Eye-One from GretagMacbeth

For those that have been investigating color management products, the consensus among many is that what's available is either too expensive or too difficult to use. While those of us who have been working with a multitude of CMS products can agree, we still sympathize with the vast majority of users that feel that most products are simply too difficult to use. At least the price for CMS products continues to drop. In one swift move, GretagMacbeth has created a new product that brings both simplicity and a very aggressive price point to the CMS market with the release of the Eye-One product line. Announced at the recent Seybold Boston show and a Seybold "Hot Pick," the Eye-One is both a joy to use and retails at a price that should make most serious color users quite happy.

I had the opportunity to spend about a month prior the Eye-One release doing beta testing on both the hardware and software. Let's start with the hardware. The Eye-One instrument is a true Spectrophotometer that can be used in both strip reading mode, single patch-reading mode or can be used to read in an emissive mode for calibration of both LCD and CRT displays. In other words, this is a very well designed, flexible piece of hardware. For creating profiles for a display, the use of a true Spectrophotometer (rather than the usual colorimeter) means added precision as well as the flexibility to deal with LCD displays. The unit ships with two devices that allow the Eye-One to be held onto either type of display for calibration and profiling. For creation of output profiles, the Eye-One can be used in a strip mode. With the ruler like plastic device that ships with the product, one can move the instrument over a row of patches very quickly. The Eye-One can sample 100 measurements per second! Due to the light source inside the Eye-One, I had no difficulty profiling papers that had a high degree of Fluorescents. With the 288 patch RGB target, one can measure and build a profile in under 5 minutes. For those that wish to take single spot measures of colors outside the computer, the Eye-One can take a single measurement with the push of it's large rubber button. The Eye-One is attached to the Mac using a removable USB cable.

What makes the Eye-One product really a standout is the Eye-One Match software that drives it. The product is Wizard based but sports one of the coolest interfaces since Kai was creating Photoshop plug in's. But the UI isn't just sexy but quite well designed and intuitive. All the on line help is easily accessible and thanks to some good beta testers, quite clear and concise. The steps to create a display, scanner or output profile are very straightforward. Eye-Match is capable of producing output profiles for a number of different devices. As can be seen in Figure 1, the first step is for the user to pick the kind of output device they wish to profile. Since unlike GretagMacbeth's high-end profiling package (ProfileMaker Pro), Eye-One Match has very limited parameters for the creation of output profiles so it's important for the user to pick the correct kind of device they wish to profile. This makes Eye-One Match less powerful as than ProfileMaker Pro (which is a logical move for GretagMacbeth) but also makes Eye-One Match a much simpler product to use. For example, while there is no control over black generation issues with Eye-One Match (UCR/GCR, total ink etc), the defaults are quite good. For users that need specific control over such issues, ProfileMaker Pro is a much better (albeit expensive) option.

For creation of display profiles, virtually all the necessary options are available to the user. For example, the setting of black point is conducted using the actual Eye-One instrument for adjustment of the hardware controls on the display. For those users who have control over the individual Red, Green and Blue guns on the monitor, the Eye-One Match software and Eye-One hardware can be used to set each to the correct color temperature prior to calibration and profiling. Eye-One Match can even create scanner profiles. The process isn't much different from other products where a scan is created and imported into the software along with a TDF (Target Description File) for profile generation. What is somewhat unique with this product is that a special reflective target ships with the Eye-One Match and Eye-One hardware and the user can create a custom TDF file for profiling a reflective scanner. Such an option isn't available for transmissive scanners nor does a transmissive IT8 target ship with the product.

The Eye-One Spectrophotometer comes in two basic flavors. For $600, one can purchase the instrument that can only read in an emissive mode, therefore it is only useable for dealing with a display. This bundle is called the Eye-One Monitor. One very nice feature of the $600 Eye-One Monitor bundle is that multiple users can load the software on multiple machines and since the hardware is the "Dongle" (hardware protection), it isn't necessary to purchase site licenses for those shops that need to deal with lots of displays. This alone could make the $600 Eye-One Monitor bundle one of the best deals in the industry. For $1500,00, the Eye-One Pro Spectrophotometer and a somewhat scaled down version of Eye-One Match allow the user to deal with the display and read spectral data outside of the computer but the software doesn't allow the creation of output profiles. Therefore the best option is the $3000 Eye-One Pro Spectrophotometer with the Eye-One Match software, which allows all devices to be profiled. There is no upgrade path for the $600 Eye-One (emissive only) unit therefore we think most users will be best served with the full $3000 Eye-One Pro package.

The quality of the output profiles, both RGB and CMYK I tested were excellent. That's no surprise since I was told the color engine behind Eye-One Match is the same as ProfileMaker Pro. I was told to expect support for the Eye-One Spectrophotometer in future versions of ProfileMaker Pro. In addition, those that may need some of the modules from ProfileMaker Pro (like their ProfileEditor module) can purchase them separately for use with the rest of the Eye-One product line. ProfileMaker Pro still has many features and options not available in the Eye-One product line but for a great deal of users, I think many users will find the Eye-One Match and the Eye-One Spectrophotometer all the tools necessary for color managing all their devices. GretagMacbeth has also released a free utility called Eye-One Share. It's a product that allows users who have access to the Eye-One Spectrophotometer to create custom color palettes or measure spot colors to sure with users who need to evaluate color for various projects they may be working on. For example, if a user with an Eye-One wanted to measure some color patches and send that data to another designer who had the Eye-One Share utility, that designer could, with any ICC output profile see a specific recipe needed to produce that color (see figure 3). The Eye-One Share architecture is open allowing GretagMacbeth to provide free modules that would work much like a plug in, extending new capabilities to the product.

The Eye-One product line is exciting because it provides excellent tools that are affordable and well designed for a new market that previously wouldn't deal with difficult to use profiling products. The addition of a shareware product for describing color is a plus. GretagMacbeth has also created a new web page that is dedicated to the Eye-One line as well as a new place on the web for creative professionals to gather and share information about color. The URL is www.i1color.com.

Splash Screen 1&2 show the elegance in the software design.

Figure 1 shows the interface in the wizard where the user is expected to pick the kind of output device they intend to profile. Here I've picked RGB. On line help aids the novice user into understanding what mode to pick.
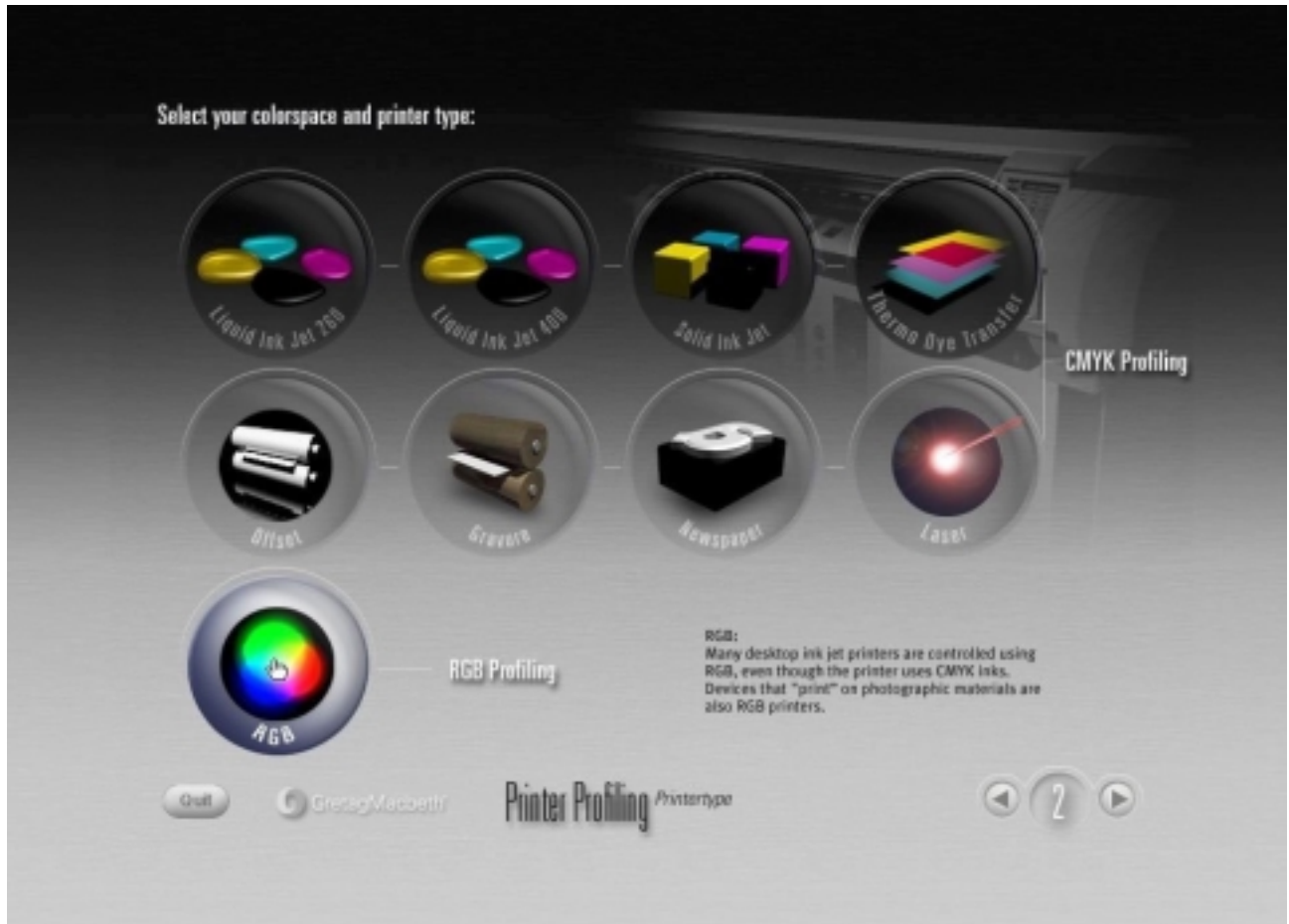
Figure 2 shows the on line help which is accessed by moving through a series of on screen buttons. Here the software is illustrating how one sets up the hardware for monitor calibration.
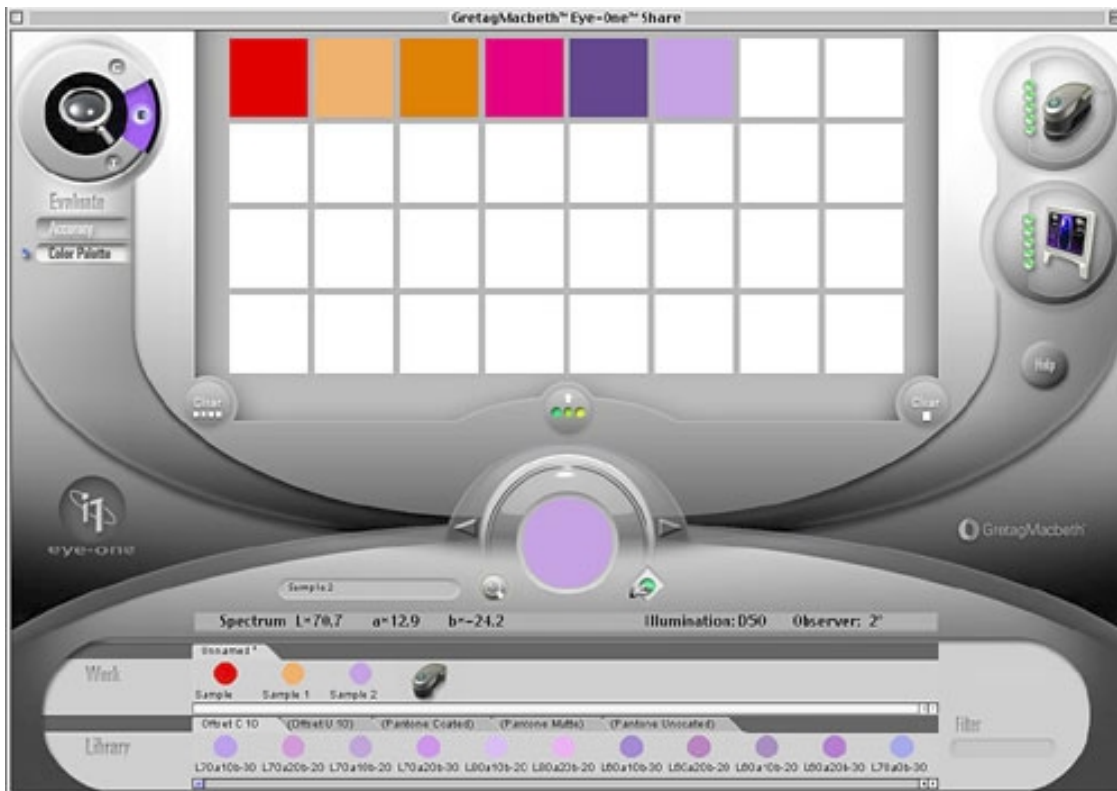

Fig 3 Eye-One Share. In this one module, I've measured 6 colors from the Real World Photoshop 6 book. The last color was dragged and dropped over the large oval in the center of the U providing color in LAB and additionally, the software automatically shows the various Pantone libraries below so I can find the closest color matches.