

The ST200X: Quantifying Its Status as the Best All-Digital Film Viewer and Scanner

As the market for small-volume, walk-up archival digital film viewers/scanners continues to grow, potential owners must wade through a dearth of information, much of it conflicting. Rather than use an inaccurate checklist, the following information is designed to offer in-depth look at the competitive advantages of the ST200X.



Modular Design and Physical Control Buttons

The modular component design and the physical controls found on the ST200X are some of the equipment's greatest attributes, allowing for easy repair and technology upgrades. The physical controls allow operators to quickly and easily make physical adjustments, particularly with respect to moving film. The ST200X's design

better emulates legacy products, easing the transition from outdated technology to digital replacements. While competing products may be slightly smaller and less expensive, they will not have these unique and important design features.

WYSIWYG: Dedicated View Mode and Separate Software Program Allow For Easy Adjustments to Microfilm Images

Many customers prefer using clearly labeled physical controls rather than cryptic PC software icons. With S-T Imaging's "What You See Is What You Get" (WYSIWYG) capability, **ST200X users can send edited images directly to printers and files without learning how to use image management software.** WYSIWYG allows for seeing and making adjustments from either the page live view or from within the software as needed. Unlike the ScanPro 2000, ST products allow adjustments to the actual digital image using the controls on the ST200X *before* switching over to software. The ScanPro 2000 product does not have physical controls and can only offer software controls.

All Micro Media. In Color.

Fiche, jackets, aperture cards, roll film (16/35mm and cartridge), micro opaques and ultra fiche can be scanned in very high resolution (up to 4800 dpi) and/or, in only one second, using standard resolution (1280 x 1024 dpi) settings. **Only S-T systems also scan photo film, color slides and other media in color.** Unlike the ScanPro 2000 and all other legacy film viewer and reader printer solutions, the ST200X family is not limited to black and white images.

Speed Efficiency

Depending on the accessories and options purchased with the ST system, virtually all microform media types listed can be scanned at high or low resolution, with the highest far exceeding that of the competition. The ST is the only product on the market that separates high resolution scanning from standard resolution viewing, allowing both processes to be more efficient. Standard image resolution captures are completed in less than a second. High resolution scans can be completed in 30 seconds or less.

High Resolution Scanning

Resolution is a measure of image quality and the higher, the better. A resolution of 300 dpi is considered archival quality by the U.S. National Archives and Records Administration* (NARA) for most documents. Engineering drawings and various other large and complex documents may require up to 600 dpi. With a unique combination of interspatial line scanning and optical scanning at up to over 12 megapixels on full newspaper pages, the ST200X high resolution true ccd line scanners far exceeds 300 dpi and exceeds double the pixel count on the camera of competing products.

Pre-processed Video Streaming and High Speed USB 2.0 Connectivity

Library and other walk-up patrons spend significant time reading, manually searching through the film for specific information before deciding to scan or print. ST200X products make this a more efficient experience because they do not rely on a PC connection to send the live image for viewing to the screen. An internal video pre-processor sends the images to a directly connected PC monitor at 30 frames per second. This eliminates reliance on the use of either the industry standard high speed USB 2.0 connection or a proprietary FireWire board and cable for the support of the viewing process. The result is a more real-time image appearance which is not wavy, does not break up and does not appear out of focus or improperly balanced for brightness or contrast while waiting for the screen image to be refreshed. S-T products also provide a high speed USB 2.0 connection for the transfer of the still images that the camera captures to the PC – taking less than a second per image to transfer. The S-T technology ensures fast screen refresh for image viewing, fast scanning, fast image transfer and unsurpassed interface compatibility.

Image Editing

The ST200X allows customers to straighten, crop, adjust brightness, adjust contrast, invert, mirror and sharpen prior to scanning. Driven by custom ScanWrite software, the industry-leading library environment scanning program, *only* the ST200X provides the option to perform the same functions *after* scanning but before the final output of an image to a compressed format. Additionally, only the ST200X system provides both physical buttons and software controls that can be used to edit images either *before and after* scanning. ST also allows images to be placed as native uncompressed working files directly from the scanning function into other image management software. For advanced image editing and more complex image format saving options, S-T operators appreciate the inclusion of a free copy of PhotoShop Elements with ST200 systems.

In summary, the ST200X has been designed to specifically meet the requirements of small-volume library/archival staff and patrons. The result is a system that is intuitive and easy to use with an enhanced viewing function, fast standard resolution image scanning and unmatched high resolution image scanning functions.

PROBLEM

High-resolution viewing slows down efficiency by creating lag time when refreshing, especially after moving film, when zooming or when re-balancing brightness or contrast. The result can be degradation or wavy images and a delay in the re-drawing of the screen.

THE S-T SOLUTION

Using standard 1280x1024 screen resolution for viewing and quick capture via camera, the ST200X achieves faster zooming and immediate screen-refresh when moving from image to image - without degradation. This is complimented by separate high-resolution ccd line scanners to achieve much higher resolution archival scans than "all-in-one" camera-only products can achieve.

*Technical Information Paper No. 12, National Archives Report on Digital-Imaging and Optical Digital Data Disk Storage Systems: Long-Term Access Strategies for Federal Agencies.

ST200X Features and Specifications - All Digital Microfilm Viewer and Scanner

All Digital Viewing and Scanning

View all images on a PC prior to scanning versus an analog viewer screen

Direct to Digital Video Screen Output – High Speed Digital Viewing

System provides direct video output that does not rely on USB or FireWire Connection. The internal video processor streams video for immediate refresh of image at 30 fps so that you do not have to wait for the PC to “redraw” the image on the screen through successive refreshes after moving from one frame to the next, avoiding a fuzzy or pixilated or out of focus or dark image during the viewing process.

Image Modification and Zoom During Digital Viewing

Very fast and quiet zoom to allow WYSIWYG (“What You See Is What You Get”) editing prior to screen capture at full size rather than cropping small section of screen that results in much lower resolution image capture

Library User Software designed for secure, walk-up user functionality:

1. Integrated Digital Output. *Able to output the scanned images to SD, CD, USB flash drive with scanner software provided, not external applications*
2. Single and Multipage file formats. *User is able to save digital images as PDF one file, PDF many files, JPEG and or PNG file formats, uncompressed tiff, and compressed group 4 tiff*
3. Post Scan Edit. *Crop, adjust contrast and brightness, sharpen, invert, rotate, mirror images after scanning, prior to saving to electronic media*
4. Auto Purge. *After each user session is properly closed out, the last user’s image files are automatically removed from desktop so as not to leave them for other users to see or use up disk space and slow performance*

Resolution

Able to scan full width of 35mm roll film at up to 3650 dpi, up to 13.1 megapixels

Multimedia platform

Able to digitize and edit opaque microcards, microfiche, 8mm, 16mm, & 35mm roll microfilm, 35mm positive color slides and 35mm color negatives without changing hardware carriers or software

Universal Lens

Able to zoom up to 96X and down to 7X without purchasing a higher resolution lens or manually exchanging lenses; able to add Micro Book Ultra fiche Close up lens option for up to 125X

Viewer Print Mode

Able to edit and then save file or print from viewer mode without operating scanner software

Film Control Buttons

To control film movement forward and reverse, slow and fast

Camera Control Buttons

To autofocus, adjust brightness and contrast of images, mirror image, rotate and invert the positive and negative viewing of images on the PC monitor

PhotoShop Elements© Compatible

Includes Photoshop software; scanners are able to drop native PhotoShop images into the program from a pull-down menu so that they can be modified with extensive image management and editing software before saving to any format first

Remote Film Access via the Internet

Optional Remote Film Access® through a high-speed internet connection using S-T Imaging’s patent pending technology and intellectual property

Upgradeable Modular Components

Able to upgrade hardware components such as camera and scanners as technology changes without having to purchase an entire new system