

# **UReach Super1 Series Hard Disk Duplicator and Eraser User Manual**

Home » UReach » UReach Super1 Series Hard Disk Duplicator and Eraser User Manual



Super1 Series Hard Disk Duplicator & Eraser User Manual v A.02

#### **Contents**

- 1 Product Disclaimer
- **2 Piracy Statement**
- 3 Before You Start
- **4 Notice Symbols**
- **5 Function Table**
- **6 Product Overview**
- **7 Functions**
- 8 Documents /
- Resources

# **Product Disclaimer**

U-Reach 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 U-Reach 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 U-Reach product. U-Reach makes every effort to ensure proper function of all products. However, the customer is responsible for verifying that the output of U-Reach product meets the customer's quality requirement.

The customer further acknowledges that improper use of U-Reach products, software program, and/or hardware issues can cause loss of data, defective formatting, or unreliable data loading. U-Reach 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

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.

# **Piracy Statement**

U-Reach accepts no responsibility for copyright infringement or misuse of any U-Reach 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 foroperational effectiveness.

# Caution

Refers to procedures that need to be adhered to or precautions.

# **Function Table**

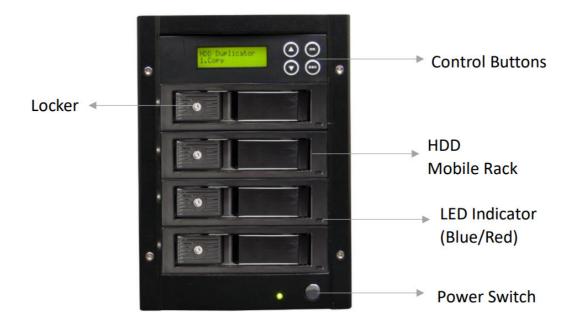
Function	Description		
1. Copy	Copies data from source device to targets. (There are four copy modes for selection at function "6.1 Copy Area")		
2. Compare	Compares the source and targets to ensure copy accuracy.		
3. Copy + Compare	Automatically launches compare function after copy is completed.		
4. Erase It is capable to enable/ di sable erase of source H DD at function 6.6.2	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.		
	<b>4.4 DoD EraseComp</b> Erases device(s), complying with DoD 5220.22-M Standards and verifies complete erasure.		
	4.5 7-Pass Erase Erases device(s) 7 times complying with DoD 5220.22-M(ECE) Standards.		
	4.6 Secure Erase Erases the non-loadable areas complying with NIST 800-88 Standards.		
	4.7 Enhanced Secure Erase Erases devices that supports this feature.		
5. Utility	5.1 Show Disk Info Displays basic information including device model and capacity.		
	5.2 Update Syst em	<b>5.2.1 Update BIOS</b> Updates system firmware by any device at the source port.	
		<b>5.2.2 Create Update HDD</b> Prepares by formatting the device to a 2GB FAT partition to acc ept firmware file.	
	5.3 System Info. Displays system information such as controller, model number, software version, etc.		
	5.4 Get Checksum This function will count CRC64 value at each port.		

6. Setup	6.1 Copy Area Setup copy mode.	<b>6.1.1 System and Files</b> Copies data and skips empty space. Only supports standard formats.	
		<b>6.1.2 All Partitions</b> Copy all the partitions and data, not include unallocated partition.	
		6.1.3 Whole HDD Copies all source data, bit-by-bit.	
		6.1.4 Percentage (%) Sets percentage of source capacity to copy	
	6.2 Copy GPT Backup Area Enable this function to copy the end GPT format.		
	6.3 Skip Error Skips bad sectors during Copy/Compare.		
	6.4 Language Sets preferred language: English or Japanese.		
		No	
	6.5 Delete Disk Sign ature After Copy	Yes Do not copy the disk signature onto target devices.	
	6.6 Advanced Setup	6.6.1 Unknown Format Allows user to copy or skip unknown format(s).	
		6.6.2 Erase Master Allows user to erase the source port or not.	
		6.6.3 Erase Pattern You can select overwrite data to be 1byte or Big random data .	
		6.6.4 Wait HDD Time Sets device power up buffer time prior to copy, erase, etc.	
		6.6.5 Mark After Erase Creates watermark on the device(s) after erase job is comple ted.	
		6.6.6 Transfer Rate Allows user to select from UDMA2 to 7. UDMA6 is the fastest .	
		6.6.7 Stop Motor Time	

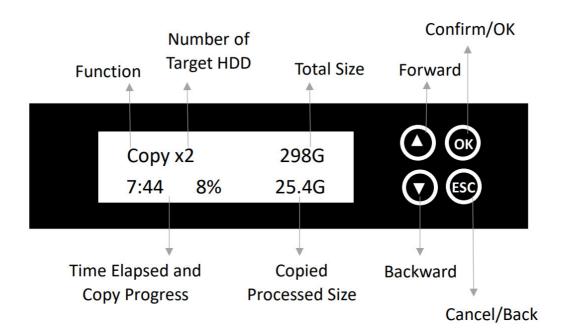
	6.6.7 Stop Motor Time Sets device power down buffer time when tasks are finished.
6.7 Restore Default Reinstates manufacturer settings.	

<sup>\*</sup>Above functions and features subject to change without notice.

# Example: 1-3 Model



# **LCD Configuration**



# **Functions**

# 1. Copy

Step 1: Prepare Source & Targets

Prepare a source HDD and target HDDs.

(It's strongly recommended the source and target are the same capacity.)

Caution Required adapters to copy SSDs and 2.5" HDDs.

Step 2: Place Source & Targets

Place source HDD at source port, target HDDs to other ports.

Step 3: Enter Function "1.Copy"

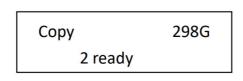
Use ▲ ▼ to select "1.Copy", and then press <OK>. Duplication will start to proceed.

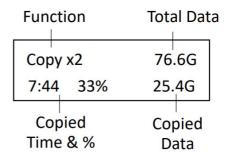
**Note** 

1. If the user set "6.6.4 Wait HDD Time" at 3-30 seconds, the machine will start duplicating automatically after HDDs initialize.

2. If the user set "6.6.4 Wait HDD Time" at "wait key to start," need to press <OK> to start duplication.

The information below shows on LCD during duplication.





Step 4: Completion!

Quantity of copy Pass/Fail, duplication time, and checksum value will show on LCD after duplication completes.

#### Caution

User is responsible for verification of targets' quality. Testing a few completed targets in a mass production environment for quality control is recommended.

#### 2. Compare

Proceed to verify device(s).

Scroll to select "2. Compare", 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.

# 3. Copy+Compare

Sequentially automates from Function 1, Copy to Function 2, Compare.

Scroll to select "3. Copy+Compare", then press "OK" to start the automated duplication and verification process.

# Caution

User is responsible for verification of targets' quality. Testing a few completed targets in a mass production environment for quality control is recommended.

## 4. Erase

There are 7 submenu modes.

**Caution** Please back up all important data before using this function.

**Step 1:** Connect device(s) for sanitizing.

Note Source Port is disabled for erasing. Go to 6.9.2 to enable source port erasing.

Step 2: Enter function "4. Erase"

Scroll to select "4. Erase", then press "OK" to view the 8 erase modes.

Step 3: Select an Erase Function.

Here are a couple tips to see port details during erase:

- Press "▲" or "▼" to view real-time status of each port.
- Press "OK" to view the details of each port.

## Step 4: Erase Completed

Here are a few tips to perform or stop an Erase job.

- Press "Asynchronous Erase Button" to start a new Erase job.
- Press "Asynchronous Erase Button" for 5 seconds to stop a single port.
- Press "ESC" for 5 seconds to stop all the erase jobs.

#### Caution

User is responsible for verification of targets' quality. Testing a few completed targets in a mass production environment for quality control is recommended.

#### 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 on the connected device(s).

Scroll to select "4.2 Full Erase", then press "OK" 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 "OK" 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 "OK" to start the erasing and verifying process.

#### 4.5 7-Pass Erase

This function will erase device(s) 7 times complying with DoD 5220.22-M(ECE) Standards.

Scroll to select "4.5 7-Pass Erase", then press "OK" to start the erasing process.

#### 4.6 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.

#### Caution

If Secure Erase process is interrupted, the device will be locked. Please execute again and wait until it finishes.

#### 4.7 Enhanced Secure Erase

This function erases devices that supports this feature.

Scroll to select "4.7 Enhanced Secure Erase", then press "OK" to start the erasing process.

# 5. Utility

This menu contains submenus related to device information, system information and updates.

Scroll to "5. Utility", then press "OK" to view the submenus.

# 5.1 Show Disk Info

This function will display basic information such as device model, name, capacity, etc...

Scroll to select "5.1 Disk Info", then press "OK" to view the connected device(s).

Then scroll 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 BIOS Format", then press "OK" 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 "OK" 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

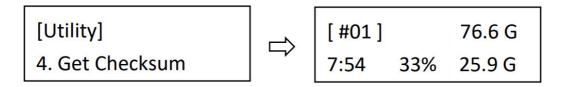
This function will display basic information such as controller, model number, software version, etc.

Scroll to select "5.3 System Info", then press "OK" to view all information.

#### 5.4 Get Checksum

This function will will count CRC64 on each port. Scroll to select "5.4 Get Checksum", then press "OK" to view all information.

#### **Processing:**



#### Result:

[ #01 ] Checksum : D254A1F430094C8F [ #02 ] Checksum : D254A1F430094C8F

# Caution

User is responsible for verification of targets' quality. Testing a few completed targets in a mass production environment for quality control is recommended.

# 6. Setup

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

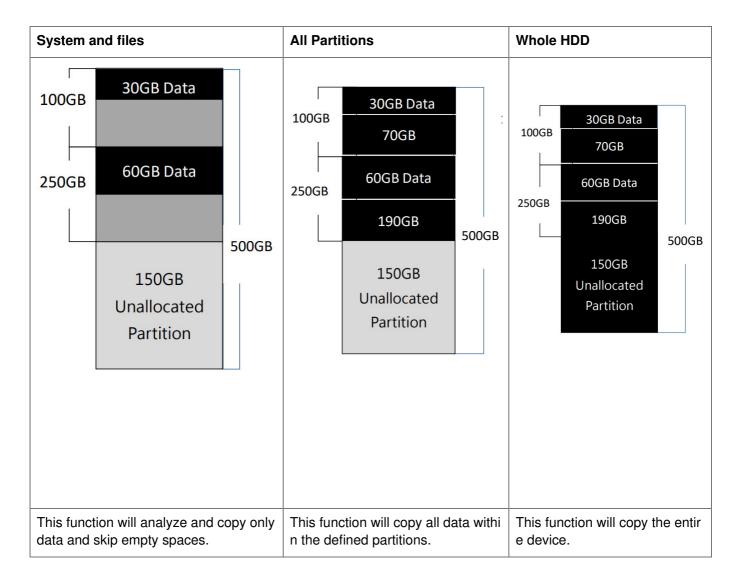
# 6.1 Copy Area

There are 4 submenu modes.

Scroll to select "6.1 Copy Area", 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.



# · Copy and Compare Preparations

Please consider the following settings before proceeding with copy or compare:

- 6.1 Copy Area
- 6.2 Copy GPT Backup Area
- 6.3 Skip Errors
- 6.5 Delete Disk Signature After Copy
- 6.6.1 Unknown Format

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

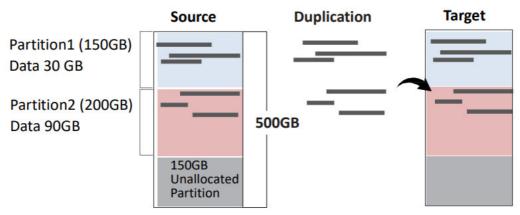
# 1. System and Files

Copies data and skips empty space. Only supports standardized formats.

Scroll to select "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/exFAT, NTFS, EXT2/EXT3/EXT4, and HFS/HFS+/HFSX are supported in this copy mode.

# [Copy Area] System and Files



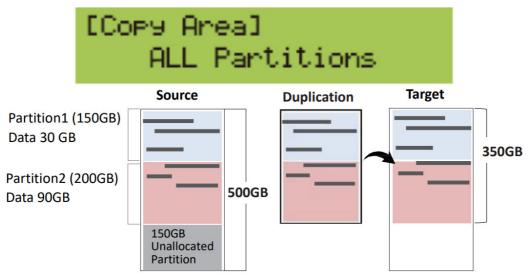
Only 120G data area will be copied.

# 2. All Partitions

Copies all partitions and data, unallocated partitions not included.

Scroll to select "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.



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

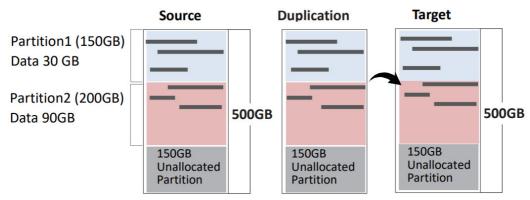
# 3. Whole HDD

Copies all source data bit by bit.

Scroll to select "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 Area] Whole HDD

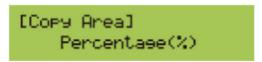


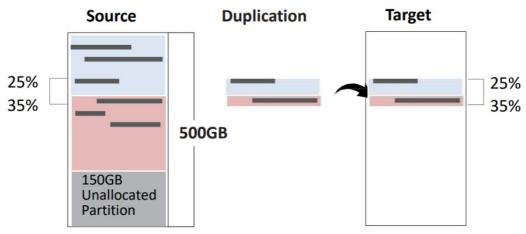
All 500GB of data will be copied.

# 4. Percentage (%)

Select percentage of source capacity to copy.

Scroll to select "Percentage", set the upper and lower %, then press "OK" to save the copy method.



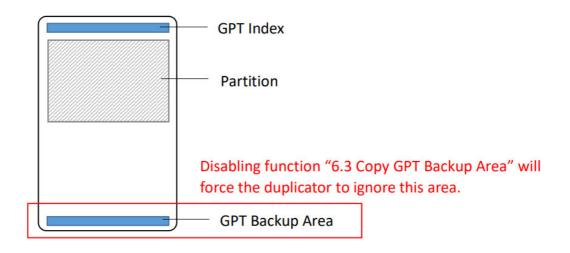


Only copies the selected area.

# 6.2 Copy GPT Backup Area

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

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



#### Caution

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

## 6.3 Skip Errors

Skips bad sectors during Copy/ Compare/ Erase.

Scroll to select "6.3 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 Error" at "0." Bad sectors can be set as unlimited or at a value from 0 to 65.535.

#### 6.4 Language

Select English or Japanese.

Scroll to select "6.4 Language", then press "OK." Then scroll through to select the desired language.

# 6.5 Delete Disk Signature After Copy

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

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 "Delete Disk Signature After Copy" is set at "Yes."

# 6.6 Advanced Setup

# 6.6.1 Unknown Format

This function only works with "6.1 Copy Area >> System and Files."

Scroll to select "6.6.1 Unknown Format", then press "OK".

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

# 1. Copy Unknown

Copy unknown format(s).

Scroll to select "6.6.1 Unknown Format >> Copy Unknown", then press "OK" to save this setting.

# 2. Skip Unknown

Skip unknown format(s).

Scroll to select "6.6.1 Unknown Format >> Skip Unknown", then press "OK" 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 "OK." Then scroll through to select one of two settings.

# 1. Disabled

Devices connected to source port cannot be erased.

Scroll to select "6.6.2 Erase Master >> Disabled", then press "OK" to save this setting.

#### 2. Enabled

Devices connected to source port can be erased.

Scroll to select "6.6.2 Erase Master >> Enabled", then press "OK" to save this setting.

#### 6.6.3 Erase Pattern

Scroll to select "6.6.3 Erase Pattern", then press "OK". Then scroll through to select one of two settings.

# 1. One Byte

Random character written per byte.

Scroll to select "6.6.3 Erase Pattern >> One Byte", then press "OK" to save this setting.

# 2. Big Random Data

Random character written in a set of area.

Scroll to select "6.6.3 Erase Pattern >> Big Random Data", then press "OK" to save this setting.

#### 6.6.4 Wait HDD Time

Sets device power up buffer time prior to copy, erase, etc...

Scroll to select "6.6.4 Wait HDD Time", then press "OK" to set buffer time from 3 to 50 seconds. The default is 30 seconds.

#### 6.6.5 Mark After Erase

Creates watermark on the device(s) after erase job is completed. This watermark will show when executing "5.1 Show Disk Info."

# 6.6.6 Transfer Rate

Allows user to select the transfer rate.

Scroll to select "6.6.6 Transfer Rate", then press "OK". Select the desired transfer mode from UDMA2 to 7. The default is UDMA6.

# 6.6.7 Stop Motor Time

Sets device power down buffer time when tasks are completed.

Scroll to select "6.6.7 Stop Motor Time", then press "OK" to set buffer time from 1 to 20 seconds. The default is 5 seconds.

#### 6.7 Restore Defaults

Restores all settings back to manufacturer defaults.

Scroll to select "6.7 Restore Defaults", then press "OK" to restore settings back to manufacturer defaults.

\*Specifications subject to change without notice.

v A.02

# **Documents / Resources**



**UReach Super1 Series Hard Disk Duplicator and Eraser** [pdf] User Manual

Super1 Series Hard Disk Duplicator and Eraser, Super1 Series, Hard Disk Duplicator and Eraser, Duplicator and Eraser, Eraser

Manuals+,