KIOXIA

SSD Utility

User Guide
Software Version 6.0.0.22

Contents

Notice

Disclaimer

Technical Support

Welcome!

SSD Utility enables you to manage and get the best out of your SSDs supported by the SSD Utility (hereinafter referred to as the "SSD", "drive" or "device").

Key features

SSD Utility enables you to:

❚ See the status of your SSD

❚ See a detailed view of SMART attributes

❚ Update SSD firmware

❚ Secure erase data to make it unrecoverable

❚ Assist technical support in diagnosing problems with views and logs of SSD, computer and SSD Utility details

❚ Be alerted of issues with drive health, reliability or temperature

❚ Enhance security with password protection (EXCERIA PLUS Portable SSD)

For more details of SSD Utility features, see SSD Utility Features on page 8.

System requirements

Supported SSDs include:

	Windows 11	Windows 10 x64
EXCERIA PRO SSD	ü	ü
EXCERIA PLUS G2 SSD	ü	ü
EXCERIA PLUS G3 SSD	ü	ü
EXCERIA PLUS SSD	ü	ü
EXCERIA G2 SSD	ü	ü
EXCERIA SSD	ü	ü
EXCERIA SATA SSD	ü	ü
EXCERIA PLUS Portable SSD	ü	ü
RD500 (TOSHIBA)	ü	ü
RC500 (TOSHIBA)	ü	ü
TR200 (TOSHIBA)	ü	ü
XS700 (TOSHIBA)	ü	ü

⚠ CAUTION: Before you start, make back-up copies of any data on the SSD that you want to keep; some operations result in the complete loss of data on the SSD.

ⓘ Please confirm the following before using SSD Utility:

¡ Set the SATA controller to AHCI mode in the motherboard BIOS.

For instructions see the user documentation for your computer.

¡ You must run SSD Utility as an administrator.

¡ For firmware updates, your computer must be connected to the internet.

¡ To create a Bootable Media for Secure Erase / Format NVMe™, your computer must be connected to the internet.

Installing SSD Utility

This guide assumes that you have already correctly installed your SSDs. You can:

▪ Install SSD Utility in Windows.

▪ Create a Bootable Media. This enables you to do some things that you cannot do from within your operating system. For example, for some SSDs or system boot drives, Secure Erase could not be done from the Windows Operating System. The Bootable Media is written to a USB flash drive.

Install SSD Utility in Windows

Run the installer and follow the onscreen instructions.

Create a Bootable Media

You can use a USB flash drive to create a standalone bootable tool called Bootable Media which can be used to do a Secure Erase of your SSD. The SSD Utility will only offer a Bootable Media if it is required – you should create the Bootable Media if prompted.

These instructions assume that you are familiar with the functionality of SSD Utility for Secure Erase and Format NVMe.

⚠ CAUTION: Before you start, make back-up copies of any data on the SSD that you want to keep.
Also any data on the flash drive is erased during this operation.
USB flash drive capacity must be at least 128MB.
The USB flash drive is automatically formatted as FAT32, which ensures that any files saved onto the drive can be easily read from any Windows system.

If SSDs not supported by the SSD Utility (hereinafter referred to as the "unsupported SSDs") are connected to your computer, the Bootable Media feature may not work properly. Please dismount unsupported SSDs from the computer before using the Bootable Media feature. Please contact Technical Support (https://personal.kioxia.com/support) if you have any problems with Bootable Media operation.

Secure Erase with Bootable Media

1. Insert your USB flash drive into your computer, then restart your computer.

2. Set your BIOS to boot from your USB flash drive; see the relevant user documentation for your computer.
   If your BIOS supports both UEFI and legacy boot, select the legacy boot first.
   You only need to use UEFI boot if you experience any issues with legacy boot.

3. After the computer has booted, the Secure Erase of selected SSD when the Bootable Media is created will run automatically.

   Since this will delete all data from the SSD, the script will provide a warning message then request confirmation that the secure erase command should be run; with the following message:

   `Are you sure you want to erase your drive? (yes/no):`

   To proceed, type yes. To cancel the operation type no.

   The script will ask you to confirm the suspend/resume erase process; If the message is displayed, please type yes to proceed.

   If an error message is displayed during execution, refer to the "List of Error Messages" for action.

   After the computer has shutdown, remove the USB flash drive from the computer, power-on your computer and select boot from internal drive Windows system installed and restart your Windows system.

4. After your computer is restarted, check that the data on the selected SSD has been erased.

   If you cannot address with the error in how to address with error messages., or If the data has not been erased, please contact our technical support (https://personal.kioxia.com/support).

(i) If your selected SSD is a SATA drive, the computer will lock the drive during the boot process. The script will unlock the drive using suspend and resume commands; however, these commands can stop the display from working on some computers. The secure erase will still be executed, but there will not be a message displayed when the erase finishes; instead the computer will automatically shutdown after the command has completed. The process should take no longer than 5 minutes. If your computer does not shutdown please manually shutdown, remove USB flash drive and contact technical support.

Starting SSD Utility

A shortcut to SSD Utility is installed along with the application, either on desktop or in the Start menu under **KIOXIA Corporation - SSD Utility**. Click this to run SSD Utility.

Uninstall SSD Utility

To uninstall from Windows, use the standard uninstall facility in Control Panel, or run the installer again and select **Remove**.

Remove Bootable Media from your USB flash drive

1. Insert the USB flash drive into a Windows computer.

2. Delete the USB flash drive volume and reformat under the following steps.

⚠ CAUTION: The following steps will erase all data in USB flash drive. Selecting the wrong drive will remove all data in that drive, be sure to select the USB flash drive you want to delete.

As an example, the following is the removal procedure for Windows 11
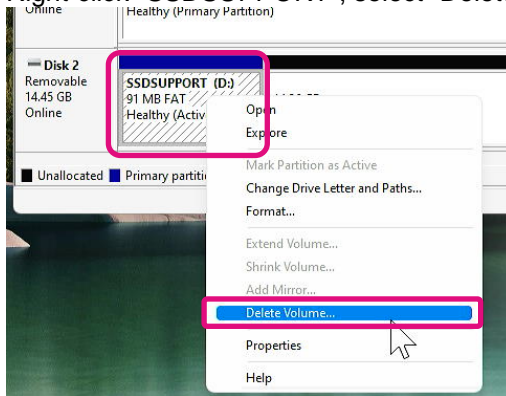
    2-1.   Right-click the "Start" button on the taskbar, select "Disk Management" from the displayed menu.
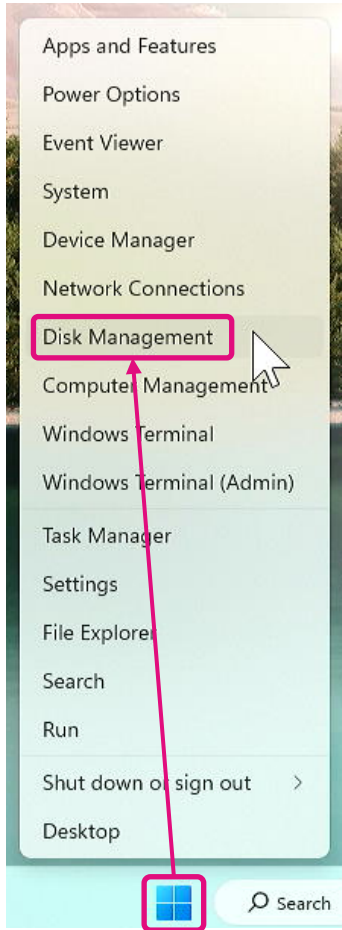
2-2.   Disk Management   window opens. Use scroll bar to scroll till "SSDSUPPORT" in Volume label is displayed.
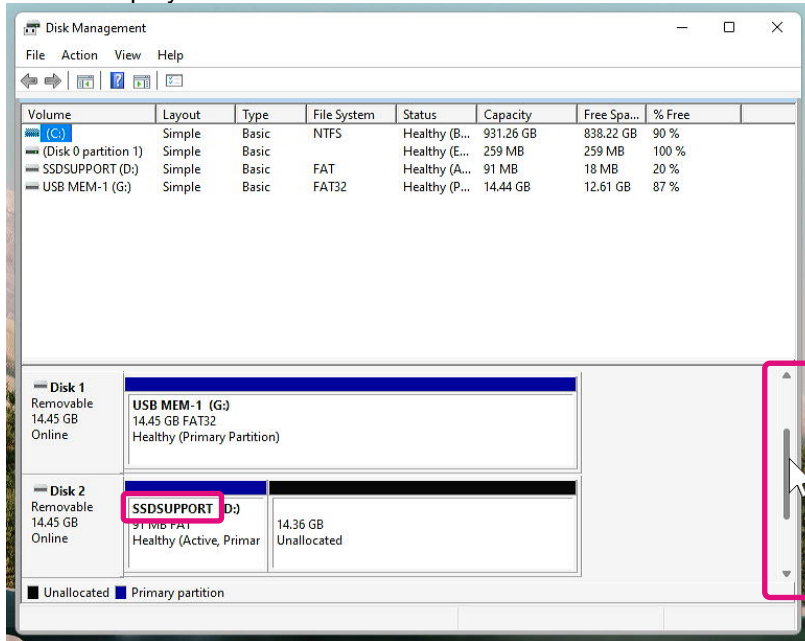
2-3.   Right-click "SSDSUPPORT", select "Delete Volume" from the menu.

2-4.   The following Pop-up displays. Click "Yes" after confirming the message.
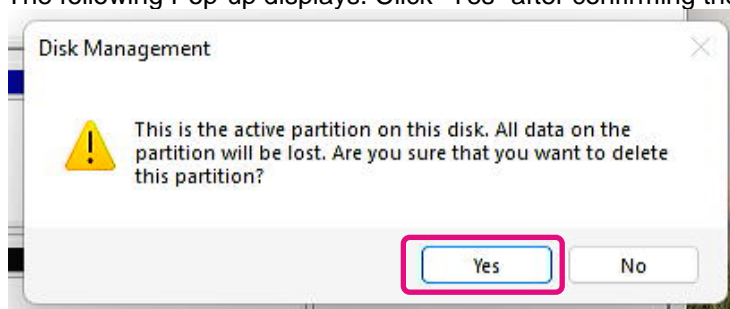
2-5. Confirm that the partition is removed.
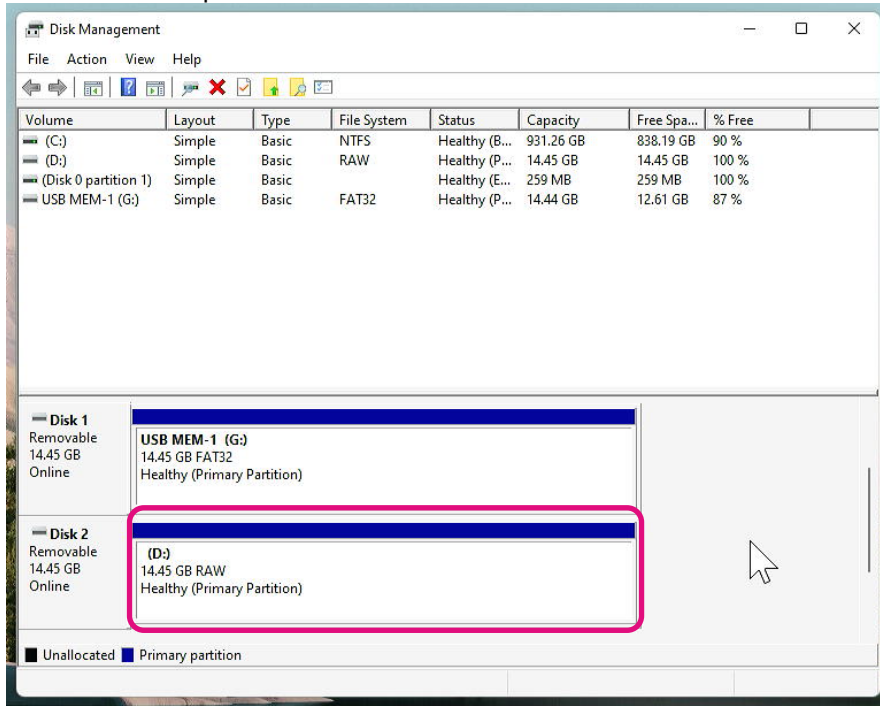
2-6. Right-click the target drive to format, and select "Format (F)..." from the displayed menu.
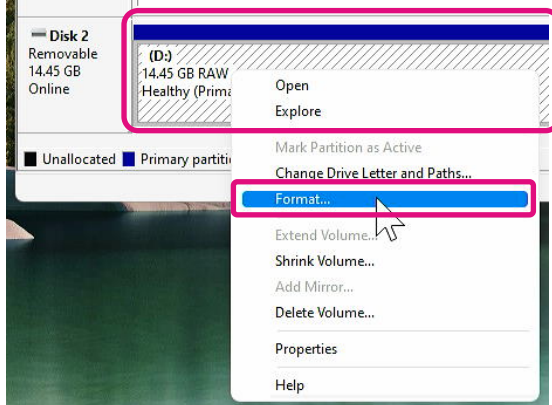
2-7. A pop-up for format will appear. Enter each item and click "OK" button.
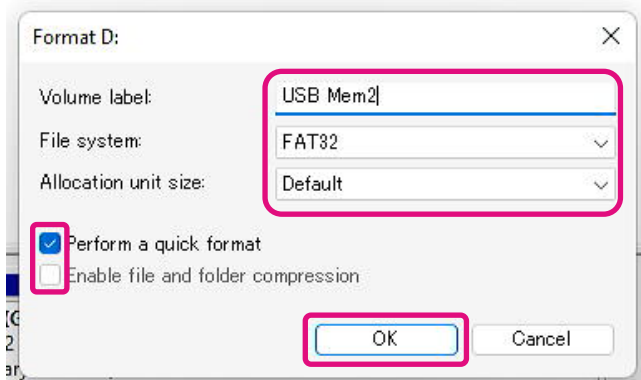
2-8. The following popup will appear. Click "OK" button after confirming the message.
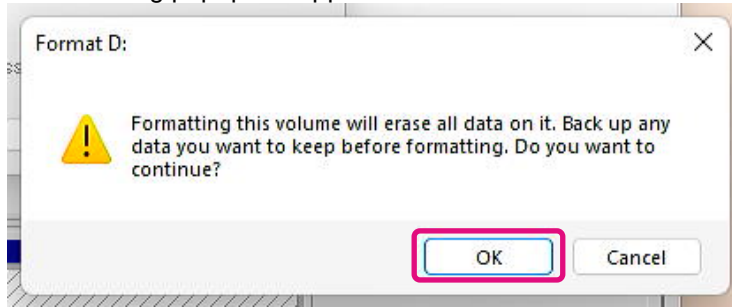
2-9. Confirm that the volume label and file system are as specified in step "2-7".
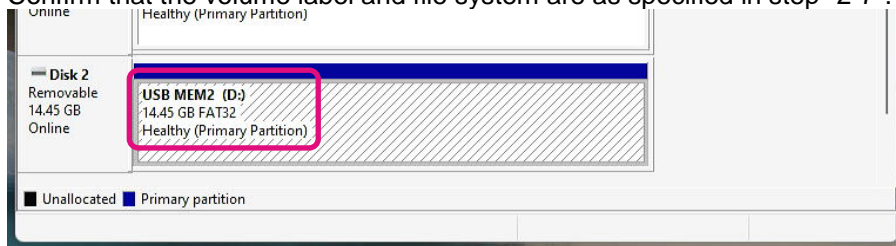
This completes the steps for removing Bootable Media from a USB flash drive.

SSD Utility Features

UI overview

The SSD Utility window is divided into panes.
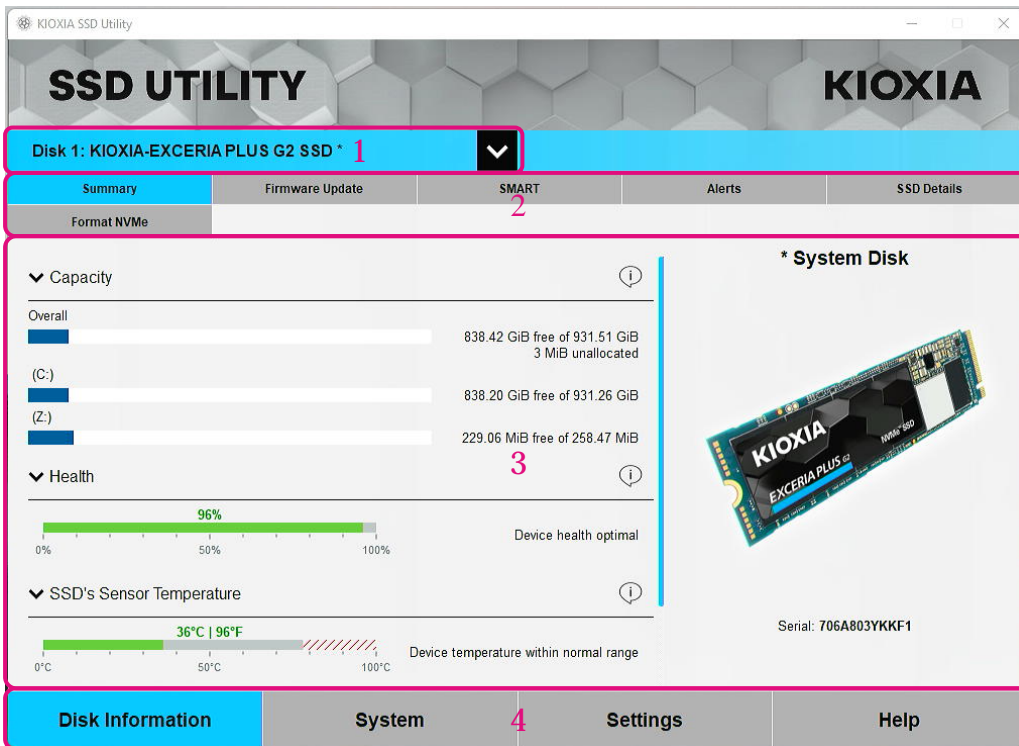
1   **Select drive list** - a list of SSDs installed in the current computer. If you only have one supported SSD installed in your computer, it will be automatically selected. When you have more than one SSD installed, ensure that the target SSD is selected before you click tasks from the following Task bar. Only drives for which this SSD Utility can provide functionality will appear in the selection list.

2   **Task bar** – displays the tasks you can carry out.

3   **Main pane** - displays information you request, or fields for a task.

4   **Option bar** – displays options you can select. Contents in 2 and 3 above will change depending on the option selected.

Functional Overview

SSD Utility supports the features in the following table, listed by their location in the user interface. The features supported by the selected drive are different. If you have more than one supported SSD, the task bar is displayed according to the drive selected from **select drive** list.

To view the description of each feature, click ⓘ. The Help includes links to further information online.

If you do not find the information you need in the Help or in this guide, you can contact our technical support team; for details, see the company Website online or the contact details on the help page in the product. (see below).

Option	Task	Feature
Disk information	Overview	A quick overview of the drive status, including:
		Capacity - current usage of the drive.
		Health - remaining drive lifetime. 🟩 = SSD operating optimally (100% to 21%) 🟨 = consider replacing your SSD to prevent future data loss (20% to 11%) 🟥 = replace your SSD urgently (10% to 0%) Health value may reach to zero (0) even within the warranty period. In this case, the SSD will not be covered by the warranty.
		SSD's sensor temperature - temperature measured by the SSD's sensor (may be higher or lower than SSD case temperature)
		Interface – Status of physical interface connection.
		Host Memory Buffer – Status of Host Memory Buffer.
	Firmware update	Provides advanced methods of updating SSD firmware for the selected drive.
	SMART	Shows current SMART attribute values, which can help you to realize if there is a problem with your SSD.
	Alerts	Shows a detailed report of all the alert conditions that may require attention, plus any that have occurred in the past.
	SSD details	Shows details about SSD. This feature may be used when contacting technical support.
	Security	The password protection function is only valid for portable SSDs. **Set Password** - Set Password on a portable SSD, validate password protection function. **Unlock device** – Unlock potable SSD with a password. **Remove Password** - Remove Password from a password protected device. For more information on the password protection, see "Password Protection Features".
	Secure Erase / Format NVMe	**Secure Erase** – delete all the data from your SSD so that it is unrecoverable (non-NVMe SSDs) **Format NVMe** - low level format an NVMe SSD, including changing the LBA format and securely erasing the data. Note: To secure erase / Format NVMe SSDs, you may need to create a bootable media on to a USB flash drive – see section "Create a Bootable Media".

Option	Task	Feature
System	-	Shows details of your system, which may be useful when contacting technical support

Settings	-	General application configuration, including:
		
		Language - the user interface language.
		
		Logging - enable logging to help technical support diagnose problems
		
		Monitoring - whether SSD Utility stays running to monitor your SSDs
		
		    Run in the Background - enable tool to run in the Background
		    Run at login - automatically runs tool when login

Help	-	**Contact Us** - links to online support information **SSD Utility** – Overview about SSD Utility. You will be notified if a new version of SSD Utility is available **Save support package -** Information about the system being used is saved in a zip file. You may be asked to provide this file to technical support.

Password Protection Features

EXCERIA PLUS Portable SSD

EXCERIA PLUS Portable SSD allows you to lock the device with a password to prevent others from accessing the user data area of the device. Please follow the instructions below to use the password protection feature.

The password protection requires following two passwords

• Master Password

This is the password to disable the password protection. This is a 32-character alphanumeric password that SSD Utility will automatically generate and display when you enable the password protection in "Set Password" below. If you forget the Master Password, you will not be able to disable the password protection feature by removing Master Password and User Password.

• User Password

This is the password used to unlock the device locked by the password protection. This is a password of 8 to 32 alphanumeric characters to be entered by the user when activating the password protection in the "Set Password" procedure described below. Entering the User Password in "Unlock device" procedure will unlock the device and allow access to the user data area of the device.

If you forget your User Password, you will not be able to unlock the device and access the user data area. of the device. In this case, please follow the "Remove Password" procedure described below to remove both passwords using the Master Password and disable the password protection.

⚠ CAUTION

- **You must keep your Master Password and User Password safe for yourself.**
- **You must keep your Master Password as a new Master Password will be displayed each time you "Set Password".**
- **If you lose both your User Password and Master Password, your device will be permanently locked and you will not be able to access your user data area.**

There is no function to change User Password and Master Password. If you wish to change your password, please execute "Remove Password" and then execute "Set Password" again.
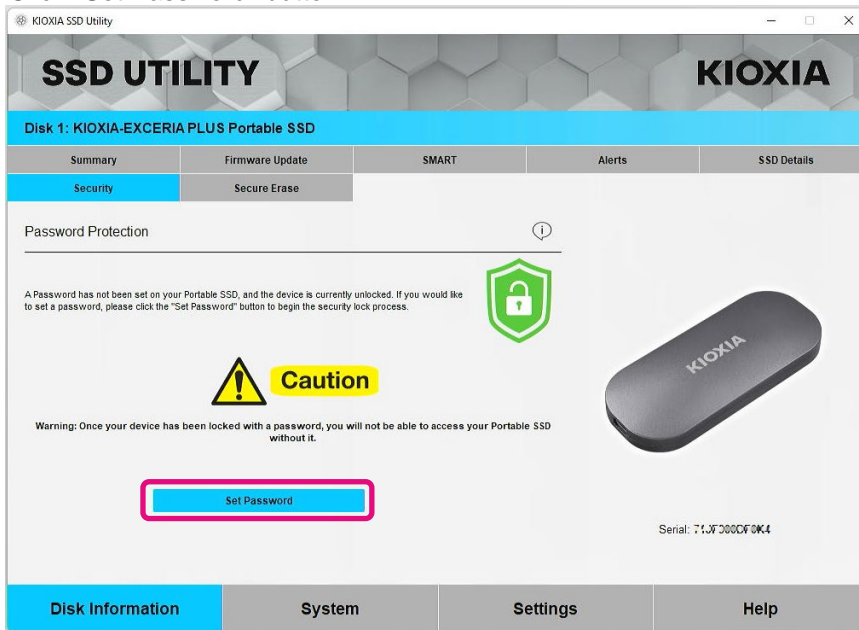
To execute the "Set Password" procedure, "Unlock device" procedure, and "Remove Password" procedure from the next page, please execute the SSD Utility while the EXCERIA PLUS Portable SSD is connected to your computer.
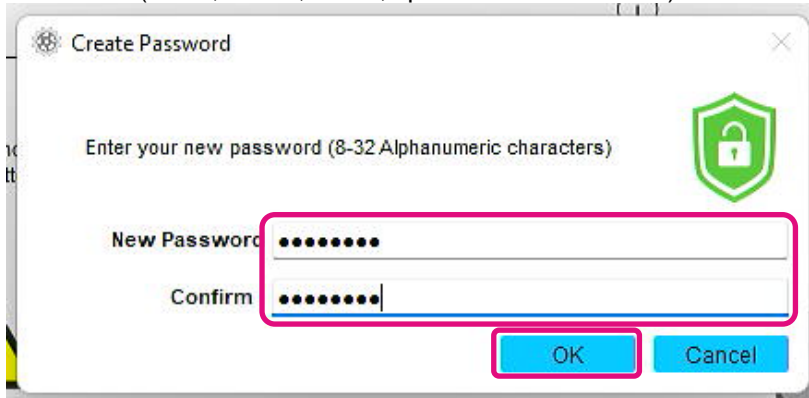
"Set Password" procedure:

1, Click "Disk Information" button, and then click "Security" button.

2, Click "Set Password" button.

3, Enter the password (User Password) in the pop-up window that appears and click the "OK" button. Please note that the User Password should be any 8 to 32 single-byte alphanumeric characters (a to z, A to Z, 0 to 9; spaces are not allowed).
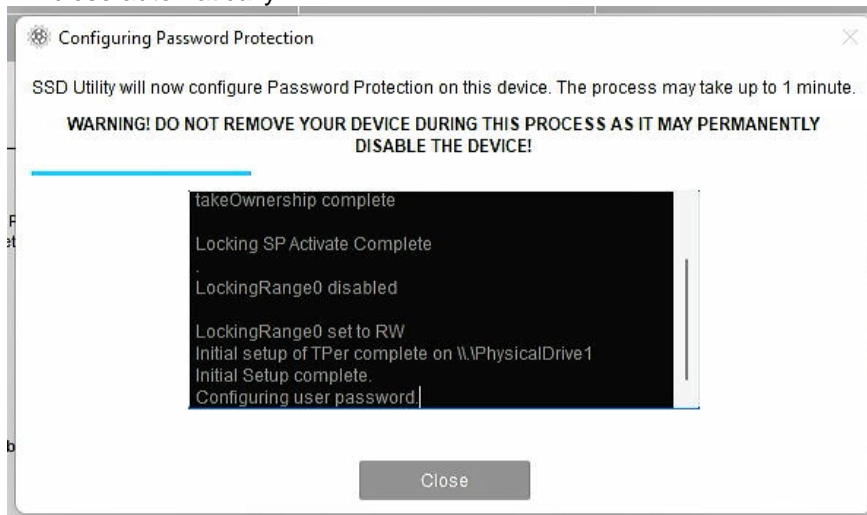

4, Password protection configuration will begin. Please wait until it is finished.

⚠️ Note: Do not remove the device until it is finished.

Once the password protection configuration is successfully completed, the popup below will close automatically.

5, The Master Password will be displayed.
⚠️Note: Be sure to keep your Master Password, as you will need it to "Remove Password".
Once you have securely stored the Master Password, click the "Close" button.
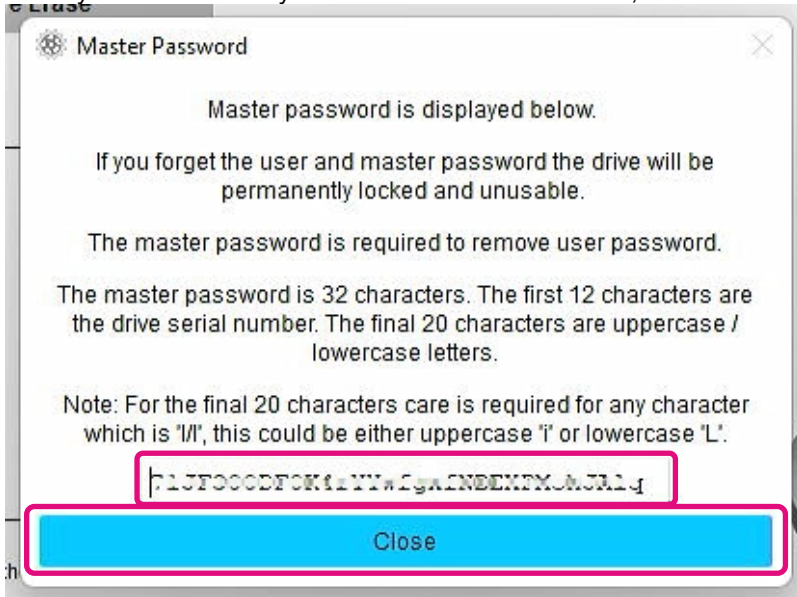
6, A warning will appear. Please confirm again that you have stored the Master Password and click the "Close" button.
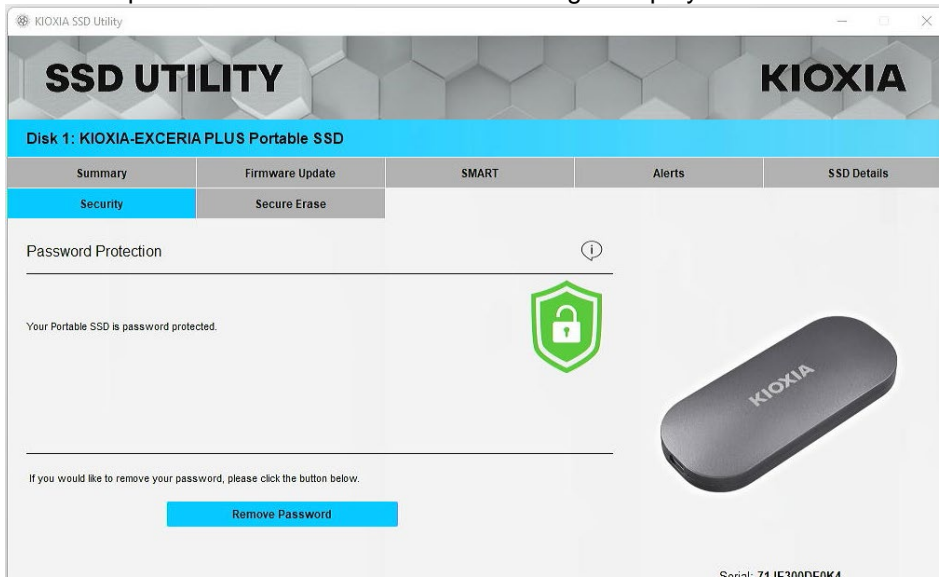
⚠️Note: Once you close this pop-up, you will not be able to re-display the Master Password. Please be sure to keep the Master Password for yourself.
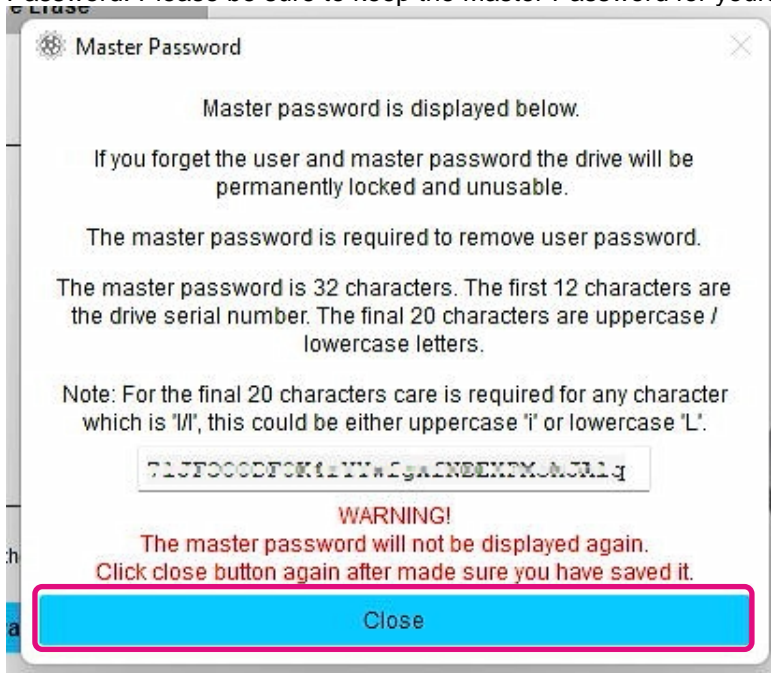
7, Pop-up window will appear after the password has been set. Click "OK" button.

8, Password protection is enabled and the following is displayed.

If ⬛ is displayed as shown above, the device is unlocked and you can access the user data area of the device.

If you wish to lock the device, safely disconnect the device from the USB port and reconnect it. If ⬛ is displayed, the device is locked and the user data area of the device cannot be accessed.

This completes the "Set Password" procedure.

If "Set Password" failed

If you use a USB port with unstable connection and/or operation, "Set Password" may fail during the process. If it fails during the process, the following pop-up may appear.
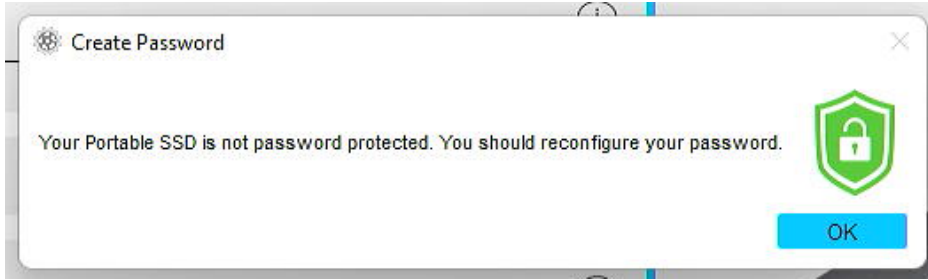

If this pop-up is displayed, click "OK" button to close the pop-up window, change the USB port to which the device is connected, execute "Remove Password" operation, and then perform "Set Password" operation again.

Procedure for confirming that the SSD is locked with password protection

To ensure that your EXCERIA PLUS Portable SSD is password protected by SSD Utility, please follow the steps below.

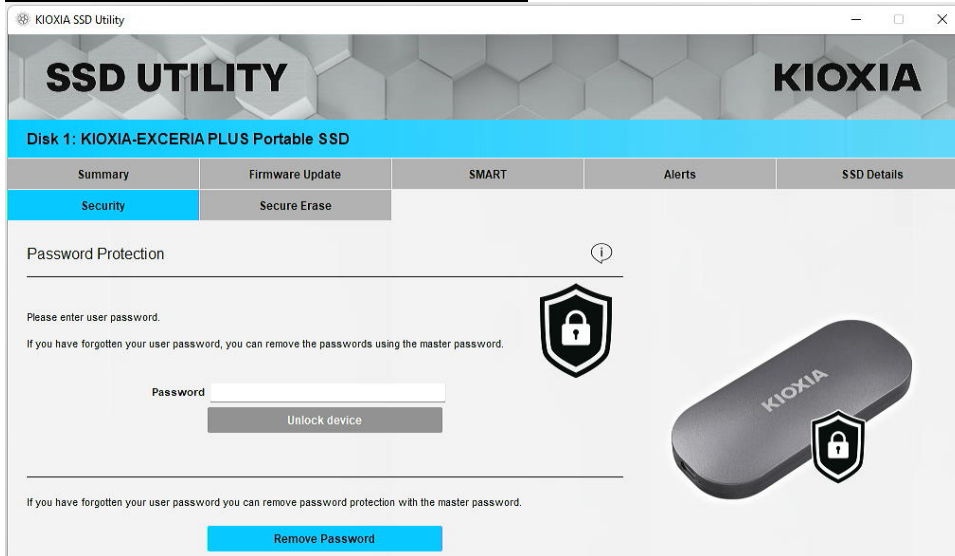1, Safely remove the EXCERIA PLUS Portable SSD from your computer.
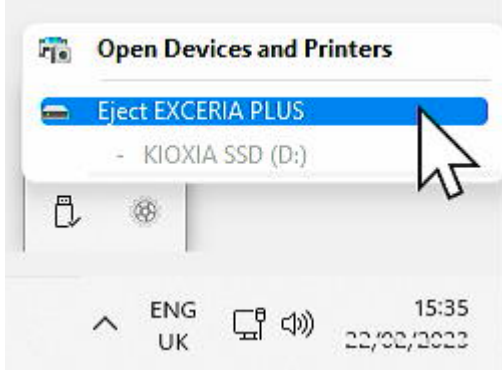

2, Execute the SSD Utility on your computer.

3, Connect the EXCERIA PLUS Portable SSD to your computer.

4, If the SSD Utility recognizes your EXCERIA PLUS Portable SSD and a black shield icon appears, the device is locked by password protection.


If the black shield icon does not appear here, select "KIOXIA-EXCERIA PLUS Portable SSD" and select "Security" tab. If "Remove Password" button appears even though you have not "Unlocked the device" as shown below, the password protection may not be set correctly. In this case, please click the "Remove Password" button to remove the passwords, and then try "Set Password" again.
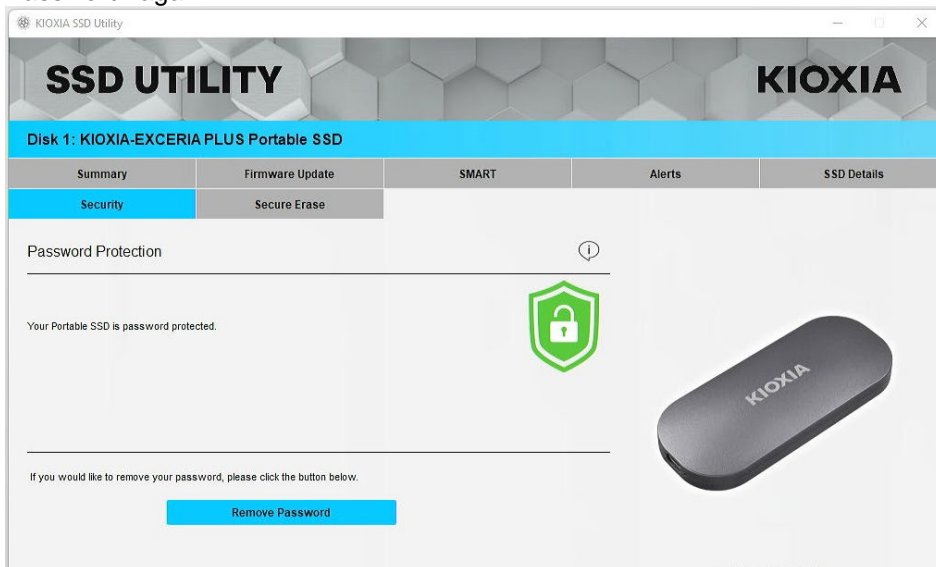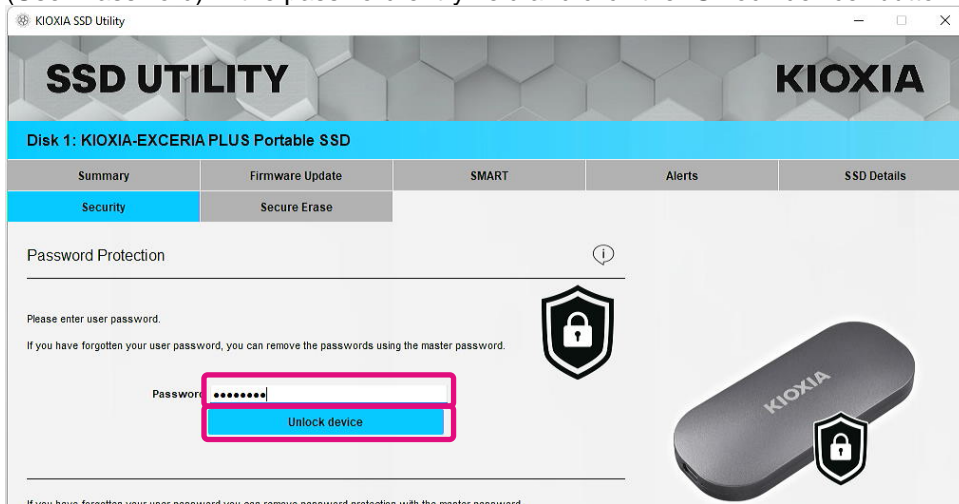
"Unlock device" procedure:

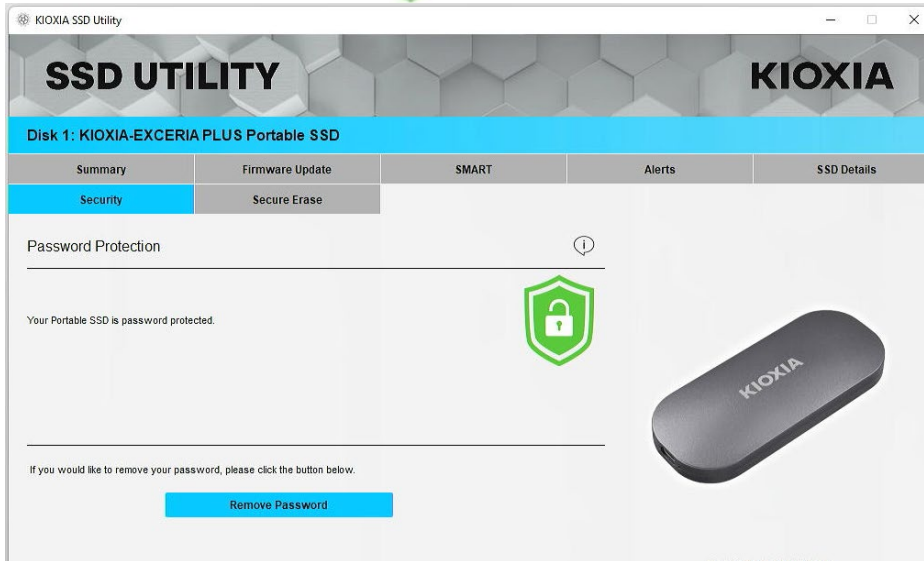1, Click "Security" button, and then click "Security" button.
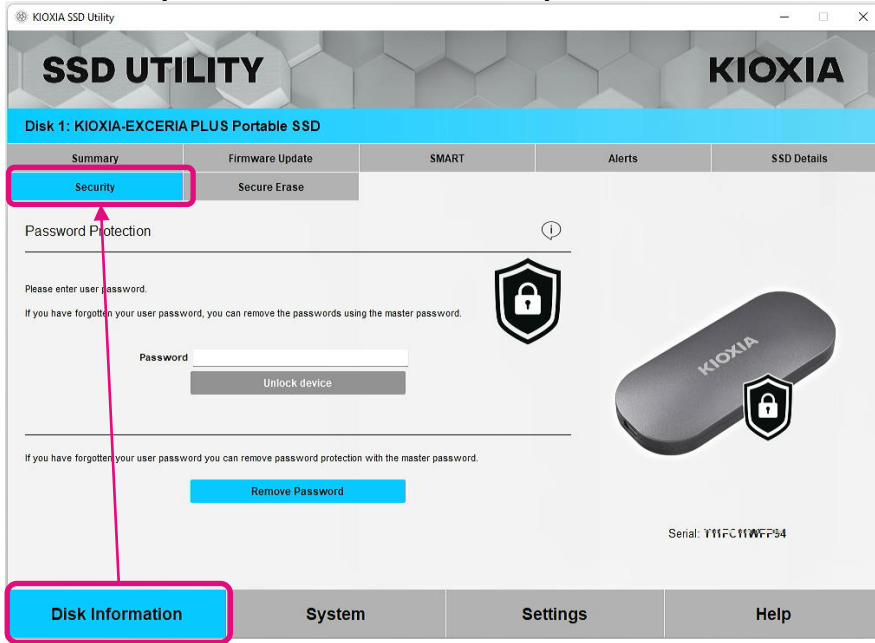
2, If the device is locked, a pane for entering a password will appear. Enter your own password (User Password) in the password entry field and click the "Unlock device" button.

3, The device will be unlocked and a pop-up will appear. Click "OK" button.

4, The device will be unlocked and will be displayed as shown below.

This completes the "Unlock device" procedure.

If you enter an incorrect User Password during "Unlock device", the following pop-up will appear. Click "OK" to close the pop-up window and enter the correct User Password to "Unlock device" again.


If you enter the wrong User Password five times in a row, the following will appear on the SSD Utility. In this case, please disconnect the target device from the USB port safely and reconnect it to reset the retry counter. And then, please execute "Unlock device" again.
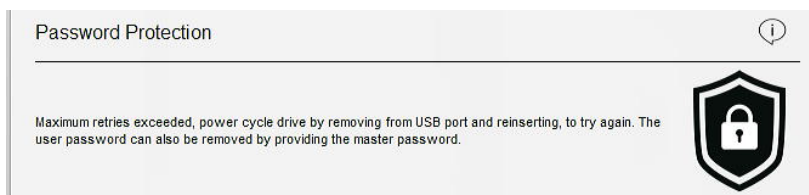
If you do not know the correct User Password, you cannot execute "Unlock device". To disable the password protection, please execute "Remove Password".
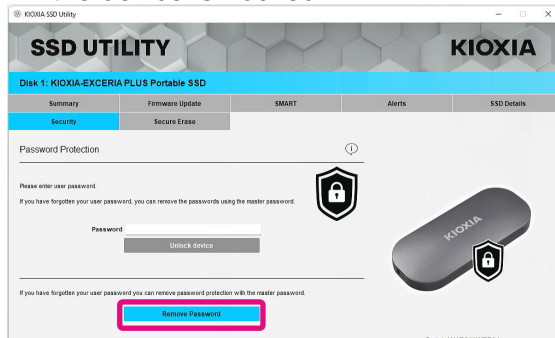
"Remove Password" procedure:

1, Click "Disk Information" button, and then click "Security" Button.
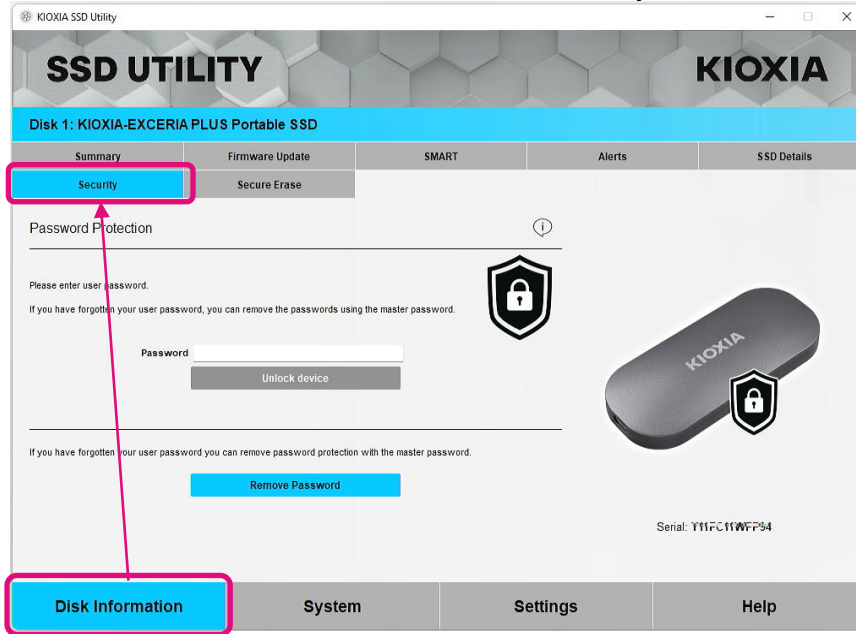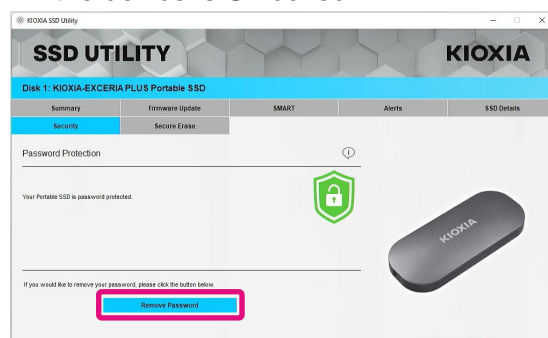

2, Depending on the lock status of the device, one of the followings will be displayed. In either case, click the "Remove Password" button.
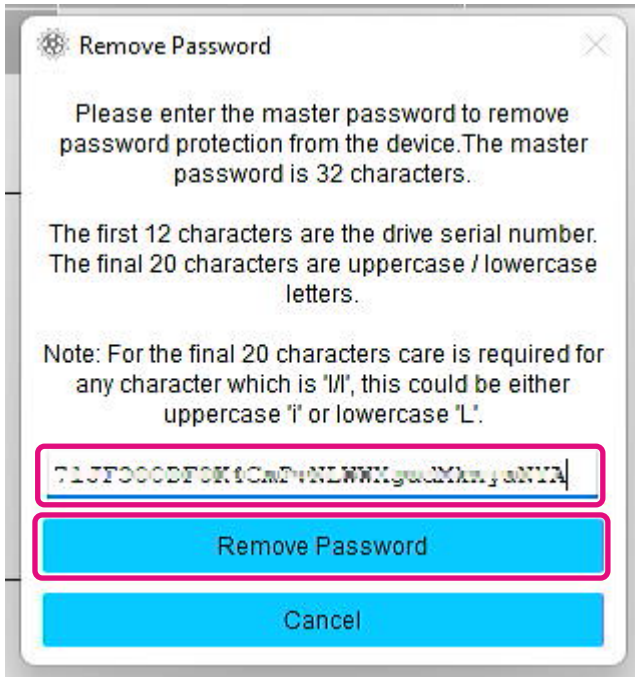
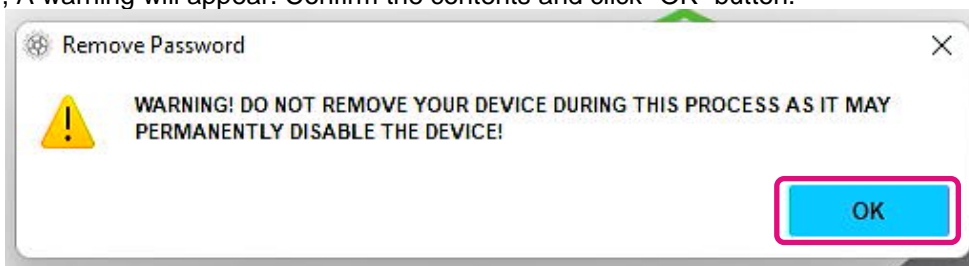If the device is Locked: If the device is Unlocked:

3, A pop-up will appear asking you to enter Master Password. Enter the stored Master Password and click "Remove Password" button.

4, A warning will appear. Confirm the contents and click "OK" button.

5, Password deletion will be executed. Please wait until it finishes.
⚠ Note: Do not remove the device until it finishes.
If the Remove Password is successful, the popup below will close automatically.
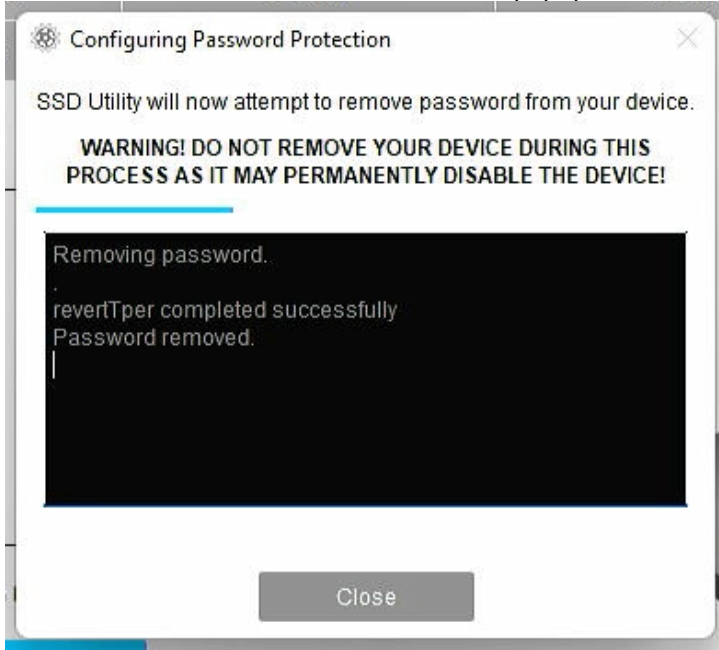
6, The password will be removed and a pop-up will appear. Click the "Close" button.

7, The password will be removed and the following will be displayed.
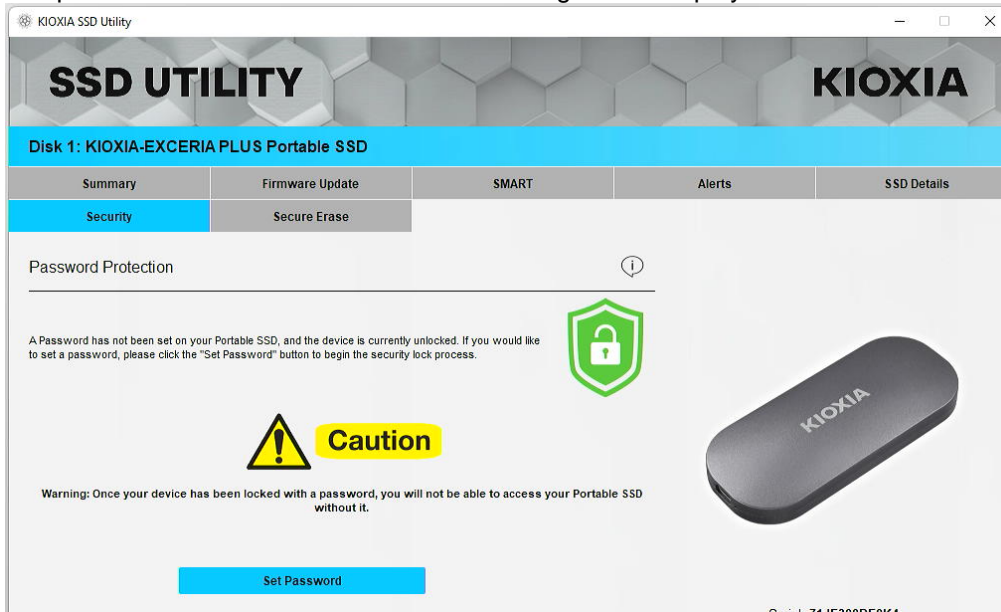
This completes the "Remove Password" procedure.

If you entered an incorrect Master Password during "Remove Password", the following pop-up will appear. Please enter the correct Master Password and click the "Remove Password" button again.

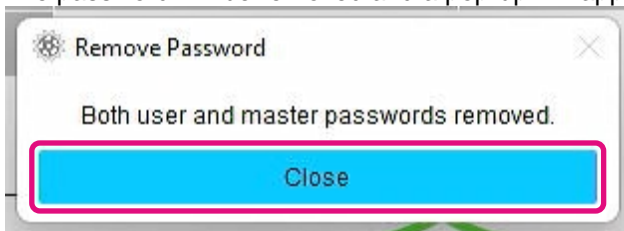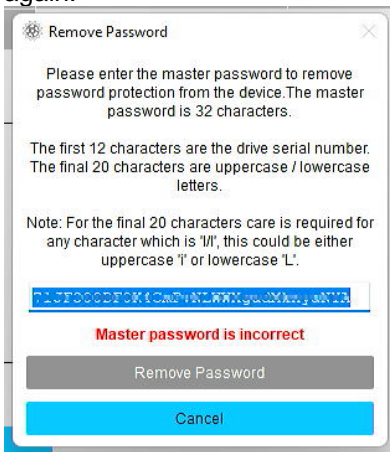If you enter the wrong Master Password four times in a row, the following warning will appear on the pop-up window. Click the "Close" button, disconnect the device from the USB port safely and reconnect it, and then execute "Remove Password" again.
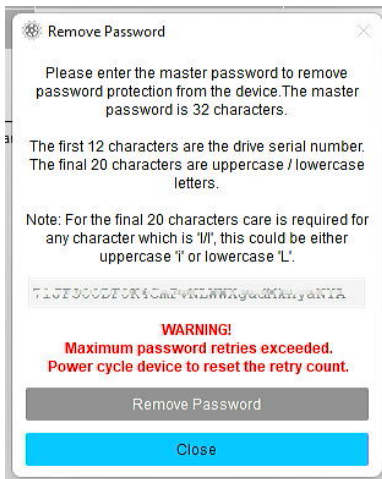
If you do not know the correct Master Password, you cannot execute "Remove Password".

Target Products

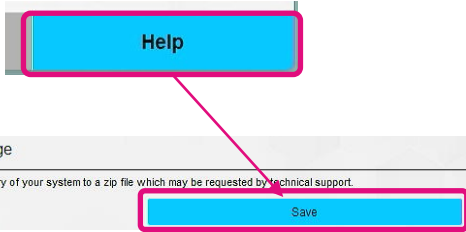| Option	Task	Feature	EXCERIA PRO SSD	EXCERIA PLUS G2 SSD	EXCERIA PLUS G3 SSD	EXCERIA PLUS SSD	EXCERIA G2 SSD	EXCERIA SSD	EXCERIA SATA SSD	EXCERIA PLUS Portable SSD	Note
Disk Information	Summary	Capacity	✓	✓	✓	✓	✓	✓	✓	✓	
		Health	✓	✓	✓	✓	✓	✓	✓	✓	
		SSD's sensor temperature	✓	✓	✓	✓	✓	✓	✓	✓	
		Interface	✓	✓	✓	✓	✓	✓	✓	✓	
		Host Memory Buffer			✓						
	Firmware Update	Firmware Update	✓	✓	✓	✓	✓	✓	✓	✓	
	SMART	SMART	✓	✓	✓	✓	✓	✓	✓	✓	
	Alerts	Alerts	✓	✓	✓	✓	✓	✓	✓	✓	
	SSD Details	SSD Details	✓	✓	✓	✓	✓	✓	✓	✓	
	Security	Password Protection Feature								✓	
	Secure Erase / Format NVMe	Secure Erase	✓	✓	✓	✓	✓	✓	✓	✓	
System	-	System Details	✓	✓	✓	✓	✓	✓	✓	✓	
Settings	-	Language	✓	✓	✓	✓	✓	✓	✓	✓	
		Logging	✓	✓	✓	✓	✓	✓	✓	✓	
		Monitoring	✓	✓	✓	✓	✓	✓	✓	✓	
Help	-	Contact us	✓	✓	✓	✓	✓	✓	✓	✓	
		About SSD Utility	✓	✓	✓	✓	✓	✓	✓	✓	
		Save Support Package	✓	✓	✓	✓	✓	✓	✓	✓	

List of Error Messages

SSD Utility Error Message	When the error messages is displayed	Description of error message and how to address
Unable to run SSD Utility as there is already a copy running on this system	At the startup of SSD Utility execution	The SSD Utility is already running. Multiple SSD Utilities cannot be run at the same time. Close the pop-up window with this message, and then from the menu of the SSD Utility icon in the notification area of the taskbar. Select "Show KIOXIA SSD Utility" to display the SSD Utility that has already been run.
Secure erase failed	During "Secure Erase"	The "Secure Erase" has not been completed correctly. If you still cannot Secure Erase after trying again, try connecting to another port. If you still cannot Secure Erase after taking the above measures, please contact our technical support.
Firmware update failed	During firmware update	The firmware update has not been completed correctly. If you still cannot update firmware after trying again, try connecting to another port. If you still cannot update the firmware after taking the above measures, please contact technical support.
Unexpected error, please send a support package	All display screens within the SSD Utility	Please send your support package to Technical Support. You can save the support package (zip file) by following these steps. Click on the "Save" button under "Save Support Package" in the "Help" option.
Please reinstall SSD Utility immediately.	At the startup of SSD Utility execution	It is likely that an important file required to execute the SSD Utility is corrupted/missing. Please uninstall the SSD Utility and then reinstall it.
Maximum retries exceeded, power cycle drive by removing from USB port and reinserting, to try again.	During "Unlock Device"	The device could not be unlocked because you entered the wrong password consecutively. Pease safely remove the affected drive from the USB port, re-insert it, and retry "Unlock Device" again.
Password settings of your Portable SSD are in an unknown state. Power cycle drive by removing from USB port and reinserting.	During "Set Password" for portable SSD	Safely remove the drive from the USB port and reinsert it, then retry "Set Password".

Password Incorrect	During "Unlock Device"	The password you entered is incorrect. Please close the pop-up and enter the correct password.
Failed to configure Password Protection. Please contact technical support.	After "Set Password"	There is some possibility that "Set Password" has failed. Please try "Remove Password". If you cannot "Remove Password", please contact Technical Support.

Bootable Media Error Message	When the error messages is displayed	Description of error message and how to address
Serial number xxxxxxxxxxxx not found	When booting from a USB flash drive with Bootable Media already created	The SSD selected when Bootable Media was created could not be found. Please make sure the SSD you selected when creating Bootable Media is connected to your computer. If there are unsupported SSDs connected to the computer, please remove them and try again.
Segmentation fault	When booting from a USB flash drive with Bootable Media already created	There is some possibility that the Bootable Media program is not running properly. If unsupported SSDs are connected to your computer, please remove them and try again.

About Trademarks

▪ NVMe is the registered trademark or trademark of NVM Express, Inc. in the United States or other countries.

▪ Windows and Microsoft are trademarks of the Microsoft group of companies.

Other company names, product names, service names, etc., may be used as trademarks by their companies.