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*** Basic Information ***
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[Create date] 2018/04/27

[Program Name] Engine

[Version] 1.33:13

[PCB No.]

[Interchangeability] X / O

[Other Firmware Requirements] None

[PCB Requirements] None

[Software category] Normal Release

[Release category] Normal Release

[Program category] Firmware

Exported to(language) GEN(all)

[Firmware No.] M1585550Q

[File Information]

File Name M1585550Q.fwu

File Type Module for Service

Size 0.39 MB (410228 byte)

[File Information]

File Name M1585550Q.rfu

File Type Module for Remote Upgrade

Size 0.40 MB (418048 byte)

[Availability of RFU] Yes

[Production reflection] 2018/05

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*** Note ***
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[Note]

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*** Important Notes ***
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[Important Notes]

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*** Modification History ***
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[Modifications made:]

Rank C

Symptom corrected:

1. When the "Sleep Mode Timer" or the "Fusing Unit Off Mode (Energy Saving) On/Off" setting is changed from the default setting, the PCDU might keep rolling, which might cause the screw to break and waste toner to spill out of the PCDU.
2. Corrected a malfunction with the initial toner supply mode when replacing the toner bottle.

Other changes:

3. Instead of displaying SC541 or SC544, a message that prompts users to reset the fusing unit is displayed.

[Modification history]

Version 1.32:13

Other changes:

- Improved the fusing temperature control.

Version 1.30:13

Other changes:

Minor changes only for the Japanese model.

Version 1.28:13

Symptom corrected:

1. Waste toner collection coil of the PCDU may break.
2. Fan may not stop even in sleep mode.
3. Cleaning operation of the fusing roller may not complete.
4. Notifications of the remaining toner amount and toner near end alert appear earlier than expected.

Other changes:

1. Toner refresh mode was optimized for paper narrower than A4 SEF (210mm).
2. Support of traditional Chinese for the Asia-Pacific M158 model.
This change applies to the following firmware modules and versions:
 - System firmware: v1.12 or later (M1585770H)
 - Printer firmware: v1.12 or later (M1585756H)
 - Web Support firmware: v1.11 or later (M1585750G)

Version 1.25:13

Symptom corrected:

- SC332 may occur.

Version 1.24:13

Symptom corrected:

1. Waste toner full alert appears earlier than expected.

Other changes:

1. Supports the model SP4520DN, newly released for the European market.

This release also applies to model SP4510DN, which has already been released in the European market.

For SP4510DN, please refer to RTB No. RM158030 for explanation on compatibility with this release and hardware modification.

2. The margins at the leading and trailing edges can be set to 0 mm.

Version 1.23:13

Symptom corrected

"Waste Toner full" is displayed earlier than expected because the connection between the toner cartridge terminal and the connector on the mainframe is loose.

Version 1.21:13

Other Changes

Specifications were changed for the Japanese model.

Version 1.20:13

Minor change

Version 1.19:13

Symptom corrected

The main motor or paper exit motor may not turn off if an SC occurs during continuous printing which requires the machine to stop (once the paper is exited).

Version 1.18:13

1st Mass production

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*** Basic Information ***
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[Create date] 2019/07/01

[Program Name] Web Support

[Version] 1.14

[PCB No.]

[Interchangeability] X / O

[Other Firmware Requirements] None

[PCB Requirements] None

[Software category] Normal Release

[Release category] Normal Release

[Program category] Firmware

Exported to(language) GEN(all)

[Firmware No.] M1585750K

[File Information]

File Name M1585750K.fwu

File Type Module for Service

Size 4.71 MB (4942100 byte)

[File Information]

File Name M1585750K.rfu

File Type Module for Remote Upgrade

Size 4.72 MB (4948224 byte)

[Availability of RFU] Yes

[Production reflection] 2019/07

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*** Note ***
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[Note]

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*** Important Notes ***
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[Important Notes]

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*** Modification History ***
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[Modifications made:]

Rank C

Symptom corrected:

- The XSS vulnerability of screens in the Address Book that was pointed out in CVE-2018-15884 has been fixed.
Ricoh devices already had a countermeasure to protect against the CSRF vulnerability pointed out in CVE-2018-15884.

[Modification history]

Version 1.13

Rank C

Other changes:

- The following values can be set with solution software that uses SOAP I/F.
"SNMPv3 Setting"
 - SNMPv3 Trap Communication
 - Encryption Algorithm
 - Permit SNMPv3 Communication"Program/Change Administrator"
 - Encryption Password

Version 1.12

Other changes:

- Support for ErP Lot 6 compliance.

Version 1.12

Other changes:

- Added support for adhering to the Lot 6 regulation of the EU in European devices.

Version 1.11

Other changes:

- Support for Traditional Chinese in Asia-Pacific models.
This firmware is dependent on the following versions of firmware modules:
 - System firmware: v1.12 or later (M1585770H)
 - Printer firmware: v1.12 or later (M1585756H)

Version 1.10

Other changes:

- Support for the Portuguese orthography.

Version 1.09

Other changes:

- Support for Korean in Asia-Pacific models.

This firmware is dependent on the following versions of firmware modules:

- System firmware: v1.10 or later (M1585770F)
- Printer firmware: v1.10 or later (M1585756F)

Version 1.08

Other changes:

- Support for AirPrint.

This firmware is dependent on the following firmware modules.

Please be sure to update all of them:

- Printer firmware: v1.09 or later (M1585756E)
- Network Support firmware: v13.23.1 or later (M1585753E)

Version 1.07

1st Mass production

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*** Basic Information ***
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[Create date] 2017/05/12

[Program Name] Network Support

[Version] 13.26

[PCB No.]

[Interchangeability] X / O

[Other Firmware Requirements] None

[PCB Requirements] None

[Software category] Normal Release

[Release category] Normal Release

[Program category] Firmware

Exported to(language) GEN(all)

[Firmware No.] M1585753H

[File Information]

File Name M1585753H.fwu

File Type Module for Service

Size 7.94 MB (8323664 byte)

[File Information]

File Name M1585753H.rfu

File Type Module for Remote Upgrade

Size 7.95 MB (8331520 byte)

[Production reflection] 2017/05

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*** Note ***
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[Note]

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*** Important Notes ***
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[Important Notes]

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*** Modification History ***
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[Modifications made:]

Symptom corrected:

1. When the device is set to use "IEEE 802.1X" and "TLS1.2" is set to "active", authentication will fail.
2. When the device is in Energy Saver Mode, if information about the network interface for the device is being obtained from the SNMP Manager application, nonexistent errors are recorded in the system logs.

[Modification history]

Version 13.25

Other Changes:

- Added support for adhering to the Lot 6 regulation of the EU in European devices.

Version 13.24

Other changes:

- Changed the DH key specification to use 2,048 bits instead of 512 bits to prevent the Logjam vulnerability (CVE-2015-4000).
In addition, by modifying this specification, SSL/TLS communication can be established when using Mac OS X 10.10.4 and iOS 8.4.

Version 13.23.1

Symptom corrected:

- When performing IPP printing with the job spool enabled in Mac OS X 10.7 or later and iOS 6 or later, the document is not printed.

Other changes:

- Support for AirPrint.
This firmware is dependent on the following firmware modules.
Please be sure to update all of them:
SP 4510DN:
 - Printer firmware: v1.09 or later (M1585756E)
 - Web Support firmware: v1.08 or later (M1585750D)

SP 4520DN:

- Printer firmware: v1.08 or later (M1595756E)
- Web Support firmware: v1.07 or later (M1595750D)

Version 13.22

Symptom corrected:

1. When the device is in Energy Saver Mode, if information about the network

interface for the device is being obtained from the SNMP Manager application, nonexistent errors are recorded in the system logs.

2. When the display language of the operation panel is set to Catalan, Scan to Folder fails.

Other changes:

- When printing from the Windows operating system, if the RAW protocol is used for the standard TCP/IP port, a significant amount of time might pass until the next job is printed. Because of this, the initial print timeout period is changed to 15 seconds and the shortest timeout period that can be set is changed to 5 seconds.

Version 13.21

1st Mass production

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*** Basic Information ***
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[Create date] 2017/12/04

[Program Name] Printer

[Version] 1.16

[PCB No.]

[Interchangeability] X / O

[Other Firmware Requirements] None

[PCB Requirements] None

[Software category] Normal Release

[Release category] Normal Release

[Program category] Firmware

Exported to(language) GEN(all)

[Firmware No.] M1585756L

[File Information]

File Name M1585756L.fwu

File Type Module for Service

Size 3.14 MB (3287496 byte)

[File Information]

File Name M1585756L.rfu

File Type Module for Remote Upgrade

Size 3.14 MB (3293440 byte)

[Availability of RFU] Yes

[Production reflection] 2017/12

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*** Note ***
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[Note]

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*** Important Notes ***
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[Important Notes]

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*** Modification History ***
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[Modifications made:]

Symptom corrected:

- The specific combination of "Duplex/Booklet" and "Bypass Tray" might not be selectable from the settings in the SDK application even though the combination is supported.
- A print job conducted from Ricoh Smart Device Print&Scan via Enhanced Locked Print NX FS v2 cannot be printed.
- After an SC reboot occurs, if the dialog window stating that the automatic reboot has occurred is not closed, SDK-J applications cannot be started, which results in an SC990 error occurring.
- IPDS printing might stall if IPDS jobs are printed continuously.
- The functions of Enable mode and Disable mode are reversed in "Engy Sv Md to Dsbl Prt Srv".

[Modification history]

Version 1.14

Symptom corrected:

- When attempting to preview a large-size JPEG image from "Print/Scan (Memory Storage Device)", an SC899 error occurs.
- When printing from AirPrint, the paper weight "Plain 2 (75 to 81g/square metre)" is out of the search target of "Auto Tray Select" even if "Plain Paper or Recycled Paper" is specified in the job.

Version 1.13

Symptom corrected:

An SC899 error might occur when the RHPP port (port 59100) receives specific data.

Other changes:

Added support for adhering to the Lot 6 regulation of the EU in European devices.

Version 1.12

Other changes:

Support for Traditional Chinese in Asia-Pacific models.

This firmware is dependent on the following versions of firmware modules:

- System firmware: v1.12 or later (M1585770H)
 - Web Support firmware: v1.11 or later (M1585750G)
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Version 1.11

Symptom corrected:

- Under all of the following conditions, paper is fed from the device trays even though the paper feed tray setting in the driver is set to the bypass tray:
 - The "Tray Setting Priority" of the bypass tray is "Driver/Command".
 - The "Paper Confirmation for Bypass Tray Display" setting is "Display".
 - The "Tray Switching" setting is "On".
 - The paper size and paper type set on the device matches to the setting configured on the driver is selected.

Other changes:

- Support for the Portuguese orthography.

Version 1.10

Other changes:

- Support for Korean in Asia-Pacific models.

This firmware is dependent on the following versions of firmware modules:

- System firmware: v1.10 or later (M1585770F)
- Web System firmware: v1.09 or later (M1585750E)

Version 1.09

Other changes:

1. Support for AirPrint.

This firmware is dependent on the following firmware module.

Please be sure to update it:

- Network Support firmware: v13.23.1 or later
- Web Support firmware: v1.08 or later

2. When printing a .tiff document from a removable storage device, the pages of the document might be rotated 90 degrees or 270 degrees depending on the orientation of the paper set in the device tray.

Version 1.08

Other changes:

"Performance Priority" mode was added.

- Performance Priority: Prioritizes print speed
- Environment Priority (Default): Prioritizes environmentally-friendly conditions (duplex printing is slowed down after 70 sec.)

Version 1.07

1st Mass production

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*** Basic Information ***
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[Create date] 2017/05/01

[Program Name] RPCS

[Version] 3.14.6

[PCB No.]

[Interchangeability] X / O

[Other Firmware Requirements] None

[PCB Requirements] None

[Software category] Normal Release

[Release category] Normal Release

[Program category] Firmware

Exported to(language) GEN(all)

[Firmware No.] M1585758D

[File Information]

File Name M1585758D.fwu

File Type Module for Service

Size 0.55 MB (574532 byte)

[File Information]

File Name M1585758D.rfu

File Type Module for Remote Upgrade

Size 0.55 MB (581888 byte)

[Production reflection] 2017/05

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*** Note ***
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[Note]

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*** Important Notes ***
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[Important Notes]

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*** Modification History ***
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[Modifications made:]

Symptom Corrected:

- When "Unauthorized Copy Prevention Printing: Printer" is enabled, an error might occur, causing the job to be cancelled. (GFPR#RA14120002)

[Modification history]

Version 3.14.5

Symptom corrected:

When printing a RPCS vector job that contains an image with transparent parts that the RPCS driver generates, the transparent parts are printed in black.

Version 3.14.4

1st Mass production

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*** Basic Information ***
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[Create date] 2019/07/05

[Program Name] System

[Version] 1.18

[PCB No.]

[Interchangeability] X / O

[Other Firmware Requirements] None

[PCB Requirements] None

[Software category] Normal Release

[Release category] Normal Release

[Program category] Firmware

Exported to(language) GEN(all)

[Firmware No.] M1585770P

[File Information]

File Name M1585770P.fwu

File Type Module for Service

Size 15.70 MB (16466944 byte)

[File Information]

File Name M1585770P.rfu

File Type Module for Remote Upgrade

Size 15.71 MB (16474368 byte)

[Availability of RFU] Yes

[Production reflection] 2019/07

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*** Note ***
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[Note]

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*** Important Notes ***
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[Important Notes]

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*** Modification History ***
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[Modifications made:]

Symptom corrected:

- If the machine repeatedly transitions into and out of energy saving mode, the operation panel might not light up and SC819 might occur.
- The message notifying that the toner cartridge is almost empty might be displayed under "Check Status" before the status light flashes yellow.

Other changes:

- The message displayed when the fusing unit is not set correctly, changed, to prompt users to reinstall it.

[Modification history]

Version 1.17

Rank C

Other changes:

- The default setting for symbols and numbers on a Simplified/Traditional Chinese soft keyboard has been changed from two-byte characters to one-byte characters.

Version 1.16

Rank C

Symptom corrected:

- An invalid value is returned when obtaining the counter MIB, `ricohEngCounterValue`, during device shutdown.
- The operation panel displays "Printout Failed" and jobs cannot be printed, if SMC all print (SP5-990-001) or NIB summary (SP5-990-007) is executed on machines set to Chinese, Formosan or Korean.

Version 1.15

Symptom corrected:

Minor changes were applied for the Japan domestic model only.

Version 1.14

Symptom corrected:

- A part of the image may disappear, if the file is printed from the document server (saved using PS driver) with the image orientation rotated 90 degrees.

Version 1.13

Symptom corrected:

- If the automatic supply order function is activated and the PCDU reaches life, PCDU order calls are sent to the @Remote repeatedly.

Other changes:

- Support for ErP Lot 6 compliance.

Version 1.12

Symptom corrected:

1. If the automatic supply order function is activated and the PCDU reaches life, PCDU order calls are sent to the @Remote repeatedly.
2. The alert indicator may flash in yellow without displaying a message.

Other changes:

1. Support of traditional Chinese for the Asia-Pacific models.

This change applies to the following firmware modules and versions:

- Printer firmware: v1.12 or later (M1585756H)
- Web Support firmware: v1.11 or later (M1585750G)
- Engine firmware: v1.28:13 or later (M1585550M)

Version 1.11

Specification Change:

- Support for the Portuguese orthography.

Version 1.10

Symptom corrected:

1. Cannot access flash memory on the controller board.
2. SC816-01 may occur after print job is completed.
3. An SC819 error might occur when using network-related functions, such as accessing Web Image Monitor.
4. When the CTS protection function is enabled, the throughput for the wireless LAN connection is reduced.
5. In wireless LAN environments, when A-MSDU is enabled, the device cannot receive packet data that is more than 2,048 bytes.
6. In wireless LAN environments, when large volume printing is being conducted, the job is cancelled in the middle of printing.
7. In wireless LAN environments, when the authentication methods WPA2 and A-MPDU are enabled, printing might take a significant amount of time.
8. When the threshold for fragmentation is set in the access point settings, the MFP/LP will fail to receive the packet data if the computer sends data that is larger than the threshold that is set.
9. When trying to establish an ad-hoc connection among three or more devices, the third and subsequent devices cannot connect.
10. The device cannot communicate when using the WMM (Wi-Fi Multimedia) function.
11. If "AAM-E for 4.3 inch panel printer" included in SLNX or CAP v2 is installed to the device, users cannot log in to Web Image Monitor.

Other changes:

1. Support for Korean in Asia-Pacific models.

This firmware is dependent on the following versions of firmware modules:

- Printer firmware: v1.10 or later (M1585756F)
 - Web System firmware: v1.09 or later (M1585750E)
2. Supports the model SP4520DN, newly released for the European market.
This firmware is dependent on the following versions of firmware modules:
 - Engine firmware: v1.24:13 or later (M1585550K)
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Version 1.09

Symptom corrected:

- Machine data encryption settings bug corrected.
- If "Display" is selected under "Paper Confirmation for Bypass Tray," printing is available only in LEF.
(User Tool -> Printer Features -> System -> Tray Setting Priority -> Paper Confirmation for Bypass Tray)
- When Simplified Chinese characters are included in the additional email information, username, password, a destination folder name, or a filename for SMB/NCP, the connection is unsuccessful, the data transmission fails, or the body of the email contains garbled text.

Version 1.08a

Symptom corrected:

1. Address Book display error (Device Manager NX series).
2. SC674 occurs when the directions of the image and paper feed are not the same.

Other changes

3. Added "Performance Priority" mode (UP).

Note:

- Performance Priority mode prioritizes printing speed
- Environment Priority mode (default) prioritizes environmentally-friendly conditions (duplex printing is slowed down after 70 sec.).

4. Added a "Cool-down" feature (SP1-110-001, default: ON).

Note: When this mode is enabled, the occurrence of black spots is minimized. However, printing speed is reduced.

Version 1.07

1st Mass production

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*** Basic Information ***
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[Create date] 2019/07/03

[Program Name] OpePanel

[Version] 1.09

[PCB No.]

[Interchangeability] X / O

[Other Firmware Requirements] None

[PCB Requirements] None

[Software category] Normal Release

[Release category] Normal Release

[Program category] Firmware

Exported to(language) GEN(ja,en,f,e,d,i,nl,s,n,dk,sf,p,pl,h,cz,ru,sc,br,tr,ca,gr)

[Firmware No.] M1595740G

[File Information]

File Name M1595740G.fwu

File Type Module for Service

Size 46.81 MB (49086956 byte)

[File Information]

File Name M1595740G.rfu

File Type Module for Remote Upgrade

Size 46.82 MB (49094912 byte)

[Availability of RFU] Yes

[Production reflection]

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*** Note ***
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[Note]

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*** Important Notes ***
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[Important Notes]

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*** Modification History ***
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[Modifications made:]

Rank C

Other changes:

- The message displayed when the fusing unit is not set correctly, changed, to prompt users to reinstall it.

[Modification history]

Version 1.08

Other changes:

- Support for ErP Lot 6 compliance.

Version 1.07

Specification Change:

- Support for the Portuguese orthography.

Version 1.06

Other changes:

"Performance Priority" mode was added.

- Performance Priority: Prioritizes print speed
- Environment Priority (Default): Prioritizes environmentally-friendly conditions (duplex printing is slowed down after 70 sec.)

Version 1.05

1st Mass production

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*** Basic Information ***
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[Create date] 2019/07/01

[Program Name] PCL

[Version] 1.10

[PCB No.]

[Interchangeability] X / O

[Other Firmware Requirements] None

[PCB Requirements] None

[Software category] Normal Release

[Release category] Normal Release

[Program category] Firmware

Exported to(language) GEN(all)

[Firmware No.] M1595759K

[File Information]

File Name M1595759K.fwu

File Type Module for Service

Size 1.42 MB (1487752 byte)

[File Information]

File Name M1595759K.rfu

File Type Module for Remote Upgrade

Size 1.43 MB (1495296 byte)

[Availability of RFU] Yes

[Production reflection] 2019/07

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*** Note ***
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[Note]

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*** Important Notes ***
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[Important Notes]

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*** Modification History ***
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[Modifications made:]

Rank C

Symptom corrected:

- Double-byte characters of Asian languages such as Japanese, Chinese, and Korean might be missing.

[Modification history]

Version 1.09

Rank C

Symptom corrected:

- If printing PCL5 data after installing the Andale font on the machine, some Chinese characters might not be printed.

Version 1.08

Symptom corrected:

- When printing the contents of an A3 size document on A4 size paper via Direct printing, the text might be distorted.

Version 1.07

Symptom corrected:

- An SC899 error occurs when using the PCL6 driver to print a PDF from the Reader application in Windows 8.1. (GFPR#RA15050002)

Version 1.06

Symptom corrected:

1. When characters that contain the incorrect TrueType font data are printed, not only are incorrect characters missing but so are correct characters that follow incorrect characters. (GFPR#RE16030046)
2. The image quality output from PCL5 data might be poor if the image was created by using certain applications, such as RICOH ProcessDirector. (GFPR#RE15030034)
3. When "Unauthorized Copy Prevention Printing: Printer" is enabled, an error might occur, causing the job to be cancelled. (GFPR#RA14120002)
4. A blank page or missing image is printed out if the PCL data created by certain applications (such as Microsoft Excel 2010) contains a significant amount of graphics and/or transparent objects.
5. An SC899 error might occur when graphics are drawn by the RGB Brush.

Version 1.05

Symptom corrected:

1. An SC899 error might occur when printing a PCL job which contains reduce or enlarge image. (GFPR#RE16020028)

2. Some lines and/or borders might be missing from PCL jobs.
(GFPR#RC16040013)

Version 1.04

Symptom corrected:

1. Using a bitmap font might result in jobs being cancelled. (GFPR#RE13100030)
2. When the print settings are changed for a stored document that includes a banner page, the changed settings are not applied when the document is printed.
3. If a raster image is specified in the PCL6 driver to be reduced, be enlarged, or undergo N-up printing, unexpected white lines might appear in the printout.
(GFPR#RA14080005, GFPR#RA14110005)
4. If an image size is big and has been enlarged by using the "Reduce/Enlarge" option in the PCL6 driver, unexpected white lines might appear in the printout.
5. When printing a PCL5 host-printing job in which 32,000 or more of the fill patterns are specified, the device will stall.
6. If a PCL5 job is printed under certain conditions related to the font header information when using host printing, PCL default fonts are used. (GFPR#RE14100009)

Version 1.03

1st Mass production

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*** Basic Information ***
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[Create date] 2017/12/04

[Program Name] Printer

[Version] 1.14

[PCB No.]

[Interchangeability] X / O

[Other Firmware Requirements] None

[PCB Requirements] None

[Software category] Normal Release

[Release category] Normal Release

[Program category] Firmware

Exported to(language) GEN(all)

[Firmware No.] M1595756J

[File Information]

File Name M1595756J.fwu

File Type Module for Service

Size 4.01 MB (4209396 byte)

[File Information]

File Name M1595756J.rfu

File Type Module for Remote Upgrade

Size 4.02 MB (4215040 byte)

[Availability of RFU] Yes

[Production reflection] 2017/12

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*** Note ***
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[Note]

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*** Important Notes ***
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[Important Notes]

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*** Modification History ***
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[Modifications made:]

Symptom corrected:

- The specific combination of "Duplex/Booklet" and "Bypass Tray" might not be selectable from the settings in the SDK application even though the combination is supported.
- A print job conducted from Ricoh Smart Device Print&Scan via Enhanced Locked Print NX FS v2 cannot be printed.
- After an SC reboot occurs, if the dialog window stating that the automatic reboot has occurred is not closed, SDK-J applications cannot be started, which results in an SC990 error occurring.
- IPDS printing might stall if IPDS jobs are printed continuously.
- The functions of Enable mode and Disable mode are reversed in "Engy Sv Md to Dsbl Prt Srv".

[Modification history]

Version 1.13

Symptom corrected:

- The wrong content might be written on the Printer Configuration page.
- When attempting to preview a large-size JPEG image from "Print/Scan (Memory Storage Device)", an SC899 error occurs.
- When printing from AirPrint, the paper weight "Plain 2 (75 to 81g/square metre)" is out of the search target of "Auto Tray Select" even if "Plain Paper or Recycled Paper" is specified in the job.

Version 1.12

Symptom corrected:

An SC899 error might occur when the RHPP port (port 59100) receives specific data.

Other changes:

Added support for adhering to the Lot 6 regulation of the EU in European devices.

Version 1.09

Symptom corrected:

- Under all of the following conditions, paper is fed from the device trays even though the paper feed tray setting in the driver is set to the bypass tray:
 - The "Tray Setting Priority" of the bypass tray is "Driver/Command".
 - The "Paper Confirmation for Bypass Tray Display" setting is "Display".
 - The "Tray Switching" setting is "On".
 - The paper size and paper type set on the device matches to the setting

configured on the driver is selected.

Other changes:

- Support for the Portuguese orthography.

Version 1.08

Other changes:

1. Support for AirPrint.

This firmware is dependent on the following firmware module.

Please be sure to update it:

- Network Support firmware: v13.23.1 or later
- Web Support firmware: v1.08 or later

2. When printing a .tiff document from a removable storage device, the pages of the document might be rotated 90 degrees or 270 degrees depending on the orientation of the paper set in the device tray.

Version 1.07

Other changes:

"Performance Priority" mode was added.

- Performance Priority: Prioritizes print speed
- Environment Priority (Default): Prioritizes environmentally-friendly conditions (duplex printing is slowed down after 70 sec.)

Version 1.06

1st Mass production

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*** Basic Information ***
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[Create date] 2017/05/01

[Program Name] PS3

[Version] 1.00

[PCB No.]

[Interchangeability] X / O

[Other Firmware Requirements] None

[PCB Requirements] None

[Software category] Normal Release

[Release category] Normal Release

[Program category] Firmware

Exported to(language) GEN(all)

[Firmware No.] M1595760A

[File Information]

File Name M1595760A.fwu

File Type Module for Service

Size 0.01 MB (1312 byte)

[File Information]

File Name M1595760A.rfu

File Type Module for Remote Upgrade

Size 0.01 MB (8448 byte)

[Production reflection] 2017/05

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*** Note ***
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[Note]

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*** Important Notes ***
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[Important Notes]

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*** Modification History ***
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[Modifications made:]

Other changes:

- New Model Supported.

[Modification history]

Version 1.00

1st Mass production

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*** Basic Information ***
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[Create date] 2017/05/01

[Program Name] PDF

[Version] 1.03

[PCB No.]

[Interchangeability] X / O

[Other Firmware Requirements] None

[PCB Requirements] None

[Software category] Normal Release

[Release category] Normal Release

[Program category] Firmware

Exported to(language) GEN(all)

[Firmware No.] M1595762C

[File Information]

File Name M1595762C.fwu

File Type Module for Service

Size 4.16 MB (4362432 byte)

[File Information]

File Name M1595762C.rfu

File Type Module for Remote Upgrade

Size 4.17 MB (4370688 byte)

[Production reflection] 2017/05

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*** Note ***
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[Note]

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*** Important Notes ***
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[Important Notes]

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*** Modification History ***
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[Modifications made:]

Symptom corrected:

- PDF file may not be printed via direct print if the PDF file contains True Type fonts.
- Printing might be slow when a spreadsheet containing many cells with patterns that are different from the default pattern in the following setting is printed from Microsoft Excel 2013:
Select "Format Cell", select the "Fill" tab, and change the "Pattern Style" setting
- Images might be missing when printing from the PS3 driver.
- The number of copies specified by the PjL command in a PDF job cannot be overwritten to "1" by using certain applications that use the SDK interface, such as Enhanced Locked Print NX v2, implemented on the device.

[Modification history]

Version 1.02

1st Mass production

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*** Basic Information ***
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[Create date] 2017/12/04

[Program Name] XPS

[Version] 1.05

[PCB No.]

[Interchangeability] X / O

[Other Firmware Requirements] None

[PCB Requirements] None

[Software category] Normal Release

[Release category] Normal Release

[Program category] Firmware

Exported to(language) GEN(all)

[Firmware No.] M1595764B

[File Information]

File Name M1595764B.fwu

File Type Module for Service

Size 2.01 MB (2104296 byte)

[File Information]

File Name M1595764B.rfu

File Type Module for Remote Upgrade

Size 2.01 MB (2109696 byte)

[Availability of RFU] Yes

[Production reflection] 2017/12

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*** Note ***
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[Note]

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*** Important Notes ***
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[Important Notes]

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*** Modification History ***
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[Modifications made:]

Symptom corrected:

- When printing the contents of an A3 size document on A4 size paper via Direct printing, the text might be distorted.

[Modification history]

Version 1.04

Symptom corrected:

- An SC899 error might occur when graphics are drawn by the RGB Brush. (GFPR#RE15100026)
- When printing a excel sheet that contains images that drawn by collar custom brush, the job may be canceled.
- When "Unauthorized Copy Prevention Printing: Printer" is enabled, an error might occur, causing the job to be cancelled. (GFPR#RA14120002)

Version 1.03

1st Mass production

=====
*** Basic Information ***
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[Create date] 2017/12/25

[Program Name] System

[Version] 1.14

[PCB No.]

[Interchangeability] X / O

[Other Firmware Requirements] None

[PCB Requirements] None

[Software category] Normal Release

[Release category] Normal Release

[Program category] Firmware

Exported to(language) GEN(all)

[Firmware No.] M1595770L

[File Information]

File Name M1595770L.fwu

File Type Module for Service

Size 16.95 MB (17768800 byte)

[File Information]

File Name M1595770L.rfu

File Type Module for Remote Upgrade

Size 16.95 MB (17776896 byte)

[Availability of RFU] Yes

[Production reflection] 2017/12

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*** Note ***
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[Note]

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*** Important Notes ***
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[Important Notes]

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*** Modification History ***
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[Modifications made:]

Rank C

Symptom corrected:

- An invalid value is returned when obtaining the counter MIB, ricohEngCounterValue, during device shutdown.

[Modification history]

Version 1.13

Symptom corrected:

- A part of the image may disappear, if the file is printed from the document server (saved using PS driver) with the image orientation rotated 90 degrees.

Version 1.12

Symptom corrected:

- If the automatic supply order function is activated and the PCDU reaches life, PCPU order calls are sent to the @Remote repeatedly.

Other changes:

- Support for ErP Lot 6 compliance.

Version 1.11

Symptom corrected:

- The address book can be accessed while printing is being conducted.

Other Changes:

- Support for the Portuguese orthography.

Version 1.10

Symptom corrected:

- SC816-01 may occur after print job is completed.
- Cannot access flash memory on the controller board.
- An SC819 error might occur when using network-related functions, such as accessing Web Image Monitor.
- When the CTS protection function is enabled, the throughput for the wireless LAN connection is reduced.
- In wireless LAN environments, when A-MSDU is enabled, the device cannot receive packet data that is more than 2,048 bytes.
- In wireless LAN environments, when large volume printing is being conducted,

the job is cancelled in the middle of printing.

- In wireless LAN environments, when the authentication methods WPA2 and A-MPDU are enabled, printing might take a significant amount of time.
- When the threshold for fragmentation is set in the access point settings, the MFP/LP will fail to receive the packet data if the computer sends data that is larger than the threshold that is set.
- When trying to establish an ad-hoc connection among three or more devices, the third and subsequent devices cannot connect.
- The device cannot communicate when using the WMM (Wi-Fi Multimedia) function.
- If "AAM-E for 4.3 inch panel printer" included in SLNX or CAP v2 is installed to the device, users cannot log in to Web Image Monitor.

Other changes:

- Support for Korean in Asia-Pacific models.
 - Support for the Portuguese orthography.
 - Support the model SP4520DN, newly released for the European market.
- This firmware is dependent on the following versions of firmware modules:
- Engine firmware: v1.24:13 or later (M1585550K)

Version 1.09

Symptom corrected:

- If "Display" is selected under "Paper Confirmation for Bypass Tray," printing is possible only in LEF.

Version 1.08

Symptom corrected:

- Machine data encryption settings bug corrected.
- If "Display" is selected under "Paper Confirmation for Bypass Tray," printing is available only in LEF.
(User Tool -> Printer Features -> System -> Tray Setting Priority -> Paper Confirmation for Bypass Tray)
- When Simplified Chinese characters are included in the additional email information, username, password, a destination folder name, or a filename for SMB/NCP, the connection is unsuccessful, the data transmission fails, or the body of the email contains garbled text.

Version 1.07a

Symptom corrected:

1. Address Book display error (Device Manager NX series).

Other changes

2. Added "Performance Priority" mode (UP).

Note:

- Performance Priority mode prioritizes printing speed
- Environment Priority mode (default) prioritizes environmentally-friendly conditions (duplex printing is slowed down after 70 sec.).

3. Added a "Cool-down" feature (SP1-110-001, default: ON).

Note: When this mode is enabled, the occurrence of black spots is minimized. However, printing speed is reduced.

Version 1.06

1st Mass production

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*** Basic Information ***
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[Create date] 2018/04/27

[Program Name] Engine

[Version] 1.35:09

[PCB No.]

[Interchangeability] X / O

[Other Firmware Requirements] None

[PCB Requirements] None

[Software category] Normal Release

[Release category] Normal Release

[Program category] Firmware

Exported to(language) GEN(all)

[Firmware No.] M1605550S

[File Information]

File Name M1605550S.fwu

File Type Module for Service

Size 2.00 MB (2097652 byte)

[File Information]

File Name M1605550S.rfu

File Type Module for Remote Upgrade

Size 2.01 MB (2105600 byte)

[Availability of RFU] Yes

[Production reflection] 2018/04

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*** Note ***
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[Note]

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*** Important Notes ***
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[Important Notes]

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*** Modification History ***
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[Modifications made:]

Rank C

Symptom corrected:

1. When the "Sleep Mode Timer" or the "Fusing Unit Off Mode (Energy Saving) On/Off" setting is changed from the default setting, the PCDU might keep rolling, which might cause the screw to break and waste toner to spill out of the PCDU.
2. Faxes that are received and stored in the memory might not print out.
3. Corrected a malfunction with the initial toner supply mode when replacing the toner bottle.

Other changes:

4. Instead of displaying SC541 or SC544, a message that prompts users to reset the fusing unit is displayed.

[Modification history]

Version 1.34:09

Other changes:

- Improved the fusing temperature control.

Version 1.32:09

Other changes:

Minor changes only for the Japanese model.

Version 1.30:09

Other changes:

1. Toner refresh mode was optimized for paper narrower than A4 SEF (210mm).
2. For the model M160, support for Traditional Chinese in Asia-Pacific models.
This change is dependent on the following versions of firmware modules:
 - System/Copy firmware: v1.11 or later (M1605770K)
 - Web Support firmware: v1.10 or later (M1605750G)
 - OpePanel_ TWN firmware: v1.01 or later (M1605742)

Version 1.27:09

Symptom corrected:

- Waste toner collection coil of the PCDU might break.
- Fan may not stop even in sleep mode.
- Cleaning operation of the fusing roller may not complete.
- Notifications of the remaining toner amount and toner near end alert appear earlier than expected.

Version 1.26:09
Symptom corrected:
- SC332 may occur.

Version 1.25:09
Symptom corrected:
1. Waste toner full alert appears earlier than expected.

Other changes:
1. Supports the model MP401SPF, newly released for the European market.
This release also applies to model SP4510SF, which has already been released in the European market.
For SP4510SF, please refer to RTB No. RM160030 for explanation on compatibility with this release and hardware modification.
2. The margins at the leading and trailing edges can be set to 0 mm.

Version 1.24:09
Symptom corrected
"Waste Toner full" is displayed earlier than expected because the connection between the toner cartridge terminal and the connector on the mainframe is loose.

Version 1.22:09
Other Changes
Specifications were changed for the Japanese model.

Version 1.21:09
Minor change

Version 1.20:09
Symptom corrected
1. The main motor or paper exit motor may not turn off if an SC occurs during continuous printing which requires the machine to stop (once the paper is exited).
2. A jam occurs if the paper in the tray runs out (and the machine switches to another tray) while a duplex FAX job is being printed out.

Version 1.19:09
1st Mass production

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*** Basic Information ***
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[Create date] 2017/05/12

[Program Name] Web Support

[Version] 1.12

[PCB No.]

[Interchangeability] X / O

[Other Firmware Requirements] None

[PCB Requirements] None

[Software category] Normal Release

[Release category] Normal Release

[Program category] Firmware

Exported to(language) GEN(all)

[Firmware No.] M1605750J

[File Information]

File Name M1605750J.fwu

File Type Module for Service

Size 5.83 MB (6118200 byte)

[File Information]

File Name M1605750J.rfu

File Type Module for Remote Upgrade

Size 5.84 MB (6123776 byte)

[Production reflection] 2017/05

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*** Note ***
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[Note]

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*** Important Notes ***
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[Important Notes]

*** Modification History ***

[Modifications made:]

Other changes:

- Added an SP setting for enabling or disabling the "Screen Monitoring" function.
SP5-885-205: default = 0 ("Screen Monitoring" is enabled)

This firmware is dependent on System/Copy firmware v1.13 (M1605770M) or later,
so please be sure to update that firmware as well.

[Modification history]

Version 1.11

Other changes:

- Added support for adhering to the Lot 6 regulation of the EU in European devices.

Version 1.10

Other changes:

- Support for Traditional Chinese in Asia-Pacific models.

This firmware is dependent on the following versions of firmware modules:

- System firmware: v1.11 or later (M1605770K)

Version 1.09

Symptom corrected:

- When the following settings are enabled, print jobs that have been conducted are not displayed on the job history screen:

- On the operation panel: User Tools > Printer Features >
System tab > Store and Skip Errored Job

- In Web Image Monitor: Device Management > Configuration >
Printer > Basic Settings > Store and Skip Errored Job

This firmware is dependent on System/Copy firmware v1.10(M1605770J)
or later, so please be sure to update it.

Other changes:

- Support for the Portuguese orthography.

Version 1.08

Symptom corrected:

- Minor bug correction.

Version 1.07

1st Mass production

=====
*** Basic Information ***
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[Create date] 2019/10/25

[Program Name] Network Support

[Version] 13.30

[PCB No.]

[Interchangeability] X / O

[Other Firmware Requirements] None

[PCB Requirements] None

[Software category] Normal Release

[Release category] Normal Release

[Program category] Firmware

Exported to(language) GEN(all)

[Firmware No.] M1605753N

[File Information]

File Name M1605753N.fwu

File Type Module for Service

Size 8.81 MB (9236628 byte)

[File Information]

File Name M1605753N.rfu

File Type Module for Remote Upgrade

Size 8.82 MB (9244928 byte)

[Availability of RFU] Yes

[Production reflection] 2019/10

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*** Note ***
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[Note]

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*** Important Notes ***
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[Important Notes]

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*** Modification History ***
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[Modifications made:]

Rank C

Symptom corrected:

- If the device has not being used a significant amount of times, functions that require a network connection will fail.
- SC819 might occur after updating firmware remotely.

Other changes:

- The default value of "Algorithm Signature" has been changed from SHA1-RSA 2048 to SHA256-RSA 2048 when the device creates or requests a new device certificate.

[Modification history]

Version 13.29

Rank C

Symptom corrected:

- SMB client timeout configuration is not correctly applied in the device.
- SC899 occurs when conducting Scan to Folder, and the device might automatically restart.
- When conducting Scan to Folder, if a host name is resolved to multiple IP addresses by NBNS, the device tries to connect to only the first resolved IP address.
- When a HP device is working on the same subnet, Scan to Folder will fail.
- Network browsing sometimes fails when conducting Scan to Folder.
- The device might freeze during data transmission when conducting Scan to Folder with SMBv2/v3.
- When conducting Scan to Folder in a high-load network environment, the device's status gets stuck on sending and the scanner becomes unusable.
- When conducting Scan to Folder using SMBv2/v3, if the device receives UDP communication from the outside to the port used by SMBv2/v3, Scan to Folder might fail.
- DNS name resolution for the device might fail if DDNS is enabled in a DHCPv6 environment.
- There is a probability (1/256) that the SSL connection to the device will fail if the connecting component doesn't have a process to retry the SSL connection.

Version 13.28

Symptom corrected:

- On a device with SMBv2/v3 firmware, when sending a scanned or fax document using the Hotfolder plug-in for GlobalScan or StreamlineNX, an "incorrect" document may be sent to the destination and may be lost the original document.

Version 13.27.1

Other changes:

- Newly added SMBv2/v3 support.

This firmware is dependent on the following firmware modules. Please be sure to update all of them:

System/Copy v1.15 (M1605770P)

Network Support v13.27.1 (M1605753K)

Web Support v1.13 (M1605750K)

Scanner v01.10 (M1605779J)

OpePanel

- North America, Europe, Asia and China model: v1.13 (M1605740K)

- Taiwan model: v1.04 (M1605742C)

Please refer to the RTB(No.RGene095) for details.

Version 13.26

Symptom corrected:

1. When the device is set to use "IEEE 802.1X" and "TLS1.2" is set to "active", authentication will fail.
2. When the device is in Energy Saver Mode, if information about the network interface for the device is being obtained from the SNMP Manager application, nonexistent errors are recorded in the system logs.

Version 13.25

Other Changes:

- Added support for adhering to the Lot 6 regulation of the EU in European devices.

Version 13.24

Other changes:

- Changed the DH key specification to use 2,048 bits instead of 512 bits to prevent the Logjam vulnerability (CVE-2015-4000).
In addition, by modifying this specification, SSL/TLS communication can be established when using Mac OS X 10.10.4 and iOS 8.4.

Version 13.23

Symptom corrected:

- When performing IPP printing with the job spool enabled in Mac OS X 10.7 or later and iOS 6 or later, the document is not printed.

Version 13.22

Symptom corrected:

1. When the device is in Energy Saver Mode, if information about the network interface for the device is being obtained from the SNMP Manager application, nonexistent errors are recorded in the system logs.
2. When the display language of the operation panel is set to Catalan, Scan to Folder fails.

Other changes:

- When printing from the Windows operating system, if the RAW protocol is used for the standard TCP/IP port, a significant amount of time might pass until the next job is printed. Because of this, the initial print timeout period is changed to 15 seconds and the shortest timeout period that can be set is changed to 5 seconds.

Version 13.21
1st Mass production

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*** Basic Information ***
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[Create date] 2017/05/10

[Program Name] NetworkDocBox

[Version] 1.02

[PCB No.]

[Interchangeability] X / O

[Other Firmware Requirements] None

[PCB Requirements] None

[Software category] Normal Release

[Release category] Normal Release

[Program category] Firmware

Exported to(language) GEN(all)

[Firmware No.] M1605754D

[File Information]

File Name M1605754D.fwu

File Type Module for Service

Size 1.90 MB (1993740 byte)

[File Information]

File Name M1605754D.rfu

File Type Module for Remote Upgrade

Size 1.91 MB (1999104 byte)

[Production reflection] 2017/05

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*** Note ***
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[Note]

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*** Important Notes ***
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[Important Notes]

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*** Modification History ***
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[Modifications made:]
Symptom corrected:
- Minor bug correction.

[Modification history]

Version 1.01
1st Mass production

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*** Basic Information ***
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[Create date] 2017/12/18

[Program Name] Printer

[Version] 1.10

[PCB No.]

[Interchangeability] X / O

[Other Firmware Requirements] None

[PCB Requirements] None

[Software category] Normal Release

[Release category] Normal Release

[Program category] Firmware

Exported to(language) GEN(all)

[Firmware No.] M1605756J

[File Information]

File Name M1605756J.fwu

File Type Module for Service

Size 3.90 MB (4091536 byte)

[File Information]

File Name M1605756J.rfu

File Type Module for Remote Upgrade

Size 3.91 MB (4096256 byte)

[Availability of RFU] Yes

[Production reflection] 2018/01

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*** Note ***
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[Note]

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*** Important Notes ***
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[Important Notes]

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*** Modification History ***
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[Modifications made:]

Rank C

Symptom corrected:

- The specific combination of "Duplex/Booklet" and "Bypass Tray" might not be selectable from the settings in the SDK application even though the combination is supported.
- A print job conducted from Ricoh Smart Device Print&Scan via Enhanced Locked Print NX FS v2 cannot be printed.
- After an SC reboot occurs, if the dialog window stating that the automatic reboot has occurred is not closed, SDK-J applications cannot be started, which results in an SC990 error occurring.

[Modification history]

Version 1.09

Symptom corrected:

- When attempting to preview a large-size JPEG image from "Print/Scan (Memory Storage Device)", an SC899 error occurs.
- When printing from AirPrint, the paper weight "Plain 2 (75 to 81g/square metre)" is out of the search target of "Auto Tray Select" even if "Plain Paper or Recycled Paper" is specified in the job.

Version 1.08

Symptom corrected:

An SC899 error might occur when the RHPP port (port 59100) receives specific data.

Version 1.07

Symptom corrected:

- Under all of the following conditions, paper is fed from the device trays even though the paper feed tray setting in the driver is set to the bypass tray:
 - The "Tray Setting Priority" of the bypass tray is "Driver/Command".
 - The "Paper Confirmation for Bypass Tray Display" setting is "Display".
 - The "Tray Switching" setting is "On".
- The paper size and paper type set on the device matches to the setting configured on the driver is selected.

Other changes:

- Support for the Portuguese orthography.

Version 1.06

Other changes:

- When printing a .tiff document from a removable storage device, the pages of the document might be rotated 90 degrees or 270 degrees depending on the orientation of the paper set in the device tray.

Version 1.05

1st Mass production

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*** Basic Information ***
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[Create date] 2017/05/01

[Program Name] RPCS

[Version] 3.14.5

[PCB No.]

[Interchangeability] X / O

[Other Firmware Requirements] None

[PCB Requirements] None

[Software category] Normal Release

[Release category] Normal Release

[Program category] Firmware

Exported to(language) GEN(all)

[Firmware No.] M1605758E

[File Information]

File Name M1605758E.fwu

File Type Module for Service

Size 0.55 MB (574956 byte)

[File Information]

File Name M1605758E.rfu

File Type Module for Remote Upgrade

Size 0.55 MB (581888 byte)

[Production reflection] 2017/05

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*** Note ***
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[Note]

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*** Important Notes ***
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[Important Notes]

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*** Modification History ***
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[Modifications made:]

Symptom Corrected:

- When "Unauthorized Copy Prevention Printing: Printer" is enabled, an error might occur, causing the job to be cancelled. (GFPR#RA14120002)

[Modification history]

Version 3.14.4

Symptom corrected:

When printing a RPCS vector job that contains an image with transparent parts that the RPCS driver generates, the transparent parts are printed in black.

Version 3.14.3

1st Mass production

=====
*** Basic Information ***
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[Create date] 2019/10/28

[Program Name] PCL

[Version] 1.12

[PCB No.]

[Interchangeability] X / O

[Other Firmware Requirements] None

[PCB Requirements] None

[Software category] Normal Release

[Release category] Normal Release

[Program category] Firmware

Exported to(language) GEN(all)

[Firmware No.] M1605759L

[File Information]

File Name M1605759L.fwu

File Type Module for Service

Size 1.42 MB (1486588 byte)

[File Information]

File Name M1605759L.rfu

File Type Module for Remote Upgrade

Size 1.42 MB (1491200 byte)

[Availability of RFU] Yes

[Production reflection] 2019/10

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*** Note ***
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[Note]

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*** Important Notes ***
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[Important Notes]

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*** Modification History ***
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[Modifications made:]

Rank C

Symptom corrected:

- Double-byte characters of Asian languages such as Japanese, Chinese, and Korean might be missing.

[Modification history]

Version 1.11

Rank C

Symptom corrected:

- If printing PCL5 data after installing the Andale font on the machine, some Chinese characters might not be printed.

Version 1.10

Rank C

Symptom corrected:

- When printing the contents of an A3 size document on A4 size paper via Direct printing, the text might be distorted.

Version 1.09

Symptom corrected:

- An SC899 error occurs when using the PCL6 driver to print a PDF from the Reader application in Windows 8.1. (GFPR#RA15050002)
- The image quality output from PCL5 data might be poor if the image was created by using certain applications, such as RICOH ProcessDirector. (GFPR#RE15030034)

Version 1.08

Symptom corrected:

- When characters that contain the incorrect TrueType font data are printed, not only are incorrect characters missing but so are correct characters that follow incorrect characters. (GFPR#RE16030046)
- When "Unauthorized Copy Prevention Printing: Printer" is enabled, an error might occur, causing the job to be cancelled. (GFPR#RA14120002)
- A blank page or missing image is printed out if the PCL data created by certain applications (such as Microsoft Excel 2010) contains a significant amount of graphics and/or transparent objects.
- An SC899 error might occur when graphics are drawn by the RGB Brush.

Version 1.07

Symptom corrected:

1. An SC899 error might occur when printing a PCL job which contains reduce or enlarge image.
(GFPR#RE16020028)
2. Some lines and/or borders might be missing from PCL jobs.
(GFPR#RC16040013)

Version 1.06

Symptom corrected:

1. When the print settings are changed for a stored document that includes a banner page, the changed settings are not applied when the document is printed.
2. If an image size is big and has been enlarged by using the "Reduce/Enlarge" option in the PCL6 driver, unexpected white lines might appear in the printout.
3. If a PCL5 job is printed under certain conditions related to the font header information when using host printing, PCL default fonts are used. (GFPR#RE14100009)
4. When printing a PCL5 host-printing job in which 32,000 or more of the fill patterns are specified, the device will stall.
5. Using a bitmap font might result in jobs being cancelled. (GFPR#RE13100030)
6. If a raster image is specified in the PCL6 driver to be reduced, be enlarged, or undergo N-up printing, unexpected white lines might appear in the printout.
(GFPR#RA14080005, GFPR#RA14110005)

Version 1.05

1st Mass production

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*** Basic Information ***
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[Create date] 2017/05/01

[Program Name] PDF

[Version] 1.03

[PCB No.]

[Interchangeability] X / O

[Other Firmware Requirements] None

[PCB Requirements] None

[Software category] Normal Release

[Release category] Normal Release

[Program category] Firmware

Exported to(language) GEN(all)

[Firmware No.] M1605762D

[File Information]

File Name M1605762D.fwu

File Type Module for Service

Size 4.16 MB (4360348 byte)

[File Information]

File Name M1605762D.rfu

File Type Module for Remote Upgrade

Size 4.16 MB (4366592 byte)

[Production reflection] 2017/05

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*** Note ***
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[Note]

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*** Important Notes ***
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[Important Notes]

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*** Modification History ***
=====

[Modifications made:]

Symptom corrected:

- PDF file may not be printed via direct print if the PDF file contains True Type fonts.
- Printing might be slow when a spreadsheet containing many cells with patterns that are different from the default pattern in the following setting is printed from Microsoft Excel 2013:
Select "Format Cell", select the "Fill" tab, and change the "Pattern Style" setting
- Images might be missing when printing from the PS3 driver.
- The number of copies specified by the PjL command in a PDF job cannot be overwritten to "1" by using certain applications that use the SDK interface, such as Enhanced Locked Print NX v2, implemented on the device.

[Modification history]

Version 1.02

1st Mass production

=====
*** Basic Information ***
=====

[Create date] 2017/12/21

[Program Name] XPS

[Version] 1.06

[PCB No.]

[Interchangeability] X / O

[Other Firmware Requirements] None

[PCB Requirements] None

[Software category] Normal Release

[Release category] Normal Release

[Program category] Firmware

Exported to(language) GEN(all)

[Firmware No.] M1605764C

[File Information]

File Name M1605764C.fwu

File Type Module for Service

Size 2.01 MB (2103732 byte)

[File Information]

File Name M1605764C.rfu

File Type Module for Remote Upgrade

Size 2.01 MB (2109696 byte)

[Availability of RFU] Yes

[Production reflection] 2018/01

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*** Note ***
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[Note]

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*** Important Notes ***
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[Important Notes]

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*** Modification History ***
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[Modifications made:]

Rank C

Symptom corrected:

- When printing the contents of an A3 size document on A4 size paper via Direct printing, the text might be distorted.

[Modification history]

Version 1.05

Symptom corrected:

- An SC899 error might occur when graphics are drawn by the RGB Brush. (GFPR#RE15100026)
- When printing a excel sheet that contains images that drawn by collar custom brush, the job may be canceled.
- When "Unauthorized Copy Prevention Printing: Printer" is enabled, an error might occur, causing the job to be cancelled. (GFPR#RA14120002)

Version 1.04

1st Mass production

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*** Basic Information ***
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[Create date] 2017/08/25

[Program Name] System/Copy

[Version] 1.15

[PCB No.]

[Interchangeability] X / O

[Other Firmware Requirements] None

[PCB Requirements] None

[Software category] Normal Release

[Release category] Normal Release

[Program category] Firmware

Exported to(language) GEN(all)

[Firmware No.] M1605770P

[File Information]

File Name M1605770P.fwu

File Type Module for Service

Size 23.52 MB (24662580 byte)

[File Information]

File Name M1605770P.rfu

File Type Module for Remote Upgrade

Size 23.53 MB (24670464 byte)

[Availability of RFU] Yes

[Production reflection] 2017/09

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*** Note ***
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[Note]

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*** Important Notes ***
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[Important Notes]

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*** Modification History ***
=====

[Modifications made:]

Other changes:

- Newly added SMBv2/v3 support.

This firmware is dependent on the following firmware modules. Please be sure to update all of them:

System/Copy v1.15 (M1605770P)

Network Support v13.27.1 (M1605753K)

Web Support v1.13 (M1605750K)

Scanner v01.10 (M1605779J)

OpePanel

- North America, Europe, Asia and China model: v1.13 (M1605740K)

- Taiwan model: v1.04 (M1605742C)

Please refer to the RTB(No.RGene095) for details.

[Modification history]

Version 1.14

Specification Change:

- Screen monitoring from Web Image Monitor is not possible for three seconds after the operation panel has been touched.

Version 1.13

Other changes:

- Added an SP setting for enabling or disabling the "Screen Monitoring" function.
SP5-885-205: default = 0 ("Screen Monitoring" is enabled)

This firmware is dependent on Web Support firmware v1.12 (M1605750J) or later, so please be sure to update that firmware as well.

Version 1.12

Symptom corrected:

- A part of the image may disappear, if the file is printed from the document server (saved using PS driver) with the image orientation rotated 90 degrees.
- On machines installed with CAP v2, the simple FAX application may shut down abnormally, if an address registered without a FAX number is selected.
- In the case of the following conditions, when attempting to log in to a device with CAP v2 installed, the attempt may fail with the "Failed to authenticate. Address Book is being updated." error message.

- The FAX function is enabled on the device.
- "Logout Using Card" is set as "On" in the CAP configuration tool.

Other changes:

- Support for ErP Lot 6 compliance.

Version 1.11

Symptom corrected:

- Fax received is not printed and forwarded to the folder, if "Forwarding setting of Reception File Setting" is enabled.

Other changes:

- Support for Traditional Chinese in Asia-Pacific models.

This firmware is dependent on the following versions of firmware modules:

- Web Support firmware: v1.10 or later (M1605750G)

Version 1.10

Symptom corrected:

- The machine can not recover from energy saver mode.
- SC672-12 occurs when scanning a document into memory while at the same time performing Media Print and refreshing the operation panel display.
- Print jobs may not start after supplying paper when a paper end occurs.
- When scanning an original containing multiple pages with the Twain driver, error (code: 36856) occurs on the client PC and scan stops midway.
- Fax data encoded with Base64 is not correctly received.
- When the CTS protection function is enabled, the throughput for the wireless LAN connection is reduced.
- In wireless LAN environments, when the authentication methods WPA2 and A-MPDU are enabled, printing might take a significant amount of time.
- In wireless LAN environments, when A-MSDU is enabled, the device cannot receive packet data that is more than 2,048 bytes.
- When trying to establish an ad-hoc connection among three or more devices, the third and subsequent devices cannot connect.
- The device cannot communicate when using the WMM (Wi-Fi Multimedia) function.
- When the threshold for fragmentation is set in the access point settings, the MFP/LP will fail to receive the packet data if the computer sends data that is larger than the threshold that is set.
- In wireless LAN environments, when large volume printing is being conducted, the job is cancelled in the middle of printing.
- An SC819 error might occur when using network-related functions, such as accessing Web Image Monitor.
- If an email sent by scan-to-email is opened in Office 365 cloud mail service, contents of the attached file may falsely appear in the body of the message with the characters corrupted.
- The address book can be accessed while scanning or printing is being conducted.
- When the following settings are enabled, print jobs that have been conducted are not displayed on the job history screen:
 - On the operation panel: User Tools > Printer Features > System tab > Store and Skip Errored Job
 - In Web Image Monitor: Device Management > Configuration > Printer

> Basic Settings > Store and Skip Errored Job

This firmware is dependent on Web Support firmware v1.09(M1605750F) or later, so please be sure to update it.

Other changes:

- Support for the Portuguese orthography.
- The maximum data transmission speed has been changed to 130 Mbps because 40-MHz wireless LAN bandwidth is no longer supported.

Version 1.09

Symptom corrected:

- The machine does not automatically reboot after the installation (overwriting) of an SDK app, even though the user has enabled this setting.

Version 1.08

Symptom corrected:

1. When scanning with "Hungarian" or "Polish" selected under "Cognitive Language" in "OCR Settings", if the value of a Unicode character exceeds 256, then the character will be converted to a question mark ("?").
This firmware is dependent on the following firmware module.
Please be sure to update it:
 - Scanner firmware: v1.08 or later.

Other changes:

2. Supports the model MP401SPF, newly released for the European market.
This release also applies to model SP4510SF, which has already been released in the European market.
For SP4510SF, please refer to RTB No. RM160030 for explanation on compatibility with this release and hardware modification.

Version 1.07

Symptom corrected:

- When scanning with "Hungarian" or "Polish" selected under "Cognitive Language" in "OCR Settings", if the value of a Unicode character exceeds 256, then the character will be converted to a question mark ("?").
- If "Display" is selected under "Paper Confirmation for Bypass Tray," printing is available only in LEF.
(User Tool -> Printer Features -> System -> Tray Setting Priority -> Paper Confirmation for Bypass Tray)
- When scanning documents of different sizes with all of the following configured, a send error occurs:
 - Set the original feed type setting for original orientation to "Readable orientation".
 - Enabling "Auto detect" and "Mixed original sizes".
 - Selecting any of the "Black & White" scanning settings.
 - Using multi-pass ADF and OCR.
- When Simplified Chinese characters are included in the additional email information, username, password, a destination folder name, or a filename for

- SMB/NCP, the connection is unsuccessful, the data transmission fails, or the body of the email contains garbled text.
- POP mail may not be received, if the mail contains UIDL that does not comply with RFC.

Version 1.06

Symptom corrected:

1. Cannot receive a FAX if the reception protocol for SMTP is configured (rare occurrence).
2. Address Book display error (Device Manager NX series).
3. SC819 occurs when the machine recovers from Sleep/Energy Saver mode.

Other changes:

4. Added "Performance Priority" mode (UP).

Note:

- Performance Priority mode prioritizes printing speed
 - Environment Priority mode (default) prioritizes environmentally-friendly conditions (duplex printing is slowed down after 70 sec.).
5. Added a "Cool-down" feature (SP1-110-001, default: ON).

Note: When this mode is enabled, the occurrence of black spots is minimized. However, printing speed is reduced.

Version 1.05

1st Mass production

=====
*** Basic Information ***
=====

[Create date] 2017/05/12

[Program Name] Fax

[Version] 08.00.00

[PCB No.]

[Interchangeability] X / O

[Other Firmware Requirements] None

[PCB Requirements] None

[Software category] Normal Release

[Release category] Normal Release

[Program category] Firmware

Exported to(language) GEN(all)

[Firmware No.] M1605776G

[File Information]

File Name M1605776G.fwu

File Type Module for Service

Size 1.94 MB (2037204 byte)

[File Information]

File Name M1605776G.rfu

File Type Module for Remote Upgrade

Size 1.95 MB (2044160 byte)

[Production reflection] 2017/05

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*** Note ***
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[Note]

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*** Important Notes ***
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[Important Notes]

=====
*** Modification History ***
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[Modifications made:]

Symptom corrected:

- If logged in with user authentication, FAX settings for Auto Print FAX Journal (SWUSR_03, bit7) and setting whether or not to include sender name in reports (SWUSR_04, bit5) may change after logging out.
- SC899 may occur when logging out from a machine with the user authentication enabled.
- Fax application may stall when recovering from energy saving mode.

[Modification history]

Version 07.00.00

Other Changes:

Added support for adhering to the Lot 6 regulation of the EU in European devices.

Version 06.00.00

Symptom corrected:

- Minor bug correction

Version 05.00.00

1st Mass production

=====
*** Basic Information ***
=====

[Create date] 2018/04/27

[Program Name] Engine

[Version] 1.24:06

[PCB No.]

[Interchangeability] X / O

[Other Firmware Requirements] None

[PCB Requirements] None

[Software category] Normal Release

[Release category] Normal Release

[Program category] Firmware

Exported to(language) GEN(all)

[Firmware No.] M1715550L

[File Information]

File Name M1715550L-P01.zip

File Type Module for Service

Size 0.33 MB (341902 byte)

[File Information]

File Name M1715550L-P02.zip

File Type Module for Service

Size 0.33 MB (341875 byte)

[File Information]

File Name M1715550L-P03.zip

File Type Module for Service

Size 0.33 MB (341888 byte)

[File Information]

File Name M1715550L-P04.zip

File Type Module for Service

Size 0.33 MB (341893 byte)

[File Information]

File Name M1715550L-P05.zip

File Type Module for Service

Size 0.33 MB (341893 byte)

[File Information]

File Name M1715550L-P06.zip

File Type Module for Service

Size 0.33 MB (341902 byte)

[File Information]

File Name M1715550L-P07.zip

File Type Module for Service

Size 0.33 MB (341875 byte)

[File Information]

File Name M1715550L-P08.zip

File Type Module for Service

Size 0.33 MB (341889 byte)

[File Information]

File Name M1715550L-P09.zip

File Type Module for Service

Size 0.33 MB (341892 byte)

[File Information]

File Name M1715550L-P10.zip

File Type Module for Service

Size 0.33 MB (341882 byte)

[File Information]

File Name M1715550L-P11.zip

File Type Module for Service

Size 0.33 MB (341897 byte)

[File Information]

File Name M1715550L-P12.zip

File Type Module for Service

Size 0.33 MB (341870 byte)

[File Information]

File Name M1715550L-P13.zip

File Type Module for Service

Size 0.33 MB (341884 byte)

[File Information]

File Name M1715550L-P14.zip

File Type Module for Service

Size 0.33 MB (341887 byte)

[Availability of RFU] No

[Production reflection] 2018/06

*** Note ***

[Note]

*** Important Notes ***

[Important Notes]

*** Modification History ***

[Modifications made:]

Rank C

Symptom corrected:

1. When the "Sleep Mode Timer" or the "Fusing Unit Off Mode (Energy Saving) On/Off" setting is changed from the default setting, the PCDU might keep rolling, which might cause the screw to break and waste toner to spill out of the PCDU.
2. Corrected a malfunction with the initial toner supply mode when replacing the toner bottle.

Other changes:

3. Instead of displaying SC541 or SC544, a message that prompts users to reset the fusing unit is displayed.

[Modification history]

Version 1.23:06

Other changes:

- Improved the fusing temperature control.

Version 1.21:06

Other changes:

Minor changes only for the Japanese model.

Version 1.19:06

Symptom corrected:

- Waste toner collection coil of the PCDU may break.
- Fan may not stop even in sleep mode.
- Cleaning operation of the fusing roller may not complete.
- Notifications of the remaining toner amount and toner near end alert appear earlier than expected.

Other changes:

- Toner refresh mode was optimized for paper narrower than A4 SEF (210mm).

Version 1.16:06

Symptom corrected:

- SC332 may occur.

Version 1.15:06

Symptom corrected:

1. Waste toner full alert appears earlier than expected.

Other changes:

1. The setting of SP5-931-003 for the European model was changed.
See RTB No. RM171014 for explanation on compatibility with this release

and hardware modification.

2. The margins at the leading and trailing edges can be set to 0 mm.

Version 1.14:06

Symptom corrected

"Waste Toner full" is displayed earlier than expected because the connection between the toner cartridge terminal and the connector on the mainframe is loose.

Version 1.12:06

Other Changes

Specifications were changed for the Japanese model.

Version 1.11:06

Minor change

Version 1.10:06

Symptom corrected:

The main motor or paper exit motor may not turn off if an SC occurs during continuous printing which requires the machine to stop (once the paper is exited).

Version 1.09:06

1st Mass production

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*** Basic Information ***
=====

[Create date] 2019/10/18

[Program Name] CTL

[Version] 1.21

[PCB No.]

[Interchangeability] X / O

[Other Firmware Requirements] None

[PCB Requirements] None

[Software category] Normal Release

[Release category] Normal Release

[Program category] Firmware

Exported to(language) GEN(ja,en)

[Firmware No.] M1725720T

[File Information]

File Name M1725720T.zip

File Type Module for Service

Size 243.52 MB (255344981 byte)

[Availability of RFU] No

[Production reflection] 2019/10

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*** Note ***
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[Note]

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*** Important Notes ***
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[Important Notes]

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*** Modification History ***
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[Modifications made:]

Rank C

Other changes:

- Newly added SMBv2/v3 support.

[Modification history]

Version 1.20

Rank C

Symptom corrected:

- Scan to Folder might fail if a hostname specified instead of an IP address as the destination.

Other changes:

- The message displayed when the fusing unit is not set correctly, changed, to prompt users to reinstall it.

Version 1.19

Rank C

Symptom corrected:

- Some Arabic characters might be missing if the TrueType font is included in the job.

Version 1.18

Symptom corrected:

1. Cannot enter SP mode after a CTL board is replaced.
2. SC856 might occur if the machine receives a FAX while in energy saving mode

Version 1.17

Symptom corrected:

1. FAX is not sent to particular receivers.
2. The machine does not respond to PJJ Echo command and cannot print.
3. Regarding the following, the host name obtained from the DHCP server should be displayed, but the host name that was manually set by the user is displayed.
 - Top page of Web Image Monitor
 - Screen that creates the device certificate in Web Image Monitor
 - Subject of Scan-to-Email
4. An error report might be printed when printing PCL data without using a Ricoh driver.

Other changes:

- The certificate for SHA-2 is supported.

Version 1.16

Other changes:

- Support for ErP Lot 6 compliance.

Version 1.15

Symptom corrected:

1. Error message "@Remote Cert. Update failed" falsely appears.

Version 1.14

Symptom corrected:

1. The printer sends an error alert to the NRS center when its SC history contains less than 11 SC logs.
2. Even if the Life Alert Display Setting for the PCDU or Maintenance kit is disabled in the SP, the alert message may appear.
3. Even if the Parts PM System Setting is set to user maintenance in the SP, the alert message prompts the user to contact the service representative.
4. Powering OFF and then ON is needed to recover from a jam that occurs while printing received faxes.
5. If the power is turned OFF during Memory Transmission, fax received cannot be printed.
6. After canceling two jobs in Smart Device Connector while they are being sent to the printer, subsequent jobs cannot be canceled on the printer side and the printer cannot print, copy, scan, or fax for five minutes.
7. The following OpenSSL vulnerabilities have been addressed:
 - CVE-2014-0224
 - CVE-2014-3572
 - CVE-2015-1789

Other changes:

1. The margins at the leading and trailing edges can be set to 0 mm.
2. SP5-931-003 setting for the European model was changed.
See RTB No. RM171014 for explanation on compatibility with this release and hardware modification.
3. Support for the Portuguese orthography.
4. Device Manager NX Pro and Enterprise cannot recognize USB connections.

Version 1.13

Specification change:

Auto reboot function in emergency and ordinary reboot function added.

Symptom corrected:

1. Paper end error persist even if paper was added.
2. No paper end error message displayed even if jamming paper was removed when paper jam and paper end occurred simultaneously.
3. Failure of @Remote certification update.
4. SC688-00 may occur when multiple copies if a paper size or type mismatch occurs.
5. When force print was chosen during the size error message, print continues until the first page of the next job is printed.
6. Error will not disappear when force print was conducted during pass error status.
7. Unnecessary SP deleted.
8. Screen freeze's in message "PleaseWait" when starting up the machine.
9. Printing status will not end even if all job was cancelled when error occurred.
10. Fax image might disappear when power turned off while fax transmission.

11. Fax line usage improved.
12. Backside of the paper will not printed out when force print is conducted.
13. Waste toner call condition corrected.
14. Image problem occurs while duplex copying.
15. If the device is disconnected from the network or if the USB cable is unplugged from the device while an image is being scanned by using the TWAIN driver, the device might stall.
16. When sending print data that includes the PDL command "INFO VARIABLES" to the printer, the printer will hang during printing.
17. When adding a printer in Mac OS X by using Bonjour after restarting the device or changing the device's network interface settings, the message "Setting up the device..." is displayed and the printer might not be added. In addition, if a printer has already been added in Mac OS X, that printer will be shown as offline on the printer list screen and printing might not be possible.
18. When the MFP is powered off and connected to a computer via a USB cable, if there are jobs in the printer spooler on the computer, the printer application might stall after the MFP is powered on.
19. When canceling multiple jobs that encounter paper size errors, the username and job name from the first job is displayed on the cancel screen of the second and subsequent jobs.
20. Blank pages are not output when printing PDF files that include blank pages from Smart Device Connector.
21. When the TWAIN driver is restarted after pressing the cancel button while an image was being scanned, an error might occur in the TWAIN driver and the message "Please wait" might be displayed on the operation panel.
22. When printing PCL5 data that does not include the PDL in the @PJL ENTER LANGUAGE command, the data-in light might flash and the device might hang.

Version 1.11.1

Symptom corrected:

1. A FAX is received but cannot be printed out under the following conditions.

- Non-ECM

- Dummy data is larger than 16k bytes

Note: The dummy data may be larger than 16k bytes in the case of direct transmission, in order to keep the receiver on-line.

2. Norwegian guidance of PS setting is wrong.

Note: Translation corrected.

=====
*** Basic Information ***
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[Create date] 2017/08/23

[Program Name] CTL

[Version] 1.18

[PCB No.]

[Interchangeability] X / O

[Other Firmware Requirements] None

[PCB Requirements] None

[Software category] Normal Release

[Release category] Normal Release

[Program category] Firmware

Exported to(language) GEN(ja,en)

[Firmware No.] M1725720Q

[File Information]

File Name M1725720Q.zip

File Type Module for Service(Over 1GByte File .zip/.exe)

Size 242.43 MB (254207013 byte)

Check Sum -8Bit Sum: 6AA0

 -16Bit Sum(Little Endian): A6DE

 -16Bit Sum(Big Endian): 63C2

[Availability of RFU] No

[Production reflection] 2017/08

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*** Note ***
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[Note]

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*** Important Notes ***
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[Important Notes]

*** Modification History ***

[Modifications made:]

Symptom corrected:

1. Cannot enter SP mode after a CTL board is replaced.
2. SC856 might occur if the machine receives a FAX while in energy saving mode

[Modification history]

Version 1.17

Symptom corrected:

1. FAX is not sent to particular receivers.
2. The machine does not respond to PjL Echo command and cannot print.
3. Regarding the following, the host name obtained from the DHCP server should be displayed, but the host name that was manually set by the user is displayed.
 - Top page of Web Image Monitor
 - Screen that creates the device certificate in Web Image Monitor
 - Subject of Scan-to-Email
4. An error report might be printed when printing PCL data without using a Ricoh driver.

Other changes:

- The certificate for SHA-2 is supported.

Version 1.16

Other changes:

- Support for ErP Lot 6 compliance.

Version 1.15

Symptom corrected:

1. Error message "@Remote Cert. Update failed" falsely appears.

Version 1.14

Symptom corrected:

1. The printer sends an error alert to the NRS center when its SC history contains less than 11 SC logs.
2. Even if the Life Alert Display Setting for the PCDU or Maintenance kit is disabled in the SP, the alert message may appear.
3. Even if the Parts PM System Setting is set to user maintenance in the SP, the alert message prompts the user to contact the service representative.
4. Powering OFF and then ON is needed to recover from a jam that occurs while printing received faxes.

5. If the power is turned OFF during Memory Transmission, fax received cannot be printed.
6. After canceling two jobs in Smart Device Connector while they are being sent to the printer, subsequent jobs cannot be canceled on the printer side and the printer cannot print, copy, scan, or fax for five minutes.
7. The following OpenSSL vulnerabilities have been addressed:
 - CVE-2014-0224
 - CVE-2014-3572
 - CVE-2015-1789

Other changes:

1. The margins at the leading and trailing edges can be set to 0 mm.
2. SP5-931-003 setting for the European model was changed.
See RTB No. RM171014 for explanation on compatibility with this release and hardware modification.
3. Support for the Portuguese orthography.
4. Device Manager NX Pro and Enterprise cannot recognize USB connections.

Version 1.13

Specification change:

Auto reboot function in emergency and ordinary reboot function added.

Symptom corrected:

1. Paper end error persist even if paper was added.
2. No paper end error message displayed even if jamming paper was removed when paper jam and paper end occurred simultaneously.
3. Failure of @Remote certification update.
4. SC688-00 may occur when multiple copies if a paper size or type mismatch occurs.
5. When force print was chosen during the size error message, print continues until the first page of the next job is printed.
6. Error will not disappear when force print was conducted during pass error status.
7. Unnecessary SP deleted.
8. Screen freeze's in message "PleaseWait"when starting up the machine.
9. Printing status will not end even if all job was cancelled when error occurred.
10. Fax image might disappear when power turned off while fax transmission.
11. Fax line usage improved.
12. Backside of the paper will not printed out when force print is conducted.
13. Waste toner call condition corrected.
14. Image problem occurs while duplex copying.
15. If the device is disconnected from the network or if the USB cable is unplugged from the device while an image is being scanned by using the TWAIN driver, the device might stall.
16. When sending print data that includes the PJJ command "INFO VARIABLES" to the printer, the printer will hang during printing.
17. When adding a printer in Mac OS X by using Bonjour after restarting the device or changing the device's network interface settings, the message "Setting up the device..." is displayed and the printer might not be added. In addition, if a printer has already been added in Mac OS X, that printer will be shown as offline on the printer list

screen and printing might not be possible.

18. When the MFP is powered off and connected to a computer via a USB cable, if there are jobs in the printer spooler on the computer, the printer application might stall after the MFP is powered on.
19. When canceling multiple jobs that encounter paper size errors, the username and job name from the first job is displayed on the cancel screen of the second and subsequent jobs.
20. Blank pages are not output when printing PDF files that include blank pages from Smart Device Connector.
21. When the TWAIN driver is restarted after pressing the cancel button while an image was being scanned, an error might occur in the TWAIN driver and the message "Please wait" might be displayed on the operation panel.
22. When printing PCL5 data that does not include the PDL in the @PJL ENTER LANGUAGE command, the data-in light might flash and the device might hang.

Version 1.11.1

Symptom corrected:

1. A FAX is received but cannot be printed out under the following conditions.

- Non-ECM

- Dummy data is larger than 16k bytes

Note: The dummy data may be larger than 16k bytes in the case of direct transmission, in order to keep the receiver on-line.

2. Norwegian guidance of PS setting is wrong.

Note: Translation corrected.

=====
*** Basic Information ***
=====

[Create date] 2017/08/25

[Program Name] OpePanel

[Version] 1.13

[PCB No.]

[Interchangeability] X / O

[Other Firmware Requirements] None

[PCB Requirements] None

[Software category] Normal Release

[Release category] Normal Release

[Program category] Firmware

Exported to(language) GEN(ja,en,f,e,d,i,nl,s,n,dk,sf,p,pl,h,cz,ru,sc,br,tr,ca,gr)

[Firmware No.] M1605740K

[File Information]

File Name M1605740K.fwu

File Type Module for Service

Size 46.82 MB (49093492 byte)

[File Information]

File Name M1605740K.rfu

File Type Module for Remote Upgrade

Size 46.82 MB (49099008 byte)

[Availability of RFU] Yes

[Production reflection]

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*** Note ***
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[Note]

=====
*** Important Notes ***
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[Important Notes]

=====
*** Modification History ***
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[Modifications made:]

Other changes:

- Newly added SMBv2/v3 support.

This firmware is dependent on the following firmware modules. Please be sure to update all of them:

System/Copy v1.15 (M1605770P)

Network Support v13.27.1 (M1605753K)

Web Support v1.13 (M1605750K)

Scanner v01.10 (M1605779J)

OpePanel

- North America, Europe, Asia and China model: v1.13 (M1605740K)

- Taiwan model: v1.04 (M1605742C)

Please refer to the RTB(No.RGene095) for details.

[Modification history]

Version 1.12

Specification Change:

- Screen monitoring from Web Image Monitor is not possible for three seconds after the operation panel has been touched.

Version 1.11

Other changes:

- Support for ErP Lot 6 compliance.

Version 1.10

Specification Change:

- Support for the Portuguese orthography.

Version 1.09

Specification change:

Only Japanese domestic market.

Version 1.08

Other changes:

"Performance Priority" mode was added.

- Performance Priority: Prioritizes print speed
- Environment Priority (Default): Prioritizes environmentally-friendly conditions (duplex printing is slowed down after 70 sec.)

Version 1.07

1st Mass production

=====
*** Basic Information ***
=====

[Create date] 2017/08/25

[Program Name] OpePanel

[Version] 1.04

[PCB No.]

[Interchangeability] X / O

[Other Firmware Requirements] None

[PCB Requirements] None

[Software category] Normal Release

[Release category] Normal Release

[Program category] Firmware

Exported to(language) TWN(ja,en,f,e,d,i,nl,s,n,dk,sf,p,pl,h,cz,ru,sc,tc,br,tr,gr)

[Firmware No.] M1605742C

[File Information]

File Name M1605742C.fwu

File Type Module for Service

Size 46.83 MB (49100724 byte)

[File Information]

File Name M1605742C.rfu

File Type Module for Remote Upgrade

Size 46.83 MB (49107200 byte)

[Availability of RFU] Yes

[Production reflection]

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*** Note ***
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[Note]

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*** Important Notes ***
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[Important Notes]

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*** Modification History ***
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[Modifications made:]

Other changes:

- Newly added SMBv2/v3 support.

This firmware is dependent on the following firmware modules. Please be sure to update all of them:

System/Copy v1.15 (M1605770P)

Network Support v13.27.1 (M1605753K)

Web Support v1.13 (M1605750K)

Scanner v01.10 (M1605779J)

OpePanel

- North America, Europe, Asia and China model: v1.13 (M1605740K)

- Taiwan model: v1.04 (M1605742C)

Please refer to the RTB(No.RGene095) for details.

[Modification history]

Version 1.03

Specification Change:

- Screen monitoring from Web Image Monitor is not possible for three seconds after the operation panel has been touched.

Version 1.02

Other changes:

- Support for ErP Lot 6 compliance.

Version 1.01

1st Mass production

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*** Basic Information ***
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[Create date] 2017/05/02

[Program Name] PS3 Font

[Version] 1.16

[PCB No.]

[Interchangeability] X / O

[Other Firmware Requirements] None

[PCB Requirements] None

[Software category] Normal Release

[Release category] Normal Release

[Program category] Firmware

Exported to(language) GEN(all)

[Firmware No.] M1095275A

[File Information]

File Name M1095275A.fwu

File Type Module for Service

Size 4.59 MB (4815356 byte)

[File Information]

File Name M1095275A.rfu

File Type Module for Remote Upgrade

Size 4.60 MB (4821248 byte)

[Production reflection] 2017/05

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*** Note ***
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[Note]

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*** Important Notes ***
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[Important Notes]

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*** Modification History ***
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[Modifications made:]

Other changes:

This firmware was modified to support SP 450DN.

[Modification history]

Version 1.16

1st Mass production

=====
*** Basic Information ***
=====

[Create date] 2019/12/03

[Program Name] Java VM v11 for eDC

[Version] 11.44.00

[PCB No.]

[Interchangeability] X / O

[Other Firmware Requirements] None

[PCB Requirements] None

[Software category] Normal Release

[Release category] Normal Release

[Program category] Firmware

Exported to(language) GEN(all)

[Firmware No.] M1095283F_edc

[File Information]

File Name M1095283F_edc.ifu

File Type Module for Service

Size 58.92 MB (61779820 byte)

[Availability of RFU] No

[Production reflection]

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*** Note ***
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[Note]

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*** Important Notes ***
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[Important Notes]

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*** Modification History ***
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[Modifications made:]

Rank C

Symptom corrected:

- If the "Below 128 bit SSL Key" prevention setting is activated under the "Select Available Functions" menu, it may not be correctly applied to the machine.
- When the amount of file descriptor, used on JavaVM, is 256 or more, a certain print command from the SDK application might cause an error.
- Application installation using Remote Install Manager through IEEE 802.11 Interface Unit might be failed.

[Modification history]

Version 11.42.00

Rank C

Symptom corrected:

- SDK application might not startup if the Stream Line NX settings changed.
- When JavaVM launched "NullPointerException" error message may be displayed, and JavaVM startup may fail.

Version 11.41.00

Rank C

Symptom corrected:

- Errors might be occurred by using the Globalscan.

Version 11.40.01

Rank C

Symptom corrected:

- The SDK application icon might not be displayed after recovering from energy saving mode under the following conditions:
 - An SDK application is set as a priority function.
 - An SDK application is set as a function key.
- SC899-00 may occur if logging in from a keyboard.
- FAX cannot be transmitted if CAP v2 is installed.
- The printing speed is not as fast as the past model if CAP V2 is installed.
- The wrong JavaVM firmware can be mistakenly installed on any machine, possibly leading to unexpected errors occurring with JavaVM or bootup failing.
- The SDK application may stop suddenly due to the increase of memory usage.
- Gloria don't start up when power off/on then system settings can't be used.
- The package firmware might not be updated if the firmware includes an application that needs to be rebooted when updated.

Other changes:

- Minor changes for its internal operations.
 - Login might fail if attempting to log in with an IC card while the On-demand Print screen is displayed.
-

Version 11.38.01

Symptom corrected:

- SDK applications (e.g. Streamline NX, GlobalScan NX, CAP/ELP) may not be able to start during the boot process due to a Java VM error.
- If only IPv6 is enabled on the device, utility tools (e.g. Device Manager NX family or Streamline NX v3) will fail to install applications remotely.
- The following issues occur if any device certificate is imported using the Device Manager NX Enterprise Certificate Management Tool.
 - Device Manager NX Enterprise fails to retrieve the information about the application(s) installed on the device.
 - GlobalScan NX fails to apply profiles or retrieve device information when using the AdminTool.

Version 11.37.00

Symptom corrected:

- When conducting location-free printing or authentication processing by using a solution product, an SC899 error might occur or Java VM might close unexpectedly and an SC error related to Java VM not responding might occur.
- The DSDK application fails to connect to the LDAP server when using Kerberos authentication.

Version 11.35.01

Symptom corrected:

- If the "Chng Stgs" button is pressed after pressing the "Preview" button in ELP-NX, the "Change Print Settings" configuration may not be set correctly.
- After applying the security update that changes the priority order for cipher suites, SSL communication fails between an application that includes an SSL server function and the Windows operating system.
- When "Tracking Permission" and "Stop Printing" are enabled in "Enhanced Print Volume Limitation", processing of the job might fail.

Version 11.33.02

Symptom corrected:

- Sending fax from the document server using IPv4-mapped address may result in an error.
- An alert message unrelated to scan operation (for example, JAM) appears across the entire screen of the operation panel, disabling scan operation.

Version 11.32.04

Symptom corrected:

- Machine may stall, if scanned from the contact glass with Size Setting disabled.
- SC637 may occur, if the machine is shut down while printing.
- ESA applications that support distribution of inbound FAX documents (such as GlobalScan or SLNX SFM) will deliver inbound FAX documents that include the metadata from other FAX jobs.

- If an ESA application is installed to or uninstalled from multiple PCs via Remote Install Manager or SLNX ADM at the same time, the application may not detect the device status for the other installations/uninstallations

Version 11.30.02

Symptom corrected:

- CAP V2 is disabled if switched to Energy Saver mode while CAP V2 starts up after power ON.
- If the firmware is updated remotely while the device is in energy saving mode, the SDK platform may not boot up.
- User information may not be displayed, if a job is run by logging in with the user code authentication.
- Machine response slows down when a trouble occurs in the HDD.
- Characters are randomly broken onto new lines, if the following settings are configured in Scan Settings:
 1. Vertical text in a PDF file is copied and pasted into an application.
 2. "OCR Settings" is set to "On".
 3. "Cognitive Language" is set to "Japanese".
- Less than 128-bit encryption methods will be prohibited.

Version 11.26.04

- 1st Mass production for Da-P1d

Version 11.17.01

- 1st Mass production for Gim-P1c/Gim-P1d/Gim-MF1d

Version 11.17.01

Error correction

- Supported IC card writer (PR-700UDM).

Version 11.16.00

Symptom Corrected:

- SC990 occurs when machine is powered on, and it cannot be recovered by the machine reboot.
- SC899 may occur when a device recovers from STR mode.
- ESA application screen may be displayed when visible/not visible settings for ESA counter screen is changed 5 or more times.
- Coin charge request may not be displayed on ESA application screen even no charge remains in a coin rack.
- If the scan function is used on a device with Streamline NX, GlobalScan NX, or RICOH Scan CX installed, the job log is not registered correctly.
- If ESA application is installed, HTTP communication may not be performed correctly.
- When using the scan function continuously on a device with Streamline NX or GS-NX is installed, a "Scanner is in use by another function" error may occur.
- As for Streamline NX, the login screen immediately after an

application change is not displayed.

- USB device ESA applications use cannot be used because vender ID and product ID are not correctly registered on the device.
- Application switching might not be performed when Steamline NX or 3rd vendor application switches the normal application on the operation panel.
- When the device receives a lot of data, the device may freeze.
- ELP-NX V2 does not accept the print job, even if a error code which allows printing to continue is notified.
- If CAP v2 or Steamline NX is used, card login may not be performed.
- When switching a language on the initial setting screen, if the initial setting screen is closed immediately, the display does not switch the language in the ESA application.
- When the device display language is Turkish or Catalan, the ESA application icon does not display on the home screen.
- A Java VM internal process causes a change to the device's configured sleep timing.
- Even if a Java VM remote update has been successful, the device may display a banner message saying "SDK/J update done FAIL" incorrectly.
- An unexpected screen may appear when a device with 9 or more ESA applications installed recovers from energy saver mode.
- An ESA application may stop during a scan with PDF creation if a paper jam occurs during the 1st page of the input document.
- ESA application installation and uninstallation may take longer than expected in specific conditions.
- When a device failed to reboot after receiving a reboot request from a device management application, installed ESA applications would not restart automatically and remained in "Stopped" status.
- Java VM might not start properly when the device is started.
- RuntimeException rarely occurs when a device with multiple ESA applications installed recovers from energy saver mode.
- Depending on a Device Java VM internal file, the device results in SC990 when it is continuously used.(for Ti-P1)

Version 11.05.04

- SC899 very rarely occurs when a device is started.
- SC998 very rarely occurs when a device recovers from energy saver mode while ESA applications are set as function priority.
- The ESA application shortcut is displayed improperly when 9 or more ESA applications are installed.
- The User Code Authentication screen may not appear properly after a device with the "Administrator Authentication Management" setting enabled recovers from energy saver mode.
- SDK/J smmary may not be printed out when 13 or more ESA applications are installed.
- 4 line LCD devices do not enter Energy Saver Mode after specific operations.
- SC899 may occur when a device with a FAX function recovers from energy saver mode.

Version 11.02.04

Pre-release

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*** Basic Information ***
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[Create date] 2019/12/03

[Program Name] Java VM v11 for eDC

[Version] 11.44.00

[PCB No.]

[Interchangeability] X / O

[Other Firmware Requirements] None

[PCB Requirements] None

[Software category] Normal Release

[Release category] Normal Release

[Program category] Firmware

Exported to(language) GEN(all)

[Firmware No.] M1095283F_edc

[File Information]

File Name M1095283F_edc.ifu

File Type Module for Service

Size 58.92 MB (61779820 byte)

[Availability of RFU] No

[Production reflection]

=====
*** Note ***
=====

[Note]

=====
*** Important Notes ***
=====

[Important Notes]

=====
*** Modification History ***
=====

[Modifications made:]

Rank C

Symptom corrected:

- If the "Below 128 bit SSL Key" prevention setting is activated under the "Select Available Functions" menu, it may not be correctly applied to the machine.
- When the amount of file descriptor, used on JavaVM, is 256 or more, a certain print command from the SDK application might cause an error.
- Application installation using Remote Install Manager through IEEE 802.11 Interface Unit might be failed.

[Modification history]

Version 11.42.00

Rank C

Symptom corrected:

- SDK application might not startup if the Stream Line NX settings changed.
- When JavaVM launched "NullPointerException" error message may be displayed, and JavaVM startup may fail.

Version 11.41.00

Rank C

Symptom corrected:

- Errors might be occurred by using the Globalscan.

Version 11.40.01

Rank C

Symptom corrected:

- The SDK application icon might not be displayed after recovering from energy saving mode under the following conditions:
 - An SDK application is set as a priority function.
 - An SDK application is set as a function key.
- SC899-00 may occur if logging in from a keyboard.
- FAX cannot be transmitted if CAP v2 is installed.
- The printing speed is not as fast as the past model if CAP V2 is installed.
- The wrong JavaVM firmware can be mistakenly installed on any machine, possibly leading to unexpected errors occurring with JavaVM or bootup failing.
- The SDK application may stop suddenly due to the increase of memory usage.
- Gloria don't start up when power off/on then system settings can't be used.
- The package firmware might not be updated if the firmware includes an application that needs to be rebooted when updated.

Other changes:

- Minor changes for its internal operations.
 - Login might fail if attempting to log in with an IC card while the On-demand Print screen is displayed.
-

Version 11.38.01

Symptom corrected:

- SDK applications (e.g. Streamline NX, GlobalScan NX, CAP/ELP) may not be able to start during the boot process due to a Java VM error.
- If only IPv6 is enabled on the device, utility tools (e.g. Device Manager NX family or Streamline NX v3) will fail to install applications remotely.
- The following issues occur if any device certificate is imported using the Device Manager NX Enterprise Certificate Management Tool.
 - Device Manager NX Enterprise fails to retrieve the information about the application(s) installed on the device.
 - GlobalScan NX fails to apply profiles or retrieve device information when using the AdminTool.

Version 11.37.00

Symptom corrected:

- When conducting location-free printing or authentication processing by using a solution product, an SC899 error might occur or Java VM might close unexpectedly and an SC error related to Java VM not responding might occur.
- The DSDK application fails to connect to the LDAP server when using Kerberos authentication.

Version 11.35.01

Symptom corrected:

- If the "Chng Stgs" button is pressed after pressing the "Preview" button in ELP-NX, the "Change Print Settings" configuration may not be set correctly.
- After applying the security update that changes the priority order for cipher suites, SSL communication fails between an application that includes an SSL server function and the Windows operating system.
- When "Tracking Permission" and "Stop Printing" are enabled in "Enhanced Print Volume Limitation", processing of the job might fail.

Version 11.33.02

Symptom corrected:

- Sending fax from the document server using IPv4-mapped address may result in an error.
- An alert message unrelated to scan operation (for example, JAM) appears across the entire screen of the operation panel, disabling scan operation.

Version 11.32.04

Symptom corrected:

- Machine may stall, if scanned from the contact glass with Size Setting disabled.
- SC637 may occur, if the machine is shut down while printing.
- ESA applications that support distribution of inbound FAX documents (such as GlobalScan or SLNX SFM) will deliver inbound FAX documents that include the metadata from other FAX jobs.

- If an ESA application is installed to or uninstalled from multiple PCs via Remote Install Manager or SLNX ADM at the same time, the application may not detect the device status for the other installations/uninstallations

Version 11.30.02

Symptom corrected:

- CAP V2 is disabled if switched to Energy Saver mode while CAP V2 starts up after power ON.
- If the firmware is updated remotely while the device is in energy saving mode, the SDK platform may not boot up.
- User information may not be displayed, if a job is run by logging in with the user code authentication.
- Machine response slows down when a trouble occurs in the HDD.
- Characters are randomly broken onto new lines, if the following settings are configured in Scan Settings:
 1. Vertical text in a PDF file is copied and pasted into an application.
 2. "OCR Settings" is set to "On".
 3. "Cognitive Language" is set to "Japanese".
- Less than 128-bit encryption methods will be prohibited.

Version 11.26.04

- 1st Mass production for Da-P1d

Version 11.17.01

- 1st Mass production for Gim-P1c/Gim-P1d/Gim-MF1d

Version 11.17.01

Error correction

- Supported IC card writer (PR-700UDM).

Version 11.16.00

Symptom Corrected:

- SC990 occurs when machine is powered on, and it cannot be recovered by the machine reboot.
- SC899 may occur when a device recovers from STR mode.
- ESA application screen may be displayed when visible/not visible settings for ESA counter screen is changed 5 or more times.
- Coin charge request may not be displayed on ESA application screen even no charge remains in a coin rack.
- If the scan function is used on a device with Streamline NX, GlobalScan NX, or RICOH Scan CX installed, the job log is not registered correctly.
- If ESA application is installed, HTTP communication may not be performed correctly.
- When using the scan function continuously on a device with Streamline NX or GS-NX is installed, a "Scanner is in use by another function" error may occur.
- As for Streamline NX, the login screen immediately after an

application change is not displayed.

- USB device ESA applications use cannot be used because vender ID and product ID are not correctly registered on the device.
- Application switching might not be performed when Steamline NX or 3rd vendor application switches the normal application on the operation panel.
- When the device receives a lot of data, the device may freeze.
- ELP-NX V2 does not accept the print job, even if a error code which allows printing to continue is notified.
- If CAP v2 or Steamline NX is used, card login may not be performed.
- When switching a language on the initial setting screen, if the initial setting screen is closed immediately, the display does not switch the language in the ESA application.
- When the device display language is Turkish or Catalan, the ESA application icon does not display on the home screen.
- A Java VM internal process causes a change to the device's configured sleep timing.
- Even if a Java VM remote update has been successful, the device may display a banner message saying "SDK/J update done FAIL" incorrectly.
- An unexpected screen may appear when a device with 9 or more ESA applications installed recovers from energy saver mode.
- An ESA application may stop during a scan with PDF creation if a paper jam occurs during the 1st page of the input document.
- ESA application installation and uninstallation may take longer than expected in specific conditions.
- When a device failed to reboot after receiving a reboot request from a device management application, installed ESA applications would not restart automatically and remained in "Stopped" status.
- Java VM might not start properly when the device is started.
- RuntimeException rarely occurs when a device with multiple ESA applications installed recovers from energy saver mode.
- Depending on a Device Java VM internal file, the device results in SC990 when it is continuously used.(for Ti-P1)

Version 11.05.04

- SC899 very rarely occurs when a device is started.
- SC998 very rarely occurs when a device recovers from energy saver mode while ESA applications are set as function priority.
- The ESA application shortcut is displayed improperly when 9 or more ESA applications are installed.
- The User Code Authentication screen may not appear properly after a device with the "Administrator Authentication Management" setting enabled recovers from energy saver mode.
- SDK/J summary may not be printed out when 13 or more ESA applications are installed.
- 4 line LCD devices do not enter Energy Saver Mode after specific operations.
- SC899 may occur when a device with a FAX function recovers from energy saver mode.

Version 11.02.04

Pre-release

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*** Basic Information ***
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[Create date] 2019/12/03

[Program Name] Java VM v11 UpdateTool

[Version] 11.44.00

[PCB No.]

[Interchangeability] X / O

[Other Firmware Requirements] None

[PCB Requirements] None

[Software category] Normal Release

[Release category] Normal Release

[Program category] Firmware

Exported to(language) GEN(all)

[Firmware No.] M1095283F_upd

[File Information]

File Name M1095283F_upd.exe

File Type Module for Service

Size 58.63 MB (61476880 byte)

Check Sum -8Bit Sum: 068B

-16Bit Sum(Little Endian): 7ECC

-16Bit Sum(Big Endian): 12BF

[Availability of RFU] No

[Production reflection]

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*** Note ***
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[Note]

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*** Important Notes ***
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[Important Notes]

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*** Modification History ***
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[Modifications made:]

Rank C

Symptom corrected:

- If the "Below 128 bit SSL Key" prevention setting is activated under the "Select Available Functions" menu, it may not be correctly applied to the machine.
- When the amount of file descriptor, used on JavaVM, is 256 or more, a certain print command from the SDK application might cause an error.
- Application installation using Remote Install Manager through IEEE 802.11 Interface Unit might be failed.

[Modification history]

Version 11.42.00

Rank C

Symptom corrected:

- SDK application might not startup if the Stream Line NX settings changed.
- When JavaVM launched "NullPointerException" error message may be displayed, and JavaVM startup may fail.

Version 11.41.00

Rank C

Symptom corrected:

- Errors might be occurred by using the Globalscan.

Version 11.40.01

Rank C

Symptom corrected:

- The SDK application icon might not be displayed after recovering from energy saving mode under the following conditions:
 - An SDK application is set as a priority function.
 - An SDK application is set as a function key.
- SC899-00 may occur if logging in from a keyboard.
- FAX cannot be transmitted if CAP v2 is installed.
- The printing speed is not as fast as the past model if CAP V2 is installed.
- The wrong JavaVM firmware can be mistakenly installed on any machine, possibly leading to unexpected errors occurring with JavaVM or bootup failing.
- The SDK application may stop suddenly due to the increase of memory usage.
- Gloria don't start up when power off/on then system settings can't be used.
- The package firmware might not be updated if the firmware includes an application that needs to be rebooted when updated.

Other changes:

- Minor changes for its internal operations.
- Login might fail if attempting to log in with an IC card while the On-demand Print screen is displayed.

Version 11.38.01

Symptom corrected:

- SDK applications (e.g. Streamline NX, GlobalScan NX, CAP/ELP) may not be able to start during the boot process due to a Java VM error.
- If only IPv6 is enabled on the device, utility tools (e.g. Device Manager NX family or Streamline NX v3) will fail to install applications remotely.
- The following issues occur if any device certificate is imported using the Device Manager NX Enterprise Certificate Management Tool.
 - Device Manager NX Enterprise fails to retrieve the information about the application(s) installed on the device.
 - GlobalScan NX fails to apply profiles or retrieve device information when using the AdminTool.

Version 11.37.00

Symptom corrected:

- When conducting location-free printing or authentication processing by using a solution product, an SC899 error might occur or Java VM might close unexpectedly and an SC error related to Java VM not responding might occur.
- The DSDK application fails to connect to the LDAP server when using Kerberos authentication.

Version 11.35.01

Symptom corrected:

- If the "Chng Stgs" button is pressed after pressing the "Preview" button in ELP-NX, the "Change Print Settings" configuration may not be set correctly.
- After applying the security update that changes the priority order for cipher suites, SSL communication fails between an application that includes an SSL server function and the Windows operating system.
- When "Tracking Permission" and "Stop Printing" are enabled in "Enhanced Print Volume Limitation", processing of the job might fail.

Version 11.33.02

Symptom corrected:

- Sending fax from the document server using IPv4-mapped address may result in an error.
- An alert message unrelated to scan operation (for example, JAM) appears across the entire screen of the operation panel, disabling scan operation.

Version 11.32.04

Symptom corrected:

- SC637 may occur, if the machine is shut down while printing.
- ESA applications that support distribution of inbound FAX documents (such as GlobalScan or SLNX SFM) will deliver inbound FAX documents that include the metadata from other FAX jobs.
- Machine may stall, if scanned from the contact glass with Size

Setting disabled.

Version 11.30.02

Symptom corrected:

- CAP V2 is disabled if switched to Energy Saver mode while CAP V2 starts up after power ON.
- If the firmware is updated remotely while the device is in energy saving mode, the SDK platform may not boot up.
- User information may not be displayed, if a job is run by logging in with the user code authentication.
- Machine response slows down when a trouble occurs in the HDD.
- Characters are randomly broken onto new lines, if the following settings are configured in Scan Settings:
 1. Vertical text in a PDF file is copied and pasted into an application.
 2. "OCR Settings" is set to "On".
 3. "Cognitive Language" is set to "Japanese".
- Less than 128-bit encryption methods will be prohibited.

Version 11.26.04

- 1st Mass production for Da-P1d

Version 11.17.01

- 1st Mass production for Gim-P1c/Gim-P1d/Gim-MF1d

Version 11.17.01

Error correction

- Supported IC card writer (PR-700UDM).

Version 11.16.00

Fixed:

- If the scan function is used on a device with Streamline NX, GlobalScan NX, or RICOH Scan CX installed, the job log is not registered correctly.
- If ESA application is installed, HTTP communication may not be performed correctly.

Version 11.05.04

- SC899 very rarely occurs when a device is started.
- SC998 very rarely occurs when a device recovers from energy saver mode while ESA applications are set as function priority.
- The ESA application shortcut is displayed improperly when 9 or more ESA applications are installed.
- The User Code Authentication screen may not appear properly after a device with the "Administrator Authentication Management" setting enabled recovers from energy saver mode.
- SDK/J smmary may not be printed out when 13 or more ESA applications are installed.
- 4 line LCD devices do not enter Energy Saver Mode after specific operations.

- SC899 may occur when a device with a FAX function recovers from energy saver mode.

Version 11.02.04

Pre-release

=====
*** Basic Information ***
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[Create date] 2017/08/25

[Program Name] Scanner

[Version] 01.10

[PCB No.]

[Interchangeability] X / O

[Other Firmware Requirements] None

[PCB Requirements] None

[Software category] Normal Release

[Release category] Normal Release

[Program category] Firmware

Exported to(language) GEN(all)

[Firmware No.] M1605779J

[File Information]

File Name M1605779J.fwu

File Type Module for Service

Size 1.46 MB (1529276 byte)

[File Information]

File Name M1605779J.rfu

File Type Module for Remote Upgrade

Size 1.47 MB (1536256 byte)

[Availability of RFU] Yes

[Production reflection] 2017/09

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*** Note ***
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[Note]

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*** Important Notes ***
=====

[Important Notes]

=====
*** Modification History ***
=====

[Modifications made:]

Other changes:

- Newly added SMBv2/v3 support.

This firmware is dependent on the following firmware modules. Please be sure to update all of them:

System/Copy v1.15 (M1605770P)

Network Support v13.27.1 (M1605753K)

Web Support v1.13 (M1605750K)

Scanner v01.10 (M1605779J)

OpePanel

- North America, Europe, Asia and China model: v1.13 (M1605740K)

- Taiwan model: v1.04 (M1605742C)

Please refer to the RTB(No.RGene095) for details.

[Modification history]

Version 01.09

Symptom corrected:

Max. Email Size for scanner send settings cannot be configure via DMNX.

Version 01.08

Symptom corrected:

1. When scanning with "Hungarian" or "Polish" selected under "Cognitive Language" in "OCR Settings", if the value of a Unicode character exceeds 256, then the character will be converted to a question mark ("?").

Version 01.07

Symptom corrected:

1. When Simplified Chinese is selected in the "Insert Additional Email Info" setting in Send Settings, text in an email sent by using Scan to URL is garbled.
2. When using a TWAIN driver in certain software applications, such as Pneumologis, an SC899 error occurs.

Version 01.06

Symptom corrected:

- When resuming from Energy Saver Mode, if an application icon other than the one for scanner is pressed on the operation panel, the scanner might be called.

Version 01.05
1st Mass production

=====
*** Basic Information ***
=====

[Create date] 2017/08/28

[Program Name] browser

[Version] 1.04.00

[PCB No.]

[Interchangeability] X / O

[Other Firmware Requirements] None

[PCB Requirements] None

[Software category] Normal Release

[Release category] Normal Release

[Program category] Firmware

Exported to(language) GEN(ja,en,gb,f,e,d,i,nl,s,n,dk,sf,p,pl,h,cz,ru,sc,tc,br,tr,ca)

[Firmware No.] M4445754D

[File Information]

File Name M4445754D.fwu

File Type Module for Service

Size 11.75 MB (12325496 byte)

[File Information]

File Name M4445754D.rfu

File Type Module for Remote Upgrade

Size 11.76 MB (12333312 byte)

[Availability of RFU] Yes

[Production reflection] 2017/08

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*** Note ***
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[Note]

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*** Important Notes ***
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[Important Notes]

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*** Modification History ***
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[Modifications made:]

Other Changes:

- Support for TLS 1.0, TLS 1.1, and TLS 1.2.

[Modification history]

Version 1.03.00

Symptom corrected:

- Keyboard response is slow when using the Web Scanner application.
- SC899 may occur when performing Java Script functions.

Version 1.02.00

1st Mass production

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*** Basic Information ***
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[Create date] 2019/08/02

[Program Name] Engine

[Version] 1.35:13

[PCB No.]

[Interchangeability] X / O

[Other Firmware Requirements] None

[PCB Requirements] None

[Software category] Normal Release

[Release category] Normal Release

[Program category] Firmware

Exported to(language) GEN(all)

[Firmware No.] M1585550S

[File Information]

File Name M1585550S.fwu

File Type Module for Service

Size 0.39 MB (410228 byte)

[File Information]

File Name M1585550S.rfu

File Type Module for Remote Upgrade

Size 0.40 MB (418048 byte)

[Availability of RFU] Yes

[Production reflection] 2019/08

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*** Note ***
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[Note]

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*** Important Notes ***
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[Important Notes]

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*** Modification History ***
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[Modifications made:]

Rank C

Symptom corrected:

- SC542-01 might occur frequently when the fusing unit warming up as the toner accumulates on the fusing thermistor. To reduce the SC, detection timing is changed.
- SC551 and SC543 might occur frequently due to contact failure of the fusing drawer connector caused by the drawer connector oxidization.
 - To reduce the SC551, the temperature of the fusing thermistor (edge) which is not used for the heater control is replaced with normal temperature.
 - To reduce the SC543, the burnout detection temperature of the fusing thermistor is changed.
- The fusing SC might occur frequently due to the contact failure caused by the drawer connector oxidization. The fusing fan control method is changed in order to prevent condensation which encourages oxidization.
- The fusing fan might not rotate even though the machine is ready after waking up from the energy saving mode.

[Modification history]

Version 1.34:13

Rank C

Symptom corrected:

- When the feed tray is switched to Tray 1 after two or more pages have been printed from a lower paper tray (option), an image on the leading edge of the next page might shift.
- When the machine detects that the fusing unit has been replaced, the SP counters are not reset, and the near-end and end alerts for the fusing unit are not reset:
SP7-803-003, SP7-803-013, SP7-803-023, SP7-803-004, SP7-803-014, and SP7-803-024.

Version 1.33:13

Rank C

Symptom corrected:

1. When the "Sleep Mode Timer" or the "Fusing Unit Off Mode (Energy Saving) On/Off" setting is changed from the default setting, the PCDU might keep rolling, which might cause the screw to break and waste toner to spill out of the PCDU.
2. Corrected a malfunction with the initial toner supply mode when replacing the toner bottle.

Other changes:

3. Instead of displaying SC541 or SC544, a message that prompts users to reset the fusing unit is displayed.

Version 1.32:13

Other changes:

- Improved the fusing temperature control.

Version 1.30:13

Other changes:

Minor changes only for the Japanese model.

Version 1.28:13

Symptom corrected:

1. Waste toner collection coil of the PCDU may break.
2. Fan may not stop even in sleep mode.
3. Cleaning operation of the fusing roller may not complete.
4. Notifications of the remaining toner amount and toner near end alert appear earlier than expected.

Other changes:

1. Toner refresh mode was optimized for paper narrower than A4 SEF (210mm).
2. Support of traditional Chinese for the Asia-Pacific M158 model.

This change applies to the following firmware modules and versions:

- System firmware: v1.12 or later (M1585770H)
- Printer firmware: v1.12 or later (M1585756H)
- Web Support firmware: v1.11 or later (M1585750G)

Version 1.25:13

Symptom corrected:

- SC332 may occur.

Version 1.24:13

Symptom corrected:

1. Waste toner full alert appears earlier than expected.

Other changes:

1. Supports the model SP4520DN, newly released for the European market.
This release also applies to model SP4510DN, which has already been released in the European market.
For SP4510DN, please refer to RTB No. RM158030 for explanation on compatibility with this release and hardware modification.
2. The margins at the leading and trailing edges can be set to 0 mm.

Version 1.23:13

Symptom corrected

"Waste Toner full" is displayed earlier than expected because the connection between the toner cartridge terminal and the connector on the mainframe is loose.

Version 1.21:13

Other Changes

Specifications were changed for the Japanese model.

Version 1.20:13

Minor change

Version 1.19:13

Symptom corrected

The main motor or paper exit motor may not turn off if an SC occurs during continuous printing which requires the machine to stop (once the paper is exited).

Version 1.18:13

1st Mass production

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***** Basic Information *****
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[Create date] 2019/12/09

[Program Name] Network Support

[Version] 13.29

[PCB No.]

[Interchangeability] X / O

[Other Firmware Requirements] None

[PCB Requirements] None

[Software category] Normal Release

[Release category] Normal Release

[Program category] Firmware

Exported to(language) GEN(all)

[Firmware No.] M1585753L

[File Information]

File Name M1585753L.fwu

File Type Module for Service

Size 7.87 MB (8254888 byte)

[File Information]

File Name M1585753L.rfu

File Type Module for Remote Upgrade

Size 7.88 MB (8261888 byte)

[Availability of RFU] Yes

[Production reflection] 2019/12

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***** Note *****
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[Note]

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***** Important Notes *****
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[Important Notes]

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***** Modification History *****
=====

=====
[Modifications made:]

Rank C

Symptom corrected:

- A vulnerability (CVE-2019-1559) to a Padding Oracle Attack on CBC encryption has been fixed. To activate this fix, CBC mode must be disabled after updating the firmware.
- msh> set cbc down
- msh> logout
- Enter "yes" to save the changes.

[Modification history]

Version 13.28

Rank C

Symptom corrected:

- DNS name resolution for the device might fail if DDNS is enabled in a DHCPv6 environment.
- There is a probability (1/256) that the SSL connection to the device will fail if the connecting component doesn't have a process to retry the SSL connection.

Version 13.27

Rank C

Symptom corrected:

- When SSL/TLS is enabled, the Device Manager NX cannot obtain the state of encryption even though the hard disk of the device is encrypted.
- SC819 might occur after updating firmware remotely.
- If the device has not been used a significant amount of times, functions that require a network connection will fail.

Other changes:

- The default value of "Algorithm Signature" has been changed from SHA1-RSA 2048 to SHA256-RSA 2048 when the device creates or requests a new device certificate.

Version 13.26

Symptom corrected:

1. When the device is set to use "IEEE 802.1X" and "TLS1.2" is set to "active", authentication will fail.
2. When the device is in Energy Saver Mode, if information about the network interface for the device is being obtained from the SNMP Manager application, nonexistent errors are recorded in the system logs.

Version 13.25

Other Changes:

- Added support for adhering to the Lot 6 regulation of the EU in European devices.
-

Version 13.24

Other changes:

- Changed the DH key specification to use 2,048 bits instead of 512 bits to prevent the Logjam vulnerability (CVE-2015-4000).
In addition, by modifying this specification, SSL/TLS communication can be established when using Mac OS X 10.10.4 and iOS 8.4.

Version 13.23.1

Symptom corrected:

- When performing IPP printing with the job spool enabled in Mac OS X 10.7 or later and iOS 6 or later, the document is not printed.

Other changes:

- Support for AirPrint.

This firmware is dependent on the following firmware modules.

Please be sure to update all of them:

SP 4510DN:

- Printer firmware: v1.09 or later (M1585756E)
- Web Support firmware: v1.08 or later (M1585750D)

SP 4520DN:

- Printer firmware: v1.08 or later (M1595756E)
- Web Support firmware: v1.07 or later (M1595750D)

Version 13.22

Symptom corrected:

1. When the device is in Energy Saver Mode, if information about the network interface for the device is being obtained from the SNMP Manager application, nonexistent errors are recorded in the system logs.
2. When the display language of the operation panel is set to Catalan, Scan to Folder fails.

Other changes:

- When printing from the Windows operating system, if the RAW protocol is used for the standard TCP/IP port, a significant amount of time might pass until the next job is printed. Because of this, the initial print timeout period is changed to 15 seconds and the shortest timeout period that can be set is changed to 5 seconds.

Version 13.21

1st Mass production

*** Basic Information ***

[Create date] 2019/07/05

[Program Name] System

[Version] 1.17

[PCB No.]

[Interchangeability] X / O

[Other Firmware Requirements] None

[PCB Requirements] None

[Software category] Normal Release

[Release category] Normal Release

[Program category] Firmware

Exported to(language) GEN(all)

[Firmware No.] M1595770P

[File Information]

File Name M1595770P.fwu

File Type Module for Service

Size 16.95 MB (17768176 byte)

[File Information]

File Name M1595770P.rfu

File Type Module for Remote Upgrade

Size 16.95 MB (17772800 byte)

[Availability of RFU] Yes

[Production reflection] 2019/07

*** Note ***

[Note]

*** Important Notes ***

[Important Notes]

*** Modification History ***

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[Modifications made:]

Rank C

Symptom corrected:

- When the display language is set to French, the alphabet keypad is displayed instead of the number keypad, and the password for Locked Print cannot be entered.
- If the machine repeatedly transitions into and out of energy saving mode, the operation panel might not light up and SC819 might occur.
- The message notifying that the toner cartridge is almost empty might be displayed under "Check Status" before the status light flashes yellow.

Other changes:

- The message displayed when the fusing unit is not set correctly, changed, to prompt users to reinstall it.

[Modification history]

Version 1.16

Rank C

Other changes:

- The default setting for symbols and numbers on a Simplified/Traditional Chinese soft keyboard has been changed from two-byte characters to one-byte characters.

Version 1.15

Rank C

Symptom corrected:

- When the SDK application is set as the device's priority function and this differs from the priority function of the logged in user, the device's function priority setting might be overwritten to the user's priority setting.

Other changes:

- The wait timer for the startup of the SDK/J application can be increased through SP mode.
- SP5-101-190: PrimacyApli WaitTimer
- 0: 180 seconds
- 1: 360 seconds

Version 1.14

Rank C

Symptom corrected:

- An invalid value is returned when obtaining the counter MIB, ricohEngCounterValue, during device shutdown.

Version 1.13

Symptom corrected:

- A part of the image may disappear, if the file is printed from the document server (saved using PS driver) with the image orientation rotated 90 degrees.

Version 1.12

Symptom corrected:

- If the automatic supply order function is activated and the PCDU reaches life, PCDU order calls are sent to the @Remote repeatedly.

Other changes:

- Support for ErP Lot 6 compliance.

Version 1.11

Symptom corrected:

- The address book can be accessed while printing is being conducted.

Other Changes:

- Support for the Portuguese orthography.

Version 1.10

Symptom corrected:

- SC816-01 may occur after print job is completed.
- Cannot access flash memory on the controller board.
- An SC819 error might occur when using network-related functions, such as accessing Web Image Monitor.
- When the CTS protection function is enabled, the throughput for the wireless LAN connection is reduced.
- In wireless LAN environments, when A-MSDU is enabled, the device cannot receive packet data that is more than 2,048 bytes.
- In wireless LAN environments, when large volume printing is being conducted, the job is cancelled in the middle of printing.
- In wireless LAN environments, when the authentication methods WPA2 and A-MPDU are enabled, printing might take a significant amount of time.
- When the threshold for fragmentation is set in the access point settings, the MFP/LP will fail to receive the packet data if the computer sends data that is larger than the threshold that is set.
- When trying to establish an ad-hoc connection among three or more devices, the third and subsequent devices cannot connect.
- The device cannot communicate when using the WMM (Wi-Fi Multimedia) function.
- If "AAM-E for 4.3 inch panel printer" included in SLNX or CAP v2 is installed to the device, users cannot log in to Web Image Monitor.

Other changes:

- Support for Korean in Asia-Pacific models.
 - Support for the Portuguese orthography.
 - Support the model SP4520DN, newly released for the European market.
- This firmware is dependent on the following versions of firmware modules:
- Engine firmware: v1.24:13 or later (M1585550K)

Version 1.09

Symptom corrected:

- If "Display" is selected under "Paper Confirmation for Bypass Tray,"

printing is possible only in LEF.

Version 1.08

Symptom corrected:

- Machine data encryption settings bug corrected.
- If "Display" is selected under "Paper Confirmation for Bypass Tray," printing is available only in LEF.
(User Tool -> Printer Features -> System -> Tray Setting Priority -> Paper Confirmation for Bypass Tray)
- When Simplified Chinese characters are included in the additional email information, username, password, a destination folder name, or a filename for SMB/NCP, the connection is unsuccessful, the data transmission fails, or the body of the email contains garbled text.

Version 1.07a

Symptom corrected:

1. Address Book display error (Device Manager NX series).

Other changes

2. Added "Performance Priority" mode (UP).

Note:

- Performance Priority mode prioritizes printing speed
- Environment Priority mode (default) prioritizes environmentally-friendly conditions (duplex printing is slowed down after 70 sec.).

3. Added a "Cool-down" feature (SP1-110-001, default: ON).

Note: When this mode is enabled, the occurrence of black spots is minimized. However, printing speed is reduced.

Version 1.06

1st Mass production

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*** Basic Information ***
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[Create date] 2018/10/04

[Program Name] Engine

[Version] 1.36:09

[PCB No.]

[Interchangeability] X / O

[Other Firmware Requirements] None

[PCB Requirements] None

[Software category] Normal Release

[Release category] Normal Release

[Program category] Firmware

Exported to(language) GEN(all)

[Firmware No.] M1605550T

[File Information]

File Name M1605550T.fwu

File Type Module for Service

Size 2.00 MB (2097652 byte)

[File Information]

File Name M1605550T.rfu

File Type Module for Remote Upgrade

Size 2.01 MB (2105600 byte)

[Availability of RFU] Yes

[Production reflection] 2018/11

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*** Note ***
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[Note]

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*** Important Notes ***
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[Important Notes]

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*** Modification History ***
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[Modifications made:]

Rank C

Symptom corrected:

- When the feed tray is switched to Tray 1 after two or more pages have been printed from a lower paper tray (option), an image on the leading edge of the next page might shift.
- When the machine detects that the fusing unit has been replaced, the SP counters are not reset, and the near-end and end alerts for the fusing unit are not reset:
SP7-803-003, SP7-803-013, SP7-803-023, SP7-803-004, SP7-803-014, and SP7-803-024.

[Modification history]

Version 1.35:09

Rank C

Symptom corrected:

1. When the "Sleep Mode Timer" or the "Fusing Unit Off Mode (Energy Saving) On/Off" setting is changed from the default setting, the PCPU might keep rolling, which might cause the screw to break and waste toner to spill out of the PCPU.
2. Faxes that are received and stored in the memory might not print out.
3. Corrected a malfunction with the initial toner supply mode when replacing the toner bottle.

Other changes:

4. Instead of displaying SC541 or SC544, a message that prompts users to reset the fusing unit is displayed.

Version 1.34:09

Other changes:

- Improved the fusing temperature control.

Version 1.32:09

Other changes:

Minor changes only for the Japanese model.

Version 1.30:09

Other changes:

1. Toner refresh mode was optimized for paper narrower than A4 SEF (210mm).
2. For the model M160, support for Traditional Chinese in Asia-Pacific models.
This change is dependent on the following versions of firmware modules:
 - System/Copy firmware: v1.11 or later (M1605770K)
 - Web Support firmware: v1.10 or later (M1605750G)
 - OpePanel_ TWN firmware: v1.01 or later (M1605742)

Version 1.27:09

Symptom corrected:

- Waste toner collection coil of the PCPU might break.

- Fan may not stop even in sleep mode.
- Cleaning operation of the fusing roller may not complete.
- Notifications of the remaining toner amount and toner near end alert appear earlier than expected.

Version 1.26:09

Symptom corrected:

- SC332 may occur.

Version 1.25:09

Symptom corrected:

1. Waste toner full alert appears earlier than expected.

Other changes:

1. Supports the model MP401SPF, newly released for the European market.

This release also applies to model SP4510SF, which has already been released in the European market.

For SP4510SF, please refer to RTB No. RM160030 for explanation on compatibility with this release and hardware modification.

2. The margins at the leading and trailing edges can be set to 0 mm.

Version 1.24:09

Symptom corrected

"Waste Toner full" is displayed earlier than expected because the connection between the toner cartridge terminal and the connector on the mainframe is loose.

Version 1.22:09

Other Changes

Specifications were changed for the Japanese model.

Version 1.21:09

Minor change

Version 1.20:09

Symptom corrected

1. The main motor or paper exit motor may not turn off if an SC occurs during continuous printing which requires the machine to stop (once the paper is exited).

2. A jam occurs if the paper in the tray runs out (and the machine switches to another tray) while a duplex FAX job is being printed out.

Version 1.19:09

1st Mass production

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*** Basic Information ***
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[Create date] 2019/08/20

[Program Name] Engine

[Version] 1.37:09

[PCB No.]

[Interchangeability] X / O

[Other Firmware Requirements] None

[PCB Requirements] None

[Software category] Normal Release

[Release category] Normal Release

[Program category] Firmware

Exported to(language) GEN(all)

[Firmware No.] M1605550V

[File Information]

File Name M1605550V.fwu

File Type Module for Service

Size 2.00 MB (2097652 byte)

[File Information]

File Name M1605550V.rfu

File Type Module for Remote Upgrade

Size 2.01 MB (2105600 byte)

[Availability of RFU] Yes

[Production reflection] 2019/09

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*** Note ***
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[Note]

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*** Important Notes ***
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[Important Notes]

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*** Modification History ***
=====

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[Modifications made:]

Rank C

Symptom corrected:

- SC542-01 might occur frequently when the fusing unit warming up as the toner accumulates on the fusing thermistor. To reduce the SC, detection timing is changed.
- SC551 and SC543 might occur frequently due to contact failure of the fusing drawer connector caused by the drawer connector oxidization.
 - To reduce the SC551, the temperature of the fusing thermistor (edge) which is not used for the heater control is replaced with normal temperature.
 - To reduce the SC543, the burnout detection temperature of the fusing thermistor is changed.
- The fusing SC might occur frequently due to the contact failure caused by the drawer connector oxidization. The fusing fan control method is changed in order to prevent condensation which encourages oxidization.
- The fusing fan might not rotate even though the machine is ready after waking up from the energy saving mode.

[Modification history]

Version 1.36:09

Rank C

Symptom corrected:

- When the feed tray is switched to Tray 1 after two or more pages have been printed from a lower paper tray (option), an image on the leading edge of the next page might shift.
- When the machine detects that the fusing unit has been replaced, the SP counters are not reset, and the near-end and end alerts for the fusing unit are not reset:
SP7-803-003, SP7-803-013, SP7-803-023, SP7-803-004, SP7-803-014, and SP7-803-024.

Version 1.35:09

Rank C

Symptom corrected:

1. When the "Sleep Mode Timer" or the "Fusing Unit Off Mode (Energy Saving) On/Off" setting is changed from the default setting, the PCPU might keep rolling, which might cause the screw to break and waste toner to spill out of the PCPU.
2. Faxes that are received and stored in the memory might not print out.
3. Corrected a malfunction with the initial toner supply mode when replacing the toner bottle.

Other changes:

4. Instead of displaying SC541 or SC544, a message that prompts users to reset the fusing unit is displayed.

Version 1.34:09

Other changes:

- Improved the fusing temperature control.
-

Version 1.32:09

Other changes:

Minor changes only for the Japanese model.

Version 1.30:09

Other changes:

1. Toner refresh mode was optimized for paper narrower than A4 SEF (210mm).

2. For the model M160, support for Traditional Chinese in Asia-Pacific models.

This change is dependent on the following versions of firmware modules:

- System/Copy firmware: v1.11 or later (M1605770K)

- Web Support firmware: v1.10 or later (M1605750G)

- OpePanel_ TWN firmware: v1.01 or later (M1605742)

Version 1.27:09

Symptom corrected:

- Waste toner collection coil of the PCDU might break.

- Fan may not stop even in sleep mode.

- Cleaning operation of the fusing roller may not complete.

- Notifications of the remaining toner amount and toner near end alert appear earlier than expected.

Version 1.26:09

Symptom corrected:

- SC332 may occur.

Version 1.25:09

Symptom corrected:

1. Waste toner full alert appears earlier than expected.

Other changes:

1. Supports the model MP401SPF, newly released for the European market.

This release also applies to model SP4510SF, which has already been released in the European market.

For SP4510SF, please refer to RTB No. RM160030 for explanation on compatibility with this release and hardware modification.

2. The margins at the leading and trailing edges can be set to 0 mm.

Version 1.24:09

Symptom corrected

"Waste Toner full" is displayed earlier than expected because the connection between the toner cartridge terminal and the connector on the mainframe is loose.

Version 1.22:09

Other Changes

Specifications were changed for the Japanese model.

Version 1.21:09

Minor change

Version 1.20:09

Symptom corrected

1. The main motor or paper exit motor may not turn off if an SC occurs during continuous printing which requires the machine to stop (once the paper is exited).
2. A jam occurs if the paper in the tray runs out (and the machine switches to another tray) while a duplex FAX job is being printed out.

Version 1.19:09

1st Mass production

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*** Basic Information ***

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[Create date] 2019/10/29

[Program Name] System/Copy

[Version] 1.18

[PCB No.]

[Interchangeability] X / O

[Other Firmware Requirements] None

[PCB Requirements] None

[Software category] Normal Release

[Release category] Normal Release

[Program category] Firmware

Exported to(language) GEN(all)

[Firmware No.] M1605770S

[File Information]

File Name M1605770S.fwu
File Type Module for Service
Size 23.52 MB (24662724 byte)

[File Information]

File Name M1605770S.rfu
File Type Module for Remote Upgrade
Size 23.53 MB (24670464 byte)

[Availability of RFU] Yes

[Production reflection] 2019/10

*** Note ***

[Note]

*** Important Notes ***

[Important Notes]

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*** Modification History ***

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[Modifications made:]

Rank C

Symptom corrected:

- The HDD might malfunction when the following conditions are met:
 - Auto Erase Memory Setting is enabled.
 - Sleep Mode Timer is set to more than 60 minutes or the Sleep Mode is disabled.

[Modification history]

Version 1.17

Rank C

Symptom corrected:

- An invalid value is returned when obtaining the counter MIB, `ricohEngCounterValue`, during device shutdown.
- When fax forwarding is enabled, if a fax is received while the machine is

entering STR mode, the fax might not be forwarded to the registered email destination or printed out.

- The email account information for receiving internet faxes is not imported or exported.

Version 1.16

Rank C

Symptom corrected:

- When the capture function (SP5-836-001) is enabled, if the user stops the copying and then logs out while the "Stop key has been pressed" message is displayed, the screen might freeze if the user then tries to log back in.
- After entering the user code to start up the Copy application, the user code input screen does not disappear.
- If the "Stop" button is pressed while logging out after a paper jam occurred, the "Start" button of the copy application might not respond.

Other changes:

- The wait timer for the startup of the SDK/J application can be increased through SP mode.
 - SP5-101-190: PrimacyApli WaitTimer
 - 0: 180 seconds
 - 1: 360 seconds
- The default setting for symbols and numbers on a Simplified/Traditional Chinese soft keyboard has been changed from two-byte characters to one-byte characters.

Version 1.15

Other changes:

- Newly added SMBv2/v3 support.

This firmware is dependent on the following firmware modules. Please be sure to update all of them:

System/Copy v1.15 (M1605770P)

Network Support v13.27.1 (M1605753K)

Web Support v1.13 (M1605750K)

Scanner v01.10 (M1605779J)

OpePanel

- North America, Europe, Asia and China model: v1.13 (M1605740K)
- Taiwan model: v1.04 (M1605742C)

Please refer to the RTB(No.RGene095) for details.

Version 1.14

Specification Change:

- Screen monitoring from Web Image Monitor is not possible for three seconds after the operation panel has been touched.

Version 1.13

Other changes:

- Added an SP setting for enabling or disabling the "Screen Monitoring" function.

SP5-885-205: default = 0 ("Screen Monitoring" is enabled)

This firmware is dependent on Web Support firmware v1.12 (M1605750J) or later,
so please be sure to update that firmware as well.

Version 1.12

Symptom corrected:

- A part of the image may disappear, if the file is printed from the document server (saved using PS driver) with the image orientation rotated 90 degrees.
- On machines installed with CAP v2, the simple FAX application may shut down abnormally, if an address registered without a FAX number is selected.
- In the case of the following conditions, when attempting to log in to a device with CAP v2 installed, the attempt may fail with the "Failed to authenticate. Address Book is being updated." error message.
 - The FAX function is enabled on the device.
 - "Logout Using Card" is set as "On" in the CAP configuration tool.

Other changes:

- Support for ErP Lot 6 compliance.

Version 1.11

Symptom corrected:

- Fax received is not printed and forwarded to the folder, if "Forwarding setting

of Reception File Setting" is enabled.

Other changes:

- Support for Traditional Chinese in Asia-Pacific models.

This firmware is dependent on the following versions of firmware modules:

- Web Support firmware: v1.10 or later (M1605750G)

Version 1.10

Symptom corrected:

- The machine can not recover from energy saver mode.
- SC672-12 occurs when scanning a document into memory while at the same time performing Media Print and refreshing the operation panel display.
- Print jobs may not start after supplying paper when a paper end occurs.
- When scanning an original containing multiple pages with the Twain driver, error (code: 36856) occurs on the client PC and scan stops midway.
- Fax data encoded with Base64 is not correctly received.
- When the CTS protection function is enabled, the throughput for the wireless LAN connection is reduced.
- In wireless LAN environments, when the authentication methods WPA2 and A-MPDU are enabled, printing might take a significant amount of time.
- In wireless LAN environments, when A-MSDU is enabled, the device cannot receive packet data that is more than 2,048 bytes.
- When trying to establish an ad-hoc connection among three or more devices, the third and subsequent devices cannot connect.
- The device cannot communicate when using the WMM (Wi-Fi Multimedia) function.
- When the threshold for fragmentation is set in the access point settings, the MFP/LP will fail to receive the packet data if the computer sends data

that is larger than the threshold that is set.

- In wireless LAN environments, when large volume printing is being conducted, the job is cancelled in the middle of printing.
- An SC819 error might occur when using network-related functions, such as accessing Web Image Monitor.
- If an email sent by scan-to-email is opened in Office 365 cloud mail service, contents of the attached file may falsely appear in the body of the message with the characters corrupted.
- The address book can be accessed while scanning or printing is being conducted.
- When the following settings are enabled, print jobs that have been conducted are not displayed on the job history screen:
 - On the operation panel: User Tools > Printer Features > System tab
 - > Store and Skip Errored Job
 - In Web Image Monitor: Device Management > Configuration > Printer
 - > Basic Settings > Store and Skip Errored Job

This firmware is dependent on Web Support firmware v1.09(M1605750F) or later, so please be sure to update it.

Other changes:

- Support for the Portuguese orthography.
- The maximum data transmission speed has been changed to 130 Mbps because 40-MHz wireless LAN bandwidth is no longer supported.

Version 1.09

Symptom corrected:

- The machine does not automatically reboot after the installation (overwriting)

of an SDK app, even though the user has enabled this setting.

Version 1.08

Symptom corrected:

1. When scanning with "Hungarian" or "Polish" selected under "Cognitive Language" in "OCR Settings", if the value of a Unicode character exceeds 256, then the character will be converted to a question mark ("?").

This firmware is dependent on the following firmware module.

Please be sure to update it:

- Scanner firmware: v1.08 or later.

Other changes:

2. Supports the model MP401SPF, newly released for the European market.

This release also applies to model SP4510SF, which has already been released in the European market.

For SP4510SF, please refer to RTB No. RM160030 for explanation on compatibility with this release and hardware modification.

Version 1.07

Symptom corrected:

- When scanning with "Hungarian" or "Polish" selected under "Cognitive Language" in "OCR Settings", if the value of a Unicode character exceeds 256, then the character will be converted to a question mark ("?").
- If "Display" is selected under "Paper Confirmation for Bypass Tray," printing is available only in LEF.

(User Tool -> Printer Features -> System -> Tray Setting Priority ->

Paper Confirmation for Bypass Tray)

- When scanning documents of different sizes with all of the following configured, a send error occurs:
 - Set the original feed type setting for original orientation to "Readable orientation".
 - Enabling "Auto detect" and "Mixed original sizes".
 - Selecting any of the "Black & White" scanning settings.
 - Using multi-pass ADF and OCR.
- When Simplified Chinese characters are included in the additional email information, username, password, a destination folder name, or a filename for SMB/NCP, the connection is unsuccessful, the data transmission fails, or the body of the email contains garbled text.
- POP mail may not be received, if the mail contains UIDL that does not comply with RFC.

Version 1.06

Symptom corrected:

1. Cannot receive a FAX if the reception protocol for SMTP is configured (rare occurrence).
2. Address Book display error (Device Manager NX series).
3. SC819 occurs when the machine recovers from Sleep/Energy Saver mode.

Other changes:

4. Added "Performance Priority" mode (UP).

Note:

- Performance Priority mode prioritizes printing speed

- Environment Priority mode (default) prioritizes environmentally-friendly conditions (duplex printing is slowed down after 70 sec.).

5. Added a "Cool-down" feature (SP1-110-001, default: ON).

Note: When this mode is enabled, the occurrence of black spots is minimized. However, printing speed is reduced.

Version 1.05

1st Mass production

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*** Basic Information ***
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[Create date] 2018/10/16

[Program Name] Fax

[Version] 09.00.00

[PCB No.]

[Interchangeability] X / O

[Other Firmware Requirements] None

[PCB Requirements] None

[Software category] Normal Release

[Release category] Normal Release

[Program category] Firmware

Exported to(language) GEN(all)

[Firmware No.] M1605776H

[File Information]

File Name M1605776H.fwu

File Type Module for Service

Size 1.94 MB (2037856 byte)

[File Information]

File Name M1605776H.rfu

File Type Module for Remote Upgrade

Size 1.95 MB (2044160 byte)

[Availability of RFU] Yes

[Production reflection] 2018/10

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*** Note ***
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[Note]

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*** Important Notes ***
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[Important Notes]

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*** Modification History ***
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[Modifications made:]

Rank C

Symptom corrected:

- SC899 might occur if there are multiple FAX alerts.

[Modification history]

Version 08.00.00

Symptom corrected:

- If logged in with user authentication, FAX settings for Auto Print FAX Journal (SWUSR_03, bit7) and setting whether or not to include sender name in reports (SWUSR_04, bit5) may change after logging out.
- SC899 may occur when logging out from a machine with the user authentication enabled.
- Fax application may stall when recovering from energy saving mode.

Version 07.00.00

Other Changes:

Added support for adhering to the Lot 6 regulation of the EU in European devices.

Version 06.00.00

Symptom corrected:

- Minor bug correction

Version 05.00.00

1st Mass production

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*** Basic Information ***

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[Create date] 2019/08/05

[Program Name] Engine

[Version] 1.26:06

[PCB No.]

[Interchangeability] X / O

[Other Firmware Requirements] None

[PCB Requirements] None

[Software category] Normal Release

[Release category] Normal Release

[Program category] Firmware

Exported to(language) GEN(all)

[Firmware No.] M1715550N

[File Information]

File Name M1715550N-P01.zip

File Type Module for Service

Size 0.32 MB (337597 byte)

[File Information]

File Name M1715550N-P02.zip

File Type Module for Service

Size 0.32 MB (337575 byte)

[File Information]

File Name M1715550N-P03.zip

File Type Module for Service

Size 0.32 MB (337588 byte)

[File Information]

File Name M1715550N-P04.zip

File Type Module for Service

Size 0.32 MB (337591 byte)

[File Information]

File Name M1715550N-P05.zip

File Type Module for Service

Size 0.32 MB (337592 byte)

[File Information]

File Name M1715550N-P06.zip

File Type Module for Service

Size 0.32 MB (337597 byte)

[File Information]

File Name M1715550N-P07.zip

File Type Module for Service

Size 0.32 MB (337576 byte)

[File Information]

File Name M1715550N-P08.zip

File Type Module for Service

Size 0.32 MB (337588 byte)

[File Information]

File Name M1715550N-P09.zip

File Type Module for Service

Size 0.32 MB (337590 byte)

[File Information]

File Name M1715550N-P10.zip

File Type Module for Service

Size 0.32 MB (337582 byte)

[File Information]

File Name M1715550N-P11.zip

File Type Module for Service

Size 0.32 MB (337593 byte)

[File Information]

File Name M1715550N-P12.zip

File Type Module for Service

Size 0.32 MB (337572 byte)

[File Information]

File Name M1715550N-P13.zip

File Type Module for Service

Size 0.32 MB (337584 byte)

[File Information]

File Name M1715550N-P14.zip

File Type Module for Service

Size 0.32 MB (337586 byte)

[Availability of RFU] No

[Production reflection] 2019/08

*** Note ***

[Note]

*** Important Notes ***

[Important Notes]

*** Modification History ***

[Modifications made:]

Rank C

Symptom corrected:

- SC542-01 might occur frequently when the fusing unit warming up as the toner accumulates on the fusing thermistor. To reduce the SC, detection timing is changed.
- SC551 and SC543 might occur frequently due to contact failure of the fusing drawer connector caused by the drawer connector oxidization.

- To reduce the SC551, the temperature of the fusing thermistor (edge) which is not used for the heater control is replaced with normal temperature.
- To reduce the SC543, the burnout detection temperature of the fusing thermistor is changed.
- The fusing SC might occur frequently due to the contact failure caused by the drawer connector oxidization. The fusing fan control method is changed in order to prevent condensation which encourages oxidization.
- The fusing fan might not rotate even though the machine is ready after waking up from the energy saving mode.

[Modification history]

Version 1.25:06
Rank C

Symptom corrected:

- When the feed tray is switched to Tray 1 after two or more pages have been printed from a lower paper tray (option), an image on the leading edge of the next page might shift.

Version 1.24:06
Rank C

Symptom corrected:

1. When the "Sleep Mode Timer" or the "Fusing Unit Off Mode (Energy Saving) On/Off" setting is changed from the default setting, the PCDU might keep rolling, which might cause the screw to break and waste toner to spill out of the PCDU.
2. Corrected a malfunction with the initial toner supply mode when replacing the toner bottle.

Other changes:

3. Instead of displaying SC541 or SC544, a message that prompts users to reset the fusing unit is displayed.

Version 1.23:06
Other changes:

- Improved the fusing temperature control.

Version 1.21:06

Other changes:

Minor changes only for the Japanese model.

Version 1.19:06

Symptom corrected:

- Waste toner collection coil of the PCDU may break.
- Fan may not stop even in sleep mode.
- Cleaning operation of the fusing roller may not complete.
- Notifications of the remaining toner amount and toner near end alert appear earlier than expected.

Other changes:

- Toner refresh mode was optimized for paper narrower than A4 SEF (210mm).

Version 1.16:06

Symptom corrected:

- SC332 may occur.

Version 1.15:06

Symptom corrected:

1. Waste toner full alert appears earlier than expected.

Other changes:

1. The setting of SP5-931-003 for the European model was changed.
See RTB No. RM171014 for explanation on compatibility with this release and hardware modification.
2. The margins at the leading and trailing edges can be set to 0 mm.

Version 1.14:06

Symptom corrected

"Waste Toner full" is displayed earlier than expected because the connection between the toner cartridge terminal and the connector on the mainframe is loose.

Version 1.12:06

Other Changes

Specifications were changed for the Japanese model.

Version 1.11:06

Minor change

Version 1.10:06

Symptom corrected:

The main motor or paper exit motor may not turn off if an SC occurs during continuous printing which requires the machine to stop (once the paper is exited).

Version 1.09:06

1st Mass production

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*** Basic Information ***
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[Create date] 2019/04/19

[Program Name] CTL

[Version] 1.20

[PCB No.]

[Interchangeability] X / O

[Other Firmware Requirements] None

[PCB Requirements] None

[Software category] Normal Release

[Release category] Normal Release

[Program category] Firmware

Exported to(language) GEN(ja,en)

[Firmware No.] M1725720S

[File Information]

File Name M1725720S.zip

File Type Module for Service(Over 1GByte File .zip/.exe)

Size 242.43 MB (254210037 byte)

Check Sum -8Bit Sum: 8253

 -16Bit Sum(Little Endian): BAA3

 -16Bit Sum(Big Endian): 1AB0

[Availability of RFU] Yes

[Production reflection] 2019/03

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*** Note ***
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[Note]

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*** Important Notes ***
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[Important Notes]

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*** Modification History ***
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[Modifications made:]

Rank C

Symptom corrected:

- Scan to Folder might fail if a hostname specified instead of an IP address as the destination.

Other changes:

- The message displayed when the fusing unit is not set correctly, changed, to prompt users to reinstall it.

[Modification history]

Version 1.19

Rank C

Symptom corrected:

- Some Arabic characters might be missing if the TrueType font is included in the job.

Version 1.18

Symptom corrected:

1. Cannot enter SP mode after a CTL board is replaced.
2. SC856 might occur if the machine receives a FAX while in energy saving mode

Version 1.17

Symptom corrected:

1. FAX is not sent to particular receivers.
2. The machine does not respond to PJL Echo command and cannot print.
3. Regarding the following, the host name obtained from the DHCP server should be displayed, but the host name that was manually set by the user is displayed.
 - Top page of Web Image Monitor
 - Screen that creates the device certificate in Web Image Monitor
 - Subject of Scan-to-Email
4. An error report might be printed when printing PCL data without using a Ricoh driver.

Other changes:

- The certificate for SHA-2 is supported.

Version 1.16

Other changes:

- Support for ErP Lot 6 compliance.

Version 1.15

Symptom corrected:

1. Error message "@Remote Cert. Update failed" falsely appears.

Version 1.14

Symptom corrected:

1. The printer sends an error alert to the NRS center when its SC history contains less than 11 SC logs.
2. Even if the Life Alert Display Setting for the PCDU or Maintenance kit is disabled in the SP, the alert message may appear.
3. Even if the Parts PM System Setting is set to user maintenance in the SP, the alert message prompts the user to contact the service representative.
4. Powering OFF and then ON is needed to recover from a jam that occurs while printing received faxes.
5. If the power is turned OFF during Memory Transmission, fax received cannot be printed.
6. After canceling two jobs in Smart Device Connector while they are being sent to the printer, subsequent jobs cannot be canceled on the printer side and the printer cannot print, copy, scan, or fax for five minutes.
7. The following OpenSSL vulnerabilities have been addressed:
 - CVE-2014-0224
 - CVE-2014-3572
 - CVE-2015-1789

Other changes:

1. The margins at the leading and trailing edges can be set to 0 mm.
2. SP5-931-003 setting for the European model was changed.
See RTB No. RM171014 for explanation on compatibility with this release and hardware modification.
3. Support for the Portuguese orthography.
4. Device Manager NX Pro and Enterprise cannot recognize USB connections.

Version 1.13

Specification change:

Auto reboot function in emergency and ordinary reboot function added.

Symptom corrected:

1. Paper end error persist even if paper was added.
2. No paper end error message displayed even if jamming paper was removed when paper jam and paper end occurred simultaneously.
3. Failure of @Remote certification update.
4. SC688-00 may occur when multiple copies if a paper size or type mismatch occurs.
5. When force print was chosen during the size error message, print continues until the first page of the next job is printed.
6. Error will not disappear when force print was conducted during pass error status.
7. Unnecessary SP deleted.
8. Screen freeze's in message "PleaseWait" when starting up the machine.
9. Printing status will not end even if all job was cancelled when error occurred.
10. Fax image might disappear when power turned off while fax transmission.
11. Fax line usage improved.
12. Backside of the paper will not printed out when force print is conducted.
13. Waste toner call condition corrected.
14. Image problem occurs while duplex copying.
15. If the device is disconnected from the network or if the USB cable is unplugged from the device while an image is being scanned by using

the TWAIN driver, the device might stall.

16. When sending print data that includes the PJI command "INFO VARIABLES" to the printer, the printer will hang during printing.
17. When adding a printer in Mac OS X by using Bonjour after restarting the device or changing the device's network interface settings, the message "Setting up the device..." is displayed and the printer might not be added. In addition, if a printer has already been added in Mac OS X, that printer will be shown as offline on the printer list screen and printing might not be possible.
18. When the MFP is powered off and connected to a computer via a USB cable, if there are jobs in the printer spooler on the computer, the printer application might stall after the MFP is powered on.
19. When canceling multiple jobs that encounter paper size errors, the username and job name from the first job is displayed on the cancel screen of the second and subsequent jobs.
20. Blank pages are not output when printing PDF files that include blank pages from Smart Device Connector.
21. When the TWAIN driver is restarted after pressing the cancel button while an image was being scanned, an error might occur in the TWAIN driver and the message "Please wait" might be displayed on the operation panel.
22. When printing PCL5 data that does not include the PDL in the @PJI ENTER LANGUAGE command, the data-in light might flash and the device might hang.

Version 1.11.1

Symptom corrected:

1. A FAX is received but cannot be printed out under the following conditions.

- Non-ECM

- Dummy data is larger than 16k bytes

Note: The dummy data may be larger than 16k bytes in the case of direct transmission, in order to keep the receiver on-line.

2. Norwegian guidance of PS setting is wrong.

Note: Translation corrected.