

HP LaserJet Pro M404-M405 series



The HP LaserJet Pro M404 printer—focus your time where it's most effective—growing your business

Winning in business means working smarter. The HP LaserJet Pro M404 printer is designed to let you focus your time where it's most effective—helping to grow your business and staying ahead of the competition.

Dynamic security enabled printer. Only intended to be used with cartridges using an HP original chip. Cartridges using a non-HP chip may not work, and those that work today may not work in the future.
<http://www.hp.com/go/learnaboutsupplies>



HP LaserJet Pro M404dw



HP LaserJet Pro M404n

Built to keep you—and your business—moving forward

- Help decrease the amount of paper used in the office by printing on both sides of the page.
- Grab pages and go—without waiting. This device wakes up and prints fast.¹
- Print wirelessly even without the network; stay connected with dual band Wi-Fi and Wi-Fi direct.^{2,3,4}
- Print effortlessly from any device, virtually anywhere, to any HP printer—securely through the cloud.⁵

Best -in-class security—detect and stop attacks⁶

- A suite of embedded security features help protect your printer from being an entry point for attacks.⁶
- Help secure confidential information with optional PIN/Pull printing to retrieve print jobs.⁷
- Optional HP JetAdvantage Security Manager lets you set configuration
- Thwart potential attacks and take immediate action with instant notification of security issues.¹⁰

Simply designed to uncomplicate your day

- Set up this printer fast and easily manage device settings to help increase overall printing efficiency.
- Make the most of your office space with a printer that conveniently fits into your workstyle.
- Get connected and start printing fast with seamless Wi-Fi setup from your smartphone.
- Work without delays or messes, with cartridges featuring auto seal removal.

Sustainability is smart business

- avoid frustrating reprints, wasted supplies, and service calls using Original HP toner cartridges.
- Help save paper right out of the box. The duplex print setting is set at default paper savings mode.⁸
- Saves up to 18% energy over prior products.⁹
- Help save energy with HP Auto-on/Auto-off technology.¹¹

¹ Measured using ISO/IEC 24734 and excludes first set of test documents. For more information, see <http://www.hp.com/go/printerclaims>. Exact speed varies depending on the system configuration, software application, driver, and document complexity. ² Wireless operations are compatible with 2.4 GHz and 5 GHz operations. App or software and HP ePrint account registration may also be required. Some features require purchase of an optional accessory. Learn more at <http://www.hp.com/go/mobileprinting> ³ Feature is only supported on the HP LaserJet Pro M404dw. Wireless performance is dependent on physical environment and distance from access point, and may be limited during active VPN connections ⁴ Feature is supported on the HP LaserJet Pro M404dw only. Mobile device needs to be connected directly to the Wi-Fi network of a wireless direct-capable MFP or printer prior to printing. Depending on mobile device, an app or driver may also be required. Learn more at <http://www.hp.com/go/businessmobileprinting> ⁵ To enable HP Roam, some devices may require firmware to be upgraded and an optional accessory to add Bluetooth® Low Energy (BLE) beaconing capabilities. Subscription or accessory may be required. For more information, visit <http://www.hp.com/go/roam> ⁶ Based on HP review of 2019 published security features of competitive in-class printers. Only HP offers a combination of security features that can monitor to detect and automatically stop an attack then self-validate software integrity in a reboot. For a list of printers, visit <http://www.hp.com/go/PrintersThatProtect>. For more information: <http://www.hp.com/go/printersecurityclaims> ⁷ Pin printing enabled via USB installed in rear of device. ⁸ Dependent upon country setup specifications ⁹ Based on HP Internal testing using normalized TEC Value, 2019. ¹⁰ Instant threat notifications can appear on the device control panel when a potential threat occurs from malicious intent or there is a bug or vulnerability in the firmware code of the device. If this error raises concern, please contact your company IT representative or, if unavailable, HP Support, who can investigate the cause through analysis of device syslog data using a standard SIEM tool from McAfee, Splunk, Arcsight or SIEMonster. The control panel error message may show an error code on a blue screen during code signature checks or memory write intrusions. ¹¹ HP Auto-On/Auto-Off Technology capabilities subject to printer and settings; may require a firmware upgrade.

Product walkaround

1. Dual-band Wi-Fi with Bluetooth® Low Energy¹ for easy wireless printing and setup
2. 100-sheet multipurpose tray 1 supports media sizes up to 216 x 356 mm
3. Hi-Speed USB 2.0 port, USB port for job storage and PIN printing², Gigabit Ethernet LAN port
4. Rear door (access to the print path)
5. 2-line LCD control panel
6. 150-sheet output bin
7. Front door release button
8. Front door (access to HP EcoSmart black toner cartridges)
9. Automatic two-sided printing³
10. 250-sheet input tray 2 supports media sizes up to 216 x 356 mm



Front view

Series at a glance



HP LaserJet Pro M404dw



HP LaserJet Pro M404n

	HP LaserJet Pro M404dw	HP LaserJet Pro M404n
Product number	W1A56A	W1A52A
Print speed (letter/A4)⁴	Up to 40/38 pages per minute (ppm) (all models)	Up to 40/38 pages per minute (ppm) (all models)
Two-sided printing	Automatic	Manual
Control panel display	2-line LCD (all models)	2-line LCD (all models)
100-sheet multipurpose tray 1, 250-sheet tray 2	√	√
Optional 550-sheet tray 3	Add up to one (all models)	Add up to one (all models)
Input capacity (standard/maximum⁵)	Up to 350/900 sheets (all models)	Up to 350/900 sheets (all models)
Recommended monthly page volume⁶	Up to 4,000 pages (all models)	Up to 4,000 pages (all models)
Cartridge yields⁷ (A/X)	Black: ~3,000/10,000 pages (all models)	Black: ~3,000/10,000 pages (all models)
Dual-band Wi-Fi with Bluetooth Low Energy¹	√	Not available

¹ Wireless operations are compatible with 2.4 GHz and 5 GHz operations only. Wi-Fi is a registered trademark of Wi-Fi Alliance®. Bluetooth is a trademark owned by its proprietor and used by HP Inc. under license. Learn more at hp.com/go/mobileprinting ² Requires purchase of separate USB flash drive with at least 16 GB capacity. ³ Automatic two-sided printing is not available on the HP LaserJet Pro M404n model. ⁴ Measured using ISO/IEC 24734, excludes first set of test documents. For more information, see hp.com/go/printerclaims. Exact speed varies depending on the system configuration, software application, driver, and document complexity. ⁵ Selection of optional 550-sheet tray 3 required to reach maximum input capacity. ⁶ Recommended Monthly Page Volume (RMPV): HP recommends that the number of printed pages per month be within the stated range for optimum device performance, based on factors including supplies replacement intervals and device life over an extended warranty period. ⁷ Actual yields vary considerably based on images printed and other factors. For details visit hp.com/go/learnaboutsplies. Pages may vary based on customer printing conditions and usage. Optional high-yield cartridges are not included in printer purchase and must be purchased separately.

HP Services

Downtime can have serious consequences, so HP provides support beyond the standard warranty. You benefit from reduced risk, maximized uptime, predictable service delivery and no unbudgeted repair costs. HP Care Pack Services provide a comprehensive suite of protection services designed to keep HP hardware and software up and running so employees can stay productive.

For carepack availability visit: hp.com/go/cpc

Top features

Today's businesses are always on, and always connected. Choose a printer that can keep up with how you actually work, collaborate, and get things done

HP Print Security isn't just about securing printers. It's about helping to secure your network with real-time threat detection, automated monitoring, and software validation—designed to detect and stop an attack as it happens.⁶

You have enough to worry about each day. It's easy to accomplish what you need—and exceed your own expectations—with a streamlined printer that's made for simple use.

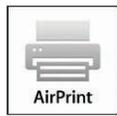
Business is all about resource management, and finding efficiencies is everyone's responsibility. HP LaserJet printers are designed with the environment in mind, so you can handle what you need while conserving energy wherever possible.

Accessories

D9P29A HP LaserJet 550-sheet Feeder Tray
P0R81AA HP v222w 16GB Mini USB Drive

Supplies

CF258A HP 58A Black LaserJet Toner Cartridge (~3,000 pages)
CF258X HP 58X Black LaserJet Toner Cartridge (~10,000 pages)



¹ Measured using ISO/IEC 24734 and excludes first set of test documents. For more information, see <http://www.hp.com/go/printerclaims>. Exact speed varies depending on the system configuration, software application, driver, and document complexity. ² Wireless operations are compatible with 2.4 GHz and 5 GHz operations. App or software and HP ePrint account registration may also be required. Some features require purchase of an optional accessory. Learn more at <http://www.hp.com/go/mobileprinting> ³ Feature is only supported on the HP LaserJet Pro M404dw. Wireless performance is dependent on physical environment and distance from access point, and may be limited during active VPN connections ⁴ Feature is supported on the HP LaserJet Pro M404dw only. Mobile device needs to be connected directly to the Wi-Fi network of a wireless direct-capable MFP or printer prior to printing. Depending on mobile device, an app or driver may also be required. Learn more at <http://www.hp.com/go/businessmobileprinting> ⁵ To enable HP Roam, some devices may require firmware to be upgraded and an optional accessory to add Bluetooth® Low Energy (BLE) beaconing capabilities. Subscription or accessory may be required. For more information, visit <http://www.hp.com/go/roam> ⁶ Based on HP review of 2019 published security features of competitive in-class printers. Only HP offers a combination of security features that can monitor to detect and automatically stop an attack then self-validate software integrity in a reboot. For a list of printers, visit <http://www.hp.com/go/PrintersThatProtect>. For more information: <http://www.hp.com/go/printersecurityclaims> ⁷ Pin printing enabled via USB installed in rear of device. ⁸ Dependent upon country setup specifications ⁹ Based on HP Internal testing using normalized TEC Value, 2019. ¹⁰ Instant threat notifications can appear on the device control panel when a potential threat occurs from malicious intent or there is a bug or vulnerability in the firmware code of the device. If this error raises concern, please contact your company IT representative or, if unavailable, HP Support, who can investigate the cause through analysis of device syslog data using a standard SIEM tool from McAfee, Splunk, Arcsight or SIEMonster. The control panel error message may show an error code on a blue screen during code signature checks or memory write intrusions. ¹¹ HP Auto-On/Auto-Off Technology capabilities subject to printer and settings; may require a firmware upgrade.

HP LaserJet Pro M404-M405 series

Technical Specifications	HP LaserJet Pro M404dw(W1A56A)	HP LaserJet Pro M404n(W1A52A)
AIO functions	Print	
Print speed	A4: Up to 38 ppm; Letter: Up to 40 ppm black; ⁷ First Page Out Black: As fast as 6.3 sec; ⁹	
Print resolution	Black (best): HP FastRes1200 (Enhanced up to 4800 x 600 dpi)	
Print Technology	Laser; Print Resolution Technologies: HP FastRes1200, HP ProRes1200, 600 dpi	
Print Cartridges Number	1 (black)	
Standard Print Languages	HP PCL 6, HP PCL 5c, HP postscript level 3 emulation, PDF, URF, PWG Raster	
Printer Smart Software Features	Apple AirPrint™, Mopria certified, Google Cloud Print 2.0, Wi-Fi Direct printing, ROAM enabled for easy printing, HP ePrint, HP Auto-On/Off Technology, Job Storage with PIN printing, N-up printing, collation	Apple AirPrint™, Mopria certified, Google Cloud Print 2.0, HP ePrint, Roam capable for easy printing, HP Auto-On/Off Technology, Job Storage with PIN printing, N-up printing, collation
Printer Management	HP Printer Assistant; HP Utility (Mac); HP Device Toolbox; HP Web JetAdmin Software; HP JetAdvantage Security Manager; HP SNMP Proxy Agent; HP WS Pro Proxy Agent; Printer Administrator Resource Kit for HP Universal Print Driver (Driver Configuration Utility - Driver Deployment Utility - Managed Printing Administrator)	
Standard Connectivity	1 Hi-Speed USB 2.0; 1 host USB at rear side; Gigabit Ethernet 10/100/1000BASE-T network; 802.11b/g/n / 2.4 / 5 GHz Wi-Fi radio	1 Hi-Speed USB 2.0; 1 host USB at rear side; Gigabit Ethernet 10/100/1000BASE-T network
Network Capabilities	Built-in 10/100/1000Base-TX Ethernet, Gigabit; Auto-crossover Ethernet; Authentication via 802.1X	
Wireless Capability	Yes, built-in dual-band Wi-Fi; Authentication via WEP/WPA/WPA2, WPA Enterprise; Encryption via AES or TKIP; WPS; Wi-Fi Direct; Bluetooth Low Energy	No
Mobile Printing Capability	Apple AirPrint™; Google Cloud Print™; HP ePrint; HP Smart App; Mobile Apps; Mopria™ Certified; ROAM capable for easy printing; Wi-Fi® Direct printing ⁵	Apple AirPrint™; Google Cloud Print™; HP ePrint; HP Smart App; Mobile Apps; Mopria™ Certified; ROAM capable for easy printing ⁵
Memory	Standard: 256MB DRAM; 256MB Flash; Maximum: 256MB DRAM; 256MB Flash	
Processor Speed	1200 MHz / Hard disk: None	
Duty Cycle	Monthly, A4: Up to 80,000 pages ¹⁰ ; Recommended Monthly Page Volume: 750 to 4000 ¹¹	
Paper Handling	Input Capacities: 100-sheet multipurpose Tray 1, 250-sheet input Tray 2; Up to 350 sheets (Tray 1: up to 100 sheets; Tray 2: up to 250 sheets) standard labels legal; Output Capacities: 150-sheet output bin; Up to 150 sheets standard labels legal; Duplex Options: Automatic (default); Envelope Feeder: No; Standard Paper Trays: 2; Media Types Supported: Paper (plain, EcoFICIENT, light, heavy, bond, colored, letterhead, preprinted, prepunched, recycled, rough); envelopes; labels; Media Weight Supported: Tray 1: 60 to 175 g/m ² ; Tray 2, Optional 550-sheet Tray 3: 60 to 120 g/m ² ; Media Sizes Supported: Tray 1, Tray 2: A4; A5; A6; B5 (US); B6 (US); 16K (195 x 270 mm, 184 x 260 mm, 197 x 273 mm); 10 x 15 cm; Oficio (216 x 340 mm); postcards (JIS single, JIS double); envelopes (DL, C5, B5); Optional Tray 3: A4; A5; A6; B5 (US); B6 (US); 16K (195 x 270 mm, 184 x 260 mm, 197 x 273 mm); 10 x 15 cm; Oficio (216 x 340 mm); postcards (JIS single, JIS double); Automatic duplexer: A4; B5; 16K (195 x 270 mm, 184 x 260 mm; 197 x 273 mm); Oficio (216 x 340 mm); Media Sizes Custom: Tray 1: 76 x 127 to 216 x 356 mm; Tray 2, optional Tray 3: 100 x 148 to 216 x 356 mm	Input Capacities: 100-sheet multipurpose Tray 1, 250-sheet input Tray 2; Up to 350 sheets (Tray 1: up to 100 sheets; Tray 2: up to 250 sheets) standard labels legal; Output Capacities: 150-sheet output bin; Up to 150 sheets standard labels legal; Duplex Options: Manual (driver support provided); Envelope Feeder: No; Standard Paper Trays: 2; Media Types Supported: Paper (plain, EcoFICIENT, light, heavy, bond, colored, letterhead, preprinted, prepunched, recycled, rough); envelopes; labels; Media Weight Supported: Tray 1: 60 to 175 g/m ² ; Tray 2, Optional 550-sheet Tray 3: 60 to 120 g/m ² ; Media Sizes Supported: Tray 1, Tray 2: A4; A5; A6; B5 (US); B6 (US); 16K (195 x 270 mm, 184 x 260 mm, 197 x 273 mm); 10 x 15 cm; Oficio (216 x 340 mm); postcards (JIS single, JIS double); envelopes (DL, C5, B5); Optional Tray 3: A4; A5; A6; B5 (US); B6 (US); 16K (195 x 270 mm, 184 x 260 mm, 197 x 273 mm); 10 x 15 cm; Oficio (216 x 340 mm); postcards (JIS single, JIS double); Media Sizes Custom: Tray 1: 76 x 127 to 216 x 356 mm; Tray 2, optional Tray 3: 100 x 148 to 216 x 356 mm
Product Dimensions	W x D x H: 15 x 14.06 x 8.5 in; 381 x 357 x 216 mm ¹ ; Maximum: 15 x 25 x 9.5 in; 381 x 634 x 241 mm	
Product Weight	8.56 kg/18.87 lb	
What's in the box	HP LaserJet Pro M404; Preinstalled HP 58A Black LaserJet Toner Cartridge (yield ~1,500 pages); Getting Started Guide; Support Flyer; Warranty Guide; Regulatory Flyer; Power cord ¹⁴	
Warranty Features	One-year Bench/Depot Repair warranty. Warranty and support options vary by product, country and local legal requirements. Contact your Contractual Vendor or go to hp.com/support to learn about HP award winning service and support options in your region. (wty code 4E; wty ID A033)	
Energy Efficiency Compliance	EPEAT® Silver; CECP; ENERGY STAR® qualified; Blue Angel RAL-UZ 205	
Control Panel	2-line LCD; OK button; Left button; Right button; Cancel button; Back button; Wireless button; Ready LED; Error LED; Wi-Fi LED	2-line LCD; OK button; Left button; Right button; Cancel button; Back button; Ready LED; Error LED
Display Description	2-line backlit LCD graphic display	
Software Included	No software solutions are included in the Box, Download software at http://123.hp.com/laserjet or http://hp.com	
Fonts and Typefaces	84 scalable TrueType fonts	
Compatible Operating Systems	Windows Client OS (32/64 bit), Win10, Win8.1, Win 8 Basic, Win8 Pro, Win8 Enterprise, Win8 Enterprise N, Win7 Starter Edition SP1, UPD Win7 Ultimate, Mobile OS, iOS, Android, Mac, Apple® macOS Sierra v10.12, Apple® macOS High Sierra v10.13, Apple® macOS Mojave v10.14, Discrete PCL6 Printer Driver, For more information on the supported operating systems go to http://support.hp.com , Enter your product name and search, Click on User Guides and enter your product name and search for User Guide, Search for the Supported Operating Systems section, UPD PCL6 / PS Printer Drivers, Supported Operating systems, For more information on the supported operating systems see http://www.hp.com/go/upd	
Compatible Network Operating Systems	Windows Server 2008 R2 64-bit, Windows Server 2008 R2 64-bit (SP1), Windows Server 2012 64-bit, Windows Server 2012 R2 64-bit, Windows Server 2016 64-bit, Failover Cluster 2008 R2, Failover Cluster 2012 R2, Terminal server 2008 R2, Remote Desktop server 2012 R2, Citrix Server 6.5, Citrix XenApp & XenDesktop 7.6, Novell iPrint server, Citrix Ready Kit Certification - Upto Citrix Server 7.18 for more information see http://citrixready.citrix.com , Linux- For more information see http://developers.hp.com/hp-linux-imaging-and-printing , Unix- For more information see http://hp.com/go/unixmodelscripts , UPD PCL6 / PS Printer Drivers, Supported for Compatible Network Operating systems please see http://hp.com/go/upd	
Minimum System Requirements	PC: 2 GB available hard disk space, Internet connection, USB port, Internet browser. For additional OS hardware requirements see microsoft.com; MAC: 2 GB available hard drive space, Internet connection or USB port, OS hardware requirements see apple.com	
Power	Power Supply Type: Internal (built-in) Power Supply; Power Requirements: 110-volt input voltage: 110 to 127 VAC (+/- 10%), 50/60 Hz (+/- 2 Hz); 220-volt input voltage: 220 to 240 VAC (+/- 10%), 50/60 Hz (+/- 2 Hz) (Not dual voltage, product varies by part number with # Option code identifier); Power Consumption: 495 watts (active printing), 5.5 watts (ready), 0.5 watts (sleep), 0.5 watts (Auto Off/Wake on LAN, enabled at shipment), 0.05 watts (Auto-off/Manual-on), 0.05 (Manual Off) ²	
Acoustics	Acoustic Power Emissions: 6.7 B(A); Acoustic Pressure Emissions: 54 dB(A) ⁵	
Operating Environment	Operating Temperature Range: 15 to 32.5°C; Recommended Operating Temperature: 17.5 to 25°C; Storage Temperature Range: -20 to 40°C; Operating Humidity Range: 10 to 80% RH; Recommended Humidity Operating Range: 30 to 70% RH	
Security Management	Secure Boot, Secure Firmware Integrity, Runtime Code Integrity, password protected EWS, secure browsing via SSL/TLS 1.0, TLS 1.1, TLS 1.2; IPP over TLS; Network: enable/disable network ports and features, unused protocol and service disablement, SNMPv1, SNMPv2, and SNMPv3, community password change; HP ePrint: HTPS with certificate validation, HTTP Basic Access Authentication, SASL authentication; Firewall and ACL; control panel lock, certificates configuration, UPD PIN printing, Syslog, signed firmware, administrator settings, 802.1x authentication (EAP-TLS, and PEAP), authentication via WEP/WPA/WPA2 Personal, WPA2-enterprise; encryption via AES or TKIP; Encrypted data storage; Secure data erase; Automatic firmware updates; Secure Encrypted Print via optional job storage, Compatible with optional HP JetAdvantage Security Manager, IPPS	Secure Boot, Secure Firmware Integrity, Runtime Code Integrity, password protected EWS, secure browsing via SSL/TLS 1.0, TLS 1.1, TLS 1.2; IPP over TLS; Network: enable/disable network ports and features, unused protocol and service disablement, SNMPv1, SNMPv2, and SNMPv3, community password change; HP ePrint: HTPS with certificate validation, HTTP Basic Access Authentication, SASL authentication; Firewall and ACL; control panel lock, certificates configuration, UPD PIN printing, Syslog, signed firmware, administrator settings, 802.1x authentication (EAP-TLS, and PEAP); Encrypted data storage; Secure data erase; Automatic firmware updates; Secure Encrypted Print via optional job storage, Compatible with optional HP JetAdvantage Security Manager

¹ Without trays and covers not extended ² Power requirements are based on the country/region where the printer is sold. Do not convert operating voltages. This will damage the printer and void the product warranty. Power consumption values typically based on measurement of 115V device. ³ Toner cartridges designed for distribution and use within a designated region only; will not work outside of designated region. ⁴ Declared yield value in accordance with ISO/IEC 19752. Actual yields vary considerably based on images printed and other factors. For more information, visit <http://www.hp.com/go/learnaboutsupplies> ⁵ Local printing requires mobile device and printer to be on the same network (usually Wi-Fi access points bridge wireless to wired connections) or have a direct wireless connection. Wireless performance is dependent on physical environment and distance from access point. Remote printing requires an Internet connection to an HP web-connected printer. Wireless broadband use requires separately purchased service contract for mobile devices. Check with service provider for coverage and availability in your area. For more information visit hp.com/go/mobileprinting to enable HP Roam, some devices may require firmware to be upgraded and an optional accessory to add Bluetooth® Low Energy (BLE) beaconing capabilities. For more information, visit hp.com/go/roam ⁶ Acoustic values are subject to change. For current information see <http://www.hp.com/support>. Configuration tested: base model, simplex printing, A4 paper at an average of 40 ppm. ⁷ Measured using ISO/IEC 24734, excludes first set of test documents. For more information see <http://www.hp.com/go/printerclaims>. Exact speed varies depending on the system configuration, software application, driver, and document complexity. ⁸ Measured using ISO 24734 Feature Test, A5 Landscape Feed. Speed may vary based on content, PC, media orientation, and media type. ⁹ Measured using ISO/IEC 17629. For more information see <http://www.hp.com/go/printerclaims>. Exact speed varies depending on the system configuration, software application, driver, and document complexity. ¹⁰ Duty cycle is defined as the maximum number of pages per month of imaged output. This value provides a comparison of product robustness in relation to other HP LaserJet or HP Color LaserJet devices, and enables appropriate deployment of printers and MFPS to satisfy the demands of connected individuals or groups. ¹¹ HP recommends that the number of pages per month of imaged output be within the stated range for optimum device performance, based on factors including supplies replacement intervals and device life over an extended warranty period ¹² HP SureSupply alerts you when your print cartridge is running low and helps you purchase online or locally through HP or a participating retailer. For more information, visit <http://www.hp.com/go/SureSupply>; only available with Original HP supplies; Internet access required.

Learn more at hp.com

© Copyright 2019 HP Development Company, L.P. The information contained herein is subject to change without notice. The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein. ENERGY STAR and the ENERGY STAR logo are registered U.S. marks. Windows is a registered trademark of Microsoft Corporation. AirPrint, iPad, iPhone, and iPod touch are trademarks of Apple Inc., registered in the U.S. and other countries.

