

## 1:1 HDD/SSD Duplicator with Image Library Backup & Restore

SATDUP11IMG



\*actual product may vary from photos

DE: Bedienungsanleitung - [de.startech.com](http://de.startech.com)

FR: Guide de l'utilisateur - [fr.startech.com](http://fr.startech.com)

ES: Guía del usuario - [es.startech.com](http://es.startech.com)

IT: Guida per l'uso - [it.startech.com](http://it.startech.com)

NL: Gebruiksaanwijzing - [nl.startech.com](http://nl.startech.com)

PT: Guia do usuário - [pt.startech.com](http://pt.startech.com)

For the most up-to-date information, please visit: [www.startech.com](http://www.startech.com)

## FCC Compliance Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

## Use of Trademarks, Registered Trademarks, and other Protected Names and Symbols

This manual may make reference to trademarks, registered trademarks, and other protected names and/or symbols of third-party companies not related in any way to StarTech.com. Where they occur these references are for illustrative purposes only and do not represent an endorsement of a product or service by StarTech.com, or an endorsement of the product(s) to which this manual applies by the third-party company in question. Regardless of any direct acknowledgement elsewhere in the body of this document, StarTech.com hereby acknowledges that all trademarks, registered trademarks, service marks, and other protected names and/or symbols contained in this manual and related documents are the property of their respective holders.

# Table of Contents

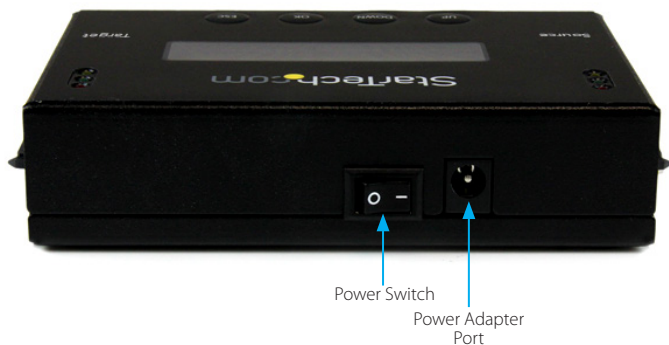
<b>Product Diagram .....</b>	<b>1</b>
Front View .....	1
Rear View .....	1
<b>Introduction .....</b>	<b>2</b>
Packaging Contents .....	2
<b>Hardware Installation .....</b>	<b>2</b>
<b>User Menu Table of Contents .....</b>	<b>5</b>
<b>User Menu Table of Contents .....</b>	<b>6</b>
<b>Hardware Operation .....</b>	<b>6</b>
1. Copy .....	6
2. Compare .....	11
3. Copy & Compare .....	11
4. Image Manager .....	12
5. Utility .....	13
6. Setup .....	17
<b>Technical Support .....</b>	<b>20</b>
<b>Warranty Information .....</b>	<b>20</b>

# Product Diagram

## Front View



## Rear View



# Introduction

## Packaging Contents

- 1 x HDD Duplicator
- 2 x 10cm SATA Cables
- 2 x 50cm SATA Cables
- 1 x eSATA + 5V DC Type F Power Cable
- 1 x eSATA + 12V DC Type M Power Cable
- 1 x Power Adapter
- 3 x Power Cords (NA, UK, EU)
- 2 x HDD Pads
- 1 x Instruction Manual

**WARNING!** Hard drives and storage enclosures require careful handling, especially when being transported. If you are not careful with your hard disk, lost data may result. Always handle your hard drive and storage device with caution. Be sure that you are properly grounded by wearing an anti-static strap when handling computer components or discharge yourself of any static electricity build-up by touching a large grounded metal surface (such as the computer case) for several seconds.

## Hardware Installation

**WARNING!** Hard drives and drive duplicators require careful handling, especially when being transported. If you are not careful with your hard disk, lost data may result. Always handle your hard drive and duplicator device with caution. Be sure that you are properly grounded by wearing an anti-static strap when handling computer components or discharge yourself of any static electricity build-up by touching a large grounded metal surface (such as the computer case) for several seconds.

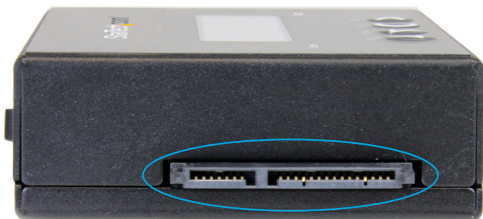
1. Ensure the power switch is set in the off position. Using the included **Universal Power Adapter**, connect the **Power Adapter Port** on the back of the **SATDUP11IMG** to an available power outlet.



2. Connect your **Source drive** to the **SATA SSD/HDD Source Port** on the **SATDUP11IMG**.

**Note:** The Source Drive can be a drive you intend to make an exact copy of, or an Image drive containing several hard drive images.

- a) If the source drive is a **SATA HDD/SSD**, use the included **Short SATA cable** or the included **Long SATA cable** if the drive is installed into a PC chassis.
- b) If your source drive is an **eSATA HDD/SSD Enclosure or Dock**, use the included **eSATA + 12V Power Cable** or **eSATA+5V Power Cable** depending on your drive requirements.



3. Connect your **Target drive** to the **SATA SSD/HDD Target Port** on the **SATDUP11IMG**.

**Note:** The Target Drive can be a drive you intend to overwrite with another drive image, or an Image drive you intend to add an additional drive image to.

- a) If the target drive is a **SATA HDD/SSD**, use the included **Short SATA cable** or the included **Long SATA cable** if the drive installed into a PC Chassis.
- b) If your target drive is an **eSATA HDD/SSD Enclosure or Dock**, use the included **eSATA + 12V Power Cable** or **eSATA+5V Power Cable** depending on your drive requirements.



4. For added drive protection and heat insulation, place the **source drive** and target drive on top of each, of the included **SSD/HDD Pads**.
5. Set the **Power Switch** to the on position. The **SATDUP11IMG** is now ready to use.

# User Menu Table of Contents

<b>1. Copy</b>	1.1 HDD > Image	
	1.2 Image > HDD	
	1.3 HDD > HDD	
<b>2. Compare</b>	2.1 HDD > Image	
	2.2 Image > HDD	
	2.3 HDD > HDD	
<b>3. Copy+Compare</b>	3.1 HDD > Image	
	3.2 Image > HDD	
	3.3 HDD > HDD	
<b>4. Image Manager</b>	4.1 Show HDD Info	
	4.2 Show Image Info	
	4.3 Rename Image	
	4.4 Delete Image	
	4.5 Format HDD #2 (Setup Image Drive)	
<b>5. Utility</b>	5.1 Show HDD Info (Select Device 1 or Device 2 depending on your preference)	5.1.1 Model Number
		5.1.2 Version of Firmware
		5.1.3 Serial Number
		5.1.4 Device Power Cycle
		5.1.5 Power-on Hours
		5.1.6 Reallocation Event Count
		5.1.7 Off-Line Scan Uncorrectable
		5.1.8 Seek Error Rate
		5.1.9 Temperature



# User Menu Table of Contents

6. Setup	6.1 Copy Area	6.1.1 System and Files
		6.1.2 ALL Partitions
		6.1.3 Whole HDD
		6.1.4 Percentage
	6.2 Skip Error	
	6.3 Language	
	6.4 Advanced Setup	6.4.1 Unknown Format
		6.4.2 Stop Motor Time
	6.5 Restore Defaults	

## Hardware Operation

### 1. Copy

The copy section of the menu enables you to create exact duplicates of entire drives, or use your Image drive to copy a specific drive image from your image drive. As well as add drive images from hard drives to your image drive. Refer to functions [1.1 / 1.2 / 1.3] for details.

**Note: By Default quick copy mode “System and Files” is selected.**

#### 1.1 HDD -> Image

The HDD to image enables you to create an Image Library Drive/Add an Image to your HDD Image Library Drive.

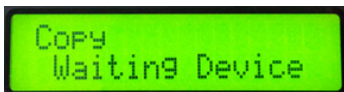
- Using the **UP/DOWN Navigation buttons** and the **Display Screen**, locate **1.Copy** from the on screen menu, and press the **OK button**, to access the [Copy] sub menu.



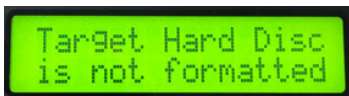
- Using the **UP/DOWN Navigation buttons** and the **Display Screen**, locate **1.HDD -> Image**, on the [Copy] sub menu, and press the **OK button**.



- The **SATDUP11IMG** will analyze the **source drive** and ensure the **target drive** is ready, by verifying size and format.

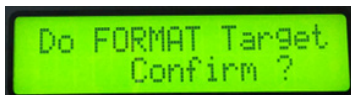


**Note:** If the target drive has not been formatted as an Image drive, the **SATDUP11IMG** will alert you on the display screen, Press the **OK button**.



**WARNING!** Formatting your HDD/SSD will delete all data stored on the target drive.

- Press the **OK button** again to format your target drive as an Image drive.



- Once the drives have been analyzed (and if necessary, formatted the SATDUP11IMG will begin to copy your SSD/HDD image to the Image Drive.



- The image will be completely copied when the % indicator on the **Display Screen** reaches 100%. The image drive now contains the drive image (and if working with a non-formatted drive, an image drive has also been created.)

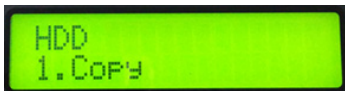
## 1.2 Image -> HDD

The Image to HDD enables you to restore an HDD Image from an Image Library Drive.

**WARNING! The drive attached to the Target port will be overwritten, deleting all data currently stored on the drive.**

**Note: The target drive must be equal to or larger than the source drive image. If the target drive is larger than the source drive image, any additional space will remain unformatted.**

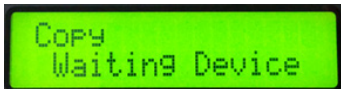
- Using the **UP/DOWN Navigation buttons** and the **Display Screen**, locate **1.Copy** from the on screen menu, and press the **OK button**, to access the [Copy] sub menu.



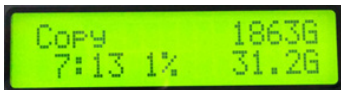
- Using the **UP/DOWN Navigation buttons** and the **Display Screen**, locate **2.Image-> HDD**, on the [Copy] sub menu, and press the **OK button**.



1. The **SATDUP11IMG** will analyze the **source Image Library Drive** and ensure the **target drive** is ready, by verifying size and format. Using the UP/DOWN Navigation buttons and the Display Screen, select the drive image you would like to copy over to the target drive and press the **OK button**.



2. Once the drives have been analyzed (and if necessary, formatted), you will receive an indicator stating the **SATDUP11IMG** is ready and begin the duplication process.



3. The drive image duplication will be complete when the % indicator on the **Display Screen** reaches 100%. The image drive now contains the drive image (and if working with a non-formatted drive, an image drive has also been created.)

#### 4. 1.3 HDD -> HDD

The HDD to HDD enables you to copy one hard drive exactly to another.

**WARNING! The drive attached to the Target port will be overwritten, deleting all data currently stored on the drive.**

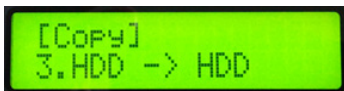
**Note: The target drive must be equal to or larger than the source drive. If the target drive is larger than the source drive, any additional space will remain unformatted.**

1. Using the **UP/DOWN Navigation buttons** and the **Display Screen**, locate **1.Copy** from the on screen menu, and press the **OK button**, to access the [Copy] sub menu.

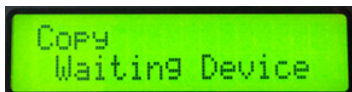


**WARNING! Proceeding will overwrite your target drive with the data on your source drive, deleting all data currently stored on the target drive.**

2. Using the **UP/DOWN Navigation buttons** and the **Display Screen**, locate **3. HDD->HDD**, on the [Copy] sub menu, and press the **OK button**.



3. The **SATDUP11IMG** will analyze the **source drive** and ensure the **target drive** is ready, by verifying drive size, and begin the duplication process.



4. The drive duplication will be complete when the % indicator on the **Display Screen** indicates the duplication has reached 100%. The target drive is now a duplicate of the source drive.



## 2. Compare

The Compare function can be used after your duplication is finished, to confirm the data on the target HDD is identical to the source HDD.

Run The Compare feature after your Copy task is completed.

Note: Please be sure to select the sub menu option that corresponds with your Copy Selection (i.e. IMG->HDD / HDD -> IMG / HDD -> HDD).

## 3. Copy & Compare

The Copy & Compare function executes a duplication based on your selection and then automatically executes the compare function immediately afterwards.

Note: For step by step instructions and definition of sub menu options (i.e. IMG->HDD / HDD -> IMG / HDD -> HDD) please see Copy functions [1.1 / 1.2 / 1.3].

## 4. Image Manager

The Image Manager enables you to create an Image Library Drive and review details, delete, and rename drive images saved on your image drive. Refer to functions [4.1 / 4.2 / 4.3 / 4.4 / 4.5] for details.

**Note: Ensure your image drive is connected to the target port on the SATDUP11IMG for the below operations.**

### 4.1 Show HDD Info

Displays Disk information from the physical hard drive being used as your image drive.

### 4.2 Show Image Info

Displays each drive image file stored on your image drive.

### 4.3 Rename Image

Enables you to rename images on your image drive, follow the below steps to rename a specific image on your drive.

1. From the function table, select 4.Image Manager >> 3.Rename Image.
2. Using the up and down arrow keys, select the file you wish to rename.
3. Using the up and down arrow keys, select words up to 8 characters, then press the okay button to complete your update.

### 4.4 Delete Image

Enables you to delete drive images saved on your image drive. follow the below steps to rename a specific image on your drive.

**WARNING! All data stored in that specific drive image will be lost.**

1. From the function table, select 4.Image Manager >> 3.Delete Image.
2. Using the up and down arrow keys, select the Image you wish to Delete.
3. Press the okay button to delete your specified Drive Image.

## 4.4 Format HDD #2

Enables you to delete the data on the target drive and prepare it to be a new Image Library Drive. Follow the below steps to format and create your Image Library Drive.

**WARNING! All data stored on the drive connected to the target port will be deleted.**

1. From the function table, select 4.Image Manager >> 4.Format HDD #2.
2. Press the okay button to confirm your format.

## 5. Utility

From the Utility options you can access different administrative configurations and information. See the list below outlining the details of each option. Refer to functions [5.1 / 5.2 / 5.3 / 5.4 / 5.5] for details.

### 5.1 Show Disc Info.

The Show Disc Info. function displays information about the HDD attached to the source port (Device 1) or the target port (Device 2) select your desired disc then refer to functions [5.1.1 - 5.1.9] for details.

#### 5.1.1 Model Number

The Model Number function shows basic information about the connected HDD.

[Disc Info.]

1. Model Number

Model: WDC WD

5000BPVT-00HXZT3

#### 5.1.2 Version of Firmware

The Version of Firmware function displays the HDD firmware version of the connected HDD.

[Disc Info.]

1. Version of Firmware

Version

01.01A01



### 5.1.3 Serial Number

The Serial Number function displays the serial number of the connected HDD

[Disc Info.]  
1. Serial Number

Serial NO.:  
WD-WXB1A91M3998

### 5.1.4 Device Power Cycle

The Device Power Cycle function displays the number of times the HDD has been turned on and off.

[Disc Info.]  
5. Device Power Cycle

[Device Power Cycle]  
99

### 5.1.5 Power-on Hours

The power-on Hours function displays the total number of hours the HDD has been powered-on.

[Disc Info.]  
6. Power-on Hours

[Power-on Hours]  
18

### 5.1.6 Reallocation Event Count

The Reallocation Event Count function displays the number of reallocating events. A reallocation event occurs when the HDD fails to save data. Once this occurs the HDD will need to redefine the location to store the data causing a higher amount of drive read/write errors.

[Disc Info.]  
7. Reallocation Event Count

[Reallocation Event Count]  
0

### 5.1.7 Off-Line Scan Uncorrectable

The Off-Line Scan Uncorrectable Sector Count function displays the volume of sectors that are uncorrectable when scanned off-line. The higher the uncorrectable sector volume is, the more seriously the HDD is damaged.

[Disc Info.]

8. Off-Line Scan uncorrecta  
Uncorrectable Sector Count

[Off-Line Scan uncorrecta]

0

### 5.1.8 Seek Error Rate

The Seek Error Rate function displays the rate of error that occurs while searching for data. This represents the rate of damaged data that is stored on your HDD.

[Disc Info.]

8. Seek Error Rate

[Seek Error Rate]

0

### 5.1.9 Temperature

The Temperature function displays the current HDD temperature.

[Disc Info.]

9. Temperature

[Temperature]

22°C

## 5.2 System Info.

The System info function displays duplicator information such as model name and firmware version.

## 5.3 Update System

From The Update System menu you can perform a BIOS update or create an update hard drive to perform a BIOS update. Follow the steps below for details.

### 5.3.1 Update Bios

If an update to the device firmware is available on the StarTech.com product page, this option can be used to update the device. The steps below outline the steps for executing a system update.

**Note: A firmware update should only be done if recommend by StarTech.com. The below steps should only be performed by advanced users. Please contact StarTech.com Technical Support for assistance.**

- a) Format a blank hard drive with a 10GB FAT32 partition. (To do this you can run The Create Update HDD task in the menu (See 5.2.2
- b) Download the firmware file from the StarTech.com Website, and place the file on the main directory of the new partition.
- c) Connect the hard drive to the source port of the SATDUP11IMG.
- d) Using the Navigation Buttons locate "5.2.1 Update BIOS" and press ok.

The update will take place, and the on screen display will alert you upon completion.

### 5.3.2 Create Update HDD

Automatically formats the source hard drive to the proper format for a BIOS update (10GB FAT32 partition).

## 6. Setup

From the Setup function you can access different advanced configurations. See the list below outlining the details of each option. Refer to functions [6.1 – 6.5] for details.

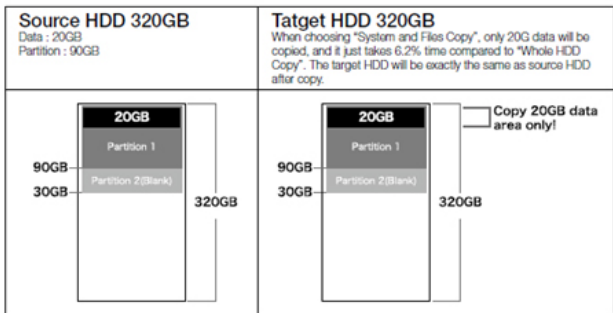
### 6.1 Copy Area

The Copy Area function enables you to adjust the mode in which the hard drives are copied. Refer to functions [6.1.1 / 6.1.2 / 6.1.3] for details.

1. Select “6.1 Copy Area” using the navigation buttons.
2. From the “Copy Area” menu you can select your desired method of hard drive duplication. See the list below outlining the details of each option.

#### 6.1.1 System and Files

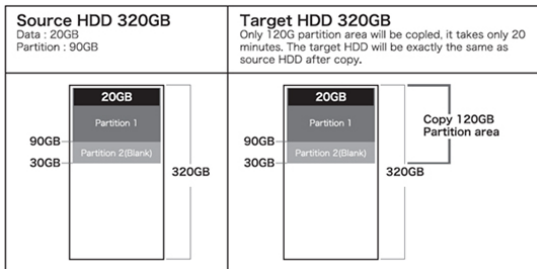
It will copy source HDD's System and Files instead of the whole HDD. The system will analyze the source HDD and identify the data area to copy. The copy will be completed as long as the source HDD data is within the size of the target HDD.



Note: System and Files only supports FAT, NTFS, and LINUX(ext2/ext3/ext4).

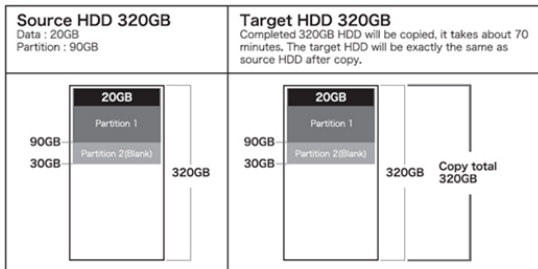
## 6.1.2 All Partitions

This mode will copy all of the partitions bit for bit including the free space. It can support all of the formats



## 6.1.3 Whole HDD

This mode will copy the entire HDD, regardless of the content, format, partition, or free space, and it will take much more time to duplicate the source HDD completely.



## 6.2 Skip Error

The Skip Error function allows you to define a number of acceptable sector errors during the duplication process in the event that the hard drive has bad sectors on it.

## 6.3 Language

The Language function allows you to set is to set the language the menu is displayed in.

## 6.4 Advanced Setup

From Advanced Setup you can adjust HDD Wait Time, and lock the keys, see details below.

- a) Select "6.4 Advanced setup" using the navigation buttons.
  
- b) From the "Advanced" menu you can select your desired application See the list below outlining the details of each option.

**Note:** The number **6.4** at the beginning of each option below represents the "Advanced Setup" heading on the main menu, the numbers: **.1, .2, .3, etc.** indicate the option within the "Advanced Setup" sub menu.

### 6.4.1 Unknown Format

The Unknown Format function allows you to set how the device manages unknown HDD area.

### 6.4.2 Stop Motor Time

When the system finishes function executing, the motor won't stop running immediately. This function is used to set the time of motor stopping after finishing function executing.

## 6.5 Restore Default

The Restore Default function sets the duplication setting back to the original configuration.

# Technical Support

StarTech.com's lifetime technical support is an integral part of our commitment to provide industry-leading solutions. If you ever need help with your product, visit [www.startech.com/support](http://www.startech.com/support) and access our comprehensive selection of online tools, documentation, and downloads.

For the latest drivers/software, please visit [www.startech.com/downloads](http://www.startech.com/downloads)

## Warranty Information

This product is backed by a two year warranty.

In addition, StarTech.com warrants its products against defects in materials and workmanship for the periods noted, following the initial date of purchase. During this period, the products may be returned for repair, or replacement with equivalent products at our discretion. The warranty covers parts and labor costs only. StarTech.com does not warrant its products from defects or damages arising from misuse, abuse, alteration, or normal wear and tear.

### Limitation of Liability

In no event shall the liability of StarTech.com Ltd. and StarTech.com USA LLP (or their officers, directors, employees or agents) for any damages (whether direct or indirect, special, punitive, incidental, consequential, or otherwise), loss of profits, loss of business, or any pecuniary loss, arising out of or related to the use of the product exceed the actual price paid for the product. Some states do not allow the exclusion or limitation of incidental or consequential damages. If such laws apply, the limitations or exclusions contained in this statement may not apply to you.

Hard-to-find made easy. At StarTech.com, that isn't a slogan. It's a promise.

StarTech.com is your one-stop source for every connectivity part you need. From the latest technology to legacy products — and all the parts that bridge the old and new — we can help you find the parts that connect your solutions.

We make it easy to locate the parts, and we quickly deliver them wherever they need to go. Just talk to one of our tech advisors or visit our website. You'll be connected to the products you need in no time.

Visit [www.startech.com](http://www.startech.com) for complete information on all StarTech.com products and to access exclusive resources and time-saving tools.

*StarTech.com is an ISO 9001 Registered manufacturer of connectivity and technology parts. StarTech.com was founded in 1985 and has operations in the United States, Canada, the United Kingdom and Taiwan servicing a worldwide market.*