

Print Head Technology: The DirectAdvantage printer uses the Epson 4800 Piezo-Electric wide format print head. This is the same print head used in the 44" Epson 7800 and 44" Epson 9800 wide format printers. This is a much more durable print head than the head used in the Epson 2000 series home inkjet printers used by other printers.

Print Area: The adult platen has a printable area of 15" wide and 18" long enabling printing of oversized graphics.

Print Time: A 12" by 10" photograph image will print in less than 2 minutes. Print time is measured based on a full printing cycle including loading and unloading a garment. The first print may take longer due to the time required to process the image in the computer. Re-prints will begin printing immediately because the image has already been processed and can be re-printed from the print queue software with re-processing.

Printer DPI: Although the printer is capable of printing at higher resolutions, 720 DPI is the maximum DPI recommended for printing on textiles. Higher resolutions will result in muddy or over saturated images.

Print Head Life: The NaturaLink inks used in the printer use both pigment and dye based chemistry. This is one of the reasons that the DirectAdvantage has a longer print head life than competitive machines. Every printer on the market will require the replacement of a print head over time. Print head life is variable based upon the number of prints, maintenance of the printer and environmental conditions such as extreme heat or cold.

Portability: The DirectAdvantage printer is completely portable. The printer includes 4 handles that allow 2 people to safely and easily lift and relocate the printer. The printer weights 110 pounds and can operate from any stable surface including a standard 6 foot folding table. In order to move the printer, the ink cartridges should be removed and the print head should be locked.

Power Requirements: The printer can be plugged into any standard 3-prong 110 volt power outlet.

Loading System: The garment is loaded on a removable platen. An optional metal frame can be placed over the platen to remove wrinkles in the garment. The platen assembly moves under the print heads during the printing process. The machine has a laser that will automatically adjust the height of the print heads for garments of different thicknesses. Once the garment is printed, it can be removed from the platen before curing the ink with a heat press.

Printable Items: In additions to youth and adult T-Shirts, the printer is also capable of printing on sweat shirts, tote bags and towels. Any item with a cotton content of at least 50% that can lay flat on the platen may be printed.

Garment Thickness: The printer will automatically detect the thickness of a garment using a laser height adjustment system. This enables printing of thick garments such as sweatshirts.

White Ink Capability: The printer is white ink capable. This means that the printer is fully capable of printing white once Sawgrass releases it's upcoming white ink solution. Because the printer has 2 sets of CMYK ink cartridges, one CMYK set can be replaced with four white ink cartridges. Sawgrass is in the development any testing phase of a white ink solution for the DirectAdvantage printer that resolves many of the challenges presented by existing systems.

Ink Color Range: The printer is capable of printing 2 million color combinations using dual CMYK print cartridges.

Garment Color Range: In addition to white garments, the printer can print on light and mid-tone garments such as natural, ash and pastels. Due to the high level of opacity of the NaturaLink inks, the printer is ideally suited to printing tone on tone prints on pigment or garment dyed garments.

Ink Chemistry: The NaturaLink ink is a water-based ink which uses both a dye and pigment based chemistry. The pigment based ink systems used by every other printer on the market, use a bonding agent to glue inks to the surface of a garment. Unlike pigment based inks, the NaturaLink hybrid ink chemistry produces extremely bright, vibrant and durable images that are dyed into the garment. This is due to the NaturaLink chemistry which creates a “cross-link” chemical reaction when heated. This enables the ink bond to the cotton molecules in the garment. The net result is an excellent image quality and wash durability.

Wash Durability: Because the NaturaLink inks use a cross-link chemistry to bond the ink to the garment, the wash durability is excellent.

Ink Delivery System: The printer uses a special version of the standard Epson 110cc inkjet cartridge. A full set of ink is nearly one liter of ink (880cc). This eliminates the need for a high maintenance bulk ink system. The cartridge based system also enables quick tear down and setup of the printer in a mobile printing environment.

Ink Curing Method: After the garment is printed, the garment must be pressed for 25 seconds at 400°F using a standard heat press. The heat and pressure from the press create the chemical reaction that bonds the NaturaLink inks to the cotton molecules in the garment.

Printing Software: Each printer includes a powerful and user friendly printing software. The Power Driver software enables the user to control color levels and ink saturation to ensure the best possible quality for each image. The Power Driver can be selected from the print menu in any graphics software such as CorelDRAW, PhotoShop or Illustrator. Once the print settings are selected, the image is processed and placed in a print queue. Images can be dragged and dropped to the active print jobs list to begin printing. Multiple images can be sent back to back, including different jobs. Each image only has to be processed once, enabling very fast re-prints. The Direct Advantage printer does not require the expense and learning curve of a RIP software.

Software Compatibility: The PowerDriver software is fully compatible with Windows XP and Windows Vista. The software is not compatible with the Mac operating system, however Mac computers capable of running Windows XP or Vista, can install and use the PowerDriver software.

Color Correction: Color correction is one of the most serious challenges presented by direct to garment printing. Adjusting the colors of images is essential to achieving quality print results. The DirectAdvantage printer uses two different methods to correct colors. The PowerDriver software is uniquely capable of controlling the ink saturation levels of bitmap images (photos) and vector images (text and vector based clip art). This enables the printer to produce crisp and clear photographic images combined with very opaque and bright vector images. Other printers can not independently control bitmap and vector data on the same image. This results in fuzzy

oversaturated bitmap images and dull or under-saturated vector images. This capability is a key advantage of the DirectAdvantage Printer.

Color Matching: The printer includes the Color Sure color palette for color matching of vector images in CorelDRAW. The PowerDriver software can print a Color Sure color chart. Colors from the Color Sure palette in CorelDRAW can be used to match the print results in the chart. This is a low tech, but effective way of matching colors for vector images. The Smart Designer X3 add-on software for CorelDRAW has an automated color matching system that can re-color images automatically to match the Color Sure palette or ink color charts from popular screen print ink manufacturers. This software is sold separately from Digital Art Solutions.

Connectivity: The printer is connected to the computer using a standard USB 2.0 printer cable.

Compatible Graphics Programs: The Power Driver software is fully compatible with most popular graphics programs including CorelDRAW, Corel PhotoPaint, Adobe Illustrator and Adobe Photoshop.

Technical Support: Digital Art Solutions' experienced technical support staff provided phone support for all aspects of the printer including software, ink and the printer itself. Support is available Monday through Friday, 7AM -5PM, Arizona Standard Time. In addition, Sawgrass has a full-time support staff dedicated exclusively to the DirectAdvantage printer. Digital Art Solutions and Sawgrass provide a double-layer of support for each DirectAdvantage owner.

Warranty: The standard warranty is 1 year for all parts excluding the print heads. The print head warranty is 6 months. The standard warranty requires the printer to be shipped to a depot repair center. Onsite and extended warranties are available through a third party service company.