NV-BM Series

PCIE Duplicator and Sanitizer

User Manual
v A.01

Index Table

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Warranty

U-Reach 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 are available for the life of the product as defined by U-Reach.

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

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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 U-Reach 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 sockets.
- Never turn off the power while the firmware updates.
- 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 discharging.
- 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 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	**1.1 Source Port** Copies data from the device connected to the Source Port (Port #1).	
	1.2 Internal Storage *(Available when internal SSD is installed)* Copies saved data images from the duplicator's internal storage device.	
2. Compare	**2.1 Source Port** Verifies data, bit-by-bit, from the device connected to the Source Port (Port #1).	
	2.2 Internal Storage *(Available when internal SSD is installed)* Verifies saved data images, bit-by-bit, from the duplicator's internal storage device.	
3. Copy + Compare	**3.1 Source Port** Copies and verifies data, bit-by-bit, from the device connected to the Source Port or Port #1.	
	3.2 Internal Storage *(Available when internal SSD is installed)* Copies and verifies saved data images, bit-by-bit, from the duplicator's internal storage device.	
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 DoD3 Pass Erases device(s) complying with DoD 5220.22-M Standards.	
	4.4 DoD3 Pass+Compare 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 Device Info** Displays basic information such as device model, name, capacity, etc.	
	5.2 System Update	**5.2.1 Update BIOS** Updates system firmware through the USB port.

		5.2.2 Create BIOS Format 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.	
	5.4 Burn SSD Firmware Begins firmware update for compatible SSDs.	
6. Setup	**6.1 Copy Modes**	**6.1.1 System and Files** Copies data and skips empty space. Only supports standard formats.
		6.1.2 All Partitions Copies or skips HPA, DCO, unknown partitions, modified formats, etc. defined by settings.
		6.1.3 Whole Device Copies all source data, bit-by-bit.
		6.1.4 Percentage (%) Sets percentage of source capacity to copy.
	6.2 Skip Bad Sectors Skips source bad sectors.	
	6.3 Language Sets preferred language: English or Japanese.	
	6.4 Advanced Setup	**6.4.1** **Unknown Format** → **6.4.1.1 Copy Unknown** Copies unknown format(s). **6.4.1.2 Skip Unknown** Skips unknown format(s).
		6.4.2 **Erase Source Port** → **6.4.2.1 Disabled** Source port will be unable to erase. **6.4.2.2 Enabled** Source port will be able to erase.
		6.4.3 **Erase Pattern** → **6.4.3.1 One Byte** Random character written per byte. **6.4.3.2 Big Random Data** Random character written in a set of area.

		6.4.4 Device Power Up Sets device power up buffer time prior to copy, erase, etc.	
		6.4.5 Scroll Lock	6.4.5.1 Disabled
			6.4.5.2 Enabled Only down/up buttons are disabled. Reboot system for setting to be in effect.
		6.4.6 Device Power Down Sets device power down buffer time prior to device disconnection.	
		6.4.7 Boot Password Sets up the login password.	
	6.5 Restore Defaults Reinstates manufacturer settings.		
7. Log Manager	7.1 Today's Log Report Outputs today's log data.		
	7.2 Recent Log Report Outputs recent log data.		
	7.3 Custom Log Report Outputs a set period of log data.		
	7.4 Advanced Function Default password: 123456	7.4.1 Clear All Logs Clear all log records.	
		7.4.2 Password Setup Allows password change.	
		7.4.3 Adjust Time/Date Change time and date.	

Product Overview

The NV-BM Series is the world's first standalone PCIe M.2 duplicator. It boasts ultra-high speed duplication and each port is independent. That's why no matter how many targets are running, it possesses the same ultra-high transmission speed performance. A technology far beyond PC-based duplicators.

The duplicator is specially designed for professional use. The smart Quick Copy (System and Files) mode supports FAT16/32/64, NTFS(Windows), ext2/3/4(Linux), HFS/HFS+/HFSX(Mac) formats and can copy only data contained area, which highly increases the production efficiency. Furthermore, the innovative interface design can help you easily swap devices during operation to reduce time and effort while repairing.

Complies with the U.S. Department of Defense's erasing standard (DoD5220.22 M). It is important to make sure the data inside the disregarded device will not be retrieved and can be safely transferred.

Product Features

Operation Type

Standalone, FPGA based operation (Non-PC based system design).

Controller Design

Embedded controller is designed to support capacities up-to 18TB. Constant improvement supports latest market-available devices.

Protocols Supported

Supports Native NVMe and Native AHCI and SATA protocol.

Bandwidth Performance

Speed transfers of up to 24.0GB/min. (400MB/sec.) and dedicated bandwidth enables high volume replications without speed degradation.

Read-Only Source Port

There is no option to disable this built-in feature and it is integrated with all U-Reach duplicators.

Cable-free Hardware Design

Modularly designed ports effectively reduce downtime and is cost effective for long term ownership.

Image Management

Allows user to transfer multiple master images from PC and store them in the duplicator's internal storage device.

Event Log Management

Records operating durations, device writing/reading speeds, individual port copy progressions, connected hard drive models, capacities, serial numbers, and PASS or FAIL results. Log report files are generated through the front USB port and are saved to USB devices.

Hardware Overview

· Front View

USB port for Log
Report Outputs
and Firmware
Updates.

Control Buttons

OK Button

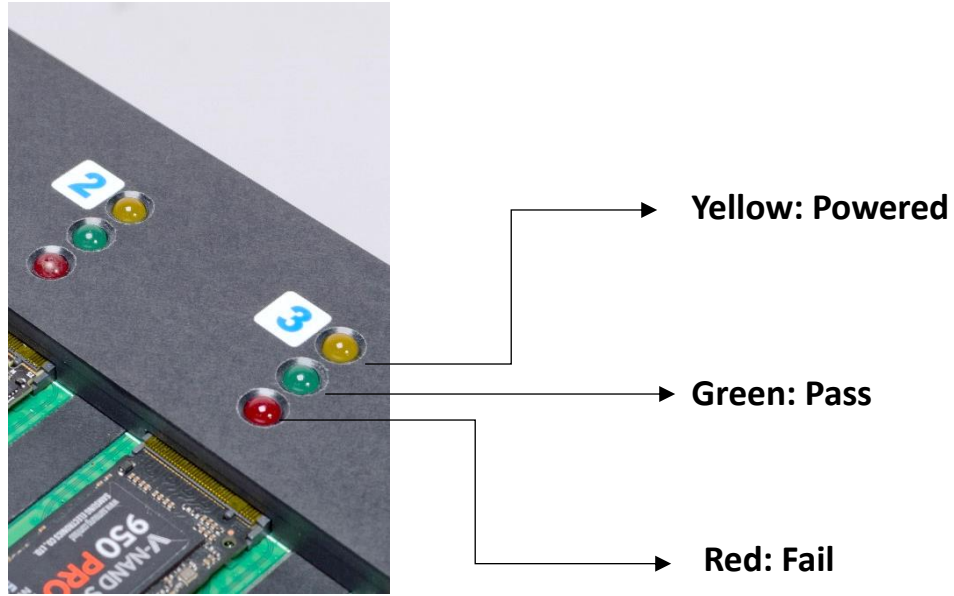LCD Display

SSD slot for saving
Master Image.

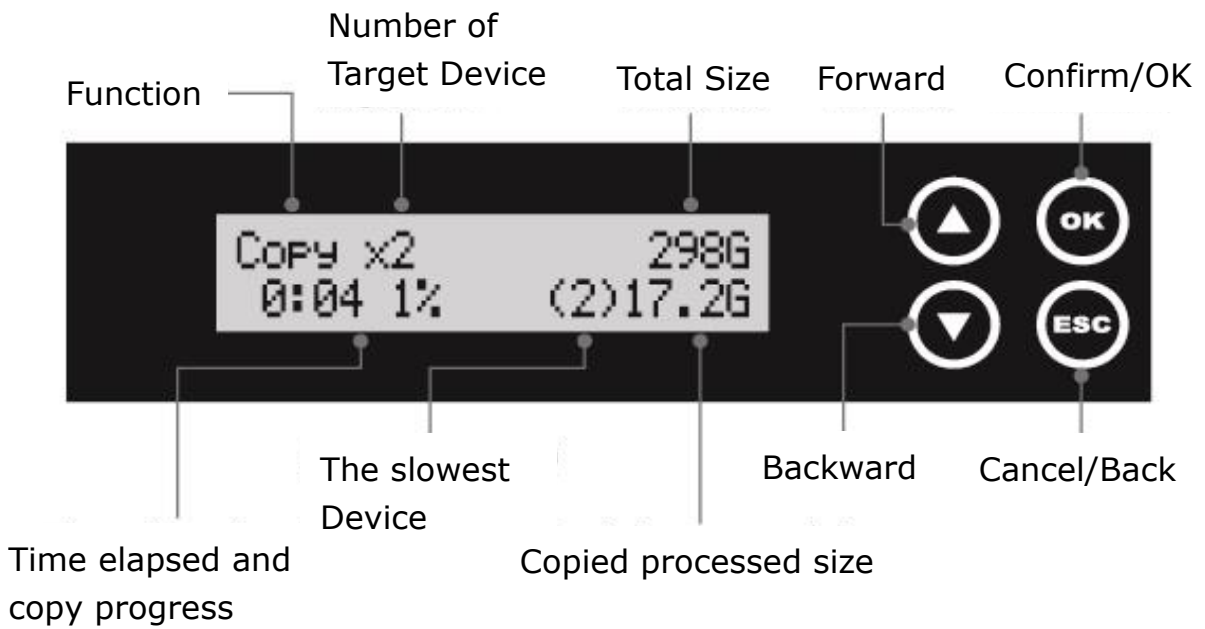· Back View

USB Port
for PC-LINK

Power Input

Power Switch

Grounding Port

- LED Status

Yellow: Powered

Green: Pass

Red: Fail

- LCD Configuration

Function

Number of
Target Device

Total Size

Forward

Confirm/OK

Copy x2   298G
0:04 1%   (2)17.2G

Time elapsed and
copy progress

The slowest
Device

Copied processed size

Backward

Cancel/Back

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 "OK" to select which source to copy from. Scroll to select "1.1 Source Port" or select "1.2 Internal Storage", then press "OK" to start the duplication process.

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

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

```
Copy            40.0G

       3ready
```

Function   Total Data
```
Copy x3              40G

 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), the copied duration, and CRC64 will be displayed on the LCD after duplication completes.

```
Pass:3   Fail:0    8:00

CRC:7073923CEBDF7B58
```

1.1 Source Port

Scroll to select "1. 1 Source Port", then press "OK" to copy to targets from the source port.

1.2 Internal Storage *(Available when internal SSD is installed)*

Scroll to select "1. 2 Internal Storage", then press "OK" to select which GOB Image to copy from the duplicator's built-in storage device. The GOB Image is created through U-Reach's proprietary software that is included with the duplicator.

Caution	1. When "1.2 Internal Storage" is selected, the 1st port becomes a target port automatically (e.g. NV-BM600 will become 1-6 duplicator). Please use the duplicator carefully as the manufacturer will not held responsible for any data loss. 2. The GOB Image (internal storage) will not copy to smaller target capacities.

2. Compare

Scroll to select "2. Compare", then press "OK" to select which source to verify from. Scroll to select "2.1 Source Port" or select "2.2 Internal Storage ", then press "OK" to start the verification process.

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

2.1 Source Port

Scroll to select "2. 1 Source Port ", then press "OK" to verify targets from the source port.

2.2 Internal Storage *(Available when internal SSD is installed)*

Scroll to select "2. 2 Internal Storage " , then press "OK" to select which GOB Image to verify from the duplicator's built-in storage device. The GOB Image is created through U-Reach's proprietary software that is included with the duplicator.

3. Copy+Compare

Sequentially automates from Function 1, Copy to Function 2, then Compare.
Scroll to select "3. Copy+Compare", then press "OK" to select which source to copy and verify from. Scroll to select "3.1 Source Port" or select "3.2 Internal Storage ", then press "OK" to start the automated duplication and verification process.

3.1 Source Port

Scroll to select "3. 1 Source Port", then press "OK" to copy to and verify targets from the source port.

3.2 Internal Storage *(Available when internal SSD is installed)*

Scroll to select "3. 2 Internal Storage" , then press "OK" to select which GOB Image to copy and verify from the duplicator's built-in storage device. The GOB Image is created through U-Reach's proprietary software that is included with the duplicator.

Caution	1. When "1.2 Internal Storage" is selected, the 1st port becomes a target port automatically (e.g. NV-BM600 will become 1-6 duplicator). Please use the duplicator carefully as the manufacturer will not held responsible for any data loss. 2. The GOB Image (internal storage) will not copy to smaller target capacities.

4. Erase

There are 4 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 6.4.2.2 to enable source port erasing.

Step 2: Enter function "4. Erase"

Scroll to select "4. Erase", then press "OK" to view the 5 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 "OK" 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 "OK" to start the erasing process.

4.3 DoD3 Pass

This function will erase all data per DoD 5220.22-M Standards of the connected device(s).
Scroll to select "4.3 DoD3 Pass", then press "OK" to start the erasing process.

4.4 DoD3 Pass+Compare

This function will erase all data per DoD 5220.22-M Standards, then verifies the erasure of the connected device(s).
Scroll to select "4.4 DoD3 Pass+Compare", then press "OK" to start the erasing and verification process.

4.5 Secure Erase

This function erases the non-loadable areas complying with NIST 800-88 Standards.
Scroll to select "4.6 Secure Erase ", then press "OK" 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 "OK" to view the submenus.

5.1 Device Info

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

5.2 System Update

There are 2 submenu options.

5.2.1 Update BIOS

Step 1: Prepare a USB drive for update.

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

Note	The USB's format must be: FAT16 or FAT32.

Step 2: Proceed to update firmware

Connect USB drive to the USB port in front of the duplicator. Scroll to select "5.2.1 Update BIOS", then press "OK" to start the firmware update process.

```
[Update System]
1.Update BIOS
```

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. U-Reach will not be held responsible for any damages.

5.2.2 Create BIOS Format

Step 1: Connect a device to the source port.

Step 2: Scroll to select "5.2.2 Create BIOS Format", then press "OK" to start the format process.

This will format the device to a 2 GB FAT32 Partition.

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

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 "OK" to view the connected device(s). Then scroll through to view all information.

5.4 Burn SSD Firmware

Allows user to do firmware updates for compatible SSDs.

Note	Contact a U-Reach technical team for "Supported SSD List."

Step 1: Prepare a USB drive for update.

Connect a USB drive to PC. Locate the desired BIOS file and save it to the root directory of the USB drive.

Note	The USB's format must be: FAT16 or FAT32.

Step 2: Proceed to update firmware

Connect USB drive to the USB port on the front side of the duplicator. Scroll to select "5.4 Burn SSD Firmware", then press "OK" to start the firmware update process.

4. Burn SSD Firmware

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

6. Setup

This menu will reveal submenus related to device information, system information and updates.
Scroll to select "6. Utility", then press "OK" to view the submenus.

6.1 Copy Modes

There are 4 submenu modes.
Scroll to select "6.1 Copy Modes", then press "OK." 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.
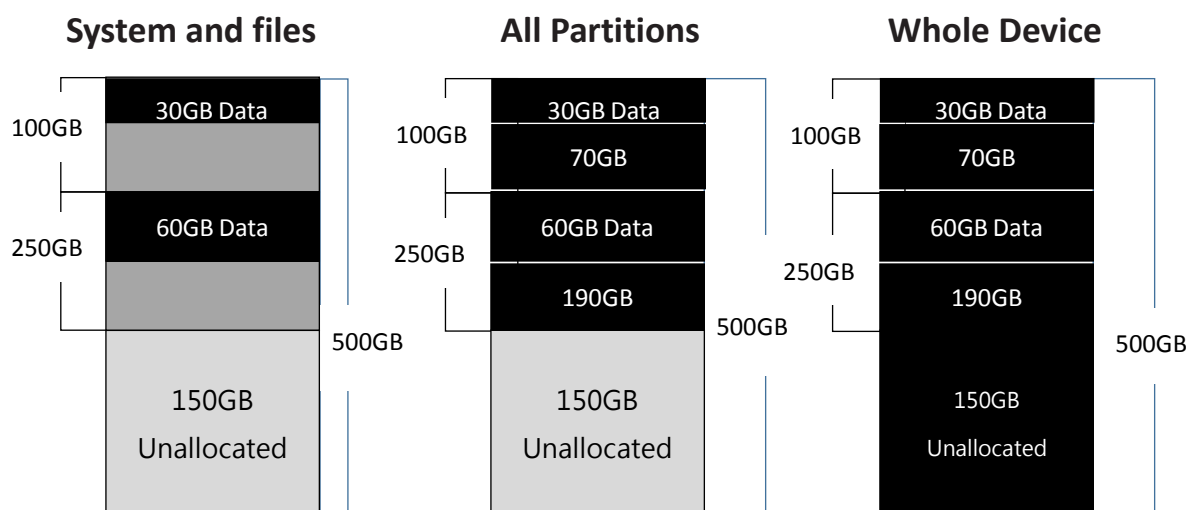
System and files	All Partitions	Whole Device
100GB / 250GB / 500GB 30GB Data 60GB Data 150GB Unallocated	100GB / 250GB / 500GB 30GB Data 70GB 60GB Data 190GB 150GB Unallocated	100GB / 250GB / 500GB 30GB Data 70GB 60GB Data 190GB 150GB Unallocated
This function will analyze and copy only data and skip empty spaces.	This function will copy all data within the defined partitions.	This function will copy the entire device.

● Copy and Compare Preparations

Please consider the following settings before proceeding with copy:
- 6.1 Copy Modes
- 6.2 Skip Bad Sectors

Using appropriate copy modes can greatly reduce operation time and increase efficiency. There are four copy modes with different copy methods.

6.1.1 System and Files

Copies data and skips empty space. Only supports standard formats.
Scroll to select "6.1.1 System and Files", then press "OK" 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. FAT16/32/64, NTFS, EXT2/EXT3/EXT4, and HFS/HFS+/HFSX are supported in this copy mode.

[Copy Mode]
System & Files

Only 120G data area will be copied.
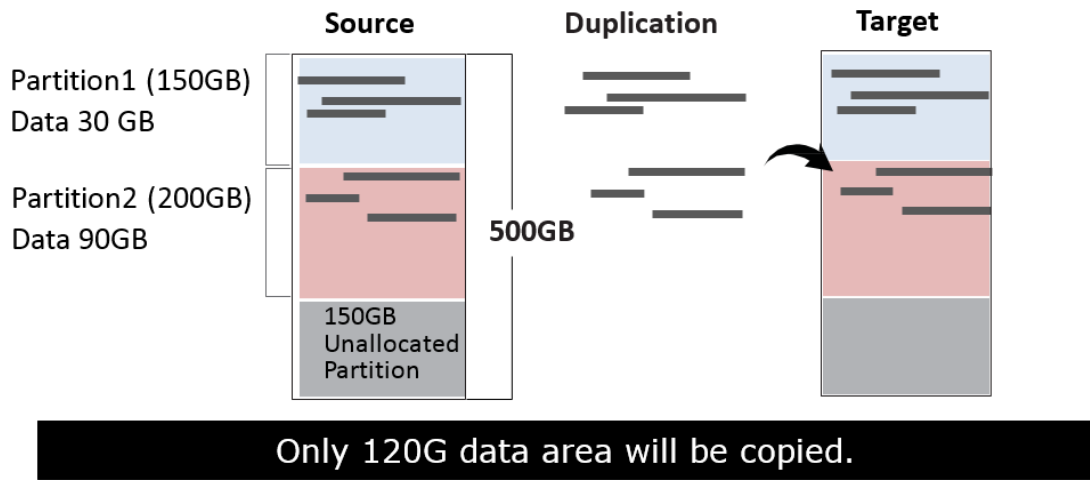
6.1.2 All Partitions

Copy or skip HPA, DCO, unknown partitions, modified formats, etc. defined by settings.
Scroll to select "6.1.2 All Partitions", then press "OK" to save the copy method.

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

[Copy Mode]
ALL Partitions

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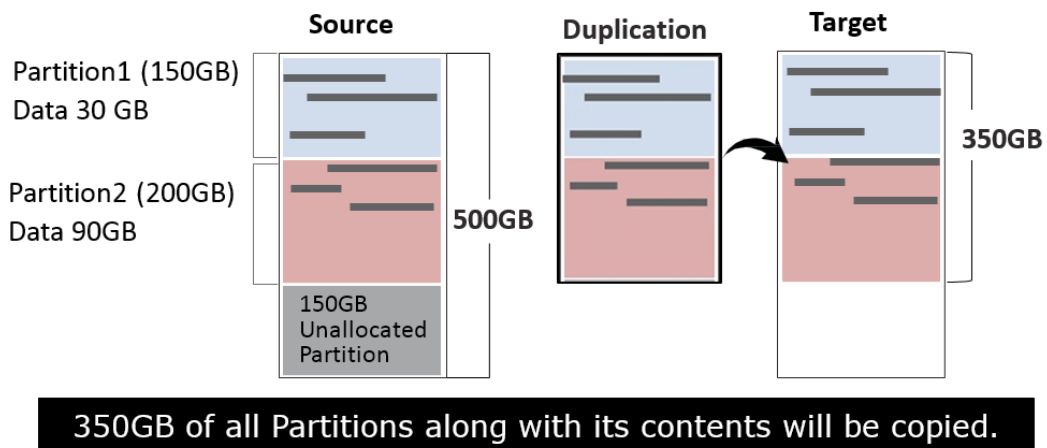
6.1.3 Whole Device

Copies all source data, bit-by-bit.
Scroll to select "6.1.3 Whole Device", then press "OK" 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.

[Copy Mode]
Whole Device

Source | Duplication | Target

Partition1 (150GB)
Data 30 GB

Partition2 (200GB)
Data 90GB

500GB

150GB Unallocated Partition | 150GB Unallocated Partition | 150GB Unallocated Partition
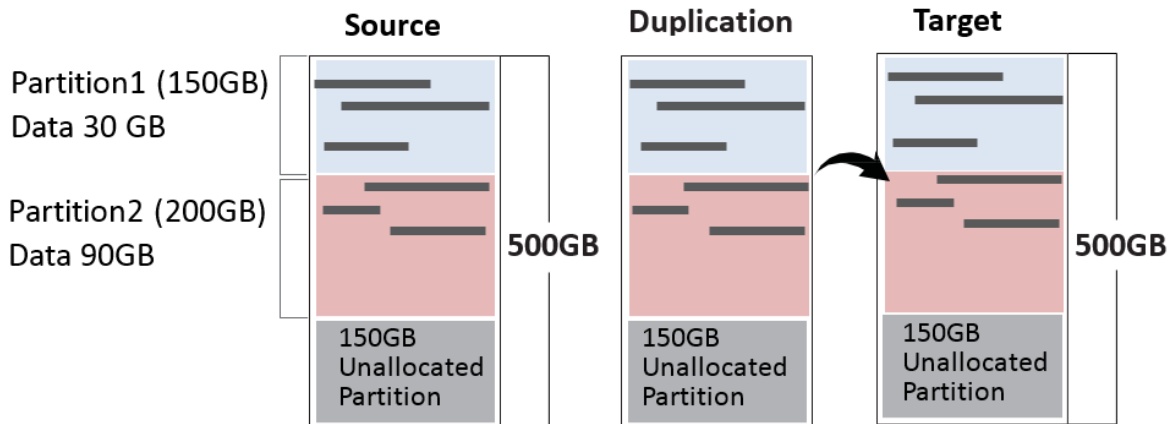
500GB

All 500GB of data will be copied.

6.1.4 Percentage (%)

Select percentage of source capacity to copy.
Scroll to select "6.1.4 Percentage", then press "OK" to save the copy method.

[Copy Mode]
Percentage (%)

Source | Duplication | Target

25%
35%

500GB

150GB Unallocated Partition

25%
35%
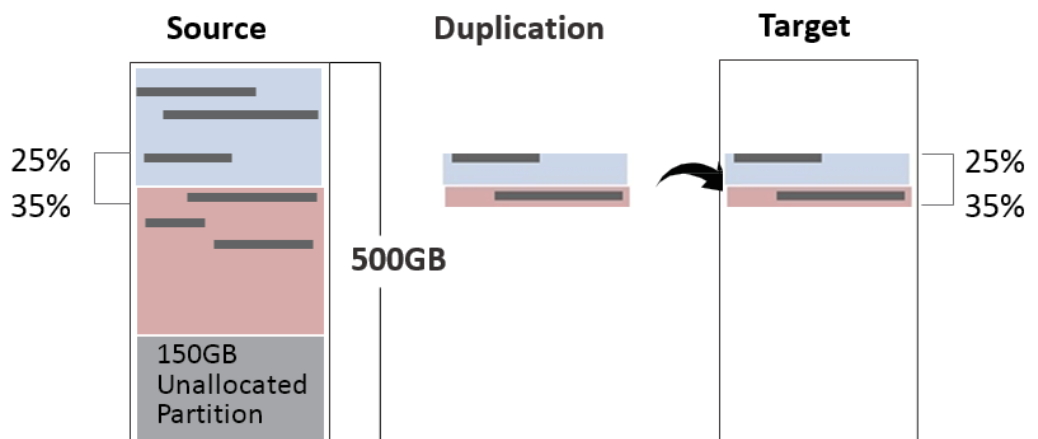
Only copies the selected area.

6.2   Skip Bad Sectors

Skip source bad sectors.

Scroll to select "6.2 Skip Bad Sectors", then press "OK" 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.

<div style="text-align:center">

[Skip Bad Sectors]
1000

</div>

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

6.3 Language

Select English or Japanese.
Scroll to select "6.3 Language", then press "OK." Then scroll through select the desired language.

6.4 Advanced Setup

This function contains settings to fine tune copy and erase functions.
Scroll to select "6.4 Advanced Setup", then press "OK" to view the submenus.

6.4.1 Unknown Format

This function only works with copy functions: "6.1.1 System and Files" and "6.1.2 All Partition".
Scroll to select "6.4.1 Unknown", then press "OK". Then scroll through to select one of two settings.

Unknown format includes all forms of modified and proprietary data and partitions.

■   Copy Unknown
Copy unknown format(s).
Scroll to select "6.4.1.1 Copy Unknown", then press "OK" to save this setting.

■   Skip Unknown
Skip unknown format(s).
Scroll to select "6.4.1.2 Skip Unknown", then press "OK" to save this setting.

6.4.2 Erase Source Port

This function allows user to enable or disable the source port for sanitization.
Scroll to select "6.4.2 Erase Source Port", then press "OK." Then scroll through to select one of two settings.

■ **Disabled**

Source port will not be allowed to erase.
Scroll to select "Disabled", then press "OK" to save this setting.

■ **Enabled**

Source port will be allowed to erase.
Scroll to select "Enabled", then press "OK" to save this setting.

6.4.3 Erase Pattern

Scroll to select "6.4.3 Erase Pattern", then press "OK". Then scroll through to select one of two settings.

■ **One Byte**

Random character written per byte.
Scroll to select "One Byte", then press "OK" to save this setting.

■ **Big Random Data**

Random character written in a set of area.
Scroll to select "Big Random Data", then press "OK" to save this setting.

6.4.4 Device Power Up

Set device power up buffer time prior to copy, erase, etc...
Scroll to select "Device Power Up", then press "OK" to set buffer time.

6.4.5 Scroll Lock

This function allows user to enable or disable the 4 control panel buttons.
Scroll to select "Scroll Lock", then press "OK" to access available settings.

■ **Disabled**

Scroll to select "Disabled", then press "OK" to save this setting.

■ **Enabled**

Only down/up buttons are disabled. Reboot system for setting to be in effect.
Scroll to select "Enabled", then press "OK" to save this setting.

6.4.6 Device Power Down

Set device power down buffer time prior to device disconnection.
Scroll to select "6.4.6 Device Power Down", then press "OK" to set buffer time.

6.4.7 Boot Password

Sets up the login password for system.

- **Disabled**
  No need password to start-up the system.

- **Enabled**
  Requires the password to start-up the system.

Caution	The system has to be sent back for reset if the password is forgotten.

6.5 Restore Defaults

Restores all setting to manufacture defaults.
Scroll to select "6.5 Restore Defaults", then press "OK" to restore settings back to manufacture defaults.

7. Log Manager

This menu allows user to access several submenus.
Scroll to select "7. Log Manager", then press "OK" access submenus.

I. Log Report Diagram

II. How to Export Log Reports

The Log Report Management Tool assists users with monitoring, recording and managing the entire duplication process. By displaying detailed information for each port, this tool helps to identify the slowest writing device, that in turn, keeps the operation running efficiently.

Note	1. The USB must be FAT16/FAT32 format.
	2. The LCD will display the number of recorded logs.
	(E.g. #1-#6 means there are 6 logs.)

❶   Export Today's Log Report

Export today's log report via USB port to a USB drive.

> [Log #1- #6]
> 1. Today's Log Report

❷   Export Recent Log Report

Exports a recent log report (1-28 days) via USB port to a USB drive.

> [Log #1- #6]
> 2. Recent Log Report

❸   Export Custom Log Report

Exports a specific time period's log report via USB port to a USB drive.

> [Log #1- #6]
> 3. Custom Log Report

7.1 Today's Log Report

Outputs current day log report
Scroll to select "7.1 Today's Log Report", then press "OK" to output log report to a USB drive.

7.2 Recent Log Report

Outputs recent log report
Scroll to select "7.2 Recent Log Report", then press "OK" to output log report to a USB drive.

7.3 Custom Log Report

Outputs recent log report
Scroll to select "7.3 Custom Log Report", then press "OK" to output log report to a USB drive.

7.4 Advanced Function

This menu allows user to access several submenus.
Scroll to select "7.4 Advanced Function", then press "OK" access submenus.
Default password: 123456

7.4.1 Clear All Logs

Clear all log records.
Scroll to select "7.4.1 Clear All logs", then press "OK" to clear all log records.

7.4.2 Password Setup

Allows password change.
Scroll to select "7.4.2 Password Setup", then press "OK" to change to desired password.

7.4.3 Adjust Time/Date

Change time and date.
Scroll to select "7.4.3 Adjust Time/Date", then press "OK" to adjust the time and date.

Image Management

Users can easily create a GOB image on PC, upload it to the machine and do duplication.

1. Software Introduction

1.1 Connect the PC Link USB drive/disc on PC, it will show two folders.

📁 PCIe Software: The installation software is stored in this folder. Please copy the folder from PC Link USB drive/disc to PC.

📁 Usermanual: The user guide is stored in this folder.

1.2 Double click 📁 PCIe Software, it will show three folders.

📁 Driver: The PC needs to install the driver first in order to install other software.

📁 GOB Compiler: Used for creating GOB Image.

📁 PCIE-Upload Image: Used for uploading the GOB Image to PCIE duplicator.

1.3 Double click 🖥 to install the driver.

2. Creating a GOB Image

2.1 Connect a source drive to PC.

2.2 Double click 📁 GOB Compiler and execute "GOB Complier 🔧 application".

2.3 Select the source device, and then click "Analyze Drive," it will display data details at the bottom.
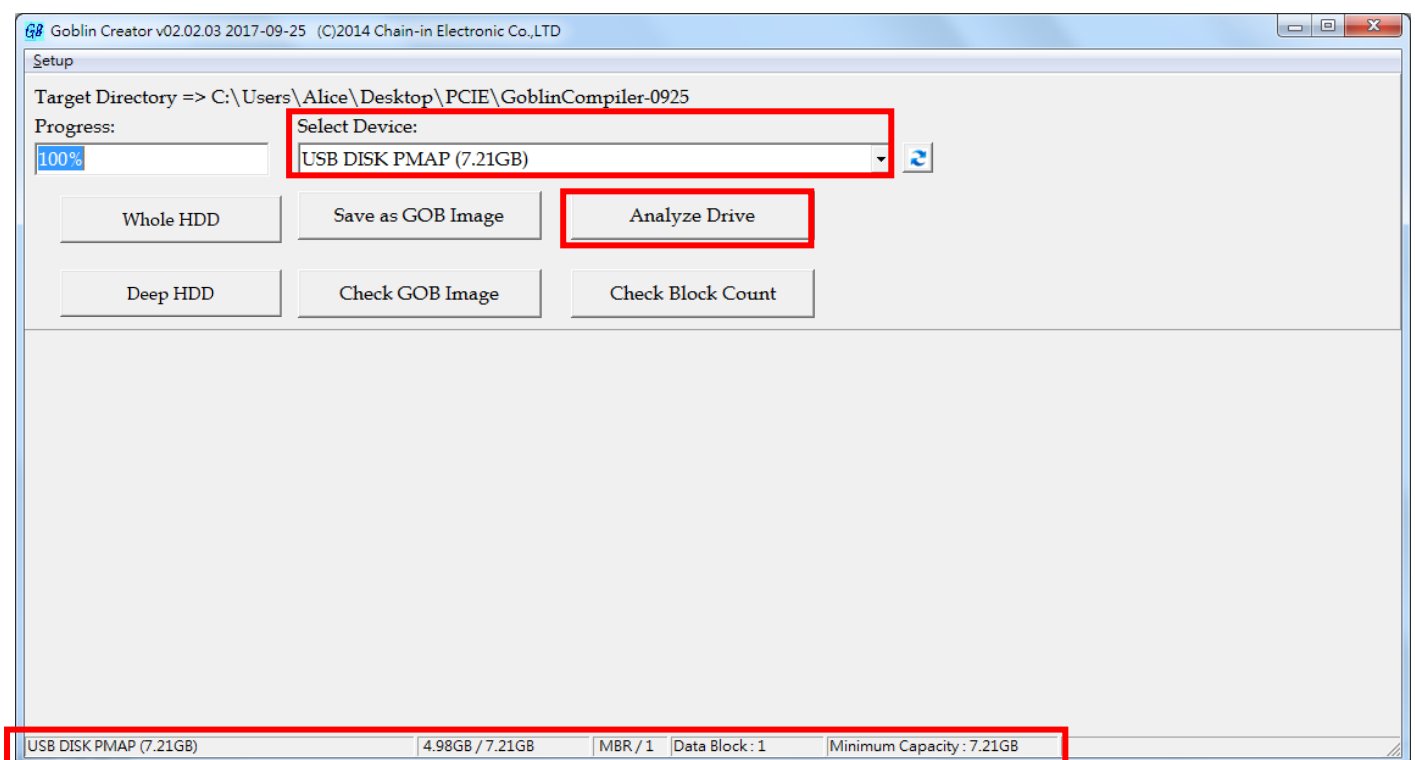
Note	If the device has not been detected in the list, please click ⟳ "renew button" in the right.

Caution	Please note the GOB Image file will not copy to smaller target capacities than the original source drive capacity.

2.4 There are 3 modes for making GOB image files, System and Files, Whole Device, and Depth Profiling Analysis.

❶ System and Files:
a. Click "Save as GOB Image," named the image and click "Save." The GOB file will be created.
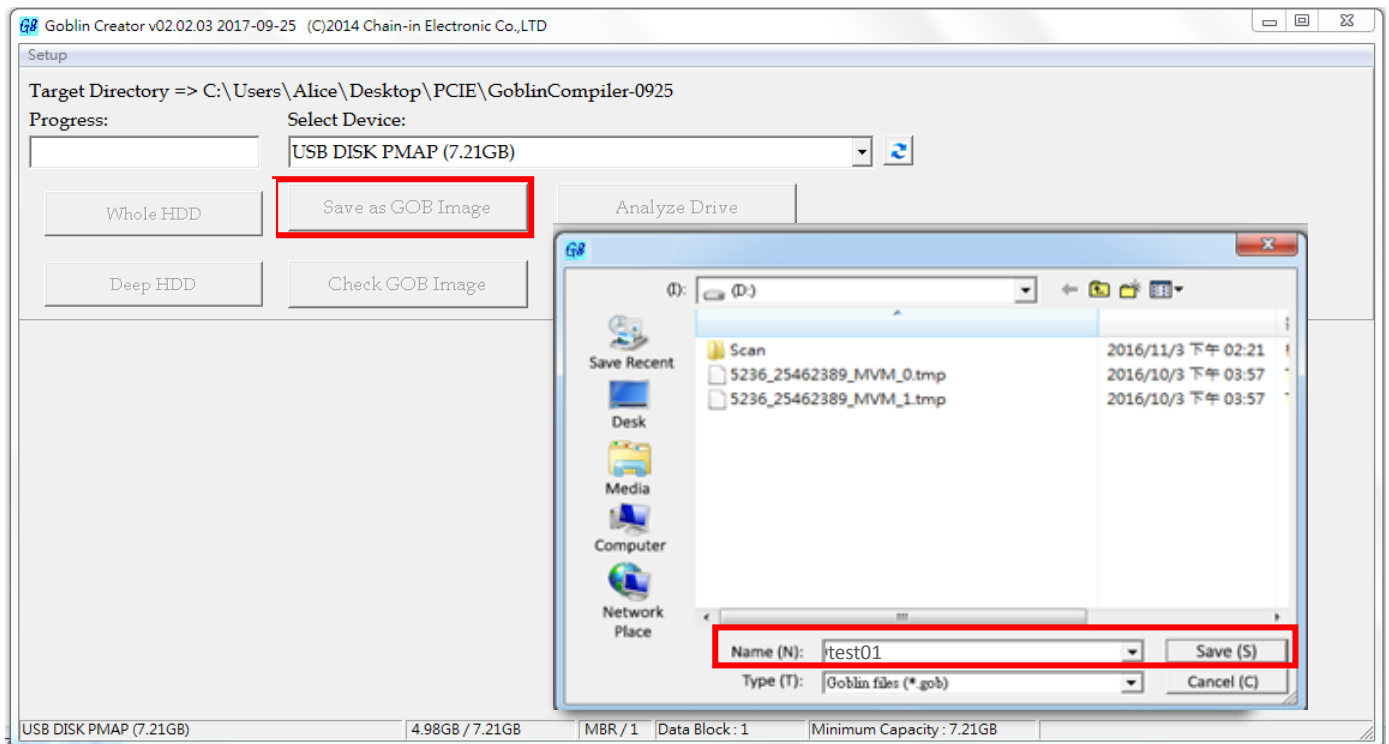
b. During compiling process, the percentage of production is shown in the "Progress".
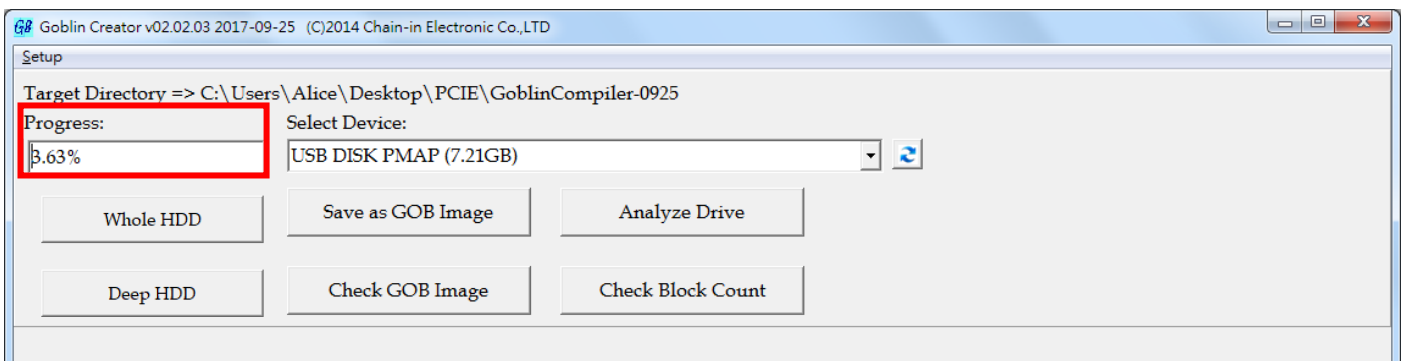
c. After completion, the detail of image information will display at the bottom.
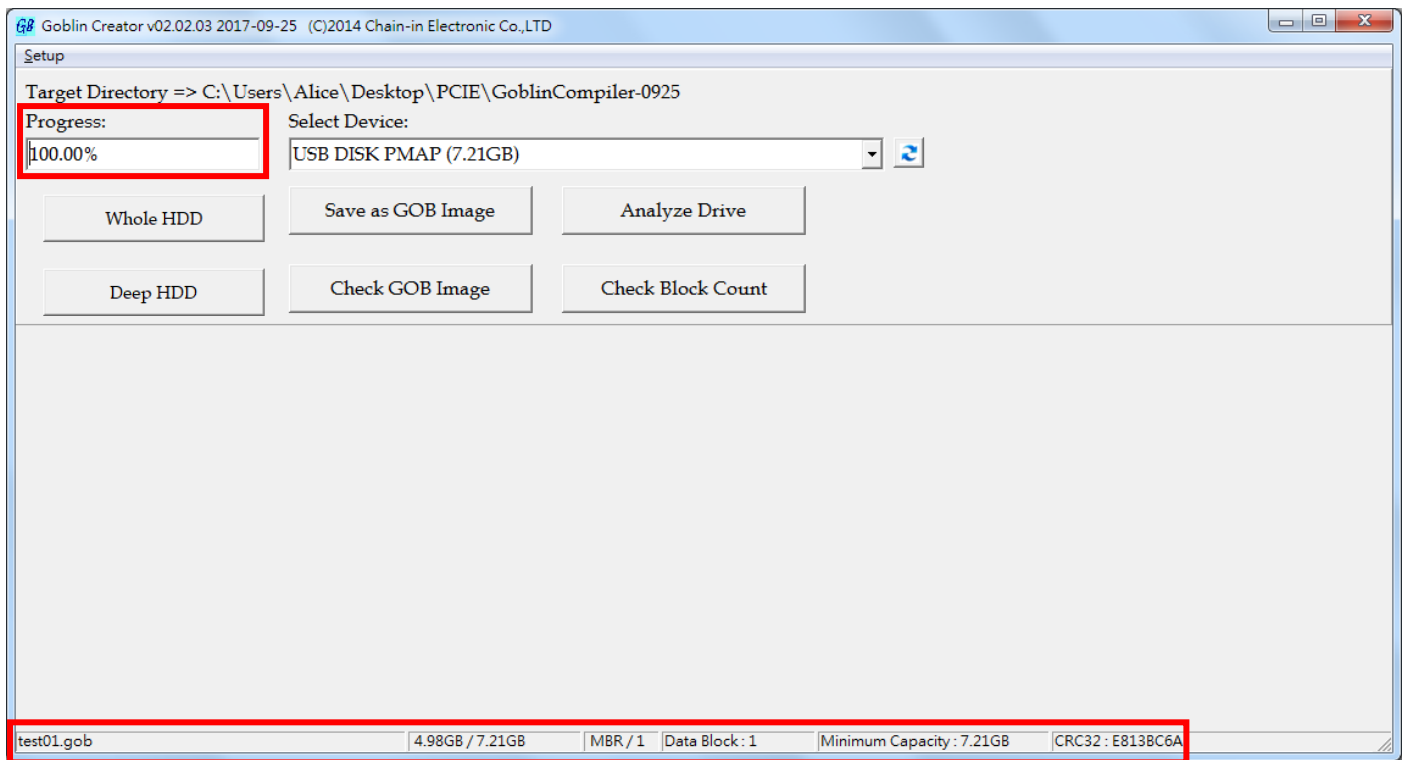
❷ Whole Device

a. Click "Whole HDD," named the image and click "Save." The GOB file will be created.
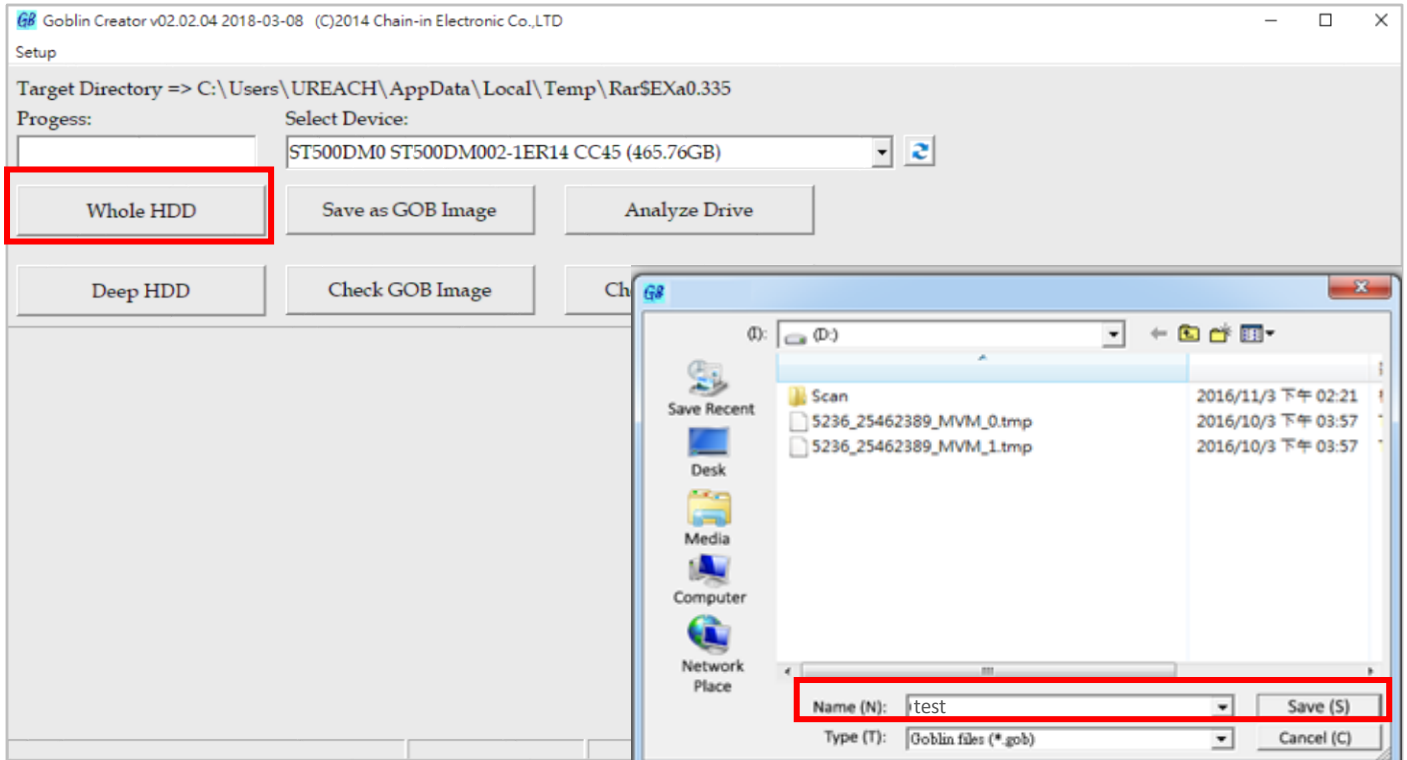
b. During compiling process, the percentage of production is shown in the "Progress".
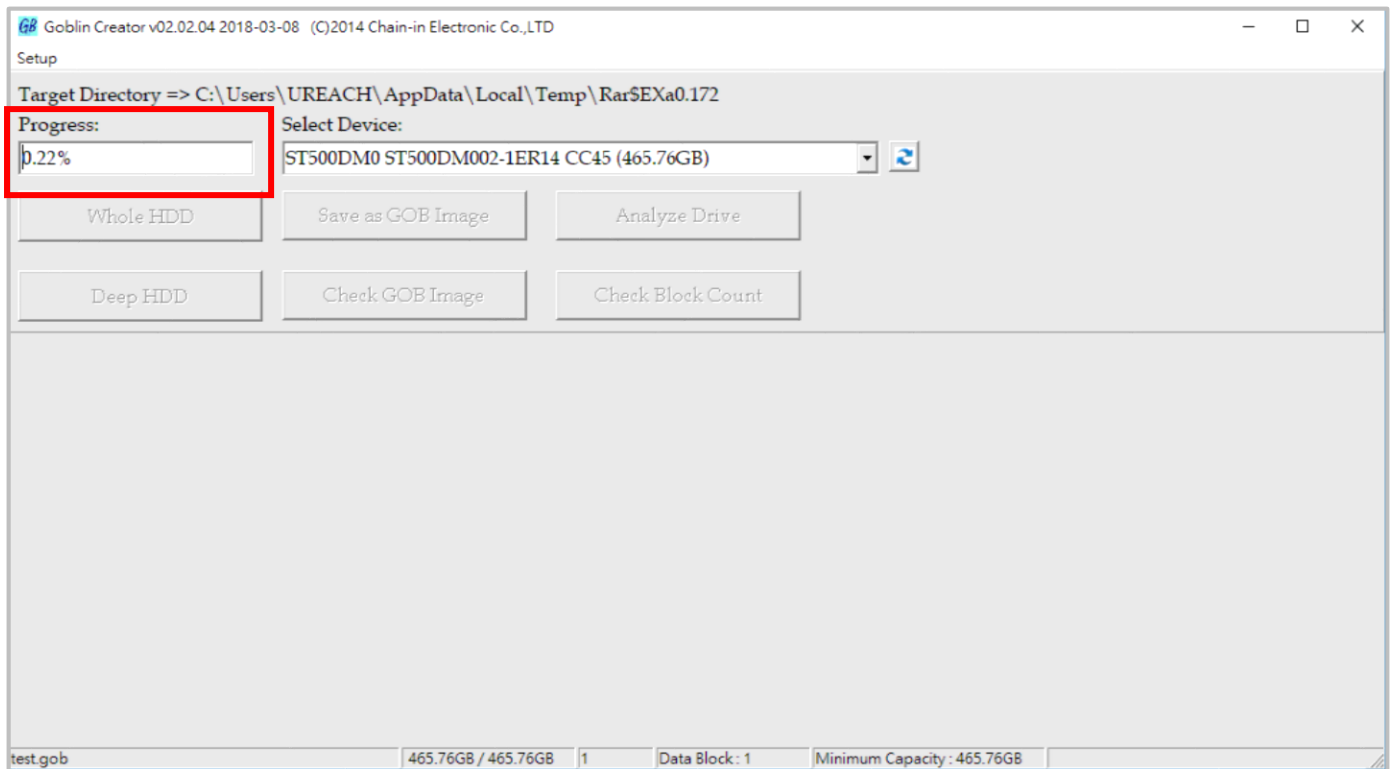
c. After completion, the detail of image information will display at the bottom.
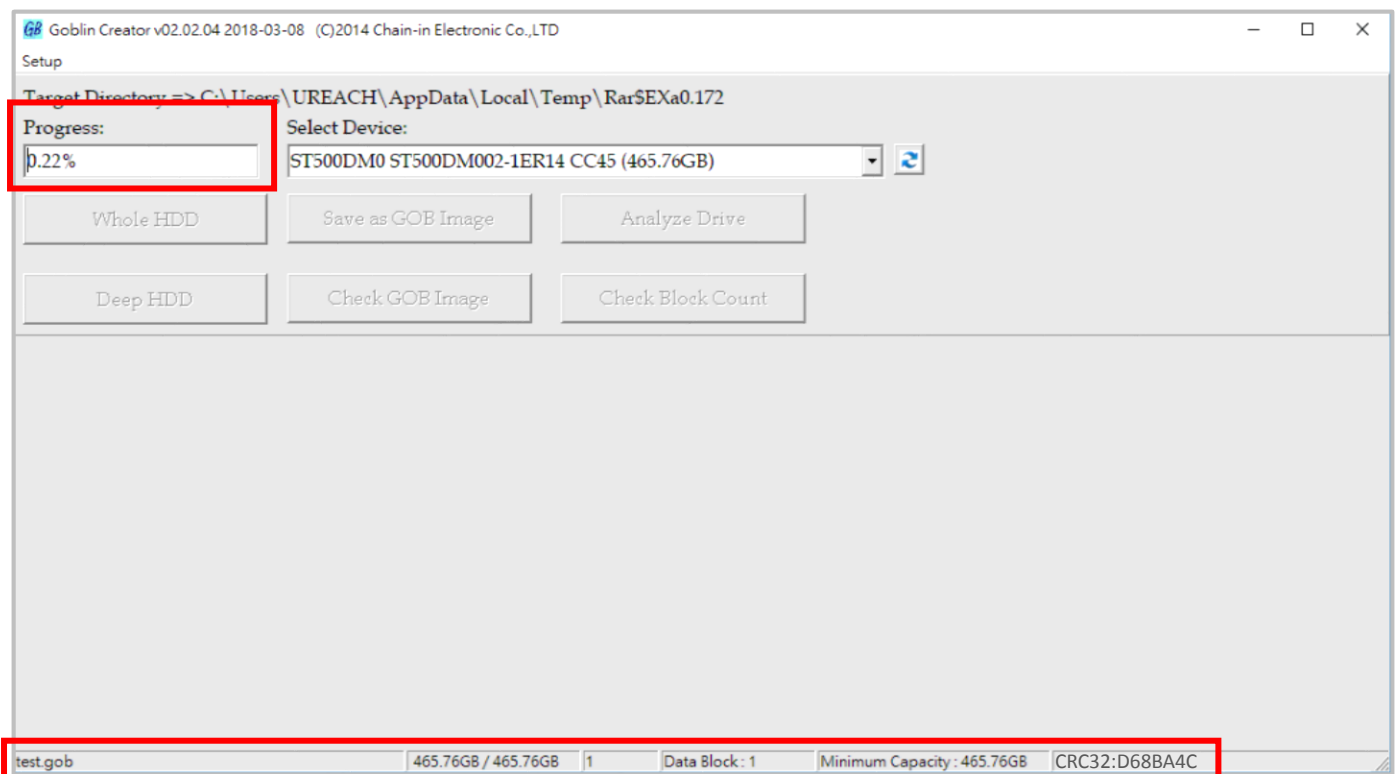
❸ Depth Profiling Analysis
This function is specially designed for data format which "System and Files copy mode" doesn't support. It detects data area in the source and makes the image file.

a. Click "Deep HDD," name the image and click "Save." The device will start the deep analyze process, and the GOB file will be created.
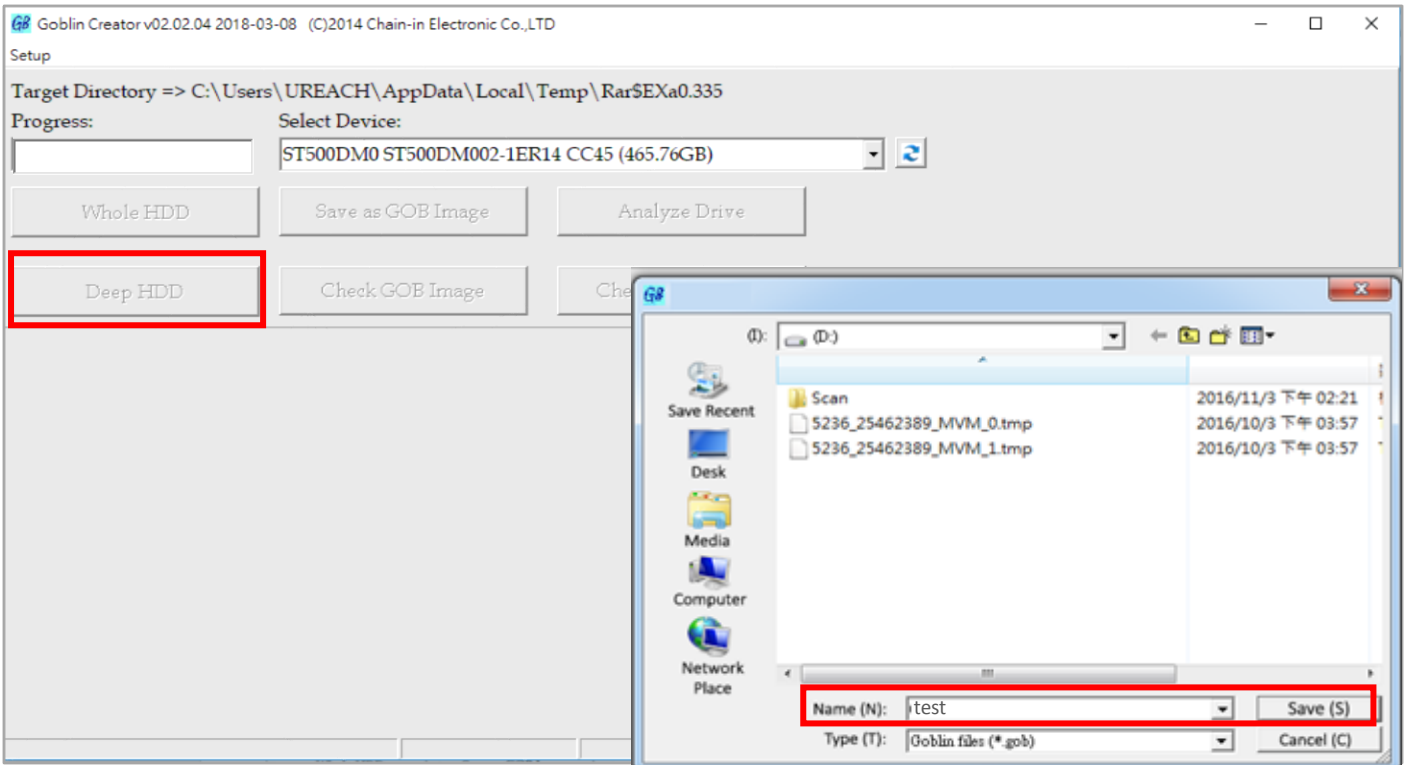
b. After completion, the progress will show "Deep Analyze 100%."
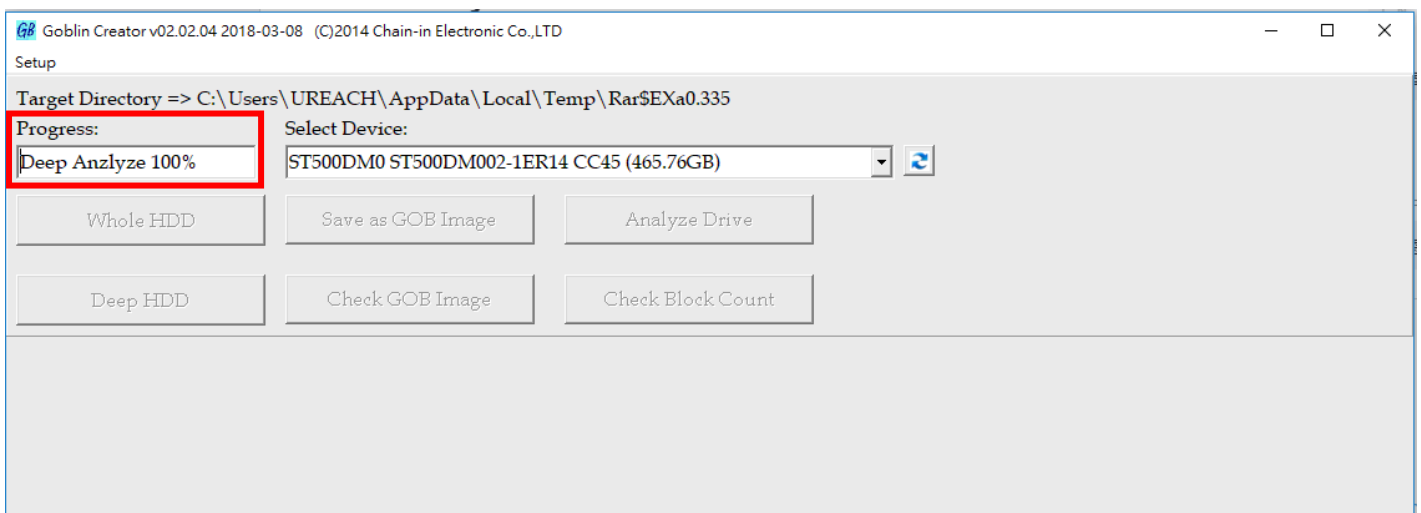
Caution	● If your source device has a lot of garbage data, the image file size made through Depth Profiling Analysis will be big. It is recommended to use a clean device to make a source. Executing 4.5 Secure Erase is one way to

clean the device.
- Depth Profiling Analysis copy only supports new target device (clean target device). Without using a clean target device, there will be high risk for data error.
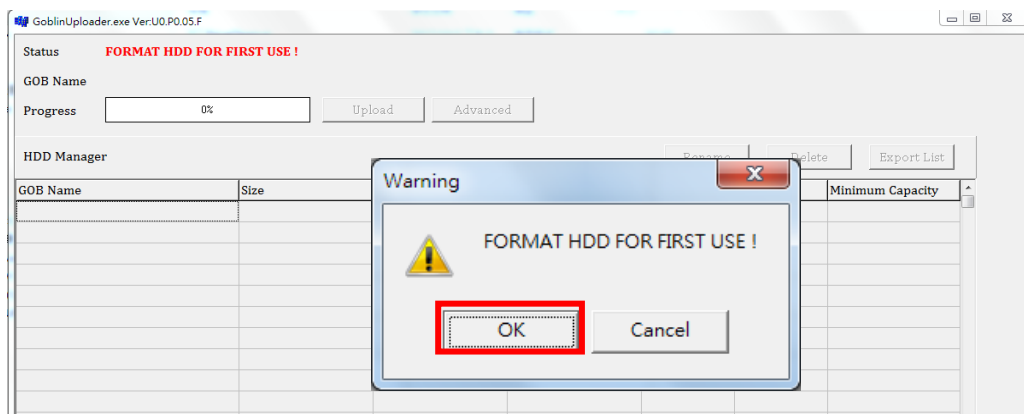
3. Upload the GOB Image to PCIE Duplicator

Steps 3.1 to 3.4 are for users who have purchased an optional internal SSD and will be setting it up for the first time.

3.1 Insert an SSD into the internal port of the PCIE duplicator.

3.2 Connect your computer via USB cable to the PCIE duplicator with both systems powered on.

3.3 Double click 📁 PCIE-Upload Image and execute "GOB Uploader 🔧 application."
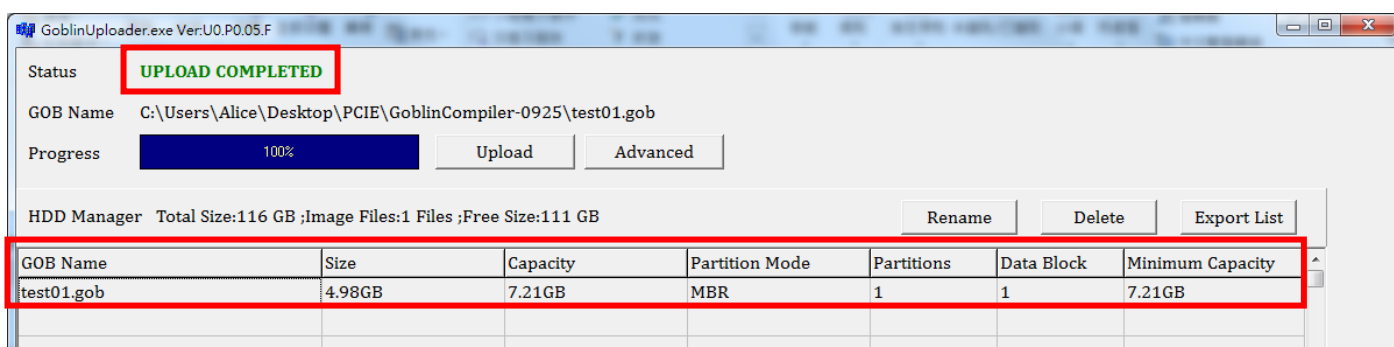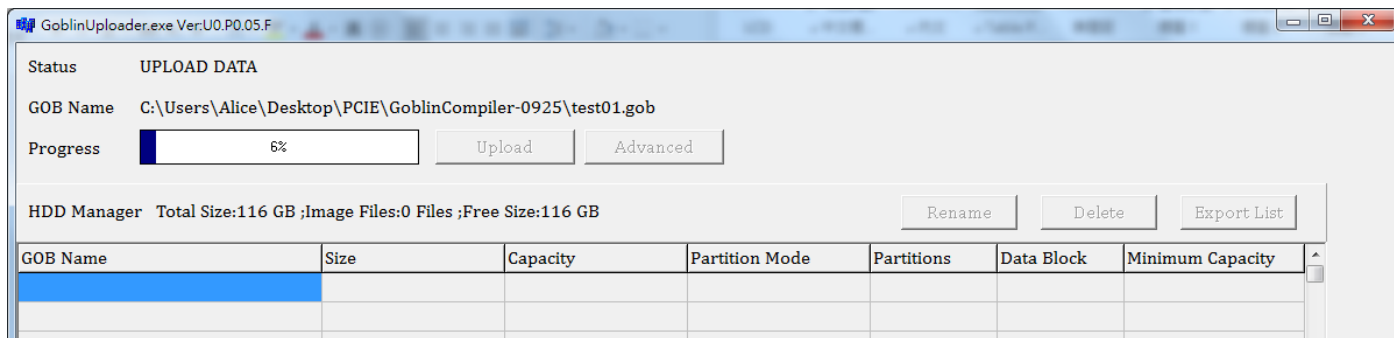
3.4 After successful detection, a popup menu will display (shown in the figure below). Click OK to "Format HDD FOR FIRST USE." This formats the internal SSD installed in the PCIE duplicator.

3.5 Once formatted, click "Upload" and choose an image file. For example, select "test01.gob" then press "OPEN".
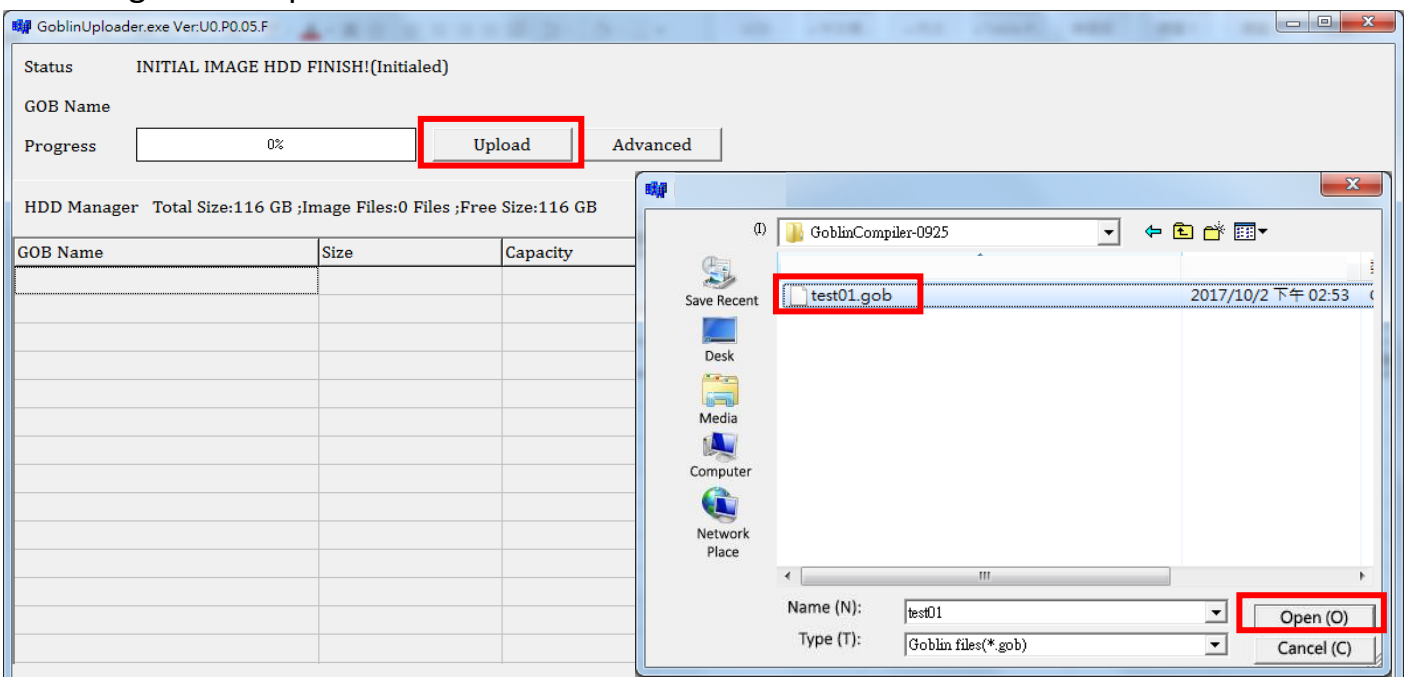
3.6 The progress bar will launch. It uploads the GOB image to the duplicator's internal SSD and completes at 100%.

GOB Name	Size	Capacity	Partition Mode	Partitions	Data Block	Minimum Capacity
test01.gob	4.98GB	7.21GB	MBR	1	1	7.21GB

|		
Note	• To verify the GOB file in the duplicator, please power off, remove the USB link cable, and then power on the machine. Scroll through to select "1.2 Internal Storage", then press "OK" to verify the file name and size are correct. Select Image: Test01.gob 5096M • A maximum of two duplicators can be connected. If more than two duplicators are connected, a popup menu will display an error message "Machine ID Not Match!" • To resolve the error, all files must be deleted, except "GOB Uploader application" within PCIE-Upload Image folder.	

4. How to copy by selecting GOB Image

4.1 Confirm that the GOB Image is stored on duplicator successfully.

4.2 Remove the USB connection cable from duplicator to PC and reboot the duplicator.

4.3 Scroll to select "1. 2 Internal Storage", then press "OK" to select the GOB Image to copy from the duplicator's built-in storage device.

5. How to delete the GOB Image

5.1 Connect your computer via USB cable to the PCIE duplicator.
    Then, execute "GOB Uploader ▦ application."

5.2 Select the GOB file in the list, and press "Delete."
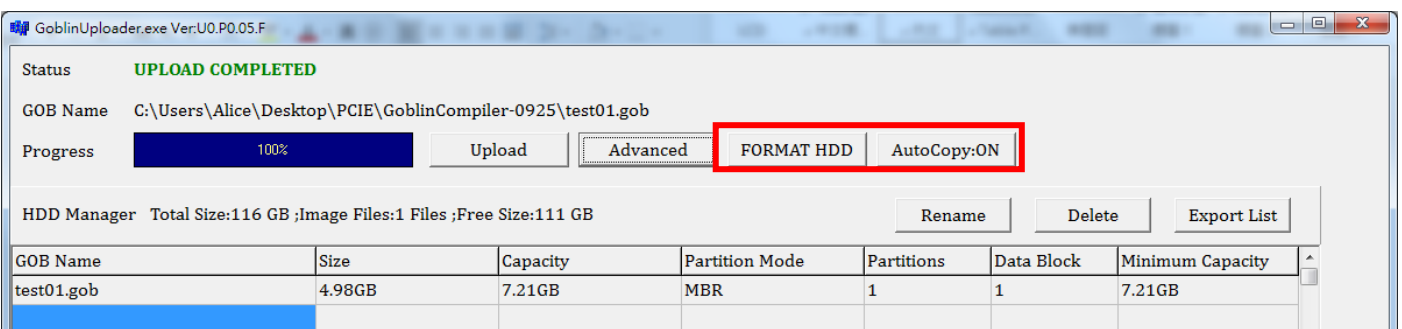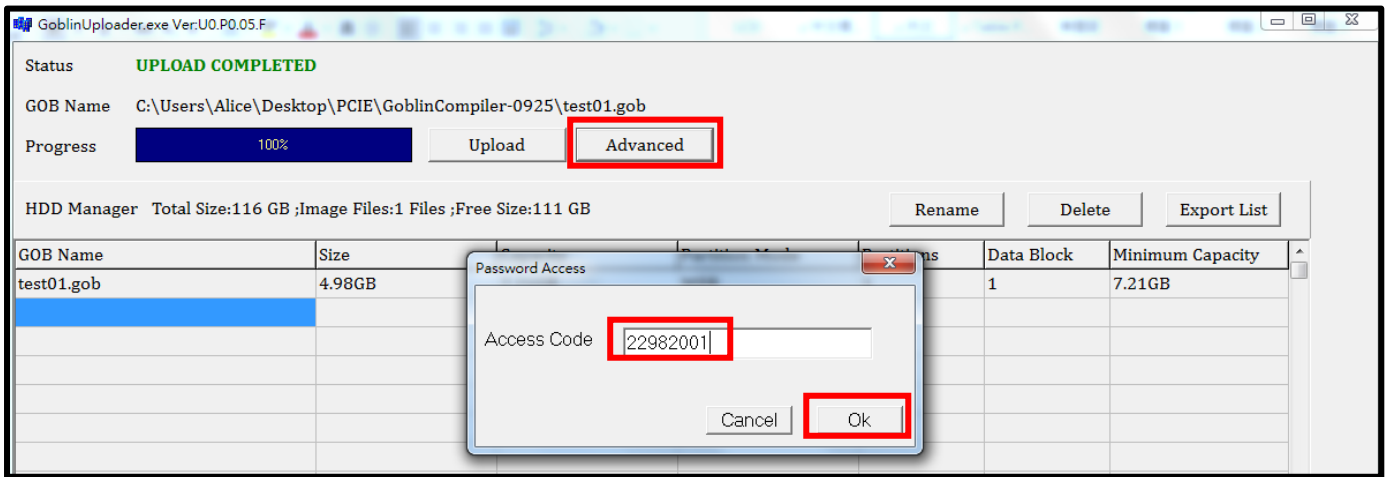
5.3 Confirm the file name and then press "OK."
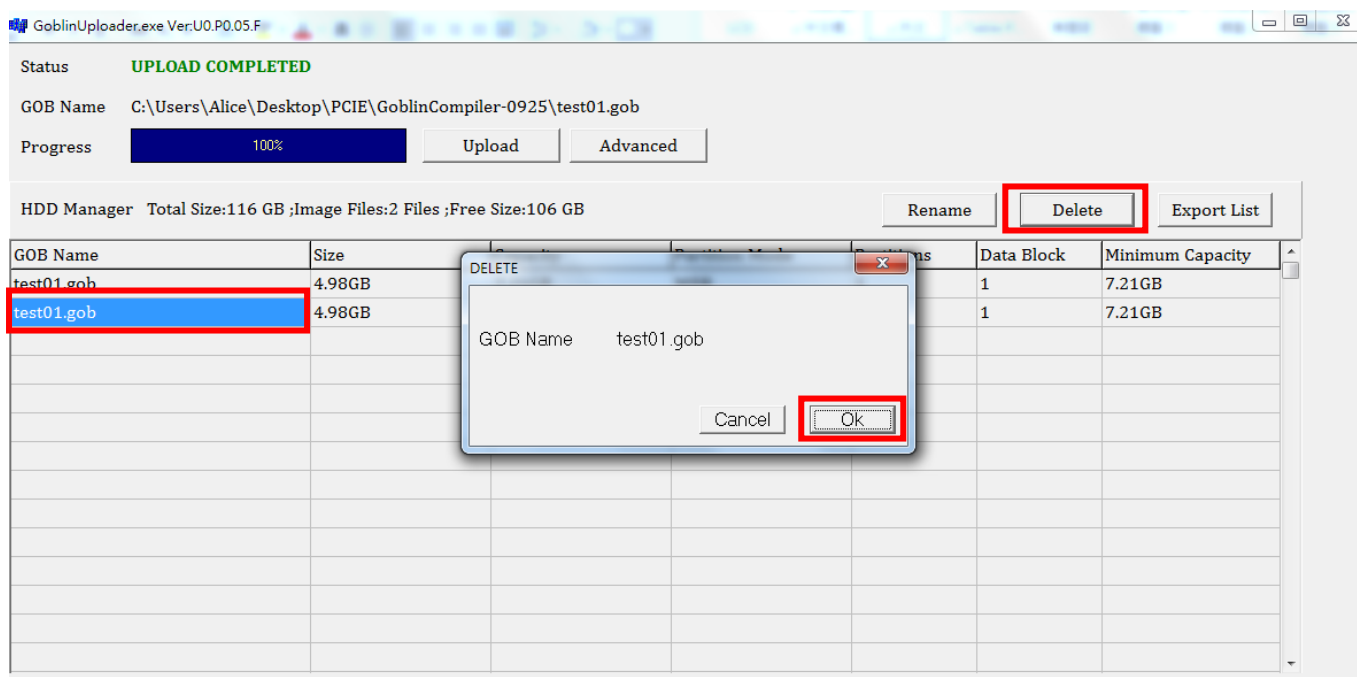
6. Advanced Functions

6.1 Connect your computer via USB cable to the PCIE duplicator.
    Then, execute the "GOB Uploader ▦ application."

6.2 Press "Advanced" and enter the password, "22982001." It will display the advanced functions on the main screen.

- **Format HDD:**
  Format the internal SSD in the PCIE duplicator.

| Caution | Please backup all important data before using this function. |

- **AutoCopy:**
  It will automatically copy after the image is uploaded.

More Information

For additional details on the U-Reach® NV-BM Series, please visit:
http://www.ureach-usa.com/PCIe-1-to-20.html

Specifications are subject to change without notice.