



USB 2.0 Drive Duplicator

User Manual

Version E

Index

Product Disclaimer	3
Warranty	4
Piracy Statement	4
Before You Start	4
Notice Symbols	5
Introduction	6
Function Table	9
[Duplicator]	13
1. Copy	13
2. Compare	14
3. Copy+Compare	14
4. Do Format	15
5. Erase	16
6. Utility	17
7. Setup	18
8. Working Mode	20
[Tester]	21
1. Media Check	21
2. Signal Detection	24
3. Measure Speed	24
4. Do Format	25
5. Utility	26
6. Working Mode	27
Specification	28

Product Disclaimer

The manufacturer is not accountable for any incidental or consequential damages, including, but not limited to property harm, loss of time or data from use of any our product, or any other damages attributable to product malfunction or failure of including without limitation, those attributed to reliance of the materials provided, costs of product replacement, loss of use, data or profits, delays or business interruptions, any principle of

legal responsibility arising from or in reference to the use, overall performance, delays in servicing, or lack of ability to render service of any our product. The manufacturer makes every effort to ensure proper function of all products. However, the customer is responsible to verify that the output of our product meets the customer's quality requirement. The customer further acknowledges that improper use of our products, software program, and/or hardware issues can cause loss of data, defective formatting, or unreliable data loading. The manufacturer will make efforts to resolve or repair any issues recognized by customer either within the warranty period or on a time and materials basis.

Specifications and features are subject to change without notice or obligation.

Warranty

The manufacturer provides a basic ???-year parts and labor warranty for all its products, excluding cables, adapters, and other consumable items. An extended warranty may be purchased. Telephone and email support is available for the life of the product as defined by the supplier.

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

Piracy Statement

The manufacturer accepts no responsibility for copyright infringement or misuse of any our equipment. Copying any form of data (audio, video, or software) without the permission of the copyright holder is illegal. It is the sole responsibility of the user to ensure that the legal copyrights of the copyright owners are respected.

Before You Start

Important Notice

- Carefully read the entire manual before operating.
- Devices will operate at high temperature during high-speed tasks. Please wear protective gloves to prevent burns when handling devices.
- Ensure machine and operator are properly grounded to prevent ESD.
- 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 noncompliance with 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.
- 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 devices.
- Static electricity may cause duplication error. Please pay attention to the duplicator's environment and operator's equipment. Purchasing static electricity elimination equipment to avoid static electricity shock while in high static electricity areas.

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.

Introduction

1. Features

The duplicator was designed with diversified media compatibility and high-speed performance in mind to not only flawlessly duplicate in high speed demands, but also provides helpful examinations by delivering the most accurate testing functions known today. The user-friendly interface offers stress-free operation with no steep learning curve

to climb. Its ergonomic design facilitates efficient operation through simpler insertion and removal of flash cards.

- Ultra-high transmission speed.
- Real multitask processing capability. Whether copy, compare, media check or format, each feature is independently executed. Each flash slot has an independent processing unit.
- Powerful H2/H5 for speed and flash quality check.
- Non-PC based, with no risk of virus infection.
- One touch copy. Real time information will be displayed on the LCD screen.
- Supports Asynchronous erase/format/media check/speed check. The status of each flash media can be viewed during copy operation by pressing the ▲ ▼ keys.
- Ultra-high speed bit-for-bit hardware comparison.
- Various copy speed selection is available for assorted flash media quality.
- Special speed selection function to filter out qualified flash media during quality control process.

2. Package Contents

*Wear protective gloves to prevent burns when handling devices.

3. Hardware Overview

Function Table

*Below functions and features subject to change without notice.

*There are different menus for the 2 working modes. Please choose at “Working Mode”

USB3.1 Duplicator

Function	Description	
1. Copy	Data or whole media duplication only.	
2. Compare	Bit-for-bit comparison between the source and target flash medias.	
3. Copy&Compare	First copies, then compares the target to the source once duplication is completed.	
4. Do Format	1. Auto Format Auto formats media to FAT16 or 32.	
	2. FAT16 Format Formats media to FAT16.	
	3. FAT32 Format Formats media to FAT32.	
	4. Set FAT 16 Cluster Size Sets FAT16 Cluster size.	
	5. Set FAT 32 Cluster Size Sets FAT 32 Cluster size.	
5. Erase	5.1 Quick Erase Erases flash media content. It will keep the FAT format.	
	5.2 Full Erase Fully erases, bit for bit, data on flash, including format and content.	
	5.3 DoD Erase Erases flash three times complying with USA Department of Defense (DoD) standards.	
6. Utility	6.1 USB Info. This feature will show flash's data information, file format, content size, and capacity.	
	6.2 System Info. This feature will show system information, such as, model number and software version.	
	6.3 System Update System firmware update via the flash media.	
7. Set Up	7.1 Copy Area	7.1.1 System and Files The system automatically analyzes the source data's format and copies only the data area. (Available for FAT16/32, NTFS, Linux - ext2/ext3/ext4)
		7.1.2 Whole Media Copies the flash's entire content, including the empty

		space.
	7.2. Button Sound Enables or disables the audible beep when a button is pressed.	
	7.3 Active USB Revision	
	7.4 Target Tolerance Sets the capacity tolerance range between the source and target. The default setting is “No limit”.	
	7.5. Power off Time Between Copy+ Compare Sets the power-off time between Copy and Compare.	
	7.6. Language Sets system language. (English or Japanese)	
	7.7. Erase Master Port Allows user to erase/format the source port or not.	
	7.8 Set to Default Reverts everything back to original manufacturer settings.	
8. Working Mode There are different menus for the 2 working modes.	8.1. Duplicator	
	8.2. Tester	

USB3.1 Tester

Function	Description	
1. Media Check	1.1 H2 (Keep Format) Checks the flash's quality by reading and writing H2 files. This function will change the flash's content but keep the original format.	
	1.2 H2 (Keep Data) Checks the flash's quality by reading and writing H2 files. This function will not change the flash's content and format.	
	1.3 H2 (Overwrite) Checks the flash's quality by reading and writing H2 files. This function will change the flash's content and format.	
	1.4 H5 (Keep Format) Checks the flash's quality by reading and writing. This function will change the flash's content but keep the original format.	
	1.5 H5 (Keep Data) Checks the flash's quality by reading and writing. This function will not change the flash's content and format.	
	1.6 H5 (Overwrite) Checks the flash's quality by reading and writing. This function will change the flash's content and format.	
	1.7 Setup Range % Sets the flash's checking range percentage.	From 1%~100%.
	1.8 Setup Range MB Sets the flash's checking range in MB.	From 1~9000MB.
	1.9 Set Error Limit Sets the error tolerance range when checking the flash.	Set up in Sector, KB, MB, or GB.
	1.10 Minimum Read Speed Sets the minimum read speed.	From 0~260 MB/SEC
	1.11 Minimum Write Speed Sets the minimum write speed.	From 0~260 MB/SEC
	1.12 Set Capacity Limit	Set Upper Limit
		Set Lower Limit
		Clear Limit

	1.13 PreCheck USB Signal	No need
		USB3 Signal
		USB2 Signal
		USB2,3 Signal
2. Signal Detection	2.1. USB2 and USB3 Detects both USB2.0 and USB3.1 signals of the device.	
	2.2. Only USB3 Detects USB3.1 signal of the device.	
	2.3. Only USB2 Detects USB2.0 signal of the device.	
3. Measure Speed	Measure USB speed in read and write.	
4. Do Format	4.1 Auto Format Auto formats media to FAT16 or 32.	
	4.2 FAT16 Format Formats media to FAT16.	
	4.3 FAT32 Format Formats media to FAT32.	
	4.4 Set FAT 16 Cluster Size Sets FAT16 Cluster size.	
	4.5 Set FAT 32 Cluster Size Sets FAT 32 Cluster size.	
5. Utilities	5.1. USB Info. This feature will show flash's data information, file format, content size, and capacity.	
	5.2. System Info. This feature will show system information, such as, model number and software version.	
	5.3. System Update System firmware update via the flash media.	
6. Working Mode There are different menus for the 2 working modes.	6.1 Duplicator	
	6.2 Tester	

[Duplicator]

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 start the duplication process.

Note

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

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

Note

- Before duplication, select the data area at "6.1 Copy area"
- Press ▲▼ together for 5 seconds to stop operation on the slowest device.
- Press "ESC" for 5 seconds to stop all the copy jobs.

Caution

It is recommended to reboot the machine after manually stopping the copy.

Step 4: Copy Completed!

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

Note

- If flash card is removed during copy process, the system will stop immediately, and red light will illuminate to notify user the copy has failed. Removing the flash card during copy is strongly discouraged as it will damage the flash card.
- Backup the data on target flash cards before starting the copying process as any pre-existing data will be lost once copy is complete.

2. Compare

The compare function checks the accuracy of copy result. Scroll to select "2. Compare", then press "OK" to start the verification process.

3. Copy+Compare

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

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

4. Do Format

Note

The source port will not perform any formatting because this function will delete the flash media's data.

4.1 Auto Format

This function formats flash into FAT. Plug in the flash media and press "OK". The system will automatically detect its capacity, then format the media per its capacity.

- If the flash media format is already FAT16 or FAT32, the format function won't alter its original format.

- If the original flash media is not FAT format, i.e. NTFS, Linux or FAT multi-partition.

The system will format per flash's capacity. If capacity is above 2GB, the system will format the flash to FAT32 and below 2GB, the system will format the flash to FAT16.

Capacity < 2GB	Format FAT16
Capacity > 2GB	Format FAT32

4.2 FAT16 Format

Sets the FAT16 format.

4.3 FAT32 Format

Sets the FAT32 format.

4.4 Set FAT16 Cluster Size

Sets the FAT16 cluster size.

4.5 Set FAT32 Cluster Size

Sets the FAT32 cluster size.

5. Erase

Caution

Flash data will be wiped out. Please make sure to backup all important data before using this function.

Note

Enable or disable the source port for sanitization at function [7. Working Mode] > [6. Setup] > [7.Erase Master Port].

5.1 Quick Erase

This function erases flash data while keeping the format if the original flash format is FAT16/32. Use the ▲ ▼ buttons to view status, progress, and information.

Note

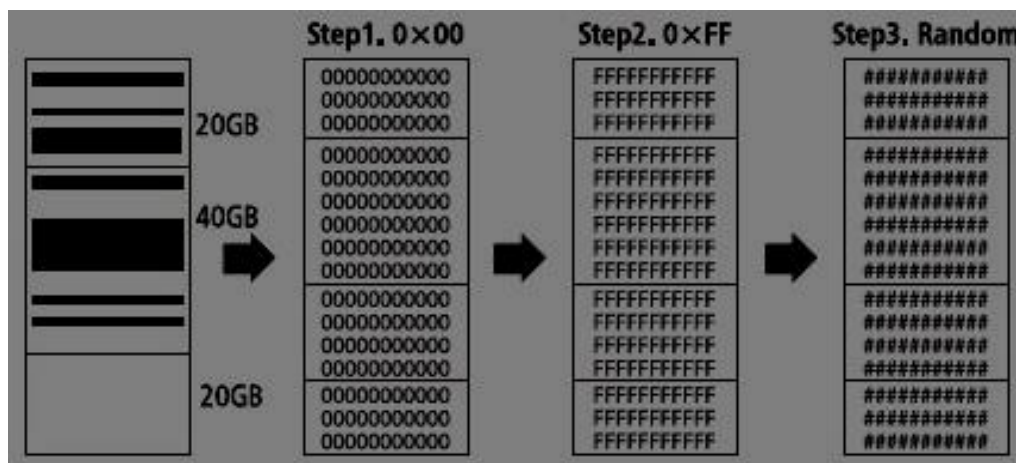
Quick erase function will erase only FAT 16/32 formatted devices.

5.2 Full Erase

Completely erases the entire flash media, including format and content. This task takes longer. Pressing <ESC> during this process will abandon the task, but the original format and content will no longer be readable.

5.3 DoD Erase

DoD Erase complies with the U.S.A. Department of Defense (DoD 5220) standards by erasing the flash three times, which guarantees that data is completely scrubbed.



Note

Use the ▲ ▼ buttons to view the status of each port during erase.

6. Utility

6.1 USB Info.

This setting displays the flash media's basic information such as file format, content size, and total capacity.

Use the ▲ ▼ buttons to view the information of each flash media, source included.

Note

Using this function will not delete the flash media content or format.

6.2 System Info.

This function displays system information such as model number and software version.

6.3 System Update

Step 1: Prepare a USB drive for update.

Connect a USB drive to PC. Download the latest firmware, unzip the BIOS firmware, then save it to the root directory in the USB drive.

Note

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

Please place the unzipped file ".bin" into the USB for update.

Step 2: Proceed to update firmware.

Connect USB drive. Scroll to select "6.3 System Update", 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 supplier will not be held responsible for any damages.

7. Setup

7.1 Copy Area

❶ System and Files

Also known as "Quick Copy". The source's format is automatically analyzed and if it's recognizable, such as, FAT 16/32/64, NTFS, or Linux ext. 2/3/4, the system will copy the data only, rather than the entire flash.



Note

If the file format is not recognized, the whole flash card, including empty space, will be copied even if you specify copy area in "System and Files".

❷ Whole Media



The system will copy the whole flash card, including empty space and format. This function is useful when users want to copy the whole flash or have a flash source with an unknown format. "Whole media" copies take a bit longer to complete.

7.2 Button Sound

Controls whether to hear a sound when a button is pressed.

7.3 Active USB Revision

Sets the operating protocol for the duplicator.

❶ Both USB 2.0/3.0 :

The duplicator will detect USB3.1 first. If the device does not support USB3.1 protocol, the machine will detect USB2.0 instead.

❷ Only USB 2.0 :

The duplicator will detect USB2.0 only. If the device does not support USB2.0 protocol, it will show "Fail."

❸ Only USB 3.0 :

The duplicator will detect USB3.1 only. If the device does not support USB3.1 protocol, it will show "Fail."

7.4 Target Tolerance

This function sets the capacities tolerance range between the source and target flash. If the capacity is outside the tolerance range, the copy will fail.

❶ 100% Same

❷ No Limit

❸ Allow Tolerance

Set UP Limit: The target capacity can be bigger than the source capacity.

Set UP Limit: The target capacity can be smaller than the source capacity.

7.5 Power Off Time Between Copy + Compare

The use of this setting is highly advised as it prevents data loss due to unstable flash. Users can set the time gap of power supply between copy and compare. The time gap can be set from 0 to 15 seconds. The default is "3".

7.6 Language

Sets the system's language. (English or Japanese)

7.7 Erase Master Port

Default setting is "Off". Turning on will allow the master port to do erase, format and quality check.

7.8 Set to Default

Restores all settings back to manufacturer defaults.

8. Working Mode

There are different menus for the 2 working modes.

8.1 Duplicator

Please refer to this manual guide from P.11.

8.2 Tester

Please refer to this manual guide from P.19.

[Tester]

1. Media Check

Note

- Functions mentioned with “Overwrite” will change the content and format of flash media, please do not execute this function if there is important data stored in it.
- To protect source data, the system default setting will not execute this function on the master device.

1.1 H2 (Keep Format)

This function performs a read and write test to determine the flash’s quality. After H2 (Overwrite) test, the device will be formatted into original format. (Supports FAT16, FAT32, and exFAT).

1.2 H2 (Keep Data)

This function performs a read and write test by H2 file on the empty space to determine the flash’s quality. The flash’s original data will not be erased during this test.

1.3 H2 (Overwrite)

This function performs a read and write test to determine the flash’s quality. After H2 (Overwrite) test, the device will contain H2 files which can be verify again through computer’s software if necessary.

1.4 H5 (Keep Format)

This function performs a read and write test on the empty space to determine the flash’s quality. The device will be formatted into original format. (Supports FAT16, FAT32, and exFAT)

1.5 H5 (Keep Data)

This function performs a read and write test on the empty space to determine the flash’s quality. The flash’s original data will not be erased during this test.

1.6 H5 (Overwrite)

This function performs a read and write test to determine the flash’s quality. The flash’s original data will be erased during this test.

1.7 Setup Range %

This function sets the quality check capacity range. Use the ▲ ▼ buttons to set the range from 1 to 100%. The higher the percentage, the longer it takes.

1.8 Setup Range MB

This function sets the quality check capacity range in MB. Use the ▲ ▼ buttons to set the range from 1MB to 9000MB.

Note

The duplicator will abide by whichever was set last if both Range% and Range MB are set.

1.9 Setup Error Limit

This function sets the error tolerance range while checking the flash. Use the ▲ ▼ buttons to set the error limit value. Select units to use (KB or MB), then select the value.

1.10 Minimum Read Speed

This function can be used to select the flash media whose reading speed is too slow. Users can set an expected minimum reading speed for media check, so the flash media that doesn't reach the minimum speed value will be identified.

1.11 Minimum Write Speed

This function can be used to select the flash media whose writing speed is too slow. Users can set an expected minimum writing speed for media check, so the flash media that doesn't reach the minimum speed value will be identified.

Note

When the red-light illuminates to indicate that an error has occurred, use the ▲ ▼ buttons to view the error information.

1.12 Set Capacity Limit

This function is used to set the flash device testing capacity limit. Users can set an upper and lower limit of the flash capacity. To reset, select “clear limit”.

1.13 PreCheck USB Signal

This function can setup whether the Tester to do signal test before Media Check or not.

❶ “No Need”

The Tester will NOT check USB’s signal before Media Check.

❷ “USB 3 Signal”

The Tester will do USB3.1 signal test before Media Check.

❸ “USB 2 Signal”

The Tester will do USB2.0 signal test before Media Check.

❹ “USB2, 3 Signal”

The Tester will do both USB2.0 and USB3.1 signal test before Media Check.

2. Signal Detection

2.1. USB2 and USB3

This function detects both USB2.0 and USB3.1 signal of the device. If any signal can’t be recognized, it will show red light.

2.2. Only USB3

This function detects USB2.0 signal of the device.

2.3. Only USB2

This function detects USB3.1 signal of the device.

3. Measure Speed

This function measures the "read" and "write" flash media speed.

- ❶ Plug flash media into the slot, select function [3. Measure Speed], then press "OK" to start this function.
- ❷ Use the ▲ ▼ keys to view the exact "Read" and "Write" flash media speed on each port.

Note

- To protect source data, the system will not execute "Measure Speed" on the master device.
- The function may alter the format and data content of flash.

4. Do Format

Note

The source port will not perform any formatting because this function will delete the flash media's data.

4.1 Auto Format

This function formats flash into FAT. Plug in the flash media and press "OK". The system will automatically detect its capacity, then format the media per its capacity.

- If the flash media format is already FAT16 or FAT32, the format function won't alter its original format.

- If the original flash media is not FAT format, i.e. NTFS, Linux or FAT multi-partition.

The system will format per flash's capacity. If capacity is above 2GB, the system will format the flash to FAT32 and below 2GB, the system will format the flash to FAT16.

Capacity < 2GB	Format FAT16
Capacity > 2GB	Format FAT32

4.2 FAT16 Format

Sets the FAT16 format.

4.3 FAT32 Format

Sets the FAT32 format.

4.4 Set FAT16 Cluster Size

Sets the FAT16 cluster size.

4.5 Set FAT32 Cluster Size

Sets the FAT32 cluster size.

5. Utility

5.1 USB Info.

This setting displays the flash media's basic information such as file format, content size, and total capacity.

Use the ▲ ▼ buttons to view the information of each flash media, source included.

Note

Using this function will not delete the flash media content or format.

5.2 System Info.

This function displays system information such as model number and software version.

5.3 System Update

Step 1: Prepare a USB drive for update.

Connect a USB drive to PC. Download the latest firmware, unzip the BIOS firmware, then save it to the root directory in the USB drive.

Note

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

Please place the unzipped file ".bin" into the USB for update.

Step 2: Proceed to update firmware.

Connect USB drive. Scroll to select "5.3 System Update", 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 supplier will not be held responsible for any damages.

6. Working Mode

There are different menus for the 2 working modes.

6.1 Duplicator

Please refer to this manual guide from P.11.

6.2 Tester

Please refer to this manual guide from P.19.

Specification

USB3.1 Duplicator/Tester	
Specifications	Capacity
	Operation Type
	Supported Languages
	LCD Display
	LEDs
	Control Panel
Features	Copy Modes
	Compare Function
	Diagnostic Modes
	Sanitization Modes
	Format Functions
Compatibility	Supported Formats
	Supported O/S
Hardware Specifications	Power Supply
	Working Temperature
	Storage Temperature
	Working Humidity
	Storage Humidity
	Certifications

**Specifications subject to change without notice.*