

rocstor®



ROCSECURE DE51

**5-Bay Encryption RAID
Desktop Storage System**

AES-256-bit Encryption

User Manual

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IMPORTANT NOTICES

Safety Notices

- The warranty is void if an unauthorized person attempts and/or repairs the hard disk drive.

- Read all Manuals and instructions carefully before using the device.
- Do not spill any liquid or insert any object into the device.
- Use the device within the specifications indicated, including but not limited to: power requirements, temperature, humidity, sunlight and magnetism from other devices such as computers and televisions.
- The product information provided in this user's manual is subject to change without prior notice and does not represent a commitment on behalf of the Manufacturer or vendor. Rocstor nor vendor assumes no liability or responsibility for any errors that may appear in this manual. Firmware, software, images, and descriptions may vary slightly from actual products.
- Please visit the Rocstor website, www.rocstor.com for further information concerning specifications and use of the device.

General Notices

- Consistently make multiple backup copies of your data for your protection. Hard disk drives are subject to failure at any time.
- Rocstorage, Inc. shall not be held liable for loss of data or the restoration or recovery of data on the device. Please view complete Limited Warranty Information in this manual or on the Rocstor website (www.rocstor.com) for further details.

Capacity Disclaimer

Actual accessible hard drive capacity will indicate up to 10% lower than stated under different Operating Systems and formatting.

The storage volume is measured in total bytes before formatting. References to round numbers of gigabytes or terabytes are an approximation only. For example, a disk drive labeled as having 500GB (gigabytes) has space for approximately 500,000,000,000 bytes before formatting. After formatting, the drive capacity is reduced by about 5% to 10% depending on the operating system and formatting used.

Care and Handling

The following instructions concern the proper care and handling of the Arcticroc 4-Bay RAID. Please take a moment to review these instructions.

- As with any storage solution, it is recommended that all data be backed up regularly.
- Ensure that you follow the proper removal procedure to disconnect the RAID.
- Do not move or disconnect this device from your computer while it is reading or writing data. This may cause damage to the RAID.
- Do not place this device near a heat source or expose it to direct flame.
- Do not place the device near any equipment generating strong electromagnetic fields. Exposure to strong electromagnetic fields may cause the device to malfunction or data to be corrupted.
- Do not drop or cause shock to your RAID.
- Do not spill any liquid or insert any object into the device.
- Do not attempt to disassemble and service the Rocpro drive during the warranty period.

- Please read the Safety Notices and Limited Warranty information in this Manual and on the Rocstor website (www.rocstor.com) for further details.

FCC-B RADIO FREQUENCY INTERFERENCE STATEMENT

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions:
This device may not cause harmful interference.

This device must accept any interference received, including interference that may cause undesired operation.



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 when the equipment is operated in a commercial environment. This equipment generates radio frequency energy, and if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.



PRECAUTIONS FOR THE RAID SYSTEM

The main circuit board of the RAID System is susceptible to static electricity. Proper grounding is required to prevent electrical damage to the RAID System unit or other connected devices, including the host computer. **Always** place the RAID System unit on a smooth surface and avoid all dramatic movement, vibration and percussion.

- **Any loss, corruption, or destruction of data is the sole responsibility of the owner/user(s). Under no circumstances will the manufacturer be held liable for the recovery, restoration, loss ... of any data.**
- Installation of MSU Software in the host computer is required for proper operation.
- Do **NOT** allow water to enter the RAID System unit.
- Installation of additional equipment in the host computer may be required. Visit our website to download the latest product information updates.
- Do **NOT** attempt to service this unit yourself. Disassembling the RAID System's inner parts will expose you to dangerous voltages or other hazards.
- Do **NOT** block the ventilation. Proper airflow is required to ensure reliable operation and to prevent overheating.
- Do **NOT** place the RAID System close to magnetic devices (such as a mobile phone), high-voltage devices (such as a hair dryer), or near a heat source (such as on the dashboard of a car or any place where it will be exposed to direct sunlight).
- Do **unplug** the RAID System unit from the electrical outlet when not in use to provide an ecological friendly environment.
- **Use only** the power supply cable provided with the RAID System unit.
- **Any loss, corruption, or destruction of data is the sole responsibility of the user of the RAID System.**

Under no circumstances will the manufacturer be held liable for the recovery or restoration of any data



Please thoroughly read and follow the instructions provided in this manual. Failure to do so may result in damage to the RAID System, and any or all of the connected devices.



Introduction

Rocsecure DE51 5 – Bay RAID Desktop Encryption Storage System

Rocsecure® Encryption products and solutions enable you to efficiently control your data from unauthorized users. With Rocstor, you can ensure business continuity through variety of real-time hardware Encryption Storage products



Rocsecure® DE51 Volume Raid solution is the most reliable real-time hardware encrypted data solutions available. Secure your valuable data with Advanced Encryption Standard Algorithm AES-256 encryption when regulatory mandates or the need to protect intellectual property from security breaches dictate.

Rocsecure DE51 RAID Storage securely encrypts all data in real-time as it is written to the drive. You have the comfort of knowing that all data contained on these drives is protected against unauthorized access, including hardware theft, failure of a drive, or drive retirement. The encrypted RAID storage data cannot be accessed without the use of a unique Secure Key Token Authentication. The Rocsecure DE51 is authenticated by a digital key token, which is inserted for authentication, and removed soon after the device is authenticated, and then ready for secure data transfer.

Choose Rocstor drives and store your future.



BOX CONTENTS

- Rocsecure DE51 x 1
- eSATA cable x 1
- USB 3.0 to eSATA Adapter x 1
- Power Cable x 1
- Secure Key Token x 3
- Drive Bay Keys x 2
- CD User Manual

Please make sure that the contents listed above are not damaged or missing. If you should find damages or missing contents, please contact your supplier immediately.

Please keep (store) all package contents and packaging material during the limited warranty period.

KEY FEATURES

- Real-Time Hardware AES-256 Encryption
- Large Capacity Storage Solutions, up to five 3.5" SATA hard drives
- One unique Rocstor Token Key for access to the Volume Encryption RAID Storage
- Built-in Hardware RAID 0, 1, 3, 5, 10, JBOD or Clone accelerator set for high performance access.
- Drive Hot-Swap support
- Incorporates SATA hard drive
- RAID diagnostic via LED lights.
- OS independent. Compatible with both Windows® and Mac® operating systems.
- Connect via eSATA or USB 3.0 port (Cables Included)
- Includes two (2) Rocstor Key Tokens
- Includes all necessary cables

ENCRYPTION FEATURES

- Advanced Encryption Standard Algorithm AES-256 bit key strength Real-time encryption (virtually zero time in encrypting and decrypting the data)
- Hardware encryption (not software imbedded in a chip)
- The cryptographic engine is NIST (National Institute of Standards and Technology) of USA and CSE (Communications Security Establishment) of Canada certified hardware AES (Advanced Encryption Standard) algorithm.
- FIPS (US Federal Information Processing Standard) 140-2 Cryptographic Engine validated (FIPS Inside)
- Authentication: Secure key token
- No software or GUI involved is required for installation (for encryption or authentication)

MINIMUM SYSTEM REQUIREMENTS

To utilize the RAID, the minimum system configuration in the host computer requires the following:

OS Independent

Windows: 2008, 2012 (32/64bit), 7, 8, 10 or higher

Linux: Red Hat, SUSE, CentOS...etc

MAC: OS X(10.6, 10.7, 10.8, 10.9 or higher)



3.5 or 2.5 inch SATA-compatible hard drive and/or 2.5-inch Solid State Drive(s) (SSD) are required for the RAID System. Once the hard drive and/or SSD are formatted, the actual available storage capacity can vary depending on the selected operating environment (normally 5-10 % less).

HARDWARE REQUIREMENTS AND PRECAUTIONS

1. Whenever turning off or unplugging the Rocsecure DE51 Series from your computer system becomes necessary, always remember to safely remove it from your operating system first.
2. When the Rocsecure DE51 is connected to the computer system, it's prohibited to remove, insert or swap the hard drive while data transfer is being performed.
3. If you will be incorporating either software or hardware RAID functionality to operate with the ST4 Series, it is important to understand the RAID level and its component that will be incorporated and the precautions to take as each RAID level and component may function differently and contains various limitations.
4. If installing your own HDD, please make sure that the hard drives are free from bad blocks or defects prior to installation in order to avoid system crashes or data loss.
5. It is highly recommended for users to back up important data contained within the drives of the Rocsecure DE51 Series on a regular basis or whenever the user feels necessary to a remote or a separate storage device. Rocstor will not be responsible for any loss of data caused during the use of the DE51 Series or the recovery of the data lost.

CONNECTORS

- eSATA Connector
- Power Input
- ON/OFF Power Switch
- Voltage Selector Switch

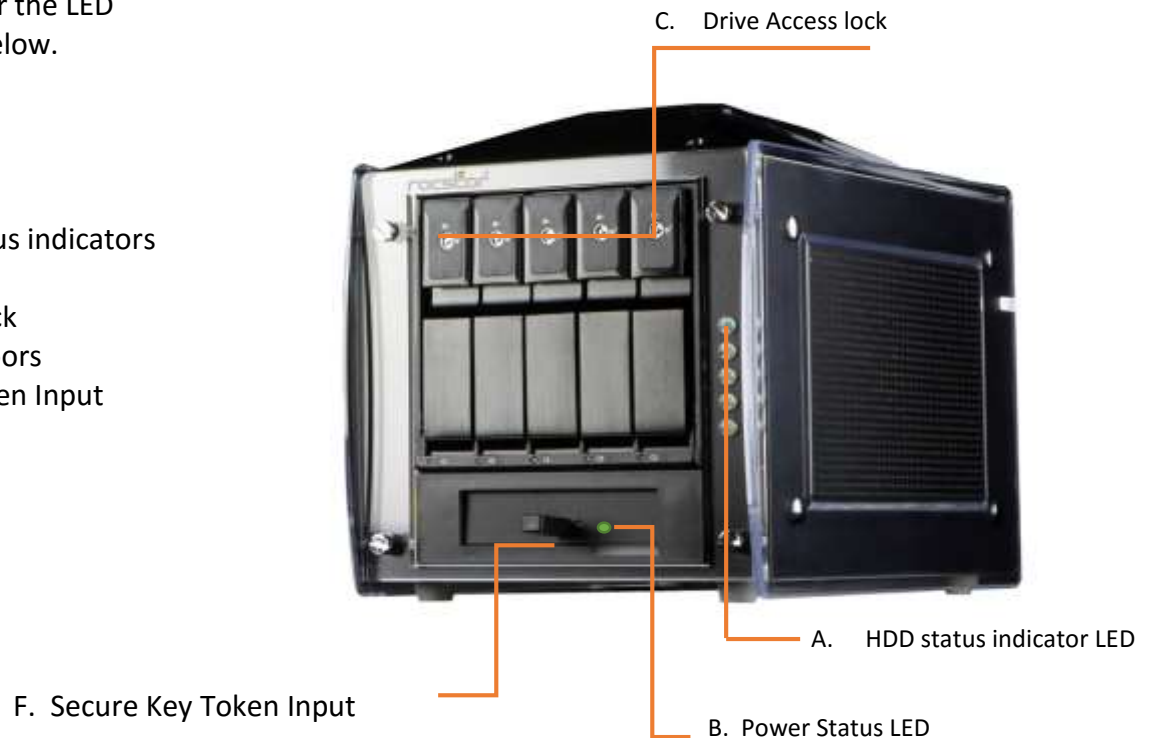


SYSTEM VIEWS

Front and Rear View

The status indication of each LED indicator is listed under the LED INDICATORS section below.

- A. Hard drive status indicators
- B. Power LED
- C. Drive access lock
- D. Drive Access doors
- F. Secure Key Token Input



Operation

To operate the Rocsecure DE51, the Secure Key Token must be inserted before the unit is powered up. This will enable the system to validate the encrypted codes in the token key and enable the drives to power up. When the Rocsecure Token Key is recognized and active, the PWR LED light on the front of the unit will lite up. While the PWR LED is on, the Secure Token Key may be removed and stored in a safe location. If the power is turned off, or the RESET button on the Secure Key Module in front of the unit pressed, then the Secure Key Token needs to be inserted in for the for the PWR LED and the access to the drives is restored. If the PWR LED is not on, the Token Key must be inserted in order to the storage unit to be accessed.

The Host Activity LED will activate to ON which will indicate a connection to an eSATA or USB host adapter. The light will flicker to indicate activity between the Rocsecure DE51 RAID tower and the computer. The HDD LED on this unit is normally dark and will also flicker to indicate activity between the RAID Tower and the computer. The RAID Error LED will glow if a RAID is defined and is either in a degraded or offline state. It will flicker to indicate a fault-tolerant RAID is rebuilding with a spare.

Installation

1. Make sure rear power switches are in the OFF position..
2. Connect Power Cord to the unit..
3. Connect the computer to DE51 via eSATA Cable.
4. Mount Turn on main power switch on the back of the unit.

Drive Installation

- A. Be sure all doors are unlocked, use the provided keys to unlock if needed.
- B. Gently pull the lever on the door to release it.
- C. Insert the drive as shown on the label inside the door. The SATA connector toward the rear, with label side to the right. The drive should slide in easily, don't force it.
- D. Close the door on the drive bay. It should also give little resistance, don't force it. It can help to slightly tug the lever while snapping the door shut to make it easier. As soon as the drive is in position it will power up.
- E. The drives may be locked in place if desired.



IMPORTANT NOTE: There is no back door for the Rocsecure DE51 encrypted hard drives if the Secure Key Token is lost or stolen .



IMPORTANT NOTE: all hard drives installed MUST be RAID compatible hard drives, with same capacities and speeds of 7,200 R.P.M. or higher and preferably from the same manufacturer of hard drives.

Secure Key Token

The Three Secure Token keys have identical encryption code. It is recommended, one of these keys should be kept in a safe and secure location. If you are down to the last key, make a backup of all the data stored inside your Rocsecure DE51 tower prior to sending the last key to Rocstor for duplication.

Rocstor is not responsible for key lost in the mail or retrieval of the data inside the encrypted hard drive.

IDENTIFYING HARD DRIVES

If you are using the Rocsecure DE51 to encrypt multiple hard drives, it is important to label your hard drives if you are taking the drive out of the DE51. The encrypted drive will act like a brand new drive when attach directly to the SATA controller of a computer. There will be no partition or any hint to indicate that the drive contains encrypted data. When the drive is partitioned, all the encrypted data will be lost. The same holds true if a hard drive already has data on it is installed into the Rocsecure DE51. The computer detects the hard drive as a brand new unallocated drive. Once you proceed to partition the drive, the data on the hard drive will be erased and cannot be recovered.

PORT MULTIPLIER COMPATIBILITY

When configured as a set of individual drives and connected to a SATA or an eSATA host adapter, the Port Multiplier will only work with a Port Multiplier aware host. This includes setting up the unit with more than one array. Identify your host controller and check with its hardware manufacturer if you are unsure. Rocstor offers several Port Multiplier aware host adapters.

Using identical drives for all settings other than JBOD or LARGE is strongly recommended. Creating a LARGE array using drives that have different properties will use all space on all members, and performance will match that of the member in use during any particular I/O operation. Creating a RAID using drives that are not all the same size will result in all members using only as much space as the smallest member. Creating a RAID using drives that have different performance will degrade the overall performance of the array.

PORT MULTIPLIER MODES

The Port Multiplier supports individual drives (JBOD Mode), several types of RAID and some non-RAID drive sets. Each configuration has different properties and requirements, as follows:

RAID SELECTION

JBOD (INDIVIDUAL DRIVES)

- Minimum number of drives: 1
- Unit Capacity: 100% of each drive
- Fault Tolerance: None
- Spare: No
- JBOD mode offers all connected units to the host adapter, no RAID is defined at all.
- Note: JBOD mode requires a SATA controller featuring Port Multiplier support for eSATA connections
- Note: Optical drives can only be configured as JBOD using an eSATA connection.

RAID 0 (STRIPE SET)

- Minimum number of drives: 2
- Unit Capacity: size of each drive times number of drives.
- Fault Tolerance: None - if any drive is lost all data is lost
- Spare: No
- RAID 0 "stripes" the file system across the array by placing "chunks" of data sequentially between drives in a specific order

RAID 1 or 10 (MIRROR SET, STRIPE OR MIRROR SETS)

- Number of drives: 2 (RAID 1) or 4 (RAID 10)
- Unit Capacity: size of one drive (RAID 1) or size of two drives (RAID 10) times Number of drives.
- Spare: Yes, if EZ mode is not disabled and 3 (RAID 1) or 5 (RAID 10) drives are present, the array will be initialized with a spares
- Fault tolerance: RAID 1 can withstand the loss of one drive without losing data. RAID 10 can withstand the loss of one drive from each mirror set without losing data. RAID 1 works by duplicating the exact same data on two drives. RAID 10 works by using two RAID 1 sets configured as members of a RAID 0. Disks 1 and 2 are mirrored, disks 3 and 4 are mirrored, and the two mirror sets are striped together mode offers all connected units to the host adapter, no RAID is defined at all.

RAID 3 (STRIPE SET WITH DEDICATED PARITY)

- Minimum number of drives: 3
- Unit Capacity: size of one drive times number of total drives minus one.
E.g. (4TB x 5 drives – 1 Drive = 16TB)
- Spare: Yes
- Fault tolerance: can withstand the loss of one drive without losing data. RAID 3 works by striping data for individual i/o blocks across all members except one, which contains parity data for the stripe set computed internally by the Port Multiplier. In the event of failure, the missing information can be calculated using the parity information.

RAID 5 (STRIPE SET WITH STRIPED PARITY)

- Minimum number of drives: 3
- Unit Capacity: size of one drive times number of total drives minus one.
E.g. (4TB x 5 drives – 1 Drive = 16TB)
- Spare: Yes
- Fault tolerance: can withstand the loss of one drive without losing data. RAID 5 works by striping data for individual i/o blocks across all members of the set, with each member taking turns carrying parity data computed by the Port Multiplier. In the event of failure, the missing information can be calculated using the parity information.

CLONE (MIRROR SET)

- Minimum number of drives: 2
- Unit Capacity: size of one drive.
- Spare: Yes
- Fault tolerance: can withstand the loss of any number of drives without losing data as long as at least one complete member remains online. CLONE mode works the same way as RAID 1, by maintaining a complete copy of the entire set of data on each drive..

LARGE (SPANNED SET)

- Minimum number of drives: 2
- Unit Capacity: 100% of all drives together regardless of differences in size.
- Spare: No.
- Fault tolerance: cannot withstand the loss of any drives without losing data. However, some data may be recovered as long as the drive(s) carrying the filesystem data (boot record, directory, etc.) remain online. LARGE mode is neither a RAID nor is it a JBOD. It works by declaring the sum of all available space of the member drives as a single unit, without striping the data. As each member is filled, new data is stored on the next...

NOTES ABOUT SPARE DRIVE

If EZ mode is disabled (SW1: 2 ON), all individual drives not configured as array members will be offered to the host adapter as separate units. To create an array with one or more spares, set or modify the RAID mode while the spares are disconnected from the Port Multiplier. When EZ mode is enabled (SW1 :2 OFF), individual drives connected when an array is present are considered spare. Spare drives must be equal to or larger in size than the smallest member. When any type of array is defined, individual units will be considered spare

Raid 0 and LARGE arrays are not fault-tolerant and spare drive will not be useful, therefore disabling EZ for these arrays is recommended. When a spare drive is present and fault-tolerant RAID (1, 10, 3, or 5) is defined, EZ Mode will automatically rebuilt any available spare into the array to replace failed drive.

RESETTING RAID

NOTE: This procedure destroys all RAID data. It should not harm individual drives or their contents; however, creating backups of all data is strongly recommended before proceeding. Be sure the port multiplier is connected to an active host before proceeding. The port multiplier will not complete the process if it has no host connection.

1. Power down the unit and set the dip switch to the desired RAID Mode.
2. While holding the SET button, turn the unit on. A long beep will sound from the Port Multiplier. The SET button may be released once the long beep starts. Shortly after releasing the SET button, the port multiplier should "chirp" to indicate the process is complete. If instead of a chirp the Port Multiplier sounds a series of short beeps, an error has occurred during the process.

SETTING OR MODIFYING THE RAID MODE

NOTE: Setting or modifying the RAID mode destroys all data. Be sure the port multiplier is connected to an active host before proceeding. The port multiplier will not complete the process if it has no host connection.

1. Follow the procedure for resetting the RAID Mode.
2. Power down the unit and set the dip switch to the desired RAID Mode.
3. While holding the SET button with a ball point pen, turn the unit on. A long beep will sound from the Port Multiplier. The SET button may be released once the long beep starts. Shortly afterward, the port multiplier should "chirp" to indicate the process is complete. If instead of a chirp the Port Multiplier sounds a series of short beeps, an error has occurred during configuration of the array.

BZS SWITCH (SW1: 1)

The BZS switch is used to silence the audible alarm buzzer. The OFF position permits the audible alarm, and the ON position silences the audible alarm. The BZS switch has immediate effect.

EZ SWITCH (SW1: 2)

The EZ (spare) switch inhibits spares when ON. When in the OFF position, all individual drives (not defined as members of an array) are considered spare and are not offered to the operating system. Should a RAID become degraded, when the EZ switch is in the OFF position a spare drive will be used automatically to rebuild the RAID, if present. EZ mode is determined when the unit is powered up. Changing the switch will have no effect until the unit has been re-powered.

Warning: turning off the EZ switch to rebuild an array will consider any drives not declared array members to be eligible for rebuild as a spare. Rebuilding will destroy all existing data on that drive and the drive chosen is not predictable. Disconnect any individual drives with valuable data on them before enabling EZ Mode.

RAID Mode Switches M2, M1, MO (SW1 :3 - SW1 -5)

RAID MODE SWITCH SETTING

The RAID Mode switches define what type of RAID will be initialized when the unit is powered up while the RAID Mode button is held down, as follows:

DIP SWITCH POSITION	1 (BZS) *	2 (EZ)	3 (M2)	4 (M1)	5 (M0)
JBOD (FACTORY DEFAULT SETTING)	OFF	OFF **	OFF	OFF	OFF
RAID 0	OFF	ON ***	ON	ON	ON
RAID 1 OR 10	OFF	OFF	ON	ON	OFF
RAID 3	OFF	OFF	ON	OFF	OFF
RAID 5	OFF	OFF	OFF	ON	OFF
CLONE	OFF	OFF	OFF	ON	ON
LARGE	OFF	ON	ON	OFF	ON

NOTE:

- * Audible alarm is recommended at all times.
- ** EZ Mode has no effect when no array is defined.
- *** Disabling EZ for RAID 0 and large is strongly recommended.

Specification

System Type	5-Bay Tower RAID system
Host Interface	eSATA- eSATA to USB 3.0 Included
Disk Interface	SATA
Disk Type	3.5" & 2.5" HDD/SSD – Hot Swap Drive Support
Encryption Technology	FIPS Validated AES-256 Real-time Hardware Encryption Engine
RAID Levels	0, 1, 3,5, 10, JBOD*, Clone, and Large
Token Key	Two (2) Token Key Authentication Included
	Built-in RAID Accelerator
	LED indicator for RAID & disk drives status in front
RAID Controller Functions	RAID 0 (Striping), RAID1 (Mirroring), RAID 3, RAID 5 (Parity), RAID10 (Mirrored Striped), JBOD (Concatenation)*, Clone Mode (N-Way Mirror) using built-in Hardware RAID and LARGE
	RAID Set Up Via a Set of Dip Switches Accessible From the Back of the Storage Enclosure
	*JBOD not available in Mac OS
Power Supply	300W. 110V~240V power supply (optional for redundant)
	OS Independent
Supported OS	Windows: 2008, 2012 (32/64bit), 7, 8, 10 or higher
	Linux: Red Hat, SUSE, CentOS...etc
	MAC: OS X(10.6, 10.7, 10.8, 10.9 or higher)
Physical	Dimension: L: 12", W:8.25", H: 8" (without handle) / H: 9.5" (with handle)
	Weight : 8.65 lbs Without HDD 15.5 lbs with HDD
Operating Temperature	0°C ~ 40°C / 0°F ~ 104°F
Storage Temperature	-20°C ~ 70°C / -68°F ~ 158°F
	5%~85%, Non-condensing
Operating Humidity	Storage Humidity 5%~95%

LIMITED WARRANTY

This Limited Warranty is provided by Rocstorage, Inc. (hereinafter: Rocstor) for all lines of products.

General Terms

EXCEPT AS EXPRESSLY SET FORTH IN THIS LIMITED WARRANTY, ROCSTOR MAKES NO OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. ROCSTOR EXPRESSLY DISCLAIMS ALL WARRANTIES AND CONDITIONS NOT STATED IN THIS LIMITED WARRANTY. ANY IMPLIED WARRANTIES THAT MAY BE IMPOSED BY LAW ARE LIMITED IN DURATION TO THE LIMITED WARRANTY PERIOD. SOME STATES OR COUNTRIES DO NOT ALLOW A LIMITATION ON HOW LONG AN IMPLIED WARRANTY LASTS OR THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR CONSUMER PRODUCTS. IN SUCH STATES OR COUNTRIES, SOME EXCLUSIONS OR LIMITATIONS OF THIS LIMITED WARRANTY MAY NOT APPLY TO YOU.

This Limited Warranty applies to the Rocstor branded hardware products sold by or leased from Rocstorage, Inc., its worldwide subsidiaries, affiliates, authorized resellers, or country distributors (collectively referred to in this Limited Warranty as "Rocstor") with this Limited Warranty. This Limited Warranty is applicable in all countries and may be enforced in any country where Rocstor or its authorized service providers offer warranty service subject to the terms and conditions set forth in this Limited Warranty. However, warranty service availability and response times may vary from country to country and may also be subject to registration requirements in the country of purchase.

Rocstor warrants that the Rocstor hardware product and all the internal components of the product that you have purchased or leased from Rocstor are free from defects in materials or workmanship under normal use during the Limited Warranty Period. The Limited Warranty Period starts on the date of purchase or lease from Rocstor. Your dated sales or delivery receipt, showing the date of purchase or lease of the product, is your proof of the purchase or lease date. You may be required to provide proof of purchase or lease as a condition of receiving warranty service. You are entitled to warranty service according to the terms and conditions of this document if a repair to your Rocstor branded hardware is required within the Limited Warranty Period. This Limited Warranty extends only to the original purchaser or lessee of this Rocstor branded product and is not transferable to anyone who obtains ownership of the Rocstor branded product from the original purchaser or lessee.

Rocstor products are manufactured using new materials or new and used materials equivalent to new in performance and reliability. Spare parts may be new or equivalent to new. Spare parts are warranted to be free from defects in material or workmanship for thirty (30) days or for the remainder of the Limited Warranty Period of the Rocstor hardware product in which they are installed, whichever is longer.

Rocstor's Obligation under the Limited Warranty

During the Limited Warranty Period, Rocstor will repair or replace the defective component parts or the hardware product. All component parts or hardware products removed under this Limited Warranty become the property of Rocstor. The replacement part or product takes on either the Limited Warranty status of the removed part or product or the thirty (30) day limited warranty of the spare part. In the unlikely event that your Rocstor product has a recurring failure, Rocstor, at its discretion, may elect to provide you with a replacement unit of Rocstor's choosing that is at least equivalent to your Rocstor branded product in hardware performance. Rocstor reserves the right to elect, at its sole discretion, to give you a refund of your purchase price or lease payments (less interest) instead of a replacement. This is your exclusive remedy for defective products. The original Limited Warranty is not extended when the product, or a part of the product, is repaired or replaced during the Limited Warranty period. Rocstor shall not be responsible or liable for backing up any data that is on a drive being returned for service

YOU SHOULD MAKE PERIODIC BACKUP COPIES OF THE DATA STORED ON YOUR HARD DRIVE OR OTHER STORAGE DEVICES AS A PRECAUTION AGAINST POSSIBLE FAILURES, ALTERATION, OR LOSS OF THE DATA. BEFORE RETURNING ANY UNIT FOR SERVICE, BE SURE TO BACK UP DATA AND REMOVE ANY CONFIDENTIAL, PROPRIETARY, OR PERSONAL INFORMATION. ROCSTOR IS NOT RESPONSIBLE FOR DAMAGE TO OR LOSS OF ANY PROGRAMS, DATA, OR REMOVABLE STORAGE MEDIA. ROCSTOR IS NOT RESPONSIBLE FOR THE RESTORATION OR REINSTALLATION OF ANY PROGRAMS OR DATA OTHER THAN SOFTWARE INSTALLED BY ROCSTOR WHEN THE PRODUCT WAS MANUFACTURED.

Rocstor does not warrant that the operation of this product will be uninterrupted or error-free. Rocstor is not responsible for damage that occurs as a result of your failure to follow the instructions that came with the Rocstor branded product.

This Limited Warranty does not apply to expendable parts. This Limited Warranty does not extend to any

product from which the serial number has been removed or that has been damaged or rendered defective (a) as a result of accident, misuse, abuse, or other external causes; (b) by operation outside the usage parameters stated in the user documentation that shipped with the product and/or posted on the Rocstor website; (c) by the use of parts not manufactured or sold by Rocstor; (d) as a result of normal wear; or (e) by modification or service by anyone other than (i) Rocstor, (ii) a Rocstor authorized service provider, or (iii) your own installation of end-user replaceable Rocstor or Rocstor approved parts if available for your product in the servicing country.

These terms and conditions constitute the complete and exclusive limited warranty agreement between Rocstor and you regarding the Rocstor branded product you have purchased or leased. These terms and conditions supersede any prior agreements or representations including representations made in Rocstor sales literature or advice given to you by Rocstor or an agent or employee of Rocstor-that may have been made in connection with your purchase or lease of the Rocstor branded product. No change to the conditions of this Limited Warranty is valid unless it is made in writing and signed by an authorized representative of Rocstor.

Buyer's Obligation under the Warranty

The person requesting coverage under this warranty shall prove that he or she is the original purchaser and declares that the product has not been sold, leased, bartered or otherwise changed possession. **The purchaser shall frequently backup the Rocpro hard drive and backup the data immediately prior to returning the drive for warranty service.**

The buyer must notify Rocstor and show proof of notification, through any reasonable means of communication. See full street address email address and toll free phone numbers below or updated contact information are available on Rocstor.com website. The notification shall identify any defect, malfunction, or nonconformity promptly upon discovery. Rocstor will acknowledge receipt of the communication and issue a Return Merchandise Authorization (RMA) code. The buyer is obligated to securely and safely package(s) the product, preferably in the original packing materials, WITH THE RMA number, and deliver it together with a copy of the original purchase receipt and a description of the problem to the Rocstor home office. Buyer is responsible for the product until it is received by Rocstor. It is recommended that the product be insured during transportation by the sender. You must prepay any shipping charges, taxes, or duties associated with transportation of the product. In addition, you are responsible for insuring any product shipped or returned for service. You assume risk of loss during shipping.

Limitation of Damages (Liability)

IF YOUR ROCSTOR BRANDED HARDWARE PRODUCT FAILS TO WORK AS WARRANTED ABOVE, THE ORIGINAL PURCHASER'S SOLE AND EXCLUSIVE REMEDY SHALL BE REPAIR OR REPLACEMENT. ROCSTOR'S MAXIMUM LIABILITY UNDER THIS LIMITED WARRANTY IS EXPRESSLY LIMITED TO THE LESSER OF THE PRICE YOU HAVE PAID FOR THE PRODUCT OR THE COST OF REPAIR OR REPLACEMENT OF ANY ROCSTOR HARDWARE COMPONENTS THAT MALFUNCTION IN CONDITIONS OF NORMAL USE. ROCSTOR IS NOT LIABLE FOR ANY DAMAGE TO ANY OTHER PRODUCT CONNECTED TO A ROCSTOR PRODUCT.

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ROCSTOR IS NOT LIABLE FOR ANY DAMAGES CAUSED BY THE PRODUCT OR THE FAILURE OF THE PRODUCT TO PERFORM, INCLUDING ANY LOST PROFITS OR SAVINGS OR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES. ROCSTOR IS NOT LIABLE FOR ANY CLAIM MADE BY A THIRD PARTY OR MADE BY YOU FOR A THIRD PARTY. THIS LIMITATION OF LIABILITY ALSO APPLIES WHETHER DAMAGES ARE SOUGHT OR A CLAIM IS MADE UNDER THIS LIMITED WARRANTY OR AS A TORT CLAIM (INCLUDING NEGLIGENCE AND STRICT PRODUCT LIABILITY), A CONTRACT CLAIM OR ANY OTHER CLAIM. THIS LIMITATION OF LIABILITY CANNOT BE WAIVED OR AMENDED BY ANY PERSON. THIS LIMITATION OF LIABILITY WILL BE EFFECTIVE EVEN IF YOU HAVE ADVISED ROCSTOR OR AN AUTHORIZED REPRESENTATIVE OF ROCSTOR OF THE POSSIBILITY OF ANY SUCH DAMAGES.

THIS LIMITED WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS. YOU MAY ALSO HAVE OTHER RIGHTS THAT MAY VARY FROM STATE TO STATE OR FROM COUNTRY TO COUNTRY. YOU ARE ADVISED TO CONSULT APPLICABLE STATE OR COUNTRY LAWS FOR A FULL DETERMINATION OF YOUR RIGHTS.

Disclaimer

We accept no liability for any loss of data, damages and the inability of Rocstor products to work with any third party equipment. Nor can Rocstor accept any liability or responsibility for software or third party hardware products.

Limited Warranty Period

The limited warranty period for the Arcticroc 4-Bay RAID is one (1) Year Parts and Labor. This Limited Warranty extends only to the original purchaser or lessee of this Rocstor branded product and is not transferable to anyone who obtains ownership of the Rocstor branded product from the original purchaser or lessee.

Types of Limited Warranty Service

Your Rocstor Limited Warranty consists of repair or replacement of defective parts, including hard drives identified by Rocstor Support Organization as “pre-failure.”

Carry-in Limited Warranty Service Available Monday - Friday

Under the terms of carry-in service, you may be required to deliver your Rocstor product to the Rocstor Service Center or an authorized service location for warranty repair. You must prepay any shipping charges, taxes or duties associated with transportation of the product. In addition, you are responsible for insuring any product shipped or returned for service. You assume risk of loss during shipping.

YOU SHOULD MAKE PERIODIC BACKUP COPIES OF THE DATA STORED ON YOUR HARD DRIVE OR OTHER STORAGE DEVICES AS A PRECAUTION AGAINST POSSIBLE FAILURES, ALTERATION OR LOSS OF THE DATA. BEFORE RETURNING ANY UNIT FOR SERVICE, BE SURE TO BACK UP DATA AND REMOVE ANY CONFIDENTIAL, PROPRIETARY OR PERSONAL INFORMATION. ROCSTORAGE IS NOT RESPONSIBLE FOR DAMAGE TO OR LOSS OF ANY PROGRAMS, DATA OR REMOVABLE STORAGE MEDIA. ROCSTORAGE IS NOT RESPONSIBLE FOR THE RESTORATION OR REINSTALLATION OF ANY PROGRAMS OR DATA OTHER THAN SOFTWARE INSTALLED BY ROCSTORAGE WHEN THE PRODUCT WAS MANUFACTURED.

Rocstorage shall not be responsible or liable for backing up any data that is on a drive being returned for service. Expect that all data on the drive will be destroyed and not retrievable when returned for warranty service.

Rocstor Replaceable Parts Program

Where available, the Rocstor Replaceable Parts program ships approved replacement parts directly to you to fulfill your warranty. This will save considerable repair time. After you call the Rocstor Technical Support Center at **888.877.8777** a replaceable part can be sent directly to you. Once the part arrives, call the Rocstor Technical Support Center. A technician will assist you over the phone to ensure that the installation is quick and easy.

Service Upgrades

Rocstor offers extra coverage for your product. For information on service upgrades, visit www.rocstor.com.

Service upgrades purchased in one country are not transferable to another country.

Capacity Disclaimer

Actual accessible hard drive capacity will indicate up to 10% lower than stated under different Operating Systems and formatting.

The storage volume is measured in total bytes before formatting. References to round numbers of gigabytes or terabytes are an approximation only. For example, a disk drive labeled as having 500GB (Gigabytes) has space for approximately 500,000,000 bytes before formatting. After formatting, the drive capacity is reduced by about 5% to 10% depending on the operating system and formatting used or “1GB = 1,000,000,000 bytes.

Options and Software

The Limited Warranty terms and conditions for Rocstor options are as indicated in the Limited Warranty applicable to Rocstor options. **ROCSTOR DOES NOT WARRANTY SOFTWARE PRODUCTS, INCLUDING ANY SOFTWARE PRODUCTS OR THE OPERATING SYSTEM PREINSTALLED BY ROCSTOR.** Rocstor’s only obligations with respect to software distributed by Rocstor under the Rocstor brand name are set forth in the applicable end-user license or program license agreement. Non-Rocstor hardware and software products are provided “AS IS” and without any Warranty. However, non-Rocstor manufacturers, suppliers or publishers may provide their own warranties directly to you.

The data stored in Rocstor and Rocsecure storage product lines are not guaranteed by Rocstor (or the hard disk manufacturer.) We are not responsible for any loss of data. Always back up data regularly

TECHNICAL SUPPORT

Software Technical Support

Software technical support is defined as assistance with questions and issues about the software that was either preinstalled by Rocstor on the Rocstor branded product or that was included with the Rocstor branded product at the time of your purchase or lease of the product. Technical support for software is available for the first ninety (90) days from date of product purchase or lease. Your dated sales or delivery receipt, showing the date of purchase or lease of the product, is your proof of the purchase or lease date. You may be required to provide proof of purchase or lease as a condition of receiving software technical support. After the first ninety (90) days, technical support for software that was either preinstalled by Rocstor on the Rocstor branded product or included with the Rocstor branded product at the time of your purchase or lease of the product is available for a fee.

WARNING: The individual user should take care to determine prior to use whether this device is suitable, adequate or safe for the use intended. Since individual applications are subject to great variation, the manufacturer "Rocstor" makes no representation or warranty as to the suitability or fitness of these devices for any specific application.

Technical Support

The Rocsecure DE51Bay RAID is backed by free telephone technical support for two (2) years from the date of purchase. Please register your product with Rocstor. To register, fill in the Limited Warranty Registration form in the Support tab at www.rocstor.com.

Free telephone technical support is available weekdays from 9 AM until 6 PM Pacific Standard Time. Customers in the United States and Canada can call toll-free: **(888) 877-8777**; all others must call **(818) 449-2000**.

When calling for support, please have the product's serial number (printed on the label on the bottom of the drive) and system hardware information available.

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Assembled and integrated in U.S.A. using domestic and / or foreign components.



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Corporate, Government and Academic Customers

Our Corporate Sales Team's goal is to help our U.S.A. and Canadian customers find a storage solution that best serves their needs. We will help you determine your best purchasing options. For more information please contact the appropriate department below or call us at +1 (855)245-1616 US Toll Free

General sales information: sales@Rocstor.com
Corporate sales information: corporate_sales@Rocstor.com
Educational sales information: academic_sales@Rocstor.com
Federal, State & Local government sales information:
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Resellers/Business Development/OEM Partners

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