

# WiebeTech

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## NVMe Drive eRazer

### User Manual

A6-3155-00 Rev. 1.2

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**FCC Compliance Statement:** This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.

In the event that you experience Radio Frequency Interference, you should take the following steps to resolve the problem:

1. Ensure that the case of your attached drive is grounded.
2. Use a data cable with RFI reducing ferrites on each end.
3. Use a power supply with an RFI reducing ferrite approximately 5 inches from the DC plug.
4. Reorient or relocate the receiving antenna.

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# 1. INTRODUCTION

This User Manual shows you how to set up the NVMe Drive eRazer. The NVMe Drive eRazer allows you to choose from several industry standard erase modes to erase an NVMe M.2 or a U.2 SSD. You can also connect the Drive eRazer to a computer via USB to receive a digital report of the erasure process with a third party app or the Drive eRazer App (available at [wiebetech.com/software](http://wiebetech.com/software)).

## 1.1. WHAT'S IN THE BOX

Check the package contents to verify that you have received the items below. Please contact WiebeTech if any items are missing or damaged.

Item	Quantity
NVMe Drive eRazer	1
Power adapter and cord	1
Power adapter label	1
U.2-to-OCuLink adapter	1
M.2-to-U.2 adapter	1
USB Type-A Cable	1

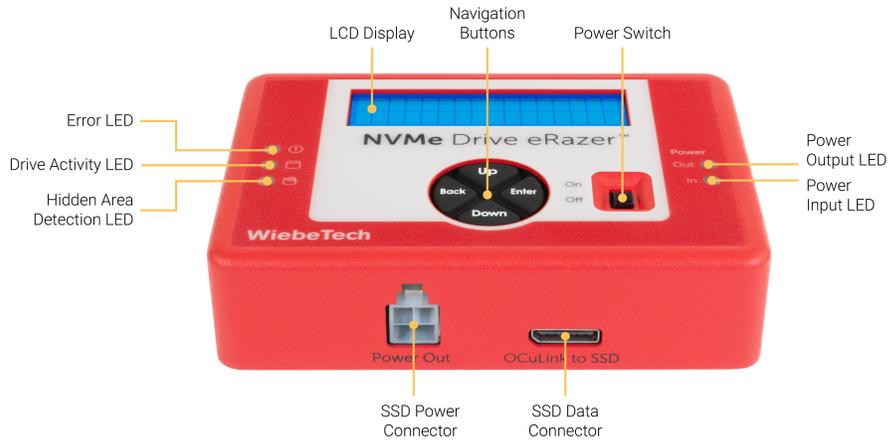
## 1.2. SAFETY INFORMATION

Please read the following before handling this product.

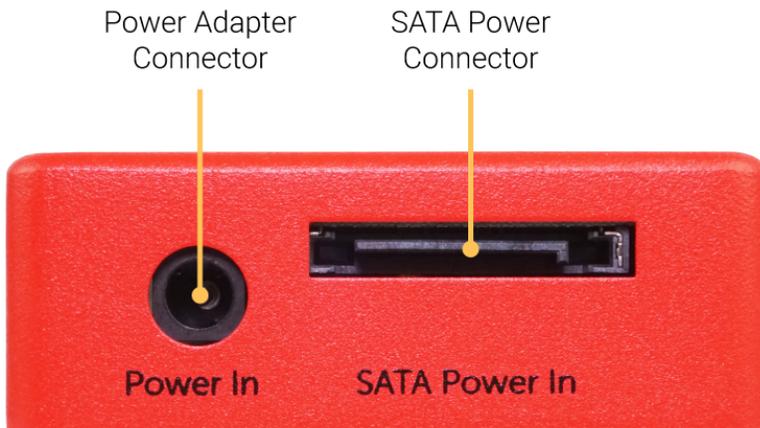
1. Do not drop the product, submit it to impact, or pierce it.
2. The circuit boards within this product are susceptible to static electricity. Proper grounding is strongly recommended to prevent electrical damage to the product or other connected devices, including the computer host.
3. Avoid placing this product close to magnetic devices, high voltage devices, or in an area exposed to heat, flame, direct sunlight, dampness, moisture, rain, vibration, shock, dust, or sand.
4. To avoid overheating, this product should be operated in a well-ventilated area.
5. Before starting any type of hardware installation, please ensure that all power switches have been turned off and all power cords have been disconnected to prevent personal injury and damage to the hardware.
6. A damaged cable or device may malfunction and/or overheat and become a fire hazard.
7. Use only with high quality, undamaged cables and prevent cables from being pinched or damaged. The cable supplied with your system has been optimized for performance. Longer cables may not work or only work intermittently.

# 1.3. IDENTIFYING PARTS

## Front and Top



## Right Side



**Left Side**



**Back Side**



## 2. SETUP

1. Ensure that the NVMe Drive eRazer power switch is in the "Off" position.
2. Attach the Drive eRazer to power. You may use the included power adapter or a SATA power connector from a computer.
3. Connect the Drive eRazer to the drive.
  - **U.2 drive:** Connect the included U.2-to-OCuLink adapter to the U.2 drive. Then connect the adapter's OCuLink connector and power connectors to the appropriate ports on the Drive eRazer.
  - **M.2 drive:** Attach your M.2 drive to the included M.2-to-U.2 adapter. Next, connect the included U.2-to-OCuLink adapter to the other side of the M.2-to-U.2 adapter. Finally, connect the adapter's OCuLink and power connectors to the appropriate ports on the Drive eRazer.
4. Determine how you want to use the Drive eRazer .
  - **To erase the attached drive:** Turn on the power switch. The connected drive will power up and the main menu will appear on the LCD screen. Continue on to the section for how to erase drives. See [Section 3: "How to Erase Drives" \(page 8\)](#).
  - **To view the drive's contents:** Attach a USB cable to the USB Type-C port on the rear of the Drive eRazer . Next, turn on the power switch. The connected drive will power up and the main menu will appear on the LCD screen. If the drive is formatted, it will mount to your computer and you can view its contents.



### NOTE

Attached drives cannot be erased when the Drive eRazer is connected to a computer. Disconnect the Drive eRazer from the computer to erase the attached drive.



### TIP

You can use a hex editor or the Drive eRazer App to see the values of specific sectors on formatted or unformatted drives. This is useful if you need to independently verify that a drive has been erased.

## 3. HOW TO ERASE DRIVES

Use the LCD and navigation buttons to navigate through the menu interface. The available options you can choose from are listed below. You can start erasing NVMe drives, adjust settings, view information about the Drive eRazer and the attached drive, or check on operational status.

Use the LCD and navigation buttons to navigate through the menu interface. You can start erasing NVMe drives, adjust settings, view information about the Drive eRazer and the attached drive, or check on operational status.

The **Up** and **Down** buttons allow scrolling through the menu options. The **Right** button selects the option on the screen. The **Left** button goes back to the previous screen.

1. Turn on the NVMe Drive eRazer .
2. After a brief "Standby" screen, it will display the "Start Erasing" screen.
  - If the screen displays "Quickest Erase" as the current erase method, press **Enter** and continue on to Step 3.
  - If the defaults have changed and a different erase method is displayed, skip to Step 4.
3. The screen will show the fastest erase method supported by the drive. Press **Enter** again to confirm the selection and return to the "Start Erasing" screen.



### NOTE

To change this method, return to the main screen and then choose **Review Settings > Erase Type**.

4. On the "Start Erasing" screen, press **Enter**
5. On the "Will Erase All Data" screen, press **Enter** to confirm.
6. The Drive eRazer will erase the attached drive. When it is finished, the "Verify" screen will appear. Press **Enter** to continue.



### TIP

The Drive eRazer will attempt to output a digital report of the erasure process regardless of whether it is connected to a computer or not. You can use a third party terminal app or the Drive eRazer App to receive digital reports and save them (see [Section 4: Generating Reports, page 11](#)).

7. To erase another drive, power cycle the Drive eRazer .

### 3.1. MENU STRUCTURE

- **Start Erasing:** Choose this to erase the attached drive using the current settings.

- **Review Settings:** You can view or change the following settings:
  - **Erase Type:** Lets you change the default erase type that appears on the "Start Erasing" screen. For information on the available erase modes, see [Section 3.2: Erase Modes, page 9](#).
  - **Verification:** Set the verification level here. The available settings are Minimal, Medium, High, and 100%.
  - **Report Test:** Similar to printing a test page, this allows you to send a test report to a connected label printer or terminal app.
  - **Reset to Factory:** Resets the Drive eRazer to factory defaults.
- **View Drive Info:** Displays information about the attached drive. The following information is available: temperature, size, capacity, namespaces, drive manufacturer, PCI vendor ID, PCI SS VID, model number, serial number, firmware revision, power cycles, power on hours, available spare, life span used, read commands, read data, write data, data errors, warning temperature, warning time, critical temperature, critical time, and NVMe version.
- **View Dock Info:** Displays information about the Drive eRazer. The following information is available: Product name, unique ID number, and firmware version.

## 3.2. ERASE MODES

This is a list of erase modes that your drive may support. Not all erase methods will be available. Only those erase modes supported by your drive will appear in the Drive eRazer menu.

ERASE MODE	DESCRIPTION
Quickest Erase	Uses the quickest of the following erase modes that is also supported by the connected drive.
Random Erase	Uses the NVMe Sanitize Overwrite command with a randomly generated pattern to overwrite all areas that are able to contain user data, including caches, Persistent Memory Regions, and unallocated or deallocated areas of the media. User may select the number of passes. A new pattern is generated for each pass.
Verify Only	No erasing—performs the verification step only. User supplies the pattern to verify drive contents against.
Australia ISM	Australia's data sanitization standard.
Block Erase	Uses the NVMe Sanitize Block Erase command to erase all areas that are able to contain user data, including caches, Persistent Memory Regions, and unallocated or deallocated areas of the media.
Crypto Erase	Uses the NVMe Sanitize Crypto Erase command to securely delete a self-encrypting drive's encryption key, which almost immediately renders all user data unreadable and unrecoverable. This setting may only be chosen if the connected NVMe drive supports it.
Custom Erase	Customizable mode using the NVMe Sanitize Overwrite command to overwrite all areas that are able to contain user data, including caches, Persistent Memory Regions, and unallocated or deallocated areas of the media. Allows user-selected values for the number of passes and data pattern.
DOD Clear	US Department of Defense "Clear" standard.

ERASE MODE	DESCRIPTION
Format Crypto	Uses the Format NVM command with the “Cryptographic Erase” secure erase option. Erases all user data by securely deleting the encryption key with which the user data was previously encrypted.
Format Data	Uses the Format NVM command with the “User Data Erase” secure erase option.
HMG IS5 Erase	Great Britain’s data sanitization standard.
ITSP.40.006 V2	Canada’s data sanitization standard.
NIST80088 Clear	“Clear” standard defined by NIST special publication 800-88 Revision 1.
NIST80088 Purge	“Purge” standard defined by NIST special publication 800-88 Revision 1.

## 4. GENERATING REPORTS

1. Make sure the NVMe Drive eRazer is powered off.
2. Connect the Drive eRazer to a computer using the included USB cable. Connect the USB connector on the cable to the "Report" USB port on side of the dock and the other side to your computer.
3. Turn the Drive eRazer on.
4. Open the Drive eRazer App (you must use version 1.1.0 or higher, available at [wiebetech.com/software](http://wiebetech.com/software)) or a third party terminal app like TeraTerm and ensure it is ready for receiving your generated report. Please consult your preferred app's user documentation for instructions on how to do so.



### TIP

You can verify the output from the Drive eRazer is working by sending a test report. From the main screen, go to **Review Settings > Report Test**.

5. Erase an NVMe drive. When using the default settings a label will automatically generate at the end of the erase process. If you need to, at the end of an erase process you can resend the report to your printer or app by pressing **Enter**.



### NOTE

If you need to regenerate or reprint a report, you can do so up until you turn off the Drive eRazer.

## 5. PRODUCT SUPPORT

Your investment in WiebeTech products is backed up by our free technical support for the lifetime of the product. Contact us through our website, [wiebetech.com/support](http://wiebetech.com/support) or call us at 1-360-816-1800.