SySTOR

NVMe/SATA Tower Duplicator & Sanitizer NX Series User Manual
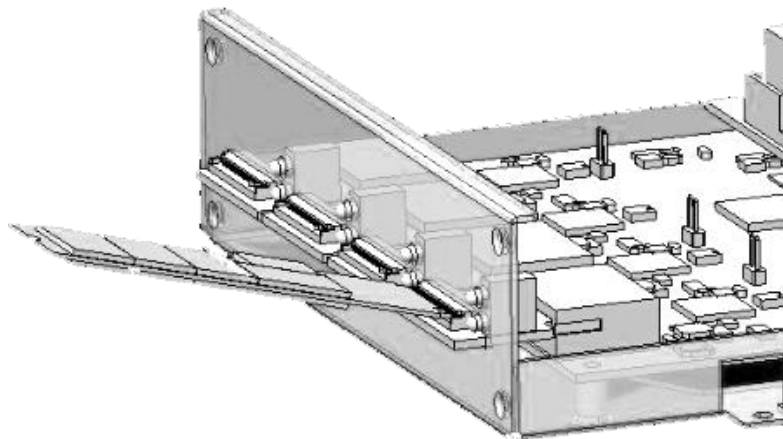
Index Table

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.
- 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 non-compliance with our operating instructions will void the warranty.
- Store the equipment safely when not in use and keep out of the reach of children.
- Please turn off duplicator before replacing the socket.
- Never turn off the power while the firmware updating.
- Use only approved, stable power sources.
- The power supply has overload protection. When it is overloaded and shutdown, please unplug the power cord for 2 minutes for discharge.
- 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 HDDs.
- Static electricity may cause duplication error. Please pay attention to the duplicator's environment and while operating equipment. Purchasing electricity elimination equipment helps avoid shock.
- Devices will operate at high temperatures during selected tasks.
- Wear protective gloves to prevent burns when handling devices.
- Ensure machine and operator are properly grounded to prevent ESD.

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.

Functions Table

Functions	Descriptions	
1. Copy	Copies data from source device to targets. (There are four copy modes in function "6.2 Copy Area")	
2. Compare	Verifies the targets to the source device to ensure copy accuracy.	
3. Copy+Compare	Automatically launches compare function after copy is completed.	
4. Erase	**4.1 Quick Erase** Erases device(s)' index table.	
	4.2 Full Erase Erases entire device(s) complying with NIST 800-88 Standards.	
	4.3 DoD Erase Erases device(s) complying with DoD 5220.22-M Standards.	
	4.4 DoD EraseComp Erase device(s) complying with DoD 5220.22-M Standards and verifies complete erasure.	
	4.5 Secure Erase Erases the non-loadable areas complying with NIST 800-88 Standards.	
5. Utility	**5.1 Show Device Info** Displays basic information such as device model, name, capacity, etc.	
	5.2 Update System	**5.2.1 Update BIOS** Updates system firmware through the source port.
		5.2.2 Create Update HDD Prepares by formatting the device to a 2GB FAT partition to accept firmware file.
	5.3 System Info. Displays system information such as controller, model number, software version, etc.	
6. Setup	**6.1 Start-up Menu** Sets default function to display after equipment initialization.	
	6.2 Copy Area	**6.2.1 System and Files** Copies data and skips empty space. Only supports standard formats.

		6.2.2 All Partitions Copies or skips HPA, DCO, unknown partitions, modified formats, etc. defined by settings.	
		6.2.3 Whole HDD Copies all source data, bit-by-bit.	
		6.2.4 Percentage (%) Sets percentage of source capacity to copy.	
	6.3 Copy GPT Backup Area Enable this function to copy the end GPT format.		
	6.4 Skip Bad Sectors Skips source bad sectors.		
	6.5 Language Sets preferred language: English, Japanese, Spanish.		
	6.6 Advanced Setup	**6.6.1** **Unknown Format**	**6.6.1.1Copy Unknown** Copies unknown format(s).
			6.6.2.2 Skip Unknown Skips unknown format(s).
		6.6.2 **Erase Master**	**6.6.2.1 Disabled** Source port will be unable to erase.
			6.6.2.2 Enabled Source port will be able to erase.
		6.6.3 Delete Disk Signature After Copy	**No**
			Yes Do not copy the disk signature onto target devices.
		6.6.4 PCIe Speed Sets data transmission speed.	
		6.6.5 Clean SSD Before Copy	**No** The default setting is "No".
			Yes
	6.7 Restore Defaults Reinstates manufacturer settings.		

Functions

1. Copy

Step 1: Prepare source and target devices.

Note	Recommendation: Target device(s)' capacity must be equal to or larger than the source device capacity.

Step 2: Connect source and target devices.

Step 3: Proceed to copy.

Scroll to select "1. Copy", then press "Enter" to start the duplication process.

Note	The number of working/connected targets will be displayed on LCD. Press "Enter" to start.

The following information below states what is displayed on the LCD during duplication.

```
                              Function          Total Data
                                 |                  |
   Copy          40.0G        Copy x3              40G

           3 ready            1:38   25%   (4) 10.3G
                                 |          |       |
                              Copied     Slowest  Copied
                              Time & %    Port     Data
```

Note	Press ▲ ▼ together for 5 seconds to stop operation on the slowest device.

Step 4: Copy Completed!

The quantity of passed or failed target device(s) and the copied duration will be displayed on the LCD after duplication completes.

2. Compare

Scroll to select "2. Compare", then press "Enter" to start the verification process.

Note	The number of working/connected targets will be displayed on the LCD. Press "Enter" to start.

3. Copy+Compare

Sequentially automates from Function 1, Copy to Function 2, then Compare.
Scroll to select "3. Copy+Compare", then press "Enter" to start the automated duplication and verification process.

4. Erase

There are 5 submenu modes.

Caution	Please backup all important data before using this function.

Step 1: Connect device(s) for sanitizing.

Note	Source Port is disabled for erasing. Go to 6.6.2.2 to enable source port erasing.

Step 2: Enter function "4. Erase"

Scroll to select "4. Erase", then press "Enter" to view the 3 submenus.

4.1 Quick Erase

This function will erase the index table from the connected device(s).
Scroll to select "4.1 Quick Erase", then press "Enter" to start the erasing process.

4.2 Full Erase

This function will erase all data per NIST 800-88 Standards to the connected device(s).
Scroll to select "4.2 Full Erase", then press " Enter " to start the erasing process.

4.3 DoD Erase

This function will erase all data per DoD 5220.22-M Standards on the connected device(s).

Scroll to select "4.3 DoD Erase", then press " Enter " to start the erasing process.

4.4 DoD EraseComp

This function will erase all data per DoD 5220.22-M Standards, then compare erasure of the connected device(s).
Scroll to select "4.4 DoD EraseComp", then press " Enter " to start the erasing and verifying process.

4.5 Secure Erase

This function erases the non-loadable areas complying with NIST 800-88 Standards.
Scroll to select "4.3 Secure Erase ", then press " Enter " to start the erasing process.

5. Utility

This menu will reveal submenus related to device information, system information and updates.
Scroll to select "5. Utility", then press " Enter " to view the submenus.

5.1 Show Device Info

This function will display basic information such as device model, name, capacity, etc.…
Scroll to select "5.1 Device Info", then press " Enter " to view the connected device(s). Then through to view connected device(s) by port number order.

5.2 Update System

Step 1: Prepare a device for update.
Connect a device to the source port. Scroll to select "5.2.2 Create Update HDD", then press " Enter " to start the format process. This will format the device to a 2GB FAT32 Partition.

Step2: Download Firmware.
Connect this device to PC. Download the latest firmware provided by supplier's technical support, unzip the BIOS firmware, then save it to the root directory in the device.

Note	Ensure that the device does not have any bad sectors.

Step3: Proceed to update firmware.
Connect this device to the source port. Scroll to select "5.2.1 Update BIOS", then press "

Enter " 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. The manufacturer will not be held responsible for any damages.

5.3 System Info

This function will display basic information such as device model, name, capacity, etc...
Scroll to select "5.3 System Info", then press " Enter " to view the connected device(s). Then scroll through to view all information.

6. Setup

This menu will reveal submenus related to copy area, skip bad sector, and setting language.
Scroll to select "6. Utility", then press " Enter " to view the submenus.

6.1 Start-up Menu

This function allows user to select the default function to display after equipment initialization.
Scroll to select "6.1 Start-up Menu", then press " Enter" Next, scroll through the available menus for startup.
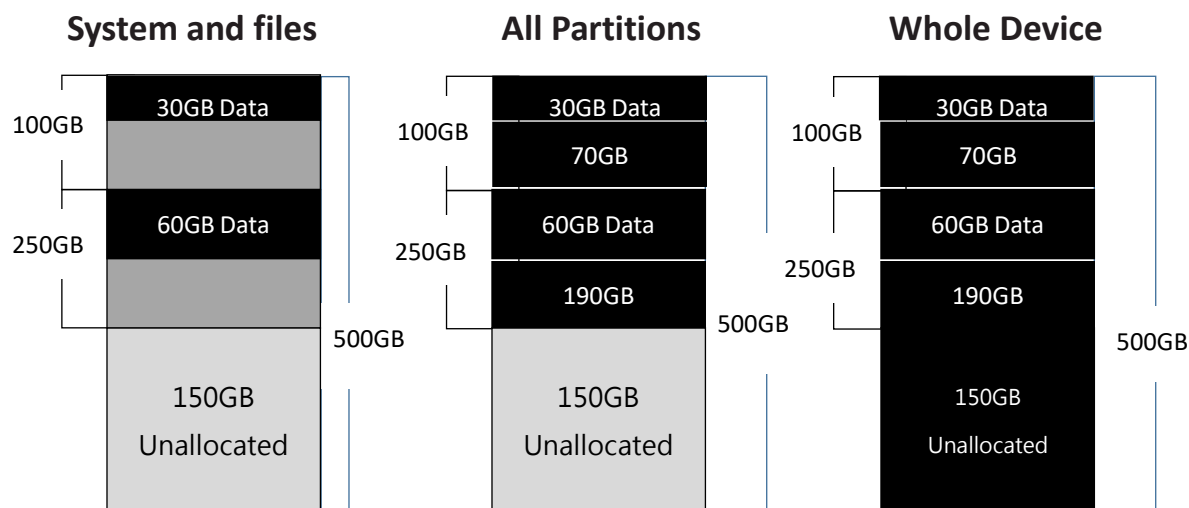
6.2 Copy Area

There are 4 submenu modes.
Scroll to select "6.2 Copy Area", then press " Enter" Then scroll through to select one of the four copy methods.

● Selecting the Proper Copy Modes

Example: There are two defined partitions in a 500GB device. The charts below illustrate what portion would be duplicated.

	System and files	All Partitions	Whole Device
100GB	30GB Data	30GB Data	30GB Data
		70GB	70GB
250GB	60GB Data	60GB Data	60GB Data
		190GB	190GB
500GB	150GB Unallocated	150GB Unallocated	150GB Unallocated

This function will analyze and copy only data and skip empty spaces.

This function will copy all data within the defined partitions.
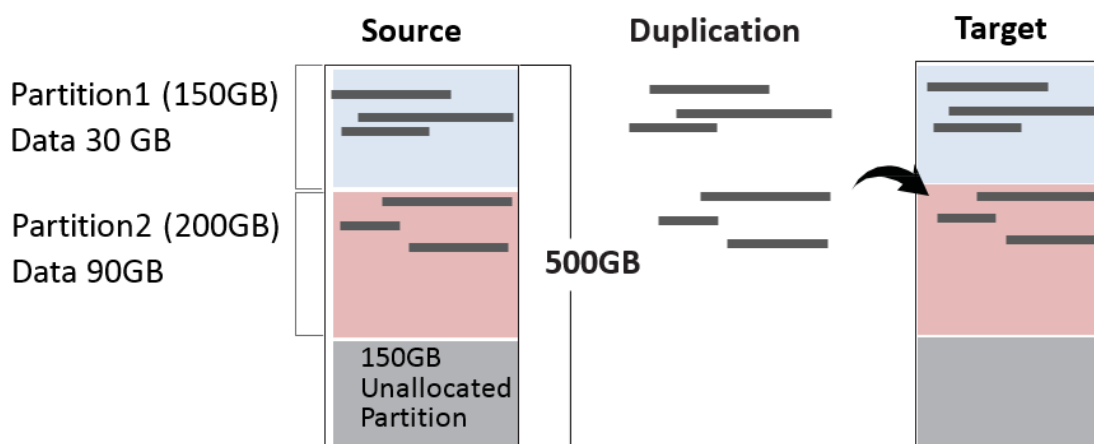
This function will copy the entire device.

❶ System and Files

Copies data and skips empty space. Only supports standard formats.
Scroll to select "6.2 Copy Area > System and Files", then press " Enter " to save the copy method.

Allows user to copy source device's System and Files, instead of the entire device. The system will analyze the source device and identify the data area to copy. If the source device's data is within the target device's capacity, the copy will be processed. FAT16/32/exFAT, NTFS, EXT2/EXT3/EXT4, and HFS/HFS+/HFSX are supported in this copy mode.
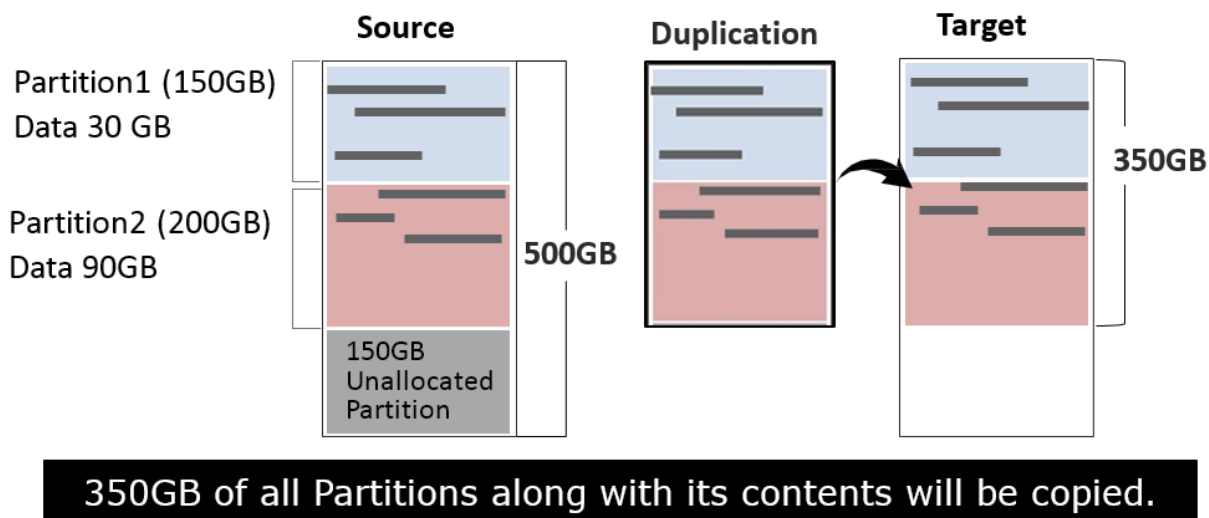
Source

Partition1 (150GB)
Data 30 GB

Partition2 (200GB)
Data 90 GB

500GB

150GB Unallocated Partition

Duplication

Target

Only 120G data area will be copied.

❷ All Partitions

Copy or skip HPA, DCO, unknown partitions, modified formats, etc. defined by settings.

Scroll to select "6.2 Copy Area > All Partitions", then press " Enter " to save the copy method.

The target device's capacity must be equal to or larger than the source device's capacity.
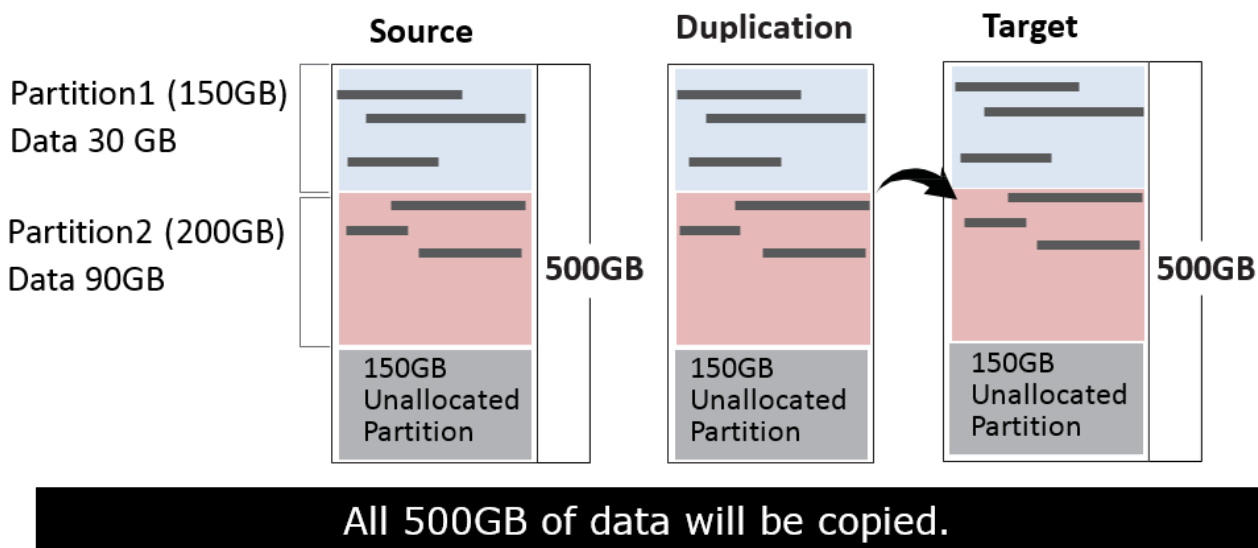

350GB of all Partitions along with its contents will be copied.

❸ Whole Device

Copies all source data, bit-by-bit.
Scroll to select "6.2 Copy Area > Whole Device", then press " Enter " to save the copy method.

Copies the whole source device, irrespective of content, format, partition, or empty space. This mode does not analyze the data.

All 500GB of data will be copied.

❹ Percentage (%)

Select percentage of source capacity to copy.
Scroll to select "6.2 Copy Area > Percentage", then press " Enter " to save the copy method.
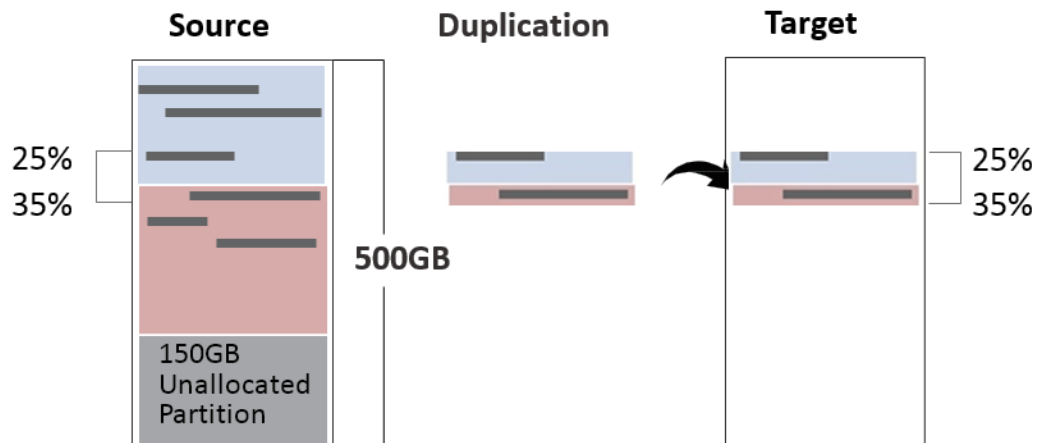
Only copies the selected area.

6.3 Copy GPT Backup Area

Disabling this function allows the duplicator to copy from big capacity device to small capacity device(s).

Note	The partition size of the source HDD must be smaller than target capacity.

GPT Index

Partition

Disabling function "6.3 Copy GPT Backup Area" will force the duplicator to ignore this area.
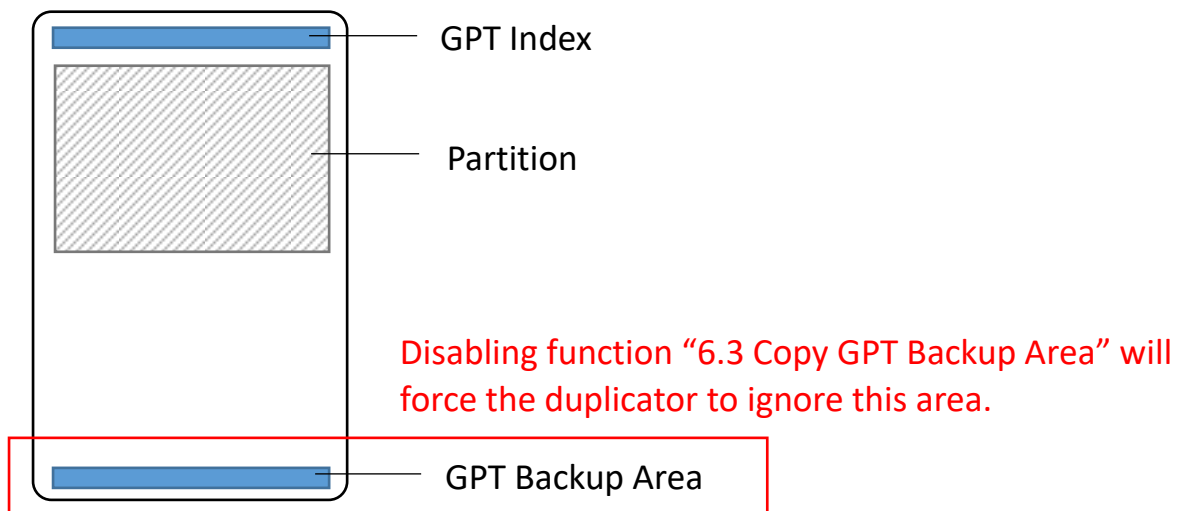
GPT Backup Area

Caution	If function is disabled, the target HDD will reconstruct the GPT Backup Area by Windows system. It may require the HDD to restart to work.

6.4 Skip Bad Sectors

Scroll to select "6.4 Skip Bad Sectors", then press " Enter " to scroll through the available

values for skipping bad sectors. If the device data is critical and needs to be a full clone, it is recommended to set "Skip Bad Sectors" at "0." Bad sectors can be set as unlimited or at a value from 0 to 65,535.

Caution	The "Copy+Compare" function is advised for enhanced copy accuracy.

6.5 Language

Select English, Japanese, Spanish.
Scroll to select "6.5 Language", then press " Enter" Then scroll through select the desired language.

6.6 Advanced Setup

6.6.1 Unknown Format

This function only works with "6.2 Copy Area >> System and Files."
Scroll to select "6.6.1 Unknown Format", then press " Enter".
Unknown format includes all forms of modified and proprietary data and partitions.

❶ Copy Unknown

Copy unknown format(s).
Scroll to select "6.6.1 Unknown Format >> Copy Unknown", then press " Enter " to save this setting.

❷ Skip Unknown

Skip unknown format(s).
Scroll to select "6.6.1 Unknown Format >> Skip Unknown", then press " Enter " to save this setting.

6.6.2 Erase Master

This function allows user to enable or disable the source port for sanitization.
Scroll to select "6.6.2 Erase Master", then press " Enter" Then scroll through to select one of two settings.

❶ Disabled

Devices connected to source port cannot be erased.
Scroll to select "6.6.2 Erase Master >> Disabled", then press " Enter " to save this setting.

❷ Enabled

Devices connected to source port can be erased.
Scroll to select "6.6.2 Erase Master >> Enabled", then press " Enter " to save this setting.

6.6.3 Delete Disk Signature After Copy

Set at "Yes" means do not copy the disk signature part.

14

This function is for Windows only. Windows will only recognize one device if you connect two or more with the same disk signature.

| Caution | "Compare" function will always Fail if "6.6.3 Delete Disk Signature After Copy" is set at "Yes." |

6.6.4 PCIe Speed

Sets data transmission speed at "Normal" or "Low Speed."

6.6.5 Clean SSD Before Copy

Sets to clear SSD before copy function. The default setting is "No".

6.7 Restore Defaults

Restores all setting to manufacture defaults.
Scroll to select "6.7 Restore Defaults", then press " Enter " to restore settings back to manufacture defaults.

Specifications are subject to change without notice.