UNIDUPDOCK

Instruction Manual

Hard Drive Docking Station

USB to IDE SATA Standalone Hard Drive Duplicator Dock

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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.

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Introduction

The StarTech.com UNIDUPDOCK functions as both a convenient hard drive copying/imaging solution and an external USB to SATA/IDE HDD docking station for 2.5" (up to 500Gb) or 3.5" hard drives (up to 2 TB).

Packaging Contents

- 1 x universal HDD duplicator
- 1 x USB 2.0 A B cable
- 2 x IDE 40 to 40 pin cables
- 2 x LP4 to LP4 cables
- 2 x 40 to 44 pin adapters
- 1 x universal power adapter (NA/JP, EU, UK, ANZ)
- 1 x instruction manual

System Requirements

- 2.5" and/or 3.5" SATA and/or IDE hard drive(s)
- **USB operation:** Microsoft® Windows® 2000/XP/Vista/7 (32/64-bit), or Apple® Mac OS® X, or Linux®

Product View

- Built-in LCD screen
- Configuration buttons
- LP4 molex connector
- 40-pin IDE connector
- 7+15 SATA connector
- Power connector
- ON/OFF switch
- USB connector

Configuration Buttons

Button	Function
▲	Navigate Up
▼	Navigate Down
ENT	Enter
ESC	Cancel
RESET	Reset duplicator dock (soft)
MUTE	Mute buzzer sounds

Installation

WARNING: Hard drives 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.

Hardware Installation

1. Plug the universal power adapter into a wall power outlet and into the DC In connector on the duplicator dock.

2. If using a SATA hard drive as the source disk, gently slide the hard drive into the 7+15 SATA connector labeled Source-1 on the duplicator dock. Skip to step 6.

3. If using an IDE hard drive as the source disk, connect the IDE ribbon cable

   SATA HDD

   SATA HDD
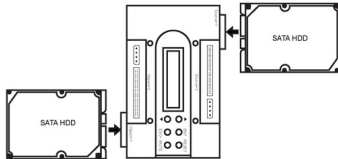
   (included) to the 40-pin connector labeled Source-2. The connector is keyed to fit only one way.

4. Connect the LP4 molex cable (included) into the 4-pin connector next to the 40-pin IDE connector. The connector is keyed to fit only one way.

5. The jumper settings on IDE hard drives must be set to either 'master' or 'cable select'. Refer to hard drive manufacture if unsure how to set.

6. Connect the IDE hard drive to the ribbon cable and LP4 molex connector. If connecting a 2.5" IDE hard drive, attach the 40 to 44-pin adapter to the end of the ribbon cable and LP4 cable, then connect the hard drive to

the adapter.

NOTE: Only one Source disk and one Destination disk can be installed at a time. Only connect a SATA or an IDE hard drive, not both.
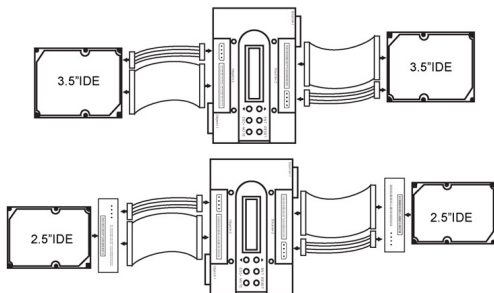
7. Follow the same procedure for either a SATA or IDE hard drive for the Destination side of the duplicator dock.

NOTE: SATA and IDE hard drives can be mixed, so one side can be SATA while the other is IDE.

8. Slide the power ON/OFF switch on the side of the unit to the ON position, to power up the unit.

9. Once the unit has booted up, use the configuration buttons and built-in LCD display to configure and operate the duplicator dock.

10. If using as an external hard drive dock, connect the USB cable from the duplicator dock to the computer's USB port.
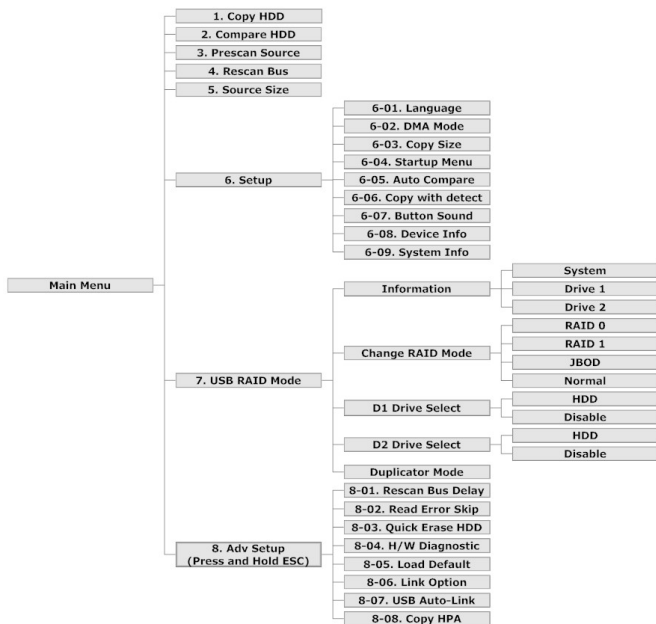
Driver Installation

No driver installation is required for any supported operating system, as this hard drive dock is natively supported, so the drivers are already installed.

How to Use

Menu Options

Copy HDD

```
Main Menu ──┬── 1. Copy HDD
            ├── 2. Compare HDD
            ├── 3. Prescan Source
            ├── 4. Rescan Bus
            ├── 5. Source Size
            │
            ├── 6. Setup ──┬── 6-01. Language
            │              ├── 6-02. DMA Mode
            │              ├── 6-03. Copy Size
            │              ├── 6-04. Startup Menu
            │              ├── 6-05. Auto Compare
            │              ├── 6-06. Copy with detect
            │              ├── 6-07. Button Sound
            │              ├── 6-08. Device Info
            │              └── 6-09. System Info
            │
            ├── 7. USB RAID Mode ──┬── Information ──┬── System
            │                      │                 ├── Drive 1
            │                      │                 └── Drive 2
            │                      │
            │                      ├── Change RAID Mode ──┬── RAID 0
            │                      │                       ├── RAID 1
            │                      │                       ├── JBOD
            │                      │                       └── Normal
            │                      │
            │                      ├── D1 Drive Select ──┬── HDD
            │                      │                      └── Disable
            │                      │
            │                      ├── D2 Drive Select ──┬── HDD
            │                      │                      └── Disable
            │                      │
            │                      └── Duplicator Mode
            │
            └── 8. Adv Setup ──┬── 8-01. Rescan Bus Delay
               (Press and Hold ESC)├── 8-02. Read Error Skip
                                 ├── 8-03. Quick Erase HDD
                                 ├── 8-04. H/W Diagnostic
                                 ├── 8-05. Load Default
                                 ├── 8-06. Link Option
                                 ├── 8-07. USB Auto-Link
                                 └── 8-08. Copy HPA
```

• Perform a 1:1 sector clone from the Source disk to the Destination disk. Each disk sector on the Source disk will be copied, regardless if it contains data or not. If using a Destination disk larger than the Source, any extra space will be untouched and left unallocated.

Compare HDD

• Compares the sectors on the Source disk to the Destination disk. Used to

ensure that the Copy operation was successful.

Pre-scan

• Scans the Source disk for bad sectors/blocks and reports the errors.

Rescan Bus

• Rescans the hard drive connectors on the duplicator dock to detect new/ swapped drives.

Source Size

• Displays the total storage capacity of the Source disk.

Setup

• System information and settings.

  • DMA Mode

    • Switch between different DMA modes, for better compatibility across different drives. Will affect maximum data transfer rates.

  • Copy Size

    • Specify the percentage of the source drive that should be copied.

  • Startup Menu

    • Sets the first item that should be selected from the main menu on startup.

  • Auto Compare

    • Automatically runs the Compare HDD function after copying. OFF by default.

  • Copy with Detect

    • Automatically rescans the bus before beginning Copy operation. OFF by default.

  • Button Sound

    • Turn audio feedback (beeping) ON/OFF.

  • Device Info

    • Lists disk information about the Source/Destination disks.

  • System Info

• Lists information about the duplicator, such as firmware version.

USB RAID Mode

• Set the RAID mode for the attached drives when connected to a computer via USB. Switch between USB and Duplicator modes.

Advanced Menu Options

The Advanced Menu can be access from the main menu by pressing and holding the <ESC> button for several seconds.

Rescan Bus Delay

• Sets the time interval delay before starting "Rescan Bus" from the main menu.

Read Error Skip

• Ignore any read errors (sector or block) detected during the copying process. Normally, read errors result in cancellation of the copying process. OFF by default.

Quick Erase HDD

• Quickly erase all the data on the Source hard drive.

H/W Diagnostic

• Runs though a suite of self diagnostic tests and displays the results.

Load Default

• Resets all settings to factory defaults.

Link Option

• Enable/disable the "USB RAID Mode" option from appearing in the Main Menu.

USB Auto-Link

• Automatically enter USB mode on startup. OFF by default.

Copy HPA

• Copy the Source drive's Host Protected Area during duplication. OFF by default.

Duplicator (Copy) Mode

Use the <UP> and <DOWN> arrows on the duplicator dock to select the Copy HDD mode and press the ENT button to activate. The LCD screen will display transfer rates, progress percentage, amount of data copied and a countdown timer.

NOTE: As the duplicator dock creates a 1:1 copy, the Destination disk must be of equal or greater capacity than the Source disk.

RAID Mode

Use the <UP> and <DOWN> arrows to navigate to the Setup Mode and press the ENT button. Navigate to the "Change RAID Mode" option and press ENT.

NOTE: Changing the RAID mode may result in data loss, so make sure all important data is backed up, before attempting to change the RAID mode.

Available RAID Modes

Mode	Function
Normal	Two independent disks
RAID0	Striped drives for maximum data transfer rates. Combined capacity will be double the smallest drive. No redundancy/backup.
RAID1	Mirroring a single drive to create two exact copies.
JBOD	Concatenate two drives to create a single large disk.

RAID 1 Rebuild

When operating in RAID1 mode, if one of the hard drives fails or is removed, the duplicator dock will enter a failed state and a buzzer will sound once per second.

Use the <UP> and <DOWN> arrows to display information on either Drive1 (Source) or Drive2 (Destination).

Reconnect a hard drive to the appropriate Source of Destination side and the duplicator dock will automatically prompt for a rebuild.

The progress of the rebuild will be displayed, including the transfer speed, percentage complete and a countdown timer to completion.

Specifications

Bus Interface	USB 2.0
Chipset ID	ACARD ARC286
Connectors	2 x 7+15 SATA connector 2 x 40-pin IDE male 2 x LP4 molex male 1 x USB type B 1 x DIN power connector
LEDs	4 x Disk Power/Activity
RAID Modes	0, 1, JBOD (concatenation), single disks
Maximum Data Transfer Rate	USB: 480Mb/s
Hard Drive Compatibility	2.5" SATA 1.5/3.0Gb/s and ATA/33/66/100/133 drives up to 500GB in capacity 3.5" SATA 1.5/3.0Gb/s and ATA/33/66/100/133 drives up to 2TB in capacity
Dimensions	151.0mm x 110.0mm x 27.0mm
Weight	235g
Compatible Operating Systems	Windows 2000/XP/Vista/7, Mac OS X, Linux

Technical Support

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