

# DataPort<sup>®</sup> 25 Secure User Manual

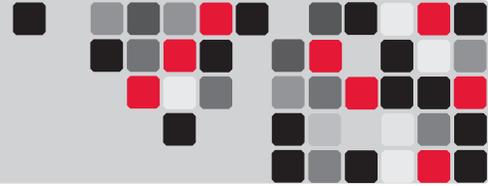


## Models Covered:

DataPort 25 Secure with AES 128

DataPort 25 Secure with AES 256

- **Hardware-based AES 128-bit or 256-bit Encryption** - Offers affordable military-grade AES 128-bit or 256-bit data protection that encrypts the entire hard drive - including boot sector, OS, temp, and swap files.
- **Meets Industry Standards** - All CRU Secure 256-bit product architecture and encryption engine designs meet FIPS140-2, level 3 per certification number 1471, and all CRU AES 256-bit security chips are NIST & CSE validated (FIPS PUB 197).
- **Easy-to-Use Security** - A Security Key stored separately from the unit makes the DataPort 25 less vulnerable to attack if the unit is lost or stolen. No pins or passwords are needed.
- **Maintains Performance Integrity** - A high-speed hardware processor encrypts/decrypts at full disk bandwidth, preventing performance degradation.



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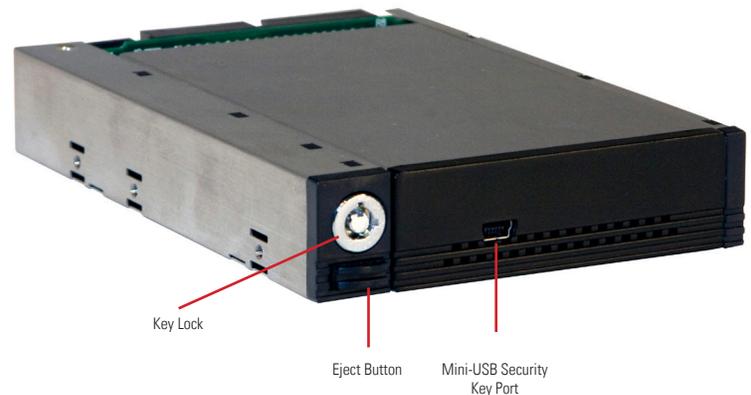
## 1. Pre-Installation Steps

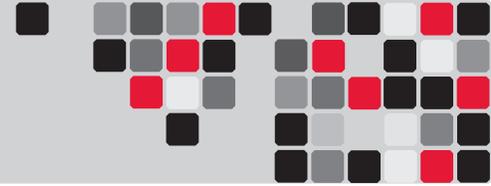
### 1.1 Box Contents

The following list contains the items that are included in the complete configuration for this device. Depending on which configuration and accessories you purchased, the package may include fewer items than what are listed here. Please contact CRU-DataPort if any items are missing or damaged:

Accessories	Quantity
DataPort 25 Frame	1
DataPort 25 Carrier	1
16x M3 Cover & Drive Mounting Screw Kit	1
DataPort Keys	2
Security Keys	3
Lanyards for Security Keys	3
Security Key Labels	6

### 1.2 Identifying Parts of Your DataPort 25 Secure





### 1.3 Warnings and Notices

Please read the following before beginning installation.

- The main circuit board of the HDD carrier is susceptible to static electricity. Proper grounding is strongly recommended to prevent electrical damage to the enclosure or other connected devices, including the computer host. Avoid all dramatic movement, vibration and percussion.
- Avoid placing the HDD carrier close to magnetic devices, high voltage devices, or near a heat source, including any place where the product will be subject to direct sunlight. Do NOT allow water to make contact with the carrier or receiving frame.
- Though the Security Key port is mechanically identical to a standard Mini-USB port, inserting Security Keys into any other Mini-USB port will damage the keys and render them useless. Please only use the Security Keys in DataPort Secure products.
- Likewise, inserting a Mini-USB cable or other device into the DataPort 25 Security Key port on the carrier can cause internal damage and potentially lead to loss of data.
- Any time power is cycled on the DataPort 25 Secure, the encryption key will need to be installed in order to access the data on the drive.

## 2. Installation Steps

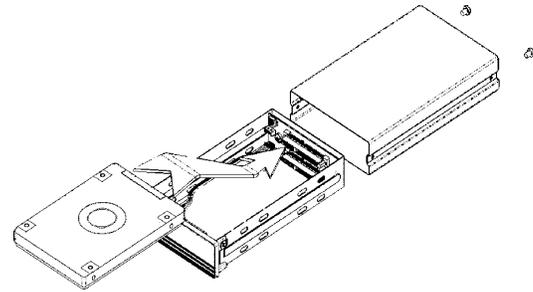
### 2.1 Receiving Frame Installation

- a. Slide the receiving frame into an open drive bay.
- b. Secure the receiving frame to the chassis with the mounting screws provided.
- c. Attach a SATA data cable to the JP4 connector on the rear of the frame and attach the other end of the data cable to the appropriate SATA port on the computer's motherboard.
- d. Attach a 4-pin Floppy power connector to the rear of the receiving frame.

### 2.2 Hard Drive Installation

- a. If the carrier is bundled with a frame, press the Eject button once to release the button, and again to eject the carrier from the frame.
- b. Slide the cover of the carrier back and off.
- c. Remove the screw kit from the carrier.

- d. Insert a 2.5" SATA hard drive, with the top label facing down, into the unified power and data connector inside the carrier.



- e. Secure the hard drive to the carrier by using the mounting screws provided.
- f. Replace the cover and secure it by inserting two screws from the screw kit into the rear of the carrier.

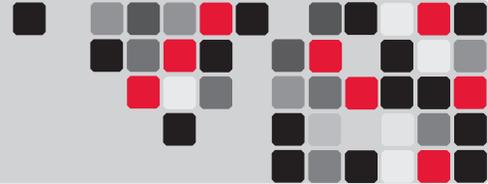
### 2.3 Operating your DataPort 25 Secure

- a. Slide the DataPort 25 Secure carrier into an open DataPort 25 frame (may be sold separately) installed in the computer.
- b. Insert the Security Key into the Mini-USB port on the face of the carrier.
- c. Power on the DataPort 25 frame with the DataPort Key by inserting it into the keylock and turning it 90 degrees clockwise.
- d. When both green LEDs are lit, showing that the drive is ready and encrypted, the Security Key may be removed and stored in a safe location.

When any hard drive is first used with the DataPort 25 Secure it will show up as a blank, unallocated drive and you'll need to format the drive in the DataPort 25 Secure before you can use it in the enclosure. **Note that formatting a drive will erase all data on the drive, so be sure to back up your data before beginning this operation.** See Section 3 for instructions on how to format the drive with Mac or Windows operating systems.

### 2.4 Safe Carrier Removal

- a. Turn off the computer or properly dismount the drive from the system. See Section 3.1.3 for instructions on how to properly dismount the drive on a Mac or Section 3.2.3 for properly dismounting the drive on a Windows system.
- b. Use the DataPort Key to turn the keylock 90 degrees counter-clockwise to unlock and power off the unit.
- c. Push the eject button below the keylock once to release the button, and again to eject the carrier.



### 3. Usage with Mac and Windows Operating Systems

#### 3.1 Usage with Mac OS X

##### 3.1.1 Compatibility

The DataPort 25 Secure supports 2.5" SATA hard drives.

##### 3.1.2 Formatting a Drive

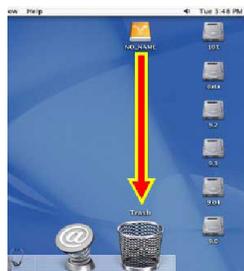
To format, use Mac OS X's Disk Utility (found in the applications folder).

- Insert the Security Key into the Mini-USB port on the face of the carrier.
- Click on the drive in the window to the left (see picture below).
- Click the Erase tab in the window to the right (see picture below).
- Select the format type. Most users prefer Mac OS Extended with Journaling (HFS+), which is required for compatibility with Time Machine (OS 10.5 or newer). If you need to use your DataPort 25 Secure with both Mac and Windows computers, select MS-DOS File System instead.
- Enter a name for the new volume and then click "Erase" to start the process.
- When formatting is finished and both green LEDs are lit, showing that the drive is ready and encrypted, the Security Key may be removed and stored in a safe location.



##### 3.1.3 Mounting and Unmounting Volumes

If the hard drive installed in the DataPort 25 Secure is already formatted, an icon representing the drive's volume will appear (mount) on the desktop. You can begin using the volume right away. If the drive is unformatted, a message will appear on the desktop saying that the disk is unreadable. Use OS X's Disk Utility to easily format the drive (see section above).



Unmount the volume before powering down the unit by dragging the volume's icon to the trash bin, or by selecting the volume then pressing Command-E. Disconnecting the unit without first unmounting the volume can result in data loss.

##### 3.1.4 Creating a Boot Drive

To activate this feature, first install OS X on the hard drive in your carrier. The easiest way to do this is to clone an existing system drive using a utility such as Carbon Copy Cloner or Super Duper. Next, go to System Preferences --> Startup Disk. A window will list the available bootable volumes. Select the volume from which you wish to boot. Another method is to hold down the Option key during boot up. A screen should appear that allows you to select the volume you wish to use. This is useful if you wish to boot from the DataPort 25 Secure hard drive only some of the time.

#### 3.2 Usage with Windows Operating Systems

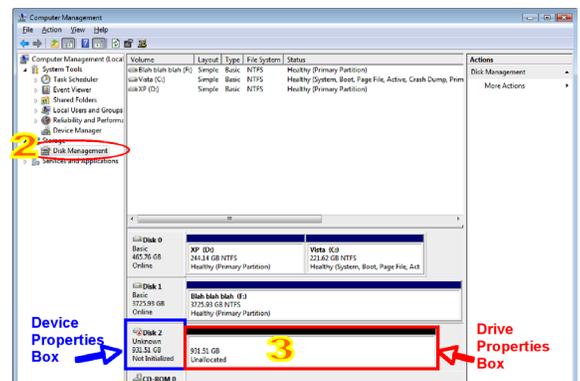
##### 3.2.1 Compatibility

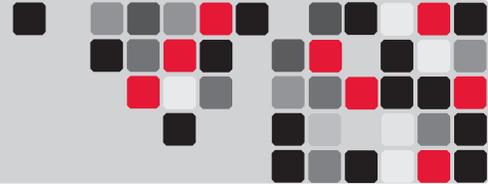
The DataPort 25 Secure supports 2.5" SATA hard drives.

##### 3.2.2 Formatting a Drive

To format, use the Disk Management utility.

- Insert the Security Key into the Mini-USB port on the face of the carrier.
- Right-click on My Computer, then select Manage. The Computer Management window will open.
- In the left pane of this window, left-click on Disk Management.
- The drive should appear in the list of Disks in the lower middle/right pane (see picture below). You may need to scroll down to see it. If the drive is already formatted, you can identify it easily by its volume name. If it's unformatted, the Drive Properties Box will say "Unallocated" and you'll need to initialize the disk before formatting it. Initialize the disk by right-clicking the Device Properties Box and selecting Initialize Disk.





- e. To format the drive, right-click the Drive Properties Box and select Format.
- f. If you are prompted to select a partition type, select MBR for volumes 2TB or smaller, or GPT for volumes larger than 2TB. Note: Windows XP does not support GPT or volumes larger than 2TB.
- g. Click through several more windows, leaving the default settings, until you see a window that allows selection of a file system. Choose NTFS and enter a name for the new volume. Be sure to check the box labeled "Perform a quick format" unless you want to completely erase any data on the drive and have time to wait. A quick format should take less than a minute, while standard formatting may take several hours.
- h. Click "Next" and then "Finish" to start the format process. When the format is complete, the Drive Properties Box will update to show the new volume name. The new volume can now be found in My Computer.
- i. When formatting is finished and both green LEDs are lit, showing that the drive is ready and encrypted, the Security Key may be removed and stored in a safe location.

### 3.2.3 Mounting and Unmounting Volumes

If the hard drive inside of the DataPort 25 Secure carrier is already formatted, you can begin using the volume right away. When the DataPort 25 Secure is properly connected and turned on, a window may open to allow you access to the volume. If no window appears, find the volume by double-clicking the "My Computer" icon.

Unmount the DataPort 25 Secure before powering it down by single-clicking the green arrow icon on the task bar (in Windows XP) or the USB plug icon with the green checkmark on the taskbar (Windows Vista and Windows 7), then selecting the proper device from the menu that pops up. Windows will indicate when it is safe to disconnect the DataPort 25 Secure. Disconnecting the unit without first ejecting it can result in data loss.



## 4. Encryption

- The DataPort 25 Secure uses full disk hardware encryption to encrypt the entire contents of the drive - including the boot sector, operating system and all files - without performance degradation.
- The encryption key must be installed prior to powering on the DataPort 25 Secure for the data to be decrypted on the drive. If the key is externally connected to the Mini-USB Security Key Port and is not internally installed, then once it has been

accepted, it may be removed and stored apart from the data so that in the event that the drive is lost or stolen, the data is protected.

- When a drive is formatted using an encryption key, the same or a duplicate key must be used in order to access the data. There is no "back door" to access the data; lost keys make data recovery virtually impossible.

## 5. Frequently Asked Questions (FAQ)

### Q: What do the LED lights indicate?

A:	#	LED Name	Color	State	Description
	1	Drive Activity	Amber	Intermittent	Flashes when the drive is being accessed.
	2	Power	Green	Solid	Unit is powered on.
				Flashing	The data cable is connected to an incorrect SATA port.
	3	Key Error	Red	Solid	Encryption engine error. Contact Technical Support.
				Flashing	The Security Key is not present or is not functioning.
	4	Encryption	Green	Solid	The Security Key is present and encryption is enabled.

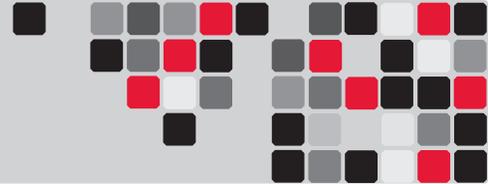
### Q: Why can't I access my data when I turn on my unit?

**A:** If you have data on the drive, don't panic! Barring the failure of the hard drive your data is still intact, but is not reachable because the drive was not formatted within this unit using the correct Security Key. If you previously formatted the drive using a Security Key, power off the unit and insert the correct Security Key into the Mini-USB Security Key port on the front of the carrier. Then turn your unit back on. When both green LEDs are lit, showing that the drive is ready and encrypted, you should then be able to access your data. You can then remove the Security Key and store it in a safe location.

If you did not format the drive using a Security Key, you will need to make a backup copy of your data and format the drive using the correct Security Key. See Section 3 for instructions on how to format the drive with Mac or Windows operating systems.

### Q: I turned my unit off and back on and now I cannot access my data. Why?

**A:** Cycling power on the DataPort 25 Secure unit will require you to reinsert the Security Key into the Mini-USB Security Key port



before turning the unit back on, even if you have not turned your computer off. If the unit is on, power it off and insert the correct Security Key into the Mini-USB Security Key port on the front of the carrier. Then turn your unit back on. When both green LEDs are lit, showing that the drive is ready and encrypted, you should then be able to access your data. You can then remove the Security Key and store it in a safe location.

**Q: Why can't I use another device through the Mini-USB port on the front of the DataPort 25 Secure carrier?**

**A:** This port is used by the Security Key to provide the encryption key to the unit hardware that will allow the unit to access the data on your hard drive. It does not pass data to the drive itself. **Under no circumstances should you insert anything other than a Security Key into the Mini-USB Security Key Port.** Though it is mechanically identical to the standard Mini-USB port, inserting a Mini-USB cable or other device into the Mini-USB Security Key Port on the carrier can cause internal damage and potentially lead to loss of data.

Likewise, inserting the Security Keys into any other Mini-USB port will damage the keys and render them useless. Please only use the Security Keys in DataPort Secure products.

If you have already tried to use another device through this port or have inserted the Security Key into another device's Mini-USB port, first check to see if your Security Key still works in your DataPort 25. If it does not, please contact Technical Support.

**Q: Can I use my 128-bit encrypted hard drive in a 256-bit enclosure, or a 256-bit encrypted hard drive in a 128-bit enclosure?**

**A:** No. 128-bit and 256-bit encryption are not cross-compatible.

**Contacting Technical Support**

Still need help? Please contact our Technical Support team through CRU-DataPort.com. Or call us toll free at (800) 260-9800, or directly at (360) 816-1772.

**6. Technical Specifications**

Product Name	DataPort 25 Secure
Interface Types & Speeds	SATA: up to 1.5 GB/s
Compatibility	2.5" SATA Hard Drives
Data Connectors	<ul style="list-style-type: none"> <li>One (1) SATA connector</li> <li>One (1) mini-USB Security Key connector</li> </ul>
Encryption	128-bit AES (Advanced Encryption Standard) or 256-bit AES <b>128-bit and 256-bit encryption are not cross-compatible</b>
Connector Insertion Rating	25,000+ Carrier-to-Frame
Operating System Requirements	<ul style="list-style-type: none"> <li>Windows 7, Vista, or XP</li> <li>Mac OS X</li> <li>Linux distributions that support SATA, USB, or FireWire 800</li> </ul>
Compliance	EMI Standard: FCC Part 15 Class B, CE EMC Standard: EN55022, EN55024 FIPS: FIPS 140-2, FIPS PUB 197
Shipping Weights	2.00 pounds (includes accessories)
Dimensions	Complete Assembly: 4.02" x 6.10" x 1.02" (102mm x 155mm x 26mm) Removable Carrier: 3.11" x 5.24" x 1.02" (79mm x 133mm x 26mm)
Warranty	We don't expect anything to go wrong with your CRU product. But if it does, Tech Support is standing by and ready to help.  Contact us at <a href="http://www.cru-dataport.com/support">http://www.cru-dataport.com/support</a> . We also offer phone support at (800) 260-9800.

**Product Warranty**

CRU-DataPort (CRU) warrants this product to be free of significant defects in material and workmanship for a period of five years from the original date of purchase. CRU's warranty is nontransferable and is limited to the original purchaser.

**Limitation of Liability**

The warranties set forth in this agreement replace all other warranties. CRU expressly disclaims all other warranties, including but not limited to, the implied warranties of merchantability and fitness for a particular purpose and non-infringement of third-party rights with respect to the documentation and hardware. No CRU dealer, agent, or employee is authorized to make any modification, extension, or addition to this warranty. In no event will CRU or its suppliers be liable for any costs of procurement of substitute products or services, lost profits, loss of information or data, computer malfunction, or any other special, indirect, consequential, or incidental damages arising in any way out of the sale of, use of, or inability to use any CRU product or service, even if CRU has been advised of the possibility of such damages. In no case shall CRU's liability exceed the actual money paid for the products at issue. CRU reserves the right to make modifications and additions to this product without notice or taking on additional liability.

**FCC Compliance Statement:** "This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) 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 home or commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.

In the event that you experience Radio Frequency Interference, you should take the following steps to resolve the problem:

- 1) Ensure that the case of your attached drive is grounded.
- 2) Use a data cable with RFI reducing ferrites on each end.
- 3) Use a power supply with an RFI reducing ferrite approximately 5 inches from the DC plug.
- 4) Reorient or relocate the receiving antenna.

