



PCIe NVMe/SATA SSD Duplicator & Sanitizer YL Series PRO User Manual



Disclaimer

The duplicator machine is specially designed for data backup of storage devices. Please observe the relevant provisions of copyright when using it. Any backup without the consent or authorization of the copyright holder is illegal. Please confirm before backup. The duplicator is not responsible for any illegal acts, and the user is responsible for all legal liabilities.

The source port of duplicator is write-protected, and the settings and data content of any storage device in the source port will not be changed at all. Do not place the source storage device on the target port to avoid accidentally changing (deleting) of data. It has nothing to do with the duplicator if there is any mistake in correcting (deleting) the data by user. In addition, the duplicator is not responsible for the risks and data losses incurred as a result of duplication. By purchasing this product, the user accepts this statement and agrees to be bound by it.

Before Use

1. Please read this manual carefully before the operation to avoid any misconduct.
2. Make sure that the storage device you want to use is of good quality and can be used normally.
3. The capacity of target storage device must be greater than or equal to the capacity of source storage device to avoid incomplete data backup.
4. It is recommended to use the Copy + Compare function when backing up, to ensure that the backup data is 100% the same as the source data, because the target storage device may have write errors or damaged sectors.
5. When updating the firmware, please do not turn off the power. If the power is interrupted accidentally, the machine cannot be turned on, and it must be returned to the factory for processing.
6. Keep the duplicator used in a dry environment. Rain, moisture, liquid, etc. may corrode the circuit board and cause the machine to malfunction.
7. Avoid using the duplicator in dusty or dusty environments. Dust may cause bad contact with the port.
8. This product warranty does not apply to accident, man-made destruction, abuse, or improper use (such as using not in accordance with the product description, or intended to exceed the scope of use for which this product was designed, or improper use of fixtures, etc.)
9. If the duplicator performs normally, it is strongly recommended not to update the firmware, unless there is a problem in use or a new function is required.
10. For convenience, the source storage device will be referred to as the source device, and the target storage device will be referred to as the target device in this manual.

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I. Introduction

This duplicator system is designed and developed based on the FPGA from the world famous semiconductor company XILINX. Every processing channel is parallel to each other with its own control unit, therefore the duplicator will not sacrifice speed for the increasing number of targets loaded - always remain the same and fast copy speed. The duplicator supports intelligent copy with multiple file formats created by three major operating systems (Windows/Linux/MAC), and makes mirror copies of data efficiently. Furthermore, this duplicator has been fully tested with quality assurance before leaving our manufacturing facility.

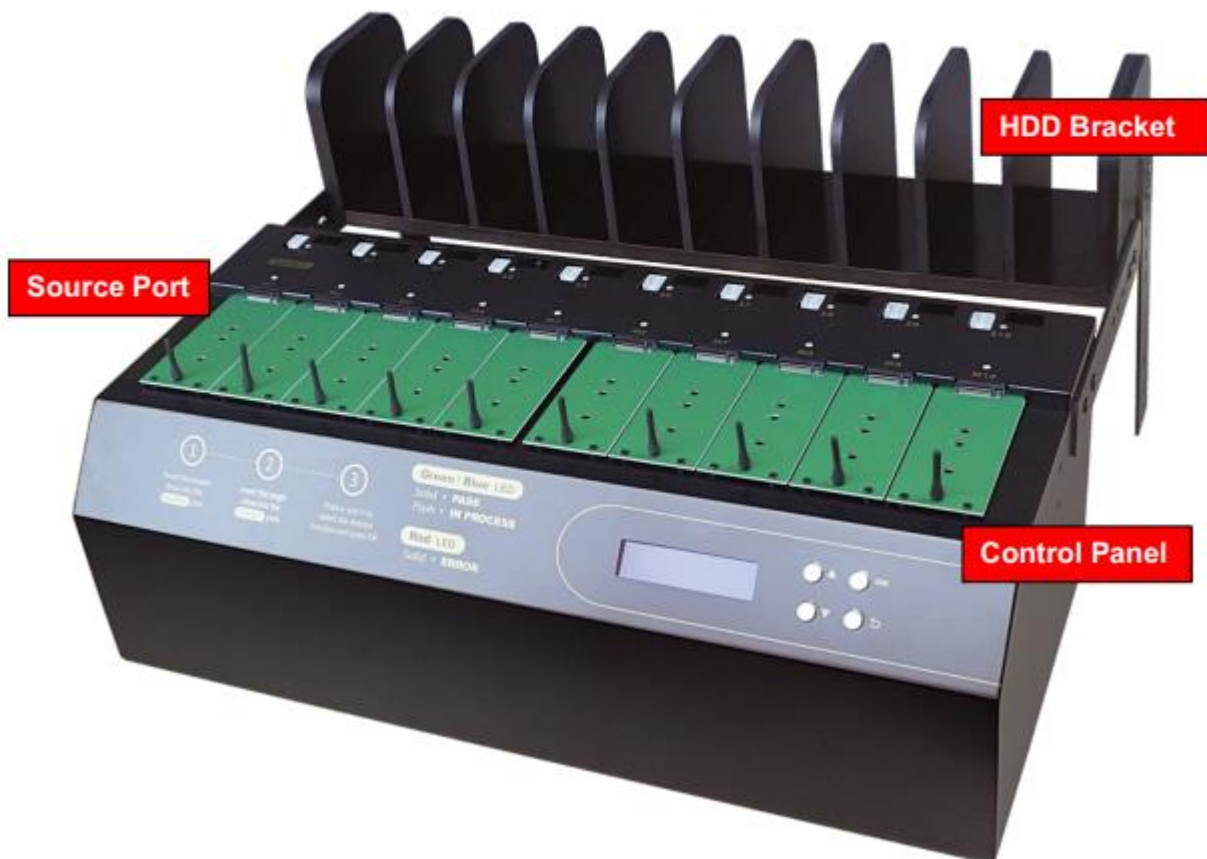
1. Features

- a. Each processing channel has its own control unit and operates independently with dedicated bandwidth of up to 300 or 600 MB per second depends on the model.
- b. Standalone operation. No PC or software is required, minimizing possible computer virus infection.
- c. Instant power on and off, no warm-up or cool-down required.
- d. Easy-to-use One-Touch copy operation.
- e. Compare function available for verification of copy accuracy.
- f. Menu options are user-friendly and easily accessed through the 4-button control panel. Use ▲ or ▼ button to scroll through the options and view the operation status of each channel on the 2-line backlit LCD display.
- g. Powerful 32-bit CRC checksum to assure data integrity.
- h. Heavy-duty hardware construction for commercial production or personal use.
- i. 115V and 230V switching power supply maximizes portability for operation anywhere.
- j. Designed to save users time and effort in creating multiple copies quickly and reliably.
- k. Unique source data analysis to copy data area only to achieve highest efficiency
- l. Supports multiple file formats: Windows: FAT 16/32、exFAT、NTFS, Linux: ext 2/3/4、LVM、XFS, Mac: HFS/HFS+/HFSX

m. Not only to do copy, but also test device capacity and reading/writing speed.

2. Duplicator Introduction

The following picture shows the 1-9 Systor NVMe Pro duplicator as an example. The source port can be selected from M.2 or SATA. The appearance of the duplicator may be changed without notice.



3. Control Panel Overview



▲ Button: Up, Backward: To navigate backward in the menu.

▼ Button: Down, Forward: To navigate forward in the menu.

OK Button: Enter, OK: Execute the function.

Back Button: Escape, Cancel: Go back to the previous level in the menu.

Operation	Standalone (No PC or Software is required)
Target	4, 9
Transfer Speed	300MB/s 600MB/s
Copy Mode	Synchronous
Copy Area	File and System, Percentage, All Partition, Nonzero and Whole Media,
Supported Media	SATA SSD/HDD and M.2 NVMe/SATA SSD
Supported File System Format (for Intelligent Copy)	Windows : FAT16/32, exFAT, NTFS Linux : ext2/3/4, LVM, XFS MAC : HFS/HFS+/HFSX
Display	2-line Backlit Monochrome LCD
Control Button	4 push-button control panel (OK, Back, UP, DOWN)
Memory	256MB DDR3

4. Specifications

II. Notice

1. The duplicator tasks mentioned in this user's manual are as following: Copy, Compare, Copy + Compare, Capacity Check, Format, Erase and Quality Check.
2. The Green/Blue LED flashes during the execution process of a task. After the task is done, the Green/Blue LED will stay solid if the process is successful, otherwise the Red LED will be on if the process is failed.
3. Press and hold **Back** button during the execution process of a task will stop and exit the execution of the task.
4. DO NOT unplug HDD/SSD drive from the duplicator during the execution process of a task. It may cause damage to the duplicator system and media.
5. It is strongly recommended that the capacity of target storage device must be greater than or equal to the capacity of source storage device to avoid incomplete data backup.
6. The setting **5.11.4 Erase Source Port** is to set if the data of source port can be erased. It is used for all erase, format and quality check functions.

When setting is Enable, the data in source port will be erased.

- If **Erase Source Port** is Disable, a prompt "**Target** data will be erased!" will be showed to double check entering the erase function.
- If **Erase Source Port** is Enable, a prompt "**Source** and **Target** data will be erased!" will be showed to double check entering the erase function.

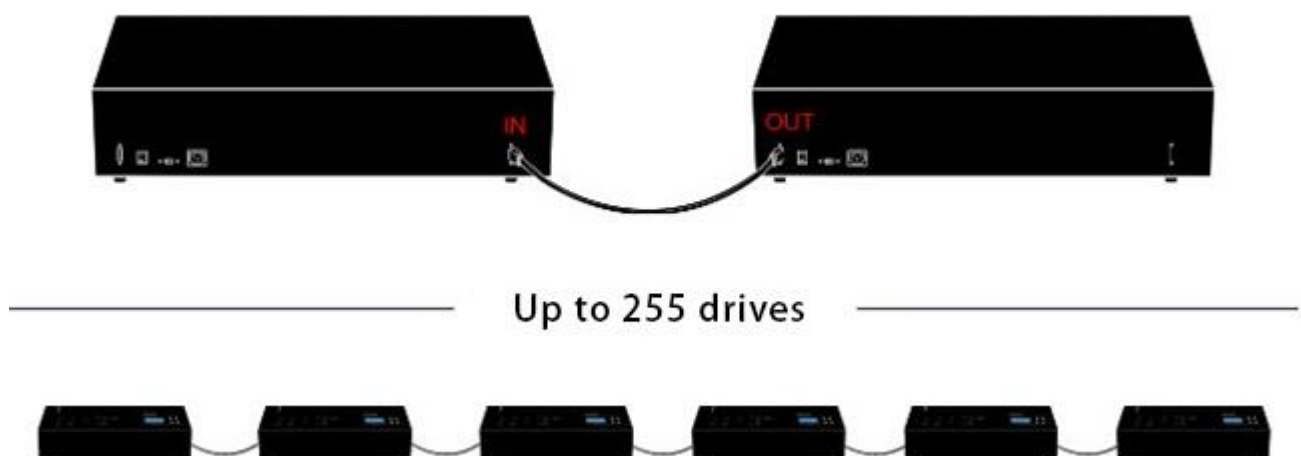
III. Operation Overview

The duplicator will start to execute a task after the source and target devices have been inserted and the OK button is pressed. The task will begin and end at the same time for all target devices. Any other target device plugged in during the process of a task will not be executed with the task.

- a. Insert source media into the source port and blank media into the target port properly.
- b. Select the task from menu, and press **OK** button to execute it.
- c. **If the Target SSDs are not fully connected, pressing the OK button again will execute the function immediately. Otherwise, if the OK button is not pressed again, the function will be executed about 40 seconds later.**
- d. During the execution process, the status of each target device can be checked by using the ▲ and ▼ buttons.
- e. After the task is done, LCD display will show the number of successful and failed target(s), and execution time.

IV. Daisy Chain Operation

The Systor NVMe PRO duplicator has a daisy chain function. It can link multiple duplicators as one unit. The unit only needs one source at the 1st duplicator and the source ports after 1st duplicator will become target ports. The connection method is shown as below.

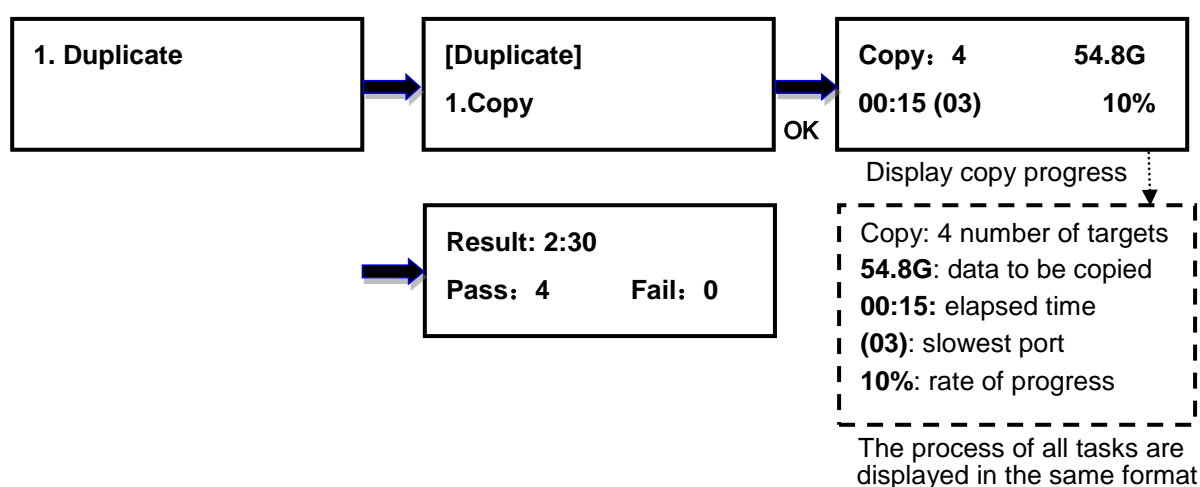


V. Menu Overview

1. Duplicate

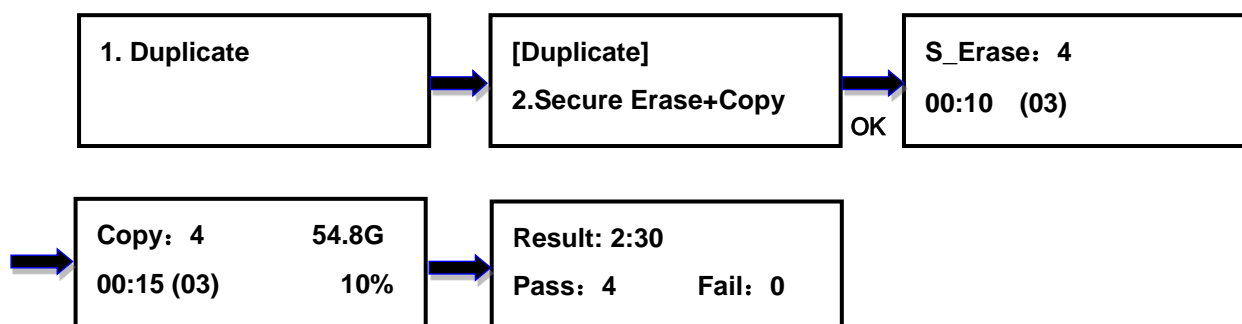
1.1 Copy

To copy from source device to target device(s), please go to **5.1 Copy Area** to select the setting first before this step. Press OK the copy task will be executed immediately. Other tasks have the same execution for other tasks.



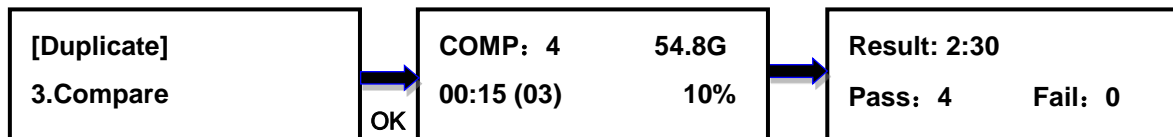
1.2 Secure Erase+Copy

Before Copy, Secure Erase will be executed first to reset device(s) as factory setting. It can enhance copy speed for used SSD. After Secure Erase, Copy will be executed immediately.



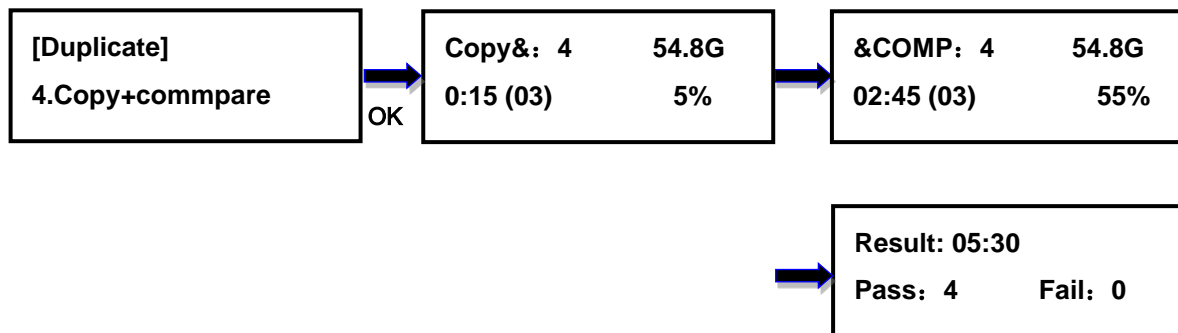
1.3 Compare

This command allows to compare the copied target devices against the source for accuracy.



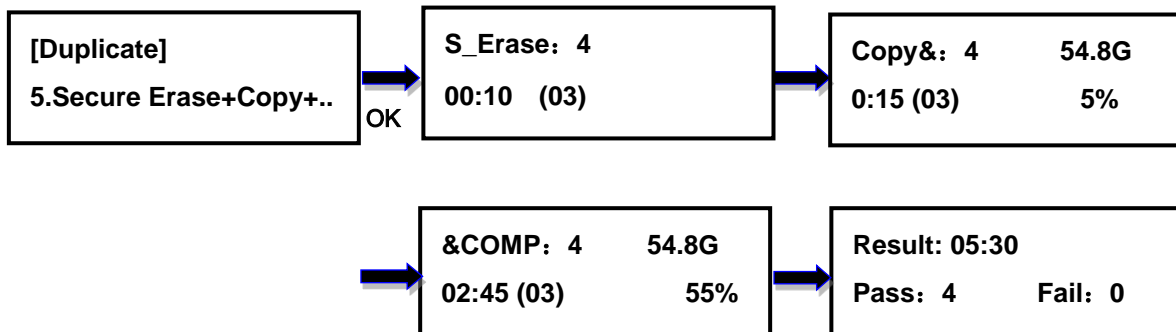
1.4 Copy + Compare

This command allows duplicator to start Copy process first, then follow with Compare process immediately.



1.5 Secure Erase+Copy+Compare

Before Copy, Secure Erase will be executed first to reset device(s) as factory setting. It can enhance copy speed for used SSD. After Secure Erase, Copy will be executed immediately and then Compare.

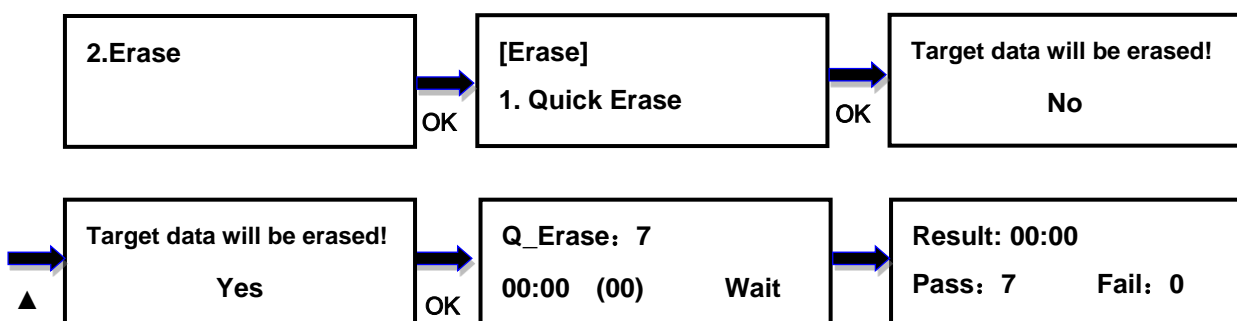


2. Data Erase

Users can enable the setting of **5.11.4 Erase Source Port** to improve the efficiency. The default is [Disable](#).

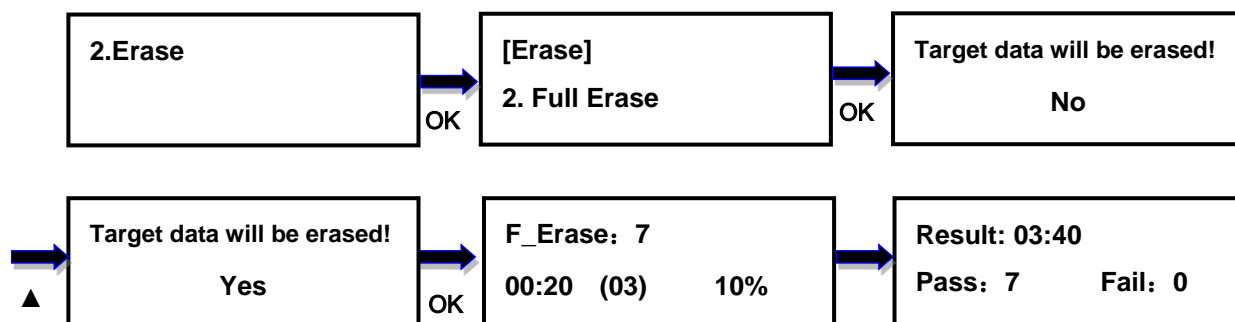
2.1 Quick Erase

This option erases the table of content of file system of the target device, so it is fast to do Quick Erase. There is chance that some files can be retrieved by software.



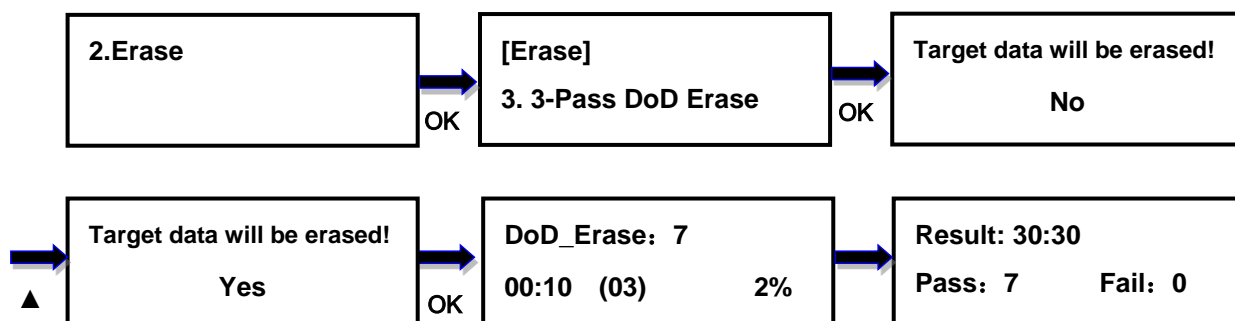
2.2 Full Erase

This option completely erases the content of target device. It takes longer time to erase and the content will not be retrieved by software.



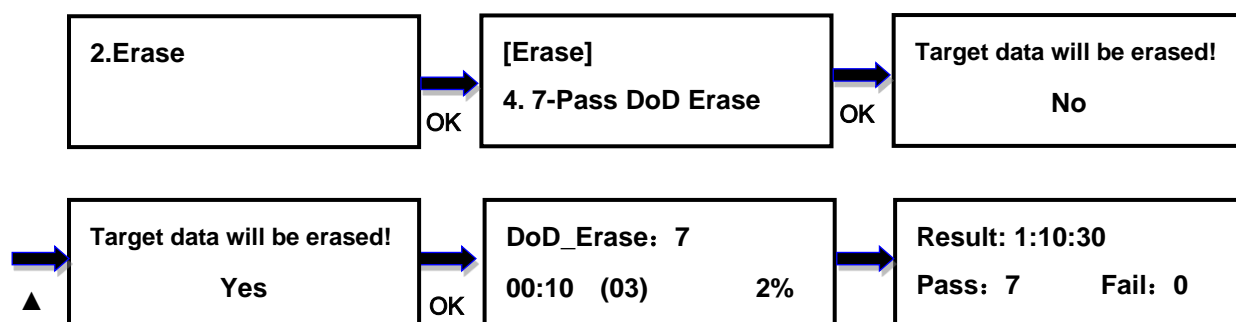
2.3 3-Pass DoD Erase

This is to comply with the U.S.A. Department of Defense (DoD 5220) standard to fully erase the media by rewriting bit by bit three times to guarantee the data to be permanently deleted. It takes long time to erase, and the content will not be retrieved by software.



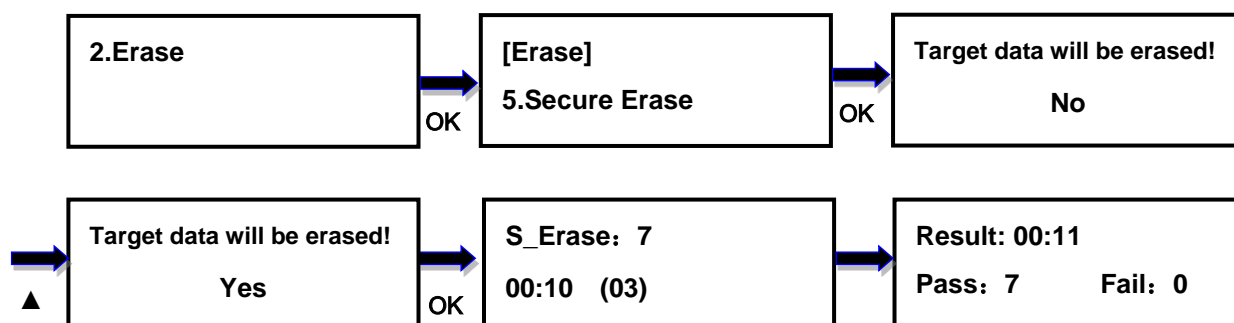
2.4 7-Pass DoD Erase

This is to comply with the U.S.A. Department of Defense (DoD 5220) standard to fully erase the media by rewriting bit by bit seven times to guarantee the data to be permanently deleted. It takes long time to erase, and the content will not be retrieved by software.



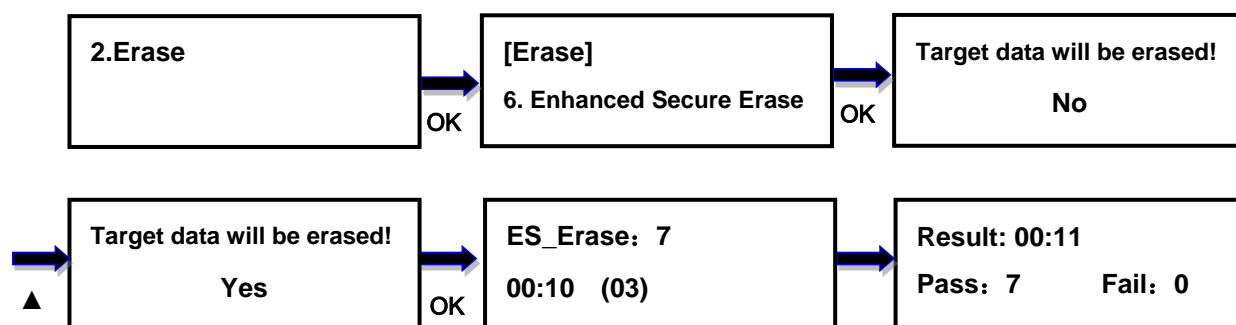
2.5 Secure Erase

The Secure Erase is dedicated to erasing SSD. It resets all its storage cells as empty - restoring the SSD to factory default settings and write performance. Secure Erase is recognized by the US National Institute for Standards and Technology (NIST), as an effective and secure way to meet legal requirements data sanitization attacks against up to laboratory level. It only spends few seconds (the real time depends on drive) when used for SSD.



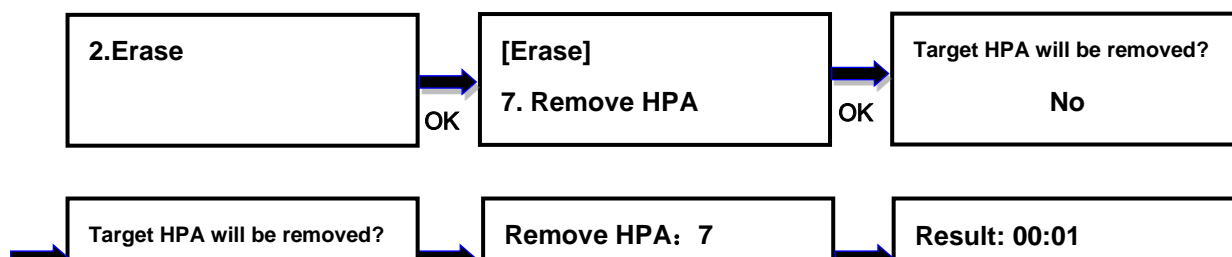
2.6 Enhance Secure Erase

The Enhance Secure Erase is similar to Secure Erase. Beside the function of Secure Erase, it shall write predetermined data patterns to all user data areas. All previously written user data shall be overwritten, including sectors that are no longer in use due to reallocation.



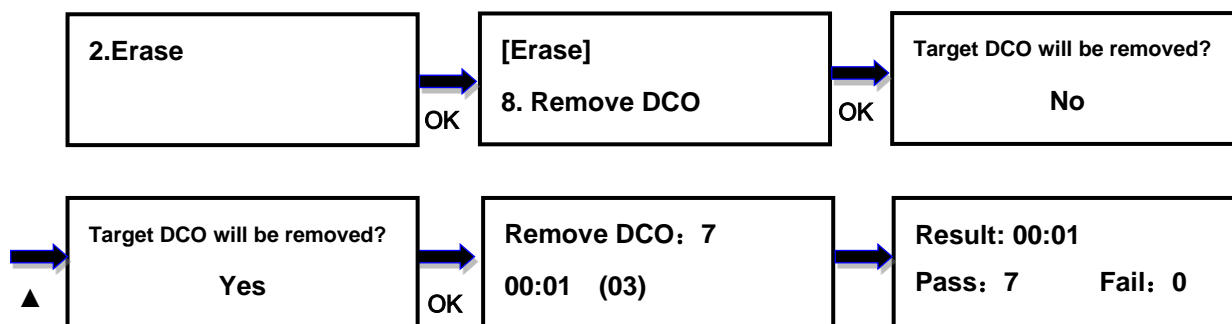
2.7 Remove HPA

This option removes the HPA setting of the disks inserted into the target ports.



2.8 Remove DCO

This option removes the DCO setting of the disks inserted into the target ports.

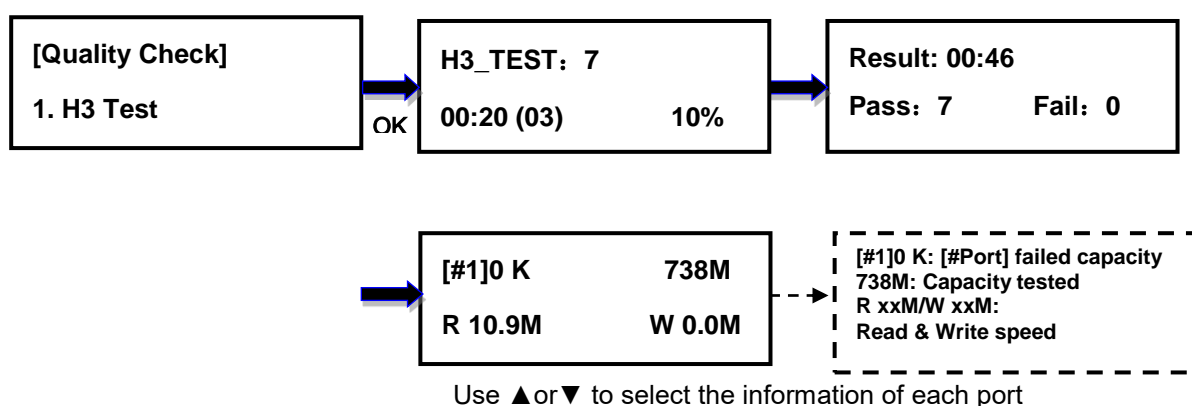


3. Quality Check

Users can enable the setting of **5.11.4 Erase Source Port** to improve the efficiency. The source port can be set to execute the Quality Check function. The default is [Disable](#).

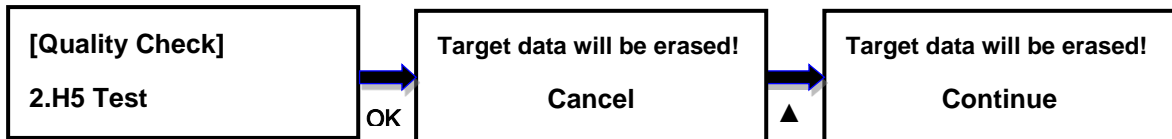
3.1 H3 Test

Testing Read function under designated area in the device to verify if it is good. It will not change the original data stored in the device. **Attention: this function only tests Read function, but not Write function.**



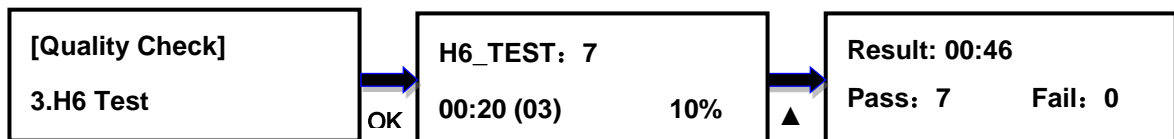
3.2 H5 Test

Testing Read and Write function under designated area in the flash media. It will clear the original data stored in the device, and format or secure erase the device after the testing is done.



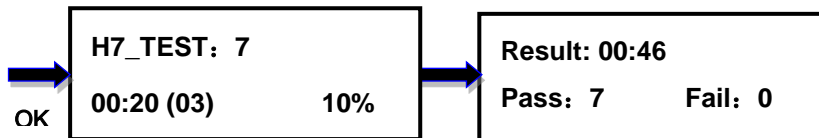
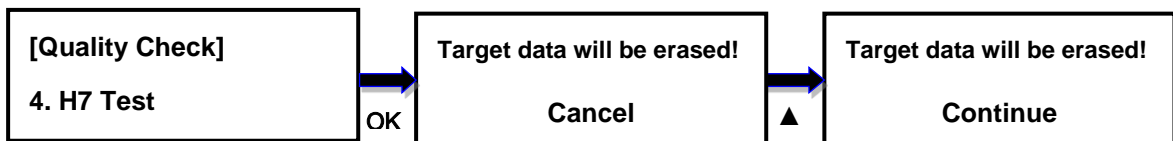
3.3

Testing OK → H5_TEST: 7
00:20 (03) 10% → Result: 00:46
Pass: 7 Fail: 0 (area are excluded) in the storage device. It will not change the original data stored in the device.



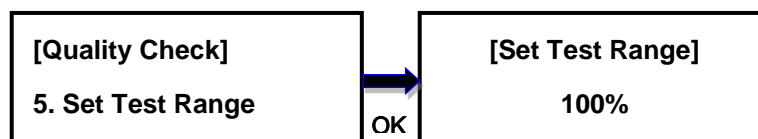
3.4 H7 Test

Advanced method to test the Read and Write function twice under designated area in the device, which can effectively detect the overrated capacity of device. It will clear the original data stored in the device, and format or secure erase the device after the testing is done.



3.5 Set Test Range %

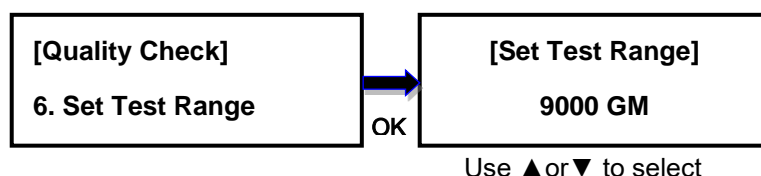
Set up the testing range. It can be set from 1% to 100%.



Use ▲ or ▼ to select

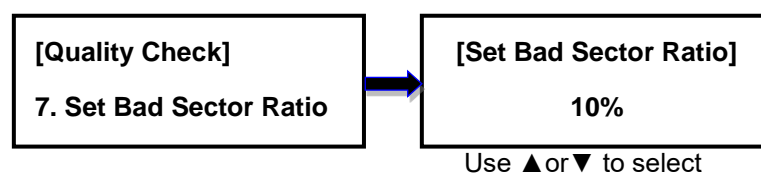
3.6 Set Test Range Byte

Set up testing range. It can be set from 1GB to 9000GB. Both 3.5 & 3.6 are for setting test range, the last setting works. For example, when you set Test range=10% then set 100GB, the test range is 100GB. When you set 10% again, the test range is 10%.



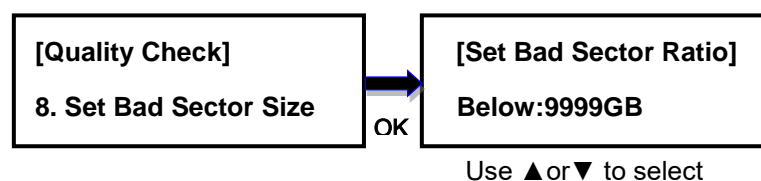
3.7 Set Bad Sector Ratio

Set up tolerance ratio of bad sector for device testing, from 0.01% to 50% or OFF.



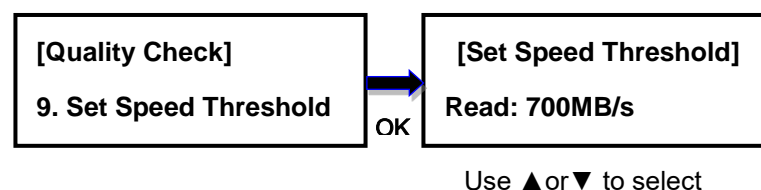
3.8 Set Bad Sector Size

Set up tolerance size of bad sector for flash media testing, from 0MB to 9999GB or OFF.
Both 3.7 & 3.8 are for tolerance of bad sector, the last setting works.



3.9 Set Speed Threshold

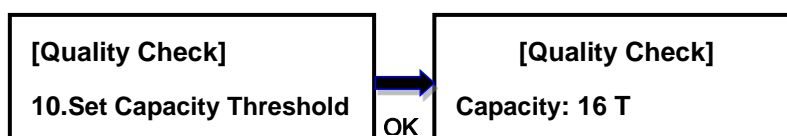
Set up minimum Read and Write speed for flash media testing, ranging from 5MB/S to 700 MB/S or OFF.



3.10 Set Capacity Threshold

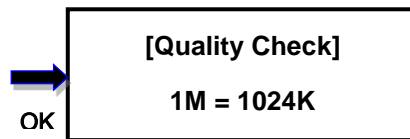
The difference between actual capacity and labeled capacity of storage device is allowed and the threshold can be set up in 3 steps.

Capacity: Set up labeled capacity from 32MB to 16TB, Depend on Source, and OFF.

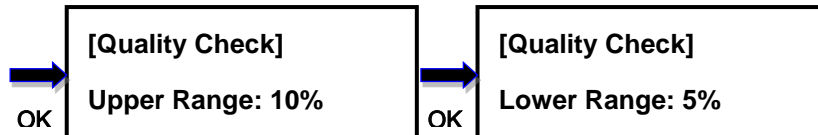


Use ▲ or ▼ to select

Unit: You can choose the unit of 1M=1000K or 1M=1024K.

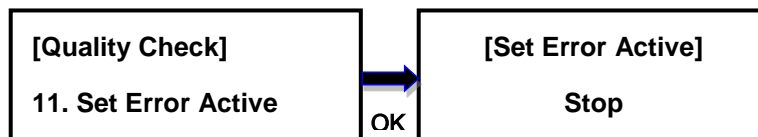


Tolerance: Set up the tolerance ratio for the difference between actual and labeled capacity, ranging from 0 to 50%.



3.11 Set Error Active

This is the setting to stop or continue the test when any of the testing conditions (such as Capacity Threshold or Bad Sector Ratio) is failed to meet.



Use ▲ or ▼ to select

3.12 Set Format Type

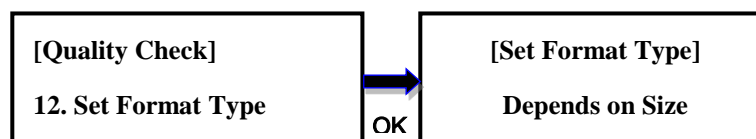
H5 and H7 Test will format the storage devices after testing. This setting is to set up the file system format for the Format function implemented by H5 and H7 Test. The options are Depends on Size, FAT32, exFAT and off. The default is Depends on Size.

Depends on Size: System will automatically select FAT16 when the size is smaller than 2G, select FAT32 as file system format when the flash media capacity is less than or equal to 32 GB, and select exFAT when the flash media capacity is greater than 32 GB.

FAT16: Select FAT16 as file system format.

FAT32: Select FAT32 as file system format.

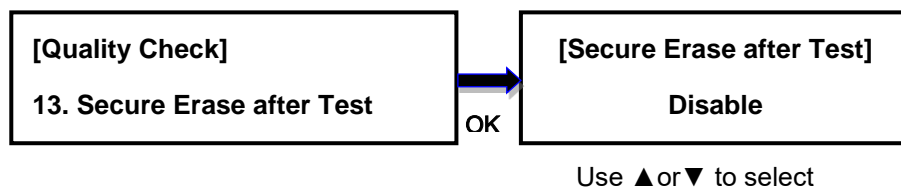
exFAT: Select exFAT as file system format.



Use ▲ or ▼ to select

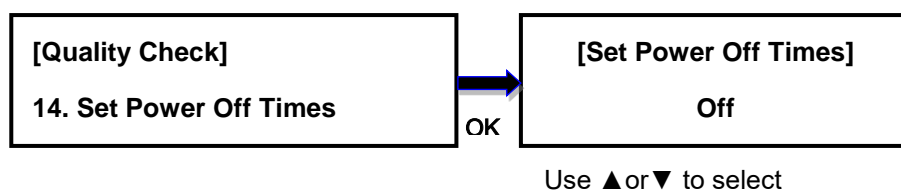
3.13 Secure Erase after Test

This is the setting to Enable or Disable execute secure erase after H5 or H7 test finished. The priority of this setting is high than format setting. For example, if Format Type set exFAT and Secure Erase after Test is Enable, only Secure Erase is executed.



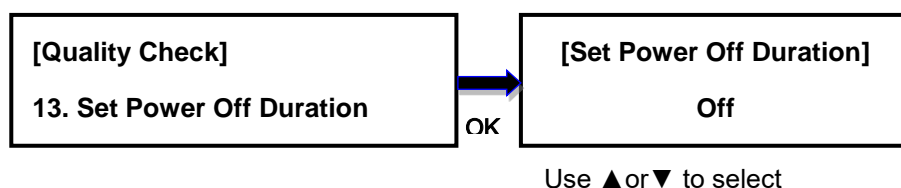
3.14 Set Power Off Times

This is the setting to set power off times when execute quality check function. The power off times is for each read/write process. For example : H5 Test : if setting is 3, 3 times power off will be happened in write & read process separately. The setting is from 5 to 1000 times and off. The default is off.



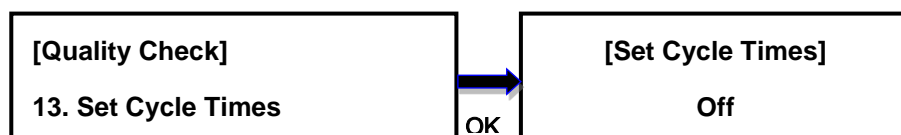
3.15 Set Power Off Duration

This is the setting to set the power off duration when the option is not off. It set the power off duration for each power off time. The setting value is from 5 to 100 sec and off. The default is off.



3.16 Set Cycle Times

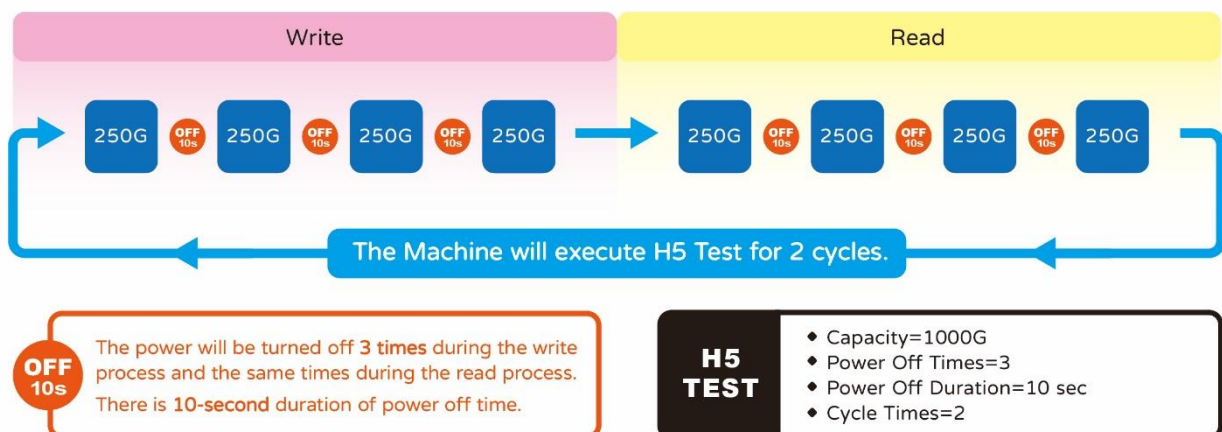
This is the setting to set the execution times of quality check function. The setting value is from 5 to 100 times and off. The default is off.



Use ▲ or ▼ to select

The example with H5 Test as follows :

- Power off times=3
the power off will be happened at the position of 250GB、500GB、750GB
(1000G/(3+1)=250G)
- Power off Duration=10 sec
The each power off time is 10 sec.
- Cycle Times=2
The machine will execute H5 2 times.

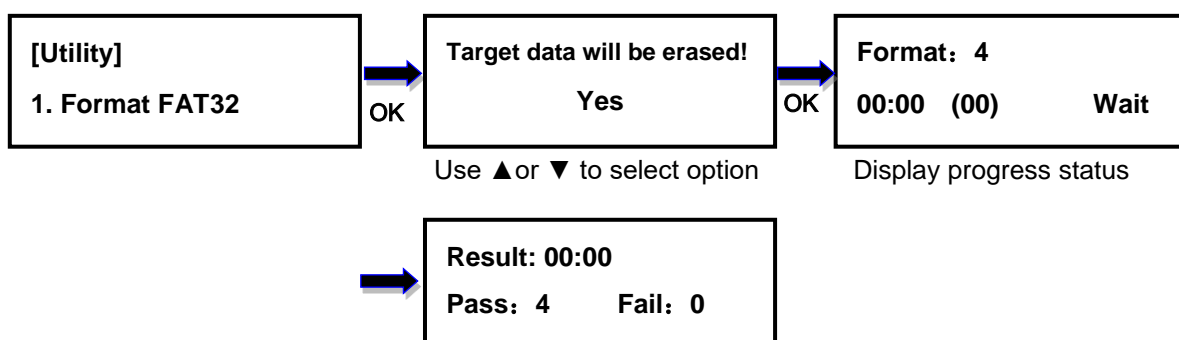


4. Utility

4.1 Format FAT32

The source port can be set to execute or not at **5.11.4 Erase source port**. The default is [Disable](#).

This option allows to format the target device to FAT32 file format. User will be asked if it is sure to format the target devices before the Format process starts.

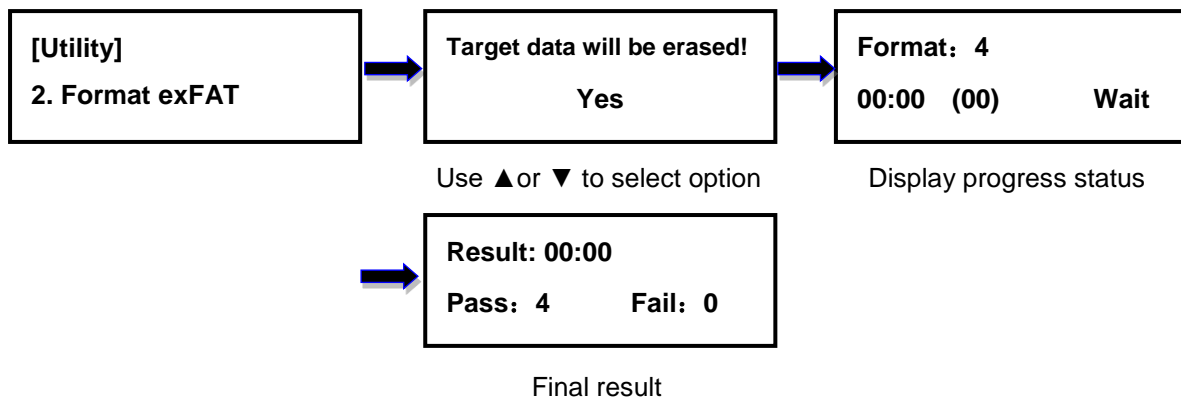


Final Result

4.2 Format exFAT

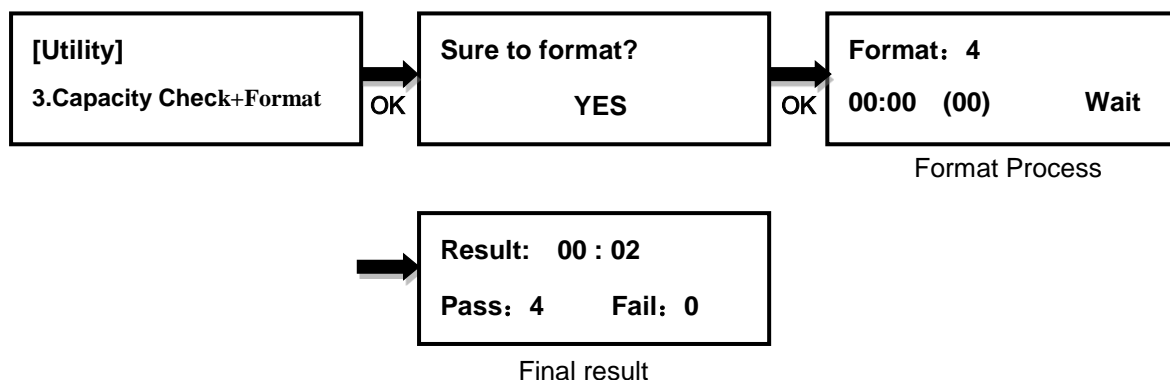
The source port can be set to execute or not at **5.11.4 Erase source port**. The default is [Disable](#).

This option allows to format the target device to exFAT file format. It will not format the source device, avoiding accidentally erasing the original data content. User will be asked if it is sure to format the target devices before the Format process starts.



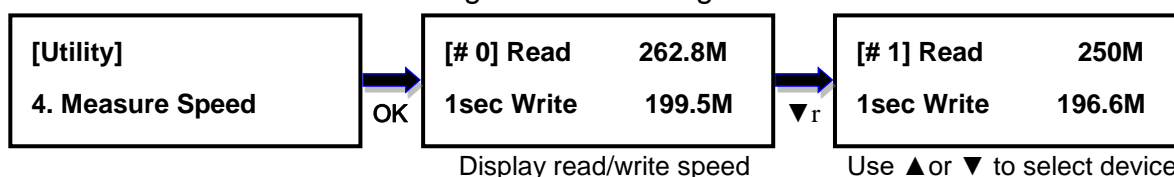
4.3 Capacity Check + Format

It will format the devices to the file format according to the system Setup (please refer to 5.7 Set Format Type), then sort out target devices based on the capacity threshold (please refer to 5.8 Set Capacity Threshold). Duplicator will display the device which is not in the capacity range and its red LED will flash. Press ▲ ▼ button to switch between the target devices with smaller capacity to check the data status. The ones without capacity issue will not be displayed to expedite the capacity check process. If Format and or Capacity Check is failed, the red LED will stay solid on.



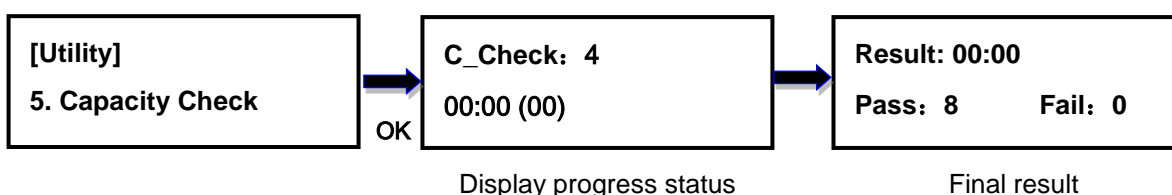
4.4 Measure Speed

This option allows to measure the actual Read and Write speed of the target device. This option will NOT alter or erase existing data on the target device.



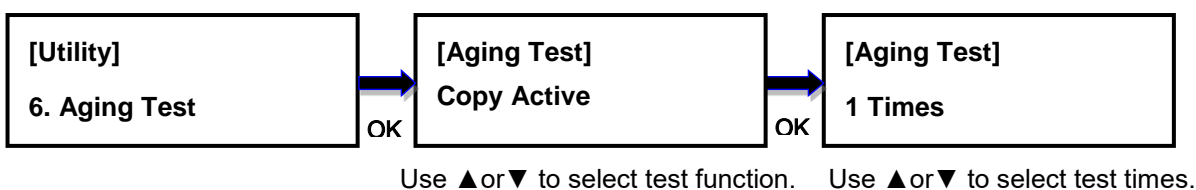
4.5 Capacity Check

This command allows to verify the device capacity. It can detect the actual capacity of devices within 3 seconds.



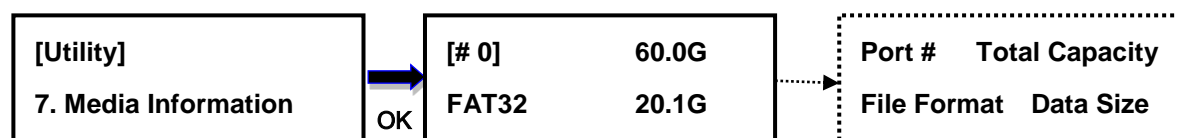
4.6 Aging Test

Users can set the test function and test times for Aging test. There are 5 functions, Copy, Secure Erase+Copy, Compare, Copy+Compare, Secure Erase+Copy+Compare, can be selected. Test times from 1 to 10,000 times can be selected.



4.7 Media Information

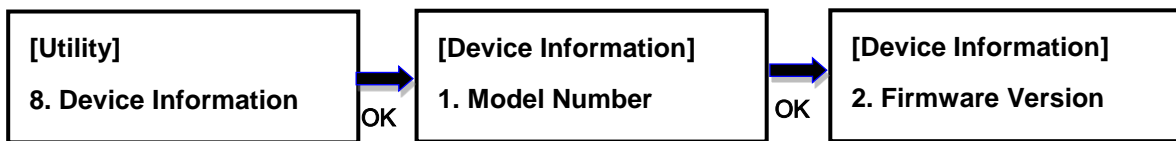
This option displays the information of selected device media, such as total capacity, file format and the size of data content.



Use ▲ or ▼ to view the information

4.8 Device Information

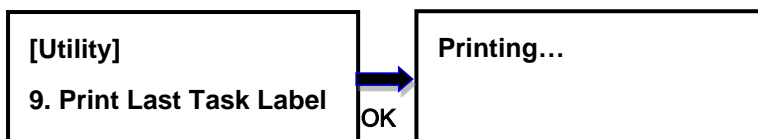
This option displays the device information of the selected device. The information are listed as follows. **Model Number, Firmware Version, Serial Number, Power Cycle Count, Power-on Hours, Reallocation Event Count, Offline Scan Uncorrectable Sector Count, Seek Error Rate, Temperature.**



Use ▲ or ▼ to select option

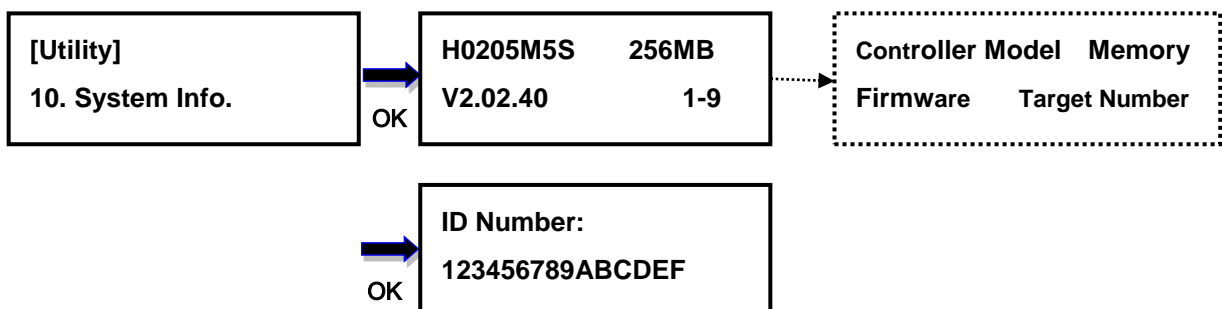
4.9 Print Last Task Label

If the label quality is not good of the last task or getting lost, this option allows user to print the label(s) of the last task again.



4.10 System Info.

This option displays general information of the duplicator, including controller model, system memory size, firmware version, number of targets and ID Number.

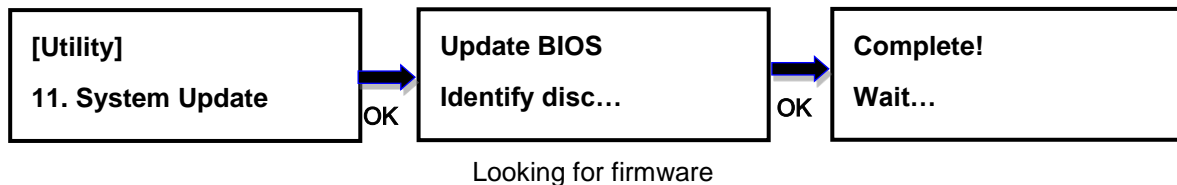


4.11 System Update

This option allows user to update the firmware of duplicator when necessary. Please obtain the proper firmware file from manufacturer, and save the unzipped file under home folder on

the device ([The file system of should be FAT32](#)). Insert the M.2 SSD containing the firmware into the source port of duplicator and press OK. It will update the system, reboot the duplicator automatically after update, active and operate under the new firmware.

Please do not reboot the duplicator manually.

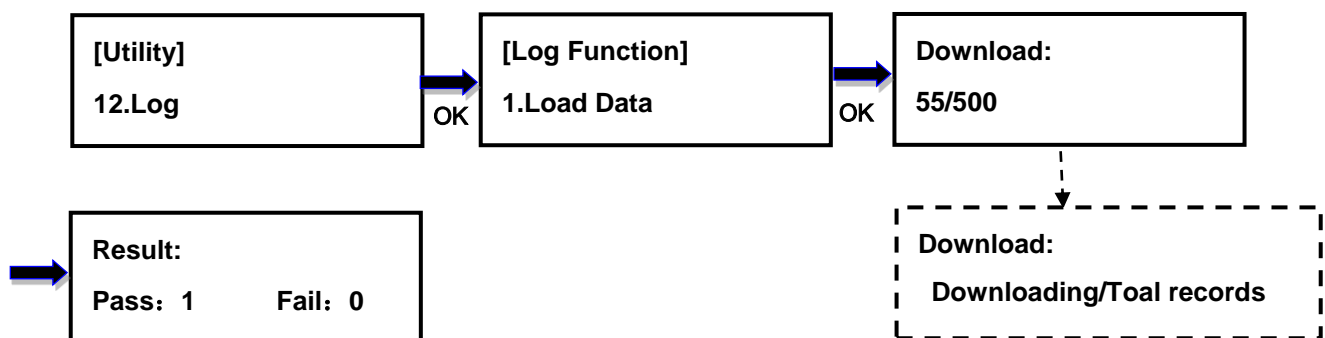


4.12 Log Menu

The duplicator keeps logs in the flash memory of Copy, Compare, Copy+Compare, Erase, and Format function. 10,000 records of log data can be stored. The records of log data for a task is the number of source+targets+1. For example : 1 to 3 copy task needs $1+3+1=5$ records. 3 exFAT format task needs $0+3+1=4$ records. The log file is **read only**. Users cannot modify the log data.

4.12.1 Load Data

Insert a disk into the **Port M2**. The file system of the disk must be FAT32 or exFAT.



Open the file from computer. The file name of log file is "LOG_DATA_XXXX.txt". XXXX is from 0000 to 9999 in sequence. If no log file in the disk, it starts from 0000. If 0000 is exist in the disk, it will be added 1 to be 0001 and so on. The information in log file is shown below. It was recorded for 1 to 3 Copy and uses 5 log records.

[Log File]
 System Model: E0205M5S Target Number: 4
 Firmware Version: v2.02.40
 Machine ID: 84E15PF8SMS6RBA1

Machine boot at 2023/4/09 17:07

Task: Copy

Copy Area: System and Files

Smaller Target: Partly Copy

Unknown Format: Copy

HPA: Skip

DCO: Disable

Performance: Speed

Mode: Synchronous

Source:

Device Model: UMAX M.2 G3X4 256GB T

Series Number: 7FBC07171BD900188745

Capacity: 238.4G

Data size: 3555M

Result:

Total: 3

Pass : 3

Fail : 0

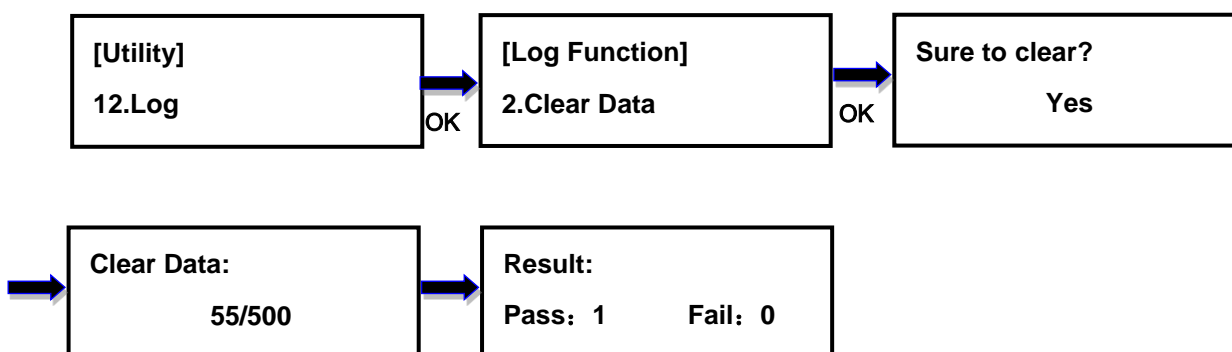
Spend Time : 00:00:07

[Detail Target Records]

Space . NO.	Label NO.	Port	Result	Start Time	Spend Time	Device Model	Target Capacity	Series Number
0001	0002	M1	Pass	2023/04/09 16:09	00:00:10	PLEXTOR PX-128M5Pro	119.2G	P02314109173
0002	0003	M2	Pass	2023/04/09 16:09	00:00:11	SanDisk SSD U110 64GB	58.6G	140791403873
0003	0004	M3	Pass	2023/04/09 16:09	00:00:12	ADATA SP550	111.7G	2F3820030313

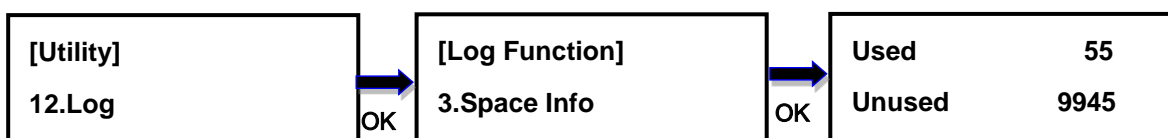
4.12.2 Clear Data

This option clears all the log data in duplicator.



4.12.3 Space Info

This option shows the number of log records and amount of free space available.



5. Setup

5.1 Copy Area

This option allows to select the area on the source device to copy onto the target devices. You may select **System and Files** to skip all the unoccupied area on the source device or **Percentage**, **All Partition**, **Whole Media** and **None-Zero**. By default, the copy area is set up as [System and Files](#).

System and Files

The duplicator first analyzes the file format of source device. You may copy only the system and files area to save overall copy time if the file format is FAT16, FAT32, exFAT, NTFS (Windows), EXT2, EXT3, EXT4 (Linux), LVM, XFS and HFS/HFS+/HFSX (Mac). For instance, the source device has 8GB capacity but with only 50MB of data in FAT32 file format. The duplicator will copy only the 50MB of data area to the target device, hence shortening overall copy time.

Percentage

When selected, the duplicator copies the selected percentage range. Users can set copy percentage at this item. It has nothing with data or empty spaces.

All Partition

When selected, the duplicator copies all partitions in the drive. It will not copy the area that have not been partitioned.

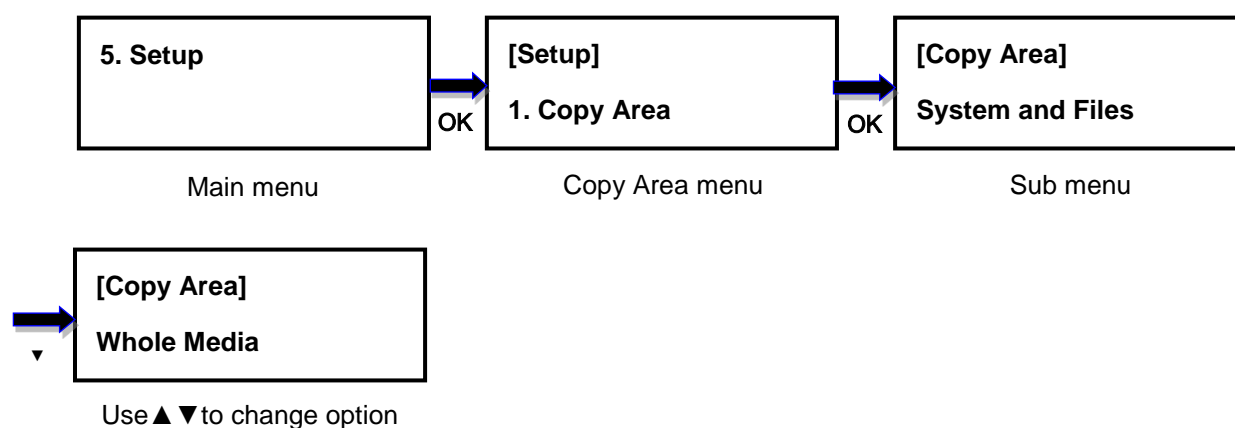
None-Zero

When user select the option, the duplicator will analyze the data first where the none zero data located and then store on the DDR. After analysis, the copy will be start immediately. Duplicator will only copy none zero area. When finished, user just need to change another target devices and then press OK. Don't need to do analysis again unless exit the function.

Remark : The data of targets device must be all Zero. Can use 1.2 Secure Erase+Copy

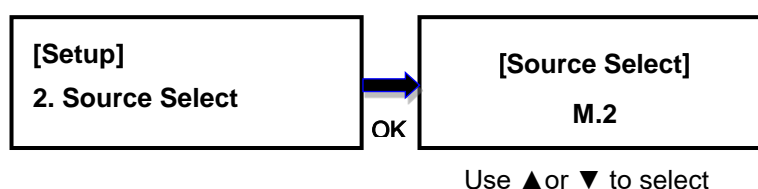
Whole Media

When selected, the duplicator copies the entire content on the source device, including both the data and empty spaces. This option is used when you have a source device with unknown file format. For instance a source device has 8GB capacity and 50MB of data with unknown file format, the duplicator will copy the whole 8GB of content to target device.



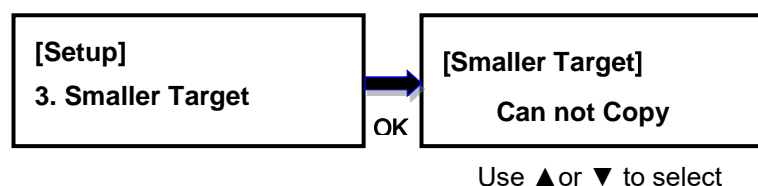
5.2 Source Select

This option allows to select the M.2 or SATA port as the source port. The default setting is [M.2](#).



5.3 Smaller Target

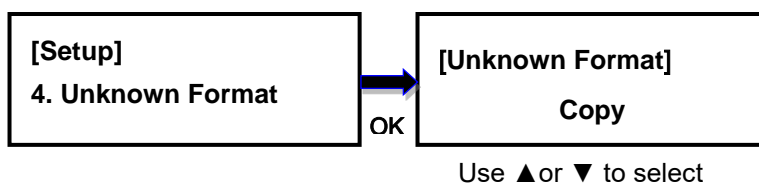
If the capacity of the target device is smaller than the source device, the duplicator will partly copy or cannot copy. [Can Not Copy](#) is the default setting.



5.4 Unknown Format

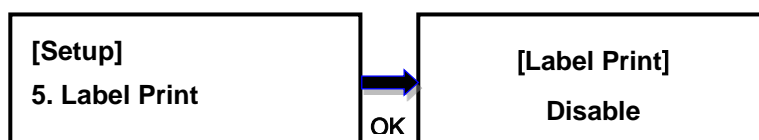
This option allows you to Copy or Skip unknown format. If option Skip is selected here, the

unknown format from source will not be copied during copy process. [Copy](#) unknown format is the default setting.



5.5 Label Print

This option allows you to print the label when the external label printer is connected after a task is finished. [Disable](#) is the default setting.



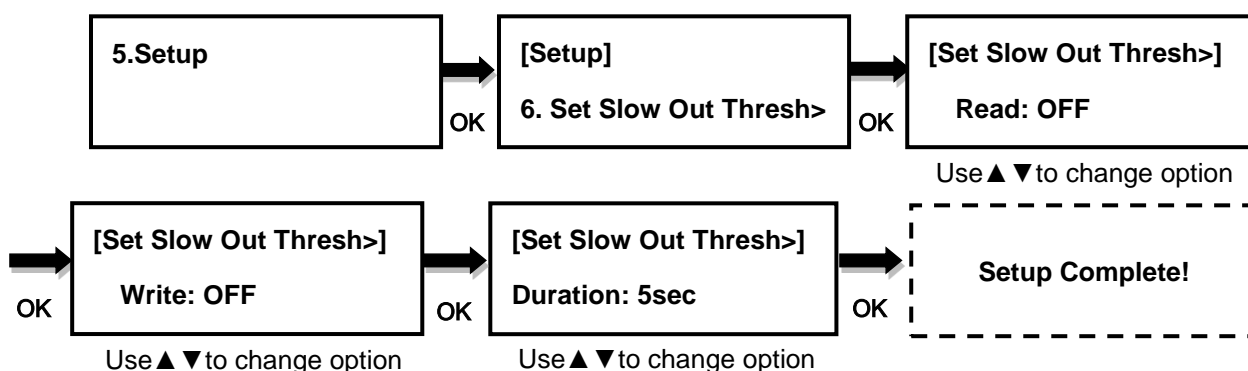
5.6 Set Slow Out Threshold

This function allows to set up read/write speed threshold for target devices. When the target device is causing the copy or compare process delay due to its lower read/write speed and the rest of the devices in the same batch have to wait for it, the Slow Out Threshold strategy will be applied as the following: the system will stop the copy or compare process for that particular target device when its read/write speed is below the threshold for continuing number of seconds based on the setting, and its red LED will flash to give warning. There are 3 settings to set up.

Read: set up the lowest read speed , and options are OFF, 10MB/s~700MB/s. The default setting is [OFF](#).

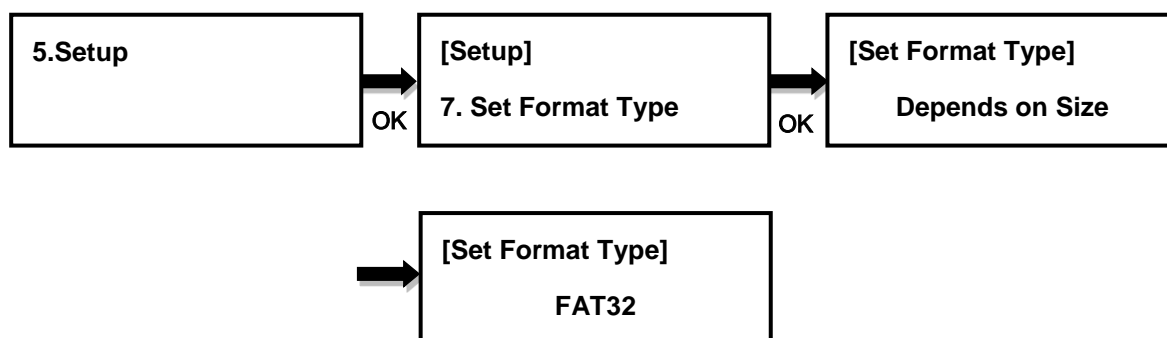
Write: set up the lowest write speed, and options are OFF, 10MB/s~700MB/s. The default setting is [OFF](#).

Duration: set up the period when read or write speed is lower than the threshold for continuing number of time, and options are 1~20second. The default is [5 second](#).



5.7 Set Format Type

This function allows to set up the target device format, and the setting will be applied by Command **4.3 Capacity Check + Format** under the main menu. The options are Off, FAT32, exFAT, and Depends on Size. The default setting is [Depends on Size](#).



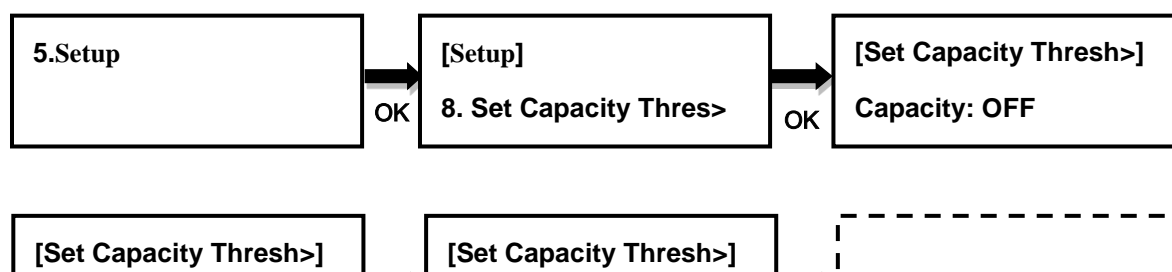
5.8 Set Capacity Threshold

This function allows to set up the capacity threshold for Command **4.3 Capacity Check + Format** under main menu. It will be failed when the target device capacity is below the threshold range, and the red LED will flash to give warning. There are 3 settings.

Capacity: the size of device capacity which will be used for sorting, and options are OFF, 32M, 64M, 128M, 256M, 512M, 1G, 2G, 4G, 8G, 16G, 32G, 64G, 128G, 256G, 512G, 1T, 2T, 4T, 8T, 16T. The default is [OFF](#).

Tolerance: the acceptable range of capacity for sorting, and options are OFF, 0~50%. The default setting is [15%](#).

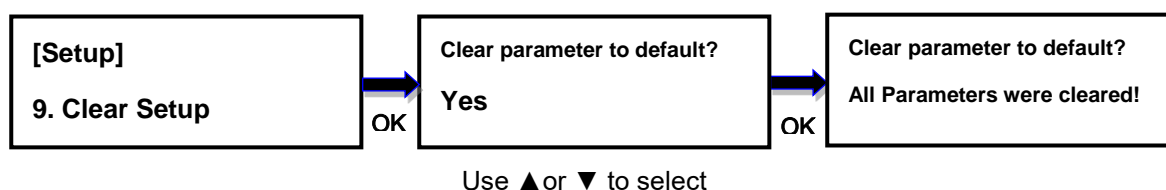
Capacity Definition: define the standard for capacity conversion. Options are 1MB=1000K and 1MB=1024K. The default is [1MB=1024K](#).



Use ▲ ▼ to change option

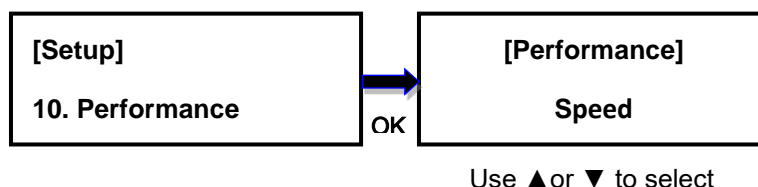
5.9 Clear Setup

This option resets the duplicator back to factory default settings.



5.10 Performance

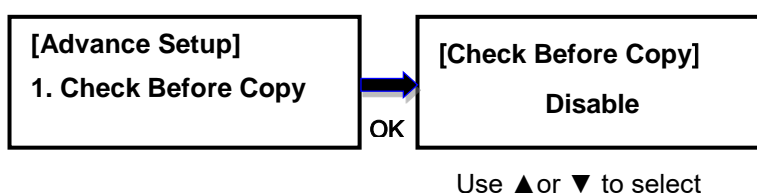
This option allows to set up the performance for Copy function based on the following modes: Speed, Balance, and Compatibility. Speed mode is to execute the Copy function at the fastest speed, but may have compatibility issue with certain brands flash media. Balance mode is to execute the Copy function at stable speed, and have less compatibility issue with certain brands device. Compatibility mode is to execute the Copy function at the most stable speed, and almost have no compatible issue with storage drive. The default mode is [Speed](#).



5.11 Advance Setup

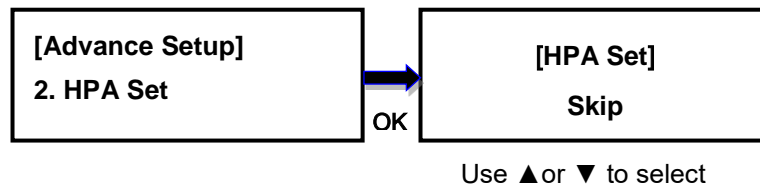
5.11.1 Check Before Copy

This option allows to check device real capacity before copying. By default this option is [Disable](#).



5.11.2 HPA Set

HPA, Host Protected Area or Hidden Protected Area, is kept invisible space for booting area, recovery data or blocked bad-sector, etc. By creating HPA, it resets max sectors and keeps some space for HPA. It reduces the reported size of HDD. There are 4 settings in this function. The HPA setting and data stored in HPA of source HDD will not be modified.



Skip (default)

Copy data from source to target except data stored in HPA and keep the target HPA setting during Copy.

Clear Target HPA without Copy

Do not copy data in HPA and remove the target HPA setting during Copy

Set Target HPA without Copy

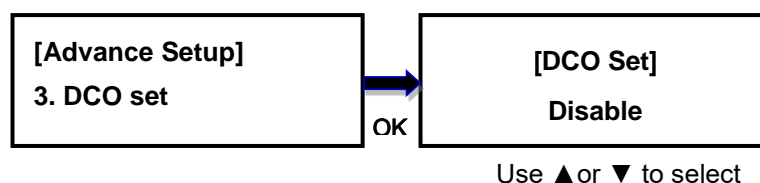
Do not copy data in HPA and set the target HDD the same HPA setting as the source HDD during Copy.

Copy

Copy data from source to target including data stored in HPA set the target HDD the same HPA setting as the source HDD during Copy.

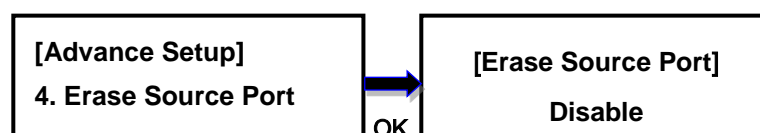
5.11.3 DCO Set

This option allows you to enable or disable set DCO. If option **Disable** is selected here, the DCO set from source will not be copied during copy process. If **Enable** is selected, the set DCO will be copied to all target HDDs. **Disable** set DCO is the default setting.



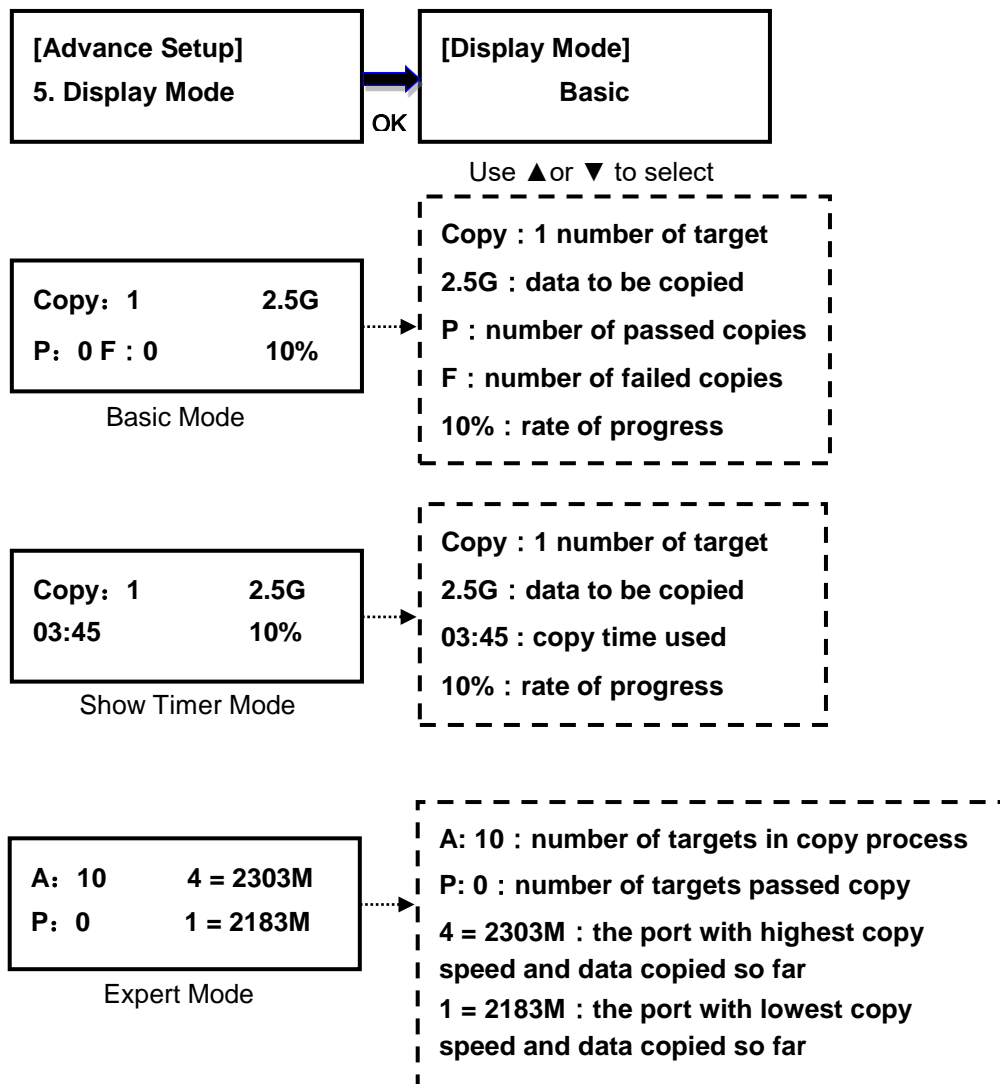
5.11.4 Erase Source Port

This option allows you to set if the master disk can be erased or not. **Disable** is the default setting.



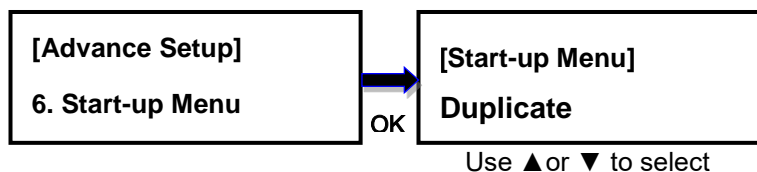
5.11.5 Display Mode

There are four display modes: **Auto**, **Basic**, **Show Timer**, and **Expert**. **Basic** shows the copy progress in general; **Show Timer** displays the time used for the task; **Expert** shows the devices with highest copy speed and lowest copy speed and their copy progress respectively. **Auto** equal to Show Timer when operation mode is synchronous and **Basic** when asynchronous. By default it is [Auto Mode](#).



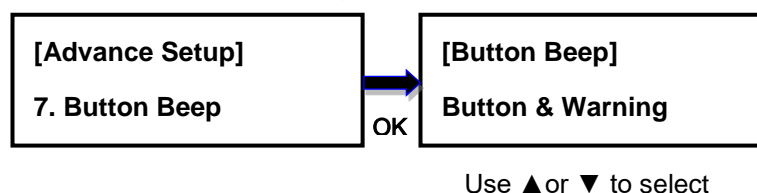
5.11.6 Start-up Menu

Choose one of the following as the default start-up function: Duplicate, Data Erase, Quality Check, Utility and Setup. The default start-up function is **Duplicate**.



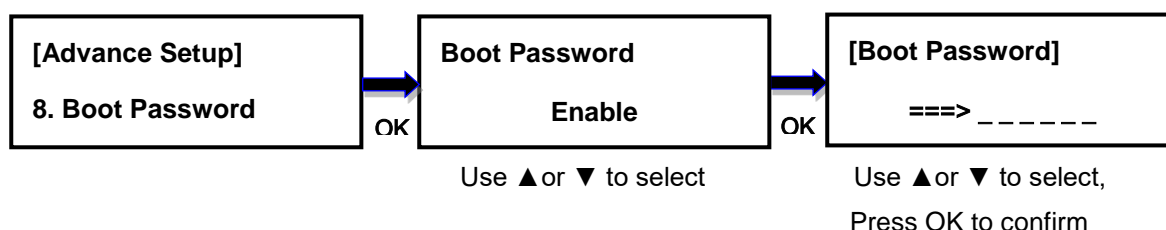
5.11.7 Button Beep

This option allows to set up button sound from the following options: Button & Warning, OFF, Warning only. The default setting is **Button & Warning**.



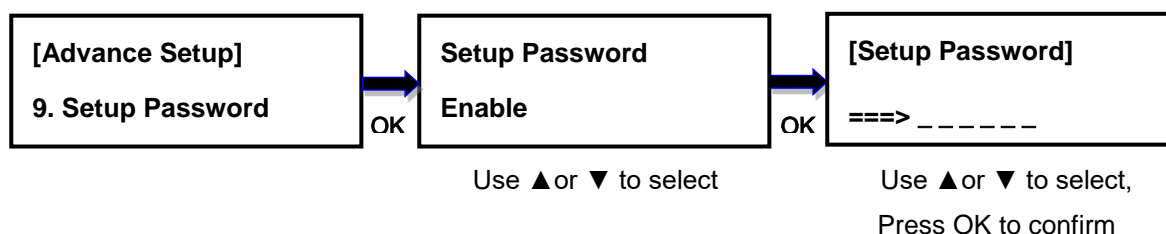
5.11.8 Boot Password

This option allows to set up password for system boot up to prevent from the unauthorized use of the duplicator. The password must be 6 characters.



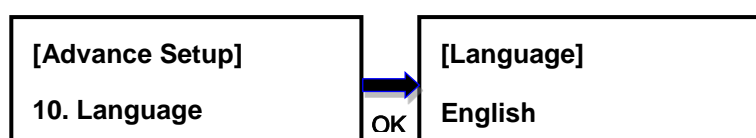
5.11.9 Setup Password

This option allows to set up password for Setup function to prevent from the change of system settings on the duplicator. The password must be 6 characters.



5.11.10 Language

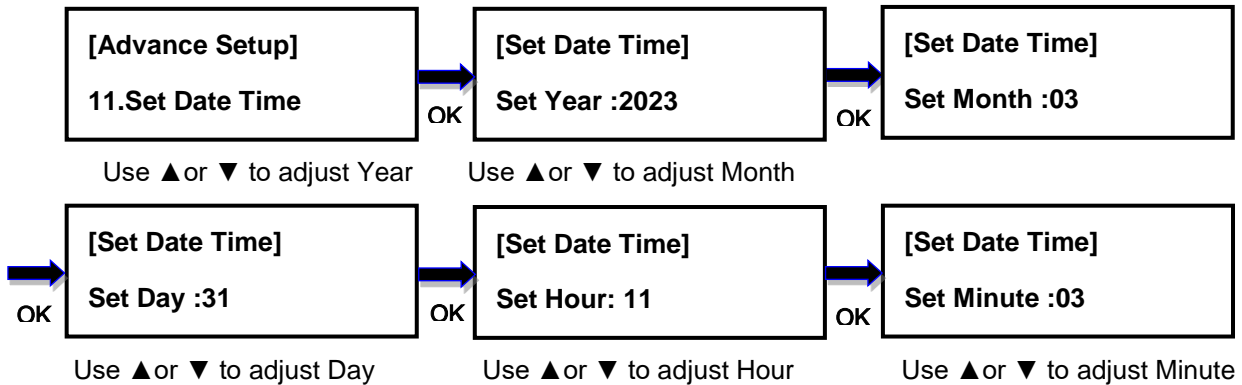
This option allows to choose the language for display: English, Spanish, Portuguese, and Japanese. **English** is the default language.



Use ▲ or ▼ to select

5.11.11 Set Date Time

This option sets the date and time of the duplicator. It has a battery to provide power to the clock when no power adapter is connected.



VI. Troubleshooting

When the duplicator malfunctions or you have questions about using the duplicator, you can first check the following related problems and eliminate them. If you still have problems, you can contact the technical support department.

Q1 : Why there is no display and nothing happens when the power switch is turned on?

1. Please make sure that the power cord is tightly connected to the duplicator, and the power outlet works normally.
2. Please check whether the duplicator power voltage selection switch is in the correct position 110V or 220V. Please adjust it according to the local voltage.
3. Make sure that the power cord is not damaged.

Q2 : Why can't the duplicator recognize the media device?

1. Please check if the media device can be used normally on a computer.
2. Please insert the media device into different ports for testing. If some ports can recognize the media device and some cannot, it may be that some ports have been used for too long,

resulting in poor connection. Please send duplicator in for repair. If all of the ports are unrecognized, it may be the compatibility issue. Please set the Performance mode to Compatibility in **5.10 Performance** in the main menu. If it is still unrecognizable, the media device may be of poor quality and not compatible with this duplicator. Please replace the media device with another brand.

Q3 : Why is the copy failure rate high?

1. The media device quality may be poor, please change it to other brands with better quality.
2. The duplicator has been used for a long time, resulting in poor port contact with media device. Please send it to the manufacturer for inspection.

Q4 : Why is the copy speed slow?

1. The copy speed depends on the writing speed of the media device. When the writing speed of the media device is slow, the copy speed becomes slow.
2. There may be a slower media device in the batch of media. Remove it (press the up and down keys at the same time to remove the slowest media device during copy process) to speed up.

Q5 : Why the media device cannot be used normally after copying?

During the copying process, the duplicator reads the data from the source media device and then writes to the target media device. An error may occur during the writing process, or the target media device has bad sectors and cannot be written normally. It is recommended to use the Compare function to ensure that the data copied to the target media device is 100% the same as the source media device.

Q6 : Why is copy failed?

1. Data on the source media device cannot be read normally. The source media device may be of poor quality or has bad sectors. The copying process to all target media devices will stop.
2. Target media device cannot be written normally. The target media device may be of poor quality or has bad sectors. The copying process of this target media device will stop, and others will continue to copy.

Q7 : Why can't I update the firmware?

1. Different duplicators have different update files, please make sure your update files are correct.
2. Please make sure that the media file system is **FAT32**, the update file is uncompressed (the file extension is .BIN) and saved on the root directory of the media device.

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