

ULTRADOCK™ V4 USER MANUAL

Revised August 2, 2011



Features

- Quadruple connectivity! UltraDock is compatible with four different interfaces: eSATA, FireWire 800, FireWire 400 and USB.
- Self-aligning connector provides easy attachment of IDE/PATA 3.5" drives
- Host attachment for 2.5" and 3.5" SATA drives.
- LEDs show when unit is receiving power as well as power output status
- Power status LED verifies that unit is switched on (or off)
- Host-detection LEDs indicate connection to either FireWire or USB host
- Access LED shows hard drive activity
- Small size allows you to take it anywhere
- Aluminum case is briefcase tough, with excellent heat dissipation
- Two options for power input: Use the included AC adapter, or use a 4-wire connector from a computer's power supply

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1. Pre-Installation Steps

1.1 Check the accessories packaged with your UltraDock.

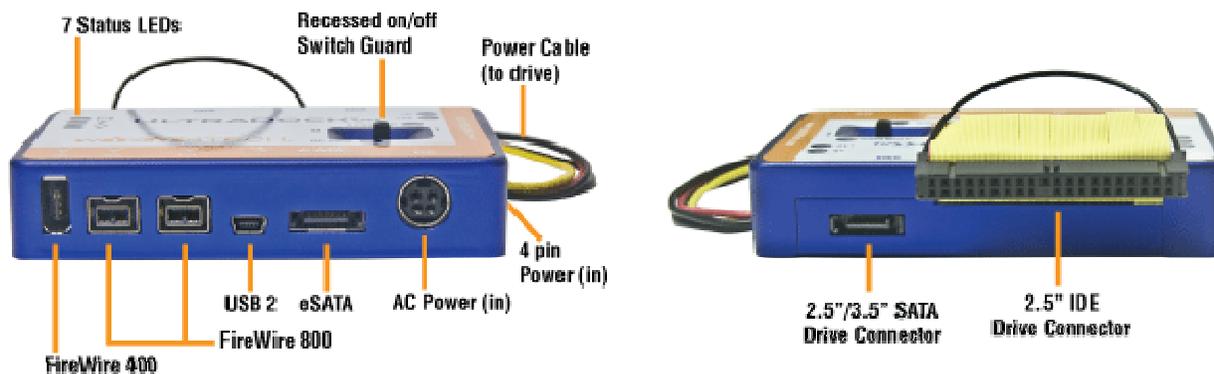
The following list contains the items included in the complete configuration for this device. Depending on which configuration and accessories you purchased, the package may include fewer items than what are listed here. Please contact CRU-DataPort if any items are missing or damaged:

UltraDock	1
AC adapter & power cord	1
FireWire 800 cable	1
FireWire 400 cable	1
USB cable	1
eSATA cable	1
SATA power/data cable	1
Metal bottom plate	1
Hard drive screws	4
Rubber bumpers	4
Quick Start Guide and Warranty information	1

1.2 Identify the Parts of your UltraDock

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

1.2.3 Connectors



LEDs

- a Hard drive access
- b Unit is connected to USB host
- c Unit is connected to FireWire host
- d +12V DC power input is present
- e Optional 4-pin power input is connected
- f +12V Power output to drive is on (yellow wire)
- g +5V Power output to drive is on (red wire)



2. Installation Steps

2.1 Attach a Bottom Plate

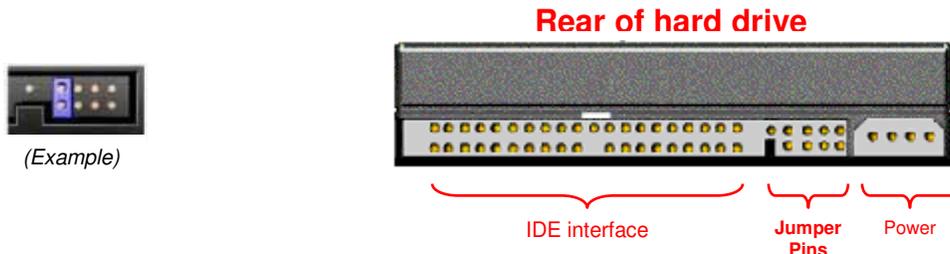
Attach bottom plate to your 3.5-inch hard drive. This step is optional but recommended. The purpose of the bottom plate is to provide protection to your drive electronics and aid heat dissipation. Attach the bottom plate to your drive using the four screws supplied. Attach a rubber bumper to each corner.



2.2 Hard Drive Attachment

2.2.1 IDE/PATA: 3.5-inch

If using a 3.5-inch IDE/PATA drive, configure the jumpers on your hard drive. The drive must be set to the Master setting. Consult the instructions for your drive (some drives display configuration information on the drive's label). A few drives have both "Master with Slave Present" and "Master without Slave" options. Choose the latter in this case. In rare cases, if the Master setting does not work then try Cable Select.



Attach the free end of the IDE ribbon cable to the back of the hard drive. The connector is keyed to insert only one way. The IDE pins on the hard drive are fragile, so be very careful when inserting or removing the IDE connector

Attach the 4-pin power connector from the dock into the back of the hard drive. As with the IDE cable, the power connector will only fit one way.

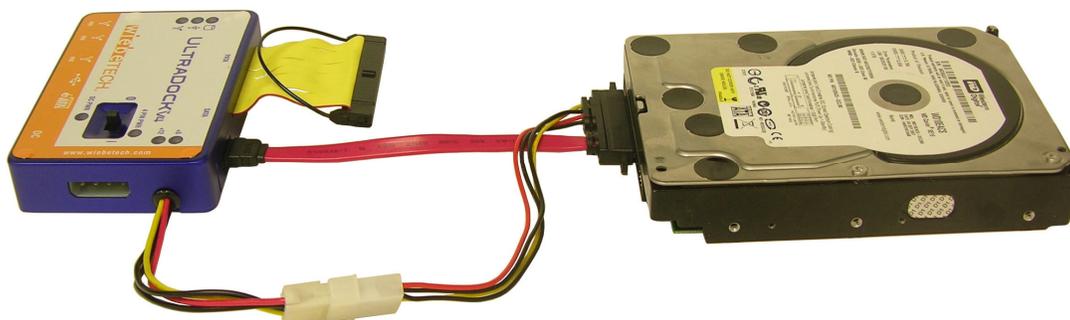
Attach the free end of the IDE ribbon cable to the back of the hard drive. The connector is keyed to insert only one way. The IDE pins on the hard drive are fragile, so be very careful when inserting or removing the IDE connector

Attach the 4-pin power connector from the dock into the back of the hard drive. As with the IDE cable, the power connector will only fit one way.



2.2.2 SATA HDD: 3.5-inch & 2.5-inch

Take the SATA power/data cable and attach the 4-wire power input to the 4-wire power output from the dock. Attach the SATA data cable to the SATA slot on UltraDock. Plug the SATA data/power connector into the drive.



2.3 Connecting and Powering UltraDock

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



FireWire 400

FireWire 800

USB

eSATA

Connect power to the UltraDock. Use either the included AC adapter or, optionally, you can connect a 4-wire power cable from inside a computer case. This is useful if you wish to access a drive inside a computer without removing it first.



Your UltraDock is now ready to use! Turn on the unit by moving the power switch to the “I” position. The red drive access indicator will light briefly after the unit is powered up, indicating that the FireWire bridge has successfully established communication with the drive. Thereafter, it will light whenever the drive is accessed.

Note: The UltraDock may utilize any 12V regulated switching power supply capable of supplying 2A or greater. Do not use unregulated adapters, as damage may occur to the UltraDock or the attached drive.

2.4 Using UltraDock v4 with v4 Combo Adapters

Combo Adapters are available from WiebeTech that can allow your UltraDock to access all kinds of drives. Follow these three simple steps to use a Combo Adapter with your dock:

1. Attach the dock’s 4-wire power connector to the adapter.
2. Connect the dock’s IDE ribbon cable to the adapter’s IDE pins.
3. Connect the drive to the adapter.



You are now ready to use your dock to access the drive. Combo Adapters are available for SATA drives, notebook drives, microdrives, ZIF drives, and more. See the WiebeTech website for more details (www.wiebetech.com).

3. Usage with Mac and Windows Operating Systems



3.1 Usage with Mac OS X

3.1.1 Compatibility

UltraDock does not require drivers for operation under Mac OS X. However, if you install a host card specifically to work with this product, that card may require drivers. See your card's User Manual for drivers and instructions.

3.1.2 Using Volumes

If the hard drive attached to the UltraDock 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. You can use OS X's Disk Utility to easily format the drive.

Eject 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. Shutting down the unit without first ejecting the volume can result in data loss.



3.1.3 Booting from your UltraDock

Some Macs support booting from an external device. To activate this feature, you must first install OS X on the external volume. 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 your dock only some of the time.



3.2 Usage with Windows operating systems

3.2.1 Compatibility

UltraDock does not require drivers for operation under Windows XP, Vista, or 7. However, if you install a host card specifically to work with this product, that card may require drivers. See your card's User Manual for drivers and instructions.

3.2.2 Using Volumes

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

Eject the volume before powering down the unit by single-clicking the green arrow icon on the task bar, then selecting "Safely remove..." Windows will indicate when it is safe to disconnect the dock. Shutting down the unit without first ejecting the volume can result in data loss.



3.2.3 Booting from your UltraDock

Some PC motherboards support booting from an external device. To activate this feature, you will need to adjust the motherboard's BIOS settings. Check with your motherboard's manufacturer or owner's manual for details.

4. Frequently Asked Questions

Q: My UltraDock v4 works great with SATA drives but I am having compatibility issues with IDE/PATA drives. What should I do?

A: First check to make sure the SATA power/data cable is unplugged from the SATA output port. IDE/PATA drives cannot be recognized if a SATA connection is made with the SATA output. Next check to make sure the 4-pin power cable is plugged into the IDE/PATA drive. If the power and host connection are securely attached to the UltraDock v4, then the IDE cable may be faulty. Contact Technical Support for further instructions.

Q: Why does my dock experience errors or unmount during long file transfers?

A: The environment in which the dock is used can affect its performance. The surface that the dock and drive are set upon may not allow heat to dissipate away from the units. The bottom plate supplied with the product will help to dissipate heat away from the hard drive and dock. If placed on a non-conductive surface, the drive or dock may suffer heat related failures. After cooling, the units usually return to a useable state. Occasionally these heat related failures can be permanent.

Q: How should I set my hard drive jumper settings?

A: Note: This is only necessary for IDE/PATA drives (the type of drive that has a 40-pin data interface).

Try the MASTER setting first. This is the recommended setting for most WiebeTech products. Some hard drives have two different MASTER settings: one for when there is a SLAVE drive present and one for when there is NO SLAVE drive present. Choose the setting for NO SLAVE present. There may be some drives that will not work with either of these settings. The next choice is CABLE SELECT. If this does not work, try using NO jumpers. This may be the same as MASTER with NO SLAVE present.

If you're unsure how to change the jumper configuration, check the manual that came with your hard drive, or the manufacturer's website. Some drives also have the information printed on the label.

Q: I lost my AC adapter. Where can I get a replacement?

A: The AC adapters for all current WiebeTech products (and most discontinued products) are available for purchase on our website.

Third party AC adapters can also be used with WiebeTech products as long as they have REGULATED POWER. Be sure to check with the manufacturer of the adapter for this specification. Also check to make sure the volts and amps are correct for the product, as well as the pin configuration (for DIN connectors).

Q: Why does Disk Utility show S.M.A.R.T. information as "not supported" for my external drive? I know the drive supports this technology.

A: Even if a drive is S.M.A.R.T. enabled, external FireWire enclosures cannot pass S.M.A.R.T. information to the host because this information is lost when the data is translated from the IDE protocol to FireWire.

Enclosures that connect via eSATA usually pass S.M.A.R.T. data unless the enclosure combines more than one drive into a hardware RAID. However, the eSATA host in the computer may or may not support S.M.A.R.T. Check the card manufacturer's website for this specification.

Q: Can I attach an eSATA drive enclosure to the SATA drive connection on UltraDock? Will this allow me to access it via FireWire or USB on my computer as if it were a bare hard drive?

A: Yes. By using an eSATA to SATA convertor cable, you can connect an eSATA drive enclosure to the output (device) side of the dock. You can then connect the input (host) side to a computer via any of the connections. This should give you access to the drive without requiring its removal from its housing. If you are using a Forensic UltraDock, writes to the drive will be write-blocked.

5. Technical Specifications

Product Name	UltraDock v4
Drive Interfaces	<ul style="list-style-type: none"> • 3.5-inch IDE/PATA • 2.5-inch & 3.5-inch SATA
Host Interfaces	<ul style="list-style-type: none"> • eSATA • FireWire 800 (two ports, daisy-chainable) • FireWire 400 • USB 2.0
Power Supply	Input: 100-240VAC; Output: +12V
Compatibility	3.5-inch IDE/PATA, 3.5-inch SATA and 2.5-inch SATA drives
Operating System	<ul style="list-style-type: none"> • Windows XP, Vista, Windows 7 • Mac OS X • Linux distributions supporting FireWire
Shipping Weight	3 pounds, including accessories
Dimensions	110mm (L) x 75mm (W) x 22mm (H) Dimensions are exclusive of attached plates, drives, and cables.
Compliance	CE, FCC, RoHs, C-Tick
Support	We don't want anything to go wrong with your CRU-DataPort product. But if it does, Tech Support is standing by and ready to help. Contact us through cru-dataport.com . CRU also offers phone support at (800-260-9800). WiebeTech is a brand of CRU.

UltraDock is a trademark of CRU Acquisitions Group, LLC. Other marks are the property of their respective owners.
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Limited Product Warranty

CRU-DataPort (CRU) warrants UltraDock to be free of significant defects in material and workmanship for a period of one year 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.

