Protecting
Your Digital
Assets™

Forensic UltraDock™ User Manual

Features

- Four separate host attachment options (USB 3.0, FireWire 800, FireWire 400, and eSATA) for compatibility with virtually any computer
- Multiple LEDs indicate operational status, including disk activity, hidden area detection, error state, and the status of power input and output
- LCD menu allows user to configure settings and view information on attached drives
- Detects and indicates hidden areas (HPAs or DCOs) found on hard drives
- All-aluminum case for rugged durability and excellent heat dissipation
- Compatibile with forensic acquisition and analysis software

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Forensic Device User Advisory

Before using this tool for accessing sensitive data, verify the write-blocking function of the product. This is easily done: attach a known good formatted drive, and verify that the drive mounts properly on your computer. Copy files to the drive. Due to the "spoof writing" style of write-blocking employed by this product, the files will appear to copy successfully. Next, unmount and remount the drive The files that you copied should not appear after the drive is remounted. If they do appear, there is a problem with your forensic device, and you should contact our support department for further instructions.

CRU support may be reached through cru-inc.com or at (800) 260-9800 (toll free)

1. Pre-Installation Steps

1.1 Box Contents

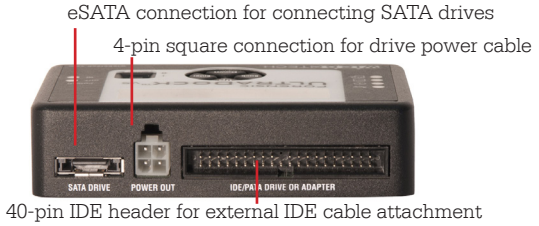
Please contact CRU if any items are missing or damaged:

Forensic UltraDock unit	1
AC adapter & power cord	1
USB 3.0 cable	1
FireWire 800 cable	1
FireWire 400 cable	1
eSATA cable	1
SATA drive attachment cable	1
IDE cable	1
Molex mini-fit to legacy power cable	1
Metal drive plate	1
Packet of screws and bumpers	1
Quick Start Guide and Warranty Info	1

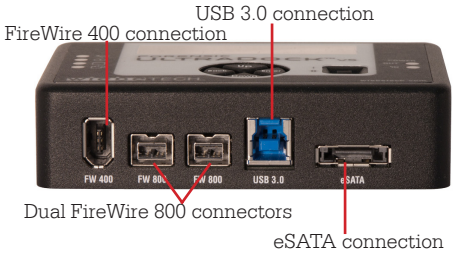
1.2 Identifying Parts

Take a moment to familiarize yourself with the parts of your new Forensic UltraDock. This will aid you in the remaining

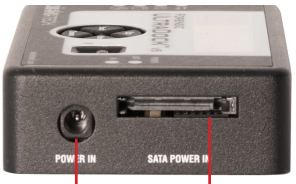
Drive Side



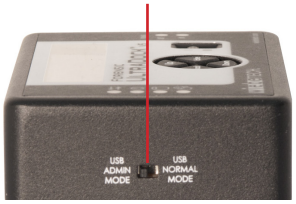
Host Side



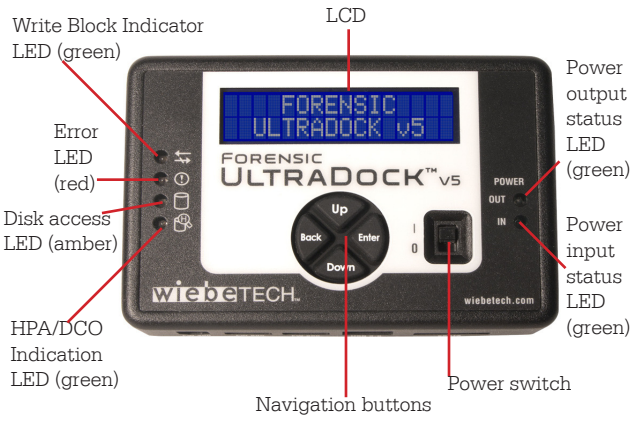
Power



USB Mode Switch



Top of Unit



2. Setup

a) Attach protective metal drive plate to your 3.5" hard drive. (This step is optional.) The purpose of the bottom plate is to provide protection to your drive electronics and aid heat dissipation.

b) If attaching an IDE/PATA drive, configure the jumpers on the rear of the drive. The drive must be set to the Master setting. Consult the instructions or your drive (some drives display configuration information on the drive's label).

c) Connect Forensic UltraDock to the drive (or adapter) using either the IDE ribbon cable for IDE drives or the SATA data/power cable for SATA drives.

d) If using an adapter, connect the drive to the adapter.

e) Attach the power cable to Forensic UltraDock and to the drive. For SATA drives, the power cable and data cable are combined into a single SATA drive interface.

f) Connect the eSATA, FireWire or USB cable from your computer into the corresponding port on Forensic UltraDock.

g) Provide power to Forensic UltraDock. Use either the included AC adapter or you can connect a SATA power cable from inside a computer case. This is useful if you wish to access a drive inside a computer without removing it first.

h) Turn on the power switch. The connected drive will power up and Forensic UltraDock's main menu will appear on the LCD screen.

You are now ready to use Forensic UltraDock to access the drive.

3. Menu Structure/Usage of Forensic UltraDock v5

Use the LCD and 4-button navigation interface to view information about the drive and dock or adjust HPA/DCO handling. On the 4-button navigation interface, UP and DOWN allow scrolling through options, while ENTER selects and BACK exits or returns to the previous screen.

Forensic UltraDock's menu consists of the following screens:

3.1 View Drive Info

This screen displays information about the attached drive.

- Press ENTER, and then use the UP or DOWN buttons to scroll through and view the following info about the drive.

Appearance on LCD	Explanation
Disk Temp	Temperature of the attached drive, measured in degrees Celsius.
Capacity (MB)	Capacity of the HDD, measured in megabytes.
Manufacturer	Manufacturing company name of the HDD.
Model number	Model number of the HDD.
Serial number	Serial number of the HDD.
Firmware Rev	Firmware revision number of the HDD.
HPA size (MB)	The size of the Host Protected Area of the HDD, measured in megabytes/
DCO size (MB)	The size of the Device Configuration Overlay of the HDD, measured in megabytes.
Disk health	Displays the S.M.A.R.T. health status of the drive.
Start/ Stops	S.M.A.R.T. information on how many times the drive has spun up and spun down.
Power cycles	S.M.A.R.T. information on how many power on/off cycles the drive has underwent.
Bad sectors	Number of bad sectors reported by the drive.

3.2 View Dock Info

This screen displays information about your Forensic UltraDock unit.

- From the "View Drive Info" screen, press the UP or DOWN buttons to get to the "View Dock Info" screen. Press ENTER.

- Use the UP or DOWN buttons to scroll through and view the following info about Forensic UltraDock.

Appearance on LCD	Explanation
Product Name	Brand name of the product (e.g. "Forensic UltraDock").
Unique ID#	A specific, unique number assigned to the unit for identification, akin to a serial number.
Firmware ver. #	Firmware version currently installed on the Forensic UltraDock product.

3.3 HPA/DCO Auto

This screen allows you to configure the way Forensic UltraDock will automatically handle hidden areas it detects on drives during power up.

- From the "View Drive Info" screen, press the UP or DOWN buttons to get to the "HPA/DCO Auto" screen. Press ENTER.
- Press UP or DOWN to scroll through the four ways Forensic UltraDock can handle HPAs and DCOs.

1) Ignore all - Detects and indicates their presence, but does not remove them.
2) Temp Unlock HPA - Temporarily remove HPA only.
3) Perm Unlock HPA - Permanently remove HPA only
4) Unlock All - Permanently remove any HPA or DCO

- Press ENTER when your desired mode appears on the LED. Forensic UltraDock will then set your desired mode as the default.

4. USB Mode Switch

There are two USB modes on Forensic UltraDock, USB Admin and USB Normal.

- USB Normal (USB 3.0 Mode): Use this mode when Forensic UltraDock is connected to a USB 3.0 port on your computer with a USB 3.0 cable (such as the cable included with the product). If Forensic UltraDock is used with a USB 2.0 port or cable and it is switched to USB Normal mode, the dock will not function correctly.

- USB Admin (USB 2.0) Mode: This mode ensures that Forensic UltraDock is backwards-compatible with USB 2.0. In this mode you can use any cable or USB port type, but it will operate at USB 2.0 speed. USB Admin mode should also be used when using CRU applications (such as Forensic Software Utility) to update the dock.

Technical Specs

Product name	Forensic UltraDock v5
Drive Types Supported:	• PATA/IDE 2.5 drives (with PATA Adapter 25) • PATA/IDE 3.5" • SATA 3G • Hitachi 1.8" drives (with PATA Adapter 18-HIT-ZIF) • Toshiba 1.8" drives (with PATA Adapter 18-TOSH) • MacBook Air 2010 (with SATA Adapter MBA2010) • MSATA (with SATA Adapter mSATA) • PCIe PATA (with PATA Adapter mPCIe) • PCIe SATA (with PATA Adapter mPCIe) • PCIe USB (with PATA Adapter mPCIe)
Host (I/O) Ports	FireWire 400: up to 400 Mbps (1) pair of FireWire 800: up to 800 Mbps (1) USB 3.0: up to 5 Gbps (1) eSATA: up to 3 Gbps
Operating system compatibility	Windows XP or later Windows Server 2003 or later Mac OS X Linux distributions that support the desired connection
LEDs	6: Drive access, HPA/DCO detected, error, power input status, power output status, write-block status
Warranty:	3 Years
Support	Your investment in CRU products is backed up by our free technical support for the lifetime of the product. If you need to contact us for any reason, please visit cru-inc.com/support or call us at 1-800-260-9800 or +1-360-816-1800.