



i-Dot[®] SERIES

DIGITAL TEXTILE PRINTERS



FEATURES

- Print quality superior to printers costing more than twice as much
- i-Dot 4100 produces phenomenal results on whites, lights, darks and blacks
- i-Dot 2100 produces extraordinary images on whites and lights at exceptional speed

If you're thinking about entering the world of direct-to-garment printing, there's no better companion than an i-Dot digital textile printer. The i-Dot 4100 & i-Dot 2100 offer the most value in their price ranges, and they're superior to printers costing more than twice as much. Not only do they have the sophisticated feature set experienced professionals require, they're priced within the reach of most screen printers, embroiderers, and other garment-decorating professionals. In fact, i-Dots make it possible for businesses outside the garment-decoration industry to provide clients with customized apparel.

All models come with a 36 x 52 cm (14" x 20.5") pallet but can print images up to 41 x 51 cm (16" x 20") on 100% cotton, 50/50 cotton blend, and some polyester fabrics. i-Dot 4100 produces phenomenal results on

whites, lights, darks and blacks. i-Dot 2100 produces similar results on whites and lights at exceptional speed.

Their phenomenal image quality and ink-saver capability is made possible by M&R's exclusive Absolute Position[®] Technology (APT) and i-Color RIP Software. i-Dot's laser-guided substrate placement helps ensure that garments are correctly positioned. The combination of these and other key features make i-Dots unique. In no time at all, you'll be turning out amazingly sharp text and line art with exceptional blending and photographic transitions.

digital.mrprint.com
store.mrprint.com



WHY GO DIGITAL?

Direct-to-Garment printing may not be for everyone—but it's close. When it comes to medium-to-large print runs, digital garment printing can't rival the speed and cost of screen printing. However, nothing beats digital garment printing when it comes to short runs and one-of-a-kind prints. Prior to the arrival of digital garment printers, short-run printing wasn't economically viable. The cost of color separation, screen coating & exposure, and setup & registration put short runs of screen-printed garments beyond the reach of most customers. With Direct-to-Garment printing, however, traditional preparation is a thing of the past. The only thing that's required is a digital image file. The operator simply pulls up the image, specifies the number of prints, and sends it to the printer. While the last—or only—garment using that file is being printed, the operator can pull up the file for the next garment.

The uses for digital garment printers are endless. And while some large screen-printing operations have digital divisions with numerous Direct-to-Garment printers, those same printers are ideal for all sizes of embroidery and screen-printing operations since they're well positioned to serve the pent-up demand for small custom orders. In addition, embroiderers who may have been interested in expanding into screen printing, but were dissuaded by start-up costs, space requirements, or an additional learning curve will find digital garment printing particularly attractive. Digital garment printers even give those outside the industry a chance to become part-time apparel decorators. In fact, any business that would benefit from the ability to offer their clients custom-printed apparel should consider digital garment printing.

WHY BUY M&R?

That's easy. It's because M&R is the world's foremost manufacturer of screen printing and Direct-to-Garment equipment, setting the standard for innovation, quality, and service. M&R equipment has always represented exceptional value. That's because we've held to the standards M&R was founded on: Innovative Design, Quality Products, and Unmatched Customer Service.

INNOVATIVE DESIGN

We remain the most innovative company in the industry, continually challenging and overcoming design barriers. However, we aren't simply developing innovative new hardware. We're creating a system of affordable, integrated products designed to work seamlessly together to reduce our customers' operating costs and increase their profits.

QUALITY PRODUCTS

Quality is the thread that runs through every product in the M&R line. We know that customers depend on us for reliable equipment, so our quality standards remain second to none.

UNMATCHED CUSTOMER SERVICE

Whether you own an i-Dot digital garment printer or other products from M&R, it's reassuring to know that we have the largest network of sales and support in the industry. Wherever you are, whatever you need, we'll be there for you.

i-Dot 4100

- **i-Dot 4100** dramatically simplifies direct-to-garment printing. Since M&R's i-Color RIP software reproduces most graphic files with no preparation, all the operator needs to do is open an image file, load a shirt, indicate the garment color, and press **PRINT** to produce an image of phenomenal quality, accuracy and vibrancy.
- **i-Dot 4100** can be paused at any point in the print cycle without losing position, and **i-Dot 4100**'s standby mode allows the printer to be left unattended up to ten days with the push of a button.
- **i-Dot 4100** comes with nearly everything necessary to get started in digital textile printing, from the included computer and workstation to the complete startup kit.
- The kit contains eight 220 ml i-Pak™ ink cartridges: four white cartridges for printing on black and dark garments and one cartridge each of Cyan, Magenta, Yellow, and Black (CMYK). M&R's i-Pak Bulk Ink System is optionally available. These exceptional water-based inks—part of the Artistri® collection from DuPont™—are PVC and Phthalate free.

- The kit also includes eight i-Clean cartridges for printhead flushing; startup containers of i-Prep™ fabric pre-treatment for dark and colored garments; i-Tack™ pallet adhesive; and i-Clean™ solution for cleaning individual printheads & dampers and for general printer maintenance.



i-Dot 2100

- **i-Dot 2100** produces exceptional results on white and light garments at print speeds up to 35% faster than other digital textile printers.
- **i-Dot 2100**'s i-Pak Bulk Ink System supports a dual CMYK print engine that increases print speed while reducing ink costs.
- Since white and light garments don't require pretreatment, **i-Dot 2100** is ideal for high-volume runs of light-colored garments.
- In addition to the i-Pak Bulk Ink System, **i-Dot 2100**'s startup kit includes eight i-Clean cartridges for printhead flushing; startup containers of i-Tack™ pallet adhesive; and i-Clean™ solution for cleaning individual printheads & dampers and for general printer maintenance.
- PVC and Phthalate-free water-based inks—part of the Artistri® collection from DuPont™—are available in bulk sizes.



PRINT QUALITY

Print quality is the essential ingredient in every digital textile printer, and most people assume—incorrectly—that print quality begins and ends at the printhead. While high quality printheads are essential, the supporting hardware and software is what makes the difference between mediocre prints and great prints. And this is where i-Dots excel.

INCLUDED COMPUTER & MONITOR

Although most direct-to-garment printers are sold without a computer, that's not the case with i-Dots. Since trouble-free computer operation is essential to successful direct-to-garment printing, M&R decided to make a computer part of every i-Dot package. Since each computer comes with all the software necessary to operate the i-Dot, users don't have to load or configure system software, much less resolve hardware or software conflicts. The inclusion of a PC also enables M&R to extensively test each i-Dot system prior to shipment. There's no question that a complete preconfigured system is the surest way to seamless printer operation. The bottom line is that M&R doesn't take shortcuts when it comes to customer satisfaction.



I-COLOR RIP SOFTWARE

M&R's proprietary i-Color RIP software quickly converts digital art files into printed images with maximum sharpness, superior shading & gradations, and exceptional color accuracy—all while minimizing print time. It also recognizes nine raster-based file formats, including Photoshop files with channels. i-Color features four standard RIP modes (White, Black, Color, and Economy-Color) on the i-Dot 4100 and the White RIP mode on the i-Dot 2100. To further optimize i-Dot 4100 print quality, Black Color Mode (BCM) and Economy Color Mode (ECM) calculate the black areas in each image. On black garments, BCM prevents the printer from laying down white underbase and black ink on black image areas. On colored garments, ECM prevents the printer from laying down white underbase where black will be printed. This saves ink and increases print speed, but the main benefit is images far superior to other direct-to-garment methods—and printed garments that are softer, more breathable, and much closer to water-based screen-printing.

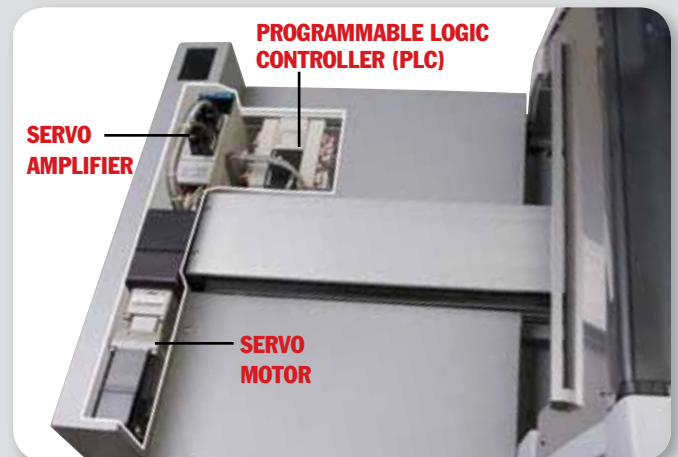


TRANSPORT ENCODERS & HARDWARE

Although inkjet print engines have built-in encoders and transport motors, they're designed for moving one sheet of paper at a time. And no provision is made for the precise repositioning necessary for double-printed designs on dark shirts. When used to drive the relatively heavy weight of a pallet and shirt, these encoders have difficulty maintaining pinpoint accuracy. Despite those serious issues, most manufacturers continue to rely on this cheap but inadequate technology. Not M&R. Instead of relying on the print engine's built-in low resolution encoder, we developed Absolute Position® Technology.

ABSOLUTE POSITION® TECHNOLOGY

M&R's exclusive Absolute Position® Technology (APT) gives i-Dots a level of repeat registration not found in any other digital textile printer. While most printers rely on low-resolution encoders, APT uses M&R's proprietary high-resolution servo encoder. APT's custom-designed firmware integrates flawlessly with M&R's i-Color RIP software. Absolute Position Technology also includes a servo amplifier, PLC controller, and an exceptionally accurate servomotor-driven linear actuator. The combined power of the elements in the APT system working together—rather than its individual parts—enable i-Dots to print multiple layers of ink on dark and colored shirts with unmatched layer-to-layer accuracy. When registration matters, i-Dot's APT is the technology that professionals rely on. No other digital textile printers even come close.



- **A LOOK INSIDE i-Dot's APT** — Here's an inside look at the key components of Absolute Position Technology: the Programmable Logic Controller (PLC) is the computer that drives the system, the Servo Amplifier translates the PLC's commands for movement of the pallet and interfaces with the printer, and the Servo Motor moves the pallet on an industrial-grade transport system designed for precision and repeatability.

i-Dot® SERIES

PRODUCT FEATURES

Model shown is the i-Dot 4100. Features apply to both models except as noted.

CYMK i-PAK CARTRIDGES ON i-DOT 4100 OR DUAL CMYK i-PAK BULK INK SYSTEM ON i-DOT 2100 (not shown)
Deliver phenomenal color quality

ABSOLUTE POSITION® TECHNOLOGY (APT)
Gives i-Dot a level of repeat registration not found in any other digital textile printer

LASER-GUIDED SUBSTRATE PLACEMENT
Minimizes misprints

TOUCH-SCREEN USER INTERFACE
Simplifies operation



SYSTEM STAND
Secures computer and makes printer and workstation easy to access

WORKSTATION
Monitor, keyboard & mouse

FOUR WHITE i-PAK INK CARTRIDGES ON i-DOT 4100
Provide the base layer for printing on black & colored garments

36 X 52 CM (14" X 20.5") PALLET
Pallets are available in other sizes & styles

PALLET HEIGHT ADJUSTMENT
Lets operator compensate for substrate thickness

COMPUTER
Loaded, configured, and extensively tested with i-Color RIP Software

SPECIFICATIONS

	i-Dot 4100	i-Dot 2100
Electrical Requirements¹	110 V, 1 ph, 7 A 50/60 Hz, 0.8 kW 208/230 V, 1 ph, 4 A 50/60 Hz, 0.8 kW	110 V, 1 ph, 7 A 50/60 Hz, 0.8 kW 208/230 V, 1 ph, 4 A 50/60 Hz, 0.8 kW
Maximum Image Area	41 x 51 cm (16" x 20")	41 x 51 cm (16" x 20")
Standard Pallet Size	36 x 52 cm (14" x 20.5")	36 x 52 cm (14" x 20.5")
Offers the most value in its price range	✓	✓
Appropriate for businesses outside the garment-decorating industry	✓	✓
Prints on 100% Cotton Garments	✓	✓
Prints on 50/50 Cotton Blend Garments	✓	✓
Prints on Black & Dark Garments	✓	✓
Prints on White & Light Garments	✓	✓
Included Computer & Monitor	✓	✓
Factory-tested Hardware & Software	✓	✓
Absolute Position Technology (APT)	✓	✓
Laser-Guided Substrate Placement	✓	✓
i-Color RIP Software	✓	✓
Recognizes 9 raster-based file formats	✓	✓
Recognizes Photoshop files with channels	✓	✓
Black Color Mode (BCM) reduces ink usage on black & dark garments	✓	
Economy Color Mode (ECM) reduces ink usage on white & light garments	✓	
Dual CMYK Print Engine		✓
Included i-Pak Bulk Ink System		✓

¹ If incoming voltage differs from the voltage(s) listed in this brochure, calculate amperage accordingly. Other electrical configurations are available. Contact The M&R Companies for details.

ACCESSORIES & SUPPLIES – Order Online at STORE.MRPRINT.COM



I-PAK BULK INK SYSTEM
(Standard on i-Dot 2100. Optional on i-Dot 4100)
Reduces ink costs for high-volume operations
(not recommended for occasional users)



BULK SUPPLIES
Larger sizes for economical printing



PALLETS
Additional pallets are available in the following sizes:
10 x 52 cm (4" x 20.5")
25 x 52 cm (10" x 20.5")
42 x 52 cm (16.5" x 20.5")



The M&R Companies
M&R • NUARC • AMSCOMATIC

The M&R Companies 1N372 Main Street, Glen Ellyn, Illinois 60137-3576 USA

USA: 800-736-6431 / 630-858-6101 / Fax: 630-858-6134 • Outside USA: +1-847-967-4461 / Fax: +1-847-967-0417

M&R Printing Equipment, Inc. and its subsidiaries (hereinafter M&R), believe the information in this advertisement to be accurate at publication, though it does not purport to list all manufacturing and specification variations, nor does it assume liability resulting from incompleteness or inaccuracy. M&R reserves the right to change specifications without notice. M&R expressly disclaims any liability for damages, consequential or incidental, from purchase, installation, servicing, and/or use of any product/service based upon information herein. No warranties of merchantability or fitness for a particular purpose are made or are to be implied from the information herein. No information herein may be reproduced or used in any manner without the prior, express written consent of M&R in each case. Copyright 2011 M&R Printing Equipment, Inc. All rights reserved. 081911