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



*Actual product may vary from photos*

## User Manual
**SKU#:SATDUP11IMG**

# Compliance Statements

## 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

## Industry Canada Statement

This Class B digital apparatus complies with Canadian ICES-003.
Cet appareil numérique de la classe [B] est conforme à la norme NMB-003 du Canada.

CAN ICES-3 (B)/NMB-3(B)

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# Safety Statements

## Safety Measures

- Wiring terminations should not be made with the product and/or electric lines under power.
- Cables (including power and charging cables) should be placed and routed to avoid creating electric, tripping or safety hazards.

## Mesures de sécurité

- Les terminaisons de câblage ne doivent pas être effectuées lorsque le produit et/ou les câbles électriques sont sous tension.
- Les câbles (y compris les câbles d'alimentation et de chargement) doivent être placés et acheminés de façon à éviter tout risque électrique, de chute ou de sécurité

## 安全対策

- 電源が入っている状態の製品または電線の終端処理を行わないでください。
- ケーブル(電源ケーブルと充電ケーブルを含む)は、適切な配置と引き回しを行い、電気障害やつまづきの危険性など、安全上のリスクを回避するようにしてください。

## Misure di sicurezza

- I terminali dei fili elettrici non devono essere realizzate con il prodotto e/o le linee elettriche sotto tensione.
- I cavi (inclusi i cavi di alimentazione e di ricarica) devono essere posizionati e stesi in modo da evitare pericoli di inciampo, rischi di scosse elettriche o pericoli per la sicurezza.

## Säkerhetsåtgärder

- Montering av kabelavslutningar får inte göras när produkten och/eller elledningarna är strömförda.
- Kablar (inklusive elkablar och laddningskablar) ska dras och placeras på så sätt att risk för snubblingsolyckor och andra olyckor kan undvikas.

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# Product Diagram

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## Rear View



| 1 | *Power Switch* |
|---|---|
| 2 | *Power Adapter Port* |

# Product Information

## Packaging Contents

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

## Requirements

- Source Drive x 1
- Target Drive x 1

# Hardware Installation

> *Warning! Hard drives and drive duplicators require care-ful handling, especially when being transported. If you are not careful with your hard disk, lost data may result. 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. Connect the **Universal Power Adapter** to the **Power Adapter Port** on the back of the **Duplicator** an the other end to an **AC Electrical Outlet**.

2. Connect a **Source Drive** to the **SATA HDD Source Port** on the **Duplicator**.

   - **SATA HDD/SSD**: Connect the **Short SATA Cable** (included) to the **SATA HDD Source Port** and the other end to the **SATA Port** on the **SATA HDD/SSD.**
   - **PC Installation:** Connect the **Long SATA Cable** (included) to the **SATA HDD Source Port** and the other end to the **SATA Port** on a **SATA HDD/SSD** installed in a **PC**.
   - **eSATA HDD/SSD Enclosure or Docking Station:** Connect the **eSATA + 12V Power Cable** (included) or **eSATA+5V Power Cable** (included) to the **SATA HDD/SSD Port** and the other end to a **SATA Port** on an **Enclosure** or **Docking Station**.

   *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.*

3. Connect a **Target Drive** to the **SATA HDD Target Port** on the **Duplicator**.

   - **SATA HDD/SSD**: Connect the **Short SATA Cable** (included) to the **SATA HDD Target Port** and the other end to the **SATA Port** on the **SATA HDD/SSD.**
   - **PC Installation:** Connect the **Long SATA Cable** (included) to the **SATA HDD Target Port** and the other end to the **SATA Port** on a **SATA HDD/SSD** installed in a **PC**.
   - **eSATA HDD/SSD Enclosure or Docking Station:** Connect the **eSATA + 12V Power Cable** (included) or **eSATA+5V Power Cable** (included) to the **SATA HDD Target Port** and the other end to a **SATA Port** on an **Enclosure** or **Docking Station**.

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

4. For drive protection and heat insolation, place the **Source Drive** on an **HDD Pad** and place the second **HDD Pad** on the top of the **Source Drive**. Then place the **Target Drive** on the **HDD Pad** on top of the **Source Drive**.

5. Move the **Power Switch** on the **Duplicator** to the On position. The **Duplicator** is now ready to use.

# Operation

## Copy Function

The **Copy** section 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.

*Note: By default* **Quick Copy** *mode will copy only the* **System and Files** *from the connected* **Source HDD**.

### Copying a HDD

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

1. Use the **Up/Down Navigation** buttons to navigate to the **Copy** section, on the on-screen menu.

2. Press the **OK Button**, to access the **Copy** sub-menu.

3. Use the **Up/Down Navigation** buttons to naviagte to one of the copying methods, on the **Copy** sub-menu.

   - **HDD - Image:** The HDD to image enables you to create an Image Library Drive/Add an Image to your HDD Image Library Drive.
   - **Image - HDD:** The Image to HDD enables you to restore an HDD Image from an Image Library Drive.
   - **HDD - HDD:** The HDD to HDD enables you to copy one hard drive exactly to another.

4.

5. Press the **OK** button, the **Duplicator** will analyze the **Source Drive** and ensure the **Target Drive** is ready, by verifying size and format. The **Display Screen** will read **Copy Waiting Device**.

6. If the **Target Drive** has not been formatted as an **Image Drive**, the **Duplicator** will alert you on the **Display Screen**, **Target Hard Disc Not Formated**, press the **OK** button.

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

7. Press the **OK** button again to format the **Target Drive** as an image drive.

8. When the drives have been analyzed and if necessary, formatted, the **Duplicator** will begin to copy the SSD/HDD image to the image drive.

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

## Compare

The **Compare** function can be used after the HDD duplication is finished and confirms that the data on the **Target HDD** is identical to the **Source HDD**.

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

## Copy & Compare

The **Copy & Compare** function duplicates the **Source HDD** based on the copy method selected and then automatically compares the data on the **Target HDD** with the **Source HDD** afterwards.

*Note: For step by step instructions and definition of sub menu options (i.e. IMG->HDD / HDD -> IMG / HDD -> HDD) please see the [Copy Function] Section.*

## Image Manager

The **Image Manager** allows you to create an **Image Library Drive** and review details, delete, and rename drive images saved on your image drive.

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

### Show HDD Info

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

### Show Image Info

Displays each drive image file stored on your image drive.

### 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** (on screen), select **Image Manager >> Rename Image**.

2. Use the **Up/Down Navigation** buttons to select the file you wish to rename.

3. Using the **Up/Down Navigation** buttons to rename the selected image (max 8 characters), then press the **OK** button to complete the update.

### Delete Image

Allows you to delete drive images saved on your image drive.

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

1. From the **Function Table** (on screen), select **Image Manager >> Delete Image**.

2. Use the **Up/Down Naviagation** buttons to select the **Image** you wish to **Delete**.

3. Press the **OK** button to delete the selected **Drive Image**.

### Format HDD #2

Allows you to delete the data on the **Target Drive** and prepare it to be a new **Image Library Drive**.

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

1. From the **Function Table** (on screen), select **Image Manager >> 4.Format HDD**.

2. Press the **OK** button to confirm your format.

# Utility

From the **Utility** options you can access different administrative configurations and information.

### 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).

### Model Number

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

### Version of Firmware

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

### Serial Number

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

### Device Power Cycle

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

### Power-on Hours

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

## 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.

## 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.

## 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.

## Temperature

The **Temperature** function displays the current HDD temperature.

## System Info

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

## Update System

From the **Update System** menu you can perform a BIOS update or create an update hard drive to perform a BIOS update.

## Update Bios

If an update to the device firmware is available on the www. startech.com/SATDUP11IMG page, this option can be used to update the device.

> ***Note:*** *A firmware update should only be done if recommended by StarTech.com.*

> ***Waning!*** *The below steps should only be performed by advanced users. Please contact StarTech.com Technical Support for assistance.*

1. Use the **Create Update HDD** feature to automatically format a blank hard drive with a 10GB FAT32 partition.

2. Download the firmware file from the www.startech.com/ SATDUP11IMG, and place the file on the main directory of the new partition.

3. Connect the **Hard Drive** to the **Source Port** of the **Duplicator**.

4. Using the **Up/Down Navigation Buttons** locate, **Update BIOS** and press the **OK** button. The update will take place, and the on screen display will alert you upon completion.

## Setup

From the **Setup** function you can access different advanced configurations.

## Copy Area

The **Copy Area** function enables you to adjust the mode in which the hard drives are copied.

1. Use the **Up/Down Naviagation** buttons to select **Copy Area**.

2. From the **Copy Area** menu, select one of the hard drive duplication methods:

   - **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).*

   - **All Partitions:** This mode will copy all of the partitions bit for bit including the free space. It can support all of the formats

   - **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.

   - **Percentage:** Copies a percentage of the connected **Source HDD**. Enter a starting percentage e.g. 0% and an ending percentage e.g. 25%.

## 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.

### *Language*

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

### Advanced Setup

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

1. Use the **Up/Down Naviagation** button to select **Advanced Setup**.

2. From the **Advanced** menu you can select your desired application:

   - **Unknown Format:** The **Unknown Format** function allows you to set how the device manages unknown HDD area.
   - **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.
   - **Restore Default:** The **Restore Default** function sets the duplication setting back to the original configuration.

## Warranty Information

This product is backed by a two-year warranty.

For further information on product warranty terms and conditions, please refer to www.startech.com/warranty.

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