



Reference Manual for HDDMINI

Hard Drive Duplicator

V 1.0

Device Menu Overview

This system comes with many features that can be accessed/adjusted by various functions and settings within the operation menu. Please see the detailed descriptions below:

1. Copy

This process will copy the source hard drive, which is inserted into the Source Port, onto one or multiple target hard drives simultaneously.

2. Copy+Compare

This function performs the Copy process, after which, it will perform a Compare process automatically to ensure data accuracy.

3. Erase

This function erases the hard drives(s) connected to any port other than the Source Port. There are three options for this function:

- *Quick Erase: It will erase only the beginning section of the hard drive, which is just enough to make it look empty.*
- *Full Erase: It will erase the entire hard drive by writing 0's throughout. The erase timeframe varies depending on the data capacity of the hard drive.*
- *DOD Erase: It will erase the hard drive thoroughly to avoid any possible chances of recovery. User will be prompted for # of passes to perform, the more pass rounds selected, the lower the risk of data contents being recovered, but also the longer the time the process will take.*

4. Copy Mode

This setting will allow for the selection of a Copy Mode. There are 3 options:

- *Smart: This mode is the recommended and fastest approach to making copies since it will analyze the source hard drive on supported file systems (FAT16/32, NTFS, exFAT, ext2/3/4) and copy only the area that contains data. If the file system on the source hard drive is NOT being supported, the system will automatically shift to RAW mode.*
- *RAW: This mode is the safest and slowest approach to making copies since it will copy the entire source hard drive bit by bit.*

5. Setup

1) Language

This setting will allow you to choose the display language of the system.

2) Buzzer

This setting will allow the choice to hear a beep sound when a button is pressed or when a task has been completed.

3) Screen Saver

This setting will allow the choice to enable the Screen Saver feature or not. By enabling this feature, a screen saver will be displayed when the system has been idle for an extended period.

4) Read Error Skip*

This setting will allow for the change to the number of times the system will skip ahead when it encounters a reading error, while reading the source hard drive.

By default, the system does not skip any reading error, which would result in an immediate job failure if any read error occurred during the duplication process.

**Enable this setting will not fix any discovered error(s); it will merely skip it and read the remaining data of the source hard drive.*

5) Write Error Skip*

This setting will allow for the change to the number of times the system will skip ahead when it encounters a writing error, while writing to the target hard drive.

By default, the system does not skip any writing error, which would result in an immediate failure for such target hard drive if any write error occurred during the duplication process.

**Enable this setting will not fix any discovered error(s); it will merely skip it and continue write to the next data block of the target hard drive.*

6) Partition Layout

This setting will allow user to adjust various partition layout options for the target hard drive during the duplication process under “SMART”/“Partition” mode.

There are two options for this setting:

- *Auto Ratio: The system will automatically adjust the partition layout under the same ratio as the source hard drive.*
- *As It: The system will set the partition layout exactly same as the source hard drive regardless the capacity differences.*

7) Size Tolerance

Normally, the capacity of the target hard drive is required to be greater than the source hard drive so that all of the data can be copied without loss.

However, not all hard drives have identical storage capacity, even when they are all labeled identically in terms of GB size. Thus, by enabling the size tolerance, the system will allow the target hard drive’s capacity to be less than the original hard drive by the percentage specified at the risk of less data loss/corruption.

8) Startup Menu

This setting will allow you to choose which menu you would like to see first when you turn on the system.

9) Partition Mode

This setting will allow you to copy only the valid partitions of the source hard drive (along with MBR/GPT table) bit by bit.

6. Utilities

1) Compare

This function will perform the data comparison process between the source and target hard drive to ensure data accuracy.

2) Verify Disk

*This function will scan all **target** hard drives for readability.*

3) Measure Speed

This function will perform read and write testes to report the read speed for the source hard drive and write speed of all target hard drives.

4) Device Info

This function will show information regarding the hard drive connected to the system.

5) System Info

This function will show the system's hardware & software information.

6) Load Default

This function will reset all of the options back to the manufacture's default settings. Perform this function if the system is acting abnormal. Perform the "Shutdown" operation and restart the system in order for these changes to take effect.

7) Update Firmware

This function will update the software for the system. The update file needs to be transferred to a Hard Drive pre-formatted as "FAT32" file system on a PC.

There are two options for this function:

- *Format Update HDD: This function will prepare a hard drive to be eligible for firmware-update by format such hard drive in the source port as FAT16/32 File System.*
- *Update: This function will perform firmware-update with the firmware-update hard drive that contains the firmware update file.*

General Firmware Update Procedure:

- a. *Pre-format a SATA Hard Drive using "Format Update HDD" function.*
- b. *Copy the manufacture certified update file onto such pre-formatted hard drive via a PC/Mac.*
- c. *Insert such hard drive into the Source Port of the system.*
- d. *Execute the "Update" function.*
- e. *Restart the system when asked to do so.*

It is strongly suggested that an upgrade to the system's firmware not be performed, unless the system is getting unstable and instructed to do so by a technician.

8) Save

This function will save all the settings modified since the last time the system was booted-up.

7. Manage Accounts

This menu will allow the Administrator to perform the following user administrative tasks. This feature is disabled by default. Prior to activating this feature, the duplicator recognizes all users as the only activated user defined as the administrator. The pre-defined password for this menu is "0000".

1) View User

This menu allows for the viewing of the existing user accounts.

2) Create User

This menu allows for the creation of additional user accounts. Each user has individual settings. During this process, there are prompts to enter a new user name (up to 8 alphanumeric letters or numbers) and user password (consisting of a 4-digit number) for a new account.

3) Delete User

This menu allows for the deletion of an existing user account. During this process, there is a prompt to select the existing account to be removed.

**User "Admin" is the administrative account; this account CANNOT be deleted.*

4) Password on Bootup

This menu allows for the enabling/disabling of the user administrative feature prompt; user login upon boot up.

8. Shutdown

This function saves any system settings that have been modified since powering on the system, to make sure it is safe to turn off the system without any loss of settings. Once the Ready to Power OFF message appears, then the system can be safely turned off via the machine Power Switch. Turning off the system without performing this function will increase the risk of damaging the system.