

# User Guide



## 1:31 USB HDD / Flash Duplicator (UDFH31)

[www.addonics.com](http://www.addonics.com)

### Technical Support

If you need any assistance to get your unit functioning properly, please have your product information ready and contact Addonics Technical Support at:

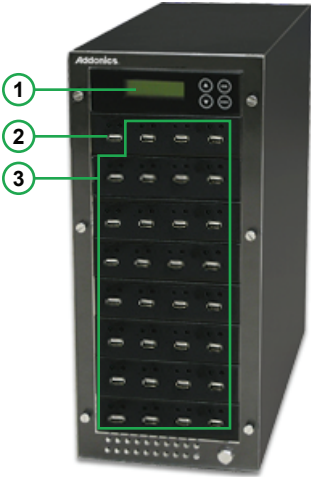
**Hours: 8:30 am - 6:00 pm PST**

**Phone: 408-453-6212**

**Email: <http://www.addonics.com/support/query/>**

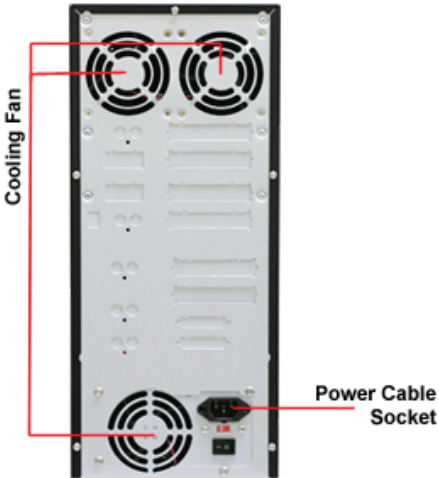
# Unpacking and Overview

## Front View



1. LCD Display and Control Module
2. Source Port
3. Target Ports

## Rear View



**Power Cord (U.S. Version Shown)**

**WARNING:** Please remember to set the power supply to your local outlet voltage prior to plugging in the power cord. Failure to do so may damage the power supply.

## Compatibility

Duplicator is USB 2.0 compliant. Works with USB 3.0 devices at 480Mb/s. Works with the following devices:

- USB Flash media drive
- USB External hard disk
- Addonics Pocket Ultra DigiDrive (including PCMCIA storage devices or flash storage with the Addonics adapters)
- Addonics Pocket eSATA/USB DigiDrive
- Addonics Pocket Micro SATA UDD
- Addonics Diamond or Ruby ExDrive, with or without Cipher feature, using the Addonics USB 3.0 to eSATAp Adapter
- Any of the above USB storage devices used with the Addonics CipherUSB

**NOTE:** Using an external power supply with storage devices that support external power is strongly recommended.

Using the Duplicator with Adapters not supplied by Addonics is not supported or recommended.

Duplicating source media encrypted using the Addonics Cipher family of products can be done without using the Cipher hardware – which will result in encrypted duplicates. This requires the **Setup** option **Copy Area** to be set to “Whole Media.”

The Duplicator can copy media formatted as FAT16, FAT32, NTFS, ext2 or ext3 with the **Setup** option **Copy Area** set to “System and Files.” Copying NTFS media this way requires target media that is larger in capacity than the source.

## Quick Start

1. Insert the source device into the source slot, and any target devices desired.
2. Turn on the unit.
3. After a self-diagnostic, the unit will scan all ports and start on the Copy function.
4. Press OK to begin.
5. The Duplicator can operate in Asynchronous mode if it is able to contain all of the source data in internal memory – about 200MB. Otherwise it will operate in Direct mode.

### For Direct mode:

Once the Duplicator has analyzed the source device, it will scan for suitable target devices. While examining connected targets, the port's green LED will blink. If the device is suitable, the green LED will glow. If the device

is unsuitable, the red LED will glow. The Display will show how many targets are ready.

Press OK once all of the targets are ready to begin copying. The green LEDs will blink to indicate activity. Once copying is complete for a target, the green LED will glow to indicate copy succeeded or the red LED will glow to indicate the copy failed.

**For Asynchronous mode (default):**

Once the Duplicator has analyzed the source device, it will scan for suitable target devices. While examining a target device, the green LED will blink. If a target device is suitable, the green LED will continue to blink and the copy process will begin immediately. When a target is finished, the green LED will glow to indicate the copy succeeded, or the red LED will glow to indicate the copy failed.

Once a target device's port LED is glowing green or red, the device may be removed and another inserted in its place. The new device will be examined and copying will proceed. The LCD Display will show an ongoing tally of devices that passed and failed the copy process.

**Duplicator Functions**

The Duplicator menu has three sections: Main Menu, and Utility and Setup which are accessed as Main Menu Items 6 and 7.

**Main Menu**

**1. Copy**

Performs the Copy process as described in the Quick Start section. When the Copy function is on the menu display, it also shows the current setting for the Copy Area function in the Setup Menu: (Data) for the "System and Files" setting, or (Whole) for the "Whole Media" setting. For details, see 7.2. Copy Area.

**2. Compare**

Performs a full comparison between the target devices and the source device.

**3. Copy+Compare**

Performs both the Copy and Compare functions in a single step. Between the two functions the devices are all powered down for a duration set by the Power Off Time Between Copy+Compare function in the Setup menu. Copy+Compare does not display the Copy Area setting.

**4. Capacity Check**

Performs a basic test on target devices to determine if they are functioning

properly. Does not report the status of the source device. Displays pass and fail counts, and number of drives remaining to test under “Capacity” when in progress. When complete, each target port will show a green or red LED glowing to indicate which devices pass or fail. Using the arrow keys will show the status or capacity of each device.

Capacity Check does work in Asynchronous mode, so once it's been activated, target devices can be removed when finished and more target devices can be inserted.

**NOTE:** NEVER remove a device while the LED is blinking.

## 5. Information

The Information function is actually a sub-menu with two functions:

### 5.1. USB Info.

Pressing OK for USB info will begin with a port number (beginning with [1], which is the SOURCE port). Use the arrow buttons to move between ports. As each port is selected, the unit will read a device if present, and report on the capacity and file system found on that port.

### 5.2. System Info.

Displays the type of duplicator (by source and target count, for example 1-7) and the firmware version.

## Utility Menu

### 6.1. Do Format

Formats the target media using the following sub-options:

#### 6.1.1. Auto Format

The Duplicator will format the media using the following rules:

If the media is formatted using one partition of either FAT16 or FAT32, the unit will simply reformat the media the same way.

If the media is not formatted using a FAT file system, it will be formatted as FAT16 if the capacity is under 2GB, or FAT32 if greater than 2TB.

#### 6.1.2. FAT Format

The Duplicator will format the media as FAT16.

#### 6.1.3. FAT32 Format

The Duplicator will format the media as FAT32.

Having chosen one of the three sub-options, press OK once more to confirm the choice or ESC to cancel.

**NOTE:** NEVER remove a device while the LED is blinking.

### 6.2. Measure Speed

Estimates the read and write speed of the target media. After selecting this function, the port number in use will appear on the LCD, beginning with Port 2 (the first target). Press the arrow buttons to switch between targets. Once a target is detected, the test will continue to run without accepting any more input until it is complete, then provide a short report on the read and write speed for the media found.

**NOTE:** NEVER remove a device while the LED is blinking.

### **6.3. Media Check**

Performs a full examination of all space on target media using the following sub-options:

#### **6.3.1. H3 Safe**

Performs a read-only examination of media, without harming any data.

#### **6.3.2. H5 R/W**

Performs a destructive read-write examination of media.

#### **6.3.3. Setup Range**

This option determines how much of the media is examined by the Media Check, expressed as a percentage. This percentage is shown in the Media Check menu for the Safe and R/W options. Default setting is 100%.

#### **6.3.4. Set Error Limit**

This option determines how much of the tested media may show an error before a media is counted as a FAIL. Expressed as a percentage of the tested area. The Default setting is 0.

Media Check uses Asynchronous Mode, meaning devices may be removed once tested and new media may be inserted after the process begins.

**NOTE:** NEVER remove a device while the LED is blinking.

### **6.4. Quick Erase**

Erases all content on all target media, leaving the file system intact. Quick Erase only works on FAT16 or FAT32 file systems. Media formatted using other file systems will fail, leaving the data intact. Works in Asynchronous Mode, meaning media may be removed once erased and more may be inserted later.

**NOTE:** NEVER remove a device while the LED is blinking.

### **6.5. Full Erase**

Erases all content on target media completely by overwriting all blocks with zeros, leaving the media unformatted when complete. Works in Asynchronous Mode, meaning media may be removed once erased and more may be inserted later.

**NOTE:** NEVER remove a device while the LED is blinking.

### **6.6. DoD Erase**

Performs a 3-pass sanitization of all media blocks compliant with DoD 5220.22-M standards.

### **6.7. System Update**

Performs a firmware update to the unit. Update procedure details to be released with the update itself. Briefly, insert a media into the device containing the binary firmware image, then press OK. When the process is complete, turn the unit completely off, wait five seconds, then turn the unit back on.

### **6.8. Calc. Checksum**

Calculates a checksum value for the Copy Area function defined in the Setup Menu.

**NOTE:** This function is not to be used to validate copies. Media that have identical content and structure may still have different checksums. Testing media devices for accurate duplication should only be done using the Compare function.

## Setup Menu

### 7.1. Startup Menu

Defines the function that will appear by default after power-on testing is completed. Any of the Main Menu functions may be selected.  
Default is 1. Copy.

### 7.2. Copy Area

Determines the method for copying from the source device to the target devices: "Whole Media" copies the entire device, sector-by-sector – without any regard to the contents. "System and Files" copies only the contents of file systems understood by the firmware: FAT16, FAT32, NTFS, ext2 or ext3. File systems not recognized by the firmware will be copied using the "Whole Media" method.  
Default is "System and Files."

### 7.3. Button Beep

Enables or disables the unit sounding a "beep" noise when buttons are pressed.

### 7.4. Asyn Hold Time

During operations that use Asynchronous Mode, this setting determines the delay after all media have been removed before confirming that an operation is complete. Once that delay has been expired, the operation will halt and the display will request confirmation to exit the function. Press OK to confirm the exit, ESC to resume the function.  
Settings are "Turn OFF" to disable this feature, meaning Asynchronous functions will continue indefinitely until ESC is pressed, or a selection of delay in seconds or minutes.  
Default is "Turn OFF."

### 7.5. Target Tolerance

Used to define the acceptable difference in capacity during the copy function, using one of three settings:

No Limit: Target capacity will not be considered before proceeding.

100% Same: Target capacity will be considered suitable only if the capacity is identical to the source.

Allow tolerance: Selecting this option offers two additional choices: Set UP Limit allows either "No Limit" or a percentage greater than the source capacity. Set LOW Limit allows either "No Limit" or a percentage less than the source capacity.

The Target Tolerance menu item displays the current setting in parentheses.  
Default is "No Limit."

**NOTE:** The size of the file system on the source is always duplicated with all contents. Target devices greater than or less than the source capacity will not reflect any changes to correct the difference.

The Duplicator always copies files in their original location. If a smaller target is allowed, any files that occupy space on the source that doesn't exist on the target will cause the duplicate to fail.

### 7.6. Asynchronous

Enables or disables Asynchronous Mode during the copy function. When

enabled, the Copy, Compare, and Copy+Compare functions will work as described by the Quick Start section of this User Guide. When disabled, the Copy, Compare, and Copy+Compare functions will work as described in the Quick Start section of this User Guide in Direct Mode only. Default is "Enable."

### **7.7. Check Before Copy**

Enables or disables testing target media before proceeding with the Copy function.

Default is "Do Check" (enabled).

### **7.8. Power Off Time Between Copy+Compare**

Determines the delay in seconds between the Copy and Compare functions during Main Menu function 3. Copy+Compare.

Default is 3 (seconds).

### **7.9. Language**

Sets the language used by the firmware's LCD display. Choices are English or Japanese.

Default is English.

### **7.10. Working Mode**

Determines the approximate rate at which the Duplicator will attempt to copy media. Faster settings may shorten copy time but result in higher failure rates, slower settings will cause the process to take longer but will improve the reliability of the copy.

Default is "Normal Mode." Choices are: Slowest, Slower, Normal, Faster, Fastest.

### **7.11. Set HDD Mode**

When enabled, all target devices will be required to be equal to or greater than the capacity of the source, overriding "LOW Limit" tolerance settings (see 7.5. Target Tolerance).

### **7.12. Restore Default**

Returns all settings to their factory default values.

## **CONTACT US**

**www.addonics.com**

**Phone: 408-573-8580**

**Fax: 408-573-8588**

**Email: <http://www.addonics.com/sales/query/>**