Protecting Your Digital Assets™

CRU® WiebeTech® UltraDock UDv5.5

User Manual

Features

- Four separate host attachment options (USB 3.0, USB 2.0, FireWire 800, 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
- Able to create HPAs and DCOs
- Aluminum case for rugged durability and excellent heat dissipation

CRU WIEBETECH

TABLE OF CONTENTS

1 Pre-Installation	2
1.1 Package Contents	2
1.2 Identifying Parts	3
1.3 LED Behavior	3
1.4 Warnings and Notices	3
1 Installation Steps	4
2 How to Use the LCD Interface	4
3 HPA/DCO Handling	5
4 CRU Configurator	5
5 Technical Specifications	6

1 PRE-INSTALLATION

1.1 PACKAGE CONTENTS

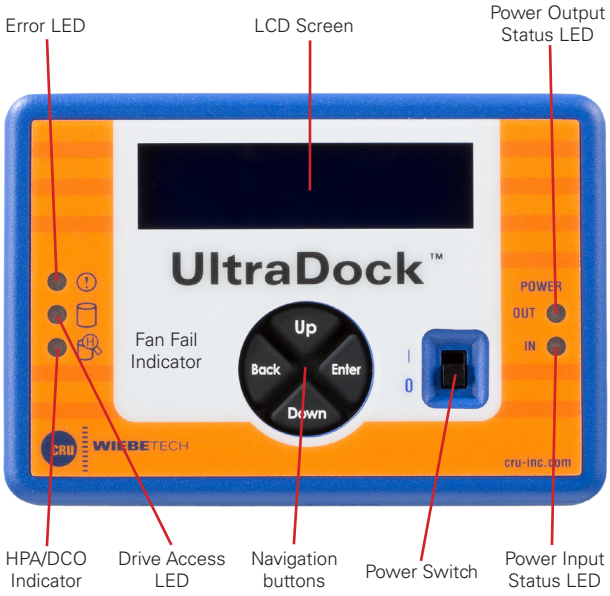
The following list contains the items that are included in the complete configuration for this device. Please contact CRU if any items are missing or damaged:

Accessories	Quantity
UltraDock	1
AC adapter and power cord	1
USB 3.0 cable	1
FireWire 800 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

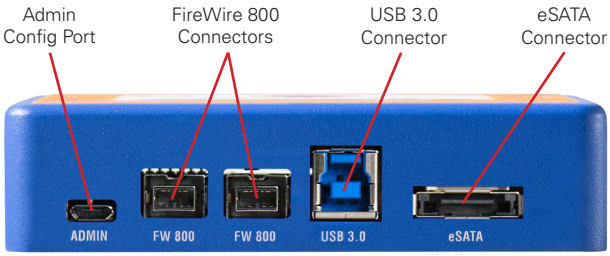
1.2 IDENTIFYING PARTS

Take a moment to familiarize yourself with the parts of the UltraDock UDv5.5. This will help you to better understand the following instructions.

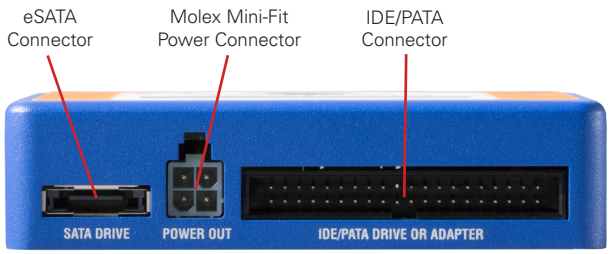
TOP VIEW



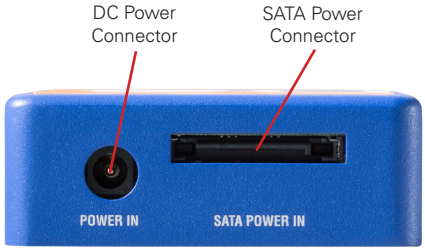
FRONT VIEW



REAR VIEW



SIDE VIEW



1.3 LED BEHAVIOR

LED	COLOR	STATE	DESCRIPTION
Power Out	Green	Solid	The UltraDock UDv5.5 is powered on and outputting power.
Power In	Green	Solid	The UltraDock UDv5.5 is connected to power.
Error	Red	Solid	There is a problem with the UltraDock UDv5.5. Please contact Technical Support.
Drive Access	Amber	Blinking	Data is currently being accessed from the attached drive.
		Solid	Your computer host does not support drive activity polling.
HPA/DCO	Green	Solid	A host protected area (HPA) or device configuration overlay (DCO) has been detected on the attached drive.

1.4 WARNINGS AND NOTICES

Please read the following before beginning installation.

General Care

- The main circuit board of the UltraDock UDv5.5 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, tapping on the unit, and vibration.
- Avoid placing the hard drives close to magnetic devices, high voltage devices, or near a heat source. This includes any place where the product will be subject to direct sunlight. Do **NOT** allow water to make contact with the drive or the UltraDock UDv5.5.
- Remove the drives before transporting the UltraDock UDv5.5 to prevent damage to the drive interfaces.

1 INSTALLATION STEPS

a. Use the provided screws to attach the protective metal plate to the bottom of your 3.5" drive. This step is optional. The purpose of the bottom plate is to provide protection to the drive electronics of your hard drive.

b. If you're attaching an IDE/PATA drive, configure the jumpers on the rear of the drive to Master. Consult the instructions on your hard drive's label.

c. Connect the UltraDock UDv5.5 to the drive (or adapter), using the IDE ribbon and Molex power cables for IDE/PATA drives or the unified SATA data/power cable for SATA drives.

d. If you're using an adapter, connect the drive to the adapter.

e. Connect a eSATA, FireWire, or USB cable from your computer to the corresponding port on the UltraDock UDv5.5.

f. Provide power to the UltraDock UDv5.5. Connect the included AC adapter or a SATA power cable from the inside of your computer case.

g. Turn on the power switch.

You are now ready to use the UltraDock UDv5.5 to access the attached drive. If the drive is already formatted, it can be used right away. If the drive is brand new, or its format is not compatible with your computer, the drive will need to be formatted before being used.

STOP! Formatting a drive will erase all data on the drive, so be sure to back up your data before beginning this operation.

2 HOW TO USE THE LCD INTERFACE

Use the LCD and 4-button navigation interface to view information about the attached drive and the UltraDock UDv5.5. On the 4-button interface, **Up** and **Down** allow you to scroll through options, while **Enter** selects an option and **Back** goes back to the previous screen. The contents of the menu are listed on the following page.

MENU ITEM	SUBMENU ITEM	ACTION
View Drive Info	Disk Temp	Displays the temperature of the attached drive, displayed in °C.
	Capacity (MB)	Displays the capacity of the attached drive, measured in megabytes.
	Manufacturer	Displays the manufacturer of the attached drive.
	Model number	Displays the model number of the attached drive.
	Serial number	Displays the serial number of the attached drive.
	Firmware rev	Displays the firmware revision of the attached drive.
	HPA size (MB)	Displays the size of the host protected area, if any, on the attached drive. Measured in megabytes.
	DCO size (MB)	Displays the size of the device configuration overlay, if any, on the attached drive. Measured in megabytes.
	Disk health	Displays the S. M. A. R. T. status of the attached drive.
	Start/Stops	Displays how many times the attached drive has spun up and spun down.
	Power cycles	Displays how many power on/off cycles the attached drive has undergone.
	Bad sectors	Displays the number of bad sectors reported by the attached drive.

HOW TO USE THE LCD INTERFACE, CONTINUED...

MENU ITEM	SUBMENU ITEM	ACTION
View Dock Info	Product Name	Displays the brand name of the product (e.g. UltraDock)
	Unique ID#	Displays the specific, unique number assigned to the unit for identification, akin to a serial number.
	Firmware Ver. #	Displays the version of the firmware currently installed on the UltraDock UDv5.5.
Create HPA/DCO	Set DCO Size	This option is only available if no HPA exists on the drive. It allows you to set a new size for the DCO. Press **Up** or **Down** to set a new size for the HPA, and **Enter** to confirm the choice. The disk capacity available to a computer will be reduced by this amount. Set the value to 0 to have no DCO. Values exceeding the available capacity will not be accepted.
	Set HPA Size	Allows you to set a new size for an HPA. Press **Up** or **Down** to set a new size for the HPA, and **Enter** to confirm the choice. The disk capacity available to a computer will be reduced by this amount. Set the value to 0 to have no HPA. Values exceeding the available capacity will not be accepted.

3 HPA/DCO HANDLING

The UltraDock UDv5.5 will check to see if any HPAs (host protected areas) or DCOs (device configuration overlays) are present on startup. If an HPA or DCO is detected, the UltraDock UDv5.5 will indicate that one has been found and ask what you want to do with it. Use the **Up** and **Down** buttons to scroll through the options, shown below, and then press **Enter** to select an option.

DCO FOUND	HPA FOUND
Keep DCO – Keeps the DCO	**Keep HPA** – Keeps the HPA
Remove DCO – Permanently removes the DCO, exposing any hidden data within that area	**Remove HPA Temp** – Temporarily removes the HPA
	Remove HPA Perm – Permanently removes the HPA

4 CRU CONFIGURATOR

CRU Configurator for both Mac and Windows provides extended configuration options for many CRU products, including the UltraDock UDv5.5. It displays information about the UltraDock UDv5.5 and any attached drive and can monitor the UltraDock UDv5.5 in the background and sends an email or text message if a problem is detected.

Download it here: www.cru-inc.com/support/software-downloads/configurator-software-download/

Setup Instructions

Connect a USB micro-B cable to the "Admin" port on the UltraDock UDv5.5 and connect the other end to your computer. Then, turn on the UltraDock UDv5.5. Finally, open the Configurator application.

5 TECHNICAL SPECIFICATIONS

Product Models	UltraDock UDv5.5
U.S. Patent No.	8,090,904
Drive Interface Types & Speeds	PATA/IDE: up to 133 MB/s SATA (with eSATA cable): up to 6 Gbps
Host Interface Types & Speeds	eSATA: up to 6 Gbps USB 3.0: up to 5 Gbps FireWire 800: up to 800 Mbps USB Micro-B: up to 480 Mbps (Admin configuration only)
Supported Drive Types	2.5" and 3.5" rotational and solid state SATA drives 3.5" rotational IDE/PATA drives 2.5" rotational IDE/PATA drives*, Hitachi 1.8" drives*, Toshiba 1.8" drives*, MacBook Air 2010*, MacBook Air 2011*, mSATA*, mini PCIe PATA*, mini PCIe SATA*, mini PCIe USB* *Requires the appropriate CRU SATA or PATA adapter
Host Data Connectors	One (1) USB 3.0 connector (backwards compatible with USB 2.0) One (1) eSATA connector Two (2) FireWire 800 connectors
Supported Operating Systems	Windows 10, 8, and 7 Windows Server 2016, 2012 and 2008 product families OS X/macOS 10.10 "Yosemite" or newer Linux distributions that support the connection type used
Compliance	EMI Standard: FCC Part 15 Class A EMC Standard: EN55022, EN55024 CE, RoHS, RCM
Product Weight	0.4 pounds (0.18 kg)
Product Dimensions	4.33in W x 2.95in L x 1.06in H (110mm W x 75mm L x 27mm H)
Technical Support	Your investment in CRU products is backed up by our free technical support for the lifetime of the product. Contact us through our website, cru-inc.com/support or call us at 1-800-260-9800 or +1-360-816-1800.

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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 A 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, 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. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at this own expense.

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.

FC Tested to comply with FCC standards
FOR OFFICE OR COMMERCIAL USE

CRU Protecting Your Digital Assets™

For more information, visit the CRU web site.

www.cru-inc.com

Part Number: A9-000-0055 Rev 1.1

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