Firmware Updating with USB Device ES9465/ES9475/CX3535/CX4545/MB760/MB770/MPS5502 MC770/MC780/MPS3535/MPS4242

To update firmware, store update program and firmware data files in the USB device.

The update program is "signatures.sig", and it needs to be stored in the USB device. It is necessary for updating firmware except that of the System firmware.

For the data file for each firmware, refer to the following tables.

Notes:

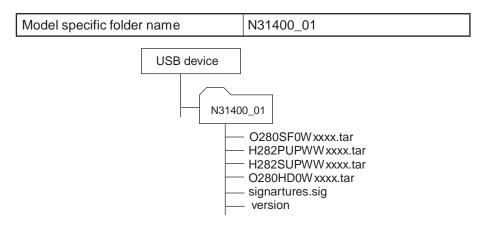
- When performing the update, use the latest program.
- OKI does not support use of the download jig.

Firmware type and data file name for updating

Equipment

Firmware	Stored	Data file name	Display
System firmware	System control PC board (CU board)	O280SF0Wxxxx.tar * xxxx is version.	SYSTEM FIRMWARE (OS Data)
PU firmware	PU PC board	H282PUPWWxxxx.tar * xxx is version.	ENGINE FIRMWARE
SU firmware	SU PC board	H282SUPWWxxxx.tar * xxx is version.	SCANNER FIRMWARE
System software	HDD	O280HD0Wxxxx.tar * xxxx is version.	SYSTEM SOFTWARE (HD Data)

Store the data file for updating in the model specific folder. This configuration is an example. The number of files differs depending on the installed option.



Notes:

- Since the date and time set in the equipment are recorded in the firmware update log, make sure that they are correct before updating the firmware.
- Never change the model specific folder name, since it is used for identifying the data file when the data files used for updating multiple models are stored in the USB device.

Important:

- Only the USB devices which meet the following conditions should be used for updating. Be careful since updating with any device other than the above is never guaranteed.
 - A combination USB device with a flash memory (to be connected directly to the USB port) and its capacity is **2GB or more**.
 - Operation of the USB device used for updating has been confirmed at the input check of this equipment (Test mode 03).
 - USB devices which comply with the following standards regulated by USB-IF (USB Implementers Forum)

Class number: 8 (=08h) (Mass-storage class)

Sub-class number: 6 (=06h) (SCSI transfer command set)

Protocol number: 80 (=50h) (Bulk-Only)

- * Most common USB devices comply with the specification above and can be used for updating. However, the operation in all the Multi-Functional Digital Color Systems and Multi-Functional Digital Systems is not necessarily guaranteed since the most of these devices are developed based on use in a PC environment (Windows or Macintosh). Therefore, check thoroughly that the device is operational in the equipment for which the updating will be performed when purchasing it.
- The USB devices complying with <u>USB2.0</u> can be used for updating.
- Do not update the firmware by any storage device other than a flash memory (such as a USB connection type memory card reader, CD/DVD drive or hard disk), since it is never quaranteed.
- It is possible to store the model specific update program and the data file for updating directly in the root directory when you store the updating data file for one specific model in the USB device. However, if the model specific folder for the same model as that of the data file stored in the root directory already exists, this will have priority.

Update procedure

Important:

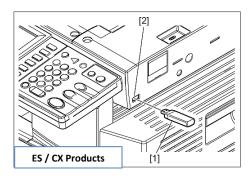
- The file system of USB device should be formatted in the FAT or FAT32 format. Be careful
 since the devices formatted in NTFS or other format will not be able to be operated. The file
 system can be confirmed on the device properties in applications such as Explorer of
 Windows.
- Never shut down the equipment during the update. Firmware data and the following option data (if installed) could be damaged and may not be able to be operated properly.
 - Data Overwrite Enabler (GP-1070)
 - Meta Scan Enabler (GS-1010)
 - External Interface Enabler (GS-1020)
 - IPSec Enabler (GP-1080)
 - Unicode Font Enabler (GS-1007)

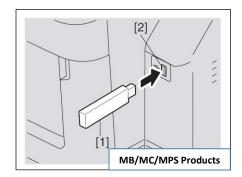
NOTE:

In the event that the update procedure fails see page 7 for formatting the HDD (Hard Drive)

Update procedure

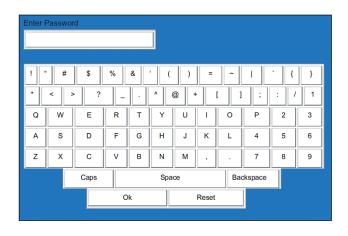
- (1) Connect the USB device to the PC and write the model specific folder in which the data file is stored. Store the data file for updating in the model specific folder.
- (2) Press the [POWER] button to shut down the equipment.
- (3) Connect the USB device [1] to the USB port [2] on the right upper cover.





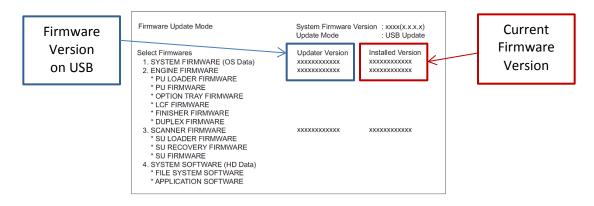
- (4) Press the **[POWER]** button while simultaneously holding down the **[4]** and **[9]** buttons. Data in the USB device are checked and the checking status is displayed on the screen.
- (5) Enter the password, and then press the [OK] button.

 (If the password is not set for Service, press the [OK] button without entering anything.)



NOTE: Screens may differ slightly

The screen for selecting items to be updated is displayed after approx. 3 minutes. On this screen, the current firmware version of this equipment and the firmware version of data to be updated are displayed.



(6) Select the item with the digital keys.

"*" is displayed next to the selected item. Display or delete the "*" by pressing the number of the item.

Item	Remarks
1. SYSTEM FIRMWARE(OS Data)	Updating System firmware
2. ENGINE FIRMWARE	Updating PU firmware
3. SCANNER FIRMWARE	Updating SU firmware
4. SYSTEM SOFTWARE (HD Data)	Updating System software

(7) Press the [START] button.

Updating starts and the processing status is displayed on the LCD screen.

Status display during update	Status display when update is completed
SYSTEM FIRMWARE(OS Data) update in progress	SYSTEM FIRMWARE(OS Data) Completed
ENGINE FIRMWARE update in progress	ENGINE FIRMWARE Completed
SCANNER FIRMWARE update in progress	SCANNER FIRMWARE Completed
SYSTEM SOFTWARE (HD Data) update in progress	SYSTEM SOFTWARE (HD Data) Completed

(8) "Update successfully completed Restart the MFP" is displayed at the bottom of the LCD screen after the updating is completed properly.

Firmware Update Mode	System Firmware Version : xxxx(x.x.x.x) Update Mode : USB Update
Updata Status * 1. SYSTEM FIRMWARE (OS Data) * 2. ENGINE FIRMWARE * PU LOADER FIRMWARE * PU FIRMWARE * OPTION TRAY FIRMWARE * LCF FIRMWARE * FINISHER FIRMWARE * DUPLEX FIRMWARE * 3. SCANNER FIRMWARE * SU LOADER FIRMWARE * SU LOADER FIRMWARE * SU FIRMWARE * SU FIRMWARE * SU FIRMWARE * SU FIRMWARE * APPLICATION SOFTWARE * APPLICATION SOFTWARE Update successfully completed Restart the MFP	Completed

(9) Press the [POWER] button to shut down the equipment, and then remove the USB device.

(10) Perform the initialization of the updated data.

- Press the [POWER] button while simultaneously holding down the [0] and [8] buttons.
- Key in "9030", and then press the [START] button.
- Press the [INITIALIZE] button.

Do Not Skip this Step

Confirmation of the updated data

After the updating is completed, check each data version in the Setting Mode (08) to confirm that the data were overwritten properly.

Firmware	Code	Remarks
Updating System firmware	08-9930	System firmware version
Updating PU firmware	08-9901	PU firmware version
Updating SU firmware	08-9902	SU firmware version
Updating System software	08-8952	HD data external version
	08-9900	System software version
Updating Finisher firmware	08-9904	Finisher firmware version
Updating FAX firmware	08-9905	FAX firmware version

Assist Mode (3C)

This equipment has the Assist Mode to enable the following functions.

(1) Update error flag clearing (Clear Error Flag in Software Installation)

Even if the firmware downloading has been completed normally, the Recovery Mode may accidentally start up when the power is turned ON again. In this case, clear the Update Error flags used in the download process with this function. (Normally, the flags are automatically cleared in the download process.) Also in the case the Recovery Mode accidentally starts up after the replacement of SRAM on the SYS board, the flags are cleared with this function.

(2) Data storage partition formatting (Format Root Partition)

When a defect occurs on the UI data, etc. which are stored in the HDD, the partition with the stored UI data, etc. is formatted with this function.

(3) HDD partition creation (Format HDD)

When the HDD is replaced or UI data, etc. are downloaded using the USB storage, it is necessary to format a partition in the HDD before downloading. In this case, the partition is created in the HDD with this function.

Notes:

• Perform the HDD partition formatting only when a new HDD is installed since all data in the current HDD are erased by this operation.

Procedure

(1) Turn ON the power while [3] button and [CLEAR] button are pressed simultaneously. The following screen is displayed.

Firmware Assist Mode

Select number(1-8) and press START key

- 1. Clear Error Flag in Software Installation
- 2. Format Root Partition
- Format HDD
- 4. Clear SRAM
- 5. Key Backup Restore
- 6. Erase HDD Securely
- 7. Erase SRAM Securely
- Clear Service Tech Password
- (2) Select item #3 [Format HDD] with the digital keys and press the [START] button.
- (3) Once formatting is complete re-install the firmware using the update procedure on page 4 beginning at step # 3.

^{**}Do not use this function since it is not normally necessary.

^{***}HDD data must be installed after performing this function.