Firmware Release Notes

Entrust Desktop Printer Firmware

This document provides a summary of the new features and updates to the Entrust® Datacard® (formerly Sigma) DS, DSE and EM Series Direct-to-Card Printers firmware.

Version Information

Firmware Version	D4.5.2-SP2
Release Date	November 2026
Update of Released Version	D4.5.2-SP1
Component Versions:	
• Printer	D4.5.2-5004
• Printer BSP	D4.1.25-12
• Embosser Firmware Version	E1.1.57-1
• Laminator Firmware Version	L1.1.8-2
• TIM Impresser Firmware Version	I1.1.6-1
• RIM Indenter Firmware Version	N1.1.4-1
• DGM (LCM) UV Cure Firmware Version	V1.1.4-1
• Multi-hopper Firmware Version	M1.3.4-1
• OpenCard Plug-in Version	PLG.1.32-4
• Smart Card Coupler	DE-ABCM5_CCID_DC_260903

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D4.5.2-SP2 Firmware Release

Improvements

- Updated module firmware for Multi-Hopper (MH), Rear Indent Module (RIM), Tactile Impression Module (TIM), and Durable Graphics Module (DGM). These updates support newer EEPROM parts being used in manufacturing the modules.

  If the printer detects that the attached module contains the new EEPROM part, downgrades below D4.5.2-5004 will be prevented as the module will not save settings properly with prior released firmware.

- Fixed Printer Dashboard issue where the prompt to create an initial user account does not appear.

Security

- Apache updated to version 2.4.69 to address latest CVEs.
- gSOAP updated to version 2.8.146 to address vulnerabilities.
- Applied upstream Linux kernel patches to address latest CVEs.

Prior D4.5.2-SP1 Firmware Release

Security

- Updated printer operating system and patch level to the version released in October 2026.
- Update PHP to version 8.4.27 to address latest CVEs.
- Distrust certificates affected by the eMudhra CA compromise.

Prior D4.5.2 Firmware Release

New Features

- Added support for USB Printer Class Device operation mode with the UsbDeviceType setting.

  Access the UsbDeviceType setting from Printer Dashboard using an Administrator's account at **Configuration** > **Settings** > **Communication** > **UsbDeviceType**. Refer to "Changing the USB Connection Between a Printer Class Device (PCD) or Network" in the printers Installation and Administrator's Guide for details on using this new feature.

- Updated LCD panel layout for Datacard branding.
- Updated name of LCM to DGM to reflect current branding.
- Added VerticalOffsetImageShift to Printer Dashboard. This setting allows administrators to adjust the Vertical position of card designs. The setting supplements the pre-existing VerticalOffset setting and enables the vertical position of the card design to shift without unintended image cropping.



Access the VerticalOffsetImageShift setting from Printer Dashboard using an Administrator's account at **Configuration** > **Settings** > **Print** > **VerticalOffsetImageShift**.

Improvements

- Fixed issue with spaces in OpenCard filenames.
- Fixed issue where QR code was not displayed on service code screen.
- Added retries on magstripe read operations.
- Updated Duali Smart Card Coupler firmware to restore auto-get response behavior and add enable/disable functionality.
- Improved error reporting for card entry sensor issues.
- Improved handling of factory MAC address on printer.

Security

- Updated printer operating system and patch level to the version released in August 2026.

Prior D4.5.1 Firmware Release

New Features

- Added support for printing on PETG/rPETG cards with UV-curable monochrome ribbons.
- Added ability to run a cleaning card on Sigma DSE from the User button.
- Added support for YMCKL-KT and YMCKF-KT ribbons on Sigma DSE.
- Introduced a user selectable enhanced cleaning option.

Improvements

- Removed several prompts for running cleaning cards to just a reminder to the user to remove the ribbon if it is installed, and to insert the cleaning card.
- Fixed occasional print artifact on Sigma DSE printers.
- Fixed issue in setting the initial MAC on the printer.

- Eliminated 196 errors when updating laminator firmware on laminators with only a L1 lamination station.
- Updated laminator firmware to not heat the rollers on startup if they cannot be raised.
- Improved laminator firmware update process.

Security

- Updated printer operating system and patch level to the version released in October 2025.
- Protect against brute force login attempts to Printer Dashboard.
- Merged 4 settings into one new setting for controlling secure communications with the printer - TLSEncryptAllCardData. Added privacy risk warning to user if they disable this setting.

Prior D4.4.4-SP2 Firmware Release

Improvements

- The prior D4.4.4-SP1 firmware release blocked firmware downgrades for certain Sigma DS3/DS4 model printers based upon the version of main board in the printer. A change has been made to allow these printers to be downgraded to firmware versions D4.4.1 and later. Other printers may be allowed to downgrade to earlier releases depending on hardware installed and features enabled in the printer.

Prior D4.4.4-SP1 Firmware Release

Improvements

- Fixed problem where changes to the printer's date and time did not persist across power cycles or resets.

Issue Included From Prior D4.4.4-5000 Hotfix

Early Release Printer Displays "Mainboard Unprogrammed" on Front Panel at Startup

Reference Number	EARDI-1572
Issue Summary	Early release Sigma printers may display "Mainboard Unprogrammed" messages on the front panel during startup. After startup is complete the printer will display Ready condition on the front panel and operate normally.
Systems Impacted	Early release Sigma printers.
Fix	Firmware updated to store the standard startup image used during printer startup.

Prior D4.4.4 Firmware Release

New Features

- Added support for the laminator with printer kiosk models.

Improvements

- Added Printer Dashboard support for Test Card Secure Print on 600 dpi printhead models.
- Corrected back side color printing of Printer Dashboard test cards.
- Updated embosser firmware to decrease embosser 127 errors.
- Updated laminator firmware to decrease 197 errors while running cleaning cards.
- Corrected wasted card 102 condition at end of ribbon.
- Increased number of OpenCard jobs accepted for queuing.
- Allow OpenCard jobs formatted with barcodes to run successfully even if barcode data is not submitted.
- Eliminated memory leak when OpenCard jobs are run.

Security

- Updated printer operating system and patch level to the version released in August 2025.

Prior D4.4.3 Firmware Release

New Features

- Support added for using the following ribbon types for the Sigma DS3 with 600 dpi printer:
  - KT and KTT
  - YMCKF-KT
  - YMCKL-KT
  - Black premium
  - White premium
  - White standard
  - YMCKT, PETG friendly
- Support added for 300x600 color printing for Sigma DSE model printers.
- Added support for GDI Windows Driver.

Improvements

- Updated Duali Smart Card Coupler firmware to resolve problem with auto-get response behavior.
- Added support for 4k RSA keys to custom TLS certificate with private key workflow.
- Improved reliability of picking and ejecting cards when using Quiet Mode.
- Improved reliability of card movement between printer and the Light Curing Module.
- Added warning display on front panel when the Light Curing Module lamp cleaning is needed.
- Reduced embosser 127 errors when dispensing a card to a Sigma kiosk printer.
- Corrected condition where the user button could not cancel a print job on a Sigma DSE model printer.
- Corrected a rare condition where the front panel becomes unresponsive.
- Corrected some service codes displayed on the front panel for German and French languages.
- Corrected firmware updates from Printer Dashboard (future FW updates from D4.4.3 will now work, while updates to D4.4.3 will need to be done with the firmware update utility).
- Corrected descriptions for some settings in Printer Dashboard.

Security

- Improved security of TLS cipher and Apache configurations.



NOTE: The D4.4.2 release was only shipped with Sigma DSE model printers and is not available for other Sigma printer models. All changes applicable to other Sigma printer models in this release are stated in the D4.4.3 Firmware Release notes above.

Prior D4.4.1 Firmware Release

New Feature

- Added support for the new Sigma DS3 with 600 DPI printer.

Improvements

- Added support for SNMPv3.
- Improved print quality for images at trailing edge of card when using ymcKT supply.
- Corrected barcode printing errors with OpenCard.
- Corrected DHCP hostname reported by the printer.
- Improvements to reduce card not in position errors for printers with DGM (formerly LCM) modules.