



DataOverwriteSecurity Unit Type M19

Operating Instructions

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How to Read This Manual

Symbols Used in This Manual

This manual uses the following symbols:

 **Important**

Indicates points to pay attention to when using the machine, and explanations of likely causes of paper misfeeds, damage to originals, or loss of data. Be sure to read these explanations.

 **Note**

Indicates supplementary explanations of the machine's functions, and instructions on resolving user errors.

[]

Indicates the names of keys on the machine's display or control panels.

Disclaimer

To the maximum extent permitted by applicable laws, in no event will the manufacturer be liable for any damages whatsoever arising out of failures of this product, losses of documents or data, or the use or non-use of this product and operation manuals provided with it.

Make sure that you always copy or have backups of important documents or data. Documents or data might be erased due to your operational errors or malfunctions of the machine. Also, you are responsible for taking protective measures against computer viruses, worms, and other harmful software.

Notes

Contents of this manual are subject to change without prior notice.

The manufacturer shall not be responsible for any damage or expense that might result from the use of parts other than genuine parts from the manufacturer with your office products.

1. Before Using This Option

This chapter explains the conditions for using this option.

Conditions for Use

This option is effective on the premise that it is used under the following conditions:

Operating Environment

- The machine is used in its normal state (i.e. it is neither damaged, modified nor are there missing components).
- The machine is managed by an administrator who has carefully read and understood the manual for this option, and can ensure the safe and effective use of this option by general users.
- Access <https://www.ricoh.com/security/products/mfp/cc/> to check that your machine complies with certification, which is based on an IT security certification system (hereafter CC certification).

Note

- Customer engineers dispatched from the supplier and its affiliated companies are trained in the maintenance of this option.

Instructions for Use

The procedures in this manual should be performed by the machine administrator. For details, see Security Guide provided with the machine.

- Do not use the machine while an error message is displayed. If an error message appears, see page 15 "When an Error Message is Displayed".
- This product does not work on machines equipped with a self-encrypting hard disk. See if "Ic Hdd" or "Ic Ctrl" is displayed on the Firmware Version screen to check if this product is supported by your machine. For details about the Firmware Version, see "System Setting", Connecting the Machine/System Settings provided with the machine.
- Before using this product, make sure that it is installed correctly on your machine. See if "Data Erase Opt" is displayed on the Firmware Version screen to check if this product is correctly installed. Also, select [Prohibit] in [Change Firmware Structure] and [Service Mode Lock] to use this product in a CC-certified operating environment. For details about how to display the Firmware Version screen and how to change the settings, see "Changing Default Settings" and "System Settings", Connecting the Machine/System Settings, "Specifying the Extended Security Functions" and "Restricting a Customer Engineer Operation", Security Guide provided with the machine.

- Before turning off the main power of the machine, make sure that the Data Overwrite icon has turned to "Clear".
- Before using Web Image Monitor to turn off the main power switch on the machine, make sure that the Data Overwrite icon shows "Clear".
- If the machine enters Energy Saver mode when overwriting is in progress, press [Energy Saver] to revive the display in order to check the icon.

2. Deleting Data on the Machine

This chapter explains how to erase the data on the hard disk in your machine.

Auto Erase Memory

A document scanned in copier, or scanner mode, or print data sent from a printer driver is temporarily stored on the hard disk of your machine. Even after the job is completed, it remains in the hard disk as temporary data. Auto Erase Memory erases the temporary data on the hard disk by writing over it.

Overwriting starts automatically once the job is completed.

The copier, fax and printer functions take priority over the Auto Erase Memory function. If a copy, fax or print job is in progress, overwriting will only be performed after the job is completed.

Types of Data that Can or Cannot Be Overwritten by Auto Erase Memory

Depending on the machine type, some functions may not be available.

Data overwritten by Auto Erase Memory

Copier

- Copy jobs

Printer

- Print jobs
- Sample Print/Locked Print/Hold Print/Stored Print jobs

A Sample Print/Locked Print/Hold Print job can only be overwritten after it has been executed. A Stored Print job is overwritten after it has been deleted.

- Spool printing jobs

Fax

- LAN-Fax print data
- Faxes sent/received using remote machines

Data sent or received directly by your machine via fax, as well as fax numbers, will not be overwritten by Auto Erase Memory.

Scanner

- Scanned files sent by e-mail
- Files sent by Scan to Folder
- Documents sent using Web Image Monitor
- Network TWAIN scanner

Data scanned with the network TWAIN scanner when the TWAIN driver's "ADF(Read-ahead)" function is checked will be overwritten by Auto Erase Memory. Data scanned when the "ADF(Read-ahead)" function is not checked will not be overwritten.

Document Server

- Documents stored by the user in Document Server using the Copier, Printer, Fax or Scanner functions

A stored document can only be overwritten after it has been printed or deleted from Document Server.

Other

- Information registered in the Address Book

Data stored in the Address Book can only be overwritten after it has been changed or deleted.

- Applications using Embedded Software Architecture

Embedded Software Architecture programs' data can only be overwritten after it has been deleted.

Data Not overwritten by Auto Erase Memory

- Counters stored under each user code

Methods of overwriting

You can select a method of overwriting from the following:

- NSA

Temporary data is overwritten twice with random numbers and once with zeros.

- DoD

Each item of data is overwritten by a random number, then by its complement, then by another random number, and is then verified.

- Random Numbers

Temporary data is overwritten multiple times with random numbers. The number of overwrites can be selected from 1 to 9.

Note

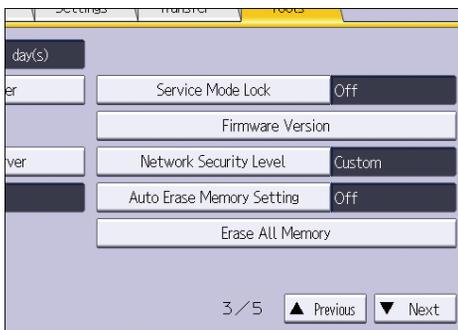
- The default method for overwriting is "Random Numbers", and the default number of overwrites is 3.
- Methods of Auto Erase Memory that have been evaluated for CC certification are NSA, DoD, and Random Numbers (the number of overwrites can be selected from 1 to 9).
- NSA stands for "National Security Agency", U.S.A.
- DoD stands for "Department of Defense", U.S.A.

Using Auto Erase Memory

★ Important

- When Auto Erase Memory is set to [On], temporary data that remained on the hard disk when Auto Erase Memory was set to [Off] might not be overwritten.
- If the main power switch is turned off before Auto Erase Memory is completed, overwriting will stop and data will be left on the hard disk.
- Do not stop the overwrite mid-process. Doing so will damage the hard disk.
- If the main power switch is turned off before Auto Erase Memory is completed, overwriting will continue once the main power switch is turned back on.
- If an error occurs before overwriting is completed, turn off the main power. Turn it on, and then repeat from Step 1.
- The machine will not enter Sleep mode until overwriting has been completed.

1. Log in as the machine administrator from the control panel.
2. Press [System Settings].
3. Press [Administrator Tools].
4. Press [▼Next] twice.
5. Press [Auto Erase Memory Setting].



6. Press [On].
7. Select the overwriting method you want to use.
 - If you select [NSA] or [DoD], proceed to Step 10.
 - If you select [Random Numbers], proceed to Step 8.
8. Press [Change].
9. Enter the number of times that you want to overwrite using the number keys, and then press [#].
10. Press [OK].

Auto Erase Memory is set.

11. Log out.**Note**

- If you enable both overwriting and data encryption, the overwriting data will also be encrypted.

Canceling Auto Erase Memory

1. Log in as the machine administrator from the control panel.
2. Press [System Settings].
3. Press [Administrator Tools].
4. Press [▼Next] twice.
5. Press [Auto Erase Memory Setting].
6. Press [Off].
7. Press [OK].
Auto Erase Memory is disabled.
8. Log out.

Overwrite icon

When Auto Erase Memory is enabled, the Data Overwrite icon will be indicated on the panel display of your machine.

Icon	Icon name	Explanation
	Dirty	This icon is lit when there is temporary data to be overwritten, and flashes during overwriting.
	Clear	This icon is lit when there is no temporary data to be overwritten.

Important

- The Data Overwrite icon will be "Clear" when there is a Sample Print/Locked Print/Hold Print/ Stored Print job.

Note

- Depending on your machine, the display might differ slightly.
- If the Data Overwrite icon is not displayed, first check if Auto Erase Memory has been set to [Off]. If the icon is not displayed even though Auto Erase Memory is [On], contact your service representative.

- If the Data Overwrite icon continues to be "Dirty" when there is no data to be overwritten, turn off the machine's main power. Turn it on again and see if the icon changes to "Clear". If it does not, contact your sales or service representative.

Erase All Memory

Overwrite and erase all data stored on the hard disk when you relocate or dispose of the machine. The device settings stored on the machine's memory are initialized.

For details about using the machine after executing Erase All Memory, contact your sales representative.

★ Important

- If the main power switch is turned off before "Erase All Memory" is completed, overwriting will be stopped and data will be left on the hard disk.
- Do not stop the overwrite mid-process. Doing so will damage the hard disk.
- We recommend that before you erase the hard disk, you use Device Manager NX to back up the user codes, the counters for each user code, and Address Book. The Address Book can also be backed up using Web Image Monitor. For details, see Device Manager NX Help or Web Image Monitor Help.
- The only operation possible during the "Erase All Memory" process is pausing. If "Random Numbers" is selected and overwrite 3 times is set, the "Erase All Memory" process takes several hours.
- The "Erase All Memory" function also clears the machine's security settings, so that neither machine nor user administration will be possible. Ensure that users do not save any data on the machine after "Erase All Memory" has completed.
- When using the Smart Operation Panel, you must also format the data stored on the operation panel when deleting the data stored on the machine's hard disk. You can format the data stored on the panel in [Initialize Screen Features Settings] in [Screen Device Settings] under [Screen Features]. You can format the [Screen Features] settings, individual application settings, and cache memory.

Types of Data that Can be Overwritten by Erase All Memory

Copier

- Copy jobs

Printer

- Print jobs
- Sample Print/Locked Print/Hold Print/Stored Print jobs
- Spool printing jobs

Fax

- LAN-Fax print data
- Faxes sent/received using remote machines

Scanner

- Scanned files sent by e-mail
- Files sent by Scan to Folder
- Documents sent using Web Image Monitor
- Network TWAIN scanner

Data scanned with the network TWAIN scanner when the TWAIN driver's "ADF(Read-ahead)" function is checked will be overwritten by Auto Erase Memory. Data scanned when the "ADF(Read-ahead)" function is not checked will not be overwritten.

Document Server

- Documents stored by the user in Document Server using the Copier, Printer, Fax or Scanner functions

Other

- Information registered in the Address Book
- Counters stored under each user code
- Applications using Embedded Software Architecture

System Settings or other settings related to the device are initialized.

Methods of Erasing

You can select a method of erasing from the following:

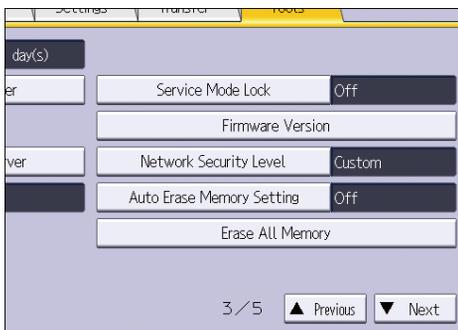
- NSA
Data is overwritten twice with random numbers and once with zeros.
- DoD
Data is overwritten by a random number, then by its complement, then by another random number, and is then verified.
- Random Numbers
Data is overwritten multiple times with random numbers. The number of overwrites can be selected from 1 to 9.
- BSI/VSITR
Data is overwritten 7 times with the following patterns: 0x00, 0xFF, 0x00, 0xFF, 0x00, 0xFF, 0xAA.
- Secure Erase
Data is overwritten using an algorithm that is built in to the hard disk drive.
- Format
The hard disk is formatted. Data is not overwritten.

↓ Note

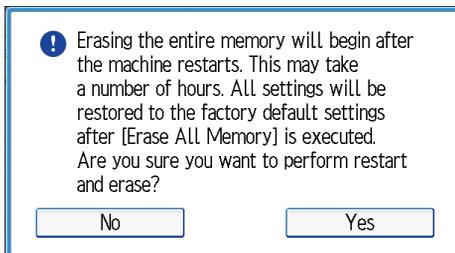
- The default method for erasing is "Random Numbers", and the default number of overwrites is 3.
- Methods of Erase All Memory that have been evaluated for CC certification are NSA, DoD, Random Numbers (the number of overwrites can be selected from 1 to 9), and BSI/VSITR.
- NSA stands for "National Security Agency", U.S.A.
- DoD stands for "Department of Defense", U.S.A.
- If your machine is equipped with the Enhanced Security HDD Option, the hard disk automatically discards the encryption key, making it impossible to decrypt the data on the hard disk before the data is erased using the selected method.

Using Erase All Memory

1. Disconnect communication cables connected to the machine.
2. Log in as the machine administrator from the control panel.
3. Press [System Settings].
4. Press [Administrator Tools].
5. Press [▼Next] twice.
6. Press [Erase All Memory].



7. Select the method of erasing.
 - If you select [NSA], [DoD], [BSI/VSITR], [Secure Erase], or [Format], proceed to Step 10.
 - If you select [Random Numbers], proceed to Step 8.
8. Press [Change].
9. Enter the number of times that you want to overwrite using the number keys, and then press [#].
10. Press [Erase].

11. Press [Yes].**12. When erasing is completed, press [Exit], and then turn off the main power.**

For details about turning off the main power, see "Turning On/Off the Power", Getting Started provided with the machine.

Note

- If the main power switch is turned off before "Erase All Memory" is completed, overwriting will start over when the main power switch is turned back on.
- If an error occurs before overwriting is completed, turn off the main power. Turn it on again, and then repeat from Step 2.

Suspending Erase All Memory

To turn off the machine's power while Erase All Memory is enabled, suspend Erase All Memory in advance. Erase All Memory will resume when you turn on the main power.

★ Important

- If [Secure Erase] or [Format] has been selected, the process cannot be suspended.
- Erase All Memory cannot be canceled.

1. Press [Suspend] while Erase All Memory is in progress.**2. Press [Yes].**

Erase All Memory is suspended.

3. Turn off the main power of the machine.

For details about turning off the main power, see "Turning On/Off the Power", Getting Started provided with the machine.

3. Appendix

This chapter explains the accessories for this product and what you should do when an error message is displayed on the screen.

When an Error Message is Displayed

Contact your service representative.

Accessories

- Operating Instructions (this manual)

