

Technical Specifications

Print result:	single- or double-sided
Resolution:	300 dpi
Available ribbon types:	YMCK, YMCKK and YMCKPO
Printable materials:	PVC, PVH, 100 % PET, ABS and Polycarbonate
Card format:	85.7 x 57 mm
Card thickness:	0.25 -2.0 mm
Printer dimensions (H x W x D):	381 x 340 x 339 mm
Weight:	22 kg
Power supply:	100 VAC - 240 VAC

Features

	XID 430	XID 440	XID 450
Print speed	100 single-sided cards per hour	120 single-sided cards per hour	up to 700 single-sided cards per hour*
Lamination options			
Inline Lamination	—	●	●
Multiple Standard OLMs	—	●	●
Multiple DS OLMs	—	●	●
OLM-Printer Communication	—	●	●
Encoding options			
Contact Chip Encoding	—	○	○
Magnetic Encoding	○	○	○
Contactless Encoding	—	○	○
Legic/Mifare/HID	—	○	○
PC Interface	USB	USB and SCSI-2	USB and SCSI-2
EIP = Enhanced Image Processing	—	●	●
Printer Password	—	—	●
Printer Look up tables	—	●	●

— not available ○ optional available ● available

* using IPM = Intelligent Printer Management

SPECIFICATIONS

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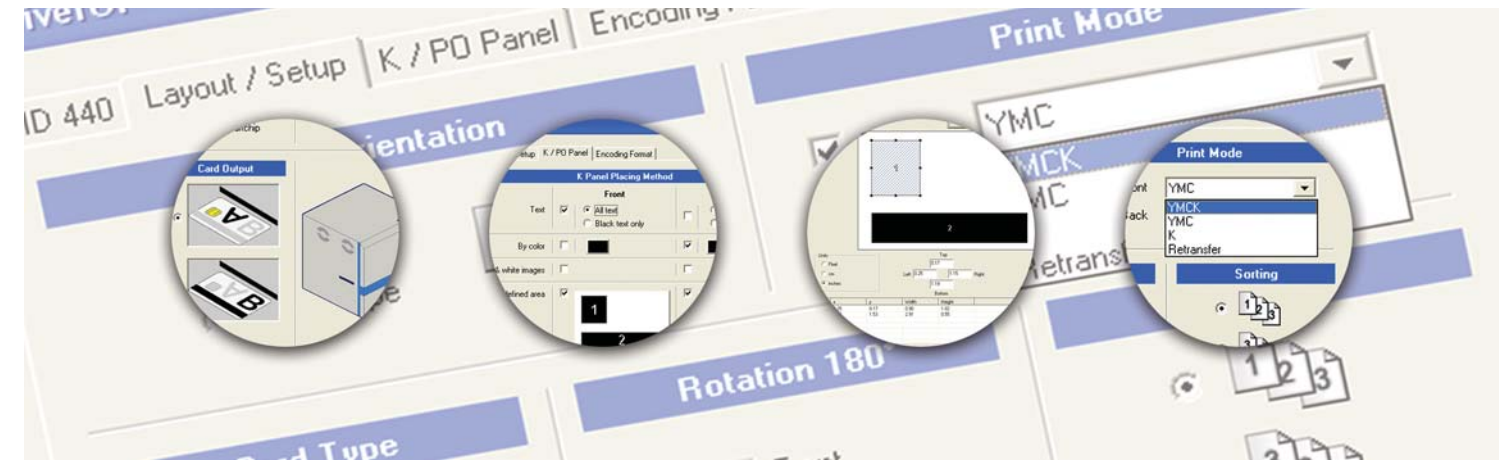
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EDISecure XID Re-Transfer Printer Family





The history of the Re-transfer technology

Victor Data Systems (VDS), a subsidiary of the JVC Group in Japan, introduced the world's first re-transfer printer for printing ID cards in 1996. In 1998, the company introduced a second-generation re-transfer printer that greatly improved production speed and lowered operational cost. The second-generation model was widely embraced by the ID marketplace and garnered a reputation as a reliable solution for printing high-quality images on cards containing electronic circuitry. In 2002, VDS released a third-generation model that made re-transfer printing affordable for all but the smallest of companies or projects, and re-transfer printers began to be used in a broad range of industries and applications. In October 2003, the Digital Identification group of companies introduced a fourth-generation of re-transfer printing based on the well proven and highly reliable VDS platform. This fourth generation offers several models at a range of price points, providing the marketplace with price and performance more suited to a client's specific needs.

Every printer comes with a very powerful sophisticated printer driver.

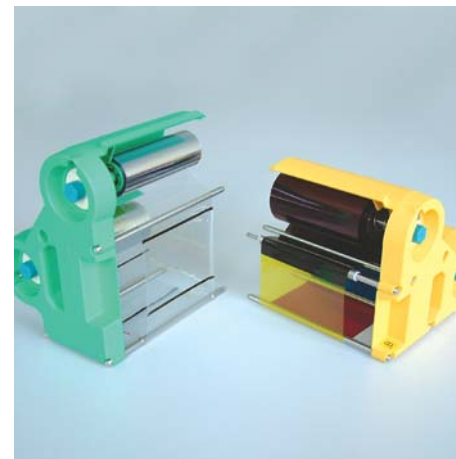
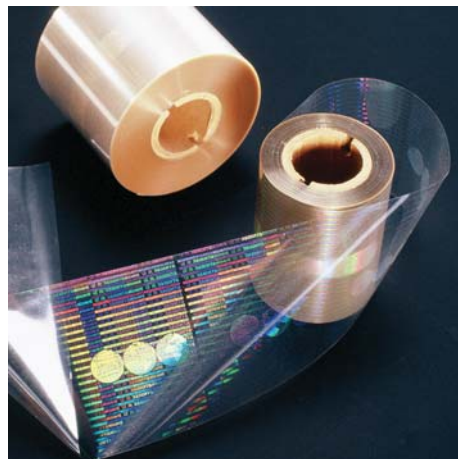
Features

- Generic printer driver for Windows 2000 and XP Operating Systems
- Runs with any Windows application software
- Offers complete control over all printer features
- Advanced error handling ensures that no print job is lost
- Look-Up Table downloadable for color corrections
- Printer Password protection for highest security
- Smart (contact & contactless) and magstripe encoding, also over network
- Overlapping download in Batch Print Mode for high speed printing
- Intelligent Printer Management on one workstation. Up to 6 printers can be driven by 1 computer and will allow an output capacity of up to 700 cards per hour.
- Build-In Interface for custom chip encoding. External function calls to the printer driver allow the loading and unloading a card into the smart chip encoding position within the printer. These function calls are documented and do allow any system integrator with programming capabilities to do smart chip encoding with the XID printer.

- Printer status can be queried at any time from custom application. This allows any Windows application to synchronize the encoding and printing process.
- Read pre-encoded cards (chip & magstripe) before printing
- Intuitive User Interface
- Fully configurable K plane usage for any layout objects
- Optimised color ribbon usage (intelligent ordering of front & back printing)
- Visual display of card-type, orientation and layout sides for hassle-free post print processing (lamination)
- Configurable offset for perfect layout positioning from any application
- Peel-Off* areas (e.g. to prevent printing on signature panels) can be defined visually
- Printer status monitor displays printer queue and status of current operation
- Automatic logging of complete print process for support purposes
- Easy import and export of device driver's settings

* requires special ribbon

Some of the listed features are available for XID 440 und XID 450 printers only.



Encoding ID cards can be this simple

Access rights, time & attendance, cashless canteen billing and many other functions can all be combined on just one card, using different encoding technologies as necessary. Whatever the system, from barcode, to magnetic stripe or smartcard (contact or contactless), EDISecure XID Re-transfer ID card printers print and encode in one operation. Even cards with multiple encoding technologies can be personalized and ready for use in one simple process. Using re-transfer printing technology, both contact and contactless smart cards can be effortlessly encoded and printed to the highest standards on the front and rear. Quickly and reliably.

Maximum Flexibility

The XID re-transfer technology makes it possible to print onto a variety of card materials with outstanding results, including cards made of PVC, PVH, ABS, Polycarbonate and pure PET. Equally important, when printing onto cards containing electronic circuitry, the XID re-transfer printing process produces spectacular results compared to direct-to-card printers. Even Digicards and Lasercards can be personalized with the EDISecure XID printer solutions.

All models in the XID family are capable of producing 1D and 2D barcodes, and all models optionally support magnetic stripe encoding. The XID 440 and XID 450 can optionally support virtually any prevalent form of contact or contactless encoding. The XID 440 and XID 450 also support a wide range of lamination options, including:

- Single-sided lamination
- Double-sided lamination using a single lamination module
- Double-sided lamination using two lamination modules for increased throughput and the ability to choose different lamination materials for the front and back of the card
- Double lamination (two different lamination materials) on both sides of the card using two lamination modules

Reference the EDISecure XID OLM brochure for additional details.

The XID 450 features NETencoding Management, which permits a PC to route a print job and the accompanying encoding data to the correct printer in a network environment, and Intelligent Printer Management, which allows for up to six printers to be "daisy-chained" together for peak throughput.

Investment protection

All EDISecure XID printers can be upgraded at a later date to provide even more functionality. For example, start with a XID 430 today and upgrade its firmware to a XID 440- or XID 450-level later so that you have support for encoding or lamination options you didn't originally think you would need.

And as evidence that XID printer solutions are built for the long-haul, all models include a lifetime warranty on the printhead provided you use our recommended supplies.

The innovative Re-transfer technology

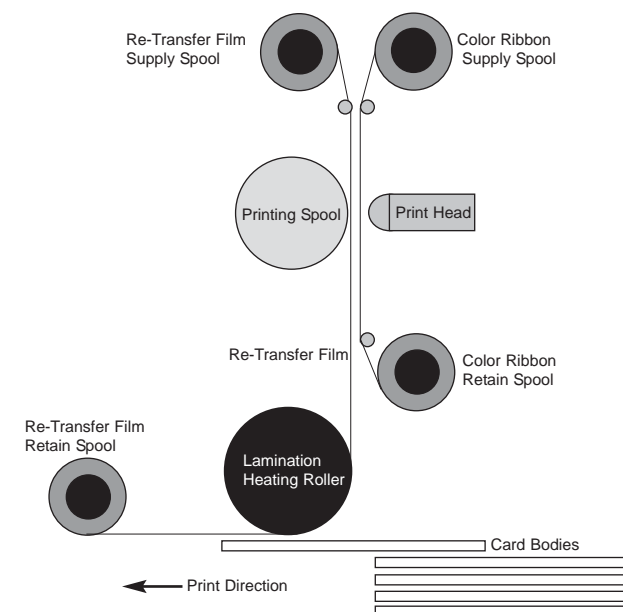
One of the key advantages of re-transfer ID card printing technology is increased abrasion resistance - information printed with a re-transfer printer lasts longer! This enhanced wear-protection results from first transferring information to be printed onto a card to the underside of a clear ribbon (the initial dye transfer), then transferring the printed information from that ribbon onto a card in such a manner that the information on the card appears under a protective "release layer" of the clear ribbon (the "re-transfer" step).

The process works like this. In addition to a color YMCK-type ribbon that all dye sublimation direct-to-card printers use, re-transfer printers include a second, clear, polyester-based re-transfer ribbon, often referred to as the re-transfer "film." Instead of transferring dye directly from the YMCK-type ribbon onto a card, which leaves the dyes exposed and prone to wear from ordinary abrasion, re-transfer printers transfer, or sublimate, the dyes onto the clear re-transfer film, then transfer this film to the card.

The sublimation, or dye transference, is accomplished by converting electronic information from a PC (the print job) to heat impulses in the printer's thermal printhead. As tiny points on the thermal printhead are heated, dye is sublimated, or released, from the color ribbon to form pixels of color. This dye transfer process is done for each patch of color

on the ribbon - that is, first, all of the required yellow dye is transferred, then all of the required magenta dye, and so on for cyan and carbon black. Various combinations of the dyes yield the full color spectrum, and once a completed card image has been transferred to the clear re-transfer film, the image is re-transferred to a card using a heated and specially coated lamination roller. The combination of heat and pressure applied by the roller causes the printed image to be released, or transferred, from the polyester film to the ID card. However, the dyes comprising the image are fused into the card body beneath a protective "release layer" of

the re-transfer film, which enhances the durability of the printed information. The total time required to print one full-color card side using this process is between 29 and 39 seconds depending on the XID printer model.





**EDISecure
XID 430**

...is an entry-level-priced re-transfer printer that produces near offset printing-type quality. Standard features include the ability to print the front and back of a card in a single pass, true edge-to-edge printing with no adverse impact on the printhead life, easy-to-load, color-coded ribbon and re-transfer film cartridges, 1,000 prints per ribbon (YMCK) and re-transfer spool, card supply hopper for 300 standard (30 mil) cards and optional magnetic stripe encoder.

**EDISecure
XID 440**

...is the recommended choice when lamination or chip encoding is required. In addition to all of the features of the XID 430, the XID 440 provides support for optional contact chip encoders for memory and processor chips and contactless HID, Legic and Mifare modules. Options include single- and double-sided lamination modules and time-saving enhanced XID color management kit/matching tools.

**EDISecure
XID 450**

...is the top-of-the-line in the product family and the ideal solution when maximum hourly output is desired. In addition to all of the features and options of the XID 430 and XID 440, the XID 450 provides NETencoding Management and Intelligent Printer Management (IPM). NETencoding permits intelligent routing of print jobs and the accompanying chip encoding data in a network environment. Intelligent Printer Management allows up to six XID 450 printers to be connected to a single PC or print server, yielding as many as 700 single-sided, full-color ID cards per hour. If a printer unit fails, simply swap it out with a standby unit with virtually no loss in hourly output.

EDISecure Re-Transfer Printer Solutions

The Digital Identification group of companies offers a complete product line of re-transfer ID card printers and related lamination and encoding accessories. You can start with the very reasonably priced XID 430 and obtain results superior to virtually any direct-to-card printer. Or move up to the XID 440 for increased speed and support for numerous encoding and lamination options. And for the maximum in flexibility, step up to the XID 450 and obtain the performance you need to manage even central issuance-type production volumes.

Ease of Use

Despite the performance, XID printer solutions are very easy to operate. The printers feature a smart LCD display that provides printer status information using both text messages and traffic light-type changes in the color of the LCD display (green = go/OK, yellow = warning, red = problem/stop).

Blank card stock is loaded into a pull-out drawer that can accommodate 300 standard (30 mil) thickness cards, and cards can be added while the printer is printing. Different card thicknesses are reliably accommodated via a quick rotation of thickness selector built into the card supply drawer, or if you frequently alternate between various card types, simply order extra card drawers and interchange them as often as required.

Spools of the standard color ribbon (YMCK) and re-transfer film can print up to 1,000 single-sided cards before requiring replacement, and replacement is simplified by the use of color-coded cartridges.