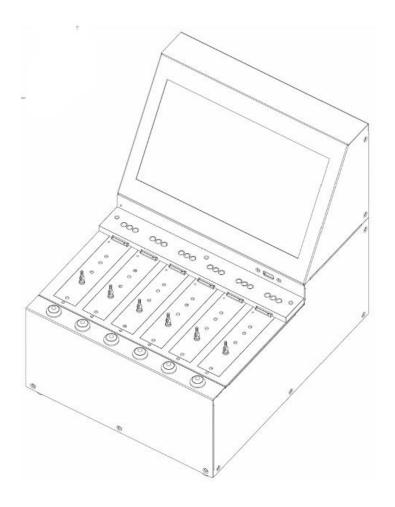
# **GE Series** Touch Screen M.2 SSD Data Eraser

User Manual v A.02



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### **Product Disclaimer**

The manufacturer is not accountable for any incidental or consequential damages, including, but not limited to property harm, loss of time or data from use of any our product, or any other damages attributable to product malfunction or failure of including without limitation, those attributed to reliance of the materials provided, costs of product replacement, loss of use, data or profits, delays or business interruptions, any principle of legal responsibility arising from or in reference to the use, overall performance, delays in servicing, or lack of ability to render service of any our product. The manufacturer makes every effort to ensure proper function of all products. However, the customer is responsible to verify that the output of our product meets the customer's quality requirement. The customer further acknowledges that improper use of our products, software program, and/or hardware issues can cause loss of data, defective formatting, or unreliable data loading. The manufacturer will make efforts to resolve or repair any issues recognized by customer either within the warranty period or on a time and materials basis.

Specifications and features are subject to change without notice or obligation.

## Warranty

The manufacturer provides a basic one-year parts and labor warranty for all its products, excluding cables, adapters, and other consumable items. An extended warranty may be purchased. Telephone and email support is available for the life of the product as defined by the supplier.

All warranties are specific to market region and will be defined per market region in which the product was purchased.

### **Piracy Statement**

The manufacturer accepts no responsibility for copyright infringement or misuse of any our equipment. Copying any form of data (audio, video, or software) without the permission of the copyright holder is illegal. It is the sole responsibility of the user to ensure that the legal copyrights of the copyright owners are respected.

### **Before You Start**

### **Important Notice**

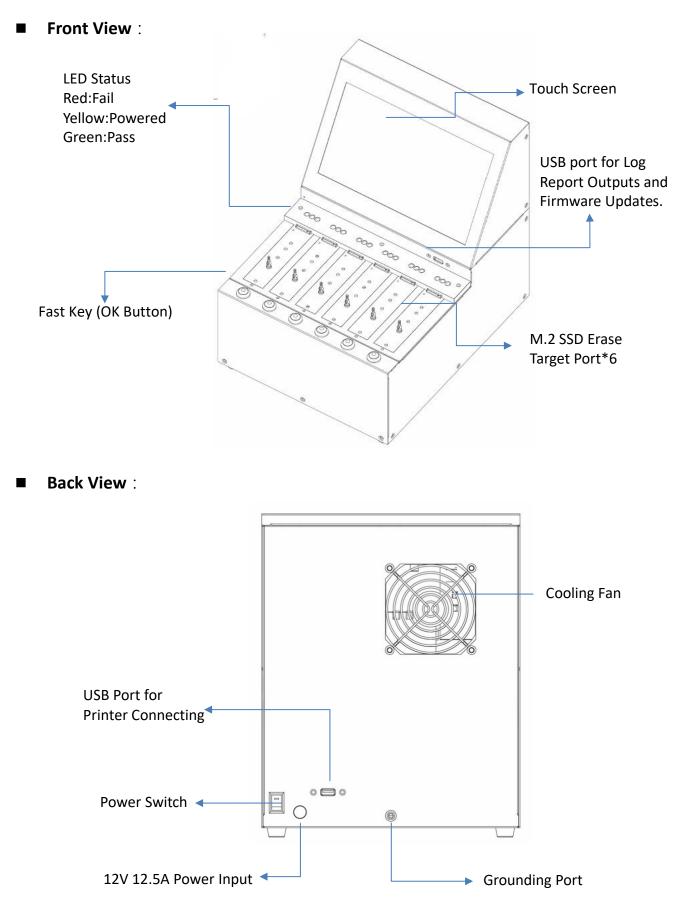
- Carefully read the entire manual before operating.
- Never turn off the power while the firmware is updating.
- Devices will operate at high temperature during high-speed tasks. Please wear protective gloves to prevent burns when handling devices.
- Devices working in high temperature may cause it to slow down or even shut down. Please make sure the devices are not overheated.
- Ensure machine and operator are properly grounded to prevent ESD.
- Make sure the source device is correct and functioning.
- Equal capacity of source and target is recommended for guaranteed data consistency.
- Using the Copy+Compare function provides the most flawless duplication.
- Damage incurred due to noncompliance with our operating instructions will void the warranty.
- Store the equipment safely when not in use and keep out of the reach of children.
- Use only approved, stable power sources.
- Use product only in a clean, dry, dust free, and ventilated area. Liquids or foreign debris can severely damage your duplicator.
- It is typical for the machine to heat up during operation.
- While in use, do not move the duplicator or remove devices.
- Static electricity may cause duplication error. Please pay attention to the duplicator's environment and operator's equipment. Purchasing static electricity elimination equipment to avoid static electricity shock while in high static electricity areas.
- Devices will operate at high temperatures during selected tasks.
- Wear protective gloves to prevent burns when handling devices.
- Do not place vases, flowerpots, cups, cosmetics, medicines, small metal parts, or containers filled with water or any other liquid on/near this product. If liquid overflows or such objects or substances fall into the machine, it may cause damage to the product, which may seriously result in fire or electric shock.
- Do not place heavy objects on the product because the product may overturn and cause injury.

## Notice Symbols

Special items, procedures, or notes to be observed prior to use.

- Note: Refers to related duplicator operations, special details, tips, or suggestions for operational effectiveness.
- **Caution:** Refers to procedures that need to be adhered to or precautions.

### **Product Introduction**



### **Functions**

Main Options	Function List
Home Page	<ul><li>Language</li><li>System Info.</li><li>Power Off</li></ul>
Erase	<ul> <li>Standard Erase Function</li> <li>Special Erase Command</li> <li>Check whether the hard drive has been erased</li> </ul>
Device Information	<ul> <li>Model No, Version, Serial No, Capacity, Max LBA, bytes/sector</li> <li>Smart Info.</li> <li>Show Content</li> </ul>
Erase Log Manager	<ul> <li>Print</li> <li>Save File</li> <li>Select Range</li> <li>Clear ALL log records</li> </ul>
Utilities	<ul> <li>Erase Settings</li> <li>Advanced Utility</li> <li>Adjust the system clock</li> <li>Update System</li> </ul>

\*Specifications subject to change without notice.

\*The function names of different languages may vary from region to region, and the company reserves the right to name product functions without prior notice.

## Power On/Off

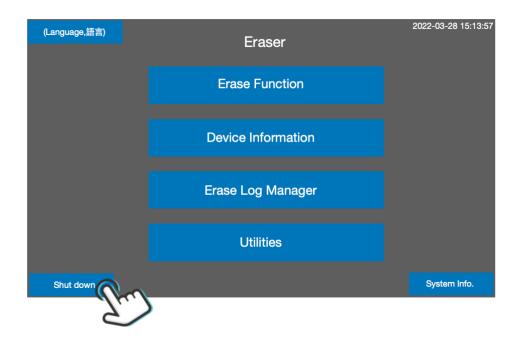
#### 1. How to turn on the Eraser

Please check if the machine is connected to the power supply first. Press the switch from the back of the machine and wait for the screen to display. Then it finishes booting.



#### 2. How to shut down the Eraser

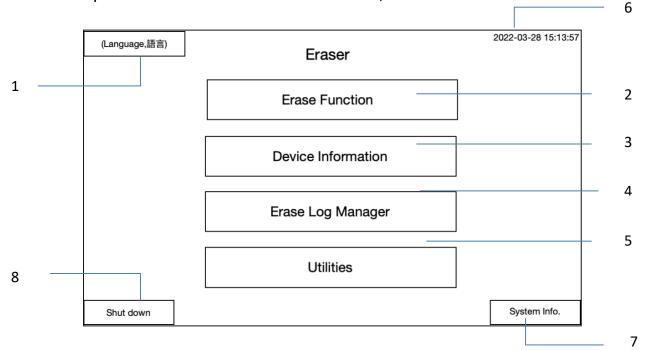
After using this product, please select "Shut down" on the main screen, at the same time, the system will start saving all settings and hard drive erase report. When the screen appears "Shutdown procedure is completed, please turn off the power", please press the power switch at the back of the machine to shut down.



**NOTE**: If you turn off the power directly, there may be a risk of losing records. Please follow the shutdown procedure.

### The Erase Main Menu

This section explains the functions in the main menu,



#### 1. Language

The default screen for the first boot is English. You can also set a language to be a fixed language on the display. Currently, there are 11 languages available, including Traditional Chinese, Simplified Chinese, and English. After selecting the language, please click on the confirmation button.

#### 2. Erase Function

You can select an erase mode to be performed on the device and check if the device has been erased.

#### **3.** Device information

Displays the status of each drive, e.g., serial number, model, capacity, Smart Info, and data content.

#### 4. Erase Log Manager

Records the operation and working status of each port in detail. The erasure information is available for users to review and audit.

#### 5. Utilities

Erase settings, Advanced Utility, Adjust the system clock, and Update System.

#### 6. Time Display

The time can be set by selecting Adjust Clock in the utility function.

#### 7. System Info.

Displays the detailed information of the data eraser system, e.g., model number, firmware version and the model number of a connected printer.

#### 8. Shut down

After usage, please select Shutdown on the main screen.

### How to erase device data

This section explains how to perform a device erase. First, select "Erase Function" on the screen to execute erasure.

#### **1. Standard Erase Function**

This function is the most used erase functions, e.g., one pass erase, DoD erase, and so on. It can be selected from the erase settings.

#### 2. Special Erase Command

Secure erase and enhanced secure erase as the special data erase commands. This must be supported by the drive to execute. It's available from the erase settings.

#### 3. Check whether the device has been erased

This function is used to check if the device has been erased on the machine.

#### Note:

1. The data eraser has multiple erase functions to select from the Erase Settings. From (1) to select the desired erase functions (2) to create sequence (3) to check the details of each erase function. Please refer to the chapter on Erase Settings.

2. For the list of erase functions, please refer to appendix 1 and appendix 2.

#### • Operation Steps

#### Step 1: Insert a device carefully

Note: Please plug in a device first before running the erase function.

#### Step 2: Select the specified erase function

Select the function you want to perform, and it will be executed automatically. If you need to exit this function halfway, please wait until the "ABORT" appears in the upper right corner of the screen. To avoid damage to the device, please do not remove the device before it displays "Abort".

**Note**: The files and data in the drives cannot be recovered after it had been erased. Please make sure you have backed up all required files before the operation.

#### Step 3: Erasing is complete.

Each port is operated independently. When the green light is on, and the screen shows that the data erase is finished. You can separately replace the device for the second round. Press the blue button next to each port to erase data for the second round.

#### **Step 4: Output the log report**

The erasure report can be exported to a USB flash drive in PDF format from the Event Log Report by selecting a single record or a specified range of erasure records.

**Note** : The format of the USB flash drive must be FAT16 or FAT32.

### Check whether the device has Been erased

This function allows you to double-check if the device has been completely erased and how long it took to erase to facilitate making the operation schedule. Please note that the time may be affected by the speeds of different devices. If you need to exit in the middle of the process, you can select the "Abort" button. After completion, the screen will prompt Complete and inform the device writing speed and the total inspection time spent. If you want to perform the next round of inspection, please click "Exit", replace the device with a new one, and re-execute the inspection task.

### Show Disk Info and Show Devices' Smart Info.

This menu contains submenus related to device information, S.M.A.R.T Info, system information and updates.

#### Options

Smart Info.	This is a function to detect the status of the Device. Monitor and record the execution of the device's hardware such as heads, disks, motors, and circuits through the detection commands in the device and compare with the hard disk's preset values.		
Show Content	Display the data written in the device. If this function is specified, the erased device will display all the values in the hard disk as 00.		

**Note:** Smart info is a mechanism for the hard disk to warn users and t secure their data in advance. Except for some early devices, most devices are now equipped with this technology. The content of the Smart Info provided are customized by the device's manufacturer, so the Smart Info content of each device is different.

## Log Manager

This function will display all the erase processes of each device, including the execution time, erase pattern, serial number of devices, and execution result. After selecting the designated removal task first, check the details of the task. It can also directly output the erased data to the USB device.

**Note:** The USB device format must be FAT16 or FAT32. If the format is incorrect, the file cannot be saved to the USB device correctly. Due to the varying quality of USB devices, it is highly recommended to check whether the file has been saved on the computer after the storage is completed.

Erase Log Manager					
No.	Test Time	Elapsed	Erase Method	Model Name	$\supset$
001	2022-03-01 09:18:55	00:23	Secure Erase	PCle SSD	
002	2022-03-01 09:19:01	00:07	Secure Erase	PCle SSD	
003	2022-03-01 09:18:55	00:07	Secure Erase	PCle SSD	
004	2022-03-01 09:19:01	00:14	Secure Erase	PCIe SSD	
005	2022-03-01 09:18:55	00:07	Secure Erase	SAMSUNG MZHPV128HDGM-0	
006	2022-03-01 09:19:01	00:14	Secure Erase	PCle SSD	
007	2022-03-01 09:18:55	00:14	Secure Erase	SAMSUNG MZHPV209HDGM-0	
008	2022-03-01 09:19:01	00:07	Secure Erase	PCIe SSD	
009	2022-03-01 09:19:01	00:07	Secure Erase	SAMSUNG MZHPV128HDGM-0	$\bigtriangledown$
Print			Save File	Select Range	~
Clear All log records				back to previous menu	

#### Options

No.	Erase Record Item	
Test Time	Time to perform erase (Year-Month-Day Hour: Minute: Second)	
Elapsed	Total time of erase (Minute: Second). 'User Abort' will be shown	
	once the erase job is forced to stop.	
Erase Method	Erase function in use	
Model Name	The model number of the drive (Built-in information for the	
	disk)	
Print	Select the specified task and print out the erasure report.	
Save File	Select the designated task and save its erasure report to the	
	USB device.	
Select Range	Select a specified date range and save the erasure report within	
	this range to the USB device.	
Clear ALL log records	It deletes all the erase records stored in the data erase system	

#### back to previous menu | To quit this function

If there is the need to print out or export an erase log report for every single disk drive, it allows you to tap an erase log report for each desired disk drive and look up more detailed log records or reports to print out and export.

The following figure demonstrates how to look up the device's erasure record reports for No. 004. When this screen appears, you can print out and export the erasure report of the disk drive.

Port	04	
Start Time	2022-03-01 09:19:01	
Elapsed Time	00:14	
Erase method	Secure Erase	
Result	Pass	
Model	PCIe SSD	
Version	EDFM00.5	
Serial No.	5153070317B700007990	
Capacity	119GB	
Capacity (LBA)	250069809	
Smart Info.	See more	

#### Note:

1. Tap See more of the Smart Info. To check further information.

2. User are advised to export the erasure reports monthly to avoid the loss of erasure records.

# Utilities

#### 1. Erase Settings

This data eraser provides several erasing functions, please edit the menu options of erasing functions, and display sequence in the erasing settings before using the erasing function. You can also look up the descriptions of each erase function in the Erase Settings.

#### Example: Set the menu option "Standard Erase Function"

Specifies the DoD 5220.22-M, German VSITR, and BMB21-2019, etc. 8 erasing functions, and they must be in sequence.

**Step 1:** Select "Erase Settings" in the "Utilities"

Step 2: Select "Setup standard ERASE function menu"

**Step 3:** Out of the multi standard erase function, select a specified erasing function (a maximum of 8 functions can be specified) and select the display order from 1 to 8. After the sequence is selected, press "Confirm" button to complete the setting.

Note: Tap each erase function to read more about it.

**Step 4:** Return to "Standard Erase Function", check the display, and confirm whether the function item and its sequence tally with the settings. Then, you can start to execute the erase function.

#### 2. Advanced Utility

Output language pack	Export the current language packs to edit the languages. (USB pen drive is required)	
Input language pack	The completely edited language pack will be imported into th data eraser.	
Reset Printer Driver	To reconnect the printer by performing this function.	
Setup password	To conduct authority settings of all functionalities.	

**Note:** The advanced tools belong to the management tools, please contact the original manufacturer to confirm the operation instructions.

#### 2. Adjust the system clock

The user can set the time display on the system, and it will be displayed in the upper right corner of the screen.

#### 3. Update System

#### Step 1: Prepare a USB drive for update.

Connect a USB drive to PC. Download the latest firmware provided from our technical support, unzip the BIOS firmware, and save it to the root directory in the USB drive.

**Note** : The format of the USB flash drive must be FAT16 or FAT32.

#### Step 2: Proceed to update firmware

Connect USB drive to the USB port in front of the Data Eraser. Select "Update BIOS" in the "Utility", then press "OK" to start the firmware update process.

**Caution:** The firmware update process may take longer than 5 minutes. Please do not disrupt power or process during BIOS update. If interrupted, the system will become useless. We will not be held responsible for any damages.

### **Product care and maintenance**

Use a soft, dry, lint-free cloth and wipe the screen gently. If you see scratches on the screen, it may be a mark. Gently wipe it off with a soft, dry cloth. If you are unable to remove the stain, use a soft, lint-free cloth with water or lens cleaner, and do not allow the screen to come into direct contact with the liquid.

**Warning:** The display (LCD) is made of glass, in case hitting or falling as well as improper operation may cause the screen to crack. If the screen breaks and the internal liquid gets into your eyes or mouth, please immediately rinse the affected area with clean water for at least 15 minutes. If any symptoms occur after washing, seek medical attention.

**Note:** If the product is equipped with a mercury-containing fluorescent lamp (e.g., not an LED), please discard it in accordance with local, state, and federal laws and regulations.

\*Specifications subject to change without notice.

# **Appendix 1.-Standard Erase Function**

Erase Function	Number of Times to Erase	Erase Pattern
1-Pass (00)	1	(00)
1-Pass (Random)	1	(Random)
DoD 5220.22-M	3	$(00 \rightarrow FF \rightarrow Random)$
DoD 5220.22-M ECE	7	$(00 \rightarrow FF \rightarrow Random \rightarrow 96 \rightarrow Random \rightarrow FF \rightarrow 00)$
NSA 130-1	3	(Random $\rightarrow$ Random $\rightarrow$ 00)
NSA 130-2	2	(Random $\rightarrow$ Random)
US Army AR380-19	3	(FF → 00 → Random)
BMB21-2019	6	$(00 \rightarrow FF \rightarrow Random \rightarrow Random \rightarrow Random \rightarrow FF)$
DoE M205.1-2	3	(Random $\rightarrow$ Random $\rightarrow$ 00)
Canadian OPS-II	7	$(00 \rightarrow FF \rightarrow 00 \rightarrow FF \rightarrow 00 \rightarrow FF \rightarrow Random)$
Canadian CSEC ITSG-06	3	(FF $\rightarrow$ 00 $\rightarrow$ Random)
German VSITR	7	$(00 \rightarrow FF \rightarrow 00 \rightarrow FF \rightarrow 00 \rightarrow FF \rightarrow AA)$
Russian GOST p50739-95	2	(00 $\rightarrow$ Random)
US Air Force 5020	3	(Random $\rightarrow$ 00 $\rightarrow$ FF)
British HMG IS5 Baseline	1	(00)
British HMG IS5 Enhanced	3	$(00 \rightarrow FF \rightarrow Random)$
Navso P-5329-26 RL	3	$(01 \rightarrow 27FFFFFF \rightarrow Random)$
Navso P-5329-26 MFM	3	$(01 \rightarrow 7FFFFFF \rightarrow Random)$
NCSC-TG-025	3	$(00 \rightarrow FF \rightarrow Random)$
Bruce Schneier	7	(FF → 00 → Random → Random → Random → Random → Random)
Australian ISM-6.2.93	1	(Random)

\*Specifications subject to change without notice.

# **Appendix 2.-Special Erase Command**

Erase Function	Number of Times to Erase	Descriptions
Secure Erase	1	The eraser sends commands to the device to safely erase the data. The device itself performs a complete deletion of the logical blocks or sectors and writes in the 00 pattern. If the erase is interrupted before it is completed, the drive will become unusable. This function is to ensure that the data in the drive is safely destroyed before reuse. If secure erase is applied to an SSD, the performance can be restored to its original state. (Supported by most SATA drives)
Secure Erase + Verify	1+1	After secure erase is performed, the data comparison will run immediately.
Enhanced Secure Erase	1	An even more enhanced command for secure erase. The eraser sends the commands to the devices to erase the data deeply and safely. It writes predetermined patterns onto the disk drive, and those patterns are manufacturer- defined. For SSD, the implementation of Enhanced Secure Erase, some specific command is sent to an SSD to be sure that the data is thoroughly destroyed. (Supported by most SATA drives)
Enhanced Secure Erase + Verify	1+1	After enhanced secure erase is performed, the data comparison will run immediately.
Sanitize Block Erase	1	SAS proprietary erase command is applicable to SAS-SSD devices. Not all SAS devices support this command.
Sanitize Block Erase + Verify	1+1	After Block-erase is performed, the data comparison will run immediately.
Sanitize Overwrite	1	SAS proprietary erase command is applicable to SAS-SSD devices. Not all SAS devices support this command.
Sanitize Overwrite + Verify	1+1	After the overwrite erases are performed, the data comparison will run immediately.

\*Specifications subject to change without notice.