightness, individual color adjustment, contrast control, highlight and shadow adjustments, center to edge illumination control (flat field) and a D-max control.

A test gray scale is held in memory so you will have a standard to make all your evaluations. Once you set up your parameters, they are kept in the memory in the Forte itself. The Forte has its own self-diagnostics, and will calibrate itself whenever needed. The unit can output 24 bit color graphics and takes about 50 seconds to image a standard business graphic slide.

Photo Lab Applications

A variety of applications with the Forte are possible once you have your imaging service in place. If you plan on having a color scanner in your lab, you can scan in flat art images, block out unwanted areas, add text and then re-output into new originals using the Forte. Using a 35mm scanner, you can bring in color negatives, retouch them, and re-output them as new original slides. You can adjust the contrast, color balance and overall brightness at the software level, or in the Forte itself.

Outstanding special effects can be created on some of the new drawing packages, and then re-output one step at a time, so that you have an animation effect. For example, you can take a title and sweep, and start removing layers of sweep, making images as you go. After the film is processed, you can run these slides in reverse order through a slide show dissolve unit, and you have an animated sweep of your title.

High-contrast Kodaliths can now be made directly on the computer and output as a negative or positive image. These Kodaliths can be used as title slides, burn-in slides, or used as a photo mask in audio-visual productions. As you experiment more and more with your software and the Forte, you will find many of your optical services can be replaced with computerized versions.

Agfa Conductor Software—Macintosh

When you purchase the Agfa Forte

Film Recorder, conductor software for the Macintosh is included. This software organizes the files according to program and file format, and then batch processes them through the Forte. This program supports over 40 programs, including Adobe Illustrator, Aldus Freehand, Cricket Draw, PowerPoint, Aldus Persuasion, and most Mac programs. File formats processed directly include PICT, PICTII, 32 Bit PICT, TIFF, and Scrapbook files.

This program allows you to select film type and resolution, and preview the image before imaging. These pre-viewed images can be cropped, scaled and manipulated. Postscript files need an additional device made by Agfa called a ChromaScript II. The ChromaScript device acts as a translator for Postscript files coming from the computer and going to the Forte.

MVP Star-6 Rasterizing Card—IBM

After the vector and/or raster files have been made and saved out to disk, they can be sent through a rasterizing card called the MVP Star-6 card. This card fits in a slot in your computer, and reprocesses the files into the raster format, so they can be shot on the Forte.

The Star+ card uses a GPIB cable and is directly linked to the back of the Forte. Several computers can access the Forte using stacked GPIB cables hooked to the Forte. The card has 1 meg of memory on board, and is compatible with over 40 software packages that generate the Agfa SCODL file format.

Agfa Conductor for IBM

The standard IBM vector file format for the Forte is Agfa SCODL format. These files are processed by the Conductor software that is supplied with the MVP Star card. Conductor groups these files according to program, shooting order, and copies to be made. The program also has control over film type and module information. One interesting feature is the file enlargement/reduction feature. Using the 4x5 back and various 120 roll film backs, we were able to reduce the image to fit on 6x6, 6x7, and 6x9 formats.

Agfa Forte

Impresario by the Idaho Research Foundation—IBM

Impresario is very similar to Agfa Conductor in that it acts as a batch organizer, keeps track of images, and shoots them in the desired order. In the program, you can select film type and software program, and it even places blank text slides between jobs so you can identify each client's work. At the end of the shooting process, the computer will play a piece of classical music, telling you that it's finished. The program has a unique feature, whereby it will fix known program bugs as it is processing the image.

The Idaho Research Foundation is also involved in writing SCODL drivers for various other software manufacturers. At present, this new "Stingray" program for the Forte camera is available with Aldus Persuasion. The program will output both 24 bit raster and 8 bit vector images in 24 bit color.

Impresario Imaging Software sells for $495. For further information: The Idaho Research Foundation, 121 Sweet Ave., Moscow, ID 83843 (208) 883-8366.

McLain Imaging Services

Several raster imaging programs are offered by McLain Imaging. The main program, Image Assist, is an excellent program for direct imaging of most raster programs from IBM computers. The program is easily installed, and will process and shoot a variety of file formats on the Forte—Targa, PCX, GIF, FLI, RIX, BMP, LBM, and raw raster files.

The program can use expanded memory if you have it, and can shoot complex images over 20 megabytes in less than 7 minutes. Standard raster files take as little as 1 1/2 minutes to shoot. Color correction, exposure adjustment, scaling, and image merging are all possible with Image Assist.

McLain Imaging also makes several other programs that help the Forte user process images. ToSCD converts raster pictures to SCODL format so they can be batch processed along with other program vector files. ZMVP and FMVP allow users of Mirage and Freedom of Press to do direct imaging through the Agfa MVP card.

For further information: McLain Imaging Services, 2417 Venier Way, Costa Mesa, CA 92627, (714) 642-5219.

Zenographics SuperPrint—IBM

This Windows compatible program allows the slide creator to save files in TARGA, TIFF, and BMP formats. These images can then be processed through the McLain Imaging software. The advantage to this software is that it will accommodate most every Windows function and color and reproduce it exactly. If you want to send the image directly to the Forte, you can use a version of SuperPrint designed for the Agfa Forte camera. This part of the program does not work with the Agfa MVP card and requires a third party interface called the GPIB board.

Zenographics SuperPrint Software Drivers for the Forte sell for $1,995. For further information: Zenographics at 4 Executive Circle, Suite 200, Irvine, CA 92714, (714) 851-6325.

Freedom of Press

When you first purchase a Forte, you will want to image Postscript files. There are two methods to accomplish this. If you have the budget, you would use the Agfa ChromaScript device that directly translates these files into the Forte. If you can't, and you have a zillion color, super-complex Postscript files you want to image, then Freedom of Press is the answer.

The program has a very specific task. It only processes Postscript files and sends them to over 200 different output devices, including the Agfa Forte camera. The program is much slower than the ChromaScript II, but does an excellent job of imaging what most other rastering software programs will not do.

The Freedom of Press Postscript Imaging Software sells for $1,495. For further information: Custom Applications at 900 Technology

Park Drive, Bldg 8, Billerica, MA 01821, (508) 667-8585.

Image-In—IBM and Photoshop—Mac Scanning Programs

Two additional programs are worth mentioning because of their relationship to photography and film recorders—Image-in and Photoshop. Both these programs make raster files that can be imaged on the Forte. These two programs by different companies are designed to work with scanned images and prepare them for output to separation, color prints, or a film recorder. Slides, negatives, and prints can be scanned in, retouched and then sent back out to a film recorder.

These two software programs combined with the Forte can add additional services to your lab. Not only can you set up an imaging service, but you can use the Forte to fix damaged slides and negatives, and make new originals and internegatives using the Forte as the final output device.

An original photograph can be scanned in, text added and then printed out as a print or new original. Once you start playing with the programs and the Forte we feel you will find more uses for both.
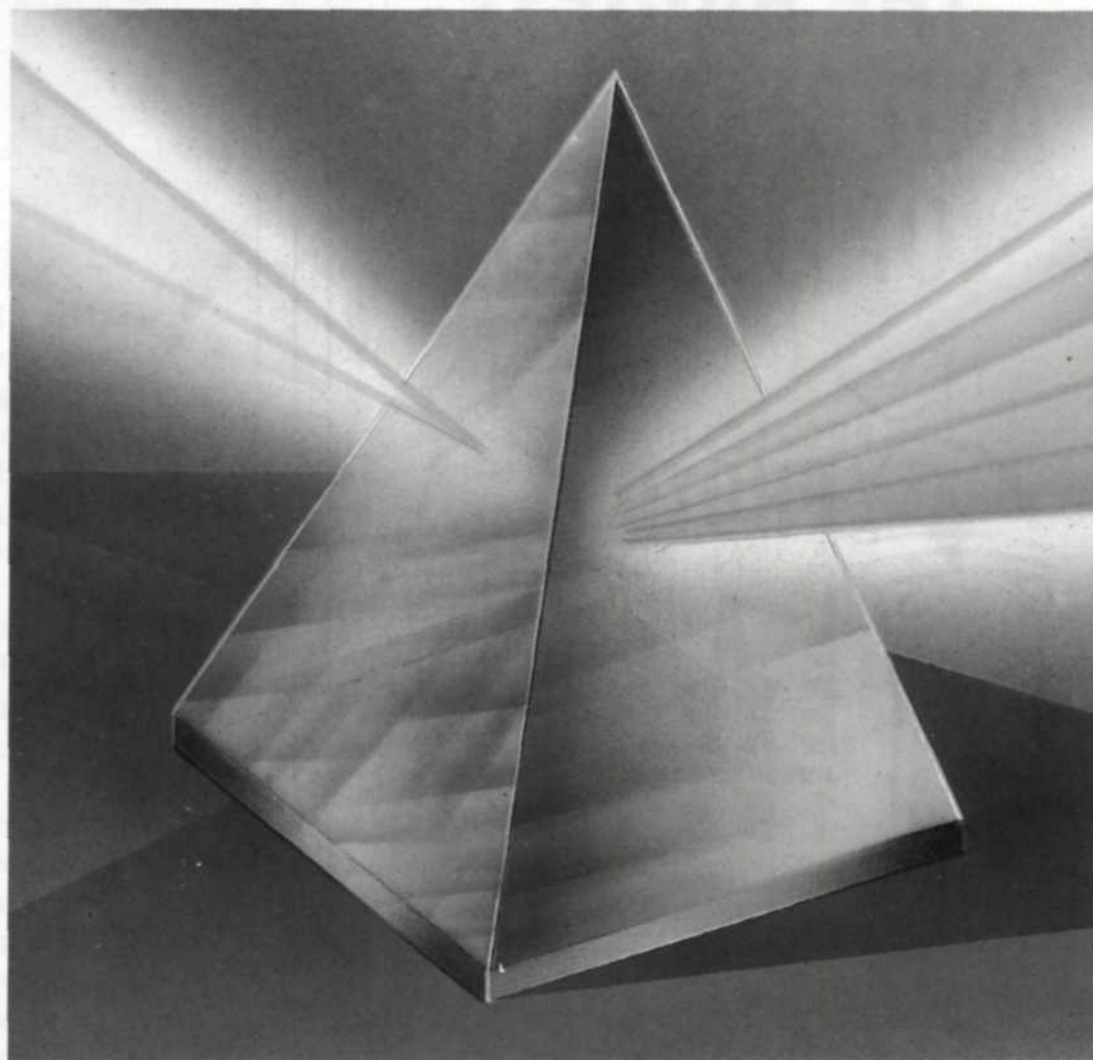
Image-In Software for photo manipulation of raster images sells for $795. For further information: Image-In Inc., 406 East 79th St., Minneapolis, MN 55420, (612) 888-3633.

Photoshop sells for $895. For further information: Adobe Systems, Inc., 1585 Charleston Rd., Mt. View, CA 94039 or (800) 83-FONTS.

Conclusion

We feel the Agfa Forte is an outstanding contribution to our business. With a little imagination and an open mind about photography's future, there is a definite place for this type of equipment in the professional lab.

The Forte is available with standard 35mm back for $34,995. Chromascript II is $17,995; MVP Star-16 Card with Conductor Software is $1,495. For further information: Agfa Corporation, 1 Ramland Rd., Orangeburg, NY, 10962, (914) 365-0190.